



Presentation on Improved Stoves

Anjana Giri
UNDP GEF Small Grants Programme

28th April 2008





Traditional Stove for Cooking Meals



Traditional Open Stone Stove for preparing Cattle feed



Traditional Stove used in Monasteries and schools (on right hand side)

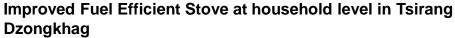
National average of 1.27 ton per capita per annum fuel wood consumption Fuel wood is by far the most important source of energy in rural Bhutan

In Bhutan SGP has basically done three types of stoves:

- at the household level, the closed type of stoves with chimney which are much more fuel-wood efficient compared to the open type where you have to feed-in firewood from all the three sides and are much cleaner because the chimney takes the smoke out of the kitchen in Tsirang Dzongkhag;
- household stoves but different than the first one to an indigenous Brokpa community in Merak and Sakten and;
- community level stoves which were provided to 10 Gomdeys and Lhakhangs and for 58 remote Community and Primary schools in collaboration with WFP.









Chimney Pipe coming out of Kitchen roof



Village women constructing the chimney for fuel-efficient stoves during Capacity Building Training.

Also seen in the picture is a technician from MTI



Materials Used – Mud Klin (like traditional oven) with metal sheet chimney pipe and iron grate

Biomass Fuel Efficiency project in Tsirang: Benefits

- 50 % reduction in fuel wood consumption;
- cleaner kitchen and utensils;
- reduced time spent on cooking & washing utensils and in collecting fuel wood;
- ability to keep food warm for longer period;
- reduced risk of smoke-related illnesses and
- Low cost and simple technology involved, making it easier for the local people to adopt.

Household stoves for the Merak and Sakten community





The project has helped the beneficiaries (indigenous people of Merak and Sakten) reduce the fuel wood consumption significantly. Though Impact study has not been conducted, however beneficiaries have expressed that the benefits of fuel efficient stoves are immense. A total of 634 stoves have been supplied to the two remote geogs of Merak and Sakten in the north of Trashigang Dzongkhag.





Rectangular Stoves for the people of Sakten



Ornamental Stoves for Merak for reduced fuel wood consumption

Community level stoves provided to Monasteries/Lhakhangs and Community and Primary schools in collaboration with WFP



Drudgery on Parents having to contribute fire wood to Community Primary School



A set of newly installed fuel-efficient stoves in Nabji Community School



Parents during the Environmental Awareness workshop getting familiarized with the fuel-efficient stoves





Reduction in indoor air pollution and significant reduction in fuel wood consumption

Thank You