

HUMANITARIAN INNOVATION FUND

Large Grant Final Report

Organisation Name	United Nations World Food Programme
Project Title	mVAM: piloting mobile voice technology for household food security data collection
Partner(s)	InSTEDD
Problem Addressed / Thematic Focus	Interactive voice response (IVR) and live telephone interviews for household food security data collection.
Location	Democratic Republic of the Congo and Somalia
Start Date	June 1, 2013
End Date	April 30, 2015
Reporting Period	June 1, 2013 – April 30, 2015
Total Funding	GBP 222,471 (HIF+WFP)
Total Spent	GBP 222,471 (HIF+WFP)
Innovation Stage	Implementation
Type of Innovation	Process innovation
Project Impact Summary	The mVAM approach has increased the cost-effectiveness and timeliness of collecting household level information for food security monitoring. The availability of real-time food security data for programmatic decision making has significantly increased. Thanks to the HIF funded pilot project, mVAM is now a well-established remote data collection approach in WFP and within the food security / humanitarian community.

PROJECT ACTIVITIES AND OUTPUTS

Please go to **Appendix 1** and attach the final workplan, showing all work that was actually completed.

1. With reference to the final workplan, what have been the key achievements of the project?

INNOVATION OUTCOMES

Whether this innovative project was successful, not successful, or a mix of both, the HIF would like you to report as much detail as possible, so that success can be built on and failures can be learned from. By 'success' we mean that the innovation has achieved the planned positive impact/outcome, or that it has performed better than the current process, product or system.

2. Has the project demonstrated the success of the innovation? (Please choose only one answer.)

- Completely successful
- Significantly successful
- Partially successful
- Completely unsuccessful

2b. Please select the successes that your project have achieved:

(You may choose more than one)

- There is real evidence that the project achieved the planned outcome(s)
 - There were perceived contributions or improvements to the planned outcome(s)
 - Learning was achieved within the project cycle
 - 'Lessons learned' were gathered and circulated to humanitarian stakeholders and actors
 - The completion of this project has led to another innovation
 - Other *(please comment)* _____
-

2c. Please select the challenges your project has encountered:

(You may choose more than one)

- The project did not complete its planned activities
 - There is no real evidence that the project achieved the planned outcome(s)
 - There were few perceived contributions or improvements to the planned outcome(s)
 - Learning was not achieved within the project cycle
 - 'Lessons learned' were not circulated to humanitarian stakeholders and actors
 - Other *(please comment)* Delays in getting the project started in Somalia. While this necessitated a no-cost extension of the project, project objectives were met in that country.
-

2d. If there is any evidence for the successful performance of the innovation, please describe it further:

- Remote mobile data collection proved to be quick and affordable, compared to traditional surveys. We also realized there are important benefits for staff safety, as staff are not required to travel to dangerous/remote places.
- Data quality for mobile surveys has been shown to be adequate
- mVAM information has been used to support decision making in the offices where the project has been implemented

- Scale-up of the project to more locations in both Somalia and DRC and the adoption of the mVAM data collection approach in 11 WFP country offices.
- mVAM is now becoming a standard WFP emergency response tool. It has been used in Ebola, Iraq and Yemen.
- Demand from within the organisation (HQ, Regional and Country offices) for mVAM solutions. Interest from other departments at WFP for the technology.
- Following on from IVR data collection an automated 2-way communication system has been set up in Goma, DRC and Somalia will follow shortly;
- External partnerships formed, e.g. with Nielsen, InSTEDD and a 5year long term agreement signed with Geopoll
- Successful fundraising for scale up with private sector donors, including Google.org and the Cisco Foundation as well as with traditional donors (USAID)
- Requests for guest blogs and participation in events (Cartagena Data Festival Innovation Fair, others...); good media visibility
- Other organizations are now using mVAM-inspired approaches for remote surveys (UNICEF and FEWS NET)
- Project won the 2014 WFP Innovation challenge

3. Please show the components of the project which contributed the most to any successes:

(where 1 = most influence 3 = least influence)

Component	1	2	3	N/A
Design and placement of the innovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The methodology or approach to collecting evidence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Context	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The availability of resources and capacities (financial, human, technical etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Success in identifying and responding to different project and innovation risks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Strength of relationships and collaborations within the team and with other stakeholders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The process was flexible and responsive to emerging results	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to draw on experience and expertise of existing practice, codes and standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: Support from WFP management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please show the components of the project which contributed the most to any unsuccessful elements of the project

