ECB PROJECT
CASE STUDY

Playing with Reality: The ECB experience using emergency simulations to improve humanitarian response

By David Hockaday and Sarah Lumsdon

March 2012

www.ecbproject.org/simulations
Introduction

“… Although in my experience it is impossible to get simulations to perfectly match up to the reality, they do help identify what you need to seriously invest in before the disaster hits. They help channel and focus thinking and resources to where they are really needed….”

Gareth Price-Jones, Oxfam Great Britain (GB) Country Director, Bangladesh

The final evaluation of ECB Phase 1 acknowledged the importance of emergency simulations as a practical preparedness tool that provides a safe space for humanitarian agencies to build staff capacity\(^1\) to respond to emergency situations\(^2\). The ECB Simulations Project was launched in 2007 when ECB agencies developed a Simulation Administrators’ Guide that included both a Multi-Agency and a Single Agency Simulation tool. The development of this Guide was a key milestone in the ECB Project’s efforts to build national staff emergency response capacity. This case study focuses on the learning from implementing the ECB Project Multi-Agency simulations at the national level between April 2010 and March 2012, using the ECB Simulations Administrators’ Guide.

Context

With the likelihood of increasing frequency and intensity of disasters\(^3\), the ECB Project agencies focus their capacity building initiatives at the national level in order to prepare for this trend. The ECB Simulations Project - a series of practical tools and guidelines to support building national staff skills in emergency response - is a key priority for the ECB Project community.

There are many obvious benefits to collaboration during a disaster response such as better coordination, improved geographical coverage, consistency in response and reduction in duplication. Collaboration can often lead to improved efficiencies too, as resources and staff are shared and this can often lead to other positive outcomes such as joint evaluations and shared learning. Improved collaboration in emergencies can often come about through building relationships in between responses, a point highlighted in the ECB Phase 1 final evaluation. The importance of pre-positioning relationships is a key component for the ECB Project, and it is for this reason that multi-agency simulations are favoured.

‘Learning by doing’ is one of the most effective methodologies for training and capacity building\(^4\). Simulation-based training methods have been used in the private and public sector for years. Research suggests learners undergoing simulation-based training achieve deeper understanding, higher levels of confidence, retain knowledge longer, show a greater interest in the subject matter and are better able to transfer their learning to their job than

---

1 In this document, ‘capacity’ is defined as the skills, ability and competencies of an individual to carry out a particular role
2 See Emergency Capacity Building Project Final Evaluation Report; Social Impact Inc; July 2007; p31
3 United Nations Environment Programme (UNCEP); Session Concept Paper; World Conference on Disaster Reduction; January 2005; Page 1
those exposed to more conventional training methods. Simulations provide a safe learning environment where participants can try out new behaviours, test their knowledge and develop the right behavioural competencies to improve the speed, quality and effectiveness of future responses to emergencies. Multi-agency simulations also provide a safe space to develop relationships and collaboration among agencies.

As part of the ECB Project, the Bill and Melinda Gates Foundation provides support for an annual emergency simulation to be held in each of the ECB consortium countries over the five-year period of the project. Further support has been provided by the British Government, through the Department for International Development (DFID) as part of the Consortium of British Humanitarian Agencies (CBHA) National Staff Development Programme. The European Commission, through the Directorate General for Humanitarian Aid and Civil Protection (DG-ECHO), has also supported the ECB Simulations Project. With this support, and by the end of the project in August 2013, the ECB Project will have run over 15 multi-agency simulations in ECB consortium countries, providing national responders with an excellent opportunity to practice in advance of an actual disaster striking.

Between April 2010 and March 2012, nine simulations have been successfully conducted in all five ECB consortia including three in Bangladesh, one in Bolivia, Indonesia and Niger and three in the Horn of Africa (two in Kenya and one in Uganda), involving a total of more than 200 participants from over 50 agencies.

The simulations were all multi-agency, facilitated by staff experienced in running such events from global, regional and national levels. Where possible, national staff work alongside international facilitators in order to build a cadre of national staff experienced in facilitating simulations. A strong relationship with the United Nations Inter-Agency Standing Committee (UN-IASC) Sub Working Group on Preparedness also enabled the ECB Project to utilise a roster of experienced and trained simulation facilitators.

