Final Report
Rapid Environmental Impact Assessment in Disasters Project
(Phase I)

USAID Grant # HAD-G-00-02-00118-00

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May 2004

Executive Summary

This report covers the Rapid Environmental Impact Assessment in Disasters (REA) project. The project was intended to formulate and test a process to quickly identify and assess salient environmental issues in disasters, and to develop and test a training module for the REA process.

This report addresses specific OFDA/USAID reporting requirements but covers project activities since initial funding was received from UNEP/OCHA in August 2001 and includes project activities funded by the Royal Norwegian Ministry of Foreign Affairs. The project was executed by Benfield Hazard Research Centre, University College London, (BHRC) and CARE International. InterWorks developed the training materials.

The project was divided into two parts: (1) Development and field testing of a rapid environmental impact assessment in disasters process and (2) Development of training materials on the REA process. Field tests of the REA were conducted in Afghanistan, Ethiopia and Indonesia. Tests resulted in a significant evolution in the REA process from a limited focus on external assistance organizations to a broad coverage including community input. The field tests indicated the basic REA process worked, although improvements in the process and related documentation were needed. REA training events were held in Norway, Guatemala and India. Each event led to improvements in training materials and suggestions on improvements the underlying REA process. A set of training materials (Trainer's and Participant's documents, eLearning CD) were produced during the project. Key project documents, including the REA Guidelines and training materials are available on the project web site www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_index.htm.

The project met most, but not all, of the output indicators. The project was successful in developing the REA process and tools and related training materials, but the uptake of the REA was less than anticipated. REA results produced during the field tests did not appear to have any significant impact on on-going disaster response activities. Use of the REA in other disasters was not reported.

An evaluation of the project was critical of aspects of project management and identified changes to the REA product and process to facilitate the assessment process and use of the assessment results. Some of the recommended changes parallel improvements identified by the project and include: (1) Simplify the REA process, (2) Make the process location-specific, (3) Integrate the REA into other assessment tools, (4) Make the Guidelines easier to use, (5) Improve the availability of information on the REA, and (6) Expand the variety of training products. These changes are being incorporated into a second phase of the project.

In summary, the project was successful in developing, testing and producing training materials on a process to rapidly identify environmental issues in disasters. Further work remains in improving the usability of the REA process and assessment results.

Introduction

This is the final report on the Rapid Environmental Impact Assessment in Disasters (REA) project, Phase I. The REA project was developed to formulate and test a process to quickly identify and assess salient environmental issues in disasters, and to develop and test a training module for the REA process.

The REA project was a collaborative effort of Benfield Hazard Research Centre at the University College London, (BHRC) and CARE International with financial support from the joint United Nations Environment Program (UNEP) and Office for the Coordination of Humanitarian Assistance Unit (OCHA) unit, Royal Norwegian Ministry of Foreign Affairs (MFA) and OFDA/USAID (OFDA). InterWorks developed and tested the training materials.

Details on the organization, funding, activities and outcomes of the project are provided below, together with key lessons learned. Also included are recommendations of an evaluation conducted at the end of the project. A concluding section brings together the accomplishments of the project, the lessons learned and evaluation results. Annexes to this report provide background to the project and a chronology of project-related activities.

Key project documents are available on the project web site www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_index.htm. The Guidelines for Rapid Environmental Impact Assessment in Disasters, the REA Quick Guide, detailed reports on field tests and trainings and background papers prepared on rapid environmental impact assessment in disasters can be found at this site. The site also contains a literature list on disasters and the environment based on a similar shorter document contained in the Guidelines. Unless otherwise noted, all documents referred to in this report can be found on the web site.

This report was drafted by Charles Kelly (BHRC) and edited by Jock Baker (CARE USA) with input from Paul Thompson (InterWorks), Sigrid Nagoda (CARE Norge) and John Twigg (BHRC). A draft report was circulated to key participants for suggestions and comments before a final draft submission to OFDA/USAID[1].

Although prepared as a specific requirement under the OFDA/USAID funding, the report covers activities since initial funding was received from UNEP/OCHA in August 2001. Performance indicators in the OFDA grant to CARE are specifically addressed in terms of OFDA-funded and overall project activities.

Project Organization and Funding

The key project staff and their responsibilities are summarized below. Other persons involved in the project are listed in Annex A.

1 On acceptance by USAID, the report will be posted on the project web site.

Key Project Personnel

Person	Organization and Involvement
Charles Kelly	BHRC, Lead Researcher
Mario Pareja	CARE, later BHRC, Environment Specialists.
John Twigg	BHRC Project Officer
Jock Baker	CARE REA Project Manager
Paul Thompson	InterWorks, lead developer of training materials.
Sigrid Nagoda	CARE Norge Project Officer, involved in conceptual discussions on REA development.
Debbie Williams	BHRC, initial REA conceptualization and funding

The project used a collaborative management approach. The initial collaboration structure was established between Kelly and Pareja (at the time working for CARE USA). Both worked together on developing and promoting the rapid impact assessment, with Pareja focusing in internal (CARE) discussions and Kelly focusing on external funding.

Direct funding for the REA was first secured in August 2001 from UNEP/OCHA. A summary of funding sources, values and activities is provided on the next page.

Initial funding was provided to Kelly on a consultant fee basis. Administrative details were handled directly by Kelly with UNEP/OCHA. Activities were coordinated with Pareja.

Funding from the Royal Norwegian Ministry of Foreign Affairs (MFA) was provided through CARE Norge on a direct reimbursement basis to Kelly, BHRC and Thompson. Nagoda was the project officer for this funding and was involved in discussions on the development of the REA.

Funding Sources and Values

Source (period)	Activities	Value
UNEP/OCHA (8/01 – 1/02)	REA Development	$25,000
Royal Norwegian Ministry of Foreign Affairs (12/01 to 5/03)	REA field tests (Afghanistan and Ethiopia) and training (Oslo)	$49,490
OFDA/USAID (7/02- 2/04)	REA field test (Indonesia) training (Oslo, Guatemala and India)	$206,305
CARE US	REA design and liaison	(Not fixed)
Total (approximate)		**$280,495**

Arrangements for the Afghanistan and Ethiopian REA field tests (funded by MFA) were made collaboratively by Kelly and Baker in consultation with Pareja, Nagoda and the respective CARE country programs. Arrangements for the first REA training (partially funded by MFA and OFDA) were made by CARE Norge[2], with the participation of Kelly, Thompson, Baker and Pareja.

The OFDA/USAID grant to CARE was handled by Baker through a contract with InterWorks and a sub-grant to BHRC. Liaison with OFDA was handled by CARE on administrative issues and Kelly, Baker, Pareja on technical issues. InterWorks and BHRC (Twigg) dealt directly with CARE USA on sub-grant/contract matters.

The Indonesian field test (financed by the OFDA) was coordinated by Baker, Pareja, and Kelly in consultation with CARE Indonesia. InterWorks and Kelly worked together on transforming the REA process into training modules (funded by OFDA). The second and third REA training events were fully funded by OFDA[3] and developed as a collaborative effort of Baker, Kelly and InterWorks, in consultation with the respective CARE country offices.

Kelly and Pareja, and to a lesser degree Thompson, Nagoda and Baker, were involved in promoting the REA throughout the project. These efforts were only partially financed with OFDA funds.

The project operated through a relatively flat and efficient organizational structure. Effectively, Kelly led development and testing of the REA, InterWorks led the development of the training materials, Pareja (initially), Baker and Nagoda led coordination within the CARE system and management of respective funding. All parties were involved in planning and organizing training events.

The lack of a single focal point for all project activities does not appear to have posed significant problems in project management. The project's loose organization had the advantage of allowing different funding sources to be brought into the project while minimizing administrative overhead involvement and costs.

