Managing Invasive Species for Climate Change Adaptation in the Pacific (MISCCAP): a PRISMSS-NZ Collaboration for Pacific resilience.

A new project is underway to allow Pacific Island Countries and Territories (PICTs) to take stronger action against invasive species, and thereby build resilience to climate change. Invasive species make ecosystems and communities more vulnerable to natural disasters and the impacts of climate change. They increase erosion, reduce food and fish production, and pose critical threats to ecosystem services and human health. Invasive species will become more widespread as disturbances, carbon dioxide levels in the atmosphere, and temperatures increase under climate change.

New Zealand’s Ministry of Foreign Affairs and Trade (MFAT) is partnering with the Secretariat of the Pacific Regional Environment Programme (SPREP), Manaaki Whenua - Landcare Research (MWLR), and the New Zealand Department of Conservation (NZDOC) in this endeavour. “MFAT funding ($9.9m over 4 years) is providing key support for the newly established Pacific Regional Invasive Species Management Support Service (PRISMSS), which is hosted by SPREP, and to which both MWLR and NZDOC are partners contributing their expertise,” said Joe McCarter of MFAT. Other agencies such as Island Conservation, Birdlife International Pacific, Pacific Biosecurity, and the Pacific Community are also involved with PRISMSS.

While PRISMSS remains a service available to the whole Pacific, this new project will focus in the first instance on the Cook Islands, Niue, Republic of the Marshall Islands, Tonga, Tuvalu, and Vanuatu. The involvement of other PICTs will also be explored. This project is designed to be complementary to other invasive species projects underway funded by other donors such as the Global Environment Facility (GEF 6). Specialist support, technical assistance, advice and training on invasive species and biosecurity management will be provided to participating countries, enabling priority management actions against invasive species to be agreed and implemented by them. Initiatives to increase the awareness of Pacific communities about invasive species will also be undertaken.

SPREP is the region’s key inter-governmental organisation for the environment and sustainable development, and is owned and governed by twenty-one PICTs and five “metropolitan” members including New Zealand. The SPREP Invasive Species Team’s primary objective is to “significantly reduce the socio-economic and ecological impact of invasive species on land and water ecosystems and control or eradicate priority species” in the Pacific region. “A major national and regional gap is the implementation of management action of invasive species,” said David Moverley of SPREP. PRISMSS is the mechanism designed to address this gap. This project will help assist SPREP to:

- Establish the PRISMSS and systems required to scale up invasive species management.
- Implement key actions to support PRISMSS programmes.
- Strengthen the enabling environment and mainstream invasive species management across the Pacific.

This project will extend MWLR’s current Natural Enemies – Natural Solutions (NENS) programme allowing more invasive weeds to be tackled. “Weeds are a particularly problematic subset within invasive species because they threaten all terrestrial and freshwater ecosystems in the Pacific, and because of the sheer number of them to manage,” said Lynley Hayes, who is leading the NENS programme. Weeds thrive on disturbance and often the first species to recover after storms and cyclones, which also spread them to
previously uninvaded areas. The only feasible method for managing widespread weeds is through the use of their natural enemies, which has a long history (>100 years) of being safely and successfully used in the Pacific. However, this has in recent decades become a forgotten or underutilised tool in most PICTs. This new project will allow this valuable management approach to once again be more widely utilised and embraced through four key strands:

- Training people in NENS and developing the infrastructure and set ups to conduct the work.
- Developing better information about NENS opportunities are available to PICTs and determining the top priorities.
- Supporting collaboration through the sharing of lessons, stories, expertise, and natural enemies already present in the Pacific.
- Creating new solutions through researching natural enemy options for serious emerging weed threats in the Pacific which have not been studied to date.

“NZDOC’s involvement reflects, and will build on, its long commitment to sharing its internationally recognised expertise in predator control, invasive species management and threatened species relocation and restoration with Pacific Island partners,” said Jonathan Rudge of NZDOC. Specifically, NZDOC will assist by:

- Providing specialist support, technical assistance, advice and training on invasive species management to PICTs.
- Supporting the implementation of priority invasive species management actions and regional work programmes, especially Predator Free Pacific (PFP) and Resilient Ecosystems-Resilient Communities (RERC).
- Providing direct operational support for priority in-country projects based on existing Standard Operating Procedures and protocols.
- Assisting with awareness raising, and research activities.

It is expected that the new partnerships and opportunities, created by this project to strengthen action against invasive species in the Pacific, will play a meaningful role in improving the quality of life for many people whose wellbeing and security is tied closely to the health of their ecosystems.