

Preparedness

Logistics

Introduction

Logistics is a diverse and dynamic function that is flexible and changes according to the various constraints and demands imposed upon it. There is, realistically, no 'true' name or 'true' definition that can be universally applied, because products, organisations and systems differ.

Many terms are therefore used interchangeably, in literature and in the humanitarian world. One quite frequently accepted view in the humanitarian sector is:

Logistics = Supply + Materials Management + Distribution

Logistics is concerned with physical material and information flows from raw material through to the final destination of the finished product. Major emphasis is now placed on the importance of information as well as physical flows, and an additional and very relevant factor is that of reverse logistics – the flow of products and packaging back through the system.

There is often confusion between "logistics" and "supply chain management". Logistics is one activity of the end-to-end process of supply chain management.

Humanitarian aid in emergencies may well be '80% logistics' but it encompasses a wider spectrum of activities; as Van Wassenhove observes : *"To many humanitarians, the definition of logistics is open to interpretation"*.

From article in *Journal of the Operational Research Society*, vol 57, no 5, p 475, 2006.

"Supply Chain Management deals with the management of materials, information, and financial flows in a network consisting of suppliers, manufacturers, distributors, and customers.

Prof. HauLee -Stanford Supply Chain Forum

Thomas and Nizushima expand the definition of humanitarian logistics to include:

"The process of planning, implementing and controlling the efficient, cost-effective flow and storage of goods and materials as well as related information, from the point of origin to the point of consumption for the purpose of meeting the end beneficiary's requirements."

Logistics training: necessity or luxury? by Anisya Thomas and Mitsuko Mizushima, published in *Forced Migration Review*, no 22, Jan. 2005.

For the purpose of the LOG we will adapt the definition by Thomas and Nizushima.

Commercial Logistics versus Humanitarian Logistics

Business logistics and commercial supply chains are sophisticated operations based on forecast demand, inventory control and a number of models that optimise a dynamic and fast moving system. Humanitarian

supply chains are essentially the same but with the following significant differences:

- unpredictable demand in terms of timing, geographic location, type of commodity, quantity of commodity;
- short lead time and suddenness of demand for large amounts of a wide variety of products and services;
- high humanitarian stakes regarding timelines in the face of a sophisticated global media and the high anticipatory attention of the donors;
- lack of initial resources in terms of supply, human resource, technology, capacity and funding.

(Source, Balcik and Beamon, 2008, 102)

The LOG and the Humanitarian Supply Chain

The various elements in the humanitarian supply chain, ranging from assessment right through distribution to monitoring and evaluation, are represented as main topics in the LOG highlighting “best practices” in terms of information, templates, tools and standard procedures.

