Marie Skłodowska-Curie Actions
Research and Innovation Staff Exchange (RISE)
H2020-MSCA-RISE-2019

Project Acronym : FALAH – Project Number : 873185
Annex 1 to the Grant Agreement
(Description of the Action)
Part B

2. Excellence

2.1 Quality and credibility of the research/innovation action; level of novelty and appropriate consideration of inter/multidisciplinary, intersectoral and gender aspects

Specific objectives and the relevance of the research and innovation action

Building a network of interdisciplinary teams to:
- Gather and summarize knowledge on cropping practices, consumption, innovation and the dynamics of family farming in the Pacific Islands in a context of socioeconomic transition and climate change.
- Accumulate and cross traditional and scientific knowledge on small-scale farming and eating habits, share knowledge to establish production and consumption strategies adapted to the socio-cultural context.
- Improve understanding of how family farming functions through ecological, economic, sociological and spatial dimensions and how it adapts to the environment (natural and socio-cultural).
- Examine the effects of family farming on lifestyle (i.e., diet and physical activity and inactivity) and its impact on the health and well-being of populations in urban, peri-urban and rural areas.
- Explore nutrition (macro- and micronutrient intakes) and physical activity (energy expenditure) in families practicing family farming and identify potentially long-lasting effects on health.
- Analyze inter-generational (children, parents and grandparents) benefit on family farming lifestyles (i.e., diet and physical activity and inactivity) on health.
- Compare traditional family farming practices and their adaptation to the environment and identify best practices to disseminate for national policies and NGO strategies or through education programs.
- Examine the role of school in promoting food education, physical activity, and changing dietary habits for the well-being of populations, from a bottom-up perspective.
- Share new knowledge to develop sustainable intervention strategies that can help people from other regions, particularly the EU and especially populations of peri-urban areas, in developing local-level agriculture that ensures the health of all.

The main objective is to build a network of research teams operating in the Pacific Islands that have a common interest in food security and its direct or indirect relationship with the environment, health and nutrition. The final goal is to promote and revitalise family agriculture to improve the health of Pacific populations and ensure food security in the context of rapid social and economic transformations and climate change, which effects are particularity harmful to Pacific islands.

Family farming provides a significant part of the food supply to most Pacific Islands people and communities, but there is no comprehensive view of the importance of this agricultural production in the South Pacific region and its contribution to population health. In this project, agriculture is considered in its basic and broadest sense as "*human activity to produce plants and animals useful to humans*." This deliberately simplified position considers agriculture from the point of view of plants and animal species, including breeding and fishing. This conception places agriculture at the heart of Melanesian societies and thus links land and sea. Moreover, agriculture occupies a central place in human-environmental relations and intervenes at all levels of the functioning of the Oceanic societies. It connects people with nature, structures and guides relations with the environment, controls the exploitation of natural resources, and establishes deep relationships with the environment. This approach, with its perspective on improving living and health conditions, means that this activity is viewed globally through lifestyle. Family farming in the Pacific, as elsewhere, is rooted in rules and customary places[1]. Agriculture is combined with other activities, such as coastal fishing, where land and marine activities are closely linked [2], particularly smallholders who combine market and non-market activities [3] and on agricultural and non-agricultural activities. Around the world, many authors emphasize the importance of combining activities in and around agricultural activity[4] [5][6][7][8], even in countries known to have processes of agricultural specialization.

The lifestyle of Pacific Islanders has undergone a brutal transition over the last 70 years. The cultures of Pacific Islands peoples have been exposed to military presence during and after the Second World War [9], the development of centralised political rule, monetisation of economic systems, and increased trade globalisation. A food transition is underway in the Pacific regiona, and the food pattern has shifted from a traditional diet of mostly fresh fish, vegetables, and tubers to a modern diet that includes canned

meat or fish, oil, sugar, rice and processed foods[10]. At the same time, daily activity, which was initially based on fishing and agriculture, has shifted to more sedentary activities that have had a major impact on people's health. More recently, the mechanization and digitization of environments have strongly influenced behaviour and levels of physical activity. This obesogenic environment is the root cause of the so-called "non-communicable diseases" (NCDs), and the process starts at an early age. Once described as being in good health by the first European navigators [11], Pacific Islanders today face the highest rates of overweight prevalence and its complications, such as diabetes[1]. Thus, the prevalence of diabetes and hypertension is higher than 20% in more than eight countries in the region and overweight (Body Mass Index (BMI) ≥ 25) affects between 50 and 80% of adults[12].

The combined populations of Papua New Guinea (PNG), the Solomon Islands (SOL), Vanuatu (VTU), New Caledonia (NC) and Fiji (FJ) were estimated at 10 million in 2016. In PNG, SOL and VTU, about 80% of the population lives in rural areas and produces more than 90% of their food using extensive forest fallow cropping systems. Their basic products are root crops (sweet potatoes, taros and yams) and bananas. However, this diet is linked to an economy relatively un-monetised. When cash flows in, imported food constitutes one of the main expenses. In these same countries, at the current growth rates the population will double in just under 30 years. If there is no change in population growth rates, Melanesian countries will face significant challenges in maintaining food security over the next 30 years. In NC, where per capita income is much higher than other Pacific Islands, small-scale family farming is also predominant in the organization of the agricultural system, particularly in the Northern Province and the Loyalty Islands, inhabited largely by the indigenous Kanak people. In Kanak culture, contemporary family farming still operates, however some household members leave the tribe to seek work in towns. The growth of development hubs, the increase in the education level and the improvements in material conditions are not systematically synonymous with a decline in agricultural activities, hunting and fishing [13].

Family farming is the basic source of food for most people in Pacific Islands Countries, and it can contribute to the sustainable use of natural resources through balanced management, where economic and institutional conditions permit. The Pacific region is also the origin of a unique biodiversity of cultivated spaces. Many dozen of tubers cultivars are often cultivated in each village, which can lead to hundreds of thousands of cultivars in a large island.

Thanks to its great adaptability and resilience, family farming often plays a protective role for the environment, especially in times of crisis due to political problems, phytosanitary risks or the consequences of climate change. Family farming provides public services to the landscape as well as "ecosystem services"[2]. It provides economic benefit, enhances quality of life and employs a significant proportion of people. However, family farming in the Pacific region is facing significant changes, such as abrupt socioeconomic transition and climate change, both of which have multiple consequences. Yet, the adaptability of family farming to these changes shows potential sources of innovation. Empirical data is lacking on the real productivity and sustainability of family farms. This is a problem because the development of public policies related to family farming is dependent of the provision and exchange of reliable and useful information for stakeholders and decision-makers over the long term, especially in the face of climate change, which has particularly affected the islands of this region.

Within this context, we have built project FALAH (Family farming, Lifestyle and Health) in the Pacific based on strong partnerships. The actual or potential relationships between agriculture and food have suggested a systemic approach to the interactions between societies and the environment, and this approach will enable us to compare this multifunctional activity at the core of how these societies operate. They refer to the concept of lifestyle[3] involving productive activities, exploitation of resources,

[1] Western pacific regional action plan for the prevention and control of NCD's– WPRO 2014; IDF atlas : http://www.diabetesatlas.org/

[2] La FAO définit les services écosystémiques délivrés par l'agriculture comme les « externalités de l'agriculture ». Ainsi la complantation dans les « jardins » mélanésiens contribue à réduire l'érosion des sols. Elle assure donc un service écosystémique de régulation.

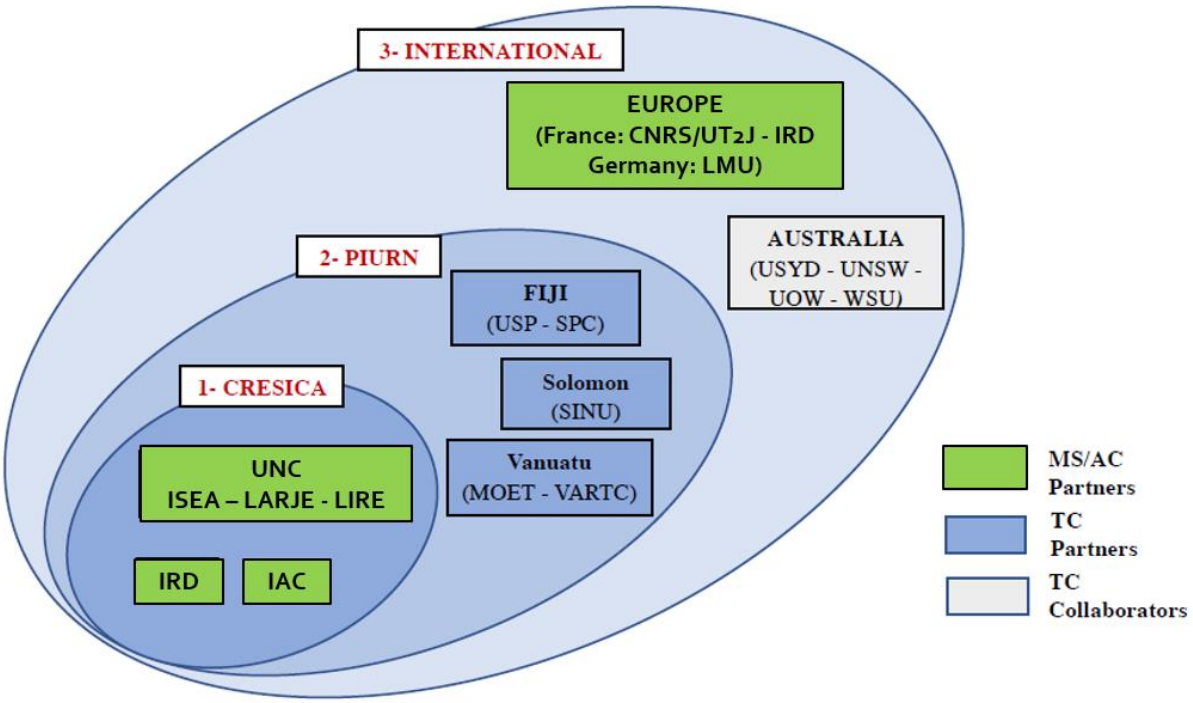
[3] The lifestyle includes nutrition, physical activity and inactivity in a person. Together, they are the main individual health factors.

sources of supply and consumption, behaviours, spaces of exchange and education, and so on. We have therefore adopted a global and interdisciplinary approach to Pacific Island societies in their environment.

The teams involved in FALAH come from several disciplines (agronomy, geography, nutrition, biology, exercise physiology, education, ecology, sociology, anthropology, politics, psychology, law, economics, environmental science, modelling, and computer science). Although they work in different fields, all mainly focus on agriculture and/or lifestyle and secondarily on health. The originality of the project lies in the permanent links among these teams, which make up relatively distinct and complementary scientific and geographical clusters. FALAH brings together scientists, social scientists and non-scientists to share research knowledge and then to share and exchange results and innovations for the sustainability of Pacific Island societies. The project thus ensures the networking of networks that combine scientific proximities and disciplinary complementarities at several levels, from local to regional and international (see figure 1 below).

At the local level, the three research teams from the University of New Caledonia (UNC) form the basic framework of the FALAH project. These are the Institute of Exact and Applied Sciences[4] (ISEA-EA7484), the Interdisciplinary Laboratory for Educational Research[5] (LIRE EA7483) and the Research Center for Law and Economics[6] (LARJE-EA3329). UNC, the project's leading institution, has twenty two teacher-researchers, including four professors and twelve assistant professors. The three UNC teams and the partners of the Consortium for Research, Higher Education and Innovation of Caledonia [CRESICA: Caledonian Agronomic Institute (IAC) and the Research Institute for Development (IRD)] make up the New Caledonian network of the FALAH project (1- CRESICA).

Figure 1: FALAH Pacific networking, partners and collaborators



At the regional level, the project involves three partners from the PIURN (Pacific Island Universities Research Network : Fiji, Solomon Islands and Vanuatu). Established in November 2012 under the auspices of UNESCO, PIURN aims to generate new knowledge to address priority challenges in the Pacific region, share physical and intellectual resources to facilitate quality research, strengthen the

[4] https://isea.unc.nc/

[5] https://lire.unc.nc/en/research-themes-2/health-and-wellbeing-for-youth/

[6] https://larje.unc.nc/en/home/

content of scientific research in both programs and teaching, and develop joint research training initiatives. The three partners have four teams, including two in Vanuatu (Ministry of Education and Training – MOET and Vanuatu Agricultural Research and Technical Centre - VARTC, one in Fiji (University of South Pacific - USP)[7] and one in Solomon Islands (Solomon Islands National University - SINU). These teams and the New Caledonian partners make up the regional FALAH project network (2- PIURN). The teams of the PIURN network are spread over half a dozen territories composed of about fifteen islands, which constitute as many fields of research, experimentation, actions and/or application of the project partners.

At the international level, FALAH works with teams from two European partner countries (France and Germany) and an international Pacific organization, the South Pacific Community (SPC), and has close collaborations with four Australian universities: the University of Sydney (USYD), the University of New South Wales (UNSW), Western Sydney University (WSU) and the University of Wollongong (UOW). The German team is from of Ludwig Maximilians Universität München (LMU), and the French teams are from the University Toulouse Jean-Jaurès (UT2J) and the National Centre for Scientific Research (CNRS) in Montpellier. The researchers and research professors of these international teams have been working for several years on the Pacific terrain. FALAH is comprised of 10 teams eligible for funding by the European Commission in H2020-MSCA-RISE, with 6 MS/AC and 4 TC eligible for funding, and 4 additional TC from Australian universities (cf figure 1). Fieldwork will be spread over 4 territories: Fiji, New Caledonia, Solomon Islands and Vanuatu. CNRS, LMU will contribute to research in Vanuatu while UOW and WSU teams will assist in Solomon Islands. The teams from New Caledonian network CRESICA benefit from geographical proximity and are thus present in Vanuatu, Fiji, Solomon Islands and New Caledonia (3- INTERNATIONAL).

The FALAH proposal is part of the United Nations initiative, facilitated by the Food and Agriculture Organisation (FAO) and supported by the International Fund for Agricultural Development (IFAD), stemming from the International Year of Family Farming (IYFF) in 2014 and the subsequent 10 years action plan ("2014++"). The EU has strongly supported this initiative in several ways, one of which is the support of high-level research projects led by the French Research Institute under the name: International Centre for Agricultural Research for Development (CIRAD). In 2014, CIRAD emphasized the major role of family farming in the world and the prospects for studies on family farming to renew both biophysical and socioeconomic development approaches.

