



The Cascading System for Human Capacity Development

Approach of the Environmental Planning and Disaster Risk Management Programme - EPDRM 2008-2013 -

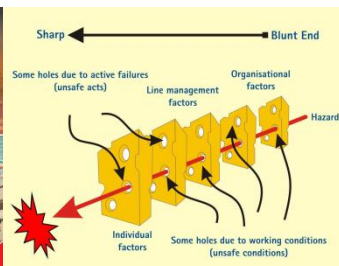
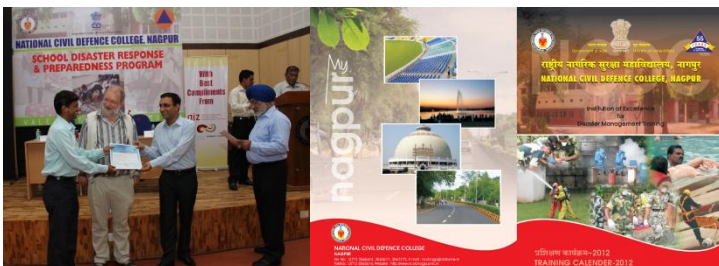


India, with its varied agro-climatic regions, is prone to natural disasters such as floods, droughts, cyclones, flash floods and landslides. Climate change exacerbates the frequency and intensity of such events. Moreover, spreading industrialisation, the non-existent or inefficient planning, contradictory and confusing regulations as well as deficits in industrial safety increase the risk for workers and the exposed local population.

Paradigm shift in Indian policy

In the past, the approach in disaster management has been to react and provide instant relief. However, as such events are becoming more frequent and widespread it becomes imminent to adopt a prevention and preparedness centric approach:

- Government of India (GoI) passed the National Disaster Management Act in 2005 and established the National Disaster Management Authority (NDMA) as an apex body supported by State and District Disaster Management Authorities (SDMA, DDMA), for providing the legal and institutional framework needed to coordinate DRM in India.
- As given in the NDMA guidelines, the challenge is to move from a reactive to a proactive approach to DRM; which requires not just technical solutions but also improved awareness and understanding among all stakeholders and the society as a whole.
- In the 12th Five Year Plan, GoI has allocated approximately Rs 3000 crores (approx. 360 Mill €) for capacity building in disaster management, emphasising the importance given to DRM in national policy. NDMA plans to review the guidelines produced in light of experiences of the last five years and develop National Action Plans for dealing with different types of disasters.
- In 2009, India launched the National Skill Development Policy, based on the idea that skills and knowledge are the driving forces of economic growth and social development.
- Civil Defence in India was upgraded in the 2010 (*Civil Defence Act, 1968 Amended Vide Notification Dated 22 Jan 2010*) and now includes “any measures taken for the purpose of Disaster Management, before, during, or after any Disaster”. The ongoing strategic discussion of the Civil Defence institutions and the Ministry of Home Affairs has a strong component in Capacity Building.



The contribution of the Indo-German Development Cooperation

The 'Deutsche Gesellschaft für internationale Zusammenarbeit' with the Indo-German Environmental Partnership Programme (IGEP) contributed to India's national efforts for *Human Capacity Development in Disaster Risk Management* since 2008 with the *Environmental Planning and Disaster Risk Management (EPDRM)* project¹. The programme aimed at supporting partner institutions and facilitators in conceptualizing, establishing, managing and demo-operating prototype national capacity building systems with a view to promoting sustainable resource management and facilitating adjustments in disaster risk management to climate change. There was - and there is - a tremendous need for capacity building, particularly at the level of upper and middle management of government agencies, risk management institutions, environmental regulating agencies, industry associations, individual industries and organisations working with the civilian society, as well as in state and private training providers. With limited budgets and the huge challenges of a densely populated and vulnerable society a leverage system is the most efficient approach.

By establishing a cascade system comprising national training providers, key zonal institutions and state-level institutions and developing standardized modular capacity building programmes, the programme contributed to human capacity building at training institutions and governmental authorities involved in disaster risk management and disaster mitigation and response.