However, there were two areas where activities needed adjustment during the project. The first was in arranging training events[4]. Initial arrangements were for CARE USA to backstop the REA training since CARE country offices were seen as the best vehicle through which to arrange country or region-level training.

This arrangement was not workable due to staff changes. As a result, the training site selection and organization process evolved into a collaborative effort between CARE USA, BHRC and InterWorks. This was particularly the case for the Guatemala and India events.

This collaboration was successful in large part because of good communications and the willingness of all parties (and particularly country-level offices) to be flexible and accommodating in making good arrangements on short notice. However, the project only involved three training events. A more ambitious training program would have required a single

2 Nagoda was on maternity leave during the Oslo REA training, and a number of CARE Norge staff were involved on organizing the training.
3 OFDA funds were also used to cover consultant costs for the Oslo training.
4 The LFW/Konark training was organized directly by Kelly with LWF.

point-of-contact to coordinate all the training activities.

A second area of adjustment was the management of administrative issues between BHRC, CARE USA and CARE Norge. Basically, each institution had their own procedures. After some effort, these procedures were harmonize and produced a satisfactory flow of financial information and reporting from BHRC to CARE.

Project Activities

This section summarizes project activities as they related to the major objectives of the project, and other activities undertaken but which were not initially planned as part of the project. A number of lessons learned are included at the end of each summary.

REA Development and Field Testing

The basic objective of this element was to **establish a Rapid Environmental Impact Assessment (REA) process for disaster situations**. Activities under this objective are summarized at right.

REA Development Tasks

- Establish a REA procedure.
- Test the REA during three different types of disasters in three different locations.
- Revise the REA as per test results.
- Consult with an Advisory Board.
- Submit the REA Guidelines for consideration as a good practice model for identifying and evaluating environmental impact during disasters.
- Publish the REA/Guidelines and make it available at selected web sites.

REA Development

Creating the REA procedure involved a fixed price consultancy funded by UNEP/OCHA. The process involved consultations with NGOs, donors and international organizations and a field visit to Orissa India to discuss disaster response conditions and environment-disaster concerns following a major disaster.

The result of this work was a draft Guidelines for Rapid Environmental Impact Assessment in Disasters. The draft was reviewed by the project Advisory Board[5], which noted a number of gaps, including:

- The lack of sections on disaster and relief aid impacts on the environment,
- The need to identify pre-disaster and external conditions which would affect the REA process and results, and,
- Input from disaster survivors and neighbors was not specifically included in the assessment process.

These issues were addressed by expanding the number of sections and detail in the REA. Following these changes, a Guidelines version 1 was released for comment and field testing.

Afghanistan Field Test

The first test of the REA took place from mid February to mid March 2002 in Afghanistan in cooperation with CARE Afghanistan with funding from MFA. The change of government in Afghanistan had led to a significant increase in funding and relief and recovery activities. The operational expansion was seen as an opportune point to establish a based-line on environmental issues to proactively incorporating these issues into new plans and projects.

The assessment was led by Kelly and involved a series of assessment and review meetings with a group of mid and senior level CARE staff. These meetings were interspersed with visits to project sites and contacts with other organizations working in Afghanistan. A community level

5 See Annex A or www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_index.htm, for names and background of the Advisory Board members.

assessment was also planned, but was not possible due to insecurity. A detailed report on the field test *(Rapid Environmental Impact Assessment: Field Test Report: Afghanistan*) can be found at the project web site.

The REA identified environmental issues and reached consensus as to which were of greatest importance. Changes to the forms and format of several REA sections were identified, and difficulties of completing the REA process in English with participants who were not fluent in the language were noted. Participant feedback indicated that the REA results tended to be male oriented and the process was time consuming given the other demands on staff in Afghanistan.

Operationally, the assessment didn't appear to have any impact on CARE activities. Environment-disaster issues were identified but no action is reported to have been taken. Clearly, some issues required technical advice not available in Afghanistan. It was also unlikely that some suggested changes to projects would find easy funding.

A more fundamental issue was that all organizations in Afghanistan were facing already significant program management demands and had limited capacity to deal with (or interest in) environment-related issues. In the words of one senior UN staff, the environment just wasn't a priority given the other critical issues facing the country.

The Cost

CARE Ethiopia raised the issue of the cost of a REA. The local costs of the Awash assessment (15 days) including the counterpart and a driver but not lead researcher was approximately $2,500 (salary, per diem, travel costs). This assessment covered a limited area and population.

The cost of the 14 day assessment in Indonesia was $7,900 (12 persons, per diem and transport costs, excluding consultant costs). This cost was similar to doing other assessments in Indonesia.

Piggy-backing the REA onto another assessment would get more comprehensive results at marginally greater cost. This is a recommended approach for completing an REA.

The cost of an expatriate consultant to lead the REA suggests that building local capacity to do an REA is more cost effective than waiting for a disaster and having to call in a consultant to train staff and lead a REA.

This reaction raised the basic question as to whether a REA can contribute to avoiding environmental problems during or after a disaster. The Afghan test suggests it unlikely a REA will have any impact on disaster plans or operations in the absence of strong local demand for input on environmental issues.

A review of the test with CARE Afghanistan highlighted concerns (1) about the time needed to complete the REA process and (2) whether the REA was too complex for someone who was not an expert in the process. This latter point was addressed in subsequent tests. Reducing the time demand of the REA was a continuing project focus.

Further, the outside review identified the need for local buy-in to the REA process, and led to a shift in test design to testing the REA with a counterpart rather solely by the lead researcher. This shift had the additional advantage of making the subsequent field tests more realistic in terms of use of the REA by non-specialists.

Ethiopian Field Test

The Ethiopia field test was conducted by Kelly from mid-August to mid-September 2002 in cooperation with CARE Ethiopia and with funding from MFA. In addition to testing the REA process, a community level assessment was also included (at the request of CARE Norge) and an effort was made to have the assessment process done by a local counterpart (Samuel Tadesse) to the degree possible. A full report on the field test (*Rapid Environmental Impact Assessment Field Test Report: Ethiopia)* is available on the project web site.

The assessment covered the Awash/Awash Fentale areas of east central Ethiopia. At the start of the assessment this area was considered to be one of the most severely drought affected areas in Ethiopia and was coincidently the location of a CARE project involving natural resource management.

The field test involved an assessment session in Addis Ababa with CARE staff (led by Kelly), followed by the same assessment process conducted by Tadesse with CARE project staff in Awash. For the community assessment, the tables in the REA were converted a set of questions and administered to four communities by the counterpart and other CARE Awash staff.

The results of the staff-level and community assessments were then consolidated and discussed with the CARE management staff and the Awash project manager (on two occasions) and formulated into an emergency project proposal by the lead researcher at the request of CARE Ethiopia. As opportunities were available, consultations were also held with government, NGO and IO officials in Addis Ababa and the field.

The test demonstrated that someone with no specific background and minimal training, but with some mentoring, could complete the REA process. The assessment quickly identified salient issues which were then incorporated into a draft emergency project proposal[6] to the satisfaction of the Awash project management. Discussions with the government and several NGOs indicated an interest in taking the generic REA process and refining it to focus on typical disasters and response mechanisms in Ethiopia.

The community assessment was more successful than expected (although getting gender-differentiate input was not always possible). The positive community assessment experience indicated the REA process should include both organizational and community input.

Changes to the form and format of the Guidelines materials were suggested and made during the field work. Clearer guidance was also needed on how to conceptualize actions to address issues identified in the assessment.

