



# Humanitarian Logistics – A New Form of Logistics?

by

Hans W. Ittmann, CSIR Centre for Logistics,  
P O Box 395, Pretoria, 0001

[hittmann@csir.co.za](mailto:hittmann@csir.co.za)

19th SAIIE & 35th ORSSA 2005 Conference,  
Emerald Casino Resort, Vanderbijlpark  
28-31 August 2005

[www.csir.co.za](http://www.csir.co.za) 2005





# Agenda

- Introduction
- Types of Emergencies
- A Case for Humanitarian Aid
- Humanitarian Logistics Issues
- South African Case Study
- Conclusion

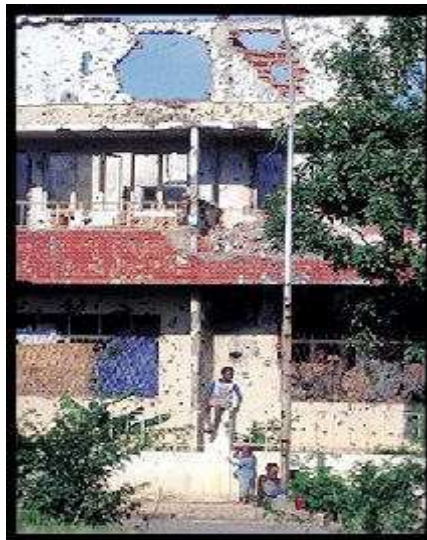
# Introduction

- 26 January 2001, Gujarat, India
- 11 September 2001, New York, USA
- 26 December 2004, Indian Ocean Region
- 29 August 2005, Hurricane Catherine, New Orleans, USA
- .....Tsunami, Darfur, Hurricanes, Earthquakes, South African Food Crises, HIV/AIDS pandemic.....
- Every year the world experience some 500 disasters, killing around 75 000 people and affecting 200 million
- Humanitarian impact huge
- Disaster relief in all these cases critical
- Logistics is 80% of this disaster relief – needs to be slick, effective and efficient

*Most of what is covered in this talk is based on work by Luk van Wassenhove and Fritz Institute in the USA*

# Types of Emergencies

- Tsunami
- Earthquakes
- Floods
- Famine
- Civil unrest/civil war
- Economic collapse
- Pandemics



# A Case for Humanitarian Aid

“The science of supply chain management in business has advanced so much in the last ten years, especially through the use of IT. How can we use this knowledge to help in the humanitarian context, where no science of disaster logistics yet exists? By contrast business supply chains have been repeatedly disturbed by man-made and natural disasters. Thus they have inadvertently tended to take on the characteristics of disaster supply chains. How can business therefore also learn from the experience of the humanitarian world that must so often operate in a framework of disasters?”

Luk van Wassenhove

# Humanitarian Logistics Issues

- Can happen any time – unexpected occurrence
- Complex environment
  - Scale of operation can be huge
  - Original infrastructure can be destroyed
- Need to deal with many stakeholders
  - Large number of uncoordinated and disparate donors
  - Government, media, military and beneficiaries
  - Many humanitarian organizations
- Require robust equipment
  - Must be able to set up and dismantle quickly
  - Safety a major issue
- Work in a context between life and death

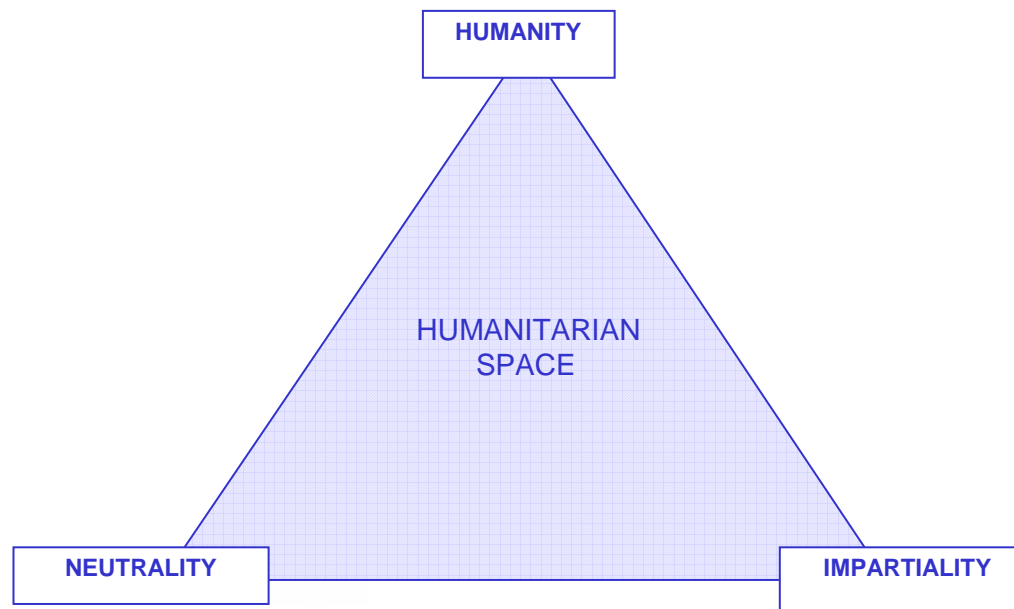
# Humanitarian Logistics Issues

- Working with uncertainty and risk
- Need to deal with the unknown and the unexpected
- Speed of response absolutely critical
- All elements of any supply chain still applicable in the humanitarian context
- Adherence to humanitarian principles



