Improved cookstoves to improve health for mother and children in Bangladesh

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

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 partners

SIMAVI Netherlands
World Bank-Bangladesh Office
ARECOP-Indonesia
German Technical Cooperation GTZ
Winrock

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.

VERC Village Education Resource Center
Yakub Hossain / Team leader
Anowar Hossain Mollah / Project Manager
B-30, Ekhlas Uddin Khan Road
Anandapur, Savar, Dhaka-1340, Bangladesh
Tel: +88 (0)2 7710412
Mob: +88 (0)1716540181
Fax: +88 (0)2 7710779
anowarhossain2001@yahoo.co.uk
www.verc.org

Objective 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 behaviour 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.

VERC – Household Energy Network:
Promotes cleaner, affordable and more efficient household energy sector.

PCIA – Partnership for Clean Indoor Air
Air pollution: VERC employs people in organizations to reduce exposure heating in households around the world.

Improved have been 309

Education for adults and children

Winrock

Women and young children involved in cooking are the first victims of this type of air pollution. Indoor air pollution kills an estimated two million 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.
The improved cookstove

What is an improved cookstove?

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

ICS installation: Catalyst development by training, 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 project aims to disseminate 114,000 ICS in 13 districts until 2015.

Project activities

- **Community mobilization**: catalyst (stove builders) selection and stove choice
- **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.

Social marketing: Flip chart, poster, billboard, demonstration centers, school session, exhibition, motivational film.

**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

**Risks and mitigation**

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

- **As cooking in traditional stoves has become 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.