

## ARECOP PTA & CCP Meeting

### IMPROVED COOKSTOVE OF PHILIPPINES Accomplishments for January to December 2006

22-26 January 2007  
Chiang Mai, Thailand

## Planned activities

- Research & documentation
  - ☞ best practices in cooking energy in
- Support to local initiatives
  - ☞ micro-lending for the commercialization & improvement of *Mabaga* stove
- Linkages & Alliance-building/Promotion
  - ☞ participation to local & international meetings
  - ☞ join/organize awards
- Publication & electronic networking
  - ☞ Improved kitchen design & models, IAP, Flyers & brochures on ICS, update of database on stoves & experts, website
- Management & administration of the program

For January to December 2006, ARECOP funds for ICS-Philippines in the amount of EUR5,500 was used to leverage funds from

1. UNDP Regional Energy Programme for Poverty Reduction (REP-PoR) for "Ambulant Food Vendors: Energy-Efficient Stoves & Hygienic, Healthy Food – A Pilot Project for the Urban Entrepreneurial Poor in the Philippines" in the amount of US\$42,000
2. ENERGIA Networking for Energy, Gender and Water Network (ENGENDER) of EUR5,000
3. Approtech Asia micro-finance for ICS-Philippines partners & ICS Centers – PhP500,000

## Accomplishments as Planned

- **Research & documentation**
  - ☞ best practices in cooking energy using ICS with ambulant food vendors
  - (1) Article contributions to Glow & ENERGIA News
  - (2) report on the scientific research & commercialization activities related to ICS, clay cooking wares, clay water filter by Dr. Cris Lopez, Jr. (report on commercialization)
- **Support to local initiatives**
  - ☞ financing the production & improvement of *Mabaga* stove for food vendors, household and partner organizations - US\$8,000
  - ☞ Clay vs metal stoves – MIRDC & PNOC comments



Pottery center Contact Person & Potter	No. of stoves sold in 2006	
	MABAGA charcoal	MALIYAB fuelwood
Ilocos Norte, Pangasinan, La Union, Isabela, Cagayan Valley Ms. Irma P. Acebedo & Lita Ulep	none	4,000
Iloilo, Antique, Guimaras Dr. Cris Lopez, Jr. & Rainier Roa	>2,000	>1,000
South Cotabato & Davao Mr. Emil Sumagaysay & Agustin Cabance	>1,000	800

## Publication & e-networking

👉 flyer of *Mabaga* stove & brochure,  
tarpaulin for ICS partners, exhibition materials

👉 e-networking & databases still in  
progress

## Accomplishments continued:

- **Linkages & Alliance-building**
  - 👉 participation in local & international meetings, seminar-workshops such as
    1. World Bank Clean Energy Week in Washington D.C.
    2. AIT Professional Training Program on Appropriate Urban Environmental Management Technologies in Bangkok
    3. Zonta International-Makati
    4. Go *Negosyo* Fair & Exhibition with the Department of Science and Technology in Makati
    5. *Mahal Ko Bayan Ko mabaga* stove dealership in Tahanan Village, Tanza Resettlement Area, Quezon Memorial Circle and Nayong Pilipino
    6. SEA RE on Development of Regional Competency Standards for Training in RE in Manila
    7. ASEAN Business Forum on RE in Makati
    8. ADB Clean Energy Week in Ortigas
    9. ENERGIA NFP Meeting in New Delhi

## Unaccomplished as planned

- MPA pilot project – training of trainers accomplished and community pilot projects implemented but were not carried out as planned by the partner-implementing organizations due to fast turn-over of staff
- Documentation of the ICS commercialization approach of MFI – same as above and deadline was May 2006

## Deviation from planned activities

### Capability-building activities responsive & relevant interventions for sustainability beyond 2007

• Improved Kiln Construction – Iwate & Yoshimura Kiln in Davao City for the

- (1) production of high quality charcoal to compliment the *Mabaga* stove commercialization and improved heat efficiency spurred by the UNDP REP-PoR project on energy-efficient stove provision to food vendors households; food vendors are dealers of *mabaga* stove,
- (2) Advocacy on improved IAQ & cleaner cooking energy
- (3) Reduction of greenhouse gas & black ash powder in the production process & preparation for the capability-building activities and linkages in the quantification of GHG reduction
- (4) increased income of charcoal producers with wood vinegar, and
- (5) introduction sustainable tree plantation & charcoal production.

