



'To LAW or to SLOW'

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**Making Disaster
Risk Management (DRM)
Sustainable**



Disaster-related attitude

- If national disaster-related regulation exists
- It is (usually) Civil Protection driven
- It is (in its nature) reactive
- It is (mostly) focused on emergency services
- It is inter-institutionally (vertically and horizontally) uncoordinated



When disaster strikes

- Intensive media coverage (role of media?)
- Global (usually uncoordinated) response
- Terabytes of satellite images
- “Flood” of the Hi-Tech solutions (buoys, computer models, ...)
- ...
- ... and after some time
- ... attention turns to some other events



Common definitions

- The Problem:
- In multi-disciplinary research in general and disaster reduction in particular **there are often no common definitions or concepts.**
- Hence, there is **lack of mutual understanding** and communication is difficult.



Core terminology of disaster risk management

- A first step towards common concepts:
- Definitions of terms have simultaneously and homogeneously grown in many disciplines. But **multi-disciplinarity often results in the same term being defined in different ways by the various disciplines involved.**
- In order to enable collaboration and communication free of misunderstanding it is crucial to make the different definitions known across the disciplines and, in the long-term, to facilitate the emergence of a common vocabulary and preferably of unique, well formulated definitions and concepts.



Flying low in Africa?





Sustainable disaster risk management

How to build sustainable disaster risk management?

Four parallel “roads”:

- **Legislation**
- Inter-institutional (horizontal and vertical) coordination
- Sensible and sustainable technology
- DM education (professionals and public awareness), and research



South African achievements

South African **Disaster Management Act**, No. 57 of 2002, on 15 January 2003:

- An integrated and coordinated disaster management (umbrella) policy
- Focusing on prevention and disaster risk reduction
- National, provincial, district and municipal disaster management centres / offices



South African achievements

National **Disaster Management Framework** as the legal instrument, specified by the Act, comprises 4 KPAs and *3 Enablers*:

1. Integrated institutional capacity for DRM
2. Disaster risk assessment
3. Disaster risk reduction
4. Response and recovery
 - *Information management and communication*
 - *Education, training, public awareness and research*
 - *Funding arrangements*



1. Integrated institutional capacity for DRM

- Arrangements for the development and adoption of **integrated disaster risk management policy**.
- Arrangements for integrated **direction and implementation** of disaster risk management policy.
- Arrangements for **stakeholder participation** and the engagement of **technical advice** in disaster risk management planning and operations.
- Arrangements for **national, regional and international co-operation** for disaster risk management.



2. Risk assessment and monitoring

- Disaster risk assessment and risk reduction planning.
- Generating a National **indicative disaster risk profile**.
- Monitoring, updating and disseminating risk information.
- Conducting quality control



3. Disaster risk reduction

- Disaster risk management planning.
- **Setting priorities** for disaster risk management planning.
- **Scoping and development** of disaster risk reduction plans, projects and programmes.
- **Inclusion** of disaster risk reduction efforts in other structures and processes.
- **Implementation and monitoring** of disaster risk reduction programmes and initiatives.



4. Response and recovery

- Early warnings.
- Assessment, classification, declaration and review of a disaster.
- Integrated response and recovery.
- Relief measures.
- Rehabilitation and reconstruction.

Enabler 1: Information management and communication

- **Establishing** an information management and communication system.
- **Integrated** information management and communication **model**.
- **Data** acquisition.
- Information management and communication **support** for key performance areas and enablers.
- Specialised system functionalities.
- **Development** of an integrated information management and communication **system**.
- Information **dissemination**.



Enabler 2: Education, training, public awareness and research

- National education, training and research **needs and resources analysis**.
- National disaster risk management education and training **framework**.
- Disaster risk management **education**.
- **Training** programmes for disaster risk management.
- **Creating awareness**, promoting a culture of risk avoidance and establishing good media relations.
- **Research programme** and information and advisory services.



Enabler 3: Funding arrangements

- **Legislative framework** for funding arrangements.
- **Principles** underpinning funding arrangements.
- **Overview** of funding arrangements.



South African achievements

Social aspects of disaster risk management

The Act makes provision for disaster risk management through:

- The urgent integration of risk reduction strategies into all sustainable development initiatives.
- The development of a strategy to reduce vulnerability, especially poor and disadvantaged communities.



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Inter-institutional coordination

NATIONAL SPHERE		
INTER-GOVERNMENTAL COMMITTEE ON DISASTER MANAGEMENT (ICDM) (Established by the President)	NATIONAL DISASTER MANAGEMENT ADVISORY FORUM (NDMAF) (Established by the Minister)	NATIONAL DISASTER MANAGEMENT CENTRE (NDMC) (Established by the Act.)
<ul style="list-style-type: none">• Cabinet members• MECs• SALGA• Other role players	<ul style="list-style-type: none">• Head of the NDMC• National Departments• Local Government• Experts in disaster management• Other	<ul style="list-style-type: none">• Minister to appoint the Head of the NDMC• <i>See powers and duties.</i>

Similar structures on provincial and municipal level

Inter-institutional coordination

The **National Disaster Management Centre** (NDMC) has been constituted with the objective

- to promote an integrated and coordinated system of disaster management,
- with a special emphasis on prevent and mitigation,
- by national, provincial and municipal organs of state, statutory functionaries, other role players and communities.



Inter-institutional coordination

- NDMC Mission is:
- To develop and maintain an effective National Disaster Management Information System (NDMIS).
- To develop and maintain early warning systems.
- To develop a national disaster management framework.
- To assist with capacity building and training.
- To develop and maintain an integrated, effective and efficient emergency response service.
- To encourage research and analysis of disaster occurrences.
- To monitor and evaluate the performance on disaster management.
- To keep, maintain and update databases.
- To develop a vulnerability atlas.



Inter-institutional coordination

Seamless data and information integration between:

- National Disaster Management Centre (NDMC)
- National Department of Water Affairs and Forestry (DWAF)
- National Department of Health (DoH)
- National Department of Agriculture (DoA)
- National Department of Environmental Affairs and Tourism (DEAT)
- South African Weather Service (SAWS)
- South African Police Service (SAPS)
- Satellite Application Centre (SAC)



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Sustainable disaster risk management

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Four parallel “roads”:

- Legislation
- Inter-institutional (horizontal and vertical) coordination
- Sensible and sustainable technology
- **DRM education, training, public awareness and research**



DRM Training, education, public awareness and research

Disaster risk management **education**

- Education for disaster risk management professionals (NQF levels 5–8)
- Education for practitioners in professions associated with disaster risk management (NQF levels 5–8)
- Integration of disaster risk reduction education into primary and secondary school curricula (NQF levels 1–4)
- Responsibility for the development of accredited education programmes



DRM Training, education, public awareness and research

Creating awareness, promoting a culture of risk avoidance and establishing good media relations

- Integrated public awareness strategy
- Schools
- Role of the media
- Responsibility for an integrated public awareness strategy



DRM Training, education, public awareness and research

Research programme and information and advisory services

- Research
- Information provision
- Advisory service
- Responsibility for establishing a research programme and information and advisory services



The Role of the UNU-EHS

- To promote DM legislation
- To encourage inter-institutional (horizontal and vertical) DM coordination
- To assist sensible and sustainable implementation of technology for DM
- To actively participate in development of DM curricula to educate DM professionals (undergraduate and postgraduate levels), as well as in form of public awareness



Credits

South African Institutions:

- National Disaster Management Centre
- Department of Water Affairs and Forestry
- Department of Agriculture
- Department of Health
- Satellite Application Centre
- South African Universities