# Energising Development (EnDev) - Bangladesh

#### Project description

Title: Energising Development (EnDev) Bangladesh Commissioned by: EnDev is funded by the Netherlands, German, Norwegian, UK, Swiss and Swedish governments. The programme operates in 25 countries, including Bangladesh Country: Bangladesh Lead executing agency: Ministry of Power, Energy and Mineral Resources/ Sustainable and Renewable Energy Development Authority (SREDA)

Overall term: 2005 to 2019



# Context

Bangladesh's rural economy is characterised by slow growth, insufficient infrastructure and high unemployment. Due to lack of electricity supply, the rural population relies on biomass mainly from agricultural waste and wood for 70 per cent of their energy consumption. Energy consumption in Bangladesh is characterised by a low level of access to reliable electricity and a heavy dependency on biomass for cooking. The traditional stoves used by most households

are energy inefficient and cause indoor air pollution leading to premature deaths. Only eight per cent of the population have access to the natural gas network and liquified petroleum gas for cooking.

EnDev Bangladesh supports the provision of efficient and clean cooking as well as the provision of modern energy for lighting and small electrical appliances. The programme supports the development of markets for modern energy facilities, especially in rural areas. Part of the programme is the training and coaching of manufacturers and retailers, for example in energy-efficient cookers and small solar energy systems.

The programme's activities focus on reliable, affordable, easily adoptable and environmentally sound energy services and resources. It supports the dissemination of solar home systems (SHS), PicoPV systems (1-10 Wp) and distribution of improved cookstoves (ICS), working with partner organisations.

### Objective

People in rural areas have access to reliable and clean energy services from sustainable sources.



## Approach

EnDev Bangladesh currently focuses on three areas: support for improved cooking technology, promotion of solar energy for lighting and electrical appliances, and capacity development of sustainable 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. The brand name is 'Bondhu Chula' (meaning friendly stove). EnDev supports the training of stove builders and sales staff, involves local women for marketing of ICS and introduces quality assurance and verifications.

EnDev supports the establishment and capacity building of the Household Energy Platform (HEP) under the Sustainable and Renewable Energy Development Authority (SREDA) to enhance coordination between stakeholders in the improved cookstove sector.

The programme is working to improve cookstove standards and testing capacity in Bangladesh in collaboration with SREDA and other stakeholders. In addition, EnDev is involved in developing the market for alternative fuels for cooking such as briquettes and pellets.

The solar energy component supports dissemination of solar home systems (SHS) including small solar home systems (SSHS). Moreover, the programme implements PicoPV systems, with the dissemination focusing on incentives through a Results Based Financing (RBF) approach for systems smaller than 1,200 lmh/day. EnDev implements activities through Collaborative Labelling and Appliance Standards Programme (CLASP) and gives incentives for outstanding DC appliances to be introduced in the market. EnDev Bangladesh implements Lighting Bangladesh, a joint initiative of Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH and International Finance Corporation (IFC) which aims to provide access to lighting in offgrid areas by catalysing the private sector driven PicoPV systems market in Bangladesh. It strengthens awareness of the benefits of high quality Pico Solar Lighting and supports the marketing processes, gives advice regarding the necessary taxation and helps to distribute the products.

EnDev Bangladesh maintains a thorough monitoring, evaluation and reporting system in order to provide reliable data and to track progress.

#### Results

The improved cookstoves component has facilitated access and the sales of 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 when they were using traditional stoves. In average, a stove saves around 500 kilogrammes of wood per year. EnDev has disseminated about 480,000 SHS/SSHS in the country. The solar energy component has reached more than 2.4 million people with a PicoPV system. The prevalence of illnesses associated with indoor air quality and kerosene related accidents was found to be significantly lower among women and children.