

# Understanding the performance of emergency feeding programmes: Save the Children's CMAM Report

Alice Obrecht

CASE STUDY



The **Humanitarian Innovation Fund (HIF)** supports organisations and individuals to identify, nurture, and share innovative and scalable solutions to the challenges facing effective humanitarian assistance. The HIF is a programme managed by ELRHA. [www.humanitarianinnovation.org](http://www.humanitarianinnovation.org)

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## HIF-ALNAP case studies on successful innovation

This study is one in a series of 15 case studies, undertaken by ALNAP in partnership with ELRHA's Humanitarian Innovation Fund (HIF), exploring the dynamics of successful innovation processes in humanitarian action. They examine what good practice in humanitarian innovation looks like, what approaches and tools organisations have used to innovate in the humanitarian system, what the barriers to innovation are for individual organisations, and how they can be overcome.

### About the case studies

Case study subjects are selected from a pool of recipients of grants from the HIF. The HIF awards grants of between £20,000 and £150,000 to support the recognition, invention, development, implementation and diffusion stages of the innovation process. The HIF selects grantees on the basis of a variety of criteria designed to achieve a robust representation of the range of activity in humanitarian innovation.

The case study subjects are chosen to reflect innovation practice in the humanitarian system. They cover information communication technology (ICT) innovations and non-ICT innovations, and they offer a balance between innovations that have reached a diffusion stage and those that have not. They also reflect the wide geographic range of the areas where innovations are being trialled and implemented. (For more information on the methodology and criteria used to select case study subjects, see the forthcoming 'Synthesis report' for the case study series).

### About HIF-ALNAP research on successful innovation in humanitarian action

These case studies are part of a broader research partnership between ALNAP and Enhancing Learning and Research for Humanitarian Assistance (ELRHA) that seeks to define and understand what successful innovation looks like in the humanitarian sector. The ultimate aim of this research is to improve humanitarian actors' understanding of how to undertake and support innovative programming in practice. This research partnership builds on ALNAP's long-running work on innovation in the humanitarian system, beginning with its 2009 study, *Innovations in International Humanitarian Action*, and draws on the experience of the HIF grantees, which offer a realistic picture of how innovation actually happens in humanitarian settings.

Innovation is a relatively new area of work in humanitarian action, yet it is one that has seen exponential growth in terms of research, funding and activity at both policy and programming levels. While the knowledge base around innovation in the humanitarian sector is increasing, there remain a number of key questions for humanitarian organisations that may be seeking to initiate or expand their innovation capacity. The HIF-ALNAP research has focused on three of these:

#### Primary research questions

**What does successful humanitarian innovation look like?**

**What are the practices organisations can adopt to innovate successfully for humanitarian purposes?**

#### Secondary research question

**What are the barriers to innovation in the sector and how can they be mitigated?**

The case studies will be used to produce a synthesis document that addresses these three questions. The outputs of this research are aimed at humanitarian organisations interested in using innovative practices to improve their performance, as well as organisations outside the humanitarian sector, such as academic institutions or private companies, seeking to engage in innovation in humanitarian action.

## 1. About this case study

Organisation	Save the Children UK (SCUK)
Partners	Centers for Disease Control (CDC); Concern Worldwide; GOAL; International Medical Corps (IMC)
Project	Transforming decision making on emergency feeding programmes using the CMAM Report

Grant	Start date	Grant period	Total HIF budget	Location
Development	April 2013	12 months (+ 3-month no-cost extension)	£149,836	UK, global
Diffusion	July 2014	6 months	£19,671	UK, global

Humanitarian agencies have used Emergency Supplementary Feeding Programmes (SFPs) widely to combat emergency levels of malnutrition. Yet SFPs have been found to be ineffective in several contexts, and there is a lack of quality data on whether or not they work at all.

The Community-based Management of Acute Malnutrition (CMAM) Report is a technology-based product innovation designed to facilitate more reliable reporting of data on [CMAM programming](#).<sup>1</sup> It is part of a broader *paradigm*<sup>2</sup> innovation aimed at changing how humanitarian actors measure the performance of acute malnutrition programming.

The CMAM Report offers a platform for data monitoring, reporting and analysis for all components of CMAM programming, through an online database that also has offline capabilities. It provides detailed standardised guidance and user manuals for five different user types to ensure the collection and analysis of comparable and ‘unbiased’ data on moderate acute malnutrition interventions.

By improving the quality and consistency of reporting on SFPs and other CMAM interventions, this innovation aims to enable a more objective analysis on the contexts in which SFPs work, or where an alternative method would be more effective.

Starting originally as an Access-based software – developed by a consortium of organisations led by SCUK and the Emergency Nutrition Network (ENN) – the CMAM Report migrated into a more user-friendly and accessible format after SCUK received HIF funding to develop the new software with MSM, a UK-based software development firm.

SCUK and MSM continuously developed the programme by conducting frequent and rapid trials, which SCUK tested with a steering group comprising humanitarian NGOs and UN agencies. While this resulted in a strong piece of software, the development process was more time-consuming and costly than SCUK originally envisioned, in part because of cultural differences between the humanitarian NGO sector and the private sector that created different expectations around the agility and cost of the process.

The final software was launched and rolled out in 2015 and has been adopted by nine agencies in 20 countries. The aim of the innovation is to support more objective analysis that can ‘inform the humanitarian nutrition sector about whether SFPs work, under which conditions they work effectively and ineffectively, and where alternative interventions should be implemented for a cost effective humanitarian response that is accountable to the emergency affected community’.<sup>3</sup>

To that end, the innovation has shown potential. A review of data from a two-year period collected by several NGOs using the CMAM Report has been used to provide an updated analysis of the effectiveness of CMAM programming. However, this review has also highlighted the continuing challenges of data quality, which continue to impede greater understanding of performance despite gains in standardisation and in tools for analysis. The innovation process has been successful at creating a user-friendly piece of software for reporting on CMAM programming performance. It has also supported standardised guidance and indicators for CMAM programming more widely. Yet there remain challenges to wider uptake that are complex and related largely to the broader paradigm innovation (around improving performance measurement practices in the humanitarian nutrition sector) within which this product innovation (an improved software for reporting and analysis) is embedded.

## 2. The Problem

Nearly half (45%) of under-fives who died in 2014 were killed by undernutrition. Emergency Supplementary Feeding Programmes (SFPs) have been used widely by humanitarian agencies as a key treatment to combat emergency levels of malnutrition.

Yet a 2008 review of the efficacy (impact at individual level) and effectiveness (impact at population level) of SFPs found that not only were they ineffective in several contexts, but also, more worryingly, existing data on SFPs 'was of poor quality, incomparable and insufficient to complete a robust analysis',<sup>5</sup> pointing to a significant gap in the nutrition sector's ability to understand whether SFPs offer a high-quality and effective intervention.

This review outlined three key challenge areas that, if addressed, could support improved quality and effectiveness in acute malnutrition programming. One of these was to improve reporting and measurement practices for SFPs through the establishment of a standardised set of minimum reporting requirements and the development of a piece of software to facilitate reporting against these. This software would ideally replace the current practice around SFP and broader CMAM reporting, which rely on a tapestry of Excel sheets, each formatted differently for different donor requirements, and which can contain statistical errors and inconsistencies in reporting categories.

Since the 2008 review, humanitarian nutrition programming has evolved, with new innovative products (e.g. Ready-to-use Supplementary Foods), processes (Community Therapeutic Care) and paradigms (CMAM). The need to understand the relative efficacy and effectiveness of these approaches enhances the need for standardised reporting categories and accessible software that can support unbiased analysis.