Language again posed a challenge. However, Tadesse and other CARE staff translated key parts of the REA process on-the-fly, so that staff not fluent in English could fully participate in the organization assessment. It also turned out that Tadesse and key participants in the community assessment spoke a common language. In most cases, questions went from English to a local language for further discussion by community members.

Indonesian Field Test

The Indonesia field test was conducted in January 2003 with the cooperation of CARE Indonesia and funding from OFDA/USAID. The project lead researcher and environment expert

6 The project was not funded but aspects were included in relief activities by CARE and other organizations.

(Pareja) managed the test. The assessment took place in Central Kalimantan and coincided with the start-up of two projects to address the impact of fires on the region. (See *Rapid Environmental Impact Assessment Field Test Report: Indonesia* on the project web site.)

This field test continued the trend of having local staff conduct the REA and incorporated a community assessment effort. After an initial (and unfortunately too short) introduction to the REA for CARE staff, the lead CARE counterpart (U. Suparman), led an organizational level assessment meeting involving CARE staff, government and NGO organizations working in Central Kalimantan. This assessment meeting took considerably longer than anticipated, particularly because the REA process was not available in Bahasa Indonesian and most participants were not at ease working in English.

The organizational assessment[7] was followed by team assessments of 13 communities using the Ethiopian questionnaire, translated and adjusted for Indonesia. The organizational and community assessments were then consolidated to generate a prioritized list of issues and actions. These were then linked to the possible improvements in the to-be-started projects. The assessment results were also presented to the individuals who had participated in the original organizational assessment for comment.

The community assessment process worked better than the initial organizational level assessment, largely because staff were familiar with community assessment methods and were working with a document in Bahasa Indonesian. The consolidation process did experience difficulties in handling more abstract environmental issues (e.g., sustainability), a problem also noted in Ethiopia. At the same time, the results of the community and organizational assessment process identified clear and salient issues with relevance to the to-be-implemented projects. These results were obtained with minimal input from the lead researcher.

Gender and the REA

In Afghanistan, female CARE staff were involved in the assessment, but feedback indicated the assessment did not cover some female-specific concerns. Subsequent Guidelines revisions emphasized the need to consider gender perspectives in the assessment process.

In Ethiopia, one of four community groups surveyed included female members. According to the information collected, there were no significant differences between men and women with respect to environmental concerns expressed.

In Indonesia, there was one women on each survey team and men and women were included in groups met during the survey. Teams used a variety of mechanisms to "hear" women=s as well as men's views. Gender-differentiated views were recorded but not tagged as such at the consolidation and analysis stage. Tagging is useful if those doing an assessment want to track issues, actions and post assessment assistance outcomes by gender.

Evolution of the REA Guidelines

The Guidelines were significantly reorganized following the Indonesian test. The organizational and community level assessments became equal parts in the REA process. More guidance was provided on how to conduct the assessment, including details of options and alternatives which could be used depending on local conditions. The reorganization and rewriting of the Guidelines was completed in mid-March 2003 and the resulting document (version 3) shared

7 As originally conceived, the REA focused on relief organizations. Subsequent to the Indonesian field test, the REA was restructured to cover both organizations providing external assistance (the organization level assessment) and communities (the community level assessment).

with InterWorks and the Advisory Board.

Further, generally minor, changes were made to the Guidelines following training activities which identified specific changes useful in improving process documentation.[8] In particular, getting the terminology and format of the rating tables used in the organizational level assessment acceptable to all users has been a continuing challenge.

There has also been a tendency to include more detailed instructions and background information in the Guidelines. This improves the document's usefulness, but also leads to a physically larger document, which leads to comments that the REA is too big. As one way to address the size issue, a REA Quick Guide, providing only the assessment forms and completion instructions, has been produced (see web site). The Guidelines have also been translated into Spanish, an outcome not initially funded under the project.

The Guidelines have been shared with OFDA/USAID through a number of meetings and in a submission to include the REA as part of a revision of the OFDA Field Operations Guide (FOG). However, links to specific projects are not being included in the revised FOG and it is expected that only general reference will be made to the need for environmental assessment.

In summary, a process to assess and identify salient environmental issues during disasters has been developed and field tested. These tests resulted in significant changes and improvements to the coverage of the REA. The addition of a community assessment component significantly expands the usefulness of the REA and opens the possibility that communities themselves can conduct rapid environmental impact assessments.

The REA can be completed under field conditions with minimal training and experience. However, it is clear that training and experience in managing meetings and community assessment significantly reduces the workload needed to complete the REA process.

Changes to the Guidelines, particularly to further clarify terminology and process, continue. Localization of the REA (simplifying the Guidelines to local conditions) to conditions in countries or regions (as well as translation) should reduce the need to make continual minor changes to the core Guidelines document.

A significant ongoing issue is refining the REA process to be as user friendly as possible for field personnel during disasters. The localization process, training (discussed below) and incorporating the REA into other assessments (suggested during the Indonesian field test and promoted during the training), all are routes to this end.

The other significant issue is how to facilitate the incorporation of assessment results into on-going activities. This was not done in Afghanistan, only partially done in Ethiopia and proposed but not confirmed in Indonesia.

REA Training Module Development and Testing

The objective of this component was to **assure the adoption of the REA and environmental considerations in disaster response as best practices by IOs and NGOs** through the tasks

8 The Guidelines are currently at version 4.2.

identified in the box at right.

Work under this objective was largely accomplished by InterWorks under contact to CARE with funding from OFDA/USAID. Training events were coordinated among CARE US, CARE Norge, country offices, InterWorks and BHRC.

Initial development of the REA training modules began with a consultation between the lead researcher and InterWorks in October 2002. In February 2003 the lead researcher spent two weeks working with InterWorks on how to turn the Guidelines into a training course. This rather intensive consultation was needed because the Guidelines had evolved significantly from the initial (January 2002) design and, following the Indonesian field test, was significantly modified and reorganized, as discussed above.

Training Tasks

- Compile background information relevant to disaster management and environmental impact assessment.
- Draft course work and a training plan covering the REA, including a stand alone module and self-study course.
- Present training materials in three training courses.
- Publish the training and background materials.

The initial outline for the three day face-to-face training module provided for one day devoted to disaster concepts, one day to the REA process and one day for a table top exercise. However, based on the field test results and the post-Indonesia Guidelines, it was decided to focus most of the training on the details of completing each element of the REA.

This approach was adopted because a REA can seem to be a formidable challenge given the perceived complexity of dealing with the environment and a disaster at the same time. The REA training needed to highlight the simplicity of the REA approach.

The InterWorks approach was to break down the REA process into easily understandable tasks and then to reinforce understanding of these tasks though exercises. This approach was seen, and proved, to be effective in teaching participants in how to complete the REA process despite an initial reaction that the process was extremely complicated. The materials produced by InterWorks included a Participant's Workbook, PowerPoint® presentations and a Trainer's Guide that included case studies, problems and small group exercises.

OIso Training

The initial time line for the development of the three day module was quite short. The first two training events occurred in April 2003. The first training was conducted in Oslo, Norway (funded primarily by MFA with additional OFDA support) from April 8 to 10 2003. Most of the 10 participants were from academic or development institutions in Norway, although one participant came from CARE Madagascar and one from Lutheran World Federation in Geneva. One participant was a private sector professional trainer specializing in environmental impact assessment. The training was led by Paul Thompson (InterWorks) with Becky Myton (CARE Honduras and Advisory Board member) as co-trainer and Kelly (BHRC) as observer.

The training was successful for the first use of a training module. As was expected, a number of issues relating to the training materials and the structure of the REA Guidelines were noted

during the training and through feed-back from the participants. However, none of this input indicated the need for substantial changes to the training approach or the Guidelines. A full report on the Oslo training is available from the project web site.