In this respect, the FALAH initiative is in line with the European Union's strategic program to significantly strengthen research collaborations between Europe and the South Pacific (i.e., INCO-NET, PACE NET +) on the main challenges facing the world today. The assessment of family farming developed by Commissioner Dacian Ciolos in 2013 at the conference "Family farming: a dialogue for a more sustainable and resilient agriculture in Europe and the world" remains very relevant and comprehensive today. It is also very useful in the Pacific region.

The high-level events of the European Commission in Brussels (2016): "Innovative Solutions for Sustainable Nutrition, Food Security and Inclusive Agriculture Growth", highlighted the role of smallholders to address the many challenges of food security, healthy nutrition and sustainability, agricultural growth and inclusive development. The consultation paper for this event stated (p.2-3): "*A particular focus is on innovative ways to put research into practice and increase its success. The effective organization of all actors in the innovation process lets us complete the last mile of translating research results into impacts on the livelihoods of the poor, often the most difficult part. The European strategy of AR4D is firmly anchored in smallholder production systems, sustainable intensification, value chain development and the stability of food systems. Ensuring that AR4D has an impact at national and local levels implies complementary investments in institution building, capacity building, the creation of new skills and competences, information management and extension services. Appropriate mobilization of national and international scientific expertise and governance of agricultural research are needed to ensure that the interests of the poor and food insecurity are effectively addressed.*"

[7] It should be noted that the Fiji-based USP has a network of campuses scattered throughout the twelve South Pacific countries. Some of these campuses are part of the FALAH project, although they are not displayed as separate entities since they are part of the USP team, which is the largest in the number of participants in the FALAH project.

The 2011-2015 Pacific Food Security Framework for Action: "*Toward Food Security in the Pacific*" recognizes that the changes in food supply and demand pose a growing threat to food security and have impacts on the health of Pacific populations. "*Food security is when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and preferences to ensure an active and healthy life*"[8]. A holistic approach is needed to tackle the problem of food security.

Many factors affect food security or the ability of populations to continue to feed themselves:

At the macro level, globalization and trade, population growth and urbanization affect the availability of and access to sufficient, safe and nutritious food. In addition, national and regional policies on agriculture, environment, trade and health have an impact on household incomes, food prices, local food production, imported foods, nutritional standards and the advertising, labelling and marketing of food products. Last, resilience to climate change and the ability to cope with extreme weather events and other natural hazards (volcanic eruptions and earthquakes) will have important implications for food security. Agricultural policies have always paid more attention to the market and production dimension of family farming and have shown little or no interest to the non-market dimension of rural activities. In addition, these policies have often neglected the diversity of revenue sources that constitute the means of subsistence for the agricultural community, while not considering them as barriers to agricultural development.

At the micro level, social determinants, such as household access to jobs and natural resources, influence income and access to food; the media climate influences food awareness and the perceived acceptability and/or attractiveness of certain food choices. These factors interact to determine which foods are obtained and consumed, ultimately affecting health and development outcomes. Conversely, all these changes might be new opportunities for family farmers, such as new markets with urbanization, and new value chains for organic foods (coconut oil, vanilla, cocoa). The livelihoods approach is an alternative to agricultural problems, embedded in a broader economic context in which family farmers develop complex strategies that combine non-agricultural activities with their agricultural production systems, and almost all the food-related agriculture in the Pacific Island countries is provided by smallholder family farms. These farmers are often limited in their investment capacity because their small incomes serve primarily domestic and community needs (health, food, education, church and basic services). They rely mainly on a judicious knowledge and use of natural resources, which until now have been little valued in the markets.

The Pacific region, one of the most vulnerable in the world, will be impacted in the near future by the effects of climate change that will not only affect the environment but also population health[9]. Indeed, climate change has been acknowledged as a factor that increases the risk of a pandemic because of its widespread effects on natural systems, human activities like food production, and human health and well-being. It is important to note that climate change is occurring in a region whose populations are still transitioning to a Western lifestyle and in a context of an extreme prevalence of obesity and non-communicable diseases. This sets the stage for a syndemic, in which complex systems interact to produce multifaceted, intertwined outcomes to pose a paramount health challenge for Pacific populations and more broadly for humans, the environment, and our planet in the 21st century.[10]

Seven of the Top 10 countries with the highest diabetes prevalence in the world are in the Pacific region and the list includes Fiji, New Caledonia, Solomon Islands and Vanuatu. All of them have been greatly affected by the pandemic of obesity. A great number of studies demonstrate positive associations between excess body weight in childhood/early adulthood and the increased risk of several non-communicable diseases (NCD) later in life[14].

Although individual and environmental factors are linked to instances of people being overweight and obese, a diet too high in calories couples with low physical activity is the leading cause. Malnutrition in all its forms refers to an abnormal physiological condition caused by inadequate, unbalanced, or excessive consumption of macronutrients or micronutrients[10]. In PNG, Vanuatu and Solomon Islands,

[8] http://www.fao.org/wsfs/world-summit/en/

[9] https://www.un.org/sustainabledevelopment/

50%, 30% and 30% respectively of children under five are stunted. Over 40% of children under five and over 30% of women of reproductive age are anemic[15]. Surveys among adults in the French Pacific territories show that less than 50% of people consume fruit and vegetables every day (this percentage drops below 35% in Wallis) and more than 20% consume sugary drinks every day (in New Caledonian adolescents, the proportion has increased sharply to 80%)[16]. Furthermore, most adults − especially women − do not meet the recommendations for regular physical activity. Meanwhile, there is evidence that healthy lifestyle behaviours adopted during childhood within the family circle (parental and socio-environmental influences) continue into adult life, and this indicates that healthy behaviours should be adopted as early as possible to promote a healthy lifestyle across the lifespan [17].

Ultimately, the FALAH proposal aims to contribute to achieving the European Commission's High Event goal of finding innovative solutions for sustainable nutrition, food security and inclusive agriculture growth in the Pacific region to benefit people's health and well-being.

The FALAH project combines, accumulates and discusses multidisciplinary knowledge from different countries and regions in order to more deeply study how farmers/gardeners of smallholders/families/villages cope with or may be empowered to cope with the pressures on them. FALAH strengthens the network of members and the human resources of the research teams and local experts for a positive knowledge outcome to inform public policy.

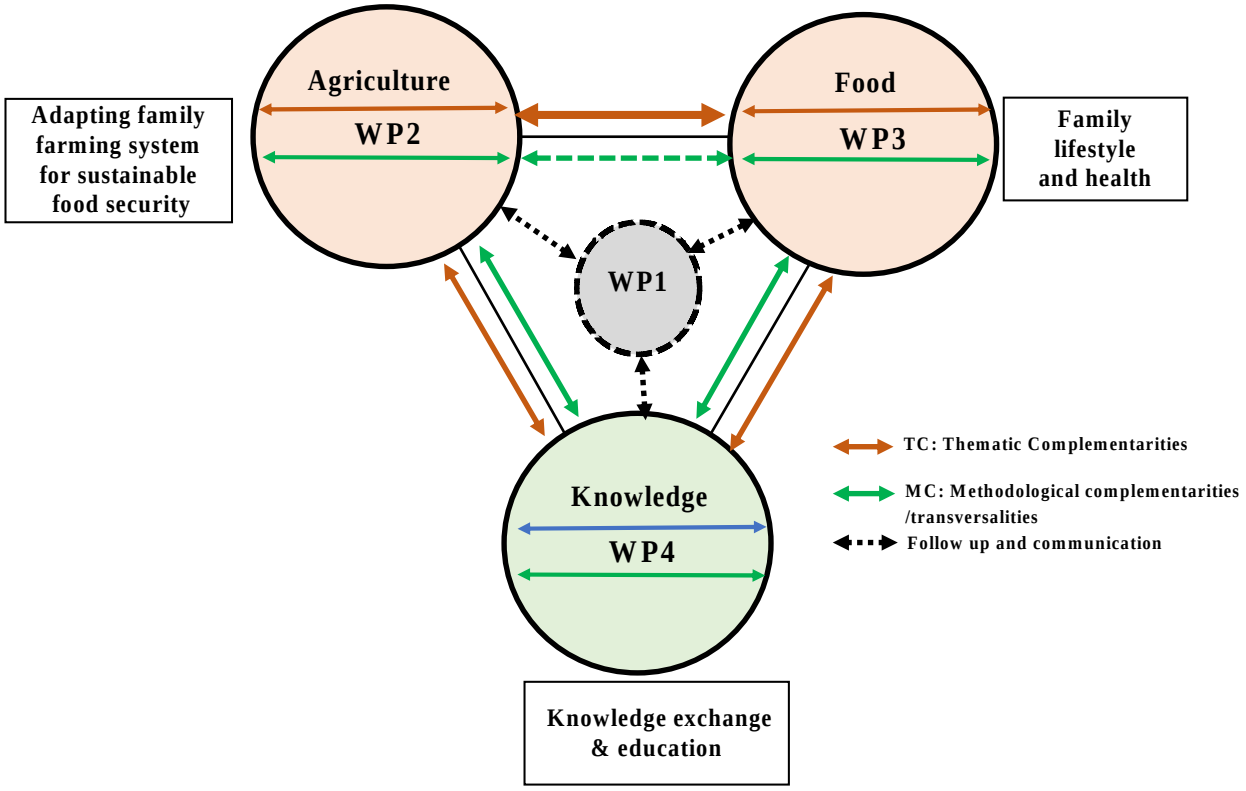
Methodological approach:

The methodological approach for team networking in the FALAH project is based on the ongoing articulation between the disciplines. This multidisciplinary articulation makes it possible to bring in international researchers with the specific skills needed to analyze the complexity of family farming and its contribution to food security and population well-being. The scientific activities are organized in two inseparable levels: (1) global, referring to the structuring of members and partners in the Work Program (WP) with the specific Research and innovation activities, and (2) operational, referring to the internal and external functioning of the teams involved in the WPs. The two levels enrich each other with internal and external complementarities made possible by the bridges between them. The articulation of these two levels is an original and innovative aspect of our methodological approach.

This interdisciplinary methodological posture led us to simplify the project organization into three major scientific components corresponding to three relatively distinct but complementary working groups (WP2, WP3, and WP4). These three working groups collectively contribute to the scientific development of the project that ensures a better understanding of how family farming contributes to sustainable food security. The multidisciplinary integration and cross-referencing of approaches takes place within WPs that operate within the framework of programmed research activities. The planned research and subsequent knowledge-sharing activities within WPs are described in batches of interdependent work (see 1.3.3. WT3 Work package descriptions – WP1). WP1 is dedicated coordinating and managing work schedules, exchanges and communication between these WPs (figure 2).

The scientific WPs are structured from three entries including two multi-thematic entries (agriculture for WP2 and Food for WP3) and a transversal entry (knowledge and education for WP4). Each entry defines the heart of the WP, the central core from which the research and innovation activities are organized through exchanges between the multidisciplinary teams involved in the WP or with the other WPs. WP2 and WP3 upstream of the project are structured around agriculture and food; the relations between the two themes are very close, especially in rural areas fragmented or isolated by their island status. WP4 logically follows on these two and is centred on know-how and sharing.

Figure 2: FALAH Pacific, methodological approach



Thematic entries (WP2 and WP3) feed on each other through the complementary disciplines and methodological transversalities provided and implemented by WP4. This WP allows bridges, and installs and facilitates dialogue between different fields of study. It ensures spatial and methodological integration through multidisciplinary transversalities and communication. The titles of the WPs are revealing and significant of the constant concern for exchanges, which are vital to maintaining the permanent interdisciplinary dialogue between the partner teams, and to ensure the overall coherence of the methodological approach of the FALAH project. The WP4 thus ensures the multidisciplinary integration that is at heart of the scientific innovations developed by the FALAH network. The interdependent WPs maintain close relationships of scientific complementarities shown on the diagram by arrows whose colour reflects the type of relationships. These complementarities are of two types: thematic/disciplinary and methodological/transversal. The thematic complementarities (TCs) (brown arrows) concern mainly the two multi-thematic working groups; secondarily they concern two multi-thematic WPs, and the transversal WP4. Methodological complementarities (green arrows) occur mainly within WP4 but are beneficial for WP2 and WP3. These disciplinary, thematic and/or methodological complementarities, which led to the division of the WPs into subgroups (thematic and/or methodological), correspond to the specific tasks within the WPs (figure 2).

Research activities are carried out within the framework of team exchanges between WP2 and WP3 in the form of method sharing. This will help deepen the acquisition of new knowledge and/or tests and the implementation of new methods on shared sites or fields that have or have not been the subject of previous investigations and have been chosen for their representativeness.

The innovative nature of this work is, first, that it takes into account the diversity of fields of study to develop new approaches to deepen and complete previous work. Innovation here first consist of identifying bridges (convergence between themes), then designing and jointly preparing surveys to explore these areas of disciplinary convergence. We plan to associate with the surveys on population eating habits (WP3) questions specific to agricultural activity (WP2) and to the relations and

interconnections between various spaces, for example, for exchanges, gifts, and the circulation of people and agricultural products in rural and urban spaces) (e.g., the AASIP[10] project).

The methodological innovation is then translated by the common researches so the approaches can evolve. Among the multi-themed WPs, common activities are shaped: mini-concertation between fields of research to confront methods, common surveys design to collect data, poll investigation etc… These tasks lead to the organisation of seminars (internal and/or external) and joint activities conducted in the form of experiments on specifically chosen study areas, especially peri-urban areas.

For example, WP2, which investigates "the adaptation of family farming systems to sustainable food security", involves several disciplines. It addresses the issue of family farming from the perspective of community relations, relationships to society, markets and the environment. These areas involve the biophysical, socio-economic and spatial aspects of family farming. Schematically, the biophysical dimensions draw on the soil sciences (soil surveys and measurements); the socioeconomic dimensions use sampling techniques, surveys, and interviews; while spatial and environmental approaches make use of spatialization tools for Earth observation (cartography, GIS, remote sensing, drones). Methodologies from several disciplines will be mobilized within this WP, with each researcher first working according to the approaches specific to his or her disciplinary field. The grouping of multidisciplinary teams within a single WP then makes it inevitable to use different methods and compare them in order to obtain a global and integrated analysis of agriculture and food in a context of the rapid transformation of environments and societies under the combined effects of anthropogenic actions and climate change.

