

**FAMILY FARMING LIFESTYLE AND HEALTH IN THE PACIFIC**

**GRANT AGREEMENT NUMBER 873185**

**DELIVERABLE D1.3**

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**Dissemination Level**

<b>PU</b>	Public	<b>X</b>
<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	

**SUMMARY**

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## 1. General Progress of the action

### 1.1 Please indicate the progress of the action during the period covered by this report:

- The action has fully achieved its objectives for the period.
- The action has achieved most of its objectives for the period, with relatively minor deviations.
- The action has achieved some of its objectives, but corrective action is required.
- The action has failed to achieve critical objectives and/or is severely delayed.

### 1.2 Please describe the general scientific progress of the action during the period covered by this report (including by giving qualitative indicators and by describing deliverables and milestones achieved):

Family farming Lifestyle and Health in the Pacific project focusses on family farming including agriculture, fishing, hunting and harvesting which ensure not only food and market production, but also very fundamental social, environmental and cultural functions.

The singularity of this project stays in the fact that Pacific islands countries and territories are facing cumulative vulnerabilities such as a dramatic climate change, a rapid socio-economic transition and more recently a worldwide sanitary crisis. These combined vulnerabilities in the context of a rapid socio-economic transition and the globalization process have considerably disrupted local agro and food systems, as well as main components of lifestyle that are mainly physical activity and nutrition behaviours. Migration flows generated internally by rapid urbanization and externally by the search for international rents have a significant impact on the available labour forces in rural areas by offering alternative sources of monetary income. The improvement of human capital (education) directs people towards less physically demanding jobs, reduces the attractiveness of traditional and subsistence activities, which are generally much less remunerative. Among the large drivers of food systems, the nutrition transition has been characterised by a decrease in subsistence production leading to a less physical active life and an increase availability and consumption of industrial food products that both significantly affect health of populations. Poor diet and unhealthy lifestyles are associated with overweight, obesity and non-communicable diseases and therefore ways of assessing and monitoring the changes that happen overtime are required to co-design effective interventions to address population health. Such evolution also has serious consequences on the purchasing power of populations and food security. This is particularly the case following the acceleration of the globalization process, which has generated a strong increase in interdependencies and systemic risks, as shown by the recent Covid-19 crisis.

From February 2023 to March 2025, scientific progress of the action is observed with the realisation 4 international workshops with 15 to 30 participants each; 2 international conferences with more than 40 presentations each. Our progresses permitted to show an increase of mobilities from and to Europe/Pacific with an equilibrium between teams (developed below). At the same time, research on fields of application (Fiji, Van, Solomon Islands, New Caledonia) were shared between

teams with systematic visits at the end of workshops. An increase of scientific diffusion was observed too (detailed below).

**The impact of the FALAH project** is highly relevant since its objective is to promote and revitalise family farming, including agriculture, fishing, hunting and harvesting practices, to improve the health of Pacific populations and ensure food security in the context of rapid social and economic transformations and climate change and more recently of the sanitary crisis, both affecting Pacific islands.

During the specific period of February 2023 and March 2025, the coordination team observed an increase of solicitation for medias as well as for different scientific collaborations that highlighted the University of New Caledonia, the partners of the consortium as well as EU.

**WP 1 performed secondments: N/A (management tasks are not eligible for secondments)**

**WP 1 Achievements**

FALAH project allows the coordination team to realise tasks assigned that are detailed in specific actions listed below.

**Ensure the realisation of 11 scientific events during the four years of the project (Task 1.1).**

The coordination team is in charge of 11 scientific events in the Pacific region (Vanuatu, New-Caledonia, Fiji, Solomon Islands and Australia). This first progress report included 4 of these 11 events.

In this second progress report, 6 additional events took place in due time, and actions linked to these events will be developed below in this first progress report.

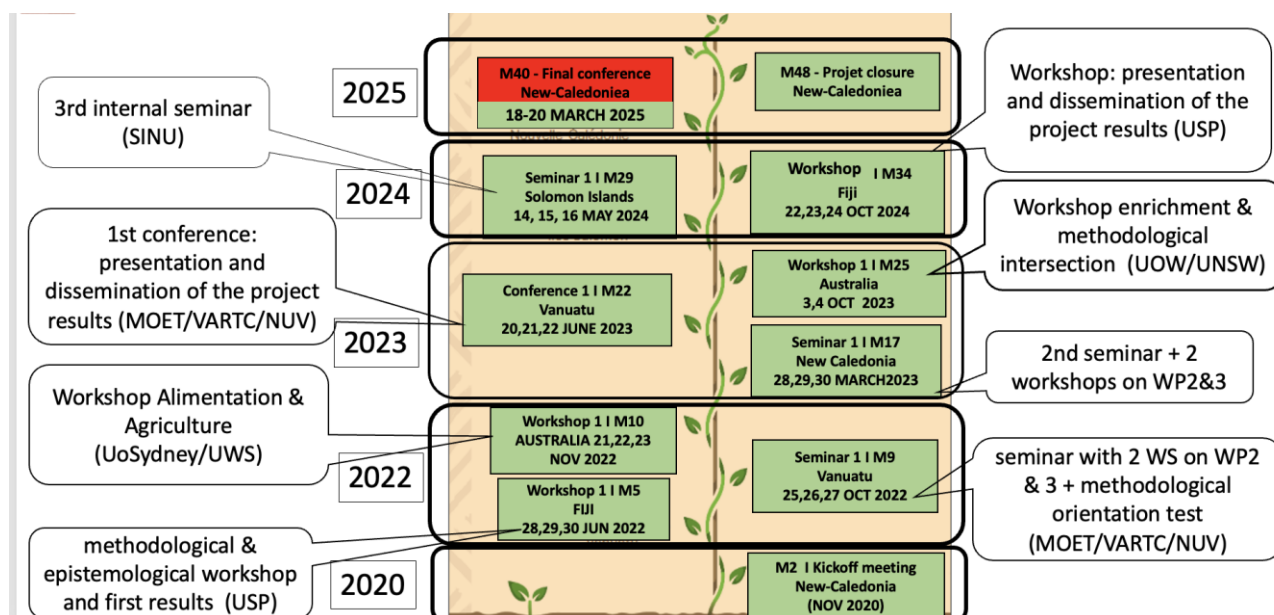


Figure 1: Schedule of the 11 FALAH scientific events

**Enhancing the potential and future career prospects of the staff members (Task 1.5)**

In March 2023, a one week [training session](#) was proposed by Dr Simar from the University of New South Wales to PhD students of FALAH consortium at the University of New Caledonia. Moreover, a second week for PhD students consisted to be trained by seniors to learn how to use [Redcap and Mysurvey solutions tools](#), prior to the workshop organised at the University of New Caledonia in March 2023 (<https://zenodo.org/records/13968076>) and at the University of the south Pacific in October 2024 (<https://zenodo.org/records/13942546>), to prepare quantitative studies to be implemented on the field and/or analyse data after the field part of the research. The training sessions enriched the skills of ESR and PhD students enrolled in the project.

**Developing new and lasting research collaborations, achieving transfer of knowledge between participating organizations and contribution to improving research and innovation potential at the European and global levels (Task 1.3).**

The strategy for a sustainable and lasting research collaboration inside the consortium continued on through:

\*The continuation of the supervision (by FALAH members from EU and the Pacific region) of 9 PhD students in WP2 and WP3.

\*Complimentary funds for mobility and research:

Funding from the EU (European Union)

Title of the project: CHANCES-Pacific: Climate cHange and the future of coAstal CommuNities: transformation of Lifestyle, livElihoods and Lifestyle in the South Pacific (RERIPA Call 3).

Dates: 2023-2025

Consortium: USP, SINU, NUV, MOET, UNC, IAC, USYD

Funding: 350 000 euros,

Main objective: Create living labs to understand (the future of) livelihoods and lifestyles of communities in the Pacific (Vanuatu, Fiji, Solomon Islands) affected by coastal vulnerabilities and sea-level rise and to identify solutions with and for communities that can improve livelihood and lifestyle.

Funding from the AUF (Agence Universitaire de la Francophonie)

Title of the project: AFC FALAH : action de recherche formation-cibl  (targeted training research action)

Dates: 2024-2025

Consortium: UNC

Funding: 20 000 euros,

Main objective: Fund non-eligible mobilities for PhD students' training, participate to FALAH events, research capacity building.

Project funded by the UNC Foundation (2024)

Title of the project: FALAH experimental educational gardens (Agricultural spaces and educational gardens in urban-rural transitions, environmental protection and healthy food education for the Caledonian population).

Dates: 2024-2025

Consortium: UNC – Association Partages en herbe – Arbotech – L'île aux abeilles – Direction de la Formation professionnelle Continue

Funding: 12 570 euros

Main objectives: Continue to support and promote the setting up of agricultural start-ups under the Pépîte NC scheme. Support agricultural-sportive practices and generalize the associated facilities to create socio-economic links between urban and rural New Caledonians of different generations. Disseminate and pass on good AP practices Raise awareness of agricultural production and promote the development of AP in schools to improve health and nutrition in New Caledonia.