Component	Yes-contributed to failures
Weaknesses in the design and placement of the innovation	<input type="checkbox"/>
The methodology or approach to collecting evidence	<input type="checkbox"/>

Context	<input type="checkbox"/>
A lack of access to resources and capacities (financial, human, technical etc.)	<input type="checkbox"/>
Difficulty in identifying and responding to different risks	<input type="checkbox"/>
Lack of good relationships and collaboration within the team and with other stakeholders	<input type="checkbox"/>
Having a process that was not flexible or responsive to emerging results	<input type="checkbox"/>
No ability to draw on experience and expertise of existing practice, codes and standards	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

5. What are the top three, key lessons learnt relating to the innovation? *This should relate to the innovation or the sector in which it operates, rather than project implementation.*

1. Remote mobile technology can successfully be used to collect household food security data at scale in humanitarian contexts.

2. Using different surveys modes (face-to-face, live voice, SMS, IVR)... leads to different results. It's important to understand these 'mode effects' in order to implement remote data collection responsibly.

3. Remote surveys open up the possibility of implementing high frequency monitoring. This generates an immense quantity of data. Agencies therefore need strong analytical capacities to process, store and share this information, or risk being overwhelmed.

6. Do the final outcomes support the initial rationale for the innovation?

- Yes, completely
- Yes, significantly
- Partially
- No, not at all

Please describe further:

7. How has your understanding of the innovation changed through the project period?

1-AS THE PROJECTR PROGRESSED, WE DEVELOPED A BETTER UNDERSTANDING OF THE INNOVATION'S POTENTIAL TO DELIVER NEW INFORMATION STREAMS TO WFP. WE INITIALLY IMPLEMENTED THE SAME QUESTIONNAIRE MODULES WE HAD BEEN USING TRADITIONALLY, BUT SOON BEGAN INNOVATING AROUND THE TYPES OF SURVEY QUESTIONS WE USED. WE PROGRESSIVELY INTRODUCED NEW SURVEY QUESTIONS AND DEVELOPED NEW METHODS TO ANALYZE THEM. WE ALSO REALIZED THAT THE VOLUMES OF INFORMATION GENERATED BY THE PROJECT CALLED FOR AN OVERHAUL OF OUR INFORMATION MANAGEMENT SYSTEMS. WE REALIZED WE WERE DEALING WITH AN INNOVATION THAT WAS TRULY TRANSFORMATIVE, CONSIDERING ITS BROAD IMPACTS.

2-ONE OF THE KEY INSIGHTS WE HAD ABOUT THE INNOVATION INVOLVED THE APPLICATION OF REMOTE MOBILE SURVEYS IN REMOTE OR INSECURE AREAS (SEE BELOW).

8. Did the innovation lead to any unexpected outcomes or results? How were these identified and managed?

1-SCALE-UP OF THE PROJECT WAS MUCH QUICKER THAN ANTICIPATED, WE WERE SURPRISED AT THE LARGE PENT-UP DEMAND FOR THE SERVICE, AND AT HOW QUICKLY THE ORGANIZATION IS LEVERAGING THIS NEW TOOL IN LEVEL 3 EMERGENCIES.

IT SEEMED THAT THE MOST ATTRACTIVE FEATURE OF MVAM WAS NOT COST OR RAPIDITY, AS WE HAD ASSUMED. IT EMERGED THAT WFP MANAGERS WERE ATTRACTED TO MVAM'S ABILITY TO DELIVER FRESH FOOD SECURITY INFORMATION FROM THE MOST COMPLEX AND INSECURE ENVIRONMENTS AND DELIVER INSIGHTS THAT NO OTHER TOOL COULD OFFER.

THIS RAPID SCALE UP HAS IMPLIED A CHANGE IN THE DEMANDS PLACED ON THE PROJECT TEAM . THE MVAM TEAM HAS BEEN ABLE TO GROW IN ORDER TO MEET THE REQUESTS FOR ADVICE, TOOLS AND SUPPORT ARISING FROM THE FIELD. WE HAD KEEN INTEREST FROM DONORS, AND THEREFORE THE RESOURCES WERE AVAILABLE TO FUND THIS INCREASED CAPACITY.

2-THE REVIEW OF THE MVAM ACTIVITY ALSO SHOWED THAT OUR WORK ACTUALLY EMPOWERS THE PEOPLE WHO PARTICIPATE IN THE SURVEYS. IN DR CONGO RESPONDENTS RECEIVED PHONES AND AIRTIME CREDIT FROM WFP. PEOPLE USED THESE PHONES AND AIRTIMES TO OBTAIN INFORMATION OF VALUE TO THEM (ABOUT FOOD DISTRIBUTIONS, SECURITY IN THEIR HOME AREA). SOME PROJECT PARTICIPANTS RECEIVED MOBILE MONEY TRANSFERS THROUGH THE PHONES WE PROVIDED. THIS HAS LED US TO MAKE 'EMPOWERMENT' A COMPONENT OF THE MVAM THEORY OF CHANGE.