More concretely, a project currently led by the USP and called “Addressing threats to traditional food security and diet quality in the rural Pacific” concerns the interactions and mutual influences of food production from traditional Melanesian and Polynesian family gardens and quality diets, and thus community health in Pacific societies. Here, we share the expertise of WP2 (family farming and agriculture production) and WP3 (nutrition and health) related to climate change.

The originality and innovation of the methodological approach at the heart of FALAH is based on these crossings of multidisciplinary knowledge that ensure the scientific articulation between the teams within the WPs. This articulation is coupled with a geographical complementarity. Indeed, most of the project's partner teams operate in the same study areas or in areas with a similar context. The FALAH network consists of researchers from the MS/AC teams whose study areas are located in the island spaces of the South Pacific. This is the case for LUM in Vanuatu and Fiji, TL2J in Vanuatu and Fiji, CNRS in Vanuatu and Fiji, UNC in Vanuatu, Fiji and Solomon, IAC and IRD in Vanuatu, and Fiji, to name just a few examples. To facilitate crossover possibilities and methodological comparisons, we propose that, in addition to specific areas, TC partner teams invest around urban spaces. Peri-urban and urban areas have thus been selected as methodological exploration fields for all South Pacific partners. Apart from a few big cities (Noumea, Suva, Honiara, etc.), urbanization in Oceania is characterized by the dispersal of dwellings and huts across the landscape, usually with urban migration and settlement from various regions and a resulting variety of local cultures. Peri-urban areas have thus been selected as methodological exploration sites for all the South Pacific partners.

Works in Port Vila and observations near squats and on the outskirts of Noumea have shown that allotment gardens are inseparable from informal settlements. These spaces will be explored in the second phase of the project: the north western peripheries of Port Vila in Vanuatu and the Voh, Kone and Pouembout (VKP) zone in New Caledonia are being approached for these methodological experiments. The space between VKP in the northern province of New Caledonia is indicative of these particular forms of urbanity that mix dwellings, buildings and agricultural parcels. In these areas, the data will be collected through structured observations, taking into account qualitative questions and quantitative approaches, and remote sensors.

Spatial dimensions will allow the landscape of agricultural production to be taken into account. Spatialization methods using remote sensing tools (aerial photographs, satellite images, drones, etc.) will be mobilized (following what is done in SOSPADYS[11] project). This exploitation of multi-source

[10] https://isea.unc.nc/

[11] https://isea.unc.nc/sospadis/

and multi-sensor satellite data will link the teams through these tools and open reflection toward new research questions. The abundance of data and the multiplicity of origins will inevitably push questions in the direction of the most appropriate methodological choices for exploring the research questions. Data mining methods coupled with spatial modelling will attempt the automatic extraction of agricultural parameters in the peri-urban environment, particularly on the matter of unsanitary housing. These combinations of methods will fuel the transversal activities of the WP4 teams, mainly in the form of field experiments and exchanges within the framework of the methodological seminars.

Inter/multidisciplinary types of knowledge involved, where applicable

The objectives of the FALAH project are multidisciplinary and concern the various fields of application that are based on the following expertise: traditional local knowledge, migration, urbanization, links between urban and rural areas, and rural social dynamics; policy analysis at local and global levels; urban dynamics, analysis of quantitative and qualitative data; cropping systems, plant protection, soil analysis, agricultural production techniques, agro-biodiversity, animal production and climate resilience; data mining, spatial analysis, mapping, modelling, and the cross-fertilization of qualitative and quantitative data; and exercise physiology, nutritional ecology, diets, food intake and eating habits.

Partner universities and research organizations are contributing to the knowledge base needed to carry out the project (see section 4.3). Sharing this knowledge among project members is a necessity (1.3.3. WT3 Work package descriptions – WP2). More specifically, UNC is involved in the three WPs, and the IAC and VARTC partners supported by CIRAD are proceeding to the selection of best adapted and least vulnerable species that are accepted by the populations, and they will also ensure that this knowledge is communicated in rural areas and cities.

This expertise is provided by the partners involved, whose abilities to work in an integrated team have been proven and implemented in the context of previous and/or ongoing research projects[12]. The subject under study, the interfaces and bridges between the disciplines, and the key issues (sustainability of family farming, food security and health) at the heart of the FALAH project are presented in an inter- and multidisciplinary way and the structure of the project in WPs, adapted accordingly.

Other activities will focus on the integration and cross-fertilization of quantitative and qualitative methods and the combinations of spatial and geographic data and individual, often qualitative, information.

Finally, family farming and health form a spatial chain of space to the individual through the geographical. The individual's well-being is at the centre, and we can schematize by saying that the chain starts from food production and ends on the plate and in energy expenditure. Analysing agriculture and food to understand their effects on health requires an integrated multidisciplinary approach to the micro (what the individual eats) and the macro (socio-environmental factors).

Consideration will be made of how the proposed RISE project promotes gender equality

In this research project, gender parity has been taken into account at all levels. In general and compared to the proportion of South Pacific women in research, the female participation rate in the FALAH project is around 50%. The project supports gender equity, and the researchers are both men and women. In terms of responsibilities, women are fairly represented at all levels (see 1.3.3. WT3 Work package descriptions - project governance on WP1). The majority of the WP leaders and co-leaders are women, giving a greater voice to decision-making. Last, the postgraduate students in the respective teams are mostly women (nearly 60%).

In the research field, we intend to direct work on the place and role of women in agriculture contribution to product marketing. These dimensions in production activities are often obscured or untreated.

[12] Projects: Food culture in New Caledonian families, AASIP, SOSPADYS

2.2 Quality and appropriateness of knowledge sharing among the participating organisations in light of the research and innovation objectives

The planned research and knowledge sharing activities involve a number of inter-related work packages that encapsulate the scope of the problems to be explored. This FALAH project has been designed to address the overall objective and the research questions above. Four interconnected work packages will collectively contribute to the outcome for a sustainable family farming in the Pacific in the context of climate change and the EU's strategies to sustainable agriculture and health of populations.

Approach and methodology used for knowledge sharing

The proposed plan for knowledge transfer involves continuous researcher interactions while involved in this project. This will enable us to develop our expertise and ultimately publish the outcomes. In the initial stages, the methods we employ will generally include observation and analysis of each country's context, because it is recognised that the socio-cultural environment at both national and local levels will be significantly meaningful to this project.

As the collaboration moves as planned at the beginning of the program the methods for sharing and collaborating will involve an early level of hands on engagement in each other's context specific research projects. This interactive approach is critical for sharing and learning from one another and developing our knowledge and expertise. It is through this form of direct collaboration that we can better determine what may work across our contextual divides and what may not. Equally, at this stage we will be sharing our independent research results, with the specific aim of mirroring the research outcomes in other countries and contexts.

Several investigations under the FALAH project are already well advanced and will feed into the project in the early stages. The methodology for sharing will involve distant, online discussions and, when in the working sessions, face-to-face discussion and preparation as well as during interactions.

The project will involve more collaborative writing, reviewing and sharing of the knowledge and expertise we have acquired through the other two stages of the project. Much of the collaborative reporting will be initiated through face-to-face discussion during the work sessions and will continue in the form of collaborative writing following these. It is believed that an important component of this final stage will be the dissemination of the project's outcomes via joint international conference presentations and organisation as well as via a special edition of a journal or a co-edited book.

The exchange proposal will involve a transfer of knowledge at different levels, i.e. individual members, teams (workshops), national and international transfer (seminars, conferences, training and vulgarization sessions). There will be a final conference at the end of the project.

2.3 Quality of the proposed interaction between the participating organisations

Contribution of each participating organisation in the activities planned

All senior members of this exchange grouping have considerable experience in transferring knowledge both in agriculture, nutrition, health and education research collaborations and in teaching students at masters and doctoral levels. The senior researchers in these teams have experience in mentoring developing researchers. Details of the expertise of the key persons are provided below, as well as some of the ESRs who have particular research expertise for this project.

Expertise in key persons

Partner 1: University of New Caledonia (UNC)

Jean-Marie Fotsing is professor of Geography since 1999 and has successively taught at the University of Orleans, at the University of West Indies-Guyana, then at the University of New Caledonia since 2016. A specialist in remote sensing and GIS, his research has focused on various fields, including agrarian systems, soil erosion and landscape dynamics, planning of urban and rural areas, environment and health relationships and spatial modelling. He has coordinated research projects in various fields and supervised about 20 PhD theses in Africa (Cameroon, Burkina Faso, Gabon, DRC, Congo, Mozambique), America (West Indies, Brazil, Chile, Guyana) and Oceania (New Caledonia, Vanuatu).

He is currently the coordinator of the AASIP project, the academic director of the ADTO Master and supervises 3 thesis in Vanuatu (related to family farming and food in urban and peri-urban areas in Port Vila and Luganville). He is the scientific coordinator and PI of FALAH.

Catherine Ris is a professor of Economics at the UNC. She is head of LARJE laboratory at UNC Her main research interests a major academic works are in development, labour economics and education economics. She is currently supervising 2 PhD students in field of Economic Development. She is the co-PI of the project.

Olivier Galy is associate professor in exercise physiology. He leads the LIRE laboratory at UNC. His current research addresses the global issues of lifestyle including inadequate physical activity levels and poor food choices in Pacific youth. He is also currently working on new technology-supported solutions in particular in the development of innovative user-centred digital solutions that integrate education principles and vulnerable sensors (Grants: Pacific fund 2016, Diabetes Australia 2017). He is currently supervising 2 PhD students in New Caledonia involved in the FALAH project (with C Caillaud from University of Sydney). He is the PI for food and culture project in NC and he co-leads the AASIP project. He co-leads the scientific coordination of the project.

Nathalie Angelé—Halgand, is associate professor in Management at UNC. She got academic positions at Montpellier and Nantes Universities. In Nantes she was Director of the Department of Healthcare Management at the School of Medicine and run the Masters program in healthcare management and public health. In March 2018 she joined New Caledonia University, where to pursue her research agenda in a part of the world where global warming makes public services management issues acuter. She is currently supervising 6 PhD students. She is co-leader of WP4.

Partner 2: Institut agronomique calédonien (IAC)

Séverine Bouard is PhD and specialist of Melanesian rural livelihoods, development studies, governance in rural development policies. Since 2008, her research addresses issues related to the kanak livelihoods and evolution of development policies (place of local leaders, policy making, etc.). Her recent research activities mainly focus on building methodologies and analysis on Kanak indigenous livelihoods. Furthermore, she worked on sustainable development, mining activities and local governance in NC. She is leader of WP2.

Partner 3: Institut de recherche pour le développement (IRD)

Gilbert David is director of research in marine and island geography. Member of UMR 228 Espace Dev, he leads a research team devoted to the integrated approach of Nature and Society. After a PhD on the fishing system and food security in Vanuatu (Brest Univ in 1991.). He has supervised 15 PhD theses, three of which deal with Pacific Islands. He coordinated GERSA project (integrated management of watershed and coral reefs: Vanuatu, Fiji, French Polynesia, New Caledonia, from remote sensing to stakeholders), French Development Agency and Conservation International, GERSA is part of the CRISP program (Coral Reef initiative for the South Pacific) from 2006 to 2009. He is leader of WP4.

Catherine Sabinot is PhD from the National Museum of Natural History (Paris), is permanent researcher in anthropology and ethnoecology at IRD. She is based in Noumea, NC. Adopting an anthropological and comparative approach (fieldworks in Africa, America, Indo-Pacific), she studies the evolution of interactions between societies and their environment on islands and coastal places. She participates to numerous projects in Pacific region since 2013 (5 as a leader or a co-leader) concerning fisheries, family farming and pluri-activity, value of places, fresh water governance, protected areas policies, and articulations between local and global norms, values and knowledge. She supervise 2 PhD theses at UNC and INALCO. She is co-leader of WP2.

Partner 4: Ludwig Maximilians Universität München (LMU)

Eveline Dürr is professor at the Department of Cultural and Social Anthropology of the Ludwig-Maximilians-Universität (LMU) in Munich. She is affiliated with the Rachel Carson Center for Environment and Society at the LMU as board member and co-chair of the doctoral program. From 2013 to 2014, she was nominated as Carson Professor. Previously, she held a position as Associate Professor at the Auckland University of Technology in New Zealand. She has supervised several PhD students on environmental topics, including climate change in the Pacific. Currently, she is the

supervisor of six doctoral candidates, including Desirée Hetzel's dissertation on environmental transformation and farming in rural Vanuatu.

Arno Pascht received his PhD in Anthropology at the University of Bayreuth. After this, he held a position as lecturer at the Department of Social and Cultural Anthropology, University of Cologne. Currently is currently a post-doctoral researcher at the LMU and researcher for the interdisciplinary SOC Pacific project.

Partner 5: Centre National de la Recherche Scientifique (CNRS)

Sophie Caillon gets a PhD in a disciplinary path from ecology to anthropology. Her field of research can be defined by two themes: the relationships between humans and habitats, and agrobiodiversity. She analyses how cultural and biological interact and constitute an adaptive potential for societies exposed to faster global changes. Member of the interdisciplinary commission of CNRS named "CID 52: Environnements sociétés : du fondamental à l'opérationnel ». She won the prize for young researchers of the Fondation de la Recherche pour la Biodiversité. She has been a visiting researcher at McGill University (Montreal, Canada).

Arnaud Banos is research director at CNRS, JRU 6266 IDEES, he is current director of LabEx DynamiTe. He is the former director of CNRS research unit Géographie-cités (2014-2017). Former director of the Complex Systems Institute of Paris (2009-2013) and the former director of European Network "Spatial Simulation for Social Sciences" (2009-2012, GDRE, CNRS). He is currently supervising 4 PhD theses.

International Partner

Partner 6: South Pacific Community (SPC)

Solène Bertrand is a non-communicable diseases adviser with 15 years' experience working in the Pacific region to address lifestyle-related diseases and nutritional issues. Skilled in developing non-communicable diseases strategies and policies, creating and implementing effective NCD prevention and control programs, and conducting awareness campaign and health surveys.