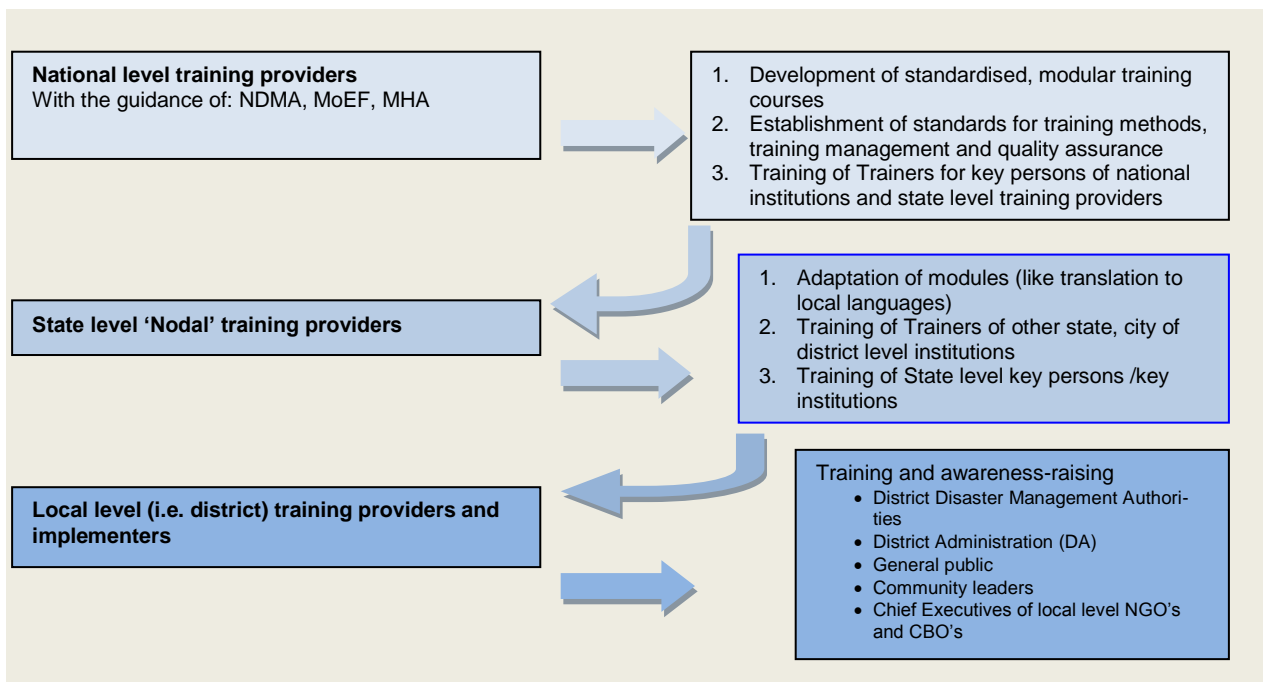
The Indo-German cooperation followed the concept of a leverage system.

A capacity assessment in 2007, covering 30 training institutions involved in Disaster Management brought out the need for:

- improving *training management* in India to make it more efficient and effective;
- developing *standardised modularised training programmes* and training approaches in fields where German and Indian skills and interaction can improve capacities;
- supporting *nodal institutions with existing networks* among training institutions for co-ordinating development and delivery of capacity development programmes through a 'cascade effect';
- *Institutional cooperation* between Indian and German institutions. Such cooperation can contribute to bringing best practices and international experiences, teaching approaches and teaching methodology into improving sustainability of training programmes.

The leverage system: Support of a 'Cascading System of Training Providers'

The 'Cascading System' is a network of training providers at national, state and local level:



¹ The project worked under the political cooperation with the *Ministry of Environment and Forests (MoEF)*, GoI and in substantial coordination with the *National Disaster Management Agency (NDMA)* and the *Ministry of Home Affairs (MHA)*, GoI.

The implementing partners



The partners of the EPDRM Programme were apex training institutions with a national mandate for developing capacity building programmes in disaster risk management. These key partners guaranteed a maximum scaling effect:

The **Disaster Management Institute Bhopal (DMI)** reaches industries, industrial states, first responders and regulatory agencies in the industrial sector. DMI is a *Centre of Excellence* for chemical Disaster Risk Management.

(Sub-project iDRM: Industrial Disaster Risk Management - 2008-2010)

The **National Institute for Disaster Management (NIDM)** Delhi offers Training of Trainers and other training programmes and designs curricula and programmes in all aspects of DRM that are offered through government state and district training institutions.

