### **VERC** a national NGO



**VERC** (Village Education Resource **Center)** is a non governmental organization created in 1977 to work with the **poorest people** for the improvement of their everyday life by

promoting self reliance.

VERC employs 1,500 people and has 24 office areas all over the Bangladesh.

VERC leads actions in seven field programs:

- 1. Livelihood Development
- 2. Water, Sanitation, Hygiene Promotion, Arsenic Mitigation and Technology Development
- 3. Education for adults and children
- 4. Preventive and Clinical support on maternal and child health care
- 5. Environmental protection considering adaptation to climate change
- 6. Disaster Preparedness and Management
- 7. Integrating Disability Issues in Community Development

**HEDON** - Household **Energy Network:** 

promotes cleaner, affordable and more efficient household energy sector.



PCIA - Partnership for Clean Indoor Air pollution: 309

organizations to reduce smoke exposure from cooking and heating practices in households around the world.

## **VERC** partners

**SIMAVI Netherlands** 

World Bank-Bangladesh Office



**ARECOP-Indonesia** 

**German Technical Cooperation GTZ** 



Winrock

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# **VERC** networks

ICS national network in Bangladesh: 82 NGOs which promote ICS technologies all over the country.



ARECOP - Asia Regional Cookstove **Program:** facilitates the development of

effective improved cookstove and biomass energy programs at the household and small industry levels.



NEXUS: a global alliance that uses

carbon finance to alleviate poverty and reduce emissions of greenhouse gases.

# **VERC**

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# Improved cookstoves to improve health for mother and children in Bangladesh









#### The project aims to fight indoor air pollution by using improved cookstoves

#### Context



In Bangladesh, biomass fuel is the most widely used fuel for domestic cooking.

As a consequence, indoor air pollution, resulting from combustion of biomass fuel in inefficient cooking stove is widespread, especially in poorly ventilated kitchen environments.

Women and young children involved cooking are the first victims of this type of air pollution. Indoor air pollution kills an million estimated two women and children every year.

VERC has been working on Improved

Cookstoves Program in Bangladesh since 1987. By now VERC has been disseminating different types of cookstove models. From its experience, VERC has found that the Improved Cookstove can save 30-60% fuels compared with traditional ones and make kitchen smoke free.

As VERC intends to introduce improved stoves in its

proposed working areas, hence it will reduce a huge amount of CO2. More than **47,000 Improved Cookstoves** have been implemented in Bangladesh over the past ten years thanks to VERC ICS Program.

# Objectives of the project

The project aims to fight air indoor pollution to reduce cookstove users'health hazards.

The specific objectives are to:

- Reduce cookstove users' health hazards
- Protect the climate by reducing CO2 emissions
- Reduce families' fuel expenses
- Mobilize the community
- Develop and apply behavioural change communication to ensure adaptation of improved behaviours
- **Protect national forests**

**Economic gains** are achieved at all levels of the stove distribution network: the stove producers make an average profit of 150 Takas from each Improved stove and the stove users save money from the reduction in fuel use and the increased durability of the stove.

### The improved cookstove

#### What is an improved cookstove?

An Improved Cookstove (ICS) is an improved version of the traditional stove having higher fuel efficiency.



a traditional stove

VERC disseminates 5 models of ICS. They were designed by BCSIR (government of Bangladesh). Community has to choose one of the five models for its members

The main changes are:

- The grate in the middle of its combustion chamber
- The chimney
- An entry of primary air below the grate



an improved cookstove

The project aims to disseminate **114,000 ICS in 13 districts** until **2015**.

# **Project activites**

> Community mobilization: catalyst (stove builders) selection and stove choice



- > Social marketing: Flip chart, poster, billboard, demonstration centers, school session, exhibition, motivational film.
- **Capacity building:** Training module and manual development, training for local stove builders, training for project staff and other interested people.
- > Information dissemination: Seminar, workshop, roundtable meeting.
- ICS installation: Catalyst development by training, 5 types of stoves disseminated, ICS installation, continuous monitoring.



- Behaviours change communication: Courtyard meeting, film show, school session, folk song.
- > Stove performance: Efficiency tests, quality control.
- **Entrepreneurship development**: Training for local entrepreneurs, seed money distribution, credit support, stove production center.

## Benefits of the project

The project enables environmental, social and economic benefits:

- Reduction in smoke and CO2 emissions
  compared to traditional cook stoves
- Protects from deforestation
- Improvement of cookstove users 'health
  (mothers and their children): greater combustion
  efficiency and reduced exposure time reduce the health
  negative impacts of cooking with wood fuel
- Allows money saving which could be spent in health or education
- Gender implications, as almost all stove users are female
- Creation of small-scale businesses and new
  jobs such as stove producers and retailers
- Allows time saving which could be dedicated to children education or a new economic activity
- Improved technology is transferred to local population



improved technology is transferred to the local

people



# Risks and mitigation

The project has some risks which could be mitigated by VERC measures;

- As cooking in traditional stoves has became norm for the majority in Bangladesh, it's a real challenge to change people's behaviours: VERC marketing and communication actions help to mitigate this risk.
- Economic factor is one of the major constraints for installing the ICS for the poorest people: VERC microfinance programs have been developed to make access to ICS easier.
- ICS is not a priority issue in the national context but
  VERC leads lobbying activities to improve this situation.
- Information and knowledge gap on rational use of biomass fuel and ICS technology. VERC has developed a communication strategy to reduce this gap.