TC Partners

Partner 7: Solomon Islands National University (SINU)

Hugo Bugoro obtained his PhD in Tropical Medicine, from China in 2011, and is now the acting director of Research and Postgraduate Studies at SINU.

Partner 8: University of the South Pacific (USP)

Jito Vanualailai obtained his PhD in Applied Mathematics (Systems and Control Theory) from Kobe University, Japan, in 1994, after which he joined the School of Computing, Information & Mathematical Sciences of the USP, Fiji, where he is now Professor of Applied Mathematics. He is also the Director of Research of USP.

Viliamu Iese is a research fellow at the Pacific Centre for Environment and Sustainable Development (PaCE-SD), at USP. He is leading USP research on evaluating community food production initiative and health risks. He is also an active member of Fiji and Pacific Food Security Humanitarian Cluster. He is currently completing a PhD on developing a crop simulation model for sweet potato in Pacific Island Countries.

Partner 9: Vanuatu Agricultural Research and Technical Center (VARTC)

Vincent Lebot, gets is PhD in 2004 and his expertise concern plants biodiversity especially in oceania. Between 2001 and 2016, he was the PI of an international scientific network entitled: « Adapting clonally propagated crops to climatic and commercial changes" (www.EdibleAroids.org). Also PI of ANR Systerra « Végé-Culture". In Vanuatu he leads the program « root and tubercules for the ministry of agriculture in Port-Vila, Vanuatu.

Partner 10: Ministry Of Education and Training (MOET)

Felicity Rogers Nilwo is the National Senior Curriculum Coordinator at the Curriculum Development Unit under the Vanuatu Ministry of Education and Training - MOET. She has previously taught Biology, Earth Science and Chemistry at Secondary schools in Vanuatu. Her PhD research is focused on the agricultural production systems and consumptions of smallholder farmers in Vanuatu.

Pierre Metsan has been a school principal and mathematics teacher for 14 years.He is now working as the Principal Education Officer of Higher Education within the Ministry of Education and Training (MOET) on the project of the creation of Vanuatu National Bilingual University. Moreover he is currently enrolled as a PHD student at the University of New Caledonia. His PhD research focusses on the idea to explore a cultural value to enhance motivation for learning mathematics in Vanuatu secondary schools.

Adeline Mweleul is a recent graduate of the ADTO Master (Local Development and Management of Oceanian Territories). She previously taught history and geography at Lycée Louis Antoine de Bougainville (Port-Vila). She also taught geography for five years to continuing education students at the University of the South Pacific in Port Vila. Her Ph.D. research focuses on urban and peri-urban agriculture and his contribution to the nutrition of Port Vila and Luganville populations in Vanuatu, including the exchange and marketing of agricultural products in urban markets.

TC Collaborators

The University of Sydney (USYD)

David Raubenheimer is professor in nutritional ecology. He gets a Leonard P Ullmann Chair in Nutritional Ecology and work at the Charles Perkins Centre (USYD). He is a leading expert in nutritional ecology: the discipline that studies how nutrition-related aspects of an animal's environment interact with its biology to determine health and fitness outcomes. His approach is comparative, using ecological and evolutionary diversity to understand these interactions. His studies of insects, fish, birds and a variety of mammals have helped develop a new approach to human nutrition-related problems, such as the dietary causes of obesity.

Corinne Caillaud is associate professor at the USYD. Her current research addresses the global issue of inadequate physical activity levels and poor food choices in the youth through the design of new technology-supported solutions that take advantage of artificial intelligence; in particular with the development of innovative user-centred digital solutions that integrate education principles and wearable sensors. Her expertise will fit into lifestyle, in particular around physical activity exercise and the design of mobile solutions to assess physical fitness, physical activity and their relationship with health. She co-supervise 2PhD students involved in the FALAH project with Galy from UNC.

The University of New South Wales (UNSW)

David Simar is associate professor and is at the head of the Immunometabolism Research Group. His research program focuses on the investigation of the interplay between the immune system and metabolic functions of the host in different diseases state, including metabolic diseases and cancer, and under various environmental factors, including physical activity and nutritional interventions in children.

Romain Barres is Professor and Deputy Program Director at the Center for Basic Metabolic Research in the Faculty of Health and Medical Sciences at the University of Copenhagen and a Visiting Research Fellow in the School of Medical Sciences at UNSW Sydney. His research program focuses on the investigation of the mechanisms by which environmental factors, including physical activity and nutrition, induce epigenetic modifications, thus predisposing or protecting individuals from metabolic diseases.

The University of Wollongong (UOW)

Charles Hawksley is PhD and is researches on food security, human security, and aid and development. He has conducted research in Solomon Islands, Papua New Guinea, Timor Leste, Vanuatu and New Caledonia on aid, development, government, human rights, policing and food security. He brings expertise in Pacific Politics and food security to Work Package 2. He has a long-standing research collaboration with Australian co-coordinator of WP2, Dr Georgeou (WSU), and has twice taught Pacific Politics at UNC.

Aurelie Delisle a Research Fellow who brings experience and networks in the Pacific Region working with partners' institutions, communities and multi-disciplinary research teams to develop community-based natural resource management systems. She leads the capacity development portfolio of 'Strengthening and scaling community-based approaches to Pacific coastal fisheries management in support of the New Song' in Kiribati, Solomon Islands and Vanuatu.

Western Sydney University (WSU)

Nichole Georgeou is PhD and her researches on food security, human security, and aid and development. She has conducted research in Solomon Islands, PNG, Timor Leste and Vanuatu on gender, development, and volunteering, human rights, policing and food security. She is Director of WSU's Humanitarian and Development Research Initiative. She brings expertise in food security, gender and development to Work Package 2. She has a long-standing interest in development and civil society and conducts collaborative research with Dr Hawksley (UOW).

Justification of the main networking activities

To develop and implement the research idea of the FALAH project there is a need for networking and non-research activities among the researchers involved. Staff exchange is a key issue and will have many beneficial outcomes, among other things, related to the seminars listed as scientific deliverables (Table 1.3.2 WT2 list of deliverables). The ten collective events scheduled at 6-month intervals (colloquia, seminars, conferences, methodological workshops) are intended to keep the discussion on a single basis in relation to the objectives of the FALAH project.

UNC as the leading institution in the development of the FALAH project have researchers in all four WPs. Hence it is important for the researchers to meet in order to get an overview of family farming, nutrition and more largely lifestyle in the Pacific. The series of seminars and workshops will include field observation as well as discussions with poeple from each country.

To maintain this scientific proximity and the dynamics of team networking, we plan to organize a dozen collective scientific events in the four territories of the Pacific TC partners. These events take the form of symposia, seminars, workshops (see 1.3.1 WT3 Work package description - deliverable for WP4). Each event has a specific objective and is part of the project activities. At the start of the project, on the sidelines of the activity launching seminar, seminars will be organized for WP2 and WP3. These workshops will aim to define and validate the program of activities in communes between teams for year 1 in relation to the programmed secondments. At the end of these restricted meetings, a session open to all team representatives will be organized (WP4) to identify the methodological correspondences and transversalities between the teams involved in WP2 and WP3.

About ten collective events are scheduled at six-month intervals over the three years of the project (see 1.3.1 WT3 Work package description - deliverable of WP4). These rotating meetings are organized on the sites of the various partners to allow collective exchanges and enrichment. The CRESICA around the UNC by its geographical position and its scientific complementarities is at the center of this network dynamics. It will host three scientific events count two symposia (kick-off meeting in M2 and final reference in M43) and a methodological seminar (M20). Trading times are also shared with all TC partners. Vanuatu will hold two seminars, one on methodological complementarities (VARTC in M8) and the other on the first results of research (MOET in M25). Fiji will also host two scientific events, one on methodological confrontations (M12) and the other on results and their vulgarization (M37). A specialized seminar will be held in Sydney at the Charles Perkins Center focused on approaches to diet and health (M15). In Wollongong, a methodological seminar and presentation of results (M27). The Solomon Islands will host a major international seminar (M32) partly because the SINU team is young and its research themes are mainly focused on WP3. Occasional visits will however accompany the researchers and their movements to MS teams will enrich their scientific knowledge and set up pilot projects.

We think of school gardens in a school located in a peripheral district of Port Vila in Vanuatu: the Lycée Montmartre. Here, in agreement with the leaders, the FALAH teams will be interested at the same time in the agricultural production, the food of the pupils, the exchanges between adults and children in a perspective of sustainable food security. A pilot school garden of the same type will be implemented in the Solomon Islands with the team of SINU.

3. Impact

3.1 Enhancing the potential and future career prospects of the staff members

Describe how the action contributes to realising the potential of individuals

The impact of the FALAH project is to form an international and inter-sectoral network of organizations working on a joint research program in the fields of agriculture, food and health in the Pacific. The participants will exchange skills and knowledge, which will allow them to make key advances that support the EU's strategy to promote sustainable family farming and health for all citizens. The exchange program will enable the researchers to better understand the research culture in different countries, and to refine and develop their thinking and practices. The researchers have different and complementary areas of expertise. Each researcher will contribute with their particular knowledge of agriculture and health (such as agronomy, geography, specialization, nutrition, sociology, psychology, education, economics, health and public management science, information and communication science). The RISE funding will enable collaboration where practices related to socially-critical issues can be examined from a multitude of socio-cultural contexts. In order to enhance research and innovation-related human resources and skills, it is important to include researchers with complementary skills. The researchers from the seven countries and territories involved in the collaboration are all, in different ways, doing research connected to FALAH.

The exchange of individual staff members will be conducted in line with the European Commission's Recommendation on the "European Charter for Researchers and Code of Conduct for the Recruitment of Researchers", (referred to as "the Charter and Code"), which highlights the responsibilities and obligations of researchers, employers and funders regarding working conditions, knowledge development and the sharing of knowledge, career planning for researchers and researcher mobility.

In the area of research, UNC will acquire broader perspectives on agriculture, nutrition and health in the context of family farming, based on non-European contexts, which can lead to a revision of future research questions and concerns. USP, Vanuatu partners and SINU, through collaboration with UNC, UT2J and LMU will also deepen their knowledge of agriculture, nutrition and health in the context of family farming. U Sydney, UOW and WS will also benefit from international linkages by collaborating with institutions in the Pacific and Europe. They will also enhance their knowledge regarding the thematic specialisations of FALAH.

The research team at UNC, UT2J and LMU will acquire new skills that make them more competent and innovative researchers. Heading a worldwide EU-research project will provide experience and greater familiarity with important EU issues and concerns. The FALAH project can reduce knowledge barriers when applying for future EU-grants. UNC will enhance the team's skills coordinating a research and development project involving seven countries with different cultures.

The FALAH project will share and highlight both individual and collective research interests, and will develop comparative research projects by recognizing each other's research areas/expertise, as well as building on these. Each partner organization offers similar but also unique experiences and skills that can be drawn upon over an extended period of time to both strengthen and develop the individuals and the institutions involved. By drawing on each strength and expertise of each individual and each institution through this collaborative approach, new areas of research interest may emerge. We therefore expect FALAH will lead to a refinement of research questions and even new research fields concerning the intersections between agriculture, food and health. The researchers will share their knowledge to further develop agriculture, food and health in order to promote sustainable family farming in the Pacific, and to use those lessons for Europe and other parts of the world.

Furthermore, one important aspect of the project is the mentoring provided by Experienced Researchers (ERs) who will facilitate Early Stage Researchers (ESRs) in gaining exposure to international research perspectives and networks. This will, for instance, be done through the ERs for the 4 different partner organizations supporting and mentoring the ESRs when writing up joint papers to be presented at the seminars and conferences planned throughout the project, and for publication. This support and mentoring will importantly occur across the 9 different universities so that the ESRs can draw on the expertise of different ERs. Each ER brings unique research experience and expertise that when combined is complementary. Such experiences will assist ESRs in writing up their own papers and establishing national and international networks and reputations from working with world leaders in

their fields. This is particularly the case for Pacific Islands women and men. The ERs will also actively encourage the ESRs' involvement in both the design and implementation of the project. All of this will help the ESRs achieve a position of responsibility earlier in their career sooner than might otherwise be possible, which adds value to their employment prospects, new grant funding, or setting up their own research groups. The establishment of a long-term and expanding collaborative network of researchers, with a research-informed interest in agriculture, food and health strategies is an important outcome of the FALAH project.

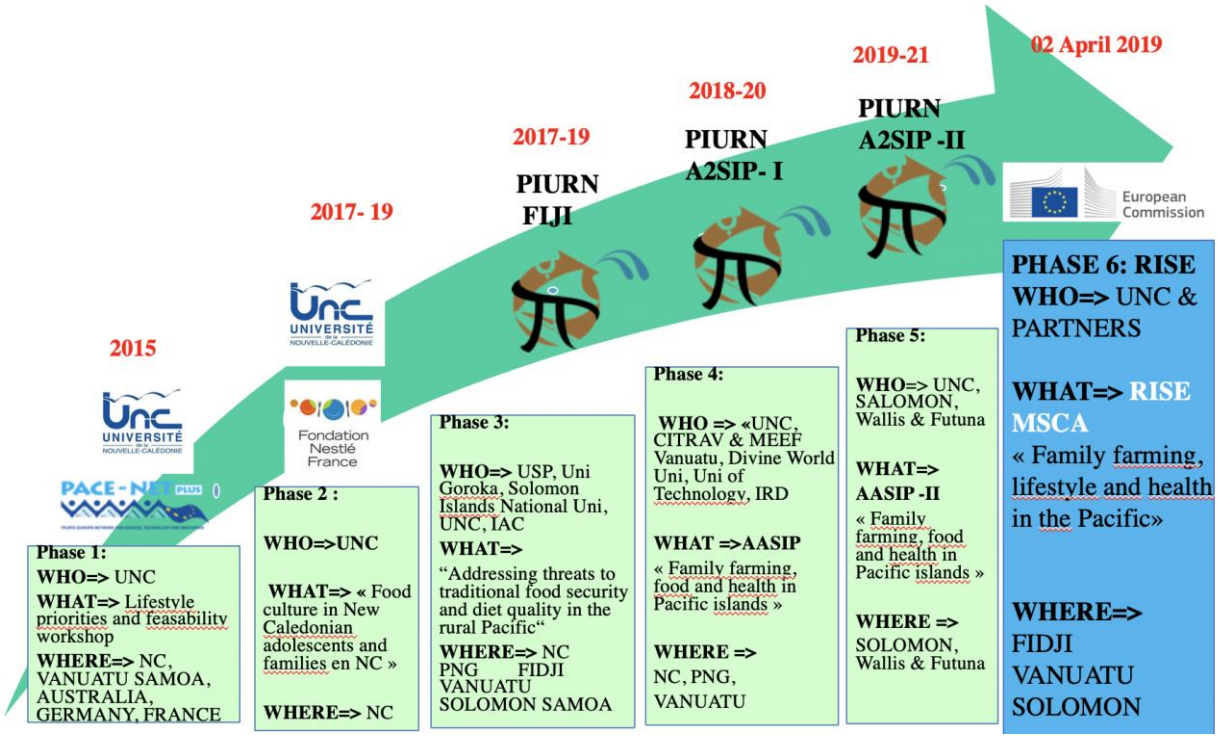
Researcher collaboration will help build better relationships with other researchers interested in the same area of research. In addition, this will allow greater knowledge exchange between countries, in accordance with Horizon 2020's "Better Health for All" challenge. Through the FALAH project, we hope to contribute to the revitalization of family farming for food security and health.