# Humanitarian Space

- Will assist everyone in need wherever found
- Will not influence the outcome of a conflict with their intervention
- Will not favor one group of beneficiaries over another



# Major Activities – Disaster Relief

- Assessment
- Appeals Management
- Operations Planning
- Mobilization
- In-country Operations
- Coordination with other HRO's
- Reporting

# The Supply Chain for Humanitarian Relief

- Preparedness
- Assessment/Appeals
- Response Mobilization
- Procurement
- Transportation Execution
- Tracking and Tracing
- Stocks/Asset Management
- Extended Point of Delivery
- Performance Evaluation

# Preparedness

- **Human resources**
  - well-selected and adequately trained people
- **Knowledge management**
  - learning from previous disasters (i.e. capturing, codifying and transferring knowledge about logistics operations)
- **Operations and Process Management**
  - appropriate skills in process and logistics management
- **Financial resources**
  - sufficient financial resources
- **The community**
  - effective ways of collaborating with other key players (governments, military, business and other humanitarian organizations)

# Humanitarian Operations Course

- Course offered by INSEAD and Copenhagen Business School
- Six weeks duration
- Course content:
  - Importance of Logistics
  - Humanitarian Landscape
  - Preparedness
  - Coordination
  - Resource Allocation
  - Information Management
  - Flow of Goods
  - Managing People
  - Corporate Social Responsibility
  - Cross Learnings and Review

# South African Case Study

- Heartbeat/Hartklop Centre for Community Development
- Support to HIV/AIDS orphaned children



# Heartbeat

- NGO that started in 2001 by a group of unpaid volunteers
- Driving force a minister with support from her local church
- Grown to an organization with:
  - 11 full time staff at the head office
  - Close to 100 part time workers
  - Support to 5000 to 8000 children in 5 provinces
  - Currently an annual budget of R 14 million
- Future objectives:
  - Expanding their reach
  - Ensuring sustainability
  - Maintain quality in implementation and training

# Logistical challenges

- Rely on different types of donations:
  - Donations from private individuals and from companies
    - Happens often but irregularly
    - Need to react quickly
  - Donations from corporates
    - Typically phone a week before the time
    - Heartbeat has no budget to handle donations
    - How to distribute such donations
    - No vehicles, no store facilities, etc
  - Regular monthly donations from Tiger Brands
    - Give them all their foods supplies monthly
    - Never sure when things will be delivered
    - Stuff arrives and they cannot store them
    - Many times food is stolen



# Logistical Problems

- Need to collect donations fast and quickly
- No mechanism to do this – no vehicles, etc rely on volunteers
- No budget to do this
- Where to store these donations?
- How to get it to the various provinces?
- How to distribute it fairly between the various provinces?
- If things arrive unexpectedly at the locations it can be lost
- When things are at the locations they have a reasonable system in place to deal with it

# What type of assistance?

- Interact with this group and get an appreciation of the issues
- Follow typical OR approach
- Challenge is how to improve their preparedness/readiness
- Funding for such involvement
- How to repeat this for other similar organizations
- Logisticians full-time or part-time – the idea is to get a community of practitioners in place

# Heartbeat/Hartklop - Impact

- Wilson was the first orphan identified by Heartbeat, in January 2000. Wilson lost both his parents, and lived on his own in a shack. Wilson struggled to survive. He could not pay for school fees, uniform, food, or paraffin. Wilson was alone and had no one to talk to. He had to face life's daily challenges without the love and support of his parents. Now four years later, Wilson is a new boy. Through Heartbeat's intervention eight of Wilson's most basic rights, as enshrined in the South African Constitution, are met.
- Wilson goes to school regularly, as Heartbeat's lobbied for the exemption of school fees. He now owns his parents' shack, and he calls this "home". Wilson has the right to a name and nationality, and through Heartbeat's work, he now has an ID document. Should Wilson fall ill, he now has access to medicine and treatment. He receives free water and electricity from the town council, through Heartbeat's lobbying. Wilson also found his "second mother" in Heartbeat's caregiver assigned to him. She helps him with homework, and listens when he talks. Wilson receives regular food parcels and he can now concentrate better at school because he is not hungry anymore.
- Wilson's life has changed dramatically over the past three years. Heartbeat intervenes in the lives of 5000 orphans, like Wilson.

# Conclusion

- Here is a new type of logistics/supply chain management but with many similarities
- Can apply the same principles of business logistics/supply chain management
- Challenge is to do something
- Many NGO's in South Africa/Southern Africa that can benefit from this type of expertise