

HUMANITARIAN INNOVATION FUND Final Report

Organisation Name	Save the Children UK
--------------------------	----------------------

Project Title	Transforming decision making on emergency feeding programmes using the Minimum Reporting package.
Problem Addressed / Thematic Focus	Monitoring and reporting of acute malnutrition
Location	Global
Start Date	1 st April 2013
Duration	12 months + approved 3 month no-cost extension
Total Funding Requested	£149,836

Partner(s)	Centres for Disease Control Atlanta
Total Funding	£332,536 Total £149,836 from HIF £182,700 from SCUK

Innovation Stage	Development
Type of Innovation	Product & Service
Project Impact Summary	Completion of comprehensive, innovative online software for CMAM reporting with offline capability.

Reporting Period	Final Report: 1 st April 2013 – 31 st June 2014
Total Spent	£327,743 Total £143,416 from HIF £184,327 from SCUK

PROJECT ACTIVITIES AND OUTPUTS

What have been the key achievements of the project?

The key achievements of the project to date include the following:

- The release of the live version of the web-based CMAM Report software and website. Though development is still ongoing in terms of fixes under the warranty period and development of new components, the software is now live and available to use. We have designed and launched a new website from which to access the software and accompanying training materials. The website can be accessed through the following link www.cmamreport.com
- To date the software has been shared with partners using the old software. It will be monitored over a warranty period of 3 months, refined as necessary and then released to a wider nutrition audience.
- Two training of trainers have been completed to prepare Save the Children staff and partners for the release of the software.
- We have completed the collection, cleaning and analysis of data and have a draft version of the analysis report which will be shared with partners, discussed and finalised (see appendix 1). This will then form the basis of any publications related to the analysis
- We have completed an evaluation of the more qualitative components of the programme. The findings of this report have been merged into an overall briefing report which describes some of the findings and lessons learned. This report is also in draft format and will be shared with partners before pulling out key advocacy messages for the dissemination phase (see appendix 3).

What were the major activities and outputs of the project (this may include a description of the activities conducted and how they related to the work plan)?

The major activities and outputs of the project are described below against the MRP assessment M&E plan (see appendix 3). There were two main activities and a number of indicators. The indicators correspond to activities mapped out in the work plan (see appendix 4).

1. MRP tools are refined to increase usability and uptake of the reporting package among SFP implementing partners.

- a. The MRP software platform is changed from MS™ Access to a web-based platform*

A great deal of time has been dedicated to the development of a web-based software to replace the Microsoft access version on which the previous software

was based. Since April 2014, there has been a process of review and development towards an innovative web-based version of the tool with offline capability. The objective of this process was to develop a web-based software which would not require installation and to have access to data at several levels without the need to send, receive and merge data with the intention of improving programme monitoring and reporting through the use of standardised indicators and improving programme management decisions, accountability and assist urgently needed learning in the effectiveness of CMAM programmes.

An initial invitation to tender was developed by the MRP team who had been involved in the development of the access based software. A tender process was conducted for the software development. Three proposals were shortlisted. The development company were selected based on price, and best met need.

An agile methodology was chosen for the programme with a fixed price cost attached. Agile software development is iterative and incremental and requirements and solutions evolve. It promotes adaptive planning, evolutionary development and delivery, iterative approach, and rapid and flexible response to change.

When development started it was through an iterative process. For each iteration delivery testing took place and was reported back to the developers. On the 5th iteration, the testing process was opened up to partners and interested parties so that they could test and comment on the software. At the same time, piloting of the software was conducted in Ethiopia, Yemen, and Myanmar. The main phase of software development was completed in June 2014.

In early July (a few days post the end of our funding) we launched CMAM Report, the fully revised and updated version of the old MRP access software.

