

Six-month project progress update

Project Number	108872-001
Project Title	Improving Dietary and Health Data for Decision-Making in Agriculture and Nutrition Actions in Africa
Reporting period	September 1, 2019-February 29, 2020

1. Project summary

The overall objective of this project is to develop an efficient solution to measure indicators that track nutrition and health outcomes and the progress at community and national levels. This report is covering activities related to the first specific objective, which is to “Develop and test cost-effective, scalable technologies to improve the collection of high-resolution (individual-level) dietary, nutrition, and health data”. The activities included the following:

- i) Updating the smartphone app (tool) in response to feedback provided by the participants of the August-September 2019 pilot;
- ii) Actualizing the original sampling frame and research design;
- iii) Training 22 Community Health Volunteers (CHVs) on the CHVs’ Tool and the Caregivers’ Tool;
- iv) Training 190 caregivers on health and nutritional concepts, on how to use smart phones, and on how to use the Caregivers’ Tool; and
- v) Providing continued field support to the CHVs and caregivers during data collection.

2. Progress towards Results/ Outcomes (up to a maximum of 10 bullet points)

- i) We successfully updated the CVHs’ and caregivers’ tools in response to feedback collected during the pilot and later during the main data collection.
- ii) We launched the main Phase 1 implementation. This included training and providing support to 190 caregivers and 22 CHVs as they collect data. This support is continuing during the post-pilot data collection (see Annex 2 for field notes).
- iii) We developed the caregiver feedback feature as part of their tool so that they can track and receive feedback on their and their child’s progress against benchmarks.
- iv) We submitted a manuscript for publication at the UNSCN Nutrition (see Annex 3).
- v) Produced a blog as an interest item: Alulu, Vincent. 2019. ILRI and FANRPAN test nutrition data collection in rural communities using pictography. ILRI Blog, <https://www.ilri.org/news/ilri-and-fanrpan-test-nutrition-data-collection-rural-communities-using-pictography>.

3. Challenges encountered/ Actions taken

- i) As stated in earlier reports, we were having a difficult time identifying an appropriate partner for the implementation of field activities, which was delaying the pilot test and data collection phase. Rather than delay further, we decided to implement with our own staff instead of an implementing partner. This decision resulted in greater flexibility and no further delays. The drawback is that with no partner in the field, we had to perform institutional and community entry activities on our own. To mitigate the impact of this issue, we implemented in Eastern Samburu, where we already have developed a relationship with the county and sub-county level health extension infrastructure.
- ii) Smart phones with the required specifications cost about 15% above the budgeted amount. In response, we reduced the sample of caregivers from 200 to 190. We believe that this will not have a material effect on the results.

4. Strategic priorities for the next 6 months

The priorities for the period March-August 2020 include the following:

- i) Identify a student and collaborators to work with;
- ii) Continue supporting the first data collection by care givers and CHVs;
- iii) Assess data accuracy and value; and
- iv) Seek advice from gender experts on how to integrate gender dynamics questions and data.

5. Key numbers to be used for infographics

Those are *cumulative* numbers since the beginning of the project, please update only if the numbers have changed from the previous reporting period.

Number of farmers (women/men)	(190/0)
Number of innovations/solutions	1
Number of Masters and PhD students	0
Number of publications	0
Other key numbers	0

Annex 1: Progress towards milestones

List the milestones given in your grant agreement for this reporting period and refer to the hard evidence in attached annexes (as needed). If applicable, explain why any are not achieved and how the project will readjust. Also include details on any unfinished milestones from the previous reporting period that were completed during this reporting period.

Milestone	Achievement (%)	Evidence/Indicator	Comment
Identify, contract and train participating (data collecting) households and community health volunteers (CHVs) for conventional data collection	100	- Training reports for CHVs and caregivers (CHV and caregiver training field notes.docx)	The reports are anonymous. If necessary can provide the actual list of names.
Develop front-end mobile application that is designed to be user-friendly and operable	100	- The Android Package (APK) is available for download at google play. Once downloaded, a demo of the caregivers' tool can be accessed using the following credentials. <ul style="list-style-type: none"> o Server key: fanrpan-kenya o Deployment key: demo o Caregiver credentials: o Username: demo@sam.car o Password: demo@sam.car 	
Back end-web system that serves as a database, dashboard and platform developed	75	- The database is available for download and analysis. - Administrators have access to a simple dashboard for examining submissions. - We have put off developing an outward-facing dashboard until we have a partner that is interested in certain indicators so that it is demand-driven.	
Data dissemination platform launched	100	- The data dissemination platform has been built into the caregivers' tool for ease of access. It was launched on December 15, 2019.	
Participant and data-user feedback collected	100	- Pilot feedback was collected and integrated into the tool. - Phase 1 CHVs' feedback was collected and integrated into the tools. - Phase 1 caregivers were trained, sent home to use the tool and then were brought back for a feedback session. The	

Milestone	Achievement (%)	Evidence/Indicator	Comment
		information from this feedback session was integrated into the tool	
Machine trained learning algorithms using the data points and associated photos developed	0	- We are still looking for an appropriate research partner to collaborate with on this. We have also reconsidered the timeline related to this milestone and feel that the collaboration with the related computer scientists would be more fitting as we complete this first implementation and are working to improve the tool for scaling, specifically, in Q1 2021.	
Application updated to improve data quality and user experiences	50	- Application has been updated in response to feedback from more than 200 users. - We will update again after the Phase 1 implementation, which will end around October 2020.	
Initial data quality analysis conducted	0	- Assessment will take place in the 3 rd quarter of 2020.	
A method provided for households to track their own consumption and child health indicators against benchmarks	100	- This has been successfully developed and launched as part of the caregivers' tool.	
Cost efficiency of the developed tool and platform tested against other conventional collection methods	0	- Assessment will take place in the 3 rd quarter of 2020.	
Capacities developed in pilot country at national, sub-national and household levels ¹	10	- Community health extension workers (CHEWs) and CHVs in Samburu county have been trained.	
Engage a post-graduate student(s) to conduct project related research	20	- ILRI has had conversations with a number of post-graduate students. We are still working to identify an appropriate student.	
Outreach to practitioners and the scientific community	10	- Jensen has presented on this project during ILRI's Institutional Planning Meeting in Addis Ababa.	
Reflection and learning workshop convened	0	- The intention was that the workshop would be held after the phase 1 implementation and analysis of the data collected from it. Due to delay in initial contracting, the implementation has been delayed, which means that the phase 1 implementation will not be complete until October 2020 and preliminary data analysis will not be complete until January 2021. We request that this milestone be adjusted to Q1, 2021.	
Technical progress update (at 18 month point)	100	-	
Annual monitoring and progress reports prepared	N/A	-	

¹ Capacity will be built through: (i) development of training tools and materials; (ii) targeted training of engaged CVHs and households on diets and health data collection; (iii) engagement of post-graduate students; (iv) formation of strategic partnerships; and (v) establishment of communities of practice at different levels to enhance the use of the tool and engagements with government ministries of Agriculture, Health, Education and other key development actors (i.e., UNICEF, WFP and FAO).