

# Major Focus Areas

- To make the ICS Network effective & efficient in Bangladesh
- To promote gender sensitive ICS program
- To improve the health of cookstove users especially the mothers & children
- To prevent ecological degradation through awareness raising & promoting improved cookstoves.

# **Technical & Financial Assistance**

- IFRD/BCSIR-Bangladesh
- ARECOP-Indonesia
- Winrock International, Clean Energy Program.

National Network on Improved Coookstove Program in Bangladesh

# Network Strategy Identification of organizations working on environmental issues Willingness to work with ICS technology development activities Holding dialogue and consensus on Network Activities Formation of Executive Body with roles and responsibilities Integrating ICS with other development initiatives Addressing the issues in relation to health, gender and poverty Technical collaboration within the network members and beyond Sharing, learning through exposure visit, workshop, research and documentation

| Period (Year) | Number<br>of NGOs | Type of NGOs                                   | Area<br>Coverage<br>(Districts) |
|---------------|-------------------|--|---------------------------------|
| 2000 to 2003  | 41                | Local (33), National<br>(6), International (2) | 24                              |
| 2004          | 78                | Local (70), National (6), International (2)    | 25                              |
| 2005          | 83                | Local (75), National<br>(6), International (2) | 28                              |
| 2006          | 83                | Local (75), National (6), International (2)    | 28                              |



# **Network Activities**

# Information Dissemination & Exchange

- Quarterly publication of News Letter for distribution among Network Members, GO, NGOs and INGOs since 2000
- Publication of case studies for sharing with stakeholders regularly
- So far 2 training manuals developed and distributed among stakeholders and being used in training sessions.
- So far 2 promotional films developed and distributed among Network Members, GO, NGOs and INGOs
- Different types of posters, leaflets published and distributed
- Website (<u>www.verc.org</u>) installed
- VERC receives various publications like news letter, poster, journal etc. from different countries and stakeholders that are shared.



| Phase                    | Name of the Training          | No. of Batch | Participants        |  |  |
|--------------------------|-------------------------------|--------------|---------------------|--|--|
| Phase I & II (1987-2003) | TOT on ICS                    | 14           | 547                 |  |  |
| Phase III (2004-2006)    | TOT on ICS                    | 52           | 1297                |  |  |
|                          | TOT on MPA                    | 2            |                     |  |  |
|                          | TOT on Kitchen<br>Improvement | 3            | VERC                |  |  |
|                          | Total:                        | 75           | 1844                |  |  |
| Meeting/Seminar/Workshop |                               |              |                     |  |  |
| Phase                    | Name of the event             | No. of Batch | Participants        |  |  |
| Phase I & II (1987-2003) | Seminar                       | 1            | Network             |  |  |
|                          | Workshop                      | 2            | Members, GO         |  |  |
|                          | Meeting                       | 3            | NGOs, INGOs<br>etc. |  |  |
| Phase III (2004-2006)    | Seminar                       | 10           |                     |  |  |
|                          | Workshop                      | 7            |                     |  |  |
|                          | Meeting                       | 21           |                     |  |  |
|                          | Total:                        | 44           |                     |  |  |
| -                        | on Improved Coookstow         |              |                     |  |  |



| Event   | Provided | # Participants attended |
|---|----------|-------------------------|
| TOT on Kitchen Improvement                      | ARECOP   | VERC                    |
| TOT on Improved Stove Selection & Dissemination | ARECOP   | 1                       |
| TOT on MPA                                      | ARECOP   | 2                       |
| TOT on ICS developed by ARTI                    | WI       | 6                       |
| Meeting on Clean Indoor Air Network             | ARECOP   | 1                       |
| Seminar on Fuel Production from Biomass         | ARECOP   | 1                       |
| Regional Workshop on ICS, Kitchen and Health    | ARECOP   | 1                       |

# Implementation of Pilot Project using MPA

Methods of Participatory Assessment in Household Energy & Coostoves Promotion in Bangladesh. Main Objective: Increased community participation for assessment of technology needs, innovation and promotion of ICS in a sustainable manner. Implementing Organizations: IDEA, SDE, UD & VERC Outcome:

- Women in the decision making process on stove option and space selection of kitchen raising voice and choice
- Fuel consumption reduced
- Time spent on cooking reduced 4
- Reduced smoke emission inside the kitchen Involvement of women in social events increased 4
- No soot in the kitchen
- Decreased in poor ventilation and smoke emission related 4
- diseases
- Community Management Committee (CMC) capacitated ÷.
- 182 HH received ICS 4

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# Research

Comparative study between a control and an intervention area on the • domestic use of cook stove.

### **Objective:**

- To assess the environment of cooking area in rural households
- To gather information about kitchen users in rural households To gather information about kitchen users in rural households To gather information regarding type of cook stove and biomass used for cooking To asses the effect of ICS (compared to traditional stove) on health of women and children To measure (on a limited scale) the pollutant level in kitchen environment.

