



Communiqué

Identifying and progressing opportunities in soil information research and management across the Pacific – a planning workshop

12 Dec, Queenstown, NZ

Preamble:

We, scientists and practitioners with an interest in soil information, from the Pacific Community, New Zealand and Australia met in Queenstown during the National Soil Conference (of Australia and New Zealand) to progress joint initiatives in soil information. We are developing new approaches to soil information and its application to food production, land management and climate resilience. With the backdrop of shared involvement in GlobalSoilMap and with the establishment of the Pacific Soil Partnership, we identified opportunities to connect and enhance these activities and to encourage new joint research and development between the parties.

While this was not a formal meeting of the Pacific Soil Partnership, the Nadi and Suva Communiqués should be seen as context for the discussion and for the agreed priorities. The communiqué from the meeting will be presented to the Pacific Soil Partnership and to the Global Soil Partnership at appropriate forums. These priorities as agreed at the meeting are:

1. Information Access:

The meeting recognised that there are significant barriers to access and use of soil data that limit the effectiveness of existing soil information systems and that need to be addressed as the Pacific Soil Portal is developed.

- Partners in the Pacific Soil Portal development should identify ways to ensure open access to publicly funded data.
- For other data and where that is not possible with public data, systems should be developed to make data discoverable and accessible where IP and other security concerns can be managed.

2. Capacity development/Building

The meeting discussed a number of current and prospective soil information activities that have the potential to build new opportunities across region and the Pacific Soils Partnership. In particular, the meeting recognised the need for capacity building across the region and the potential to facilitate that within these projects.

- To take advantage of these opportunities we will:
 - Encourage collegiate fellowship across the Pacific and support of training and development – through the New Zealand Soil Science Society and Soil Science Australia in the first instance and through the US and French societies as they become involved in regional projects.
 - Pursue Postgraduate study opportunities through the CSIRO Digital Agriculture initiative.

- Identify opportunities for training in extension and sustainable soil management across the full spectrum of post school education as part of the developing soil health projects.

3. Soil Information Systems

The meeting recognised that progress in data systems, interoperability, access and management is crucial to transformation in the effective use of soil information in the region.

- Global standards in soil data and data exchanges need to be established and adopted. The meeting suggests the establishment of a Pacific Soil Data Standards Working Group to manage standards across the region and to drive international change.
- Ensuring institutional commitments and arrangements for hosting and management and for resolving stakeholder concerns is an essential and number one priority in the development of the Pacific Soil Portal
- Effective use of cloud services and associated technologies need to be ensured and managed to ensure the success of the Pacific Soil Portal and to facilitate information management by capacity poor regions

4. Fine Scale Soil Functional Grid

Consistent with the Pacific Soil Partnership's Nadi Communiqué, the meeting reiterated that agreement that a fine scale soil functional grid, similar to that proposed in GSP Pillar 4 Implementation Plan, is a priority information resource for this community.

- The Pacific Soil Portal Project is a fundamental first step and is welcome; it will have immediate benefits and the meeting encourages all participating countries to support the development of the Portal.
- Within the activities discussed during the meeting, there is combined capacity to pursue the acquisition and construction of the fine scale covariates necessary for the Grid. The derivation of these will be a capacity building opportunity within the region.
- Hosting of the Pacific Soil Portal and the subsequent Grid is a priority issue that needs to be resolved over the next year. The meeting recommended that a submission should be made from the Pacific Soil Partnership to the next Ministerial meeting of Agriculture and Forestry Services.

5. Indigenous Knowledges/Approaches:

The meeting recognised that indigenous knowledge and practices are integral to sustainable soil management in the Pacific.

- Within the current and developing projects, the meeting agreed to recognise and incorporate relevant approaches and principles eg.
 - The PIRAS [Pacific Indigenous Rural Advisory Service] regional extension strategy.
 - Vision MATAURANGA.
 - CMEGP [Crown Mauri Economic Growth Partnership] and to increase inclusion in PSP meetings (across communities and regions) and in the use of languages where practicable.

6. Analytical capability

The meeting reiterated the finding in the Nadi Communiqué that the inadequate provision of soil analytical services is a major constraint to sustainable soil management in the Pacific.

- As part of the project development, project leaders will investigate the feasibility of deploying rapid and inexpensive spectroscopic and related sensing techniques across the region modelling on the low cost services developed in East Africa as part of AFSIS.
- These services will be connected to identified Agricultural Chemistry laboratories to provide underpinning analytics.
- The meeting encouraged analytical services in the region to engage with ASPAC quality assurance services.

7. Collaboration and joint learning

The meeting recognised that with the unprecedented confluence of soil activities, information and projects, new collaboration and joint learning experiences are valuable and accessible with appropriate planning.

- Project leaders from CSIRO, Landcare Research and the Pacific Community will devise a program [calendar] of overlapping exchanges, workshops and training where project funding and direction allows – building on the tradition of collaboration established in ACLEP, previous Ministerial Council arrangements and ACIAR projects.

8. Global Soil Partnership activities

While this was not a formal Pacific Soil Partnership meeting, the opportunity was taken to progress discussion on two key areas of Global Soil Partnership business relevant to these projects and to the Pacific Soil Partnership.

- SOC 2017 Plan
 - The meeting agreed that local management and delivery through the region is the preferred response of the PSP to the request from GSP for the global soil carbon grid.
 - While we recognise that Australia and New Zealand have the capacity to supply a version of their national Soil Carbon Stock mapping to specifications, similar national mapping is not available in the region.
 - To develop a Pacific map agreement needs to be sought at Ministerial level.
 - In the March meeting of GSP, the meeting requests that the Pacific Soil Partnership make a case for funding support for regional mapping and reinforce the preference for local management of the mapping
 - With funding a proposal to map carbon stocks across the Pacific could then be put to the Heads of Agriculture and Forestry Services.
 - The mapping is dependent on agreement and processes around data sharing and access, the development of covariates and a joint approach to mapping including capacity building.
- GSP Pacific Soil Partnership [PSP] Implementation Plan – finalise and publicise.
Despite important discussions and progress in joint projects, a PSP Implementation Plan has yet to be presented to the GSP. The meeting suggested that a draft should be prepared and developed by email with the intention to present to the GSP Plenary in 2017.



Attendees

ACIAR: Robert Edis

Landcare Research NZ: Alison Collins, Pierre Roudier, David Medyckj-Scott, Alistair Ritchie, James Barringer, Linda Lilburne, Malcolm McLeod, Gerard Grealish, Sharn Hainsworth, Carolyn Hedley

CSIRO: Mike Grundy, Neil McKenzie, Ross Searle, Peter Wilson, Liz Stower, Mike Webb, Ben Macdonald, Jeff Baldock

Pacific Community: Maria Elder-Ratutokarua, David Hunter, Nacanielisikin Tuivavalagi