



# GENDER AND ENERGY IN THE PACIFIC



## BACKGROUND

Energy services underpin almost all aspects of human activity. They provide for basic needs such as cooking, heating, and lighting, fuel a range of industrial activities, and sustain today's transportation, communication systems and even leisure activities. The energy sector therefore plays a prominent role in the national policies of all Pacific Island countries and territories (PICTs). In fact 10% of PICTs' gross domestic product (GDP) goes towards importing petroleum products, the main source of energy for urban and rural areas<sup>1</sup>.

For PICTs, expanding and modernising their energy sector is vital since the limited availability of energy constrains human and economic development. Insufficient and unreliable power supplies can limit industrial production, while the lack of modern energy services can prevent the realisation of basic human needs, such as education, health, and communication. Furthermore, access to energy is not only a catalyst for development but it can also be a springboard for promoting gender equality and women's empowerment. Without access to modern energy services, women and girls spend most of their day performing basic subsistence responsibilities including the time-consuming and physically draining tasks of collecting biomass fuels. However, with access to basic energy services, women are more likely to be able to earn a living, stay healthy and have time for education and fulfilment. Access to energy can therefore help realise gender equality and the achievement of future sustainable development goals.

This brief is part of UN Women Fiji Multi-Country Office's series on the links between climate change, gender, and a number of development issues including women's economic empowerment, health, food security, and energy. UN Women would like to acknowledge contributions from Development Alternatives with Women for a New Era and Secretariat of the Pacific Community in drafting these publications.

## KEY MESSAGES

- Women are the main providers of household energy yet they are under-represented in the energy sector and are rarely considered as key stakeholders of energy initiatives.
- Women are principal energy stakeholders, and should be recognised as key players, not only as suppliers and consumers of energy, but also as part of the solutions to sustainable energy, and should be engaged directly in policy making and project design.
- Taking both women's and men's needs into account in energy interventions, as well as strengthening women's leadership and participation in energy solutions is critical for sustainable development.
- Expansion of renewable energy should look beyond the provision of energy for core sectors, such as infrastructure and health to include investment in communication and improving access for household energy.
- More Pacific specific research and information on the nexus of gender, energy, and development is needed to support the formulation of policies and plans for future sustainable development.

10%  
to  
15%

The percentage of people in Papua New Guinea who have access to electricity<sup>8</sup>.

70%

The percentage of households in the Pacific that do not have access to electricity<sup>9</sup>.

85%

The percentage of Pacific households that do not have access to clean energy for cooking<sup>10</sup>.

## DIFFERENTIAL IMPACTS

People living in remote and rural areas, people living in poverty, and those with fewer resources are among those least likely to have access to safe and affordable energy sources. Most PICTs are remote, isolated and made up of scattered islands with small populations. This makes providing electricity to everyone, especially those outside larger urban centres, both difficult and expensive<sup>2</sup>. Unlike other regions, electricity and transport costs in the Pacific are high in relation to the number of people who need access<sup>3</sup>. While some PICTs have 100% access to electricity, energy poverty is still prevalent in areas such as Melanesia, which is home to 84% of Pacific population. Papua New Guinea (PNG), Solomon Islands, and Vanuatu<sup>4</sup> have the lowest rates of access, with only 10-15% of PNG having access to electricity<sup>5</sup>. These low levels of access inhibit the rate of development.

As countries become richer, energy consumption per capita rises correspondingly in order to satisfy increasing demand from both the industrialisation process and rising living standards. Therefore, there is a clear correlation between per-capita GDP and per-capita energy consumption, as well as between the Human Development Index and per-capita energy consumption across countries. For example, both Niue and Palau have achieved 100% access to electricity, and are the closest PICTs to achieving the MDGs, with Niue the first PICT to have achieved all seven.

The quantity and quality of available energy determines the efficiency and effectiveness of activities, as well as quality of life for users, which means, men and women should be equal stakeholders in benefiting from energy use. Unfortunately, access to energy is not gender neutral. The same energy service may impact men and women differently, with different social or economic outcomes. It is not only the gendered division of labour which creates different energy needs, but also the different perceptions of both the benefits of energy, and the capacities to access those benefits, which often have a gender bias. For example, when given a choice, men may choose to light outside the house for security reasons, while women to light the kitchen<sup>6</sup>.

While both poor women and men suffer from energy poverty in the Pacific, women are disproportionately affected. The low energy access rates as discussed above, mean that most PICTs use biomass energy (plant-based materials such as wood and animal manure) for cooking, heating and lighting, especially in rural areas. The collection of such material is an activity predominantly done by women. Without modern energy services, women and girls spend much of their time on subsistence tasks including collecting biomass fuels. The reliance on traditional energy sources, is compounded by women having less access to power, resources, and the decision-making process in order to influence how energy is used and distributed.

