

Letter from the Secretariat

January/February 2005

ASIA REGIONAL COOKSTOVE PROGRAM



Dear Colleagues,

ARECOP's Network Monitoring visit to Sri Lanka provided the opportunity to take a closer look at various interesting projects (kitchen improvement, improved brick production technology, industrial/institutional stoves) being carried out there.

WENetCam, the Cambodian Wood Energy Network has also recently conducted monitoring on the dissemination of self built ICS throughout the country. The results of monitoring and other updates from Cambodia are reported here.

We also present in this edition brief news of activities from Bangladesh, the Philippines, Indonesia and Nepal.

Monitoring of National Network: Sri Lanka ICS National Network

A monitoring visit was conducted from 12-18 December 2005. During the mission, the following organizations were visited: ARECOP country contact point (IDEA), three organizations hosting as district focal points (YDP in Badulla; CDC in Kegalle and IADF, in Matara) and project locations (cottage industry stoves, improved brick making technology and kitchen improvement) were visited. The visit covered 4 districts in the Central and Northwest provinces (Kandy district, Central Province; Kegalle District Northwest Province; Badulla District, Central Province; Kurunegala District, Northwest Province).

(YDP: Youth Development Program; CDC: Community Development Center; IADF: Integrated Agriculture and Development Foundation)

Kitchen Improvement | Kitchen Improvement (KI) projects have been conducted in 9 districts, spread over 4 provinces. The intervention is to improve health conditions in the kitchen (focusing on indoor air quality improvement, hygienic storage and handling of food materials and water) and introduce efficient kitchen layout.

There is much enthusiasm to take up KI, based on communication with district network coordinators visited and beneficiaries of the program. The district network coordinator in Badulla, YDP, is committed to KI implementation and have integrated KI into other programs. In Kegalle, KI has also been implemented in conjunction with CDC's general program on improvement of women's welfare.

Up to this point, KI has been implemented in *pilot projects* or *demonstrations*. There has not yet been a systematic approach on KI dissemination. On the other hand, KI is already reaching a stage where wider scale dissemination is possible from the technical point of view. Effective KI dissemination methods should be considered, which may include the following considerations:

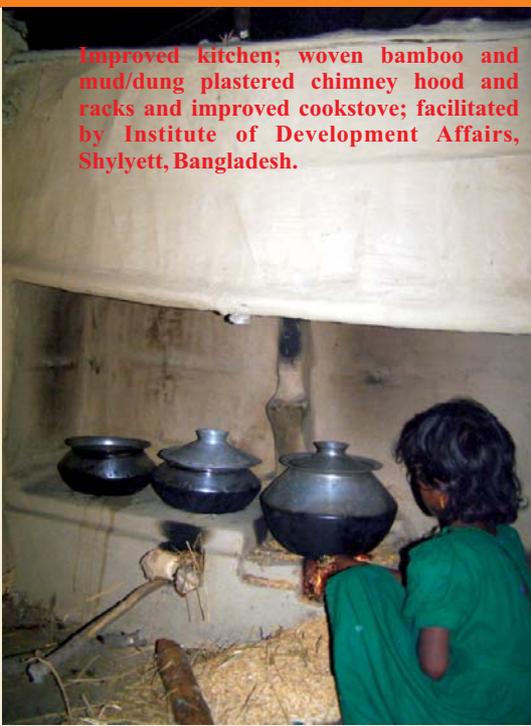
- Needs assessment of target group, promotion and awareness raising
- Costs - High initial investment (Sri Lankan Rupees 2000-5000) for kitchen improvement has been one of the obstacles to its dissemination. Different forms of financing schemes should be considered (e.g. revolving fund, payment in installments), depending on the program and conditions of target group
- If dissemination based project is being undertaken, there are scope for further technological development, specifically which focuses on increasing the efficiency of implementation, for example development of pre-fabricated components (e.g. stove platform, chimney hood components) -if these are deemed necessary and effective for more efficient dissemination.