The software, user manuals and more information can all be found on the CMAM Report website using the following link www.cmamreport.com. They can also be found in appendices 5a-5e

b. Pilot of tablet technology in the field

Due to the lengthy development process of the software, there has been no pilot of the tablet technology in the field. In the process of development however, we have purchased and utilised 6 tablets. One of these has been used by the developers to ensure compatibility of the software with tablets during testing. The other 5 are in East Africa and were used during the regional training of trainers. These tablets will be used in the roll out of the software in Somalia and Kenya.

c. A support helpdesk service is provided and maintained

Through the lifespan of the project, we have maintained a support helpdesk which has supported users in the continued use of the access based version of the software, and in support during the piloting of the new software.

d. People trained in use of software

There have been a number of trainings conducted throughout the period of this project. We have conducted two country level trainings on the MRP to update staff on the access based version of the software to facilitate its use in programming for all components of community based management of acute malnutrition (CMAM).

- 22nd-24th of April – training in Niger. This training comprised 3 trainers and 12 participants
- 12th-14th of June – training in Myanmar. This training comprised 1 facilitator and 6 participants

Towards the end of development of the web-based version of the software, two training of trainers were conducted, the first in Nairobi which included participants from Nigeria, the East Africa region, Afghanistan, Myanmar and the Asia regional office. The second was held in London. The trainings were targeted primarily at current MRP users to facilitate smooth transition, though a meeting was held in Nairobi with teams from Somalia from UNICEF, ACF, Concern, Oxfam and Save the Children, to discuss a roll out and pilot of the new software in Somalia amongst a consortium of partners.

In addition to the formal trainings, there have been a number of informal one-to-one training sessions on the use of the software to various NGOs

A third training of trainers in West African has taken place since completion of this phase of the programme and will be reported on against a separate grant.

e. Uptake of the software by NGOs and countries (number of NGOs using software, number of agencies trained)

During the project timeframe there have been no new NGOs using the software due to the promise of the new development. This was a strategic decision that was taken on the communications plan for the project, and further communication and promotion of the tool will be prioritised in the next phase of implementation when the new software is externally launched. We have received interest and are supporting some new NGOs and consortiums in the new software and will report against this in the next grant.

f. MRP training package (guidelines and training materials) is revised and delivered to wide range of SFP implementing partners.

The training materials have been developed and refined during the course of the project. In the next phase of implementation further development of innovative e-learning tools will be launched. The materials being piloted at the moment can be seen in appendix 5. These materials will be assessed through a survey of initial users before being fully revised and launched.

g. Determine baseline for future evaluation of the MRP software

Following the evaluation performed in June, an M&E plan has been drafted (see appendix 6). This will be a working document and outlines the findings of an assessment to measure the baseline use of the access based MRP software. This is intended to be used as a baseline comparison for future monitoring and evaluation of the roll out, implementation and impact of the online CMAM Report software. This document will be shared with partners.

2. Review of targeted SFP Field Data is conducted to compare different SFP contexts and approaches to identify how best to maximise performance.

a. Data is collected from targeted SFPs to enable a comprehensive review of SFP field data

In total we have collected two years of data from January 2011 to December 2013. All data we have received have now been cleaned and descriptive and preliminary analysis has taken place. A draft report has been written and shared with partners. We continue to work closely with CDC who performed the analysis following our process of cleaning, in the write up of this paper. The software development, Ebola crisis and Middle East crisis have led to some delays in this process.

b. Preliminary analysis and results shared with partners

A preliminary report has been written as mentioned above and has been shared with partners.

c. Briefing document published and disseminated

As with the analysis there have been some delays in the finalisation of this report due to software development. A draft is attached in appendix 2 and has been shared with partners. This will form the basis of papers and advocacy messaging in the dissemination phase.

d. Draft paper for publication

As mentioned, this activity has been delayed as outlined for the reasons above. This activity will be initiated in the next phase of implementation

e. Advocacy for the use of standardised indicators and/or MRP software

It was decided that the advocacy push and communications main push around the standardised indicators would be coordinated with the launch of the new software and following the dissemination of the data analysis and briefing report. However there have been several internal and external communications on the importance of standardised indicators through conferences and internal meetings¹.

What adjustments and adaptations were made through the course of the project? Why were these needed and how were these made?

