

The use of biogas improves living conditions and helps to limit the effects of climate change. Cooking on biogas is fast and smokeless and provides health benefits for the whole family, especially for women and children. The secondary product, bio-slurry, is a good fertilizer that increases crop productivity.

## Background

In Rural Cambodia, most people use wood and charcoal for cooking. Air pollution caused by cooking on open fires or traditional stoves results in many health problems and the premature death of people. In addition, cooking on an open fire emits a lot of CO2 and the stock of forest to extract wood and charcoal is rapidly declining. To prevent this, cooking on biogas is an ideal solution. Biogas is a clean cooking method that significantly improves living conditions and helps prevent the negative effects of climate change.

The biogas digester distributed in Cambodia is a Farmer's Friend, a fixed dome digester, which has a lifespan of more than 20 years. The smallest and most popular model has 4m3 capacity and can process the manure of 2-3 cows or 4-6 pigs.

## Biogas programme

The Cambodian National Biodigester Programme (NBP) is developing a self-sufficient, market-oriented national domestic biogas digester sector. It provides the training of professionals and the establishment of independent local companies, quality control of the built digesters, support with poromotion and marketing, and training of farmers in the use of installations and the special organic fertilizer (bioslurry).

A biosgas installation is not cheap. This costs approximately 600 euros excluding an investment subsidy of 150 euros. This is more affordable through a subsidy financed by the sale of carbon credits. In addition, a special biogas loan is available through three nationally operating microfinance institutions. Since 2010, more than 70% of households have used a biogas loan to finance their biogas digester. Loans are generally repaid within two years.

#### **Impact**

The benefits of biogas are wtofold: it is a source of clean, renewable fuel and organic fertilizer that can be used to improve crop yields. This leads to a higher income. By selling more agricultural products, especially fruit and vegetables, or directly with the organic fertilizers, families recieve extra income. Cooking on biogas is fast and smokeless. It eliminates the need to spend time collecting firewood and improves the health of users, especially women and children.

For more information:

https://www.fairclimatefund.nl/en/projects/cambiodjaschoon-koken-op-biogas





## Cambodian National Biodigester Programme

In 2006, the Cambodian Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Dutch Development Organization SNV started the Cambodian National Biodigester Programme (NBP) together. Since 2017, the Ministry has continued the program independently with the help of the proceeds form the sale of carbon credits. Hivos supported the program by registering the project with the Gold Standard and monitoring and verifying emission reductions. Hivos withdrew in 2022. Since then, FairClimateFund has been selling Gold Standard Carbon Credits generated by the project.

## Benefits of the project

### Contribution to the SDGs

#### Food and health

- The use of bio-slurryimproves agricultural productivity
- · Clean and save cooking prevents inhalation of harmful smoke and burns.





#### **Climate and environment**

- Reduced greenhouse gas emissions by switching to 100% renewable energy
- · Reduced wood use prevents deforestation
- · Good fertilization of the agricultural land without the use of chemicals

# 7 AFFORDABLE AND CLEAN EMERGY



#### Social

- · Women experience a lot of convenience and can spend more time on family and education
- · Bio-slurry is often used to grow crops close to home under the control of women



## Economic

- By saving time, women have more opportunities to generate extra income
- Reduced expenditure on fuel and fertilizers
- · Local employment through the sale of fertilizers





# Do you want more information about this project?

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This project is certified by Gold Standard.

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