While the challenges around the quality and reliability of data began with a particular type of intervention (SFPs), the underlying challenge identified in the 2008 report is much broader than SFPs, as it arises from an underlying monitoring and reporting paradigm in the nutrition sector that determines how performance is defined, measured and used to inform programming choices and design. The current paradigm is a behavioural system in which outcomes are not measured in any systematic or coherent manner, such that 'we, the humanitarian nutrition community, commonly implement [...] with little understanding of whether it [SFP/CMAM programming] works or how to make it work better.'<sup>6</sup>

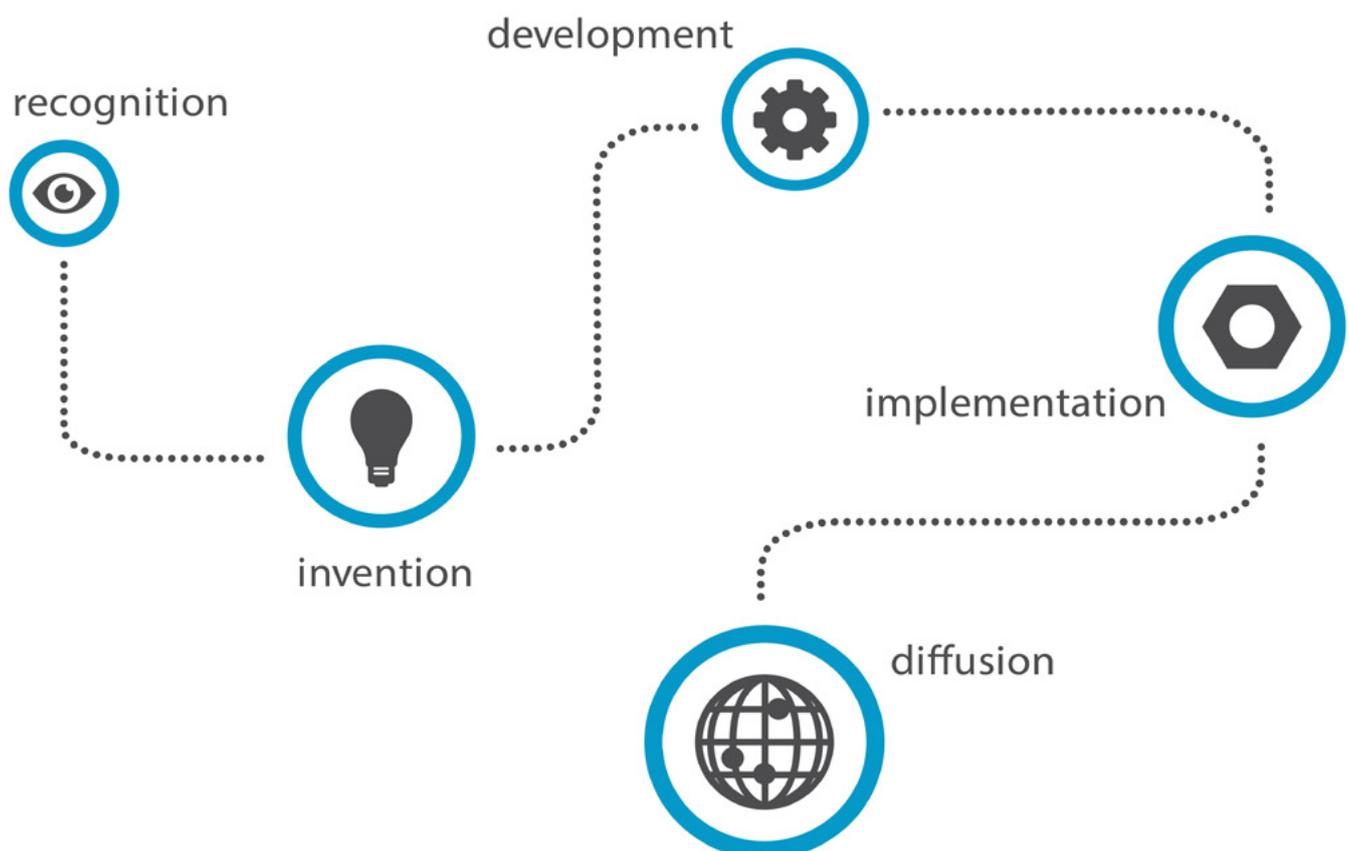
### 3. The innovation process

The stages through which successful innovations progress are often unpredictable and dynamic in nature, but there are often similarities. It is therefore useful to understand this innovation process when trying to capture why particular innovations succeed or fail.

There are various models to describe the innovation process, but HIF uses a model based on five stages:

- **Recognition** of a specific problem, challenge or opportunity to be seized
- **Invention** of a creative solution or novel idea that addresses a problem or seizes an opportunity
- **Development** of the innovation by creating practical, actionable plans and guidelines
- **Implementation** of the innovation to produce tangible examples of change, testing it to see how it compares with existing solutions
- **Diffusion** of successful innovations – taking them to scale and promoting their wider adoption

These five steps provide a useful archetype for the innovation process and are used in the HIF case study methodology. But they come with the caveat that innovation is complex and non-linear, and that identifying deviations from this model is just as important as (and possibly more so than) confirming the applicability of the model itself. The HIF-ALNAP case studies will seek to map in greater detail the chronology of these stages and how they overlap and interact for each HIF grantee.



### 3.1 Recognition



During years of work in nutrition programming in Africa, Jeremy Shoham, Executive Director of ENN, observed that in certain contexts SFPs were not performing well. However, there was no ‘central repository to review overall performance of these programmes to see what percentage were performing well or badly.’<sup>7</sup>

In 2004, Shoham commissioned a systematic review of the published evidence on the effectiveness of emergency feeding programmes. This found there was very little publically available data on impact measurement or the cost-effectiveness of nutrition programmes. The review’s lead author, Arabella Duffield, moved to SCUK, and ENN and SCUK decided to jointly carry out a second study with the US CDC in 2005.

This time, the research team reached out to aid agencies to request internal data on emergency feeding programmes. While it was not expected that many organisations would be willing to share this, in the end, nine NGOs and UN agencies provided datasets from over 120 programmes from 13 different countries.<sup>8</sup> Upon receiving the datasets, the researchers were surprised to find deep and widespread irregularities, which made it extremely difficult to draw any clear conclusions on the effectiveness of SFPs.

However, most significantly, the researchers found that there was a lack of basic shared understanding of the key categories and indicators to be used in monitoring SFPs. For example, a ‘recovery’ case – generally defined as a person who has been successfully treated and discharged – was defined differently across different organisations and across programmes within the same organisation. Total numbers of participants in treatment programmes were also calculated inaccurately and frequently involved double-counting. In total, datasets from 82 programmes were used for the review, of which only 67 supplied statistical data on programme outcomes. Many of the datasets supplying outcome statistics still featured double-counting or unclear definitions for key categories. Ultimately, nearly 50% of the datasets received were deemed unusable.<sup>9</sup>

This research resulted in the widely referenced 2008 Humanitarian Practice Network (HPN) paper, ‘Measuring the Effectiveness of Supplementary Feeding Programmes in Emergencies’, found the efficacy of targeted SFPs was quite poor, with 60% failing to meet acceptable recovery rates. The paper also highlighted “an unexpected number of information gaps, inaccuracies, statistical errors and other

‘So I was there as a consultant with this humungous amount of data on my computer, trying to make sense of it, and first thing that became very clear is the huge diversity of reporting systems: I realised that people were calculating in different ways, usually in whichever way made them look better. Not only that, [there was] the lack of standardised reporting systems: you would see people struggling to figure out their Excel sheets, and sometimes in the same programme you had a change of manager, and that involved a change of a method. So the field log reporting of supplementary feeding programmes was really, really horrific.’

Independent consultant working on the 2008 review of SFP data.

inappropriate uses of information and data,” which ‘raised concerns about the quality of the interventions, the accountability of the agencies carrying them out and their capacity to learn from experience’.<sup>10</sup>

The report called for three recommendation areas, including ‘Reporting’, under which six specific recommendations were listed. These included the development of standardised minimum reporting requirements for SFPs and ‘software to facilitate reporting’.<sup>11</sup>

### 3.2 Invention



Following on from the 2008 report, ENN and SCUK co-convened an interagency steering group to work on improving reporting practices around SFP, funded by the US Office for Disaster Assistance (OFDA). The two-pronged goal of the Minimum Reporting Package (MRP), as it was originally called, was to standardise definitions and indicators for the monitoring and reporting of data on emergency SFPs and to create software that would support the consistent and clear use of these.