\*Pursue the co-authoring of a series of papers to be published in the [Open research Europe journal](#) collection dedicated to the project and in other journal

\*Co-organisation of the project's scientific events:

- March 2023 : workshop 1 at UNC
- June 2023: [First conference at the Ministry of education and training presenting pilot experimentation 3](#)
- October 2023 : [workshop at the University of New South wales \(UNSW\) co-hosted by the university of Wollongong \(UOW\)](#)
- May 2024 : [Seminar 1 in Solomon Islands](#)
- October 2024 : [Workshop at USP](#)
- March 2025 : [Final conference at UNC](#)

As previously mentioned, we have developed in depth the strategy put to maintain a sustainable and lasting research collaborations outside the consortium to allow to other partners among Pacific islands to join our scientific events. This has been done through parallel projects funding mobilities and field work in other institutions in the Pacific. This was the case of CHANCES-Pacific: Climate cHange and the future of coAstal CommuNities: transformation of Lifestyle, livElihoods and Lifestyle in the South Pacific (RERIPA Call 3). The project aimed to understand (the future of) livelihoods and lifestyles of communities in the Pacific (Vanuatu, Fiji, Solomon Islands) affected by coastal vulnerabilities and sea-level rise and to identify solutions with and for communities that can improve livelihood and life-style.

### **Contribution of the action to the improvement of the research and innovation potential within Europe and/or worldwide (Task 1.4).**

As highlighted in the first progress report, the project's initiatives can play a key role in supporting the "Farm to Fork" strategy under Horizon Europe 2020. While the three challenges— socio-economic transition, climate change, and health crises—do not follow the same trajectory across Europe, they tend to evolve more synchronously in the Pacific region. Examining these dynamics offers valuable insights that can help shape European policy objectives and strategies.

### **Dissemination (Task 1.5)**

The dissemination strategy is maintained via social networks ([Facebook](#), [Twitter](#), [Youtube](#)) and [website](#) regarding all scientific activities. Next step, we will consider scientific dissemination from fields works from Vanuatu, Fiji and Solomon Islands. This part will continue on until the end of the project with connected networks (CHANCES Pacific Project, APY project from the University of Sydney). To ensure scientific dissemination, all members of the consortium can publish in the collection dedicated in [Open Research Europe Journal](#). Other ways to communicate science are welcome.

CORDIS platform is systematically updated: <https://cordis.europa.eu/project/id/873185>

### **Use of the results (Task 1.5)**

We are regularly solicited by different Medias ([TV](#), [Radio](#), [paper](#)) to present the project and share the results. This was applied in New Caledonia, Fiji and Vanuatu. Regarding scientific events, the main stream to communicate is through the project's [website](#). We have now a channel on Youtube to disseminate conferences and workshop when possible: <https://falah.unc.nc/fr/node/191>. Our communication strategy is both in English and French languages.

### **Expected impact (Task 1.5)**

Our project has a multi impact due to the proximity of populations and researchers. Indeed, our research outcomes are systematically published in and open access journal and shared in parallel in communities with booklets or flyers including main results written in English or in French (this is the case for the "jardins potagers" funded by the UNC foundation, during the night of Sciences a national event organized once a year). The restitution is done in communities by researchers with the presence of community leaders and/or policy leaders. This way stimulate exchanges and has a benefit for both researchers and participants to revitalize and improve family farming.

### **Quality of the proposed measures to communicate the action activities to different target audiences (Task 1.5)**

#### **Communication strategy (Task 1.5)**

We closely followed the strategy planned in the Grant Agreement with our website, and presence on social media, especially during the project's events (Facebook page and twitter account).

#### **Activities targeted at multiple audiences (Task 1.5)**

Between 203 and 2025 we were regularly solicited by different medias (TV, Radio, paper news) to present the project and share the results. This was the case in New Caledonia, Fiji and Vanuatu actually. Regarding scientific events, mean stream to communicate is our website. Our communication strategy is both in English and in French language.

### Inform and reach out to society (Task 1.5)

In July 2023, UNC attended the PIURN Conference in Cook Islands to communicate and disseminate our results as scientific coordinators of the project. Moreover, colleagues from the FALAH consortium will individually and collectively contribute and present research from FALAH. FALAH coordination was very attentive to communicate for and with society, this was the case during the night of science, an annual national open event with society (families, schools, communities) where we shared advances of the project. In parallel of each workshop and conference, we organised public conferences to disseminate largely.

### Expected impact (Task 1.5)

The expected impact on revitalization of family farming and on a healthy lifestyle in Pacific communities is aligned with expectations of Pacific societies that faced to Climate Change, and to the sanitary crisis between 2020 and 2022 and their differed impacts that increased vulnerabilities of people. Our results regarding small scale agriculture, family farming observed in the Pacific region could be useful to understand future ways of family farming in big cities in Europe where populations will have to adapt themselves to the growth of citizen, the climate change, being resilient to pandemics. In fact, all what are facing Pacific countries and territories. These impacts can be observed in academic publications, with communities/societies and mostly for public policies where we addressed our first results.

Work Package	Description of work and role of partners	Evolution of the task	Summary of the main achievement	Contribution of the secondments to the task
WP 1	Task 1.1: Project coordination (Leader: UNC, Contributors: all partners)	Task 1.1: Ongoing	Preparation of scientific events and PhD training sessions Helping researchers (especially ESR) with the linkage of their secondments with WP objectives	N/A (management tasks are not eligible for secondments)
	Task 1.2: Project management and governance (Leader: UNC, Contributors: WP leaders)	Task 1.2: Ongoing	Annual General Assembly weekly UNC coordination meeting, etc	General assembly are juxtaposed to FALAH events so secondees that are members of the GA can attend.

	Task 1.3: Internal communication (Leader: UNC, Contributors: all partners)	Task 1.3: Completed	Public website regularly updated Teams group used for the exchange of information and internal documentation(templates, reports, agreements).	N/A (management tasks are not eligible for secondments)
	Task 1.4: Kick-off and other periodic meetings (Leader: UNC, Contributors: all partners)	Task 1.4: Completed	Seminars and conferences management : 5 FALAH scientific events completed:  *March 2023 : seminar 1 at UNC  *June 2023: First conference at the Ministry of education and training presenting pilot experimentation 3  *October 2023 : workshop at the University of New South wales (UNSW) co-hosted by the university of Wollongong (UOW)  *May 2024 : Seminar 1 in Solomon Islands  *October 2024 : Workshop at USP  * Final conference at UNC in March 2025	(attendance as part of secondments) = 26,54 PM
	Task 1.5: Reporting	Task 1.5: Ongoing	- control and securing of the produced internal and external Deliverables' quality; - control regarding the work and the accordance to the specified project tasks and objectives; - regular contact with the EU Project Officer to report project activities;	N/A (management tasks are not eligible for secondments)

## **WP 2 performed secondments: 60.38 PM**

### **WP 2 Achievements/results and conclusions**

**Task 2.1"** Biophysical environmental dimensions of family farming: 1) comparative assessment of the efficiency of family farming related to soil quality 2) adaptation of family farming to natural hazard including climate variability

Regarding Tasks 2.1, 2.2 and 2.3, the leaders and team did several research works in different countries and contexts across the Pacific.

In Fiji, a PhD student C.Y Amato-Ali from USP (5 PM) and his supervisors Dr Hilda Sakakitiwaka (1,90 PM) and team worked on "Comparative assessment of food losses and climate risks in the dairy farming system between Fiji and Australia". Postharvest loss in dairy farming systems between Fiji and Australia remains a significant challenge that affects food security and the livelihoods of farmers. This paper provides a comparative assessment of food loss in dairy farming systems between two geographically distinct regions: Fiji and Australia. The paper looks at key factors contributing to food loss in dairy farming systems on-farm and post-harvest in developing country Fiji and compare these factors to a large, developed country Australia, the extent to which climate and environmental conditions influence food loss within dairy farming systems in both countries and provides a comparative analysis of dairy farming practices in Fiji and Australia and recommendations for best practices. On farm and postharvest data were gathered through interviews, surveys, and field observations, examining production practices, infrastructure, milk handling and storage and transportation. Study sites in Victoria, Australia and Tailevu, Fiji was selected based on accessibility- based selection. A total of 30 Fijian farmers were surveyed with 10 Australian farmers undertaking key informant interviews using Kobo toolbox. Climate data was collected through dairy Australia and Fiji weather meteorological service climate portals and analysed using excel, ANOVA and R-Software. Food loss is reported both on-farm, particularly in feed production and infrastructure limitations, and post- farm, primarily due to transportation challenges. The vast number of primary resilience challenges in Fiji include sourcing and growing feed, introducing appropriate livestock breeds, access to veterinary services, and strengthening dairy structures on farm whilst large-scale farms in Australia face far lesser issues mainly around infrastructure and high-quality feed procurement. The findings of this study are crucial for developing region-specific strategies to reduce food loss in dairy farming in Fiji and Australia, supporting food security, economic stability, and the sustainability of dairy production between both regions.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.2 (Socio-economic aspects). This research quantifies food losses and climate-related risks in dairy family-farming systems, informing environmental constraints/adaptation and the livelihood/food-security implications.



