Your Assessment of My Needs: Contrasting Crisis and Normal Impact Assessment

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Abstract

There is a significant gap between impact assessment in normal times and in crises such as disasters, accidents or conflict. The former is a deliberative**,** often slow process of weighing positive and negative impacts from one or more proposed courses of action. Disaster impact assessment is often openly agenda-drive, focused more on needs and driven by an expected immediate need for assistance.

The paper reviews the differences between normal and disaster assessments, highlighting areas of differences as well as commonality. The paper identifies the Humanitarian Charter and Minimum Standards for Disaster Response (The Sphere Project) as a framework for disaster needs assessment. The paper notes that most disaster assessment procedures are focused on single sectors. Comprehensive needs assessments are possible by considering livelihoods or environmental impact, but these approaches still need to be complemented by sector-specific assessments. The paper concludes with recommendations on how the gap between normal and disaster impact assessments can be bridged to make the overall process of assessing the impact of disasters more effective.

Introduction

This paper considers the differences between impact assessment under normal conditions and in disasters. In a disaster, the assessment challenge is to quickly identify, define and quantify the economic, social and human impacts of the disaster event in the days and weeks after the disaster has begun. A quick assessment is needed so that rescue, relief and rehabilitation assistance can be provided as quickly and efficiently as possible to avoid further damage and facilitate rapid recovery. This contrasts sharply with the slower pace of a normal impact assessment and implementation of resulting outcomes.

There are four reasons why it is important for those who do normal impact assessments to understand how disaster impact assessments are done. First, normal assessments provide a baseline for disaster impact assessments. A good assessment during normal periods contributes to a good assessment during a disaster.

Second, a normal impact assessment should identify, before a disaster, potential impacts and issues which need to be incorporated into a disaster assessment. The resulting pre-disaster assessment plans reduce the time and effort needed to do a disaster assessment, in turn making relief and recovery operations more effective.

Third, normal assessments can identify and quantify the impacts of potential disasters. This can lead to the reduction or avoidance of these impacts. These outcomes reduce the workload of disaster assessments by identifying impact and responses before a disaster.

Finally, disaster assessments results can be integrated into normal impact assessments of post-disaster recovery and reconstruction programs. For this to be successful, those who do normal impact assessments need to understand the outputs which disaster assessments generate and the

concepts and procedures on which they are based.

The paper uses the disaster situation encountered in less developed countries in describing the assessment context. These countries usually face limitations on the amount or accuracy of information on conditions before a disaster. These data-poor environments pose the most serious challenges to disaster impact assessments and are where good normal impact assessment is most useful in facilitating the disaster response impact.

Disasters as Normal Events

Disasters are events which we know will occur, but which are by definition rare events in time (Kelly and Khan Chowdhury:39). In fact, capacities to predict many of the events which can lead to disasters or crises are relatively well established. Most often, the problem lies with warnings not being used to avoid or limit disaster impact (see Buchanan-Smith, et al.).

Further, disasters are events which occur within the normal context of society and so are defined and characterized by the nature of the society where the hazards exist. Differences in the social contexts of a disaster are why the same hazard event in two different societies can result in disasters with different severity and recovery periods. (See Oliver-Smith 2001, 1999 and Hewitt, for further discussion of these points.)

There are a number of different definitions as to what is a disaster (see Quarantelli). For this paper, a disaster is an event which exceeds a community=s immediate ability to cope and for which outside assistance is needed for a speedy return to normal conditions.

Effectively responding to a disaster requires immediate action to save lives and property. For these actions to be effective, decisions need to be taken based on immediately available assessments of impacts and critical needs.

Assessment Requirements

Clearly determining the requirements for an impact assessment is critical before the assessment begins. While each assessment has its own context-specific requirements, the International Association of Impact Assessment (IAIA) has defined a set of best practices for how an environmental impact assessment should be accomplished. These practices provide a reasonable set of requirements for any normal assessment (see box at right).

Environmental Impact Assessment Best Practice

- Purposive
- Rigorous
- Practical
- Relevant
- Cost-effective
- Efficient
- Focused
- Adaptive
- Participative
- Interdisciplinary
- Credible
- Integrated
- Transparent
- Systematic

Source: IAIA

The Humanitarian Charter and Minimum Standards for Disaster Response (The Sphere Project) defines a set of standards for the actual provision of assistance after a disaster. One standard is that disaster assistance be based on an assessment. The Humanitarian Charter (hereafter Sphere) has also established a common set of indicators for initial disaster assessments (see box at right).

