Pacific Community
Communauté du Pacifique

9th REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

Food and Agriculture Organization of the United Nations

CONTENTS PAGE:

ORIGINAL: ENGLISH

9TH REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15-17 May 2024 - virtual)

PROVISIONAL AGENDA

Session/Time	Topics	Speakers
DAY 1: Wednesday 15 May		
Focus: Progress on Actions since PHOAFS & PMAF 2023		
Session 1	**Opening**	
12.00noon	Prayer	
	Opening remarks – Outgoing Chair- Fiji	Permanent Secretary – Ministry of Agriculture and Waterways, Fiji
	Handover of Chair	
	Opening Remarks - Incoming Chair- Tonga	Chief Executive Officer – Ministry of Agriculture, Food and Forest, Tonga
	Adoption of Meeting Agenda	Chair
	Appointment of Rapporteurs	Chair
	Photo – Virtual (Zoom)	SPC
Session 2	**Report from previous PHOAFS**	
12.30 pm	2.0 Report on action items from PHOAFS & PMAF	Chief Executive Officer – Ministry of Agriculture, Food and Forest, Tonga
12.40	2.1 Regional Research Agenda	Secretary – Ministry of Agriculture, Cook Islands
1.00 pm	2.2 Food Systems Coordination	Fiasili Lam, FAO
1.20 pm	2.3 Agri-food Systems and Climate Explorer	Assistant Chief Executive Officer, – Ministry of Agriculture and Fisheries, Samoa
1.40	Short break	
1.50pm	2.4 Regional Agriculture and Forestry Strategy	Prof . Helen Kerr and Dr Alex Ryan
4.00 pm	**Close**	

Session/Time	Topics	Speakers
DAY 2: Thursday 16 May		
Focus: Technical focus		
12.00noon	**Opening comments and prayer**	
Session 3	**Regional Public Goods** Progress on implementation of regional services and regional public goods	
12.10noon	3.1 Centre of Excellence for Pacific Crops and Trees (CePaCT)	Logotonu Waqainabete, SPC
	3.2 Pacific Soils Partnership - **information paper**	
	3.3 Food Security and Nutrition in the Pacific Report – **information paper**	
	3.4 Digital Earth Pacific	Andiswa Mlise SPC
Session 4	Reports and recommendations from technical bodies	
12.20noon	4.1 Pacific Plant Protection Organisation (PPPO)	PPPO Board Chairman, Mr New Aue
	4.2 Pacific Heads of Veterinary & Animal Production Services (PHOVAPS) -***Information Paper***	
	4.3 Pacific Agricultural Plant Genetic Resources Network (PAPGREN)	Director – Kinaai Kairo Department of Agriculture, Kiribati
	4.4 Pacific Forestry Professionals Network	President of the Fiji Forestry Professionals Association, Mr Samuela Lagataki
	4.5 Pacific Organics and Ethical Trade Community (POETCom)- **information paper**	
	4.6 One Health progress and forward plan	Dr Eric Rafai, SPC
	4.7 Vision for Adapted Crops and Soils	Karen Mapusua, SPC
13.15pm	*Short break*	

Session 5	**Technical deep dive**	
2.00 pm	5.1 UNFCCC agriculture workstream update and discussion	Dr Tekini Nakidakida, Fiji Ministry of Agriculture and Waterways
2.30 pm	5.2 Discussion on invasives management paper for 2025 meeting	Chair
3.30 pm	**Day close**	
Session/Time	Topics	Speakers
DAY 3: Friday 17 May		
Focus: Looking Ahead		
Session 6		
12.00noon	*Country statements (5 minutes with template provided)*	Chair
2.20 pm	*Short break*	
2.45 pm	*Country statements (5 minutes with template provided)*	Chair
3.30 pm	Statements from partners	Chair
3.50 pm	Review of Meeting Statement	
4.00 pm	**Thanks, and Closing remarks**	

Additional Papers for Information : QR Code for e copies.

SPC 2023 annual report

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 - 17 May 2024) - Virtual

REPORT FROM PREVIOUS PHOAFS

Paper reference	**Session 2: Agenda Item 2.0**
Title	**Update on implementation of decisions of the 8th PHOAFS**
Action	Decision
Author(s)	**SPC, FAO**

Summary

The paper provides an overview of progress by the SPC and FAO on decisions taken by the 8th meeting of the PHOAFS and the 3rd Ministerial meeting held during the Pacific Week of Agriculture and Forestry in Fiji, March 2023. Details and related decision points are presented in relevant agenda items.

Recommendation:

The PHOAFS are invited to endorse the update of progress against decisions of the 8th PHOAFS.

Background

1. The 8th Regional Meeting of Pacific Heads of Agriculture and Forestry Services (PHOAFS) met on 9 March 2023 in Nadi, Fiji, focusing on progress on actions since PHOAFS 2021. The meeting was attended by Heads of Agriculture and Forestry from American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United States, and Wallis and Futuna. Representatives and Observers from international, regional, national, government, non-government, private sector and other stakeholders also attended. The meeting outcomes were to be actioned by FAO, SPC and other stakeholders and reported on at the 2024 PHOAFS meeting.

Purpose of this paper

2. To update the PHOAFS on progress against decisions of the 8th PHOAFS meeting.

3. Decisions of the 21st of March 2023 meeting of the PHOAFS:
   - **ITEM 2.2 Development of Regional agriculture and forestry strategy using strategic foresight methodologies.**
     - Financial resources for development of the Strategy were mobilised from SPC programme funds, Government of Australia through ACIAR and the Government of New Zealand through the SPC Climate Change Flagship
     - Technical assistance was procured through a competitive process with Kerr and Associates contracted to deliver the strategy development process.
     - The process involved:
       - Horizon scanning: This identified trends and opportunities, as well as risks, that are on the horizon for agriculture and forestry in the region. Over 300 individuals were involved in the consultation process through online and in person workshops. These individuals were largely from PICTS agriculture and forestry ministries and departments and members of the technical networks that report through to the PHOAFS (PHOVAPS, PPPO, PAPGREN). Technical focal points for soils and forestry were consulted, as were meteorological services (in collaboration with SPREP). Online workshops were also held with youth, farmers organisations and the private sector as well as academics and researchers engaged with development of the Regional Research Agenda. In depth key informant interviews were also held with agribusiness, lead farmers, buyers and academics.

- Sense making: A core group consisting of 7 PHOAFS (Cook Islands Agriculture; Fiji Forestry; French Polynesia Agriculture; Guam Agriculture; Kiribati Agriculture; Solomon Islands Agriculture; Tonga Agriculture and forestry) , was identified to guide the strategy development process. The group was identified to provide a cross section of large and small economies, high and low islands, agriculture and forestry. The core group participated in one 3 day workshop in November 2023 to analyse and 'make sense' of the horizon scanning process. The results of this workshop along with a survey were circulated to all PHOAFS for feedback and input.
- In March 2024 the PHOAFS were invited to participate in a 2-day strategic foresight workshop to progress strategy development. 15 countries and territories participated. 'Serious Gaming' was utilised to provide experiential futures and support the framing of strategic choices by the PHOAFS. The core group met for an additional day to refine the key themes of the strategy.
- The draft strategy was circulated to PHOAFS for feedback, and the core group considered this input prior to finalising the draft strategy presented for validation.
- Strategy for validation and endorsement will be presented in Session 2 . Agenda Item No. 2.3

- **ITEM 2.3 Regional Research Agenda**
  - The Government of Australia through ACIAR is funding the testing of the Regional Research Agenda.
  - A call for nominations was made through the HOAFS in April 2023 for Regional Research Leaders who would form the Peer Review Group (Peer Reviewers).
  - A total of 17 Peer Reviewers were nominated and have been working closely with SPC as the Secretariat to test the framework of the Regional Research Agenda.
  - The Peer Reviewers have met five times (two face-to-face meetings and three virtual meetings) to go through each component to test and adapt the process.
  - The testing of the framework of the Regional Research Agenda (RRA) was conducted for each component: Component One focuses on Hearing Pacific Voices, Component Two focuses on Peer Review and Component Three focuses on Partners in Research.
  - The testing of the framework of the RRA is broken down into its three main components: Hearing Pacific Voices; Peer Review; Partners in Research.
  - The Peer Reviewers and the Secretariat will finalise the research and the results will be presented to the HOAFS in May 2025.
  - The progress of the testing of the RRA for endorsement will be presented in Session 2 Agenda 2.1

- **ITEM 2.4 Agriculture Workstream in UNFCCC (KJWA)**
  - Regional submissions were prepared by Fiji and submitted March 31st 2023 on behalf of the PSIDS and are attached as an Annex 1
  - FAO and SPC have prepared a brief on projects supported in 2023 that assist with implementing the KJWA. Attached as Annex 2
  - Update and decision paper on UNFCCC negotiations will be presented in Session 5, Agenda Item 5.1
- **ITEM 3.2 Pacific Soils Partnership**
  - SPC has confirmed funding to support the PSP Secretariat. The position of Soils Coordinator is under recruitment.
  - A call for nominations for PSP focal points has been made 18 countries have confirmed Focal points. Response is pending from Cook Islands, CNMI, New Caledonia, New Zealand, Pitcairn.
  - Technical assistance under recruitment to establish the governance structure and soil strategy.
  - Paper for information presented in Session 3 Agenda Item 3.2
- **ITEM 3.3 An Overview of Food Security and Nutrition in the Pacific 2022**
  - The first edition of the report has been discussed at numerous regional fora, and the feedback is very positive and aligned. The official publication is being processed.
  - FAO is leading the partnership that produced the first edition for the production of the next edition of the report, and has invested AUD 184,198 via a Letter of Agreement (LoA) with the University of the Sunshine Coast, Australia, to fund the production of next edition of the report. The next edition will cover the time period 2023 to 2024 and will cover Pacific SIDS only. FAO is communicating with IFAD, UNICEF, WFP, WHO and SPC who produced the first edition to get their commitment of their joint efforts for the development of second edition.
  - Paper for information presented in Session 3, Agenda Item 3.3
- **ITEM 4.3 Pacific Organic and Ethical Trade Community (POETCom)**

  POETCom Governance Review Implementation

  - A working group was created with a call for nominations, resulting in 13 members working group composed by stakeholders from 9 different countries and with diverse backgrounds: PGS, Ministry, Certification Bodies, Farmers group…
  - The working group was subdivided into 2 focus groups on the following topics:
    - POETCom Governance
    - POS/PGS Management
  - The Working Group met twice to discuss the priority issues including:
    - Establishing a charter between SPC and POETCom
    - Membership including voting rights, focal points and POETCom core services
    - Strengthening the PGS system

- The Working Group identified the clarification of Roles and Responsibilities between SPC and POETCom as the first step prior to creating the POETCom Governance Book. Therefore, the legal team was officially solicited to support the drafting of a charter to clarify the relationships, roles, and responsibilities of SPC and POETCom regarding the governance and management of the POS and the Organic Pasifika mark. The legal team is now studying the corpus of documents to advise the POETCom secretariat in the drafting of the documents in the upcoming months.
- The roadmap attached for the revision of POETCom governance documents and strategic plan was defined collectively with legal team to present finalised results at HOAFS 2025.
- Update will be presented in Session 4, Agenda Item No. 5.

- **Ministerial decisions:**
  - **Informing and catalysing national food systems transformation in Pacific Island Countries**
    - With funding support from FAO, a paper was developed to address the Ministers decision from the last Ministerial meeting in 2023, for the "Creation of a regional technical coordination committee or hub to inform and catalyse the food systems transformation agendas in PICTs". The paper outlines the current state of regional food system coordination and includes the benefits, limitations, opportunities, and threats of establishing a regional food system coordination mechanism, and the purpose, form, and function of different approaches to this mechanism. The paper and its recommendations will be presented to the PHOAFS for feedback and decision in Session2 Agenda Item 2.2 to guide the next steps of finalisation for the 2025 Ministers meeting.

  - **Climate information tool development**
    - With funding support from Australian Department of Foreign Affairs and Trade, CSIRO and the Australian National University were mobilised to provide technical support to design the Agri-Food Systems Climate Explorer Tool.
    - The Agri-food systems climate Explorer tool proof of concept has been designed to support policy discussions associated with the development and implementation of Samoa's Food Systems Pathway 2030.
    - The Proof of concept has been designed to help build users understanding of the risks and sensitivities of an agri-food system to climate thresholds and shocks.
    - Update and discussion paper will be presented in Session 2 - Agenda Item No. 2.4.

Recommendations:

4. The PHOAFS are invited to endorse the update of progress against decisions of the

ANNEX 1

Submission on behalf of Pacific Small Island Developing States,

on views on the elements of the joint work referred to in paragraphs 14–15 of FCCC/CP/2022/L.4, including views on topics for the workshops referred to in paragraph 15(b) on Sharma el-Sheikh joint work on the implementation of climate action on agriculture and food security mandated under Decision FCCC/CP/2022/L.4, para 17

A. Background

1. The Republic of Fiji welcomes this opportunity to make this submission on behalf of the Pacific Small Island Developing States (Pacific SIDS. The Pacific Ministers of Agriculture and Forestry during their 3rd Meeting in Nadi, Fiji on the 10th of March 2023, endorsed the development and submitting of a regional submission on behalf of the Pacific Small Island Developing States (Pacific SIDS). This submission is made pursuant to the request in paragraph 17 of FCCC/CP/2022/L.4.

B. Context

1. Agriculture and climate change are two key priorities for Pacific Small Islands Development States (Pacific SIDS). The Agriculture Sector, consisting of crops, livestock, forestry, fisheries and aquaculture, is an important sector to Pacific SIDS as it contributes to the livelihoods of a significant proportion of the region's population, accounts for an important share of export earnings for many countries in the region, and food and nutrition security. Climate change is impacting climate variability, increasing intensity of extreme events, economic slowdowns and downturns, and a major driver of food insecurity, malnutrition and poverty, and setting back gains already made in achieving the Sustainable Development Goals (SDGs) in the Pacific SIDS.
2. The Pacific Islands region include some of the most environmentally vulnerable nations in the world that are already facing development challenges. Climate change will present additional sets of issues for the agriculture sector, particularly in terms of managing the projected increase in the frequency and intensity of extreme weather events. The Pacific SIDS face the impacts of climate variability and extreme weather events, through from example, cyclones, droughts, floods, and intense rain. These situations have worsened and have caused significant production impacts, damages and losses to the agriculture sub-sectors in the past years. The climate projections for the 21st century and beyond, suggest that extreme events such as cyclones, heatwaves, droughts, and floods in the region are likely to increase in intensity (IPCC 5th Assessment Report). Extreme high (or king) tides and storm surges will continue to threaten low-lying islands, as will the ongoing sea level rise, which will cause

contamination of groundwater (IPCC 5th Assessment Report). Pacific SIDS reiterates the paramount importance of prioritizing and safeguarding food security, ending hunger and the particular vulnerability of food production systems to the adverse impacts of climate change as recognized[1].

3. The adoption of the Koronovia Joint Work on Agriculture (KJWA) at the UNFCCC COP 23 was a landmark decision highlighting the importance of agriculture in the climate change agenda. The implementation of the KJWA has focused mainly on in-session workshops with little implementation on the ground. As Pacific SIDS, we have worked with our partners such as FAO and SPC to implement the KJWA, including through awareness raising, capacity building and field demonstration of climate resilience practices in soils, nutrient use, water, livestock, methods for assessing adaptation, and socio-economic and food security dimensions of climate change across the agriculture sectors. It is therefore important that in the Sharm el-Sheikh Joint work on implementation of climate action on agriculture and food security, considers climate action on agriculture and food security on the ground, recognizing that actions and solutions are context-specific and must take into account national circumstances.

C. Views on elements of the joint work referred to under paragraph 14-15 of Decision FCCC/CP/2022/L.4

4. The Pacific SIDS welcomes the decision adopted at COP27 (FCCC/CP/2022/L.4) on the Joint Work on implementation of climate action on agriculture and food security. The Pacific SIDS reiterates its support of the key elements provided in paragraph 14 – 15 of the decision under FCCC/CP/2022/L.4 and further provides recommendations on how those key elements can be elaborated into actions in the table below.

Key elements paragraph 14	**Recommendations**
(a) Promoting a holistic approach to addressing issues related to agriculture and food security, taking into consideration regional, national, and local circumstances, in order to deliver a range of multiple benefits, where applicable, such as adaptation, adaptation co-benefits and mitigation, recognizing that adaptation is a priority for vulnerable groups, including women, indigenous peoples and small-scale farmers;	Enhance climate actions on agriculture and food security on the ground, recognizing that actions and solutions are context-specific and must consider national circumstances. Promote integrated climate smart agriculture approaches, nature-based solutions, and traditional knowledge. Promote adoption of food system approach, build on UN Food Systems Summit. Enhance anticipatory action and multi-hazard early warning systems. Multi-stakeholder involvement and participation. Enhance financial tools for agriculture, including anticipatory action, insurance, and social protection. Establish regional expert groups to support the UNFCCC Secretariat in facilitate the collection and sharing of regional information on the online portal.

(b) Enhancing coherence, synergies, coordination, communication, and interaction between Parties, constituted bodies and workstreams, the operating entities of the Financial Mechanism, the Adaptation Fund, the Least Developed Countries Fund and the Special Climate Change Fund in order to facilitate the implementation of action to address issues related to agriculture and food security	Establish an Expert Group on Agriculture and Food Security under the UNFCCC to enhance coherence, synergies, coordination, communication, and interaction between Parties, constituted bodies and workstreams. Establish finance windows under existing climate finance mechanisms to support climate actions in agriculture and food systems.
(c) Promoting synergies and strengthening engagement, collaboration and partnerships among national, regional, and international organizations and other relevant stakeholders, as well as under relevant processes and initiatives, in order to enhance the implementation of climate action to address issues related to agriculture and food security	Enhance regional and national focused events on agriculture and climate change targeting also farmers, fishers, extension officers and communities. Enhance South-South, SIDS-SIDS cooperation, partnership and sharing of lessons and practices. Enhance engagement of women and youth in implementation of climate actions related to agriculture.
(d) Providing support and technical advice to Parties, constituted bodies and the operating entities of the Financial Mechanism on climate action to address issues related to agriculture and food security, respecting the Party-driven approach and in accordance with their respective procedures and mandates	Establish an Expert Group on Agriculture and Food Security to enhance coherence, synergies, coordination, communication and interaction between Parties, constituted bodies and workstreams. Establish finance windows under existing climate finance mechanisms to support climate actions in agriculture and food systems. Strengthening effective partnerships at all levels recognising the role of governments, communities, and partner agencies in operationalising systems approaches to agroecological food production systems for resilience in the Pacific SIDS.
(e) Enhancing research and development on issues related to agriculture and food security and consolidating and sharing related scientific, technological, and other information, knowledge (including local and indigenous knowledge), experience, innovations and best practices	Enhance regional and sub-regional research agenda based on national and regional priorities and needs on agriculture and climate change nexus. Enhance collection of scientific information and data at national and regional levels, including traditional knowledge and practices to inform policies, programmes and access to climate finance.

	Strengthen national information systems
(f) Evaluating progress in implementing and cooperating on climate action to address issues related to agriculture and food security;	Prepare an annual synthesis report on the work undertaken by constituted bodies and financial and other entities under the Convention, as well as by relevant international organizations, on activities related to the joint work referred to in paragraph 14 above.

(g) Sharing information and knowledge on developing and implementing national policies, plans and strategies related to climate change, while recognizing country-specific needs and contexts;	Strengthen sharing of information and knowledge at national and sub-regional levels, build into existing platforms. Support development of science, technology and innovation platform to support resilient building in the countries.

D. Topics for workshops referred to in paragraph 15(b)

5. Pacific SIDS proposes the following topics for technical workshops referred to in paragraph 15 (b) of FCCC/CP/2022/L.4, based on Pacific regional priorities identified by Pacific SIDS.

Food systems and integrated climate resilience approaches

6. Food systems are contributing to, and affected by the impacts of climate change, ecosystems degradation and biodiversity loss. The Pacific SIDS advocates for a food systems approach involving an examination of the food system as a whole from farm-to-fork and the use of integrated climate resilience agriculture approaches such as integrated crop and livestock production systems that are also efficient and resulting in increased diversity, along with improved environmental sustainability. For the Pacific SIDS, the challenges can be achieved through food systems based on improved soil health that decrease incidences of soil borne pests and diseases, improve biodiversity, and reduce GHG emissions –thereby increasing the resilience of food production systems and communities.

Community vulnerability assessment, promoting documenting and use of traditional knowledge and practices, and building capacity on food production systems

7. Pacific SIDS agreed that work should endeavor to improve the knowledge, skills and capacity of agricultural stakeholders and communities in assessing their vulnerability to climate change and in exploring opportunities to reduce such vulnerability and adapt to the impacts of climate change. Such assessments will be carried out for different landscape units such as water-catchment, ridge to reef transects and whole of island in community-based vulnerability assessments. Agriculture-specific indicators such as soil health, production index, access to land and food security, will be included

in determining vulnerabilities of the agriculture sector. And to support sustainable intensification of food production systems.

8. Traditional knowledge (TK) and practices have played a significant part in solving problems, including problems related to climate change and variability and they continue to be used in Pacific SIDS. The appearance of certain birds, mating of certain animals, flowering of certain plants, diversity of crops and food resources that are often matched by a similar diversity in location of fields are all important signals of changes in time and seasons that are well understood in traditional knowledge systems. As TK are transmitted orally from one generation to another, they risk being lost. It is therefore important to document traditional knowledge and practices of Pacific SIDS that are related to climate resilience and adaptation, conserve local crop varieties, preserve cultural aspects of agriculture, including the promotion of their use.

Climate Information, anticipatory action, multi-hazard early warning systems

9. It is clear that the climate of Pacific SIDS has and will continue to change in diverse ways that may differ from island to island. However, constructing climate information tables for Pacific SIDS is challenging due to lack of observations and high-resolution climate projections, as well as the inadequate representation and understanding of key modes of variability and their interplay with trends. There is a great need for long and short term weather and seasonal forecasts and farming communities should be provided with downscale and usable climate information and tools to prepare and plan better.
10. While early warning systems are continually improving thanks to technological gains, there is a great need for long term weather and seasonal forecasts; and importantly to act on them. Anticipatory action meets this call and translates warnings into action to protect people and assets before a hazard develops into a disaster. The approach is being widely accepted and applied in the region, with the ASEAN Framework on Anticipatory Action in Disaster Management becoming a cornerstone piece to achieve this and the Pacific Island Forum highlighting the importance of the approach within their Disaster Risk Financing planning. FAO studies further show that for every USD 1 FAO invested in anticipatory action, families can gain up to USD 7 in benefits and avoided losses. These studies have also found that these interventions can curb food insecurity, support resilience efforts and provide a more dignified approach to aid. Now is the time to change the way we manage disasters.
11. Pacific countries during the Asia Pacific Ministers' Conference on Disaster Risk Reduction held in September 2022, highlighted the importance of multi-hazard early-warning systems (MHEWS) in supporting disaster risk reduction efforts. It includes investing in and strengthening people-centred MHEWS, disaster risk communication mechanisms and hazard-monitoring telecommunications systems – emphasizing a participatory and gender-inclusive approach. While early warning systems are continually improving, there is a great need for long-term weather and seasonal

forecasts, including downscaling of information for communities to prepare and plan better and drawing on indigenous and traditional knowledge.

Climate change, pest, disease and transboundary/invasive species, and related impact of food security

12. Increasing evidence shows that climate change is altering the distribution, incidence and intensity of animal and plant pests and diseases. The movement of plant pests, animal diseases and invasive alien aquatic organisms across physical and political boundaries threatens food security and creates huge concerns across the Pacific SIDS region. Climate change will especially impact vector-borne animal diseases due to the effects of climate change on the arthropod vectors and macro-parasites of animals due to the climate effects on the free stages of these parasites. With more food production becoming monocrops, the incidences of pests and diseases are increasing in the Pacific SIDS region. In livestock production, high priority should be given to address transboundary animal diseases such as the African swine fever including those that are zoonotic and other livestock production priorities such as animal nutrition and genetic improvement. Climate change is further adding to the scale and complexity of this challenge and the need for more research, information, knowledge, and actions are key priorities in the region. Huge capacity gaps exist in the region including the non-availability of Veterinary Specialist in country to deal with livestock biosecurity threats. One health approach should be strengthened in Pacific SIDS through effective partnership and coordination mechanisms.

Soil health, water management and improved biodiversity practices – Adaptation approaches with mitigation co-benefits

13. Soils are our allies in the fight against hunger and climate change and if managed wisely could sequester 1/3 of agricultural GHG emission, thus playing a significant role in the global carbon cycle. The traditional fallow or shifting cultivation in the Pacific SIDS have changed considerably. However, the productivity and sustainability of many cropping systems is threatened by a decline in the fertility, structure and biological health of soils. Appropriate agriculture practices can significantly reduce GHGs emissions from agriculture and food system related activities. A moved to systems closer to nature will improve biodiversity, increase soil carbon and promote microbial populations in the soil to enhance nutrient recycling and hence improve resilience of production systems.
14. Freshwater is an essential resource for Pacific SIDS and a major requirement in agricultural and food production systems. However, the ability of the island countries to effectively manage the water sector differs from island to island, as they are constrained by their small size, isolation, fragility, natural vulnerability, geography and a limited human, financial and natural resource base. Increasingly variable rainfall, cyclones / hurricanes, accelerating storm water runoff, floods, droughts, decreasing water quality and increasing demand for water are so significant in many small island countries that they threaten the economic development and the health of their peoples. The Pacific SIDS has some of the most vulnerable countries to climate change

and the incidences of drought are increasing in the region. A sustainable water management strategy for each country should be developed and there is a need to develop water budgets from rainfall and evapotranspiration data. A high priority for the Pacific SIDS is to promote the use of the bucket drip irrigation systems to improve water-use efficiency, increase water storage capacity (e.g. more/larger water tanks), protected cropping (e.g. protect from excessive rain), as well as wicking-based systems (which can protect water crops from saltwater).

15. Biodiversity can support efforts to reduce the negative effects of climate change and conserved or restored habitats can remove carbon dioxide from the atmosphere and help to address climate change by storing carbon. Conserving intact ecosystems, such as mangroves for instance, can help reduce the disastrous impacts of climate change such as flooding and storm surges, which are predicted to occur with more frequency and intensity. Resilience of food production systems in the Pacific SIDS hinges significantly on biodiversity. This is linked to the improved soil health output from below-ground biodiversity. It should be emphasized that above-ground biodiversity is dependent on healthy below-ground biodiversity. A sustainable food production system will also need to utilize the best adaptable varieties of crops, trees and animals. A priority for the Pacific SIDS is therefore to improve biodiversity in farming systems to improve soil health and increase sustainable food production; promote the cultivation of trees on farms for food security, biodiversity conservation, ecosystem services; climate regulation and for carbon sequestration. Enhancing seed systems to contribute to biodiversity and food security in Pacific SIDS is a vital foundation for sustainable agriculture production systems.

16. General education and raising awareness need strengthening at the national level, especially of farmers, communities and extension officers on the importance of biodiversity**.**

Food loss and waste

17. Globally about 30 - 60 % of food production goes to waste. Food waste is not just a social issue – it is also an environmental one. If food waste ended up in the landfills and rots, it will produce methane. About 8% of global greenhouse gas emissions comes from food waste (FAO, 2011). There is very limited information on food waste in the Pacific SIDS. A life cycle assessment of waste in each country is required, including the development of a strategy to address the problems related to food waste in order to reduce GHG emissions. Food waste reduction strategies (post-harvest technologies, food storage, transportation of perishable foods, specialized markets for perishable foods, and downstream processing of seasonally available foods (i.e mangoes and pineapples) are needed.

Assessing adaptation-mitigation co-benefits

18. Assessing adaptation and mitigation co-benefits to explore the effectiveness of different agricultural adaptations and mitigation actions in Pacific SIDS to adopt or

scale up those approaches. This helps to document evidence of loss and damage, including residual losses in our food system and how to apply approaches including climate risk management to avert, minimize and address loss and damage in the food system and agriculture in the Pacific Islands. This helps us to use limited finances well to only action workable adaptation and mitigation actions that are best options for the place, rather than doing the same thing over and over again. Foundation to the success is promoting and improving soil heath, decision making processes and context, evidence based and well researched decisions, scenario based planning.

Predictable, flexible and pre-arranged finance is crucial to allow timely implementation.

19. While anticipatory action ahead of forecasted shocks is a non-debatable concept, only a small fraction – some studies highlighted as little as 3 percent – of humanitarian financing is pre-arranged to be available when warnings materialize. We all need more innovative funding models to be able to adapt to the ever-changing Disaster Risk Management (DRM) environment which demands speed and timeliness. Stronger synergies must also be explored between humanitarian, development and climate finance for multi-risk resilience building.

[1] In the preamble of the Paris Agreement.

Submission on behalf of Pacific Small Island Developing States,

on views on the operationalizing of the Sharm el-Sheikh Online Portal mandated under paragraph 18 of FCCC/CP/2022/L.4

A. Background

20. The Republic of Fiji welcomes this opportunity to make this submission of behalf of the Pacific Small Island Developing States (Pacific SIDS. This submission together with the submission on paragraph 17 of FCCC/CP/2022/L.4 has been endorsed by Pacific Ministers of Agriculture and Forestry during their 3rd Meeting in Nadi, Fiji on the 10th of March 2023. This submission is made pursuant to the request in paragraph 18 of FCCC/CP/2022/L.4 on the operationalization of the Sharm el-Sheikh online portal.

B. Context

21. The Paris Agreement highlight the "fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change". This is echoed in countries' Nationally Determined Contribution (NDC) where the agricultural sectors stand out as a priority[1]. Climate change already affects agriculture and food security and without urgent action, millions more people will be at risk of hunger and poverty[2]. The Pacific SIDS have experienced first-hand the impacts of climate change, and the set back on sustainable development gains. Therefore, transforming and shifting to sustainable food and agriculture can maximize co-benefits of climate change adaptation and mitigation.

22. The Pacific SIDS acknowledge the progress made in the implementation of the Koronovia Joint Work on Agriculture (KJWA) in the Pacific region. As referenced in the Pacific SIDS submission on paragraph 17 of FCCC/CP/2022/L.4, we as Pacific SIDS, have worked with our partners such as FAO and SPC to implement the KJWA, including through awareness raising, capacity building and field demonstration of climate resilience practices in soils, nutrient use, water, livestock, methods for assessing adaptation, and socio-economic and food security dimensions of climate change across the agriculture sectors. These have enabled the sharing of information, knowledge and lessons learned in the Pacific.

C. Operationalization of the Sharm el-Sheikh online portal

Objective and scope of Sharm el-Sheikh online portal

23. The objective of the Sharm el-Sheikh online portal established under the joint work referred to in paragraph 14[3], is to share information on projects, initiatives and policies for increasing opportunities for the implementation of climate actions to address issues related to agriculture and food security[4]. The portal should also include, scientific, technological information and knowledge including traditional knowledge and technologies, and best practices on climate actions in agriculture.
24. The Sharm el-Sheikh online portal should facilitate the exchange of information on projects, initiatives and policies between Parties, UN Agencies, International and Regional Organizations, and Civil Society. The information should be accessible to the Constituted Bodies of the UNFCCC, to Parties, farmers, fisher folks and to the public at large, especially those that will find the information useful. Information to be shared on the portal should be collected from Parties, UN Agencies, International and regional organizations and other relevant stakeholders.

Host of Sharm el-Sheikh online portal

25. The Sharm el-Sheikh online portal should be developed and hosted under the UNFCCC Secretariat. Information on projects, initiatives and policies should be reviewed by the Expert Group on Agriculture and Food Security before the UNFCCC Secretariat shares on the Sharm el-Sheikh online portal.

Existing online portals on agriculture and food security

26. There are already existing online portals with information on climate change and agriculture at global and regional levels. The Sharm el-Sheikh online portal should be complementary and build on those existing online portals that contain relevant information on the climate change and agriculture nexus to build synergies and avoid duplication. Linkages should be made from the Sharm el-Sheikh online portal to other existing online portals.

Regular updates on portal

27. Regular updates on the portal should be reported to Parties, especially on use, access, traffic and usefulness.

[1] https://www.fao.org/3/i6273e/i6273e.pdf

[2] https://www.fao.org/3/i6273e/i6273e.pdf

[3] FCCC/CP/2022/L.4

[4] FCCC/CP/2022/L.4

ANNEX 2 KJWA – Current actions in the region through FAO and SPC

Project details					KJWA dimensions					
Project Name	**Beneficiaries**	**Total funding**	**Source**	**Duration**	Soils	Nutrient Use	Water	Livestock	Methods for assessing adaptation	Socio-economic food security
SPC										
Using modern biotech sustain food security in PI	Regional	€ 269,407.00	Australia	17/12/18-17/12/23						The project will ensure that Pacific island farmers have the aroids of importance with broad allelic diversity, strengthening the region's food production systems, and building resilience to future climate change impacts in both high islands and atolls
Responding to emerging pest and disease threats to horticulture in Pacific Islands	5 PICTs - Fiji, PNG, Samoa, Solomon Is. Tonga	€ 952,390.00	Australia	01/05/18- 30/09/23						Build diagnostic and strategic planning capacity for integrated pest and disease management (IPDM) including biological control, 2. control strategies for invasive and emergent pests 3. Extend IPDM and insecticide resistance management strategy
Providing for the long-term funding of ex-situ collections of germ plasm held by SPC	Regional	€ 47,667.51	Australia	17/12/18-17/12/23						long-term conservation and availability of the taro and yams

Pacific awareness and response to CRB (PARC)	Regional	€ 1,905,000.00	New Zealand	28/05/19-31/12/24						Limit spread of CRB-G, reduce existing populations, and find long term solutions through biocontrol and integrated pest management
Pacific seeds for life	Fiji, Kiribati, Samoa, Tonga, Tuvalu, Vanuatu	€ 157,822.00	New Zealand	08/04/2020 - 31/12/24						Development of local seed systems and resilient varieties
Safeguarding threatened coconut diversity within the International Coconut Gene bank for the South Pacific	Fiji, PNG, Samoa	€ 133,895.00	FAO	14/12/2020 - 14/12/23						Use and conserve wide range of resilient coconut varieties leading to increased productivity and income.
Pacific Organic Leading Farm Network: Agroecology and agroforestry for climate resilience	Regional	€ 4,621,075.00	KIWA	28/05/21 - 28/05/25	Develop organic farming systems for food security, climate change adaptation and biodiversity conservation				Implementation of Tool for Agroecological Performance Evaluation	
Improving root crop resilience and biosecurity	Australia, Fiji, Samoa, Solom Is, Tonga	€ 420,992.00	Australia	01/07/21-31/06/24						Develop the capability for a clean seed system for the Pacific Region
Identification of drought tolerant taro varieties		€ 26,769.00	Australia	03/04/23-07/04/24						Identification of drought tolerant taro varieties

CFU	PNG	€ 10,007 000.00	GCF	2023-2028	Nature-based solutions to protect agro-ecological systems from landslides and coastal erosion. Reforestation program of 3000 ha around croplands, mangroves, and degraded forest, vegetation planting along riverbanks or unstable lands	Eco-friendly technologies for climate-smart seed saving, post-harvest processing, and modern storage			The project utilises the Adaptation Fund core and output level indicators that are specifically defined to assess adaptation and resilience capacity of beneficiaries and ecosystems.	The project aims to enhance the sustainability of main agricultural value chains through the adoption of climate-smart practices, contributing to improving the produces' quality, increasing access to markets, and creating green jobs for women and youth in vulnerable communities.
NDC Hub	PNG	€ 53,596.00	GIZ	2023 (5 months)	The project provides support for PNG's governance framework to improve the implementation of the National Sustainable Land Use Planning Policy. The work encouraged regulation within that sector that in the long term could provide for data sharing at the national and sub-national levels through a sustainable land use monitoring system.					Strengthening PNG's effective framework for sustainable coffee development
NDC Hub	Regional	€ 0	GIZ	2023					This training sought to encourage opportunities to integrate PICs to think through the process of enhancing their NDCs by including strengthened actions in the agriculture sector. A range of possible actions for climate change adaptation	Training session titled "Enhancing NDCs for Agri-food Systems." The training was designed to empower Pacific Island Countries and Territories (PICs) to fortify their Nationally Determined Contributions (NDCs) by focusing on the agricultural sector's pivotal role in climate action.

									and mitigation in the agriculture and Land Use, Land Use Change and Forestry (LULUCF) sectors were discussed.	
NDC Hub	PNG	€ 49,245	GIZ	2023	The objective of the project is to support the Government of Papua New Guinea (PNG) to implement the National Sustainable Land Use Policy for PNG that was recently approved by National Executive Council, in May 2022.					PNG: Strengthening PNG's effective framework for sustainable coffee development
PROTÉGÉ	New Caledonia French Polynesia Wallis & Futuna	€ 8,000,000.00	European Union	2018-2024	Network of demonstration farms on agroecology Assessment of the effects of some mycorrhiza's species on soil regeneration Develop the capability for cover crops seed production	The project has supported the substitution of imported nutrients by the creation of local value chains for organic resources. Assessment of the impact on soil fertility of pigs' arable rotation and dynamic rotating grazing for cattle	Assessment of agroforestry impacts on the waler lens of the atoll islands Training on decision-making tools for irrigation	Assessment of the livestock carbon footprint in New Caledonia Assessment of the non-chemical control practices of the cattle ticks production of animal feed (poultry, pigs) from the larvae of black soldier flies	Implementation of Tool for Agroecological Performance Evaluation (TAPE)	Identification, conservation and access to planting materials of traditional food plants (roots crops, edibles leaves) Inclusive development of public policies to strengthen the sustainability of food systems. Use and conserve wide range of resilient coconut varieties leading to increased productivity and income

FAO										
Integrated climate smart agriculture practices and approaches towards sustainability and climate resilience through the KJWA Objective: Integrated climate smart agriculture measures incorporated into Pacific agricultural policies and systems in Pacific SIDS	Regional Coo Islands, Kiribati, Fiji, Niue, FSM, RMI, Nauru, Palau, Solomon Islands, Tonga, Vanuatu, Tuvalu, Samoa	USD 500,000	FAO TCP	Feb 2022 – Dec 2023		Workshop on nutrient use		Training CSA livestock practices – Dry litter, bio-gas		
					Workshop and training on soil management Regional Soil guidelines		Policy Brief on water management and food system	Guideline on climate smart livestock management		

Mainstreaming climate resilience food production systems for food security and nutrition	Palau	USD 200,000	FAO TCP	Aug 2021 to Dec 2023	Soil training and assessment		Livestock training - biogas			Limit spread of CRB-G, reduce existing populations, and find long term solutions through biocontrol and integrated pest management
Increased resilience and food security of women and men vulnerable to the impacts of COVID-19 in the Pacific	Fiji, Niue, Solomon Islands, Palau, FSM	USD 2,920,000	Global Affairs Canada	2021 - 2024	Soil training on soil test kits		Climate Smart Agriculture livestock practices Response to outbreak of CRB	Disaster Risk Management Plans – drought response	Women targeted beneficiaries with at least 40% and above must be women	Procurement of agriculture seeds, tools
Enhance regional animal health capacity to prepare and respond to risks of African swine fever introduction and spread in the Pacific	Cook Islands Fiji Kiribati Micronesia, Federated States of Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Tonga Tuvalu Vanuatu	USD 500,000	FAO TCP	Jun 2021 – Dec 2023			To develop, strengthen, and/or put in place selected Pacific countries' ASF preparedness and response plans including risk-based prevention and reduction by high-lighting emergency			

							response measures.			
Promoting ecologically-based alternatives to highly hazardous pesticides to enhance food safety and security in the Pacific Region	Cook Islands Fiji Kiribati Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Vanuatu	USD 441,000	FAO TCP	01-Mar-2021 - 31-Dec-2023						To provide technical assistance to promote ecologically-based alternatives to highly hazardous pesticides to enhance food safety and security in the Pacific Environmental and climate benefits of ecologically based alternatives linked to soil, water management
Enhancing water-food security and climate resilience in volcanic island countries of the Pacific (FSP)	Fiji Papua New Guinea Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Vanuatu	USD 50,000	01-Jun-2021 - 31-Dec-2023							To provide technical assistance to complement ongoing efforts in building resilience and adaptation to climate change.