METHODOLOGY

9. Was the methodology successful in producing credible evidence on the performance of the innovation?

- Yes, completely
- Yes, significantly
- Partially
- No, not at all

Please describe further:

The project produced a large amount of data that enabled performance evaluation. We were able to compare data with;

PARTNERSHIPS AND COLLABORATION

10. How and why did the partnership change during the course of the project?

The technology partner we had initially identified to work with were not in a position to scale-up their activities to Sub-Saharan Africa. We went on to collaborate with InSTEDD, a non-profit organisation providing free and open source interactive voice response (IVR) software.

Early on, the project generated interest with the Nielsen Company who over the past year have provided pro-bono support in methodology, survey design, dealing with attrition in panel surveys and mode experiments. InSTEDD has continued to work with us under a grant from the CISCO foundation to enhance a 2-way communication system.

11. Are there plans to continue your partnership, either while scaling up this innovation or on other projects?

- Yes, with this innovation
- Yes, with another project
- Maybe
- No

Please describe further:

WFP's collaboration with Nielsen on analytics is continuing in the area of open data. This is as a product of successful collaboration on mVAM.

DISSEMINATION

12. Please describe any steps taken to disseminate the outcomes of the project.

Please include all completed and forthcoming, as well as all planned and unplanned products (for example, research and policy reports, journal articles, video blogs, evaluations).

- Not a Rolls-Royce but it gets you there: remote mobile food security monitoring during the Ebola crisis, June, 2015. <http://www.odihpn.org/humanitarian-exchange-magazine/issue-64/not-a-rolls-royce-but-it-gets-you-there-remote-mobile-food-security-monitoring-during-the-ebola-crisis>
- Revolutionizing Data Collection - World Food Programme and Nielsen Use Scalable Mobile Surveys in Today's Changing Technological Landscape, June 2015. <http://www.wfp.org/content/revolutionizing-data-collection-world-food-programme-nielsen-scalable-mobile-surveys-jun-2015>

- A new tool in the toolbox: using mobile text for food security surveys in a conflict setting, February 2014. <http://www.odihpn.org/the-humanitarian-space/news/announcements/blog-articles/a-new-tool-in-the-toolbox-using-mobile-text-for-food-security-surveys-in-a-conflict-setting>
- Tracking Vulnerability in Real Time: Mobile Text for Food Security Surveys in Eastern Democratic Republic of Congo in [Africa Policy Journal](#), 2014. pp. 36-53.
- Video: WFP Calling <http://www.wfp.org/videos/wfp-calling>
- mVAM page: http://vam.wfp.org/sites/mvam_monitoring/
- mVAM blog: <http://mvamblog.wordpress.com/>
- mVAM toolkit: <http://resources.vam.wfp.org/mVAM>

13. Has the project received any third party coverage during the project (from news media, third party blogs, researchers or academics etc.)?

- Nesta guest blog <http://diytoolkit.org/blog/notes/home-grown-innovation-at-wfp/>
- Article in the Guardian <http://www.theguardian.com/sustainable-business/food-blog/mobile-technology-food-conflict-refugee-camps-wfp>
- CDAC Network guest blog <http://www.cdacnetwork.org/i/20140722100657-jrz9x/>
- Daily Development guest blog <http://www.dailydevelopment.org/blog/press-1-if-you-have-not-eaten-today>
- TEDx Talk by Johannes von Engelhardt – [Mobile technology for data gathering](#)
- Guest blog for [Silofighters](#) – forthcoming
- Paper on the findings of mVAM project by the review team from Tulane University – forthcoming

SCALE UP AND DIFFUSION – WHAT NEXT?

14. Is the project or innovation to be replicated or scaled up?

- Yes, we will scale up in the same or similar context
- Yes, we will scale up within our organisation (including running more pilots or trials)
- Yes, we will replicate the innovation/project in another context or country
- Yes, the innovation/project will be replicated or scaled up by another organisation or stakeholder
- Yes, other
- No

If you answered *yes* to question 14, please answer 14b:

14b. What model are you pursuing to scale up or sustain your innovation?