Another work done in Fiji by Dr F Thomas from USP (0 PM, field of research in his country) called: "Filling an empty shell": Knowledge, practices, constraints and nutritional perspectives related to reef-fishing activities in Pacific". Shellfish gathering has long been a mainstay of Pacific Island subsistence practices. The importance of this form of reef gleaning can be gauged by studying the long-term trends and patterns seen in the archaeological record, especially in relation to the Lapita migrations in Near- and then into Remote Oceania more than 3,000 years ago. In recent historical times and contemporary settings, shellfish continue to contribute a significant portion of rural communities' diet. Yet, these activities have not been well documented compared to fishing. This may be attributed to the role of women in gathering, who are often perceived by local officials and external partners as marginal in the overall contribution to protein and micro-nutrient intakes. Another factor for the relative neglect rests on the assumption that gathering does not require any special skills or knowledge of environmental cues (with the exception of tidal cycles), in contrast to the techniques used in fishing. Detailed observations of shellfish gathering activities, together with a selected literature review, aim to fill some of the gaps pertaining to decision-making in the extraction of largely sedentary inter-tidal resources. While food preferences need to be contextualized culturally, it is also argued that a human behavioral ecology framework can increase our understanding of patterns of harvest effort. Field methodology used to evaluate predictions of foraging models include observations on the targeted and actual shellfish harvested, search time, harvesting (processing) time, rate of encounter, as well as meat weight and general weather and tidal conditions insofar as these are relevant to the foraging process. Analytical methodology comprises information derived from time-motion records. It is demonstrated that variable returns can be correlated with gatherers' experience in the process of locating and gathering shellfish, as well as environmental constraints. Additional constraints, including over-harvesting for commercial purposes and the impact of Climate Change, may force an expansion of Diet Breadth, which could benefit from more detailed analyses of the nutritional value of various shellfish species.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.2 (Socio-economic aspects); Task 2.3 (Agricultural production in the environment and exchanges). This

research documents subsistence reef-gleaning practices, environmental cues and constraints (incl. climate/overharvesting) and their role in local diets and resource exchanges.

In New Caledonia, Dr Drouin from IAC (1 PM), Dr Bouard (1.57 PM), Mr Brouillon (2.23 PM) worked on “Agrobiodiversity in family farming in Oceania – a case study in Maré (New Caledonia) and Wallis and Futuna. In Oceania, family farming plays a predominant role in the subsistence of populations and plays a major role in maintaining a high level of biodiversity in cropping systems. The aim of this study is to assess agrobiodiversity in two island territories: one located in the Polynesian cultural area of Wallis and Futuna and the other Melanesian on the island of Maré in New Caledonia. About sixty surveys were conducted with the help of local agricultural services in both territories. These surveys consisted of questionnaires with farmers, supplemented by field visits to identify the species and varieties grown. The study focuses on three main traditional species: yam, taro, and banana plants. Both territories share a rich cultivated agrobiodiversity and agriculture focused on self-consumption and cultural traditions. The study shows that traditional plants, such as yam, are essential for local diets. In Maré, yam is the most diverse crop, with nearly 32 varieties per farmer. We also identified several types of fields defined by the main cultivated species. In Wallis and Futuna, yam and taro are central, with nearly 55 varieties per farmer. The introduction of new varieties compensates for the disappearance of some older ones, especially in Wallis and Futuna, where these crops are integrated if they provide added value without disrupting traditional agricultural systems. This work is based on an inventory of traditional species and varieties grown for food and ceremonial purposes. It constitutes a database on the diversity of crops on these islands, their functions and the factors influencing their evolution.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.2 (Socio-economic aspects). This research inventories crop diversity and traditional cropping systems supporting self-consumption and cultural food security; provides biophysical baseline on cropping practices and varieties.



**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.2 (Socio-economic aspects); Task 2.3 (Agricultural production in the environment and exchanges). This research connects environmental restoration practices and innovations to family-based livelihoods (seed collection/nurseries) and dissemination of best practices.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.2 (Socio-economic aspects). This research builds evidence on under-utilised edible plants (agrobiodiversity) and barriers to dietary integration to support sustainable nutrition.

In Solomon Islands, D Shadrech (0 PM, field of research in his country) worked on “The influence of ENSO on the rise of equatorial waters in the Pacific and fishing”. Upwelling is a physical mechanism in the ocean that feeds the upper ocean with deep cold, nutrient-rich water that leads on to the subsurface ocean productivity. El Niño, on the other hand, is a climate phenomenon in the tropical Pacific by which we expect equatorial upwelling to ‘shut down’. However, despite its importance in fisheries and ocean productivity, pacific equatorial upwelling receives little attention scientifically even more so is the lack of understanding of how Ekman upwelling is influenced by El Niño Southern Oscillation (ENSO) in the Equatorial Pacific (EP). This work aims to investigate whether the suppression of Ekman upwelling during El Niño events still holds true in the Equatorial Pacific. This would lead to hiatus supply of fisheries food. For this study, we use Sea Surface Temperature (SST), zonal and meridional surface wind (10 m above sea level) from Era5 reanalysis dataset from Copernicus as proxies to compute Ekman suction/pumping in the EP coupled with SST anomalies as signals to decipher its spatial and temporal distribution in the Pacific during El Niño period since 1960 to date. From the study we have uncovered that the equatorial downwelling during El Niño is balanced by the low to higher latitude upwelling especially along where pacific islands sit. Additionally, the coastal upwelling along the west coast of North and South America also contributes to balancing out downwelling in the equatorial Pacific during El Niño period. This is justified by the balancing of intensification of upwelling in the lower and higher latitude sub-EP region during El Niño period with downwelling along the same region. Consequently, this would mean less disruption to fisheries supply and promotion of sustainable and steady food security for the Pacific Island nations.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.3 (Agricultural production in the environment and exchanges). This research assesses climate variability mechanisms affecting marine productivity and fisheries supply, relevant to environmental hazards and local provisioning

Regarding Task 2.1" Socio-economic aspects: 1) SWOT of population dynamics of family farming; 2) Place of family farming in the poly-activity; 3) Role of family farming for cultivated biodiversity including starchy food; 4) Family farming and access to market; the leaders and team did several research works in different countries and contexts across the Pacific.

SINU team with C Cheon (0 PM, field of research in his country) and team did research (CHANCES Pacific) regarding the “Migrating to the town: changing diets and lifestyles in Lord Howe settlement, Honiara”. The Solomon Islands, and in particular urban communities such as the Lord Howe Settlement in Honiara, the focus of this presentation, are experiencing significant changes due to migration, urbanization, and environmental challenges. As people move to Honiara, their lifestyles and eating habits are changing. Urban residents are increasingly relying on processed foods, contributing to a rise in non-communicable diseases. Women, in particular, face food security issues, limited land access, and shifting social dynamics, creating a gap between food practices followed in the past in inhabitant’s home island of Ontong Java and the realities of city life. Case studies, like those involving Sikaiana migrants, show that while community institutions help preserve social connections, economic and social uncertainties remain. Based on research conducted within the framework of the RERIPA CHANCES-Pacific, this presentation will explore how migration and urbanization are interrelated with lifestyles and diets in the Lord Howe Settlement. It will examine the shift towards a reliance on processed foods and evaluate this dietary pattern in relation to the Pacific guidelines for a healthy living, along with broader lifestyle shifts, including social and economic changes. A mixed-methods approach will be used, combining qualitative data from interviews and focus groups with quantitative survey data. Participants will include a diverse range of residents to capture different viewpoints. Data will be collected in collaboration with the Solomon Islands National University to ensure cultural relevance. The research seeks to enhance our understanding of how migration and urbanization impact diets and lifestyles in coastal communities. Its findings will provide insights that can support the development of policies and strategies to promote sustainable practices, improve the well-being of urban coastal populations in the Pacific, and strengthen cultural resilience and adaptation.

**Task linkage (WP2):** Task 2.2 (Socio-economic aspects). This research examines migration/urbanisation drivers of dietary and lifestyle change, access constraints and socio-economic vulnerabilities affecting food practices.

In Fiji, J Tuilavuka (0 PM, field of research in his country) from USP, Dr Pascht from Kula (5 PM) and team worked on “Shifting perceptions of diet and nutritional practices in Fiji: a case study of Nadoi village, Rewa.” In Fiji, dietary patterns are undergoing significant changes, particularly in rural communities like Nadoi Village in Rewa. Diets regarded as traditional, once rich in locally produced staples such as taro, breadfruit, and fish, are increasingly replaced by ultra-processed, imported foods. This shift contributes to rising rates of non-communicable diseases (NCDs) and diminished cultural food practices. Research shows that these dietary transitions are driven by socio-economic factors like globalization, urbanization, and the availability of processed foods. Based on research conducted in the framework of the RERIPA CHANCES-Pacific project, this presentation looks at how the residents of Nadoi perceive these changes, identify the socio-economic and cultural factors driving them, and assess their health implications. Drawing from similar findings in small island developing states (SIDS), such as the role of affordability and accessibility in food choices, this presentation will discuss furthermore the possibility of culturally informed solutions. As Burkhart et

al. (2021) suggest, addressing these challenges requires empowering local communities to preserve 'traditional' diets while improving health outcomes. Residents of Nadoi are anticipated to perceive 'traditional' diets as a cherished aspect of their cultural heritage, representing local identity and community values. However, current dietary practices, dominated by processed and imported foods, are likely viewed as more practical and cost-effective due to changes in socio-economic conditions and food accessibility. These shifts in dietary patterns are expected to result in nutrient deficiencies and an increased prevalence of non-communicable diseases (NCDs) such as diabetes and hypertension. The findings will provide insights into how these perceptions and health outcomes reflect broader socio-economic and cultural drivers, addressing the research questions and emphasizing the importance of balanced strategies to preserve 'traditional' diets while improving health outcomes.

By focusing on Nadoi Village, this presentation will provide localized, culturally sensitive insights that can inform broader public health interventions and promote sustainable, healthier food practices across Fiji.

**Task linkage (WP2):** Task 2.2 (Socio-economic aspects). This research analyses socio-economic and cultural drivers of dietary transition and perceived health implications, relevant to adaptation strategies at community level.