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) - virtual

Paper reference	**Session 2: Agenda Item 2.1**
Title	**Progress Update: Testing and adapting the framework of the Regional Research Agenda**
Action	Decision
Author(s)	**Peer Reviewers and RRA Secretariat**

Summary

The vision of the RRA is as follows: ***"Identifies common forestry and agriculture development challenges in the Pacific Region, establishes Pacific research partnerships, and defines research strategies to overcome these challenges. The RRA brings decision-making, leadership, and planning into an inclusive Pacific process".***

The following paper provides an update to the Pacific Heads of Agriculture and Forestry Services (PHOAFS) on the progress to date of the testing process for the framework of the Regional Research Agenda (RRA) to achieve the above stated vision. It specifically seeks the endorsement of the PHOAFS to allow the Peer Reviewers and SPC as the RRA Secretariat to move to test the final component of the framework. The final results from the testing process will be presented at the 2025 meeting of the PHOAFS.

Recommendation:

The PHOAFS are invited to:

a) Note the progress to date of the testing process of the framework of the RRA.
b) Endorse the decision to progress trialling the pilot research in member countries[1] who wish to take part in the research to test the **Partners in Research** component of the framework of the RRA.

[1] Countries already identified by the Peer Reviewers who can start the pilot work include Cook Islands, Nauru, Marshall Islands and Wallis and Futuna. The Secretariat will write to the PHOAFS to also seek other countries who wish to be involved in the pilot research.

Background

1. The need was identified for Pacific Island Countries and Territories (PICTs) to drive, coordinate, and share resources to implement research to achieve regional impact during the Pacific Heads of Agriculture and Forestry Services (PHOAFS) in 2021. At the request of the PHOAFS, the Pacific Community (SPC), in collaboration with member countries, developed a framework of the Regional Research Agenda (RRA). The proposed framework was presented and endorsed at the 8th PHOAFS meeting in 2023 and SPC was tasked to work with member countries to operationalise the RRA framework. The PHOAFS also requested for the RRA to be a standing agenda item in all future PHOAFS meetings.

2. This paper provides an update of the testing process undertaken to operationalise the framework of the RRA to date. It also seeks the PHOAFS endorsement to allow the Peer Reviewers and SPC as the Secretariat to move towards the final stages of testing the test the final component of the framework.

Purpose of this paper

3. This paper presents the progress of the work to test the framework of the RRA and seeks the endorsement from the PHOAFS to allow the team to test the final component of the framework.

Progress Update: Testing Process

4. The testing of the framework of the RRA was carried out on each component and element of the framework. A call for nominations was made through the PHOAFS in April 2023 for Regional Research Leaders who would form the Peer Review Group (Peer Reviewers). A total of 17 Peer Reviewers were nominated and have been working closely with SPC as the Secretariat, to test the framework of the RRA. The Peer Reviewers have met five times (two face-to-face meetings and three virtual meetings) to go through each component, testing and adapting the process. The RRA is broken down into three main components: Hearing Pacific Voices, Peer Review and Partners in Research (refer to **Figure 1**).

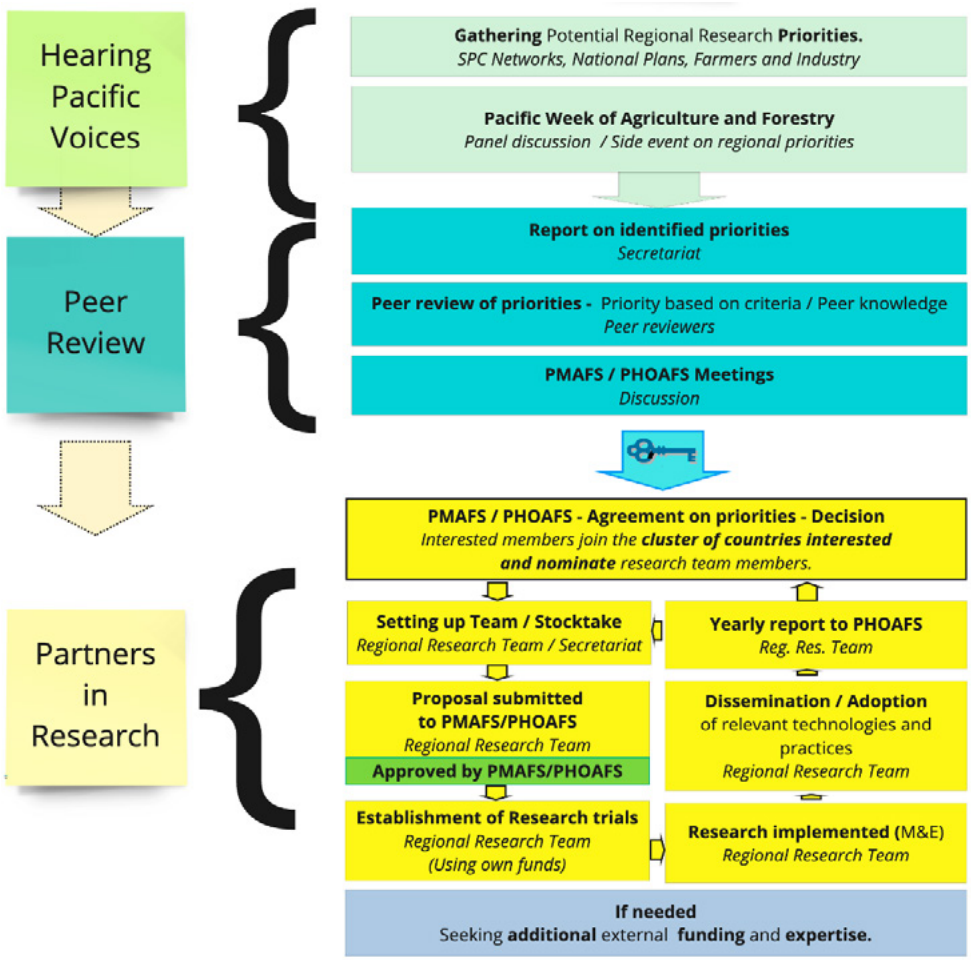


Figure 1: The framework of the Regional Research Agenda

Hearing Pacific Voices

5. To test this part of the component, the Secretariat collected priorities from national agriculture and forestry plans, strategies, policies as well as meeting outcomes from current active SPC technical networks. These were consolidated and 12 themes with 49 researchable priorities were identified. A sieving process was used to identify the researchable priorities that could be used to test the **Partners in Research** component of the framework.

6. The breakdown of the thematic areas was carried out with the focus of supporting livelihoods and the wellbeing of PICTs communities. A full list of the priorities identified were grouped into four thematic areas (attached as **Annex 1**). The fourth group (Enablers) was seen as those tools and expertise required to enable research to happen. The enablers also connect the results of the research to communities e.g. through extension agent's work and provide the feedback loops to the researchers to enable the tailoring of research to farmer's and community's needs.

a) Food Security and Nutrition
b) Climate Change
c) Sustainable Agricultural Systems
d) Enablers (extension work, data, biosecurity)

Lessons learned:

7. The main lessons learned through this testing process was that not all countries had national agriculture and forestry strategies, policies, or plans in place. Other countries had strategies in place but consultations with the farmers, foresters and the private sector and other stakeholders may not have been thoroughly done. Therefore, it was important for a space to be created for more thorough consultations on the identified priorities so that voices from the different stakeholders within the agriculture and forestry sectors could be heard to inform the researchable priorities of the PICTs.

Peer Review

8. This process was first tested by a call of nominations through PHOAFS for Research Leaders (Peer Reviewers) who would support SPC as the Secretariat. A total of 17 Peer Reviewers were nominated from 11 PICTs (American Samoa, Cook Islands, Fiji, French Polynesia, Marshall Islands, Nauru, Papua New Guinea, Solomon Islands, Samoa, Vanuatu, Wallis, and Futuna). The Peer Reviewers were nominated based on their having sound understanding of the Pacific region's social, cultural, economic and environment context. In addition, their selection was also based on their having technical expertise relevant to the agriculture and forestry research areas such as agronomy, forestry, livestock, animal nutrition, social science, post-harvest systems, plant genetic resources, pest and disease management and policy analysis to name a few.

9. Next the Secretariat reported on the results of the identified themes and possible researchable priorities to the Peer Reviewers. The Peer Reviewers went through a sieving process to identify priorities that could be used to test the final part of the framework. The sieving process was a set of questions that guided the selection of the relevant priorities that the region could work on to achieve regional collaboration and impact. While all highlighted priorities were considered important, four main researchable priorities were identified which could be used to test the rest of the framework on:

(i) **Theme:** Nutritious crops.
Priority: Support and make available healthy and nutrient-rich crops for local consumption.

(ii) **Theme:** Genetic Resources.
Priority: Improve the genetic base through seed production.

(iii) **Theme:** Forest and sustainable land management.
Priority: Implement solutions to support sustainable forest and landscape management.

(iv) **Theme:** Climate-resilient crops.
Priority: Promote crops that are climate resilient.

10. In selecting a priority, to test the framework on, one of the considerations by the Peer Reviewers was the timeframe for trialling the research. The theme **Climate Resilient Crops** with the researchable priority to **Promote Crops that are Climate Resilient** was identified as the most suitable priority to be used to test the **Partners in Research** Component of the framework. It was identified as a priority because partnerships could be established quickly, and pilot activities could be tested within a one-year timeframe in order to report results to the next Pacific PHOAFS and Ministers of Agriculture and Forestry meetings at the Pacific Week of Agriculture and Forestry (PWAF) in Tonga in 2025.

Lessons learned:

11. Not all countries were able to send in representatives to be part of the Peer Reviewers. The Secretariat acknowledged this, and it was agreed with the nominated Peer Reviewers that the process would be tested with those who were currently nominated. However, another round of nominations would need to take place after the final testing of the framework in 2025. Each peer reviewer will be nominated for two years and be replaced after that timeframe.

12. An important consideration for the implementation of the RRA process was to use and add value to existing regional processes. The PWAF was identified as a key regional event where relevant RRA stakeholders and partners would gather in the form of a conference to bring voices to the table to hear the research priorities from the respective counties. Naturally, PWAF became a key moment of the RRA timeline where regional researchable priorities can be identified, discussions on sharing resources, knowledge, and data can take place and regional research teams can meet, report progress, and learn from each other.

Partners in Research

13. The Secretariat collected literature through relevant databases and networks to identify all available publications which focused on the priority **Promote Crops that are Climate Resilient**. A total of 69 publications were identified and impacts to research, policy, and communities as well as research gaps were highlighted and presented to the Peer Reviewers. One of the main highlighted gaps from the literature review was the lack of participatory research focusing on farmers. The main recommendations from the research were more targeted research on individual crops (simulation models), increasing genetic resources through breeding programmes, and the general lack of feedback from farmers through to the governments on the performance of the planting materials distributed to farmers from the Centre for Pacific Crops and Trees (CePaCT).

Regional research project concept: Optimising the linkages between researchers, farmers, consumers to build climate resilient crops across the PICTs.

14. The overall research project concept adopts a comprehensive research approach, integrating three core components to optimise a system so that the linkages between researchers, farmers, consumers to address the challenges and opportunities to build climate resilience crops across the PICTs. The components are designed to work synergistically, ensuring that the project outcomes are robust, scalable, and aligned with the needs of both agricultural communities and regional biodiversity conservation efforts.

Component 1 (Regional):

15. The Regional Component (CePaCT) emphasises the conservation, evaluation, and dissemination of genetic resources across the Pacific. CePaCT serves as a regional hub for genetic diversity, prioritizing the collection, preservation, and sharing of plant genetic materials crucial for the development of climate-resilient crops. This component seeks to bridge the gap between the information available within CePaCT through to the Government or the users of the climate resilient planting materials. It also looks to identify ways in which gaps in the farmer feedback on the performance of climate resilient crops distributed back to the Government (distributers) of planting materials and back to CePaCT. By looking at ways to bridge this gap, it is anticipated that the feedback loops across the cycle can be bridged to optimise the process.

Component 2 (National):

16. A National Component focusing on a) the challenges and needs of farmers in the face of changing climate; b) consumers preferences, will aim to inform the introduction of varieties and crops to address the constraints or meet the specific needs and preferences of local farming communities and consumers. This component seeks to bridge the gap between agricultural research and its practical application, ensuring that crop selection and cultivation practices are directly informed by the end-users' needs.

17. The Peer Reviewers agreed that the timeframe of just under one year will require research that can be done within this limited timeframe. The testing of this part of the framework will utilise Component 2 (National). The research will utilise farmer and consumer interviews taken from market areas in those countries who wish to be part of testing this part of the framework. To date, the Peer Reviewers from American Samoa, Cook Islands, Nauru, Marshall Islands, Wallis and Futuna have indicated that the research can be started by utilising the local universities and community structures to start the data collection. However, to ensure that the process is inclusive, the Secretariat has been tasked to write to the countries to seek other countries who wish to take part in this regional effort to see how research collaboration can work across the region.

Component 3 (Evaluation of Crops and Varieties):

18. A second National Component will involve the systematic evaluation of crops and varieties under local conditions with farmers to identify those that offer the best performance in terms of yield, resilience to stresses (abiotic and biotic), and consumer acceptance. The optimisation process will include peer learning and exchange in the region. **Figure 2** provides an on overview of the research project concept.

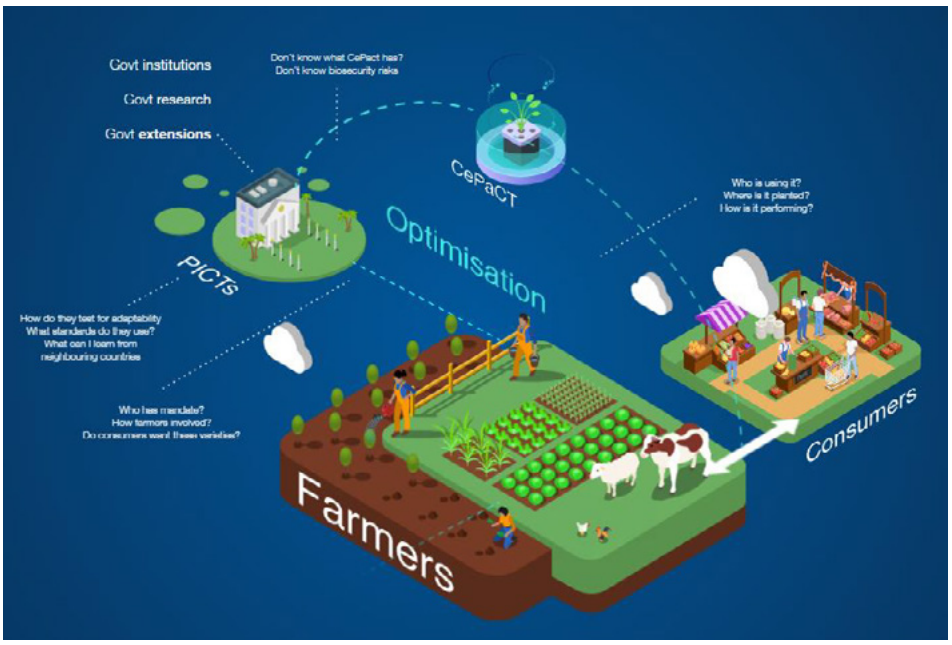


Figure 2: Research gaps that focus on optimising the linkages between CePaCT, PICTs Government, farmers, and consumers.

Lessons learned:

19. The actual research trial under the final component of the framework of the RRA is yet to be tested. However, the Peer Reviewers have already identified that this is perhaps one of the most challenging components to be implemented. This is mainly because of the level of coordination required to ensure that research is conducted for regional impact. Lessons learned from the testing of this component will be shared in the final report to the PHOAFS in 2025.

20. One challenge identified during the literature review was the difficulty in accessing data and relevant information on climate resilient crops from the Pacific Islands. This was because a lot of the research carried out had not yet been published. To support Pacific Island researchers, publish their data and research, the Peer Reviewers will trial the establishment of a Regional Research Journal to support researchers to publish their work. This journal will support to document research from the Pacific and it will also provide a platform to support the hearing pacific voices component of the framework for the RRA.

Recommendations:

21. The PHOAFS are invited to:
    c) Note the progress to date of the testing process of the framework of the RRA.
    d) Endorse the decision to progress trialling the pilot research in member countries who wish to take part in the research to test the **Partners in Research** component of the framework of the RRA.

Annex 1: Researchable priorities identified through a review of national documents and meeting outcomes from SPC networks decisions

Food Security and Nutrition	
Research Themes	**Priorities**
Import substitution and increased production	Refers to the need to increase local production to: - Reduce the importation of agricultural food products from overseas. - Better analysis of comparative advantage for food production e.g., value chain analysis. - Examine the amount of food loss across the food supply chain.
Labour availability	Relates to having limited labour available to contribute to agriculture production because of one or more of the following reasons: - Limited agricultural workforce. - Small pool of available and skilled labour. - Need for labour-saving machinery. - Reduce cost/taxes on agricultural produce.
Forest and Sustainable Land Management	Refers to the need to Improve land productivity.
Sustainable Farming practices	Refers to the need to promote the use of farming practices which supports to Improve soil health and soil fertility through GAPs (cover cropping, intercropping, agroforestry, etc)
Nutritious Crops	Refers to the need to: - Support and make available healthy and nutrient-rich crops available for local consumption. - Challenges related to non-communicable diseases in each country. - Promote school and community gardens to address healthy eating in schools and at community level.
Livestock	Refers to challenges that impacts on the growth of the livestock industry such as: - Limited/lack of improved genetic resources. - Improve food safety standards
Genetic Resources (including seed systems, planting materials)	Refers to the challenges in the countries and the need to: - Improve genetic base through seed production. - Improve genetic base through planting material. - Diversify genetic base for countries through plant breeding or incorporating new genetic material from other countries. - Establish/Improve research infrastructure to improve and expand genetic base.
Biosecurity (prevention of entry, establishment, spread of pest and diseases)	Refers to those challenges specific to prevention of the entry, establishment and spread of pests and diseases: - Lack of or ineffective policies/regulations. - Surveillance improvement for data pest collection and improved market access.
Climate Resilience Crops	Refers to the need to build climate-resilient crops due to the following reasons: - Promote crops that are climate resilient. - Promote traditional knowledge to improve resilience of farming systems. - Promote climate change sustainable cropping.

Climate Change	
Research Themes	**Priorities**
Pest and Diseases and Invasive species	Refers to those challenges which focus on: - Managing pests and disease infestation and reducing chemical use through Integrated Pest Management (IPM). - Increase in outbreaks from invasive species and the need to control these. - Persistent Organic Pollutants (POPs) due to buried pesticides or lack of proper disposal of empty pesticide containers, radiation and waste management of pesticides and chemicals. - Establish/Improve research infrastructure and capacity for diagnostics and other work related to pest and disease control.
Forest and Sustainable Land Management	Refers to the need to: - Implement solutions to support sustainable forest and landscape management (e.g., Agroforestry, Engineered Wood Products) - To maintain ecosystem services - Improve land productivity and - Enhance community resilience - Improve data collection on forests to inform Sustainable Land Management (SLM) - Implement restore areas affected by forest fires
Climate Resilience Crops	Refers to the need to build climate-resilient crops due to the following reasons: - Promote crops that are climate resilient. - Promote traditional knowledge to improve resilience of farming systems. - Promote climate change sustainable cropping.
Genetic Resources (including seed systems, planting materials)	Refers to the challenges in the countries and the need to improve the genetic base through - Seed production and planting materials. - Plant breeding or by incorporating new genetic materials from other countries - Establish/improve research infrastructure to improve and expand the genetic base

Sustainable Agricultural Systems	
Research Themes	**Priorities**
Livestock	Refers to challenges that impacts on the growth of the livestock industry such as: - Lack of feeds. - Waste management (animal waste) strategies needed. - General lack of good livestock management.
Labour availability	Relates to having limited labour available to contribute to agriculture production because of one or more of the following reasons: - Limited agricultural workforce. - Small pool of available and skilled labour. - Need for labour-saving machinery. - Reduce cost/taxes on agricultural produce.
Genetic Resources (including seed systems, planting materials)	Refers to the challenges in the countries and the need to: - Improve genetic base through seed production. - Improve genetic base through planting material. - Diversify genetic base for countries through plant breeding or incorporating new genetic material from other countries. - Establish/Improve research infrastructure to improve and expand genetic base.
Sustainable Farming practices	Refers to the need to promote the use of farming practices which supports to: - Improve soil health and soil fertility through GAPs (cover cropping, intercropping, agroforestry, etc) - Focus specifically on improving organic agriculture - Incorporate other technology (e.g., irrigation systems) to improve soils and crop production
Pest and Diseases and Invasive species	Refers to those challenges which focus on: - Managing pests and disease infestation and reducing chemical use through IPM. - Increase in outbreaks from invasive species and the need to control these. - POPs due to buried pesticides or lack of proper disposal of empty pesticide containers, radiation and waste management of pesticides and chemicals. - Establish/Improve research infrastructure and capacity for diagnostics and other work related to pest and disease control.

Enablers/ Tools	
Research Themes	**Priorities**
Biosecurity (prevention of entry, establishment, spread of pest and diseases)	Refers to those challenges specific to prevention of the entry, establishment and spread of pests and diseases: - Prevent the entry of pests and diseases. - Limited quarantine staff capacity. - Lack of or ineffective policies/regulations. - Surveillance improvement for data pest collection and improved market access.
Limited data	Relates to having: - No data/ little sharing of data/ data not accessible/lack connection between data & policy - Difficulty in collecting data. - A lack of infrastructure/systems to support improved data collection.
Extension Services and Disseminate research findings to farmers and stakeholders	Refers to those challenges related specifically to the limited non-adoption of good practices at the community level. These are related to: - Lack of capacity in the extension service. - Limited involvement of and communication to farmers (diffusion). - No effective extension structures or models in place.

9th REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15-17 May, Virtual Meeting)

Paper reference	**Session 2: Agenda Item 2**
Title	Multisectoral food system coordination in the Pacific Island region
Action	For consideration and decision
Author(s)	FAO and SPC

Summary

- In March 2023 at the Third Regional Meeting of Pacific Ministers and Agriculture and Forestry, FAO together with SPC was requested to review multisectoral coordination for food systems in the Pacific and explore opportunities and trade-offs for establishing a regional coordination mechanism to streamline food system initiatives.
- The information provided in this paper is the outcome of a desk research of relevant policy and academic documents, consultations with representatives from Pacific Island Countries and Territories, CROP agencies and development partners (see full list in footnote),[1] and a validation workshop with FAO and SPC technical staff.
- The objective of this working paper is to provide an update to the Pacific Heads of Agriculture and Forestry Services (PHOAFS) on the ongoing work to identify best fit approaches to strengthenthe regional food system coordination through the establishment of a regional mechanism. This includes the benefits, limitations, opportunities, and threats of establishing a regional food system coordination mechanism, and the purpose, form and function of different approaches to this mechanism;
- Given the current context in the Pacific region, the **priority function** for the regional food system coordination mechanism is *Creating better and more effective action on food systems through dialogue and knowledge exchange*. This function will enable *Better funding for food systems*, and be informed by *Better food system data availability and access*. In the long term, the mechanism will also fulfill the function of *Better global food systems & stronger Pacific contribution*.
- The paper identifies an approach that would address all necessary functions of a regional food system coordination mechanism, would be a **combination of technical and political mechanisms,** noting that further work is required to refine the details of what the mechanisms will entail. The Pacific Heads of Agriculture and Forestry Services are requested to endorse the following:
    - FAO and SPC to propose, through consultations with Members and relevant stakeholders a mechanism which comprises a **combination of technical and political approaches** that would address all necessary functions of a regional food system coordination mechanism, suited to resources and capacities available in the Pacific and, use this as basis to develop a Terms of Reference for the 2025 PHOAFS.

[1] Consulted PICTs: Cook Islands, Fiji, Kiribati, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, French Polynesia. PICTs invited but yet to complete the consultation: New Caledonia, Wallis & Futuna, Republic of Marshall Islands. Consulted regional organisations and development partners: PIFS, SPC, USP, SPTO, FAO, IFAD, WHO, FFA. Further consultation is expected with ILO.

Background

1. This paper addresses the March 2023 Third Regional Meeting of Pacific Ministers of Agriculture and Forestry's request for FAO and SPC to produce a paper that would inform Pacific leaders about the current state of regional food system coordination and the benefits, threats, and options to establish a regional food system coordination mechanism.

2. **The food systems of Pacific Island Countries and Territories (PICTs) are highly vulnerable to climate change and external shocks** due to their small population and land size, geographic isolation, developing economies, and their disproportionately high exposure to natural disasters.[2] Climate change induced exposures, such as increasing air and water temperatures, rising sea levels, and growing frequency and severity of extreme weather events, have a dire effect on food production, manufacturing, trade and consumption.[2] The recent global food and energy crisis further exacerbates this issue.[3] Vulnerable food systems place livelihoods, food security and nutrition at risk, contributing to the non-communicable disease (NCDs) crisis in the Pacific.[4] This makes reaching PICTs' Sustainable Development Goals (SDG) challenging.

3. **PICTs have committed to strengthening food systems** to improve social, environmental and economic outcomes**.** Ten PICTs – Fiji, Federated States of Micronesia, Kiribati, Nauru, Palau, Republic of the Marshall Islands, Samoa, Tonga, Tuvalu and Vanuatu – have already published their *National Food Systems Transformation Pathways* leading up to the United Nations Food System Summit in 2021. These Pathways were developed through country-led consultative processes, supported by FAO, SPC, the International Fund for Agriculture Development (IFAD), the World Food Programme (WFP), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and other development partners. PICTs are also supported in achieving food systems priorities through the SPC Food System Flagship.

4. **As a result of the UN Secretary General's call to action the food systems transformation agenda has been at the forefront of many development discussions in the region.** With the establishment of the UN food systems Hub and through the three UN Resident Coordinators in the Pacific, who have taken increased action to advocate for funding to support the Pacific SIDS efforts to transform their food systems, more funding has been channelled in to the region from the different pools of funds, such as the UN Joint SDGs Pooled Funds.

5. **A key challenge noted by the majority of the PICTs in their respective pathways and in past assessments was the need to strengthen coordination mechanisms for food systems through a multisectoral and multistakeholder approach at the national level.[5,6]** This also transcends and affects regional interactions and coordination efforts. The strengthening of food systems requires coordination across multiple policy sectors, such as agriculture, fisheries, forestry, health, trade and industry, environment and climate change, finance/economy, land and rural development, indigenous affairs, gender and youth affairs, education and tourism. Moreover, governments need

[2] FAO. A snapshot of the status and way forward for transforming agrifood systems in the Pacific. Identifying entry points and analysing trade-offs for policymakers. Apia; 2023. https://doi.org/10.4060/cc4940en
[3] FAO, WFP. Pacific Island Countries: Impact of rising costs of food, feed, fuel, fertilizer and finance Bulletin. Apia: FAO and WFP; 2022.
[4] FAO. SIDS Solution Forum 2021. Gender, women and youth: Implications for innovation and digitalization Pacific. 2021.
[5] Thow AM, Ravuvu A, Iese V, Farmery A, Mauli S, Wilson D, et al. Regional Governance for Food System Transformations: Learning from the Pacific Island Region. Sustainability. 2022;14(12700).
[6] Patay D, Ravuvu A, et al. Catalysing sustainable development through regional food system governance: strengthening the translation of regional food system policy guidance to national level in the Pacific Sustainable Development. 2023 http://doi.org/10.1002/sd.2732

to effectively engage with community and civil society organisations, the private sector and academic institutions.

6. **The limited coordination of policy development and activities causes major barriers for PICTs to strengthen the resilience and performance of food systems.** The lack of alignment of food system related policies and initiatives often causes the duplication of efforts, reinforces siloed & standalone approaches, which lead to resource wasting and more incoherent actions, which leave lasting negative impacts on other food system priorities. Improving food system coordination is thus greatly important to ensure that PICTs reach their sustainable development goals.

7. **The Pacific Island region is well-known for its great successes in pooling PICT resources to resolve shared problems**.[6,7] While PICTs are characterised by greatly varying socio-cultural, economic, geographic and natural features, past food system assessments and country experiences show that they share multiple vulnerabilities, from geographic isolation to disproportionally high exposure to natural hazards, relevant to food systems.[2] The region has shown great achievements in regional coordination on food system-relevant policy issues, such as fisheries, environment and gender.[2] However, current regional guidance and support relevant to food systems are often seen and addressed in siloes, leading to duplication, and gaps.[6-7] **Thus, improving regional coordination for food system strengthening by streamlining siloed initiatives is a potentially useful way to help PICTs to develop, finance, and implement food system initiatives on the national level.**

Purpose of this paper

8. The purpose of this paper is to outline considerations and options regarding the potential establishment of a regional food system coordination mechanism, informed by the consultations undertaken with representatives of PICTs and other regional stakeholders (see full list in footnote)[8] and a desk research of relevant policy and academic documents. This includes:
   - The current landscape of regional food system coordination in the Pacific Island region.
   - The benefits, limitations, opportunities and threats of strengthening regional food system coordination.
   - The functions or purposes a regional food system coordination mechanism could fulfill.
   - The form of a potential coordination mechanism.

The current landscape of regional food system coordination in the Pacific

9. The **Pacific Island region has great strengths in regional coordination** due to its robust regional structures that provide political and technical guidance for PICTs.[9,10] Many of these have mandates relevant to food systems, such as those related to health/non-communicable diseases, fisheries/fisheries resources, agriculture/production and trade. But **currently food systems are not a standing agenda item**, and these issues are addressed in siloes.

10. **Currently there is no regional technical mechanism in place in the Pacific that would coordinate regional action and support across the relevant policy sectors and stakeholders**

[7] PIFS. 2050 Strategy for the Blue Pacific Continent. Suva, Fiji: Pacific Islands Forum Secretariat (PIFS); 2022.
[8] Consulted PICTs: Cook Islands, Fiji, Kiribati, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, French Polynesia. PICTs invited but yet to complete the consultation: New Caledonia, Wallis & Futuna, Republic of Marshall Islands. Consulted regional organisations and development partners: PIFS, SPC, USP, SPTO, FAO, IFAD, WHO, FFA. Further consultation is expected with ILO.
[9] Thow AM, Ravuvu A, Iese V, Farmery A, Mauli S, Wilson D, et al. Regional Governance for Food System Transformations: Learning from the Pacific Island Region. Sustainability. 2022;14(12700).
[10] Patay D, Ravuvu A, et al. Catalysing sustainable development through regional food system governance: strengthening the translation of regional food system policy guidance to national level in the Pacific Sustainable Development. 2023 http://doi.org/10.1002/sd.2732

under the food systems banner. The SPC Food System Flagship serves as an integrated platform to connect the food system-relevant divisions within the agency. While this Flagship provides a useful example of integrated planning for food system projects, it currently has a limited mandate for regional coordination between regional organisations, PICTs, development partners, or other relevant stakeholders. **The UN Resident Coordinators' coordination support for the region is focused on resource mobilization, advocacy and less technical.**

10. **In terms of regional monitoring and evaluation (M&E), there is substantial data collection and reporting relevant to food systems, but analysis and reporting are mainly along sectoral lines**. Regional food system coordination may help consolidate the already existing food system-relevant datasets to enable evidence-informed policy actions to accelerate PICTs' efforts to strengthen food systems. However, limited human and financial resources are recognised barriers to stronger M&E on food systems on a regional level.
11. The existing regional architecture relevant to food systems in the Pacific Island region means that any new mechanism needs to complement existing structures, with due attention paid to minimising any potential for duplication or additional burden on existing organizations and PICTs.

The benefits, threats, and options of strengthening regional food system coordination

12. **The majority of consulted PICTs and regional stakeholders indicated a need to strengthen regional food system coordination**. The benefits, weaknesses, opportunities, and threats of establishing a regional food system coordination mechanism – that emerged from the consultations – are summarised in Table 1.

Table 1 The benefits, limitations, opportunities and threats of establishing a regional food system coordination mechanism

BENEFITS (STRENGTHS)	LIMITATIONS (WEAKNESSES)
• Streamlined information flow between countries, government sectors and stakeholders across the food supply chain. • Improved (cost-)effectiveness by reducing duplication of regional food system initiatives. • Pooling expertise and resources, supporting the diffusion of resources and expertise across PICTs, leading to better implementation on national level, and leveraging the global reach of the UN Coordinators' mandate • Stronger networks and dialogue between PICTs and stakeholders: improved integration between PICTs, and between government sectors and stakeholders across the food supply chain. • Harmonised food system initiatives and policies.	• Increased financial and administrative burden, draining on already limited PICT resources. • Differences between PICT priorities, features, capacities, commitments to strengthen food systems. • Limited national level food system coordination might impact PICTs' ability to represent all their food system stakeholders adequately.
OPPORTUNITIES	**THREATS**
• Momentum from the UN Food System Summit. • Commitments to develop/implement National Food System Transformation Pathways. • Momentum from PHOAF 2023. • Increasing donor funding targeting food systems.	• Limited ownership and buy-in from PICTS initially and in the long term. • Inadequate representation of PICT priorities. • Lack of clarity in roles and coordination leading to limited benefits and impacts. • Sustainability of funding. • Slow decision making and limited action.

13. The following list of **principles** were identified to drive a potential regional food system coordination mechanism: people-centred food systems, grounded in traditional knowledge and culture, lessen the burden on countries, future looking, multisectoral, multistakeholder, and agility, flexibility and responsiveness.

14. PICT and regional stakeholders identified the following **functions and mandates** for a potential regional food system coordination mechanism:

1. Better food system data availability and access

- *Mainstreaming information flow between PICTs, regional agencies, and development partners:* Information sharing and awareness raising about existing food system initiatives and activities, and progress on implementing National Food System Pathways.
- *Needs assessment:* Facilitate the mapping of food system strengths and issues on national level at each PICTs, consolidating what we already know, and identify strengths and issues that are not known yet. The purpose is to identify shared problems, resource (e.g., expertise, financing) needs and opportunities for shared solutions (e.g., pooling resources), which will inform the agenda and work plan of the regional food system coordination mechanism.
- *Monitoring & Evaluation (& Learning):* Streamlining existing datasets to create food system specific outputs. Coordinate/streamline data collection on food system related metrics from different policy sectors and countries to inform regional agendas.

2. **Better and more effective action on food systems through dialogue and knowledge exchange**
    - *Collaboration between countries:* PICTs to identify common interests and establish more cooperation with each other (e.g., research, projects, capacity building). PICTs to share expertise, lessons learned, best practices with each other.
    - *Coordination and advocacy across policy sectors (multisectoral coordination)* regionally and nationally enabling better national level multisectoral coordination.
    - *Coordination across stakeholder types (multistakeholder coordination):* improve connections and dialogue between civil, private, government sectors and academia regionally and nationally, as well as the regional multistakeholder coordination enabling better national level multistakeholder coordination.
3. **Better funding for food systems**
    - *Funding facilitation (increases):* Mapping out available funding sources, streamlining funding and donor support for regional and national food system programs/projects.
4. **Better global food systems & stronger Pacific contribution**
    - *Platform for advocacy* – coordinating Pacific contributions to the global food systems agenda.

15. **The value-add** of the regional food system coordination mechanism is that it will facilitate solving high-priority food system problems at the nexus of multiple sectors and cannot be addressed with a single-sectoral approach. Such 'big ticket issues'/nexus problems may include the interface between climate mitigation & adaptation and food systems, the intersection of trade and nutrition, and balancing livelihoods and environmental sustainability across the value chain.
16. **The outcome** of the regional food system coordination mechanism will be that PICTs have a platform for knowledge sharing and coordinated action, are able to implement better multisectoral food system initiatives, while minimising additional burden on PICTs, regional organisations and development partners.

Proposed approach for a regional food system coordination mechanism

17. FAO and SPC representatives, and the University of Sydney research team held a 2-day meeting in February, 2024, to validate the findings of the consultations and identify a potentially feasible approach arising from this consultation. Following this meeting, further consultation was undertaken.
18. Given the current context in the Pacific region, the **priority function** for the regional food system coordination mechanism is *Creating better and more effective action on food systems through dialogue and knowledge exchange* (see function #2 above). This function will enable *Better funding for food systems* (see function #3 above), and be informed by *Better food system data availability and access* (see function #1 above). In the long term, the mechanism will also fulfill the function of *Better global food systems & stronger Pacific contribution* (see function #4 above).
19. The approach recommended to address all necessary functions of a regional food system coordination mechanism, while complementing existing regional architecture and minimising additional burden on PICTs and regional bodies, would be a **combination of technical and political mechanisms** (Table 2).

Table 2 The options for the forms of the regional food system coordination mechanism

Functions / Approach	Better data availability and access	Better & more effective action on food systems through dialogue & knowledge exchange	Better funding for food systems	Better global food systems & stronger Pacific voice
Technical mechanism	✓	✓	✓	
Political mechanism		✓	✓	✓

Next steps to detail the proposed coordination mechanism options

20. Further consultations are needed to refine details for what the proposed technical and political mechanisms will entail. Both mechanisms need to take into account participation by diverse stakeholders, current food system structures (including the SPC Food System Flagship and the UN Food System Hub structure), and resourcing. Additionally, the establishment of a coordination mechanisms should consider the limited resources available in the region and therefore mechanisms explored should not be an added burden to countries and the region, and is fit for purpose.

21. Proposed details for the coordination mechanisms should be ready in time for 2025 Pacific Heads of Agriculture and Forestry Services meeting. The proposal should touch on the proposed mechanisms: scope of work; resourcing; accountability and reporting; formality; representation; and potential options for expanding the agreed upon approaches.

For decision:

22. The recommendation arising from the consultations, desk review and core group workshop is that Pacific Heads of Agriculture and Forestry Services endorse:

    a) FAO and SPC propose, through consultations with Members and relevant stakeholders a mechanism which comprises a **combination of technical and political approaches** that would address all necessary functions of a regional food system coordination mechanism, suited to resources and capacities available in the Pacific and, use this as basis to develop a Terms of Reference for the 2025 PHOAFS.

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) - Virtual

Paper reference	**Session 2 Agenda Item 3**
Title	**Agri-food Systems & Climate Explorer (ASCE) proof of concept**
Action	Decision
Author(s)	Seuseu Dr. Joseph Tauati – *CEO;* Ministry of Agriculture and Fisheries Samoa Taimalietane Matatumua – *ACEO;* Policy, Planning and Communication Division, Ministry of Agriculture and Fisheries Samoa Dr Steven Crimp – *Deputy Head of Climate;* Institute for Climate, Energy & Disaster Solutions, Australian National University Fiona Lynn – *Director, Agriculture and Food Security*; Department of Foreign Affairs and Trade, Australia Larelle McMillan – *Research Program Director, Sustainability*; Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Summary

At the 8th Meeting of the Pacific Heads of Agriculture and Forestry in March 2023, the members endorsed the development of a tool to support climate adaptative decision making for agriculture and food security in Pacific countries. The tool is envisioned to bring together context-relevant climate modelling/projections/trends with agrifood systems information to help highlight the implications of climate change for Pacific food systems policy and planning, including the risks for agricultural communities at a national and regional levels. The members requested that the Pacific Communities (SPC) support a proof-of-concept development of this tool, now termed the *Agri-food Systems & Climate Explorer* (ASCE), the trial of which has been initially implemented in Samoa.

