

**EIGHTH REGIONAL MEETING OF  
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES**  
(Nadi, Fiji, 09 March 2023)

**UPDATE ON REGIONAL PUBLIC GOODS  
Pacific Soils Partnership**

<b>Paper reference</b>	<b>Session 3 Agenda Item 3.2</b>
<b>Title</b>	<b>Enhancing partnerships on soils to support resilient food systems in the Pacific</b>
<b>Action</b>	<b>Decision</b>

<b>Summary</b>
<p>This paper reviews the Pacific Soil Partnership (PSP) arrangements and recommends a need to reinvigorate regional activity through an effective, coordinated governance structure and supported implementation plan. As agreed upon in 2014 at the first Pacific Soil Partnership plenary meeting of 12 Pacific countries, the Secretariat of the Pacific Community (SPC) and the Food Agriculture Organization (FAO), the PSP was established under the auspices of Global Soil Partnership (GSP) <a href="https://doi.org/10.4060/cc0921en">https://doi.org/10.4060/cc0921en</a> to improve soil security in the Pacific and strengthen regional cooperation. <a href="https://www.fao.org/3/bc288e/bc288e.pdf">https://www.fao.org/3/bc288e/bc288e.pdf</a></p> <p>In 2019, the PSP developed an implementation framework and a governance structure which now need to be reviewed due to recent changes in GSP arrangements (see Annex 1 and the revised GSP Action Framework 2022-30 <a href="https://www.fao.org/global-soil-partnership/about/gsp-action-framework-2022-2030/en/">https://www.fao.org/global-soil-partnership/about/gsp-action-framework-2022-2030/en/</a> ). Pacific countries also advocate the need to revive the South Pacific Agricultural Chemistry Laboratory Network (SPACNET) established in 1996 to ensure quality assurance and soil analysis in the Pacific region. SPACNET now effectively functions as a component of the regional Australasian Soil and Plant Analysis Council (ASPAC) under the PSP/GSP processes. The Pacific Soils Portal (PacSOP) initiated in 2018 has governance and guidelines for data sharing as ratified by the Heads of Agriculture and Forestry Services (HOAFS) in August 2021. The PSP framework defines key regional priorities which also relate to the SPACNET and PacSOP areas of focus, and this points to the need to better coordinate and resource all these initiatives.</p>
<b>Recommendation</b>
<ol style="list-style-type: none"><li>1. The Pacific Heads of Agriculture and Forestry Services are invited to note the following:<ol style="list-style-type: none"><li>a. The requirement to review PSP governance and implementation frameworks following change to the Global Soil Partnership arrangements.</li><li>b. PSP progress in integrating Pacific Soils Portal (PacSoP) and the revival and integration of SPACNET into PSP strategic priorities and ASPAC/GSP operational arrangements.</li><li>c. PSP to support the soil related topics and issues of the Koronivia Joint Work on Agriculture (KJWA), building on existing work on KJWA led by FAO and SPC.</li><li>d. A business development case should be completed for the PICTs regional laboratory network within ASPAC to guide infrastructure investment, capacity and capability building and private sector growth.</li></ol></li><li>2. The Heads of Agriculture and Forestry Services are invited to endorse the following:<ol style="list-style-type: none"><li>a. SPC to serve as the Secretariat for PSP to coordinate the resourcing and implementation of its activities in Pacific Islands Countries and Territories (PICTs) and more broadly with all PSP countries across the Pacific regional area and to the GSP.</li></ol></li></ol>

- b. PSP governance and strategic priorities to support soil research and capacity development needs outlined in Annex 1.

## **Enhancing partnerships on soils to support resilient food systems in the Pacific**

### **OBJECTIVES**

1. To improve governance and collaboration on soils resource management, research, capacity building and access to reliable soil analytical data and information across the Pacific region.

### **RATIONALE**

2. Achieving these objectives requires effective coordination and partnership mechanisms to jointly develop and implement relevant programmes. By harnessing the PSP framework and building on ongoing priority activities and initiatives, there is an opportunity to streamline the governance and priorities of all soil related networks to ensure ongoing collaboration amongst partners and countries.

