Successful Distribution Models for Clean Cookstoves

Lessons learned from ten innovative case studies at the bottom of the pyramid

SNV

The study: objectives and methodology

- Drawing on ten case studies in Africa, Asia and Latin America, an expert workshop and a literature review on the sector, the study "**Mapping Successful Cookstove Distribution Models"** outlines key lessons for the establishment of last mile distribution chains for clean cookstoves.

- Based on these inputs, **three operational models** and a series of **best practices** to raise the awareness, acceptability, access and affordability of clean cookstoves, are identified for scale up and replication across a variety of contexts.

- These learnings and a map of the challenges ahead are presented to help guide further last mile dissemination efforts of cookstoves and similar products that offer life-enhancing opportunities for members of the bottom of the pyramid (BoP).

- This study was carried out by SNV, the Global Alliance for Clean Cookstoves and Practical Action Consulting.

Problem definition and challenges

- **3 billion** people still lack access to clean cooking facilities, resulting in premature deaths, environmental degradation, and large negative socio-economic impacts for households and their communities.

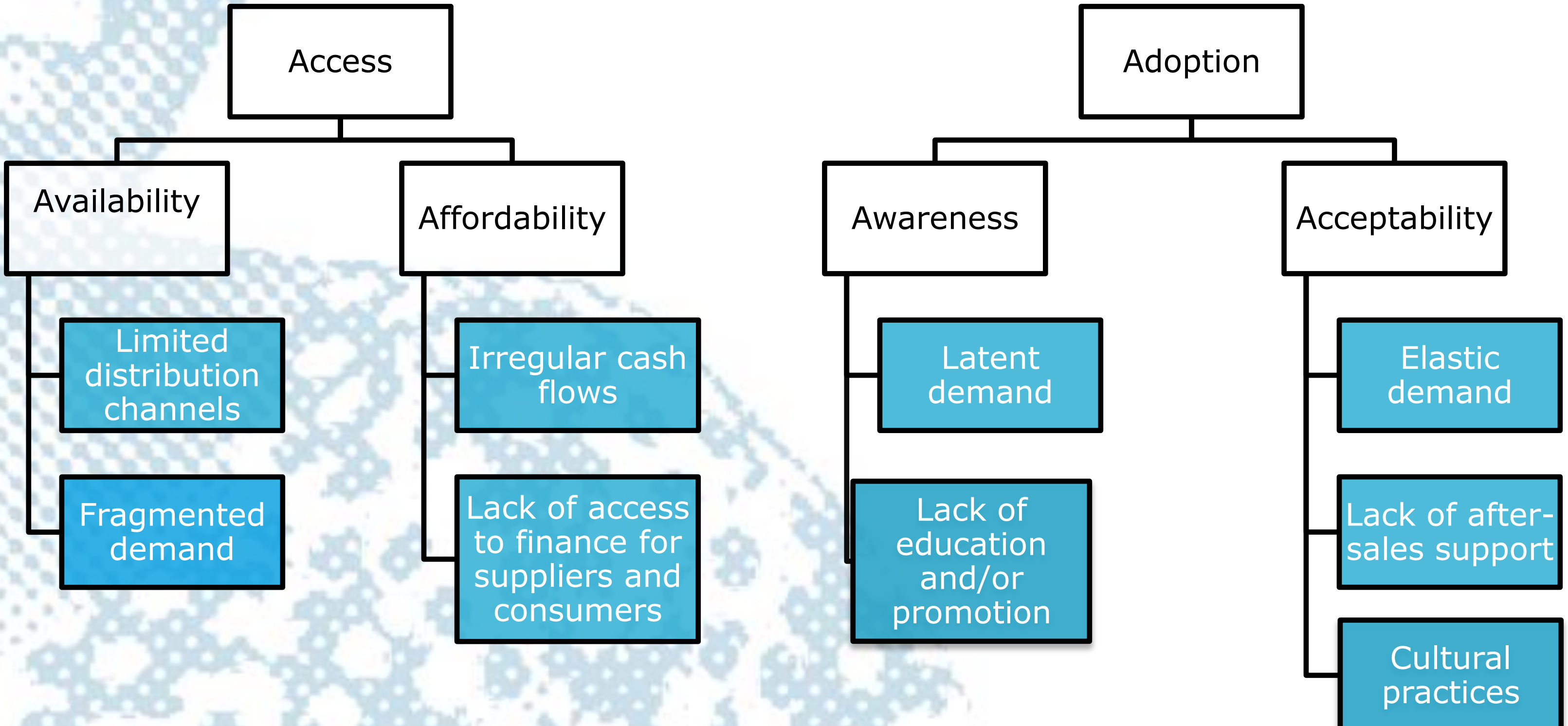
- By 2030, **100 million** more people will be relying on biomass for their cooking, heating and lighting needs.

- **14.3 million** improved cookstoves were distributed in 2013, up from 8 million in 2012. However, the global need remains much higher and distribution challenges must be addressed if we want to ensure universal access to clean cooking solutions.

What are the determining factors to establish inclusive, effective and sustainable distribution chains that will ensure the adoption and use of clean cookstoves by all?