This paper outlines the results of the ASCE prototype work with the Samoan Ministry of Agriculture and Fisheries (MAF), supported by the Australian Government Department of Foreign Affairs (DFAT) and implemented by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Australian National University (ANU) with support from SPC and Food and Agriculture Organization (FAO) of the United Nations.

A Project Advisory Committee comprising a range of government and research institutions was established in October 2023 and chaired by MAF with support from SPC and FAO. With direction from the Advisory Committee and in consultation with government, research and civil society organisations, the project team has developed an ASCE prototype for use in Samoa. This has been shared and tested for relevance with MAF and other relevant Samoan stakeholders, with iterative changes made in response to the feedback.

The ASCE has been designed to support food systems policy discussions, aligning with the development and implementation of Samoa's Food System Pathway 2030. Alignment with the Food System Pathway 2030 processes may help to make ASCE relevant for other Pacific countries that have adopted this or similar food system planning processes. Stakeholder consultations in March 2024 also revealed ASCE relevance for supporting Drought Policy and planning activities by the Samoan government.

Samoa's validation of the ASCE tool with further areas for development and expansion is in line with the concept as approved by the PHOAFS meeting in March 2023. Samoa highly recommends the tool to other Pacific Island Countries and Territories (PICTs).

Recommendation:

The PHOAFS are invited to:

a) **Acknowledge** the value of the Agri-food Systems Climate Explorer (ASCE) proof-of-concept as a preliminary tool to support Pacific climate-resilient food systems planning.
b) **request** development partners to support the further development and refinement of the ASCE for Samoa and other interested PICTs based on requests.
c) **agree** that the refined tool and progress update is presented at the Pacific Ministers of Agriculture and Forestry meeting in 2025.

Background

1. The last decade has seen a dramatic increase in the felt impacts of climate change across ecosystems and societies. This places significant burden and stress on existing agrifood systems, requiring identification and adoption of new management practices and strategic planning to improve food system resilience in the face of a changing climate.

2. Current climate projections and supporting information are not well tailored to support adaptive farming and food value chain decision-making and planning. Information is rarely presented in a way that supports adaptation, nor is it provided at an appropriate spatial scale; in some instances, information is absent for a specific location or food system.

3. To enable successful adaptation, government agencies and communities would benefit from: a confident estimate of likely climatic changes they will experience in the future; a way to enhance understanding of those climate impacts on existing food systems; and supporting mechanisms for planning and implementing adaptive food systems pathways that manage risks and increase resilience to future climate challenges.

4. The Agri-food Systems Climate Explorer (ASCE) proof-of-concept has been co-designed to ensure the information captured and presented in the tool can represent the integration of relevant climate, agricultural and socio-cultural information for active planning and decision making by MAF.

5. ASCE has been developed to support evidence-based planning and implementation of resilient food systems, as outlined in Samoa's Food Systems Pathway 2030 document. Recent discussions with Samoan government demonstrate the potential application and alignment of ASCE for other planning activities, e.g. for informing drought policy development.

Purpose of this paper

6. This paper outlines the results of the ASCE prototype work with MAF, supported by DFAT and implemented by CSIRO and ANU with support from SPC and FAO.

7. This paper outlines the key features and benefits of the ASCE proof-of-concept, including its comparative advantage to other available climate tools in supporting agri-food system decision makers to consider and address climate impacts on food system resilience.

Key features of the ASCE Proof-of-Concept

8. The Agri-food Systems Climate Explorer proof-of-concept has been designed and developed to support policy and investment discussions associated with the development and implementation of Samoa's Food System Pathway 2030.

Climate Information

9. ASCE uses interactive maps to display climate information geo-spatially and temporally for several climactic variables. It spatially provides projected climate information at the country and district level (chosen as a relevant scale for Samoa), and temporally compares the present (now to 2023) and the near future (by 2050) climate information.

10. The climate indicators have been selected based on the academic literature regarding the climate experienced by Samoa and consultation and validation with Samoan government, research, and civil society stakeholders in 2023 and March 2024, guided by MAF and the project Advisory Committee. The climate indicators, which include hazards such as drought and heat stress as well as key characteristics of Samoan climate such as the rainfall amount and timing of the local wet season were identified as relevant and important to agrifood systems planning processes in Samoa.

Food System Information

11. The ASCE tool collates and visually presents information drawn from existing datasets on agriculture, and socio-economic factors at a district scale (chosen as relevant to and available in Samoa). Information from the available evidence base has been selected in relation to the above climate variables and their impacts on the food system. The presented variables were prioritised by relevance in identifying potential risks and key risk-mitigation opportunities in agrifood systems policy and programming decisions at both national and district levels.

12. The ASCE proof-of-concept seeks to prioritise and present key data in combination with climate information to help demonstrate relationships between climate impacts and key risk and sensitivity factors of resilient agrifood systems. The key information presented in the ASCE proof-of-concept tool reflects data on existing physical and socio-economic conditions that is currently captured in Samoa through District-level survey data.

13. In comparison to other climate tools the ASCE has enabled:
    - **Data integration**: The tool integrates and displays previously separate datasets in a way that enhance their value for decision making.
    - **Appropriate spatial scale:** While global climate models provide information at the spatial scale of 150-200 km, ASCE uses data generated by CSIRO's state-of-the-art spatial downscaling techniques to provide it at the 5 km scale appropriate for Samoa's districts.
    - **User-centric design:** Using a principled design approach, the interface has been developed to optimise user-friendliness and accessibility, avoiding complex technical presentation and providing clear text-based explanations of the variables. Maps and tables of the information presented are also provided in printable format for use in policy planning meetings and the development of fliers and infographics.
    - **Fit for purpose**: The co-design and development of the tool has involved a process of engagement that imbues ASCE content and design with the information needs of and challenges faced by the Samoan Ministry of Agriculture and Fisheries.
    - **Scalability**: The design process has carefully considered how future information could be included to scale the tool and its applications, allowing it to evolve alongside agri-food system decision makers information needs as reflected through interviews and focus group activities.

14. This proof-of-concept phase has provided several key insights regarding the purpose and functionality of the ASCE tool and articulated alignment with MAF priorities and needs in food system decision-making. These are in the process of being incorporated into a final version of ASCE for Samoa. The project team will focus on finalising a prioritised set of agreed changes before the 2024 PHOAFS meeting, with other major changes finalised by August 2024.

15. With the support from PHOAFS and subject to further funding, a phased approach to the scaling of this tool could be undertaken. This could take the form of an initial expansion of ASCE development for 3 to 5 Pacific countries, followed by further expansion after feedback and consultation with PHOAFS.

16. Samoa's validation of the ASCE tool with further areas for development and expansion is in line with the concept as approved by the PHOAFS meeting in March 2023. Samoa highly recommends the e tool to other PICTs.

17. Samoa's position in scaling up of ASCE, is that this process be hosted by each country. However, in cases where other PICTs may wish to use the tool but may not have the infrastructure or resources to host it, then a centralised data hosting option via the Pacific Data Hub could be considered. Future discussions to clarify technical specifications, resourcing requirements and relationships between implementing partners will help determine the most practical and sustainable hosting arrangements, either directly in-country or through a partner-hosted password-protected portal.

18. To progress ASCE proof-of-concept to final development of a working tool for Samoa, the following steps will be taken:
    a. Refinement and optimisation of ASCE content and design in partnership with Ministry of Agriculture and Fisheries Samoa. Discussions regarding hosting and handover of ASCE data uploading and downloading will ensure sustainable upkeep of relevant information for decision making.
    b. Scaling and resourcing the process for ASCE development as relevant for other interested countries in the Pacific to support planning and implementation of their Food System Pathway 2030 or similar policy documents.

19. The Agri-food Systems Climate Explorer can be accessed via this URL: https://global.indraweb.io/asce/

    Please note that this site is still under construction and **will not be complete nor operational until May 6th**. Stakeholders should not be directed to this website until then. Password protection will be instituted once upload and download functionality have been included.

Recommendations:

The PHOAFS are invited to:

a) **acknowledge** the value of the Agri-food Systems Climate Explorer (ASCE) proof-of-concept as a preliminary tool to support Pacific climate-resilient food systems planning.
b) **request** development partners to support the further development and refinement of the ASCE for Samoa and other interested PICTs based on requests.
c) **agree** that the refined tool and progress update is presented at the Pacific Ministers of Agriculture and Forestry meeting in 2025.

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 - 17 May 2024) - Virtual

Paper reference	**Session 2: Agenda Item 4**
Title	**Pacific Agriculture and Forestry Strategy**
Action	Decision
Author(s)	**Strategy Core Group:** Temarama Anguna (Cook Islands), Philippe Couraud (French Polynesia), Chelsa Muna (Guam), Kinaai Kairo (Kiribati), Mame Kasalau (Papua New Guinea), Lottie Vaisekavea (Solomon Islands), Dr. Viliami Manu (Tonga)

Summary

The paper presents the Draft Pacific Agriculture and Forestry Strategy for review and finalisation.

Recommendation:

The PHOAFS are invited to:

a) review and provide feedback on the Pacific Agriculture and Forestry Strategy 2024-2050.
b) Provide direction on the process for finalisation and endorsement.
c) Request SPC and FAO to facilitate the development of the first 5-year implementation plan for presentation to the Heads and Ministers in 2025

Background

The 8th Regional Meeting of Pacific Heads of Agriculture and Forestry Services (PHOAFS) met on 9 March 2023 in Nadi and requested FAO and SPC to facilitate the development of the region's first Agriculture and Forestry Strategy and to utilise strategic foresight as the methodology for the strategy development. This process was undertaken during 2023 and the first 4 months of 2024.

Purpose of this paper

To present the draft as finalised by the Strategy Core Group , seek review, feedback, and validation by the PHOAFS, and agree on the next steps. The draft Strategy is attached as ***Annex 1.***

Recommendations:

The PHOAFS are invited to.

d) review and provide feedback on the Pacific Agriculture and Forestry Strategy 2024-2050.
e) Provide direction on the process for finalisation and endorsement.
f) Request SPC and FAO to facilitate the development of the first 5-year implementation plan for presentation to the Heads and Ministers in 2025

Annex 1:

Growing the Pacific

2050 Strategy for Pacific Agriculture and Forestry: Healthy, Regenerative, Secure

Executive Summary

The Pacific Agriculture and Forestry Strategy for 2024-2050 outlines a bold vision for a future where agriculture and forestry systems in the Pacific Island Countries and Territories (PICTs) are sustainable, resilient, and contribute to the well-being of our people, economies, and environment. It is founded on a participatory, Pacific led, future ready approach that recognises both national contexts and regional intentions. To achieve this vision, the strategy focuses on five strategic pathways: Integrated, Healthy, Regenerative, Secure, and Enabled.

In the Integrated pathway, policies and actions will be harmonized to promote agroecological practices, transparent governance, and inclusive decision-making. The Healthy pathway emphasizes promotion of health and well-being for people, plants, animals and the environment through agriculture and forestry, by supporting agroforestry, traditional medicine, and healthy diets. The Regenerative pathway aims to ensure the long-term climate resilience and viability of agriculture and forestry systems through innovation, knowledge sharing, and sustainable investment. The Secure pathway focuses on ensuring food and economic security for all by diversifying crops and livestock, strengthening value chains, and establishing disaster risk financing mechanisms. Lastly, the Enabled pathway seeks to empower youth, women, and communities in agriculture and forestry through education, entrepreneurship, and equitable access to resources.

Key initiatives include developing policies for agroecological practices, promoting agroforestry and traditional medicine, establishing multi-stakeholder platforms for governance, supporting research and development networks, diversifying crops and livestock while building circular systems and economies, improving plant and animal health, strengthening biosecurity, investing in data platforms,

collection protocols and advanced analytics, empowering youth, women and diverse communities through training and entrepreneurship, expanding market access, and investing in regenerative agriculture and forestry.

Success will be measured by indicators such as adoption rates of regenerative practices, improvements in food security and economic resilience, diversification of value chains, and increased participation of youth and women in the sector. Overall, the strategy aims to create a future where agriculture and forestry are not only sources of sustenance but also pillars of pride, identity, and inspiration for generations to come in the Pacific.

Letter of Introduction from Pacific Leaders

Definitions

Agriculture: Encompasses crop production, livestock production and forestry for food and non-food products.[1]

Agroecology: A holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems. It seeks to optimize the interactions between plants, animals, humans and the environment while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced.[2] The main difference from regenerative agriculture is that agroecology approaches transition first and foremost as a political issue.[3]

Agroforestry: Any land-use system that includes trees and integrates them with crops and other tended and harvested plant and animal species.[4]

Biocontrol: The deliberate use of natural enemies – predators, parasites, pathogens, and competitors – to suppress and maintain populations of a target pest species (insects, mites, weeds, plant pathogens, and other pest organisms).[5]

Biodiversity: Natural variety and variability of life forms and their environment; it includes genetic diversity (diversity within and among species), species diversity (number and variety of species), and ecosystem diversity (total number of ecosystem types).[6]

Industrial Agriculture: A system of cultivation using large amounts of labour, capital and machinery relative to land area to produce significantly greater crop yields. Large amounts of labour and capital are necessary to the application of fertilizer, insecticides, fungicides, and herbicides to growing crops, and capital is particularly important to the acquisition and maintenance of high-efficiency machinery for planting, cultivating, harvesting, and irrigation.[7]

Organic Agriculture: Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved.[8] This is accomplished by using, where possible, agronomic, biological,

[1] https://en.wikipedia.org/wiki/Agriculture

[2] https://www.fao.org/agroecology/overview/en/

[3] https://www.fao.org/family-farming/detail/en/c/1629907/#:~:text=Thus%2C%20while%20the%20agroecology%20movement,the%20social%20dimension%20of%20sustainability.

[4] https://pi-casc.soest.hawaii.edu/research/research-projects/restoration-of-coastal-agroforestry-systems/

[5] https://www.nifa.usda.gov/grants/programs/biological-control-program

[6] https://pacificfarmers.com/wp-content/uploads/2014/05/LRD_TR_Organic_standard_Eng.pdf

[7] https://en.wikipedia.org/wiki/Intensive_farming

[8] https://www.ifoam.bio/why-organic/organic-landmarks/definition-organic

and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system.[9] The Pacific Organic Standard describes the requirements for organic production.[10]

Permaculture: An approach to land management and settlement design that adopts arrangements observed in flourishing natural ecosystems. It includes a set of design principles derived using whole-systems thinking.[11]

Regenerative Agriculture: Any and all forms of agricultural practice that actively restore soil quality, biodiversity, resilience, ecosystem health, and water quality while producing sufficient food of high nutritional quality.[12]

Regenerative Forestry: Any and all forms of forestry practice that store high levels of carbon and actively restore soil quality, biodiversity, resilience, ecosystem health, and water quality while supporting forestry livelihoods.

Traditional agriculture: Indigenous form of ecologically based agriculture.[13]

[9] https://www.fao.org/organicag/oa-faq/oa-faq1/en/

[10] https://pacificfarmers.com/wp-content/uploads/2014/05/LRD_TR_Organic_standard_Eng.pdf

[11] https://en.wikipedia.org/wiki/Permaculture

[12] Grant, S. (2017). Organizing alternative food futures in the peripheries of the industrial food system. *J. Sustain. Educ.* 14, 1–14. Available online at: http://www.susted.com/wordpress/content/organizing-alternative-food-futures-in-the-peripheries-of-the-industrial-food-system_2017_05/

[13] https://pacificfarmers.com/wp-content/uploads/2014/05/LRD_TR_Organic_standard_Eng.pdf

Introduction

Pacific Island Countries and Territories (PICTs) stand at a critical juncture for our agriculture and forestry sectors. As we navigate the challenges of climate change, biodiversity loss, and economic instability, the need for a transformative strategy that ensures sustainable development has never been more pressing. Agriculture and forestry practices are not merely sectors of our economy; they are the lifeblood of our communities, the guardians of our cultural heritage, and the stewards of our environment.

Growing the Pacific: 2050 Strategy for Pacific Agriculture and Forestry: Healthy, Regenerative, Secure (*Growing the Pacific*) is the first ever Pacific-led regional agriculture and forestry strategy. It represents an ambitious shared regional agenda for agro-ecological transformation.

Growing the Pacific nests under, and aligns with, the Pacific Islands Forum *2050 Strategy for the Blue Pacific Continent*. The *2050 Strategy for the Blue Pacific Continent* provides the long-term approach to Pacific regional collaboration based on shared values and action in seven key thematic action areas. In particular, *Growing the Pacific* contributes to the themes of People-Centered Development, Resources And Economic Development and Climate Change And Disasters, while benefiting from developments across all seven themes.

Our countries and territories are diverse, with unique challenges, strengths and comparative advantages. The regional strategy does not override or subsume any national strategy. It requires translation and flexibility in application at each national level. By sending a clear signal of collective ambition to donors and investors, it is intended to assist countries in attracting the resources they need to enact their national strategies.

In spite of our differences, Pacific Islanders navigate by the same rising stars. For our allies and partners, development agencies and investors, we share this strategy in order to prioritize, align and harmonize our collective efforts towards a healthy, regenerative and secure Pacific.

Pacific Agriculture and Forestry Systems

The agriculture and forestry systems in the Pacific Island Countries (PICs) are intricate webs of relationships involving farmers, foresters, policymakers, consumers, and various other stakeholders. Farmers and foresters are the growers, cultivating crops, raising livestock, and managing forests. They rely on extension services provided by government agencies, farmer organisations and NGOs for technical support and knowledge dissemination. Value chains connect growers with processors, retailers and consumers, ensuring the flow of agricultural and forestry products from farm to fork. They operate in markets regulated by government policy and connected to consumers through local and global supply chains.

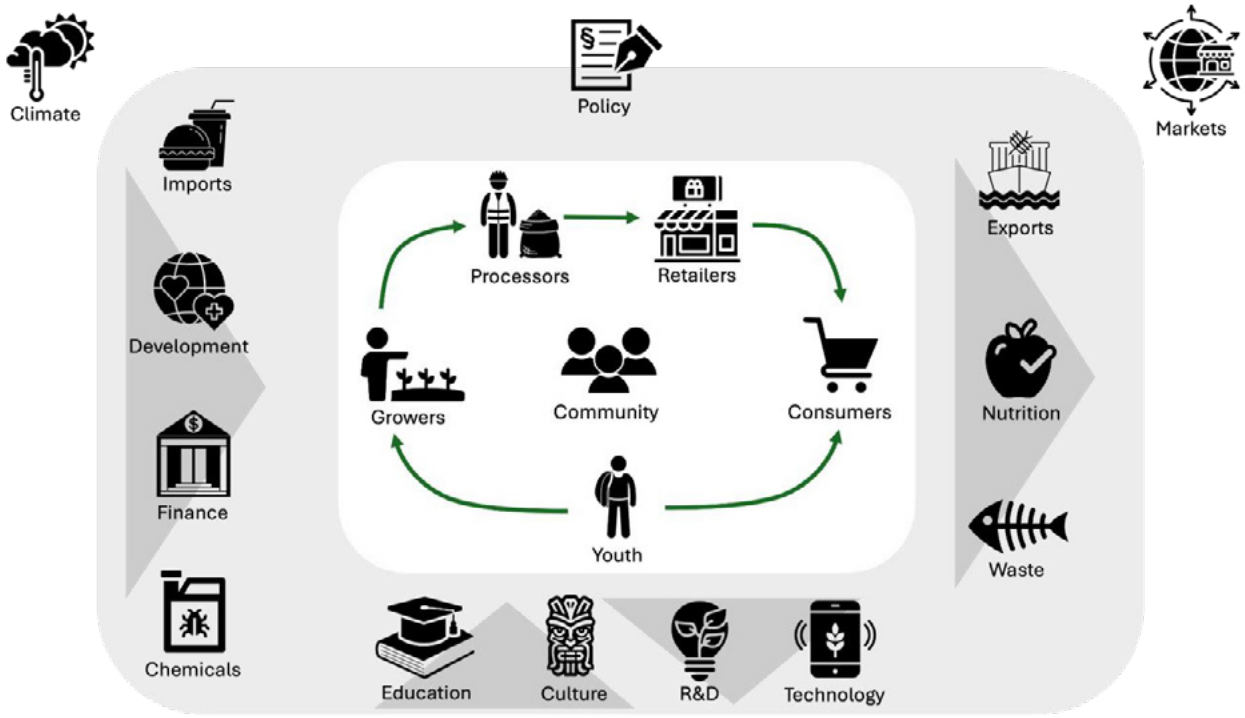


Figure 1. The Pacific Agriculture and Forestry System.

Agriculture has an ancient history in the Pacific, and some of the oldest agricultural sites in the world are found in the region.[i] Pacific Islanders have a long history of agricultural innovation around the adoption of new technologies and crops across the entire oceanic region. As a classic example, the sweet potato (Ipomoea batatas) originally from South America was successfully transferred and grown by groups across the Pacific from Rapa Nui in the East through to the highlands of Papua New Guinea in the West.[ii] This innovation is important as the Pacific region is characterised by a wide range of ecosystems and environment types from atolls to tropical volcanic islands and even through to alpine grasslands in the Papua New Guinea highlands. As crops were transplanted and grown in different environments a wide variety of agricultural innovation occurred such as the transition to seasonal planting of various root crops such as yams and sweet potato in colder climates such as New Zealand.[iii]

European contact introduced a range of different technologies and food crops into the region which then impacted agricultural production systems across the Pacific. The result of this new cycle of innovation included increased production yields as well as shifts in the means of production through the introduction of new tools and practices. Not all these shifts associated with industrial agriculture have been positive. As the region has continued to become increasingly integrated into the global economy a key consequence has been that local agricultural production has fallen for certain food crops. Taro production, for example, has fallen across the region as increasingly cheap forms of carbohydrates such as rice and highly processed imported food have become more readily available to local populations at increasingly lower prices.[iv]

These new patterns of industrial agricultural production and the associated new systems of consumption have unfortunately led to the increased incidence of a broad range of non-communicable

diseases in the region including diabetes and heart disease.[v] In addition to these regional health impacts, the large-scale importation of core foodstuffs for families in the region, such as rice and flour from wheat for bread, place the Pacific in a precarious position in terms of susceptibility to global supply changes – as the recent COVID-19 pandemic made evident.[vi]

Combined, the factors outlined here present a compelling argument of the need for governments in the region to proactively rethink the future of the agricultural and forestry sectors in the Pacific. Innovative action is going to be required to undertake these shifts and changes. But, as has been noted above, innovation in the agricultural and forestry sectors is nothing new for Pacific Islanders. The issue at hand is identifying the factors for innovation and putting them into practice. The following sections of this document provide the materials to support this new proposed space of innovation.

What we Heard

Between August and October 2023, we engaged with 285 people from across the Pacific regional agriculture and forestry system in workshops. Using the three horizons framework, each group described the future they desired for 2050 and charted the path to get there. This section summarized what we heard from farmers, foresters, youth, and specialists.

Gathering	Date	Modality	# Participants
Regional Research Agenda Peer Review Group	September 4	In person	16
PAPGREN Meeting (Plant Genetic Resources)	September 18	In person	39
Farmer Organisations	September 28	Virtual	32
Pacific Plant Protection Organisation	September 29	Virtual	10
Youth Open Talanoa	October 5	Virtual	40
Pacific Soils Partnership	October 17	Virtual	13
Forestry Heads	October 19	In person	17
SPREP Climate Outlook Meeting	October 25	In person	77

PHOVAPS Meeting (Animal Health and Production)	October 31	In person	41
Total Participants			**285**

What We Heard From Farmers

Efforts to strengthen agriculture begin with education and empowerment campaigns to attract a new generation, alongside investments in soil education. Empowering farmers' organizations ensures their voices in policy-making for more effective decisions as well as extending the reach of government and development partners in the areas of agriculture research and extension. Sustainable farming involves regenerative practices, supported by training and resources, including the preservation of plant genetic resources and crop biodiversity. Agroforestry and mixed cropping enhance productivity and ecological balance.

Engaging local communities revitalizes agriculture, through learning farms and preserving traditional knowledge. Empowering Indigenous entrepreneurship supports local economies. Effective policies involve consultations with stakeholders, tax incentives for sustainability, and quotas for women in leadership roles.

Collaboration and innovation, including digitalization, are crucial for progress. Local food production initiatives enhance food security and support small-scale producers. Diversifying agriculture reduces risks and monocropping's negative effects.

Preserving biodiversity and achieving food self-sufficiency are key for long-term sustainability, requiring forest restoration and reducing reliance on imports. This fosters resilience, equity, and environmental sustainability in agricultural systems.

During the Talanoas we encouraged participants to share their ideas in whatever way they wanted. Following the Farmer Talanoa, we received a written submission on behalf of TeiTei Tavenuni, a grassroots-led farmer organisation promoting sustainable agriculture on the island of Taveuni in Fiji. We include their letter here in full:

In 2050 we should grow/produce our own food – we will have real food security and be able to feed the ones coming to our shores as visitors/tourists.

We should have developed a production system that is resilient and productive, our land will be getting better and more productive year by year and the crops in our growing system will complement each other. The mineral density in the food must increase for better health.

To get there we will have to develop systems which rebuild our land's capacity as an opposite to declining productivity/declining soil fertility/declining nutritional value that is the result of our present systems.

To develop such a system we will all have to accept that we are dealing with a living system/ a living soil and we have to work for life/with life for rebuilding this living entity. It is called regenerative agriculture in today's language.

We do not know enough of the data for the Pacific to fully comprehend and implement regenerative practices – a part of the journey will be a reassessment of the learning institutions. We have to put money into research and training. Farmer organisations and universities must collaborate in more participatory research and shared learnings. Facilitated extension, a bottom up approach, with government and policy makers and farmers all working together with nature to develop a system to be able to produce nutrient dense foods for our future generations .

We have to develop local input solutions, local recycling, ecosystem based landcare, local knowledge and modern farming best practices to make it possible. We have to strive for what is called a circular economy.

We will need to work towards using our best lands for the most necessary crops – crops which will improve our food security and national economy.

Regenerative farming is about rebuilding the land's capacity. Due to the decline in soil fertility we are past the point where sustainability (= avoiding a further slide towards the bottom) is an option.

What We Heard From Foresters

In the pursuit of sustainability, managing the rainforest for its myriad products and ecosystem services is paramount, involving practices such as sustainable forest management and ongoing tree planting initiatives aimed at addressing diverse needs like climate change mitigation, biodiversity conservation, food security, and timber production.

Preserving traditional agriculture knowledge while embracing constructive lessons learned and best practices forms a foundational aspect of sustainable agriculture. Combining this traditional wisdom with modern technology and evidence-based scientific approaches ensures a holistic and effective approach to agricultural development.

Enhancing farming systems through applied research and leveraging the expertise of community champions and professionals are essential strategies for fostering resilient and productive agricultural systems capable of meeting the challenges of the future.

Continued efforts to raise awareness and educate communities about sustainable practices and their benefits are crucial for fostering widespread adoption and long-term success. Sharing success stories serves to inspire and provide practical examples for emulation and improvement.

Identifying specific community needs and tailoring interventions to address them directly ensures efficient resource allocation and maximum impact. Leveraging existing resources and local assets for learning, preservation, and development further enhances sustainability and resilience.

Encouraging investment from resource owners and fostering partnerships between the public and private sectors are instrumental activities in driving sustainable development initiatives forward, leveraging diverse expertise, resources, and networks for collective progress.

What We Heard From Youth

Improving incentives in agriculture and forestry for youth involves creating career paths, increasing education supports, additional incentives for those already engaged in agriculture, and fostering partnerships between universities and governments in Pacific Islands. Programs and incentives for direct engagement in the field between professional graduates and farmers are needed.

Developing land use policies involves zoning regulations to protect agricultural land and collaboration among young farmers, agriculture ministries, and landowners for equitable resource access.

Addressing food supply challenges through policy changes and awareness campaigns involves farmers, policymakers, schools, and communities to promote agriculture as a viable career and ensure a healthier society.

Implementing school projects to replant coconuts and breadfruit, planting flowers for pollinators and pest reduction, and encouraging tree planting requires collaboration among various stakeholders. Children need to understand why they are planting trees, crops and flowers, learning about their contribution to food security, income generation, and environmental sustainability.

Initiatives to save our soil through organic farming and for banana flour production, promoting agroecological campaigns for climate resilience and food security, requiring collaboration among stakeholders.

Launching tree-growing campaigns aims to restore forests and mitigate climate change, requiring community engagement and government support for sustainability and biodiversity.

Integrating technology into agriculture includes initiatives like technology clusters, drone use for pest management, and training programs to enhance crop quality and involve more young farmers.

What We Heard From Researchers

Aiming for agricultural self-reliance involves prioritizing food security, reducing food imports, and combating non-communicable diseases through healthy, locally sourced food.

Building resilience in agriculture includes climate-smart practices, resilient farming techniques, precision agriculture, and adaptation of nutrition strategies to changing climate conditions.

Sustainability is promoted through responsible soil management, biodiversity conservation, and lessons from diversified forestry industries.

Embracing technology like mechanization and digitalization enhances productivity and professionalizes agriculture, with a focus on digital marketing and e-commerce.

Community engagement encourages valuing locally produced goods for self-sufficiency and community participation in food production.

Investment in research and development focuses on genetic improvement, pest management, and knowledge sharing for stable food production.

Updating policies and legislation, along with political will, supports sustainable economic growth and trade routes for agricultural produce.

Human capital development through education and mechanization is crucial for professionalizing agriculture.

Expanding forestry's role to include biodiversity conservation and addressing invasive species protects agriculture and forestry.

Growing from Strengths

The Pacific Islands possess unique strengths that can be leveraged to create a more regenerative and resilient future. When asked, foresters, farmers, communities and experts said our regional strengths include:

1. Rich diversity of agroecological zones, crops, and livestock.
2. A growing pool of human capital including farmers, researchers, entrepreneurs, and policymakers.
3. Traditional knowledge, cultural values, and community participation at the heart of agricultural and forestry practices.
4. History of and potential for regenerative and resilient agriculture and forestry systems.
5. Potential for agriculture and forestry to contribute to the well-being of people, prosperity of economies, and conservation of the environment.
6. Traditional agriculture and indigenous crops and livestock.
7. Inclusive and participatory governance systems.
8. Youth and women's critical role in the sector's development and sustainability.
9. Biodiversity and ecosystem services that are important for food security, cultural heritage, and environmental sustainability.
10. Regional and national policies and strategies for agriculture and forestry.
11. Multi-stakeholder platforms for dialogue, decision-making, and collaboration.
12. Collective voice and bargaining power of PICs to access regional and global markets, financing, and technical assistance.
13. Access to international, regional and national financing sources for agriculture and forestry initiatives.
14. Access to training and education opportunities in agriculture and forestry.
15. Protected areas and community-based conservation programs.
16. Regional and national policies for climate-smart agriculture and forestry.
17. Certification and labeling schemes to promote quality standards and market access.
18. Existing networks and partnerships for research and development in agriculture and forestry.
19. Potential for ecotourism and nature-based enterprises to enhance biodiversity conservation.
20. The presence of local and national farmer organisations providing important services to farmers as well as an effective regional network that brings these farmer organisations together.

Overcoming Challenges

The Pacific Region faces many significant challenges. We view these challenges as signals that the status quo is unsustainable and transformational change is urgently needed.

Climate change and land use impacts:

- Increasing frequency and magnitude of extreme weather events
- Increasing coastal inundation and salinification

- Changing rainfall patterns and temperatures
- Increasing pests and diseases and decreasing pollinators
- Decreasing food security
- Loss of coastal and marine resources
- Increasing species extinction
- Decreasing availability of arable land due to urbanization, tourism and industry
- Continued conversion of forest land into agriculture
- Increasing soil erosion on mechanized farms

Socioeconomic and health challenges:

- Decreasing sovereign rents and non-tax revenues
- Lack of private sector investment
- Expensive international freight and limited market access
- Increasing imports of cheap, highly processed food
- Increasing prevalence of non-communicable diseases
- Outmigration of Pacific Islanders for seasonal work creates labour shortages
- Continued shortfall in extension workers
- Decreasing youth interest in farming

Our strategy recognizes and addresses these challenges, drawing on regional strengths and international partnerships to transition to the agriculture and forestry system the future requires of us.

A Compelling Future Vision for 2050

In 2050, the Pacific Islands will stand as a beacon of regenerative agriculture, agroecology and biodiversity, fostering prosperous and thriving communities through resilience, cooperation and shared opportunities.

We envision a vibrant and interconnected Pacific where agroecological, regenerative and resilient production systems, championed by farmers, foresters, livestock owners and youth, lead to thriving and educated Island communities, self-sufficiency, and regenerative agriculture, with an emphasis on biodiversity, affordable and healthy food access for all, and the integration of science, technology and traditional skills, while promoting resilience, economic viability, cooperation and shared opportunities.

Stated simply, our vision is a healthy, regenerative and secure Pacific.

“our vision is a healthy, regenerative and secure Pacific”

Pathways to Achieve the Vision

Weaving natural materials to form useful, strong and beautiful tools is part of our Pacific heritage, and an inspiration for us. In this strategy, there are five mutually supporting pathways that will lead us towards our shared vision. We imagine these pathways as interwoven healthy, regenerative and secure practices that guide us towards our desired future of systemic wellbeing, prosperity and resilience. These practices are enveloped by aligned policies and actions that ensure viability, and by enabled women, youth and diverse community, who have the skills, knowledge and resources to assure success.

1. Integrated: Aligning Policies and Actions to Accelerate Transition

- Align with the 2050 Strategy for the Blue Pacific Continent and report contributions towards the themes of People-Centered Development, Resources And Economic Development and Climate Change And Disasters.
- Align with international agencies, frameworks and initiatives contributing to sector transition (see Appendix B).
- Develop policies on land use, and ensure agricultural land remains available for production.
- Develop policies to promote agroecological practices to enhance ecosystem services that support clean water, biodiversity and soil health.

- Establish multi-stakeholder platforms that includes farmers and foresters through their organisations, private sector and civil society organisations for dialogue and decision-making to ensure inclusive governance.
- International partnerships to address transboundary forest and agriculture issues.
- Collaborate across ministries (education, health, trade, tourism, finance, environment etc.) both internally and across the region to create holistic approaches to complex problem solving in agriculture and forestry
- Strengthen regulatory frameworks to promote transparency and accountability in agriculture and forestry and combat illegal trade.
- Incentivize transition to agriculture and forestry with regenerative outcomes.
- Incentivize private sector investment and entrepreneurship in market-creating and market-shaping initiatives to grow agro-processing and value added industries.

- Indicator of Success: Increased adoption of integrated, regenerative land use practices, evidenced by reduced deforestation rates, improved soil health, and increased regenerative practices.

2. Healthy: Promoting Health and Well-being Through Agriculture and Forestry

- Adoption of a One Health approach to ensure the health and well-being of humans, animals, plants and ecosystems are interconnected and addressed holistically in agricultural and forestry practices.
- Improve soil quality and fertility to improve plant health.
- Promote regenerative production systems that contribute to ecosystem services and climate resilience, including agroforestry, permaculture and organic farming.
- Establish guidelines for sustainable forest management and forest conservation, addressing the challenge of forest based economies and pathways to economic diversification, biodiversity protection, and ecosystem restoration.
- Reintegrate livestock as a vital component of regenerative agriculture to build topsoil, reduce synthetic fertiliser use and convert human indigestible biomass into protein.
- Utilize biocontrols as more sustainable solutions for pest management.
- Encourage community-based and school-based initiatives for promoting healthy and affordable eating habits and lifestyles.
- Improve the accessibility and availability of healthy local foods through reliable and cost-effective distribution.
- Support improved nutrition outcomes through a food systems approach.
- Increase public awareness of the nutritional content of traditional and locally produced food and food as medicine.
- Support research and development of traditional medicine derived from forest resources for healthcare.
- Promote access and availability to traditional medicinal plants and raw materials for handicrafts.

- Indicator of Success: Increased availability and consumption of locally produced sustainably grown produce, leading to improved public health outcomes and reduced environmental impact.

3. Regenerative: Ensuring Long-Term Health of Agriculture and Forestry Systems

- Accelerate decarbonisation of the agriculture and forestry sector, including scope one, two and three emissions.
- Facilitate data gathering, data analysis, knowledge sharing and capacity building, including for regenerative business practice.
- Contribute to implementation of the *Pacific Strategic Plan for Agricultural and Fisheries Statistics*.[14]
- Develop strategies for monitoring and evaluating forest health and resilience, strengthening forest governance frameworks and trade.
- Promote afforestation and reforestation initiatives, integrating climate-smart practices and biodiversity conservation into forest management plans.
- Create training and capacity-building programs for forest-dependent communities.
- Recognize the role of indigenous communities in forest stewardship, forestry decision making and agricultural practices, ensuring the protection of indigenous rights and traditional knowledge.
- Establish regional research and development networks that put farmers and agribusinesses at the centre to promote innovation and knowledge sharing.
- Develop digital platforms for data sharing and communication to facilitate access to information and best practices.
- Engage with media and social media to enable agricultural extension, ecommerce and market connections.
- Invest in scientific research, technical capacity building, and support systems to develop innovative solutions for regenerative agriculture and forestry practices.
- Foster formal public-private partnerships with mutual accountability for sustainable investment in regenerative agriculture and forestry along the whole value chain.

- Indicator of Success: Increased adoption of regenerative practices and technologies, leading to improved productivity and resilience in agriculture and forestry.

4. Secure: Ensuring Food and Economic Security for All

- Increase market responsiveness through education and mentorship, and strengthen value chains for agriculture and forestry products to increase competitiveness and profitability.
- Support public health initiatives to reduce non-communicable diseases through improved access to healthy local foods.

[14] https://openknowledge.fao.org/items/3be8c71e-a75a-48f5-8f37-7c2f33f08b63

- Promote diversification of crops and livestock to enhance resilience to climate change and market fluctuations.
- Reduce reliance on imported animal feed
- Promote the roles of livestock and non-wood forest products in food and nutrition security.
- Strengthen value chains for non-timber forest products to create alternative income sources for forest-dependent communities.
- Support local regenerative agribusinesses to adopt innovative practices and access new export markets.
- Establish robust biosecurity systems to prevent the spread of invasive species, diseases, and pests that threaten agricultural and forestry production, through strict quarantine measures, monitoring programs, and public awareness campaigns.
- Conserve Pacific agrobiodiversity through the preservation of traditional crop varieties, establishment of seed banks, livestock genetic resources, and promotion of on-farm conservation practices.
- Mainstream valuation of and revenue streams for forestry and agriculture ecosystem services, including climate change adaptation and mitigation.
- Establish disaster risk financing mechanisms to mitigate the impact of natural disasters on agriculture and forestry.
- Ensure access to reliable, affordable and healthy food imports as a complement to local production and achieve food security.

- Indicator of Success: Diversified, resilient and viable value chains, leading to increased incomes for farmers and improved food security for communities.

5. Enabled: Empowering Youth, Women, and Community Members in All Their Diversities in Agriculture and Forestry

- Establish a Pacific Agriculture and Forestry Youth and Women Network to promote leadership and participation.
- Increase integration of agriculture and forestry education in schools.
- Fill the gaps in education pathways to meet the future talent needs of the agriculture and forestry sector.
- Provide training and education opportunities for youth and women in regenerative agriculture, livestock and forestry practices, and business management for farmers and value-added industries.
- Support community-led initiatives to ensure equitable access to resources for marginalized groups.
- Establish youth and women-led agribusiness incubators and networks to promote entrepreneurship and innovation.

- Indicator of Success: Increased representation of youth and women in decision-making roles, leading to more inclusive and equitable development in agriculture and forestry.

What is at Stake

At stake is the very future of our Pacific way of life. Our agricultural and forestry systems are under threat from a multitude of challenges, including extreme weather events, invasive species, unsustainable practices, youth out-migration, and limited access to finance and markets. If we do not act decisively, we risk losing not only our ability to feed ourselves but also our cultural identity, economic prosperity, and environmental resilience.

