



Ministry of New and Renewable Energy
Government of India



India Clean Cookstove Forum 2013

25-26 November 2013 | Le Méridien, New Delhi



GIZ/Enrico Fabian

Organised by:



Supported by:



Imprint:

Published by

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Indo-German Energy Programme - Renewable Energy Component (IGEN-RE)

First Floor, B-5/2 Safdarjung Enclave
New Delhi 110 029, India

T: +91 11 49495353

F: +91 11 49495391

I: www.igen-re.in; www.giz.de

Responsible

Mr Michael Blunck, Project Manager, Indo-German
Energy Programme - Renewable Energy (IGEN-RE), GIZ

Editorial

InsPIRE Network for Environment

Photos by

Enrico Fabian

New Delhi, December 2013

Indian Clean Cookstove Forum 2013

Background

Indoor air pollution (IAP) causes around 480,000 premature deaths annually in India (WHO). The use of improved cookstoves (ICS) can significantly reduce IAP as well as biomass consumption thereby reducing its negative effects on health and environment; however, the adoption of these stoves remains low.

The India Clean Cookstove Forum was organized by the Renewable Energy Component of the Indo-German Energy Programme (IGEN-RE) in cooperation with the Ministry of New and Renewable Energy (MNRE) on the 26th November 2013 to create an effective framework to spark, develop, evaluate and improve a collective effort towards the large scale adoption of ICS.

IGEN-RE is a bilateral collaboration project between the German Federal Ministry for Economic Cooperation and Development (BMZ), and the Ministry of New and Renewable Energy (MNRE), Government of India, implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). IGEN-RE aims to improve the conditions for energy supply based on renewable energy in rural areas.

Introductory Remarks

In his welcome address, Mr. Manfred Häbig, Deputy Country Director of GIZ India, expressed the need for providing clean cooking solutions to rural India and the requirement of imminent large capital investments in product development and distribution channels to create economies of scale. The welcome address was followed by the introduction to

the Forum and IGEN-RE's cookstove initiative by Mr. Michael Blunck, Project Manager IGEN-RE of GIZ India. Underpinning the need for providing clean cooking solutions to rural households, Mr. Blunck shared the case study of Ms. Kalavati who, like many other women from similar economic background, uses a traditional cookstove and accordingly suffers from IAP and the related health hazards. Mr. Blunck's contribution was followed by Mr. Alok Srivastava, Joint Secretary, MNRE, Government of India outlining the Biomass Cookstove Initiative of the Ministry. Mr. Srivastava apprised the Hon'ble Minister and the participants of the forum about recent initiatives, such as the launch of the National Biomass Cookstoves program in 2009. The sharing on initiatives of MNRE on Biomass Cookstoves was followed by the special address of Mr. Heiko Warnken, Head of Development Cooperation of the Embassy of the Federal Republic of Germany. In his address, Mr. Warnken stressed the need for making clean cookstoves an affordable and economically viable business option.





Inaugural Address by Dr. Farooq Abdullah, Hon'ble Minister for New and Renewable Energy, Government of India

The Hon'ble Minister in his address expressed his concern for providing each and every household in rural India with a scientifically developed ICS which is clean, effective and efficient in meeting end-user needs. Expressing his satisfaction over the efforts already undertaken by the Ministry towards meeting this objective, the Hon'ble Minister unequivocally expressed the need for different stakeholders to join hands and work together to overcome remaining challenges. Sharing his observations on the domestic energy crisis in rural areas of Kashmir, the Hon'ble Minister reinforced the urgency of tackling this issue.

Sharing of Best Practices and drawing from Practitioners' experience

The Clean Cookstove Forum was preceded by a one day workshop for practitioners active in India's clean cookstove sector on

25th November 2013. During the workshop, practitioners were given the opportunity to express and discuss challenges with regards to demand, supply and the overall market ecosystem of the ICS sector in three respective breakout groups. The key points addressed were summarized and served as starting points for the panel discussions of the Forum on the subsequent day. Besides a lively content-related discussion, participants remarked that this workshop had been one of the few opportunities to bring all manufacturers and distributors together and used this opportunity to call for the establishment of a common platform where successful initiatives as well as challenges faced could be shared and learned from. The India Clean Cookstove Practitioner Workshop and Forum aims at providing a starting point for such an initiative by bringing stakeholders together on a yearly basis as well as supporting the establishment for an online platform for knowledge exchange amongst practitioners.

