Agile Data in Action
What we've learned – and what it changes.

LAB 2

Enumerator vs App – What Data Can You Trust?

Topic:	Organization:
Enumerator vs App-What Data Can We Trust?	COSA Committee On Sustainability Assessment
Geography • Burundi • Colombia • Ivory Coast	**Topic** Agile AgApp

Description

Context

In recent years, the global spread of digital technologies allows to easily capture data and make the digitalization of agriculture possible. These data originate in a multitude of sources including satellite, sensors, and crop images often captured with the use of mobile telephones or apps. These data serve for a wide range of purposes, covering various aspects of agricultural activities from access to information such as weather forecast, and crop advice to mobile payments. Such information enables farmers to make informed data driven decision support and management regarding crop selection, planting timelines, irrigation, fertilization, and pest management. Recent studies in the literature have focused on the response rate and accuracy of new digital data collection tools compared to traditional methods. Most of the studies have compared the accuracy of telephone surveys responses against enumerator mediated in person surveys.

Objectives

This lab looks at the exact moment data is collected in the field - comparing enumerator-led methods (like CAPI) with farmer-led self-reporting (like mobile

apps). We explore both the response rate and how data quality is shaped not only by technology, but by real human factors: trust, effort, incentives, and ease of use.

Activities

Participants will discuss what drives farmers to use (or abandon) app-based reporting - and how incentives, peer learning and learning by doing can improve participation over time. The Lab will clearly explain the discrepancies in production figures collected through the App, in person survey, and real data. Results

The disparity between the production figures obtained via the AgileAg App and the actual production is primarily influenced by the difficulties encountered by farmers in utilizing the App and their willingness to engage. The motivation for farmers to adopt the App largely depends on their peer's attitude. These trends provide valuable insights for considerations regarding clustering, costs and sample sizes in study design.

Lessons learned

Out team overcame the main field challenges with ad hoc solutions

1. **Literacy:** Recruit HH with at least one member able to read and write
2. **Incentives:** Not crucial for the success of the projects
3. **Internet connectivity:** Starlink antennas for most remote zones
4. **High participation rate:** 45% average weekly participation
5. **Measurement errors:** Production Measures are valid under certain conditions

Relevant resources & tools	Contact person
AgileAg App	For more information, you can contact:
	Dr Elena Serfilippi
	Research Director
	Committee on Sustainability
	Assessment (COSA)
	es@thecosa.org