Indicators for Conducting a Disaster Impact Assessment

- The rights of those affected by the disaster underpin the assessment.
- Information collection and analysis is standardized and transparent.
- AWhere feasible, data are disaggregated by sex and age.@
- Numbers are cross-checked and validated.
- The technical (water and sanitation, nutrition, food, shelter, health), physical, social, economic, physical and security environment, vulnerability of affected populations, and underlying context of the disaster are considered.
- An assessment considers the dynamics of conflict-affected environments.
- ALocal capacities and strategies to cope ... are identified.@
- Special arrangements should be made for groups which cannot speak openly.
- Host (not-disaster-affected) populations should be consulted as part of the assessment process.
- The operating environment (personal safety, security of the affected population) is considered in the assessment.
- An assessment Atakes into account the responsibilities of ... authorities to protect and assist the population ... and ... national law, standards and guidelines applicable where the affected population is found, when they conform to international law.@
- Results are made available to the affected population, authorities and other parties involved in the disaster response.
- Assessment recommendations for external assistance are linked to an exit or transition strategy.
- Assessment teams should be gender-balanced, have clear terms of reference and seek to involve the affected population in a culturally acceptable manner.

Source: The Sphere Project: 29-33.

The IAIA best practices are largely inclusive of the more detailed Sphere indicators. However, in reality, a disaster assessment may not meet all the best practice criteria setBout in the IAIA best practice. In particular, disaster assessment may not be:

- Rigorous, since there may be little time to complete the assessment.
- Cost-effective, as resources are made available for assessments are often based on external perceptions of impacts or resources available, not resources needed to complete an independent assessment process.
- Efficient, since the disaster assessment process is normally constrained by limited access to affect areas and populations.
- Interdisciplinary or Integrated, as many disaster assessments are done on an ad hoc basis using available personnel, and limited to specific sectors (e.g., water and sanitation).
- Systematic, as many disaster assessments focus on immediate and obvious problems rather than medium and long term causes and impacts.

Disaster assessments also face a problem with being credible. Often there is disagreement as to the scale of disaster impact. In many cases, parties see an assessment as either understating or overstating impact. At times, opposing views are expressed about the same assessment.

Doubtful credibility can lead to assessors being told to re-do the assessment to generate acceptable results. In the extreme, the results of contested assessment can be disregarded and assistance decisions more directly driven by personal or political views.

All this is not to say that disaster impact assessments are always poorly received. The point is that the need (and pressure) to take action in a disaster does not usually permit the luxury of meeting all the IAIA-defined good practices.

Sphere itself recognizes that not all disaster assessments can initially conform to the Sphere indicators. The disaster assessment process often involves a series of smaller assessments completed as information is available. These interim assessments progressively meet the Sphere indicators and lead to a complete impact assessment as the disaster response evolves.

In most cases, assessors and decision makers are well aware of the limitations in a specific assessment effort, but will hold that any information is better than none at all. This is, of course, in marked contrast to normal assessments, where decisions are not normally made until an assessment has answered all outstanding issues and concerns.

Contextual Differences

There are significant differences between how an impact assessment is done in normal times and in a disaster. A summary of the contextual differences, adapted from a comparison of normal and environmental impact assessments**,** is presented at right.

Contextual Differences:
Normal & Disaster Assessments

Normal	**Disaster**
• Deliberate & pro-active	• Reactive
• Will be thorough & extensive	• May need to be partial in coverage
• Comprehensive data collection	• Based on available data
• "No project" option is a possible outcome	• "No project" outcome is not an option
• Completed in months to years	• Completed in hours to weeks
• Project launch planned	• Sudden onset
• Location chosen	• Unpredictable location
• Duration planned	• Uncertain duration
• Beneficiary population identifiable & static	• Beneficiary population heterogeneous & dynamic
• Environmental goals may be made compatible with socio-economic ones	• Priority given to life saving activities sometimes difficult to reconcile with environmental goals

Source: Kelly 2001, after UNHCR and CARE

The most significant difference is probably that the assessment process happens concurrently with the assistance effort. Sphere does hold that assistance shouldn't be provided without an assessment. However, in many cases immediate needs are easy to identify while driving through or flying over a disaster affected area. Such rapid assessments are often sufficient to justify initial lifesaving assistance.

In fact, the initial response to a disaster may be based on a presumptive assessment. This type of assessment is based on initial reports from an affected area, sometimes with limited corroboration from the disaster-affected location. Decisions to provide specific types of assistance are based on a presumption that assistance provided in previous similar disasters will be needed in the current disaster.

Presumptive assessments fall far short of the Sphere standard, and often result in inappropriate assistance preventing needed assistance from reaching the disaster victim. At the same time, presumptive assessments can, if well done and based on pre-disaster assessments, greatly facilitate the timely delivery of critical assistance.