Regarding Task 2.3. Agricultural production in the environment and exchanges: 1) produce of agriculture and fisheries in interfamilial, tribal and regional exchanges, 2) linkage of knowledge and networks (old and new) in production dynamics, 3) access to local produces and competition with imported produces (ex : rice), 4) innovation and peasant agriculture : ecological amplification; the leaders and team did several research works in different countries and contexts across the Pacific.

In New Caledonia, Mr Jean-Marie PhD student (0 PM, field of research in his country) and Dr Sabinot (1.20 PM) both from IRD and their team worked on "Knowledge flow to adapt to climate change: the case of Vanuatu and New Caledonia". This work examines the construction, circulation and articulation of local knowledge in the face of the challenges posed by climate change in Vanuatu and New Caledonia. In the face of environmental and climate upheaval, the farming practices and know-how of the communities on these islands are essential to understanding their adaptation strategies. Field surveys were conducted in the south-western and eastern regions of Santo Island, Vanuatu, to analyse the main agricultural practices observed, while taking into account the socio-cultural and environmental dynamics that frame them. Additional light will be shed on New Caledonia, in order to compare and enrich the observations. The processes of learning and transmission of agricultural practices has been done, by describing some of the local adaptation strategies developed by communities to cope with climatic hazards. The exploration of the dynamics of knowledge circulation by tracing the flow of exchanges between stakeholders before, during and after the passage of cyclone Harold in April 2020 will be done later.

**Task linkage (WP2):** Task 2.1 (Biophysical environmental dimensions of family farming); Task 2.3 (Agricultural production in the environment and exchanges). This research studies knowledge

construction/circulation to adapt farming practices to climate hazards, including stakeholder exchanges and learning processes.

In Vanuatu, Ms Fernandez, PhD student (4.2 PM), Dr Caillon (1.4 PM), Dr Banos (1.03 PM) all from CNRS and team developed this topic: “From food security to food desirability: exploring the symbolic and relational values of food”. The aim of this work is the integration of relational and symbolic values of food into the analysis of the current food transition on Epi, Vanuatu. As elsewhere in the Pacific, the increased consumption of processed and imported foods notably lead to the rise of non-communicable disease and further the insertion into formal economy (Savage and al., 2020). Although the idea that foods are “good to think about” is not new (Barrau, 1983), it deserves to be re-examined in the light of global climatic and socio-economic changes, where the focus is usually placed on the risks of food scarcity. The concept of food security could carry a decontextualized, individualized and restrictive vision of food (Wittman, 2011; Hayes-Conroy, 2013). However, food is far from consisting of the sole satisfaction of a basic biological need, but also supports unique system of representations and relationships that link people, more-than-human beings and land together (Mitchell and al., 2020). As such, dietary transitions, not necessarily determined by environmental drivers (Lebot and Siméoni, 2015), are also in-depth cultural transitions. It is then about paying attention to the way in which food is thought locally. What are the values attributed to foods according to their origin, their mode of acquisition and preparation? Which foods or culinary processes are associated with physical and spiritual health? How the introduction of exogenous foods, practices, or policies recompose this system? How, in highlighting the gap between discourse on what an ideal diet should be and observed dietary practices, the daily constraints influencing food choices can emerge? The qualitative data come from a three-month immersive fieldwork and was produced by participant observations, daily informal discussions supplemented by semi-structured interviews conducted with six men and four women between 29 to 57 years old, and focusing on food acquisition and production strategies, food preferences as well as representations related to food. These preliminary results seem to highlight the impregnation of successive prevention campaigns, carried out by the State or by partner NGOs, in which the place of processed foods varies: foods can be valued for their origin, or considered by their function. In this case, residents are encouraged to consume “tri kaen kakaé” meals (with starchy foods, vegetables and animal proteins), in which processed foods can then be considered components of a healthy diet. Ancestors’ food is alternately valued for its ability to shape strong, healthy bodies and for its adaptation to an uncertain environment; or discredited, envisioned as a mark of backwardness. Another interesting divide emerges between the cuisine of the “blakman” and that of the “waetman”, which are distinguished in particular by their texture (strong/soft), their vitality and the range of flavors produced (by nuances or by contrasts). By examining in detail what foods, meals, and culinary practices mean for those who consume or practice them, it is possible to outline their aspirations beyond nutrition: what relationships should be cultivated, and then, what futures are desirable. These results can therefore be instructive for imagining appropriate policies.

**Task linkage (WP2):** Task 2.2 (Socio-economic aspects). This research explores symbolic/relational values shaping dietary transitions and socio-economic constraints that influence food choices and policy relevance.

These research works interconnected to WP2 (also WP3 and 4) are, for some of them, in preparation for publication and will be subject to be presented in seminar and conferences and underline the importance of biophysical environmental dimensions of family farming in the Pacific region

WP 2	Task 2.1: Biophysical environmental dimensions of family farming (IAC)	Task 2.1: Completed	Task 2.1: Gather and summarize knowledge on cropping practices, consumption, innovation and the dynamics of family farming	16.14 PM
	Task 2.2: Socio-economic aspects (IRD)	Task 2.2: Ongoing	Task 2.2: Improve understanding of how family farming functions through ecological, economic, sociological and spatial dimensions and how it adapts to the environment	28.08 PM
	Task 2.3: Agricultural production in the environnement and exchanges (CNRS)	Task 2.3: Ongoing	Task 2.3: Agricultural production in the environnement and exchanges	16.16 PM

**WP 3 performed secondments: 23.25 PM**

**WP 3 Achievements/conclusion**

For the period of February 2023 to February 2025, the WP3 has been deployed on different fields of research (SI, Fiji, Van, NC) and in different ways linking, family farming, diet, physical activity and health outcome in young and adults, in rural or urban areas and has a particular interest on cultural and environmental singularities. So, different works have been done and linked to Task 3.1, 3.2 and 3.3 and in inter relation with WP2 and WP4.

Concerning Task 3.1: Food and socio-cultural environment, worked presented below came from Vanuatu, Fiji and Papua New Guinea

In Vanuatu Dr A Pascht (0 PM for this Task) NUV and team worked on CHANCES Pacific project “Livelihoods and lifestyles in coastal communities of the Pacific islands: new research perspectives with living laboratories. As a research project of the current RERIPA Call 3, aiming to develop living labs in the Pacific region, CHANCES-Pacific looks at livelihood, lifestyle and health in the context of changing lifeworlds and environments among six communities in Fiji, Vanuatu and the Solomon

Islands affected by sea-level rise and coastal erosion and/or flooding. This presentation discusses the innovative approaches taken in this project and focuses on the content-related perspectives as well as on the methods by referring to the current research process and first insights.

In the six coastal communities, the project investigates family farming, diet, physical activity, as well as key aspects of transforming sociality, economic factors and environment(s) together with community members' ideas and perspectives regarding changes in these practices and processes. From quantitative and qualitative methods, data will be triangulated to determine interconnections between those practices, processes and ideas. Among other tools, a digital app for assessing diets (iRecall.24) and a digital questionnaire are used together with a digital platform to support data collection and analysis with individual recommendations to be generated.

An important framework for the project is the idea of living labs, realised as co-development of the research by participation and co-design with the members of the communities during the research process. This allows a collaborative approach which includes the sharing of knowledge at all stages between the partners involved and is directed towards the co-creation of research findings and adapted responses to local challenges which the communities face.

**Task linkage (WP3):** Task 3.1 (Food and socio-cultural environment); Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research investigated links between family farming, diet and physical activity in coastal communities using mixed methods and co-designed living labs



In Fiji, J Prasad (0.97 PM), a PhD student from USP, worked on “Community participation and policy evaluation in the EbA framework for enhancing resilience and food security”. The Pacific Island countries, like Fiji and Vanuatu, faced significant challenges due to climate change. It threatened their food security, increased the risk of natural disasters, and impacted the livelihoods of those relying on natural resources. This study examined how community involvement and government policies could improve Ecosystem-based Adaptation (EbA) to enhance food security and resilience. It highlighted the need for greater community awareness, supportive policies, and empowered communities to manage their resources. It also focused on specific food security variables, such as

the availability of diverse foods, physical and economic access to these foods, adequate utilization of food items, and strengthening the stability of food systems. The study assessed the barriers that limited community participation in EbA, such as limited understanding, lack of funding, inadequate policy support, and the need for training and capacity building to empower local communities. It also aimed to evaluate current national policies and identify gaps that hindered the success of EbA projects. The research used surveys, interviews, group discussions, and the transect walk method with community members, stakeholders, and policymakers, along with a review of existing policies and literature. Site-specific observations, were used to map local food systems and understand the context-specific dynamics of community participation. The objective was to understand the factors that helped or hindered community participation in EbA, identify policy gaps, and provide recommendations to ensure better community involvement and alignment of policies with community needs, including enhancing their capacity for decision-making, implementation, and monitoring of EbA measures. The findings were intended to be useful for policymakers, practitioners, and researchers working on climate adaptation, food security, and sustainable development.

**Task linkage (WP3):** Task 3.1 (Food and socio-cultural environment). This research analyses community participation and policy gaps affecting food security/resilience, connecting livelihoods and sustainable adaptation to health-related outcomes.