Antigua Training

The second training was organized under the auspices of CARE's CAMI project (coordinated by Rigoberto Giron of CARE Honduras) and held in Antigua, Guatemala April 23 to 26 2003. A total of 21 participants from NGOs, IOs and governments in Guatemala, Honduras, Nicaragua, and El Salvador attended.

The training was led by Charles Dufresne (InterWorks), with Mario Pareja (BHRC) and Becky Myton as co-trainers and Kelly as observer. This training also went well, with the up-take of the REA more easy on the part of the participants than in Oslo. Participant feed-back suggested that the REA process was similar to other rapid assessment procedures used in Central America and participants had high expectations of using the REA in future disasters.

One significant challenge of the Antigua training was that it had to be presented in Spanish. Unfortunately funding to translate the Guidelines and Participant's Workbook into Spanish was unavailable, so the training sessions had to be delivered using only Spanish Power Point® slides and handouts. In fact, the training would not have been possible without the Spanish language skills of Dufresne, Pareja and Myton, together with the willingness of Pareja to translate Guidelines forms on the fly into Spanish.

Subsequent to the Antigua training a decision was made to translate the Guidelines into Spanish with OFDA/USAID funds available through cost savings in other activities. The translation is being completed at the end of the project. It will be posted to the project web site and distributed to Antigua training participants.

A number of possible changes to the training materials and REA process were identified during the training and subsequently incorporated into the respective documents. A full report on the Antigua training is available from the project web site.

Bhubaneshwar and Konark Trainings

The third training was held from November 12 to 17 2003 in Bhubaneshwar (Orissa) India under the sponsorship of CARE India and Sphere India. The 35 participants come from state and national government offices, NGOs and IOs staff in India as well as from NGOs in Sri Lanka and the US.

The classroom sessions were led by Thompson (InterWorks) with Samuel Tadesse (CARE Ethiopia) as a co-trainer, and Jock Baker (CARE) and Kelly as observers. At the request of CARE, the training was expanded from three to six days to include the classroom based module and a three day application of the REA to an actual disaster, flooding which had occurred in August 2003.

The classroom sessions followed the REA training module process used in Oslo and Antigua. The field application of the REA was organized collaboratively with CARE India staff and involved one day on the organizational level assessment and preparation for the community level assessment, one day for a community level assessment by four teams working in four

communities, and the final day to consolidate and synthesize results and develop an action plan.

A report on the classroom component of the Bhubaneshwar training can be found on the project web site. In general, the training went well, although there were challenges posed by widespread use of mobile phones during the training and somewhat erratic participation posed significant problems for the trainers. Participant feedback was positive. Additional changes to the Guidelines and training materials were identified, as was expected.

The practical sessions on the REA were documented internally by CARE India and were considered to be relatively successful in demonstrating how the REA can be used in disaster conditions, and building participant confidence in the REA process. At the same time, the sessions highlighted several points to be considered in future practical sessions, including:

- Participants need to be provided with adequate background information on the disaster being assessed during the practical session.
- The methods and procedures used for the community assessment need to be consistent across teams to produce comparable results and documentation for later use in relief planning and evaluation.
- There were outstanding flood-related needs in communities assessed but no resources available to the NGO network in Orissa for additional assistance. This made it hard for participants to develop a realistic action list. The situation may also have led to unrealistic expectations on the part of the communities assessed.

Despite these points, the practical session in Bhubaneshwar provided a good test of the idea and approaches to adding a practical use component to the REA training. These lessons have been incorporated into the next phase of the project.

An additional one half day training took place on December 12, 2003 at Konark (Orissa) India in conjunction with a LWF regional Disaster Preparedness training workshop. The 28 workshop participants[9] came from Africa, Asia, and the Western Hemisphere.

This half-day session, conducted by Kelly, covered the essentials of the REA process and focused on the organizational level assessment. The community level assessment process was also discussed in relation to actual community level assessments done by participants earlier in the workshop. The Konark session indicated that a one-half day session can be useful in providing a hands-on familiarization with the REA process, although such sessions need to be formulated for the intended audience. A report on the Konark session is available on the project web site.

eLearning Module

The development of the eLearning module (led by Dufresne) occurred concurrently with the training events. An eLearning module is designed to train individuals without the need for classroom time or monitoring of the training process.

Since the eLearning format is static once developed (as opposed to a face-to-face where the instructor can change and adjust training materials), full development was not possible until the

9 One participant had participated in the Bhubaneshwar training.

face-to-face training materials had been tested. Thus, the completion of the eLearning module to a test stage was not possible until after the Bhubaneshwar training.

Training-Related Issues

A number of issues arose during the training module development and testing. One of the most significant was the changes to the Guidelines, around which the training was built. As noted, the February 2003 version of the Guidelines was significantly different than the January 2002 version, which left InterWorks with little time to re-organize their training strategy and develop appropriate materials and exercises. As an additional twist, the Antigua training, being done in Spanish but without prepared text in Spanish, wasn't an ideal test of the basic training module (although it was a successful training event based on participant feed-back).

As a result, the basic three day module required continual tweaking to respond to participant input and additional minor changes to the Guidelines (themselves often originating from participant feedback). A better resourced project would have allowed for more testing of the training materials after most changes had been made to the Guidelines.

A second significant issue is language. Training materials were developed in English. However, a majority of training participants did not speak English as their mother tongue (This was also true of the field tests.)

In the case of Antigua, the lack of English language fluency resulted in a need to switch the training to Spanish without time for adequate preparations. The other two trainings also experience language-related problems, both due to a lack of fluency in English on the part of some participants, and from unfamiliarity with terminology used in the training and REA.[10] This language challenge indicates a need to translate the training materials into regionally appropriate languages as part of any expanded training effort.

Finally, the scheduling of training activities posed challenges to presenting effective training events. As noted, there was little time between the February 2003 revision of the Guidelines and the two April trainings. Both events were also dogged by uncertainty as to the number and origin of participants until just before the events took place.

The Bhubaneshwar event also experienced uncertainty about participant numbers and origins, although the ultimate arrangements and participation exceeded expectations. Future REA training events would benefit from a single coordination focal point and a scheduling process which works on a scale of months rather than weeks and days.

10 One participant in Oslo was not fluent in English, but the presence of several French speakers and the small size of the training group meant that direct translation of the training presentations and exercises was possible.

Project Related Activities

A number of activities took place under the mantle of the REA project but without or with minimal project funding. These included:

- Presentations (6) and publication of papers (3) on the REA process and field test.
- Incorporation of the REA into a college-level course in Honduras.
- Input into revision of the Sphere standard.
- Briefings on the REA for Geneva and Kobe-based organizations.
- Thesis work on NGO reactions to the REA process.

(Specific references can be found in Annex B.)

Discussions were also held with UNHCR on developing a refugee-specific REA tool. The proposal was not pursued by UNHCR.

Outcome Indicators

The following table compares projected to actual project output based on the OFDA project document and MFA funding (*italized*). The table is followed by a discussion of the outcomes which did not meet expectations and a broader outcome indicator as to the impact of the REA from the perspective of field test and training participants.

