

2.0 Information Management and the Humanitarian Context

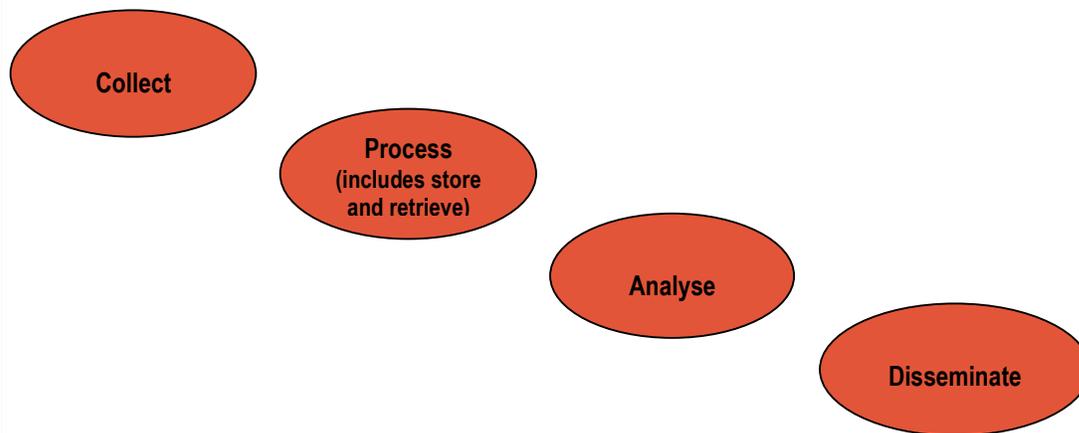
2.1 What is Information Management?

The term ‘information management’ covers ‘the various stages of information processing from production to storage and retrieval to dissemination towards the better working of an organization; information can be from internal and external sources and in any format.’¹

Within this generic definition, there are various types and purposes of IM; the focus of these Guidelines is on IM in the context of inter-agency coordination and decision making with regard to humanitarian crises.

Information forms the basis of both agency programming and inter-agency coordination. As such, the quality of information available to decision-makers is a crucial factor in achieving the objective of maximizing the impact of collective response activities. IM is vitally important because it improves the speed and accuracy of information delivered, creating a shared frame of reference that enables decision-makers to co-ordinate and plan response programming based on best available knowledge of needs and a clear understanding of each organization’s capacity.

Figure 1: The Information Management Chain



Source: OCHA ISS

Figure 1 represents the basic steps in the production of information products to support planning, decision-making and coordination processes. Each step involves a range of actors performing a variety of roles, both technical and non-technical.

Collection refers to those technical and non-technical activities that lead to the establishment of a body of data or information. In the context of OCHA’s mandate as a coordination body, this may include advocacy for inter-agency and/or multi-sectoral collect efforts and/or the coordination of partners in such a data collection or information-gathering exercise. Normally an OCHA Office or an HIC will be engaged primarily in the collection of *secondary* data, that is, using data that already exists. The responsibility for *primary* data collection will in most circumstances rest with specialized agencies. For example, UNHCR will normally collect registration data on refugees while the OCHA Office or HIC might hold statistics on the overall number of refugees, a demographic profile and their places of origin. While in most cases an OCHA Office or HIC will not have capacity to undertake large collection efforts,

¹ Association for Information Management 2005 (See <http://www.aslib.co.uk>)

staff will engage with other agencies undertaking such efforts to ensure compatibility through data standards (see Section 5.2.6).

Processing consists of primarily technical processes that transform raw data (i.e. numbers) into a format that can be easily manipulated or combined with other data in preparation for further analysis. This includes activities such as ‘cleaning’, compiling from various sources, and using established storage and archiving structures. These functions are primarily, but not exclusively, carried out by information management staff within an OCHA Office (IMU), or a HIC.

