## Indian Clean Cookstove Forum 2014

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### The Need for Clean Cooking Energy

Around 3 billion people cook and heat their homes using solid fuels (i.e. wood, charcoal, coal, dung, crop wastes) on open fires or traditional stoves.

"Approx. 4.3 million people per year die from the exposure to household air pollution."

- World Health Organization



#### The Need for Clean Cooking

In India, more than 166 million households are dependent on biomass fuel as their main source of energy for cooking.

Majority of these households use inefficient and highly polluting traditional cookstoves.

As per WHO estimates, 4,88,000 deaths in India every year are caused by Indoor Air Pollution.

Apart from the health impact, traditional cookstoves have a big impact on forest and environment and also adverse social impact like long hours for fuel collection, cooking which could be used for other important activities



#### Clean Cooking Energy – The Indian Scenario

- Promotion of Clean Cooking Energy has been a priority of MNRE.
- The National Programme on Improved Cookstoves (NPIC) was launched in 1983.
- NPIC was implemented on a mass scale through a range of implementing partners that included State Nodal Agencies, NGOs and self-employed-workers.
- During 1983-2002, it disseminated more than 35 million cookstoves in the entire country.

#### Clean Cooking Energy – The Indian Scenario

- National Biomass Cookstoves
   Initiative (NBCI) initiated in Dec
   2009, for promoting clean and
   efficient energy for cooking,
   improving technical capacity,
   strengthening R&D and pilot scale
   demonstrations of improved
   cookstoves.
- Three Test Centres set up for performance testing. development of test protocols for improved biomass domestic and community cookstoves
- Revised standards published by BIS in August 2013.

SI. No.	Type of Cookstove	Standard Performance Parameters						
		Earlier BIS(1991)			Revised Standard(August 2013)			
		Thermal efficiency (%)	CO/CO2	TSP(mg/m³)	Thermal efficiency (%)	CO (g/MJ <sub>d</sub> )	TPM (mg/MJ <sub>d</sub> )	
1	Natural Draft	Shall not be less than 25%	0.04	2	Shall not be less than 25%	5	≤350	
2	Forced Draft	Not available	Not available	Not available	Shall not be less than 35%	5	≤150	

## Unnat Chulha Abhiyan

- National Programme launched in June 2014 for promotion of improved biomass Cookstoves in all the State/UTs for providing clean cooking energy solutions and reduce drudgery of women and children and emissions
- Implementation by State Nodal/Implementing Agencies, State Departments, NGOs, business development organization etc.
- Target Users
  - Households
  - Kitchens of Mid-day Meal Schemes, Angandwadi, Forest Rest Houses
  - Tribal/SC/BC Hostels etc.
  - Road side dhabas and small hotels.



#### UNNAT CHULHA ABHIYAN (UCA) Year-wise Physical Target

SI. No.	Year	Physical Targets				
		Family Type/ Household cook-stoves including	Community Size Cook-stoves			
		earthen chulhas	Dhabas, Canteen, Industry	Anganwadis/ ICDS/ MDM/ Tribal Hostels etc		
1	2012-13	Nil	Nil	Nil		
2	2013-14	100,000	5,000	5,000		
3	2014-15	750,000	25,000	75,000		
4	2015-16	750,000	40,000	75,000		
5	2016-17	8,00,000	50,000	75,000		
Total		24,00,000	1,20,000	230,000		

#### Central Financial Assistance for UCA

SI. no.	Items	Funds in Crorers (INR)
1.	Test Centres	5.0
2.	Research and Development	7.00
3.	Deployment of family sized cook-stoves. Upto 50% of cost of cook-stoves with maximum ceiling Rs. 400/- natural draft( including earthen chulhas with matel combustion chambers) and Rs. 800/- forced draft (average support Rs. 600/-) for 2013-14 and 2014-15.	120.75
	Up to 40% of cost with max ceiling of Rs.300/- natural draft & Rs.600/-for forced draft cookstoves( including earthen chulhas with metal combustion chambers) (average support Rs.450/-) for 2015-16, 2016-17.  Construction fee to masons @10% per chulha for construction added to overall cost	
4.	Deployment of Community Cook-stoves for MDM, Anganwadi, tribal hostels, etc. Upto 50% cost of cook-stoves with max. ceiling of Rs.2500/- natural draft & Rs.5000/- forced draft type cook-stoves (average support Rs.3750/-) for 2013-14 & 2014-15.	75.07
	Up to 40% with maximum support Rs.2000/-for natural draft and Rs. 4000/- for forced draft type (the average support Rs.3000/-) for 2015-16, 2016-17.	
5.	Deployment of community cook-stoves for commercial and industry. Entire cost to be borne by users. Success fee @ 15%, 10% and 5% for 2013-15, 2015-16 & 2016-17 to implementing agency/ manufacturer/ Nodal Agency for dissemination	3.64
6.	Technical assistance for implementing agencies(@10% of support.	23.41
7.	Administrative/overhead charges for implementing organizations (@10% of support)	23.41
8.	Field Monitoring and Evaluation	20.00
9.	Publicity	16.00
	Total	294.28/-

## **UCA: Implementation Models**

■ Implementation through State Nodal Agencies /State Departments District Coordinators of Mid Day Meal Scheme, NRLM, NGOs/CSOs, manufacturers, etc. for deployment of both family type and community size chulhas.