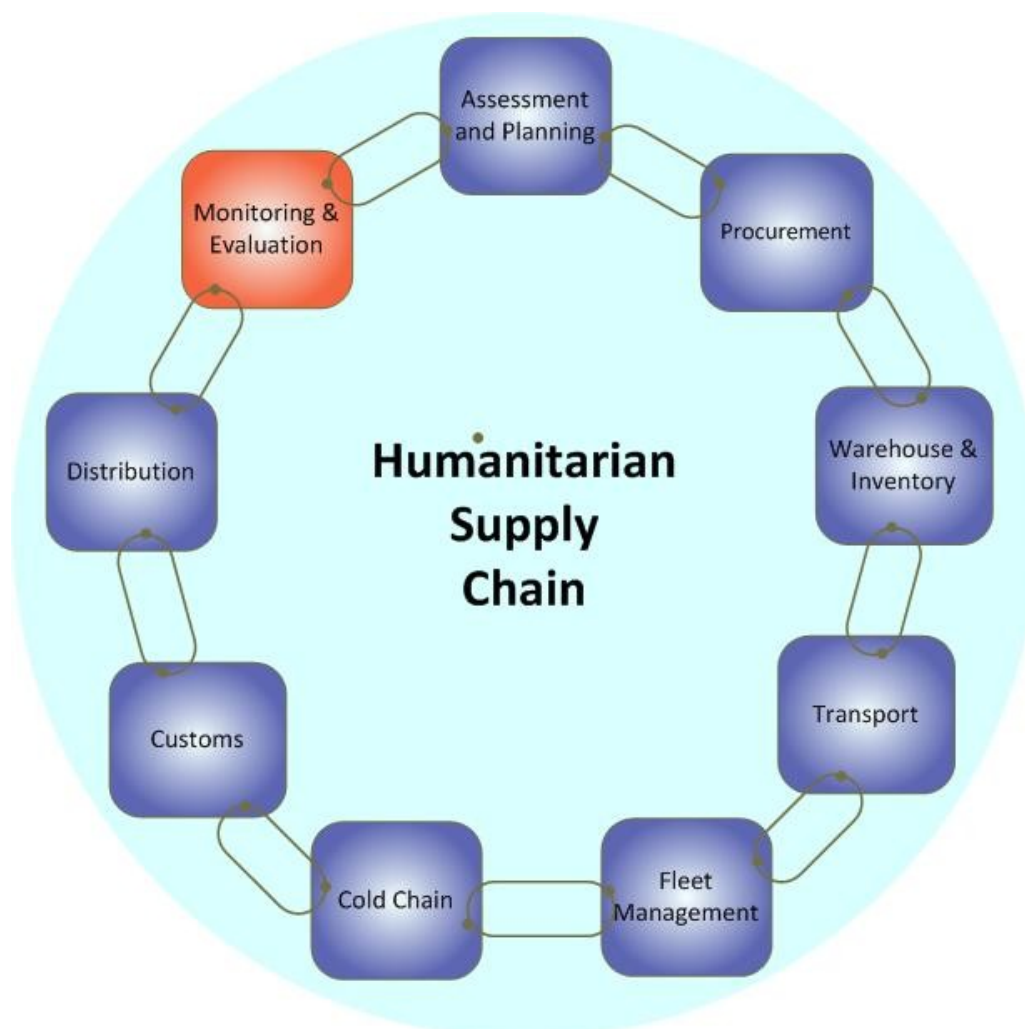


Diagram 1: The Humanitarian Supply Chain

To download the diagram, 'right click' on it and then choose 'Save Image As' from the menu OR go to Annexes .

- Assessment and Planning
- Procurement
- Warehouse & Inventory
- Transport
- Fleet Management
- Cold Chain
- Customs
- Distribution
- Monitoring & Evaluation

Intervention types

Introduction

Different types of disasters will require different intervention approaches. Disasters in the humanitarian sector are classified into three broad categories.

- Slow on-set emergencies
- Rapid on-set emergencies
- Complex humanitarian emergencies

“Understanding disasters can help reduce the risk of future disasters. Disasters occur when communities coping mechanisms are partially or completely destroyed and therefore people are unable to cope with the effects of natural or man-made hazards thus making them vulnerable to suffering.”

Understanding Vulnerability

Hazards present potential threats which may be natural (hurricanes or earthquakes) or man-made (industrial accidents, war, civil conflict).

Disasters occur when the poor and vulnerable are unable to cope with a major hazard due to underlying social, economic, environmental or political pressures.

Causes of vulnerability including poverty or social exclusion, force people to live in unsafe locations (i.e. prone to earthquake, landslides or flooding) or in an unsafe manner (i.e. poor housing or wholly reliant on subsistence agriculture)