## WAY FORWARD

- Proposals in the pipeline
- Improved kitchen and ICS, IAP for micro-entrepreneurs in urban poor communities submitted to
- (1) WB Development Marketplace
- (2) SEA UEM CIDA-AIT ADP
- (3) Industrial Guarantee Loan Fund (IGLF)-NEDA
- (4) IGLF-NEDA productive use of energy in micro-food enterprises e.g. taho, and ICS dealership program
- (5) Briquetting of agri-wastes usually burned as practiced by farmers
- (6) Carbon credit – ADB & WB consultant Anita Celdran
- (7) Stove performance test (heat efficiency) – no facility at DOE, DOST
- (8) Gasifier for wood chips in progress; rice-husk in micro-enterprises or industry

### Initiated and on-going projects:

#### 1. micro-financing in green technology package

ICS, improved kiln, Improved kitchen, rice-hull and wood chips gasifier for household and livelihood or business/industrial uses activities

#### 2. Setting trends and commercializing clay cooking and serving wares for healthy lifestyle & greenhealth technology promotion – clay rice cooker with PNOC EDC

“Pamana” (inheritance) wares

#### 3. Renewable energy technology promotions, research and publications

#### 4. Technology packages for disaster management and rehabilitation such as food & livelihood technology packages, water potability & agriculture-use technology package, agriculture & food processing technology package, among others

#### 5. Energy interventions among street food vendors for poverty reduction – ICS commercialization

**Other priority areas of concerns integrated in the projects:**

- Gender
- Health & Nutrition
- Solid Waste & Wastewater management in Environmental conservation & rehabilitation
- Enterprise and industry development – pottery business – cooking wares & serving dish
- Biodiversity & Climate change – research & documentation
- energy, water & poverty – policy advocacy & on-ground projects



**NATIONAL NETWORKING PROGRAMME OF  
THE IMPROVED COOK STOVES  
IN SRI LANKA  
UNDER THE  
ASIA REGIONAL COOK STOVE PROGRAMME  
(ARECOP)**

**ACHIEVEMENTS IN  
CONJUNCTION WITH THE  
REGIONAL AND NATIONAL  
PRIORITIES**

**MILLENNIUM DEVELOPMENT GOALS OF SRI LANKA THAT ARE  
BEING SUPPORTED BY THE ARECOP PROGRAMME**

- Control the reduction of forests and tree cover to maintain biodiversity and CO<sub>2</sub> absorption.
- Promotion of renewable energy resources.
- Protecting the Ozone Layer by the reduction of Green House Gas (GHGs) emissions.
- Support poverty alleviation by creating healthy living atmosphere for the poor.

**INTERVENTIONS OF ARECOP PROGRAMME TO  
SUPPORT MILLENNIUM DEVELOPMENT GOALS**

Control the reduction of forests and tree cover to maintain biodiversity and CO<sub>2</sub> absorption.

- Improved stoves for household cooking and for small industries saves the amount of firewood used reducing cutting of trees.
- Improved technologies reduces the amount of firewood used in Kilns (Brick kilns, Pottery kilns, Bakeries etc.).

## INTERVENTIONS OF ARECOP PROGRAMME TO SUPPORT MILLENNIUM DEVELOPMENT GOALS

### Promotion of renewable energy resources.

- Introduction of ICS and other improved technologies promotes most efficient use of firewood which is the most common renewable energy resource.
- Introduction of improved technologies in the use of biomass results in maintaining the forest and tree cover levels for sustainability.