ICS Network of Sri Lanka as well as ARECOP should be active in identifying and seeking out possible funding support for KI dissemination

KI in Kegalle facilitated by CDC, just a few months back. Notice, KI includes an overall improvement on the hygiene of the kitchen; the chart pasted in one of the kitchen visited is a checklist for a good kitchen hygiene and environmental sanitation.



Improved kitchen; woven bamboo and mud/dung plastered chimney hood and racks and improved cookstove; facilitated by Institute of Development Affairs, Shlyett, Bangladesh.



projects, i.e. program/s that could support larger scale and longer term efforts in KI dissemination.

Improved Brick Production Technology (IBPT)

IBPT was initially a research project of ITDG Sri Lanka and IDEA. The research focuses on the improvement of energy use, economy and quality of product in the brick industry:

- 1) Improvement of brick materials mixture, leads to less damaged bricks during production process, increased brick strength and decreased brick weight;
- 2) Introduction of improved drying process (improved stacking, introduction of shed for drying) leads to a faster drying process;
- 3) Improved firing method through introduction of kiln and better methods of stacking - leads to reduced fuel consumption and reduced the number of damaged bricks

From the initial ITDG&IDEA's pilot project in Hambantota district, the IBPT has been further tested in other areas, Badulla and Anuradhapura districts. The two later pilot projects were supported by GEF- UNDP and ARECOP funds.

IBPT has significant impact on the improvement of the economy and reduction of energy consumption in brick production. Biomass-based brick production is also widespread, hence the significant potential of IBPT to be implemented on a larger scale.

The technology is attractive to brick makers since there are clear benefits according to responses from those visited. Although, at this point, there is not yet a specific quantitative assessment on the economy and energy impacts of the intervention.

Meanwhile, the technology is being further developed with the aim to reduce the time for firing, through the introduction an electric blower to accelerate the initial combustion in the kiln.

Industrial and institutional stoves and ovens |

Visits were made to several cottage industrial stoves in Kandy and Kegalle Districts. The technologies for industrial/institutional stoves disseminated included:

- Stoves for boiling or frying food
- Wood fuelled oven for heating adapted from ITDG's design, which consists of combustion reactor made of mud and an oven made of 200-litre drum. The device was on the CDC's demonstration project site, supported by GEF-UNDP
- Rice husk fuelled oven for bakeries. The technology has been tested and applied earlier in projects carried out by IDEA. According to Mr. Paliakar of IADF, a pilot implementation of the above technology will be conducted by IADF and



Photos from improved brick production workshops in Badulla district depicting: Improved stacking in the drying process; kiln introduced by the project; improved brick stacking for the firing process.



Drying oven and stove, facilitated by CDC's in a demonstration project in Kegalle.

supported GEF-UNDP.

- Biomass fish drying units implemented by IADF in the South Province, supported by GEF-UNDP.

Stoves that have been implemented so far are disseminated through pilot projects and training, with funding from ARECOP and GEF. Industrial/institutional stoves are more difficult to disseminate since demand is lower and needs vary from one user to another, and locations where stoves are used are often widely separated from one to another.

Currently, the pattern of dissemination that are being carried out, depends mostly on the program orientation and resources of local NGO's/CBO's (members of ICS Network).

NEPAL

Research and Development |

Meetings were conducted between Nepal ICS Network Secretariat, Center for Rural Technology (CRT/N) with two project partners Research Center for Applied Science & Technology (RECAST) and Center for Energy and Environment (CEE) in October and November. The meetings discussed dissemination of recent technologies developed (biomass briquetting system developed by CEE; heating and gasification stoves developed by RECAST). Development of other biomass energy technologies were also discussed with RECAST.