Hazard + Vulnerability= Disaster

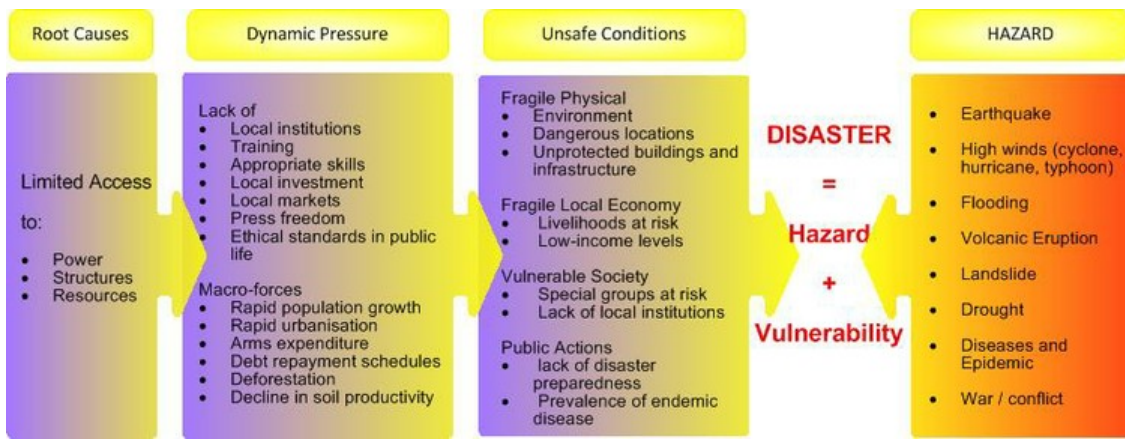


Diagram 1 : Disaster occurrence

To download the diagram, 'right click' on it and then choose 'Save Image As' from the menu OR go to Annexes.

Humanitarian Logistics Context

A hazardous situation in a country may turn into a disaster when the affected society cannot cope by using only its own resources. Under the circumstances, when lives and property are at immediate risk, humanitarian organisations may deploy emergency teams. Clusters are activated in the case of large-scale emergencies which exceed the in-country capacity of those agencies and other humanitarian organisations that are active in the area on a routine basis.

Example: Disaster Statistics - Deaths - Rapid and Slow Onset (Yr: 1900 to 1999). See CRED (EM-DAT) statistics: the Centre for Research on the Epidemiology of Disasters: www.cred.be.

Disaster	Deaths	Percentage
Earthquakes		
Volcanoes		
Landslides		
Storms	7 million	2.40%
Floods		
Wild fires		
Avalanches		
Road accidents	32.0 million	7.7%
Epidemics / aids	50.7 million	11.6%
Famines / Droughts	70.0 million	16.10%
Wars / civil strife / genocide	270.7 million	62.2%
TOTAL	434.10 million	100.00%