## INTERVENTIONS OF ARECOP PROGRAMME TO SUPPORT MILLENNIUM DEVELOPMENT GOALS

Protecting the Ozone Layer by the reduction of Green House Gas (GHGs) emissions.

- Introduction of ICS in Sri Lanka has improved the combustion of firewood and has reduced emissions.
- Introduction of New technologies to kilns, Bakeries etc. has improved the combustion of firewood and reduced emissions.

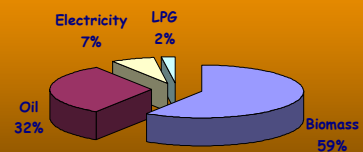
## INTERVENTIONS OF ARECOP PROGRAMME TO SUPPORT MILLENNIUM DEVELOPMENT GOALS

Support poverty alleviation by creating healthy living atmosphere for the poor.

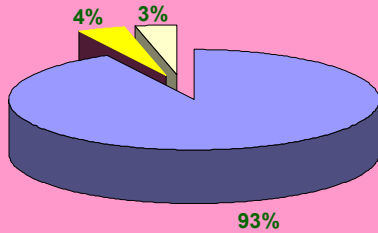
• Improved kitchens and ICS has reduced health risks caused by toxic emissions.

- Reduced health hazards has saved money for the poor.

## National Fuel Consumption Pattern

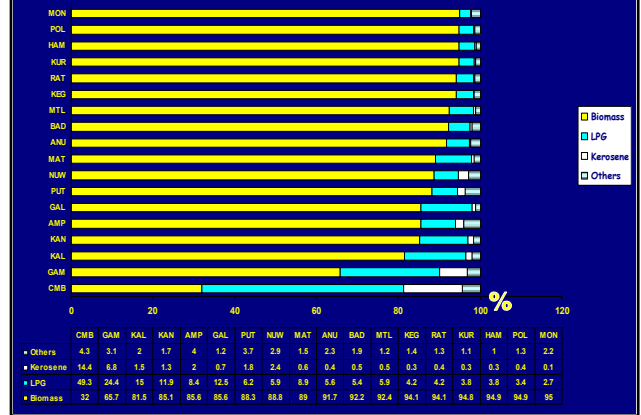


**% Fuel Used for Cooking**



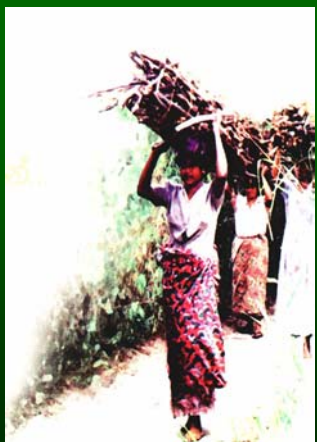
■ Biomass ■ LPG ■ Kerosene

**% Households by Fuel Type for Cooking - District Wise**



	CMB	GAM	KAL	KAN	AMP	GAL	PUT	NUW	MAT	ANJ	BAD	MTL	KEG	RAT	KUR	HAM	POL	MON
• Others	4.3	3.1	2	1.7	4	1.2	3.7	2.9	1.5	2.3	1.9	1.2	1.4	1.3	1.1	1	1.3	2.2
• Kerosene	14.4	6.8	1.5	1.3	2	0.7	1.8	2.4	0.6	0.4	0.5	0.5	0.3	0.4	0.3	0.3	0.4	0.1
• LPG	40.3	24.4	15	11.9	8.4	12.5	6.2	5.9	9.9	5.9	5.4	5.9	4.2	4.2	3.5	3.8	3.4	2.7
• Biomass	32	65.7	81.5	85.1	85.6	85.6	88.3	88.8	89	91.7	92.2	92.4	94.1	94.1	94.6	94.9	94.9	95