Where either a presumptive or rapid on-site assessment is done, initial assessment work should be followed by more detailed assessments meeting the indicators set out by Sphere. Relying only on a presumptive assessment or limited initial assessments, assistance operations take place in ignorance of the deeper causes and consequences of a disaster. This frequently results in the wrong assistance being provided to the wrong people at the wrong time in the wrong place. These

outcomes can result in the assistance doing more harm than good and arise largely from weakness in the assessment process.

The challenge for disaster assessments is to collect and analyze sufficient information to ensure the right assistance is being provided, but not to take too long in this process so as to lose the opportunity to provide input to the process driving the assistance effort. Striking this balance is often difficult, but is the essence of disaster impact assessment.

Impact and Needs

Another difference between normal and disaster impact assessments is that the former focuses on impact and the latter more directly on needs. In other words, a disaster assessment focuses on what is needed to accomplish immediate relief and recovery operations.

Disaster assessments normally seek to identify gaps between basic needs and current conditions. Basic needs normally include safety (i.e., the need for rescue services), water, health care, food, and shelter. Immediate needs can also include security (e.g., protection from violence) and other human rights-based needs. Assessing immediate needs should take place in a framework which considers the age, gender, and physical (disability), and health status of individual disaster victims as well as environmental conditions before, during and after a disaster. The Humanitarian Charter and Minimum Standards for Disaster Response (The Sphere Project) explores these needs in more detail.

The Assessment Process

The disaster assessment process involves collecting available information to identify the impact of the disaster and the basic needs for which disaster survivors require assistance to survive at a minimally acceptable level. This information can come from a media or other second hard reports and become a presumptive assessment. Or the information can come from an extensive on-the-ground data collection effort, involving the gathering of quantitative date using well defined protocols, such as through a nutrition survey. The sources of information and the complexity of the collection and analysis process generally become more numerous and complex as the response to the disaster progresses.

Most disaster assessments start with an initial assessment to confirm that assistance is needed followed by technical assessments focusing on areas of previously identified needs (Eade and Williams: 861-862). The initial information collection and analysis process is a constant but often ad hoc process in the initial phases of a disaster. In small disasters there often is no post-disaster assessment and the disaster assessment is also expected to address recovery and reconstruction requirements.

In a large disaster, the assessment process evolves into a formal system of reporting requirements and systems (often driven by the organizations funding the relief effort) geared toward centralizing all available information about the disaster in an effort to coordinate and control the overall post-disaster operation. Eventually, this system evolves into a structure designed for monitoring and reporting on post disaster reconstruction activities.

Sphere places an emphasis on participation by disaster survivors in the assessment process. However, while tools are available to ensure survivor participation, accomplishing participation in a meaningful way is not always done during a disaster. In many cases, real participation only comes about in the post-disaster recovery phase, and often leads to the identification of mistakes in the initial relief effort.

Disaster Assessment: Simple and Complex

In one way, disaster assessment is a simple process. It has the clear and immediate objectives of providing information and analysis to guide relief and recovery operations. By focusing on basic needs, the scope of the assessment is well defined and outcomes are directly linked actions to address problems identified.

At the same time, the assessment process is complex in two ways. First, the logistics of getting to, operating in and sending data and results from a disaster affected area can be a major challenge. In some disasters, infrastructure is destroyed, utilities are not functioning and populations are on the move.

These problems are compounded if the disaster has occurred in an area of conflict, where the safety of those doing the assessment is also a concern. While complex, these logistical issues are often manageable through good planning and an adequate allocation of resources to the assessment process.

The second cause of complexity is the need to make an assessment as comprehensive as possible. This is in keeping with the Sphere standard as discussed above. But it also makes sense in terms of understanding (rather than just identifying) survivors needs, understanding the root causes of the disaster and defining how to provide assistance in ways which reduces future vulnerability to disaster. This challenge is usually addressed through detailed, sector-focused, assessments during the recovery phase after a disaster.

Comprehensive Disaster Impact Assessment

The difficulty with making a disaster assessment comprehensive is that most disaster assessment tools are sector-specific, focusing on topics like water and sanitation, nutrition, logistics, shelter, gender, violence, or health status. This is not to say that these sector-specific assessment procedures are weak or incomplete. They simply cover only one aspect of the disaster impact. In many cases, individual sectoral assessments are completed in isolation of other sectoral assessments, and the sharing of data and information is much less common than would be preferred.

The typical approach to creating a comprehensive assessment is to have teams focusing on specific sectors and then compiling a consolidated report of all the sector assessments. This approach does bring together separate assessments, but produces a list of needs and issues from each sectoral assessment and not a synthesis of results and prioritization of needs.

