



## Rural energy development in Rwanda



Within its efforts to combat poverty, create employment and foster industrial development, UNIDO is undertaking several rural energy development activities in Rwanda. The country was selected as a pilot to demonstrate the approach, adapt it through feedback from its implementation, and replicate it throughout the country, as well as in the region. The efforts of UNIDO and the Government of Rwanda towards providing access to affordable modern energy in rural areas will also contribute to poverty alleviation and economic growth.

Although the country has a potential of producing energy using hydro, geothermal, solar and methane gas resources, many barriers need to be overcome, such as weak technical capabilities, low income in rural areas, weak private sector entrepreneurship and lack of financial institutions in rural areas.

UNIDO and the Ministry of Infrastructure of Rwanda launched in January 2006 a learning-by-doing project. The results so far are one operational mini-hydro site, two more in an advanced stage of construction, and several sites identified for future construction. During this process, UNIDO is not only demonstrating the

approach to provide access to affordable, locally available modern energy, but also building technical capacities on the construction, operation, management and maintenance of mini-hydro sites.

The Nyamyotsi mini-hydro power facility in the District of Nyabihu, Western province, was inaugurated on 9 February 2007. It produces 100kW of electricity for the local population of about 4000 inhabitants, serving 250 households, local authorities offices, two schools, a clinic, commercial shops and others.

By the end of 2007, two more mini-hydro sites of 200kW each will be operational at Mutobo and Gatubwe and the construction of a fourth, of 100kW, will start. As for the Nyamyotsi site, locals trained and supervised by UNIDO, using locally available materials, will build them. Local operators trained for this purpose will also do the day-to-day operation and maintenance of the sites.

The project also reviewed existing policies and strategies to promote small hydropower in the country. It carried out an assessment of suitable technologies, and analysed institutional, financial and technical capacities with the objective of developing a renewable-based rural energy development programme for productive uses in Rwanda. Based on the results obtained, the project recommended the most suitable policy guidelines and strategies to strengthen renewable energy market development, encouraging private sector investment and establishing linkages between rural energy development and productive uses to increase employment opportunities for local communities.