# Energy for rural communities



#### **Context**

One-third of the world's population lacks access to electricity to cover even the most basic needs. In Rwanda, poverty levels are very high, with more than 60 per cent of the population living below the poverty line. As in many other developing countries, Rwanda's efforts to reduce poverty and achieve greater economic growth are thwarted by the absence of electricity. And, although the country has the potential to produce energy using hydro, geothermal, solar and methane gas resources, many barriers need to be overcome, such as weak technical capabilities, lack of financial institutions in rural areas and weak private sector entrepreneurship.

## **Strategy**

In response to the request of the Government of Rwanda for quick and coordinated interventions, UNIDO and the Ministry of Infrastructure (MININFRA) implemented a project to promote renewable-based energy development for productive uses, by providing access to affordable modern energy in rural areas through the establishment of mini-hydropower stations.

On the basis of their development potential, four pilot sites, namely Nyamyotsi I, Nyamyotsi II, Mutobo and Gatobwe in the Districts of Nyabihu, Musanze and Nyarugura, were selected as sites for the minihydropower stations. Throughout the implementation process, which covered the construction, operation, maintenance and management of the facilities, UNIDO fostered the development of technical capacities and skills. At the same time, the project reviewed existing policies and proposed new solutions.

### **Current results**

- 4 mini-hydropower pilot plants established
- 2,000 households, small businesses, cottage industries, schools and health centres served with locally produced clean energy
- Local technical capacities created

# Impact/Outlook

UNIDO's initiative in Rwanda has led to a breakthrough in mini-hydropower development. Based on the initial results of the project, the Government of Rwanda has decided to establish another 17 mini- and small-hydro sites, of which some are already completed or in the process of being completed. The mini-hydropower stations are an affordable approach to rural energy development. If replicated throughout the country, the additional stations would greatly contribute to employment creation and poverty reduction.

For more information on this project: F.Ali.Mohamed@unido.org For more information about UNIDO: communications@unido.org

### At a glance:

Goal: Energy access for rural communitiesMDG: 1. Eradicate Extreme Poverty and Hunger

7. Ensure Environmental Sustainability

Thematic area:

Environment and Energy

Donors: Government of Rwanda, UNIDO

Partner: Rwanda Ministry of Infrastructure (MININFRA)

 Budget:
 USD 1,400,000

 Status:
 ongoing

 Duration:
 2006 – 2011