Output Indicators and Accomplishments

Projected Outcome	Actual Outcome	Comments
Reporting: quarterly and final	As projected, except some delay in issuing financial reports.	Delays occurred since special financial reporting procedures needed to set up by BHRC.
One REA Revision	Three major revisions to the REA and one REA Quick Guide.	The REA evolved significantly from a limited scope organization-focused process to one which included communities and a review of procurement. The Quick Guide was not initially a project output.
Seven consultations with the Advisory Board	Twelve email consultations. At least six face-to-face consultations with individual board members.	One Board member participated in the Oslo and Antigua trainings.
REA field tests: One OFDA funded and two by MFA.	Tests held in Indonesia, *Ethiopia and Afghanistan*	
One set of REA training materials, including a course syllabus book, and manuals for facilitators and participants. The training materials will include a training module for use as a stand alone unit or as part of another training program, and self-study course work.	One training module with Trainer's Guide and Participant's Workbook completed and available through the project web site. One eLearning module in final development.	Continuing evolution of the REA materials delayed completion of the eLearning module. REA materials have been included in UNEP/OCHA training activities.
Two test trainings and one final training provided: 20 relief cadres during each training.	OFDA funding supported two full trainings (Guatemala and Bhubaneshwar), part of the Oslo training and 1/2 day training (Konark). *MFA funding support part of the Oslo training.* Attendance ranged from 10 (Oslo) to 35 (Bhubaneshwar) persons.	The Bhubaneshwar training was a combined classroom and practical exercise. The practical exercise and Konark training were not initially part of the project. REA materials have also been used in a college level course and in other training activities.
A 90 per cent pass rate for the relief cadre participating in the	The pass rate for the classroom section of the Bhubaneshwar	

final training.	(final) training met the 90% level.	
One web site with the REA training materials and other project-generated documents posted and available to any user.	Web site operational at www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_index.htm.	All key project documents are available on the web site, which serves as a portal for disaster-environment information. An Environment-Disaster listserv was also established at the end of the project.
Number of disaster relief operations in which REA procedures are used for assessment and planning following the field testing and training activities.	None.	See discussion below.
At least 70% of the priority environmental issues identified will be resolved or addressed by changes to projects or activities, during the 30 day period after the assessment.	None for the Afghanistan test. Some changes indicated by the Ethiopian test were incorporated, but after the 30 day period. Changes to project activities identified in the Indonesian test could not be confirmed.	See discussion below.

The project did not meet expectations with respect to (1) having issues identified during the field tests addressed by actions after the field test, or (2) in the use of the REA in other disasters. These issues are discussed below.

Addressing Environmental Issues Identified by the REA

In Afghanistan, assistance operations were focusing on basic needs under extremely difficult policy, resource and security constraints. The capacity to take on new tasks or expanding ongoing tasks was very limited.

The REA probably would have been more useful at a supra-organizational level (i.e., above the level of one NGO) to provide policy input as well as identify immediate problems with practical solutions. (Subsequently, the UNEP Post Conflict Assessment Unit indicated the REA could have been useful in their environmental assessment conducted later in 2002.)

In Ethiopia, the assessment results were well received by Awash project staff. Unfortunately, the needs of the small population covered by the assessment (some 35,000 persons) were overshadowed by a much larger food security problem elsewhere in Ethiopia. In short, the assessment was at the right time but not the right place for maximum impact. However, CARE Ethiopia indicates that assessment results were used when possible in deciding how to provide relief assistance in the Awash project area.

In Indonesia, the assessment identified a number of areas in which the new projects could be

focused to more clearly address environmental issues. Initial information indicated that changes would be made to the two projects. Further details have not been forthcoming.

Use of the REA in Other Disasters

With respect to use of the REA in other disasters, three factors should be considered.

Too Few Trained from Too Low in the Hierarchy

By the end of the project, approximately 125 individuals were trained in the use of the REA. Many of these individuals are junior in their hierarchies and or not in a position of request REA outputs be included in needs assessment, project plans or operations. It is likely the REA will be not be used in other disasters until there is a demand for the outputs, which isn't the case at present and more people are able to use the process.

Does the REA produce useful results?

In two tests this was clearly the case. In Indonesia, the REA identified issues which had been missed in project design. In Ethiopia, the REA identified issues which were incorporated into subsequent emergency operations. Feedback following the Afghanistan test indicates the REA results were not immediately used, but this outcome may have been for reasons beyond the assessment itself.

Still, there may be a problem in that the REA identifies issues but not solutions. This output is similar to many other assessment procedures. But the apparent complexity of environmental issues may make finding solutions a problem which works against easily using the results.

Is the REA too Difficult?

The REA may be too difficult, or too much a bother, to do in a disaster situation. The tests indicated that field staff without previous training can complete the process, although the process isn't easy if preparations are not adequate.

There is clearly strong resistance to having to do yet another assessment in the post-disaster period. This is a significant issue, specifically raised in Afghanistan and Indonesia, which the project has sought to address. At the same time, the REA (like any other cross sector assessment) may appear difficult if one is not had trained in its use.

Making Relief Operations More Effective and Efficient

A final element of the expected project outcomes was whether test and training participants viewed the REA as a way to make operations more effective and efficient. This was a qualitative assessment, with information collected through one-on-one and group discussions.

For Afghanistan, some feedback indicated that the REA was seen as an unnecessary imposition on an already overloaded agenda. This reaction can be expected in any major disaster and suggests that the value of considering the environment in disaster or crisis response needs to be accepted before the crisis occurs.

In Ethiopia, the assessment dealt with a disaster affected area which subsequently was not the area of greatest donor interest. This makes it difficult to assess whether participants considered the REA as improving the effectiveness or efficiency of disaster operations at

the time the assessment was done. However, CARE Ethiopia has begun training staff in the REA and to develop an Ethiopia-specific REA process. This suggests that CARE Ethiopia staff see a value in the process and potential for use of the REA in the future.

In Indonesia, field staff involved in the REA felt positive about its use in disaster operations. Questions were raised about the burden of an additional assessment at a senior staff level, although it was admitted that an REA would have helped identify and possibly avoid negative environmental impacts in at least one crisis affected area where CARE was active.

REA training participants tended to see the REA as useful as an assessment tool. Comments by participants in Guatemala and India were generally positive about the REA process and indicative of an intent use the REA if opportunity arose. The Oslo training had fewer field personnel. Participants raised concerns about aspects of the REA process (e.g., that it didn't pay sufficient attention to environmental impacts). However, the Olso participant from Madagascar felt the REA could be used as part of the local disaster assessment process.

Evaluation Results

The project was subject to an independent evaluation. The evaluation was a desk-top effort involving a review of documents, interviews and questionnaires to a selected group of individuals involved in the project.

The evaluation report focused more on participant feed-back on the project and REA and a critical review of the REA Guidelines than on the specific outcome indicators discussed above. The full evaluation report is available on the project web site.

The evaluation was generally critical of the process used to develop the REA product and of the design of the REA process. The findings of the evaluation can be summarized in the following paragraph from the evaluation report:

> *"While the REA concept appears to be well appreciated, there appears therefore a need for some backtracking and consolidation of the current tool before other activities are advanced. Technical input or guidance to the actual concept and structure of the REA process appears to have been limited thus far, but this is the time to try and improve the integrity and rigour of this tool as well as the Guidelines which describe its application…."* EVALUATION OF THE RAPID ENVIRONMENTAL IMPACT ASSESSMENT PROJECT, A REPORT PREPARED FOR CARE USA, *page 8.*

The evaluation made nine recommendations to address the deficiencies identified. The evaluation recommendations are presented below with comments (*in italics*) relative to future project activities.

RECOMMENDATIONS

The following recommendations are made on the basis of the Evaluator's observations during the course of this evaluation, but are largely shaped on the comments and concerns raised by people contacted during this short exercise.

Recommendation 1. Strengthen the Institutional Structure and Commitment behind this Project. To make proper use of the materials thus far developed will require a significant shift in gear, and the lead agencies in this initiative CARE and/or the BHRC must be willing to commit to supporting continuation of this work, to the extent of institutionalising the REA process in their respective agencies work. Much of the "salesmanship" of this process has been at the individual level but further development of the REA, and in particular the uptake of its recommendations, will only be possible if this institutional commitment is made. This is therefore the critical time for institutions to commit themselves fully to this project by:

- acknowledging the value and appropriateness of this tool;
- securing additional funds to enable a successful roll-out of the tool;
- integrating its main messages into existing institutional policies and guidelines;
- raising awareness of what this tool offers and encouraging partnerships to further spread the use of this tool; and
- continuing to support and monitor its implementation.