**APPROACHES AND STRATEGIES ADOPTED TO REACH SUSTAINABLE ICS NETWORK IN SRI LANKA**



**WHAT ARE THE REQUIREMENTS FOR A SUSTAINABLE ICS NETWORK?**

**Network members should be able to:**

Acquire and use technical knowledge to implement ICS Programmes

Ability to seek funding for their own ICS Programmes

Develop capacity to sensitize Government and Non Government Agencies to create a demand

Communicate and share experiences and knowledge on ICS with other Network members

Share experiences and knowledge on other expertise with Network members

Adopt and seek new technologies

Integrate ICS activities into other programmes which are being implemented by them

**Interventions of IDEA to strengthen the Network members**

**REGULAR MEETINGS WITH NETWORK MEMBERS TO DISCUSS THE PROBLEMS AND PLAN OUT ACTIVITIES**



**TRANSFERRING ICS TECHNOLOGIES TO NETWORK MEMBERS BY PROVIDING TRAINING AND FOLLOW UP ACTIVITIES**



Participants under going practical training on ICS at the training workshop held in 2006



SUPPORTING AND STRENGTHENING THE NETWORK MEMBERS TO SEEK FUNDING FROM OTHER DONOR AGENCIES FOR THEIR OWN PROGRAMMES ON ICS BY FACILITATING PROPOSAL DEVELOPMENT SKILLS



CREATING AWARENESS, SENSITIZATION AND PROMOTING ICS AND RELATED CONCEPTS AMONG FOREIGN AND LOCAL DONOR AGENCIES AND EXPOSE THEM TO NETWORK MEMBERS



Member of the National Steering Committee of the Global Environment Facility – Small Grant Programme (GEF-SGP) of the UNDP inspecting an improved brick kiln where they provided funds to our Badulla network member

International Agencies supporting ICS related activities implemented by local NGOs during Tsunami relief work in Matara District

SENSITIZATION AND PERSUASION OF GOVERNMENT AND LOCAL GOVERNMENT SECTORS TO FOCUS ON ICS WITHIN THE BROADER FRAMEWORK OF NATIONAL DEVELOPMENT



Awareness Programme conducted for the Education Officers

PROVIDING EXPOSURE TO NEW TECHNOLOGIES TO EXCHANGE EXPERIENCES FOR THE NETWORK MEMBERS BY WAY OF CONDUCTING OVERSEAS AND LOCAL STUDY TOURS

STUDY TOUR OF INDIA



Participants at the Palmyra Workers Development Center



Participant inspecting a ICS in Tamil Nadu State

**CARRYOUT RESEARCH AND DEVELOP NEW TECHNOLOGIES AND TRANSFER KNOWLEDGE TO OTHER NETWORK ORGANIZATIONS**



Testing a gasfire stove



Introducing new technologies in brick manufacture

**PUBLICITY CAMPAIGNS**

**SHOWCASING THE EFFECTS OF INDOOR POLLUTION, ADVANTAGES OF ICS AND AN IMPROVED KITCHEN**

**BROCHURE PREPARED TO CREATE AWARENESS**

**INDICATORS FOR THE SUSTAINABILITY OF THE ICS NETWORK:**

- Continuation of activities under ARECOP Networking Programme
- Implementing ICS related activities with funds from other agencies
- Achieving/exceeding the expected targets in activities
- Increase in the network membership
- Trained persons continue to work in their respective NGOs

### Indicators of progress and sustainability of the Network

INCREASE IN THE NUMBER OF AGENCIES THAT ARE WORKING WITH IDEA ON ICS AND BIO-MASS RELATED PROGRAMMES

- Global Environmental Facility – Small Grant Programme of the UNDP
- Promotion of Tropical Forests – Small Grant Programme of the UNDP
- Sewa Lanka Foundation
- Sri Lanka Nature Forum
- Practical Action (ITDG)
- Energy Forum of Sri Lanka
- Energy Conservation Fund
- Plan International
- International Network for the Sustainable Energy (INFORSE-SA)

