



Improving Dietary and Health Data for Decision-Making in Agriculture and Nutrition Actions in Africa

Terms of Reference for Final Project Evaluation

Background

The Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) and the International Livestock Research Institute (ILRI) are jointly implementing the project *Improving Dietary and Health Data for Decision-Making in Agriculture and Nutrition Actions in Africa*. The project is being implemented in Kenya and is funded by the International Development Research Centre (IDRC). The project started in September 2018 and is due to end in February 2023.

Malnutrition has direct consequences on child health and long term cognitive and physical development. Globally, one in nine people is hungry and one in every three is overweight or obese. Many countries, including those in Sub-Saharan Africa, are experiencing the double burden of malnutrition, where undernutrition and micro-nutrient deficiencies co-exist with overweight, obesity and other diet-related conditions such as non-communicable diseases (NCDs). The number of people affected by hunger has been slowly increasing since 2014, with increases in Sub-Saharan Africa being greater than any other region. The world is not on track to achieve the Sustainable Development Goals (SDGs), especially SDG 2, by 2030.

One of the determining factors on achieving the nutrition targets is how data are collected to track changes on key nutrition indicators, especially at individual and household levels. Issues of data collection are even more critical for remote regions of sub-Saharan Africa, which are not easy to reach in regular and routine data collection exercises.

Standard sources of household and individual nutrition and health data include demographic health surveys (DHS), usually done every five years, and some *ad hoc* surveys that may incorporate seasonality or annual and biannual surveys to support humanitarian interventions. All these traditional methods depend on enumerators or use of health facilities to collect data. These approaches suffer from accessibility bias, are costly and the infrequent data collection intervals under heterogeneous and fast-moving confounding factors may not track changes in nutritional status and household coping mechanisms that occur over short periods of time. The low-frequency data collection can have serious implications on how practitioners and policy makers judge the impact of interventions aimed at improving household welfare. Furthermore, such data are often of little direct use to households themselves as they do not get feedback.

Unless approaches to collection of individual women and children's and household nutrition and health data, especially for not-so-easy to reach communities, are changed, this will continue to negatively impact the efforts of governments and development practitioners to effectively programme and monitor the performance of nutrition and health interventions, and ultimately, achievement of national and global nutrition and health targets.

Objectives of the Project

The main objective of the project was to develop and build capacity around a smartphone-based application for collecting and disseminating high-frequency, high-resolution food consumption and young child health data directly from and to households through the following specific objectives:



- i) New smartphone application (e-data collection tool) developed and tested for functionality
- ii) Smartphone application (e-tool) scaled-up
- iii) Results of smartphone application (e-tool) disseminated and used for policy engagement.

Activities

The following activities were implemented:

1. *Develop and test smartphone application*
 - i) Secure the services of an application developer
 - ii) Develop alpha version of data collection tool, database and data collection protocols and variables (household health, dietary diversity, minimum dietary diversity for women, of reproductive age, minimum acceptable diets for children 6-23 months, frequency of diets)
 - iii) Procure hardware (mobile phones and anthropometric measurement equipment) for use during pilot phase
 - iv) Develop and test beta-version of application during pilot phase
2. *Disseminate pilot study results*
 - i) Engage with potential users of e-tool
 - ii) Share results of pilot through publications and presentations
3. *Scale up smartphone application, test the tool in three new sites*
4. *Disseminate results and engage in policy advocacy*

Outputs

The following corresponding outputs were envisaged:

- i) Smartphone application (e-tool) developed and tested
- ii) Results of pilot study disseminated to potential users of application
- iii) Application tested in two-three new sites
- iv) Results disseminated and policy engagement conducted based on results.

Progress to date

The first two years of the project focused on objectives one and two: developed the tool and, for 12 months, iterated to improve it in response to users in Samburu County, Kenya. At the same time, the users (caregivers and community health volunteers) were collecting and submitting data. This activity closed in December 2020, by which time, the participants had submitted over 60,000 surveys. Following the closing of the pilot data collection, the Mbiotisho smartphone tool was further updated to reflect lessons learned and partners for the third component, which included implementing and collecting data in three additional locations, were identified. Because each implementing location had different partners with different objectives and samples, customized versions of the tool were developed for each partnership. As of the end of August 2021, one version of the tool had been developed and launched in one of the three new sites, Marsabit County, in collaboration with the Foreign, Commonwealth & Development Office (FCDO)-funded DIRISHA programme, which aims to establish a network of sentinel sites across the rangelands of the IGAD region. Versions of the tool for data collection have been developed for Kilifi County, in collaboration with the World Food Programme (WFP). A Mbiotisho variation for use as a messaging and tracking service was developed in collaboration with the Child Development in Marginalized Communities (CDMC) parenting study,