It is not clear that institutionalizing the REA in one institution will promote the use by other organizations since the REA could seem to be owned by the one organization and not by the whole community involved in disaster and crisis assistance. An alternative approach, while

recognizing the need for an institutional home of the REA, is to increase the number of people who know about and can use the REA, and thus create a virtual institution of REA users. Both approaches will be investigated in the second phase of the project. Both BHRC and CARE are seeking additional funds for a second phase of the project and the involvement of additional institutions in the further development and use of the REA.

Recommendation 2. Enhance the Technical Integrity of the REA Process. Before any other work is carried out it is essential that differences of opinion and concerns over some of the methodological and analytical approaches be sorted out. A small, active, working group should be established for a short period of time to overhaul the current process where needs have been identified.

The development of the REA was never seen as a once-and-for-all effort, with the results cast in concrete. Improvements to the REA process and products will occur as the REA is used and needs are better defined. Weak areas of the REA process identified in the evaluation are the prime focus for further refinement of the REA process in the second phase of the project.

Recommendation 3. Enhance the Quality of the Project's Outputs to Encourage Use and Application. It is strongly recommended that the manuals and guidelines produced thus far are revised and repackaged, following which they should be translated (or reworked in the case of the Spanish text) and disseminated – even if they are still evolving. The following in particular should be noted:

- following the above-mentioned technical revision, the Guidelines should receive a thorough edit for structure, content and language, with practical steps to follow more clearly described;
- present the information as a three-part guide to conducting an REA: Part I – "Background Information to REA", Part II – "Steps to Follow when Conducting a REA" and Part III – "Reference Material and Technical Details";
- all outputs should have a common format and appearance; and
- if resources allow, development of a computer-based "How to Conduct a REA" for ease of data capture.

Once materials have been repackaged, an official launch of the process should be organised to raise awareness of its existence.

Difficulties with the format and presentation of the REA Guidelines have been recognized since early in the project. Funds allowing, a professional make-over of the REA Guidelines will be completed in Phase II of the project.

Recommendation 4. Identify and/or Allocate Resources to Encourage and Enable Follow-up to Past and Future REA Field Tests. Unless practical uptake of the REA's recommendations happens, there will be little reason to continue with the development and dissemination of this tool. Leading by example, CARE, in particular, should identify how it might enable locally recognised priorities to be integrated into ongoing projects and programmes. Many people are convinced of the outputs of the REA assessments but not enough attention has been given to ensure that they are implemented and monitored. As this is the fundamental purpose of engaging in an REA process, it seems important that some of these findings are (sic).

Use of the REA results is an issue discussed elsewhere in the final report, and is a focus of Phase II activities. It is anticipated that integration of the REA process into other assessments will improve the up-take of REA results, but a lack of institutional demand for REA input is also a significant barrier to up-take of REA outputs.

Recommendation 5. Continue to Establish Key Partnerships and Focus Resources on Getting these Agencies to Use or Customise the REA for their Own Benefits. Attention should concentrate on getting the tool used with a select number of agencies outside CARE, as well as within. The examples started by UNEP/OCHA, OFDA and others in integrating REA approaches into their own assessment and training systems should be highlighted and built upon.

The process of developing partnerships and adaptation of the REA is a key element of Phase II of the project.

Recommendation 6. Produce a Short, Sharp Training Module on the REA. The current training materials, while comprehensive, are seemingly too large and detailed for quick and easy uptake by institutions. If a short, single stand alone module was available, this might encourage use of the tool by other agencies in their respective training programmes, including environmental tools in their emergency assessments rather than dealing with it as an add on.

Options for further development of training products and integration of the REA into other training programs has been included in Phase II plans.

Recommendation 7. Focus Attention on Training Potential REA Leaders and Other Trainers. Priority attention should be given to training individuals who are currently in a position to use and apply the benefits from the REA process – from within CARE and BHRC as well as other agencies. This will ensure a broad dissemination of qualified persons experienced in the use of the tool. Future training sessions should, as a rule, be split into a theoretical and practical session, for enhanced appreciation of the REA tool.

Included in Phase II plans.

Recommendation 8. Revitalise or Abandon the Advisory Group. Should the REA project continue into a second phase, it is advisable that the role of the Advisory Group be revisited by CARE and the BHRC, in particular. Although it will add further demands to peoples' time, if this group were to become more active in guiding and supporting implementation and application of the REA in various situations, or in assisting with contacts, it would assist the core team considerably and allow them to concentrate more on delivering the products. Much depends on whether the "management" considers it necessary to continue with a form of oversight body given that the subsequent phase, as planned, focuses mainly on roll-out through training.

The dissatisfaction with the involvement and management of the Advisory Group is unfortunate and was a weak area in project management. While several "Group" members were closely involved in the project (e.g., participating in training, adapting the Guidelines for

other use, revisions to the REA process), others felt excluded from the process, and the project did not benefit from their input. The Advisory Group process will be reviewed in Phase II and any revision will be based on greater involvement in the project.

Recommendation 9: Improve the Visibility and Outreach of the REA Process. The current web site should be overhauled and made clearer, with easier access and a title that is easily remembered. Relevant documents should be clustered, e.g. Guidelines, Training Materials, Field Tests, Resources, etc., with one paragraph of text describing the contents of each cluster. If resources exist, a central e-centre could be established to handle enquiries about the REA process and to improve inter-agency communications, responding perhaps to simple enquiries itself and directing more complicated issues to the relevant experts. Consideration should also be given to developing a small REA newsletter which be primarily web-based.

Changes to the project web site are under consideration. An email listserv was established at the end of Phase I of the project to facilitate communications about the REA project and environment-disaster linkages. This resource will evolve further in the second phase of the project.

Conclusions

Project Accomplishments

The project successfully developed and tested a process to rapidly assess environmental impacts in disasters. The process, formalized in the Guidelines for Rapid Environmental Impact Assessment in Disasters, evolved significantly from the initial version. It now provides for a comprehensive consideration of organizational and community views of salient environment-disaster issues and provides for a more comprehensive assessment than initially envisioned. The project demonstrated the REA can be implemented by non-specialists with minimal training.

The Guidelines, a shorter Quick Guide and related documentation are available on the project web site for public use. (The Guidelines has been translated into Spanish version and will be on the web site shortly.) The Guidelines have been referenced in the current Sphere standards. Input on environment-disaster impact assessment has been provided to the revision of the OFDA Field Operations Guide.

The project successfully developed and tested REA training materials, specifically targeting field personnel who are not specialists in environmental issues. As planned, three three-day training activities were held (including one in Spanish, which was not planned). The three-day training module is available on the project web site. An eLearning module has also been developed and will be available on the web site and on CD.

Training activities when beyond initial plans to include a pilot REA practicum addition to the basic three-day module and piloting of a one half day REA session. The project had unanticipated outcomes in the incorporation of the REA into a university-level course and other training programs.

Outstanding Issues

The project encountered three significant issues: language, organization of training activities and the failure of the assessments to have discernable impacts on project activities. These points are discussed below.

Language

The Guidelines and training materials were developed in English, which was not the native language of most field test or training participants. This added an unanticipated level of difficulty to the field and training testing process.

There were two lessons from this experience:

1. Anticipate that REA users or trainees will not be fluent in English, and,
2. The understanding (and presumably uptake) of the REA will be improved when documents are in a language familiar to the user.