Analysis is the process by which data or information is aggregated and summarized for presentation. Analysis is carried out at two levels. The first level involves basic statistical or spatial analysis using graphs, charts or maps to display the basic information. Adding background, context or technical (subject) expertise is the second level of analysis. An IMU or HIC will normally be involved in the first level of analysis while contextual or technical analysis might be carried out by OCHA Humanitarian Affairs Officers, experts from implementing agencies or policy specialists.

Dissemination, the last step of the chain, puts information products into the hands of policy-makers and planners at various levels. Dissemination may be to a general audience or a targeted group of key decision-makers, in a variety of formats and through a range of mechanisms. As with collection, dissemination is generally the task of all OCHA program staff.

2.2 Principles of Humanitarian Information Management and Exchange

Recognizing a need to establish global standards to guide information management and exchange in humanitarian action similar to those that govern humanitarian action as a whole, participants at the 2002 OCHA-sponsored Symposium on Best Practices in Humanitarian Information Management and Exchange identified ten guiding principles for anyone engaged in any aspect of humanitarian information management. This list was expanded at the 2007 Global Symposium+5 to further reflect the importance accorded the role of information in humanitarian action.

Accessibility

Humanitarian information and data should be made accessible to all humanitarian actors by applying easy-to-use formats and by translating information into common or local languages. Information and data for humanitarian purposes should be made widely available through a variety of online and offline distribution channels, including the media.

Inclusiveness

Information management and exchange should be based on collaboration, partnership and sharing with a high degree of participation and ownership by multiple stakeholders, including national and local governments and, especially, affected communities whose information needs should equally be taken into account.

Interoperability

All sharable data and information should be made available in formats that can be easily retrieved, shared and used by humanitarian organizations.

Accountability

Information providers should be responsible to their partners and stakeholders for the content they publish and disseminate.

Verifiability

Information should be accurate, consistent and based on sound methodologies, validated by external sources and analyzed within the proper contextual framework.

Relevance

Information should be practical, flexible, responsive and driven by operational needs in support of decision-making throughout all phases of a crisis. Data that is not relevant should not be collected.

Impartiality

Information managers should consult a variety of sources when collecting and analyzing information so as to provide varied and balanced perspectives for addressing problems and recommending solutions.

Humanity

Information should never be used to distort, to mislead or to cause harm to affected or at-risk populations and should respect the dignity of victims.

Timeliness

Humanitarian information should be collected, analyzed and disseminated efficiently and must be kept current.

Sustainability

Humanitarian information and data should be preserved, cataloged and archived, so that it can be retrieved for future use, such as for preparedness, analysis, lessons learned and evaluation. The use of Open Source Software should be promoted to further enhance access to information by all stakeholders in a sustainable way. When possible, post-emergency data should be transitioned to relevant recovery actors and host governments and training provided on its use.

Reliability

Users must be able to evaluate the reliability and credibility of data and information by knowing its source and method of collection. Collection methods should adhere to global standards where they exist to support and reinforce credibility. Reliability is a prerequisite for ensuring validity and verifiability.

Reciprocity

Information exchange should be a beneficial two-way process between the affected communities and the humanitarian community, including affected governments.