### **BACKGROUND**

3. Soil is a valuable resource for the Pacific Island Countries and Territories (PICTs) and provides ecosystem services critical to life including food production. Domestic food production from traditional systems is central to the livelihoods of most of the population in the region. However, there is substantial variation in soil resources, threats to soil function, information, capacity, and environmental challenges across the Pacific region. These challenges were identified by the soil community including universities and research institutes from 12 Pacific countries, the Secretariat of the Pacific Community (SPC) and the Food Agriculture Organization (FAO), in a meeting held in October 2014. Consequently, The Pacific Soil Partnership (PSP) formed in 2014 under the auspices of the Global Soil Partnership, <https://www.fao.org/global-soil-partnership/regional-partnerships/pacific/en/> agreed to collaboratively advance the sustainable soil management agenda in the Pacific through research, standard setting, education and awareness, and information and knowledge sharing on soils. Other focal areas agreed to were:
  - *to develop/share appropriate soil management solutions,*
  - *strengthen soil information systems and*
  - *design efficient methods for soil analysis through sharing of capacity on laboratories.*
4. 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.
5. At a meeting 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.
6. In May 2019, the PSP meeting in Brisbane developed a regional implementation framework structured around 5 GSP thematic areas (Annex 1). PSP and Pillar Chairs were nominated, although there was no clear governance and working arrangements established and due to a lack of dedicated resourcing of positions and activities. The PSP Chair continues to represent the region and report on

related country level soil activity at the GSP annual Plenaries, and regularly notes the low level of country engagement, participation and direct resourcing of PSP/GSP identified priorities. With COVID-19 regional travel restrictions the PSP has been relatively quiet for of the last 2 years.

7. Under the GSP action area 3 and linked to the Global Soil Laboratories Network (GLOSOLAN) initiative, the Australasian Soil and Plant Analysis Council (ASPAC) supports the initial work of SPACNET to develop and enhance the quality assurance programmes of laboratories. This is achieved through the soil and plant sample exchange programme and other activities including documenting standard methodologies for soil and plant analysis and quality control in the region and identifying regional laboratories as centres for short-term secondments and customised training. ASPAC has enable PICTs laboratories to continue quality assurance programmes which has improved outcomes and services. Going forward ASPAC should collaborate with PICTs on completing a business development plan for the region.
8. Linked to GSP action area 5, Australia's CSIRO, New Zealand's MWLR, along with SPC and soil experts/practitioners from Fiji, Samoa, Tonga, and Tuvalu through an ACIAR funded project 'Soil Management in the Pacific: Investigating Nutrient Budget and Soil Information' commenced the development of a Pacific Soils Portal (PacSoP) in 2018. The PacSoP has been launched online at: <https://psp.landcareresearch.co.nz/> and currently represents data for Tonga, Fiji, Samoa, Kiribati and Tuvalu. The PacSOP has governance and guidelines for data sharing as ratified by HOAFS in August 2021.

#### **Recommendation**

9. The Pacific Heads of Agriculture and Forestry Services are invited to note the following:
  - a. The requirement to review PSP governance and implementation frameworks following change to the Global Soil Partnership arrangements.
  - b. PSP progress in integrating Pacific Soils Portal (PacSoP) and the revival and integration of SPACNET into PSP strategic priorities and ASPAC/GSP operational arrangements
  - c. PSP to support the soil related topics and issues of the Koronivia Joint Work on Agriculture (KJWA), building on existing work on KJWA led by FAO and SPC.
  - d. A business development case should be completed for the PICTs regional laboratory network within in ASPAC to guide infrastructure investment, capacity and capability building and private sector growth.
10. The Heads of Agriculture and Forestry Services are invited to endorse the following:
  - a. SPC to serve as the Secretariat for PSP to coordinate the resourcing and implementation of its activities in Pacific Islands Countries and Territories (PICTs) and more broadly with all PSP countries across the Pacific regional area and to the GSP.
  - b. PSP governance and strategic priorities to support soil research and capacity development needs outlined in Annex 1.

Encl. Annex 1. Pacific Soils Partnership Governance and Implementation Framework

**ANNEX 1.**

**PSP GOVERNANCE AND IMPLEMENTATION FRAMEWORK**

The PSP 2019 meeting established an interim governance arrangement and implementation framework. To align with priority needs of PICTs, revisions were made as follows:

<b>PRIORITIES</b>	<b>FOCUS ACTION AREAS</b>	<b>LEAD</b>
Priority 1. Policy and Investment (aligned to GSP action area 2 & 6)	<p><i>Promote investment, technical cooperation, and policy on soil:</i></p> <ul style="list-style-type: none"> <li>Identify and resolve barriers to adoption of sustainable soil management practices.</li> <li>Development of sustainable soil management policies.</li> <li>Promote the adoption and implementation of improved soil management, soil carbon, soil health and soil fertility practices linked to climate adaptation and resilience co-benefits.</li> <li>Actively promote the Pacific Soil Partnership initiative and GSP.</li> <li>Improve communication and networking within PSP and more broadly.</li> <li>Establish framework to express the value of research and return on investment.</li> <li>Facilitate investment by matching activities to donor interests and expectations.</li> <li>Demonstrate how soils research can have wider benefit to the ecosystem, environment, people and economies.</li> </ul>	<ul style="list-style-type: none"> <li>Country – Lead</li> <li>ACIAR</li> <li>CSIRO</li> <li>MWLR</li> <li>FAO/GSP</li> <li>Melanesia Rep</li> <li>Micronesia Rep</li> <li>Polynesia Rep</li> </ul>
Priority 2. Soil Research (aligned to GSP action area 1)	<p><i>Promote targeted soil research and development focusing on identified gaps and priorities and synergies with related productive, environmental and social development actions:</i></p> <ul style="list-style-type: none"> <li>Identify common research needs, current status, gaps and opportunities for collaboration.</li> <li>Promote and expand new approaches to research including participatory, transdisciplinary and citizen science.</li> <li>Provide guidance on sustainable soil management targeted to the Pacific region.</li> <li>Consider support for the establishment of a “Pacific Centre for Soil and Water Management and Engineering” connected with the Pacific Community, the FAO Subregional Office for the Pacific Islands (FAO SAP), international funding agencies, and local academic institutions.</li> </ul>	<ul style="list-style-type: none"> <li>CSIRO – Lead</li> <li>SPC</li> <li>USP</li> <li>MWLR</li> <li>FAO/GSP</li> <li>Melanesia Rep</li> <li>Micronesia Rep</li> <li>Polynesia Rep</li> </ul>
Priority 3. Laboratory Services (SPACNET) (aligned to GSP action area 5 - GLOSOLAN)	<p><i>Harmonization of methods, measurements and indicators for soil testing to support sustainable management and protection of soil resources:</i></p>	<ul style="list-style-type: none"> <li>MWLR – Lead</li> <li>CSIRO – Co-lead</li> <li>SPACNET Members</li> <li>ASPAC</li> </ul>

	<ul style="list-style-type: none"> <li>• Develop Pacific guidelines for field survey and soil description, including a vocabulary service.</li> <li>• Develop correlation table for soil classifications used across the Pacific region and links to soil classification/properties to modelling needs.</li> <li>• Strengthen linkages between Pacific laboratories and ASPAC for Inter-laboratory Proficiency Program.</li> <li>• Strengthen training, including visits between laboratories, training of lab staff on-site.</li> </ul>	<ul style="list-style-type: none"> <li>• FAO/GSP/GLOSOLAN</li> </ul>
<p>Priority 4. Soil information systems (PacSOP) (aligned to GSP action area 5 - GloSIS and SOILSTAT)</p>	<p><i>Enhance the quantity and quality of soil data and information: data collection generation, analysis, validation, reporting, monitoring, and integration with other disciplines</i></p> <ul style="list-style-type: none"> <li>• Support the capture and management of all soil data.</li> <li>• Develop a Pacific Soil Portal, including all countries.</li> <li>• Assess data management capacity across the Pacific and establish governance arrangements for the Pacific Soil Portal.</li> <li>• Develop tools for modelling, monitoring and forecasting soil condition.</li> <li>• Improve communication with and understanding of governments regarding sustainable soil management.</li> </ul>	<ul style="list-style-type: none"> <li>• MWLR – Lead</li> <li>• SPC</li> <li>• CSIRO</li> <li>• FAO/GSP</li> <li>• PacSOP Body</li> </ul>
<p>Priority 5. Capacity building and awareness (aligned to GSP action area 3,4&amp;6)</p>	<p><i>Promote sustainable management of soil resources for soil protection, conservation and sustainable productivity</i></p> <ul style="list-style-type: none"> <li>• Support education, training and capacity building at all levels.</li> <li>• Enhance regional scientific and technical cooperation.</li> <li>• Develop targeted soil management communication material for farmers, the agricultural industry, researchers and the general public.</li> <li>• Support improved collaboration between Aust/NZ universities and Pacific Island nations and universities.</li> </ul>	<ul style="list-style-type: none"> <li>• SPC – Lead</li> <li>• FAO/GSP – Co-Lead</li> <li>• CSIRO</li> <li>• MWLR</li> <li>• Melanesia Rep</li> <li>• Micronesia Rep</li> <li>• Polynesia Rep</li> </ul>