Organization of Training Activities.

The results in all four training events were excellent but the lack of a single focal point for organizing and coordinating training activities increase the workload of all involved. The reason for this situation was beyond the project's control and was successfully managed. However, the need for a training focal point to reduce the work load on all involved was highlighted.

Lack of Impact of Assessment Results

The REA outputs did not, in large measure, have a discernable impact on disasters subject to the field tests or in the response to others disasters during the project period. The failure to use the REA results contrasts with strong interest in the REA, and concern about environment-disaster linkages, expressed in the training activities as well as in the contacts made in developing and publicizing the process.

Reasons why the REA field test results were not used have been identified in the case of Afghanistan (issues of greater priority needed attention first) and Ethiopia (programming priorities shifted to other areas). These outcomes are not themselves directly related to the REA process or results.

At the same time, feedback from the field tests, discussions about the REA and the evaluation indicate that a potential constraint to the use of the REA and results is that the process is too complicated to easily understand and difficult to use during a disaster. Countering that the environment can be a complicated and difficult to understand topic only highlights the initial reason for the REA project: to provide a way to rapidly and easily identify environmental issues in a disaster. Thus, while the project was successful in developing and testing a REA process and related training materials, mainstreaming the REA into the normal disaster response process did not occur.

A number of ways have been identified in which the REA can be improved and made more user-friendly. These include simplifying the REA process, making the process location-specific, integrating the REA into other assessment tools, making the Guidelines easier to use, improving the availability of information, expanding the variety of training products and establishing an institutional home for the REA. Addressing these issues in a second phase of the project should improve the uptake of the REA process and make consideration of environmental issues a more routine part of disaster response activities.

Annexes

Annex A Persons Involved in the REA Project

Person	Affiliation	Involvement
Sally Austin	CARE Afghanistan	Lead contact on field test.
Dereje Adugna	CARE Ethiopia	Disaster Officer. Involved in site selection and subsequent REA development.
Paul Barker	CARE Afghanistan	Country Director
Gaspard Bikwemu	Consultant	Advisory Board
Patricia Charlebois	UNEP/OCHA	Advisory Board. Coordinated UNEP/OCHA funding.
Charles Dufresne	InterWorks	Led Guatemala field test and development of eLearning module.
Johan Kieft,	CARE Indonesia	Coordinated field test.
Jeff Klenk	InterWorks	Provided outside review of REA process.
Walter Knausenberger	USAID	Advisory Board
Franklin J. McDonald	Disaster and environment expert	Advisory Board
Becky Myton	CARE Honduras	Advisory Board, co-trainer
Marion Pratt	USAID	Advisory Board. Coordinated USAID funding.
Anshu Sharma	SEEDS	Advisory Board
Louise Sperling	CIAT	Advisory Board
Holly Solberg	CARE Ethiopia	Program Coordinator
Ujang Suparman	CARE Indonesia	REA field test counterpart.
Samuel Tadesse	CARE Ethiopia	REA field test counterpart. Led subsequent development of Ethiopia-specific REA. Participated in Bhubaneshwar training.
Julio Galvez Tan	Foundation for the Philippine Environment	Advisory Board

Other individuals with involvement in the field tests are listed at in the **Acknowledgments** section of the **Guidelines for Rapid Environmental Impact Assessment in Disasters**. Persons involved in specific training events are listed in the respective training reports.

Annex B Project Background and Chronology[11]

REA Background

The idea of a way to rapidly assessment environmental impact in disasters initially occurred during grasshoppers and locusts control operations in Africa in the late 80s and early 90s. At the time there was widespread concern that locusts and grasshoppers would devastate food crops leading to famine and a consequent need for large scale food aid. While alternate pest control methods were available, the widespread use of pesticides was considered a justified alternative to crop losses, famine and massive food aid. Under common emergency program procedures, the normal environmental impact assessment process was waived in the face of a need to take urgent action to avoid a disaster.

Unfortunately, the grasshopper threat was not a single year event. What started as a short term solution turned into a year-to-year program of pesticide use. And what was initially justified as a one-off effort not needing an environmental review became a multi-year program with time to conduct an environmental impact assessment and to make changes to reduce negative environmental impacts.

These environmental reviews highlighted a number of areas in which avoidable environmental impacts were taking place and where the consideration of environmental issues would improve the overall effectiveness of the control programs. The simple lesson learned was that considering environmental issues are the beginning of the anti-grasshopper campaign would have made for a better overall campaign with less negative environmental impacts.

This idea, that incorporating environmental issues into disaster operations, was first considered in relation to population displacements (see Kelly, C., Disaster and Environmental Change: The Impact of Population Displacement and Options for Mitigation, Pan Pacific Hazards 96 Conference, Vancouver). A simple rating of salient factors with a direct or indirect link to displacement-related environmental damage was proposed as a rapid impact assessment tool.

At the same time, consideration was being given to possible modification of standard environmental impact assessment (EIA) procedures to fit disaster conditions. The weakness of this approach lay in the quantitative and deliberative nature of the standard EIA procedures, which would be unworkable in real disaster conditions.

The idea of a rapid environmental impact assessment (REA) process for use in disaster operations separate as separate from normal REA procedures was presented as an invited paper at a the Green Cross UK Conference “Environmental Issues in Disaster Prevention Preparedness and Response” in London. The process presented at the conference continued to focus on a simple checklist rating table approach with the greatest attention to direct and indirect impacts of disaster survivors on the environment. (See Kelly, C., Disasters and Environmental Impact: A Framework for Rapid Assessment and Planning by Response Personnel, at Green Cross UK Conference “Environmental Issues in Disaster Prevention, Preparedness and Response”, London, 1999).

Following the conference there was interest expressed in turning the nascent REA process into an operational procedure and testing this procedure under actual disaster conditions. This

[11] Key persons involved in each activity are noted in brackets if not otherwise indicated.

interest evolved into an incorporation of an REA project into the program for the Benfield Hazard Research Centre, University College London.

From this point, discussions were held with a number of potential partners and funding sources. It was felt that a partner with experience in either training or disaster operations was important to ensure that the development of the REA was not simply an academic exercise. Funding was sought for a program of field testing and development of a training module on how to use the REA.

Concurrently, CARE US was developing an effort in the area of environment and disasters, partially but not whole related to CARE's experience in dealing with Rwandan refugee and the associated environmental impacts. This effort provided a natural operational NGO counterpart to BHRC's academic base and evolved into a collaborative effort to develop and test the REA.

Although not formally coordinated, UNHCR was, at the same time, developing procedures and capacities to address refugee-related environmental impacts. This effort was also an outcome of the Rwandan refugee event, but extended more broadly to refugees to refugees in other parts of the world. There was initial concern that the REA and UNHCR efforts were duplications, but it was eventually recognized that the UNHCR efforts focused on refugees (and displaced populations in general), while the REA focused on all types of disasters. Thus, the UNHCR work was a more elaborated sub-set the larger REA effort.

Formal work on a REA document began with funding from the joint UNEP/OCHA unit in Geneva. Work under this funding included discussions with development/disaster assistance and environment NGOs in the US and Europe, academics and further discussions with donors in terms of policy and use of an environmental impact assessment process in a disaster. This phase also included a field visit to Orissa, India to collect first hand input on environment-disaster linkages and how to incorporate an REA process could be feasibly accomplished in a disaster setting.

Drafting of an initial REA process document (Guidelines for Rapid Environmental Impact Assessment in Disasters) was completed in January 2002. From the initial focus on disaster survivor impacts on the environment, the scope and breadth of the REA had expanded considerably. In particular, drafts of the Guidelines were reviewed by the project Advisory Board and significant additions were made to the document based on these reviews. These additions included:

- A section to frame the disaster (the Context Statement), which also served to focus attention on special environmental considerations (e.g., environmental concerns from before the disaster).
- A section covering the potential environmental impacts of disaster events.
- A section to consider the potential negative consequences of relief assistance.

