



Dear Colleagues,

Winrock International - Bangladesh, has sought the collaboration of Village Education Resource Center in the project, Reduction of Exposure to Indoor Air Pollution through Household Energy and Behavioral Improvement Project, in 2 municipalities. This will be the first intervention focused specifically on indoor air quality improvement in Bangladesh; which we believe will be an important turning point in terms of getting IAQ recognized and mainstreamed in the public health agenda in the country.

While in Nepal, CRT/N as the ICS Network coordinator, is forging a long term commitment to cooperate on various renewable energy, including ICS projects with the Kathmandu University. A Memorandum of Understanding had been signed between the two. Such co operation commitment would significantly strengthen the technical capacities of the ICS Network of Nepal and further consolidate ICS project implementations in the country.

An initiative has been undertaken by the WoodEnergy Network of Cambodia which facilitates the making of a joint proposal, put together by 9 Cambodian organizations. The joint proposal is to assist them to access funding supports for various ICS projects.

As usual we will also be keeping readers updated on various other activities conducted by the network.

Kitchen Improvement, Indoor Air Quality & Health (Progress on the development of Training Module)

Prof. S.K. Sharma of Energy Research Institute, Punjab University, visited the office of ARECOP Secretariat from 26-27 May 2005 to discuss the development of the training modules with Aryanto Soedjarwo, Christina Aristanti and Erwan Kow. The following were worked out during the meeting:

- > A review of existing materials, i.e. ARECOP Kitchen Improvement Training Module
- > Brainstorming on topics to be covered in the training
- > Consultation on resources needed for the training
- > Discussion on training approach
- > Tasks assignments and scheduling

It was decided during the meeting that the existing training and implementation framework developed for the Kitchen Improvement Training will be maintained, while integrating a more comprehensive coverage on indoor air quality and quantitative measurements of impact of interventions.

Development of module: Training on Improved Pottery Stoves

Different types of pottery stoves have been traditional commodity in almost all Asian countries. Various improved cookstove programs in several Asian countries (Cambodia, India, Indonesia, Lao, Philippines, Nepal, Sri Lanka, Thailand) have adopted traditional pottery stoves and introduced improved versions. Improved pottery stoves have also been quite successful and accepted in some countries (notably in Cambodia, Lao, Sri Lanka and Thailand).

In this regard, improved pottery stoves have a great potential to be applied to Asian countries which have the tradition of using pottery stoves. While seeing the great potential, skills in the design and production of improved pottery stoves are not yet widespread. These skills are being centralised in the hands of a few experts. Furthermore, such expertise is only available in several countries in Asia. Development and implementation of improved pottery stoves dissemination have thus far been slow - at the country level and at the Asia regional level. While at the same time, there is a growing interest in several Asian countries to implement improved pottery stoves dissemination.

While at the field level, for many years improved pottery stove programs have relied on informal training. Through this approach, skills diffusion has been slow to reach a large number of potential producers and teaching quality is highly determined by the ability of individual extension worker. While in countries such as Sri Lanka and Cambodia, more formal trainings have been instituted.

There have also been attempts to address the 'soft' issues in improved pottery stoves, i.e. with regards to production management and commercialization. Unfortunately, such information and knowledge do not reach as wide audience as it should, i.e. particularly those conducting program planning at the practical level.

The above experiences strongly indicate the need to address improved pottery stove program in a more concerted manner. To realize the potential and to



Improved Charcoal Stove (Ratchaburi, Thailand)

address the long term needs for effective improved pottery stove program, there must be greater diffusion of skills from the hands of a few experts and into the hands of institutions working in improved stove program at the implementation/field level. Additionally this should also be integrated with gathering of scattered information and experience, compiled systematically in an appropriate format for the purpose of knowledge transfer.

Asia Regional Cookstove Program has an initial discussion with Cambodia Fuelwood Saving Project on the possibility to jointly develop a module, which will be a comprehensive means to diffuse technical and program management skills in improved pottery stove dissemination. It is foreseen that other regional resource persons will also be involved, i.e. clay and pottery experts and those who have had significant experience in managing pottery based improved stove programs.

BANGLADESH

Training of Trainers on ICS Technology (5-9 June 2005)

The training course was organized in collaboration with the government department named as Institute of Fuel Research and Development (IFRD) of Bangladesh Council for Scientific and Industrial Research (BCSIR) at VERC Training Complex. Twenty-five (25) participants attended the training. Mrs. Mahfuja Khanam, Senior Scientific Officer of IFRD facilitated the course while APC of ICS project of VERC was co-facilitator.

Initiative Fund/ Seed Money:

Small initiative fund was awarded to potential NGOs 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 following NGOs were the recipient of fund. They are: CDS - Barisal, IDEA - Sylhet, PASS Savar, SDE - Savar, SPUS Manikgonj Unnayan Dhara Jhenaida and VERC have awarded for Seed Money for Phase III

The achievements of the NGOs provided with Seed Money are given below in brief.