(Sub-project ekDRM: Environmental Knowledge for Disaster Risk Management - 2010-2013)



The **National Civil Defence College (NCDC) Nagpur** offers hands on training on civil defence, preparedness, emergency response and relief and provides curricula and Training of Trainers skills courses for state civil defence training institutions and the *National Disaster Response Force (NDRF)*.

(Sub-project cdDRM: Civil Defence and Disaster Risk Management - 2010-2013)

The **Asian College of Journalism (ACJ) Chennai** and the **International Institute for Journalism (IIJ)** contributed to prepare the training handbook on "Reporting Disaster and Disaster Preparedness". It provides training methods and material for the trainers imparting training at Indian journalism schools, universities and institutes, to the journalism students.

(Sub-project mDRM: Media in Disaster Risk Management - 2010-2013)



Reporting Disaster and Disaster Preparedness
A Training Handbook



The **Maharashtra Environmental Engineering Training and Research Academy, Nashik (MEETRA)** offers state and national level capacity building programs and research with focus on water supply, sewerage and municipal solid waste management.

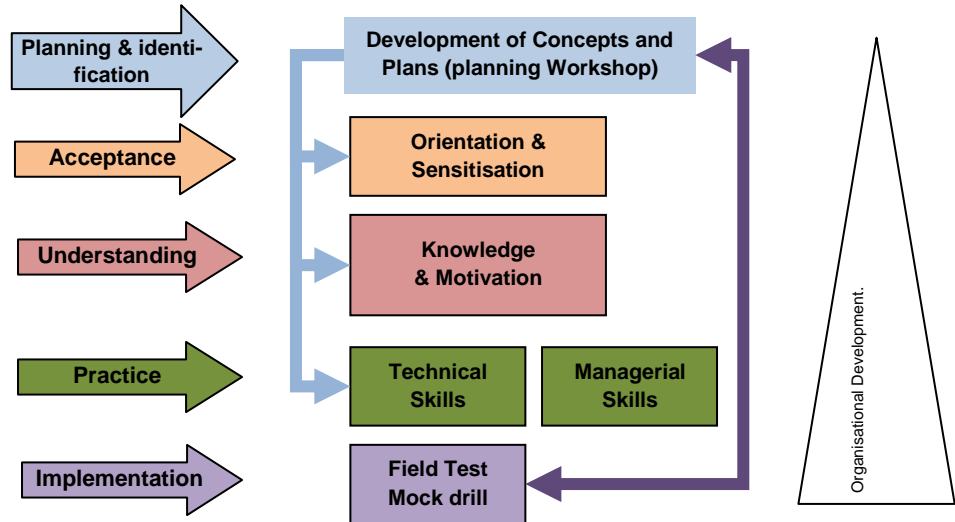
(Sub-project SUH: Sustainable Urban Habitat - Adaptation to Climate Change for Cities - 2010-2013)

Human Capacity Development Programmes

The developed *Human Capacity Development Programmes* have an ideal sequence of capacity building measures. Each programme is oriented along the series of steps (see Figure on the right).

The concept of training management, expressed in training and knowledge management platforms of each EPDRM sub-project, includes mechanisms and standards to guarantee recognition, adequate qualifications and

integrated quality assurance of training providers and trainers (Link with: <http://www.hrdp-idrm.in> for the project industrial DRM, with <http://www.ekdrm.net/> for the environmental knowledge for DRM and with <http://www.cdDRM.net> for the Civil Defence and DRM).



Sequence of Capacity Building Measures

Target groups reached

with the training courses offered by the implementing partners:

- State Regulatory Bodies (including State Pollution Control Boards)
- Directorate General Factory, Advice Service and Labour Institutes (DGFASLI)
- Chief Inspectorate of Factories (CIFs) / Directorate of Industrial Safety and Health,
- Management level of MHA Industries
- Industrial associations
- State Industrial Development Corporations (SIDCO)
- First Responders
- State and District Disaster Management Authorities (SDMA, DDMA)
- District Administration (DA)
- Controllers of Civil Defence, Chief Wardens
- Officers of the National Cadet Corps
- General public
- Community leaders
- Chief Executives of National / International NGO's
- Middle level officials from CSO and the Directorates of Statistics and Economics
- School directors and teachers
- Students of the Institute Management Studies, INDORE

The output

India's national vision is 'to build a safe and disaster-resilient India by developing a holistic, proactive, multi-disaster and technology-driven strategy for Disaster Management'.

More than 3000 participants from industries, industrial estates, first responders and regulatory agencies were reached – the majority were key persons of higher and middle management and trainers'.