By 2008, ENN and SCUK had already developed a preliminary draft of the minimum reporting standards and guidelines<sup>12</sup> and presented this at a workshop in the UK in May 2008. The interagency steering group met regularly from 2008 to 2010 to discuss and revise this set of standards and guidelines, which were used as the basis for the software development. During this time, a consultant working on the project began advising the Sphere Project on the revision of its nutrition standards. The 2011 revised Sphere standards were therefore harmonised with the Minimum Reporting standards developed by the ENN and SCUK-led group; they also refer explicitly to MRP as a key reference for minimum standards in acute malnutrition programming.<sup>13</sup>

### 3.3 Development



Over the lifespan of the MRP project, there have been three distinct phases for the software, each tied to a separate donor (see Table 1). While the activities of the first two phases comprise a range of development, implementation and diffusion activities, they are described here as a precursor to the development activities undertaken in the third and most recent phase funded by the HIF grant.

Phase 1 consisted of development and implementation and was funded by OFDA and led by ENN. It focused on securing agreement on reporting categories and indicators and creating guidelines and software to support clear and consistent reporting practices. Records for this phase show that the steering group considered broadening the project to include CMAM programming more generally, but this was ruled out at the time. World Vision (WV) cited this as the reason it chose to develop its own internal software instead of using the MRP package. By the time the latter had expanded its initial focus from SFPs to cover all aspects of CMAM programming, WV had already invested in a software of its own.

It was felt the technology would be quicker and cheaper to develop, and also more likely to receive wider adoption, if it was built on a strong pre-existing system. The UNHCR Health Information System (HIS) was identified as an appropriate model and ENN contracted the IT consultant who had worked on HIS to develop the first iteration of the MRP software. However, the consultant continually failed to meet the terms of the contract; as a result, a new consultant hired in early 2012 had to 'begin from scratch'.<sup>14</sup> These delays led to incomplete pilots, with CARE and WV teams in Kenya and Ethiopia only able to work with partially completed software. The final outputs of Phase 1 were a set of guidelines, a training module for the MRP standards and indicators and an Access-based software that partners felt was ready for wider rollout.

*Phase 2* focused primarily on *implementation* and *diffusion*: trainings on the guidelines and software took place and there was a rollout of the software across a wide range of countries and organisations. At this point, the inter-agency group recognised the need to expand the focus to include a module for Severe Acute Malnutrition (SAM) reporting, thereby encompassing all aspects of CMAM programming. This phase was funded by ECHO, who had 'pledged to encourage implementing partners to take up the MRP on any new applications for funding'.<sup>15</sup> This strong early involvement by a key humanitarian donor was viewed as supporting good participation from WFP and to a lesser extent UNICEF, two key UN stakeholders in malnutrition reporting.

By the close of the ECHO grant, over 50 individuals from 13 organisations had been trained in the MRP software. Concern Worldwide, IMC and GOAL had committed to using the MRP and were in the process of gathering retrospective data to use as a first-run test. SCUK faced challenges to rollout internally owing to the restructuring of Save the Children in 2011-2013, but had piloted the software in Burkina Faso, Côte d'Ivoire, India, Somalia and South Sudan.

While Phase 2 achieved greater outreach around and the development of several components to support the use of the software – including an e-learning course, a 'helpdesk' function and revised user guidelines and website – there were significant challenges to successful diffusion of the software. First, rollout within WFP was unsuccessful. An internal evaluation found WFP HQ staff working on the project could not advocate effectively for uptake of the software at country level as they lacked sufficient leverage with country offices – though the evaluation does not say why.

Second, a broader question was raised about the complementarity of the MRP software with existing reporting systems, which has proven critical to how external parties perceive it. In many countries, acute malnutrition programming is undertaken in partnership with, or involves reporting to, the host government. UNICEF and WFP both encourage working with government systems to support national leadership of malnutrition programming. During Phase 2, some MRP supporters believed MRP software could and should be the standardised programme used to report on SFPs, but it was not clear how it would integrate with national reporting systems, many of which include a broader set of indicators pertaining to other areas of health and nutrition. This led to intense but ultimately unsuccessful engagement with national government in Kenya and elsewhere: officials opted to use their own systems instead of adopting the MRP software. During this time, UNICEF and WFP also became less receptive, as they perceived it largely as a 'small scale, NGO-centred' product that duplicated rather than supported stronger national-level systems. These experiences point to a key challenge in solving any humanitarian problem concerning a lack of standardisation: the tension between the need for consistent data to support a fair assessment of performance across multiple countries and the desire to adapt collection and analysis tools to different contexts.

Another key challenge arose when, because of staff changes at ECHO, the donor moved away from its previous intention to require applicants for ECHO funding to adopt the MRP reporting categories. According to the internal evaluation, this had a dampening effect on incentives for the uptake of the MRP categories and consequently the software, especially among the UN agencies.

Finally, the internal evaluation found that, while the software offered an improvement in terms of standardising data categories and improving analysis, user feedback yielded low scores on user-friendliness for the software. This was because of the many bugs in the system that had to be worked out over frequent iterations, as well as its reliance on Microsoft Access. The choice of Access had been based on the aim of making the software complementary to existing programmes by basing it on the UNCHR's HIS. Yet country teams struggled with this software in the trials, in which files had to be downloaded, unzipped and then uploaded again every time a change was made to the data. The value of using an Access-based programme was further reduced when UNHCR decided to move away from the HIS because their own staff faced similar challenges working with Access.

With the ECHO grant coming to a close in 2012, SCUK applied to the HIF for funding for a new iteration of development and implementation of the MRP software (Phase 3). The HIF grant gave SCUK the opportunity to step back and reflect on the experiences of Phase 2 and rethink its approach, in particular around engaging stakeholders around the issues of standardisation and complementarity with existing systems. Based on the issues with Access, SCUK aimed to convert the software into a more user-friendly version and adapt its e-learning, guidelines and other support functions to this. SCUK also hoped to achieve what had been intended in the previous ECHO grant: an updated review of the performance of emergency feeding programmes using analysis generated by the software.

SCUK put out a tender to develop the software in the summer of 2013. Candidates were assessed using a scoring system based on the 'user profiles' that SCUK, led by its IT department, had created for the software. The contract was awarded to MSM, a UK-based software development company.

Susan Fuller was recruited to manage the project, overseeing relationships with the software developer and the steering group of humanitarian partners (Concern Worldwide, GOAL, IMC, UNICEF and WV).

At the suggestion of the SCUK IT department, SCUK and MSM agreed on an 'agile' approach to the development of the software. Approaches to project management in the IT sector are broadly divided between 'agile' and 'waterfall.' A waterfall approach is a 'sequential design process'<sup>16</sup> that starts with a clear understanding of the desired product and proceeds steadily through different stages. Changes or discoveries made later mean restarting, as the team cannot go back to previous stages once they have been closed. In contrast, agile methods involve

I think in terms of innovation and the context, or the problem context, we understood quite well what the purpose of the software was, and where it was going to be used. I think the challenges came more on a contract side, and maybe understanding around how the concept of change was to be managed throughout the project as well.

MSM software developer

a series of fast periods of development, sometimes known as ‘sprints’, in which developers work on a particular problem, then going back to review the requirements of the project. Agile methods are deemed suitable when the client does not have a clear idea of the needs that the product will have to address.<sup>17</sup>

While there is broad satisfaction with the end product, SCUK found the process of working with a private sector software developer extremely challenging and costly.

The agile approach is meant to support a flexible process that allows for learning about the problem/user needs as the process unfolds, so that these can become more clearly defined and the final product can be designed to best fit them. Critically, however, each change to the criteria, and each significant change to the software to better meet the criteria, counts as an ‘iteration’ invoiced by the developer. This means that each iteration poses significant costs to the client. Staff at SCUK felt the type of fixed-grant funding scheme that many humanitarian NGOs work with was ill-suited to this type of development process, since, by definition, it is unknown how many iterations will be needed at the outset of an agile development process and therefore unknown what will be the end cost of the project.

Initially, the development phase was intended to take place over four three-week iterations, to a total of three months. However, the types of changes SCUK and its partners requested to improve the functionality of the software ended up involving more complicated programming than expected by the developer or by SCUK. As a result, the development phase ran for 15 months instead of the original three, with further smaller tweaks being carried out for another year after during the piloting of the beta version. The project was also significantly over budget, with SCUK spending £184,327, in contrast to the original projected amount of £46,500 (additional resources from SCUK have since been placed in the project to continue user support for the rollout).