Based on engagement with the Pacific Heads of Agriculture and Forestry, farmers, foresters, youth, and subject matter experts, four possible, plausible and diverse future scenarios were developed to understand how events and choices could shape our reality by 2050. These scenarios span from the possibility of collapse to the promise of transition. Summaries of two extremes illustrate the importance and urgency of taking action together today.

The Most Dangerous Scenario: Collapse

In the late 2020s and early 2030s, Pacific Islands embraced cutting-edge technologies and intensive forestry and agriculture methods to enhance production and living standards. Mechanization and AI automated many jobs, yielding high profits and mitigating labor shortages. However, this approach later led to soil infertility, pollution, and invasive species, depleting natural resources and reducing crop yields permanently, impacting both the economy and food security. Forest and agricultural intensification also heightened zoonotic disease incidences, posing pandemic threats. Poor diet and declining mental health worsened health outcomes.

Youth and others fled the region, seeking stability elsewhere, exacerbating local income decline and inequality. Abandoned advanced technologies further strained the economy. Eventually, governments collapsed, and the region includes multiple failed states. Organized crime flourished, with drug crops and hydroponic cannabis production proliferating. Shadow governments attempt control and basic service provision, but security remains elusive.

The Most Desirable Scenario: Transformation

With climate activists leading the charge, global cooperation on emissions reduction is gaining traction. Adoption of the COP loss and damage fund aids nations with limited resources in adapting to ongoing effects. Regenerative agriculture and forestry thrive in the Pacific, bolstered by increased educational opportunities. Government support makes local products affordable, spurring international interest, especially since charismatic celebrity chefs have been broadcasting their love of native ingredients. Agritourism is on the rise across the region, offering experiential learning opportunities. While technology is prevalent, it must align with regional ethical standards. Some tech firms opt out due to restrictions, but new regulations attract global attention from those interested in a sustainable path forward. Despite growth in regenerative tech education, some resistance occurs due to perceived radical changes. Overall, though, the future is bright, people are healthy and the soil is replenished.

A Call to Action

The Pacific Agriculture and Forestry Strategy offers a bold and achievable roadmap for transforming our agricultural and forestry sectors. By aligning policies and actions, promoting health and sustainability, ensuring food and economic security, and empowering our youth, women, and communities, we can build a future where agriculture and forestry are not only sources of sustenance but also sources of pride, identity, and inspiration for generations to come. Together, let us seize this opportunity to shape a more regenerative and resilient future for the Pacific.

Therefore, we call upon:

Farmers and Foresters: Lead the transition to regenerative practices and collaborate with researchers and extension services to implement innovative solutions.

Youth: Choose careers in agriculture and forestry and actively engage in shaping the future of our food systems.

Women: Be visible role models and advocates for gender equality in agriculture and forestry.

Policymakers: Contextualize the strategy emphasizing unique regional strengths and challenges and prioritize regenerative development in policy decisions.

Consumers: Buy local, eat local and support local regenerative producers to create market signals for regenerative agriculture and forestry.

Value Chain Actors: Identify and implement business opportunities that promote regenerative practices and create efficient integration within value chains.

Extension Services: Innovate to improve the performance of agroecological systems and ensure the dissemination of knowledge and best practices.

Governments: Provide the necessary support, including financing,institutional strengthening, and educational pathways to enable the implementation of the strategy.

Funders: Invest in the transition to regenerative agriculture and forestry by harmonizing your contributions with our regional strategy to ensure long-term food security, economic prosperity, and environmental conservation in the Pacific.

Next Steps

The ambitions outlined here will serve as the foundation for development of a 5 year Growing the Pacific implementation plan that will address priority setting, leadership roles and resource allocation. Included in that document will be specific, measurable and achievable targets that can be integrated into practice. The intention is for this path forward to be incorporated into national planning efforts in ways that are appropriate and specific to their contexts.

A representative group will be tasked with clearly defining roles for stakeholders, from funders, governments, the private sector, Farmer Organisations, to NGOs in this holistic plan so that resources are effectively channeled to the bigger purpose.

Overall, we will work together to set time-bound targets for increased investment in agriculture and forestry throughout the region to accelerate the transition to a healthy, regenerative and secure future.

Review of accomplishments should be scheduled on a regular basis and updates to the strategy considered. As an interconnected, learning region, there is the opportunity for the Pacific to share lessons of agroecological transition going forward. This strategy can serve as a platform to enable that transformational growth.

Appendix A: Methodology

This strategy was developed as a foresight informed undertaking in order to best prepare the Pacific Island Agriculture and Forestry sector to build resilience for an uncertain future. The effort was participatory and Pacific led, with the support of SPC and the consultant strategic foresight team providing knowledge of methods to the process.

Step 1: Information Gathering

- A Governance Group of representative Heads of Agriculture and Forestry across the region was assembled to provide oversight to the strategy development process
- To gather information from regional subject matter experts, the consultant team conducted 15 hour long semi-structured interviews with individuals and groups via phone or video call between September and November 2023.
- Nine online and in person workshops were conducted in the same timeframe with a total of 285 participants, leveraging existing technical working groups and directly engaging youth and farmer organizations. The workshops followed a "3 Horizons" framework to identify preferred futures and articulate pathways for achieving those goals. Perspectives gathered at these sessions informed subsequent research and framed stakeholder objectives for the strategy.
- Reviews of all available national Agriculture and Forestry strategies in the region were completed to identify both common and differentiated key areas of concern, current accomplishments and intentions going forward.
- An extensive Horizon Scan was prepared by the consultant group and validated by the Governance Group to identify emerging trends and weak signals of change that are likely to impact Agriculture and Forestry in the region over the next 25 years.
- A workshop in Suva, Fiji in December 2023 convened the Governance Group to describe the current state, long-term trajectory, and desired 2050 future state for the Pacific agriculture and forestry system. The workshop ran for three days and involved a series of participatory foresight activities. Outcomes included identification of critical future uncertainties to be aware of and clarification of intent with respect to both regional alignment and varied national requirements.

Step 2: Information Processing

- Based on findings from the initial information gathering, four Scenarios of possible differentiated futures were created, incorporating trends and critical uncertainties from the previous work session. These narratives encompassed provocative but plausible explorations of what could unfold in the Pacific Islands:
    - Profit driven with Conservative approaches includes thriving agribusiness, managed climate impacts and cultural appreciation
    - Profit driven with reformist approaches results in declining forest health and agricultural intensification with extreme climate impacts

- Planet first with conservative approaches includes a highly regulated region with reduced prosperity overall but deepened community connections and support
- Planet first with reformist approaches embraces regenerative practices with ethical technology resulting in ecosystem health

- A second three day workshop attended by a wider group of Heads of Agriculture and Forestry from the region was convened in Nadi, Fiji, in March 2024
- An interactive research informed game was developed to provide an immersive experience for participants and explore the impacts of system-wide decision making about Agriculture and Forestry over the course of three decades. In a sequential, marketplace exchange, players took on roles (as Growers, Agribusiness, Consumers, Government, Funders or Youth) and made choices to strategize and adapt to changing environmental, economic and social conditions. Collaborative gameplay, including cooperation and negotiation, were required to attempt to avoid collapse and steer towards a sustainable future. The end state of the game could conclude in one of the four possible futures previously identified depending on choices made. The game provided a powerful platform for discussion of holistic and systemic approaches to addressing change within the sector.
- Translating insights developed through shared discussion, a series of backcasts of critical change requirements in order to achieve intended outcomes between today and 2050 were identified.

Step 3: Information Translation to Strategy

- In order to provide implementation context, workshop participants drafted a system map of intersecting influencers and stakeholders that will affect or be affected by the strategy.
- Obstacles to success and opportunities for change were identified.
- The Governance Group drafted key messages to guide the development of critical components of the strategy.
- A draft strategy has been prepared and circulated for review by Heads of Agriculture and Forestry

Appendix B: Aligning with Agencies, Frameworks and Initiatives

This section outlines the major actors in the Pacific working at a range of scales across the region. A key issue moving forward is how to maximize the alignment between different agencies involved in the Agriculture and Forestry sectors. The goal of this section is that by understanding the work programmes of different actors in the region then individual PICT governments and agencies using this document are able to more effectively align their work with the work being done by others in the Pacific and in doing so amplify the use of the resources available through donor harmonisation. Increased alignment to regional and international organisations' own programs by PICTs will maximise the comparative advantage for the region in the medium and long term.

There are four levels of alignment (International, Regional, National, and Sub-National) that can occur in the region – but this will not be necessary for all projects and policies – and the main focus in this section is on international and regional organisations.

International these are organizations that have an international remit but cover the Pacific region as part of this work – these include agencies such as the Un and the World Bank.

Regional these are organizations that cover the Pacific region only – this includes the CROP agencies.

National these are the respective national governments covered by this strategy

Sub-National a number of countries in the region have sub-national units such the Federated States of Micronesia, Papua New Guinea, and Solomon Islands. A number of these sub-national actors have substantial impact on their countries respective Agriculture and Forestry sectors such as the role of the Eastern Highland Province, Western Highland Province, and Simbu in coffee production in Papua New Guinea and Guadalcanal and Western provinces being the source of over 50% of Solomon Islands' logging exports.

We have not included bi-lateral donors and international non-profits in this section. The reason for this is that their funding is very specific, generally, on country-specific programming and is something then that each PICT will be more able to effectively engage with at a local national (or sub-national level).

International Agencies

Asian Development Bank (ADB)

The ADB's focus is on reducing poverty in Asia and the Pacific. It does through a range of programs, including directed loans, focused on achieving inclusive and environmentally sustainable economic growth. In the Pacific it's work in the Agriculture and Forestry sectors is focused on two key areas in its funding assistance, these being: Long-Term Food Security and the Future of Agriculture.

United Nations Agencies and Sub-Agencies

Food and Agriculture Organization (FAO)

The FAO is focused on agri-food systems transformation but largely within the context of the SDGs. They are also doing innovative work around production and fertiliser use reporting. The regional contact is the sub-regional office in Apia, Samoa. The FAO are also beginning to apply a new "One Health" approach to accelerate agri-food systems transformation in the Pacific region which is based on the holistic understanding of the fundamental interconnections between the health of people, animals (terrestrial and aquatic), plants and the environment. (Connections to programming with SPC and SPREP at the regional level and WOAH, UNEP, and WHO at the international level.)

International Fund for Agricultural Development (IFAD)

IFAD is a multilateral development organisation which is part of the UN system and which focuses exclusively on rural economies and food security. IFAD's work in the Pacific is focused on: (a) climate-smart and nutrition-sensitive agriculture; (b) facilitating market access and connectivity; and (c) building institutional capacities. In addition it also operates the Pacific

Islands Rural and Agriculture Stimulus (PIRAS) Facility which supports food system and economic recovery following COVID-19.

International Labour Organisation (ILO)

The ILO's work focuses on bringing together governments, employers and workers representatives in order to set labour standards and promote policies and programs that enable decent work for all people. In the Pacific recent work has focused on training initiatives for new generations of agricultural workers.

Intergovernmental Panel on Climate Change (IPCC)

The IPCC is the scientific organisation brought together by the UN in order to monitor and assess all global science related to climate change. In addition to their work overall of climate change monitoring the IPCC also supports works on monitoring pests and diseases in the PICTs as well as overall phytosanitary (plant health) in the region.

International Trade Centre (ITC)

The ITC has a dual mandate through UNCTAD and the WTO in the provision of support to policymakers and governments to ensure that strategies and policies work to facilitate trade and, in doing so, support economic growth. Recent Pacific regions focused work has including holding a Pacific Women in Export Leadership Workshop to promote Pacific export to alternative markets.

UN Environment Programme (UNEP)

The UNEP is the organisation tasked with coordinating responses to environmental issues within the United Nations system. In the Pacific region they provide support around environmental and biodiversity reporting – specifically through their 'State of the Environment' reports. Their regional partner for this work in the Pacific is SPREP.

UN Economic and Social Commission for Asia and the Pacific (UN ESCAP)

The ESCAP Subregional Office for the Pacific is based in Suva, Fiji. The Subregional focus is on: (a) National Planning and Policy Coherence; (b) 2030 Agenda and related Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway; (c) Social Inclusion and Equality; (d) Climate Action and Resources Management; and (e) Data and Statistics.

UN Capital Development Fund (UNCDF)

UNCDF makes public and private finance work for the poor in the world's 46 least developed countries (LDCs). This includes the following countries in the Pacific region: Fiji, Papua New Guinea. Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. More recent work in the region has focused on the Pacific Insurance and Climate Adaptation Programme (PICAP). This is a multi-year Programme that is jointly implemented by UNCDF, UNDP and the UN University – Institute for Environment and Human Security (UNU-EHS).

UN Women

UN Women champions gender equality in the international system. They undertake a range of projects to promote women's role in the agriculture and forestry sectors. For example, UN Women have partnered with the FAO in the creation of a programme that instructs women on climate-resilient farming in sub-Saharan Africa but this is not yet available in the Pacific region.

United Nations Conference on Trade and Development (UNCTAD)

UNCTAD works to formulate policies relating to various aspects of development, including trade, aid, transport, finance and technology. Work in the Pacific has tended to focus more issues to do with pollution and digital access as well as some recent work on Pacific Island's agricultural sectors access to markets.

United Nations Development Program (UNDP)

The UNDP is focused on supporting countries to eliminate poverty and achieve sustainable economic growth and human development. They run a range of programs in the Pacific focused on: (a) effective governance; (b) inclusive growth; and (c) resilience and climate change.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO's focus is on promoting world peace and security through international cooperation through the education, arts, sciences and cultural sectors. Active in the Pacific it has a long term focus on a range of initiatives including Indigenous Knowledge and Intangible Cultural Heritage.

World Food Program (WFP)

WFP focuses largely on emergency food relief. In addition to this though it provides a range of technical and development assistance in terms of managing logistics and supply chains, building capacity around emergency preparedness and response, as well as strengthening resilience against climate change. In the Pacific their work focuses on food security and nutrition, particularly around social protection interventions.

World Health Organization (WHO)

The WHO is the UN agency responsible for international public health. In the Pacific much work is focused on the impacts of climate change and of the high prevalence of noncommunicable diseases (NCDs) which include cardiovascular diseases and diabetes which are directly connected to diet. They are also part of the broader group of agencies participating in the One Health reporting.

World Meteorological Organization (WMO)

The WMO is a specialised agency within the UN which is tasked with promoting international cooperation on atmospheric science, climatology, hydrology and geophysics. In the Pacific their work is focused on weather forecasting and supporting responses to weather patterns such as El Niño / La Niña and droughts as well as catastrophic weather events such as cyclones.

World Bank

The largest global funder of agricultural development assistance the World Bank is increasingly focused on these four strategic areas: Climate-Smart Agriculture; Data-Driven Digital Agriculture; Mobilizing Capital for Development in Agriculture & Food; Public Policy and Expenditure; and Food and Nutrition Security.

World Organisation for Animal Health (WOAH)

WOAH provides and shares information around animal health and associated veterinary information. They are part of the group participating in the One Health reporting in the region.

World Trade Organisation (WTO)

Concerned to ensure that trade flows as smoothly and predictably as possible across different countries and regions the organization is concerned with establishing and monitoring the rules of trade between countries and regions. On food trade their key partners in the Pacific are WOAH and IPPC with workstreams aligning with the Southwest Pacific Codex Initiative.

International Frameworks

The UN frameworks are implemented and reported by individual countries. Each PICT is a member of the various UN agencies responsible for implementing and reporting on the global frameworks. In addition, there are existing reports that can be drawn from for data collection and reporting to support monitoring.

Sustainable Development Goals (SDGs)

The 17 individual Sustainable Development Goals (SDGs) adopted by all UN member nations are based on three high-level goals. These are: (1) economic growth, (2) social inclusion and (3) environmental protection.

UN Framework Convention on Climate Change (UNFCCC)

The Intergovernmental Panel on Climate Change (IPCC) for the monitoring of the UNFCCC. This monitoring requires a range of different inputs from different UN member countries as part of the global stocktake with these varying depending on National Determined Contributions.

International Initiatives

Southwest Pacific Codex Initiative

This is a capacity building project designed to enhance Codex competencies in the Southwest Pacific in order to promote effective participation by the region's delegations in international food standard setting activities as part of the establishment of national food regulatory requirements in the sub-region.

Regional Agencies

Secretariat of the Pacific Community (SPC)

The SPC is focused on development in the Pacific region and primarily focuses on the provision of technical and scientific advice as well as acting as a conduit for funding of development projects from donor nations. They are the home of the Pacific Data Hub and are a part of the group participating in the One Health reporting.

Pacific Islands Development Program (PIDP)

The mission of the PIDP is to assist Pacific Islands' leaders to advance their collective efforts to achieve and sustain equitable social and economic development. As a think tank they hold a range of Knowledge Development events including program exchanges and conferences.

Pacific Islands Forum Fisheries Agency (FFA)

The FFA works to facilitate regional co-operation and co-ordination on fisheries policies in the Pacific. With a specific focus on conservation and the optimum utilisation of living marine

resources in the region in a sustainable manner recent work has focused on aquaculture and on the importance of traditional land tenure systems.

Pacific Islands Forum Secretariat (PIFS)

PIFS works to enhance cooperation among PICTs. Their work is focused on these seven pillars: (a) Political Leadership and Regionalism; (b) People-Centered Development; (c) Peace and Security; (d) Resources and Economic Development; (e) Climate Change and Disasters; (f) Ocean and Environment; and (g) Technology and Connectivity. They are the lead organisation for the '2050 Strategy for the Blue Pacific Continent'.

Pacific Tourism Organisation (PTO)

The PTO works to promote and develop tourism in the Pacific in overseas markets. A small part of their work is focused on agritourism.

Secretariat of the Pacific Regional Environment Programme (SPREP)

SPREP focuses on the protection and sustainable development of the Pacific region's natural resources. They have four key work streams, which are: (a) Climate Change Resilience; (b) Environmental Governance; (c) Island and Ocean Ecosystems; and (d) Waste Management and Pollution Control. Other sub-sections include work as a part of the term working on the One Health reporting.

The University of the South Pacific (USP)

USP is a public research university with campus locations across a dozen PICTs in the broader Pacific region. They teach a wide range of courses and do research on a large number of research topics including Agriculture and Forestry – with the key focus for this being on the Apia campus in Samoa.

Appendix B: Methodology

This strategy was developed as a foresight informed undertaking in order to best prepare the Pacific Island Agriculture and Forestry sector to build resilience for an uncertain future. The effort was participatory and Pacific led, with the support of SPC and the consultant strategic foresight team providing knowledge of methods to the process.

Step 1: Information Gathering

- A Governance Group of representative Heads of Agriculture and Forestry across the region was assembled to provide oversight to the strategy development process
- To gather information from regional subject matter experts, the consultant team conducted 15 hour long semi-structured interviews with individuals and groups via phone or video call between September and November 2023.
- Nine online and in person workshops were conducted in the same timeframe with a total of 285 participants, leveraging existing technical working groups and directly engaging youth and farmer organizations. The workshops followed a "3 Horizons" framework to identify preferred futures and articulate pathways for achieving those goals. Perspectives gathered at these sessions informed subsequent research and framed stakeholder objectives for the strategy.
- Reviews of all available national Agriculture and Forestry strategies in the region were completed to identify both common and differentiated key areas of concern, current accomplishments and intentions going forward.
- An extensive Horizon Scan was prepared by the consultant group and validated by the Governance Group to identify emerging trends and weak signals of change that are likely to impact Agriculture and Forestry in the region over the next 25 years.
- A workshop in Suva, Fiji in December 2023 convened the Governance Group to describe the current state, long-term trajectory, and desired 2050 future state for the Pacific agriculture and forestry system. The workshop ran for three days and involved a series of participatory foresight activities. Outcomes included identification of critical future uncertainties to be aware of and clarification of intent with respect to both regional alignment and varied national requirements.

Step 2: Information Processing

- Based on findings from the initial information gathering, four Scenarios of possible differentiated futures were created, incorporating trends and critical uncertainties from the previous work session. These narratives encompassed provocative but plausible explorations of what could unfold in the Pacific Islands:
    - Profit driven with Conservative approaches includes thriving agribusiness, managed climate impacts and cultural appreciation
    - Profit driven with reformist approaches results in declining forest health and agricultural intensification with extreme climate impacts
    - Planet first with conservative approaches includes a highly regulated region with reduced prosperity overall but deepened community connections and support

- Planet first with reformist approaches embraces regenerative practices with ethical technology resulting in ecosystem health

- A second three day workshop attended by a wider group of Heads of Agriculture and Forestry from the region was convened in Nadi, Fiji, in March 2024
- An interactive research informed game was developed to provide an immersive experience for participants and explore the impacts of system-wide decision making about Agriculture and Forestry over the course of three decades. In a sequential, marketplace exchange, players took on roles (as Growers, Agribusiness, Consumers, Government, Funders or Youth) and made choices to strategize and adapt to changing environmental, economic and social conditions. Collaborative gameplay, including cooperation and negotiation, were required to attempt to avoid collapse and steer towards a sustainable future. The end state of the game could conclude in one of the four possible futures previously identified depending on choices made. The game provided a powerful platform for discussion of holistic and systemic approaches to addressing change within the sector.
- Translating insights developed through shared discussion, a series of backcasts of critical change requirements in order to achieve intended outcomes between today and 2050 were identified.

Step 3: Information Translation to Strategy

- In order to provide implementation context, workshop participants drafted a system map of intersecting influencers and stakeholders that will affect or be affected by the strategy.
- Obstacles to success and opportunities for change were identified.
- The Governance Group drafted key messages to guide the development of critical components of the strategy.
- A draft strategy has been prepared and circulated for review by Heads of Agriculture and Forestry

9th REGIONAL MEETING OF

PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

Paper reference	**Session 3 Agenda Item 1**
Title	**CePaCT updates on progress of implementation of its Investment Plan (2019-2023) based on two key reviews carried out in 2023.**
Action	For Information
Author(s)	**Logotonu M. W, Dr . Amit Sukal, Dr. Carmel Pilotti**

Background

1. Established in response to the 1996 recommendation by the Pacific Heads of Agriculture and Forestry Services (PHOAFS), the Centre for Pacific Crops and Trees (CePaCT) was initiated to develop systems and mechanisms for the protection, conservation, and optimal utilization of the region's plant genetic resources. This directive aimed to address the significant challenges faced by the Pacific region, including climate change, loss of genetic diversity, and the need for sustainable agricultural practices to ensure food security, improved health, and livelihoods.

2. Over the years, CePaCT has evolved into a fundamental entity within the Pacific Community (SPC), safeguarding over 2,000 accessions of vital crops and trees, making it a cornerstone in the Pacific's strategy to combat the adverse effects of climate change, dietary health issues, and agricultural productivity challenges. The establishment and subsequent progress of CePaCT underscore the collective vision of the Pacific countries to safeguard their biodiversity heritage while fostering resilience and sustainability in agricultural practices.

3. The recent external review conducted by the Global Crop Diversity Trust (Crop Trust) in 2023 builds upon CePaCT's foundational goals, assessing the Centre's advancements since the previous review in 2017 and outlining strategic directions for further enhancements. This review emphasizes the significant strides made in genetic integrity monitoring, germplasm health and availability, and infrastructural and operational capacities, aligning with the long-term objectives set forth by PHOAFS. It identifies key areas for improvement, highlighting the critical role of safety duplication and the efficiency of procedures in genebank operations.

4. This paper aims to provide PHOAFS with a comprehensive update on the progress and implementations of CePaCT's Investment Plan (2019-2023), illustrating how the Centre continues to embody the aspirations of the Pacific countries for a resilient, sustainable, and food-secure future. Through continuous improvement and adherence to international standards, CePaCT aspires to

elevate its status as a centre of excellence, contributing significantly to the well-being and prosperity of the Pacific Community.

Purpose

5. The purpose of this paper is to update PHOAFS on the four key areas as outlined in the 2023 PHOAFS CePaCT information paper for 2023/2024 focus. These four areas include:
    a) Updates on the review of progress of implementation of the first Phase of CePaCT's Investment Plan (2019-2023) – key outcomes and recommendations
    b) Updates on the second external audit of CePaCT by the Global Crop Diversity Trust (Crop Trust), 29 May - 2 June 2023 – key outcomes and recommendations
    c) Updates on securing partnerships for safety duplication of aroid and yam collections – progress to date.
    d) Update on the process of development of the next CePaCT Investment Plan.

Key Updates

Update on the review of progress of implementation of the first Phase of CePaCT's Investment Plan (2019-2023).

Overview and objectives.

6. CePaCT's progress was evaluated by an external consultant against the 2019-2023 Investment Plan, who utilized a comprehensive set of resources for a detailed assessment. This included internal reports from SPC, LRD, and CePaCT, a 2023 external genebank review by the Crop Trust, and diverse stakeholder feedback from the PAPGREN meeting in September 2023. Further depth was added through direct interviews with SPC-LRD and CePaCT staff, an online user feedback survey, and donor insights from interviews with key development partners like the Crop Trust; the Department of Foreign Affairs and Trade (DFAT), Australia; the Australian Centre for International Agricultural Research (ACIAR), and the Ministry of Foreign Affairs and Trade (MFAT), New Zealand. The objectives of the review include:

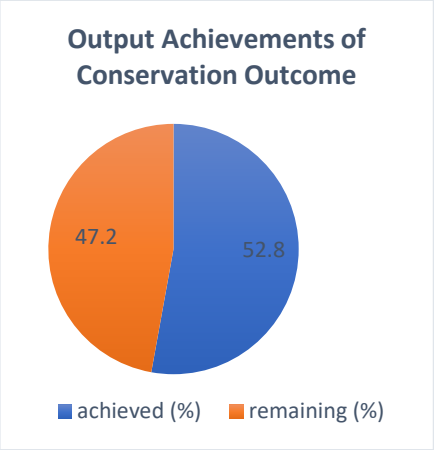
    a) Assess progress against the 2019-2023 Investment Plan's log frame indicators.
    b) Evaluate strategic relevance, effectiveness, efficiency, impact, and sustainability following the Organisation for Economic Co-operation and Development - Development Assistance Committee (OECD-DAC) criteria.
    c) Identify learnings to refine CePaCT's strategy and align future plans with regional priorities.

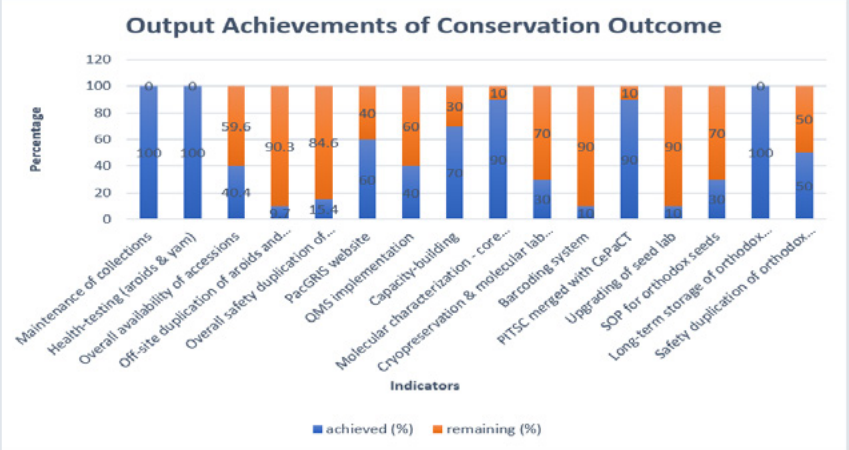
Progress against the Investment Plan indicators.

7. **Quality Management System (QMS) Progress:** Since 2018, CePaCT has been working towards establishing a Quality Management System (QMS) with the goal of enhancing genebank operations

to meet the Crop Trust's performance targets. The ambition for the first phase was to implement QMS elements to about 50% satisfaction and achieve a 75% index for germplasm health testing. However, progress reports indicate a 40% implementation of QMS elements and a 50% success rate in germplasm health testing, signifying areas for growth and improvement. A significant challenge that emerged was the COVID-19 pandemic which notably impacted the ability to meet QMS targets.

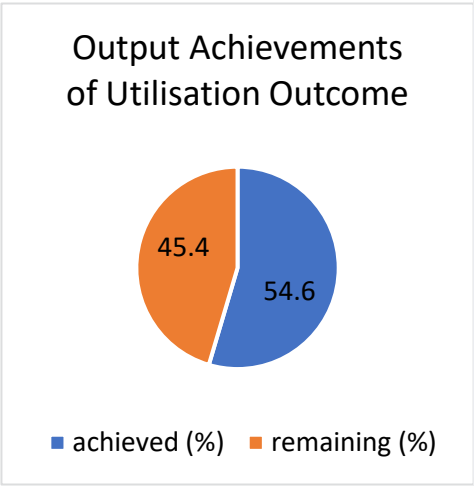
8. **Conservation Outcome achievements:** The first phase of CePaCT's Investment Plan marked significant progress, achieving 52.8% of conservation outcome indicators. This demonstrates considerable strides toward meeting established targets amid operational challenges and the impacts of the COVID-19 pandemic. Notably, the plan significantly reduced annual accession loss to less than 1%, surpassing the initial target of 5%. Progress in aroid health testing was commendable, achieving 68% of the 90% availability goal, accounting for both clean-health status and legal compliance. However, progress in yam collections was slower, at 22%, attributed to an initial focus on optimizing health testing protocols. Among the key achievements was the seamless integration of the Pacific Islands Tree Seed Centre (PITSC) with CePaCT and the initiation of orthodox seed storage, indicating a significant operational expansion. Nonetheless, establishing safety duplication, enhancing accessibility to the proposed Pacific Genetic Resources Information System (PacGRIS) website, and integrating a functional barcoding system with the GRIN-Global Community Edition (GGCE) remain pressing needs. Addressing these challenges and strategically optimizing staff deployment to achieve the 90% availability targets is crucial for bolstering CePaCT's essential conservation role in the Pacific region as it advances into the next phase.

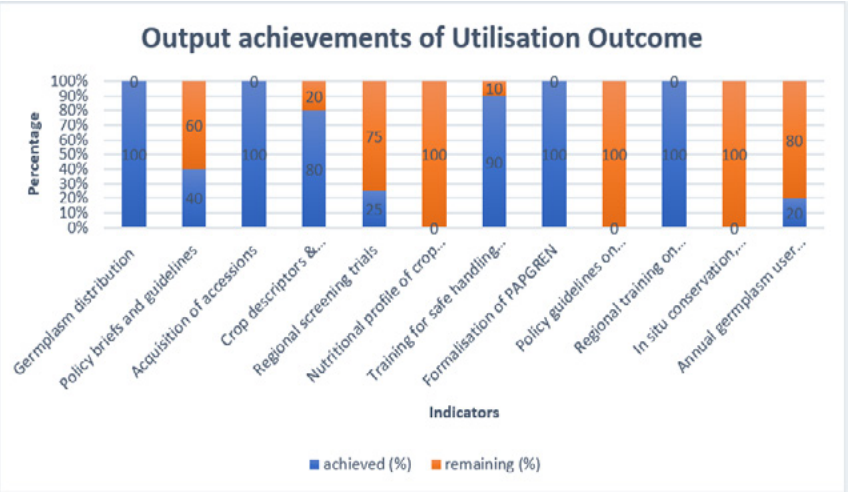




9. **Utilization Outcome achievements:** During the initial phase of CePaCT's Investment Plan, significant achievements were realized in germplasm distribution, with an average of 261 accessions distributed per year, of which 46% were climate resilient. The acquisition phase exceeded expectations with 118 new accessions, enhancing CePaCT's collections diversity. Importantly, introducing coconut as a new mandate crop responded directly to the priorities set by PHOAFS, reflecting a deepened commitment to regional plant genetic resource diversity. Alongside the establishment of PAPGREN and the attainment of crop descriptor targets, these efforts have markedly improved local capacity in germplasm management. Although success has been considerable, challenges in nutritional profiling, policy development, in-situ conservation, and

conducting annual user surveys point to areas needing augmented focus. CePaCT will leverage the PAPGREN platform to deepen farmer and community engagement in conservation and utilization efforts of plant genetic resources, intensifying work on underachieved areas, especially in enhancing regional screening trials.





10. Evaluation of CePaCT's Investment Plan.

The application of OECD evaluation criteria to CePaCT's Investment Plan has illuminated the strategic alignment and operational dynamics of the program, revealing both achievements and areas requiring enhanced focus for the next phase:

a) **Relevance:** CePaCT's interventions have been highly relevant, directly addressing the Pacific region's critical challenges such as climate change and sustainable agriculture. The conservation of crop genetic diversity aligns closely with the need for food security and ecological resilience.

b) **Coherence:** Internally, CePaCT's activities are well-integrated within the SPC Land Resources Division, enhancing organizational goals. Externally, the efforts contribute to global sustainability agendas, including the Sustainable Development Goals.

c) **Effectiveness:** The plan has achieved considerable success in germplasm conservation and distribution. However, effectiveness assessments are constrained by missing baseline data, emphasizing the need for improved data collection and analysis.

d) **Efficiency:** Investments in a Quality Management System (QMS) and staff capacity indicate progress towards operational efficiency. However, external factors like the COVID-19 pandemic and staff turnover have hindered the centre's ability to meet conservation and utilization objectives on schedule.

e) **Impact:** While it may be too early for a comprehensive impact assessment, there are indications of positive developments in QMS implementation and germplasm health testing. The full extent of the impact, especially on the environment, sector, and region, remains to be fully realized.

f) **Sustainability:** Securing long-term funding remains a challenge, with suggestions to consider a Long-Term Partnership Agreement and full-cost recovery services to enhance

sustainability. The need for a staff succession plan is also highlighted to maintain the momentum of the Investment Plan's achievements.

11. Overall, the evaluation reflects a program that is strategically aligned to the needs of the Pacific region, making tangible progress despite some operational challenges. Recommendations for the next phase focus on bolstering outward engagement, enhancing interaction with partner countries, and addressing critical areas such as germplasm utilization and information management system improvements.

Donor Feedback:

12. Donors view their investment in CePaCT as crucial for climate adaptation efforts in the Pacific. While generally pleased with the first phase's implementation, they highlight the need for a more outward-looking approach in the next phase, with a focus on distributing, evaluating, and utilizing elite planting materials among farmers. High staff turnover and the necessity for recruitment and retention of key technical staff are concerns that donors wish to see addressed.

Recommendations for the Next Investment Phase (2024-2029).

13. For the next phase of CePaCT's Investment Plan (2024-2029), recommendations call for a strategic pivot towards more dynamic, region-centric initiatives:

    a) **Refine Technical Focus:** Balance conservation with distribution, evaluation, and utilization to promote and develop climate-smart and nutritious crops.
    b) **Strengthen Regional Engagement:** Increase collaborations with Ministries of Agriculture, NGOs, and private sector entities to scale up the distribution and evaluation of CePaCT's plant material.
    c) **Develop a Sustainable 'Value chain enhancement' System:** Draw inspiration from models like the Farm to Market Alliance for efficient seed and planting material distribution.
    d) **Formulate an Orthodox Seed Strategy:** Focus on both conservation and value chain enhancement of orthodox seeds, ensuring their integration into local and regional agriculture for the future.
    e) **Enhance Data Collection and Feedback**: Implement annual user surveys and validate results through structured interviews to refine service delivery.
    f) **Plan for Staff Continuity**: Address staffing challenges and ensure continuity of expertise and knowledge through a comprehensive succession plan.

14. These focused recommendations aim to elevate CePaCT's contributions to regional food security and sustainable agricultural practices through improved plant genetic resource conservation and utilization.

15. The first phase of CePaCT's Investment Plan has laid down a solid foundation of achievements in conserving and utilizing plant genetic resources, driven by the valuable insights from challenges encountered and stakeholder feedback. Notably, our efforts in germplasm distribution have received positive responses from across the Pacific, underscoring the impact of our work and the

need for continued engagement and improvement in areas such as regional screening and farmer participation.

16. Looking forward, the next phase (2024-2029) of CePaCT's Investment Plan is set to build on these successes, with a strategic focus on addressing the evolving challenges of climate change and technological advancements. We aim to enhance our data collection and feedback mechanisms, ensuring CePaCT's initiatives remain aligned with the needs of our Pacific community for food security and sustainable agricultural practices.

17. With a collective effort and a focus on innovation and responsiveness, CePaCT is committed to advancing our mission and contributing to a resilient and sustainable agricultural future for the Pacific.

Outcomes of the external audit of CePaCT by the Global Crop Diversity Trust, 29 May- 2 June 2023.

Overview and Objectives

18. This report presents the outcomes of the second external audit of CePaCT conducted by the Crop Trust from 29 May to 2 June 2023. Following the first review in 2017, which identified 22 key recommendations focusing on areas such as genetic integrity monitoring, germplasm health and availability, infrastructure development, and staff capacity building, significant progress have been made. Out of the 22 recommendations, 15 have been fully addressed, 4 recommendations have been partially addressed, and 2 have not been implemented. One recommendation was dropped. For detailed insights into the progress made on these recommendations, please refer to the full report on this link.

19. The second review in 2023 sought to evaluate the progress CePaCT has made since 2017, identify areas needing further strengthening, assess CePaCT's operational efficiency and capacity, and ensure the genetic resources are well conserved for sustainable use. This evaluation also aimed to validate CePaCT's compliance with genebank standards, key performance indicators, and eligibility for future partnerships and funding. The comprehensive insights and detailed findings of the 2023 review are documented in the full report, accessible via this link.

Key Outcomes:

Assessment of CePaCT activities to sustain essential operations.

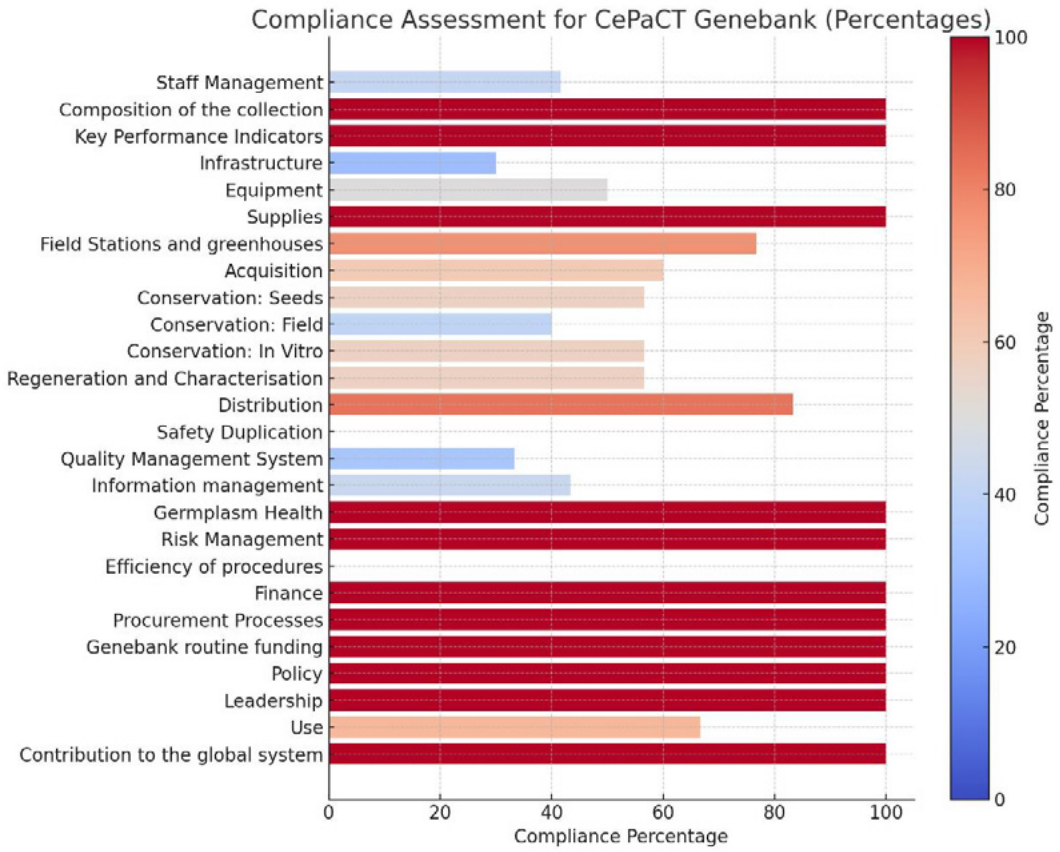
20. **In Vitro collections:** The CePaCT in vitro genebank stands out with a significant collection of 2,190 accessions, reflecting its vital role in preserving clonal crops like aroids and yams. A noteworthy aspect of CePaCT's operations is its commitment to germplasm health testing, ensuring the collection's safety and viability. Out of 1,023 accessions that have completed health testing or virus indexing, 776 have been verified as free from plant pathogens or diseases of biosecurity concern and are immediately available for distribution. This highlights CePaCT's efficiency not only in conducting thorough health checks but also in maintaining a significant portion of its collection

ready for safe distribution to partners and researchers. Furthermore, 2,170 accessions are included in the Multilateral System (MLS), highlighting CePaCT's commitment to global crop diversity conservation. This substantial contribution underscores CePaCT's operational success and its pivotal role in supporting agriculture in the Pacific.