### CONTINUED MEMBERSHIP EXPANSION IN THE NETWORK IN YEAR 2006

Name of the new Organization	District
Lower Uva Development Center	Badulla
People's Development Foundation	Ratnapura
Community Development Center	Kegalle
Rural Development Forum	Matale
Women's Development Foundation	Anuradhapura
Sri Dheerananda Credit Organization	Kandy
The Committee for the Peoples Rights	Kalutara
Women's Development Organization	Nuwara Eliya
Human & Environment Resource Management Institute	Galle

### Problems in sustaining the national network

- Losing trained cadres
- Unsustainability of network member organisations
  - Many of the CBOs collapse after the project period is over
  - Excessive dependency on voluntary work
  - Lack of expertise and inability to attract qualified personnel
- Lack of respect, support and cooperation by the government and the public and under estimation of the role played by the NGOs
- Levying taxes on foreign funds received
- Corruption, mismanagement lack of transparency in NGOs
- Reduction in donor funds
- Focus and attention on short term rehabilitation work (Tsunami) and availability of large funds for such type of work
- Focus of donor agencies on global and macro issues than on national than on national and local issues

### SUGGESTED STRATEGIES TO ADDRESS THE PROBLEMS:

1. At the National level undertake a reclassification of network partners on the basis of agreed success criteria and institute a programme to strengthen the weak.
2. To revitalise the National Network introduce a regular dialogue forum at least annually.
3. Contribute to the thinking of the National level networks to advocate policy level solutions.

ICS and Biomass related activities implemented by  
IDEA during the year 2006

Providing Training to Network Members on ICS and  
Kitchen Improvement (December 2006)



Conducted Study Tour for the Network Members to Exchange  
Experiences and ICS related interventions in  
Tsunami Relief Operations



Network partners engaged in  
Tsunami relief work



Exchanging experiences during  
study tour

Training of Traditional Potters in making 'Anagi' ICS under  
the Global Environment Facility – Small Grant Programme



GEF/SGP National Coordinator  
awarding certificates to trainees



Receiving guests at the certificate  
awarding ceremony

Improve Brick Kilns to reduce the use of firewood and also to operate using Paddy Husk



Improving brick kilns at Wegama in Monaragala District



Using Paddy Husk to burn bricks in an Improved kiln in Anuradhapura District

Participation in public functions to create awareness on ICS and related technologies



Participated in the Environment Day Exhibition held on 6th June

### Conducted Research and Development Activities



Rice Husk Gas stove made by a local artisans under the guidance of IDEA staff member



Rice Husk Gas stove made by a factory under the guidance of IDEA staff member

THE END  
AND  
THANK YOU

## VIETNAM ICS NETWORK ACTIVITIES REPORT IN THE YEAR OF 2006

**Mr Le Van Thong**  
**Mr Nguyen Cong Think**

## The Goals of Vietnam ICS Network phase 3

- ◆ Maintaining, extending and increasing the number of network members.
- ◆ Building Network capacity through publishing, sharing information and training courses.
- ◆ Increasing the number of households using ICS models.
- ◆ Add kitchen improvement and health is an important issues of network activities.
- ◆ Do well the network management for strengthening and sustaining.

## OBJECTIVES

- ◆ Increasing number of network members (30 members).
- ◆ To publicize and publish as well as to share information among network members.
- ◆ Publish newsletters with 12 issues (12,000 copies in total during 4 years).
- ◆ Publication of leaflet with 1000 copies (2 times during 4 years)
- ◆ Assist 2-3 students with their research on ICS, kitchen improvement and health.
- ◆ 20 people will have the skill to design and train on ICS through the TOT on ICS activities.
- ◆ 20 people will have the skill and knowledge on kitchen improvement and health through the training on kitchen improvement and health.
- ◆ Publication of document related to kitchen improvement and health. 60 copies in Vietnamese and 30 copies in English.
- ◆ 50 kitchens will have been improved through the pilot project on kitchen improvement and health.
- ◆ 15,000 improved cookstoves will be installed through network activities.
- ◆ ICS commercialization.
- ◆ Organize 3 national network meeting during 4 years.