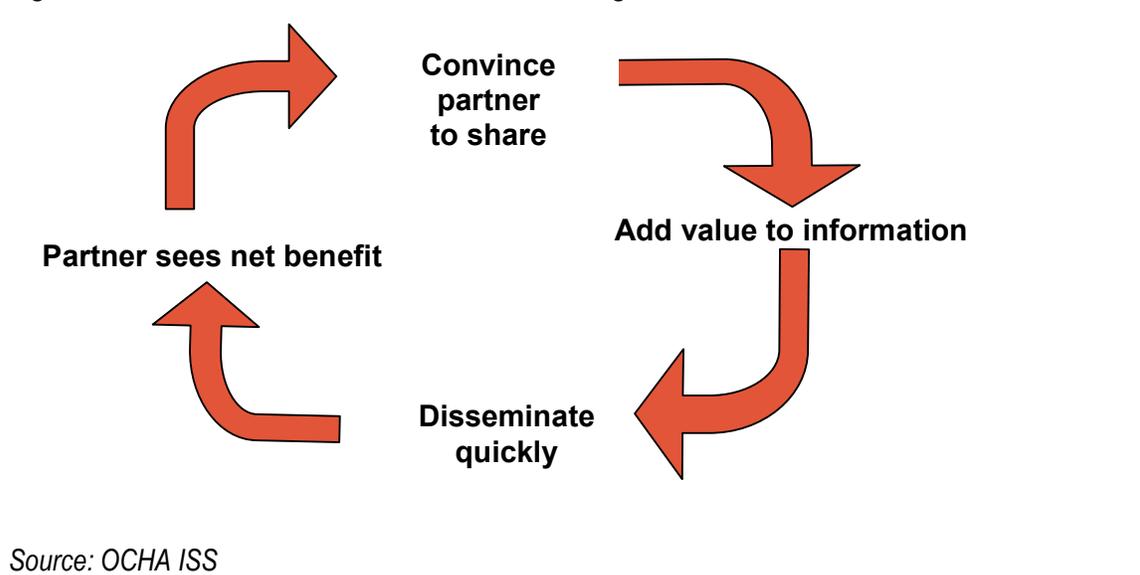
Confidentiality

The processing of any personal data shall not be done without the prior explicit description of its purpose and will only be done for that purpose, and after prior informed consent of the individual concerned. Sufficient safeguards must be put in place to protect personal data against loss, unauthorized processing and other misuse. If sensitive information is publicly disclosed, the sources of such information will not be released when there is a reasonable risk that doing so will affect the security or integrity of these sources.

2.3 The Importance of Reciprocity and Added-Value in Humanitarian Information Management

Both the OCHA Office and HICs support all steps in the IM chain: they both receive data from collecting/producing individuals and agencies, processes it to produce information in a manner which facilitates humanitarian decision making and coordination and disseminates this product to users. (Depending on the nature of the data and/or final product needed, an IMU or HIC may also undertake analysis.)

Figure 2: The Virtuous Circle of Information Exchange



In most cases, the sources for data used by an OCHA Office or HIC will also be the ultimate users of the products. Because of the reliance on other actors for primary data, developing and maintaining strong relations with client organizations in the humanitarian community is perhaps the most critical element in determining the performance and impact of an OCHA office or HIC. Figure 2 above represents the principle of reciprocity on which information exchange largely rests: potential partners will be encouraged to share data if they ultimately see (or tangibly receive) a benefit for having done so.

When an IMU or HIC is able to add value to data/information by, for example, displaying it in the form of a map and returning it in a timely fashion to the agency/ies that provided the initial data, then the agency/ies are more likely to continue to participating in an exchange relationship. If the circle is ‘broken’ at any stage, the process as a whole will ultimately break down. Initially convincing partners to share data or information without being able to show an immediate benefit is a challenge which often requires creativity and strong persuasion skills. Once a demonstrable benefit is achieved however, the process can quickly become self-sustaining due to a normally high demand for quality information products and services.

“An important message emerges from the case studies: an effective disaster information management system requires a good technological platform, but also much more.... The real difficulty lies in anchoring these technological approaches in an appropriate institutional context where they are supported by relevant and effective operating procedures, agreed terminology and data labeling, and a shared awareness of the benefits of proper handling of disaster information. Clearly, a disaster information management system must be supported by accepted rules, procedures, and relationships that encourage, facilitate, and guide the production, sharing, and analysis and use of data in response to disaster. In these case studies, the institutional dimension—the hidden wiring—determined the effectiveness of the systems.”