There are two exceptions to the sector-based approach to impact assessment: livelihood assessments and assessments of environmental issues related to a disaster. Livelihoods assessments tend to take a broad view of issues which contribute to food insecurity on the part of individuals or communities. Such an assessment can touch on nutrition, access to resources, gender, age, disabilities and health status and safety issues. Infrastructure issues, such as road conditions, can also be included, as can the economic and social conditions and history of a disaster affected population.

At the same time, a comprehensive livelihoods assessment requires considerable effort and logistics support. A significant strength of livelihoods approach is that it depends on direct contact with disaster survivors. This, however, requires some level of field survey, which can take time to organize and conduct, even if accomplished in the form of focus group discussions. While a livelihood assessment is always worth the effort, convincing emergency operations programs to take the time and make the resources available to do this type of assessment can be a major

challenge.

Further information on the livelihood approach to impact assessment can be found in Livelihoods, Chronic Conflict and Humanitarian Response: A Synthesis of Current Practice (Longly and Maxwell). A discussion of the livelihood approach and other broad based assessment concepts is provided in Sustainable Livelihood and Vulnerability to Disasters (Twigg).

The second inherently comprehensive approach to disaster assessment is to consider the linkages between the disaster and the environment. Since the environment is an all-encompassing topic, the reach of an environment-centric assessment is broad and can cover most sectors key to responding to a disaster.

This type of assessment resembles an environmental impact assessment in coverage. But the focus is on identifying the aspects of the disaster which could have negative impacts on the environment and require immediate or longer term interventions to reduce these impacts. In most cases, there is a close link between environmental impact, disaster impact and immediate relief and recovery needs.

A process to assess disaster-environment linkages has been developed by the Rapid Environmental Impact Assessment in Disasters project[1], of which the author is the lead investigator. Field tests of the project=s Guidelines for Rapid Environmental Impact Assessment (Kelly, 2003) indicates that the approach developed does provide a broad coverage of disaster related issues and directly or indirectly touches on topics covered by other sectoral assessments.

However, the same experiences indicate that the rapid environmental impact assessment process can be more cost and time effective if integrated into other sectoral assessments. Although not yet attempted, combining the livelihood and rapid environmental impact assessment approaches may be an effective way to establish the overall context of a disaster and identify which more specific sectoral assessments are urgently needed. In practice, because of the requirement to quickly collect and analyze information in a disaster, both the livelihood/disaster-environment and sectoral assessments would need to operate in an integrated fashion and work from a common data collection and analysis framework.

Conclusions

This paper has summarized how disaster impact assessments are different from normal assessments. Those who conduct assessments in normal conditions need to understand these differences so that they can formulate their assessments in ways which can be used to support disaster assessments. Understanding the process and outcomes of disaster assessments also facilitates the incorporation of this information into assessments of post disaster reconstruction programs.

The most significant differences between normal and disaster assessments are the time frame for completing the assessment and the level of information needed. Disaster assessments need to be done immediately and be based on immediately available (and often incomplete) data. This contrasts with the less time constrained and more detailed work of a normal assessment.

While disaster and normal impact assessments operate in different environments and under different conditions, the gap between the two efforts can be narrowed through four actions. First, normal assessments can consider potential disaster impact as part and parcel of the assessment

[1] See http://www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_index.htm.

process. This allows for better disaster planning which permits better disaster assessment and response.

Second, disaster assessments need to collect and present data and analysis in a way which can be used in normal impact assessments after a disaster. This smoothes the transition from disaster to normal periods, and facilitates the quick design, review, approval and completion of post disaster reconstruction programs.

Ideally, both disaster and normal assessments should use the same or compatible data collection and analysis procedures. At the least, disaster and normal assessments should agree on the minimum standards for data collection and analysis during a disaster so that available information can be integrated into the normal process.

Third, the overall disaster assessment effort needs to move towards a comprehensive assessment process and outcome. This makes the disaster assessment more complete and more useful in relief operations. It also avoids the problems of integrating multiple sectoral reports from a disaster into the standard comprehensive assessment process used in normal periods.

Finally, other assessment procedures need to be developed and tested to fill the gap between disaster and normal assessments. Disaster assessments are focused in the immediate disaster period. After this period of immediate rescue and relief there is a transition to a normal conditions which may last for weeks, months or years.

During this transition, procedures which are more rigorous than the disaster assessment process need to be developed to ease the shift to the normal assessment process. This need is less important in small disasters than large ones, and poses special challenges when the disaster is associated with a war or other form of conflict.

The Handbook for Estimating the Socio-economic and Environmental Effects of Disasters developed by the Economic Commission for Latin America is one of the tools to fill this gap. But these new assessment tools also need to incorporate a high degree of participation by disaster survivors at the same maintaining an ability to directly influence post-disaster reconstruction decision making and activities. These requirements, combining aspects of disaster and normal conditions, present a major challenge to the impact assessment profession.

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