Barriers in reaching the BoP

- **First step:** identifying the underlying barriers to be addressed by the distribution models.
- **Four A model:** access, availability, awareness and acceptability.



Selection of case studies

- **Next step:** selecting a range of cookstove and non-cookstove[1] case studies across a diverse set of contexts and countries in order to let valuable lessons emerge.

Distributor	Country	Products
Ezylife	Kenya	Household cookstoves
Ugastove	Uganda	Household & institutional cookstoves
International Lifeline Fund	Uganda	Household & institutional cookstoves
Toyola	Ghana	Household cookstoves
IVDP- Envirofit	India	Household cookstoves
GERES	Cambodia	Household cookstoves
SunnyMoney[1]	Tanzania, Kenya, Malawi, Zambia	Solar lamps
Living goods	Uganda	Health treatments, products for disease prevention and nutrition, durable goods incl. ICS
HealthKeepers Network[1]	Ghana	Health and personal care products (excl. ICS)
Soluciones Comunitarias	Guatemala	Health products (incl. clean cookstoves)

- Together, the case studies present a wide range of products, technologies, markets and business models meeting a variety of needs and constraints.

[1] *Non-cookstove case studies focus on products with similar use, market and price characteristics (see section 2 study).*

Identified distribution models

Three overarching distribution models are identified across the case studies:

1. **Village Level Entrepreneur (VLE) model**

   Engaging local entrepreneurs and artisans through various incentive structures to distribute selected additional products within their communities.

2. **Piggyback model**

   Partnering with supermarkets, hardware stores, community-based organisations, micro-finance institutions or other networks already operating in last-mile markets with access to BoP consumers.

3. **Proprietary sales network**

   Setting up a new proprietary distribution channel, including direct delivery, to serve the target market.

Compared advantages and constraints

	Advantages	Strategy
VLE	• Low investment costs, including for distribution in rural areas • VLEs direct knowledge of customers • VLE are known in communities • Overall scalability	• Difficult when product is new/unknown • High financial risk for VLE • Limited control and oversight • Limited scope for branding or product diversification • Difficult to set up after-sales service and consumer finance schemes
Piggybacking	• Low investment costs; no need for additional infrastructure • Reduced time to establish markets • Network builds on prior consumer trust • Scope for consumer finance	• Network actors need to be actively engaged • Potentially limited market that can rapidly become saturated (depending on the market size of the partner) • Limited control and oversight
Proprietary sales network	• Useful to push new products • Enhanced opportunities for branding • Full control and oversight • Convenient for setting up consumer finance and after-sales services	• Costly timewise and moneywise • High financial risk involved • Hard to reach customers in remote areas given costs involved

Applicability

Strategy	Provisions for use
VLE	• Rural and last mile locations • Existing demand for product • Best when marketing support is provided to VLEs and financial measures can be put in place to boost their capital and limit their risk
Piggybacking	• Rural and urban locations • Existing demand for product (can be relatively low) • Existing entities interested in partnering and incentives aligned
Proprietary sales network	• Urban and peri-urban locations (costly in rural areas) • Scope for raising low existing demand through sophisticated marketing strategies and dedicated finance • Large financial means needed to meet investment costs • Establishment of durable markets for the desired product

✓ In many cases, a mixture of these models (eg VLEs and proprietary sales network) can be the most effective depending on local context

Best practices per model

Strategy	Best practices
VLE	• Select entrepreneurs that are trusted in their communities • Ensure ongoing capacity building for VLEs: organize marketing, finance and business development trainings; facilitate cross-community learning; provide mentors • Set up accessible product hubs in nearby towns for last-mile VLEs • Bundle products to limit risk and ensure continuous demand • Provide financial support (eg commissions or part salary) and/or start up capital to limit risk and increase capacity of VLEs • Organize a tiered system of support and oversight for VLEs
Piggyback	• Choose well suited partner(s) for selected area(s): in (peri-) urban areas, larger distribution channels make it possible to reach out to many customers; creative options can be explored to reach the last mile (schools, MFIs etc) • Align incentives as much as possible, and set out clear boundaries for partnership • Have paid staff supervise partners and deliver trainings for increased effectiveness
Proprietary sales network	• In rural areas, cooperate with existing networks (piggyback), and engage with VLEs to reach isolated communities with minimal costs • Select sales agents who have gained trust from their communities • Train staff and provide support mechanisms as well as a tiered system of oversight • Set up hub-and-spoke centers where employees can travel to collect goods, receive training, and interact with other distribution agents • Set up incentives (eg commissions) to keep staff motivated

