

Editorial

Welcome to issue four of Knowledge Matters. I would like to start by thanking everyone who contributed to this issue, especially Ariel Higgins-Steele, Abraham Bongassie Wanta, Chris Pain, Gabrielle Smith, Joanna McClatchie, Jennifer Weiss and Paul McCallion.

The world is witnessing a new dawn with regard to the potential of information and communication technologies (ICTs) to contribute in the fight against poverty. For the first time, there are now realistic opportunities for inhabitants of remote locations in low-income countries to get connected via ICTs.

Farmers, fishermen as well as entrepreneurs are rapidly adopting mobile phones as a key tool to advance their commercial activities, and some poor people are finding new livelihoods on the back of this trend. It is against this background, that the current issue of Knowledge Matters focuses on “Technology in humanitarian and development interventions.”

This is a particularly relevant topic as a number of Concern offices are making use of the advances in technology to improve their work. This is especially true in the case of Digital Data Gathering (DDG).

The article by Chris and Abraham shows how the Malawi experience laid the foundation for the current roll-out of DDG across the organisation.

The piece by Joanna brings the DDG story up to date by reflecting on how the Sierra Leone country office are utilising the tool.

Not all the articles in the current issue of Knowledge Matters have a technology focus. For example, Jennifer shares her experience of using Writeshops to document learning. Her insight is valuable given the challenges that we have as an organisation to effectively document our learning.

As always I greatly appreciate your views and opinions and keenly encourage you to comment on issues raised here. Use the **KM blog** to share your thoughts. I would welcome you to submit any articles that you feel could benefit colleagues for the next issue of Knowledge Matters. I would also en-

courage you to share this publication with partners.

The next issue of KM is planned for March 2013.

Enjoy the read.

Kai Matturi

The views expressed are the authors' and do not necessarily coincide with those of Concern Worldwide.

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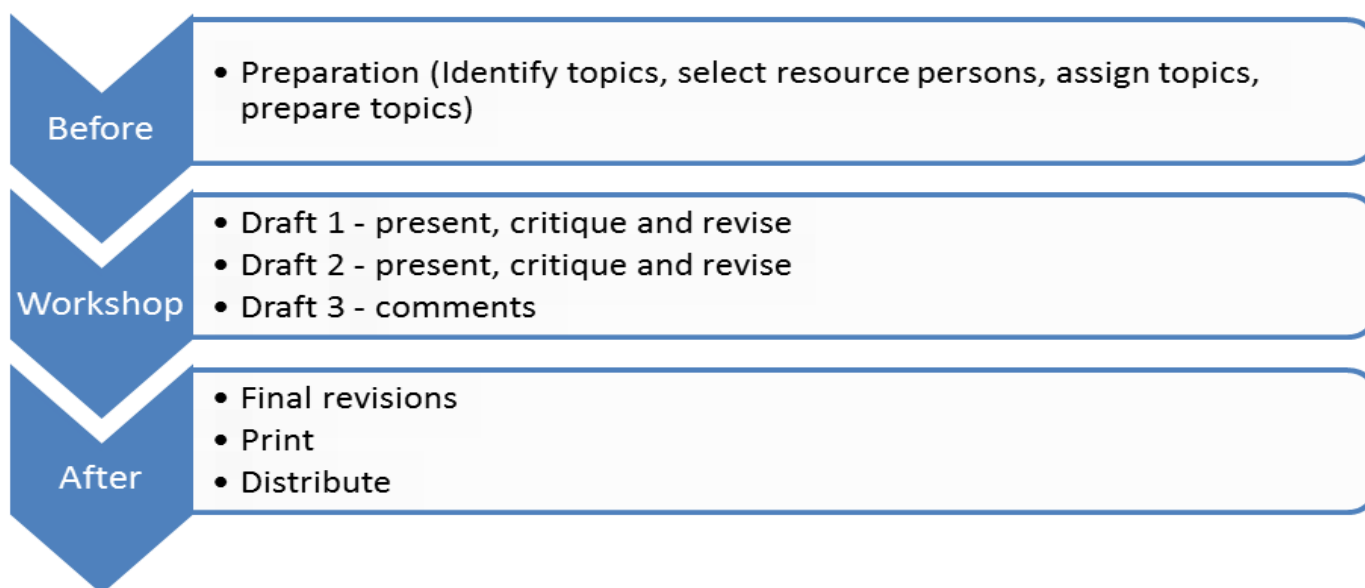
Writeshops: A quick and easy way to document learning

By *Jennifer Weiss*

In July this year I, along with colleagues from World Relief and the International Rescue Committee, participated in a writeshop for the Rwanda Child Survival Programme (CSP) which was held in Washington DC, USA. The impetus for the writeshop was driven by the CSP, which had its final evaluation in 2011. The evaluation was conducted by Eric Sario. Eric was keen on using the writeshop methodology to improve documentation of the monitoring and evaluation data generated by the programme.

Writeshops are an excellent way of bringing together different groups (researchers, NGO staff, policymakers, farmers) with different perspectives on a particular subject. Written materials can be produced in a short time by people who do not have the time to write extensively. With suitable preparation, it is possible to produce material ready for the printer within a few days of the end of the writeshop itself. The process allows comments and revisions from other participants (analogous to the peer review in conferences). *Please refer to figure 1 to get a sense of the writeshop process.*

Figure 1: Writeshop Process



Process

In the lead up to the writeshop, a number of conference calls were held. These sought to explore what data sets were available, the types of journals that would be targeted, narrowing down topics for inclusion in the writeshop, etc. A lead writer was assigned to each topic and their role in the build-up to the writeshop was to have an abstract developed, which would be shared at the writeshop.

