



Igniting the Indian Market for Improved Cookstoves

Activities under the Indo-German Energy Programme (IGEN)



Background



About 145 million Indian households use traditional cookstoves for their daily cooking and depend on biomass fuels such as wood, dung, or agricultural residues. Traditional cookstoves, such as three-stone-fires or simple potter stoves, consume excessive amounts of biomass and cause health-threatening levels of indoor air pollution. According to the World Health Organization (WHO), indoor air pollution causes nearly 500,000 premature deaths in India annually.

These negative effects of traditional cooking practices can be significantly reduced by the use of so-called improved cook-stoves that provide more efficient and clean combustion. However, adoption of these stoves has so far been low in India. This is due to three main factors:

- 1 Low demand**
Low awareness about the negative effects of indoor air pollution and existing solutions; high upfront costs for improved cookstoves
- 2 Insufficient supply of appropriate technologies**
Lack of appropriate improved stove technologies catering to the range of local cooking practices and fuels; lack of economically viable business and distribution models.
- 3 Unfavourable market environment**
Lack of enabling policies/support schemes; lack of market intelligence and knowledge networks.

The IGEN Approach

The Renewable Energy Component of the Indo-German Energy Programme (IGEN-RE) is a bilateral technical cooperation measure between the German Federal Ministry for Economic Cooperation and Development (BMZ), and the Ministry of New and Renewable Energy (MNRE), Government of India. IGEN-RE aims at improving conditions for renewable energy in rural areas to facilitate access of rural inhabitants to clean and sustainable energy.

To ensure access to sustainable cooking energy, IGEN-RE aims at strengthening the market for improved biomass cookstoves by creating a conducive market environment as well as directly addressing existing challenges on both the supply and demand side.

IGEN-RE activities involve a multitude of stakeholders such as government institutions, NGOs, and the private sector.

Activities under IGEN

Supply

DEVELOPING COST-EFFECTIVE MARKETING AND AWARENESS CAMPAIGNS

Social entrepreneurs often lack financial resources and technical expertise to implement effective marketing and awareness campaigns that are crucial in creating demand for improved stoves. IGEN-RE develops effective tools-kit for marketing and awareness raising that will be shared with interested entrepreneurs and government agencies for large-scale replication.

ESTABLISHING MODELS FOR END USER FINANCE

The majority of households in rural India cannot afford to purchase an improved cookstove due to unavailability of the upfront cash amount. In collaboration with local financial institutions and social enterprises IGEN-RE is developing business models that bundle financial products with cookstoves to minimize the challenge of high upfront investments for rural households.

Demand

FACILITATING STOVE SELECTION AND DESIGN

IGEN-RE supports manufacturers and distributors to develop and select appropriate cooking technologies that are best suited for specific regional contexts. In a first step, IGEN-RE conducted a user acceptance test with different cookstove models in Uttar Pradesh, Bihar and West Bengal to analyse prevalent cooking patterns and user preferences.

DEVELOPING INNOVATIVE DISTRIBUTION / BUSINESS MODELS

IGEN-RE is working with social enterprises such as SwitchOn and Project Dharma to develop innovative distribution and business models that can make stove sales an economically-viable business proposition.

PROVIDING DETAILED MARKET INFORMATION

In order to help stakeholders to plan their activities in a well-informed manner based on a detailed understanding of the cookstove market, its stakeholders and dynamics, IGEN-RE is conducting a study that will provide detailed information based on primary data out of four states.

Market environment

SUPPORTING THE DESIGN AND IMPLEMENTATION OF POLICIES AND SUPPORT SCHEMES

To strengthen the policy environment for clean cooking technologies, IGEN-RE supports the development and management of state-level cookstove programmes and schemes. IGEN-RE supports the West Bengal Renewable Energy Development Agency (WBREDA) in planning and implementing a state-funded programme for the dissemination of 20,000 fixed improved cookstoves.

MOBILISING CARBON FINANCE

Together with SSS-NIRE as the coordinating/managing entity and SAMUHA as the first project implementer, IGEN-RE is developing a CDM Programme of Activities (PoA) for improved cookstoves. This will allow tapping funds from the international carbon market, which will help to up-scale future stove projects in India.

FACILITATING KNOWLEDGE SHARING

IGEN-RE organises a series of workshops and events that will enable all types of different stakeholders from the cooking sector to work together more efficiently towards a more sustainable cookstove market in India.

Implementation Partners

Ministry of New and Renewable Energy, Government of India (MNRE)
<http://www.mnre.gov.in/>

Bihar Renewable Energy Development Agency (BREDA)
<http://www.breda.in/>

Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA)

<http://ureda.uk.gov.in/>
West Bengal Renewable Energy Development Agency (WBREDA)
<http://www.wbreda.org/>

Uttarakhand Renewable Energy Development Agency (UREDA)
<http://ureda.uk.gov.in/>

Project Dharma
<http://www.dharmalife.in/>

SwitchOn
<http://switchon.org.in/India/>

The Sardar Swaran Singh National Institute of Renewable Energy (SSS-NIRE)
<http://www.nire.res.in/>

SAMUHA
<http://www.samuha.org/>

The services delivered by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH draw on a wealth of regional and technical expertise and tried and tested management know-how. As a federal enterprise, it supports the German Government in achieving its objectives in the field of international cooperation for sustainable development. It is also engaged in international education work around the globe. GIZ currently operates in more than 130 countries worldwide.

Germany has been cooperating with India by providing expertise through GIZ for more than 50 years. To address India's priority of sustainable and inclusive growth, GIZ's joint efforts with the partners in India currently focus on the following areas:

- Energy - renewable energy and energy efficiency
- Sustainable Urban and Industrial Development
- Natural Resource Management
- Private Sector Development
- Social Protection
- Financial Systems Development

Within the context of the Indo-German Energy Programme (IGEN), GIZ is supporting the Ministry of Power (MoP) in the promotion of Energy Efficiency. Together with the Ministry of New and Renewable Energy (MNRE), GIZ is further working on increasing the usage of Renewable Energy in the country.

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