

Improving the Impact of Input Subsidy Programs through Better Targeting Strategies

2

This note, prepared for the Impact Program’s learning, provides a brief overview of the recent experiences from the use of targeting strategies to underpin input subsidy programs in SSA. It includes practical information on what has worked and not worked, and how targeting should be designed and implemented to show the lasting impact on the ground.

Context

Input subsidies have long been a cornerstone of agricultural policy in SSA, intended to boost productivity, support smallholders, and enhance food security. Across the six Impact Program countries—**Ghana, Kenya, Malawi, Senegal, Tanzania, and Zambia**—input subsidies total about US\$560 million annually, representing a significant portion of agricultural public spending.

Traditionally, input subsidies have been delivered through universal approaches, providing fertilizer and seed to broad segments of farmers. Despite significant investment, this approach has fallen short—yielding limited productivity gains, straining public budgets, and creating inefficiencies and inequities. Universal delivery often fails to reach the intended beneficiaries, with wealthier farmers capturing most benefits due to better access to information and markets. This undermines support for smallholders, distorts input markets, and discourages private sector investment.

Given these challenges, there is a pressing need for innovation in subsidy delivery. Reforming input subsidy programs to incorporate targeting mechanisms—especially those enabled by digital technologies—can improve access, efficiency, transparency, and equity. Targeting is foundational to broader agricultural reforms, including the adoption of e-vouchers, site-specific fertilizer recommendations, and digital soil information systems.

What is Targeting?

Targeting refers to the deliberate selection of subsidy beneficiaries based on objective, verifiable criteria such as farm size, soil fertility, geographic location, vulnerability, or asset indices. In input subsidy programs, targeting mechanisms function by identifying and prioritizing smallholder farmers who face the greatest constraints in accessing inputs and credit. Modern targeting approaches increasingly rely on digital farm registries integrated with national ID systems, biometric verification, and GPS-based mapping to enhance accuracy, transparency, and accountability.

Recent Experience and Lessons Learned

Several African countries, including **Kenya**, **Rwanda**, **Malawi**, and **Tanzania**, are implementing targeted fertilizer and seed subsidy programs, moving away from universal approaches to more efficient and equitable interventions. Transitioning from universal to targeted subsidies is politically sensitive but transparent, technology-driven targeting systems have proven politically viable when farmers view them as fair and predictable.

Kenya's transition involved the development of robust digital systems like the Kenya Integrated Agriculture Management Information System (KIAMIS), enabling transparent farmer registration, improved input management, and integration with other agricultural services. Research shows the targeting of resource-poor farmers and the use of vouchers in Kenya led to increased maize production and poverty reduction. **Rwanda's** Crop Intensification Program (CIP) emphasized geographic targeting and digital integration, resulting in significant yield increases, though benefits were greater for farmers with larger holdings.

Since 2021-22, **Malawi** has transitioned to digital beneficiary databases, aiming for fiscal sustainability and improved targeting, narrowing its subsidy focus to more productive farmers and reducing coverage from 3.7 million to 1.5 million beneficiaries. **Tanzania's** voucher scheme prioritized smallholder and vulnerable farmers using decentralized selection, but implementation challenges allowed wealthier farmers to benefit disproportionately.

Design and Implementation Considerations

Effective targeting requires attention to several key design features and best practices:

- **Objective Criteria:** Establish clear, verifiable selection criteria—such as farm size, asset indices, location, or vulnerability—that are digitally validated and perceived as fair by farmers.
- **Digital Infrastructure:** Use digital farm registries, GPS mapping, digital IDs, and biometrics to enhance transparency, accuracy, and reduce manipulation (e.g., Kenya's KIAMIS system).
- **Farmer Engagement:** Educate farmers on criteria and appeals processes. Use structured community validation to foster acceptance while ensuring safeguards against elite capture.
- **Systems Integration:** Design targeting systems to also support extension services, data collection, disaster response, and credit access to maximize investment value.
- **Graduation Pathways:** Define clear exit criteria and timelines so beneficiaries can transition to commercial markets, ensuring ongoing incentives and fiscal sustainability (i.e., exit strategies).
- **Political Leadership:** Secure strong political backing, maintain transparent communication with stakeholders, and engage input suppliers to support both subsidized and commercial market segments.

Targeted input subsidy programs can face several challenges, including **elite capture** and manipulation by local leaders as well as **inclusion and exclusion errors** that allow benefits to leak to non-targeted individuals. **Inadequate registration infrastructure** often leads to outdated beneficiary lists and farmer frustration. **Affordability constraints** may still exclude the poorest households, even with subsidies, while **lack of harmonization** across programs leads to confusing and burdensome multiple registration processes. Static targeting **without regular updates** fails to account for changing beneficiary circumstances, reducing program accuracy over time.

Potential Impact and Next Steps

At the upcoming Impact Program regional learning events, participants will gain insights into targeting approaches, tradeoffs between targeting poor vs. wealthy farmers, and technical deep-dives into digital systems. Expected outcomes include a clear understanding of evidence-based targeting, practical tools for design and implementation, strategies for stakeholder engagement, and concrete action plans for improving targeting in fertilizer subsidy programs.



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