21. **CePaCT Seed and Field collections:** The seed bank (previously known as the PITSC), an essential component of CePaCT's conservation strategy, manages 197 seed accessions alongside 33 field bank accessions, with 6 of these field accessions also maintained in vitro. This diversity is crucial for safeguarding the region's agricultural heritage. Among the seed accessions, 7accesions are ready for immediate distribution, and 3 have viability above 85%, indicating the seed bank's effectiveness in maintaining high-quality germplasm. The seed and field banks operations, although smaller in scale compared to the in vitro genebank, play a critical role in complementing CePaCT's overall conservation efforts.
22. **Security of the Crop Collection and the Genebank:** Safety duplication efforts are highlighted by the fact that only a few in vitro accessions are duplicated at two locations, with partnerships at the International Institute of Tropical Agriculture (IITA), Nigeria, the International Centre for Potato (CIP), Peru and the International Transit Centre (ITC), Belgium. This strategic approach to germplasm security ensures that critical genetic resources are preserved against potential threats, underlining the importance CePaCT places on safeguarding its collections for future generations.
23. **Documentation and Data Availability:** Documentation and data management practices are evidenced by the proactive maintenance of the collection, with 2,190 in vitro accessions subculture multiple times over the last five years. This level of activity showcases CePaCT's dedication to keeping its collections viable and well-documented, ensuring they remain a valuable resource for research and agriculture.

Assessment of Compliance.

24. The graph below presents a summary of CePaCT's compliance landscape with percentages that intuitively reflect adherence to international standards, calculated by inversely mapping the review scores against 100% compliance. For instance, areas like 'Composition of the Collection' and 'Key Performance Indicators' excel with 100% compliance, evidencing CePaCT's stringent operational protocols. In contrast, 'Safety Duplication' and 'Efficiency of Procedures' show room for critical improvement, mirrored by lower percentages that signal the need for strategic enhancements. The overall average compliance, converted from a score of 1, emerges as a robust 66.7%, a testament to CePaCT's solid performance amidst opportunities for growth. This balanced portrayal provides clear insights for prioritizing initiatives towards excellence in genebank management.



Key Recommendations

25. The review process has culminated in a total of 22 key recommendations, focusing around six main broad areas as listed below. These categories are instrumental in guiding CePaCT's strategic enhancements and operational improvements.

a) **Genetic Integrity and Diversity:** Efforts should be concentrated on finalizing digital documentation and developing robust identity validation mechanisms. These measures should aim to enhance the monitoring of genetic integrity within the CePaCT In Vitro Genebank.

b) **Germplasm Health and Conservation:** The adoption of meristem dome culture should be recommended alongside optimizing in vitro conservation conditions. This should include the procurement of essential equipment and the implementation of efficient virus and bacterial elimination methods to streamline germplasm cleaning and testing processes.

c) **Cryobank Development:** The establishment of a cryobank for long-term conservation and safety duplication should be prioritized. It should involve determining efficient cryogenic methods for crop collections and establishing clear cryobanking criteria.

d) **Seed Bank Strategy and Operational Efficiency:** The development of a comprehensive conservation strategy should be advised for the newly established seed bank. Furthermore, a redesign of workflow and facilities should be carried out to enhance seed conservation capabilities.

e) **Safety Duplication and Equipment Management:** Strategic emphasis should be placed on actions for the safety duplication of all CePaCT collections. This should also include the necessity for regular maintenance and documentation of genebank equipment to maintain operational standards.
f) **Staff Training and Succession Planning:** Training for CePaCT cryobank staff at well-established genebanks should be facilitated, alongside the development of a detailed staff succession plan to ensure operational continuity and resilience.

26. The implementation of these recommendations should significantly inform CePaCT's strategic focus areas, driving its transformation into a centre of excellence for the Pacific Community. These efforts are envisioned to contribute substantially to the long-term security, conservation, and availability of plant genetic resources.

27. The 2023 external audit by the Global Crop Diversity Trust underscores CePaCT's progress and the critical paths forward to enhance our conservation efforts and operational efficiencies. With a keen emphasis on improving genetic integrity, optimizing germplasm health, and advancing our cryobank and seed bank initiatives, we are set to address the key recommendations with strategic precision. Our commitment extends to bolstering staff training and succession planning, ensuring our readiness to meet future challenges and uphold international standards.
28. CePaCT's dedication to addressing areas for improvement, such as safety duplication and procedural efficiencies, highlights our resolve to support sustainable agriculture and biodiversity conservation across the Pacific. By focusing our efforts on these strategic enhancements, CePaCT is poised to strengthen its role as a centre of excellence, contributing significantly to the long-term security and availability of plant genetic resources for the Pacific Community.

Secure partnerships for safety duplication of aroid and yam collections – progress to date.

29. In alignment with strategic directives from the 2023 PAPGREN meeting and recognizing the urgent need to secure regional collections in alignment with genebank standards, CePaCT is progressing with safety duplication efforts for aroid and yam collections. The IITA, Nigeria has committed to hosting the yam collections, with a formal agreement anticipated by mid-2024. This partnership will enable the sharing of duplicate yam collections following the agreement.

30. For the aroid collections, Samoa has shown initial support, subject to clarifying hosting responsibilities. Engagements with the Scientific Research Organisation of Samoa (SROS) and the Ministry of Agriculture and Fisheries (MAF) in March 2024 have laid the groundwork for a thorough review of the SROS-managed Tissue Culture laboratory scheduled for April 2024. This review is critical for identifying necessary upgrades to host the collections adequately, aiming for an agreement by the third quarter of 2024, prior to any material distribution.

31. Additionally, CePaCT is pursuing further partnerships, both within and out of the Pacific, following PAPGREN's recommendations for safety duplication that meet Crop Trust standards. This strategy underscores a commitment to safe and sustainable conservation practices, embodying a collective regional initiative for plant genetic resource preservation.

Update on the process of development of the next 5-year (2024-2029) of CePaCT's Investment Plan.

32. CePaCT's Investment Plan for 2024-2029, set for finalization by April 2024, is being developed with a keen focus on enhancing PGR conservation and utilization across the Pacific. This pivotal update not only integrates comprehensive reviews and external audits, including the significant findings from the CePaCT Crop Trust 2023 review/audit, but also closely aligns with the priorities and recommendations outlined by member countries during the September 2023 PAPGREN meeting. These elements are central to our strategic approach, ensuring that the new Investment Plan reflects the collective insights and needs of the Pacific community. With the support of an external consultant, the plan aims to build on the successes and lessons learned from the first 5-year phase of CePaCT's investment strategy, steering future efforts towards meeting the SPC Strategic Plan and enhancing regional food security and climate resilience.

Recommendations:

33. The members are invited to:

a) Acknowledge the significant progress made by CePaCT, as evidenced by the comprehensive external reviews of its Genebank operations and the implementation of its Investment Plan. These reviews highlight CePaCT's dedication to excellence and continuous improvement in conserving the Pacific region's plant genetic resources.

b) Encourage PHOAFS and relevant development partners to support CePaCT's efforts in addressing the recommendations from these reviews. Such support is crucial for enhancing CePaCT's operational capabilities and strategic initiatives, further establishing its role as a centre of excellence for the Pacific Community.

ORIGINAL: ENGLISH

9th REGIONAL MEETING OF

PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

15-17 May 2024 (Virtual Meeting)

Paper reference	**Session 3 : Agenda Item 2**
Title	**Pacific Soils Partnership (PSP)**
Action	Acknowledgement
Author(s)	Pacific Soils Partnership Secretariat

Summary

Progress has been made on the decision of the 8th PHOAFS meeting including identifying funding to support the secretariat of the PSP in SPC, identification of official focal points and recruitment of TA to develop governance processes and a strategy to elevate soil security as a strategic issue.

Recommendation:

The PHOAFS are invited to.

a) Acknowledge the progress of the Pacific Soils Partnership

Background

1. The Pacific Soil Partnership (PSP) was established in 2014 under the umbrella of the Global Soil Partnership (GSP), aiming to collectively advance the agenda for sustainable soil management in the Pacific through research, standardization, education, awareness initiatives, and sharing of soil-related information and knowledge. Additionally, key focal points agreed upon were:
    a) Development and sharing of appropriate soil management solutions.
    b) Strengthening soil information systems
    c) Designing efficient methods for soil analysis through capacity sharing in laboratories.

2. The initial meeting agreed that SPC should serve as the PSP Secretariat and recommended that SPC become a formal partner of GSP. Although PSP governance

arrangements were established at that time, a formal process to review the PSP positions was not established. Without governance arrangements and agreed resourcing, progress of the PSP is still constrained by the availability of voluntary resources. In 2016, the PSP recognised that progress in data systems, interoperability, access, and management is crucial for effective use of soil information in the region and agreed to the development of a Pacific Soil and Data Standards Working Group to manage standards across the region. This working group has not continued.

3. In 2019, the PSP developed a regional implementation framework structured around 5 GSP thematic areas. PSP and Pillar Chairs were nominated, although there was no clear governance and working arrangements established and in some cases office holders were participating in an individual capacity and not as a representative of one of the PSP institutions creating issues with accountability and governance.

4. The Eighth Regional Meeting of Pacific Heads of Agriculture and Forestry Services (PHOAFS) at the Pacific Week of Agriculture on 6-10 March 2023, endorsed:
    a) Elevation of soil security in the islands to same level as food security, water security, energy security and climate change resilience.
    b) SPC to serve as the Secretariat for PSP to coordinate the resourcing and implementation of its activities across the Pacific region and consider options for resourcing a regional soil coordination role.
    c) Development of a PSP governance and strategic priorities to support soil research and capacity development needs be in line with the GSP Action Framework 2022-2030

Purpose of this paper

5. To update the PHOAFS on progress on the decisions of 2023 PHOAFS meeting with regard to the Pacific Soils Partnership.

Progress Update

6. SPC has confirmed funding to support the PSP Secretariat and coordinator's role through support from the Government of Australia. The position of Soils Coordinator is under recruitment and work is currently managed by the Soil Scientist in LRD.

7. A call for nominations for PSP focal points has been made, 18 countries have confirmed focal points. Response is pending from Cook Islands, CNMI, New Caledonia, New Zealand, Pitcairn. It is critical that Focal Points are nominated quickly so that proper Governance mechanism can be installed ensuring accountability back to national governments.

ORIGINAL: ENGLISH

8. Technical assistance is also under recruitment to revise and establish a robust governance structure and a regional soil strategy aligned to the soon to be adopted Pacific Agriculture and Forestry Strategy and addressing priorities identified at a PSP workshop in 2023 including: soil fertility and nutrient management; erosion and acidification; enhancing soil testing capacity and extension services; strengthening soil monitoring efforts; improving data collection and dissemination; advancing capacity building and networking initiatives; and the PSP endorsed strategic priorities aligned with the GSP Action Framework 2022-2030, aimed at nurturing sustainable management of soil resources to ensure soil protection, conservation, and sustainable productivity.

Recommendation:

9. The PHOAFS are invited to **acknowledge** the progress of the Pacific Soils Partnership

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) – virtual

Paper reference	**Session 3: Agenda item Paper 3.3**
Title	Overview of Food Security and Nutrition in the Pacific Report (2022)
Action	For the kind information on PHOAFS
Author(s)	Joseph Nyemah, FAO

Summary

Summary/short description/key points

On 09 March 2023, during the Pacific Week of Agriculture and Forestry (PWAF) meeting in Nadi, Fiji, the Food And Agriculture Organization of the United Nations (FAO) presented results of the "Overview of Food Security and Nutrition in the Pacific Report", which was produced in 2022 by an FAO lead partnership of the International Fund for Agricultural Development (IFAD), United Nations Children's Fund, World Food Programme (WFP), Who Health Organization (WHO) and The Pacific Community.

Following the presentation, the Pacific Heads of Agriculture and Forestry Services (PHOAFS) endorsed:

a) the future and continuous production of this report.
b) a call for development partners to take required actions to fill the identified critical data gaps.
c) the FAO-led partnership of IFAD, UNICEF, WFP, WHO and SPC, who produced this report.
d) the advocacy to countries to include food consumption, and nutrition relevant data into their national household surveys.

Recommendation: None.

Background

1. The 2022 Pacific Overview of Food Security and Nutrition report, jointly produced by FAO, IFAD, The Pacific Community, UNICEF, WFP and WHO covering the Pacific Small Island Developing States (SIDS): Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Republic of, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu; and the Asian SIDS (Timor-Leste and the Maldives) is the first of its kind by the partnership. The report draws on existing evidence of the changing context of food insecurity and malnutrition to provide an update for governments and development partners.

2. FAO also leads the production of this report in the same format at regional levels, for example covering the Asia Pacific, Middle East and North Africa regions. However, both the global and regional versions do not detail the specificities of the Pacific.

3. The SIDS covered by this report are remote, with small populations, often dispersed across many atolls. Transportation is a challenge; people depend heavily on imports but also on their terrestrial and marine ecosystems for their food and livelihoods. These ecosystems, however, are fragile and vulnerable to natural hazards.

4. Diets in these SIDS are increasingly dependent on imported and processed foods, often of poor nutritional value. Unhealthy diets are a major contributor to non-communicable diseases (NCDs), and NCDs are the single largest cause of premature death in Pacific SIDS.

5. This report examines available data to present an overview of the current state of food security and nutrition. The report looks at the key indicators for Sustainable Development Goal (SDG) 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), Targets 2.1 and 2.2, which focus on hunger and malnutrition. Additional global nutrition indicators are also presented to broaden the overview of maternal, infant and young child nutrition and nutrition-related health.

6. The objective of this paper is to inform PHOAFS of progress to date since the presentation of the report results during the 2023 meeting, during which PHOAFS endorsed:
    a) the future and continuous production of this report.
    b) a call for development partners to take required actions to fill the identified critical data gaps.
    c) the FAO-led partnership of IFAD, UNICEF, WFP, WHO and SPC, who produced this report.
    d) the advocacy for countries to include food consumption and nutrition-relevant data in their national household surveys.

Purpose of this paper

7. The purpose of this paper is to inform PHOAFS on progress to date since the 2023 meeting.

Updates

8. The first edition of the report has been widely shared and discussed at numerous regional fora, and the feedback is very positive and aligned with those of PHOAFS. The official publication is being processed.

9. FAO is committed to the continuous production of the Pacific Overview of Food Security and Nutrition report, consequently, the Organization has invested AUD 184,198 via a Letter of Agreement (LoA) with the University of the Sunshine Coast, Australia, to fund the production of next edition of the report.

10. FAO is leading the partnership that produced the first edition for the production of the next edition of the report, and the partnership agreed that the next edition will cover the time period 2023 to 2024. FAO is communicating with IFAD, UNICEF, WFP, WHO and SPC who produced the first edition to get their commitment of their joint efforts for the development of second edition.

11. The partnership agreed that the second edition – 2023 to 2024 – will however, omit Timor-Leste and the Maldives for practical reasons. For example, while the inclusion of the two countries provides opportunities for comparative analyses, accessing data in these countries is logistic and cost prohibitive.

12. FAO has invested USD1.7 million through its Technical Cooperation Programme fund to support various partnerships that to deliver capacity building for national statisticians and national agricultural censuses, compile SDG farm-based indicators, derive agrifood systems statistics, and enable Pacific leaders to attend regional and global fora to advocate for their statistics agendas.

13. During the 37th Session of FAO organized Regional Conference for Asia and the Pacific in Sri Lanka, member states called on the United Nations Rome Based Agencies (RBAs) to proactively work together in addressing data gaps. Partly as a consequence of this call, the Pacific based RBAs are collaborating to address specific data gaps in selected countries with a view to gradually cover more Pacific countries.

14. In 2023 FAO organized a regional capacity building workshop with 12 Pacific countries on SDG farm-based indicator methodology.

15. In 2023, SPC organized a regional capacity building workshop on HIES and poverty analysis during which FAO facilitated two sessions on the integration of the SDG farm-based indicators into the HIES questionnaire.

16. In 2024 FAO will organize a regional capacity building workshop on sampling for surveys.

17. FAO and partners will involve in and consult with relevant country partners in the development process of the second edition.

9th REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15 – 17 May 2024) – virtual

Paper reference	**Session 3: Agenda Item 4**
Title	**Digital Earth Pacific: provision of satellite**
Action	For Information
Author(s)	Andiswa Mlisa, Sachindra Singh, Nicholas Metherall,

Summary

Pacific Digital Earth Pacific will provide a digital public infrastructure that will ensure every nation in the Pacific has access to decades of satellite data, earth observation tools, and technologies that routinely monitor and track challenges such as coastal inundation, land use changes, deforestation, and water resources through robust decision-ready products.

The Pacific Community (SPC) initiated Phase I of Digital Earth Pacific (DEP) in March 2021 to engage stakeholders, conduct a needs assessment, develop use cases and a prototype infrastructure, and use this experience to develop a business case for making free, open and operational satellite data available for the region.

Achievements on the implementation of Phase 1 include:

- Four (4) in-country consultation workshops held Fiji, the Republic of Marshal Islands, Tonga, and Vanuatu
- User needs assessment report
- Developed Business Case: 2022 – 2030
- Established digital infrastructure.
- Developed and launched three (3) beta regional products
    - Coastline change (22 years)
    - Water Resources (11 years)
    - Mangrove change (7 years)

  And national land use land cover maps for Tonga and Fiji, and illegal gravel extraction for Fiji.
- Establish governance (Steering Committee)
- Capacity building and country engagement
- Communications and outreach
- Resource mobilisation

In addition to the three (3) regional products already developed, DEP holds the potential to support agriculture and forestry services. In agriculture, DEP can provide valuable insights into crop monitoring, soil moisture levels, and vegetation vigor, enabling farmers to make informed decisions regarding irrigation, fertilization, and pest management. By monitoring crop growth patterns and detecting anomalies early on, satellite imagery helps optimize yields and resource usage while mitigating risks, therefore informing countries' food security measures. Moreover, in forestry, satellite imagery aids in forest management by assessing tree density and species distribution and detecting deforestation or forest degradation. This data supports sustainable forest management practices, such as reforestation planning and monitoring illegal logging activities. Overall, satellite imagery enhances precision and efficiency in agricultural and forestry services, contributing to both environmental conservation and agricultural productivity.

Recommendation:

The PHOAFS are invited to :

1. Note the progress made in the development of Digital Earth Pacific and encourage members to increase the use of Earth observation technologies provided by this regional digital public infrastructure.
2. Support SPC in engaging with countries to
   a. Identify opportunities to demonstrate DEP's current capabilities and products and understand relevance to members.
   b. Identify additional use cases and quick wins.
   c. Identify opportunities for workshops focused on capacity development.
   d. Embed DEP in national science-policy interfaces to drive action and decision-making from DEP products and services

Purpose of this paper

1. The paper aims to provide a progress update on the development of Digital Earth Pacific in response to needs outlined by the Pacific countries and to demonstrate further Earth observation applications for agriculture and forestry services.

Background

2. Globally, the effects of climate change are already being observed through increases in drought, forest fires, sea level rise, flooding and hunger. Given the vulnerability of Pacific Island Countries and Territories (PICTs) in this respect, the Pacific region faces unique challenges in managing natural resources and biodiversity, securing economies and livelihoods and ensuring sustainable food systems.

3. Advancements in technology are allowing geospatial and Earth and marine observation data to scale at an unprecedented rate. New satellites are entering orbit monthly, providing a wealth of information that can help address many of the challenges across the Pacific. However, there continues to be a gap in providing access to these data in the right form and quality with the capacity needed to effectively inform policy, decision-making and action according to the needs and priorities of the region.

4. The Pacific Heads of Agriculture and Forestry Services (PHOAFS), during their 7th regional meeting in August 2021, noted the intention to leverage the benefits of Earth Observation

(EO) for members through the development of Digital Earth Pacific (DEP). Members recognised the strong demand for improved data collection and analysis, robust data management systems, and the use of innovation for more informed decision-making.

Introduction

5. The Pacific Community (SPC) initiated Phase I of Digital Earth Pacific (DEP), in March 2021, to engage stakeholders, conduct a needs assessment, develop use cases and a prototype infrastructure, and use this experience to develop a business case for making free, open and operational satellite data available for the region.

6. Digital Earth Pacific will provide a digital public infrastructure that will ensure every nation in the Pacific has access to tools and technologies to routinely monitor and track challenges such as coastal inundation, deforestation, and illegal fishing through robust decision-ready products. The system condenses decades of freely available datasets to provide a near real-time understanding on issues such as the changing coastline, the impact climate-change is having on lagoon health, where hot spots for wave energy are located, and to combine weather outlooks and agricultural production for farmers across countries.

7. Following country consultation workshop held in 2021, in four countries, Tonga, Vanuatu, Republic of Marshal Islands and Fiji, to understand country needs, a needs assessment report was compiled which informed the product development and capacity building for Digital Earth Pacific.

Implementation Roadmap

8. A phased approach for establishing and growing the Digital Earth Pacific program through the 2030 timeframe has been proposed. The roadmap is presented according to three phases:
   - **Phase 1 (2022-2024): Setting the Foundation**
     Set the strategic foundations, iterating on the technical infrastructure and related use cases, engage stakeholders and develop a fully operational program.
   - **Phase II (2025-2027): Increase Capacity, Uptake and Engagement**
     Fully operationalize DEP. Existing capabilities will be leveraged and built upon to create new innovative, decision-ready products and applications with a focus on engagement and capacity development to ensure uptake, usage, and impact.
   - **Phase III (2028-2030): Establish a Data Ecosystem**
     DEP will have a network of data, users, applications, and knowledge in a place where data is flowing bi-directionally across organizations and platforms, creating a data ecosystem approach. Governments, the private sector, and civil society are not only using data, products, and services provided by DEP but also creating their own innovations powered by DEP.

Phase 1 Progress Update

9. Initiated in March 2021, the implementation of Phase 1 has seen incredible progress, with achievements including:
   - **User needs assessment:** Understanding data needs from countries was paramount to informing the development of DEP. In this regard, four (4) in-country consultation workshops were held virtually and physically in Fiji, the Republic of Marshal Islands,

Tonga, and Vanuatu. The analysis of the use needs resulted in an aggregated list of ranked tiers I and II priorities that would inform the work plan for product development for DEP.

- **Developed Business Case:** considering the undertaken Pacific needs assessment and the estimated return on investment from Digital Earth Australia
- **Established digital infrastructure and launched three (3) beta regional products**: This included the collation of over 750,000 satellite images over the 22 PICTS, computing infrastructure, and analytical tools for the development of the regional products.

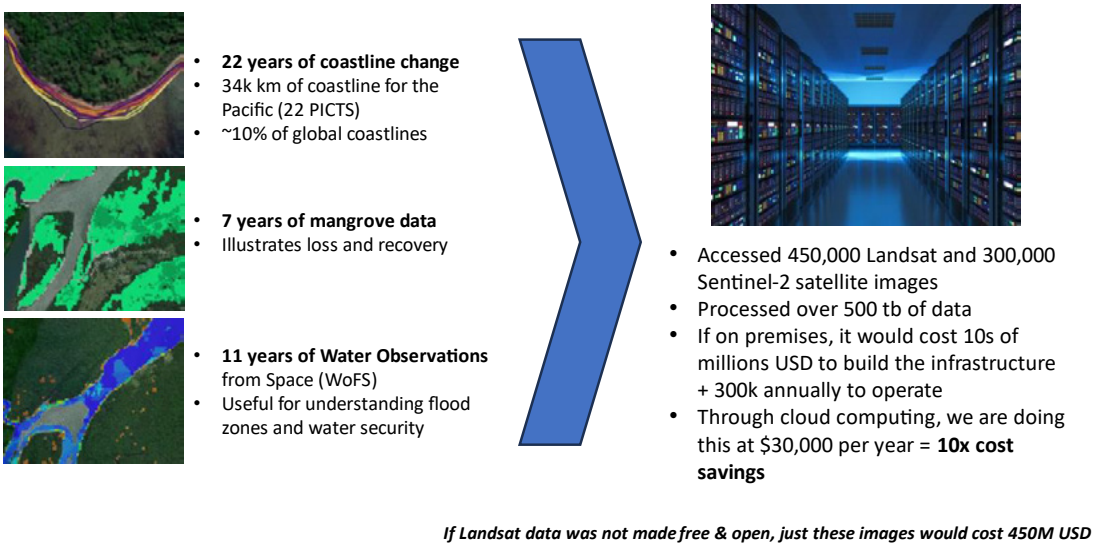


Figure 1 Digital Earth Pacific Infrastructure and three (3) regional products

10. The regional products are further complemented by bespoke co-created national products focused, two examples (Figure 2 and Figure 3) shown below on land use land cover national products.

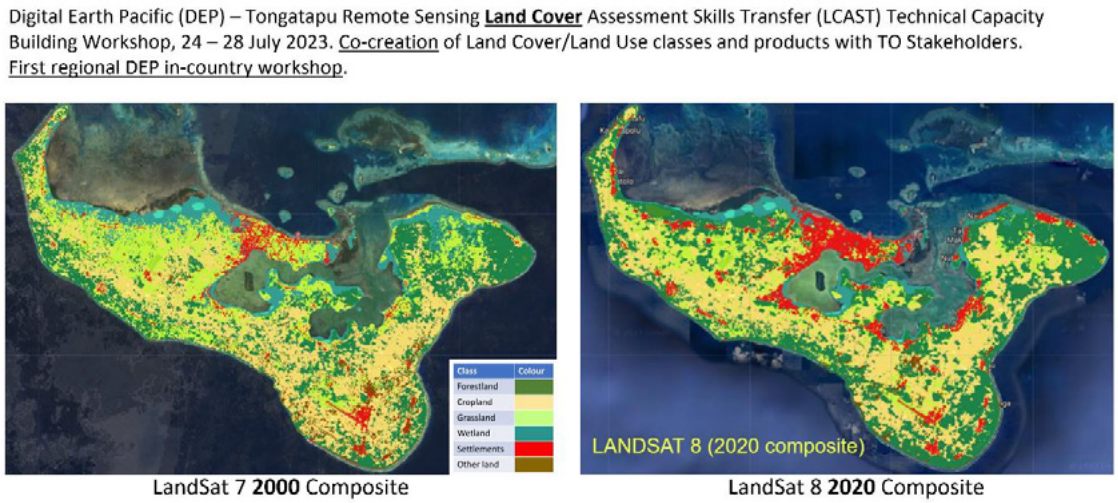
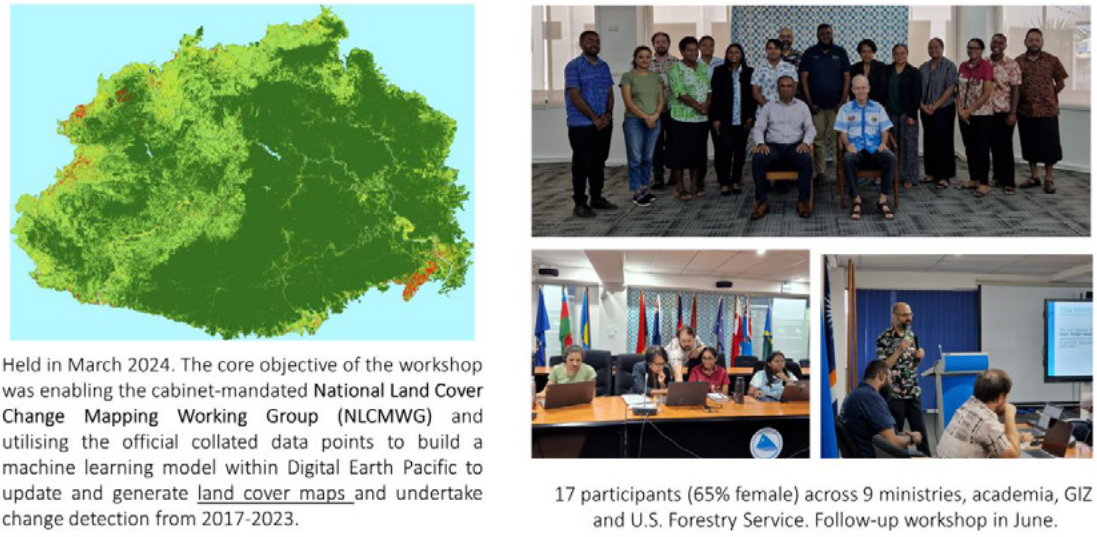


Figure 2 Tonga Land cover assessment skills transfer workshop

SESSION 3



Held in March 2024. The core objective of the workshop was enabling the cabinet-mandated National Land Cover Change Mapping Working Group (NLCMWG) and utilising the official collated data points to build a machine learning model within Digital Earth Pacific to update and generate land cover maps and undertake change detection from 2017-2023.

17 participants (65% female) across 9 ministries, academia, GIZ and U.S. Forestry Service. Follow-up workshop in June.

Figure 3 Fiji land cover land use co-creation workshop

11. In addition to the three (3) regional products already developed, DEP holds the potential to further support agriculture and forestry services. In agriculture, DEP can provide valuable insights into crop health, soil moisture levels, and vegetation vigour, enabling farmers to make informed decisions regarding irrigation, fertilization, and pest management. By monitoring crop growth patterns and detecting anomalies early on, satellite imagery helps optimize yields and resource usage while mitigating risks, therefore informing countries' food security measures. DEP also supports Government Ministries of Agriculture monitor utilisation of land for agriculture, informing ownership and leases of land as well as agricultural census activities.

12. Moreover, in forestry, satellite imagery aids in forest management by assessing tree density and species distribution and detecting deforestation or forest degradation. This data supports national forest inventories, area-based sampling, plantation forestry, and sustainable forest management practices, such as reforestation planning and monitoring illegal logging activities.

13. Overall, satellite imagery enhances precision and efficiency in agricultural and forestry services, contributing to environmental conservation and agricultural productivity.

    - **Establish governance:** The DEP Steering Committee comprises of Pacific countries (Cook Islands, Fiji, Papa New Guinea, Marshall Islands, Solomon Islands, Tonga, Tuvalu, and Vanuatu), CROP agencies (Secretariat of the Pacific Regional Environment Programme (SPREP) and University of the South Pacific (USP)), Australia and international organisations (Committee on Earth Observation Satellites (CEOS), Group on Earth Observation (GEO), National Oceanic and Atmospheric Administration (NOAA), World Food Programme (WFP)).
    - **Capacity building and country engagement:** several capacity development and country engagement workshop have been held and further are planned for 2024.
    - **Communications and outreach:** outreach to members, communities and international partner organisations are held to raise awareness and promote DEP.

- **Resource mobilisation:** SPC has received financial support from several funding partners including Australia (DFAT) and United States (NOAA), Germany (GIZ), PIFS, New Zealand (MFAT), United Kingdom (FCDO), and McGovern Foundation.

Call to Action

14. To ensure DEP provides routine information in support of decision-making, members and partners are encouraged to work with SPC to:
    - Identify opportunities for broader showcasing of DEP.
    - Demonstrate current capabilities and products and understand relevance for your country.
    - Improve existing products through co-design.
    - Identify additional use cases and quick wins.
    - Identify opportunities for workshops focused on capacity development.
    - Develop partnerships that support the long-term sustainability of DEP.
    - Embed DEP in your science-policy interface to drive action and decision-making from DEP products and services.
    - Advocate for improved satellite data coverage over the Pacific region.

Recommendation:

15. The PHOAFS are invited to:
    1. **Note** the progress made in the development of Digital Earth Pacific and encourage members to increase the use of Earth observation technologies provided by this regional digital public infrastructure.
    2. **Support** SPC in engaging with countries to
        a. Identify opportunities to demonstrate DEP's current capabilities and products and understand relevance to members.
        b. Identify additional use cases and quick wins.
        c. Identify opportunities for workshops focused on capacity development.
        d. Embed DEP in national science-policy interfaces to drive action and decision-making from DEP products and services.

9th REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

Paper reference	**Session 4: Agenda item 1**
Title	**Progress update: Pacific Plant Protection Organisation (PPPO)**
Action	**For Information**
Author(s)	**Dr. Visoni Timote, Riten Gosai** **Reviewed by: PPPO Executive Committee**

Background

1. Founded in 1994, the Pacific Plant Protection Organisation (PPPO) is one of the 10 Regional Plant Protection Organisations (RPPOs) recognised by the International Plant Protection Convention (IPPC). The PPPO aims to maintain the Pacific region's Biosecurity, Sanitary and Phytosanitary standards (SPS) to prevent entry, establishment and spread of transboundary pests and diseases. It does this by:

    a) Ensuring consideration of the views and concerns of PPPO Member Countries in developing and implementing global phytosanitary measures.
    b) Assisting in the development and implementation of effective and justified phytosanitary measures.
    c) Providing a framework for regional and global cooperation in phytosanitary matters consistent with international principles for trade in plants and plant products.
    d) Facilitating information flow among Members, other RPPOs, and international SPS bodies.
    e) Collaborating with the Pacific Community (SPC) Land Resources Division (LRD) on specific biosecurity and SPS issues, including pesticide usage and controls in the region and integrated pest management.

2. The PPPO secretariat is housed within SPC–LRD. It supports Pacific Island Countries and Territories (PICTs) in addressing biosecurity and quarantine issues covering pre-border, border, and post-border activities. The LRD manages the secretariat functions of the PPPO and provides complementary technical services in plant health, biosecurity and SPS.

3. The PPPO works with member countries . The Executive Committee (ExCo) guides the strategic directions and priorities of the PPPO with the Regional Technical Board (Full Board) meeting taking place every three years where the triennial PPPO workplan is agreed and Exco changes over.. Given the increases in trade volume and the rise in e-commerce, the need for biosecurity to protect our borders and facilitate safe trade remains utmost priority.

4. Development partners operating in the region continue to support the work of the PPPO in extending biosecurity and SPS-related assistance to PICTs. These include:
   a) European Union – Safe Agriculture trade Facilitation through Economic integration in the Pacific (SAFE Pacific) Project
   b) Department of Agriculture, Fisheries and Forestry (DAFF), Australia – Pacific Biosecurity Partnerships Program (PBPP)
   c) Ministry for Primary Industries (MPI), New Zealand – Enhanced Pacific Market Access Partnership (EPMAP) Project

Purpose

5. This paper presents the progress of the Pacific Plant Protection Organisation (PPPO) 's work. It will present the actions implemented to support the biosecurity, sanitary, and phytosanitary (SPS) services the PPPO Member Countries provided since the last update.
   The update covers four main areas of work as follows.

   a) Strengthening Phytosanitary Standards and compliance with International Guidelines
   b) Strengthening management systems across the biosecurity continuum.
   c) Improved Market Access and Safe Trade
   d) PPPO 10th Regional Technical Board Meeting Outcomes and the Priorities of PPPO for 2024-2025

Strengthening Phytosanitary Standards and Compliance with International Guidelines

Supporting Biosecurity/Quarantine authorities in addressing relevant risk pathways associated with pests and diseases.

6. The International Plant Protection Convention (IPPC) Regional Workshop on Review of Draft International Standards for Phytosanitary Measures (ISPMs) and other topics was completed in August 2023 in Rarotonga, Cook Islands.

7. Government representatives from 15 PICTs, that is, American Samoa (ASM), Cook Islands (CKI), Fiji (FIJ), French Polynesia (FRP), Federated States of Micronesia (FSM), Kiribati (KIR), Marshall Islands Republic (RMI), Nauru (NRU), New Caledonia (NCL), Niue (NUE), Papua New Guinea (PNG), Samoa (SAM), Tonga (TNG), Tokelau (TKL), Tuvalu (TUV) and Vanuatu (VAN) attended in person; Australia, New Zealand, IPPC Secretariat and the Food and Agriculture Organization Subregional Office for the Pacific Islands (FAO SAP) were also represented.

8. Through the workshop, PPPO Members contributed to international plant health standard setting by providing important comments on the following:
   a) Reorganization and revision of pest risk analysis standards
   b) Draft Annex: International movement of Mangifera indica fresh fruit to ISPM 46 (Commodity-specific standards for phytosanitary measures)
   c) 2022 Amendments to ISPM 5 (Glossary on phytosanitary terms); Second Consultation
   d) Draft Annex: Use of systems approaches in managing the pest risks associated with the movement of wood to ISPM 39 (International movement of wood)
   e) Draft Annex: Criteria for evaluation of available information for determining host status of fruit-to-fruit flies to ISPM 37 Determination of host status of fruit-to-fruit flies (Tephritidae)
   f) CPM Recommendation on sea containers

9. Additionally, the PPPO agreed to draft a proposal on the “Movement of Coconut” as an annexe to the next Call for Topics for Commodity Standard.

Reviewing and developing Legislation, Standard Operating Procedures, and export processes

10. The PPPO Secretariat, through SPC-LRD’s Biosecurity SPS Team, is facilitating a review (national consultation and gap analysis) of the biosecurity legislation in three countries: Kiribati, Samoa and Tuvalu. The outcomes from this review will inform the compilation of ‘drafting instructions’ to assist these countries in revising their biosecurity legislations to ensure they are on par with international guidelines and SPS compliance. The consultants hired for this work will also develop several SOPs to standardise operations and help harmonise the implementation of biosecurity procedures across the region. The PPPO Secretariat is also developing a simplified SOP for fruit fly surveillance suitable for the Pacific context**.**

11. It is developing capacities and capabilities in sanitary and phytosanitary safe trade and regional integration and looking through the EU-Pacific States Economic Partnership Agreement (EPA) to strengthen the potential of commodities or products that can be exported from the PICTs into the European Union market.

12. The PPPO Secretariat delivered the following trainings (inclusive of refreshers, workshops, hands-on and field immersion exercises) to participants from the region’s NPPOs, including support to Timor Leste :

Training course	Mode	Country	Male	Female
Introduction/Overview of Import Risk Analysis and Pest Risk Assessment	face-to-face	Samoa	16	13
Import Risk Analysis/Pest Risk and Market Access	Face to face collaboration with DAFF)	Solomon Islands	8	1
Pre-Border, Border and Post-Border: Biosecurity Risk Mitigation	Face to Face	Samoa	16	13
		Timor Leste	10	7
Emerging Pests – Risks on the Horizon	Face to Face	Samoa	16	13
		Timor Leste	10	7
Best Practices in Sample Collection and Submission	Face to Face and in Field	Samoa	16	13
		Timor Lest	10	7
Specific Surveillance for Fruit Flies and Fall Armyworms (FAW)	Face to face	Samoa	16	13
		Tuvalu – *Including GPS Site Location and Site Marking*	9	5
		Timor Leste	10	7
Notable Pest and Disease List Drafting	Face to Face	Samoa	4	3
		Timor Leste	10	7
Sea Container Hygiene System (SCHS)	Face to Face	Samoa	17	11
		Timo Leste	10	7
Systems Approach to Fresh Produce Exports and Bilateral Quarantine Arrangement		Solomon Islands	23	11
		Samoa	14	11
		Tonga	10	8
Pest List Database	Face to Face	Timo Leste	10	7

SESSION 4

13. In collaboration with the United Nations Centre for Trade and Development (UNCTAD)/Improving Pacific Islands Customs and Trade (IMPACT) Project, national workshops on 'Non-Tariff Measures (NTMs) including Sanitary and Phytosanitary Standards (SPS)/ Technical Barriers to Trade (TBTs) and International Trade Promotion' were facilitated in six (6) countries with the following participants.

