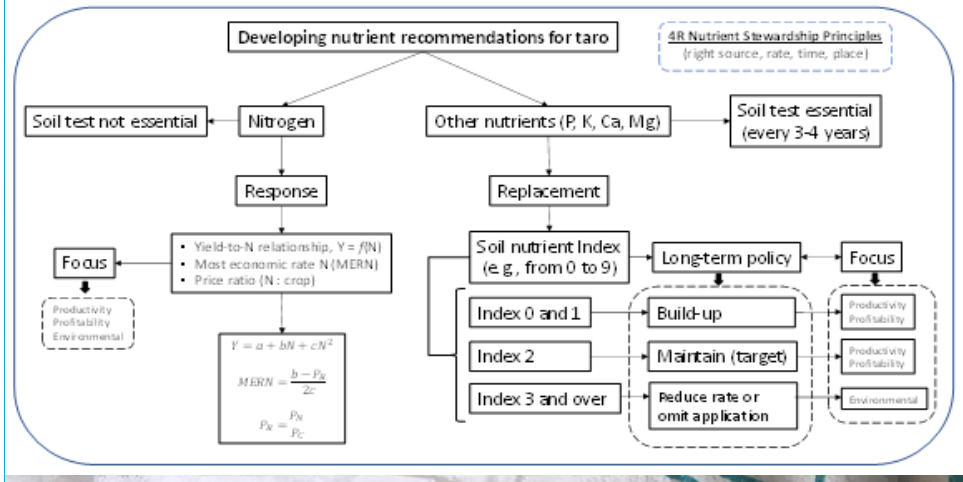
Recommendations

Solutions

- To overcome fractured and contradictory advice that clouds the broad extension system a or a group of trusted advisor(s) needs to be front and centre.
- Staff need both facilitation skills to diagnostic skills
- Non-traditional extension pathways need to be developed
  - Dr Soils, Soil health card
  - Regional relevant
    - 5 different cultures
    - Environmentally different
  - Digital pathways to connect directly with the smart phone population

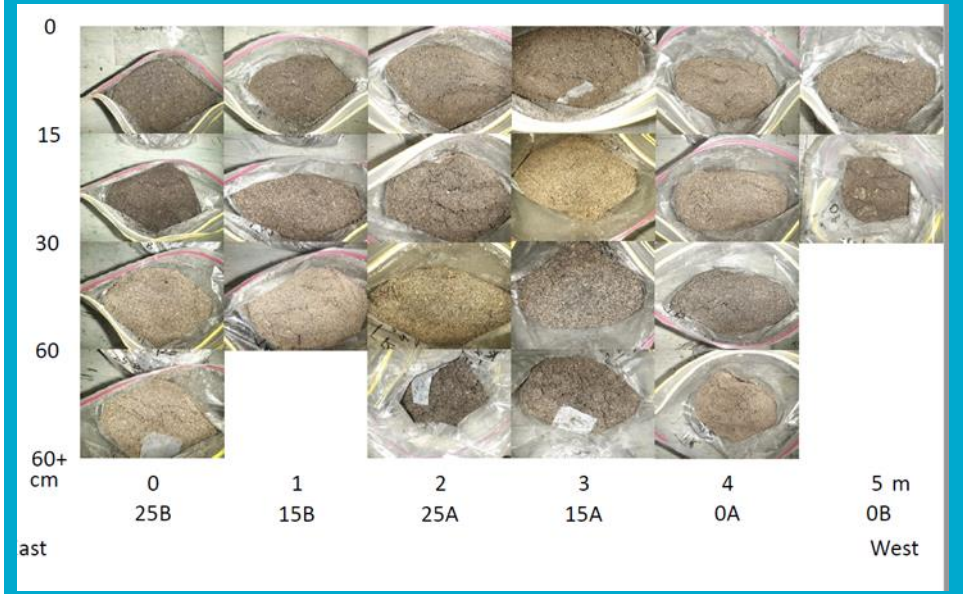
Farming system nutrient and carbon management

- Improve macro and micro nutrient budgeting
- Link to crop and pasture quality
- Extension frameworks
- Not just taro but for the farming system



Farming system nutrient and carbon management

- Organic matter levels have declined, strategies to reverse need to be developed
- Options for the development of voluntary carbon schemes