One of the positive aspects of SCUK’s approach to software development was that partners and implementing country offices engaged with SCUK as a focal point to provide their feedback on the product, and therefore remained largely unaware of the difficulties in the relationship with the software developer. Participating partners in the development and implementation phases indicated that the process for feeding back was impeccable: feedback was provided to SCUK and typically discussed in a phone call; changes were made to the software quickly (within weeks, sometimes days or hours) and a new version was made available to partners.

They were calling it agile but it was not agile – change was a contentious issue and even within parts of the software development we had included in scope there seemed to be additional costs attached. This often inhibited or delayed our ability to make the necessary changes to the software [...] It was a contradiction in terms: I don’t think there was a common understanding of the meaning of an agile methodology and there were definitely challenges around a common understanding of the scope of the project.

Susan Fuller, SCUK Project Lead

Table 1: Mapping the different development and implementation phases of the MRP project

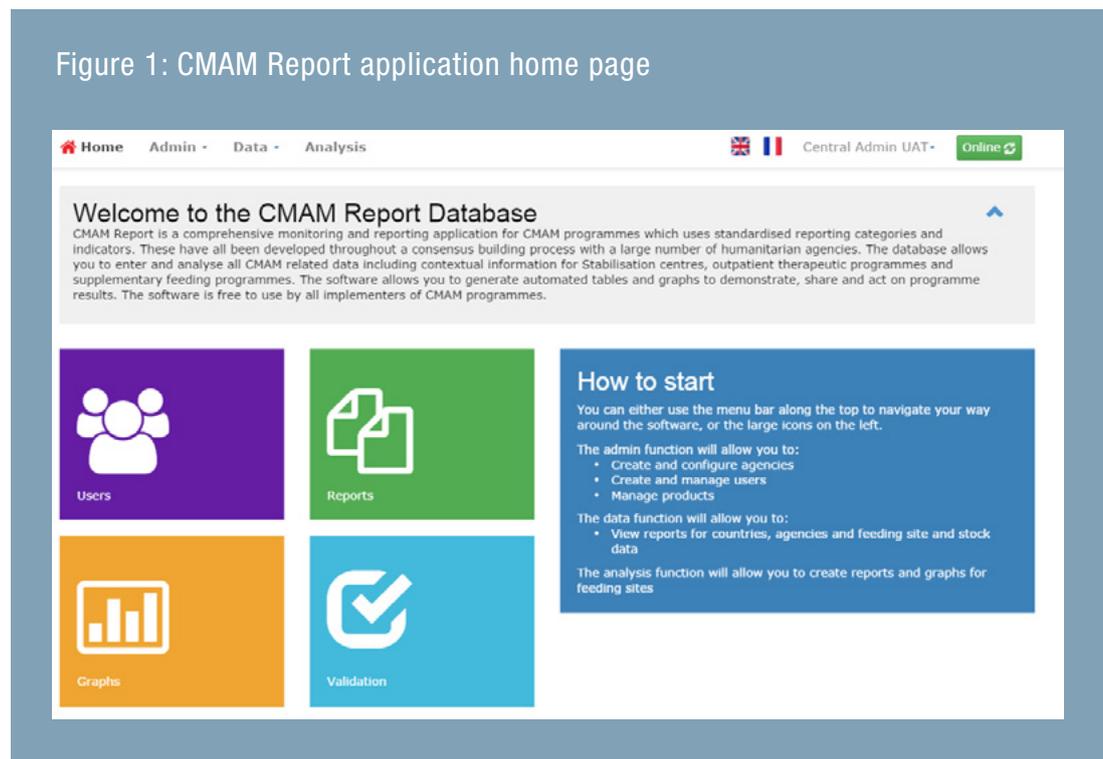
	Phase 1 <sup>18</sup>	Phase 2	Phase 3
Time period	2008-2011	2011-2012	2013-2015
Donor	US OFDA	ECHO	HIF
Implementing lead	ENN	SCUK	SCUK
Stated aim of project	‘Developing and piloting guidelines and software for minimum reporting on emergency SFPs. It was hoped that agencies would adopt this standardised reporting approach.’ <sup>19</sup>	‘incorporate learning from the piloting of the MRP and roll-out the MRP amongst implementing agencies, culminating in a review of the improved data’. Also to develop a module on SAM.	‘Develop an innovative web and tablet-based update of the MRP software to improve user-friendliness and uptake; and use this state of the art software to prospectively gather a full and comparable dataset for a robust and unique investigation of SFP performance.’
Listed partners/participants	SCUK, WV, CARE, Nutrition Information in Crisis Situations (NICS), FANTA2, IRC, WFP, Nutrition Cluster, UNHCR, Concern Worldwide and Valid International	ENN, WFP, UNICEF, WV, Concern Worldwide, GOAL	Steering group members: CDC, UNICEF, Concern, WV, EDARP, GOAL, IMC
Software format	Access-based software based on the UNHCR HIS template	Access-based software based on the UNHCR HIS template	Web-based software with offline functionality
Countries piloted (countries/regions in which trainings were held)	Kenya; Ethiopia (Thailand and Zimbabwe used as training sites)	Piloted widely in SCUK country offices (Inter-agency trainings in East Africa (Nairobi) and West Africa (Dakar) with Concern, IMC, GOAL, WFP and select ministries of health; SCUK trainings in Afghanistan, Somalia and South Sudan)	As of November 2015, currently used by 9 agencies in 20 countries: ACF-France, Concern Worldwide, EDARP, Food for the Hungry, GOAL, IMC, Medair, Save the Children and Oxfam
Lessons learnt for MRP project	<ul style="list-style-type: none"> <li>• Issues around usability/user friendliness</li> <li>• Delays in software development</li> <li>• Concerns around how MRP software and indicators fit with existing reporting systems</li> </ul>	<ul style="list-style-type: none"> <li>• Issues around usability/user friendliness</li> <li>• Delays in software development</li> <li>• Concerns around how MRP software and indicators fit with existing reporting systems, and need to engage more with key stakeholders to manage perceptions of MRP and understanding of indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Software development projects require flexibility in time and financial resources in order to meet needs that evolve over time</li> <li>• Systems should be flexible in terms of indicators to be collected, but definitions should be standardised</li> <li>• There is no one solution that will fit everywhere</li> <li>• Advanced systems are not a solution to poor-quality data, therefore more work is needed to improve the data collected on CMAM programming</li> </ul>

### 3.4 Implementation



After the fifth sprint, SCUK opened up the testing process to partners on the steering group and piloted the software in Ethiopia, Myanmar and Yemen. In each phase, feedback provided to the SCUK project team was consolidated for MSM.

Figure 1: CMAM Report application home page



Focal persons at Concern Worldwide, IMC and GOAL continued to raise awareness of the tool from 2013 through July 2014 with nutrition advisors and coordinators, and carried out ad hoc trainings with country teams during site visits. SCUK also organised several trainings with partners on the web-based prototype. Trainings were provided at country-level to country teams who had worked with the Access-based MRP Package in Niger and Myanmar.<sup>20</sup>

In July 2014, a beta version of the web-based software was launched with partners; another year of modifications and fixes then took place. MSM remained on contract through winter 2015 to support further modifications as the partners rolled out the software. Concern Worldwide, GOAL and IMC began global rollout of the software with country offices. During this time, Susan Fuller handed over the project to Christoph Andert, who had worked with Fuller during the HIF grant and also on the MRP during the ECHO grant. Andert was primarily responsible for managing the helpdesk function for the software, a feature that all partners praised as a key strength: 'I think for me, the most valuable thing was that I really had a person I contacted on a regular basis, so whenever I had something to share, then I just sent it. I didn't have to wait for the next loop.'<sup>21</sup>

Throughout the summer of 2015, SCUUK strove to ensure all possible improvements had been made to the software before attempting to launch it publically to organisations that had not yet worked with it. During this time, SCUUK also conferred with partners and decided to rename the software the CMAM Report, in order to reflect the software's ability to support reporting across all aspects of community-based malnutrition management and also to demonstrate the difference between the CMAM Report and the previous Access-based MRP software.