What actually transpired was that only one abstract out of the proposed four was developed. The first day was spent discussing and refining the topics. Day two was also spent discussing the topics; however, by the end of the day's deliberations an outline of the topics had been agreed. The third day was spent drafting the abstracts and critiquing the content of the abstracts. The final two days involved writing the papers and improving the content.

At the end of the week rough drafts of the papers had been written. Each lead author spent the following three weeks improving the papers. The papers will then be shared with external peers before a suitable journal is sought for potential publication. No target journal has yet been identified.

Arising from the writeshop process we learned a number of lessons. Firstly, there should have been an overall facilitator. This would have helped provide direction to the process. Secondly, all the necessary data should have been analysed prior to the writeshop. Thirdly, the idea of having people write in the morning sessions and then present back in the afternoon worked well. It allowed for mutual learning and accountability to occur. Finally, the idea of producing four academic papers was probably overly ambitious.

I strongly believe that Concern programmes should make more use of writeshops to document their learning. Having said this, a number of caveats need to be considered when undertaking a writeshop. Namely, a decision should be made before the writeshop on what topic(s) will be documented. This ensures that the process is guided by clearly defined outputs. Also, the target audience should be clearly identified, whether it is NGO peers, policymakers, academics, etc. Finally, an external facilitator should be used to help provide a neutral perspective on what emerges.

Keeping a check on evaluations

Kai Matturi: I am delighted to be able to share some thoughts with Chris Pain on the value of meta-evaluations. Chris is head of the Social, Economic and Development Unit (SEDU) located within the Strategy, Advocacy and Learning Directorate (SAL) of Concern. SEDU covers all of our programmes under the Food, Income and Markets (FIM) area. Chris in collaboration with various advisers within SEDU, led the meta-evaluation of the FIM portfolio of programmes. Please note that the Meta-evaluation was reviewed in the previous issue of Knowledge Matters.

Kai Matturi: Chris, how you would define a meta-evaluation, and secondly, how you would improve a meta-evaluation?

Chris Pain: The term is used for evaluations designed to aggregate findings from a series of evaluations. It can also be used to denote the evaluation of an evaluation to judge its quality and/or assess the performance of the evaluators. As a way of improving meta-evaluations, I would like to see the use of a core set of key impact indicators, against which the quality of programmes could be assessed. Take the classic indicator, a dollar a day and the number of people living below that. It would be good, for example, to take an intervention in Sierra Leone and an intervention in Malawi, and look at how many people the interventions in both jurisdictions have lifted above the dollar a day measure. Which of the interventions have been successful and why have they been successful. This is the road that I would hope future meta-evaluations would travel down. Currently, the quality of data collected precludes us for going down this road. Hopefully, the current drive across programmes to improve the quality of baselines will yield better data.

Kai Matturi: In carrying out this current FIM meta-evaluation, why did you decide to deviate from the previous approach to do this?

Chris Pain: The current meta-evaluation is not radically different from previous ones. The previous meta-evaluations utilised the Organisation for Economic Cooperation and Development-Development Assistance Committee (OECD-DAC) criteria, namely: impact, effectiveness, sustainability, relevancy and efficiency. Whereas in the current meta-evaluation, we also looked at other criteria, for example, the ability to monitor innovations being undertaken. So, maybe this is where a slight differentiation took place.

Kai Matturi: What is the intrinsic value that meta-evaluations hold?

Chris Pain: Meta-evaluations are key to fostering cross-country learning. The big thing that jumps out for me is that there is a wealth of information and knowledge being produced by country programmes. As a result, it provides us with an ideal opportunity to reflect on cross-country learning. This ensures, for example, that learning generated in country X can be shared with country Y so that mistakes are not repeated.

Kai Matturi: What was the process that was followed in undertaking the FIM meta- evaluation?

Chris Pain: The first step was to pull together what FIM evaluations had already been undertaken over the period 2009-2011. This was not as straightforward as you would imagine. The evaluation reports were resting with various people. Also it was not clear at times whether the reports were drafts or the final versions. The second stage involved developing the framework that would be used to undertake the analysis. A checklist was developed to ascertain whether certain key elements were being included in the evaluations. For example, were the evaluations presenting information in relation to baseline and endline data. The checklist also allowed us to assess whether the evaluations were commenting on the OECD-DAC criteria that I mentioned earlier. Finally, based on the data available we were able to pull together the report.

Kai Matturi: How did you ensure that the analysis was as objective as possible?

Chris Pain: One of the biggest challenges was to ensure that everyone was using a common framework for the analysis and interpretation of the results. Regular review meetings were held and also advisers didn't review evaluations with which they had been closely involved. This allowed for a degree of neutral and impartial analysis to take place.

Kai Matturi: What were the main highlights and challenges emanating from the process?

Chris Pain: We have a relatively good product that we will use as the foundation on which to base the review of the FIM strategy. The challenge was simply the volume of work involved; we had to review 56 evaluations, varying in length from 50 -100 pages. This was a challenge when you consider that we had routine work to undertake, such as country visits and reviews of proposals amongst others.

Kai Matturi: Why were you required to present the findings of the review to Concern's council? How did you find the experience?