How does a Multi-Agency Simulation work?

“….The joint participation of agencies and partners signified a very positive experience and facilitated collaboration and open spaces, which without a doubt will continue after the simulation…”

ECB Bolivia Simulation Facilitation Team, April 2010

A simulation replicates an emergency situation in a condensed timeframe and in a controlled environment. The emergency scenario is played out using a series of ‘injects’ (e-mails, situation reports, disaster data, role players) which replicate key aspects of an emergency situation. Teams must respond to these ‘injects’ as they would in a real life situation.

The debrief following the simulation is the most important part of any simulation event. This is where teams/staff can reflect on what worked well and what areas need to be improved.

---

5 Hoberman and Maitick; Experiential Management Development; From Learning to Practice; 1992. For an interesting comparison of the benefits of simulations over other types of business learning models refer to Kenworthy and Wong; Developing Managerial Effectiveness; Developments in Business Simulations and Experiential Learning; Vol. 32, 2005
The debrief should be longer than the simulation exercise if staff are to learn from the exercise and make a plan for improvements. Improvements might include individual commitments from participants, such as finding out about their own agency emergency procurement procedures, or familiarisation with the Sphere standards. As a group, this might include commitments to attend regular emergency coordination meetings, investigating joint logistic procedures or developing joint agency response protocols.

The ECB Simulation Administrators’ Guide provides a step-by-step guide to designing and implementing a simulation. The Guide provides all the necessary materials and templates that can be adapted to a particular context.

Ideally participants should remain unaware of the emergency scenario, in order for the situation to be as realistic as possible and to challenge participants. The simulation facilitators’ role is to introduce the injects and adapt injects as required to move the disaster situation forward. Their role is to increase or decrease the challenge as required to enhance participants’ learning during the exercise.

Injects provide contextual information such as conflict scenarios, weather patterns, and numbers and locations of affected populations; injects can also include security incidents and adverse media stories to challenge and test participants. Injects can be chosen depending on what the simulation facilitation team is trying to test e.g. a cholera outbreak can be used to test a sectoral response; a breach of a code of conduct to test participants’ knowledge, adherence to and understanding of international standards and codes of conduct. Injects can therefore test knowledge and behavioural competence.

Participants are encouraged to play their usual role and to make the simulation as real as possible. As it is not always possible to replicate the full range of actors in a disaster, facilitators and other staff often play roles such as government officials, UN staff or community members. It can also be constructive for participants to play other roles, in order to witness a disaster from a different perspective and to gain further understanding and empathy as to how disasters and stressful situations can be from other vantage points, such as a beneficiary or donor.

**How much time is needed to run a simulation?**

Ideally a simulation event lasts two days, one day for the Simulation and one day for the debrief, learning and action planning. The debrief is the opportunity for participants to explore performance, identify and analyse issues, and develop recommendations and learning going forward. The debrief session is key to the overall learning component of the simulation exercise.

**Who and how many people are involved?**

Most of the simulations run by the ECB Project involve both international and national NGO’s, UN agencies and in some cases government officials. Typical attendance figures range between 30 – 40 participants. It becomes difficult to simulate reality with a group much smaller than that.

**What scenario to choose?**

The simulation convenors can suggest and advise on the preferred disaster or hazard to simulate for their context. Alternatively a training needs assessment can be carried out prior to the simulation to ascertain which scenario and what elements to test. The disaster must be something that participants can relate to in order for it to be a useful learning exercise. It is the role of the lead simulation facilitator to adapt the guide to an appropriate disaster/hazard. See Box 1 for an example of how this has been done previously.
In Kenya, Niger, Indonesia and Bolivia a flood disaster was simulated while in Bangladesh waterlogging and cyclones were used.

What do they cost?
The cost of running an ECB simulation has varied greatly depending on the context and timeframe of the simulation and on the availability of national /regional resources, particularly facilitators. Managers should budget from $5,000 - $25,000 but the costs will vary depending on the context.

