

Uganda Delivery of Clean Cooking Solutions

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Background

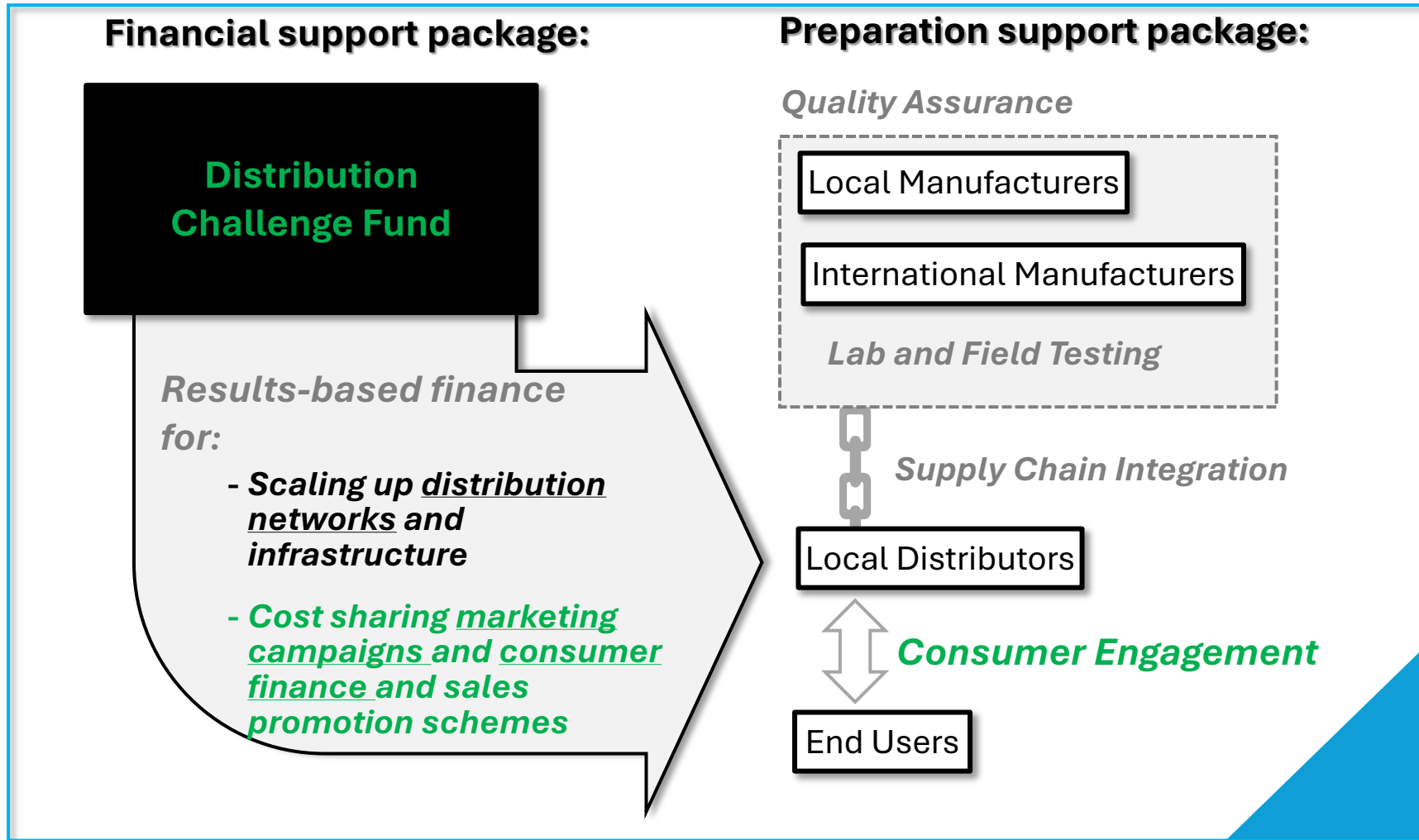
- Over 95% of Ugandans continue to rely on biomass fuels for cooking, with absolute number of people having likely increased
- Uganda's population growth (~3.2% annually average last five years) increases demand for cooking fuels and pressures natural resources
- Charcoal prices across the country have nearly doubled in the last few years, especially in the North and urban demand centers
- Patchy supply chain integration and consumer affordability remains a significant barrier