Chris Pain: It was to do with accountability and governance. We must remember that the council is responsible for setting the agenda of the organisation. Consequently, we need to be able to report to them on whether or not we are on target to meet the objectives that they have set for us. I found the whole process very stimulating. Council members were asking insightful and challenging questions.

Kai Matturi: As you probably know Chris, other arms of the organisation often undertake meta-evaluations. Are there any pearls of wisdom you would offer to others in Concern carrying out meta evaluations?

Chris Pain: I would advise colleagues to plan out the whole process very thoroughly. You should be clear on what you expect from the process. Try to be as practical as possible. Take the necessary time to refine the key questions that you want answered by the meta-evaluation. Finally, make sure that you have the necessary documentation and resources to do it.

Kai Matturi: One of the biggest criticisms faced by NGOs is that they are not evidence driven. From your experience, is this assertion correct and if so, what can actors like Concern do to counter effectively this claim.

Chris Pain: In many respects this question is one of the most difficult to answer. I believe that NGOs often base their decisions on evidence, however, what is often lacking is the documentation of this. I recently visited Chad. I was pleasantly surprised that the programme staff there want to make use of strong evidence to drive their decisions. I think we need to build systems that assess decision-making at the outcome and impact levels, and what we are doing to achieve results at these levels. This will help us to be more evidence driven.

Kai Matturi: Final thoughts?

Chris Pain: It is a very interesting time to be in Concern. There is a lot of change taking place driven by our organisational strategic plan. For example, there are various strategy reviews taking place. This presents all of us with a great opportunity to influence the future direction of the organisation. The plethora of contextual analysis that we did at the start of the year is also influencing the design of new programmes.

Theme: Technology in humanitarian and development interventions

Kicking off a discussion on the role of technology in humanitarian and development settings

By *Kai Matturi*

There has been a well-documented growth of non-governmental organisations (NGOs) working in the field of international development and humanitarian assistance over the past two decades. Many of these actors have begun to move away from a focus on mainly small-scale projects towards an increasing involvement in broader processes of development, including policy advocacy, and organisational and human capacity building.

At the same time, finding themselves vulnerable to criticisms about their level of accountability to the extreme poor, to governments, and to donors, many NGOs are beginning to seek ways of increasing their impact, effectiveness, and overall professionalism. This has led them to recognize the importance of technology for their operation and activities.

There are a number of ways that technology can impact positively upon the work of NGOs: First, there is a need for high-quality information about their work with communities, which is crucial to ensure accountability, to learn from experience, and to develop and disseminate good practice. Second, there is a need to gain access to information about wider contextual forces such as macro-economic policy, the national and local political climate, and the on-going work of other organisational actors. Third, information about organisational inputs and outputs is essential in order for NGOs to make effective use of scarce human, financial, and material resources.

The above information comes in from a wide range of formal and informal channels—for example, from international donor agencies prescribing “best practice” or “partnership” guidelines, from budgetary allocations and targets from the government, and from field officers’ assessments of the situation on the ground. Information is sometimes presented formally as electronic or manual reports of targets and achievements within the NGO, memos circulated among officers and field staff, and audio-visual material capturing situations on the ground.

While the role of technology in NGOs is essentially no different from that in other sectors of the economy, the articles in this special issue of Knowledge Matters argue that features related to the context, culture, and values of the NGO sector warrant specific consideration. The articles take up the challenge of exploring some key concepts of technology and relating them to Concern’s portfolio of interventions. All the articles featured here point to how Concern is making effective use of advances in technology to ensure that programme participants get the best out of Concern’s work.

For the first time, there are now realistic opportunities for inhabitants of remote locations in poor-vulnerable countries where Concern works to become connected via technology. Farmers, fishermen as well as entrepreneurs are rapidly adopting mobile phones as a key tool to advance their commercial activities, and some poor people are finding new livelihoods on the back of this trend. The piece by Gabrielle Smith sheds more light on some of these issues.

Whilst technology has great potential to improve the lives of the extreme poor, actors such as Concern must not remain blind to the structural challenges that confront the extreme poor. This point is acknowledged by all the contributors in this issue. The article by Paul McCallion perfectly captures this sentiment, *“Ultimately, the issue of eradicating inequality and creating a socially just world will not be resolved by adopting the latest technological innovation (McCallion, 2012).”*

Paul's point reiterates the fact that we must all remember that the nature of technology can only be instrumental; therefore it is extremely flexible and adaptable to the dynamic behaviour of its environment. Perhaps the primary motivation of technology enthusiasts is their appreciation of the potential of technology to contribute to the improvement of the human condition. Technology is only a tool that facilitates change to happen.

Having said all this, I do hope that you will enjoy the articles featured in this special issue of Knowledge Matters, that they ignite a reaction in you, be it positive or negative.

Impact of new technologies in cash transfer programming and humanitarian assistance

By Gabrielle Smith

Introduction

Information and communication technology is evolving at an extraordinary pace, changing the way we live and work. Advances in mobile phone penetration and other new technologies mean that there is growing interest from donors, practitioners and governments as to how technology can serve humanitarian responses. In this paper I summarise the findings of a study entitled "*New technologies in cash transfer programming and humanitarian assistance*". I was the lead author of the study. The study explored three different areas of technology (electronic payments, mobile communications and digital data-gathering), barriers to adopting technology and ways forward.

Branchless banking and electronic payment systems

The logistical, operational and security challenges presented by the movement of large amounts of cash to isolated or insecure places has meant that humanitarian agencies have become interested in the evolution of 'branchless banking' services.