## Achivements

## I. Network Expanding

- Attracts more members to join the network.
- Network members: RCAICE, VWU, IoE, PED, FSTAC, AULAC (VACVINA), CORD, Ha Tay, Vinh Phuc, Yen Bai, Lang Son, Nam Dinh, Ninh Binh, Ha Tinh, Hai Phong, Nghe An, Quang Binh, Quang Nga, Bac Can, Bac Giang, Thai Nguyen, Ha Nam, Dien Bien, Hoa Binh, Thua Thien Hue, Dong Thap, Soc Trang, Tra Vinh provinces, AFAP Vietnam.
- New network members: Dien Bien, Hoa Binh, Thua Thien Hue, Dong Thap, Soc Trang, Tra Vinh provinces.
- Total member: 30 members



## II. INFORMATION

- Publish quarterly newsletters and send to network member and interested orgs.
- From Oct 2005 to Dec 2006, 5 issues were published with 5000 copies.
- Printing leaflet with 1500 copies.
- Designing, editing and publishing materials for training, propagating.
- Mass media, TV program on ICS and broadcasted in local TV channel (Hatay and Bac Giang province), IoE, VWU.



## III. Propaganda Campaign and Training on ICS

### 1. Propaganda campaign for ICS dissemination

- Each member of the Vietnam ICS Network organize and implement propaganda campaign activities to raise the awareness and information of improved cookstoves for stakeholders, end-users on their own.
- Beside that, the Network and Vietnam Women Union set up some ICS propaganda programs together with regular activities of VWU.



## III. Propaganda Campaign and Training on ICS



Propaganda campaign for ICS dissemination in Ha Tay Province

### III. Propaganda Campaign and Training on ICS

#### 2. MPA Training

- After the training course in Ha Noi and Son Tay, July 2004, Vietnam Women Union carry out MPA in 8 villages. VWU also support and funded for these villages to implement ICS program.

- With the support of ARECOP, Vietnam ICS Network together with VWU conducted the MPA assessment and reviewing on July 2006 in Thanh Hoa province.

### III. Propaganda Campaign and Training on ICS



MPA assessment and reviewing in Thanh Hoa Province

### III. Propaganda Campaign and Training on ICS



MPA assessment and reviewing in Thanh Hoa Province

### III. Propaganda Campaign and Training on ICS





### III. Propaganda Campaign and Training on ICS

#### 3. Training for Cookstove Builders

- Following the TOT training for cookstove builders of the Network, some network members organized training courses for cookstove builders for itself.
- From Oct 2005 to Dec 2006, 11 training courses for cookstove builders were organized in the localities.
- Some people after participated in cookstove builder training, they become good trainers on ICS and working well with the community. They are Mr Nguyen Cong Minh (Ha Tinh), Mr Que (Huong Son), Mr Nguyen Van Hong (Ninh Binh), Mr Sang (Ha Tay).

#### 3. Training for Cookstove Builders



#### 3. Training for Cookstove Builders



#### 3. Training for Cookstove Builders



#### IV. Workshop, Meeting

- ◆ MPA assesment and reviewing in Thanh Hoa provovince on July 2006.
- ◆ Collaboration with VWU to organize workshop on energy saving and conservation for households on Nov 2006.
- ◆ Network national meeting in Hanoi on Jan 2006.

#### Network meeting in Hanoi, Jan 2006



#### Network meeting in Hanoi, Jan 2006



#### V. ICS Installed Projects

- ◆ RCAICE, VWU and other network members (FSTAC, IoE, PED and many provinces) implemented projects on ICS installed in localities.
- ◆ VWU provide funds for 64 provinces to conduct the water, sanitation and improved cookstove program.
- ◆ With the support from the energy saving and conservation program of Ministry of Industry, VWU is implementing 300 models using energy saving and conservation in 300 households.