In 2014, SCUUK also undertook a large review<sup>22</sup> of data on CMAM programming, to provide an update to the 2008 HPN report and assess how reporting practices had changed since the introduction of the minimum reporting standards and the CMAM Report software. The ultimate aim of this review is to support a better evidence base for programme design in moderate acute malnutrition programming. Five agencies including SCUUK submitted data from the CMAM Report for January 2011 through December 2013. These were analysed to understand the characteristics of CMAM programmes as they are implemented in emergency and non-emergency settings, to determine their performance, to assess the quality of implementation of the CMAM Report software and to identify recommendations for improving scale-up. The review was completed in December 2014.

The review found targeted SFPs frequently performed *below* Sphere standards whereas two alternative approaches, Stabilisation Centres and Outpatient Therapeutic Programmes, performed above them. This reinforces the findings of the 2008 HPN study, which raised serious questions about the effectiveness of SFPs as an intervention. However, detailed findings, in particular around variations



Photo credit: Save the Children/Chris Andert

in performance across different contexts and performance metrics for individual children, remain elusive, due to many challenges that still exist around data collection and use of the agreed categories at field level. As cited in the review, the accuracy of reported data continues to be a problem that impacts the ability to generate strong comparative analysis of the performance of different programmes. To address this, the CMAM project team has developed and piloted a data quality appraisal tool. SCUK and Concern Worldwide have used the summaries produced by the CMAM reporting software to monitor data quality, and a final review of the project indicated that data quality had improved over time during use of the software.

### 3.5 Diffusion



In July 2014, SCUK received a second grant from the HIF to roll out the software to the wider nutrition community. External rollout was postponed to September 2015 to ensure optimal functionality. In July 2015, SCUK began ‘soft diffusion’,<sup>23</sup> providing logins to the demo version and working with over 50 individuals in multiple organisations to promote the software. SCUK formally launched the CMAM Report through a series of instructional webinars in September 2015. The team has developed numerous resources for rollout, including a [new website](#),<sup>24</sup> an e-learning package; guidelines for five different types of user; videos; webinars; detailed guidelines for the standardised indicators; a training package including a training for trainers to support cascaded training; and a helpdesk function that provides tailored one-on-one support and continues to be resourced by SCUK. SCUK has also presented on the CMAM Report to the global nutrition cluster and several country clusters and disseminated information through meetings with donors and a variety of websites, including those of the CMAM Forum, ENN and HPN.

At the time of writing, the CMAM software has been adopted by nine organisations in 20 countries and implemented by seven Save the Children country offices. The SCUK team is currently undertaking a benchmarking exercise of all country offices to identify what is needed for rollout in each country, based on existing capacities and interest.

The 2014 review of emergency feeding programmes is not currently publically available but will be published in a forthcoming edition of the Biomedical Journal. As a result of this review, SCUK is focusing further energies on its data quality tool and improving the quality of data collected at field level in order to support future assessments of SFP performance.

The innovative elements that stand out to me are the fact that, you know, it’s real time, so you can access data real time in any country across the world that we have the CMAM Report rolled out in. Then, for the teams in country, it seems like the real innovation is on the analysis side, so just point and click analysis that can feed into reports, and I think they’re just starting to see how much that simplifies their reporting. Most of them, I think, had CMAM data in Excel, so they were doing all of their own graphs, and whatever was required by the donor, but I think so far the feedback I’ve gotten back is it does simplify that process and makes reporting easier.

*Amelia Reese-Masterson, IMC*

During the project, engagement with ministries of health continued in order to support wider uptake across governments, although this proved highly time-intensive and yielded mixed outcomes. Overall, there has been greater success with international NGO uptake; for governments, uptake of indicators rather than the software itself has been more successful.

While WV decided to develop its own internal system in 2012-2013 for reporting on acute malnutrition programming, the organisation has adopted indicators and reporting categories that are aligned with those developed and used in the CMAM Report.

Struggles with uptake (see below under Adoption) reflect the general challenges faced by an INGO seeking to bring about broader change to the humanitarian system. While the SCUK team working on CMAM has made great strides in de-branding the software to encourage uptake, an online database for storing the data must be hosted by a particular organisation, and, at the moment, for lack of a better alternative, SCUK is resourcing this hosting role. This feature of the software has been a primary source of reluctance by governments and UN agencies in adopting the software themselves, given concerns over a single INGO having access to government data. While the CMAM Report team would encourage a UN agency to take up the software in order to address the concerns around complementarity with government systems and data storage, UN agencies currently seem slow to do this.

I think in the NGO world, there's a general trend to think that we have to develop our own. There seems to be a big hesitance of taking on board what others developed. We always seem to prefer having our own logo printed on something, which I think is really sad to see. Sometimes [it's about] timing: so there's not really the openness and flexibility to just say, 'Actually, others are already ahead of us. Why don't we drop our idea, and we join the others?' Often it's not really an option, unfortunately. Then I think often we don't know enough what the others are doing. We are living in our own world, thinking what we know is enough, and there's not enough sharing.

Regina Koplow, Concern Worldwide

## 4. Was this a successful innovation process?

Inherent in all innovation processes is some degree of failure. This presents a challenge to understanding what contributes to a good innovation process: even successful processes will experience difficult pilots or setbacks in design or diffusion. The HIF-ALNAP research on innovation processes therefore distinguishes between a good innovation – an output of an innovation process that leads to measurable gains in effectiveness, quality and efficiency – and a good innovation process. This research defines a successful innovation process through three criteria:

Table: Criteria of success for innovation processes

Increased learning and evidence	There is new knowledge generated or an enhanced evidence base around the problem the innovation is intended to address, or around the performance of the innovation itself.
Improved solution	The innovation offers a measurable, comparative improvement in effectiveness, quality, or efficiency over current approaches to the problem addressed by the innovation.
Adoption	The innovation is taken to scale and used by others to improve humanitarian performance.

Through the research process for the case studies, ALNAP and HIF are also seeking to understand how HIF grantees define success in their work, in order to identify unexpected or unacknowledged benefits from engaging in innovation.

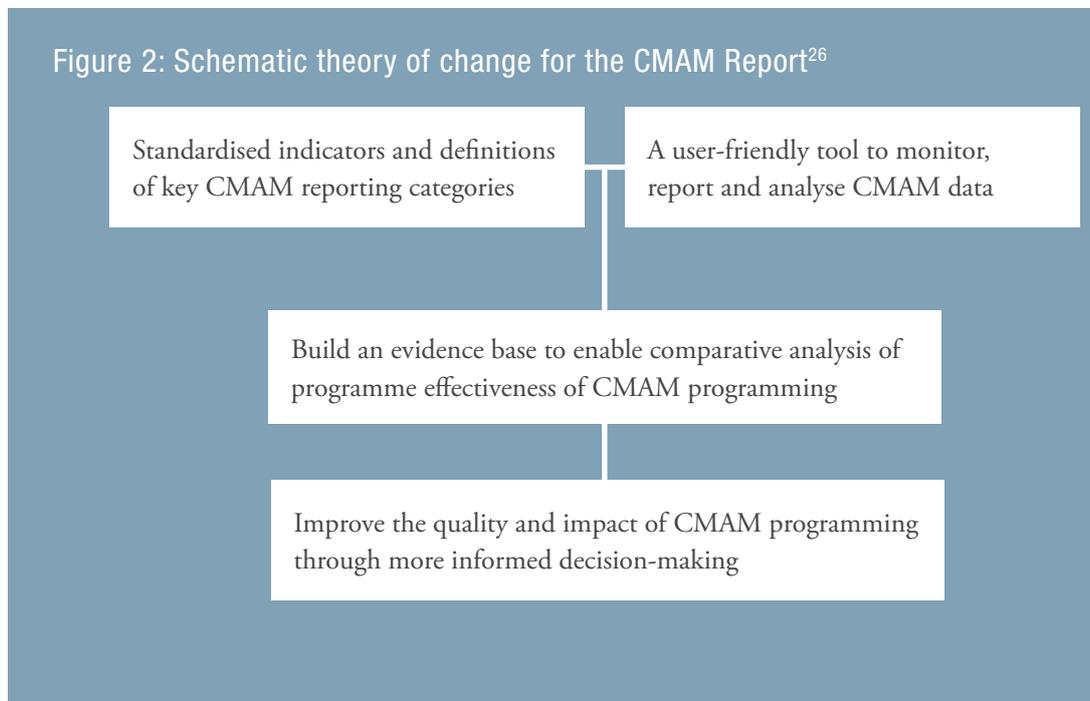
The research team used evidence collected for this case study to assess the success of the CMAM Report innovation process against the above three criteria. Overall, it is challenging to determine success, as the development of the software has been embedded in a broader and longer-running innovation process, with aspects of both processes impacting one another. Generally, the process has been moderately successful in generating learning and evidence and highly successful at adoption. While the paradigm innovation (standardisation of reporting categories and changes to monitoring practices) has been moderately successful in addressing its core problem, the product innovation (software package) appears to be highly successful based on feedback from early adopters. The process also provides clear lessons for humanitarian agencies pursuing a product innovation as part of a broader paradigm innovation. Specifically, findings were as follows:

## Increased learning and evidence

Two main areas of evidence and learning are relevant here: 1) Improving the evidence base for emergency feeding programmes; 2) Learning for the humanitarian sector on how to manage IT-based projects, particularly with private sector partners.