Country	**Males**	**Females**
Vanuatu	15	20
Fiji	17	18
Solomon Islands	21	7
PNG	22	14
Tonga	17	13
Timor Leste	43	27

14. Apart from pest and disease issues, food safety, food quality, the safe application of pesticides (understanding withholding period and maximum residue limits), as well as organics and market certification were also discussed in:

Strengthening management systems across the biosecurity continuum

15. The PPPO Secretariat team, in collaboration with DAFF Australia, provided on-the-ground support to Biosecurity Solomon Islands (BSI) to manage heightened biosecurity risks related to hosting the 17th Pacific Games (November 19-December 02, 2023), which included assistance with border operations, priority pest surveillance and waste management. Two officers from Cook Islands Biosecurity were attached with BSI/SPC during this period for knowledge exchange and to build experience and skills around scaling operations in their home country when they hold a regional event in the near future.

16. The PPPO Secretariat provided technical inputs for Plant Health Clinics (PHC) and Farmer Field Schools (FFS) to highlight plant pest/disease issues, encourage the adoption of good agricultural practices, and ensure improvement in farm biosecurity.

Addressing relevant issues at Pre-Border, At-Border and Post-Border levels, including through risk assessments, surveillance and monitoring, pest identification and authentication

17. As part of developing and maintaining early warning systems (EWS), the PPPO Secretariat provided countries with Fall Armyworm (FAW) and Fruit Fly (FF) traps,

lures, and other surveillance supplies. The team collaboratively developed resource materials on trap assembly and deployment and emerging pest and disease risks to ease the in-field work of Biosecurity Officers. The materials are available from the PPPO Secretariat.

18. Fruit fly response: At the request of the Tuvalu Government, SPC Biosecurity and Plant Health officers collaborated with the Tuvalu Department of Agriculture (DOA) to design and implement a fruit fly management and population suppression strategy on Niulakita Island. The team worked in the field during the in-country mission completed in July 2023. It assisted DOA/ Biosecurity officers in monitoring, surveillance, and early warning activities, including using digital tools (GPS), accurate data recording, and analysis of fruit fly traps, fall armyworms, and exotic ants.

19. The above activities were supported through the European Union Funded SAFE Pacific Project.

Improved Market Access and Safe Trade

Regional ePhyto Project – Roll-out and Implementation of the Generic ePhyto National System (GeNS) (EPMAP and PBPP and Pacific Agreement on Closer Economic Relations Plus (PACER Plus))

20. Electronic phytosanitary certificate (ePhyto) exchange will enhance and strengthen import and export compliance and facilitate efficient, cost-effective trade.
    a. Thirteen (13) countries have completed their Country Readiness Assessments and GeNS onboarding documents. These are Samoa, Fiji, Papua New Guinea, Cook Islands, Marshall Islands, Tonga Palau, Tuvalu, Solomon Islands, Kiribati, Tokelau, Niue, Nauru
    b. Ten (10) countries have progressed to GeNS Production, an increase of five countries from the last report. These are Fiji, Samoa, Marshall Islands, Solomon Islands, Kiribati, Cook Islands, Tonga, Niue, Tuvalu, and Papua New Guinea. Marshall Islands, Kiribati, Niue, and Tuvalu are only receiving certificates in GeNS Production, not sending them.
    c. Another two (2) countries remain in the GeNS User Acceptance Testing (UAT) phase – Palau and Nauru
    d. PPPO Secretariat facilitated the third Regional ePhyto Workshop, held in Nadi, Fiji, in November 2023. Significant outcomes of the workshop were:
        i. Recommendation of several new enhancements to improve the use of the GeNS platform. These will be submitted to the global ePhyto Steering Group (ESG) through the regional (South-West Pacific) representative to the ESG.

ii. Agreement to establish PPPO ePhyto Working Group to explore mechanisms that will effectively enable paperless trade within the region . The Terms of Reference (TOR) for the Working Group is being designed and will be approved through the PPPO ExCo.
iii. Launch of the Regional *ePhyto Talanoa* initiative with the overall objective of to keeping the PPPO members connected, informed, and prepared in the ePhyto space. TORS for the ePhyto Talanoa session and social media platforms was endorsed at the 2023 PPPO Regional Technical Board Meeting.
iv. Review of the PPPO ePhyto Regional Implementation Plan to guide the project into 2024.
v. Assured support from NZ MPI/MFAT, Australia DAFF/DFAT and Pacific Agreement on Closer Economic Relations Plus (PACER Plus) for the implementation of ePhyto in the region.

Revamping and back-end upgrade of the Pacific Islands Regional Pest List Database (PLD) and Biosecurity Information Facility (BIF) (through PBPP, EPMAP and SAFE Pacific support)

21. The PPPO Secretariat facilitated the overall upgrade of the PLD in collaboration with Australia DAFF, internal SPC teams and IT service provider ACTON Fiji Pte Limited. A training was held in May 2023, which brought together 19 Biosecurity Officers from 8 Melanesian and Polynesian countries (Cook Islands, Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu) and informed them of the upgrade works and new functionalities of the PLD. This workshop also provided an opportunity for the Country PLD Administrators to become well-versed with the upgraded PLD workflow and effectively be able to input country data. The revamped PLD can be accessed at https://pld.lrd.spc.int/

22. The PPPO Secretariat integrated the old Biosecurity Information Facility (BIF) into the SPC-LRD website under Markets for Livelihoods – Biosecurity and Safe Trade. The renewed BIF can be accessed at https://lrd.spc.int/work-areas/markets-for-livelihoods/the-regional-biosecurity-information-facility

23. The PPPO secretariat worked on establishing a webpage for the PPPO, which is now hosted on the SPC-LRD website. The new PPPO webpage is accessible at https://lrd.spc.int/work-areas/markets-for-livelihoods/biosecurity/pppo.

24. The revamped PLD, BIF, and new PPPO webpage were launched at the August 2023 PPPO Regional Technical Board meeting.

25. The Enhanced Partnership Programme (EPMAP) funded by the New Zealand MPI , supported the EPMAP Project Coordinator role which delivered project activities in Fiji, Samoa , Tonga and Vanuatu which included Export Plan workshops,

Phytosanitary Capacity Evaluations and Phytosanitary Certification Systems, GIS Electronic Export facilitation systems for Fiji and Tonga and the roll out of the Ephyto implementation plan .

PPPO Talanoa Sessions

26. The "PPPO Talanoa Session" was established to keep the PPPO Members connected and updated during the COVID pandemic when face-to-face events were not possible. Since then, the Talanoa Session has become an essential element for PPPO engagement and continues to generate impact as a platform to reflect on priorities and capture new ones, sharing issues/challenges, successes, and lessons learnt.

27. The key outcomes from this platform have been:

    a) The PPPO representatives consistently provide updates to the Commission on Phytosanitary Measures (CPM), IPPC Standards Committee (SC), IPPC Implementation and Capacity Development Committee (IC), and IPPC Focus Groups (various topics). This was previously not possible unless email updates were provided.
    b) Allowing introductions, discussions, and endorsements "out of (ExCo/Full Board) session" regarding matters of the PPPO.
    c) Allowing discussion on important regional phytosanitary matters, pest/disease incursions and related projects, for example, the progress of the Pacific Awareness and Response to the Coconut Rhinoceros Beetle (PARC) project in Papua New Guinea, Solomon Islands and Vanuatu. Discussions on a sustainable funding model for the Ephyto solution , approach to "one Health" in the region from plant health perspectives.
    d) NPPOs get an informal insight and become familiar with the structure and work of partner NPPOs through country presentations.

PPPO Decisions/Outcomes from the 10th Regional Technical Board Meeting

28. At its last Regional Technical Board (Full Board) meeting held in August 2023 in Rarotonga, Cook Islands, the PPPO elected its new ExCo as described below:

    i. Chairperson: Niue – Mr. New Aue
    ii. Vice Chairperson: Australia – Dr. Sophie Peterson
    iii. Committee Members: Melanesia: Papua New Guinea (Ms. Marjorie Kemoi) and Vanuatu (Mr. Armstrong Sam); Micronesia: Federated States of Micronesia, FSM (Mr. John Wichep) and Republic of Marshall Islands, RMI (Mr. Byrelson Jacklick); Polynesia: Cook Islands (Mr. Ngatoko Ngatoko) and Samoa (Ms. Nafanua Malele)

29. In addition to the above, the PPPO Members deliberated and:

    i. Agreed to proceed with a consultancy to review the PPPO and its Secretariat functions.
    ii. Endorsed a regional standard-setting process and approved the development of the regional standards or guidance material on the Safe Provision of Humanitarian Aid During Emergency Situations, Movement of Sand and Gravel, Movement of Handicrafts, and Disposal of International Waste.
    iii. It was agreed that the PPPO Standards Committee (SC) would consist of two members per subregion, plus Australia and New Zealand (eight members, with five making up the quorum).
    iv. Endorsed a process for regional representatives' nomination to IPPC fora and filling vacant positions for the SC, IC, and CPM Bureau. Also endorsed a process for mid-term nomination of a chairperson or Vice-Chairperson. In the case the PPPO Executive Secretary (or his/her rep) is unable to attend the TC-RPPO, a process for proxy representation of the RPPO was also accepted.
    v. It was agreed that taro will be the priority commodity for the development of a commodity standard (in collaboration with Caribbean and African RPPOs).
    vi. Endorsed creation of an *ePhyto Talanoa Session* (to be held one week before the PPPO Talanoa Session) and *GeNS Pasifika Messenger Chat Group* for quick communication and assistance with system troubleshooting.

Priorities for 2024-2025

30. In streamlining its activities and more efficiently addressing the needs of Member Countries, the PPPO has the following priorities for 2024-25:

Promote greater collaboration and coordination between regional programmes and development partner activities:

31. The PPPO Secretariat will continue to assist with the work of the Pacific Regional Invasive Species Management Support Service (PRISMS) implemented by the Pacific Regional Environment Programme (SPREP). The teams closely cooperated in updating and publishing the second edition of 'The Guiding Framework for Invasives Species Management In The Pacific'. PRISMSS is a multi-agency coordinating mechanism designed to facilitate the scaling up of operational management of invasive alien species (IAS) in the region.

32. The PPPO Secretariat will continue to facilitate regular discussions to encourage strategic implementation of project activities so that donor interventions are based on synergies and areas of complementary rather than duplication of efforts between:

a. PACER Plus: Australian Fumigation Accreditation Scheme (AFAS) and ePhyto trainings/workshops
b. Pacific Horticultural and Agricultural Market Access Plus (PHAMA Plus): research around potential alternative treatments to methyl bromide fumigation, Train the Trainers on the SCHS and other SPS or related activities
c. FAO SAP: biosecurity legislation reviews and drafting of updated legislation for selected countries
d. Australia DAFF and New Zealand MPI
e. Other regional and international agencies

33. The ongoing work on the Concept Note (CN) with the Green Climate Fund team in SPC. This is the CN on "Enhancing resilience of agricultural systems in Pacific Island Countries to adapt to increased incidence of pest, pathogen, and invasive alien species under a changing climate to ensure food security." This CN is in collaboration with FAO.

The upcoming Work of the PPPO

a. Deliberate on the outcomes of the consultancy that reviewed PPPO and its Secretariat functions and decide on the next steps.
b. Continue to support the IPPC's work by leading the Focus Group on Safe Provision of Food and Other Humanitarian Aid (Vanuatu is the Chair of this Focus Group, and PPPO's Executive Secretary is the RPPO rep to the Focus Group).
c. Continue supporting the IPPC's work at the global level by ensuring a PPPO voice in the CPM (Australia and New Zealand reps), SC (Australia, New Zealand and Papua New Guinea reps), IC (Australia, New Zealand, Cook Islands and Fiji reps) and other fora.
d. Continue facilitating the regional ePhyto project and ensure that most PPPO Member Countries can fully exchange phytosanitary certificates electronically, including collaboration with PACER Plus on capacity and capability improvements.
e. Further deliberate on and endorse the next set of *regional standards for phytosanitary measures (RSPMs)* covering the following topics: Safe Provision of Food and Other Humanitarian Aid During Emergency Situations; Movement of Sand and Gravel; Movement of Handicrafts; and Disposal of International Waste.
f. Further discuss and endorse a process for identifying the need for new PPPO pest alerts and an approach to producing these alerts, with an aim for a more country-driven process.
g. Further deliberate on and endorse a regional work plan for the Sea Container Hygiene System (SCHS) capacity building, synergies and implementation work plan.
h. Based on the gap analysis survey outcomes 2023, map a way forward regarding emergency response preparedness and early warning systems.
i. Develop a support paper (including funding) to host (in one of the PPPO Member Countries) the International Plant Health (IPH) Conference.

j. Address other relevant matters as they arise.

Key Challenges

34. The work of the PPPO to support biosecurity, SPS, and safe trade remains a high priority for PICTs. Still, core services delivered by the PPPO Secretariat and the technical inputs from SPC are currently dependent on project funding. As reported at the last session, this creates inherent risk in the regional Biosecurity SPS support system and work of the PPPO.

35. To address this, SPC is developing a programmatic approach to delivering PPPO services and, in collaboration with key partners, building a business case for sustainable programme funding.

Recommendations:

36. The PHOAFS are invited to :

a) **Note** the work of the PPPO and engagements with regional and international development partners.

b) **Note** the PPPO outcomes from the 10th Regional Technical Board (full Board) and the identified priorities for 2024-2025

c) **Support** the development of a business case for sustainable programme funding for regional biosecurity , sanitary and phytosanitary services including the PPPO Secretariat.

9th REGIONAL MEETING OF

PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15-17 May 2024 Virtual Meeting)

Paper reference	**Session 4 Agenda item 2**
Title	Update on the Pacific Heads of Veterinary and Animal Production Services (PHOVAPS) Network
Action	For Information
Author(s)	Elenoa Salele, Dr Sripad Sosale , Reviewed by the PHOVAPS Council

Background

The Pacific Heads of Veterinary and Animal Production Services (PHOVAPS) is a multilateral network hosted by the Pacific Community, Land Resources Division. Its primary goal is strengthening Pacific Island Countries and Territories' animal health and production systems (PICTs), which contribute to sustainable livelihoods, food and nutrition security, and the resilience of Pacific communities.

PHOVAPS was established in 2006 following the resolutions at the first Regional Conference of Ministers of Agriculture and Forestry Services (2005). At the time, ministers recognised the need to enhance the livestock sector, acknowledged the threat of exotic diseases, and recommended continued regional collaboration to prevent pest and disease outbreaks. Unfortunately, the network became inactive due to resource constraints, limiting PICTs' ability to coordinate and implement initiatives related to the Pacific's animal health, production, welfare, and biosecurity.

However, in 2021, PHOVAPS was re-established in response to concerns expressed during the Pacific Head of Agriculture and Forestry Services (PHOAFS) meeting. The PHOAFS highlighted the lack of capacity in the surveillance and management of zoonotic diseases and animal health and urged SPC to expand animal health services as quickly as possible. Urging SPC LRD to expand animal health services, the PHOAFS emphasised the critical need for veterinary services. In collaboration with PHAMA Plus, SPC conducted consultations and assessments with member countries and territories. As a result, key animal health and production priorities were identified and consolidated into the Pacific Animal Health and Production Framework (PAHPF). Additionally, PICTs agreed to revive PHOVAPS, establishing new mission and operational priorities outlined in the PHOVAPS Charter. The PAHPF and PHOVAPS charter were endorsed by the PHOAFS in 2021.

In 2021, the PHOAFS recommended that SPC advance para-veterinary training programmes to address the long-standing scarcity of veterinary and para-veterinary services in PICTs Collaborating with the Australian Government's Department of Agriculture, Fisheries and Forestry (DAFF), with additional funding support from the European Union, SPC convened a

workshop of experts in Nadi, Fiji, from 25–27 July 2022. The workshop aimed to review the PAHPF and develop a capacity development plan aligned with identified priorities. These recommendations and priorities were consolidated in the Pacific Animal Health and Production Capacity Building Plan (PCBP) 2022-2025 for consideration by all the 22 Member countries of PHOVAPS. The PCBP outlines regional capacity-building interventions to support animal health and production in PICTS.

The Pacific Animal Health and Production Capacity Building Plan (PCBP) 2022-2025 was endorsed by the PHOAFS in 2023. The reinvigorated PHOVAPS network includes the 22 PICT members' international and regional technical partners.

Purpose

This paper provides an update on the current progress of the PHOVAPS network as a regional technical network.

Key Progress Updates:

Since the endorsements of the PHOVAPS Charter, the Pacific Animal Health and Production Framework and the Pacific Animal Health and Production Capacity Building Plan 2022-2025, several significant activities have been successfully delivered to members:

New Funding

New funding has been secured from the World Organisation for Animal Health (WOAH) through DAFF for two years. This funding will facilitate in-person PHOVAPS meetings.

A new Grant Funding Agreement has been secured with the New Zealand Ministry of Foreign Affairs to support the PHOVAPS Interim Work Plan 2024 – 2025 in coordination with the New Zealand Ministry of Primary Industries (MPI). The grant aims to strengthen the PHOVAPS network's capacity to carry out its core functions and address the long-standing scarcity of para-veterinary services in the Pacific region. Furthermore, the grant will support the region by supporting the role of the SPC Veterinarian.

PHOVAPS Regional Meeting, November 2023

After a gap of 17 years, the first in-person PHOVAPS meeting was held in November 2023. Highlights from the PHOVAPS meeting included the endorsement of the following :

- **PHOVAPS Interim work plan: 2024 – 2025** - PHOVAPS members endorsed this interim work plan, establishing tangible, achievable, short-term deliverables for the PHOVAPS Network. It will be implemented while the PHOVAPS Business Plan and a longer-term work plan are developed. **(Refer to Annex 1)**

- **PHOVAPS Governance Documentation**:
  - Draft amendments to the governance structure of the PHOVAPS Charter will be considered at the 2024 PHOVAPS meeting.
  - The following technical working groups within PHOVAPS were acknowledged and endorsed: the One Health Technical Working Group, the Pacific Paravet Technical Working Group, and the Pacific Wildlife Network.
  - Terms of Reference (TOR) has been developed for the Pacific Paravet Technical Working Group (TWG) . The Pacific Wildlife Health Network has been endorsed by the WOAH PWHN member country representative. The TORs for the Pacific

Animal Health Laboratory Network (PAHLNet) and One Health are under review and will be developed for each Technical Working Group (guided by the PHOVAPS secretariat)

- **PHOVAPS Business Plan**: A consultant will be engaged to develop the PHOVAPS Business plan with funding support from the New Zealand Ministry of Foreign Affairs and Trade. The funding arrangements were finalised in April 2024

PHOVAPS Council

The newly established PHOVAPS Council comprises representatives from three subregions: Melanesia (New Caledonia and Fiji), Polynesia (American Samoa and Cook Islands), and Micronesia (Guam and Kiribati), and a representative each from Australia and New Zealand. These representatives include experts from relevant veterinary services, animal health laboratories, academia, and regional research institutions.

The Council's primary responsibilities are as follows.

I. **Adopt resolutions**: The Council adopts resolutions related to regional animal production and health programmes that align with country priorities.
II. **Guide implementation: It guides the implementation of PHOVAPS priorities, including the Pacific Animal Health and Production Framework,** at the regional and national levels.
III. **Monitor the progress**: The Council monitors animal health and production (AHP) initiatives in PICTS and facilitates feedback reporting to the PHOVAPS secretariat.
IV. **Maintain linkages**: PHOVAPS fosters ongoing dialogue and networking amongst its members through appropriate communication platforms such as video conferencing, emails, social media, etc.
V. **Support advocacy, visibility, and representation:** It supports advocacy efforts and ensures visibility and representation in relevant national, regional, and global platforms.
VI. **Technical Working Groups**: Council members participate in relevant technical working groups as needed.

Additionally, the newly elected PHOVAPS Council has appointed the following officers.

- PHOVAPS Chair: Cook Islands representative, Secretary for the Ministry of Agriculture, Mrs Temarama Anguna-Kamana
- PHOVAPS Vice Chair: New Caledonia representative, Head of Veterinary Inspection Services, Dr Loise De Valicourt

Summary of activities implemented in the Interim Workplan (2024-2025)

PHOVAPS Business Plan Development

The PHOVAPS secretariat will develop a Terms of Reference at the end of April 2024 which outlines the requirement for a consultant to develop a PHOVAPS Business Plan . This Business Plan will be based on priorities identified by the PHOVAPS members in the PAHPF and the PCBP. The interim workplan will cover a period of two years and address a subset of priorities while the longer-term PHOVAPS business plan is under development. The Business Plan will outline the priority projects over a 5-to-10-year period and identify opportunities for partners and donors to support these initiatives.

Update on the Paraveterinary Training Program

The para-veterinary training programme has been completed for Fiji, the Cook Islands, the Solomon Islands, and Nauru. Paravet training is currently being conducted in Niue. Training for Tonga, Republic of Marshall Islands and Kiribati will also be completed in 2024. Paravet technical training has been successfully delivered with NZ MPI and DAFF support. Under the new grant funding agreement with NZMFAT expanding the scope pf paravet training to other countries which include Vanuatu and PNG.

Para-veterinary training 2023 - 2024		
Countries completed and graduated.	**Current training**	**Countries to receive training - 2024**
Fiji 25 para vet graduates	Niue 12 in training	Tonga
Cook Islands 5 para vet graduates		Kiribati
Solomon Islands 24 graduates		Republic of Marshall Islands

Infectious Bursal Disease Virus (vvIBDV): SPC and DAFF provided a technical response after receiving official country request in July 2023 to an outbreak of a strain of very virulent Infectious Bursal Disease Virus (vvIBDV), which was confirmed in the Guadalcanal province of Solomon Islands. The ability of this strain to cause mass mortality events in farmed broiler and layer birds is a concern to the Solomon Islands and the region . The virus represents an imminent threat to Pacific livelihoods and food security. A media alert was distributed to the PHOVAPS network on 15 August 2023 with approval from the Solomon Islands government.

Other Relevant Training and Consultations

Import Risks Assessment (IRA) regional training: Conducted introductory IRA regional training for the Cook Islands, Federated States of Micronesia, Fiji, Kiribati , Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu in November 2023 to enhance the understanding of risk pathways related to importing live animals and animal products. The main requirements for importing live animals and animal products are generally based on an initial import risk analysis for that particular animal/animal product. These requirements may include sourcing from countries or zones within a country free of that specific disease of concern, the testing and certification of freedom from disease, or a course of vaccinations before export. The biosecurity service generally has the responsibility of checking the documentation, together with the arrangement of detention of live animals in isolated animal quarantine facilities, if these are available. The regional training was carried out in conjunction with DAFF and FAO in Nadi.

Global Framework – Transboundary Animal Diseases" (GF-TADs): In collaboration with WOAH, representatives of 14 Pacific countries including participants from Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, New Caledonia, Papua New Guinea, Republic of Marshall Islands (RMI), Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis and Futuna, New Zealand, and Australia attended the 7th Sub-regional Global Program – Transboundary Animal Diseases" (GF-TADs) meeting for the Pacific on 2nd November as a back-to-back event with the PHOVAPS Network meeting 2023. The conclusions and recommendations of this have been published at https://rr-asia.woah.org/wp-content/uploads/2024/02/01-summary-recommendations_gf-tads-pacific_final_20240228.pdf . The PHOVAPS Chair will also be included in the upcoming GF-TADS Steering Committee meetings for the Asia Pacific Region. The Pacific GF_TADS meeting

resulted in a 2-year sub-regional GF-TADs Workplan 2024-2025 **(refer to Annex 2)** developed and aligned to the PHOVAPS Interim Workplan. The PHOVAPS Council will oversee the implementation of the GF-TADs work plan for the Pacific.

World Animal Health Information System (WAHIS) Training: In collaboration with WOAH, WAHIS training was successfully conducted for 15 SPC member countries under the SAFE Pacific Project from 21-23 June 2023, in Chiba, Japan. The project was able to fund the training for the ten non–WOAH member countries, i.e. Samoa, Kiribati, Palau, Tonga, Solomon Islands, Tuvalu, Cook Islands, Marshall Islands, Nauru, Niue, to improve reporting of diseases to the information system. WAHIS ensures the prompt dissemination of information on potential outbreaks and facilitates decision-making regarding the international trade of animals and animal products by collecting, verifying, and publishing official animal health information, following a standardised process, thus providing high-quality, reliable data. WOAH has launched the leading, most technologically advanced reference platform for reporting animal disease and veterinary capacities – the World Animal Health Information System (WAHIS)- to support countries in maintaining global transparency and reporting animal and public health matters. This work is vital for SAFE Pacific's overall aim to provide assistance and support to Pacific Island Countries (PICs) to increase export capacity and improve economic growth by protecting local industries and the agriculture sector from exotic and invasive threats.

Emergency Response Plans (ERP) review: Completed desktop review of generic response plans with FAO and currently working with countries, that are part of the paravet training to update their respective ERPS and holding simulation exercises to aid implementation.

Provision of laboratory consumables to Fiji, Solomon Islands, Samoa and Niue to assist with surveillance and para-vet training to countries. Animal disease surveillance training has been completed for Samoa and Solomon Islands to enable early detection and response to possible disease incursions.

Inception workshop for Pacific Networked Diagnostics and Support (PaNDaS). Under the PHOVAPS network, the secretariat of PHOVAPS supported the Australian Centre for Disease Preparedness (ACDP) to operationalise this Pacific Animal Health Laboratory network. This network provides advice and support and develops specific plans for animal health and animal biosecurity laboratories and relevant departments in PICTs to build field diagnostic capacity and collect and send samples to laboratories for testing. The Inception workshop was held in Noumea in March 2023.

The International Air Transport Association (IATA)approved training in the packaging and transporting of infectious substances in collaboration with the Civil Aviation Academy of Australia. Fourteen countries have completed the first phase of this training which focused on strengthening and enhancing laboratory services to mitigate these threats. The second phase of the training is to commence in June 2024. The training addresses the timely transport of biological samples and provides and renews sample transport certification for participants. Participants include the Cook Islands, Fiji, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Solomon Islands, Samoa, Timor-Leste, Tonga, Tuvalu and Vanuatu.

Recommendations:

The PHOAFS are invited to note the consolidation of activities and progress of the PHOVAPS Network.

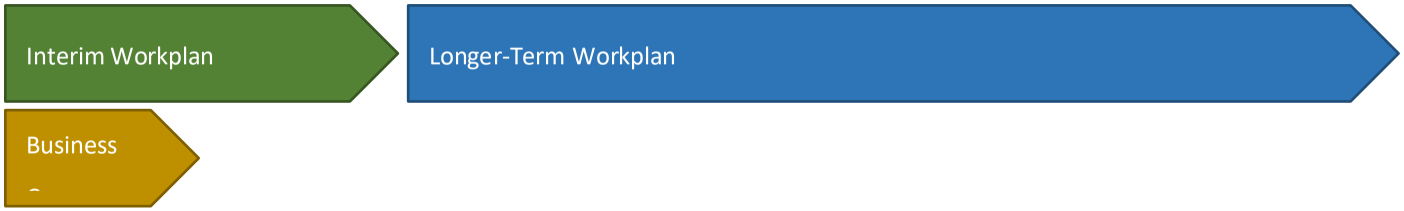
ANNEX 1: PHOVAPS Interim Workplan 2024 - 2025

Priorities	Focus Action Areas	Deliverables	Implementation Timeframe
Increase Paraveterinary capability in the Pacific region. • ***PCBP Recommendation 3*** • ***PAHPF Key Result Area 11*** Technical Working Group Alignment: PACVET/Paravet & One Health.	SPC, member countries, and partners to implement an integrated para-veterinary training scheme.	1. Delivery of hands-on-training using the SPC Para-veterinary Training program to 7 PICTs by the end of 2024. 2. Explore accreditation pathways that will allow recognition of para-veterinary training across all PICTs 3. Relevant PHOVAPS technical working group to scope ongoing professional development for para-veterinarians (e.g. practical experience in other PICTs). *These deliverables to be reflected in the PHOVAPS Business Case.*	1. 1st Half 2025 2. 1st Half 2025 3. 1st Half 2025
Strengthen in-country technical capacity in livestock production, animal husbandry, safe animal slaughter, and meat inspection processes. • ***PCBP Recommendation 8*** • ***PAHPF Objective 4*** • ***PAHPF Key Result Area 7*** Technical Working Group	SPC, member countries, and partners to coordinate and develop resources to enable PICTs to strengthen technical capacity of farmers, livestock officers/paraveterinarians, abattoir/slaughterhouse workers, and meat safety inspectors.	4. PHOVAPS Secretariat to develop SOPs for their coordinating role in this space. 5. Collate and review regional resources that support ongoing education and training of farmers, livestock officers/paraveterinarians, abattoir/slaughterhouse workers, and meat safety inspectors (e.g. including tools such as a meta-analysis, gap analysis, and case studies). *These deliverables to be reflected in the PHOVAPS Business Case.*	4. 1st Half 2024 5. 1st Half 2025

<u>Alignment:</u> Animal production, AnGR, Welfare, & One Health. Operationalisation of functional biosecurity (animal disease) surveillance systems in the Pacific. • ***PAHPF Objective 1*** • ***PAHPF Key Result Area 1*** <u>Technical Working Group Alignment:</u> Biosecurity, PAHLNet, & One Health.	SPC, member countries, and partners to coordinate and develop resources to inform biosecurity capacity building and to support animal disease surveillance.	6. PHOVAPS Secretariat to develop SOPs for their coordinating role in this space. 7. SPC and partners to develop and implement a point in time survey of member countries to determine the history of animal disease surveillance in PICTs (e.g. date of most recent disease surveillance activities), in-country biosecurity surveillance capability, and in-country biosecurity testing capacity. *These deliverables to be reflected in the PHOVAPS Business Case.*	6. 1st Half 2024 7. 2nd Half 2024
Increase veterinary capacity in the Pacific region. • ***PCBP Recommendation 1*** • ***PCBP Recommendation 2*** • ***PAHPF Key Result Area 11*** <u>Technical Working Group Alignment:</u> PACVET/Paravet, & One Health.	SPC, member countries, and partners to coordinate to develop resources that will support longer-term PHOVAPS work to increase Pacific veterinary capacity.	8. PHOVAPS Secretariat to develop SOPs for their coordinating role in this space. 9. Development of a policy paper that examines issues responsible for low veterinary capacity in the Pacific region and explores strategies to address these issues (e.g. veterinary response network, tele-vet services network). This paper will collate and synthesise the evidence base that will inform the longer-term PHOVAPS workplan. *These deliverables to be reflected in the PHOVAPS Business Case.*	8. 1st Half 2024 9. 2nd Half 2025

ANNEX 1.B: IMPLEMENTATION OF PAPHF AND PCBP PRIORITIES

PHOVAPS Priorities	2024	2025	2026	2027	2028	2029	2030 +
PCBP 3: Develop an integrated paravet training scheme.							
PCBP 8: Improve livestock production and animal husbandry.							
PAPHF 1: Operationalisation of efficient and functional biosecurity surveillance systems in the Pacific.							
PCBP 1: Support for national veterinary services.							
PCBP 2: Pacific rapid response team / mobile veterinary unit.							
PHOVAPS Business Case							
PCBP 4: Establish and implement animal welfare standards.							
PCBP 5: Establish slaughterhouses, training in humane slaughter and meat inspection.							
PCBP 6: Improve diagnostic capacity.							
PCBP 7: resourcing, management and coordination.							
PAPHF: Other priorities identified in the PAPHF							



ANNEX 2: PROPOSED SUB-REGION GF-TADS WORKPLAN FOR THE PACIFIC 2024 – 2025.

Objective 1	**Establish strategies for priority TADs at the Regional and Sub-Regional level.**				
Expected Product/Result	1. TADs prioritisation facilitated/coordinated. 2. Regional and sub-regional TAD control strategies are formulated in alignment with global and regional strategies 3. Mechanisms for harmonisation/coordinated planning established				
	Activities	**2024**	**2025**	**Lead Organisation**	**Comments**
Pacific	Sub-regional GF-TADs Meeting (PHOVAPS)	◯		WOAH, FAO	
	Develop or update (sub-)regional strategies or roadmaps of priority TADs for the Pacific.			SPC	
	Participate in the development of a new AI Global Strategy.		◯	WOAH, FAO	
	Sub-regional risk pathway				
	Emergency Preparedness & Response Program				
	Training and awareness for priority TADs (ASF, Avian diseases, FMD, LSD, PPR, rabies)				
	Animal Health and Production Legislation				
	Strengthen biosecurity practice in aquaculture.				

Objective 2	**Develop and strengthen to prevent and control TADs**
Expected Product/Result	1. Capacity gaps are identified, and priorities for capacity building are addressed. 2. Strengthening capacity of laboratory and epidemiology for prevention and control of TADs. 3. Multi-disciplinary planning for preventing and controlling priority TADs is strengthened. 4. Providing harmonised mechanisms/tools to monitor the control of priority TADs.

Activities		2024	2025	Lead Organisation	Comments
Pacific	Participate in the annual Regional Avian Disease meeting/workshop.	○	○	WOAH, FAO	
	Veterinary Legislation Support (Vanuatu, Fiji, PNG)	○	○	WOAH	VLSP Support Program
	Participate in a Standing Group of Experts meeting for ASF (twice a year)			WOAH, FAO	
	Participate in regional workshops or training for LSD.	○/□		WOAH, FAO	
	Establish and strengthen the roles of leading laboratories for each priority disease if they do not exist.	○		SPC, ACDP	
	Information sharing on novel scientific data or control measures				
	Apply "Strengthening biosecurity", "Compartmentalisation", etc.	○/□		WOAH	
	Raising awareness of AMU/AMR in aquaculture	○/□		WOAH	
Objective 3	**Improve the sustainability of priority TAD strategies through multi-disciplinary partnerships.**				
Expected Product/Result	1. Strengthen engagement and coordination with relevant stakeholders, including the private sector. 2. Strengthening coordination amongst FAO and WOAH at the global level and the regional level 3. Improve policy dialogue to advocate the TADs control for Members. 4. Promote Sustainable funding mechanisms				
Activities		**2024**	**2025**	**Lead Organisation**	**Comments**
Pacific	Resource mobilisation to improve diagnostic capacity for aquatic diseases				
	Apply for WOAH endorsement of Official Control Program/ Disease-free status for PPR and FMD.				

Legends: ●= Physical (completed), ○= Physical (planned), □= Virtual (planned), ■= Virtual (completed), x = pending, Δ = ongoing

Objective 3	**Improve the sustainability of priority TAD strategies through multi-disciplinary partnerships.**				
Expected Product/Result	5. Strengthen engagement and coordination with relevant stakeholders, including the private sector. 6. Strengthening coordination amongst FAO and WOAH at the global level and the regional level 7. Improve policy dialogue to advocate the TADs control for Members. 8. Promote Sustainable funding mechanisms				
	Activities	**2024**	**2025**	**Lead Organisation**	**Comments**
Pacific	Resource mobilisation to improve diagnostic capacity for aquatic diseases				
	Apply for WOAH endorsement of Official Control Program/ Disease-free status for PPR and FMD.				

Legends: ●= Physical (completed), ◯= Physical (planned), □= Virtual (planned), ■= Virtual (completed), x = pending, Δ = ongoing

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) - virtual

Paper reference	**Session : 4 Agenda Item: 3**
Title	**Regional Collaboration in Plant Genetic Resources: Insights from the 2023 PAPGREN Meeting**
Action	For Information
Author(s)	**Logotonu M. Waqainabete, Programme Leader Genetic Resources**

Background

1. The Pacific Agricultural Plant Genetic Resources Network (PAPGREN) was established in 2001 by the Pacific Community (SPC), with the endorsement of the Pacific Heads of Agriculture and Forestry. This initiative, supported initially by funding from the New Zealand Government, the Australian Centre for International Agricultural Research (ACIAR), and SPC, was crucial for the effective preservation and utilisation of plant genetic resources (PGR) across the Pacific islands, ensuring regional agricultural resilience and sustainability.

2. PAPGREN's founding followed the earlier establishment of the Centre for Pacific Crops and Trees (CePaCT) in 1998, which serves as the region's gene bank. CePaCT has been pivotal in managing an extensive collection of over 2,300 accessions, of which approximately 68% are from the Pacific, significantly contributing to regional food security, nutrition, and environmental sustainability.

3. PAPGREN members have played a critical role in identifying, collecting, characterising, and depositing these materials into CePaCT for long-term conservation. This collaborative effort has been instrumental amid global climate changes and socio-economic challenges.

4. The strategic review by Lebot *et al.* (2023) underscores the unique challenges and opportunities in the Pacific region regarding the conservation and utilisation of PGR. The review highlights that despite the geographical isolation and small economies of the Pacific islands, coordinated efforts such as those facilitated by PAPGREN are

essential. These efforts leverage regional strengths to manage PGR effectively, which are crucial for food security and adapting to climate vulnerabilities. The review points out that conventional breeding and coordinated regional management of PGR have not been prioritised to their full potential despite their critical role in strengthening agricultural systems against climatic changes.

5. Key achievements of PAPGREN include enhancing regional capacity for plant genetic resource management, facilitating the development of regional policies for genetic resources, and supporting member countries in meeting international obligations such as the International Treaty on Plant Genetic Resources for Food and Agriculture. These efforts underscore the strategic importance and value of PAPGREN, which continues to warrant robust support from its members, especially as new leaders come to appreciate its longstanding contributions to regional agricultural resilience.

6. Despite the cessation of direct funding in 2009, PAPGREN has continued to support national and regional programs through various donor-funded projects. The network has faced significant challenges, including a decline in coordination and operational funding, necessitating reliance on loosely arranged collaborative efforts with its members and partners.

7. The 2018 Pacific Seed for Life (PS4L) workshop represented a pivotal moment in the network's evolution, focusing on drafting and finalizing the Pacific Seed Systems Roadmap and the governance structure of PAPGREN. This effort aimed to establish a formal governance framework through the adoption of the PAPGREN Charter, providing clear and strategic leadership to ensure the network’s sustainability and enhancing its capacity to support its member countries in managing their plant genetic resources more effectively. The PS4L initiative further underscored the need for a comprehensive approach to enhancing seed systems to ensure resilience, livelihood, and food and nutritional security across the Pacific.

8. The 2023 meeting aims to solidify the groundwork laid by past efforts by finalising the PAPGREN Charter and endorsing the Pacific Seed Systems Roadmap. These documents will formalise the governance structure of the network and set clear frameworks for future conservation and utilisation efforts, ensuring that PAPGREN continues to serve as a vital resource for its member countries.

Purpose of this paper

9. This information Paper articulates and conveys the key objectives of the 2023 PAPGREN meeting, held in alignment with the ongoing efforts to strengthen the network's operational and governance frameworks. This meeting serves as a crucial juncture for PAPGREN, aiming to address the challenges highlighted in the past and capitalise on the groundwork laid to propel the network forward.

