





Climate Change



REDUCTION OF GHG

Emissions from Small to Medium Textile Processing Units

Project Background

TIDE has over the years worked on 125 projects, experimented with 54 different ideas for technology generation and dissemination, large percentages of these are in the areas of renewable energy and environment. TIDE has developed expertise in development and dissemination of biomass combustion devices used by small informal industry sectors in South India. In some of the industries like ayurvedic medicine preparation, coconut drying, rubber band making, spice and fish dyeing, area boiling, tobacco curing, silk reeling etc. TIDE has collected data to show that these interventions have lead to CO₂ emission reduction of over 180,000 tons. The textile industry has not been a focus of TIDE's attention but it has developed and field-tested designs of stoves that would reduce firewood consumption in this industry sector. The goal of the project is to create a sustainable mechanism for the reduction of GHG emissions from textile processing units by developing and installing fuel efficient stoves and solar water heaters in the small scale textile bleaching, dying and sizing units. TIDE approached United Nation Development Program (UNDP), Global Environment Facility (GEF), Small Grants Program (SGP) through Centre for Environment Education (CEE).

Community Participation

The project would involve textile industry associations in the districts where intervention is planned and the textile units by making them pay for the device and not receiving it as a grant or with subsidy. As a model approach, encouraging working through a social entrepreneur in the project. The project will create a network of rural entrepreneurs for the construction of the devices. These entrepreneurs would be capable of servicing the needs of the entire district and provide sales and maintenance support to the adopter of the technology. It is proposed to include the financial institutions to scale up the usefulness of the technology widely.



Geographical area

Erode & Coimbatore Districts Tamilnadu INDIA

o. of Beneficiaries

More than 300 institutions and users.

SGP Grant

: Rs. 15,95,000

ProjectTime Period : 2007-2009

The GEF
Small Grants
Programme









Promoting Public Awareness

The project in the last 2 years has contacted more than 500 institutions through local media and 'social entrepreneurs'. It has also built linkages with local industry associations, commercial banks, micro finance institutions to support awareness creation activities and for removal of financial barriers to adoption of energy efficient solutions. It has promoted the local social entrepreneurs who have started earning.

Innovative Financial Mechanisms

The payback period for adopting fuel-efficient devices would be less than one year and this would also ensure high replicability of the project. The utility and savings obtained from the devices will ensure economic market for the devices.

Project Results and Lessons

69 energy efficient stoves and 7 solar water heating systems installed in the textile units, which are to be paid for by the textile industry and some grants. It is arresting 2007 MTs of carbon emission per day and saving 510 MT of firewood per day.

In this project of GEF, UNDP and SGP the aim is to create a sustainable and profitable enterprise that would enable reduction of emissions from textile units and stimulate similar activity in the region. TIDE has designed and tested different models of stoves, water heaters, for bleaching, dyeing and for cooking meals for workers in textile units of different capacities.

It is now scaling up the demonstrations in 5 different locations. On seeing the benefits from the units the entrepreneurs have been able to sell more than 100 units in the existing areas. The entrepreneurs have thus made a sales revenue of Rs 760,000 (20,000 USD) with a profit of nearly Rs 175,000 (4000 USD). This is fast catching up into the areas and with the locals. The benefits of wood saving, less fumes-smoke in the areas and also the loss of heat are resulting in improved relations between the workers and the management in the units. The emerging potential in terms of scale and areas of operation is tremendous, conservatively estimated within 5 years at 10,000 Mts of CO₂ emissions reduction with nearly 250 installations. The NGO has already made links with government policies and have shared experiences with the range of stakeholders, who themselves are keen and overwhelmed to access, patronise and support the 'business model'. The project is significant in its impacts, innovativeness, low cost approach and outreach to prevent the environmental degradation (woodlots conservation).



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