Electronic payments allow money to be transferred from the bank account of the aid agency to the bank accounts or mobile phones of recipients. Recipients can withdraw the cash transferred from any branchless banking or mobile money 'agent' or use the value to purchase commodities directly in local shops.

Agency experiences of using electronic payment systems to deliver cash transfers in emergencies have been positive and the agencies interviewed want to utilise these tools in the future. The most important reported benefits of e-payment systems are improved security for staff and recipients, improved reconciliation of accounts and increased speed and lower costs. However, agencies working with new systems in emergency zones and with the poorest sections of society also face challenges arising from lack of prior experience with technology, poor infrastructure, low literacy and lack of training.

Mobile technology

The research found that mobile communication systems are increasing the speed and efficiency with which agencies communicate vital information to dispersed populations. For example, mobile phones are used to communicate important information to disaster-affected people, through call centre hotlines, automated voice-messaging systems and mass text alerts. This can improve programme accountability and is appreciated by affected communities. However, as with all technology, it is only as effective as the way it is used. Experiences in Haiti show that mass messaging must be clear and accurate to prevent confusion or distrust.

Experience with digital data gathering

Digital data gathering applications such as Episurveyor, PSI Mobile and FrontlineSMS allow household survey and other monitoring data to be collected directly into mobile phones or handheld devices rather than on paper forms, for upload directly to a data management system. These emerging technological solutions are being used by agencies seeking to improve the accuracy, efficiency and effectiveness of monitoring and evaluation activities.

Agencies have found that these technologies have been quickly mastered and adopted by staff, easily integrated with existing systems and accepted by recipient communities. With appropriate planning and the right choice of tools, agencies adopting digital data gathering technology saw significant gains in the speed and efficiency of data collection and analysis, with potential for cost savings over time and increased impact. In some cases, however, inadequate planning and preparation has led to piloting of inappropriate tools.

Barriers to wider adoption

New technology offers a promising way to deliver aid with speed, precision and flexibility, even in challenging environments. That said, only a handful of programmes are using this technology on a large scale, and no agency is using any of these technologies systematically. There are various barriers that are impeding the wider adoption of new technologies in cash transfer and humanitarian assistance interventions. The barriers which the report highlights include: the technological environment, capacity issues, along with ways of working.

Finally, what the report shows is that there is no single answer to delivering cash to people in low-income and disaster-affected communities. Deciding what system to use depends on the context, the delivery options available, what the programme aims to achieve, its scale and scope and the recipient profile. Utilising new technology brings both benefits and challenges to humanitarian aid, but experience shows that, in the right circumstances, the benefits are worth the effort.

Digital Data Gathering: Reflections on the roll-out in Sierra Leone

By Joanna McClatchie

In early August, Digital Data Gathering (DDG) was rolled out in Sierra Leone, facilitated by the recently appointed DDG team from Dublin. This team comprises Ciaran Walsh, Project Lead (based in the IT department) and I, Survey Specialist (SAL). This is a reflection on the roll-out in Sierra Leone and on the DDG experience more generally.

The roll-out process comprises a large body of work, including survey revision, digitisation, testing and in-country training. (See full process document on the intranet at: <http://intranet/People/CorporateServices/IT/ICT4D/Digital%20Data%20Gathering/DDG%20Ireland%20-%20PSI%202012%20DDG%20Process.docx>). The training took place in Freetown in early August and covered device management, troubleshooting, survey design, interview tips and guidelines, explanation of their chosen survey, administrator training, piloting, revision of survey and live data collection.

The speed of data collection with DDG is remarkable. Once enumerators are properly trained and have practised using the devices, data entry is quick and easy. Early in the training it became clear that we had a number of technophobes in the group, as well some enthusiastic technophiles. The former required encouragement and coaxing to handle and use the devices; the latter required encouragement and coaxing to slow down and stick with the pace set. With such a diverse group, it was a challenging but successful training, at the end of which even the most reticent technophobe was feeling both confident and competent in their DDG abilities.

The key is practice, practice, practice. The devices are designed to be user-friendly and easy to handle. Although the screen can be difficult to see in sunlight (as is any reflective surface), this is fairly easily solved by finding some shade. The device is rather clunky and sturdy, as it should be to make it suitable for use in the field. It is built to be long-lasting and resistant to both water and dust. I can confirm its durability after seeing one enumerator drop her device; it landed heavily on stony soil, bounced off the ground and was retrieved entirely intact with no damage sustained. It wasn't a planned part of the piloting process but it proved a useful lesson!

Data collection is not the only speedy aspect of DDG. One of my favourite aspects of DDG is that it entirely eliminates the need for data to be inputted from a survey into a spreadsheet. The data can be exported straight into an Excel sheet, immediately eliminating what would otherwise be weeks' worth of tedious work. A summary report can also be created to give you an immediate snapshot of the results. This is a useful tool which can assist in highlighting any glaring errors in the data which can then be fixed before data collection recommences. We will be working closely with field teams to identify how we can incorporate better and more rigorous data analysis assistance into DDG.

One of the most programmatically-beneficial features of DDG is its ability to reduce greatly the incidence and scale of human error. Questions can be set as mandatory, so enumerators cannot leave a question blank, nor can they skip ahead with intentions to return to the question later. Questions are built to be closed-ended as much as possible to reduce text entry, which makes data analysis easier and quicker. Validations eg the answer must be between one – 50) and logic ("If yes, skip to question 50") can be in-built into the surveys which eliminate the entry of answers outside permissible parameters as well as the need for enumerators to skip down the page looking for the next question.