Data Against Disasters, World Bank

Box #: Best Practices for Developing and Maintaining Relationships

No one organization can collect all of the data and information needed during a relief operation so cooperation among international organizations, local and national actors, and the media is critical to both the short term success and long term sustainability of both global and field based information systems. Partnerships encourage trust and commitment among stakeholders and allow information systems to remain objective, accountable and focused on common rather than narrow interests.

Maximize resources by establishing partnerships. Recognize that data and information are collected and managed by a variety of actors including national governments, UN agencies, NGOs, the private sector and research institutions and that the contributions of these providers are crucial.

Pre-establish inter-agency agreements and relationships at the national and local levels. Relationships should be established with appropriate agencies at the national level in high-risk countries prior to an emergency situation. Maintain an ongoing process of personal interaction to create partnerships for IM and exchange.

Promote trust and transparency through linkages. Use distributed networks and neutral portal repositories to assist with information sharing, and promote linkages to avoid duplication of effort (e.g. provide websites, or areas on existing websites, where interest groups or 'members' can post information and collaborate).

Engage local and national actors in information projects. Develop networks of local communities and national NGOs, civil society groups and the private sector and address the issue of local participation as part of overall emergency planning, monitoring and evaluation. Build and strengthen the national/local capacity in IM and exchange and promote the transfer and use of local knowledge.

Partnering with the media can be an effective way of communicating information to the affected population. Use local and international media outlets to inform the local population about humanitarian relief operations.

2.4 Information Management in the Humanitarian Context

2.4.1 Humanitarian Crisis

Most often, up-to-date and reliable information is scarce at the onset of a humanitarian crisis. The crisis environment is characterized by high risk factors and the consequences of mistakes or delays can be disastrous (considering that the lives and well-being of people are at stake). Humanitarian staff may be under particularly strong pressure to act quickly in what are likely to be difficult security and living conditions. In many instances the conflict or natural hazard generating the crisis will simultaneously hinder humanitarian response (e.g. communications and power utilities may be cut or damaged, physical and/or security constraints impede access to beneficiaries).

The crisis environment generally includes a large and diverse range of actors (including UN Agencies, international organizations, local and international NGOs, Government, donors, military, media actors) with differing mandates and capacities. The onset of a crisis is usually characterized by a large and sudden influx of agencies, many of which arrive with little or no prior in-country experience or capacity. For example, following the NATO intervention in Kosovo, the inter-agency contact list contained over three hundred local and international NGOs working in the province.

A protracted crisis environment is one in which there may not be immediate large-scale humanitarian needs, but where the population includes highly vulnerable groups and the political, social and/or security situation is extremely fragile. This kind of situation necessitates close monitoring, and IM remains critical in the 'ongoing assessment of political, economic and social changes and the dissemination of this information to partners and donors...with the aim of ensuring timely and appropriate planning, funding and assistance delivery'².

2.4.2 Information in the Crisis Environment

The objective of humanitarian organizations in crisis response is to alleviate human suffering and meet basic needs. Plans and operations to meet this objective will be based on information such as affected population numbers, locations, profile and needs, as well as contextual information regarding logistics, security, capacities and plans of other agencies etc.

The effectiveness of any response is dependent on the quality of information available. However, in a complex and rapidly changing crisis environment, reliable, accurate and up-to-date information is often scarce and difficult to locate. Humanitarian missions, carried out in chaotic and fast-changing environments by multiple actors, often lack even the most basic shared information systems. This means surveys are frequently repeated and the results not shared or effectively used.

Although individual organizations bear responsibility for dealing with this issue, there are certain common information needs which can benefit the humanitarian community as a whole. In this context, a focal point for information sharing and processing, such as an OCHA Office or HIC, raises the efficiency of the humanitarian community, saving individual agencies time and energy on information sharing and processing, and providing a common platform of available information which facilitates collaboration.