In PNG, D Saka (0 PM since PNG was a bridge of FALAH consortium including complementary funds from French foreign affairs minister) from the University of Goroka (bridge FALAH with Pacific fund from French foreign affairs minister) worked on “the evaluation of food gardening and approaches used by agricultural extension workers to promote traditional vegetables for community food security in the Kompiam district of Enga province, Papua New Guinea.” The Evaluation of food gardening and approaches used by agriculture extension officers to promote traditional vegetables for food security in village communities in four local level government council areas of Kompiam Ambum district, Enga Province of Papua New Guinea were investigated and evaluated. The purpose was to find out the food gardening systems, roles and values of indigenous vegetables in the societal cultures, food security, nutrition and income regarding indigenous vegetables and to discover how extension services are provided to the farmers in relation to the types of indigenous vegetables that were farmed in the district. The study was conducted through survey questionnaires, physical observations and face to face farmer interviews. Village famers, extension agents and high school and health center staff participated. The village farmers responded that they have more than two gardens in which multiple cropping is practiced to sustain family livelihoods. All farmers grow same kind of indigenous vegetables such as sweet potato, yam, taro, banana, sugarcane, pitpit (*Setaria palmifolia*), *rungia klossi*, *oenanthe javonica*, bread fruit, pandanus and sago in their gardens despite climate changes and soil types. Farm gardens vary from farmer to farmer and rely on geographical features of the land forms with various sizes and shapes in valleys along rivers and towards the mountains. Farmers’ annual incomes lie between K120 to

K600 except for the farmers from Wali Tarua and Yengis LIGs who do not have any established market access. Indigenous vegetables are traditional valued for barter trade, cultural ceremonies, donations, exchanges, balanced meals wealth and fame. Responses from the extension agents revealed that there are no records of indigenous vegetables in their files but they can identify them. Enhancement of students learning in high schools and recovery of wounds and healing in health center are identified as great benefits of the use of indigenous vegetables.

**Task linkage (WP3):** Task 3.1 (Food and socio-cultural environment). This research documents household food-gardening systems, indigenous vegetables and cultural/food-security functions, relevant to lifestyle and well-being.

Concerning Task "3.2" Lifestyle in family farming, presented works have been done in New Caledonia, Fiji, Vanuatu.

In New Caledonia, C Vuillod from Pacific Food Lab developed their concept on "Pacific Food Lab, a key player in the food transition in New Caledonia and the Pacific." The Pacific Food Lab has established itself as a key player in the food transition in New Caledonia and the Pacific. Driven by an ambitious vision of sustainable and resilient food, the cluster is committed to federating local and international initiatives to meet the environmental, economic and social challenges linked to food. Through a participatory and multidisciplinary approach, the Pacific Food Lab has led concrete actions aimed at transforming food practices while respecting Pacific cultural identities. The Pacific Food Lab relies on a participatory methodology to co-construct solutions adapted to the realities on the ground. Working with scientists, canteen chefs, educators and local communities, the cluster develops educational and operational tools to promote more equitable and environmentally-friendly food systems. As part of the FALAH project, the Pacific Food Lab worked hand-in-hand with researchers and practitioners to promote family farming as a central pillar of the food transition. These partnerships have made it possible to document and share traditional know-how, while integrating modern approaches to strengthen the resilience of food systems in the Pacific islands. Pacific Food Lab's work extends beyond New Caledonia. As part of a regional dynamic, the cluster aims to become a benchmark for other island territories facing similar challenges. The cluster's initiatives are based on the principles of circular economy, biodiversity preservation and community empowerment. These principles are at the heart of a global food transition, which positions Pacific territories as innovation laboratories for the world. The FALAH end-of-project conference is a unique opportunity to celebrate these successes and strengthen synergies to continue writing this collective history.

**Task linkage (WP3):** Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research translates research into practice through participatory tools to shift food practices and strengthen food-system resilience, relevant to lifestyle change.

G Wattelez UNC (3.83 PM) and Team worked on “Physical activity behaviour of adolescents living in the Pacific Island countries and territories (PICT) and its association with weight status: cross-sectional study using accelerometry assessment in New Caledonia.” Pacific Island Countries and Territories (PICTs) have undergone rapid socio-economic transition, especially since the middle of the 20th century. Globalization induced important modifications in terms of islanders’ lifestyle. From a rural way of life, mainly based on agriculture and its rhythms on daily life, many of them tend now to have a modernized urban way of life that is closer to a Western lifestyle. This transition has had an impact on nutrition since the access to processed chip food is easy compared to what have to be done to produce food in a traditional system. The impact has also been seen on physical activity (PA), which was practiced naturally and regularly as a result of the traditional way of life. As a consequence, islanders’ health has suffered from these lifestyle changes, especially regarding non-communicable diseases and the associated factors including overweight and obesity.

The aim of this study is to: 1) assess PA behavior of adolescents living in a PICT with objective measures; 2) identify components of PA that are the more associated with adolescents’ weight status; 3) compare with studies that have previously study similar populations. Data processing regarding the selection of variables is yet ongoing but it seems that the place of living (i.e., rural and urban) and indicators about light PA and (probably) sedentary times are the most predictive for IOTF z-score. The results we expect from this study would contribute to better understand which components of PA are to be targeted in education or intervention program to tackle the overweight and obesity pandemic in the Pacific.

**Task linkage (WP3):** Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research provides objective evidence on adolescents' physical activity patterns and links with weight status to inform interventions on lifestyle and health.



Pr C. Caillaud (0 PM since Australia was not eligible for secondment but included in the FALAH consortium) from the University of Sydney and her team worked on “Empowering

adolescents through participatory research: a case study in New-Caledonia. “Behavioural risk factors for NCDs are highly prevalent in the adolescent population with several risk factors often present together in adolescents. For example, in the Pacific region 88% of adolescents

present at least two risk factors, with the more prevalent cluster being physical inactivity and low fruit and vegetables (76%). Despite decades of public health initiatives low physical activity and poor diets remain an issue. There is a need to identify key levers that can shift behaviours and diets.

Our recent systematic review investigating facilitators and barriers for PA in the Pacific Islands showed that PA or sport programs that are committed to communities through formal co-design partnerships were needed. This project aims to empower adolescents to advocate and innovate for their health and wellbeing. Young people themselves want to be involved, and their participation is a human right exemplified in the Lansdown 22 / 30 UNICEF framework for adolescents' participation. It is crucial to engage young generations in the debate to collaboratively identify research priorities and to engage in co-designing research projects and innovative solutions for the future. This project addresses the lack of participatory research involving adolescents for the prevention of non-communicable diseases, specifically in the Pacific. The objectives of the project are to: 1) conduct a participatory research workshop with adolescents to co-design solutions that encourage healthy lives and wellbeing and 2) co-produce research outputs and 3) assess the impact of their involvement in participatory research on their sense of leadership and societal impact. This project received ethics approval from the University of Sydney ethics committee and from the Commite de Protection des Personnes de Nouvelle-Calédonie. Year 8 students attending participating school were invited to participate the research as collaborators “Recherche-Action Junior”. During a 2-hour structured workshop, adolescents engaged in co-design and co-production activities to develop either an advocacy statement (Change makers) or an innovation (Innovators) in small groups. They produced a 1-min video about their idea including scientific evidence. Participating adolescents completed a questionnaire asking if the activities enhanced their self-efficacy and leadership skills. Adolescents were offered 3 packages in each theme (either Change Makers or Innovators) including solutions about facilitated access to sport facilities or equipment, encourage water rather than soft drinks, sport festivals, smart shoes, apps, phone lock functions.

Participatory research is powerful way to engage with adolescents and to co-design solutions and research output that aim for an impact in their community for people like them.

Task linkage (WP3): Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research showed how co-designs youth-led solutions can improve diet/physical activity and assesses empowerment, supporting intervention-oriented lifestyle research.

In New Caledonia, M Urvoy (0.6 PM) PhD student at UNC and team worked on “Barriers and facilitators of physical activity among adolescents in the multicultural context of New Caledonia and in Vanuatu”. Physical activity (PA) among adolescents is an essential component of overall health and well-being. Unfortunately, 80% of the world's 1.2 billion adolescents do not meet the WHO's

daily recommendations in terms of MVPV, with significant differences depending on age, sex and region of the world. The lack of physical activity is particularly marked in the Pacific region. Among adolescents aged 11 to 17, 89% of boys and 95.6% of girls do not meet the WHO's daily recommendation of 60 minutes of physical activity. In New Caledonia, the population is largely sedentary. Declarative surveys have shown that 66% of adolescents engage in some form of physical activity. This lack of physical activity is a recognized risk factor for the development of obesity including in adolescents, as well as for non-communicable diseases. It is therefore a priority to understand the barriers and factors that encourage physical activity among adolescents. Very recently, Arlinghaus et al. developed a framework to understand barrier and facilitators in adolescents and their socialization including barrier subscales with social, environmental, competing interests; and facilitator subscales with family support, enjoyment and socialization. This framework is particularly adapted to New Caledonia where different social dimensions include Kanak, European, Polynesian, Indonesians, Ni-Vanuatu, Vietnamese communities. The aim of this study is to understand the effects of gender, place of residence on barriers (Screens, Social barriers, Environment barriers) and facilitators (Family support, Socialization, Enjoyment) of physical activity (PA) among New Caledonian adolescents in school context. A better understanding of the factors influencing New Caledonian youth within their living ecosystem rural or urban will enable us to provide better support for educational initiatives aimed at combating physical inactivity and its harmful consequences for lifestyle and health. Similar approach has been used for Vanuatu adolescents.

**Task linkage (WP3):** Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research identifies determinants of adolescent physical activity across cultural contexts to tailor education/interventions.