Principal costs are staff time and time required to organise venue hire (simulations can be run in one large room), teams of facilitators, airfares, and accommodation. A large multi-agency simulation will require two facilitators and a team of support staff; however, a single agency simulation may require one facilitator and two co-facilitators to play roles and manage the simulation.

How can simulations develop capacity?

“…The simulation can be considered successful…it met its objectives to test coordination and collaboration, identify capacity gaps and feed into national development planning, enhance teambuilding and trust, and assess leadership / management styles during an emergency…..”

Horn of Africa simulation facilitation team, April 2010

Simulations can be used to test and assess a number of different aspects of response capacity including:

1. Help organisations and managers map the capacity of a group or team of people and/or test behavioural competencies of a team or group.
2. Help organisations or managers to assess leadership or management styles in a crisis.
3. Review the effectiveness of previous training (i.e. Sphere, the NGO/Red Cross Code of Conduct or the ECB Good Enough Guide and national staff development programmes (i.e. the Consortium of British Humanitarian Agencies or the Expanding National Humanitarian Abilities (Context / ENHAncE) Projects).
4. Test the effectiveness of coordination activities (i.e. testing a joint needs assessment approach or previously agreed contingency plans, response protocols or established ways of working).
5. Analyze teamwork, communications and interaction between different stakeholder groups and agencies (understanding how others work under pressure).
6. Diagnose capacity gaps in a consortium / group of people.
7. Build trust in teams or groups of people.
8. Build understanding within a single agency team or inter-agency groups.
9. Train staff to run simulations
10. Helps participants develop new / refined skills, behaviours and competencies for an emergency situation.
The ECB Simulation in Bangladesh in early 2011, tested out a recently negotiated consortium emergency response protocol (as bullet point 4 above). The simulation highlighted some weaknesses in the protocol, which was subsequently revised as a result.

Simulations held in Bolivia, Bangladesh and Kenya provided an opportunity to look at capacity issues in each context. Generic issues were drawn out during the debrief which were then used by People in Aid and the Consortium of British Humanitarian Agencies to develop and contextualise the Humanitarian Staff Development Programs to each different country.

For example during the Bangladesh simulation debrief participants noted that there was little application of, or reference to, international standards during the simulated response. The Humanitarian Staff Development Programme course developers noted this and ensured that there was sufficient emphasis on Sphere and HAP standards during the subsequent training carried out in Bangladesh. Participants also noted that there were capacity gaps around needs assessment, so by subsequently linking the consortium with an organisation such as the Assessment Capacities Project (ACAPS) it has been possible to work on this perceived capacity gap and work towards improving needs assessment.

The simulation in Niger, in February 2011 identified a consortium-wide capacity gap in knowledge and understanding of Sphere standards and a need for further training on rapid needs assessment and data collection. As a result, a Sphere training event, and a needs assessment training event were organised by the consortia, the latter standing the agencies in good stead during a recent joint needs assessment supported by ACAPS in response increasing food insecurity in the country.

What impact does the Simulations Guide have?

“...Out of 30 country level survey responses received the ECB simulation guide scored 7.8 out of 10 in terms of its relevance to the work of respondents. In addition respondents who had attended ECB simulations also rated the quality of the events as 7.8 out of 10. Finally respondents rated the applicability of the tool to their work as 7.6 out of 10 …..”

ECB Project Mid Term Evaluation Report; September 2011; p17

As part of a commitment to capturing and using learning, the ECB Simulation Project collected data after each simulation. As a result, the project is collecting data and knowledge on the simulations implemented across the five ECB country / regional contexts.

The end users of the Guide are predominantly INGO staff from organisations such as Oxfam, World Vision and staff from International Organisations such as the Red Cross, as well as UN institutions such as the World Food Programme.

Data indicates that the simulations are appreciated by participants, facilitators and agencies working in disaster affected countries. All respondents to an evaluation of the 2010 Bangladesh simulation stated that they would recommend the Guide and that they would
use the simulation Guide again in their own agencies.

Evaluation data recorded that 78% of respondents during the 2011 Bangladesh simulation strongly agreed or agreed that the simulation helped to build intra- and inter-agency relationships. In Niger in 2011 respondents stated that the simulation supported them to conduct a joint needs assessment process.