2.4.3 Coordination of Humanitarian Response

Coordination relates to the process of planning and decision-making *among* organizations. Bringing agencies together to share and analyse information, and jointly develop response goals and strategies, coordination can also assist internal decision-making by providing the framework within which each organization can plan and execute its response activities. Therefore, by strengthening the coordination process (through providing 'best possible' information as shown in the previous section) the benefits of good IM practices at the inter-agency level flow through to the programming process of individual agencies.

"Information management systems are a critical element of effective response capacity. Responding to a major disaster involves numerous challenges in information management: tracking displaced and vulnerable populations; logging the damage to housing, infrastructure, and services; dealing with the sudden influx of humanitarian supplies; and coordinating the work of dozens and even hundreds of responding agencies. Essential information is controlled by many autonomous actors, and these actors may be working together for the first time. Developing systems that enable the information to be shared and analyzed to target resources is fundamental to building better response capacity."

Data Against Disasters, World Bank

As illustrated earlier, IM is a sequence of linked activities, essentially taking raw data, compiling/collating and associating it with other relevant data, and presenting this in a format designed to assist analysis, decision-making and action regarding aspects of a humanitarian crisis. As with coordination, IM does not in itself produce best-possible decisions or action; rather it supports this goal by providing decision-makers with high quality information products relevant to the situation under consideration.

² Association for Information Management 2005 (See <http://www.aslib.co.uk>)

Box #: Minimum Essential Data

In the early stages of a humanitarian crisis there is frequently a lack of timely and accurate data. The acquisition of appropriate data and information and its early incorporation into the planning needs of the humanitarian response has been identified as a priority in a number of recent studies on humanitarian coordination.

Among the most critical priority information needs are:

- Estimated number of individuals affected
- Geographical area affected
- Numbers and location(s) of displaced populations
- Critical immediate needs (i.e. medical assistance, shelter, food)

Core datasets to include administrative divisions, demographic information, population movements, health and education facilities, etc. These generic datasets can be applied across a wide range of functions and sectors.

The Survey of Surveys (see Section 5.2.4) and Information Needs Assessment (see Section 5.2.7) tools can be helpful in identifying what data or information exists. Where gaps are identified, the first and most important step is to secure the active participation of the major agencies in the necessary data collection activities and agreement that the entire humanitarian community will have access to relevant information outputs.

The 'humanitarian community' encompasses a large number of entities, each with particular interests and abilities. They range from formal, highly structured governmental institutions, through specialist international agencies to independent non-governmental organizations and concerned individuals. In an acute crisis, as these different types of relief stakeholders flood to the area, all under intense pressure to engage as quickly as possible, the characteristics of the 'humanitarian community' often mirror the fragmented and rapidly changing nature of the crisis itself.

Acknowledging this, UN General Assembly Resolution 46/182 (1992) recognized the need to 'make more effective the collective efforts of the international community', and confirmed that 'the UN has a central and unique role to play in providing leadership and co-ordinating the efforts of the international community to...ensure the prompt and smooth delivery of relief assistance'.

The purpose of coordination is to enable humanitarian organizations to maximise the impact of their collective effort. In simple terms coordination output might produce a set of programmes that are:

- compatible (avoiding gaps or overlaps);
- targeted to the most in need; and
- delivered in the most efficient and effective manner possible.

Six facets of coordination have been identified ³:

- 1) Avoiding duplication
- 2) Taking coherent approaches
- 3) Efficient use of resources
- 4) Leadership
- 5) Direction
- 6) Strata (local, sub-national, national, international)

³ OCHA Paper#1: Meeting of the high-level working group on OCHA, 13-14 May 2003.

The Humanitarian Coordinator, with support from OCHA and the UN Country Team, has primary responsibility for the structure and functioning of coordination mechanisms⁴. The impact on humanitarian response (measured in terms of the six facets above) will depend on their performance and the level of participation by humanitarian actors in the process.