Household Cookstoves

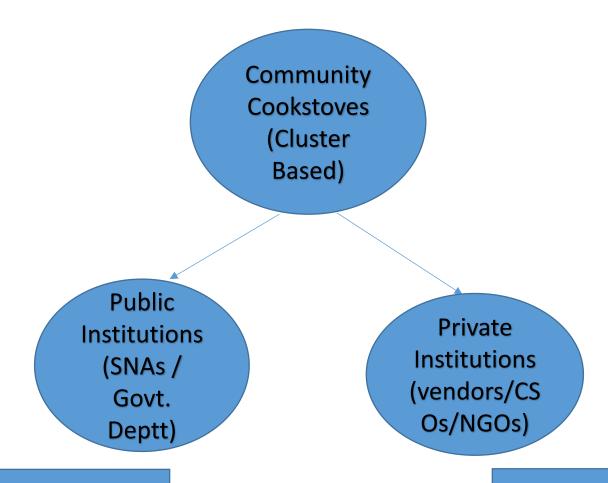
Cluster
Federation
of SHGs
Through
SRLM

SNAs /
Govt.
Deptt./CSO/
NGOs

- Community Support Fund to be setup with subsidy to be disbursed as loan to SHG members
- Technical Assistance (10%) and Adminstrative Charges (10%) to be given to SRLM

 MNRE Subsidy to be transferred to SNAs/Govt. Deptt. To be disbursed to the beneficiaries

## **UCA: Implementation Models**



Provisions for providing direct subsidy SNAs / Government Deptts.

- No subsidy to users
- Success to be given to distributors

#### Selection of Unnat Chulhas

- Only cookstoves approved by MNRE on the basis of BIS standards to be considered.
- MNRE cookstove division will consistently update the list of approved cookstoves on the basis of new model qualifying the standards.
- For earthen cookstove, only with combustion chambers to be considered.
- 33 Models and 18 manufacturers of Improved Cookstoves approved by MNRE for deployment under UCA. (List available on MNRE website.)







#### **UCA:** Fund Flow Mechanism

- Funds will be released to implementing organisations who will pass the benefit to beneficiaries
- 40% of project cost & technical assistance and overhead charges to be released with the sanction letter to State Govt. Agencies.
- For others such as NGOs, Industry, SHGs etc 30% of project cost on successful installation and commissioning with list of beneficiaries verified by the Gram Sabha/Panchayat.
- Balance funds in both cases to be released after successful field performance monitoring & evaluation by third party with submission of final completion report & related documents
- Funds for publicity and field performance monitoring activities will be released directly to the implementing agencies.

#### **UCA: Awareness Creation**

- The framework for content for awareness and demand creation to be prepared by MNRE
  - The templates for audio-visuals
  - The script for running the demonstration kits
- Each implementing partner to develop the localized content on the basis of framework and implement.
  - Implementing partner will hire agencies to implement the strategies in implementing areas.
  - The awareness creation and demand creation will happen with geographic focus.
  - Cluster based approach to be preferred.
- Several regional workshops are planned to ensure large scale participation from manufacturers and other stakeholders



## **UCA: Monitoring and Evaluation**

- UCA has provision for concurrent, third-party monitoring and post-project impact assessment.
- Third-party monitoring and post-project impact assessment will be done by MNRE
- MNRE will develop the framework for concurrent monitoring and quality control.
- Implementing partners to take responsibility of concurrent monitoring as per the framework developed by MNRE.
- MNRE will develop online platform for that will host user-submitted data from the field and provide data for quality control and assessment.
- Online grievance redressal systems for stakeholders.



#### **UCA:** Role of Test Centres

- To support research, development, demonstration and testing of improved cookstoves
- To carry out performance testing as per BIS standards
- To develop and propose new standards for earthen chulhas.
- To provide support for random field monitoring and performance evaluation of approved cookstoves in actual field conditions
- To develop annual action plan for different activities envisaged for test centres



### UCA: Integration of PoA in UCA

- All implementing agencies can participate in MNRE CDM PoA.
- SSSNIRE will be the CME for the PoA and implementing agencies (including SNAs) under UCA can be CPAs.
- Technical expert in UCC will coordinate with implementing agencies and SSSNIRE to bundle projects for availing CDM benefits.
- CPAs will avail 92% of the accrued carbon credits, remaining credits will be SSSNIRE.



# Unnat Chulha Abhiyan- Collaboration with other development agencies

- MNRE is welcoming support from other national and international agencies in programme mplementation
- Extensive capacity building and technical support being provided to manufacturers and implementing partner

- GIZ and Global Alliance for Clean Cookstoves are supporting UCA in activities such as awareness creation, stakeholder capacity building etc
- A comprehensive programme implementation guide prepared with GIZ is to be released soon

#### Clean Cooking Energy- Issues

- Need to scale up production, marketing and communication efforts to increase awareness and trigger demand.
- Increased affordability through cost reduction
- Focus on improved quality, design and technology to serve user needs better
- Clean effective and efficient cookstoves should reach every household to reduce fuelwood consumption and improve health & environment.



## Thank you.