Typical disaster cycle

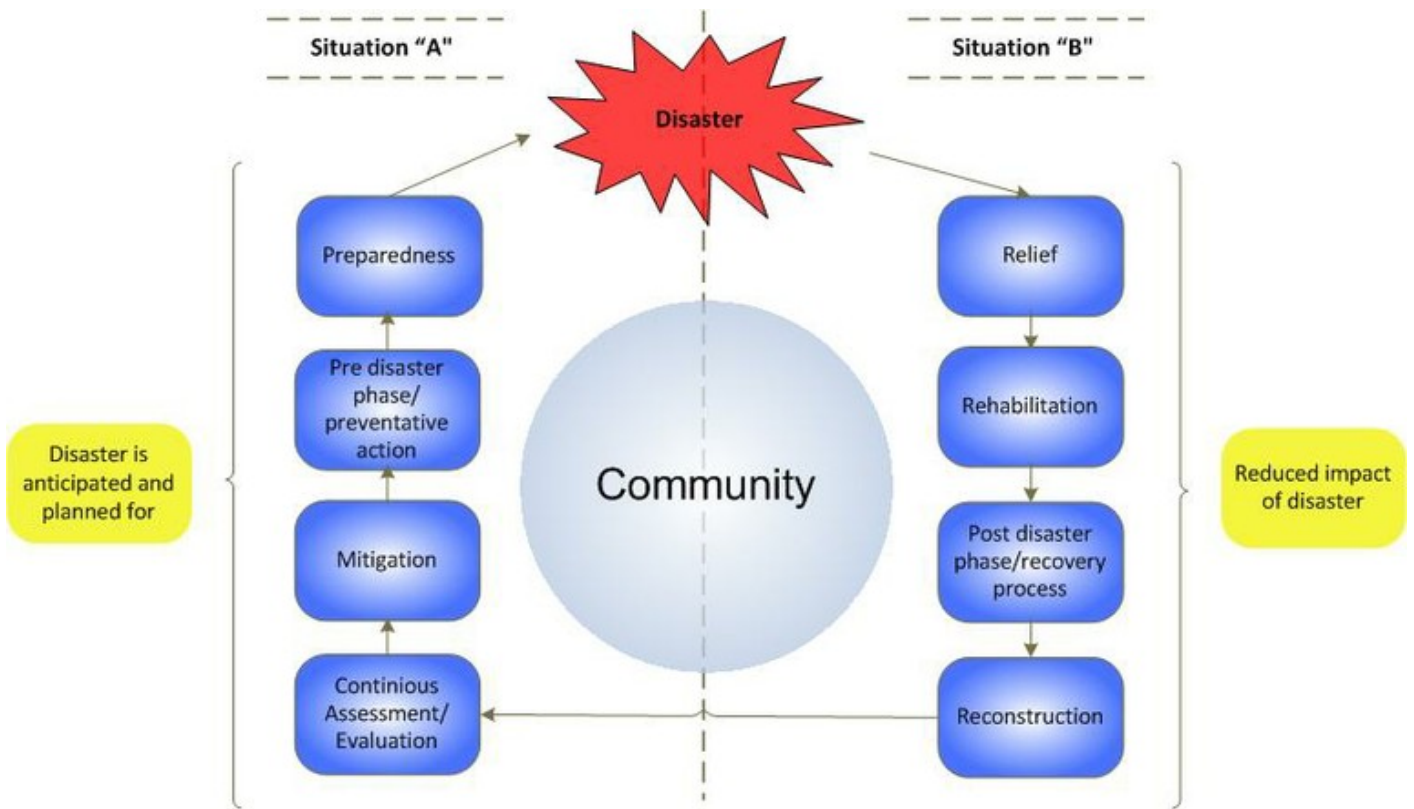


Diagram 2: Typical disaster cycle

To download the diagram, 'right click' on it and then choose 'Save Image As' from the menu OR go to Annexes.

Types of Emergencies

Slow on-set emergencies

In slow onset emergencies, situation "A" below, humanitarian organizations and governments are able to put measures in place to mitigate the effects of the disaster and be better prepared to respond to the disaster when it occurs. This should lead to the disaster having a reduced impact on the affected community. If and when the disaster occurs, the humanitarian sector and governments provide the necessary relief supplies and coordination in a timely manner through use of prepositioned stocks and established coordination mechanism.