ICS initiatives peri urban areas |

ICS intervention has not been done in peri urban areas (of Kathmandu), despite a large population using biomass as cooking fuel. CRT/N, in collaboration with Women Cooperative Society (WCS) Ltd., Kathmandu, conducted a pilot ICS dissemination in Chalnakel, one of the peri urban areas of Katmandu.

After the initial training, CRT/N

and WCS has planned making ICS compulsory and offering a loan to cover the cost of metal rods. Besides, both CRT/N and WCS realized that further orientation on ICS and its benefits from the aspect of health should be provided to the women to make them aware of ICS. Thus CRT/N and WCS hopes to undertake further expansion of ICS dissemination and stove building in that area in the year 2006. Besides, a dialogue has also been initiated with WCS to replicate this idea to other areas of WCS but within the vicinity of Kathmandu district.

Promotion of Kitchen Management Concept in Palpa District, Western Nepal | CRT/N in collaboration with Nepal Red Cross Society (NRCS) Palpa has been promoting the concept of kitchen management and awareness development of the communities in the adoption of the concept in Pipaldanda and Humin VDC of Palpa district. In this regard, ICS Network has supported Nepal Red Cross Society, Palpa to initiate the promotion of Kitchen Management Concept in Palpa. The project started in September and was expected to be completed by December 2005.

It was found that women in the community were very happy and willingly improve their kitchen. They expressed that after improving their kitchen, they have been able to save the time of cooking hours and has also make their life easy. Apart from this they strongly highlighted that it has helped them to get rid of the diseases as well since the improvement of the kitchen has helped them to keep their kitchen and the surrounding places clean.

Student Support Program |

Research on Improvement of Cookstove for Tharu Community of Eastern Nepal | ICS Network in Nepal supported students from Purwanchal University, Dharan, Nepal to undertake research activity. The students have successfully completed their research on Improvement of Cookstove for Tharu Community of Eastern Nepal in Itahari.

Research on Water Pasteurising Unit inbuilt with an Improved Cooking Stove | ICS Network supported students from Nepal Engineering Campus who undertook the research on “Water Pasteurizing Unit in an ICS”. They successfully designed and built the water-pasteurizing unit for use with Improved Cooking Stoves in Nepal using local materials in conjunction with Imperial College, London. The students have also shared the outcome of their findings with CRT/N staff, which will later be shared with network members.

Bangladesh

Seminar on Impact of Indoor Air Pollution Smoke on Mother and Child Health (VERC Training Complex, Anandapur, Savar, Dhaka on 15 December 2005) | 65 participants from local, national and international NGOs and Govt. officials attended the seminar. Md. Yakub Hossian, Deputy Executive Director of VERC chaired the seminar. Dr. Rokeya Akhter Khanum, Project Director of Institute of Fuel Research & Development (IFRD) was present as chief guest while Dr. M. Khalequzzaman, Senior Energy Specialist, GTZ, Dhaka was present as a special guest. Dr. Kurshi Talukder, Research Coordinator of Center for Women and Children's Health, presented the keynote paper.

Network Meeting | A Meeting of the National Network on Improved Cookstove Program was held on 15 December 2005 at VERC Training Complex. Following are the outcomes of the meeting:

- Ways to strengthen the network was discussed
- Strategy and policy were discussed to implement the program smoothly
- Ways had been found out to popularize ICS technology
- Experiences with ICS activities were shared with one another in network
- Progress of the network was discussed
- Discussion was held on kitchen improvement
- Preparation to arrange CCP and PTA meeting of ARECOP

Training on Kitchen Improvement | VERC Training Complex | 27- 31 Dec, 2005 | 25 participants from 25 network partner organizations attended the training session. The resource persons for the training workshop were Dr. Sanowar Hossain, of Mother and Child Hospital and VERC Engineer and Associate Coordinator, Watsan and Technology.

Refresher Training on ICS Technology | 20 20 December 2005 | A total of 25 participants attended the training. Ms. Mahfuza Khanam, Principal Scientific Officer of IFRD/ BCSIR facilitated the training courses. Eventually, Aryanto Sudjarwo of ARECOP shared his experience in the training. Participants shared their field experiences of ICS activities as well as deficiencies. They also pointed out some problems and technical faults of ICS.

