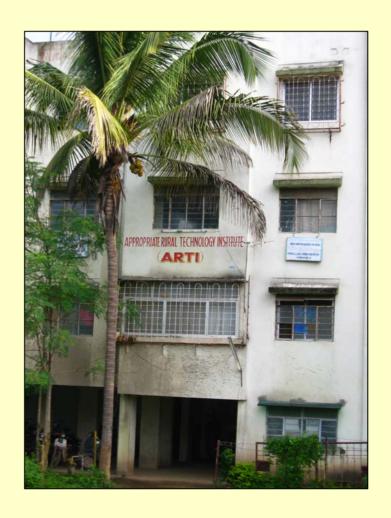
Equitable Commercialization of Improved Cook Stoves

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Government Program

- National Program on Improved Chulah (NPIC)
 - 1984-2002
 - Reduce fuel consumption/ protect the environment
 - Reduce drudgery for women (time and energy to gather wood)
 - Subsidy based
- Role of Appropriate Rural Technologies Institute (ARTI)
 - Technical Backup Unit under NPIC
 - Only involved in technologies- no say in who gets which stove



Subsidy-Based Stove Dissemination

- Artisan receives quota from Government of India (MNES)
- Target oriented
- Minimal input from users
- Minimal financial or personal investment
- Short lifespan stoves

Shell Foundation

- Decentralized authority to state and local agencies
- Simultaneous involvement by Shell Foundation
- Project Title: Commercialization of Biomass Fuel and Cooking Devices (2002)
- First phase of program complete (Beginning of 'scale up')



Market-Based Stove Dissemination

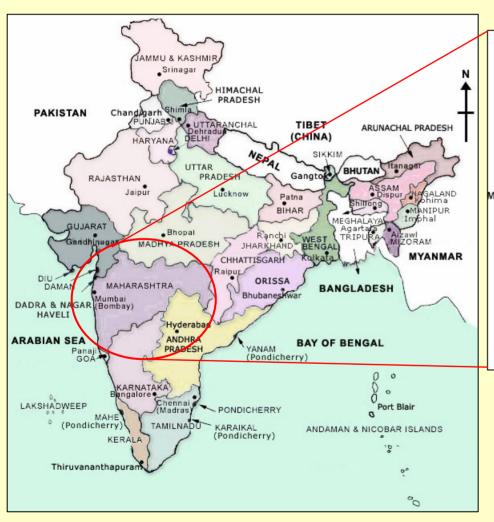
- Artisans receive financial support for marketing items
- NGO receives money for training, demos and marketing
- Emphasis on cultivating personal investment in stoves
- Localize support services
- Sustainable business model- Commercialization Toolkit
- No subsidies

Research Questions

- What has been the influence of commercialization?
- How can dissemination be improved?



Geographical Context





State: Maharashtra

Districts: Satara, Sangli and

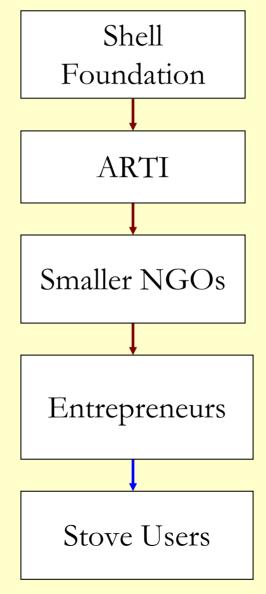
Kolhapur

Methods

- Interviews with actors along delivery 'chain'
- Focus on stove users
 - Personal interviews
 - N = 50 stove users
 - Village level IC survey
 - N = 5 villages of varying wealth



Organizational Structure



Findings

- Despite significant program success, benefits unevenly distributed:
 - Poorest demographic receives fewer stoves
 - Poorest villages receive little to no coverage



Findings

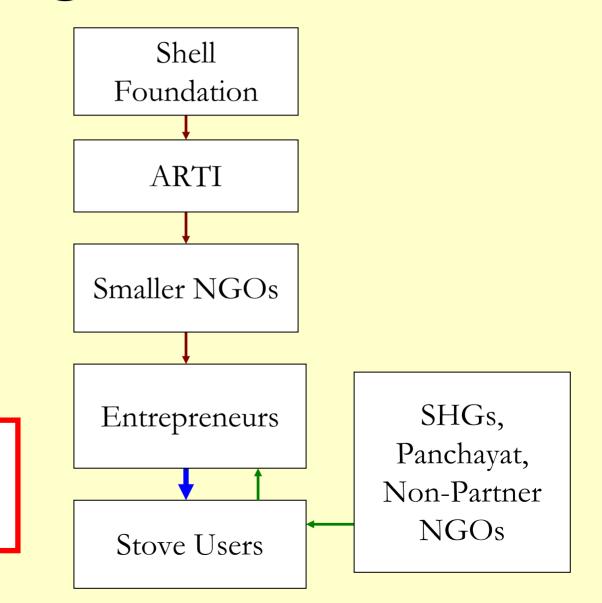
- However...notable success stories
 - ARTI encourages and facilitates local, bottom-end organizations to mediate commercialization schemes and achieve equitable distribution.

- The power of decentralized governance
 - Bottom-end organizations raise money, provide loans

Examples of Bottom-end Delivery Sector Assistance

- Self Help Groups (SHGs)
 - In all villages, loans given to poorest SHG members for the purchase of stoves.
- Village Panchayat (Village level governing body)
 - In two villages, Panchayat helped finance 50% of Rs 300 stoves to poor through village funds.
- Non-Partner NGOs
 - 'Art of Living' provided subsidies Rs 250 of Rs 300 stove to produce model 'smoke free' village. Wealthy and poor received stoves.

Modified Organizational Structure



Bottom End (Upward) Injection of Money

Providing Incentives for Bottom-End Participation

- Panchayat and SHGs receive incentive to aid in the delivery of Improved Cookstove as a result of government programs.
 - Ex. Clean Village Awards



Don't Forget the Little Guys!

- Need to encourage and facilitate bottom-end delivery organizations
 - Valuable political, social and economic capital
 - Likeminded, shrewd, enterprising and capable
- They provide:
 - A financial safety net for poorest stove users
 - An otherwise unavailable market for entrepreneurs
 - Supplemental marketing assistance for artisans

Looking Locally to Achieve Equity

- Important for policy makers and project managers to identify:
 - Challenges: Account for stove user and artisan level inequities
 - Opportunities: Integrate bottom-end organizations into the stove delivery model
- Improve the health and livelihood of both stove users and artisans
- Commercialization schemes can achieve 'robust' success (i.e., producing both a sustainable *and* equitable business model)

Research Funded by:

National Science Foundation University of Washington