which is being implemented by Aga Khan University Institute for Human Development (AKU-IHD)'s and is funded by IDRC. While the data collection from each of these locations is quite different and our partners have considerably different objectives, the core objective of this project—to develop tools for individuals to measure, record, submit and track health and nutrition information on themselves and their children, remains the same in all three sites.

A study of the gender dynamics of the use of the smartphones and the Mbiotisho application among participating households was conducted in Marsabit County, while that in Kilifi County is scheduled October to November 2022. The results of the study from Marsabit County indicated that men controlled the training and attendance of women at community meetings. This affirms the need for involvement of men in the project inception and implementation. The gender dynamics will influence the effectiveness of the application.

The results so far have demonstrated the following key messages:

- i) Rural smallholder households can use smartphones to collect nutrition and health data;
- ii) Households can receive feedback and benefit from submitted data; and
- iii) The smartphone application can replace enumerator-collected data for specific indicators, enabling less costly and more frequent data on household nutrition and health situation, especially for remote and hard to reach communities.

FANRPAN and ILRI are looking for an Evaluation Expert to conduct an end of project evaluation.

Objectives of the evaluation

The overall objective of the evaluation is to assess the implementation of the project and achievement of the three objectives from its inception in September 2018 to November 2022. The evaluation should cover all the OECD DAC criteria of relevance, effectiveness, efficiency, coherence and sustainability of the smartphone application. The specific objectives of the evaluation are to:

- i) Assess the relevance, effectiveness, efficiency, coherence and sustainability of the Mbiotisho smartphone application for collecting health and nutrition data;
- ii) Identify and document key lessons learned, good practices and positive effects in the development and use of the Mbiotisho smartphone application;
- iii) Provide a set of forward-looking and actionable recommendations to strengthen use and upscaling of the Mbiotisho smartphone application, considering lessons from the four implementation sites.

The results of the evaluation will be used by the implementing partners to inform future collaborative projects and by the funding partner, IDRC, to inform future programming.



Scope of work

The Evaluation Expert will be expected to undertake an end-of project evaluation to assess the extent to which the objectives of the project were achieved, through the following specific tasks:

- i) Attend a briefing meeting on the assignment with the FANRPAN team.
- ii) Review the project proposal document, contract and bi-annual and annual update and interim technical and financial reports;
- iii) Develop an evaluation matrix to assess how the project delivered on each of the three objectives.
- iv) Develop an evaluation design to assess project performance across the above criteria through a combination of a desk study, field surveys of participating communities, including through key informant interviews and focus group discussions, in the four implementation locations of Samburu, Marsabit, Kilifi and Nairobi (Eastleigh informal settlement) Counties.
- v) Prepare and make a presentation and submit an inception report describing an understanding of the assignment, detailed methodology and workplan.
- vi) Develop both qualitative and quantitative data collection tools for the field work.
- vii) Conduct data analysis for the field surveys and prepare a draft report for review by the Evaluation Steering Team.
- viii) Incorporate comments of the Evaluation Steering Team into the draft report.

The evaluation is expected to take up to 30 person days to complete. The Evaluation Expert will operate from Kenya, where the project activities were implemented.

Deliverables

- i) An inception presentation and report describing an understanding of the assignment, detailed methodology and workplan
- ii) Field notes and data used as input for the report
- iii) A report on evaluation of the project.

Qualifications

The ideal candidate should have at least a masters degree in a development-oriented field and a minimum of five years' experience in evaluation of research for development projects. Experience of food, nutrition and health systems would be an advantage.

Application

Interested candidates should submit their technical and financial proposals, including a cover letter, curriculum vitae and a sample of a previous evaluation report, to the following email address: Procurement@fanrpan.org. The technical proposal should be submitted separately under the subject heading **“Technical Proposal – Evaluation of Dietary and Health Data Project”**, while the financial proposal should be submitted under the subject heading **“Financial Proposal – Evaluation of Dietary and Health Data Project”**

Applications should be received by 4 November 2022.