





# **Energising Development (EnDev) Bangladesh**

Country	Bangladesh
Project Name	Energising Development (EnDev) Bangladesh
Commissioned	EnDev is funded and directed by the governments of the Netherlands, Germany, Norway, the United Kingdom, Switzerland and Sweden. It operates in 25 countries including Bangladesh.
Project region	All over Bangladesh
Lead executing agency	Ministry of Power, Energy and Mineral Resources (MPEMR) Sustainable and Renewable Energy Development Authority (SREDA)
Duration	2005-2020

# **Background**

Despite rapid urbanisation and economic growth in recent years, the majority of people in Bangladesh still live in rural areas. The rural population relies on biomass for most of their energy needs. Energy consumption in Bangladesh is characterised by unsatisfactory levels of access to reliable electricity and dependence on biomass for cooking. The traditional biomass stoves used by most rural households burn fuel inefficiently and cause indoor air pollution, leading to illnesses and premature deaths. Only eight per cent of the population have access to natural gas. However, the use of liquid petroleum gas (LPG) has seen rapid growth over the last decade, and it is expected to increase further in the near future.

Energising Development (EnDev) Bangladesh supports the provision of efficient and clean cooking, productive use of renewable energy resources as well as the provision of modern energy for lighting and electrical appliances. The programme supports the development of markets for modern energy services, especially in rural areas. Part of the programme is training and capacity development of entrepreneurs, manufacturers and retailers, for example in energy-efficient stoves, processed biomass fuels with higher energy density and diversified solar energy systems.

Funded by:

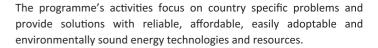












# Our approach

EnDev Bangladesh currently focuses on two main areas: support for clean and improved cooking technologies including processed biomass fuels, and promotion of the productive use of solar energy.

The improved cookstoves (ICS) component supports around 5,000 small and medium-sized local enterprises known as sanitary shops that produce and sell improved cookstoves with a chimney under the brand name 'Bondhu Chula' (friendly stove). EnDev supports capacity development for the management of Bangladesh Bondhu Foundation (BBF), Bangladesh's largest ICS organisation which promotes and disseminates Bondhu Chula all over the country. In addition, EnDev supports BBF for business development, marketing, and training of stove builders and sales staff. The programme also helps promote the production and sale of commercial stoves for small enterprises and social institutions. EnDev also assists BBF to develop gender policies and strategies.

Through financial support of the Netherlands Enterprise Agency (RVO), EnDev supported the establishment of the Household Energy Platform (HEP) programme under the Sustainable and Renewable Energy Development Authority (SREDA) of the Government of Bangladesh and continues to work with HEP to enhance coordination among stakeholders in the clean cooking sector.

EnDev provided support to HEP for development of standards for improved cookstoves sector in Bangladesh. Through collaboration with HEP. EnDev implemented a project through Practical Action (PA) Bangladesh for piloting of improved fuels such as biomass briquettes. Based on the experience, EnDev is currently supporting initiatives through PA and SNV to further develop the capacity of small and medium enterprises to produce and market briquettes made from biomass waste as alternative fuels for cooking in matching ICS.

Coordinated and Implemented by:

Political partner:











Bondhu Chula saves fuel and improves quality of life

Concerning improved access to electricity, EnDev currently supports an innovation fund project on decentralised, smart prosumer to prosumer grids. This swarm electrification approach stimulates indigenous growth through solar based e-rickshaw charging points in rural areas as a priority productive use. The project aims at building a modified cooperative model for e-rikshaw charging, nurturing village-based economies in solar Peer-to-Peer grids.

Previously, the solar energy component supported dissemination of solar home systems (SHS). Moreover, in cooperation with DFID Bangladesh, the programme implemented dissemination and market development initiatives for PicoPV systems (Solar Lantern), focusing on increasing affordability through a Results Based Financing (RBF) approach for solar lanterns upto 10Wp and 1,200 lumen-hours per day. EnDev has been implementing activities through the Collaborative Labelling and Appliance Standards Programme (CLASP) and provided incentives for energy efficient DC appliances including fans, refrigerators, and pumps for rapid market penetration.

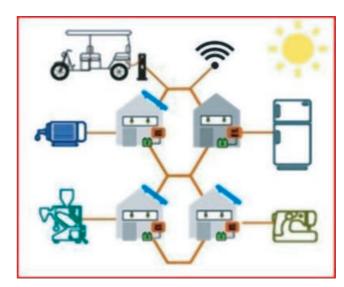
EnDev Bangladesh implemented the Lighting Bangladesh Programme, a joint initiative of GIZ and International Finance Corporation (IFC), to provide access to lighting in off-grid areas by catalysing the private sector driven PicoPV systems (Solar Lantern) market in Bangladesh. It strengthened awareness of the benefits of high-quality Pico Solar Lighting Systems and supported the marketing processes.

EnDev Bangladesh uses a results-based monitoring and evaluation system. The programme maintains a thorough monitoring, evaluation and reporting system in order to provide reliable data regarding programme intervention and outcomes. Its verification cycle is conducted periodically to measure outputs and impacts. The programme uses web-based monitoring software for data collection and analysis. This monitoring tool is calibrated regularly for data accuracy, appropriateness, and applicability. Customized tools are developed according to reporting requirements.

#### The outcomes

The improved cookstoves component has facilitated access to about 2.6 million stoves, reaching more than 5.4 million people. Studies show that 95 per cent of the users of improved cookstoves with chimneys reported a significant reduction of smoke in their kitchens and reduction in eye infections and respiratory diseases compared to using traditional stoves. On an average, one stove saves around 500 kg of wood per year.

EnDev Bangladesh disseminated more than 480,000 SHS and 80,000 solar lanterns to target groups, including school children and Rohingya refugees. The solar energy component in total has reached more than 2.7 million people. The prevalence of illnesses associated with poor indoor air quality and kerosene related accidents was found to be significantly lower among women and school children.



Productive use of Solar Energy through Swarm Grids

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