## V. ICS Installed Projects

- ◆ IoE: IoE continue to support the community to produce rice husk brick and sell it in the market and commercialization.
- ◆ PED: PED is conducting ICS dissemination program in Thanh Hoa province. 1000 ICS were built in some district and communes in this province.
- ◆ FSTAC: Continue to introduce ICS models at mountainous areas in order to minimized negative impacts caused by cutting down forest trees for firewood. FSTAC is starting a project funded by Worldbank to disseminate in the mountainous and in some middle provinces of Vietnam.



## V. ICS Installed Projects

- ◆ AFAP has developed the ICS program at mountainous provinces like Yen Bai, Bac Can and Thai Nguyen. AFAP also develop program using ICS to dry tea leaves in Bac Can and Thai Nguyen provinces. 1400 tea leaves drying stoves were built at the end of 2006.
- ◆ Many provinces like HaTay, Ha Tinh, Thanh Hoa, Soc Trang, Tra Vinh, Dong Thap, Phu Yen... are also implementing the ICS program.



## V. ICS Installed Projects



## VI. ICS Commercialization

- ◆ In 2006, the network and some network members continue to research, survey on portable stove commercialization.
- ◆ Support households and small enterprise which made and sell improved cookstove.
- ◆ Seeking the financial support from donors to mobilize the ICS commercialization.



## VII. Cleaner Biomass Fuel Technology

- ◆ IoE completed the project on rice husk briquetting.
- ◆ PED: Continue to research on wood gas stove
- ◆ RCAICE-HAU and AFAP: Implement project on ICS for tea leaves drying in Bac Can and Thai Nguyen.

## Project on rice husk briquetting – IoE Vietnam (continue from 2005)

- ◆ **Briquette stoves**
- ◆ **Why improved  
briquette stoves ?**
  - Efficiency  
(Briquettes cannot  
burn efficiently in  
woodstoves)
  - Convenience
  - Smoke  
(Environmental  
friendly)



## Project on rice husk briquetting – IoE Vietnam



## Project on rice husk briquetting – IoE Vietnam



## Project on rice husk briquetting – IoE Vietnam



## Project on rice husk briquetting – IoE Vietnam



## Tea leaves drying project (continue from 2005)



- ◆ AFAP in collaboration with Hanoi Architecture University implemented project using ICS to dry tea leaves in Thai Nguyen and Yen Bai provinces

Old tea leaves drying  
stove

## Tea leaves drying project



Old tea leaves drying stove

## Tea leaves drying project



Meeting and training for the community

## Tea leaves drying project



Pilot stove building

## Tea leaves drying project



Pilot stove building

## Tea leaves drying project



## Tea leaves drying project



Pilot stove building

## VIII. Advocacy

- ◆ Vietnam ICS Network promote advocacy activities for ICS dissemination. The Vietnam Government has started the energy saving and conservation period 2006 – 2010 since April 2006.
- ◆ Biomass and household energy is one component of the program. With the national program, biomass and household energy will have more resources for implementation and development.
- ◆ Vietnam ICS Network and each member will cooperate and work with other ministries and organizations to implement this program.

## IX. Monitoring and Evaluation

- ◆ In 2006, following the plan of ARECOP Secretariat, Vietnam ICS Network continue to conduct the monitoring and evaluation for all activities of ICS program.
- ◆ Vietnam ICS Network has appointed personnel to contact and work with network members and stakeholders to do the M & E.
- ◆ Results of the M&E is under preparing to finalize and will be complete on March 2007.

## X. Strategy of the Network in 2007

- ◆ Integrated ICS with other program such as water sanitation, health care, poverty reduction and alleviation.
- ◆ Community participation mobilization.
- ◆ Decentralization: Develop, implement ICS projects at localities levels and working more with community and end-users.
- ◆ Resources diversification to attract more investment for the ICS program.
- ◆ ICS commercialization.
- ◆ Research and development on cleaner biomass fuel technology and renewable energy.

*Xin cam on!*