The GPS function is extremely useful and thoroughly fascinating. It enables administrators to pinpoint exactly where an enumerator is when they are conducting a survey and thus provides reassurance that surveys are being conducted in the correct geographic allocations. We are currently working on developing this function so that it can map out all the GPS coordinates from a survey on a map, illustrating the clusters or geographic spread of the participants. Administrators can also view how long it takes each enumerator to complete a survey and thereby identify which enumerators may be having difficulty with the process and may require extra assistance.

A number of respondents said they preferred DDG as it enabled them to see clearly what was written on the screen and what information the enumerator was entering. This was not always easy with paper surveys, particularly in cases of illegible scrawls. This suggests that DDG can contribute towards accountability to beneficiaries by making data collection more transparent and less of a one-way, extractive process. Respondents also expressed feelings of security with DDG; they felt their information was safer stored in a computer rather than on pieces of paper, which could easily go missing or become damaged.

One of the most striking aspects of the training in Sierra Leone was the process of revising their agriculture survey. This survey had been done on paper for the past two seasons, with no requests for changes to questions, answer options or structure. However, throughout the training, there was a range of requests for changes to the survey, both in terms of question wording and available answer options. This suggests that the DDG process encourages attention to detail by forcing enumerators to look at only one question at a time. My experience in Sierra Leone would suggest that DDG has the potential to tighten up questions and answer options and therefore yield more reliable, higher quality data.

Although DDG does admittedly require a large spend at the outset, the costs reduce over time as the technology is increasingly utilised. Certainly the team in Sierra Leone seem most pleased with their investment. They are currently running a Knowledge, Attitude and Practice (KAP) survey with DDG as part of their cholera response in Freetown and we received this feedback from Laura Hastings, Child Survival Programme Manager: *"Wow...these machines are so cool. We just printed out a summary sheet of the first 30 interviews. I'm converted."*

Countries already using DDG include Sudan, Malawi (both of which were pilot countries for the project), Kenya, Zambia and now Sierra Leone. These countries are already highlighting the huge potential for DDG, with Kenya preparing to scale up to 160 data collection devices this year.

Other countries rolling out DDG this year are Burundi, Niger, and DRC. We have a number of countries already expressing interest to come on board next year. The roll-out process takes time and forward planning as we place a high emphasis on quality. This year is already fully booked but we do invite countries that would like to get on board in 2013 to get in touch. See the intranet at <http://intranet/People/CorporateServices/IT/ICT4D/ddg.aspx> or contact Ciaran Walsh (ciaran.walsh@concern.net) or myself (joanna.mcclatchie@concern.net) at any time.

Approaches to solar technology within the development and humanitarian realms

By *Paul McCallion*

Background and Introduction

Since their inception, photovoltaic (solar) technologies have offered great potential to address climatic and resource challenges, change the social and economic landscape in rural environments and create jobs and livelihoods across the developing world.

In emergencies, it can be used for water pumping projects and camp security. One often finds that solar lights are handed out in non-food Item (NFI) kits, and telephone charging points can be installed to allow easy accessibility to low level power to beneficiaries for mobile cash transfers.

NGOs regularly highlight successful solar related projects. These include, for example, boats with solar panels in Bangladesh used as mobile education centres. Another widely cited example is families living in villages in remote locations that have been issued with home solar kits consisting of a limited number of lights and charging connections for batteries or telephones.

Within development discourse, energy poverty, appropriate technology, sustainable development and enabling technology are all embedded in solar technology related programmes. However, a climate of mistrust or cost factor, limits solar deployment and any potential for research and learning. A small and growing group of NGOs and INGOs currently specialise in solar deployment but have yet to make a major impact on larger NGOs (www.inveneo.org/ or www.solar-aid.org/).

Renewable Technologies - democratic or authoritarian?

For communal solar to work, communities must embrace user discipline, clean panels, avoid draining batteries and allocate strict hours of usage. Budgeting and planning to replace batteries and bulbs must happen every 3-5 years. This implies an authoritarian approach for technology use and also means NGOs need a basic understanding of solar and training in monitoring before, during and after the handover of the technology. The democratic dimension is clear to see as well. For example, stalls may stay open later and increase income and education and study in the evenings is made possible.

The development sector sees the potential and importance of renewable technologies for delivering positive outcomes for communities and the environment. However, the sharing of knowledge and learning amongst development actors is not common. This lack of effective knowledge sharing is contributing towards the ambiguity that often surrounds renewable technologies amongst potential users.

Where does this put Concern?

Concern has deployed a significant amount of renewable technologies over the past fifteen years across its stream of programmes. Traditionally, solar water pumping has been the main area for usage. But in recent years it has been deployed in Teacher Resource Centres (TRC) to teach computer skills, in Farmer Resource Centres (FRCs) to provide adult literacy classes, in Primary Health Units (PHUs) to supply lighting for rural clinics and in providing street lights and telephone charging points for Internally Displaced People (IDPs). Home solar kits have been distributed in both development and emergency settings. Mobile solar lights have also been distributed in refugee and IDP camps.

In January 2011, Concern launched an ambitious five year strategic plan. Within the plan, strategic goal six states that greater organisational effectiveness will be realised through “*Embracing technology and becoming a greener Organisation*” (Organisational Development Plan, 2011, p. six).