In Australia, at the University of Sydney, Dr J Chen (O PM, since Australia was not eligible for secondment but included in the FALAH consortium) and team worked on “Barriers and facilitators of healthy eating and opportunity of digital technology solutions: perceptions of urban and rural schools in New Caledonia”. Poor diets contribute to the rising obesity rate (25%) among New Caledonian adolescents. While digital technologies are prevalent, little is known about how New Caledonian adolescents access online health information or how technology could support healthier

diets. This study aimed to identify barriers and facilitators to healthy eating and explore the potential of digital solutions. A mixed-methods, participation-based approach was used. Year 7-10 students from three New Caledonian schools (two urban, one rural) completed online surveys on nutrition and digital technology use. They then participated in group workbooks discussing diet-related barriers, facilitators, and technology's role in supporting healthy eating. Data were analysed using descriptive and thematic analysis. 146 adolescents (aged 12-15) participated – 34% from rural schools and 45% female. Group research included 18 groups. Individual barriers to healthy eating included lack of motivation, cravings, and emotions, while facilitators included avoiding illness, maintaining strength, and improving appearance. External barriers included high costs of healthy foods, availability of unhealthy options, social influences, and advertising, while external facilitators included reducing unhealthy nutrients and parental influence. Technology was seen as both a barrier (e.g., excessive screen time) and a facilitator (e.g., educational tools like TV recipes). Digital technology was proposed to support healthy diet adoption by providing encouragement, access to information and education. Among participants, 89% had personal digital devices and primarily accessed health information via YouTube, TikTok, and Instagram. High digital technology use presents an opportunity to provide reliable health education and motivation. Social media campaigns promoting positive dietary behaviours could help counteract external barriers and support healthy eating among New Caledonian adolescents.

**Task linkage (WP3):** Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research identifies determinants of healthy eating and assesses digital solutions to support diet change in school settings



In Wallis and Futuna, S Bertrand (O PM, since Pacific community was not eligible for secondnet but included in the FALAH consortium) PhD student at UNC and team worked on “MOVE Ô: study of children’s lifestyles in Oceania”. Childhood obesity is a major public health concern in the Pacific Islands, where over 50% of adults are overweight and non-communicable diseases account for over 80% of deaths. However, few data are available on children's stature, and very few studies have focused on the determinants/risk factors that may explain this overweight. The MOVE Ô study aims to describe the lifestyle (physical activity, sleep, and diet) of Oceanian children using qualitative methods (biometric measurements, digital application, accelerometers, self-administered questionnaires, direct observation) and quantitative methods (individual interviews). The pilot phase was conducted with 10-year-old children from Wallis and Futuna, their parents, and teachers

to gain a comprehensive understanding of the children's lifestyle as well as the environment in which they grow up (school, family, and community settings). The findings highlight a level of physical activity well above the WHO recommendations for this age group and the presence of numerous sports facilities in proportion to the size of the territory. The students' sleep duration is barely sufficient (an average of 9 hours), and screen use appears to be controlled. However, the study reveals a highly unvaried diet, with an almost complete absence of fruit and vegetable consumption. Additionally, 34% of the children surveyed are obese. Sufficient physical activity alone is not enough to compensate for an inadequate diet. A more in-depth study of dietary patterns is necessary to develop more effective prevention strategies and guide public policies to ensure a healthier future for children.

**Task linkage (WP3):** Task 3.2 (Lifestyle in family farming (diet and physical activity)). This research characterises children's lifestyles (diet, PA, sleep) to inform prevention strategies and public policies on healthy living.



**Task linkage (WP3):** Task 3.1 (Food and socio-cultural environment). This research analyses socio-cultural and gendered dimensions of small-scale fisheries and their food-security implications



In Vanuatu GM Visai (0 PM since field of research was in the country) NUV and team, CHANCES Pacific project worked on “Local perspectives on climate change adaptation and lifestyle changes in the village of Wiana, Emao Island, Vanuatu”. This work examines the socio-cultural impacts of climate change on Wiana village, a coastal community on Emao Island, Vanuatu—one of the living labs of the RERIPA CHANCES-Pacific project. By exploring the lived experiences of this

community, the study highlights how family farming practices, lifestyle, and local perceptions of change and continuity intersect in addressing environmental challenges such as coastal erosion and water scarcity. The research focuses on how families in Wiana perceive and respond to these environmental changes, particularly in relation to their farming practices, daily life, and community dynamics. It also explores how traditional values and practices are maintained while adapting to new challenges. This aligns with FALAH's themes of family farming and lifestyle, emphasizing resilience and adaptation strategies in the face of climate change.

**Task linkage (WP3):** Task 3.1 (Food and socio-cultural environment). This research examines socio-cultural impacts of climate change on family farming practices and lifestyle adaptations.



Concerning Task "3.3" Family farming lifestyle and eco-tourism work done is presented below.

In Vanuatu Pr J Bessiere (0 PM, secondment will be done later in 2025) worked on food crops on islands as a new resource for more sustainable tourism development. Food is a central component of the tourism phenomenon, not only because tourists eat several times a day, but also because it is a privileged gateway to the culture and history of the region visited. At the same time as globalization is taking hold, there is a growing interest in local cultures. The aim of this contribution is to examine the economic and socio-cultural issues underlying the development of local food cultures for tourism, as applied to the island in the Pacific region. From an economic point of view, the tourism and agri-food sectors operate at different levels. Firstly, tourists eat in hotels, restaurants and guest houses, or buy food on the local domestic market. In addition, food in its various forms plays an important role in the economic world of souvenirs bought and brought back after a trip. From a socio-cultural point of view, this process of valorization contributes to the re-appropriation of certain components of the food heritage by local populations, and through this to the maintenance and reconstruction of cultures. It also responds to a demand from tourists who are increasingly aware of the food dimension of cultural heritage in terms of its originality and its spatial and temporal roots.

**Task linkage (WP3): Task 3.3** (Family farming lifestyle and eco-tourism / inter-generational benefits). This research explores how local food crops and heritage can support sustainable tourism and socio-cultural valorisation across generations.

WP 3	Task 3.1: Food and socio-cultural environment (CNRS-UT2J)	Task 3.1: Ongoing	Task 3.1: Examine the effects of family farming on lifestyle and its impact on health and well-being	10.97 PM
	Task 3.2: Lifestyle in family farming (UNC)	Task 3.2: Ongoing	Task 3.2: Explore diet and physical activity in families practicing family farming  First <a href="#">publication</a> (related to WP4)	7.62 PM
	Task 3.3: Family farming lifestyle and eco tourism	Task 3.3: Ongoing	Task 3.3: Analyse inter-generational benefit on family farming and lifestyle	4.67 PM

#### **WP 4 performed secondments: 12.13 PM**

#### **WP 4 Achievements/Conclusion**

Regarding Task 4.1, 4.2 and 4.3 actions are ongoing in Fiji, Vanuatu and New Caledonia and were planned for Solomon Islands in 2024 and 2025.

Task 4.1 “Compare traditional family farming practices, its adaptation to the environment and identify best practices to disseminate” has been largely shared during the [FALAH workshop in Noumea](#) and after with public policies, and family farmers during the [Round table in New Caledonia, March 2023](#),

Task 4.2: “Examine the role of school in promoting food education, physical activity, and changing dietary habits” is at the heart of our work in schools and investigations has been done in Vanuatu and New Caledonia.

IRD team lead a project called CLIPSSA (linked to FALAH) where Dr Sabinot (3.13 PM) and team worked on circulation and Co-Creation of Knowledge and Know-How at the Heart of Adaptation to Climate Change for Family Farmers from the South Pacific Islands. On the front line of climate change, the South Pacific island states and territories are at the forefront of the fight against climate change because of their high exposure and vulnerability to the region's diverse weather patterns. The most probable hazards to impact the region are the intensity of droughts and heavy precipitation, which will have a particularly adverse effect on family farmers. In order to gain a deeper insight into the resilience of island communities to future hazards, the CLIPSSA project (<https://clipssa.org/>), which unites climate and social science researchers with institutional and political stakeholders, has elected to concentrate its efforts on the strengths and weaknesses of

family farmers. The social team is examining the ways in which the knowledge and know-how of family farmers is being built up today, drawing on a wide range of knowledge and expertise.

The objective was threefold, based on the ethnographic research conducted in the four archipelagos: (1) To analyse the influence of the nature of the knowledge, its vitality and the diversity of sources mobilised to acquire and adjust it on the degree of vulnerability of these people (potential and fragility) and the management of these hazards and their consequences; (2) To compare results from the four survey sites, to identify and analyse contrasts, similarities and differences between archipelagos and draw lessons for the region as a whole, (3) To discuss a number of joint analytical frameworks and ways of translating our results and even ways of cocreation of new forms of mixed knowledge so that they can be grasped by inhabitants in the field and institutional stakeholders responsible for promoting the resilience of family farmers in the face of the future climate.

**Task linkage (WP4):** Task 4.1 (Methodological and epistemological dialogue; compare practices and identify best practices to disseminate). This research develops comparative, mixed-method frameworks on knowledge/know-how for climate adaptation in family farming and translates findings with stakeholders.

Another sub FALAH project called SPAR-Pacific was developed with and for Pacific Island communities that are experiencing significant challenges, including climate change, rapid socio-economic changes, and the COVID-19 pandemic. These disruptions have affected indigenous knowledge and practices, which are traditionally passed down through generations. However, the pandemic also revealed the resilience of Pacific Island populations, as they drew on this knowledge to adapt to unprecedented challenges. The SPAR-Pacific project is a research initiative that explores the role of indigenous knowledge and practices in building resilience across Pacific Island communities. It focuses on young university students in New Caledonia, Vanuatu, Fiji, Solomon Islands, and Papua New Guinea to ensure this knowledge continues to thrive. The project has three main goals:

**Preservation and Activation:** Ensure indigenous knowledge and practices are maintained and shared among younger generations.

