Digital technologies to improve Zimbabwe’s food and nutrition security information system

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There are growing calls on governments around the world to establish integrated national food and nutrition security information systems (FNSIS) to promote evidence-based interventions and achieve the Sustainable Development Goals (SDGs).
Introduction

- Food and nutrition security information generally comes from multiple stakeholders and a variety of sources.
- This fragmentation often hinders a cohesive understanding of the determinants and outcomes of food and nutrition security.
- Hence the need to coordinate and harmonize these sources of data
- Digital technologies hosts a lot of opportunities for FNSIS in Zimbabwe. However, digital technologies is not a magic bullet, a number of challenges need to be addressed.
Methods

- A mixed-methods survey of explanatory sequential design (Creswell, 2014), conducted in November and December 2019.
- A short questionnaire initially disseminated to 62 selected representatives from stakeholders to capture their views on the pros and cons of applying digital technologies to the FNSIS.
  - Semi-structured key informant interviews were done with 12 of the 62 interviewees representing all stakeholders,
  - Descriptive statistics were used to analyse quantitative data while thematic analysis.
Case Study of Zimbabwe’s FNSIS

- More than half of the country’s population - 5.5 million rural and 2.2 million in urban areas, is regarded as food insecure (WFP 2020).
- Stunting remains high (29.4%) and the leading form of malnutrition for the under fives (ZimVAC 2020)

NB* Commitment Sixth of the Zimbabwean FNSP mandates the government to establish FNSIS in order to:
  (a) prioritise and plan FNS interventions,
  (b) provide prompt evidence for multisectoral emergency response,
  (c).provide different stakeholders with food and nutrition security information to ensure evidence-based programming.
Sources of food and nutrition security information in Zimbabwe

- Zimbabwe Demographic and Health Survey
- National Nutrition Surveillance System
- Zimbabwe Vulnerability Assessment Committee (ZIMVAC)
- Agriculture and Food Security Monitoring System
- Crop and Livestock Assessment
- Health Information System (HIS)
- Annual mapping exercises
Considerably reduce costs of data collection-93%
Decrease inequalities in access to information among stakeholders-98.8%.
Help government and stakeholders to process and analyse data faster 97.1%.
The Pitfalls !!!

Why - How did this happen?

Courtesy: www.ahajokes.com
Potential risks of digital technologies in Zimbabwe’s FNSIS

- Exclusion and potential job losses some activities - 32%
- Lack of data privacy - 41%
- Cybersecurity breaches - 27%
Other Challenges

- Lack of digital infrastructure.
- Prolonged power/electricity outages and load shedding.
- Unaffordability of bandwidth data bundles especially to the primary generators of FNS information.
- Poor network coverage especially in remote areas.
Proposed conceptual framework for a reliable and sustainable FNSIS

- Adequate budgetary support
- Multi-stakeholder partnerships
- Robust legal and institutional frameworks
- Good governance in data management
- The need for disaggregated data to enable action targeted to the most in need.

Digital Agriculture
Conclusion

- Digital Technologies could enhance the construction of a reliable and sustainable FNSIS in Zimbabwe

However

- Data quality needs to be prioritized.
- Challenges need to be effectively addressed (exclusion, a lack of data privacy and cybersecurity breaches).
- Ensure good data governance, foster inclusion through targeted support and adequate budgetary support to complement donor support