

A Pacific Island View on Research Partnerships with CABI.

Re-engaging with CABI



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- Papua New Guinea (PNG) is the largest Pacific Island country in the Pacific outside Australia in both landmass (643,000 sq km) and population (est. 8.9m).
 - Least Developing Country status.
 - oldest known evidence of agriculture in the world was 9000 years ago .
 - 3rd richest level of biological diversity and
 - 25% of the world's languages.
- PNG's large research organisation is the National Agriculture Research Institute (NARI) established in 1996.
- Amongst the developing Pacific Island countries, only PNG and the Solomon Islands are members of CABI;
- Collaborations have been ad-hoc and based on specific research projects or the odd referral of mycological and insect samples for taxonomic ID offered by CABI.
- Apart from NARI, PNG organisations which have had project-based partnerships with CABI in the past include: Coffee Industry Cooperation, Department of Agriculture & Livestock, Forest Research Institute, and Cocoa Coconut Institute (now abolished).
- No long-term or annual research partnerships with PNG.
 - Low visibility resulting in few PNG or Pacific islanders aware of CABI..
 - Perception that CABI is a UK based organisation with its focus on Africa, India and other regions only.
- PNG institutions cannot afford involving CABI scientists. The PNG Kina vs UK pound not in our favour

PNG NARI's Strategic Results Framework 2022-2031



Four (4) Key Result Areas:

1. Farming communities in PNG benefiting from improved agricultural crops and livestock and new products developed through research on value chains;
2. More communities and farm ecosystems resilient to abiotic and biotic threats including climate change, invasive species including agricultural pests & diseases, unsustainable farming and natural resource management practises;
3. Wide range of nutritious food types made available to farmers and consumers for a healthier PNG; and,
4. Better institutional management, international and national linkages for excellence in agricultural and scientific research for innovation.
 1. Maintain historical and current partnerships with international agencies (SPC, CTA, APAARI, ITPGR, IRRI, etc), donors (ACIAR, AusAid, EU, etc); and,
 2. Partnership with CABI on addressing food security and natural resources management through scientific solutions.

Invasive Species: Biological Control – national priority spp



- **Fall Army Worm (*Spodoptera frugiperda*)**. spread rapidly since first detection in 2019.
- Cocoa pod borer (*Conopomorpha cramerella*). Widespread. Cultural control.
- **Golden Apple Snail (*Pomacea canaliculata*)** – introduced since early 1990s. Increasingly serious pest for wetland areas including paddy rice.
- **Spiked pepper (*Piper aduncum*)** – rapid invasion of disturbed forests, fallow areas, coffee plantations, cattle ranches, etc late 1990s.
- **African tulip (*Spathodea campanulata*)** – invasive. New Biocontrol agents
- **4 major grass weeds:** Itch Grass (*Rottboelia conchinchinensis*), Johnson's grass (*Sorghum halepense*), Mollases (*Melinis minutiflora*) and Elephant Grass (*Pennisetum purpureum*).
- **African Swine Fever** . Detection in 2020; biosecurity containment operation is currently underway in 3 highlands provinces.