- ✓ 36 people from various organizations participate in ICS orientation
- ✓ 4 community catalysts were trained
- ✓ 1635 improved cook stoves have been installed
- ✓ 1 village achieved 100% coverage with ICS
- ✓ 10 communities have achieved 100% coverage with ICS
- ✓ 2 Demonstration Centres were established
- ✓ One recipient organization developed pottery chimney
- ✓ 10 kitchens were improved by the network partners who received kitchen improvement training



Source: Progress Report Bangladesh ICS National Network Program (Jan-Jun '05)

VERC-WINROCK Int. Cooperation

Winrock International has committed to undertake piloting on Reduction of Exposure to Indoor Air Pollution through Household Energy and Behavioral Improvement

Study Tour of ICS Production Center

[Cambodian ICS producers & distributors visit ICS Production Center, Ratchaburi, Thailand 22-27 May 2005]

Improved cookstove producers from ICO PRODAC (Improved cook stove producer and distributor association in Cambodia) visited stove production center in Ratchaburi, Thailand. The visit was coordinated by Development of Appropriate Technology and supported by Belgian Technical Cooperation (BTC), CFSP and ARECOP. The visit had provided participants an opportunity to gain additional skills and knowledge on various aspects of stove production techniques and technologies and stove production management systems. Participants also visited the office and demonstration site of Department of Energy Development and Efficiency, where they were briefed on biomass energy technologies developed in Thailand.

On June 14, ICO PRODAC conducted a meeting to follow up on the results of the



visit. The meeting discussed possibilities of adoption and adaptation of various production technologies used and management systems implemented at Ratchaburi stove production center. Participants decided to pilot test several technologies: improved kiln, pottery wheels, clay mixing machine and improved tools.



Photos by: DATE, Cambodia

Project in collaboration with VERC Bangladesh in 02 Municipality in Dinajpur and Nilphamari district.

CAMBODIA

Joint Project Proposals

Wood Energy Network of Cambodia (WENetCam) facilitated 9 organizations, to put together a joint proposal, in order to assist them to access funding supports for their ICS projects. The funding supports were considered important, as a way to enable organizations that have participated in ICS training to undertake ICS projects. The joint proposal was submitted to World Bank Development Marketplace 2005 (WBDM2005) and UNDP (GEF3 and PTF4).

Stove Monitoring System

WENetCam and Cambodia Fuelwood Saving Project (CFSP) introduced a system to monitor the dissemination of mud improved stoves, in order to strengthen the dissemination approach and stove quality control. Logbooks were created to serve as a monitoring tool for community members to record regularly the progress data. It is written in local language with illustrations to simply recorder who are community members. The logbook consists of 2 main parts:

- 1) Stove construction and utilization; and
- 2) Mould maintenance

Training opportunity to members

On May 27-30, 2005, WENetCam facilitated 4 member NGOs (FLOW, PA, CADET and AHRDHE) to attend training course on "Char Briquette Production" which was organized by Association for Supporting Disability Development (ASDD one of WENetCam members) with technical support from CFSP. The course was held in Thmor Kol district, Battambang province and aimed at providing technique of making char briquette to the trainees.



Mud ICS construction training in the community
Source: Progress Report WENetCam

Several presentations of the R&D and pilot projects of the network were also presented. Dr. Sushil Bajracharya from Research Centre for Applied Science and Technology (RECAST) presented the outcome of the research on "Development of Gasifier Stove for Domestic Use". Similarly, Dr. Krishna Raj Shrestha from Centre for Energy and Environment (CEE) presented and made practical demonstration on the outcome of research on "Design and Testing of Mechanical Press for the production of Beehive Briquette". Mr. Hari Bhakta Khoju from Rural Community Development Society (RUCODES) and Mr. Damodar Karki from CRT/N discussed and presented the overview on the implementation of Pilot Field Test on Methodology for Participatory Assessment of ICS Program.

Subsequently, Mr. Kanchan Rai from Kathmandu University (KU) also shared the experiences of the research activity undertaken by Kathmandu University in developing Smokeless Metal Stove for High Altitude Mountain Areas. The presentations were followed by

discussions and recommendations to further enhance the respective research and development works.

Support for Organizations with ICS Initiatives

ICS Network of Nepal started to work in peri urban areas in the vicinity of Kathmandu, where a large proportion of the population are still using traditional cookstoves and indoor smoke pollution is one of the major health problems. ICS Network, CRT/N in collaboration with Women Cooperative Society Ltd, Kathmandu conducted 5 days Training on ICS Construction with Kitchen Management from May 3- 7, 2005 to the women's group of Boshan village, Chalnakhel a peri-urban area of Kathmandu District. There were a total of 8 women participants who successfully completed the week long ICS construction with kitchen management training.

