

IMPROVED COOKSTOVES

CARBON PROJECT IN CHITAWAN, NEPAL

NEXUS MEMBER	Centre for Rural Technology, Nepal (CRT/N)
OBJECTIVES	<ul style="list-style-type: none">• Assisting communities reduce fuelwood consumption and expenditure.• Reduce women's drudgery• Reduce women and children's exposure to Indoor Air Pollution• Achieve a measurable and verifiable reduction of greenhouse gases
TARGETS	Rural communities residing in the Buffer Zone area of Chitawan National Park

CONTEXT AND STAKEHOLDERS

Forest resources and other biomass (primarily agricultural waste) are important sources of household energy in rural and even semi-urban areas of Nepal. Nearly 90% of the energy requirements are still met by traditional biomass: fuel wood, agro-waste and animal dung.

The heavy dependency on biomass-based energy sources has led to a situation of environmental unsustainability with an annual rate of deforestation of 1.7%, considered high for the fragile ecosystems of Nepal (State of Environment Nepal, 2003).

In addition, the biomass fuel burnt in traditional stoves exposes women and children to serious risks of indoor air pollution and often leads to respiratory problems.

CRT/N has been promoting improved cookstoves for household and institutions since 1993, mostly in the mid-hill regions of Nepal. Over the years, these improved cookstoves have been redesigned to suit local cooking requirements. So far, CRT/N has promoted about 160,000 ICS across the country and trained more than 2,500 community members in the installation of these improved cookstoves.

ICS reduce the consumption of fuelwood, resulting in lower emissions of greenhouse gases. They also contribute to lowering health risks associated with indoor air pollution caused by traditional cookstoves.

From June 2007 to May 2009, CRT implemented a carbon project in Jagatpur, Sukranagar and Meghauli Village Development Committees of Chitawan district.

The project installed about 1,700 ICS by the end of June 2009.



An ICS in use

IMPACTS AND BENEFITS

Since less fuelwood is required for cooking, the ICS reduces the pressure on biomass resources. Also, because of improved thermal efficiency, comparatively shorter time is required for cooking after the installation of ICS.

Overall improvement of the kitchen environment was found after the installation of the ICS, with reductions in indoor air pollution.

With the installation of ICS, a cleaner kitchen environment has encouraged male members of the family to spend more time in the kitchen to help out female members.

KEY FIGURES

- Reduction of 2,854 tons of GHG (VERs) during a two year period.
- 38% average fuelwood consumption reduction per unit.

ACTIVITIES OF THE PROJECT

- **Capacity building:** training local stove promoters
- **Community awareness support:** community meetings, demonstrations, awareness materials
- **ICS installation:** support to users for the purchase of non-local construction materials
- **Monitoring and follow-up support:** periodic quality control and monitoring, backup support to promoters
- **Technical test of ICS:** efficiency tests



CRT/N AND ITS PARTNERS



Centre for Rural Technology, Nepal

A nongovernmental organization established in 1989, CRT/N works with rural people on the improvement of their everyday life by promoting appropriate and renewable technologies.

Current Working Partners:

- Alternative Energy Promotion Centre (AEP) of the Government of Nepal
- Energy Sector Assistance Programme (ESAP) of AEP
- SNV Nepal
- South Asia Regional Initiative for Energy (SARI/E)
- The Lemelson Foundation, USA
- The Offset Carbon Company, UK

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