

# Information and Communication Technologies

FOR IMPROVING INVESTMENT READINESS OF  
SMALL AND MEDIUM AGRIBUSINESSES

**Alvaro Valverde**

September 2020





Commercial Agriculture for Smallholders and Agribusiness

The CASA programme is a flagship programme of the UK Foreign, Commonwealth & Development Office (FCDO) and is intended to increase global investment in agribusinesses which trade with smallholders in equitable commercial relationships, increasing smallholders' incomes and climate resilience.

The programme aims to help agribusinesses to scale up and trade in larger commercial markets. As part of its work CASA generates new evidence and analysis that supports a stronger, fairer and greener agribusiness sector.

2020 ©FCDO

## Executive Summary

Information and communication technologies (ICTs) are increasingly seen as an enabler to improve and promote efficiencies in global food market systems, and the high penetration rate of mobile phones is playing a catalytic role in developing countries. Mobile-based agriculture-value-added services (agri-VAS) aim to mitigate the information, financial and market access gaps faced by smallholder farmers and agribusinesses in developing countries. Over the last two decades, the number and variety of agri-VAS has been continuously increasing, and their landscape has been evolving.

However, **many agri-VAS never reach financial sustainability or scale and are discontinued after a few years.** Increasing efforts are being made to map the landscape of agri-VAS targeted at smallholder farmers across Africa and Asia. However, insufficient attention has been paid to exploring successful agri-VAS that have small and medium (SME) agribusinesses<sup>1</sup> as their main clients and that source from smallholder farmers. Areas with potential for further study include the following: a) agribusinesses operating in value chains that are digitized by others (e.g. mobile network operators); b) agribusinesses that are developing and deploying agri-VAS in-house; c) agribusinesses using services provided by third-party agri-VAS providers within their value chains; and d) agribusinesses that develop partnerships with agri-VAS providers to co-develop solutions.

**This study aims to address the following question: What are the factors behind successful deployment of mobile technologies to improve agribusiness productivity and investment readiness?** It aims to analyse agri-VAS that have SME agribusinesses as their main clients, as they are more likely to positively impact the investment readiness of SME agribusinesses than agri-VAS with smallholder farmers as their only clients, which are also the most evaluated type of agri-VAS.

The study consists of a combination of secondary and primary research, resulting in: a) a set of investment-policy and service-design recommendations, based on high-impact, sustainable agribusiness-focused VAS; b) recommendations on how to improve the body of impact evidence; and c) the identification of investment opportunities at the agribusiness and agri-VAS levels.

### Key findings

**A broad range of agri-VAS have been conceived with smallholder farmers in mind (e.g. farmer advisory and information services), but fewer have been developed to directly address the needs of agribusinesses (e.g. enterprise resource planning).** Out of the six main categories of agri-VAS used in this study, only five have SME agribusinesses as the main client, and out of the 26 sub-categories of agri-VAS, only 14 have SME agribusinesses as their main client. Value-chain integrated<sup>2</sup> and enterprise resource planning<sup>3</sup> VAS are the two sub-categories that are better conceived to: a) address weak value chain connections; b) improve financial access; c) improve agronomic practices; d) improve visibility and transparency throughout the value chain; e) improve farmer management; and f) improve management capabilities of agribusinesses.

**Less than a quarter of the agri-VAS with SME agribusinesses as their main clients have conducted some sort of evaluation of their impacts on smallholder farmers or agribusinesses.** The majority of those evaluations focus on the impact on farmers rather than agribusinesses. But little effort has been made to evaluate other agri-VAS with greater positive impact potential, such as enterprise resource planning or value-chain integrated services. This is likely to be because commercially-driven agri-VAS are less inclined to invest in impact evaluations and more inclined to focus on increases in their customer base.

---

<sup>1</sup> The term SME Agribusiness refers to the wide range of small and medium enterprises active in agriculture value chains.

<sup>2</sup> Agri-VAS that bundle most service categories and cover functions across the whole value chain.

<sup>3</sup> Agri-VAS that integrate core agribusiness processes and analytics, value chain intelligence and tools for managing smallholder farmers.



Of the agri-VAS that have SME agribusinesses as their main clients and reach significant scale (over 250,000 users), 61% rely on business-to-business (B2B) revenue as their only income stream, while 7% combine B2B and business-to-consumer (B2C) revenues. Of the 11% of VAS that rely on B2C as their only revenue channel, all charge commissions on their financial services as their main source of revenue. This highlights how **the majority of services reaching scale are either conceived and designed to address a latent market demand from agribusinesses or can get smallholder farmers to pay for financial services.**

Of the agri-VAS service providers interviewed, **58% reported an increase in demand for their services since the beginning of the COVID-19 crisis**, in particular for their roles in facilitating cashflows and access to credit. The ability of agri-VAS to reinforce or develop value-chain connections was also highlighted.

### Key recommendations

- Investors, concessional financiers and VAS service providers should understand the different underlying VAS types, service design success factors and business model variations.
- Investors and donors should develop and build on providers that offer enterprise resource planning (e.g. eProd) and value-chain integrated services (e.g. AgUnity).
- To reach financial sustainability, a service should avoid relying on donor or government subsidies. It should allow adaptive pricing aligned with the service offering, which needs to respond to a latent market demand (B2B) or to receive payments from those smallholder farmers who are willing to pay – for financial services, for example (B2C).
- To be replicable and scalable, a provider needs to: a) develop services for different value chains, languages and client requirements; b) build on available technology and focus on user-friendliness; c) promote trust among stakeholders; d) keep investing to improve the offering, processes, technology and increase staff numbers; and e) use strategic partnerships for replication in other geographies.
- Donors and impact investors should support the development and expansion of successful agri-VAS with SME agribusinesses as their main clients and help improve their impact evaluations.
- Investors should consider: a) investing in agribusinesses linked to agri-VAS, which can reduce risks and increase return on investment (RoI), while ensuring socio-economic impact; b) investing in a VAS itself, which can be relatively safe and can increase visibility over investible agribusinesses; c) investing in both VAS and agribusinesses, which combines the advantages of both and means it can help rapidly meet an investee's technical assistance needs.
- The above two recommendations do carry implications for donors and impact investors looking to increase the support they give to Agri-VAS. The complexity and speed at which the landscape of digital technology changes means that a high degree of technical skill is required to understand and select which 'Agri-VAS' services to back. It remains to be seen whether these skills exist within donor organizations and impact investors to the levels required, other than in those most specialized of institutions, and increasing capacity to perform this function effectively will be key for donors and impact investors seeking to invest more in this area.
- Clarity needed to determine the ownership of customer data in different models when considering support or investment.
- COVID-19 presents an investment opportunity for investors to support the scale up of successful and impactful agri-VAS, and for concessional finance to support the cash-flows of affected agribusinesses linked to successful agri-VAS.

To access the full report, please go to: <https://bit.ly/2Fa5mac>



Commercial Agriculture for Smallholders and Agribusiness