3.2 Developing new and lasting research collaborations, achieving transfer of knowledge between participating organisations and contribution to improving research and innovation potential at the European and global levels

Describe the development and sustainability of new and lasting research collaborations

All universities actively encourage their students to spend time in an exchange in the other university to engage in knowledge sharing and learning. FALAH university partners have collaborations in progress for several years. These exchanges have accelerated over the past three years through joint research projects. During these exchanges, research and other learning experiences were shared between researchers and students through workshops, seminars and other activities.

Figure 3: Dynamic of scientific collaborations between 2015 and 2019



The most recent was held at the Pacific Island Universities Network (PIURN) conference on "Traditional Knowledge, University Knowledge and the Dynamics of Current University Research in the Pacific Region", held in October 2018 in Papeete, French Polynesia. In the FALAH project, work on family farming, food security and nutrition was presented to TC (Fiji, Vanuatu, PNG, Solomon, for example). Figure 3 shows the dynamics in which most FALAH teams have been involved since 2015. To perpetuate these exchanges, we have initiated six PhD projects directly integrated into the FALAH project. The topics of research relate to the main themes of the project indifferently in WPs 2, WP3 and WP4. Most of this PhD research has a comparative dimension that will be carried out by common

secondments and movements on experimental sites or pilot projects. Specific seminars are scheduled in WP4 for doctoral studies (see 1.3.1 WT3 Work package description - deliverable of WP4).

Describe the contribution of the action to the improvement of the research and innovation potential within Europe and/or worldwide.

This project will support various EU policy initiatives including the 2010 EU policy framework on family farming, food and health. The program establishes food security, nutrition and sustainable agriculture firmly among the EU's key priorities for development cooperation in the years ahead. It prioritises support to those countries that have the biggest difficulties in meeting Sustainable Development Goal 1. The policy supports developing countries in addressing food security challenges in a comprehensive manner. It sets out policy lines and proposes priority actions across the four internationally recognised pillars of food security, agreed at the 1996 World Food Summit: increasing availability of food; improving access to food; improving nutritional adequacy of food intake; enhancing crisis prevention and management. The EU pursues action at both the national and the regional level.
The establishment of this research group is timely because there are many health issues that are causing concern in Europe, and worldwide. The great relevance of the prevalence of overweight and obesity in the Pacific increases the risk of non-communicable diseases and socio-economic impacts. The region has the highest diabetes prevalence in the world. So, research programs are needed to determine the societal and environmental factors that influence food intake and physical activity[14].
All in all the project aims to build a more sustainable family farming including healthy eating and have an active life. Hence this project aligns with the intentions of Europe 2020[13].
Exposure for European researchers to non-European research environments will give new insights into how non- European countries such as Australia can align their agriculture and health systems to their own national policy priorities. The project is unique in its research focus and partnership in a time when sustainable agriculture, food and health issues need to be better understood in the Pacific region.
The establishment of a coherent research program will ensure that the European based research group will achieve world-wide academic recognition. This project supports the aims of the EU Framework Program for Research and Innovation by supporting the overall aim of Horizon 2020: *"by coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges.*[14]
More specifically this research project will stress the area of health by examining the "many challenges [that] need to be met to grant everybody's legitimate wish for a long, happy and healthy life". Hence, the knowledge produced from this project may have significant impact related to the aim of building a healthy European, and worldwide, society.
By improving EU scholarship in this field, by providing researchers with new skills and a wider range of competences, and by offering attractive working conditions, it will strengthen the human potential in research in Europe. The program also supports the most recent EU Framework Program for Research and Innovation statement. With the collective expertise of researchers from seven countries who are at the forefront of promoting a sustainable family farming, examining agriculture, food and health perspectives, we are well positioned to provide better insights on a global scale, and eventually make a contribution towards a healthy lifestyle for all citizens in EU and worldwide.
By broadening the skills of individual researchers and institutions, we will improve EU scholarship in a field in which the EU can lead globally. It will improve the research environment in this field in both France and Germany and this knowledge can be disseminated throughout the EU and beyond.

3.3 Quality of the proposed measures to exploit and disseminate the action results

Describe the dissemination strategy about the results to achieve the potential impact of the action

The expected impact of our dissemination is that our research will not only be available to researchers in our own discipline field, but also to the public and in doing so, raise awareness of the

[13] http://www.eesc.europa.eu/?i=portal.en.theme-europe-2020
[14] https://ec.europa.eu/programmes/horizon2020/

issues highlighted by the research project. In the beginning of the project a communication and dissemination strategy will be detailed with a schedule. The project outcome will be communicated in different ways to the different stakeholders: to the research community, to the families, to the schools, to the custom communities, to the local policy makers related to agriculture, health and education mainly, and other, to EU and national politicians. The means or tools that will be used in the dissemination strategy are seminars, workshops and conferences (see 1.3.3 WT3 Work package description - deliverable of WP4), edited book/journal articles, regional, national and international networks, websites, social media. As outlined in WP4, we will also develop a sustainable website containing information about the project and all publications stemming from the projects.

Elaborate on how results (when available) will be taken up/used

Network organisations:

Each participating country has their own local and national networks and organizations where the findings from the project can be disseminated to other researchers and the general population. The aim is also to create a multi-national research unit from this network that can provide direction for future research in family farming, food and health in the Pacific within Europe and Australia, a goal that has already been initiated (for the health in the communities) with the proposed establishment of a node project. This node has the potential to attract researchers and grants related to the thematic and reinforce this team beyond the RISE project.

Seminars, workshops and conferences (see 1.3.3 WT3 Work package description- deliverable of WP4)

Initial analysis and dissemination of findings will occur throughout the project through working papers that will be presented orally at seminars and workshops. WP 4 highlights a number of planned forums which will be used to distribute and share the research findings of this project. WP4 also outlines how the research team will present the findings at international conferences in Europe and Australia.

Edited book/Journals

As indicated in WP4, time is allocated in the second half of the FALAH program for the preparation and initial writing of an edited book and/or special edition of a journal (to be defined) that will involve the reporting of the cumulative outcomes of the project, which will be a valuable contribution to international literature.

Website and social media

As outlined in WP4 a sustainable website containing information about the project and all publications stemming from the projects (including a blog and link with mainstream social media sites) will be developed. The information will be disseminated through the official web site of the UNC.

Expected impact

The knowledge generated by FALAH will be disseminated through a communication strategy. The dissemination of findings will impact on career development of researchers and both findings and feedbacks from the international network organisations will be made accessible to the public whenever the opportunity arises. Communication and dissemination strategies are expected to reach potential users at a local/regional level and at a European level in addressing the socio-economic and health challenges target communities faces (families, custom, education, policy makers etc.). One of the strengths of this research project is the shared interest in producing future generations of self-reliant and healthy citizens. One way to achieve this objective is to better understand the potential benefits of inter-actions between production, family-based consumption in Pacific Islands which contribute to their health and well-being.

Indicate intellectual property rights aspects (if applicable) and exploitation of results.

There is no planned development of new technology or brand names. The intellectual property of knowledge follows the regulations and norms of respective institutions. Articles will be published in research journals, open access journals, which means that research conducted within the project will be accessible for a wide range of people. The findings will also be distributed and disseminated through the networks and organisations above. These platforms will be used for knowledge sharing. The new knowledge will be spread through regional, national and international channels to benefit

academic/researchers/ NGOs, administrators/Government departments/policy makers, business houses/traders and consumers in addressing impacts of climate change, socio-economic and health issues in communities.

3.4 Quality of the proposed measures to communicate the action activities to different target audiences

The FALAH project is based on a network of exchanges and collaborations at various levels. This networking is based on the permanence and consistency of exchanges between partners, but also between end-users and with the population and the general public. We plan to use all types of consumer and / or scientific media to communicate with our various interlocutors. Seminars and documents for the restitution of works, local media (radio, TV transmission specific).

Describe the communication strategy of the project and its results

The FALAH project communication plan will be supported by webpages in each partner universities and social media such as Tweeter or Facebook for passive communication. More active communication will involve the use of each institutes' communication media (e.g. with papers and notes in partners' newsletters and a project newsletter) as well as local newspapers when suitable. The research will be made known to society at large in such a way that it can be understood by non-specialists, thereby improving the public's understanding of science. The teams involved in this project are traditionally involved in open days, public lectures, forums and field trips for school students and the wider public. In the FALAH project, the communities (family, custom, schools) are regarded as disseminators of the knowledge developed within the project, on family farming, food and health equities issues. They will actively participate in the education of future generations through their cascading communication activities.

How activities will be targeted at multiple audiences

In Vanuatu, a close partnership with the national radio and TV will be carried out in the first months of the project. Regular shows dealing with family farming, lifestyle and health will be planned for operating on a regular base (once a month). Partnerships with schools are also planned. **In New Caledonia**, regular shows will be also carried out on Caledonia TV.

inform and reach out to society

Seminars, workshops and conferences (see 1.3.3 WT3 Work package description - deliverable of WP4)
WP 4 highlights planned forums which will be used to distribute and share the research findings of this project, to a wider public. Each two years in the Pacific there is an international conference (via the PIURN consortium) targeting a broad audience, ranging from researchers and communities of the Pacific.
Website and social media
Selected material will also be communicated through social media outlets such as the Tweeter, Facebook group called 'FALAH' which will be an active and large network for Pacific populations discussing a range of issues related to the content, practices and assessment in the FALAH project.
Dissemination through, and close contact with the National Centres will give to the project a direct link to policy makers in the Ministry of agriculture, Ministry of Education and Research and the Ministry of Health in each country.

Elaborate on the expected impact

The project will allow us to share information that will allow us to develop family farming practices that will contribute to food security and a healthy society where equality, diversity, social justice and supportive environments are promoted. Overall the FALAH project seeks to contribute to the EU's strategy to promote a sustainable agriculture, food and health for all citizens.

4. Quality and efficiency of the implementation

Please note that the principles of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers promoting open recruitment and attractive working conditions are recommended to be endorsed and applied by all the funded participating organisations in the MSCA. In all cases, the Beneficiaries must take all specific steps and measures to implement the principles set out in the European Charter for Researchers[15] and the Code of Conduct for their Recruitment[16].

4.1 Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

Consistency and adequacy of the work plan

The planned research and knowledge sharing activities involve a number of inter-related work packages that encapsulate the scope of the problems to be explored. This project has been designed to address the overall objectives and the research questions. There are four interconnected work packages that will collectively contribute to the outcome of supporting family farming, lifestyle practices and health in the Pacific in a context of a socio-economic transition and global climate change, and the EU's strategies to promote a sustainable agriculture, food security and health. FALAH is modelled on a 'bottom up' approach to understanding family practices. The starting point, what families are currently doing in terms of agricultural practices, consumption and its impact on health. The assumption behind this project is that a better understanding of family farming model in the rural, peri urban and urban area in the Pacific will contribute to develop positives aspects of these practices in the context of the socio-economic transition and global climate change.

WP1 will be centred on "project coordination and management". This will, for instance involve: establishing and leading the project management team; monitoring, reporting and developing a finance plan (Check objectives of WP1).

WP2 focus on "Adapting family farming systems for sustainable food security" will start with seminars and field trip and observations to develop an understanding of each other's different contexts and existing family farming, existing models through Pacific islands. The majority of the WP2 will focus on piloting the observation and interview strategies on biophysical, socio-economical aspects and exchanges (market) of family farming.

WP3 focus on "Family lifestyle and health", will start in a same manner than WP2, and involves observations and interviews in all four Pacific countries. Socio-cultural dimensions of food, physical activity and nutrition, food economy and eco-tourism will be investigated in their inter-relations.

WP4 entitled "Knowledge exchanges and education" focus on the dissemination of research findings including deliverables linked to the development of methodology and epistemology, from knowledge to action and education. Although dissemination of findings will occur internally throughout the project through working papers that will be presented orally at seminars/workshops.

This WP4 will enable the researchers to present their findings at international conferences in Europe and/or anywhere else in high level conferences. WP4 is organized in order to allow time for the writing of an edited special edition of a journal that will signal the end-point of this four-year project. The dissemination phase will also involve direct work with members in all the countries. Then, a regional platform to aggregate/share informations on agriculture (spaces, productions, products) as well as human health (including nutrition, physical activity, body composition) and socio cultural aspects (of production and nutrition) of populations will be set. This platform will growth during time and is a unique opportunity to follow the evolution of families in the Pacific and the actions done to fight against climat change, obesity and ensure food security in the region.

Each of these work packages is designed to produce specific outputs. These include workshops to discuss the results, a website, a working paper series to put the research results quickly into the public domain. Overall, the work packages aim to both broaden an established research agenda and develop a new conceptual and analytical approach that will inform the communities. These will also be the basis

[15] (https://euraxess.ec.europa.eu/jobs/charter/european-charter)

[16] https://euraxess.ec.europa.eu/jobs/charter/code

of the joint research application and long term research collaboration, which will assist in promoting and reflecting upon knowledge transfer between EU and non-EU countries.