In keeping with the above goal, the Concern Dublin office completed an energy audit for the second successive year in 2011. The London office has recently had an energy audit. These energy audits take into account energy consumption, paper used in the offices and flights by staff. By taking this step Concern can measure its energy output and its carbon footprint in order to identify areas to improve on and reduce emissions.

A more refined and user friendly audit template will be rolled out eventually to field offices once all Irish and UK offices have been completed. This will help in the organisational drive to become a greener organ-



isation. In 2011 Concern released its first [“Solar Power Best Practices Guideline”](#), based on the experiences of five years of installations, follow up, monitoring and lessons learned. Experience from other NGOs and the perspectives of field staff also fed into the process of producing the guideline. Interest in this document has been limited but positive. One of the key issues that the guideline flags is that case studies of pilot projects are the key to making decisions about technology for programming. Staff with limited time find case studies quick and easy to read.

(The author left, working on a Solar Control System in Sudan with Jamma Tour, Concern Logistician and Administrator, 2009)

Concluding remarks

Development and humanitarian agencies are looking to technology-supported solutions to increase the efficiency of their operations. Whilst technology has great potential to improve the work of development and humanitarian actors, these actors must not remain blind to the structural challenges that confront the extreme poor. “Whilst development aid has done many good things in general, transforming power relations has not been one of them” (Cheru, 2012:138). Ultimately, the issue of eradicating inequality and creating a socially just world will not be resolved by adopting the latest technological innovation. Having said this, it is imperative that actors within the aid sector improve at documenting and sharing their experiences with technology. By adding to the knowledge base, we can all dispel some of the myths that surround renewable technologies such as solar.

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The Benefits of Digital Data Gathering - some learning from the Conservation Agriculture project in Malawi

By *Chris Pain and Abraham Bongassie Wanta*

Introduction and background

Historically, the collection of programme data by development and humanitarian actors, such as Concern, has involved the completion of paper-based questionnaires, followed by inputting data into an information management system. But errors are frequent, storage costs are prohibitive, and the costs of double data entry are high. Increasingly, various actors are looking to the world of technology in order to increase efficiency, speed and accuracy of data collection.

Advances in technology mean it is now possible to collect data through Digital Data Gathering (DDG) solutions, comprising of data collection using hand-held devices, from where it is transferred to a back-end server for storage and analysis. Personal Digital Assistants (PDAs), java-enabled telephones or smart phones are used to key in answers on forms displayed on the device. Electronic surveys are then uploaded onto a computer or server at a later stage, or can be directly sent to a database via the network. In view of these advantages and in order to expand the knowledge base on the use of DDGs, Concern decided in 2011 to pilot the use of DDG in its Conservation Agriculture (CA) project in Malawi. The pilot generated some lessons which are elucidated below.

Lessons one - Instantaneous data access

With the utilisation of DDG project teams can have access to accurate data in real-time which ensures that evidence based decisions can be made rapidly.

Lesson two - Improved data reliability

The Malawi pilot led to a qualitative improvement in the reliability of monitoring data. One of the main reasons for this was the removal of manual data entry. The removal of the manual data entry phase removes one of the greatest opportunities for error.

Lesson three - Reduction in data Loss

The automatic uploading of data to a web server using active-sync, as well as the storage of data offline until a signal could be found, means that data leakage is greatly minimised. For example, the devices are able to auto-sync every five minutes. However, a total protection against data loss is not guaranteed since, for example, the devices can be stolen.

Concluding thoughts

The Malawi experience suggests that the real-time quality control and enumerator supervision, enabled by the use of a DDG based survey system, make this an attractive management option and preferable to a paper based approach. This solution has the potential to be scaled up in an extensive way for teams and studies of almost any size. It is with this in mind that Concern has decided to roll-out DDG across its projects in 18 countries over the next three years. A dedicated project team has been created to support the roll-out of DDG across country programmes. Whilst the utilisation of DDG within Concern is still in its infancy, the organisation has no plans to switch back to paper-based forms.

[For those who are interested in finding more about the Malawi experience, a detailed learning paper can be downloaded from the knowledge base.](#)

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Research Reviews

The dangers of urban living



A clean environment is essential to human health; however, cleaning operations generate waste that can adversely affect human rights if inappropriately disposed. While the poor are responsible for a small fraction of

waste generated in the city, they bare the greatest burden of effects. A report commissioned by Concern Kenya, entitled, “*Trash and Tragedy - the impact of garbage on human rights in Nairobi City*” notes that the absence of a functional waste management system in Nairobi has resulted in indiscriminate dumping of waste in Dandora, one of the poorest neighbourhoods in the city.

Evidence from these neighbourhoods demonstrates that contamination from the dumpsite has adversely affected human health, particularly through respiratory diseases, endocrine complications and cancer. At least half the children in surrounding neighborhoods have heavy metal concentrations in their blood that exceed the maximum level set by the World Health Organization. Despite these risks, between 6,000 and 10,000 people eke a living from the dumpsite, while over 200,000 people have indirect economic and social links to it. Consequently, many people living around the dumpsite do not want it removed for fear of losing its benefits.

The report makes the point that the City Council of Nairobi was to decommission the dumpsite in early 2012, after eight years of planning. However, conflict between the council and the Kenya Airports Authority over the relocation of the dumpsite has brought the process to a grinding halt. The resulting stalemate implies there will be no quick end to one of the largest and most flagrant violations of human rights in the country.