Cost reduction strategies

Type	Best practices
Staff	• Recruit few but motivated and widely trusted employees • Use commissions on sales or other incentives to increase staff motivation • Seek active participation of community members, preferably female entrepreneurs, who have wide networks of relationships and can market household products such as cookstoves to other women more effectively
Logistics	• Use low-cost warehouses and offices, and combine them to reduce costs (set up hubs where the employees can travel for training and collection of products) • Equip staf with mobile phones for efficient oversight and support • Consider switching from air to sea freight if importing products, buy in bulk, and lease local transport to save transportation costs
Manufacturing	• Compare manufacturing options (types of designs) and overweigh costs of centralised versus local production (local staff, transportation, quality control)
Value chain	• Optimise value chain structure to reduce intermediaries • Deliver cheaper products by: harmonising profits across actors; overweighing manufacturing, transportation and distribution costs so as to keep them to a global minimum, having regional hubs and equipping sales agents with mobile phones to limit management costs and facilitate re-stocking

Financing mechanisms: affordability

Type	Best practices
Supplier finance	• Seek support from producer associations to mobilise resources for small cookstove suppliers • Provide loans to members along the supply chain, carbon finance, or innovative supplier finance • Offer credit plans, loan mechanisms, savings tools and trainings to VLEs in order to increase finance options and limit their financial risk
Consumer finance	• Most easily set up in proprietary sales network with extensive oversight. Some examples include offering layaway, instalments plans and rent-to-own • In VLE and piggyback models, encourage and support entrepreneurs/local networks in testing finance mechanisms (eg instalments) and/or engage with MFI institutions • Identify and target consumer groups in greater need of support, like women with limited say over budget household • Use mobile phone and mobile money to avoid lengthy loan procedures

Marketing strategies: awareness, acceptability and sustained demand

Type	Best practices
Entering the community	• Research your targeted community(ies) before engaging in the market: identify existing needs and potential competition; look at prior experiences with similar products; select trusted community promoters and entrepreneurs • Seek endorsement from village chiefs and other opinion leaders
Boosting initial demand	• Ensure information on the product and how to use it become available once product starts being sold • Provide free product trials for opinion leaders • Conduct public product demonstrations • Train users – especially early buyers- on how to use the product, and engage satisfied customers in marketing efforts through small incentives (eg discounts on fuel)
Branding of product: above and below the line marketing	• Build wide product and brand awareness (eg use TV, radio broadcasts etc) = ATL[1] • Seek more targeted awareness through direct communication = BTL[1] • Adapt the marketing messages to the local context [1] See next slide on specific ATL and BTL strategies
After-sales service and product quality	• Visit communities after cookstoves have been distributed to ensure there are no concerns and collect new orders • Provide guarantees for sold products • Organize easily accessible after-sales service and support

Marketing strategies: ATL and BTL

- **Above-the-line (ATL) marketing aims at achieving wider awareness through indirect communication (e.g. TV, radio)**
  - Very effective to enhance cookstove branding, but often expensive
  - **Effective in urban and peri-urban areas**

- **Below-the-line (BTL) marketing aims at achieving targeted awareness through direct communication (e.g. word-of-mouth)**
  - Engage with communities before selling to identify opportunities
  - Conduct village-level product demonstrations and provide free product trials for opinion leaders
  - Provide incentives for satisfied costumers to share their experiences with others
  - Engage male and female local entrepreneurs to take advantage of peer connections
  - After sales service is an important part of obtaining and maintaining community trust
  - Effective in rural areas but particularly important in rural and peri-urban locations

✓ **Combine ATL and BTL marketing for broad awareness raising and widely enhanced acceptability**

✓ **Also critical to create successful marketing messages, independent of the marketing strategy. Therefore:**
  - Demonstrate, use samples and offer free services to build consumer trust in product and its added value
  - Ensure product branding whenever resources available to generate appeal within the community
  - Adapt didactic and marketing messages to local community and needs

Recommendations for distributors

- ✓ **VLEs** and **piggybacking** are effective strategies to reach the last-mile. Combining either of those with an own sales force and/or paid managing and training staff allows for more control over the distribution chain and testing of creative consumer finance.
- ✓ Sell cookstoves alongside low-cost, **fast moving consumer goods** with greater turnover (eg toothpaste) to attract consumers and ensure more stable income for entrepreneurs
- ✓ **Incentivise active participation** from VLEs, community organizations and/or local businesses to ensure efficient partnerships
- ✓ Consider **cost reduction** opportunities at all levels of the value chain (production, transportation, distribution etc) to enhance sustainability of the distribution
- ✓ Make use of **word-of-mouth, radio or TV**, offer trials, enhance technological awareness, and consider franchising when brand and markets are well developed
- ✓ Prioritize product **quality** and provide reliable **after-sales service**

Recommendations for NGOs, donors and governments

- Encourage **sharing** of and **learning** from best practices among local businesses, larger distributors and NGOs in the cookstove sector as well as other sectors
- **Link local distributors** with national and international producers (eg through the creation of national or regional platforms)
- Demonstrate the **financial viability** of cookstove markets at the BoP (eg through market studies) and encourage local and international finance institutions to engage in those markets based on this evidence
- Establish **start-up grant funds** linked with **capacity building** to enable local manufacturers to start cookstove distribution themselves
- Foster an **enabling environment** for cookstove distributors to achieve scale and be sustainable (e.g. lower VATs for import; incentives for cookstove purchase)
- Strengthen **links** between **different actors of the value chain** and stakeholders

Thank you

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