Procedurally, each section was designed to use a simple rating table/check list approach to identify and prioritize the issues covered in each topical section of the process. Once issues had been identified and prioritized in each section of the assessment process, to ranking issues were consolidated onto one page and the assessors further ranked these issues to generate a prioritized list of salient issues requiring immediate action. This process has remained basically the same throughout the evolution of the REA and Guidelines.

Field tests in Afghanistan, Ethiopia and Indonesia each resulted in changes to the Guidelines and assessment procedures although less so to the REA process. The most common changes needed related to the wording and language used in the assessment forms.

The most significant changes were the introduction of the community level assessment and green review processes during the Ethiopian field test. Following the Indonesia field test, the Guidelines were substantially reorganized and rewritten, although the resulting changes had their origins in the Ethiopia experience.

Chronology

July 1996
Presentation of Disaster and Environmental Change: The Impact of Population Displacement and Options for Mitigation, at the Pan Pacific Hazards 96 Conference, Vancouver, Canada. (Kelly)

March 1999
Presentation of Disasters and Environmental Impact: A Framework for Rapid Assessment and Planning by Response Personnel, at Green Cross UK Conference AEnvironmental Issues in Disaster Prevention, Preparedness and Response≅, London, United Kingdom. (Kelly, Williams)

Mid 1999 to early 2001
Discussions between C. Kelly, Debbie Williams and John Twigg of Benfield Hazard Research Centre, University College London and RedR on development of a methodology for rapid environmental impact assessment and training program.

Early 2001
Development of basic REA project proposal and presentations to UNEP/OCHA, USAID/OFDA. (Kelly, Pareja)

June 2001
Presentation on the REA to CARE Norge. (Kelly, Nagoda)

August 2001 to January 2002.
Funding from UNEP/OCHA for development of the REA methodology. (Kelly) This work included discussions with Mario Pareja of CARE, and contacts with NGOs, Donors and I.O.s in the US and Europe. See Acknowledgments of the Guidelines for a list of organizations contacted.

September 2001
Presentations on the REA to environmental NGOs in Washington and to CARE International in Brussels. (Kelly, Pareja, Nagoda)

October 2001
Field trip to Orissa India to discuss disaster-environment linkages, practical emergences with environmental impacts in disasters and local needs and limits to assessment procedures. (Kelly)

October 2001
Presentation on Rapid Environmental Impact Assessment: Framework for Best Practice in Emergency Response, at Sharing Experiences on Environmental Management in Refugee Situations: A Practitioner=s Workshop, Geneva, 22-25 October 2001, hosted by UNHCR, Paper posted www.benfieldhrc.org under Disaster Management. (Kelly)

December 2001

Funding from CARE Norge for field testing and training on the REA. (Nagoda)

January 2002
Completion of Guidelines for Rapid Environmental Impact Assessment in Disasters (version 1). (Kelly, with input from Advisory Board.)

February-March 2002
Field test of the Guidelines in Afghanistan, hosted by CARE Afghanistan, followed by changes to the Guidelines document. (Kelly)

June 2002
Presentation of Assessing Environmental Impacts During Natural Disaster: the Development of a Rapid Environmental Assessment Methodology, The International Association for Impact Assessment Meeting, The Hague (later published in the Journal of Environmental Assessment Policy and Management, Vol. 4, No. 4 ,December 2002.) (Kelly)

August-September 2002
Field test of Guidelines in Ethiopia, including community assessment, hosted by CARE Ethiopia, followed by changes to the Guidelines, and inclusion of section specifically on community assessment. (Kelly, Tadesse)

October 2002
Alice Doyle, an MSc student, Environmental Impact Assessment, University of Wales Aberystwyth proposed to Asurvey select NGOs to their response and practicality of applying your guidelines as best practice≅.

November 2002
Presentation on the REA at the OFDA-NGO Biennial meeting, Washington. (Kelly)

January-February 2003
Field test of the Guidelines in Indonesia hosted by CARE Indonesia. Field test included organizational level assessment and nine day community level assessment. (Kelly, Pareja and Suparman)

February-March 2003
Redrafting of the Guidelines to reflect input from field tests, giving equal weight to organizational and community assessment procedures and results version 4). Redrafted document circulated for comment and provided to InterWorks as basis for their work on a training module. (Kelly with input from InterWorks)

February-April 2003
Development of a REA training module by InterWorks.

April 2003
Tests of REA training module in Oslo Norway and Antigua Guatemala by InterWorks.

Participants in Oslo were largely not persons who were involved in field operations. One environmental impact assessment trainer and a disaster preparedness project manager from Madagascar also participated in the Oslo training. Training led by Paul Thompson (InterWorks) with Becky Myton of CARE Honduras as co-trainer and C. Kelly as observer.
Participants in Antigua were drawn from each Central American country and included a mixture of NGO, I.O., and government personnel. This training was conducted in Spanish. Training led by Charles Dufresne of InterWorks, with Mario Pareja and Becky Myton as co-trainers and C. Kelly was an observer.
June 2003 - February 2004
Development of an eLearning module on the REA by InterWorks.

June 2003
Presentation on Gender, Disaster, and the Environment: Experiences from the Rapid Environmental Impact Assessment Project, at the International Emergency Management Society meeting, Provence, France. (Kelly)

June 2003
Presentation of Disasters Management and Environmental Impact Assessment: Gaps and Linkages at The International Association for Impact Assessment Meeting, Marakesh, Morocco. (Kelly)

Mid-2003
REA Guidelines used as the basis for a university-level course on environmental impact assessment presented by Becky Myton in Honduras.

September 2003
Incorporation of Environment as cross-cutting issue in Sphere Standards and inclusion of the REA as a reference in the Shelter section of the **Humanitarian Charter and Minimum Standards in Disaster Response Handbook**. (Pareja, Kelly)

September 2003
Presentation on the REA project made to I.O.s and NGOs based in Geneva. The presentation was hosted by UNEP/OCHA. (Kelly)

Late 2003
CARE Ethiopia begins field staff training on the REA, adapted to conditions in Ethiopia. (Tadesse)

October 2003
Presentation on the REA project to government, I.O. and NGOs based in Kobe Japan, hosted by Disaster Reduction and Human Renovation Institution. (Kelly)

October 2003
Presentation of Rapid Environmental Impact Assessment in Mega City Disasters: Issues and New Tools, at the International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, Tokyo, Japan (paper posted to symposium web site and distributed in proceedings CD). (Kelly)

November 2003
Final presentation of REA training module at Bhubaneshwar Orissa) India in cooperation with Sphere India. Training included 3 days of classroom instruction on the REA and 3 days of practical use, including a community assessment exercise. Trainees includes NGO field personnel, academics and government officials. Training led by Paul Thompson of InterWorks with Samuel Tadesse of CARE Ethiopia attended as co-trainer, Jock Baker as observer and C. Kelly as advisor on field use of the REA.

November 2003
Project review and Phase II design discussions involving CARE US, CARE Ethiopia, InterWorks and Benfield Hazard Research Centre following the Orissa training. (Baker, Kelly, Tadesse, Thompson)

December 2003
Half day training on the REA provided to LWF staff participating in a week-long workshop on community level disaster preparedness, Konark, India. (Kelly)

January 2004
Additional small changes made to the Guidelines (version 4.2). Development of a REA ≅Quick Guide≅ based on work originally done by InterWorks. (Kelly, Thompson)