National key training providers concentrated on the training of trainers of institutions with national and state level responsibilities such as state Administrative Training Institutions.

They provided the framework for content, methodology, resource material and standardised, modular training courses for national key persons and decision makers.

The state level uses the training material, the trainers and also the training approaches to streamline, adapt, and develop an offer for local stakeholders like line departments, industries and industrial estates and NGOs.



Orientation workshop in Bangalore, 2013 - the Director of NCDC (Mr. G.S. Saini) and volunteers of Karnataka

Quantitative Summary:

- 30 Training modules and five posters on key issues of DRM prepared and available online and in hard-copy.
- 12 Train the Trainers courses.
- 44 Training workshops for the target groups in industry and Civil Defence and (including blended learning and support of 7 mock drills).
- 2 Resource books and four web-based Training and Knowledge Management Platforms.
- 8 Skills training courses for training and knowledge management for "content managers" of the training providers.
- 8 Awareness and basic skills programmes in schools.
- 5 Training workshops for journalists and joint production of Training Handbook "Reporting Disaster and Disaster Preparedness".
- 3 Training and exposure visits to Germany for master trainers and key persons of training providers / government institutions of disaster management to get insights into capacity development needs in context of the growing importance of climate change and increasing vulnerability to industrial and natural disasters.
- 1 International conference for environmental knowledge in Disaster Risk Management and risk reduction.

More than 4400 trainees in skills courses, workshops and seminars

Inter-institutional cooperation with the:

- German Technical Relief Agency - THW,
- United Nations University - Institute for Environment and Human Security – UNU-EHS,
- European Process Safety Centre - EPSC and
- Flood Information Centre at the Bavarian Environment Agency.

The results and output

Individual and institutional level

- The training modules became part of the standard programme course offer of the partners: DMI (15 modules), NCDC (6 modules), NIDM (6 modules) and MEETRA (2 modules).
- The training material, by means of 12 Train the trainers courses and more than 40 skills trainings and orientation workshops, is widely spread in Indian regulatory agencies, industries and training institutions:
 - 15 training modules on 'Industrial Disaster Risk Management' became the standard for the topics covered (Launched by the Ministry of Environment and Forests).
 - NCDCs yearly programme for **state level Civil Defence training providers** has now hard copy text brochures. They will be translated to local languages by state level civil defence training providers.
 - To strengthen India's civil defence volunteer system, the Ministry of Home Affairs and NDMA approved the school programme to **establish 'Civil Defence Cadet Corps' in schools** after the positive example of the test run by the EPDRM in 2012 in ten schools. It now will be replicated in a first approach in 100 schools in India and later in all over India.
 - Out of the six training modules at NIDM, the '**Critical Infrastructure**' and '**Legal framework for disaster management**' are two new topics now included into the training programme.
- The **master trainers' course in the THW Academy** in Neuhaus (Germany) provided the basis for a future co-operation. The training was also a first step to reach the goal of NCDC to get the certification of their training from the International Search and Rescue Advisory Group (INSARAG) in United Nations - Office for Coordination of Humanitarian Affairs (UN-OCHA).



Mock drill in a school in Nagpur - the practical test for teachers after the Training of Civil Defence Cadet Corps (September 2012)

2012 - Master Trainers of civil defence state training institutions - hands-on training with THW academy in Germany



- Two training courses on **Municipal Solid Waste Management** and **Urban Sanitation** developed for various target groups (elected representatives, urban commissioners and other executive officers, and engineers). Pilot trainings and train-the-trainer course implemented in cooperation with Maharashtra Environmental Engineering Training and Research Academy (MEETRA) in Nashik, Maharashtra and Himachal Pradesh Institute of Public Administration (HIPA) in Shimla, Himachal Pradesh. Both institutes will integrate the training courses in their regular programme.

2013 – Pilot Training on Municipal Solid Waste Management, site visit to the Municipal Treatment Facility in Nashik, Maharashtra

- Six **regional workshops** in Assam, Gujarat, Orissa, Sikkim, Tamil Nadu, and Uttarakhand sensitized **local and regional media** on the role they can play in Disaster Risk Reduction, especially in the area of Disaster Preparedness. All workshops included field trips and interaction with practitioners and local people. Based on these workshops the **Training Handbook “Reporting Disaster and Disaster Preparedness”** was developed and tested in a pilot course.