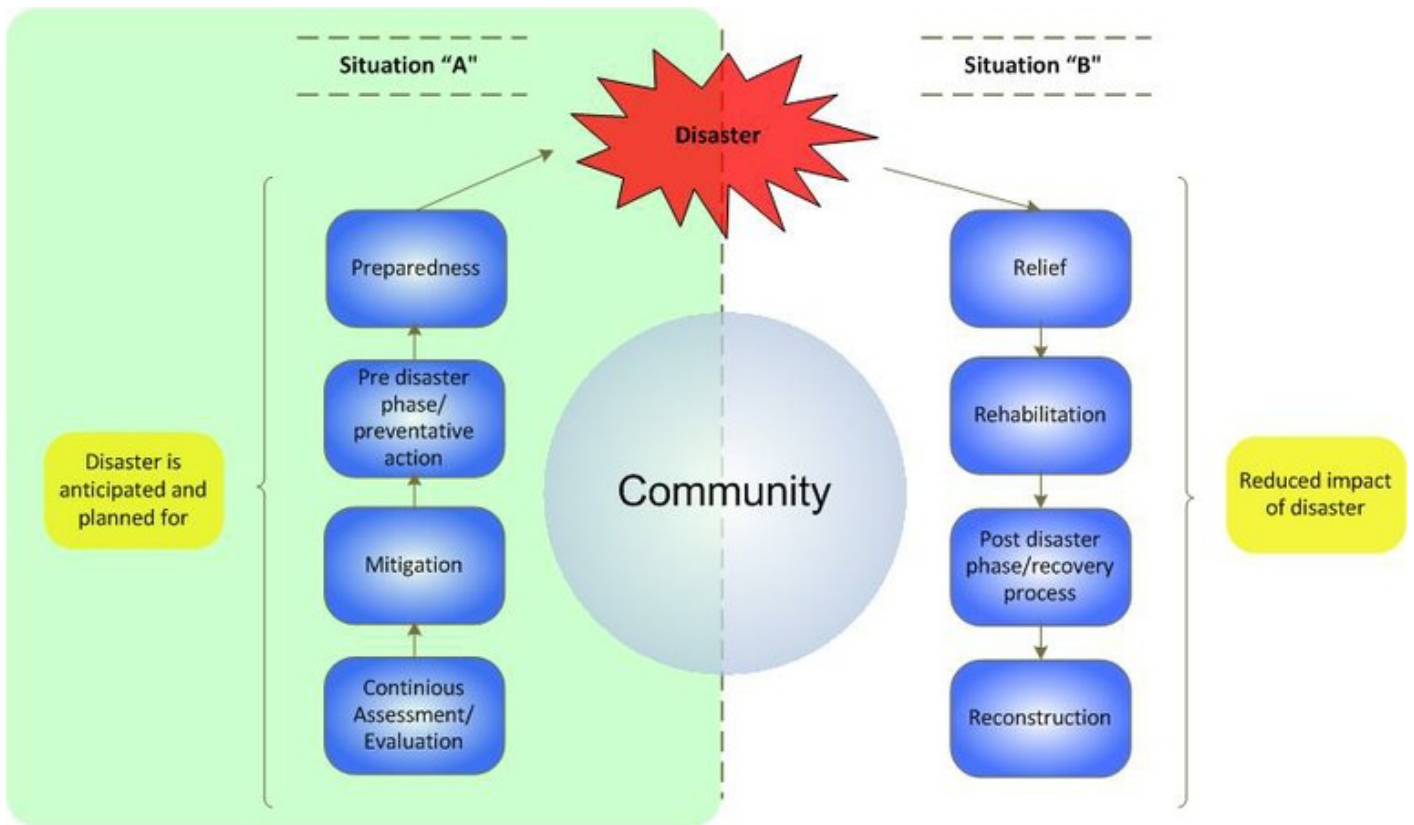


Diagram 3: Slow on-set emergencies

To download the diagram, 'click right' on it and then choose 'Save Image As' from the menu OR go to Annexes or Library.

Rapid/Sudden on-set emergencies

In case of a natural or man-made sudden on-set disaster situation "B" in the diagram below applies. There is very little time to prepare and the intervention is very much reactive. Relief activities are initiated by the humanitarian community to respond to the immediate needs while planning and preparing for the longer term requirements is being done.

In a bid to provide guidance on managing disasters, the Hyogo Framework for Action (HFA) 2005-2015, was endorsed by the world community at the 2005 World Conference in Disaster Reduction with the following strategic goals:

- Integrating disaster risk reduction into sustainable development at all levels, with special emphasis on disaster planning, mitigation, preparedness and vulnerability reduction.
- Strengthening institutions, mechanisms and capacities in communities and at all levels, to build resilience to hazards.
- Incorporating risk reduction in the implementation of emergency preparedness, response and recovery programmes.

Natural disasters, also referred to as sudden onset disasters, are emergencies caused by natural, technological and environmental calamities. The actions and activities described below will only relate to

natural disasters but the Logistics Cluster will have similar functions in technological and environmental disasters.

Sudden on-set/natural disasters are increasing in terms of frequency, complexity, scope and destructive capacity. During the past two decades, natural disasters have killed millions of people, adversely affected the life of at least one billion more people and resulted in enormous economic damage. Natural disasters include earthquakes, wind-storms, tsunamis, floods, landslides, volcanic eruptions, wildfires, etc.

The risk of natural disasters is increasing because of population growth, urbanization, and alteration disruption of the natural environment, substandard dwellings and public buildings and inadequate infrastructure maintenance.