Small Initiative Fund/ Seed Money | Small initiative funds were awarded to organizations to support them in their unique ideas for extension of ICS activities in areas where there is no ICS intervention or to promote new sustainable approaches. The achievements of the NGOs provided with Seed Money are given below in brief.

- 14 staff and 75 group members were oriented on ICS
- 14 community catalysts were trained
- 1435 improved cook stoves have been installed
- 1 village achieved 100% coverage with ICS
- 06 communities have achieved 100% coverage with ICS
- 2 Demonstration Centres were established
- One recipient organization developed pottery chimney and grate
- 5 kitchens were improved by the network partners who received kitchen improvement training

Motivational Film | A motivational film on the impact of indoor air pollution on health is under development. An agreement has been signed between the film maker and VERC. Outdoor shooting is going on in the field.

Indoor air pollution mitigation | VERC, Winrock International and Concern Worldwide have undertaken a pilot project on Reduction of



ICS installations in Jhenaidah, facilitated by Unandaya Dhara. Kitchen improvement, facilitated by Integrated Development Affairs in Shilyett.

Collaboration with World Food Program | In collaboration with World Food Program (WFP) School Feeding Project, WENetCam and GERES-CFSP will coordinate and provide technical services for the installation of 1064 improved cookstoves in primary schools in 7 provinces.

Documentation of ICS Successful Story | WENetCam is now carrying out a case study on successful ICS projects implemented by CEDAC and CCFC. These 2 projects' strategy is acknowledged as the best practice for self-built ICS dissemination in Cambodia. The study will comprehensively look at the dissemination strategies and process from which we can learn to implement ICS programs in an effective and sustainable manner. The report of the case study will be produced in both Khmer and English languages to be applicable for local and international people. According to the agreement between WENetCam and ARECOP, the study report will be finalized in April 2006.

Wood Energy Education Program | From time to time, WENetCam is trying to mainstream wood energy issues to educate young generation, particularly students. First stage of the program will be a pilot action, followed by validation of experiences which may lead to a fully develop curriculum for education programs. To support

Cambodia

ICS and wood energy awareness on TV program | In June 2005, TVK (a national TV network) invited Ms. Tong Chantheang (Wood Energy Network of Cambodia) and Mr. San You (Development and Appropriate Technology) as speakers in a program "Good Morning Cambodia". The topic in the program was on Reducing Wood Energy Consumption by using ICS. The half hour program included a debate on the importance and efficient use of firewood, display and presentation of ICS and traditional stoves, and documentary film on ICS.

Monitoring of Self Built ICS Dissemination | It was observed that strengthening of stove dissemination approaches and quality control after training sessions is very important for self-built ICS dissemination in order for effective and sustainable implementation. Periodically, WENetCam team conducts field trips to follow up and monitor ICS and wood energy programs implemented by some members, namely AHRDHE, CEDAC, CFIDA, CCFC, PAD, BEDASE, and AARR. Among these NGOs, CEDAC and CCFC are advanced in ICS extension; numerous stoves were disseminated in rural communities under the intervention of these 2 organizations. General results of the monitoring was that the rate of improved stove diffusion has been steady; and stove builders and promoters are available in the rural areas (see table). Especially, women are good at promoting and building stoves; and some women lead ICS extension at community level.

It was also shown that ICS users are happy to adopt and contribute their resources to obtain stoves when they see benefits of ICS performance: firewood and time saving from efficient stove, less smoke exposure and cleaner kitchen environment and so on. Baphnom stove promoters can generate extra income from stove sale and service.

Fundraising | Bundling small project proposals is an initiative to assist local organizations to access to funding support for their ICS project.