# Major Findings:

- ICS is better than traditional stoves because of less soot (34%), fuel efficiency (26%), less smoke (23%), convenience (17%) The rural kitchens are used solely by women (housewife, daughter and daughter-in-
- law)
- All households have improved clay made stoves Fuel types of households include: fuel wood (22%), agricultural residue (32%), cow-
- dung (31%) & other (15%)

ICS has significantly reduced air pollution in kitchen environment and thus protecting women and children from being exposed to the adverse health effects of indoor air pollution

 Study on the domestic use of cook stoves: technology, gender and health perspectives.

### **Objective:**

To identify the contribution of ICS on the improvement of health.

### Major Finding:

Husbands assisted their wives during cooking by putting fuel in stoves (73%), cutting vegetables (46%) and tasting salt of foods (39%)
Women received assistance during cooking from mother-in-law (38%) and daughter (25%)

 About 3% ICS using housewives and 21% traditional stoves using housewives have been suffering from breathing problem
 About 12% ICS using housewives and 21% traditional stoves using housewives have been suffering from skin diseases.

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# Small Grant Support for innovative activities

## Major activities:

- Catalyst Development
- Modification of Traditional Cookstove (TCS)
- Development of ICS spares using local materials
- Development of ICS mould
- Information sharing on ICS

### **Major Outcomes:**

- Delegated and sincere catalysts in place
- Significant number of ICS available in the community
- Low cost and user friendly spares of ICS available in communities
- Community people ignited to have 100% ICS coverage village

Small Grant Support awarded to 22 member organizations

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Emission Test Efficiency Test
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# Limitations

- Inadequate technical & financial support to network members
- Limited scope for research on user friendly ICS
- Project based government initiatives
- Inadequate IEC materials on ICS
- Information and knowledge gap on rationale use of biomass fuel





# Progress & Achievements of the Cambodia ICS National Network

ARECOP PTA Meeting 22-25 Jan 2007 Chieng Mai, Thailand

By Tong Chantheang

# Wood Energy Network of Cambodia (WENetCam)



A network hosted by CEDAC in partnership with GERES with core funding support from ARECOP



# Main points to be presented:

- Network program development
- Network development strategy
- Achievements
- Problems & solutions
- Challenges to sustain ICS &biomass energy program

# 20 organizations are Active Members and more than 10 others have participated in and received capacity building from the network activities Funding sources: ARECOP (core fund), GERES, WFP-TNT, BTC, Carbon Credit (newly from private donor) Partners: with NGOs and donors: GERES, DATe, WFP, BTC for technical and financial support with Government Institutions: Dep. of Energy Development (Ministry of Industry, Mines and Energy),

Development (Ministry of Industry, Mines and Energy), Climate Change Office (Ministry of Environment), Dep. of Primary Education (Ministry of Education) for building collaboration



# Main activities: Communication & information dissemination: regular network meeting, awareness raising, training materials, project initiatives Capacity building of development workers Monitoring and Evaluation of members 'ICS program Facilitation of Study/R&D Alliance with relevant programs

# Network development strategy

- Building capacity of interested organizations to be able to implement the program and have access to funding assistance
- Technical & strategic support to initial projects
- Initiating project implementation in collaboration with partners & members

# **Achievements**

- Network program:
- 15 out of the 20 member organizations have implemented ICS program with their own initiative; while the others depending on the network
- We were first successful in Carbon Credit from ICS project

# Achievements

• ICS Dissemination:

- Nationwide commercialization of

New Lao stove (target urban families)



- owner-built through self-help group and Semi-commercializatio of mud stove (target rural families)



# Achievements

- ICS Dissemination:
- 20 groups of local builders was established across 6 provinces for industry/institutional stove building service
- In-depth monitoring system was applied to ensure good quality &delivery of ICS; e.g. stove logbook, ID card...





# Achievements

- Sustainable charcoal production:
- A model Sustainable Charcoal production was set up in Takeo province with a linkage to community tree plantation, by introducing improved technology (high quality &yield)





- Char-briquette production:
- One Char-briquette production center was set up and run by a member organization in Battambang province where the char waste as raw material is collected from gasified electricity power station. The product reaches local markets.



# Problems & solutions

| Problems/barriers:  | Solutions:  |
|---|---|
| -Limited number of  | -Building local human   |
| technicians and experts   | resource to become  |
| at institutional level  | technicians& builders   |
| -Limited access to<br>financial assistance as it<br>is not attractive and<br>priority issue | -Commercial<br>dissemination through<br>soft loan and credit<br>system; Carbon credit |
|   |   |

# Challenges to sustain ICS &biomass energy program

- Network program:
- strengthen the participation of network members; collect membership fee
- strengthen monitoring system for Carbon Credit

# Challenges to sustain biomass energy program (cont.)

- ICS &biomass energy dissemination:
- <u>Supply side:</u> Integrate Tree Planting for energy self-sufficiency into School Feeding Program, Environmental Education, Community Development
- <u>Demand side</u>:
   \*Pilot project of dissemination of (commercial) Neang Kangrei stove through credit system (soft loan)