The mid-term evaluation report of the ECB Project, delivered in September 2011, described the Simulations Guide as one of ECB’s ‘significant tools’. They concluded that the Guide is well received, the quality of the events strong and the application of the learning to participants’ day to day lives very high. For example during the Indonesia simulation evaluation in 2012 one participant reported that he would be using the tool to run a simulation with local partner organisations as a preparedness activity.

And this is in fact a critical point important enough to repeat; in a sector where so often there is a major gap between ‘classroom’-based theory and ‘field’ reality in capacity building initiatives, the ECB Project has strong evidence to suggest that the Simulations Guide continues to be a legitimate tool to bridge that gap.

What are the key recommendations for managing a simulation?

There are five key recommendations for future simulation organisers and facilitators:

1. **Start planning at least three months in advance:**

   **Box 1. Contextualising the Simulations Guide – The Bangladesh Experience**

   In Bangladesh the Lead Facilitator arrived in country many days before the event and prepared for the simulation through discussion with the ECB Field Facilitator to understand the local context. This involved learning in which districts ECB agencies were operational. The Lead Facilitator then deliberately ensured that the simulated hazard (Cyclone Giri) struck districts in which ECB agencies had a presence and districts that didn’t. This naturally forced agencies to deal with an out of area response and enabled important lessons to be gathered during the debrief about how agencies would handle this in reality.

   Learning and debriefing carried out by ECB simulation organisers and facilitators has consistently highlighted that the time required to organise a simulation – particularly a multi agency initiative – is frequently underestimated. The ECB Project suggests that ninety days provides adequate planning time. This provides enough time to agree on the objectives of the simulation, source facilitators, book venues, select and invite participants and undertake the training needs assessment. This also provides time for the facilitation team to research the country context and contextualise the ECB simulation to this context.

   When conducting a multi-agency simulation, time is also needed to negotiate financial and resource contributions from participating agencies. The ECB Project supports the appointment of lead agencies for simulation activities. The lead agency takes responsibility
for coordinating the simulation arrangements and this includes developing budgets, facilitation teams and agreeing venues.

Experience has shown that where planning has been carried out at the last minute, the quality of the event has been compromised, including poorly selected participants, a simulation that has not been adequately contextualised, and a lack of understanding from participants of the objectives of the simulation. This can be a frustrating and costly outcome for all involved so it is much better to factor in adequate preparation time from the beginning.

2. Get the budget right:

Cost can vary considerably depending on where the simulation is held and can range from $5,000 to $25,000. Good experienced facilitators can make a big difference to the quality of the event, and are worth the extra cost – if you are going to get 40 people in an event, it is worth ensuring you have capable, experienced facilitators to manage the event. Cost-sharing amongst agencies must be agreed as early in the process as possible so that any issues or tensions can be resolved before the planning progresses too far.

Learning from the ECB Project suggests that the development of a transparent budget can help to reduce tensions. The budget should highlight both financial contributions from agencies, but also in-kind contributions such as the provision of facilitators, support staff, agency time or physical venues (large meeting rooms that are used in the simulation, for example). This not only gives fair representation to all the contributions to the event, but also provides the opportunity to keep a track on real costs, and therefore improve planning for future events.

Wherever possible the ECB Project tries to use local capacity in managing events – for example in Bangladesh in 2010 the two international facilitators were supported by two national staff. Not only is this the most sensible and sustainable solution, but it also keeps costs as low as possible. National staff are also able to better contextualise the simulation guide and make the event more realistic for participants.

Participants can be encouraged to bring their own laptops to the event so that, if in the event the simulation is adopting the use of real time email, hire of equipment is not necessary. Printers can also be borrowed from participating agencies for use by the simulation facilitation team – these are examples of support and contributions in-kind, that can be factored into the budget and that keep costs as low as possible.