Panel 1: Creating demand for Improved Cookstoves

The challenges identified during the Practitioner Workshop acted as guiding questions for the panelists: (1) Mr. Vinay Jaju, Co-Founder and COO, ONergy (2) Ms. Svati Bhogle, Founder & Managing Director, Sustaintech India Private Ltd (SPIL) (3) Mr. Supriyo Gupta, Managing Director, Torque Communications and Digilogue Communications (4) Ms. Sakshi Varma, Microfinance Operations Officer, International Finance Corporation, New Delhi (5) Mr. Anurag Bhatnagar, CEO, Grassroots Trading Network for Women (6) Mr. Sameer Mishra, Fullerton India. Ms. Anuradha Bhavnani, Regional Director, Shell Foundation moderated the discussion.

The starting points of the discussion, i.e. the challenges and solutions identified during the Practitioner Workshop with regards to 'Creating Demand for Improved Cookstoves', are summarized in the table below:

Various strategies discussed by panelists to tackle issues related with 'Creating Demand of Improved Cookstoves' are listed below:

Scale-up of marketing and communication efforts to increase awareness and trigger demand

Targeted awareness creation:

- Government-led marketing campaign, similar to the one on Polio, informing about health hazards of IAP and benefits of ICS
- Celebrity endorsement to help raise awareness and establish ICS as an aspirational product to increase likeliness of ICS moving up the priority ladder of household purchases
- Target men, i.e. household decision-makers by awareness raising, marketing and sensitization efforts
- Involve Panchayati Raj Institutions in spreading awareness
- Conduct market research to improve understanding about consumers preferences and needs



Challenges	Solutions
Awareness & Marketing	
Lack of awareness on health impacts of IAP	<ul style="list-style-type: none"> • Mass media campaigns with call center support • Celebrity endorsement • Government-supported campaign on IAP
Lack of awareness of benefits of ICS	
Consumer needs and preferences	
Costliness and unavailability of market research/data	Government/donors have to provide market information/data
Lack of market segmentation/definition of target groups	
Affordability	
Low price expectations	<ul style="list-style-type: none"> • Tapping carbon finance • Clear support from RBI and NABARD • Direct timely cash transfer to customers
Lack of end user financing options	
Inconsistent subsidy support	

Availability and access to market data:

- ↳ Market assessments and studies have to be provided by the government/donors
- ↳ Market segmentation has to be better understood in order to target consumers of various segments accordingly. So far, the following distinctions of market segments can be made:
 - Users who are aware of problem and available solutions and can afford stove (e.g. when LPG is not available in geographic area)
 - Users who are aware of problem and available solutions but who cannot afford improved stoves
 - Users who are neither aware of the problem nor available solutions and who cannot afford the stove

Coordination amongst government agencies:

- ↳ More proactive approach of Ministry of Health and Family Welfare, Ministry of women and Child Welfare, Ministry of Environment and Forests, and other related ministries
- ↳ Coordination between different departments at the state level
- ↳ Participation of other ministries to invest more money into R&D and marketing

Increased affordability of ICSSs

Cost reduction of the product:

- ↳ Make cookstoves cheaper: reduce production costs, enhance production efficiency, reduce waste, better packaging, etc. (see more under 'supply')
- ↳ Explore possibilities of Carbon Finance, e.g. collectively undertaking approaches. Support from MNRE is required.

