Post-Disaster: Disaster Management and Post-disaster Stage: Response & Recovery

Linking to the Goals of Sustainable Development
How do we respond, recover and rebuild to disaster in order to decrease risk and increase our resiliency in transforming our society to one that is sustainable?

Photo: Tacloban, Philippines after Typhoon Haiyan 2013
# Grading Response and Recovery aligned with Sustainable Development

A = Very Good, B = Good, C = Satisfactory, D = Not Satisfactory, F = Failure

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Disaster Response</th>
<th>Disaster Recovery</th>
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<tbody>
<tr>
<td>Fukushima (earthquake, tsunami, radiation)</td>
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<td>Haiti (earthquake)</td>
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<td>Bangkok 2012 Floods</td>
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<td>Banda Aceh (tsunami)</td>
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<td>New Orleans – Katrina (Hurricane / flooding)</td>
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<tr>
<td>Tacloban, Philippines (Typhoon)</td>
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Some Principles of Post Disaster Response and Recovery
Principles

Recovery and rehabilitation is most effective:

• when communities and stakeholders recognize that it is a long-term process;
• when activities are integrated with risk management and sustainable development;
• when conducted with the participation of all affected stakeholders;
• when services are provided in a timely, fair and flexible manner.
What we DO NOT want

• Actions taken in the aftermath of a disaster to:
  – Reconstruct same as before
  – Rebuilding the pre-existing vulnerabilities
  – Community in same state as before the disaster
1. chair
2. disaster
3. rehabilitation

United Nations Disaster Management Training Programme (DMTP)
United Nations Disaster Management Training Programme (DMTP)

A Tool for Building Back better
DRM & Sustainable Development

International Agreements & Frameworks of Importance
Issues in Agenda 21 relating to disaster reduction

- **Chapter 7** "Promoting sustainable human settlement development",
- **Chapter 11**: “... Combating deforestation and drought”;
- **Chapter 13** ”... Sustainable mountain development",
- **Chapter 17** "Protection of the oceans...",
- **Chapter 18**: “... freshwater resources: application of integrated approaches.”
WSSD in Johannesburg, September 2002

• "People, Planet, Prosperity". The presumptions to address are:
  ➢ Poverty and inequality are the greatest threat to sustainable global development in 21\textsuperscript{st} century,
  ➢ Seriously tackling inequality will involve changes in terms of trade, investment, debt relief,
  ➢ Governments cannot do this alone - partnership with business, industry and civil society is essential.
WSSD focus

• Shift in emphasis from purely environmental issues to the importance of sustainable social and economic development

• needs of the developing world, ie the intersection between poverty, environment and development.
Supporting documentation

• Several global reports under preparation, useful for WSSD:
  – Global review on disaster reduction (ISDR)
  – World Vulnerability Report (UNDP)
  – Global Environmental Outlook (UNEP)
  – World Disaster Report (IFRC)
  – World Water Report
  – Millenium Ecosystem Assessment (WRI)
  – others....
1.4.2. “The future we want” Outcome Document

SECTION I: OUR COMMON VISION

- Recognizing that poverty eradication, changing unsustainable and promoting sustainable patterns of consumption and production, and protecting and managing the natural resource base of economic and social development are the overarching objectives of and essential requirements for sustainable development
1.4.4. “The future we want” Outcome Document

SECTION III: GREEN ECONOMY

• There are “different approaches” and tools available to achieve SD → Green economy is one of the important tools,

• Guidance on green economy policies:
  – Reference to Rio Principles and past action plans
  – National sovereignty over natural resources;
  – Participation by all relevant stakeholders;
  – Sustained and inclusive growth; Sustainable Consumption and Production;
  – International cooperation on finance;
  – Indigenous peoples and non-market approaches;
  – Poverty eradication (social protection floors).
B. Sustainable Development Goals (SDGs)

