



Supporting an international initiative to maintain the Coconut Genetic Resources Network



Overview

Coconuts are grown in more than 90 tropical countries, across more than 12 million hectares, and are crucial to the sustainability of millions of smallholder households. The worldwide demand for coconut products, including coconut water and coconut oil, is increasing but supply is being impacted by ageing trees with declining productivity. An estimated 50% urgently need to be replanted.

It is critical to maintain the broad genetic diversity of coconuts to ensure the sustainability of coconut production. This provides the industry with access to new and better genetic material in the form of early-bearing and higher yield varieties, and also helps to overcome critical biotic and abiotic threats.

Five international coconut gene banks have been established in Brazil, Côte d'Ivoire, India, Indonesia and Papua New Guinea, along with 19 national collections, but they are poorly conserved and suffering from genetic erosion. There is inadequate germplasm conservation and evaluation, and inefficient germplasm utilisation.

The Coconut Genetic Resources Network (COGENT) was established with the mandate to coordinate efforts to conserve and utilise coconut genetic resources, and 39 coconut-growing countries as members. However, international support for COGENT is flagging and the network needs to be revitalised.

KEY FACTS

ACIAR Project No. GP/2018/193

Duration: January 2020 to June 2022 (2.5 years)

Target areas: Global coconut-growing countries

Budget: A\$475,624

Project Leader

Dr. Jelfina Alouw, International Coconut Community

Key partners

- Bioversity International
- Pacific Community

ACIAR Research Program Manager

Irene Kernot

Objective

The project's goal is to provide interim funding to support transitional arrangements for passing on the hosting of the COGENT program from Bioversity International to the International Coconut Community and evolve COGENT into a sustainable entity.

The objectives are to:

- Achieve an orderly transfer of the COGENT Secretariat from Bioversity to International Coconut Community.
- Establish the foundation and provide technical support for the initial implementation of the Global Strategy for Conservation and Use of Coconut Genetic Resources.
- Conduct individual appraisals of the five international gene banks and provide initial support for the long-term conservation and evaluation of the conserved germplasm and integration of the collected data into the COGENT database.
- Foster income-generating components and international research collaborations that will help sustain the COGENT program and the national and international coconut collections in the longer term.

Expected scientific results

- Production of a status report on coconut genetic resources held in trust in the five multi-site international gene banks and in the national collections in 19 coconut growing countries.
- Recommendations for restoring a functional international multilateral system to effectively share coconut germplasm for the benefit of breeding programs, as a strategy to improve coconut productivity.

Expected impact/outcomes

- A functioning and sustainable COGENT program coordinated by a financially accountable International Coconut Community, with a full-time coordinator based in Indonesia and supported by the Secretariat of the Pacific Community and support staff.
- An implementation work plan and budget for the Global Strategy for Conservation and Use of Coconut Genetic Resources.
- Development of income-generating components and international research collaborations that will help the long-term sustainability of the COGENT program and the national and international collections.
- More effective conservation and use of coconut genetic resources will contribute to building coconut stakeholders' capacity and resilience across the value-chain.
- Improved coconut-based livelihoods for coconut growing households and communities.
- Contribute to the long-term rejuvenation of the coconut industry in the Pacific, and globally.