Improving the evidence base for emergency feeding programmes is a key component of the CMAM Report project's theory of change (see Figure 2). While the 2014 review carried out with the data analysed through the CMAM Report has provided an important update on SFP performance and how it compares with contemporary CMAM practices, the detailed analysis needed to inform planning and decision-making on CMAM programming remains elusive because of persistent data quality issues. This indicates that, to some degree, the standardised reporting categories and the software are insufficient to address the original problem identified in the 2008 HPN report: basic issues with data collection at field level persist, creating further problems 'up the chain' even though stronger tools now exist for consistent reporting and analysis. This has prompted SCUK to call for a 'return to the basics of data quality' in its ongoing work to improve the nutrition sector's understanding of the performance of CMAM interventions.<sup>25</sup> Nevertheless, SCUK found data quality improved across partners after they began using the CMAM software and has developed an auditing tool to support CMAM Report users in improving the quality of data collected at field level.

Figure 2: Schematic theory of change for the CMAM Report<sup>26</sup>



In terms of learning how to manage IT-based project, SCUK currently plans to engage in a learning review of the MRP software development as well as two other IT projects it has recently run, in order to produce a set of comprehensive lessons on how to manage IT projects effectively. Based on the experience of this case study, producing lessons learnt is important, but other practices and incentives also need to be in place (particularly around funding practices) to ensure future similar projects reflect and incorporate these lessons in their planning.

### Improved solution

Both the product innovation (the software) and the paradigm innovation (standardisation of indicators and key reporting categories) were looked at to understand whether this innovation process offered an improved solution.

The primary focus of this innovation process was the development of a user-friendly tool to monitor, report and analyse CMAM data. To date, there is no formal evaluation comparing the CMAM Report software with either the Excel-based systems used by many agencies and governments or the m-Health programme developed by UNICEF, which covers a range of other health-related indicators. However, the software appears to offer a clear improvement over current practices, based on uptake of the report by eight agencies other than Save the Children and anecdotal feedback from regional advisors overseeing the roll-out and use of the software. The software is perceived by many users to be a user-friendly that improves the reporting and analysis of CMAM data. As one regional nutrition advisor said, 'There is no other software I've seen which is better than this at analysing and managing CMAM programmes.'<sup>27</sup>

While the system takes time to set up and implement, field and country staff are reportedly seeing clear benefits in the functionality of the CMAM Report. One Ministry of Health official in an East African country described the software as 'definitely' providing a better way of monitoring information on acute malnutrition over existing practices. WV has continued to engage with the project, to ensure its software is using the same indicators and reporting categories and its programme data could be included in the 2014 aggregated analysis.

From the UN agencies and governments that have not adopted the software, one of the key reasons cited is the inflexibility of the software, particularly in regards to the indicators and reporting categories used. SCUUK has striven to de-link the software from the standardised indicators and reporting categories in order to enhance the appeal of both, but the software remains based on the minimum reporting standards agreed in 2011. That some stakeholders view this as a limitation reflects a fundamental disagreement with the core problem the innovation was meant to address: the lack of standardisation in data reporting on programme performance in the nutrition sector. As the SCUUK project lead stated:

**'The issue with this is, if it were to be totally flexible, a kind of building block system and everyone who wants to use it can change it to his liking, then I think then it would be a selling tool. I think the obstacle at the moment is the standardisation, but we cannot change this, because that's also our aim. We actually built the software to standardise. So I think we have to advocate that standardisation, and that calculating the indicators in a more fair way, is a good thing.'**

This is a challenge that exists in the humanitarian sector more broadly: balancing the desire for rigorous cross-country comparative data on programme effectiveness and the desire for reporting systems that are specific to context. Looking at the problem SCUUK was aiming to address, it is clear that the software improves on existing approaches. However, wider sector recognition of the problem the software addresses remains a work in progress.

Interestingly, the software has contributed to standardising indicators and reporting categories even when the software itself is not adopted by an agency. Informants from organisations that had not taken on the CMAM Report software felt it had limitations, but that the overall project had been

quite successful at increasing adoption of the standardised reporting categories and indicators, as evidenced by the changes they had seen in their own organisations' approach to reporting categories and indicators.

This finding may indicate the tensions and challenges that are faced by humanitarian agencies that are engaged in innovation processes with multiple layers: SCUK found that de-linking the software from the issue of standardisation enabled more progress on each innovation. The level of change involved in accepting both the standardised reporting categories and the new software may have been too much for larger NGOs, UN agencies and governments; smaller NGOs were the only actors that managed to do both and find both useful. However, even INGOs, UN agencies and governments

I'd say maybe the value I do see is in standardising the indicators, and having the, sort of, set guidance package around, 'These are the indicators that you should collect, this is how you collect them, these are the denominators, numerators.' The nitty-gritty guidance element [...] is quite useful actually.

Organisation not implementing CMAM Report

have indicated that this innovation process had familiarised them with the indicators and increased the alignment of their own systems with the minimum reporting standards created in 2011.

Nonetheless, it remains to be seen whether standardisation can lead to improvements in the evidence base on emergency feeding programmes or to decision-making in CMAM programming, given continued issues with data quality, even though SCUK has responded proactively to these.

## Adoption

Although the official external launch of the CMAM Report took place only in September 2015, due to the long history of the project and the rollout of the previous Access-based version, nine organisations, including Save the Children in 20 countries, have adopted and are currently using the CMAM Report package. Concern Worldwide, IMC and GOAL are rolling it out comprehensively across all country programmes. Seven Save the Children country offices are using the software and SCUK are taking multiple approaches to gain wider roll-out within the organisation. The project manager for the CMAM Report is raising awareness of the software with a range of technical advisors across the Save the Children family and is in talks with members of the Save the Children Nutrition and Health Global Initiative to support global rollout of the software to all Save the Children members.

For adoption, a relevant question was whether the original problem addressed by the innovation was too narrowly defined, leading to a solution that some perceive to be overly narrow in focus. The CMAM Report evolved as a response to a key data and information problem within the nutrition sector, yet humanitarian agencies and governments have a wide range of reporting requirements across nutrition and health more broadly, and the systems used for these remain Excel-based or use other formats. For ministries of health in particular CMAM is one part of a broader health and nutrition system that must also be reported on. While this is largely an uptake issue, it also points to the difficulty in assessing whether an innovation has achieved an improved solution: for NGOs working on CMAM in relative isolation from other programming, the CMAM Report is effective

and time-saving; for government stakeholders, the problem of analysis and reporting on CMAM programming is part of a larger problem of analysis and reporting on health and nutrition data more broadly; as such, the CMAM Report is not perceived as being able to address these needs.

UNICEF would be a key stakeholder in linking the advantages offered by the CMAM Report to broader improvements in government reporting systems but appears more concerned with supporting systems adapted to individual contexts than with developing the analytical capacity to compare performance across programmes and countries.<sup>28</sup> For UNICEF, this also comes down to a broader issue regarding the unhelpful compartmentalisation of innovations as ‘humanitarian’ or ‘development’. UNICEF feels innovations for emergency programming are more likely to be successful if they can operate with a multi-year horizon and envision how the innovation will be sustained over the long term: typically, this means sustained through ownership by the government: ‘If you’re creating something to solve a humanitarian programme issue, can you also envisage how it might be adapted over time to speak to a development type of context, because if it’s going to be sustainable, it’s probably going to have to adapt in that way.’

