Delivering Demand-Side Subsidies: Choosing the Right Delivery Channel



endev

Key Messages

- The choice of delivery channel should reflect market conditions, company capacity, connectivity, scale, and targeting needs of the intervention.
- While results-based financing (RBF) can be suitable for delivering DSS, RBF design needs to be adjusted to the specific needs of DSS.
- The success of DSS RBF schemes relies more on initial company liquidity and capacity compared to supply-side RBF.
- RBF approaches benefit from robust digital systems for eligibility checks, company selection, claims management, data collection, verification, and timely reimbursement.
- Vouchers can effectively target specific groups and provide deeper subsidies, but require robust systems for beneficiary identification, distribution, and fraud prevention.

What the DSS Component did

The EnDev Energy Access through Demand-Side Subsidies (DSS) component primarily delivered subsidies through participating companies using a results-based financing model. Companies sold eligible products to eligible customers at a subsidised price and subsequently submitted claims for reimbursement. This model was a natural choice, as EnDev had already implemented multiple highly effective RBF schemes. The approach is also aligned with EnDev's market-based implementation approach. It enabled subsidies to be delivered through companies' sales channels, while avoiding the additional administrative requirements associated with issuing, distributing, redeeming, and reconciling vouchers. Context specific DSS RBF schemes were implemented in Liberia, Malawi, Niger and Uganda.

Companies in all countries were required to use a customer eligibility tool hosted by KoboToolbox to confirm customer eligibility prior to making a sale and register sales. Data submitted through KoboToolbox was used during the claiming process to verify eligible sales. While some countries set subsidies as a percentage of the product price (e.g. 75%), others introduced, a fixed subsidy (e.g. EUR 70) or a combination of both (e.g. max EUR 90 up to 65% of product price). Combining a percentage subsidy with an absolute cap helped limit the risk that companies overinflate prices, while ensuring that only basic energy access was supported.

While a voucher system was considered as a delivery channel by pilot countries, it was only applied in one targeted sub-pilot in Liberia. In Niger, a voucher approach was too costly and administratively burdensome for the size of the potential beneficiary group. The team estimated the cost for QR code vouchers at EUR 250.000 - 300.000 for approx. 60.000 beneficiaries (EUR 4,00 to EUR 5,00 per voucher). In Liberia, vouchers were used for a smaller, clearly defined group of

3.800 vulnerable women including widows and female-headed households. The voucher sub-pilot was implemented over a short period of 2 to 3 months, with companies present in the communities and with strong hands-on support from the project team and partner organisations. Physical vouchers were printed by EnDev with unique IDs linking each voucher to a specific end-user and distributed by the partner organisation. The cost per voucher was approx. EUR 1,30. Given the small target group and limit period of the sub-pilot, the cost and complexity of the voucher system remained low and manageable.

Direct cash transfers and reimbursement mechanisms for end-users were not considered under the DSS pilots.



What we learned

The choice of delivery channel is a critical decision that affects how effectively the subsidy reaches intended beneficiaries. Different channels create different trade-offs in term of administration, fraud risk, customer experience, company participation, and scalability.

While DSS delivery through companies under an RBF is conceptually straightforward, companies face higher operational challenges and financial risks than under classical supply-side RBF schemes. In a classical RBF scheme, companies need to first sell the product at the market price, register the sale correctly, submit claims, and wait for reimbursement after verification. However, when a demand-side subsidy is involved, companies face a sharper liquidity challenge than in traditional RBF schemes as they are required to sell their product already at a subsidised price to get reimbursed later. As companies carry the subsidised portion of the sale until reimbursement their working capital is tied up for longer and their ability to finance further sales may be constrained. Furthermore, reimbursement delays can put additional pressure on companies' cash flows.

Company readiness is therefore a central consideration in delivery-channel design. Companies need sufficient working capital, functioning record-keeping systems, adequate after-sales capacity, and the ability to meet claim and verification requirements. These capacities are often limited in more nascent markets. Delivery through companies can still be appropriate in nascent markets, but requires complementary measures such as business development support, advance payments, supplier coordination, and realistic sales planning.

Digital tools are a robust alternative to physical vouchers and can facilitate processing, but require adequate technical infrastructure, user capacity, and operational systems. KoboToolbox clearly simplified eligibility confirmation and sales registration processes, making the DSS delivery more manageable overall. However, for companies working with paper-based systems or limited digital capacity - often those selling lower-margin products - the tool itself became a challenge. This required further training on tool usage for companies, data quality controls, and the provision of digital hardware. Other digital platforms can make application management, claim processing, and verification more efficient, but face similar challenges.

Vouchers offer greater precision where the target group is small, clearly identified, and reachable through trusted structures. The Liberia voucher sub-pilot showed that a voucher approach can be effective for a well-defined target group (in this case vulnerable women who were members of a local cooperative), particularly where a higher subsidy is justified and the risk of spill-over needs to be limited. The same precision makes physical vouchers costly and hands-on. It requires well-prepared customer lists derived from reliable sources, a secure, fraud-robust voucher printing or issuance system, controlled voucher distribution, clear rules for replacement and expiry, and a well-defined process for redemption and reconciliation. These requirements were manageable in Liberia as the sub-pilot was limited in scale, time and geography. At larger scale, as considered in Niger, the administrative cost and management burden quickly become difficult to justify.



Connectivity affects the choice between physical and digital delivery tools. Digitally supported delivery models may reduce human error as well as other costs of a physical system but are less suited for areas that lack reliable network coverage. Physical systems can function in no-network areas but require stronger controls.

Overall, company-based RBF can be suitable for delivering DSS, if adapted to meet the demands of a DSS scheme. Given the different objectives and risks involved, SSS RBFs cannot simply be copied. DSS RBFs also need to account for the state of the market. A DSS RBF may function well on its own in more

mature markets but will require complementary interventions and support to be effective in nascent markets. Vouchers are more appropriate for small, well-defined target groups (often receiving relatively high subsidies) where the need for precision outweighs the added administrative burden. The delivery channel should be chosen carefully balancing the programme objective, target group size, market maturity, connectivity conditions, and available implementation capacity.

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