The report goes on to state that given the gravity and extent of the human rights violation, the decommissioning of the dumpsite should be a matter of national interest, and certainly a priority for the

county government. However, public participation must be at the core of this process to ensure the poor are not buttressed further into extreme poverty. In particular, livelihood and decent work opportunities in the waste sector should be created.

To address this tragedy and injustice, the report calls on the county government immediately to deploy modern technology to isolate the toxic waste from contact with people and the environment, as well as to identify a site for the construction of a sanitary landfill. However, for real change to occur, residents of Nairobi must take responsibility for their waste. A key step is to demand urgent delivery of a safe and comprehensive waste management system, with a functional sanitary landfill.

For those interested in finding out more the report can be downloaded from the Knowledge Base.

The state of hunger in 2012



The 2012 Global Hunger Index (GHI) Report was officially launched on October 11. The theme of this year’s report is, “*The challenge of hunger: ensuring sustainable food security under land, water and energy stresses*”. World hunger, according to

the GHI, has declined somewhat since 1990 but remains “serious.” The global average masks dramatic differences among regions and countries. Regionally, the highest GHI scores are in South Asia and Sub-Saharan Africa. South Asia reduced its GHI score significantly between 1990 and 1996—mainly by reducing the share of underweight children—but could not maintain this rapid progress. Though Sub-Saharan Africa made less progress than South Asia in the 1990s, it has caught up since the turn of the millennium, with its 2012 GHI score falling below that of South Asia.

Twenty countries still have levels of hunger that are “extremely alarming” or “alarming.” Most of the countries with alarming GHI scores are in Sub-Saharan Africa and South Asia (the 2012 GHI does not, however, reflect the recent crisis in the Horn of Africa, which intensified in 2011, or the uncertain food situation in the Sahel).

Two of the three countries with extremely alarming 2012 GHI scores—Burundi and Eritrea—are in Sub-Saharan Africa; the third country with an extremely alarming score is Haiti. Its GHI score fell by about one quarter from 1990 to 2001, but most of this improvement was reversed in subsequent years. The devastating January 2010 earthquake, although not yet fully captured by the 2012 GHI because of insufficient availability of recent data, pushed Haiti back into the category of “extremely alarming.” In contrast to recent years, the Democratic Republic of Congo is not listed as “extremely alarming,” because insufficient data is available to calculate the country’s GHI score. Current and reliable data are urgently needed to appraise the situation in the country.

The report makes the point that recent developments in the land, water, and energy sectors have been wake-up calls for global food security: the stark reality is that the world needs to produce more food with fewer resources, while eliminating wasteful practices and policies. Demographic changes, income increases, climate change, and poor policies and institutions are driving natural resource scarcity in ways that threaten food production and the environment on which it depends. Food security is now inextricably linked to developments in the water, energy, and land sectors. Rising energy prices affect farmers’ costs for fuel and fertilizer, increase demand for biofuel crops relative to food crops, and raise the price of water use. Agriculture already occurs within a context of land scarcity in terms of both quantity and quality: the world’s best arable land is already under cultivation, and unsustainable agricultural practices have led to significant land degradation. The scarcity of farmland, coupled with short-sighted bioenergy policies, has led to major foreign investments in land in a number of developing countries, putting local people’s land rights at risk. In addition, water is scarce and likely to become scarcer with climate change.

For those interested in finding out more, the entire report can be downloaded from the Knowledge Base.

The pros and cons of voucher and cash interventions

In 2011, Concern, in collaboration with the United Nations Children’s Fund (UNICEF) and an American academic institution, called Tufts University, undertook a study in the eastern part of the Democratic Republic of Congo (DRC). The study was entitled,

“Examining differences in the effectiveness and impacts of vouchers and unconditional cash transfers.” The objective of the study was to examine the differences in the effectiveness and impacts of vouchers versus unconditional cash transfers in the Bushani camp of the Masisi territory of the DRC.

A comparison of the baseline household and individual-level socio-demographic and economic characteristics suggests that the voucher and unconditional cash transfer groups were similar before the programme. Overall, cash households were slightly larger, were more likely to be female-headed, relied upon more income sources and had higher diet diversity than voucher households.

The results of the research suggest that cash transfer households were able to use the transfer to buy a more diverse set of food and non-food items than voucher households. Cash households bought more cereals, meat, condiments, oil and vegetables, medicines and housing materials than their voucher counterparts. These patterns were largely similar in November (after the first two transfers) and March (after the last transfer), despite very different transfer amounts in both periods.

The cash transfer group was more likely to save a portion of its transfer, less likely to suffer from food insecurity and more likely to purchase certain assets as compared to the voucher group. By contrast, more voucher households purchased metal sheeting and poultry than the cash group. There were no other differences in terms of diet diversity, the types of foods consumed, and the types of coping strategies used. The overall acquisition or sale of durable and non-durable goods or intra-household decision-making between the two groups was similar.

The study found that the cash transfer programme was cheaper, and more cost effective, for both Concern and programme recipients. The cash programme cost USD\$11.34 per programme recipient, as compared with USD\$14.35 per voucher recipient. In addition, despite the fact that both groups of recipients had to travel to Masisi Centre to obtain their transfer, cash transfer recipients reported feeling safer than voucher recipients, as they could conceal the cash more easily along the Bushani-Masisi road. Since the benefits in the cash group were similar to, and slightly better than, those of the voucher group, cash transfers are preferred to vouchers from a cost effectiveness, efficiency and welfare perspective.