However, at the time of writing, wider diffusion is still in its early stages. Adoption is rated as highly successful owing to the current breadth of use outside of Save the Children, as well as the high rate of expressed interest: as of November 2015, 65 individuals from 40 different humanitarian agencies, government institutions and UN institutions have requested information or a user login to trial the software. One interviewee from a government organisation indicated that they would be interested in exploring use of the software and was particularly interested in using it on a tablet. SCUUK is also looking closely at how to sustain the CMAM Report over the long term, primarily through engagement with key UN agencies, who it feels will be best placed to host the data and interface with governments on its adoption.

## 5. What are we learning about innovation?

Drawing on research from the humanitarian sector and beyond, including previous case study material, HIF has identified a range of factors generally held to be fundamental to successful innovation processes. An important part of the case study research lies in testing, through the experience of the HIF grantees, the extent to which these propositions hold true in humanitarian settings.

- **Managing relationships and setting common objectives**

Innovation always involves multiple actors – partners, implementers and end users – all of whom can change over the different stages of an innovation process. Assigning specific time and resources to managing these relationships and ensuring common objectives across the different stakeholders of an innovation will contribute to a successful innovation process.

- **Dividing tasks and responsibilities**

Given the complexity of many innovation processes, a clear division of tasks and responsibilities between individuals and organisational units is important for developing a successful innovation.

- **Resourcing an innovation**

Working in innovation requires flexibility to deal with the unknown, and this is particularly so with an innovation in the humanitarian sector. Budgets and resource plans therefore need to be suitably flexible to accommodate several possible outcomes (e.g. the need for further trials) as well as likely deviations from the original plan.

- **Flexibility of process**

At its heart, managing an innovation process is about creating space for flexibility. Processes featuring flexible timelines, feedback loops for adaptation during the piloting phase and individuals resourced to execute changes in response to emerging results will be more likely to succeed.

- **Assessing and monitoring risk**

Innovation processes in humanitarian action need to have an appropriate relationship to risk. We expect processes will be more likely to produce improved solutions and achieve uptake when they include an assessment of the different risks that might have an impact on the effectiveness of the innovation, as well as a strategy or plan to monitor and adjust development in light of changes in these risks on an ongoing basis.

- **Drawing on existing practice**

Knowledge of existing practice and experiences is expected to contribute to more effective innovations through a better understanding of past attempted solutions, an accurate initial understanding of the problem or opportunity addressed by the innovation and an awareness of potential users and their needs.

Findings for these six propositions are presented in the graphics on the next few pages.

## Managing relationships and setting common objectives

### How this factor worked in this case study

From the outset of Phase 3, SCUUK has had a specific person tasked with overseeing the innovation process, with a heavy emphasis on relationship management. All partners as well as external stakeholders praised the strength of the relationship management function with current users and international organisations: SCUUK made strong human resource investments in ensuring end user needs were being met in the transition from the Access-based software to the web-based version.

### Challenges

Despite early meetings that aimed to set clear objectives and the supportive involvement of the SCUUK IT department, the process suffered from a lack of shared objectives between SCUUK and MSM. Managing this relationship and ensuring the product was reflecting the needs of the country offices and partner organisations piloting the software required significant and unforeseen time investment by the SCUUK project lead. This may have been due to personnel changes at the SCUUK IT department, with different individuals acting as key contact points throughout the project.

While SCUUK attempted to use Phase 3 as a 'reset' to address the challenges that had arisen in earlier phases of the innovation process, the setbacks in communication and outreach that occurred in those earlier phases were difficult to move on from. Despite SCUUK's outreach, there remain negative perceptions around the compatibility of the CMAM Report package with other reporting systems. SCUUK has not had the intensive resources required to focus on relationship management and advocacy at government level on a consistent basis.

### How this factor related to the performance of the innovation process

The presence of a project lead who held responsibility for managing relationships with end users and the developers appeared to contribute to the development of a product that end users viewed as an improved solution compared with existing reporting practices.

SCUUK's continued investment in a project lead with outward-facing responsibilities means interested parties are free to trial the software, knowing they will receive free support on any questions or glitches. One organisation that has not taken up the software did so out of a concern for the sustainability of this free support—implying that the relationship management function is quite critical to outside organisations determining whether or not they will use the software, and thus an important factor for adoption.

This case also indicates how important it is to have a person who can effectively 'translate' across the different sectors that may be partnering for an innovation process. In this case, while the SCUUK IT department attempted to act as a 'translator' between the project lead and the software developer, there were many miscommunications owing to the different terminologies used and different working cultures.

## Dividing tasks and responsibilities

### How this factor worked in this case study

The implementing team at SCUUK was small, mitigating the need to clearly outline roles and responsibilities. However, key partners and staff at SCUUK felt that roles and responsibilities both within the SCUUK team and externally with the steering group were clearly outlined and agreed.

### Challenges

No challenges identified.

### How this factor related to the performance of the innovation process

Susan Fuller's clearly defined role as the manager of the relationships between end users and the software developer supported a streamlined feedback loop between multiple end users and the MSM project leads. While the relationship with the software developer proved challenging, Fuller's clear role from the SCUUK side may have made the process more successful than it might have otherwise been, given those challenges. However, overall, there was little conclusive evidence of the role that clear tasks and responsibilities might play in the success criteria in this case.

## Resourcing an innovation

### How this factor worked in this case study

The CMAM Report is the outcome of a long innovation process. One of the strengths of SCUUK in this process was their ability to continue to find new donors and sources of funding to improve the software, particularly at the end of Phase 2, when the innovation could have collapsed owing to resistance to the Access-based software.

SCUUK also invested substantial internal resources and continues to fund a part-time positions to oversee rollout and user engagement.

### Challenges

The staggering of the funding inhibited learning, as grant proposals often had to be written before lessons were fully incorporated from the previous iteration. Also, potential end users who were involved in the project during the early phase led by ENN felt the lack of substantial long-term funding at the outset gave the process a 'stop-start' feel to it, which resulted in their disengagement from the project.

Developing software is an uncertain and expensive process. SCUUK was required to revise its original budget shortly after agreeing to tender to MSM. The project was also delayed owing to unforeseen issues in establishing shared objectives with the software developer. To that end, SCUUK praised the HIF as a highly flexible donor that was able to accommodate the delays necessary for producing a better-quality product. Better models for financing humanitarian agencies' involvement in software development are needed; SCUUK is currently reviewing a range of recent IT-development projects it has engaged in in order to identify key lessons learnt.

### How this factor related to the performance of the innovation process

The reliance on two- to three-year grants to achieve a paradigm shift in how the nutrition sector monitors, reports on and analyses its performance had a clear (and negative) impact on learning and on engagement by key actors, which had knock-on effects on adoption. Given the apparent relevance of the live helpdesk function to encouraging wider adoption of the software, SCUUK's ability to continue resourcing this helpdesk has been a significant contribution to the success of the project.

Both the helpdesk function and the database of CMAM data require a sustained commitment of resources. The ability of SCUUK as an INGO to 'ringfence' the resources committed to these components and assure external stakeholders they are sustainable over the long term may also factor into the wider adoption of the software – although concerns have been raised about the sustainability of any INGO housing such data.

## Flexibility of process

### How this factor worked in this case study

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Strong feedback loops were built into the software development process, but several informants felt 'flexible' was an inaccurate way to describe this process: rather, SCUUK created a structured timeline for engagement that enabled a process that was responsive to user needs, and also supported clear expectations on when the next iteration would occur. As the software progressed into a beta version, SCUUK has used a more ad hoc approach to responding to feedback, with a single staff member tasked to respond to inquiries on the software as they come in.

### Challenges

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While SCUUK found the HIF's flexibility as a donor with respect to timelines very useful, overall this experience points to the difficulties for NGOs in maintaining a flexible approach to financing a software development process. SCUUK staff reported a tension between wanting to stay accountable for the funds being spent while also trying to stay adaptable to the needs of the project as they shifted over time during piloting.