Credibility and feasibility of the action

All of the universities in FALAH have established strong international collaboration. The institutional strengths of each of these organisations have been called on to assist us in drafting a project that maximizes the potential of the collaboration while considering the constraints of each institution. As an example, for the WP 3, the exchange dates are timed to visiting Fiji (field country for experimentations) when Fijian colleagues are not on secondments to begin measure and evaluation all together with NC and AUS who are sending to Fiji.

Credibility and feasibility of the allocation of secondments

To guaranty the realisation of the secondments by each partner, we decided to add a partner if he was able to provide a minimum of 3 colleagues of its institution in case to replacement. In addition, they were asked to provide 3 to 6 secondment (1 month) per colleague, per year of the FALAH program. This ensure the feasibility and replacement for the project. This was proposed for each WP through the 3 years of the FALAH project.

4.2 Appropriateness of the management structures and procedures, including quality management and risk management

Describe the action organisation and management structure

UNC will be responsible for the overall management and coordination of the project as described in WP1. The Research Office at UNC has extensive experience with funded program and will provide the required administrative support to the coordinator and the project FALAH. UNC has a dedicated Research Office providing financial, contractual and research administration support. The team ensures that the work of the consortium partners in all WPs is carried out as planned and that the overall goals and objectives of the project are reached. This includes the monitoring of the overall progress of work and the submission of the deliverables at agreed times. The task also includes carrying out daily coordination's administrative, legal and financial duties with the European Commission and with all project partners. Additionally, details will be found in WP1.

Elaborate on quality management, relating to the availability of adequate resources of the coordinating organisation

Management, coordination and communication among partners is of a high priority in order to ensure that the network is maintained and deepened. Apart from the workshops and the regular web conferences, e-mail and Skype will be the preferred communication tools between partners. The joint project management team will meet annually as part of the work packages/secondments but also on a regular basis via Skype given the long distance between partners. The scientific coordinator, together with the management team, will monitor the development of the project to make sure that the complementary synergies of the different teams are well exploited, interact and develop in a timely manner. Specific attention will be focused on the development of other ERs and ESRs by mentoring within the research groups and also between groups as research groups evolve during the project. The intention is that each writing team will include an experienced researcher with a mix of ERs and ESRs from each university partner. It is anticipated that the results of the exchange program will be presented and discussed in terms of objectives, work packages, deliverables, and possible improvements. Any practical issues will be recorded, discussed and if necessary adjusted. The workshops/seminars in WP4 will be convened to discuss the most effective ways to disseminate the results of the exchange program. Continuing discussion will occur throughout the project and the exchange of ideas for further development of the collaborative research project and funding proposals to ensure the sustainability of the project will continue throughout the project.

4.3 Appropriateness of the institutional environment (hosting arrangements, infrastructure)

Explain the availability of the expertise and human resources

The European partners as a team will be supported throughout the whole period of implementation of the Marie Curie grant by the Research Office of the UNC, which will advise the coordinator in his role of Management Authority. At this aim, the managerial and technical staff of the Research Office of the UNC will be fully involved and play an active role in the international exchange. In particular, one recruited staff member will follow and support the projects partners during part of their exchanges, to properly check all the administrative, managerial and technical issues related to the delivery of the project.

Each partners of the exchange program proposal has an adequate structure in terms of equipment (workstation, software and plotter) to develop both training and research activities. They are all departments and/or labs of prestigious universities either in Europe or in the Pacific region.

Describe the necessary infrastructures

Partner 1: University of New Caledonia (UNC)

Founded in 1999, the University of New Caledonia (UNC) is a French and European public institution, with a scientific, cultural and professional focus under the supervision of the French Ministry for Higher Education, Research and Innovation. UNC has brand new infrastructure and secured laboratories with high technology equipment (SIGMA), technical (data centre) and scientific areas (collaborative spaces in SIGMA building). UNC is also able to accommodate 35 incoming researchers in its on-campus accommodation (20 studios and 6 one-bedroom apartment that can accommodate 2 persons) with all facilities. The proximity of the accommodation and researchers offices and laboratories will ensure the efficiency of secondments. UNC has been highly involved in Research with several projects financed by French research agencies (ANR : Agence Nationale de la Recherche, CNRT: Centre National de la Recherche Technologique, AFD: Agence Française de Developpement) obtained Government funds, local provinces and other local organisations. Since 2014 the PIURN which UNC is part of, has cooperated on mutual matters by exchanging information on mutual interest and working on joint projects.

Partner 2: Institut Agronomique Calédonien (IAC)

The IAC is a scientist institution involved in the conservation, the development and the valorization of natural resources. It has an essential role in the set up of strategies for family farming and resilient agricultural development, the preservation of rich and original socio-agro-ecosystems, the conservation of traditional practices and as well, the development of innovative practices. The IAC has skills in geography and sociology, but also in physiology, molecular biology, biochemistry, entomology. IAC has 7 research stations in New Caledonia, places where they will offer a working space for FALAH project, especially for pilot experimentations.

Partner 3: Institut de Recherche pour le Développement (IRD)

The French National Research Institute for Sustainable Development (IRD) is a French public establishment under the joint authority of the French Ministry of Higher Education and Research and the Ministry of Foreign Affairs and International Development. Via its network and presence in fifty or so countries, it takes an original approach to research, expertise, training and knowledge-sharing, to the benefit of countries and regions that make science and innovation key drivers in their development. IRD Noumea and Montpellier belong to the joint research unit ESPACDEV and will provide an image processing laboratory to modelise peri urban spaces.

Partner 4: Ludwig Maximilians Universität München (LMU)

LMU is recognized as one of Europe's premier academic and research institutions. Since our founding in 1472, LMU has attracted inspired scholars and talented students from all over the world, keeping the University at the nexus of ideas that challenge and change our complex world. The institute provides office space with desks and Internet access for all visiting scholars. Furthermore, the LMU provides access to University services and libraries.

Partner 5: Centre National de la Recherche Scientifique (CNRS)

Montpellier Institute for CNRS invested in more than 50 research units with over 2100 permanent and non-permanent staff members, and over 6000 staff in its laboratories. CNRS is one of the main key player in research on the East side of Occitania (Languedoc-Roussilon). It establishes its regional development strategy on an active partnership with universities and other public institution for research, businesses, territorial collectivities. Many units also develop strong international and European partnerships.

International Partners

Partner 7: South Pacific Community (SPC)

The Pacific Community (SPC) is the principal scientific and technical organisation in the Pacific region, proudly supporting development since 1947. They are an international development organisation owned and governed by our 26 country and territory members. It is a unique organisation covers more than 20 sectors. They are renowned for knowledge and innovation in such areas as fisheries science, public health surveillance, geoscience and conservation of plant genetic resources for food security. Key research facilities, state of the art infrastructure and equipment are available in SPC. In this context the institution will offer a unique opportunity to host colleagues of the FALAH project and bring their expertise in family farming and health

TC Partners

Partner 8: Solomon Islands National University (SINU)

SINU is a young university and unlike other universities, do not have a research centre that can support itself. Currently, staff conducting research, coordinated by the Office of Research and Postgraduate Studies (ORPS), are initiated within their respective schools. Research facilities are therefore based in respective schools. The ORPS also assists in other research tools.

Partner 9: University of the South Pacific (USP)

The University of the South Pacific is a regional university jointly owned by the government of 12 member countries. The key USP departments involving in the RISE project are Research Office (RO); Pacific Centre for Environment and Sustainable Development (PaCE-SD); Institute of Applied Sciences (IAS); School of Agriculture and Food Technology (SAFT); Institute of Marine Resources (IMR) and the Faculty of Arts, Law and Education (FALE). Key research facilities, state of the art infrastructure and equipment available in USP. New Innovation Hub for enriching Research and Innovation on the Pacific (partnered with UNDP). Laboratory facilities to perform in -dept biological testing or to support semi-synthetic programs, USP GIS computer labs and equipment are available. USP can facilitate access and logical support of the project in Fiji. Since 2014 USP co-lead the PIURN network with UNC.

Partner 10: Vanuatu Agricultural Research and Technical Center (VARTC)

VARTC is the sole operating agricultural research facility in Vanuatu, mandated to lead scientific R&D activities in the field of agriculture, livestock and forestry to improve genetic resource to increase food security and quality for local communities. VARTC has laboratories, nurseries and many parcels dedicated to national collections of vegetal materials. A seed bank should be implemented in 2019/2020 in partnership with SPC.

Partner 11: Ministry Of Education and Training (MOET)

Ministry of Education and Training is currently running Bachelor and master's degree program under a unit called "Vanuatu Bilingual Higher Studies". They have 3 classrooms and an e-eLearning classroom under construction. Those facilities will provide sufficient resources in terms of meeting, discussion to seconded staff. This unit is well equipped with high internet connectivity and IT tools for video-conference in its campus.

TC Collaborators

The University of Sydney (USYD) owns its research premises including the Charles Perkins Centre, a $385 million building on Camperdown campus at the University of Sydney that has a capacity of 900 wet and dry laboratory researchers and focuses on food, lifestyle and health. With a floor area of

50,000m^2, the Hub provides 15% of the total teaching and research space across the campus. This is in addition to each of the participant faculties' research facilities and network with the health sector.

The University of New South Wales (UNSW) benefits from state or the art facilities to investigate physiological responses to exercise. These facilities are owned by UNSW Sydney and are being upgraded to provide additional capacity to investigate cardiovascular and metabolic responses to exercise

The University of Wollongong (UOW) Infrastructure Facility brings together experts from fields such as economics, modelling, data analytics and system engineering. This expertise is applied to various domains including energy, water, transport and cities. Australian National Centre for Ocean Resources and Security (ANCORS) is Australia's only multidisciplinary university-based centre dedicated to research, education and training on ocean law, maritime security and natural marine resource management. We also provide authoritative policy development advice and other support services to government agencies in Australia and the wider Indo-Pacific regions, as well as to regional and international organizations and ocean-related industry.

Western Sydney University (WSU) is a research institution driven by impact. Excellent research and practical outcomes are essential parts of their overarching research mission. Their research has real impact upon the social, economic and environmental wellbeing of our regional, national and international communities.

If applicable, include and list in Table B3d

Université Toulouse 1 Jean-Jaurès is an affiliated entity with a legal link to Centre national de la recherche scientifique (CNRS), and both are located in France.

Jean-Pierre Poulain is a professor of sociology at the University of Toulouse and co-head of the "Health and Food" axis of CERTOP-CNRS. He heads the Chair of "Food Studies: Food Cultures and Health" jointly set up by University of Toulouse Jean-Jaures (France) and the Taylor's University (Malaysia). He is also the co-director of the International Associate Laboratory of CNRS between CERTOP and Taylor's University (LIA-CNRS, "Food, Cultures and Health").

Laurence Tibère is Associate Professor in Sociology at the University of Toulouse Jean Jaures (France), and member of CERTOP (Rechearch Centre about work, Organization, Power), UMR-CNRS 5044. She teaches at ISTHIA (Toulouse School of Tourism, Hospitality Management and Food Studies) where she's in charge of a Master of Food Studies. She's member of the LIA (International Associated Laboratory- France-Malaisie- Food Cultures and Health- CNRS) and of the Chair of Food Studies Cultures and Health in Taylors University (Malaysia) where she's lecturer and researcher. She is co-leader of WP3.

Université Toulouse 1 Jean-Jaurès (UT2J)

University of Toulouse Jean Jaurès (UT2J) counts 30 000 students (4000 foreign students from 150 nationalities). It is also intensifying international relations based on a worldwide framework. Toulouse School of Tourism, Hospitality and Food Studies (ISTHIA) counts now over 1000 students on the Toulouse, Foix and Kuala Lumpur sites. Key research project focus on the links between tourism and nutrition, and between food and health. In 2008, Taylor's Toulouse University Center (TTUC), became a co-administered department between Taylor's University (TU, Malaysia) and UT2J. CERTOP (Research Center on Work Organisations and Policies, UMR CNRS 5044) is a French Research institute, jointly tutored from 1994 by UT2J, the CNRS (National Center for Scientific Research), and the University of Toulouse 3-Paul Sabatier. Through TTUC, UT2J and TU are involved in common research fields within the Chair of Food Studies created in 2012 to carry on research on Food, Culture and Health. In 2016, the CNRS has labelised the researches conducted by ISTHIA-UT2J and TU "LIA" (International Associate Laboratory)-CNRS « Food, Cultures and Health ». OVALIE Platform: Experimental restaurant studying deeply the influence of physical and social contexts on eating and drinking behaviours, promoting and monitoring healthy lifestyle through real-time technology food

legislation. This offer to the FALAH project potential unique fields of transfer of family farming in Asia especially in Kuala Lumpur.

Table B3d – Secondments allocated to affliated entities

WP	Task name	Staff member profile (ER/ESR/MNG /ADM/TECH)	Beneficiary /Partner organisation short name	Affiliated entity short name	Country of the affiliated entity	Person-months allocated
3	Food and socio-cultural environment	ER 23 to 28	CNRS	Université Toulouse 1 Jean Jaurès	France	11
4	Family farming lifestyle and eco tourism	ER 23 to 28	CNRS	Université Toulouse 1 Jean Jaurès	France	5

4.4 Competences, experience and complementarity of the participating organisations and their commitment to the action

Describe the adequacy of the consortium to carry out the action by explaining how participating organisations' synergies and complementarities will be exploited

The proposed exchanges involve researchers from fourteen institutions, including seven universities (plus one university being an affiliated entity of the CNRS) and seven other institutions involved in research at various levels. Academic institutions have a wide variety of experiences including SINU who is a very young university and EU and Australian partners with large experience in academic research with international reputation. This mix of very experienced researchers from the institutions will provide the academic ballast to ensure the longevity of this academic network. This collaboration will bring together an interdisciplinary research team with individuals or their research teams with complementary international reputations and knowledge in different aspects related to this project. The New Caledonian, French, German, Fijian, Vanuatu, Solomon and Australian partners bring differing strengths to this project who conduct to a new synergy in agriculture, food and health domain in the Pacific.