10. The key objectives of this paper, in alignment with the 2023 PAPGREN meeting objectives, are as follows:

a) **Finalization of the PAPGREN Charter:** To provide an update on the progress made in the finalisation of the draft PAPGREN Charter recommended for development by SPC LRD in previous Pacific Seed Forum (Fiji, 2018). This charter provides the formal governance structure that will provide clear and strategic leadership, enhancing the network's ability to effectively manage and utilize plant genetic resources across the Pacific.

b) **Endorsement of the Pacific Seed Systems Roadmap:** To provide an update on the progress in finalising of the Pacific Seeds System Roadmap recommended for development by SPC LRD in previous Pacific Seed Forum (Fiji, 2018). This roadmap serves as the regional framework that will guide PAPGREN's activities in enhancing seed systems, through the effective management of PGR thereby ensuring agricultural resilience, food security, and nutritional improvements across member countries.

c) **Strengthening Regional Collaboration and Support:** To reaffirm and enhance the collaborative ties within the network, ensuring robust support and engagement from all member countries and partners, particularly addressing the needs of new heads of agriculture and forestry who are pivotal to the network's future.

d) **Identifying Priorities for PGR Work:** To set clear priorities for plant genetic resource work over the next five years, focusing on critical areas such as climate change adaptation, crop improvement, and biodiversity conservation. This objective aims to strategically direct efforts and resources towards the most impactful areas of PGR work in the Pacific.

Key Updates from the 2023 PAPGREN Meeting

11. In alignment with its goal to enhance operational and governance frameworks, the 2023 PAPGREN meeting, held at The Pearl South Pacific Resort in Suva, Fiji, focused on leveraging past initiatives and tackling ongoing challenges in the management of plant genetic resources. Hosted by the SPC LRD, this meeting drew participation from 15 Pacific Island Countries and Territories (PICTs), and featured contributions from key international partners such as the Global Crop Diversity Trust, CGIAR, the International Coconut Community, and representatives of the International Treaty on Plant Genetic Resources for Food and Agriculture. Representatives from relevant regional bodies such as the Breadfruit people online, the Breadfruit Institute of Hawaii and the Pacific Island Farmers Organisation Network (PIFON) also made contributions. This update delves into the four strategic objectives pursued during the meeting, offering vital insights and actions for the Pacific Heads of Agriculture and Forestry Services to consider, ensuring that PAPGREN continues to effectively guide regional efforts in agricultural sustainability and genetic resource conservation.

A. Finalization and endorsement of the PAPGREN Charter:

A. The finalization of the PAPGREN Charter was a major milestone achieved during the 2023 meeting of PAPGREN. This important document underwent a rigorous and inclusive development process, engaging a wide array of stakeholders from various Pacific Island Countries and Territories (PICTs) through a participatory approach. These stakeholders contributed their insights and expertise, ensuring that the Charter would be comprehensive and reflective of the diverse needs and strategic objectives of the network.

13. Throughout the development phase, the Charter was carefully crafted to establish a formal governance structure capable of providing clear and strategic leadership, which is essential for the effective management and utilization of plant genetic resources across the Pacific. The structure of the Charter includes:

    13.1. A Governance Structure that sets up a Steering Committee to oversee the network's activities, ensuring strategic alignment and effective management of resources. The Steering committee will comprise of 2 key representatives from each sub-region of Micronesia, Polynesia and Melanesia. The SPC CePaCT team will provide secretariat support the work of the Steering Committee and PAPGREN members.

    13.2. Membership is open to all Pacific Island countries and territories. Other countries or partners can become members or observers through a decision of the PAPGREN membership and Steering Committee.

13.3. Roles and Responsibilities that delineate the functions and duties of member countries and other stakeholders within the network, enhancing clarity and coordination in the management of plant genetic resources.

13.4. Strategic Objectives that outline the long-term goals of PAPGREN, focusing on conservation, sustainable use, and equitable sharing of benefits arising from plant genetic resources.

14. The meeting concluded with the formal adoption of the amended Charter, affirming the commitment of all members to implement a governance structure that enhances coordination and streamlines efforts toward sustainable agricultural practices and resource management. The unanimous support from decision-makers was pivotal, ensuring that PAPGREN is well-equipped to lead regional efforts in genetic resource management, thereby enhancing agricultural sustainability and ecological resilience across the Pacific. For more information, please see the charter on this link or as attached.

B. Finalisation and endorsement of the Pacific Seeds Systems Roadmap

15. The finalization of the Pacific Seed Systems Roadmap was a significant achievement during the 2023 meeting of the Pacific Agricultural Plant Genetic Resources Network (PAPGREN). This comprehensive framework underwent an extensive development process, facilitated through collaborative regional workshops involving stakeholders from various Pacific Island Countries and Territories (PICTs). The inclusive nature of the process ensured that the roadmap would address the diverse needs and challenges faced by member countries in enhancing seed systems across the region.

16. The development of the roadmap focused on identifying key actions and strategies to improve seed management, availability, and quality, recognizing the critical role of seed systems in ensuring agricultural resilience, food security, and nutritional improvements across member countries. The roadmap emphasizes the need for modernized agricultural infrastructure and practices to address contemporary challenges effectively, thereby enhancing agricultural outcomes and promoting sustainable development across the Pacific.

17. The meeting concluded with the endorsement of the Pacific Seed Systems Roadmap, signalling the collective commitment of all members to implement the outlined strategies and initiatives. The roadmap provides a guiding framework for regional efforts in strengthening seed systems, aligning with the overarching goals of PAPGREN to enhance agricultural sustainability and genetic resource management in the Pacific. For more information, please refer to the roadmap on this link or as attached.

C. Strengthening Regional Collaboration and Support

18. The 2023 PAPGREN meeting was critical in reinforcing collaborative ties across the Pacific, particularly in the management of plant genetic resources (PGR). Here are the key highlights:

18.1. *Strengthening Collaborative Ties:* The meeting underscored the commitment to fostering regional cooperation in addressing agricultural and ecological challenges, with a central focus on the management and conservation of plant genetic resources (PGR). Partnerships with organizations such as the Crop Trust, CGIAR, and International Coconut Community were emphasized for their invaluable contributions to advancing PGR initiatives across the Pacific. These collaborations are vital for enhancing the exchange of PGR-related knowledge, resources, and expertise, ultimately strengthening the region's capacity for sustainable agricultural development and biodiversity conservation.

18.2 *International Engagement:* Discussions emphasized the importance of engagement with global fora, such as the International Treaty on Plant Genetic Resources for Food and Agriculture. The expressed interest of the Solomon Islands to join the Treaty reflects the network's dedication to international collaboration. Furthermore, the PNG representative emphasized that issues discussed in these global forums affect all members as owners of PGR. Given the limited representation of Pacific voices in such discussions, it is crucial for countries to be aware and united. This includes concerns regarding the fair and equitable sharing of benefits derived from Digital Sequence Information (DSI) associated with Pacific PGR. Without proper safeguards, there is a risk of exploitation by larger countries or entities. Therefore, active participation in discussions on DSI is crucial to safeguard the interests of Pacific countries and ensure fair benefit-sharing.

18.3 *Regional Consensus Building:* PNG stressed the need for PAPGREN to play a more active role in discussing important matters relevant to PGR on global platforms. This includes topics like Digital Sequence Information, where regional consensus is crucial for representing the Pacific effectively. As small island states, Pacific voices are often marginalized in global discussions. Having a united stand through PAPGREN ensures that countries are not exploited and can make informed decisions collectively.

Identifying Priorities for PGR Work

19. Across the Pacific region, countries are demonstrating a shared commitment to conserving and utilizing PGR to enhance food security, economic stability, and sustainability. Fiji has made notable advancements in PGR infrastructure, particularly

with advanced tissue culture labs, while also focusing on breeding and improving key crops like taro, cassava, yams, and coconuts. Papua New Guinea's National Agriculture Research Institute (NARI) leads efforts in crop diversity conservation, participatory varietal selection, and plant breeding, with a focus on market access and climate resilience. Vanuatu Agricultural Research & Technical Centre (VARTC) faces challenges but is dedicated to strengthening food and cash crop research and infrastructure. Despite past challenges, Solomon Islands prioritize rebuilding germplasm collections for improved livelihoods and food security.

20. Samoa emphasizes PGR conservation, although limited capacity and funding hinder active breeding programs. Tonga is focused on long-term storage of crops like yams, sweet potato, and bananas, and aims to bolster research capabilities and international commitments to PGRs. Tuvalu's projects include coconut replanting and innovative agricultural systems to combat saltwater intrusion and drought. Kiribati concentrates on conserving drought-resistant crop varieties to address food security challenges. Nauru seeks solutions to prolonged droughts impacting local food production, while the Federated States of Micronesia enhances PGR management capacity with yam, taro, and cinnamon as priority crops. New Caledonia aims to enhance agrobiodiversity knowledge and evaluate species or varieties for environmental stress tolerance, and French Polynesia supports food security through seed crop conservation and nursery production enhancement.

21. Additionally, member countries in the PAPGREN meeting identified priority crops for CePaCT, the Centre for Pacific Crops and Trees, to focus on, alongside other key support on technical and scientific advice. These priority crops include taro, cassava, yams, coconuts, bananas, sweet potatoes, and citrus varieties. CePaCT's efforts in conserving and providing access to these crops are vital for ensuring food security and resilience across the region.

22. For more information, please see this link for the full PAPGREN meeting Report.

Recommendations:

23. The PHOAFS are invited to:

a) **Acknowledge and note** the progress made by PAPGREN in developing the Charter and Roadmap. Support for PAPGREN's decisions is vital for advancing regional collaboration in genetic resource management and agricultural sustainability.

b) **Endorse** the efforts of PAPGREN and support the decisions made regarding the adoption of the PAPGREN Charter and the Pacific Seed Systems Roadmap, including the nomination of PAPGREN focal points from each country to serve on the network. Following the PHOAFS meeting, PAPGREN will prioritize identifying focal points, with subsequent approval by heads of agriculture. Once all nominations are approved, SPC

will facilitate a virtual meeting for the approved PAPGREN members to nominate the six steering committee members.

c) **Support** further actions going forward, including the development of clear actions and priorities for the network. Following the endorsement of the Charter and Roadmap, SPC will organize a physical meeting for the PAPGREN Steering Committee to develop these clear actions and identify priorities for the network's collaborative efforts. PHOAFS' support in this regard is essential for ensuring the effectiveness and sustainability of PAPGREN initiatives.

9TH REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15 – 17 May 2024 – virtual)

Paper reference	**Session 4: Agenda Item 4**
Title	**Pacific Network of Foresty Professionals (PNFP)**
Action	Information
Author(s)	Jalesi Mateboto, SPC Secretariat

Summary

The Agenda Item briefly introduces the Pacific Network of Forestry Professionals (PNFP), which was developed based on the interest of member countries who attended the 2023 Pacific Week of Agriculture and Forestry Side event on **"Enhancing communication and networks to promote sustainable forest management".** Member countries strongly supported the development of a regional network to connect forestry professionals in the Pacific.

Recommendation:

PHOAFS are invited to.

a) Note progress that is being made towards the establishment of the Pacific Network of Forestry Professionals and the development of national associations.
b) Note the important contribution that the Pacific Network of Forestry Professionals and the national associations could make to capacity building and the professional development of forestry professionals within the Pacific.
c) Note and support the planned activities.

Background

1. Forestry professionals in Pacific Island Countries (PICs) work in geographically isolated areas with limited resources. They are employed within governmental, private sector, and non-governmental organisations that have highly variable and generally very limited

capacity to provide programs for professional support and continuing professional development.

2. The role of a professional association is to define the skills and standards of the profession and assist members in furthering their professional development through ongoing learning and exchange of information. Professional associations are apolitical, voluntary, and independent of government and industry. They serve to promote the science and practice of forestry, as well as the expertise and knowledge of forestry professionals; they are not 'industrial unions.

3. Vanuatu and PNG established professional associations a few years ago, and Fiji, after some in-country consultations supported by SPC and FA, registered the Fiji Forestry Professionals Association in 2023. In-country consultations were also held in Tonga and Samoa, and they have shown great interest in forming their own forestry professional associations. Vanuatu expressed interest in joining the PFPN, and on the recent in-country consultation held in Port Vila, they had vowed to review their mode of operation and the re-naming of their group from Vanuatu Foresters Association to Vanuatu Forestry Professionals Association.

4. Professional forestry associations within PICs have previously struggled to remain active due to a lack of local capacity compounded by the 'tyranny of distance' for traditional means of communication. Local capacity is likely to continue to constrain the viability of professional associations within smaller PICs.

5. Forestry professionals in the Pacific, however, are now increasingly 'connected' and accustomed to working online and communicating via digital platforms. Modern communications and networks between countries can now provide a way of sharing resources and information to provide professional support to all forestry professionals in the region.

Purpose of this paper

6. This paper informs the meeting of the role and progress made in establishing the Pacific Network of Forestry Professionals.

Progress Update

7. At the third Pacific Week of Agriculture and Forestry (PWAF) in 2023, the side event on **"Enhancing communication and networks to promote sustainable forest management"** generated much interest among participants, who expressed strong support for the development of a regional network to connect forestry professionals in the Pacific.

8. Since then, the Land Resources Division (LRD) of the Pacific Community (SPC) with financial support from the Australian Department of Foreign Affairs and Trade (DFAT),

Australian Centre for International Agriculture Research (ACIAR) and the Crawford Fund (Tasmania), and technical support from Forestry Australia, has been consulting and creating awareness on the formation of the Pacific Network of Forestry Professionals and the establishment of national associations, where feasible, with interested countries.

9. Pacific Islands Countries and Territories (PICTs) are experiencing evolutionary changes in the nature of institutions and in the diversity of people that are engaged in the practice of forestry and the management of tree resources. A large number of professionals are in the government forestry systems with academic qualification outside of forestry. In Tonga for example, there are only two forestry graduates out of the twenty-four currently employed with the forestry division, similarly in Samoa, there are only two forestry graduates in the system now . Information that we have so far indicated that there are no forestry graduates in the forestry divisions in Niue, and the Cook Islands. However, the consultations we had so far indicated that there are a number of forestry graduates outside of government and are willing to assist and network as a sector. In Tonga for example, there are eight forestry graduates (3 retirees) outside of forestry division and are willing to assist, whilst in Samoa, there are seven forestry graduates (3 retirees) outside of the government system.

10. The network of forestry professionals in the Pacific will connect local forestry associations and individual forestry professionals and foster the sharing of information and access to programs for professional development, professional accreditation, exchange of information and training to enhance core forestry technical skills.

11. The planned regional network is based on the following-
    - *Voluntary participation* - Interested local professional forestry associations (where they exist) and individual forestry professionals will be able to be connected to a network through modern digital and traditional communication platforms
    - *Local ownership* - Support will be provided to encourage the development of active local associations with local projects, events and initiatives.
    - *Partnerships and the sharing of resources* - The network will seek to establish partnerships with organisations such as Forestry Australia, the New Zealand Institute of Forestry and the Pacific Community (SPC) to provide access to scientific and technical information, education and training.
    - *Collegial approach* - The network will foster communication, collaboration and professional support, including access to mentoring, professional accreditation and work-exchange programs.
    - *Equal opportunity* - The network will actively provide and promote equal opportunity for the active engagement and participation of all forestry professionals regardless of characteristics such as gender, culture, race, ethnicity and age. 'Forestry professionals' includes any professional involved in managing forests and tree resources, including researchers, advisers, educators and administrators.

- *Independent* - The network should be valued and supported by all sectors, including governmental, private and non-governmental. However, the network must operate and must be seen to operate as an apolitical, independent professional association.

12. A hybrid regional workshop is planned for August 2024 to discuss the network's governance structure and explore the possibility of providing technical and scientific forestry advice to HOAFS through forestry technical meetings. In addition, in-country consultations is also planned for the Solomon Islands and Papua New Guinea in the first half of 2024.

13. It is also envisaged that the Network will convene side events and forestry technical meetings during the PWAF 2025 to discuss forestry issues and challenges and identify actions that promote the sustainable management of landscapes and the utilization of forests, trees, and products.

Recommendations:

14. The PHOAFS are invited to.
    d) **Note** progress that is being made towards the establishment of the Pacific Network of Forestry Professionals and the development of national associations.
    e) **Note** the important contribution that the Pacific Network of Forestry Professionals and the national associations could make to capacity building and the professional development of forestry professionals within the Pacific.
    f) **Note** and support the activities planned

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) – virtual

Paper reference	**Section 4 Agenda Item 5**
Title	**Update: Pacific Organic and Ethical Trade Community (POETCom)**
Action	**For Information**
Author(s)	**Jim Pierce , POETCom Coordinator**

Background

1. The Pacific Organic and Ethical Trade Community (POETCom) is a membership organisation and the region's peak body for organic agriculture. POETCom has managed the Pacific Organic Standard (POS) and Pacific Organic Guarantee Scheme (POGS) on behalf of the Heads of Agriculture of the Pacific Community since 2006. POETCom has 75 member organisations, organic and agroecological farmers, representing nearly 25,000 farmers across 15 Pacific Island Countries and Territories (PICT). *This represents a 28% increase since the last Pacific Heads of Agriculture and Forestry meeting in March 2023.* The POETCom Secretariat is hosted within the Land Resources Division (LRD) and leverages POETCom's access, influence, and success throughout the Pacific.

Purpose

2. This paper provides updates on the organic movement in the region and the review of the POET Com Governance, the Pacific Organic Standard (POS) and the Participatory Guarantee System (PGS) as agreed during the 8th Pacific Heads of Agriculture and Forestry Services meeting.

Progress update: POETCom Governance Revision

3. The Development of the final revised Governance documents has taken much longer than our original work plan anticipated, as the following explanation details. Since the work was not completed as scheduled, a POETCom General Assembly was postponed from 2023 to 2024.

POETCom Governance Revision Working Group

4. The POETCom Governance Revision Working Group was established through a Call for Nominations in April 2023. The group comprises 13 members: seven men and six women from seven PICTS and technical services experts from Australia and New Zealand. The members represent POS farmer and processor users, certification bodies, and Government regulatory staff, ensuring diversity in the group.

The Working Group is divided into two Focus Groups: POETCom Governance and POS/PGS Management. The group is facilitated by the POETCom Coordinator, the Protégé Project Manager, and one of the Consultants who led the review.
In August 2023, the Working Group had an inception meeting and met twice to discuss priority issues. They focused on establishing a charter between SPC and POETCom, a membership that includes voting, strengthening focal points and POETCom core services, and strengthening the PGS system. The working group is now ready to review the draft revised documents from the secretariat. The documents will be implemented once approved by the POETCom Board and membership.

POETCom Charter

5. The Working Group has identified that the first step towards creating the POETCom Charter is establishing a formal agreement with the SPC. This includes clarifying the roles and responsibilities of SPC and POETCom. In early 2024, the Secretariat met with the SPC Legal Division to begin the process of these clarifications. Once the Charter is in place, POETCom can develop a strategy and proposals for funding.

The process to review POETCom Governance.

6. The project is advancing much more slowly than we anticipated. To ensure Governance review is delivered by 2025, the Secretariat has developed a Workplan and a Roadmap (Annex 1 attached) to help guide the revision process in 2024, including processes with SPC Legal, the POETCom Board, and Membership validation at National and Regional Assemblies. The goal is to present the final product to the PHOAFS in 2025.

Pacific Organic Standard Review

7. The first draft of the Pacific Organic Standard (POS) Guidelines in French and English was released in early 2023 and has since proved to be a valuable resource. The final publication with graphics and illustrations is expected to be completed by the third quarter of 2024 through the PROTÉGÉ project. It's important to note that the POS Guidelines will be updated regularly to remain current, relevant, and valuable.
In June 2023, Papua New Guineas' office of the National Institute of Standards and Industrial Technology approached POETCom to discuss using the POS, including the Guidelines, in their National Organic Conformity Assessment and Certification Schemes. The POS was explicitly developed for the Pacific Island economies, and this is an excellent example of how it continues to serve the region as intended by the HOAFS. The accompanying Guidebook also adds to the value of the POST as a resource for the region.

Update on Organic Certification

8. According to the IFOAM Organics International 2024 World of Organic Agriculture report, published in February 2024 and based on 2022 data collected in 2023, the organic movement is expanding across the Pacific.

Here are some key findings.

Organic Certified Land

10. There are **98,663 hectares** of organic certified land in eight Pacific Island countries and territories: Cook Islands, Fiji, French Polynesia, New Caledonia, Papua New Guinea, Samoa, and Vanuatu. This represents a **34% decrease from 2023.**

Participatory Guarantee System (PGS)

11. There are **17,988.66 hectares** under the PGS, which is a **55% increase** over 2023 PGS involves local communities in the certification process.

Third-Party Certified Land

12. There are **80,787.34 hectares** third-party certified, showing a 61% decrease from 2023 Third-party certification involves external organisations verifying organic practices.

PGS Groups

13. There are **12 operational** PGS groups in **six** Pacific Island countries: Cook Islands, Fiji, French Polynesia, New Caledonia, Solomon Islands and Vanuatu, representing **1,038 farmers.**

Two newly approved PGS groups in 2023:

14. Cornerstone Niu Enterprises (Fiji): A project within the Social Empowerment Education Program [SEEP] starting with 45 farmers from Naitasiri, Viti Levu. Palau Organic Growers Association (POGA): Starting with five core farmers and processors, with anticipated growth in the coming years. Additionally, **six** PGS groups are under development in Fiji, Niue, and Samoa.

Third-Party Licensees

15. There are **68** third-party licensees, representing a **5% increase** over 2023.
These licensees involve **22,068 growers**, which is a 37**% increase** over 2023 in **eight** Pacific Island countries (Fiji, French Polynesia, New Caledonia, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu). This growth is stronger than the global average **increase of 26%.** The increase in organic certification under the POETCom-managed PGS system indicates strong growth in local and regional organic value chains.

16. Third-party licensee numbers **increased by 37%** in 2022, showing a strong post-COVID resurgence. However, third-party certified hectares **decreased by 61%,** partially due to better reporting and the loss of approximately 100 organic vanilla farmers in Niue.

Regional Pool of Certification Auditors

17. In 2023, as part of the EU-funded SAFE Pacific project, POETCom embarked on establishing a regional pool of certification auditors with the training of 15 carefully selected individuals from seven countries: Cook Islands, Fiji, New Caledonia, Palau, Samoa, Solomon Islands, Tonga, Vanuatu. These individuals are undergoing training to become lead auditors and consultants specialising in Organic and Food Safety. The goal is to create a pool of Pacific auditors. Doing so makes the certification process more cost-effective and contributes to local employment.

18. In conjunction with establishing a regional auditor pool, POETCom is negotiating Memorandums of Understanding (MOUs) with organic and food safety certification bodies active in the Pacific region. These MOUs aim to support a regional certification mechanism by fostering collaboration to improve scheduling and the use of trained auditors. This strategic effort will enhance the effectiveness and accessibility of organic and food safety certifications.

Supporting national organic policy interventions

19. Pacific Island Governments continue to create a supportive organic policy environment as the demand for certification grows and regional and national agencies and development partners recognise the value of organic agriculture as a development tool for the Pacific Island context.

20. National Organic Policies, including incorporating organic principles in national agriculture policies, are imperative in successfully building a high-integrity organic sector, assuring consumer confidence in the Organic Label, and creating public-private partnerships. Organic Agriculture is the key contributor to sustaining our cultures and communities, improving farmer livelihoods, people's health, and the environment in the Pacific.

21. New Caledonia and French Polynesia remain the only countries that have regulated organics. Vanuatu's government has endorsed its first national organic policy, and the governments of Palau and Fiji have now drafted policies that are waiting for official endorsement by authorities. In the case of Fiji, in October 2023, POETCom assisted the Fiji Ministry of Agriculture with the final consultation of the Fiji Organic Policy before it goes before the Cabinet in 2024. Consultations were held in Labasa (Northern), Narere (Central), and Lautoka (Western). LRD/POETCom co-facilitated the meetings, including organising farmers' attendance.

22. Others included.

- Kiribati: In November 2023, a situational analysis was prepared, including with the Ministry of Environment, Lands and Agriculture Development (MELAD), to review the potential of organic agriculture in Kiribati.
- Samoa: The Samoa Agriculture and Fisheries Sector Plan (2022/23 – 2026/27) Strategic Outcome 1 includes references to supporting the development of organic production and markets.

- Cook Islands: The development of the agricultural regulations will include the Pacific Organic Standard as the regulated standard for organic farming.

- Federated States of Micronesia: Organic practices and concepts were incorporated throughout the 2023-2027 Draft Agriculture Policy, released in May 2023.

POETCom International Links

23. To ensure that the Pacific is staying engaged in international discussions and direction setting in organic agriculture, POETCom remains active with regional and global organisations, including:

IFOAM Organics International

24. The Oceania Pasifika IFOAM regional group fosters partnerships with the Australian and New Zealand Organic Movements. This collaboration has allowed POETCom to collaborate with input and comment as their National Organic Policies are developed, for example, to assure that POS certified product from PICTS continues to be accepted as equivalent for use as ingredients and that the Organic Pasifika mark continues to be recognised in the marketplace.

25. POETCom is discussing with the Convenors of the Intercontinental Network of Organic Farmers Organization (INOFO) about joining membership to strengthen the small-holder farmer voice on the global stage and to jointly share and access communications and knowledge products.

Recommendations:

29. The members are invited to:

(i) **Note** the progress and ongoing work of POETCom in building the organic movement in the Pacific.

(ii) **Note** POETCom's revised roadmap and work plan for POETCom Governance Revision and Pacific Organic Standard Review.

PHOAFS 9/Information Paper 4.5
15-17 May 2024

ORIGINAL: ENGLISH

Annexe 1: POETCom Governance Revision Roadmap

	Tasks and Milestones	April-24	May-24	June-24	July-24	August-24	Sept-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	March-25	April-25
Phase 2	**Revision and consensus**													
2.1	Document revision/drafting													
2.1.1	POS ownership & Organic Pasifika Trademark Licensing drafting													
2.1.2	POETCom Charter/Statutes drafting including: mandate and vision of POETCom, link with SPC, roles and responsabilities towards SPC, roles of the various bodies, members.													
2.1.3	ToR of the General Assembly and advisory board													
2.1.4	Membership policy													
2.1.5	Standard Committee ToR Revision													
2.1.6	PGS Committee ToR Drafting													
2.2	Working Group meetings as needed													
2.3	Final consensus by Working group and SPC Legal													
Phase 3	**Board & LRD Approval**													
3.1	Documents to Advisory Board & LRD													
3.2	Comment period													
3.3	Board Vote													
Phase 4	**GA Approval**													
4.1	Translation													
4.2	Documents to Membership													
4.3	Comment period													
4.4	GA Vote & consultation on POETCom Strategic plan													
4.5	Revision of governance documents and POETCom Strategic plan													
Phase 5	**HOAFS**													
5.1	Documents Submitted to HOAFS													

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) – virtual

Paper reference	**Session** 4: **Agenda item** 6
Title	Update: One Health progress and forward plan
Action	For Information
Author(s)	Dr. Eric Rafai

Background

1. One Health is an integrated and collaborative approach that recognizes the interconnectedness of human health, animal health, and environmental health in Pacific Island countries & territories (PICTs). It emphasizes the shared responsibility of safeguarding the well-being of humans, animals, and ecosystems by promoting interdisciplinary cooperation, sustainable practices, and disease prevention to ensure the health and prosperity of communities and their animals in the island environment context.

2. The One Health concept is not a new idea to the Pacific as the practice of working in multi-sectors is a common occurrence for PICTs during natural disasters or national emergencies. During major tropical cyclones, tsunami's, etc. the different government sectors, private entities and partners are driven to work together by national leadership in an organized manner under a national disaster mandate to monitor and respond to humanitarian efforts before -, during- or post disaster.

3. Historically, a One Health type project was implemented at the regional level, from 2006 to 2011, by PICTs and partners (New Zealand, Australia) which established the Pacific Regional Influenza Pandemic Preparedness Project (PRIPP) to respond to an emerging threat at that time. The PRIPP was aimed at building the capacity of PICTs to detect and effectively respond to emerging diseases, in particular the highly pathogenic avian influenza (HPAI). The project was jointly managed and delivered by SPC's Public Health Division and the Animal Health & Production thematic teams of the Land Resource Division (LRD) of SPC. The PRIPP ceased in 2011 but a positive documented outcome of its One Health approach is the PICTs readiness and resilience towards the impact of Pandemic H1N1 in 2009. For example, the PICTs had at hand country pre-pandemic plans to respond to the pandemic event and as the workforce had undertaken capacity-building and simulation exercises prior to the 2009 Pandemic event[1].

[1] Influenza surveillance in the Pacific Island countries and territories during the 2009 pandemic: an observational study - PMC (nih.gov)

4. During the PRIPP project, the Pacific Heads of Veterinary & Animal Production Services (PHOVAPS) was the eminent coordinating body and secretariat for the veterinary or animal health services for the region. A decade later, the 2021 PHOVAPS Charter prescribed a One Health Scientific & technical Working group in section 6.2.7 which has the intent to support multi-stakeholder approach to addressing animal health, zoonosis, food safety, and antimicrobial resistance guidelines in PICTs.

5. More recently, the concept of One Health was introduced during the 2023 Pacific Agriculture Week to the Heads and Ministers of Agriculture, Forestry and Fisheries meeting at a side-event. At this panel discussion, some senior officials notably declared having minimal or basic knowledge about One Health and its application in the Pacific prompting a general consensus for all PICTS and partners to advocate for the benefits and importance of initiating a One Health approach and the need to create greater awareness across sectors and communities in the Pacific.

6. The concept of One Health is also strongly advocated by regional partners as an approach to strengthen country multi-sector collaboration and transdisciplinary support to address some of the key priorities across these sectors such as zoonotic diseases, antimicrobial resistance, food security, etc. The recent COVID19 pandemic, frequent disease outbreaks, etc. is compelling evidence to strengthen global and regional health security by enabling greater preparedness to identify and respond to threats to the livelihood & well-being of the people, animals, and environment in the Pacific.

Purpose

7. This paper aims to provide an update on the current progress of One Health and plan forward.

Progress Update: One health and forward plan

8. The SPC (Pacific Community) and its partners are committed to promoting the One Health approach in the Pacific with the establishment of a One Health coordinator position in 2023. The position coordinates the One Health initiatives across the Land Resource Division (LRD) and the Public Health Division (PHD) and similarly work across the corresponding regional meetings of PHOVAPS and PPHSN and related partner agencies.

USAID – SPC Global Health Security One Health project to support One Health activities for the next 5 years (2024-2028)

9. Furthermore, the current development of a USAID – SPC Global Health Security One Health project to support One Health activities for the next 5 years (2024-2028) will certainly benefit the PICTS directly and through PHOVAPs and PPHSN, especially through the POSW group (Pacific One Health Scientific & Technical Working) Group. The SPC – USAID Global Health Security project is focused initially on Strengthening Global Health Security in 11 Pacific Island countries. The project is aimed at targeting support to strengthen multisectoral collaboration, coordination, and communication within countries to address country priority issues identified from health, animal & environment sector, in conjunction with partner agencies initiatives in the region. An inception plan meeting with the Pacific Island Countries & territories (PICTs) is planned for the latter half of the year, in conjunction with the Quadripartite Joint Plan of Action workshop.

Pacific Quadripartite -Pacific Community

10. The Agencies of the Quadripartite which consists of WHO, FAO, WOAH and UNEP are committed to support One Health activities in the Pacific Island countries & territories. The One Health High Level Expert Panel (OHHLP) is an advisory group for the Quadripartite organization that provides guidance and recommendations on One Health issues to these agencies and countries. The Quadripartite is planning to assist the PICTs in a Joint of Plan of Action workshop for One Health implementation in August 2024. Therefore, seeking support of HOAFs to this workshop to release the Ministry of Agriculture & Forestry One Health representative to participate in this workshop. The candidate will be invited together with country representatives from the Human Health and Environment Health sector to enable the completion of a One Health workplan for the country, to be supported by the Quadripartite and its partners.

Link to PHOVAPS network through the POSW group.

11. Lastly and more importantly, in direct reference to the PHOVAPS information paper in Session 4, Agenda item 12, the PHOVAPS Governance document outlines the PHOVAPS members endorsement of (b) selection of PHOVAPS technical working groups to be activated. One of the Scientific & Technical working groups from the Charter to be activated is the Pacific One Health Scientific & Technical Working Group, also abbreviated as POSW (pronounced as 'PAWs') group. A draft term of reference of the POSW group was also provided to PHOVAPS meeting for endorsement. A group of PICTs represented at the PHOVAPs meeting were selected as POSWs members, as the other members of the POSW group would be selected from the Pacific Public Health Surveillance Network (PPHSN) and other regional sector groups in the region. The POSW group's purpose is to provide oversight and support through coordination, collaboration and communication between One Health partners and countries. The full POSW group will meet within the fringes of the PHOVAPs and PPHSN meetings to opportunistically work on related issues and to conduct the project-steering mechanism for the USAID – SPC Global Health Security Project.

12. The USAID - SPC Global Health Security project is co-developed and is a partnership between the Land Resource Division and the Public Health Division guaranteeing co-ownership of resources and for most parts of the project co-facilitation of activities in Pacific Island countries in the spirit of One Health. This arrangement has unique implications for the PHOVAS–POSW members composition, responsibility, and function. The link and reporting to the PHOVAPS council remain like other TWGs (Scientific and Technical Working Groups) under PHOVAPS.

13. Several One Health activities have also been initiated by partners with SPC and PICTs since the last meeting. In 2023, FAO SAP facilitated a Virtual learning Course (VLC) One Health that was completed by several Country and Partner agency representatives from the public, animal, and environment sectors. FAO SAP also facilitated a One Health capacity building workshop in Samoa with Senior government officials and Heads of livestock & animal production services from PICTs of selected countries. Further advocacy for the One Health approach was conducted by FAO SAP at the Senior Officials meeting at the FAO Asia Pacific Regional Conference. FAO ECTAD (RAP) had also initiated inception workshops for its USAID Global Health Security projects for its intensive support countries (Fiji, PNG). WOAH continues to support countries with Progressive Veterinary Services (PVS) pathway activities, while WHO & SPC Public Health Division help a few countries complete their Joint external evaluation (JEE) which is a key foundational principle for the One Health approach, core to the Pandemic fund application.

9th REGIONAL MEETING OF

PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15-17 May , Virtual Meeting)

Paper reference	**Session:4 Agenda Item:7**
Title	**Vision for adapted Crops and Soils**
Action	Decision
Author(s)	SPC, CSIRO, DFAT, MFAT, US State Department

Summary

The Vision for Adapted Crops and Soils (VACS) is a global movement to champion nutritious, climate-resilient crops by focusing on the agricultural fundamentals – seeds and soils. The movement initially began in Africa. SPC, CSIRO, DFAT, MFAT and US State Department have been consulting on the possibility of developing a Pacific VACS programme tailored to the specific needs and priorities of Pacific Countries and Territories.

It is proposed, if of interest to the Pacific Heads of Agriculture, to initiate work to co-create a Pacific VACS approach which would be adapted to the Pacific context. In particular, it would build on existing work and initiatives such as the Regional Research Agenda, the Pacific Soils Partnership, the PAPGREN and be designed to contribute to the goals of the Pacific Agriculture and Forestry Strategy once endorsed.

Recommendation:

The PHOAFS are invited to

a) **endorse** SPC to convene and coordinate a co-creation exercise, with support from Australia (through DFAT and CSIRO), and New Zealand (through MFAT) to develop a Pacific VACS programme.
b) **request** SPC to ensure the design is adapted to the Pacific context, particularly building on existing work and initiatives such as the Regional Research Agenda, the Pacific Soils Partnership, the PAPGREN and designed to contribute to the goals of the Pacific Agriculture and Forestry Strategy.

Background

1. The Vision for Adapted Crops and Soils (VACS) is a global movement to champion nutritious, climate-resilient crops by focusing on the agricultural fundamentals – seeds and soils. The movement initially began in Africa, initiated through a partnership between the US State Department, the African Union, and the Food and Agriculture Organisation of the United Nations. In Africa the movement has successfully mobilized more than USD$150 million in funding from a variety of donors including the Netherlands, the UK, Norway, Japan, and the Rockefeller Foundation.
2. Various discussions on adapting VACS for the Pacific were commenced during the 2023 Crop Diversity Summit in Berlin between SPC and the US State Department. Further discussions were held with research institutes and Governments of Australia and New Zealand in March and April this year.

Purpose of this paper

- To provide background to the PHOAFS on the Vision for Adapted Crops and Soils programme
- To gauge interest from the PHOAFS on developing a Pacific VACS
- To seek endorsement of PHOAFS to move forward with a co creation process to develop Pacific VACS.

3. VACS seeks to deliver high-yielding, locally adapted crop varieties to farmers and consumers in an effort to improve food security and nutrition. In Africa, this work has been progressed through a three phased approach:

Phase 1 – identify the most important crops for nutrition through a consultation process (approximately 6 months).

A consultative process was undertaken to determine a prioritised set of the most important crops for nutrition across six crop categories for each sub-region in Africa. The crops categories included legumes, cereals, roots and tubers, nuts and oilseeds, and fruits and vegetables, as well as trees used for food, and ensured distribution of crops that are important throughout the five regions of Africa for their consumption, breeding potential, and contribution to improving soil quality. The end result was agreement on a prioritised set of 60 crops at the first technical convening.

Phase 2 – assess how some of those crops and the soils they are grown in will be affected by climate change through the year 2050 (approximately 6 months).

This phase developed climate-crop models for a subset of prioritised crops to project how their productivity will fare under different climate scenarios. This subset of 20-25 crops was selected through a follow-up workshop and consultations with the participants of the initial technical convening. The climate crop-modelling team then produced Opportunity Crop Profiles for 20 of these crops to build the evidence base for scaling investments.

Phase 3 – mobilise resources to accelerate research, development and deployment for these crops (long term).

This phase launched alongside phases 1 and 2 and resulted in three major institutions – IFAD, CGIAR, and FAO – each creating dedicated funding channels for VACS implementation through donor funds. This phase is ongoing and will focus on scaling investment to accelerate research, development and deployment for these crops in order to provide additional production options for farmers, and nutritious choices for consumers.

Pacific VACS opportunity

4. If of interest to the Pacific Heads of Agriculture, we propose to initiate work to co-create a Pacific VACS approach.
5. This would draw from the three phased approach developed in Africa, but would be adapted to the Pacific context, particularly building on existing work and initiatives such as the Regional Research Agenda, the Pacific Soils Partnership, the PAPGREN and designed to contribute to the goals of the Pacific Agriculture and Forestry Strategy once endorsed. Drawing on learnings from the Africa experience, the Pacific approach would also closely integrate a soils component alongside the crop research to address issues of soil health and soil nutrients required for prioritised crops and projected impact of climate change on soil health.
6. SPC would act as a conveyor and coordinator of a co-creation exercise, with support from the Government of Australia (through DFAT and CSIRO), and the Government of New Zealand (through MFAT).
7. The co-creation exercise would focus on:
    a) Alignment with, building on and supporting existing Pacific initiatives.
    b) Geographic targeting (regional, sub-regional or targeted countries);
    c) Consultation processes.
    d) Governance and funding structures.
    e) Timeframes

Recommendation:

8. The PHOAFS are invited to
    a) **endorse** SPC to convene and coordinate a co-creation exercise, with support from Australia (through DFAT and CSIRO), and New Zealand (through MFAT) to develop a Pacific VACS programme.
    b) **request** SPC to ensure the design is adapted to the Pacific context, particularly building on existing work and initiatives such as the Regional Research Agenda, the Pacific Soils Partnership, the PAPGREN and designed to contribute to the goals of the Pacific Agriculture and Forestry Strategy.