In practice, coordination is a complex process (joint analysis, planning and decision making; building consensus on goals and priorities) but the first step is to ensure that the relevant actors are at least working with the same information and that this is as accurate and timely as possible. ***Information is in this sense the foundation stone on which decision-making and coordination are based.***

IM increases the quality of available information, and this can benefit all the actors and fora, and therefore the above mentioned facets of coordination, above. However good information will not generate positive coordination *per se*; rather it is a tool for the use of coordination focal points and fora. It is in this sense that IM *supports* coordination actors and mechanisms.

Box #: Humanitarian Needs Assessment

Humanitarian needs define the crisis response. Needs information is collected through assessments, and the collection and analysis of data is the responsibility of operational agencies. However, an IM specialist may support the process in a number of ways by providing:

- guidance on survey design (to ensure the quality, type and format of data collected meets the user's output needs)
- technical advice on data processing and management
- technical support to production of outputs for general distribution

The OCHA Office or HIC may have other data which could assist in analysis of the information on needs. For example, linking the W3 database of humanitarian activity with information on humanitarian needs could produce very useful outputs (e.g. maps) showing gaps or overlaps by sector, area, agency etc.

2.4.3 Sensitive Information and the Security of Humanitarian Staff

While the primary responsibility for the safety and security of humanitarian aid workers rests with host governments, the UN Department for Safety and Security (UNDSS) contributes to creating a safe environment by providing specialised security advice to the humanitarian community. In general, OCHA staff does not disseminate security-related information to the humanitarian community unless explicitly advised by UNDSS. As such, any information on security-related issues including maps of security phases, should be cleared by UNDSS before publication. Procedures for disseminating tools such as contact lists which could potentially impact the safety of staff should also be agreed upon with the humanitarian community in consultation with UN Department of Safety and Security (UNDSS) staff.

⁴ Donors, NGOs and Government also have responsibilities, both regarding internal coordination and participation in UN fora.

Box #: Handling Sensitive Information

The overall policy of OCHA is to make as much information as possible openly available. However, some humanitarian information may be sensitive to particular parties or place people at risk, and should therefore be treated accordingly. This kind of situation often arises in complex emergencies which involve conflict. For example, displacement routes and locations may threaten IDPs if made available to military parties to a conflict.

Because each crisis is different (and changing), the type of information which will be considered sensitive is a matter of judgement. Security staff, beneficiaries and civilian populations will be the primary criterion and the political environment is also often an important factor. In deciding on which information is sensitive and how it should be dealt with, staff should take the advice of the information source, potential users and consult with and follow the instructions of the Humanitarian Coordinator.

2.5.2 Preparedness and Contingency Planning

Although the value of information in coordinating humanitarian response is by now well-known, less attention is often given to the integration of information management activities into preparedness and contingency planning efforts. In this context information management can be viewed in two ways: as a support function for planning and preparation and as a key component of a potential response scenario. A more detailed discussion of the role of data preparedness as part of overall preparedness efforts can be found in Chapter 7.

(a) Information Support to Contingency Planning

Contingency planning often includes the development of potential crisis and response scenarios, both of which rely on accurate data to make them realistic and comprehensive. Population data, for example, may be used to anticipate the number and demographic profile of those who may be affected by a natural disaster occurring in a specific geographic area. Who Does What Where (3W) information may be a useful starting point for anticipating capacities for response by sector or geographic area.

(b) Planning Information Management Capacity

Too often, information management has been an afterthought when it comes to humanitarian response. Increasingly however, the importance of establishing disaster information systems before a crisis occurs is becoming clear to relief and development professionals.⁵ While establishing a comprehensive information management system is a goal for many countries, this often takes years of development and training. In the short term, much more basic efforts to identify and assign information management roles and tasks in potential response scenario may result in significant benefits to all actors once a response is triggered. Many of these institutional arrangements have been or are being developed at the global level

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⁵ See Data Against Disasters etc.

but their reiteration and clarification in local contingency planning exercises is often necessary to ensure a common understanding among all partners.