



# Lessons from Practice . Wood Gassifier Stoves as a cooking solution in Sri Lanka

Regional workshop on Women, Energy and Enterprise Building  
Session II – Lessons from Practice – Cooking Solutions  
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# Background

- 88% H/Hs cook with biomass
- 90% energy in kitchen is biomass
- Anagi stove was a solution
- Forced draft stove introduced (NERD)
- Had scopes for improvement
- Natural draft WGS conceived (NERD)

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# Product Idea

- Energy crisis / Firewood shortage
- ↓D'forestation / Emissions (Environment)
- Drudgery (time, efforts, water, surroundings)
- Social status/ Convenience (modern cook)
- Beyond forced draft WGS (technology/innovation)

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# Technology Cycle

- Research / Technology completion
- Prototypes → Drawings
- Field trials → Improvements
- Finalised product
- Manuals → Advertisement
- Training / Technology Tfr /Licenses
- Launch / Publicity / Marketing

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## Production

- 19 licensees / Across SL
- Medium & small entrepreneurs
- WGS is one among many products
- Production Area / Unit Production
- Material from Colombo / Town
- Product modifications done

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# Marketing - Product

- Producer gas
- Top burn
- Small chips (supplementary good)
- Natural draft
- Stainless Steel / Clay Insulator
- 600 g fuel / 40 minutes burn

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# Marketing - Price

- Upto Rs 3,750
- Esti. Cost upto Rs 3,000
- Most expensive stove
- Substantial % (58% of mean family income)
- Inferior-normal good (Energy Ladder)

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## Market prices of single burner or equivalent stoves in Sri Lanka (2010)

#	Stove (Single burner or equivalent)	Market Price (LKR)
1	Clay stove	125
2	Hot plate (with coil and base)	625
3	Liquefied Petroleum (LP) gas stove	1,450
4	Kerosene cooker	2,000
5	Electric Cooker	2,200
6	Wood Gassifier Stove	3,750

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# Market prices of common fuels used for domestic cooking in Sri Lanka (2010)

#	Fuel	Typical price (LKR)
1	Fuel wood (Rubber fuelwood -including transport upto door step)	8 / kg
2	Electricity (for total cumulative monthly consumption of over 120 kWh)	16/ kWh
3	LP gas (domestic cylinder of 12.5 kg and excluding transport)	132 / kg
4	Kerosene (at the petroleum distribution sheds)	51 / litre

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# Marketing - Place

- Own W/S or sales outlets
- Personal Selling
- With other products / sales
- Closer shops / Other's Outlets
- IDB Sales Centre

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# Marketing - Promotion

- Demonstrations / Posters
- Welfare Soc installment schemes
- NERD (+others) promotions
- Packaging (Spectra ▲ )
- Presentations / Word of Mouth
- Vidatha Centres/ Other Org.s

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# Financing

- Use existing equipment / WS
- Self financed
- Bank loans (commercial rates)
- Equipment assistance from SLSEA
- Credit from suppliers
- Cover from other product range

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# End User Concerns

- Price / Access to fuel (externally)
- Correct size (Internally)
- Filling stove (initially/ while burning)
- Flame Controlling / Stop burning
- Ignition difficulties / Yellow Flame
- Height / Limited pot sizes
- Soot, no handle, ash removal

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# Challenges

- End user concerns (above slide)
- Over expectations / perceptions
- Misinformation / Poor operation
- Access to stoves / services
- Right fuel (supply chain)
- Price

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# Recommendations

- Wide Awareness / Promotion
- Product improvements
- Supply Chains (Stoves, Insulator, Fuel)
- Mass Production/ Distribution
- Finance/ Incentives (Tax/ Price subsidy)
- Policy & Practice interventions

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THANK YOU

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