There were a number of adaptations made to the timeframe and budget of the project. These were needed to cover the additional time and costs incurred with different iterations of the software development. Initially the delays were due to the need to source additional funds. Following this, the main reasons for the delay in the software development process was ongoing negotiations throughout the entire process of development with the software developer over the addition of change controls. These were additional costs for parts of the software development not believed to be defined within the scope of the project, which have arisen during planning meetings. There has also been a significant underestimation of the work needed in the software development on the part of the developer. In addressing this we have had some very forthright discussions with the developers seeking assurance that there will be no further significant delays, and likewise no significant change controls. Sadly both continued to occur right to the end of development.

A change allowance of £14,000 was negotiated initially to be covered by MSM (the software developer). After this, each change was negotiated individually with one of three results: 1). absorption of the cost on behalf of SCUK, 2). absorption of the cost by MSM or 3). division of costs between MSM and SCUK.

Overall these adaptations resulted in a no-cost extension of 3 months to the programme, and meant that the software development was not completed until the very end of the project timeframe. This in turn meant that there was no roll out of the software until the very end of the project. This has also resulted in delays to other activities in the project such as the development of the analysis and briefing reports.

Please explain any budget variances greater than 15% of the original budget headlines

¹ A presentation on the MRP and the importance of standardised indicators was made at the Coverage Monitoring Network meeting in London in October 2013 which had wide participation from leading CMAM practitioners. Poster presentations were also made to the Global Nutrition Cluster in Geneva in 2013 and at the International Symposium in Vienna in 2014

Following the tender process, the actual cost of the software development was much higher than expected and required substantial additional funding. Identification of additional funding took some time which meant that the original work plan was pushed back by some months. The overall time needed for development was also significantly underestimated by the developers. The agreed cost of the software development at the start of the project was £160,000, significantly more than was originally budgeted.

Save the Children requested and was granted a no cost extension of 3 months (project completion date change from 31st March to 30th June) to account for delays in the initiation of software development and the increase in development time. A new budget was proposed alongside this which reflected additional funds added to the total cost of the project with some adjustment of spending lines to accommodate spending deadlines of the SCUK contribution.

There is an under-spend on the travel expenses line which is greater than 15%. We believe this is due to not all expenses being claimed and some trips working out cheaper than expected. There is also an under-spend on the training line. All of these funds were allocated to country programmes attending training but were not claimed. Instead country programmes have covered their own costs. The full financial report can be seen in appendix 7.

INNOVATION OUTCOMES

What were the outcomes of the project (positive or negative) and how did these follow from activities and outputs described above?

The main outcome of the project in terms of innovation is the completion of the software development.

The software is a comprehensive monitoring and reporting package for global reporting of all CMAM components, developed in consultation with the wider nutrition community. Previously an access based software; it has now been developed into an online reporting system for CMAM with offline capability. It can be used on desktop computers, laptops, tablets, smart phones with any of the following browsers: Firefox, Google Chrome, Internet Explorer. It is freely available to all agencies/countries that wish to use it. There is also potential for the software to be replicated and housed locally given sensitivities in data collection and storage. The software supports:

- Secure data collection through controlled access from field to HQ levels
 - Data collection and entry varies by country, CHWs, MOH, programme staff, senior levels – 5 adaptable user access levels in system
- Enables the use of standardised indicators and reporting categories (comparable data and unbiased reporting)



- Gender and age disaggregated reporting through all admission and discharge categories – if desired
- Analysis of additional components – Feeding site or Grant level reporting, Stock tracker, AWG/LOS calculator, MUAC screening and BSFP
- Creation of summary tables and graphs by feeding site, group of feeding sites, geographical location up to global level, e.g. East Africa or global
- Export of tables and graphs to PDF, Excel, Word and data export to Excel
- Data can be selectively exported to Excel and in turn statistical software
- Real-time check for data entry mistakes
- Built in analysis capacity
 - Creation of summary tables and graphs by feeding site, group of feeding sites, geographical location up to global level, e.g. East Africa or global. Can also search by grants or context
 - Graphs (with raw data attached in case the system does not produce graphs to your specifications)
 - Analysis of programme characteristics and trends

Has the project demonstrated the success of the innovation? If no, what are the key lessons about the innovation or area of practice?

Due to the delay in development, the software was not ready to be released until the very end of the project. This means that within this funding period there has been no implementation of the software at field level and as a result we have not been able to demonstrate the success of the innovation. We believe this will be possible in the future but new systems take time to implement, get started and show success. Save the Children remains committed to evaluating the success of the innovation and making necessary adaptations. We are therefore planning an evaluation of the software towards the end of 2015.

