FAST FACTS

United Nations Development Programme



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Renewable Energy in Fiji

Fiji has a wide range of renewable energy resources that have been tested, sustained and planned for by the Government of Fiji together with development partners. These include biomass, biofuel, biogas, ethanol, gasifiers, geothermal, hydro, solar, ocean and wind. The most technically and economically feasible renewable energy resources that can be further developed are biomass (and biofuels), hydro and solar.

Using its core resources together with funding from development partners, the Government of Fiji has progressed with renewable energy development through implementation of its Rural Electrification Programme to encourage wider use of solar photo-voltaic systems as well as the roll-out of its Bio-fuels Programme with seed funding from the United Nations Development Programme (UNDP).

Fiji Renewable Energy Power Project

The Fiji Renewable Energy Power Project (FREPP) is funded by the Global Environment Facility (GEF) and implemented by UNDP in partnership with the Fiji Department of Energy. It focuses on the removal of major barriers (policy,



A mill worker preparing the coconuts for drying in Nacamaki village. Credit: Sheryl Ho/UNDP.

MATTERS OF FACT

- Nacamaki village in Koro is host to the Koro Island Biofuel Mill, first biofuel project site in Fiji which opened on 10 March 2010.
- The Koro Island Biofuel Mill is one of nine biofuel project sites in Fiji. It is funded by Government from the Biofuels Programme, worth US\$1.55 million and is co-financing FREPP.
- **GEF/UNDP** allocated resources: US\$975,000.
- **Project duration:** 2012 2015.
- **Partner:** Fiji Department of Energy, Ministry of Public Utilities (Water & Energy).
- **Donors:** UNDP/GEF and Government of Fiji.



The biofuel being mixed and stored in drums in the Koro Biodiesel Mill ready for sale. Credit: Sheryl Ho/UNDP

regulatory, market, finance and technical) to the widespread and cost-effective use of grid-based renewable energy supply via commercially viable renewable energy technologies. The Project consists of four main components:

- 1. Energy policy and regulatory frameworks;
- 2. Renewable energy resource assessments and renewable energy-based project assessments;
- 3. Renewable energy-based power generation demonstrations; and
- 4. Renewable energy institutional strengthening.

FREPP is expected to facilitate investments in renewable energy-based power generation in Fiji, which will support socio-economic development, utilize available renewable energy resources and contribute to reducing greenhouse gas emissions.

As part of the roll-out of Government's bio-fuel programme, the Koro Island Biofuel Mill was commissioned in 2010 followed by Cicia and Rotuma in 2011. Gau, Vanuabalavu, Rabi and Lakeba have been commissioned and awaiting start-up capital, and project sites in Matuku and Moala are currently under reconstruction.

The mills produce enough fuel to meet the islands demands. In Koro, the Mill operates five days a week for eight hours (240 days per year), produces 240,000 litres of biofuel per annum and retailed at FJ\$2.45 per litre. The biofuel produced is sufficient to light up the villages and power appliances all year-long for three to five hours a day. During the first year of production, the biofuel was also used as fuel for transport by all 14 villages in Koro.



For many women in Nacamaki village, the production and sale of virgin coconut oil is a major source of income. Credit: Sheryl Ho/UNDP.

Gender Assessment in Nacamaki Village

A team from UNDP and the Fiji Department of Energy conducted a Gender Assessment for the Government-funded FREPP demonstration project in Nacamaki village in December 2013, host of the Koro Island Biofuel Mill. The Assessment was conducted to determine what extent gender needs are addressed through the FREPP demonstration project. The assessment documented and analyzed gender differences since the establishment of the Mill. The assessment methodology used time-use surveys, single sex focus group discussions and key informant interviews. Initial findings from



Young men in Nacamaki village participating in the time use survey during the Gender Assessment. Credit: Sheryl Ho/UNDP.

the single sex focus group discussions and key informant interviews show:

- A consistent and cheaper fuel supply for power/electricity and to some extent fuel for transport.
- Employment opportunities at the biofuel mill have benefitted primarily men. Access to electricity at night has allowed more time for women to weave traditional mats and make handicrafts for sale.
- An increase in household income since the Mill opened in 2010. This has enabled: (i) women to purchase household items that makes daily chores (such as washing and cooking) quicker to complete; (ii) families able to invest in education materials for children; and (iii) afford luxury electrical items (such as TV, radio, mobile phones) for household use.
- The intensive process of producing coconut body oil by women is significantly reduced.
- Men and women can access the internet in particular social media through mobile phones.
- Children and women can walk around safely at night, and have a better quality of study time due to better lighting.
- The profile of the village has increased through regular Government and NGOs visits and exposure to research and assessments.

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