3. Get the right people in the room:

A successful and useful simulation is dependent on having the right people in the room, particularly for a multi-agency simulation. Senior staff should not delegate attendance to another staff member as this is unlikely to happen in an emergency – simulations need to have decision-makers in the room in order to role-play decision-making in an emergency response. A country director or deputy director accompanied by at least two other key humanitarian staff from the same agency are the ideal participants for a multi-agency event. This helps to ensure that the simulation reflects reality and that any recommendations drawn from the debrief can be acted upon. Less than three participants from each agency may result in participants having to merge to create a fictitious agency, which is obviously not ideal when trying to “game” a real emergency response. Creating a fictitious agency seriously hampers the effectiveness of the debrief too and will result in very little organisational learning that the participants can take back to their respective
agencies.

4. **The debrief is the most important part of the simulation:**

If the individual participants, and the agencies, are to make the most of the simulation experience, participants must be fully engaged in the simulation and understand that the debrief is the most important part of the event.

The debrief provides an essential space for reflection on opportunities and recommendations to improve practice. Inconsistent and sporadic attendance is one of the facilitators’ biggest challenges and can seriously impact the quality of a simulation. The quality of the debrief suffers too, and agencies are less likely to learn or to identify important agency specific recommendations if they don’t have the participants available for the whole event.

For example the simulation debrief conducted in Bangladesh in September 2011 provided a key moment for participants when it became clear that some elements of a consortium contingency plan that had been developed previously were not appropriate for the consortium. The debrief provided an opportunity to reflect on this, and for participants and decision makers to suggest revisions. The plan was subsequently revised into a more workable document for agencies.

In addition the simulation held in Indonesia in 2012 was also used to test a consortium contingency plan and an established joint needs assessment process. The simulation revealed that the consortium contingency plan needed to be better socialised within participating agencies so that all staff were aware of the obligations on each agency within the consortium during a future response. Consequently a smaller, local language handbook version of the plan is now in production to help with this. The simulation also helped the consortium identify some issues with the joint needs assessment online database which were subsequently fixed in collaboration with the IT company that had developed the database.

5. **Experienced facilitators are essential:**

“...Simulations provide overwhelming and controversial information. This is very close to real life emergencies. I have had the experience in one of our recent ECB Simulations where a participant decided to give up responding to the incoming requests. When I asked if he was OK, the participant said to me “it’s too much just for me to handle all those requests”.....”

Soso Bagashvili, ECB Simulation Facilitator

Skilful facilitators are needed to not only implement the simulation itself but also to create a delicate and important balance with the tone of the simulation. Participants need to feel that they are in a safe space, that they have the confidence to be honest about their performance. The simulation must keep moving at a difficult but manageable speed – to ensure that the simulation keeps the pressure on and that it mimics reality, but does not set
people up for failure.

The role of the simulation facilitator is to ensure participants feel stretched and challenged but in a way that enables positive learning to be established. This requires a specific skill set in a facilitator. ECB simulation organisers have acknowledged this and attempted to put a simulation facilitation team together with complementary skills – one facilitator who is experienced in developing the simulation timeline and taking participants through the simulated response and another facilitator who takes the lead during the second day debrief when an ability to manage large groups and ensure learning is explored and captured, is a key requirement.

The ECB Simulations Guide is an instruction booklet, but it does require a certain degree of skill to interpret and contextualise the guidelines. It is also essential the facilitators can adapt the simulation as it evolves either to reduce or increase complexity, to reflect the capacity of the participants. It is important that the simulation is not a negative experience for participants, especially if they possess the wrong skills, capacity or profile for an emergency response, as it will not encourage participants to engage in emergencies in the future.

See Box 1 to see a brief example of how this was done successfully given the requirements and capacity of participants and agencies in Bangladesh.

Where it was not possible to accurately contextualise the simulation to the country (due to time constraints for example), it is possible to run a simulation based on a fictitious country. This can have an advantage as the facilitator can have full control over the situation and the role of key actors. The ultimate downside is that participants generally do not feel that the simulation is ‘real’ which can often detract from the learning during the debrief as participants tend to question whether a simulation event or simulated inject would or wouldn’t have happened in their context rather than focus on the transferable learning that it provided.

The Road Ahead

“…You must integrate the possibility to invite the key players (UN agencies, other NGO’s, Government representatives) in any future simulation exercises. These exercises must be as close to reality as possible….”