- Applying for more donor funding
- Selling the innovation or patent
- Cost recovery (for example, selling your service or being paid as a consultant to implement the innovation)
- Innovation to be taken up by organisation or government as standard and included in standard planning and core funding by them
- Other _____

Please describe further: Ideally mVAM data collection costs will be included in future WFP country specific project proposals. We have also seen other organizations use mVAM approaches.

15. If the project or innovation could be replicated or scaled up, please list the three most important issues or actions that will need to be considered:

(where 1 = most important and 3 = least important)

Suggestion/issue	1	2	3
1. Leverage the capabilities of the private sector to scale mobile phone surveys. Private providers have the ability of placing thousands of phone surveys at very short notice and have strong quality control systems in place. Avoid the temptation of doing everything in-house.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Hire staff that are tech savvy and eager to try new things. New approaches tend to be met with scepticism and even resistance by more seasoned mid-level technical staff. More junior and motivated staff are generally better equipped to deal with trial and error that scaling will imply.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. In every instance of replication, ensure that the data produced through mobile surveys meets high standards of quality. A comparison of data captured through mobile surveys and through traditional means is recommended.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Appendix 1. Final Workplan

Below is a table that is the same as the workplan that you submitted with your original application. There are **three ways** to respond to this section.

1. If there have been no changes at all through the project you may cut and paste your original workplan here.
2. If there have been changes to the project but these changes **were previously reported to the HIF** in an *Agreement Amendment* form, please adjust your original workplan so that these changes are recorded in it here.
3. If there have been changes which were **not previously reported to the HIF**, please **also** fill in Table 2 (which is on the next page). In particular, please make sure to explain any budget various greater than 15% in Table 2.

Please paste your final workplan in here >

Expected Results	Main Planned activities	Implementation period Months																		Responsible party / person	Amount			
		PHASE 1 - PREPARATION						PHASE 2 - IMPLEMENTATION AND LEARNING													2013		2014	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		HIF	WFP	HIF	WFP
1.A voice platform (IVR and live calls) is operational in each country	1.1 Initial telephony assessment	█																	WFP Information manager		9,662			
	1.2 Scoping missions; strategy notes written	█	█																Country analysts, WFP Information manager	5,000	9,662			
	1.3 Procurement	█	█	█															Country offices	14,544				
	1.4 Software development	█	█	█	█														InSTEDD	9,000				
	1.5 Questionnaires streamlined	█	█																Data manager	4,771				
	1.6 Respondents selected	█	█																Country offices, Data manager	4,772				
	1.7 Initial contact with survey					█													WFP country offices and sub-offices	10,500				

Expected Results	Main Planned activities	Implementation period Months																Responsible party / person	Amount					
		PHASE 1 - PREPARATION						PHASE 2 - IMPLEMENTATION AND LEARNING											2013		2014			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		17	18	HIF	WFP	HIF	WFP
	respondents 1.8 Call center staff trained 1.9 Tests calls																			Data manager, Data analyst	1,000		1,000	
																				Data manager, country offices	1,000			
2. Data is collected, analysed and posted on wfp website	2.1 12 rounds of data collection																			WFP Country offices			42,000	
	2.2 Data cleaned, analysed, cleared and posted on vam.wfp.org																			Data manager, analyst			36,000	
	2.3 Troubleshooting																			InSTEDD, data manager, WFP information manager				9,662
	2.4 Support missions																			Data manager, data analysts			10,000	
3. Learning is captured and shared	3.1 Process management and monitoring (including project blog, dashboard, helpdesk function)																			Project Manager, Food security analyst		7,790		17,616
	3.2 Cost, speed compared to usual surveys																			Project manager, Food security				8,808

Expected Results	Main Planned activities	Implementation period																		Responsible party / person	Amount			
		Months																			2013		2014	
		PHASE 1 - PREPARATION						PHASE 2 - IMPLEMENTATION AND LEARNING													HIF	WFP	HIF	WFP
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18																								
																				analyst				
	3.3 External evaluation																			Consultant, Project manager			5,000	4,944
	3.4 Paper drafted for peer review																			Project manager				4,944
	3.5 Guidance note drafted ¹																			Project manager				4,944

Table 2: Changes to Workplan

For every change in the final workplan that is different to your original worktable AND that has not already been reported to the HIF, please add a record in this table. Changes can include alterations to the methodology, project process or innovation design, for example.

Change (as referenced in workplan above)	Reason for change	Overall impact of change
1.		
2.		
3.		
4.		

¹ The finalization of the guidance note will take place *after* project implementation; the activity here consists in compiling key lessons.