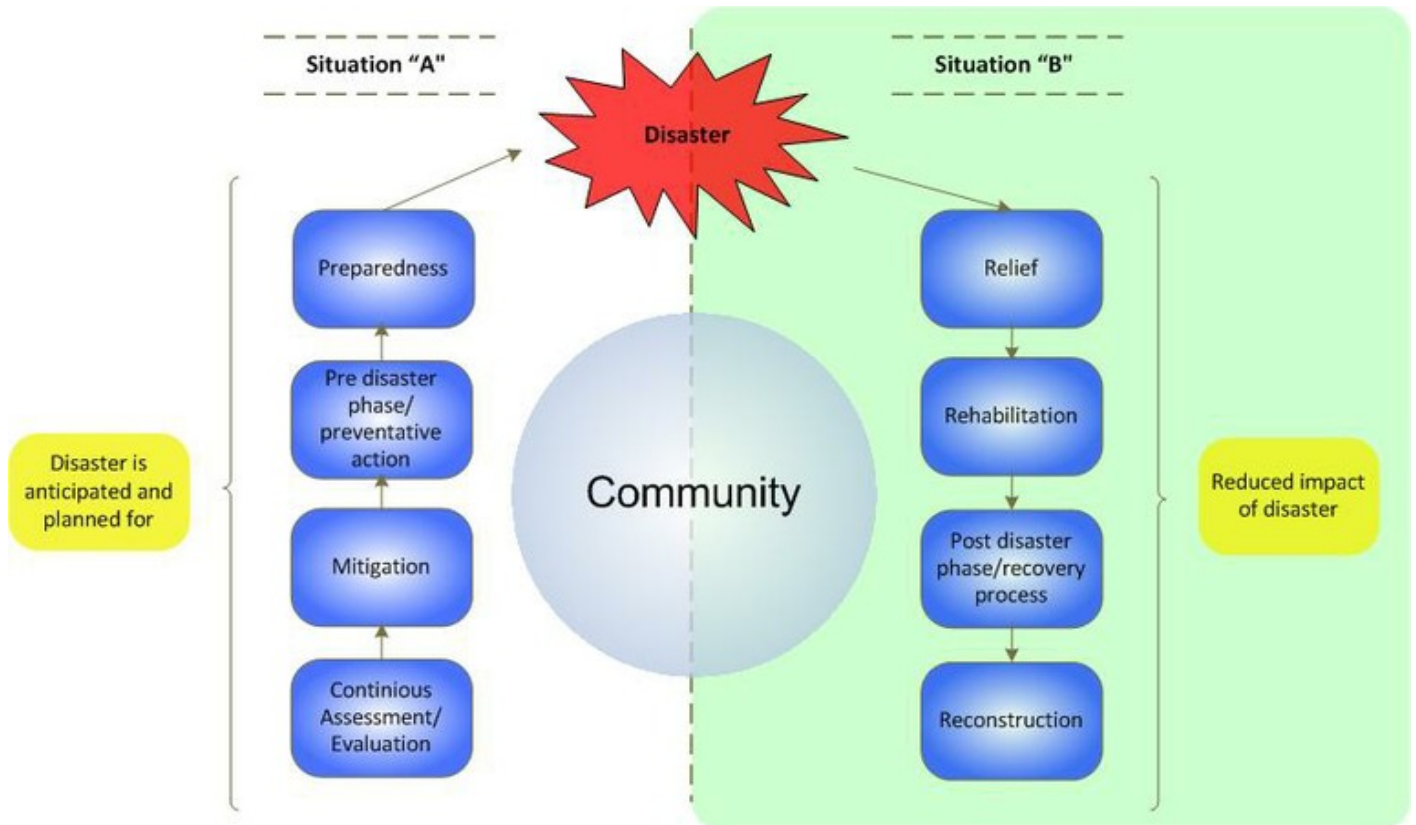


Diagram 4: Rapid on-set emergencies

To download the diagram, 'right click' on it and then choose 'Save Image As' from the menu OR go to Annexes.

Complex humanitarian emergencies

Complex emergencies are defined by the Inter-Agency Standing Committee (IASC) as, "a humanitarian crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single and/or ongoing UN country programme."