### How this factor related to the performance of the innovation process

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SCUUK staff remained highly flexible to the specific design features of the software. While this resulted in high resource costs, it appeared to support a more successful process that engaged strongly with users of the software. In terms of collecting and responding to feedback on the pilot versions of the software, structured responsiveness, not necessarily flexibility, appeared to be key to developing what project partners viewed as an improved solution, and thus enabled adoption of the software.

## Assessing and monitoring risk

### How this factor worked in this case study

There was no formal risk assessment or risk monitoring carried out by SCUK. One participating member of the steering group recalled an ‘open discussion’ on risk at the outset of the process that focused on the need to engage better with governments and international organisations to combat misconceptions around the software.

### Challenges

There were several risks impacting the duration, resources and ultimately the reception of the CMAM Report; while some were alluded to briefly in a risk assessment completed as part of the HIF grant application, it does not appear there was a specific plan put in place to monitor and mitigate these. In particular, while risks to the reputation of the software were mitigated through more careful advocacy in the HIF grant, risks of a delayed software development process were not sufficiently considered, despite there being clear lessons on these from the ECHO-funded phase. This may have been due to the need to complete the HIF grant application prior to completing the final review of the ECHO phase.

### How this factor related to the performance of the innovation process

While a more formal and proactive approach to risk monitoring and mitigation may have helped address some of the challenges faced in this process, it is difficult to assess the impact of this success factor on the overall success of the innovation process. This is because it is impossible to say whether the lack of more formal risk monitoring led only to delays in the project or whether it had broader impacts on development, implementation and diffusion activities.

## Drawing on existing practice

### How this factor worked in this case study

Phases 1 and 2 of the development of the standardised indicators and the software suffered from a lack of appropriate attention to different potential users and, importantly, their existing practices on SFP reporting. As a result, there were numerous setbacks in convincing governments and UN agencies to see the project as broader than ‘just for NGOs’; this perception continues to follow the project.

In cases where SCUK has found inroads to adoption by governments, this has come through intensively working with officials to understand existing systems and demonstrate clearly the added value of using the standardised ‘minimum reporting’ guidelines, such as in Pakistan.

### Challenges

Perceived lack of engagement with existing systems was cited as a key shortcoming when the software was developed as an Access-based programme. While SCUK has attempted to learn from this and engage more directly with governments, this requires more intensive resources than are currently available. As a piece of software that focuses on CMAM programming alone, some informants questioned whether the CMAM Report can ever be compatible with governments’ needs. In this sense, the CMAM Report may be a victim of its own success, providing a huge step-change for one particular area of reporting while broader reporting continues to rely on lower-quality Excel-based systems.

### How this factor related to the performance of the innovation process

An awareness of existing practices that facilitates better understanding of the problem and potential user needs was a critical factor to the success of this project; unfortunately, for most of the process up to the HIF grant, this factor was not present, which impeded successful development of the software and outreach. While compatibility has improved significantly with the web-based programme, at the time of writing, UNICEF, one of the biggest actors in MAM programming and a critical stakeholder, has not taken on the CMAM Report software, primarily because of lingering concerns over the compatibility of the CMAM Report with existing systems.

## Additional potential contributing factors

### Strategic mapping and advocacy

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Where strategic mapping and advocacy were undertaken, they produced strong results for SCUUK. While resources for this level of intensive and specified engagement with potential users are limited, this may require increased focus for the CMAM Report to achieve longer-term adoption.

**‘It might be useful if you can identify ahead of time that a bunch of different agencies have similar goals that you think are strategic objectives that are going to be met through the software. Like, some sort of agency survey, or open discussion where you can find out ahead of time, that five or six agencies have this strategic objective in their work plan, and this software clearly aims to address that.’**

Partner organisation

### Demonstrating results

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While the core partners for this innovation felt the long trial period was positive and did not pose significant risks, within Save the Children there was some disillusionment from field offices that had participated in the early pilots. Evaluators of the ECHO-funded phase of the project concluded that the long trialling period sapped the energy and enthusiasm of several field teams, and that the lack of a finished product impeded SCUUK’s (and to some extent ENN’s) ability to successfully engage key stakeholders such as UN agencies and government officials. This indicates that a bottom-up and participatory approach to software development may need to be balanced against the need to maintain enthusiasm for wider adoption.

**‘It’s a difficult balancing act, because yes, talking and relationship building is needed, but you’ve also got to have something to show [...] People like to see something tangible, don’t they?’**

Independent evaluator for the ECHO grant

## 6. Emerging lessons for best practice in innovation

- Paradigm innovations take years to see success take hold; any product or process innovation connected to broader paradigm innovations requires significant investments in relationship management and advocacy around problem recognition in order to encourage adoption;
- Internal processes for learning are critical: organizational processes that rely on donor reporting mechanisms for learning will experience a tension between the need to learn from an iteration or phase of an innovation and the need to acquire sustained resources to support the innovation process;
- In addressing problems that involve strong stakeholder support by governments, humanitarian agencies may need to consider the development dimensions of these problems and find ways of addressing them as well in order to achieve long-term sustainability.
- IT-driven innovations that involve the design of new software can be extremely time and resource intensive and are best carried out with an individual or organization that has the capability to 'translate' between IT sector-specific language and the humanitarian context.

## Endnotes

1. <http://cmamreport.com/>
2. ALNAP study: Ramalingam, B. et al (2009). Innovations in international humanitarian action. p.3.
3. CMAM Report Project Overview, HIF internal document.
4. UN-IGME (2014) Levels and Trends in Child M. New York: UN.
5. HIF large grant application, p.6.
6. Ibid.
7. Email communication with Jeremy Shoham.
8. Interview with Carlos Navarro-Colorado, independent consultant during Phases 1 and 2 of the innovation process.
9. Navarro-Colorado, C., Mason, F. and Shoham, J. (2008) 'Measuring the Effectiveness of Supplementary Feeding Programmes in Emergencies'. HPN Network Paper 63. London: ODI; interviews with key informants.
10. Ibid., p.4.
11. Ibid., p.22.
12. ENN (2011) 'Development of a Minimum Reporting Package for Emergency Supplementary Feeding Programmes'.
13. Sphere Project (2011) The Sphere Project Handbook.
14. Interview with Carlos Navarro-Colorado, 02/10/2015.
15. Feeny and Keylock (2013).

16. <http://www.base36.com/2012/12/agile-waterfall-methodologies-a-side-by-side-comparison/>
17. <http://manifesto.co.uk/agile-vs-waterfall-comparing-project-management-methodologies/>
18. Information for this column taken from ENN (2011) 'Development of a Minimum Reporting Package for Emergency Supplementary Feeding Programmes'.
19. Ibid., p.4.
20. SCUK (2014) HIF Large Grant Final Report.
21. Interview with Regine Kopplow, 01/04/2015.
22. SCUK (2014) 'Review of Current Community Management of Acute Malnutrition (CMAM) Practice and Outcomes in 12 Countries using the Minimum Reporting Package'. Internal reporting document.
23. Interview with Chris Andert, SCUK.
24. <http://www.cmamreport.com/>
25. SCUK (2014).
26. Created on the basis of the Large HIF Grant Application. Specifically, the application states that the enhanced data analysis will enable 'NGOs, donors, local and national governments to compare performance of programmes in different contexts, [and compare] different SFP approaches with differing frequency of food distributions, intensities of community involvement and nutritional supplements used.'
27. Key informant interview, October 2015.
28. Interview with UNICEF representative, September 2015.



## Other case studies from HIF and ALNAP on innovation

Improving water quality and quantity in emergencies:  
The Inclined Plate Settler water treatment system

A community financing mechanism for disaster risk reduction:  
The Bio-rights approach

Words of Relief: Translators without Borders' local language  
translation for emergencies

Supporting disabled people in emergencies: Motivation's  
appropriate and affordable wheelchairs

Innovations in international humanitarian action:  
ALNAP's 8th Review of Humanitarian Action

[www.humanitarianinnovation.org](http://www.humanitarianinnovation.org)

[www.alnap.org/innovation](http://www.alnap.org/innovation)

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