5. REFERENCES:

1. Bouard S., Guyard S., Apithy L. Sustainable family farming in the Pacific: lessons from a large survey in New Caledonia. International conference on agriculture extension, September, Goroka, Eastern Highlands, Papua New-Guinea.; 2017.
2. Mallet, J.; Napoe, C.; Tyuienon, R.; Bouard, S.; Sabinot, C. Traditional Fishing Activity, Customary Exchanges and the Vision of Informality in New Caledonia. In *Informal Ethnic Entrepreneurship : Future Research Paradigms for Creating Innovative Business Activity*; Ramadani, V., Dana, L.-P., Ratten, V., Bexheti, A., Eds.; Springer International Publishing: Cham, 2019; pp. 243–258 ISBN 978-3-319-99064-4.
3. Sabinot, C.; David, G.; Juncker, M.; Bouard, S.; Fossier, C.; Mallet, J.; Kombouare, F. Pêches identitaires, nourricières et commerciales dans les écosystèmes récifaux. In *Nouvelle-Calédonie : archipel de corail*; Payri, C., Ed.; IRD: Marseille, 2018; pp. 191–198.
4. Wheeler, T.R.; Craufurd, P.Q.; Ellis, R.H.; Porter, J.R.; Prasad, P.V.V. Temperature variability and the yield of annual crops. *Agriculture, Ecosystems and Environment* **2000**, *1–3*, 159–167.
5. Achieving success in rural development: toward implementation of an integral approach - De Janvry - 2005 - Agricultural Economics - Wiley Online Library Available online: https://onlinelibrary-wiley-com.proxy.univ-nc.nc/doi/full/10.1111/j.0169-5150.2004.00015.x (accessed on Apr 1, 2019).
6. Malézieux, É.; Moustier, P. La diversification dans les agricultures du Sud : à la croisée de logiques d'environnement et de marché I. Un contexte nouveau. *Cahiers Agricultures* **2005**, *14*, 277-281 (1).
7. Haggblade, S.; Hazell, P.B.R.; Reardon, T. *Transforming the Rural Nonfarm Economy: Opportunities and Threats in the Developing World*; Intl Food Policy Res Inst, 2007; ISBN 978-0-8018-8664-5.
8. Losch, B.F.-G., Sandrine White, Eric Thomas *Structural Transformation and Rural Change Revisited*; Africa Development Forum; The World Bank, 2012; ISBN 978-0-8213-9512-7.
9. Obesity emergence in the Pacific islands: why understanding colonial history and social change is important | Public Health Nutrition | Cambridge Core Available online: https://www-cambridge-org.proxy.univ-nc.nc/core/journals/public-health-nutrition/article/obesity-emergence-in-the-pacific-islands-why-understanding-colonial-history-and-social-change-is-important/46EB4B7010DF40775454796AD5B83F0C (accessed on Mar 30, 2019).
10. The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report - The Lancet Available online: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32822-8/fulltext?utm_campaign=tlobesity19&utm_source=HubPage (accessed on Mar 18, 2019).
11. Coyne, T.; South Pacific Commission, N. (New C. eng; Hughes, R. (ed); Langi, S. (ed) Lifestyle diseases in Pacific communities. **2000**.
12. Noncommunicable diseases and risk factors in adult populations of several Pacific Islands: results from the WHO STEPwise approach to surveillance - Kessaram - 2015 - Australian and New Zealand Journal of Public Health - Wiley Online Library Available online: https://onlinelibrary-wiley-com.proxy.univ-nc.nc/doi/full/10.1111/1753-6405.12398 (accessed on Mar 10, 2019).
13. Bouard, S.; Apithy, L.; Guyard, S. Family Farming in Contemporary Kanak Society. In *Diversity of Family Farming Around the World: Existence, Transformations and Possible Futures of Family Farms*; Bosc, P.-M., Sourisseau, J.-M., Bonnal, P., Gasselin, P., Valette, É., Bélières, J.-F., Eds.; Springer Netherlands: Dordrecht, 2018; pp. 285–296 ISBN 978-94-024-1617-6.
14. Abarca-Gómez, L.; Abdeen, Z.A.; Hamid, Z.A.; Abu-Rmeileh, N.M.; Acosta-Cazares, B.; Acuin, C.; Adams, R.J.; Aekplakorn, W.; Afsana, K.; Aguilar-Salinas, C.A. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128· 9 million children, adolescents, and adults. *The Lancet* **2017**, *390*, 2627–2642.
15. Regional Framework for Accelerating Action on Food Security and Nutrition in Pacific SIDS.
16. Wattelez, G.; Frayon, S.; Cavaloc, Y.; Cherrier, S.; Lerrant, Y.; Galy, O. Sugar-Sweetened Beverage Consumption and Associated Factors in School-Going Adolescents of New Caledonia. *Nutrients* **2019**, *11*, 452.

17. Riebe, D.; Franklin, B.A.; Thompson, P.D.; Garber, C.E.; Whitfield, G.P.; Magal, M.; Pescatello, L.S. Updating ACSM's Recommendations for Exercise Preparticipation Health Screening. **2015**, *47*, 2473–2479.

6. Ethics issues

During the project, families will give informed written consent prior to participation in the study. The study protocol will be approved by the ethics committee of each university concerned by the project (USP, University of Vanuatu, SINU and UNC). The protocol also will meet all legal requirements and the criteria of the Declaration of Helsinki[17].

During the project data will be collected from families (children, parents, grand parents). Data will be generated through questionnaires, observations and, individual interviews. All transcribed interviews will be translated into english and anonymised before data is shared between countries. The following ethical considerations in relation to our research involving human participants have been made:

INFORMED CONSENT: the participants will be provided with project information in a participant information sheet (pis). All participants will be older than 10 years old and able to provide informed consent. (example below)

VOLUNTEERS: the research participants will be assured that participation is strictly voluntarily and that they can withdraw from the study at any point in the study. This will be explicit on the cf.

CONFIDENTIALITY: we will take into account the issue around confidentiality, which means that all data is processed and stored to prevent unauthorized access to the material. Signed confidentiality agreements will be sought from staff working with data (transcribers, translators, data entry). Consent forms (cf) will be collected from all consenting participants and stored in a secure location.

ANONYMITY: although anonymity cannot be guaranteed, ID number will be used for all participants. participating will not be named.

VULNERABILITY: the research participants that are going to be invited to take part in the involved in mental illness etc.)

IMPACT: we do not perceive that the impact of our research in any way would cause environmental damage, stigmatization of particular social groups, political or financial retaliation, etc).

BENEFITS-SHARING ACTION PLANNED : Data collected will enable to built a regional database through Fiji, Solomon, Vanuatu and NC. This will have a great potential for a global understanding of family farming in different Melanesian and Polynesian communities of Pacific.

Example of consentment form (will be translated into native language of each country):
CONSENT FORM (SAMPLE)

Project Title: “FALAH project”
Researcher: Name

-I have had the research project explained to me. I have read and understand the information sheet given to me.

-I understand why I have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.

-I understand that all interviews will be digitally recorded and transcribed.

-I understand that my involvement in the study is completely voluntary

-I understand that I am free to withdraw my participation at any time during the interviews without explanation.

-I understand that if I wish to withdraw completely from the research I can do so at any time.

-I understand that the researcher will make every effort to obscure my identity in research reports, including using a pseudonym and not disclosing any personal information about me. I do, however, understand that there is a possibility that my identity may not remain confidential.

I understand that a transcriber will be used and s/he will sign a confidentiality agreement.

I understand that copies of the information I give will be stored securely

I understand that the data from this research will be used in academic articles, and conference presentations. In none of these will my name be used.

[17] https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

I understand that has sign my principal has signed a consent form assuring that participation or non participation will in no way affect my employment status.
I agree to be part of this research project
I understand that if I have any question I can contact: ……
NAME …… CONTACT: ……
SIGNATURE …… DATE……
APPROVED BY THE UNIVERSITY OF ……. HUMAN PARTICIPANTS ETHICS COMMITTEE ON …… E

Ethics Requirements to be cleared before the Grant Agreement Signature

Humans

-The procedures and criteria that will be used to identify/recruit research participants must be clarified in the grant agreement before signature.

During the project, data will be collected from families (children, parents, grands parents). In each areas and countries, fields will be chosen according to the following criteria's: rural and urban areas, main island and isolated islands of the four countries (Fiji, Solomon Islands, Vanuatu and New Caledonia). Families will be invited to participate to the study in different contexts : public spaces and/or in communities, including home. Data will be generated through questionnaires, observations and, individual interviews. All transcribed interviews will be translated into english and anonymised before data is shared between countries. All the ethical considerations in relation to our research involving human participants have been made.

-The informed consent procedures that will be implemented for the participation of humans and for data processing must be included in the grant agreement before signature.

The informed consent procedures that will be implemented for the participation of humans and for data processing will includes:
A statement that the study involves research subjects and an explanation of the purposes of the research,
The expected duration of the subject's participation,
A description of the procedures to be followed and an identification of any procedures which are experimental.
A statement that participation is voluntary.
Information about who is organising and funding the research.
A description of any reasonably foreseeable risk, discomfort or disadvantages.
A description of any benefits to the subject or to others which may reasonably be expected from the research avoiding inappropriate expectations.
A statement describing the procedures adopted for ensuring data protection/confidentiality/privacy including duration of storage of personal data.
A description of how incidental findings are handled.
A reference to whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject.
A statement offering the subject the opportunity to ask questions and to withdraw at any time from the research without consequences.
An explanation of what will happen with the data or samples at the end of the research period and if the data/ samples are retained or sent/sold to a third party for further research.
Information about what will happen to the results of the research.

For children, informed consent of parents/legal representative (the definition of legal representative should be in accordance with the legislation of the host country.) will be obtained, but also, when the child is able to give assent, the investigator must also obtain that assent.

The study protocol will be approved by the ethics committee of each university concerned by the project (USP, Vanuatu, SINU and UNC). The protocol also will meet all legal requirements and the criteria of the Declaration of Helsinki[18].

-If applicable, the applicant must clarify whether vulnerable individuals/groups will be involved, and the measures to protect them and minimise the risk of their stigmatisation must be included in the grant agreement before signature.

In the project, no vulnerable individuals/groups will be involved.

-In case children and/or adults unable to give informed consent are involved, details on how the consent of the legal representatives (and assent, when applicable) will be acquired must be included in the grant agreement before signature.

In this project, children unable to give informed consent will be involved. In this case, informed consent of parents/legal representative (the definition of legal representative should be in accordance with the legislation of the host country) will be obtained, but also, when the child is able to give assent, the investigator must also obtain that assent.
In case to long-term studies, where the child reaches the age of majority, the research team should obtain his/her consent to continue the study and/or for the use of samples already obtained.
A child's refusal to participate or continue participating in the research should always be respected. Researchers should avoid exerting any pressure against the child/his-her parents that will lead to the participation of the child to the research.
Informed Consent and Information sheets are comprehensive and separate for parents/legal representative and for children.
Information sheets must be in accordance to the age of children:
• Information for children five years and under should be predominantly pictorial.
• For pre-adolescent (aged up to 16) information sheets should explain briefly and in simple terms the background and aim of the study, so the child can consider assent. It also should contain an explanation that their parents will be asked for consent.
• If an adolescent aged 16 to 18 is no longer a minor as defined in national law, or is an "emancipated minor", then written informed consent is required from these individuals.
Assent of the child who is able to give must be required.
Information sheets should indicate how the study will affect the child at home, school or other activities.

Projects involving illiterate populations:
When clinical trials are conducted in developing countries or communities with poor resources in developed countries, additional measures may often be needed to ensure that the objectives of informed consent are met. These measures are related to the researcher's knowledge of the local ethos. For example, in certain cases it may be appropriate to seek the agreement of a person(s) invested with a

[18] https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

certain authority within the community. However, free and informed consent always has to be given by each individual involved in a trial/research.
Where formal written informed consent from the participant is not possible, the following strategies should be used:
- Presence of a community representative trained by the scientific team.
- Witnessing the oral approval by a trained and independent community representative.
He/She will verify that the purpose of the research has been explained to the participant and he/she has understood what is proposed.

- Templates of the informed consent/assent forms and information sheets (in language and terms intelligible to the participants) must be specified in the grant agreement before signature.

Template of information sheet:

Project Title: "FALAH project", project number: 873185
Funded by: **Marie Skłodowska-Curie Actions, Research and Innovation Staff Exchange (RISE),** H2020-MSCA-RISE-2019 European Union.
Description of the project: Family farming, lifestyle and health in the Pacific: FALAH"
Presentation: FALAH is a scientific project focused on family farming and food in the Pacific Islands. Due to the close relationship between agriculture and food in the Pacific, the project aim to better understand the relations between agriculture and food in families. This project mobilizes researchers and teaching-researchers from Europe and partners from Vanuatu, Fiji, Salomon Islands, New-Caledonia and Australia. Fields of application are exclusively in Fiji, Solomon Islands, Vanuatu and New Caledonia. The network of research teams operating in the Pacific Islands that have a common interest in food security and its direct or indirect relationship with the environment, lifestyle and health. The final goal is to promote and revitalize family agriculture to improve the health of Pacific populations and ensure food security in the context of rapid social and economic transformations and climate change, which effect are particularity harmful to Pacific islands.

APPROVED BY THE UNIVERSITY OF ……. HUMAN PARTICIPANTS ETHICS COMMITTEE ON ……

Template of informed consent:
Participant name:
-I have had the research project explained to me. I have read and understand the information sheet given to me.
-I understand why I have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.
-I understand that all interviews will be digitally recorded and transcribed.
-I understand that my involvement in the study is completely voluntary
-I understand that I am free to withdraw my participation at any time during the interviews without explanation.
-I understand that if I wish to withdraw completely from the research I can do so at any time.
- I understand any reasonably foreseeable risk, discomfort or disadvantages.
- I understand any benefits which may reasonably be expected from the research avoiding inappropriate expectations.
- I understand what will happen with the data at the end of the research period and if the data are retained or sent/sold to a third party for further research.