9th REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)
(15 – 17 May 2024) - virtual

TECHNICAL DEEP DIVE

Paper reference	**Session** 5 **: Agenda item** 1
Title	**UNFCCC Agriculture Workstream**
Action	**Decision**
Author(s)	**Dr Tekini Nakidakida, Fiji ; Irene Singh, Fiji; Leah Bently, Solomon Islands, Malia Talaki (FAO), Karen Mapusua (SPC)**

Summary

The paper provides an update on outcomes of the UNFCCC COP 28 in relation to agriculture and food systems and seeks guidance for negotiators taking part in the Bonn intercessional and COP 28 on key issues and priorities to help ensure improved outcomes for COP 29.

Recommendation:

PHOAFS are invited to:

a) **note** the update on the UNFCCC process in relation to agriculture and food systems.
b) **endorse** closer collaboration between PSIDS and Australia and New Zealand on areas of mutual interest and alignment including development of regional submissions.
c) **provide** guidance to the negotiators for COP 28 in relation to G77 alignment and establishment of a coordination mechanism.
d) **request** FAO and SPC to continue supporting the Pacific agriculture negotiators in the UNFCCC.

Background

1. The Koronivia Joint Work on Agriculture (KJWA) is a landmark decision (2017)[1] under the UNFCCC that recognizes the unique potential of agriculture in tackling climate change. The Koronivia decision addresses six interrelated topics on soils, nutrient use, water, livestock, methods for assessing adaptation, and the socio-economic and food security dimensions of climate change across the agricultural sectors.

2. By mainstreaming agriculture into UNFCCC processes, the KJWA can:
   • drive transformation in agricultural and food systems, and address the synergies and trade-offs between adaptation, mitigation and agricultural productivity.
   • provide concrete solutions to the climate and environmental challenges we are facing
   • KJWA complements country Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and the Enhanced Transparency Framework (ETF) under the Paris Agreement.

3. The COP27 decision 3/CP.27 established a 4-year Sharm el-Sheikh joint implementation plan on climate actions in agriculture and food security, including the implementation of the outcomes of the Koronivia joint work on agriculture, past and future topics.
   "a holistic approach to addressing issues related to agriculture and food security, taking into consideration regional, national and local circumstances, in order to deliver a range of multiple benefits……[enhance] research and development on issues related to agriculture and food security and consolidating and sharing related scientific, technological and other information, knowledge (including local and indigenous knowledge), experience, innovations and best practices."
4. The decision also established the Sharma el-Sheikh online portal for sharing information on projects, initiatives and policies for increasing opportunities for the implementation of climate action to address issues related to agriculture and food security, and this may include new (eg Food systems) and practical concepts (eg practices to increase soil carbon).

5. The 8th PHOAFS meeting:
   (a) Endorsed regional submissions to the UNFCCC on topics for future workshops and the operationalisation of the online portal.
   (b) Requested FAO and SPC to support the Pacific SIDS with the implementation of the KJWA where possible.

Purpose of this paper

6. To update the PHOAFS
   (a) on joint submissions to the UNFCCC
   (b) outcomes of COP 28 in Dubai in relation to agriculture

[1] Decision 4/CP.23

SESSION 5

(c) on support provided to implementation of KJWA by FAO and SPC
(d) Seek guidance to the negotiators on key issues for COP29 to be held in Azerbaijan in November 2024.

Regional submissions to UNFCCC

7. Regional submissions were prepared by PSIDS through the Pacific Koronivia Network and submitted by Fiji on 31st March 2023 on behalf of the PSIDS and are attached as an Annex 1

COP 28 Outcomes

8. Members of the PSIDS negotiations team for COP 28 were Dr Tekini Nakidakida, Fiji (remotely); Irene Singh, Fiji; Leah Bently, Solomon Islands, Kauanga Rimai, Kiribati. Technical assistance was supported on site by Karen Mapusua, SPC. FAO provided financial support to 3 PSIDS negotiators to participate in the 59th Sessions of the Subsidiary Bodies in Bonn (2023) and 6 for the COP 28. The negotiation team engaged in PSIDS and AOSIS coordination meetings, coordination with Australia and New Zealand, and provided support to PSIDS delegations for drafting of text and provision of technical input for national statements and various workstream negotiations. The negotiation team also provided briefings to the PSIDS negotiators during the virtual Post-COP28 Analysis Workshop hosted by SPREP in February 2024. The Workshop serves as a pivotal platform for (PSIDS) to reflect on the outcomes COP28 and begin preparation for 60th Sessions of the Subsidiary Bodies in Bonn, Germany (3-13 June 2024) and COP 29 in Baku, Azerbaijan (11-22 November 2024).

9. COP 28 outcomes were mixed regarding agriculture. Some progress could be seen to be made as agriculture and food systems began appearing in key decision texts outside of the agriculture workstream itself:
    a) *Global Goal on Adaptation:* Decision text includes a target for countries to attain "climate-resilient food and agricultural production and supply and distribution of food" by 2030, as well as emphasizing the importance of sustainable and regenerative food production to improve access to food and nutrition for all.
    b) *Global stocktake*: there is emphasis on the critical importance of food systems transformation to meet the mitigation, adaptation, finance, and loss and damage goals of the Paris Agreement and on food systems-specific indicators in nationally determined contributions (NDCs). the Global Stocktake decision text fails to acknowledge the huge mitigation potential of food systems and land use. It also does not mention the need to shift food systems away from a dependence on fossil fuels and scale up renewable energies, both of which are critical for keeping within 1.5% temperature increase.
    c) *The Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action* while not a negotiated outcome was endorsed by over 160 countries and includes time-bound targets, such as updating NDCs, national adaptation plans (NAPs), and national biodiversity strategies and action plans (NBSAPs) to include food systems targets by 2030. It also encourages

governments to repurpose domestic support, e.g. subsidies, to agriculture to better deliver for people, planet, and nature.

10. Agriculture workstream: The key elements of COP 27 decision to be negotiated during COP 28 were:
    a) Establishment of a coordination mechanism to support implementation of KJWA.
    b) Establishment of an information portal.
    c) Topics of future workshops;
    d) Annual synthesis report
11. These topics were discussed in the 2023 Bonn session and no agreement was reached on the draft text. The co-chairs were requested to prepare a draft paper for discussion during COP 28 which formed the basis of discussions in Dubai.

Negotiations stalled on the issue of a coordination group.

12. G77 sought a new entity/governance process to undertake coordination to drive implementation which they feel is lacking under the current arrangements. There was not a clear proposal from the G77 on what the coordination mechanism would look like and statements from G77 parties on this were inconsistent.

13. Developed countries and some other Parties would not accept this, seeing it as a establishing a parallel governance process, citing duplication of secretariat services and the role of the SBSTA and SBI, additional burden on parties, and being unable to see added value. They sought improved coordination through informal consultation times to be scheduled during the SBSTA and SBI as an alternative.

14. As a result, the co-chairs suspended the negotiations resulting in a procedural decision deferring the negotiations to the intercessional (60th Sessions of the Subsidiary Bodies) in Bonn June 2024. The co-chairs made every effort to make some progress, offering to select initial workshop topics from submissions already made but the G77 refused. This outcome means a delay of at least 18months in implementation of the COP 27 decisions.

15. The G77 appointed a small group including Fiji and PNG to work between sessions on a path forward.

16. Historically in the UNFCCC negotiations PSIDS agriculture negotiators, minus Palau and Tuvalu who are not members of the G77, have aligned with G77 decisions. It is becoming increasingly clear that there is strong divergence of PSIDS priorities from the positions of the G77 across negotiation streams and in several work streams, there was no joint G77 position reached.

Support to implementation of KJWA

17. A summary of work contributing to the six interrelated topics on soils, nutrient use, water, livestock, methods for assessing adaptation, and the socio-economic and food

security dimensions of climate change across the agricultural sectors that were completed since 8th PHOAFS or are ongoing is provided in Annex 2.

COP 28 priorities for negotiators

18. Collaboration with Australia and New Zealand on regional submissions .
19. At request of AOSIS Chair to strengthen coordination with AOSIS members on agriculture negotiations.
20. Aligning Agriculture Workstream with PSIDS priorities and other workstreams including:
    a) Gender and social inclusion - Ensure implementation plan addresses gender and social inclusion.
    b) Loss and Damage – implementation plan must support building baselines and develop methodologies for assessing loss and damage in the sector that are context specific and relevant.
    c) Just Transition - must prioritise research, development and upscaling the use of non-fossil fuel-based agriculture inputs to support a just transition.
21. Support urgent progress on implementing KJWA COP27 decisions.
    a) Guidance sought on aligning with G77. Negotiators request guidance on aligning on a case-by-case basis to enable negotiators to articulate and maintain PSIDS priorities more strongly in the Agriculture workstream.
    b) Guidance sought on the Establishment of a coordination mechanism on Agriculture and Food Security under the UNFCCC to strengthen coherence, synergies, coordination, communication, and interaction between Parties, constituted bodies and workstreams. This is currently where negotiations are blocked.
22. 60th Sessions of the Subsidiary Bodies (June 2024) and COP 29 (November 2024) priorities for negotiators
    a) FAO and SPC to support the PSIDS Agriculture negotiators in the preparation for the 60th Sessions of the Subsidiary Bodies and for COP29 where possible.
    b) Confirm PSIDS priorities for the meetings referred to above and agreed priorities to form the basis of PSIDS agreed positions for the negotiators, building on the regional submissions mentioned earlier and COP28 priorities PSIDS Agriculture negotiators to engage in broader PSIDS and AOSIS coordination wherever possible.

Recommendations:

23 The PHOAFS are invited

(a) **to note** the update on the UNFCCC process in relation to agriculture and food systems.

(b) **to endorse** closer collaboration between PSIDS and Australia and New Zealand on areas of mutual interest and alignment including development of regional submissions where relevant.

(c) the PHOAFS **are requested** to provide guidance to the negotiators for COP 28 in relation to G77 alignment and establishment of a coordination mechanism.

(d) **to request** FAO and SPC to continue supporting the PSIDS agriculture negotiators in the upcoming meetings of the UNFCCC.

ANNEX 1

Submission on behalf of Pacific Small Island Developing States,

on views on the elements of the joint work referred to in paragraphs 14–15 of FCCC/CP/2022/L.4, including views on topics for the workshops referred to in paragraph 15(b) on Sharma el-Sheikh joint work on the implementation of climate action on agriculture and food security mandated under Decision FCCC/CP/2022/L.4, para 17

A. Background

1. The Republic of Fiji welcomes this opportunity to make this submission on behalf of the Pacific Small Island Developing States (Pacific SIDS. The Pacific Ministers of Agriculture and Forestry during their 3rd Meeting in Nadi, Fiji on the 10th of March 2023, endorsed the development and submitting of a regional submission on behalf of the Pacific Small Island Developing States (Pacific SIDS). This submission is made pursuant to the request in paragraph 17 of FCCC/CP/2022/L.4.

B. Context

1. Agriculture and climate change are two key priorities for Pacific Small Islands Development States (Pacific SIDS). The Agriculture Sector, consisting of crops, livestock, forestry, fisheries and aquaculture, is an important sector to Pacific SIDS as it contributes to the livelihoods of a significant proportion of the region's population, accounts for an important share of export earnings for many countries in the region, and food and nutrition security. Climate change is impacting climate variability, increasing intensity of extreme events, economic slowdowns and downturns, and a major driver of food insecurity, malnutrition and poverty, and setting back gains already made in achieving the Sustainable Development Goals (SDGs) in the Pacific SIDS.
2. The Pacific Islands region include some of the most environmentally vulnerable nations in the world that are already facing development challenges. Climate change will present additional sets of issues for the agriculture sector, particularly in terms of managing the projected increase in the frequency and intensity of extreme weather events. The Pacific SIDS face the impacts of climate variability and extreme weather events, through from example, cyclones, droughts, floods, and intense rain. These situations have worsened and have caused significant production impacts, damages and losses to the agriculture sub-sectors in the past years. The climate projections for the 21st century and beyond, suggest that extreme events such as cyclones, heatwaves, droughts, and floods in the region are likely to increase in intensity (IPCC 5th Assessment Report). Extreme high (or king) tides and storm surges will continue to threaten low-lying islands, as will the ongoing sea level rise, which will cause contamination of groundwater (IPCC 5th Assessment Report). Pacific SIDS reiterates the paramount importance of prioritizing and safeguarding food security, ending

hunger and the particular vulnerability of food production systems to the adverse impacts of climate change as recognized[1].

3. The adoption of the Koronovia Joint Work on Agriculture (KJWA) at the UNFCCC COP 23 was a landmark decision highlighting the importance of agriculture in the climate change agenda. The implementation of the KJWA has focused mainly on in-session workshops with little implementation on the ground. As Pacific SIDS, we have worked with our partners such as FAO and SPC to implement the KJWA, including through awareness raising, capacity building and field demonstration of climate resilience practices in soils, nutrient use, water, livestock, methods for assessing adaptation, and socio-economic and food security dimensions of climate change across the agriculture sectors. It is therefore important that in the Sharm el-Sheikh Joint work on implementation of climate action on agriculture and food security, considers climate action on agriculture and food security on the ground, recognizing that actions and solutions are context-specific and must take into account national circumstances.

C. Views on elements of the joint work referred to under paragraph 14-15 of Decision FCCC/CP/2022/L.4

4. The Pacific SIDS welcomes the decision adopted at COP27 (FCCC/CP/2022/L.4) on the Joint Work on implementation of climate action on agriculture and food security. The Pacific SIDS reiterates its support of the key elements provided in paragraph 14 – 15 of the decision under FCCC/CP/2022/L.4 and further provides recommendations on how those key elements can be elaborated into actions in the table below.

Key elements paragraph 14	**Recommendations**
(a) Promoting a holistic approach to addressing issues related to agriculture and food security, taking into consideration regional, national, and local circumstances, in order to deliver a range of multiple benefits, where applicable, such as adaptation, adaptation co-benefits and mitigation, recognizing that adaptation is a priority for vulnerable groups, including women, indigenous peoples and small-scale farmers;	Enhance climate actions on agriculture and food security on the ground, recognizing that actions and solutions are context-specific and must consider national circumstances. Promote integrated climate smart agriculture approaches, nature-based solutions, and traditional knowledge. Promote adoption of food system approach, build on UN Food Systems Summit. Enhance anticipatory action and multi-hazard early warning systems. Multi-stakeholder involvement and participation. Enhance financial tools for agriculture, including anticipatory action, insurance, and social protection. Establish regional expert groups to support the UNFCCC Secretariat in facilitate the collection and sharing of regional information on the online portal.

SESSION 5

(b) Enhancing coherence, synergies, coordination, communication, and interaction between Parties, constituted bodies and workstreams, the operating entities of the Financial Mechanism, the Adaptation Fund, the Least Developed Countries Fund and the Special Climate Change Fund in order to facilitate the implementation of action to address issues related to agriculture and food security	Establish an Expert Group on Agriculture and Food Security under the UNFCCC to enhance coherence, synergies, coordination, communication, and interaction between Parties, constituted bodies and workstreams. Establish finance windows under existing climate finance mechanisms to support climate actions in agriculture and food systems.
(c) Promoting synergies and strengthening engagement, collaboration and partnerships among national, regional, and international organizations and other relevant stakeholders, as well as under relevant processes and initiatives, in order to enhance the implementation of climate action to address issues related to agriculture and food security	Enhance regional and national focused events on agriculture and climate change targeting also farmers, fishers, extension officers and communities. Enhance South-South, SIDS-SIDS cooperation, partnership and sharing of lessons and practices. Enhance engagement of women and youth in implementation of climate actions related to agriculture.
(d) Providing support and technical advice to Parties, constituted bodies and the operating entities of the Financial Mechanism on climate action to address issues related to agriculture and food security, respecting the Party-driven approach and in accordance with their respective procedures and mandates	Establish an Expert Group on Agriculture and Food Security to enhance coherence, synergies, coordination, communication and interaction between Parties, constituted bodies and workstreams. Establish finance windows under existing climate finance mechanisms to support climate actions in agriculture and food systems. Strengthening effective partnerships at all levels recognising the role of governments, communities, and partner agencies in operationalising systems approaches to agroecological food production systems for resilience in the Pacific SIDS.
(e) Enhancing research and development on issues related to agriculture and food security and consolidating and sharing related scientific, technological, and other information, knowledge (including local and indigenous knowledge), experience, innovations and best practices	Enhance regional and sub-regional research agenda based on national and regional priorities and needs on agriculture and climate change nexus. Enhance collection of scientific information and data at national and regional levels, including traditional knowledge and practices to inform policies, programmes and access to climate finance. Strengthen national information systems

(f) Evaluating progress in implementing and cooperating on climate action to address issues related to agriculture and food security;	Prepare an annual synthesis report on the work undertaken by constituted bodies and financial and other entities under the Convention, as well as by relevant international organizations, on activities related to the joint work referred to in paragraph 14 above.

(g) Sharing information and knowledge on developing and implementing national policies, plans and strategies related to climate change, while recognizing country-specific needs and contexts;	Strengthen sharing of information and knowledge at national and sub-regional levels, build into existing platforms. Support development of science, technology and innovation platform to support resilient building in the countries.

D. Topics for workshops referred to in paragraph 15(b)

5. Pacific SIDS proposes the following topics for technical workshops referred to in paragraph 15 (b) of FCCC/CP/2022/L.4, based on Pacific regional priorities identified by Pacific SIDS.

Food systems and integrated climate resilience approaches

6. Food systems are contributing to, and affected by the impacts of climate change, ecosystems degradation and biodiversity loss. The Pacific SIDS advocates for a food systems approach involving an examination of the food system as a whole from farm-to-fork and the use of integrated climate resilience agriculture approaches such as integrated crop and livestock production systems that are also efficient and resulting in increased diversity, along with improved environmental sustainability. For the Pacific SIDS, the challenges can be achieved through food systems based on improved soil health that decrease incidences of soil borne pests and diseases, improve biodiversity, and reduce GHG emissions –thereby increasing the resilience of food production systems and communities.

Community vulnerability assessment, promoting documenting and use of traditional knowledge and practices, and building capacity on food production systems

7. Pacific SIDS agreed that work should endeavor to improve the knowledge, skills and capacity of agricultural stakeholders and communities in assessing their vulnerability to climate change and in exploring opportunities to reduce such vulnerability and adapt to the impacts of climate change. Such assessments will be carried out for different landscape units such as water-catchment, ridge to reef transects and whole of island in community-based vulnerability assessments. Agriculture-specific indicators such as soil health, production index, access to land and food security, will be included in determining vulnerabilities of the agriculture sector. And to support sustainable intensification of food production systems.

8. Traditional knowledge (TK) and practices have played a significant part in solving problems, including problems related to climate change and variability and they continue to be used in Pacific SIDS. The appearance of certain birds, mating of certain animals, flowering of certain plants, diversity of crops and food resources that are often matched by a similar diversity in location of fields are all important signals of changes in time and seasons that are well understood in traditional knowledge systems. As TK are transmitted orally from one generation to another, they risk being lost. It is therefore important to document traditional knowledge and practices of Pacific SIDS that are related to climate resilience and adaptation, conserve local crop varieties, preserve cultural aspects of agriculture, including the promotion of their use.

Climate Information, anticipatory action, multi-hazard early warning systems

9. It is clear that the climate of Pacific SIDS has and will continue to change in diverse ways that may differ from island to island. However, constructing climate information tables for Pacific SIDS is challenging due to lack of observations and high-resolution climate projections, as well as the inadequate representation and understanding of key modes of variability and their interplay with trends. There is a great need for long and short term weather and seasonal forecasts and farming communities should be provided with downscale and usable climate information and tools to prepare and plan better.
10. While early warning systems are continually improving thanks to technological gains, there is a great need for long term weather and seasonal forecasts; and importantly to act on them. Anticipatory action meets this call and translates warnings into action to protect people and assets before a hazard develops into a disaster. The approach is being widely accepted and applied in the region, with the ASEAN Framework on Anticipatory Action in Disaster Management becoming a cornerstone piece to achieve this and the Pacific Island Forum highlighting the importance of the approach within their Disaster Risk Financing planning. FAO studies further show that for every USD 1 FAO invested in anticipatory action, families can gain up to USD 7 in benefits and avoided losses. These studies have also found that these interventions can curb food insecurity, support resilience efforts and provide a more dignified approach to aid. Now is the time to change the way we manage disasters.
11. Pacific countries during the Asia Pacific Ministers' Conference on Disaster Risk Reduction held in September 2022, highlighted the importance of multi-hazard early-warning systems (MHEWS) in supporting disaster risk reduction efforts. It includes investing in and strengthening people-centred MHEWS, disaster risk communication mechanisms and hazard-monitoring telecommunications systems – emphasizing a participatory and gender-inclusive approach. While early warning systems are continually improving, there is a great need for long-term weather and seasonal forecasts, including downscaling of information for communities to prepare and plan better and drawing on indigenous and traditional knowledge.

Climate change, pest, disease and transboundary/invasive species, and related impact of food security

12. Increasing evidence shows that climate change is altering the distribution, incidence and intensity of animal and plant pests and diseases. The movement of plant pests, animal diseases and invasive alien aquatic organisms across physical and political boundaries threatens food security and creates huge concerns across the Pacific SIDS region. Climate change will especially impact vector-borne animal diseases due to the effects of climate change on the arthropod vectors and macro-parasites of animals due to the climate effects on the free stages of these parasites. With more food production becoming monocrops, the incidences of pests and diseases are increasing in the Pacific SIDS region. In livestock production, high priority should be given to address transboundary animal diseases such as the African swine fever including those that are zoonotic and other livestock production priorities such as animal nutrition and genetic improvement. Climate change is further adding to the scale and complexity of this challenge and the need for more research, information, knowledge, and actions are key priorities in the region. Huge capacity gaps exist in the region including the non-availability of Veterinary Specialist in country to deal with livestock biosecurity threats. One health approach should be strengthened in Pacific SIDS through effective partnership and coordination mechanisms.

Soil health, water management and improved biodiversity practices – Adaptation approaches with mitigation co-benefits

13. Soils are our allies in the fight against hunger and climate change and if managed wisely could sequester 1/3 of agricultural GHG emission, thus playing a significant role in the global carbon cycle. The traditional fallow or shifting cultivation in the Pacific SIDS have changed considerably. However, the productivity and sustainability of many cropping systems is threatened by a decline in the fertility, structure and biological health of soils. Appropriate agriculture practices can significantly reduce GHGs emissions from agriculture and food system related activities. A moved to systems closer to nature will improve biodiversity, increase soil carbon and promote microbial populations in the soil to enhance nutrient recycling and hence improve resilience of production systems.
14. Freshwater is an essential resource for Pacific SIDS and a major requirement in agricultural and food production systems. However, the ability of the island countries to effectively manage the water sector differs from island to island, as they are constrained by their small size, isolation, fragility, natural vulnerability, geography and a limited human, financial and natural resource base. Increasingly variable rainfall, cyclones / hurricanes, accelerating storm water runoff, floods, droughts, decreasing water quality and increasing demand for water are so significant in many small island countries that they threaten the economic development and the health of their peoples. The Pacific SIDS has some of the most vulnerable countries to climate change and the incidences of drought are increasing in the region. A sustainable water management strategy for each country should be developed and there is a need to develop water budgets from rainfall and evapotranspiration data. A high priority for

the Pacific SIDS is to promote the use of the bucket drip irrigation systems to improve water-use efficiency, increase water storage capacity (e.g. more/larger water tanks), protected cropping (e.g. protect from excessive rain), as well as wicking-based systems (which can protect water crops from saltwater).

15. Biodiversity can support efforts to reduce the negative effects of climate change and conserved or restored habitats can remove carbon dioxide from the atmosphere and help to address climate change by storing carbon. Conserving intact ecosystems, such as mangroves for instance, can help reduce the disastrous impacts of climate change such as flooding and storm surges, which are predicted to occur with more frequency and intensity. Resilience of food production systems in the Pacific SIDS hinges significantly on biodiversity. This is linked to the improved soil health output from below-ground biodiversity. It should be emphasized that above-ground biodiversity is dependent on healthy below-ground biodiversity. A sustainable food production system will also need to utilize the best adaptable varieties of crops, trees and animals. A priority for the Pacific SIDS is therefore to improve biodiversity in farming systems to improve soil health and increase sustainable food production; promote the cultivation of trees on farms for food security, biodiversity conservation, ecosystem services; climate regulation and for carbon sequestration. Enhancing seed systems to contribute to biodiversity and food security in Pacific SIDS is a vital foundation for sustainable agriculture production systems.

16. General education and raising awareness need strengthening at the national level, especially of farmers, communities and extension officers on the importance of biodiversity**.**

Food loss and waste

17. Globally about 30 - 60 % of food production goes to waste. Food waste is not just a social issue – it is also an environmental one. If food waste ended up in the landfills and rots, it will produce methane. About 8% of global greenhouse gas emissions comes from food waste (FAO, 2011). There is very limited information on food waste in the Pacific SIDS. A life cycle assessment of waste in each country is required, including the development of a strategy to address the problems related to food waste in order to reduce GHG emissions. Food waste reduction strategies (post-harvest technologies, food storage, transportation of perishable foods, specialized markets for perishable foods, and downstream processing of seasonally available foods (i.e mangoes and pineapples) are needed.

Assessing adaptation-mitigation co-benefits

18. Assessing adaptation and mitigation co-benefits to explore the effectiveness of different agricultural adaptations and mitigation actions in Pacific SIDS to adopt or scale up those approaches. This helps to document evidence of loss and damage, including residual losses in our food system and how to apply approaches including climate risk management to avert, minimize and address loss and damage in the food system and agriculture in the Pacific Islands. This helps us to use limited finances well

to only action workable adaptation and mitigation actions that are best options for the place, rather than doing the same thing over and over again. Foundation to the success is promoting and improving soil heath, decision making processes and context, evidence based and well researched decisions, scenario based planning.

Predictable, flexible and pre-arranged finance is crucial to allow timely implementation.

19. While anticipatory action ahead of forecasted shocks is a non-debatable concept, only a small fraction – some studies highlighted as little as 3 percent – of humanitarian financing is pre-arranged to be available when warnings materialize. We all need more innovative funding models to be able to adapt to the ever-changing Disaster Risk Management (DRM) environment which demands speed and timeliness. Stronger synergies must also be explored between humanitarian, development and climate finance for multi-risk resilience building.

[1] In the preamble of the Paris Agreement.

Submission on behalf of Pacific Small Island Developing States,

on views on the operationalizing of the Sharm el-Sheikh Online Portal mandated under paragraph 18 of FCCC/CP/2022/L.4

A. Background

20. The Republic of Fiji welcomes this opportunity to make this submission of behalf of the Pacific Small Island Developing States (Pacific SIDS. This submission together with the submission on paragraph 17 of FCCC/CP/2022/L.4 has been endorsed by Pacific Ministers of Agriculture and Forestry during their 3rd Meeting in Nadi, Fiji on the 10th of March 2023. This submission is made pursuant to the request in paragraph 18 of FCCC/CP/2022/L.4 on the operationalization of the Sharm el-Sheikh online portal.

B. Context

21. The Paris Agreement highlight the "fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change". This is echoed in countries' Nationally Determined Contribution (NDC) where the agricultural sectors stand out as a priority[1]. Climate change already affects agriculture and food security and without urgent action, millions more people will be at risk of hunger and poverty[2]. The Pacific SIDS have experienced first-hand the impacts of climate change, and the set back on sustainable development gains. Therefore, transforming and shifting to sustainable food and agriculture can maximize co-benefits of climate change adaptation and mitigation.
22. The Pacific SIDS acknowledge the progress made in the implementation of the Koronovia Joint Work on Agriculture (KJWA) in the Pacific region. As referenced in the Pacific SIDS submission on paragraph 17 of FCCC/CP/2022/L.4, we as Pacific SIDS, have worked with our partners such as FAO and SPC to implement the KJWA, including through awareness raising, capacity building and field demonstration of

climate resilience practices in soils, nutrient use, water, livestock, methods for assessing adaptation, and socio-economic and food security dimensions of climate change across the agriculture sectors. These have enabled the sharing of information, knowledge and lessons learned in the Pacific.

C. Operationalization of the Sharm el-Sheikh online portal

Objective and scope of Sharm el-Sheikh online portal

23. The objective of the Sharm el-Sheikh online portal established under the joint work referred to in paragraph 14[3], is to share information on projects, initiatives and policies for increasing opportunities for the implementation of climate actions to address issues related to agriculture and food security[4]. The portal should also include, scientific, technological information and knowledge including traditional knowledge and technologies, and best practices on climate actions in agriculture.
24. The Sharm el-Sheikh online portal should facilitate the exchange of information on projects, initiatives and policies between Parties, UN Agencies, International and Regional Organizations, and Civil Society. The information should be accessible to the Constituted Bodies of the UNFCCC, to Parties, farmers, fisher folks and to the public at large, especially those that will find the information useful. Information to be shared on the portal should be collected from Parties, UN Agencies, International and regional organizations and other relevant stakeholders.

Host of Sharm el-Sheikh online portal

25. The Sharm el-Sheikh online portal should be developed and hosted under the UNFCCC Secretariat. Information on projects, initiatives and policies should be reviewed by the Expert Group on Agriculture and Food Security before the UNFCCC Secretariat shares on the Sharm el-Sheikh online portal.

Existing online portals on agriculture and food security

26. There are already existing online portals with information on climate change and agriculture at global and regional levels. The Sharm el-Sheikh online portal should be complementary and build on those existing online portals that contain relevant information on the climate change and agriculture nexus to build synergies and avoid duplication. Linkages should be made from the Sharm el-Sheikh online portal to other existing online portals.

Regular updates on portal

27. Regular updates on the portal should be reported to Parties, especially on use, access, traffic and usefulness.

[1] https://www.fao.org/3/i6273e/i6273e.pdf

[2]https://www.fao.org/3/i6273e/i6273e.pdf

[3] FCCC/CP/2022/L.4

[4] FCCC/CP/2022/L.4

ANNEX 2 KJWA – Current actions in the region through FAO and SPC

Project details					KJWA dimensions					
Project Name	Beneficiaries	Total funding	Source	Duration	Soils	Nutrient Use	Water	Livestock	Methods for assessing adaptation	Socio-economic food security
SPC										
Using modern biotech sustain food security in PI	Regional	€ 269,407.00	Australia	17/12/18-17/12/23						The project will ensure that Pacific island farmers have the aroids of importance with broad allelic diversity, strengthening the region's food production systems, and building resilience to future climate change impacts in both high islands and atolls
Responding to emerging pest and disease threats to horticulture in Pacific Islands	5 PICTs - Fiji, PNG, Samoa, Solomon Is. Tonga	€ 952,390.00	Australia	01/05/18- 30/09/23						Build diagnostic and strategic planning capacity for integrated pest and disease management (IPDM) including biological control, 2. control strategies for invasive and emergent pests 3. Extend IPDM and insecticide resistance management strategy
Providing for the long-term funding of ex-situ collections of germ plasm held by SPC	Regional	€ 47,667.51	Australia	17/12/18-17/12/23						long-term conservation and availability of the taro and yams

Pacific awareness and response to CRB (PARC)	Regional	€ 1,905,000.00	New Zealand	28/05/19-31/12/24						Limit spread of CRB-G, reduce existing populations, and find long term solutions through biocontrol and integrated pest management
Pacific seeds for life	Fiji, Kiribati, Samoa, Tonga, Tuvalu, Vanuatu	€ 157,822.00	New Zealand	08/04/2020 - 31/12/24						Development of local seed systems and resilient varieties
Safeguarding threatened coconut diversity within the International Coconut Gene bank for the South Pacific	Fiji, PNG, Samoa	€ 133,895.00	FAO	14/12/2020 - 14/12/23						Use and conserve wide range of resilient coconut varieties leading to increased productivity and income.
Pacific Organic Leading Farm Network: Agroecology and agroforestry for climate resilience	Regional	€ 4,621,075.00	KIWA	28/05/21 - 28/05/25	Develop organic farming systems for food security, climate change adaptation and biodiversity conservation				Implementation of Tool for Agroecological Performance Evaluation	
Improving root crop resilience and biosecurity	Australia, Fiji, Samoa, Solom Is, Tonga	€ 420,992.00	Australia	01/07/21-31/06/24						Develop the capability for a clean seed system for the Pacific Region
Identification of drought tolerant taro varieties		€ 26,769.00	Australia	03/04/23-07/04/24						Identification of drought tolerant taro varieties

CFU	PNG	€ 10,007 000.00	GCF	2023-2028	Nature-based solutions to protect agro-ecological systems from landslides and coastal erosion. Reforestation program of 3000 ha around croplands, mangroves, and degraded forest, vegetation planting along riverbanks or unstable lands	Eco-friendly technologies for climate-smart seed saving, post-harvest processing, and modern storage			The project utilises the Adaptation Fund core and output level indicators that are specifically defined to assess adaptation and resilience capacity of beneficiaries and ecosystems.	The project aims to enhance the sustainability of main agricultural value chains through the adoption of climate-smart practices, contributing to improving the produces' quality, increasing access to markets, and creating green jobs for women and youth in vulnerable communities.
NDC Hub	PNG	€ 53,596.00	GIZ	2023 (5 months)	The project provides support for PNG's governance framework to improve the implementation of the National Sustainable Land Use Planning Policy. The work encouraged regulation within that sector that in the long term could provide for data sharing at the national and sub-national levels through a sustainable land use monitoring system.					Strengthening PNG's effective framework for sustainable coffee development
NDC Hub	Regional	€ 0	GIZ	2023					This training sought to encourage opportunities to integrate PICs to think through the process of enhancing their NDCs by including strengthened actions in the agriculture sector. A range of possible actions for climate change adaptation	Training session titled "Enhancing NDCs for Agri-food Systems." The training was designed to empower Pacific Island Countries and Territories (PICs) to fortify their Nationally Determined Contributions (NDCs) by focusing on the agricultural sector's pivotal role in climate action.

									and mitigation in the agriculture and Land Use, Land Use Change and Forestry (LULUCF) sectors were discussed.	
NDC Hub	PNG	€ 49,245	GIZ	2023	The objective of the project is to support the Government of Papua New Guinea (PNG) to implement the National Sustainable Land Use Policy for PNG that was recently approved by National Executive Council, in May 2022.					PNG: Strengthening PNG's effective framework for sustainable coffee development
PROTÉGÉ	New Caledonia French Polynesia Wallis & Futuna	€ 8,000,000.00	European Union	2018-2024	Network of demonstration farms on agroecology Assessment of the effects of some mycorrhiza's species on soil regeneration Develop the capability for cover crops seed production	The project has supported the substitution of imported nutrients by the creation of local value chains for organic resources. Assessment of the impact on soil fertility of pigs' arable rotation and dynamic rotating grazing for cattle	Assessment of agroforestry impacts on the waler lens of the atoll islands Training on decision-making tools for irrigation	Assessment of the livestock carbon footprint in New Caledonia Assessment of the non-chemical control practices of the cattle ticks production of animal feed (poultry, pigs) from the larvae of black soldier flies	Implementation of Tool for Agroecological Performance Evaluation (TAPE)	Identification, conservation and access to planting materials of traditional food plants (roots crops, edibles leaves) Inclusive development of public policies to strengthen the sustainability of food systems. Use and conserve wide range of resilient coconut varieties leading to increased productivity and income

FAO										
Integrated climate smart agriculture practices and approaches towards sustainability and climate resilience through the KJWA Objective: Integrated climate smart agriculture measures incorporated into Pacific agricultural policies and systems in Pacific SIDS	Regional Coo Islands, Kiribati, Fiji, Niue, FSM, RMI, Nauru, Palau, Solomon Islands, Tonga, Vanuatu, Tuvalu, Samoa	USD 500,000	FAO TCP	Feb 2022 – Dec 2023		Workshop on nutrient use		Training CSA livestock practices – Dry litter, bio-gas		
					Workshop and training on soil management Regional Soil guidelines		Policy Brief on water management and food system	Guideline on climate smart livestock management		

Mainstreaming climate resilience food production systems for food security and nutrition	Palau	USD 200,000	FAO TCP	Aug 2021 to Dec 2023	Soil training and assessment		Livestock training - biogas			Limit spread of CRB-G, reduce existing populations, and find long term solutions through biocontrol and integrated pest management
Increased resilience and food security of women and men vulnerable to the impacts of COVID-19 in the Pacific	Fiji, Niue, Solomon Islands, Palau, FSM	USD 2,920,000	Global Affairs Canada	2021 - 2024	Soil training on soil test kits		Climate Smart Agriculture livestock practices Response to outbreak of CRB	Disaster Risk Management Plans – drought response	Women targeted beneficiaries with at least 40% and above must be women	Procurement of agriculture seeds, tools
Enhance regional animal health capacity to prepare and respond to risks of African swine fever introduction and spread in the Pacific	Cook Islands Fiji Kiribati Micronesia, Federated States of Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Tonga Tuvalu Vanuatu	USD 500,000	FAO TCP	Jun 2021 – Dec 2023			To develop, strengthen, and/or put in place selected Pacific countries' ASF preparedness and response plans including risk-based prevention and reduction by high-lighting emergency			

							response measures.			
Promoting ecologically-based alternatives to highly hazardous pesticides to enhance food safety and security in the Pacific Region	Cook Islands Fiji Kiribati Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Vanuatu	USD 441,000	FAO TCP	01-Mar-2021 - 31-Dec-2023						To provide technical assistance to promote ecologically-based alternatives to highly hazardous pesticides to enhance food safety and security in the Pacific Environmental and climate benefits of ecologically based alternatives linked to soil, water management
Enhancing water-food security and climate resilience in volcanic island countries of the Pacific (FSP)	Fiji Papua New Guinea Samoa SAP - Subregional Office for the Pacific Islands, Apia Solomon Islands Vanuatu	USD 50,000	01-Jun-2021 - 31-Dec-2023							To provide technical assistance to complement ongoing efforts in building resilience and adaptation to climate change.

9TH REGIONAL MEETING OF PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(15 – 17 May 2024 – virtual)

Paper reference	**Session 5: Agenda Item 2**
Title	**Proposed discussion paper for Ministers of Agriculture and Forestry 2025- Invasive management**
Action	Decision
Author(s)	**Karen Mapusua**

Summary

The Agenda Item provides for the discussion of Invasive species and pest and disease management as potential topics for the Ministers' meeting in 2025.

Recommendation:

PHOAFS are invited to **request** the Secretariat to prepare a session for the Ministers of Agriculture and Forestry for their 2025 meeting.

Background

1. The 8th Regional Meeting of Pacific Heads of Agriculture and Forestry Services (PHOAFS) met on 9 March 2023 in Nadi. Invasive species management was raised as an issue during Country presentations. The ability to prevent invasive exotic pests and diseases from entering our shores is critical to maintaining both our trade and the fragile ecosystems of the Pacific. Our region holds three of the world's 35 global biodiversity hotspots. We have over 400 endemic species of plants, of which approximately 90% are native species. However, our crops, trees and livestock are threatened by the invasion of new pests and diseases, which is likely to worsen under climate change impacts.

2. Recent examples include an outbreak of the Fall Army Worm in Papua New Guinea and the Solomon Islands. This pest has significantly threatened global food security in a short period.

3. The invasive Coconut Rhinoceros Beetle (CRB) Guam strain (called CRB-G in short) has been found in eight Pacific countries since its discovery in Guam in 2007. ASF, a highly contagious viral disease of domestic and wild pigs that can cause severe economic and

production loss, is now present in PNG and poses a significant threat to the pork industry in the Pacific. African tulip (Spathodea campanulate) trees, introduced as ornaments, threaten island biodiversity and ecosystem resilience. It is amongst the world's 100 worst invasive alien species by the International Union for Conservation of Nature (IUCN).

Purpose of this paper

4. The PHOAFS should decide if an agenda item on invasive species and pest and disease management is a priority for the Ministerial meeting and discuss what form such a session would take.

5. The Agenda Item will be a facilitated discussion with the HOAFS. No additional information is presented.

Recommendations:

6. The PHOAFS are invited **to request** the Secretariat to prepare a session for the Ministers of Agriculture and Forestry at the 2025 meeting.