Uganda Clean Cooking Supply Chain Expansion Project 2016 - 2020

- A \$2 million ESMAP-funded recipient-executed project targeting 50,000 households
- Focused on establishing manufacturer-distributor and providing upfront/ results-based financing; + awareness, marketing and consumer financing via TA and microlending
- Benefited 8 clean cooking consortia of two or more supply chain players; with 13 companies new market entrants bringing new products
- Conducted 6-month consumer trials in households and lab+field of products to test quality, compatibility and consumer WTP



Support Mechanism



Disbursement Triggers

3 Triggers:

Presentation of firm order of > 5000 stoves

Presentation of audited monthly sales data

Presentation of audited monthly marketing expenses



3 Support Lines:

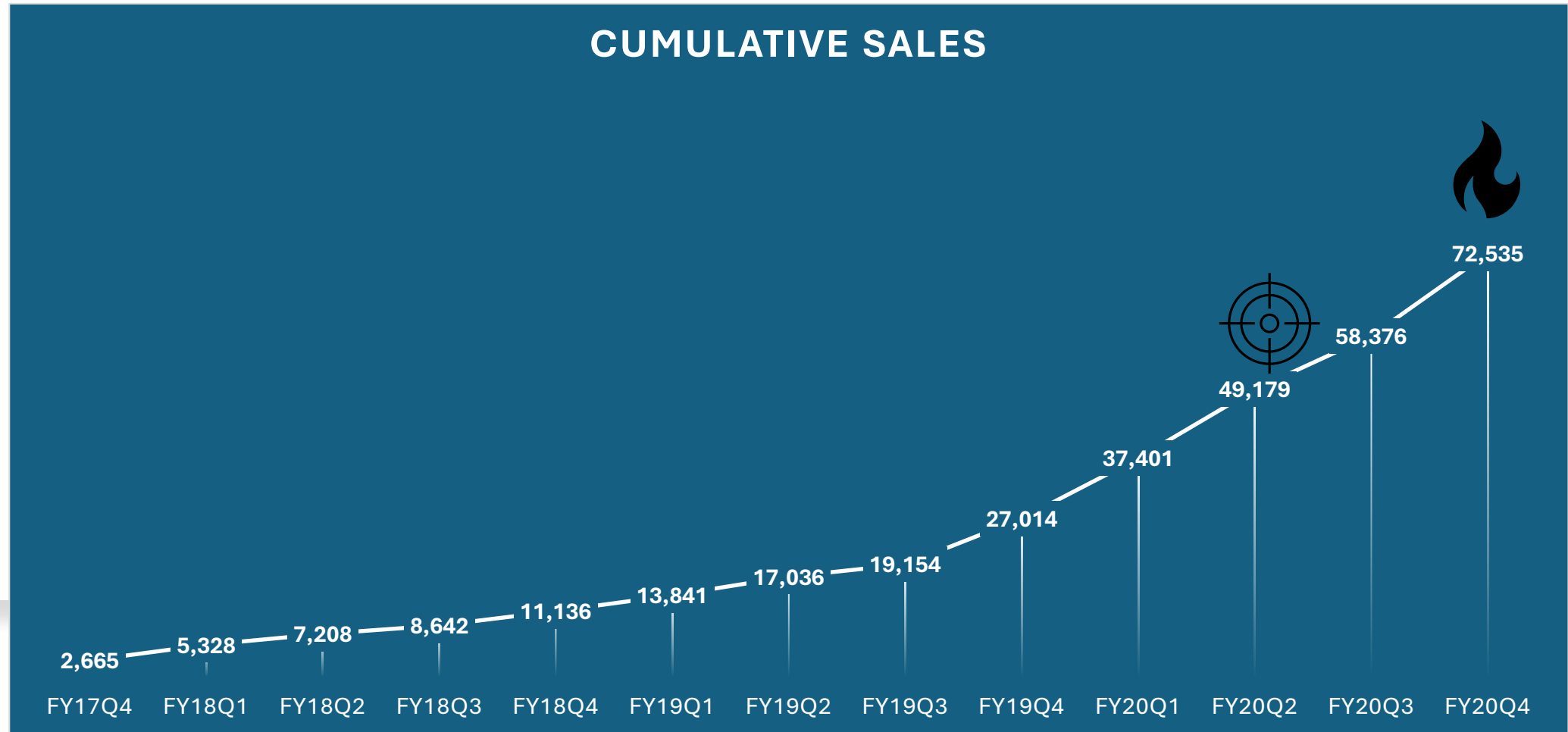
Working capital grant (one-time): 50% of initial order of stoves, up to a maximum amount of US\$100,000