Do the outcomes support the initial rationale for the innovation?

It is hard to fully determine at this stage if the outcomes support the initial rationale as the impact has not been measured. We do however believe that the outcomes do support the initial rationale which was inadequate reporting systems. We have developed a comprehensive software and throughout development have responded to criticisms of the access based version and feedback from evaluations. We have facilitated a consultative process taking partners feedback into account and therefore look forward to assessing the take up and impact of the tools in the future.

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

Throughout the project we have made changes to the innovation to adapt to feedback from the field. The area of innovation is very current at the moment and so we have had the opportunity to participate in other forums looking at developing different information systems as well as mhealth applications. This

has improved our understanding that there is no single solution to the problem in question. Whilst the software can act as a comprehensive system for reporting CMAM activities, at some point in the future, CMAM will increasingly integrate with health systems and will require links to other systems and platforms.

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

As mentioned there were a number of changes raised throughout the project which have led to a more comprehensive and flexible software. The main changes not planned at the start are the change in focus from grants and programmes to feeding site and geographical levels, and the introduction of the new user account for a country level administrator such as the ministry of health or Unicef. These changes have meant that we are able to respond to some of the challenges and criticisms of the previous version of the software by making it a tool more suitable for use at national level, rather than a tool which is NGO focused.

Though many of the changes have resulted in delays to the project and increases in costs, we see all of the changes that have been raised as opportunities to make the software a more user friendly and appropriate tool and have therefore embraced change.

What are the key lessons learnt relating to the innovation (this should relate to the innovation itself, rather than project implementation)?

In the process of software development there have been a number of lessons learnt. The first is the need to adequately resource the project both technically and financially. We have benefited significantly from having a team fully dedicated to the development of this work rather than managing it as a side line to an already over stretched work load (even so, we have still had to reprioritise some work for example the analysis has taken longer due to development demands). The project has required flexibility in time and financial resources in order to meet needs which have evolved over time. In the world of information systems we don't believe there is one solution that would fit everywhere. What we have learnt is that platforms which can link different systems are likely to play a vital role in facilitating more efficient ways of working in the future, and would be a key consideration if we were to enter into a phase two if development.

METHODOLOGY

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

Given that the software was not implemented during the project timeframe, there were no means to produce evidence on the performance of the innovation. What can be reflected on in terms of methodology is the methodology used to develop the software. The agile process and iterative approach to development was appropriate and has been successful in getting the software to the release stage. We also hope that the process of ensuring we listened to findings from previous evaluations of the old software and by following a consultative process for development, that we have achieved a product that is more suitable to users' needs than the previous version.

What adjustments were made to the methodology during the course of the project? Why were these needed and how were they made?

The main adjustments were related to the timeframe and an increase in the number of planned iterations. We also modified one of the planned iterations to include the pilot testing and user acceptance testing in order to make the process transparent, get feedback on development so far and promote ownership of the software development by end users.

PARTNERSHIPS AND COLLABORATION

Describe the partnership arrangements and how these may have changed during the course of the project.

We have maintained a good relationship with CDC who were identified as a partner in the proposal. The focal point we work with at CDC does have other commitments and so at times there have been delays but overall we have a positive relationship that will continue into the next phase of dissemination. CDC has taken an active role in decisions made throughout the project, and have made a very positive contribution to the overall analysis.

We have also maintained positive partner collaboration in determining new aspects and in testing of the software with GOAL, Concern, EDARP, IMC, World Vision and ACF. These agencies have not only provided data for the analysis but have provided substantial constructive feedback into the software throughout partner testing and training sessions. This relationship has been maintained through regular updates and communication as well as joint calls at key milestones within the project.

DISSEMINATION

Indicate the steps taken to disseminate the outcomes of the project.

To date the software has been shared with established users of the old software or partners who have been actively involved in development and testing, in order to support a smooth transition between the two versions. This means that

it has been shared within Save The Children, Concern, IMC, EDARP, World Vision, ACF and GOAL. Passwords to the software and training materials have been provided as well as attendance for some at the trainings mentioned above. Other key partners (UNICEF and WFP) were also invited to review the software but did not respond within the timeframe of this phase of implementation.

