



Dissemination of Improved Cook Stove – How can Scouts help?

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Traditional stove in a rural household



- 3 raised points
- One fuel inlet
- Burning chamber is deep, 30 cm
- No primary air inlet





Impact of the use of traditional stoves

- Traditional stoves cause indoor air pollution – Smoke is hazardous to health (e.g. eye ailment, bronchial diseases, headache, even cancer)
 - 14,000 women and 32,000 children die every year [WHO]
- Wastage of fuel (efficiency: 5% - 10%)
 - Consumption of biomass: >50 million tons/year



ICS being promoted by GIZ

- Adaptation of technology (IFRD, BCSIR)
 - affordable to people (e.g. low cost)
 - acceptable by people
 - usable by all types of biomass available
 - by locally available raw material

Learning through doing & field testing

- 3-pot ICS with 1 chimney & 2 grates
- 2-pot ICS with 1 chimney & 2 grates
- 1-pot ICS with 1 chimney & 1 grate

Brand Name: Bondhu Chula



Bondhu Chula

- No smoke in the kitchen
- Efficiency: 26%-29%
- Fuel saving: 50% - 60%

Household, which buys fuel: saving 250 – 400 Taka/month
Cost: 800 -1200 Taka
Payback period: 2-3 month

Restaurant:
Cost: 4000 – 6000 Taka
Saving 100-200 Taka/day
Payback period: 1-2 month



Impacts of Bondhu Chula Use

- ✓ Significant reduction of indoor air pollution in kitchens
- ✓ Reduction of cooking fuel by about 50% - biomass saving
 - Saving of money
 - Reduced burden on forest resources
 - Improvement of soil by increased use of bio-fertilizer
 - Time saving
 - Clean kitchen & pots
 - Reduction of 1ton of GHG/Chula/year
- ✓ Income generation for builders and trainers




Bondhu Chula (Clay / Brick made)





Dissemination Strategy

- Work with local partners all around the country
- Training on
 - manufacturing
 - inspection & monitoring
 - business development
 - maintenance ( user's training)
- Institutional capacity of partner
 - Fund for promotional works (leaflet, posters, fairs, etc.)



Potential Market

- About 25 million rural households
- About 3 million urban households
- About 2 million restaurants, hostels, etc.



Concrete Stove (1)

Since 2010: start with concrete Stove (Bricks, sand, cement)

Advantages:

- Concrete stoves can be produced with defined forms
- Quality can be maintained during production
- Concrete stoves can be installed quicker
- Concrete stoves can be used soon after installation
- Concrete stoves needs less maintenance and after sales service
- Concrete stove lasts long
- Can even be shifted
- Total cost is almost same



Concrete Stove (2)

- Involve sanitary shops and masons all over Bangladesh

Advantages:

- Sanitary shops and masons available all over Bangladesh
- the speed of installation will jump up











GIZ's Contribution

Entrepreneur does business and GIZ helps

- Train up masons sanitary shops
 - Production of stoves
 - Installation of stoves
 - Maintenance & after sales services
- Help in promotion & marketing
- Help in users' training
- Monitoring and quality control





Projects

- GIZ works with Power Division, Ministry of Power, Energy and Mineral Resources, especially with SREDA
- GIZ has implemented with Department of Environment under Ministry of Environment and Forests “Market Development Initiative for Bondhu Chula” funded by Bangladesh Climate Change Trust and Energizing Development (EnDev)
 - ✓ 5,000 entrepreneurs & 5 lakh Bondhu Chula
- 2nd phase has started
 - ✓ 4 lakh Bondhu Chula till December 2016
- Another project by GIZ and Indian High Commission
 - ✓ 70,000 Bondhu Chula



Achievement of GIZ till 31 October 2015

- About 1,800,000 domestic Chula
- About 7,500 institutional Chula
- Dissemination is speeding up!
- Over 5000 entrepreneurs
- Over 10,000 persons are earning livelihood by making Chula.



Other initiatives

- BCSIR
- World Bank supported program through IDCOL
- USAID supported project implemented by CCEB



Long-term Vision

- **Replace all traditional stoves by Bondhu Chula.**

Impact

- ✓ Less indoor air pollution; saving 46,000 lives/year
- ✓ Health benefit: less suffering & saving medicine costs
- ✓ Saving of 25-30 million tons of biomass (current value: over Tk 5000 crore)
- ✓ Reduction of 250 – 300 million tons of CO₂
- ✓ Conservation / regeneration of forest
- ✓ Regeneration of soil fertility (cow dung / biomass to soil)
- ✓ Income generation for builders of ICS and trainers of stove construction (mid term: 20,000 jobs)



How can Scouts cooperate?



চিত্র: রোভার স্কাউটার বন্ধু চুলা ব্যবহার করছে

- ✓ Take part in the fairs / electricity week program
- ✓ Undertake joint programs in schools
- ✓ Continuous program