Inventory renewal grant (monthly): 20-30 % of wholesale price per stove sold (differentiated by emissions profile)

Consumer engagement subsidy (monthly): 50% of eligible marketing, sales and comm. expenses, up to a maximum of US\$100,000

- ⇒ **Funds managed by implementing entity – Private Sector Foundation Uganda oversight by external auditor – KPMG**
- ⇒ **Bank NOBs only on quarterly reports.**

Project Results



Lessons learned

- Concerted effort to **stimulate demand** for the grant facility in spite of the incentives; started with few market players
- Lack of **debt financing options** for expanding inventory and widening footprint
- Challenges and delays on **tracking, verifying sale and usage** of sold products by the IVA
- Bundling clean cooking and clean energy products can help **leverage existing distribution networks and flex financing options** e.g. partnerships between cookstove manufacturers and PAYG off grid solar companies
- **Behavioral diagnostic** study essential to understand user preferences
- Distributors offering flexible payment options outperformed others, highlighting that **consumer financing is essential** for clean cooking solutions



Uganda Energy Access Scaleup Project (EASP)

- Drawing from the lessons learned, the new Uganda EASP will concurrently address the three challenges of distribution, awareness, and affordability.
- Uganda Energy Credit Capitalization Company (UECCC) is implementing the financial intermediation component of the EASP - USD\$135 million to support scaling OGS, clean cooking, and PUE products nationwide including refugee settlements and refugee host districts.
- USD\$10 million from ESMAP Clean Cooking Fund + USD\$10 million IDA match
- Targeting 353,000 households to benefit 1,660,000 Ugandans and expected to result in net emission reduction of 2.4 million tCO₂ over project lifetime
- Clean Cooking for Public Institutions – first phase targeting 182 schools and hospitals with biomass, LPG, biogas, and EPC solutions

The Financial Intermediation Component

- Comprehensive coverage of clean cooking technologies including: efficient biomass stoves, electric cooking, LPG, biogas, ethanol, etc.
- Stimulate demand and allow companies to expand their distribution footprint and soft infrastructure

1. Results-based financing to catalyze scale and address affordability constraints of households and enterprises

- Subsidy ranging from 30-50% with added incentives for underserved remote rural areas and refugee settlements
- IVA doing verification of sales and pricing via calls and field visits for each ESCO claim

2. Credit Support Facility (CSF) Provides Lines of Credit through PFI that on-lend to ESCOs for working capital

3. TA Facility supports beneficiaries and other key project stakeholders to build capacity and skills to address barriers to effective service delivery. The eligible beneficiaries are PFIs, ESCOs, and other stakeholders

RBF levels

Clean Cooking Solution (CCS)	Subsidy Rates	Subsidy Cap (UGX)
Category A. Household Biomass Cookstove		
i. Household biomass cookstove (carbonized biomass)	50%	30,000
ii. Household biomass cookstove (Uncarbonized biomass)	50%	40,000
iii. Modern Household biomass cookstove (processed biomass fuel such as pellets and woodchips)	50%	72,500
Category B. Household Biogas	30%	870,000
Category C. LPG package	40%	130,000
Category D. Ethanol cookstoves	40%	120,000
Category E. Electric Cooking devices		
i. Induction/Infrared Cookers	50%	140,000
ii. Electric Pressure Cookers	50%	150,000
Category F. Solar cooker with PV and battery	30%	600,000

Monitoring, Reporting and Verification

- UECCC is utilizing the Prospect dMRV platform, which has the capacity to capture real-time sales data conducted by ESCOs and facilitate claims verification and processing.
- The platform significantly reduces transaction costs and speeds up verification.
- It also provides portfolio performance demonstrations and data analytics dashboards.
- dMRV is capable of conducting desk verification, including checking data completion, product eligibility, and buyer identity through digital parsing of ID numbers with the national register.
- Once the claims are desk-checked then they are verified by the Independent Verification Agency (IVA) via phone and field surveys.

High Level Challenges

- Multiple Donor RBF schemes with varied subsidy levels in the country. Calls for more engagement and harmonization to minimize duplication and market distortion – dMRV tools to avoid double counting
- Limited testing capacities of Testing Laboratories in Uganda especially for Biomass stoves. Under EASP
- Overwhelming interest in the program risks funds being depleted and disrupt the continuity of support in the market
- The ongoing preparation of ASCENT Uganda lending project is expected to continue the same lines of support with new IDA funding