Energy Form	Women's Needs and Issues <sup>7</sup>		
	Practical Needs	Productive Needs	Strategic Issues
Electricity	<ul style="list-style-type: none"> <li>pumping water supplies – reducing need to haul and carry</li> <li>lighting improves working conditions</li> </ul>	<ul style="list-style-type: none"> <li>increase possibility of activities during evening hours</li> <li>providing refrigeration for food production and sale</li> <li>power for specialised enterprises such as internet cafes</li> </ul>	<ul style="list-style-type: none"> <li>Safer public spaces allowing participation in other activities (e.g. evening classes and women's group meetings)</li> <li>opening horizons through radio, TV, and the internet</li> </ul>
Improved biomass (supply and conversion technology)	<ul style="list-style-type: none"> <li>improved health through better wood stoves</li> <li>less time and effort in gathering and carrying firewood</li> </ul>	<ul style="list-style-type: none"> <li>more time for productive activities</li> <li>lower cost for process heat for income-generating activities</li> </ul>	<ul style="list-style-type: none"> <li>control of natural forests in community forestry management frameworks</li> </ul>

# THE GENDER AND ENERGY NEXUS IN THE PACIFIC REGION

**Energy and Gender Perceptions:** While the burning of biomass is the main source of energy in rural areas, on a global level energy is primarily thought of in terms of electricity and fossil fuels. Biomass is often seen as a free commodity and is considered women's work, with no economic value attached to the collection of the fuel. Therefore, women's and girls' contribution to energy in the home is often unrecognised and unquantified. Electricity and fossil fuels on the other hand have a quantifiable value and are considered part of the male domain. As a result of these social expectations, the differential energy needs of women and men are often overlooked.

**Impact of Biomass Fuels on Gender:** In general, Pacific urban homes are supplied by national power grids. In rural areas, electricity, where available, is provided off the grid by diesel or petrol-run generators that only operate for a few hours per day. Efficient fuel sources, such as liquefied petroleum gas (LPG), are often unavailable due to high costs and logistical difficulties of transportation<sup>11</sup>. Rural communities and poorer urban families, therefore, still rely on biomass for cooking, lighting, and heating<sup>12</sup>.

In most PICTs, women and girls are responsible for collecting traditional fuels. Women can spend up to three hours a day collecting fuel<sup>13</sup>, with an additional six hours spent collecting water for daily needs and preparing food<sup>14</sup>. Spending time on these laborious tasks reduces the time women have available for income generation and education, thereby limiting opportunities to reach their full potential and those of their daughters<sup>15</sup>. For example, as workloads get heavier, especially during disasters, families may withdraw their daughters from school to help with daily household chores, which threatens the girls' potential to finish primary school and the overall achievement of universal primary education. Moreover these conditions create further barriers to women's ability to voice their energy concerns and claim rights; thereby reinforcing women's exclusion and exacerbating their problems.

Energy poverty not only erodes women's productivity, but also has an impact on health. Health risks posed to women in their efforts to secure household energy is high. For example, in less secure environments, women and children are at risk of injury and violence during fuel gathering<sup>16</sup>. Additionally, WHO estimates that globally four million people die prematurely every year due to smoke inhalation as a result of wood burning and insufficient stove combustion<sup>17</sup>.

**Energy & Women's Economic Empowerment:** Women often face difficulties in benefiting from energy services due to inequitable access to resources. Lack of control over land and property, as well as lack of access to income and credit mean women often miss out on economic activities that come with improved access to energy.

Improved access to electricity and appliances, such as refrigerators, can relieve some of the work burden and facilitate women's economic empowerment<sup>18</sup>. Additionally, street lighting, for example, increases the hours in which street vendors can work<sup>19</sup>, which is particularly relevant in the Pacific as the majority of market vendors are female<sup>20</sup>. Lighting at night also increases women's levels of safety when it comes to sexual and gender-based violence and assault<sup>21</sup>. This is particularly pertinent in PICTs where levels of violence against women are very high, a situation that escalates further during and after disasters when basic services such as electricity and lighting are disrupted.

**Women as Agents of Change:** The burden of providing energy for household consumption means women have less time to engage in discussions around distribution and consumption of energy. The exclusion of women from energy plans and decision-making processes leads to gender blind policies. Yet women can be powerful actors in the transition to sustainable energy and their involvement in the design, distribution, management and consumption of sustainable energy solutions. In Fiji, for example, illiterate rural women are working to install and maintain solar lighting systems in their villages.



# CONCLUSIONS & RECOMMENDATIONS FOR SUSTAINABLE DEVELOPMENT GOALS

It is essential to recognise that access to sustainable energy services is central in addressing many of the Pacific's development challenges. However, long-term social-economic development will be neither effective nor sustainable unless measures to expand sustainable energy security are accompanied by favourable policies that promote gender equality and women's empowerment.

Recommendations for sustainable development goals include:

- In the efforts to achieve commitments made under the Barbados Declaration, expansion of renewable energy should look beyond the provision of energy for core sectors such as infrastructure, health and water to include investment in improving access for domestic energy.
- Taking women's needs into account in energy interventions and strengthening women's leadership and participation in sustainable energy solutions is critical in the transition to sustainable energy as part of sustainable development.
- National energy and development policies should recognise women not only as suppliers and consumers of energy, but also as part of the sustainable energy solutions. It is therefore critical to engage them directly in policy making and project design.
- Investment in research is needed to understand the nexus of gender and energy in the Pacific context, which would support the formulation of policies and plans for energy access in the region and to ensure equal benefits for all member of the society.
- Expansion of sustainable energy for domestic use alone will not achieve gender equality and sustainable development. More investment in addressing the underlying causes of gender inequality in the Pacific is needed to enable women to take a more active role in energy decision-making processes and to take advantage of access to energy for economic and social progress.
- National energy plans and policies should focus on daily household energy needs such as lighting and cooking, which are usually the responsibility of women, as well as transportation and large-scale production of energy to increase economic development.



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