Promotion of Kitchen Management Concept in Palpa District, Western Nepal - Nepal Red Cross Society (NRCS) Palpa implemented Women in Water and Energy Management project in Palpa district of Nepal from April 2002-September 2004. The main objective of the project was to meet the water and energy needs of women and enhance the skill of women for better water and energy management. Improved Cookstove has been the integral component of this project and women of the project site has been trained as promoters for awareness development on the benefits of ICS and ICS installation. However, kitchen management has been the forgotten aspect in this

NEPAL

National Network Meeting

The 11th ICS Network Meeting was held on 8th June 2005 at the Centre for Rural Technology, Nepal (CRT/N). The meeting received overwhelming participation both from Kathmandu and other districts. There were also participants coming from organizations new to the Network.

Mr. Ganesh Ram Shrestha welcomed the participants and briefly highlighted the objectives and operational mechanism of the Asia Regional Cookstove Program (ARECOP) and ICS Network in Nepal. Progress of the network activities till date and the activities carried out was briefed to the participants by Network Officer, Ms. Rakshya Pandey.

endeavor and in order to have a broader impact they aim to promote the concept of kitchen management in the project site as well as in the other communities. Therefore in order to promote the concept of kitchen management in the project site and awareness development of the communities in the adoption of the concept, ICS Network has approved to support Nepal Red Cross Society, Palpa to initiate the promotion of kitchen Management Concept in Palpa. The project will start from July and is expected to complete by December 2005

Visit of Prof. Kirk Smith

Prof. Dr. Kirk Smith from the School of Public Health at the University of California, Berkeley also visited Centre for Rural Technology, Nepal (CRT/N) on June 6, 2005, in the course of his visit to Nepal. During his visit to CRT/N, Prof. Smith was briefed on overview of ICS activities undertaken by CRT/N so far and also the future scope of ICS in the context of Nepal. Correspondingly Prof. Smith also shared his experiences about his recent research being done by UC Berkeley, USA including studies done in Nepal on the association of indoor air pollution due to cooking smoke, which ultimately leads to cataract and TB. Dr. Smith appreciated the role of ICS Network that is being undertaken as a country contact point of ARECOP since the year 2000.

ICS Network Cooperation with Kathmandu University

Memorandum of Understanding (MoU) with Kathmandu University was signed between Center for Rural Technology/Nepal (CRT/N) and Kathmandu University (KU), Dhulikhel, on June 02, 2005 by Mr. Ganesh Ram Shrestha, Executive Director on behalf of CRT/N and Prof. Dinesh Prasad Chapagai, Dean on behalf of KU at CRT/N.

On the occasion, Prof. Suresh Raj Sharma, Vicechancellor, KU, was also present. The major areas of co-operation between KU and CRT/N are the promotion of joint action oriented research projects in the field of rural technologies and renewable energy, which also includes smokeless stoves (ICS) for fuel efficiency, reduction of indoor smoke and space heating. Besides, exchange of academic and research material, enrollment of KU student for the practical and on the site training at CRT/N's ongoing projects, preparation of joint research proposals and implementation of projects for the promotion and development of rural appropriate technologies.



Source: Progress Report, ICS Network Program of Nepal (Jan-June '05)

Model Improved Kitchen at CRT/N

In rural households, women prepare at least two full meal everyday and spend at least 8 to 11 hours a day in kitchen and food preparation related activities. However, the kitchen in rural household is the most neglected part of the house and kitchen improvement/management is given low priority.

ICS Network has taken the initiative to assist CRT/N to develop a model-improved kitchen at CRT/N complex. The kitchen reflects the typical managed kitchen of the rural communities of Nepal. The model has integrated most of the necessary items such as improved cookstove, cupboard, sink for washing dishes etc that are arranged systematically.

Student Support Program

ICS Network has been implementing the Student Support Program since 2003. Where in the past focus has been on the impact study of ICS programs, the present focus of the program will be on design and technical aspect of ICS. In this case, the student will not only undertake assignment on ICS as a part of their thesis work but the outcome of the research will also be useful for the organization in designing the new models as per the requirement of the concerned areas in need.

PHILIPPINES

Baseline data collection on Indoor Air Pollution

Implementing organization: APPROTECH Asia

Supervision: Dr. C. Magturo (A. Asia volunteer; medical specialist from the National Cent. for Disease Prevention and Control Env. and Occupational Health Office of the Dept. of Health)

In this research study, the Dr. Magturo identified diseases that have strong

relationship between the poor indoor air pollution and the use of biomass fuel. The study determines:

- ✓ the length of exposure of the cook (men or women) to heat and smoke in the kitchen while cooking
- ✓ presence and frequency of common physical complaints associated with cooking activities.
- ✓ whether they have consulted physicians and the resulting diagnosis and recommendations of the physicians
- ✓ other (gender based) strenuous activities for the cook (women or men) that might have direct bearing on the physical stress of the cook.

Documentation on the Evolution of the cooking stoves in the Philippines

APPROTECH Asia is now carrying out the above documentation. Stoves documented vary from stoves in residential kitchen from Luzon, Visayas, and Mindanao to small industrial stoves used in food or industries, such as, pork "chicharon, corn crackers, peanut britles, rice cake "Puto and "Puto kutchinta" rice cake "bibingka" and other institutional stoves in schools, prison, hospital, slaughter house and restaurants. Wood, charcoal and other biomass stoves are being documented in the study.