The report can be downloaded from the Knowledge Base.

Sharing programme/project learning

Innovations “Learning in Innovation”
Quarterly briefsProcess documentation in an emergency
settingBy **Ariel Higgins-Steele**

Concern's former Emergency Coordinator, Amanda McClelland has produced a valuable learning document that sheds light on the 2010 Mitigation Programme in Niger. The Mitigation intervention in Niger was one of Concern's flagship programmes. It was critical in laying the foundation for Community Resilience to Acute Malnutrition (CRAM). The latter is one of the five models being tested under the Irish Aid Programme Funding stream.

CRAM aims to support communities in countries affected by slow onset hazards, particularly recurrent drought, to reduce risk and better manage the underlying shocks that lead to food insecurity and malnutrition whilst also preventing nutritional crises in the short to medium term. The model hinges on flexible programming which ensures a smooth transition from developmental to humanitarian actions when circumstances demand this.

The intervention in Niger can be described as unconventional for a number of reasons. Firstly, it was on a large scale, in terms of caseload and its vast operational area. Secondly, it was complex in nature for several reasons; the piloting of a new operational framework for supporting regional health structures; the piloting of mobile phone technology in cash transfers; and the integration of operational research on the impact of mobile phone transfers.

Given the uniqueness of the intervention it is critical that the process surrounding it was well documented for institutional learning. The report achieves exactly this. The report is divided into eight chapters and aims to document the concept, logic and design of the 2010 mitigation programme; the planning undertaken to implement the programme; and the decisions made throughout the programme cycle.

The report will no doubt make for interesting reading for those interested in understanding not only the intervention itself but also about the challenges that face actors working in fragile settings such as Niger. It will also interest those who want to get a sense of the factors that influenced the development of CRAM. The report is long and wordy in nature. However, it can be read in sections. [For those interested in reading the report it can be downloaded from the Knowledge Base.](#)

A new set of briefs from *Innovations for Maternal, Newborn & Child Health* (“*Innovations*”) highlight process-related learning from pilot projects from districts in three countries where implementation is ongoing:

- 1) Sierra Leone: “Helping Health Workers Cope” and “Quality Circles”
- 2) India (Odisha): “Male Health Workers for Accessible Care”
- 3) Malawi: “ICT for MNCH”

These briefs are intended to summarise the most relevant learning surfacing from monitoring data and observations.

***Innovations* Malawi Baseline Brief**

Innovations' baseline brief summarises the methodology and key findings related to maternal, newborn and child health (MNCH) knowledge, attitudes and practices (KAP) in Balaka District, Malawi.

The primary source of data for estimating the coverage of MNCH interventions at baseline was a cross-sectional household survey in the catchment areas of the intervention and comparison health centres. The survey was supplemented by focus group discussions, client exit interviews, rapid health facility assessments and an ethnographic method called Hearsay.

Some key findings included: a higher knowledge-practice gap for maternal health than for child health, a smaller gap between knowledge and behaviour of high-impact interventions that are not dependent upon facility care-seeking (eg exclusive breastfeeding), and for some indicators (eg start of ANC) there is a difference between the intervention and comparison districts.

[The documents referenced above can be accessed on the Knowledge Base.](#)

Knowledge Matters basics

Knowledge Matters is a Concern Worldwide internal organisational peer reviewed publication. The publication is committed to encouraging high quality analysis and fostering intellectual excellence in the understanding of Concern's work. It does this by reviewing all of Concern's evaluative and research work, as well as commissioning articles by Concern staff members. Published quarterly by the Programme Approaches and Learning Unit, it seeks to connect and collect Concern's knowledge.

The views expressed are the authors' and do not necessarily coincide with those of Concern Worldwide.

For whom is the publication

All staff involved in designing, implementing, managing, monitoring, evaluating and communicating Concern's work. This publication should also be shared with partners.

What this publication includes

- ◇ Promising practice
- ◇ Organisational learning
- ◇ Promotion of multi-sectoral and integrated approaches to programming
- ◇ Links to full reports

What it doesn't include

- ◇ Targeted recommendations
- ◇ Additional evidence not included in the papers cited
- ◇ Detailed descriptions of interventions or their implementation

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Knowledge Base

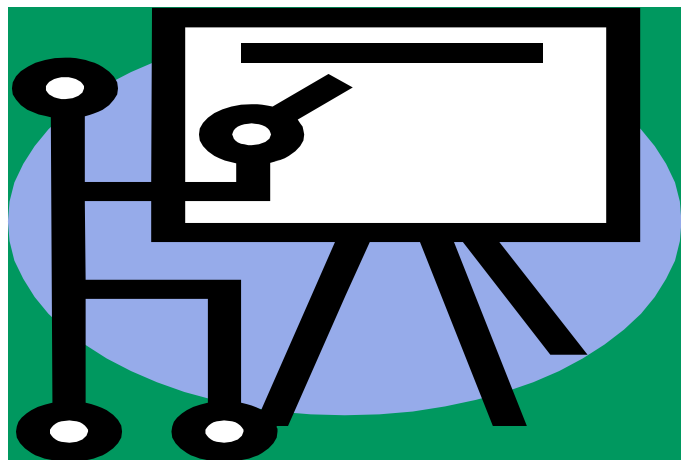
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Have your say

Your views and feedback are welcomed. Please use the contact details below to get in touch. Kai.matturi@concern.net, cw_kai.matturi, +353 1 417 8079.

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