GxExM and farm management

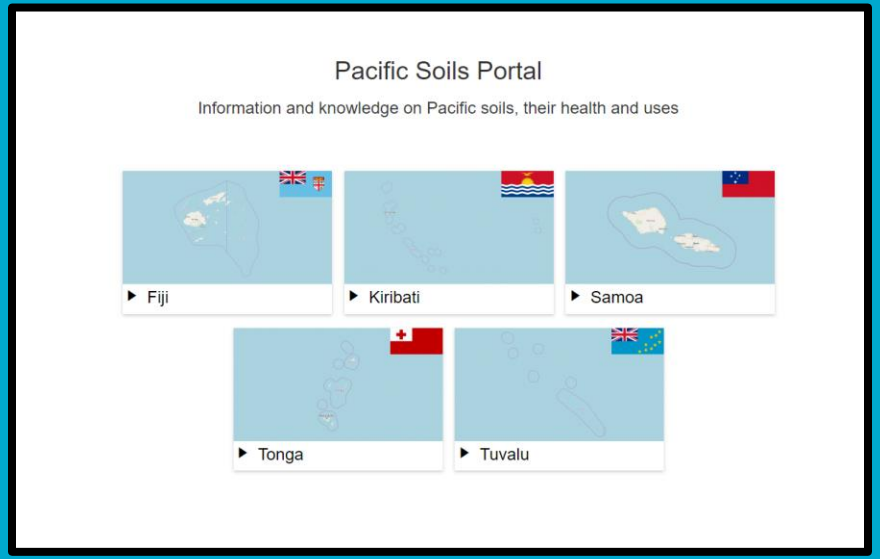
- Investment into GxExM research
- Weed management
- Tillage management
- Crop rotations
- Placement

Rapid Sensing

- MIR spectroscopy has been successfully used to augment soil laboratory analysis in Fiji
- Next generation NIR and pXRF hand-held sensing should be explored
- Rapid sensing need to be considered within a broader Pacific Island Countries and Territories laboratory impact and business plan

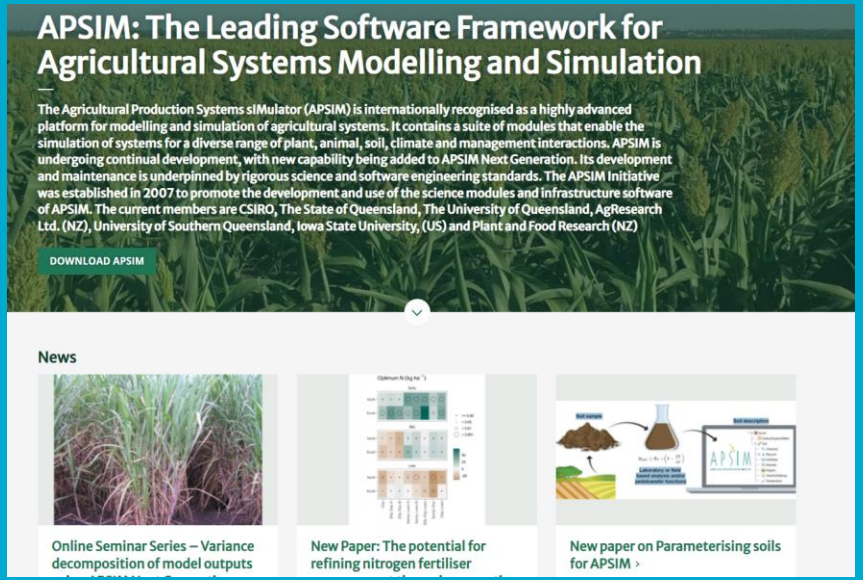
Pacific Soil Portal

- Should be transferred to SPC to improve impact throughout the PICTs, connections to Digital Earth Pacific and the Datahub
- Should be used to develop new soil mapping and land capability mapping in subregions for land use planning.
- Link to the soil health card initiatives in Fiji and Tonga.
- USP teaching



Farming system modelling

- The taro module in APSIM was developed by Crimp et al. (2017) using data collected in Fiji, Vanuatu, and Tonga
- Significant savings in field-based experimental work could potentially be realised if this was, in part, replaced by virtual trials, leaving field trials for verification of modelling outcomes.



Thank you

We would like to acknowledge ACIAR and the Australia Federal Government in enabling the pathway to impact.

To my colleagues thank you for all your effort over the last 4 years.