The draft briefing and analysis reports have also been shared with partners for their comments before finalisation and wide dissemination.

What dissemination activities have or will be conducted (whether or not included in the budget)?

Following the internal partner launch, we are planning a wider launch process through establish nutrition networks such as the global nutrition cluster, the ENN and the CMAM Forum towards the end of 2014. This will take place once the following are finalised

- French versions of the software
- Release of country admin user
- Completion of warranty period to ensure bugs are fixed
- Revision of initial drafts of training manuals
- Development of e-learning and other innovative materials
- Update of the website to reflect all of the above changes

Once the briefing and analysis reports are complete, these will be widely distributed and will be available on the CMAM Report website and other relevant information sharing websites (e.g. CMAM Forum).

What publications have resulted from the project, or are forthcoming (i.e. research and policy reports, journal articles, case studies, evaluations etc.)?

There are no publications to date but we would like to write something for publication once the analysis and briefing reports are completed. We are also working with ALNAP/HIF to feed into a case study of the project.

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

In addition to the conference coverage we have had, we have been in communication with TUFTs University who have included the MRP in their emergency nutrition and food security and livelihoods course as an example of a reporting system.

TRANSFERABILITY

Please indicate if there is any potential to replicate the project and how.

There are no plans to replicate the project as such. We would like to increase the use of the software and in doing this we understand the sensitivities around data collection and storage as well as the need for flexibility and adaptability of the software. We are therefore open to making the scripts for the development open to other so that that can replicate the system to suit their individual needs.

Are any other organisations planning to use or adapt the innovation?

Since completion of the project the software has started to be implemented by Save The Children, IMC, Concern and EDARP. There are plans to implement the software among a consortium on NGOs in Somalia. Throughout development we have had interest from actors in South Africa, Cameroon, and Kenya. We will pursue this interest once the software warranty period is complete. We are also in the final stages of securing funding for an mhealth project in collaboration with World Vision to pilot an app which looks at individual child level data for nutrition to support health workers in the identification and management of acute malnutrition. Within this project there are plans to investigate links between the app and the CMAM Report software.

What steps have been taken to ensure the transfer of the innovation and the learning from the project?

Throughout the project we have participated the sharing of information about development and ongoing findings from the review process. We have attended a number of international meetings to promote the MRP, discuss the development process and share ongoing findings of the analysis:

- In June 2013 we attended the global nutrition cluster meeting and presented a poster on the old software with emphasis on the message of standardised indicators (see appendix 8).
- In October 2013, we presented at an international nutrition meeting held in London which was organised by the coverage monitoring network (see appendix 9 and <http://www.coverage-monitoring.org>).
- In May 2014, we presented a poster at the symposium for moderate acute malnutrition held in Vienna (see appendix 10)
- In July 2014 we presented at the humanitarian innovation conference (see appendix 11).
- We are due to present at the October technical nutrition meeting organised by the Emergency Nutrition Network

Since completion of the funding period we have also conducted a lessons learned workshop with the software developers. This as well as other project findings will be shared in the analysis and briefing reports. We will also work on producing papers for publication once final papers have been agreed upon.

Finally, within Save The Children, there are plans to develop a health information system. Much of the learning from this project has been shared within this process.



humanitarian
innovation fund



elrha
enhancing learning & research
for humanitarian assistance

List of appendices

Appendix 1: Draft analysis report

Appendix 2: Draft briefing report

Appendix 3: MRP M&E plan for HIF

Appendix 4: HIF work plan

Appendix 5: Draft software manuals

Appendix 6: Monitoring and evaluation plan for roll out and implementation of the CMAM Report software

Appendix 7: Financial report

Appendix 8: MRP poster presented at the GNC

Appendix 9: MRP presentation given at the London meeting on a decade of community based treatment of severe acute malnutrition

Appendix 10: MRP poster presented at the Vienna meeting on Moderate Acute malnutrition

Appendix 11: CMAM Report presentation given at the Oxford Humanitarian innovation project conference