**Perceptions and Intangible Aspects:** Understand how young people perceive this knowledge, especially its cultural and non-material importance.

**Post-Pandemic Dynamics:** Study how indigenous knowledge develops, is expressed, and is transmitted in the context of the COVID-19 pandemic and ongoing socio-economic and environmental changes.

By focusing on youth, the project highlights the importance of preserving indigenous wisdom to address present and future challenges. Indigenous practices are key to fostering resilience, helping communities adapt to changing environments, and preparing for the uncertainties of tomorrow.

SPAR-Pacific demonstrates how traditional knowledge remains a vital resource for Pacific Island populations in navigating a rapidly changing world. The project is described here : <https://open-research-europe.ec.europa.eu/articles/5-183/v1>

**Task linkage (WP4):** Task 4.1 (Methodological and epistemological dialogue; compare practices and identify best practices to disseminate); Task 4.3 (Local communities empowerment based on knowledge transfer). This research supports intergenerational transmission of indigenous knowledge and community resilience through documentation and activation of practices

In Vanuatu, local Perspectives on Climate Change Adaptation and Lifestyle Changes in Wiana Village, Emao Island was also studied by Ms Visai (0 PM since field of research was in the country) from the University of Vanuatu. This work (inside CHANGES-Pacific project) focuses on the socio-cultural impacts of climate change on the coastal community of Wiana village, Emao Island, Vanuatu — one of the living labs of the RERIPA CHANCES-Pacific project. By exploring the lived experiences of this community, it aims to highlight how family farming practices, lifestyle, and local perspectives on change and continuity intersect to address environmental challenges such as coastal erosion and water scarcity. This approach examines how people perceive and respond to changes while maintaining values and practices they consider important, offering insights into the interplay between adaptation and practices valued as traditional. The primary aim was to understand how Wiana village families perceive and respond to environmental changes and challenges particularly in relation to their farming practices, lifestyle, and community dynamics. Wiana village provides a compelling case study of how local perspectives environmental and social factors interact to shape community adaptation strategies. The presentation will focus on: 1-Community Perspectives: How villagers perceive and articulate the impacts of coastal erosion on their lives; 2-Family Farming Practices: Investigating whether and how agricultural techniques or land use have been adjusted focusing on the connections with environmental changes and challenges; 3-Lifestyle Adjustments: Examining the role of cultural values, local knowledge, and evolving needs in adaptation efforts. A qualitative social science approach will be used employing interviews, focus group discussions, and participant observation. By focusing on the voices of community members, the findings will reflect a narrative-style analysis, prioritizing their lived experiences and the values they attach to both change, challenges and continuity. This methodology ensures that the presentation amplifies local perspectives while offering deeper insights into community-driven resilience. This work directly addresses FALAH's focus on family farming and lifestyle by exploring the interrelationship between agricultural practices, social structures, and community resilience as practised and conceptualised by members of a specific community. This highlights how Wiana families use local knowledge and collective action to navigate environmental and cultural change. Such insights could inform sustainable solutions for

other Pacific communities. This work aims to inspire dialogue on the value of integrating local perspectives into climate adaptation strategies. Wiana village offers a powerful example of resilience and ingenuity, with lessons that extend beyond the island's shores.

**Task linkage (WP4):** Task 4.1 (Methodological and epistemological dialogue; compare practices and identify best practices to disseminate); Task 4.3 (Local communities empowerment based on knowledge transfer). This research elicits local knowledge on adaptation of family farming and lifestyle to environmental change and frames transferable insights for other communities, aligning with best-practice identification and knowledge transfer

In Solomon Islands, The Role of Traditional Food Preservation Methods in Enhancing Food Security and Health Resilience in Small Island Communities was also explained in a literature review by Dr Bugoro (0 PM, since field of research was in the country) from Solomon Islands national University. Food security and health resilience are critical concerns for small island communities in the Solomon Islands, where environmental challenges, climate change impacts, and economic limitations affect food availability. This review examines the role of traditional food preservation methods—such as drying, fermentation, and smoking—in supporting food security and enhancing health resilience in these communities. Traditional preservation techniques extend the shelf life of locally available foods and provide essential nutritional benefits that contribute to dietary diversity, reducing reliance on imported foods while strengthening community resilience against food shortages. Recommendations include documenting and revitalizing these preservation practices, integrating traditional knowledge into national food security strategies, and encouraging intergenerational knowledge transfer. This review underscores the need for policies that incorporate traditional methods within contemporary food security frameworks, fostering a culturally relevant and sustainable approach to health resilience in the Solomon Islands.

**Task linkage (WP4):** Task 4.1 (Methodological and epistemological dialogue; compare practices and identify best practices to disseminate); Task 4.3 (Local communities empowerment based on knowledge transfer). This research synthesises traditional preservation practices as transferable 'best practices' for food security and promotes policy integration/knowledge transfer.

Together, these research activities contributed to build methodological and epistemological dialogue towards family farming science by taking in consideration the Island space and stakeholders; facilitate the involvement of family farmers in applied science with new tools and methods, and useful dataset in their daily life to face to big challenges in Pacific Islands.

## Task "4.2" From Scientific Knowledge to Action

In Vanuatu Dr Pascht (OPM for this task but 5PM for tasks 2.2 and 2.3 with transversal approach between WP4 and WP2)

From KULA and team worked on CHANCES Pacific project “Livelihoods and lifestyles in coastal communities of the Pacific islands: new research perspectives with living laboratories. As a research project of the current RERIPA Call 3, aiming to develop living labs in the Pacific region, CHANCES-Pacific looks at livelihood, lifestyle and health in the context of changing lifeworlds and environments among six communities in Fiji, Vanuatu and the Solomon Islands affected by sea-level rise and coastal erosion and/or flooding. This presentation discusses the innovative approaches taken in this project and focuses on the content-related perspectives as well as on the methods by referring to the current research process and first insights.

In the six coastal communities, the project investigates family farming, diet, physical activity, as well as key aspects of transforming sociality, economic factors and environment(s) together with community members’ ideas and perspectives regarding changes in these practices and processes. From quantitative and qualitative methods, participants were involved since the beginning of the project. Tools and methods were co validated. All the data will be triangulated to determine interconnections between those practices, processes and ideas. An important framework for the project is the idea of living labs, realised as co-development of the research by participation and co-design with the members of the communities during the research process. This allows a collaborative and ethic approach which includes the sharing of knowledge at all stages between the partners involved and is directed towards the co-creation of research findings and adapted responses to local challenges which the communities face.

**Task linkage (WP4):** Task 4.2 (From scientific knowledge to action; role of school in food education/PA/diet change); Task 4.3 (Local communities empowerment based on knowledge transfer). This research uses living-lab co-design and mixed methods to translate scientific knowledge into locally-adapted actions, supporting pilot/action-oriented work and knowledge transfer.

## Task "4.3" local communities empowerment based on knowledge transfer

Regarding task 4.3, teams worked on local communities empowerment based on knowledge transfer with different approaches especially in schools. For example, Dr Amond (0 PM since Australia is not eligible for secondments but included in the FALAH consortium) and team explored the Digital Health Landscape in schools to understand how adolescents living in urban and rural Vanuatu use social media to access health information. Indeed, worldwide, adolescents increasingly engage with online platforms as sources to search and discuss information

related to health, marking a significant shift in their information-seeking behaviours (Hausmann et al., 2017; Skinner et al., 2003). With limited evidence of this from the Pacific Islands Countries and Territories (PICTs), understanding how adolescents in PICTs use online platforms for health information is important. Access to, and the use of, digital technologies vary across urban, rural, and tribal areas. Adolescents living in urban areas may face different health issues compared with their rural and tribal counterparts, necessitating tailored digital health (literacy) interventions (Jacobs, 2020). Gaining insight into the patterns of use and purposes behind their engagement with online platforms for health-related information enables the development of effective educational initiatives and interventions that are tailored to their needs and preferences ensuring that efforts to enhance digital health literacy are relevant and impactful for adolescents. This study investigated the online health-related behaviours of adolescents in Vanuatu. Recognising the unique cultural and contextual factors in Vanuatu, this study aimed to shed light on how adolescents living in urban areas compared with those living in rural areas navigate online resources to make informed health decisions. In June 2023, researchers from the University of Sydney and the University of New Caledonia joined to Vanuatu to run the project for data collection. The classes and students at each school were selected based on teacher interest and consent to participate in the study. Students completed a questionnaire either offline via a REDCap mobile app on digital tablets or online via the same REDCap questionnaire on a computer in a classroom. A total of 245 participants were recruited from two schools in Vanuatu. Of these, 197 participants (58% urban, 42% rural) completed the questionnaire. Majority of participants from both locations were female (62% in the urban school and 66% in the rural school). Findings on their health and digital technology use reveal that 77% of participants own a mobile phone, primarily used for music (34%) and gaming (22%). However, only 24% (n= 47) reported using apps, social media, or websites for health purposes. Social media emerged as the preferred source for health information, with platforms like Facebook, TikTok, YouTube, Instagram, and Twitter being popular. Participants from the urban location (25%) favoured social media slightly more than participants in the rural location (11%) for health information, while rural participants (12%) used social media more than urban participants (8%) for health searches. Search engines were more popular among urban participants (12%) than rural participants (5%). Both urban (9%) and rural (8%) participants predominantly used social media for discussing health topics. Contrary to the common notion of a digital divide, our study highlights similar patterns of online health platform usage between urban and rural adolescents in Vanuatu. By understanding the approach by adolescents to seek health information, we aim to bridge gaps in understanding and potentially tailor interventions that resonate with the specific needs of this population, contributing to the advancement of their overall health outcomes. This study highlights the importance of cultural sensitivity, addresses the risks of misinformation, and emphasises the role of policy and education in effectively engaging adolescents with digital health tools to foster positive health outcomes (Raeside et al., 2022; Swire-Thompson & Lazer, 2020; Taba et al., 2022).