Improved end-user financing:

- ↳ Exploit network of Regional and Rural Banks for both, financing for end-users and manufacturers. So far, the role of commercial banks is minimal
- ↳ Decrease loan costs of Micro Finance Institutions (MFIs)
- ↳ Subsidy schemes should be consistent, transparent with a single clearance to ensure timely access. Clear support from NABARD and RBI has to be provided
- ↳ Ensure high quality of products and provide after sales services that ensure the repair/replacement of an ICS within 24 hours

Panel 2: Improving Supply of Appropriate Cookstove Technology



Mr. Hari Natarajan, Senior Technical Expert of GIZ, moderated the second panel discussion, which was attended by: (1) Mr. Gaurav Mehta, Founder and CEO, Project Dharma (2) Dr. B S Negi, Director, Ministry of New and Renewable Energy (MNRE) (3) Prof. Rajendra Prasad, Scientist, IIT Delhi (4) Mr. Ankit Mathur, Founder & CTO, Greenway Grameen (5) Mr. Santosh Singh, Technical Expert, GIZ.

For 'Improving Supply of Appropriate Cookstove Technologies' the challenges and solutions identified in the practitioner workshop have been summarized in the table below:

The panel discussed various approaches for overcoming existing challenges and finding solutions towards 'Improving Supply of Appropriate Cookstove Technologies' which are outlined below:

Challenges	Solutions
Product development	
Lack of investments into R&D	<ul style="list-style-type: none"> Support through research institutions Standard designs/materials, open source Market assessment studies
Insufficient market research and market data	
Production	
Economies of scale cannot be reaped	<ul style="list-style-type: none"> Clustered project interventions Support through research institutions Standards on materials and their quality
Inefficient processes	
Choice of inappropriate materials	
Distribution Model & Costs	
Lack of marketing and user training	<ul style="list-style-type: none"> Universal tax exemptions Use of existing distribution networks
Inefficient and costly logistics	
Inadequate after sale service models	
Appropriate technologies	
Technologies do not cater user needs and varying fuel mix	<ul style="list-style-type: none"> R & D on stoves for diverse fuels Reoccurring random quality checks
Production quality is inconsistent	

Decreased cost of ICS

Improved distribution

- ↳ Communication channels between customers and manufacturers have to be improved, e.g. establishment of Customer Interaction Joints where field officers can act as links between users and producers
- ↳ Improve logistics through the usage of existing distribution networks
- ↳ Adequate after sales services have to be installed
- ↳ Enhance marketing and user training

Improved production processes

- ↳ In order to decrease production costs, it is crucial to tap benefits of economies of scale. Clustered project interventions could support the creation of economies of scale which is currently hindered by the high level of market fragmentation.
- ↳ Make processes more efficient
- ↳ Chose more adequate materials in manufacturing of ICSS

Improve value creation and product placement

Create clear and tangible benefits for consumers

- ↳ Establish ICS as an aspirational product that ranks high in consumers' purchase priority list
- ↳ Increased focus on health benefits (of children in particular), improved time management, instead of/additionally to reduced emissions and fuel savings

Improved quality, design and technology to serve user needs better

Cater to changing and varying fuel mix and geographically different consumer preferences

Consistent product quality and improvement of quality monitoring of products

- ↳ Standards have to be improved and elaborated so that they also include lifetime, materials used, designs, etc.
- ↳ Introduction of an open source design



More R&D and market research to make ICS more suitable for users' needs

- ↳ Accommodate need of different and varying fuel sources
- ↳ Focus on building ICS with two burners to actually achieve time saving
- ↳ Use field testing to include user experiences
- ↳ Include pictorial user guides on the packaging of ICS
- ↳ Conduct market assessment studies



Panel 3: Developing the Market Ecosystem

Mr. Paranjy Guha Thakur, Journalist, moderated the last panel discussion. The Panel consisted of (1) Mr. T Pradeep, Institutional Advisor, Samuha (2) Ms. Veena Joshi, Senior Advisor, SDC (3) Ms. Rekha Krishnan, Coordinator, Ashden Collective (4) Ms. Sujatha Srinivasan, Director, SERVALS (5) Mr. T. L. Shankar, Principal, ASCI (6)

Ms. Pinal Shah, Director, SEWA Urja Avaran Company.

