

Regional Training on High Quality Charcoal Production and Biomass Briquetting

26 February – 7 March, 2007. Pak Chong, Thailand.



13 participants from Cambodia, Nepal, Philippines, Sri Lanka and Thailand, participated in the training. The training was designed for mostly practical sessions on the construction and operation of several charcoal kiln designs and on the production of wood vinegar. The participants also familiarize themselves with manual biomass briquetting technologies.



Training components

1. Charcoal Production

- Carbonization of biomass
- Charcoal from solid biomass (Iwate Kiln; Yoshimura kiln; Vertical drum kiln; Horizontal drum kiln; Double horizontal kiln; Pipe kiln)
- Charcoal from loose biomass (ARTI's Retort kiln)

2. Grey charcoal production (Pyrolysed biomass)

3. Biomass briquetting

- Manual screw pressing
- Manual press beehive briquette

Leading experts in charcoal production, Mr. Sigiura Ginji and Mr. Hirowaka Tsuyoshi of International Cooperation Association of Charcoal Making, contributed as resource persons for

the training. Mr. Budhinan Bhuengwongyart, a charcoal specialist from Thailand guided participants in the kiln construction. Dr. A.D. Karve of ARTI, trained the participants in loose biomass charring and briquetting.

Participants took part in lecture, workshop and practical sessions. The first five days of the training took part in ATA complex and consisted of theories and practical sessions on the operation of Yoshimura kiln, vertical drum kiln, horizontal drum kiln and retort kiln. In day 4, participants had the opportunity to visit Buntun Bamboo Charcoal Factory at Pracheen Buri.



From day 6 up to day 9, the training took place in Mr. Bhuengwongyart's charcoal factory. Participants took part in the construction of different parts of Iwate kiln – the floor, the wall, the chimney and the roof. Another hands on component of the training was on the process of wood vinegar production.