- If I am a children, I understand that informed consent of parents/legal representative (the definition of legal representative should be in accordance with the legislation of the host country.) will be obtained, but also, when the child (me) is able to give assent, the investigator must also obtain that assent.
-I understand that the researcher will make every effort to obscure my identity in research reports, including using a pseudonym and not disclosing any personal information about me. I do, however, understand that there is a possibility that my identity may not remain confidential.
I understand that a transcriber will be used and s/he will sign a confidentiality agreement.
I understand that copies of the information I give will be stored securely
I understand that the data from this research will be used in academic articles, and conference presentations. In none of these will my name be used.
I understand that has sign my principal has signed a consent form assuring that participation or non-participation will in no way affect my employment status.
I agree to be part of this research project
I understand that if I have any question I can contact: ……
NAME ……
CONTACT: ……
SIGNATURE ……
DATE……

Protection of personal data

-A description of the technical and organisational measures that will be implemented to safeguard the rights and freedoms of the data subjects/research participants must be specified in the grant agreement.

We will take into account the issue around confidentiality, which means that all data is processed and stored to prevent unauthorized access to the material. Signed confidentiality agreements will be sought from staff working with data (transcribers, translators, data entry). Data collected from all consenting participants will be stored in a secure server at the University of New Caledonia and managed by the DPO.
We will follow the GDPR's core data-protection principles (articles 5 and 25 GDPR). "Data protection by design" will include:
• the anonymisation of personal data;
• data minimization (i.e.: collect only the data that we need to meet your research objectives; (Article 5(1) GDPR);
• applied cryptography (e.g. encryption and hashing);
• using data-protection focused service providers and storage platforms; and
• arrangements that enable data subjects to exercise their fundamental rights (e.g. as regards direct access to their personal data and consent to its use or transfer).
When considering whether and how to apply the principle of data protection by design, we should take into account:
• the nature, scope, context and purposes of processing;
• the severity of the risks to the data subjects' fundamental rights should we fail to protect their information; and
• the cost and availability of the technologies and applications we may need.

-Description of the anonymization/pseudonymisation techniques that will be implemented must be specified in the grant agreement.

ANONYMITY: to guaranteed anonymity an ID number will be used for all participants. Participating will not be named.
To guarantee the anonymity of the answers, the investigator in charge of the group will take care of the anonymity of the students according to a simple nomenclature:
-two numbers for the class level
-Two numbers for the establishment
- A number for the country
- Two numbers for the student, in non-alphabetical order
depending on the case
- three numbers for parents
- three numbers for grandparents
The anonymity list will be kept by the DPO.
Protection of personal data will be done according to the GDPR recommendations (https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules_en).

-In case personal data are transferred from a non-EU country to the EU (or another third state), confirmation that such transfers comply with the laws of the country in which the data was collected must be specified in the grant agreement.

In case personal data will be transferred from a non-EU country to the EU (or another third state), such transfers will comply with the laws of the country in which the data was collected.

-The applicant must explain how all of the data they intend to process is relevant and limited to the purposes of the research project (in accordance with the 'data minimisation 'principle). This must be specified in the grant agreement.

All of the data we intend to process are relevant because we aim to promote and revitalize family agriculture to improve the health of Pacific populations and ensure food security in the context of rapid social and economic transformations and climate change, which effect are particularity harmful to Pacific islands. During the project, we will do the research in accordance with the "data minimisation principle". Indeed, data processing must be lawful, fair and transparent. It should involve only data that are necessary and proportionate to achieve the specific task or purpose for which they were collected (Article 5(1) GDPR). All of the data that we need to meet our research objectives. Collecting personal data that we do not need for our research project may be deemed unethical and unlawful.

Third countries

-In case activities undertaken in non-EU countries raise ethics issues, the applicants must ensure that the research conducted outside the EU is legal in at least one EU Member State. This must be specified in the grant agreement.

In case activities undertaken in non-EU countries will raise ethics issues, the applicants will ensure that the research conducted outside the EU is legal in at least one EU Member State

7. Letters of Commitment of partner organisations

USP
OFFICE OF THE DEPUTY VICE-CHANCELLOR
Research, Innovation and International

The University of the South Pacific
Private Mail Bag, Laucala Campus
Suva, Fiji

Ph: (679) 323 2397
Fax: (679) 323 1504
www.research.usp.fj

September 24, 2019

Project officer
European Commission

Proposal Number 873185 FALAH

Dear Sir/Madam,

I the undersigned Professor Derrick Armstrong, in my capacity as Legal Authorized Representative of the Office of the Deputy of Vice-Chancellor, the University of the South Pacific, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the proposal number 873185 – acronym FALAH submitted within the call H2020-MSCA-RISE-2019 should the proposal be funded.

We will contribute to the project through establishing an administrative team to work to coordinate the FALAH activities within USP and between USP and partners. The administrative team will be mainly within the Research Office including the Pacific Island University Research Network (PIURN).

We will contribute through hosting and supporting exchange professionals from partner Universities in Europe. We will provide them with office space and other logistical support needed for a successful exchange program. We will also prepare and organize USP staff exchange schedules and rules to ensure our staff will maximize the benefits of the exchange program when visiting EU institutions. This will enable our staff to return and conduct in-house seminars and training to disseminate the skills and knowledge learned through the exchange programs. We will formalize the exchange arrangements through a formal MOU between USP and the EU partners.

The Research Office through the Strategic Research Themes (SRT) will also prioritise FALAH with the view to provide support through co-funding research activities in the field of Family Agriculture for Resilience, Food Security and Health and Knowledge Exchange, and graduate scholarships covering the research packages in FALAH promoting Innovation, Empowerment and Sustainability.

Since FALAH is encouraging research exchange for both well established and early career researchers, we are anticipating increases in publications in well-recognized journals. USP will provide rewards for staff with high ranking publications, innovative and high -impacts research.

USP could also provide ICT infrastructure and technical capacity to support Knowledge and Information exchange component of FALAH Project.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Yours sincerely,

Professor Derrick Armstrong
Deputy Vice Chancellor (Research, Innovation & International)

SOLOMON ISLANDS NATIONAL UNIVERSITY

Office of the Vice-Chancellor

Kukum Campus, PO Box R113 Honiara, Solomon Islands Ph: (677) 30694

11th September, 2019

TO WHOM IT MAY CONCERN

I the undersigned, Dr Jack Maebuta, in my capacity as Legally Authorized Representative of the Solomon Islands National University, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project on Family Farming, Life Style and Health in the Pacific – Proposal Number 873185 should the proposal be funded.

We will contribute to:

(1) Implementing aspects of relevance to family farming and practice (WP1) as SINU identifies Agriculture among its key strengths;
(2) Addressing the high incidence of non-communicable diseases (WP2) with the expert assistance of SINU specialists in dietetics and nutrition; and
(3) Improving education, communication and dissemination of information to enhance the effectiveness of measures in (1) and (2) above (WP3).

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded. The participation of SINU in this proposal with be multidisciplinary, and will therefore result in significant university-wide capacity-building, both enabling faculty staff to upgrade formal qualifications and contributing to enhanced specialist skills and expertise. The participating units in SINU will be the School of Natural Resources & Applied Sciences (SNRAS), School of Nursing and Allied Health Sciences (SNAHS), School of Technology and Maritime Studies (STMS), and the Office of Research and Postgraduate Studies (ORPS).

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Dr Jack Maebuta
Pro Vice-Chancellor (Academic)

CENTRE TECHNIQUE DE RECHERCHE
AGRONOMIQUE DU VANUATU

B.P. 231
ESPIRITU SANTO
Tel : (678) 7733477

CTRAV
VARTC

VANUATU AGRICULTURAL RESEARCH
AND TECHNICAL CENTER

P.O.BOX 231
ESPIRITU SANTO
Tel : (678) 7733477

20th of February 2019.

VARTC Letter of Commitment

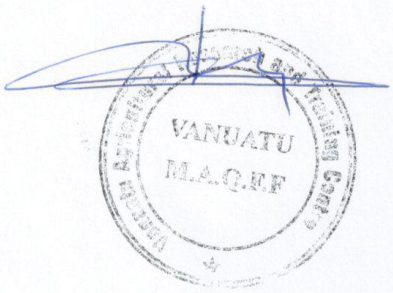
I undersigned Michel LECHAPT, in my quality of Legal Authorized Representative of Vanuatu Agricultural Research and Technical Center (VARTC) commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project family farming lifestyle and health in the Pacific – proposal number 873185 – acronym FALAH submitted within the call H2020-MSCA-RISE-2019 should the proposal be funded.

We will contribute to the lead researches in the field of agriculture, such as researches on genetic resources in order to increase food security and enhance sustainable farming systems

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded

We are pleased to provide any additional information on our commitment towards the project upon your request or the Request of European Commission.

Michel LECHAPT 20/08/2019



GOUVERNEMENT
DE LA REPUBLIQUE
DE VANUATU

MINISTERE DE L'EDUCATION ET DE LA FORMATION

DIRECTEUR GENERAL
Sac De Courier Privé 028
Port Vila, Vanuatu
Tel : 22309
Email : ibergmans@vanuatu.gov.vu

GOVERNMENT
OF THE REPUBLIC
OF VANUATU

MINISTRY OF EDUCATION AND TRAINING

DIRECTOR GENERAL
Private Mail Bag 028
Port Vila, Vanuatu
Tel : 22309
Email : ibergmans@vanuatu.gov.vu

OFFICE OF THE DIRECTOR GENERAL - BUREAU DU DIRECTEUR GENERAL

Port-Vila, 11th September 2019

To Whom It May Concern

Re: Commitment letter from the Ministry of Education and Training.

I undersigned, IATI Bergmans, in my quality of Director General and Legal AuthorizedRepresentative of the Ministry of Education and Training, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project Family farming, lifestyle and health in the Pácific – proposal number 873185 - acronym FALAH should the proposal be funded.

In order to ensure a successful implementation of the Project, we will contribute to host partner's organization members to respective fields of research in Vanuatu and will also facilitate the secondment of our Vanuatu team member's, particularly our current PHD candidates, in New-Caledonia and Europe to enhance their knowledge and skills in their respective fields of interest.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Yours Sincerely,

Bergmans IATI,

Director General

Ministry of Education and Training.

THE UNIVERSITY OF SYDNEY

Research Grants and Contracts
Research Portfolio

Dr Pearly Harumal
Director
Research Grants and Contracts

5 August 2019

To whom it may concern

August 2019 - Revised Letter of Support on award.

I the undersigned Dr Pearly Harumal, in my capacity as the Legal Authorized Representative of The University of Sydney, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project Family farming, lifestyle and health in the Pacific - proposal number 873185 - acronym FALAH, should the proposal be funded.
We will contribute to the project through:
1) the development and implementation of methodology framework to assess nutrition and physical activity using appropriate digital tools;
2) supporting the analysis of complex data sets and
3) hosting a workshop with project partners.

The team contributing to the project has demonstrated expertise in these domains and will make a distinct contribution to the project deliverables.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Kind Regards

for A/ Dr Pearly Harumal
Director Research Grants and Contracts
University of Sydney

Research Grants and Contracts|
Research Portfolio
Level 6, Jane Foss Russell Building |
The University of Sydney | NSW | 2006
AUSTRALIA

T +61 2 8627 8175
F +61 2 8627 8145
E pearly.harumal@sydney.edu.au
http://sydney.edu.au/research_support/

ABN 15 211 513 464
CRICOS 00026A

UNSW SYDNEY | Australia's Global University

I, Debbie Docherty, in my quality of Legal Authorized Representative of UNSW Sydney, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project Family farming, lifestyle and health in the Pacific – proposal number 873185 – acronym FALAH submitted within the call H2020-MSCA-RISE-2019 should the proposal be funded.

We will contribute to the development of the research tools that will be used to measure family lifestyle, health and well-being. We have extensive experience in the assessment of physical fitness, physical fitness and physical activity in children and adults across a wide variation of health conditions. This will ideally position us to contribute to the training and education of research staff involved in this project.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

[Date] 12 AUG 2019

[Signature]

Debbie Docherty
Director
Research Grants and Contracts

UNIVERSITY
OF WOLLONGONG
AUSTRALIA

I undersigned Sharon Martin, in my quality of Legal Authorized Representative of University of Wollongong's Director, Research Service Office, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project Family farming, lifestyle and health in the Pacific - proposal number 873185 - acronym FALAH, submitted within the call H2020-MSCA-RISE-2019 should the proposal be funded.

We will contribute to the proposed work plans focussing on adapting family farming systems for sustainable food security, and to education and knowledge exchange.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

University of Wollongong's contribution to FALAH Pacific will be coordinated by Dr Charles Hawksley (Politics and International Studies), who will contribute his research expertise to the food security work package. Dr Hawksley will be supported by other UOW staff, who will contribute to the education and knowledge exchange work plan. Professor Pascal Perez will lead the co-collaborators in Australia on education and knowledge exchange.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Yours sincerely,

Sharon Martin
Director Research Services Office
6 September 2019

Research Services Office
University of Wollongong NSW 2522 Australia
Telephone (02) 4221 3386 Facsimile (02) 4221 4338
Email: research-services@uow.edu.au Web: www.uow.edu.au

WESTERN SYDNEY
UNIVERSITY

12 September 2019

I the undersigned, Stephen Hannan, in my capacity as Legal Authorized Representative of Western Sydney University's Research Engagement Development and Innovation, commit to set up all necessary provisions to send/host the secondments contributing to the development and implementation of the project Family farming, Lifestyle and Health in the Pacific - proposal number 873185 - acronym 'FALAH', submitted within the call H2020-MSCA-RISE-2019, should the proposal be funded.

We will contribute to the proposed work plans focussing on adapting family farming systems for sustainable food security, and to education and knowledge exchange.

I am aware of and agree with the principle that the setting up of such provisions is a precondition for the proposal to be funded.

WSU's contribution to FALAH will be coordinated by Dr Nichole Georgeou, Director, Humanitarian and Development Research initiative (HADRI), who will contribute who will contribute her research expertise to the food security work package. She will be supported by other WSU staff, who will contribute to the food security work package and the education and knowledge exchange work plan.

We are pleased to provide any additional information on our commitment towards the project upon your request or the request of the European Commission.

Signed:

Stephen Hannan
Executive Director, Research Engagement Development and Innovation
Western Sydney University

University of Western Sydney
ABN 53 014 069 881 CRICOS Provider No 00917K
Locked Bag 1797 Penrith NSW 2751 Australia
westernsydney.edu.au

Marie Skłodowska-Curie Actions
Research and Innovation Staff Exchange (RISE)
H2020-MSCA-RISE-2019

Project Acronym : FALAH – Project Number : 873185
Annex 1 to the Grant Agreement
(Description of the Action)
Part B