Other team members from Pacific Community developed research in a bridge territory: Wallis and Futuna where Childhood obesity is a major public health concern in the Pacific Islands where more than 50% of adults are overweight and non-communicable diseases account for more than 80% of

causes of death. However, few data are available on the corpulence of children, and very few studies have looked at the determinants/risk factors that can explain this overweight. The MOVE Ô study aims to describe the lifestyle (physical activity, sleep and diet) of Pacific children through qualitative methods (biometric measurements, digital application, accelerometers, self-questionnaires, direct observation) and quantitative methods (individual interviews). The pilot phase was carried out with 10-year-old children on the island of Wallis and Futuna, their parents and teachers in order to obtain a global vision of the children's way of life but also of the environment in which they evolve (school, family and community environment). The results highlight a practice of physical activity well beyond the WHO recommendations for this age group and the existence of numerous sports infrastructures in proportion to the size of the territory. The students' sleep time is just enough (9 hours on average) and the use of screens seems to be controlled. However, there is a very little varied diet with almost no consumption of fruit and vegetables. In addition, 34% of the children who participated in the survey are obese. Sufficient physical activity is not enough to compensate for an inadequate diet and a more in-depth study of dietary patterns is necessary to propose more relevant prevention actions and guide public policies to guarantee children a healthy future.

**Task linkage (WP4):** Task 4.2 (From scientific knowledge to action; role of school in food education/PA/diet change); Task 4.3 (Local communities empowerment based on knowledge transfer). This research generates evidence on children's lifestyle determinants in school/family contexts to inform prevention strategies and actionable school/community interventions and transfer.

Then, Dr David (1.50 PM) from IRD and team worked on empirical School-Based interventions on family farming as an educational lever for dietary behaviour change in transitioning Pacific Island Countries and Territories. The Republic of Vanuatu, a Melanesian archipelago in the South Pacific, is in the early stages of a health and nutrition transition characterised by a rising burden of non-communicable diseases (NCDs), declining traditional diets, and persistent undernutrition. Ranked first worldwide by the World Risk Index, the country faces compounding climate vulnerabilities that disproportionately affect its young population (median age: 20.3 years), many of whom attend boarding schools far from their families on isolated outer islands. While school feeding programmes remain scarce across the Pacific, growing evidence suggests that experiential, garden-based education is more effective than classroom-only nutrition instruction at modifying dietary behaviours. We hypothesised that school-based family farming, grounded in the ecological intensification of traditional Ni-Vanuatu agricultural practices, can function as an effective educational tool for both short-term enhancement and long-term generational change of dietary behaviours among youth in Pacific Islands countries and Territories. This research presented empirical interventions already used by teachers with hands-on pedagogical tools poultry farming, intercropped gardens, composting, clam gardens, and climate-adapted cultivation are adapted to a typology of school environments. We argue that the school, positioned as a cultural bridge between ancestral agricultural knowledge and modern food systems, offers a scalable model for Pacific Island countries facing similar transitional challenges.

WP 4	Task 4.1: Methodological and epistemological dialogue towards family farming science (IRD)	Task 4.1: Ongoing	Task 4.1: Compare traditional family farming practices, its adaptation to the environment and identify best practices to disseminate	4.13 PM
	Task 4.2: From Scientific Knowledge to Action (UNC)	Task 4.2: Ongoing	Task 4.2: Examine the role of school in promoting food education, physical activity, and changing dietary habits	6.7 PM
	Task 4.3: Local communities empowerment based on knowledge transfer (UNC)	Task 4.3: Ongoing	Task 4.3: Share new knowledge to develop sustainable intervention strategies that can help people from other regions	1.3 PM

In conclusion, our milestone has been reached with the implementation of Workshops, seminars and conferences linked to different Tasks and WP as per the grand agreement.

<b>Milestone's name – means of verification:</b>	<b>Progress:</b>
Mid-term 1 project results: Workshops in M18 and M21	Achieved
Mid-term 2 project results: conference in M30	Achieved
Mid-term 2 project results: conference in M49	Achieved
Final project results: end of secondments in M63	Ongoing

## 2. Corrective Measures

### 2.1. Please explain any delays accumulated in the secondments / activities / deliverables foreseen in the Grant Agreement and the measures taken to oversee them.

Between February 2023 and March 2025 violent riots erupted in New Caledonia following France's proposed electoral reforms expanding voting rights to recent French settlers, resulting in 13-14 deaths and involving approximately 9,000 participants. The unrest caused severe economic devastation with damages exceeding €2.2 billion, over 150 businesses destroyed, 1,500 jobs lost, and required over €3 billion in French recovery assistance. The crisis severely disrupted higher education with university closures, suspended research activities, canceled international exchange

programs, and limited student access to educational facilities. Social impacts included mass emigration, deepened ethnic divisions, and ongoing political instability through 2025, exposing fundamental colonial tensions regarding New Caledonia's political future. So, the situation had some impacts on the project, mostly in 2024 till the end of the project.

Below is the detailed justification for underperformance of each partner, as per detailed above (implementation planned): Three secondments had to be ended early due to a bereavement in the family, a child's illness, and illness of the secondee. In addition, some changes beyond the secondees' control affected international flight connections. In the Pacific region, reaching partner institutions often requires multiple connections, and disrupted flights and/or hazardous weather conditions can affect secondment duration. As a result, six secondees were unable to complete their planned mobility periods (PMs) in full. Because of these regional constraints, some secondments show a shortfall of 1 to 3 days compared with the original plan.

**Beneficiaries:**

**UNC – 56.2%**

COVID-19, staff turnover, academic commitments, violent riots in NC

**IAC – 49.1%**

COVID-19, violent riots in NC

**IRD – 41,3%**

COVID-19, violent riots in NC

LMU MUENCHEN - 0 (Terminated 15/03/2022)

**CNRS – 56.2%**

COVID-19, staff turnover

**SPC - 0 (IO - not funded)**

**Kula e.V – 100% (Added 01/01/2022)**

COVID-19

**TC partners:**

**USP – 57.2%**

COVID-19, staff turnover, academic commitments, and focal point left the institution, violent riots in NC

**SINU – 65.9%**

COVID-19, staff turnover, academic commitments, violent riots in NC

**VARTC – 40 %**

COVID-19, staff turnover, other work commitments, several natural disasters , violent riots in NC

**Ministry of Education and Training – 25,8%**

COVID-19, staff turnover, other work commitments, several natural disasters, violent riots in NC

**UNSYD - 0**

Only hosting obligations.

**UNSW - 0**

Only hosting obligations.

**UOW - 0**

Only hosting obligations.

**WSU - 0**

Only hosting obligations.

**TOTAL IMPLEMENTATION OVER THE REPORTING PERIOD 2: 52,7 %**

**2.2 Please indicate any potential risks identified and suggested approaches to mitigate them.**

As per the period 1, the main risks identified for our consortium, remain natural hazard risks and sanitary risks that are frequent in the region and could affect future mobilities and/or events. Additionally, riots in New Caledonia between May 2024 and the end of the year 2024 temporary affected the University of New Caledonia and in this way, FALAH coordination team. Mitigation measures will mainly rest on the ability of rescheduling secondments over time (preferably over the same reporting period). In addition to the reallocation of person-months among each beneficiaries and partners.

<b>Risk number</b>	<b>Description of risk as per the Grant Agreement</b>	<b>Occurrence and proposed risk-mitigation measures</b>
1	Staff turnover: Members of the research exchange team (RET) leaving their institution	Occurred: Secondment associated to this staff will be transferred to another staff of the institution
2	Delays in planned secondments or deliverables	Occurred: Secondments were rescheduled and deliverables submitted as soon as they could be ready
3	Partner's withdrawal	Occurred: The partners have been replaced with another eligible entity
4	Problems with creation of effective communication system	The project is depending on effective communication system. Each home institution has IT-support that ensure that the university's IT service run smoothly and match the requirements of the project
5	Problems with dissemination	The dissemination activities will effectively be monitored through all the different networks each institution is engaged in and through different national and international channels in the field
6	Natural, social, health, political hazards, including COVID-19 pandemic	Occurred: Postponing of secondments
7	Shortage of funding for third country partners	Occurred: Additional funding has been secured to funds ineligible secondments to allow TC-TC travels, including attending FALAH events.
8	Delays in participants administrative achievements	Occurred: Sets of procedures, guidelines, administrative support from the coordinator and templates were made available to all participants within the consortium

### 3. Ethical Issues

As a reminder, the detailed project and all its surveys have been submitted to the Consultative Ethical Committee of New Caledonia without any concerns regarding the project's data collection and ethical issues that may arise (see deliverable D5.1). This approval is used in other countries where the FALAH project research is applied (Vanuatu, Fiji, and Solomon Islands).

### 4. Additional information

None