Facilitators debrief feedback from Lucien Simba, UNOCHA and ECB Simulation Facilitator

Funding is available from the Directorate General for European Affairs (ECHO) to run five more simulations, one in each of the ECB consortium countries, towards the end of 2012. These simulations will be used as an opportunity for participants to apply learning gained from other capacity building programs, such as the ENHAnce project (Expanding National Humanitarian Ability Project, led by Oxfam GB) and will be tied to the behavioural competency framework arising from the Consortium of British Humanitarian Agencies program.
Greater efforts will be made by ECB consortium agencies and simulation organisers to engage key stakeholders such as UN, donor and government staff in future simulations to better reflect a realistic response. The simulation in Uganda included government, UN and INGO participation and was successful in building closer relationships between these important responders in country. The pre-positioning of relationships is an important principle of the ECB Project, and simulations are a great tool to develop trust and relationships.

In addition, the ECB Project is collaborating with the United Nations Inter-Agency Standing Committee (UN-IASC) Sub Working Group on Preparedness. The UN-IASC shared its roster of trained simulation facilitators and discussed the potential for collaborating on the development of an online simulations resource. The resource would include toolkits, formats and templates, learning and guidance for people interested in running simulations in their respective agencies / countries.

The Haiti earthquake in 2010 highlighted to the international community the importance of effective coordination in an urban response environment. With more people now living in cities than in rural areas, and increasing frequency of disasters, urban response is likely to be a continued consideration for humanitarian agencies, going forward. Simulations are an excellent preparedness tool to help bring different stakeholders together – be they government staff, emergency services, or search and rescue teams – and to help responders build relationships and test out ways of working in a safe environment. Simulations are the ideal tool to help equip emergency workers with the tools, skills and experience they need to respond to the challenges ahead – particularly providing effective coordination and communication during a disaster in both rural and urban areas.

Acknowledgements

About the authors: David Hockaday is the Global Field Project Manager for the Emergency Capacity Building Project. David is responsible for coordinating the ECB Simulations Project and is chair of the ECB Simulations Reference Group. Sarah Lumsdon is Strategic Project Manager for Management and Coordination in Oxfam’s Humanitarian Department and is a member of the ECB Simulation Reference Group.

The authors would like to acknowledge the input and hard work of many people to develop this collaborative case study. To all intents and purposes the authors have simply tried to capture the wisdom, experience and learning of the following simulation and collaboration heroes; Gareth Price-Jones (Oxfam GB), Soso Bagashvili (Save the Children), Lucien Simba (UNOCHA), Kwok Lee (Oxfam GB) and Richard Jacquot (Mercy Corps).

We have made every effort to edit and compile this document to a high quality. However, all errors and mistakes are those of the authors alone.

About the Emergency Capacity Building Project

In order to address the challenges of humanitarian response, a consortium of seven NGOs formed in 2003. These seven agencies—CARE International, Catholic Relief Services, International Rescue Committee, Mercy Corps, Oxfam GB, Save the Children and World Vision International—formed The Inter-Agency Working Group (IWG) on Emergency Capacity.

Phase II of The Emergency Capacity Building (ECB) Project spans 2008 to 2013 and
aims to improve the speed, quality, and effectiveness of the humanitarian community to save lives, improve welfare, and protect the rights of people in emergency situations. With five years of additional funding support from the Bill & Melinda Gates Foundation, and new project grants from the Directorate General for Humanitarian Aid and Civil Protection (DG-ECHO), USAID (OFDA), the Department for International Development (DfID/UKAID) and numerous private donors, the ECB Project is in the middle of an ambitious second phase.

The ECB case study series seeks to document and share ECB’s work and learning with the humanitarian community. The series includes case studies of how the ECB Project functions and its programmatic work in technical areas. Follow this link for more information on the ECB case study series.

As part of our commitment to sharing learning, material in the ECB Simulations Guide (and all other resources on the ECB website) can be downloaded for free and adapted for single- and multi-agency simulations.

For further information, please email info@ecbproject.org

Visit www.ecbproject.org/simulations to review the following relevant resources

ECB Simulations Administrators Guide – Single Agency and Multi-Agency

ECB Single Agency Simulation materials ZIP files

ECB Multi-Agency Simulation materials ZIP files

ECB Simulation Training of Trainers Guide