- Still firmly committed to MDGs but also recognize utility of a set of SDGs (based on Agenda 21 and the JPOI, Rio Principles);
- SDGs focused on priority areas selected on the Outcome Document;
- established an intergovernmental process on SDGs → working group will be constituted, to submit a proposal for SDGs to the UNGA;
- need to assess targets and indicators for SDGs.
The Draft “Sustainable Development Goals” (SDGs)

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Outcome document of the Open Working Group, July 2014
Hyogo Framework for Action (Doc. 7)

• Provides priorities for action 2005 – 2015 for entire DRM

• Five Priority areas specified
  – Key activities outlined for each of the five priority areas

• Implementation and Follow up
  – States
  – Regional Organizations
  – International Organizations
  – ISDR Process
  – Resource Mobilization
Five Priority Areas of HFA (Doc 7.0)

1) Governance: organizational, legal and policy frameworks
2) Risk identification, assessment, monitoring and early warning
3) Knowledge management and education
4) Reducing underlying risk factors
5) Preparedness for effective response and recovery
A short Systems Exercise
After Immediate Rescue and Response, then what?

- First things first: there are people to rescue, mouths to feed. Medical supplies to distribute, bodies to bury, law and order to reinstate. But what next? When the immediate threat from the hazard has passed, when the suddenly homeless take stock and regard the obliterated ruins of their city, where do you start? How do you rebuild a city?
## Disaster Response & Recovery Areas

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<thead>
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<th>Governance, Leadership, Decision-making</th>
<th>Infrastructure</th>
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<tr>
<td>Health &amp; sanitation</td>
<td>Waste management</td>
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<tr>
<td>Mental health</td>
<td>Mortality management</td>
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<tr>
<td>Public safety</td>
<td>transportation</td>
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<tr>
<td>Communications</td>
<td>Business vitality</td>
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<tr>
<td>Emergency medical care</td>
<td>Education &amp; training</td>
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<tr>
<td>Food security (procurement, distribution)</td>
<td>Children welfare</td>
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<tr>
<td>Housing</td>
<td>Public services &amp; utilities</td>
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<td>Environmental management</td>
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The Sustainable Development Planning & Action Cycle

1. Understanding Systems
2. Understanding Sustainability
3. Defining Your Vision, Goals, and Framework
4. Indicators and Information
5. Systems Analysis
6. Innovation
7. Strategy: Plan how to succeed in making change
8. Then commit to ...
9. Monitoring and Adaptation

INDICATORS: Assess where you are, and where you are headed.
SYSTEMS: Figure out why you are headed there, and where you can effectively change direction.
INNOVATION: Identify what changes to make for sustainability.
STRATEGY: Plan how to succeed in making change.
Starting with the End in Mind

A
Awareness

C
Creative Solutions

D
Decide on Priorities

B
Baseline

Backcasting

Future

Visioning

Does it move us in the right direction? Is it a flexible platform? Is it a good return on investment?

Envisioning a Sustainable Future
"The future is an act of the imagination."

- Warren Ziegler
System Connection Circle

Hazard resilient Housing
Instructions

1. Identify one area for disaster response & recovery
2. Identify 6 or more factors influencing resilience after disaster
3. Construct a simple system connection circle between the different factors
4. Brainstorm innovative ideas for decreasing hazard; decreasing exposure, decreasing vulnerability, and increasing capacity.
Hazard, exposure and vulnerability drive direct risk in Disaster Risk Management Analysis

\[
Risk = \frac{\text{Hazard} \times \text{Exposure} \times \text{Vulnerability}}{\text{Adaptive Capacity}}
\]

Reducing Risk & Increasing Resilience

Source: Adapted and expanded from IIASA CATSIM model (Mechler et al., 2006)
System Connection Circle

Hazard resilient Housing

- Electricity
- Materials
- Planning & Design
- Sanitation
- Community (supply chain)
- Land/Property Ownership
- Location to Hazard
- Clean Potable water
- Roads
- Quality of Construction

Quality of Construction

Sustainability Asia
Comments, Questions, Discussion
THANK YOU FOR YOUR ATTENTION!

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