Likely characteristics of a complex emergency include:

- a large number of civilian victims, populations who are besieged or displaced, human suffering on a major scale;

- substantial international assistance is often needed and the response goes beyond the mandate or capacity of any one agency;
- delivery of humanitarian assistance is often impeded or prevented by parties to the conflict;
- high security risks for relief workers providing humanitarian assistance; and
- increasingly relief workers are being targeted by parties to the conflict.

Reducing Risk of Disaster

Disaster risk relates to the chance of negative consequences when a particular hazard affects vulnerable people or locations. Risks can be reduced through measures that mitigate the effects of disaster:

- Structural measures (i.e. design of buildings, physical barriers);
- Non structural measures such as environmental control or land use regulation, training and public awareness.

And measures that prepare for disasters i.e.:

- planning and early warning systems;
- stockpiling and increased community response capacity;
- coordination between actors at national, international and global level; and
- logistics capacity assessment and mapping of existing logistics resources.

See Stock Prepositioning topic.

"Before you go"

Pre-Departure Checklist

Time spent in preparation is seldom wasted. Often, in an emergency, time is limited, but the following information should enable you to use your time wisely.

Personal Items

- Valid passport (and photocopy) and at least six passport photos. In some countries the yellow booklet (immunization record) may be required. Ensure that this booklet includes your blood group.
- Driver licence.
- Adequate amount of relevant currency and/or travel cheques. Also take at least one credit card.
- Food and water for 36 hours, four changes of clothing appropriate for the location, toilet articles, flash-light with spare batteries, alarm clock, pocket-knife, earplugs and business cards.
- Sleeping bag, mosquito net , mosquito dome, tent, ground mat, etc, (if required).
- Essential information about the country (figures and basic facts: main historic events, humanitarian background, season, regional context, cultural and religious aspects etc).

- Essential contacts, embassy, etc.

Optional Items (brought at own risk): pocket-size binoculars, electrical adapters for appliances, pocket calculator, personal digital camera, condoms, swapping items (pins, buttons, pencils, stickers, etc).

Personal Health Items and Medical Tips

- Prescription medicine for expected length of stay; pain killers, medication for colds, allergies, diarrhoea, athlete's foot, etc.
- Sunscreen, insect repellent, antiseptic ointment, lip salve, vitamins, small scissors, tweezers, soap, isopropyl alcohol, water-purification tablets, three packets of oral re-hydration salts, baseball cap or hat for sun and rain, extra pair of spectacles or contacts (plus copy of your optician's prescription).
- Prescription of medicine for endemic/communicable diseases (prevention and treatment): ask your doctor or to the medical department of your organisation for medical advice.
- Comprehensive individual first aid kit.

- Make sure that your vaccination status is still valid.

Items Provided by Your Organisation

Items that would normally be provided by your organisation:

- Laptop computer with accessories for e-mail.
- Most recent version of LOG on an USB.
- Obtain an electronic map of the affected country/region. (The Logistics Cluster website would normally have them available within the first 72 hours of an emergency).

- Specific items related to the task such as mobile phone, satellite phone, PDA, GPS, digital camera (flyaway kit).
- Country clearances for affected country and visa if required.

Links

ReliefWeb tool - Before you go on mission, create your customized briefing kit to get a concise overview of a humanitarian situation in a single PDF file.

Visit the Logistics Cluster web page – read the operations page and the relevant country page.

Term of References

Functions within Logistics

This section hosts Terms of Reference, Job descriptions for various functions within Logistics. They are provided to serve as a guide and are not intended to be prescriptive but can be adjusted to meet specific organisational needs.

- Air Operations Officer (Helicopters)
- Senior Supply Officer and Supply Officer and Assistant Supply Officer
- Warehouse Manager and Assistant Warehouse Officer
- Cold Chain Officers and Supervisors-EPI Managers
- Customs Officer
- Logistics Officer and Logistics Assistant
- Procurement Officer
- Transport / Logistics Officer
- Transport / Shipping Officer
- Workshop / Fleet Officer

TOR of the Inter-Agency Standing Committee.

Humanitarian Coordinator TOR

Resident Coordinator JD