For 'Developing the Market Ecosystem' the challenges and solutions identified in the practitioner workshop have been summarized in the table below:

Challenges	Solutions
Policy & Support Schemes	
Lack of comprehensive policy on 'clean cooking'	<ul style="list-style-type: none"> • Development of 'clean cooking' policy / mission • Awareness raising / lobbying for high-level policy makers • Tax holiday & duty exemptions • Government-supported mass media campaigns
Lack of joined efforts & coordination between Government Agencies	
Delay/bureaucracy in subsidies	
VAT & duties	
Lack of awareness on IAP	
Standards & Certification	
Lack of information	<ul style="list-style-type: none"> • Certification based on field performance & user feedback • Include standards for material quality
Limitation to lab testing	
Quality & transparency of testing	
Financing	
Financing for users and manufacturers	<ul style="list-style-type: none"> • Risk guarantees • Priority banking under RBI • Technical support for Carbon Finance
Access to Carbon Finance	



The strategies elaborated up by the panel for achieving solutions towards ‘Developing the Market Ecosystem’ are listed below:

Focus on clean cooking instead of Improved Cookstoves: There is need for a clean cooking policy/mission

Joint efforts and coordination amongst government agencies

- ↳ Involvement of ministries besides MNRE (e.g. Ministry of Health and Family Welfare, Ministry of Women and Child Welfare, Ministry of Environment and Forests), in particular with regards to funding, R&D and marketing/awareness about IAP
- ↳ Policies based on agro-ecological zones or smaller regions rather than states that differ in fuel use, dietary and cooking habits

Targeted subsidies

- ↳ Subsidies have to reach BPL customers

- ↳ Subsidies have to be less bureaucratic and have to be paid in a timely manner
- ↳ Subsidies should not be relied on in the long-term but focus should rather be laid on creating innovative business models including:
 - Seed capital and soft loans for manufacturers
 - Risk guarantees for financial institutions
 - Improved end user financing
 - Improved tax system, tax holidays for ICS manufacturers
 - Include ICS in priority banking scheme under RBI
 - Technical support to make Carbon Finance accessible

Improved ICS standards

- ↳ Field testing and standards for quality material need to be included
- ↳ Testing centres have to be improved in terms of quality, transparency and accessibility

The Way Forward

Summing up the days discussion Mr. Michael Blunck expressed the need for addressing the challenges identified in the forum. He assured that the discussion and deliberations made during the day would help GIZ and MNRE to redesign interventions and programs. Reiterating words of the Hon'ble Minister, Mr. Blunck reinforced the need for cooperation among different stakeholders and the need for different ministries and departments to join efforts to bring about the desired change. Awareness generation, finance and distribution are key areas where cooperation is required to address the challenges identified. As highlighted during discussions, developing a clean cooking policy would bring different stakeholders under one umbrella but for this collaboration at policy level is required. According to Mr. Blunck, there is a real need for a robust network or platform for knowledge exchange and cooperation initiatives. This platform could be based on an online network for practitioners and complemented by events, such as the Clean Cookstove Forum bringing all stakeholders together at regular intervals. Furthermore, the need of appropriate technologies reaching the lowest segment of the people within a definite time frame was emphasized. Referring to Ms. Kalavati whose story had been shared in the introductory session, Mr. Blunck officially wind up the day with the earnest hope that every last household will be provided with a clean cooking solution in the near future.

For more information on India Clean Cookstove Forum and other initiatives of IGEN-RE please refer to the following websites;

www.igen-re.in <http://bit.ly/18lojrC>





Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

About GIZ

GIZ is a federal enterprise with operations around the globe. It supports the German Government in the fields of international cooperation for sustainable development and international education. GIZ supports people and societies in shaping their own futures and improving their living conditions.

GIZ in India

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
- Biodiversity Programme
- Private Sector Development
- Social Protection
- Financial Systems Development

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Michael Blunck

Indo-German Energy Programme
Project Manager - Renewable Energy Component

GIZ Office India, 1st Floor, B-5/2 Safdarjung Enclave
New Delhi 110 029, India
E: michael.blunck@giz.de
www.giz.de
www.igen-re.in