Although we didn't succeed with the Development Marketplace2005 of World Bank and the Small Grant Program of the UNDP (GEF and PTF) due to high competition, we tried to apply again for the Development Marketplace 2006 Award. This is a package of 11 small proposals sent by 11 organizations. In this project, GERES-CFSP is a partner mainly responsible for technical and advisory assistance, while those 11 organizations are project

Number of organizations implementing ICS	18
No. of stove disseminated	
Samaki	3736
Ba Phnom	3195
Palm Sugar	62
No. of community builder/promote ICS program coverage	447
	12 provinces
	38 districts
	438 villages

Summary of self built ICS dissemination statistics (WENetCam, December 2005)

this project, we are trying to seek project partners and funding assistance. The first identified partner may be UNESCO under Education Program as it is supporting the Cambodia government to reform their education system.

INDONESIA



Stoves disseminated in Enu Village, Donggala (Photos by: Katopasa)

Healthy-energy saving stoves in Donggala, Central Sulawesi |

The stove program was initiated with a training on “healthy-energy saving stoves in September 2005, facilitated by Yayasan Katopasa (Central Sulawesi), in cooperation with YBUL (Jakarta) and SGP-GEF-UNDP, in Donggala district. This was followed with a formation of stove producer group “Tora Rangka”. Presently the group produces about 150 stoves a month with a selling price

between 8000-12000 Indonesian Rupiah (US\$ 0.84-1.3). The stove project was part of a larger project on "The Utilization of Non-Timber Resources & Forest Conservation" - which include income generation, community managed production forest and charcoal making. (Extracted from press release of Yayaasn Katopasa, 26 January 2006).



South Sumatera Regional Training on Improved stove and Kitchen Improvement, 14- 18 February 2006 |

The above training was facilitated by The Indonesian Stove Network and organized by the South Sumatera Focal Point Heifer International and “PANSOS “Bodronoyo”. 20 trainees came from 5 provinces (Sumatera Selatan, Lampung, Bengkulu, Jambi, Bangka-Belitung) in the South Sumatera region.



Training sessions - stove construction and stove design workshop

PHILIPPINES

Ambulant Food Vendors: energy-efficient stoves and hygienic, healthy food: A Pilot Project for the Entrepreneurial Poor in the Philippines | The project, funded by UNDP REP-PoR is ongoing (November 2005 to March 6, 2006). The pilot project will provide ambulant food vendors with charcoal, improved cookstoves, solar water heater and clay water filter or Solar Water Disinfection

(SODIS) for those selling juices or cold drinks in Manila, Davao and Cebu

Addressing Indoor Air Pollution and Health Issues | Proposal on the above project has been submitted to SEA-UEM

EVENTS

Pacific Gender and Energy Strategic Planning and Awareness Raising Training Workshop, Nadi, Fiji Islands, 5-9 December 2005 | As part of close collaboration between ARECOP and ENERGIA, ARECOP's manager Christina Aristanti was requested to participate in the above training and workshop as a resource person to share her experiences in facilitating the Asia Network as well as to be a trainer on Gender and Energy. Her participation was well appreciated by the Pacific Network. It is also beneficial for her to know better the Pacific Network.

South Asia Regional Workshop on Indoor Air Pollution, Health and Household Energy (27-28 February 2006, Kathmandu, Nepal), organized by Practical Action, Nepal | ARECOP Secretariat is presenting a paper on Asia Regional Kitchen Improvement, with specific discussion on South Asian Countries. ARECOP CCP in Nepal will also participate in the above event.

Inter-Regional Training Workshop on Indoor Air Pollution and Household Energy Monitoring , Colombo, Sri Lanka (Tentative: End of April) | Organized by: WHO, United States Environmental Protection Agency and the Center for Entrepreneurship in International Health and Development.

ARECOP Secretariat will be supporting one Sri Lankan participant; WHO, based on ARECOP's recommendation is supporting one participant each from Nepal, Bangladesh and the Philippines.