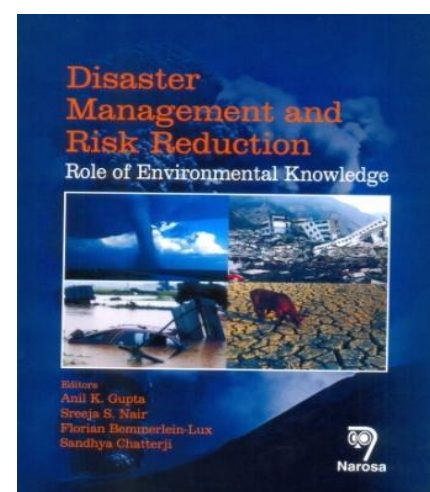
Several participants of the workshop established a community of practice under the URL www.media4drr.in which is hosted on facebook. Currently the group has more than 70 members regularly exchanging information and insights on disasters and DRR.



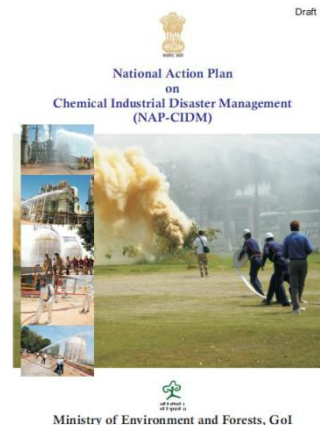
2010 – Demonstration of rescue operations during field trip of regional orientation workshop

Institutional strengthening and organisational development

- **DMI and NCDC use their officially-launched internet-based training and knowledge management platforms** to improve outreach and business optimisation for their training offer since 2008. Content managers were trained and are now hired by the institutions. The sites had more than 250 000 visits since 2010.
- Support of the **upgrading of the Disaster Management Institute, Bhopal**: DMI was declared “Centre of Excellence”.
- **Blended Learning as advanced training methodology**: In the National Institute for Disaster Management (NIDM), the training methodology of **blended learning** was adopted and a test training of trainers on “Databases and Statistics for Disaster Risk Management” implemented. The methodology is now used in their regular training scheme of Disaster Risk Management and Climate Change Adaptation for State Disaster Management Authorities, Administrative Training Institutions and Regulatory Agencies.
- **Outreach of the first international conference on “environmental knowledge for Disaster Risk Management”** in 2011 (see <http://www.ekdrm.net/>):
 - The published conference resource book – “*Disaster Management and Risk Reduction - Role of Environmental Knowledge*”, NAROSA Publishing House Pvt. Ltd. - is used as text book and resource material for graduate and undergraduate level in universities/colleges throughout India. Background: The University Grants Commission (UGC) with NIDM as technical committee member for the **approval of curriculum** on DRM approved the courses on DRM.



- **Cooperation of NIDM with the United Nation University, Bonn** started in training module development about Critical Infrastructure (CI), a new topic for NIDM training offers.
- **Network of 15 institutions for industrial Disaster Risk Management** is strengthened for capacity building in (industrial) disaster risk management. It includes state disaster management institutions, the National Civil Defence College, Chief Inspectors of Factories and Boilers, Directorate General Factory Advise Service and Labour Institutes, State Administration Training Institutions, State and District Disaster Management Authorities etc. They share knowledge and experience, facilitate trainers and training material exchange and formulated the topics of the developed training modules.
- Concept of the **first National Action Plan on Chemical (Industrial) Disaster Management (NAP-CIDM)**: the plan is the first national plan which is now the framework for state action plans (see <http://www.hrdp-idrm.in/e23112/>). The final draft of the supported first was delivered in August 2011 to the Ministry of Environment and Forests, GoI.
- While in 2010 the cited **"Best Practices in Civil Defence"** examples were from the United States of America, in 2011 all the contributions of decision makers (like the Director General Civil Defence and the Secretary Border Management) mentioned the German volunteer organisations like THW and fire fighters as best practice.



Implications/lessons learned

The programme aimed at supporting partner institutions and facilitators in conceptualizing, establishing, managing and demo-operating prototype national capacity building systems with a view to promoting sustainable resource management and facilitating adjustments in disaster risk management to climate change.

1. Human Capacity Development activities are most effective when national or local policies create challenges that require new approaches.
2. Integration of the systems, the organisational and the individual level: The interface between training and research institutes (like DMI, NIDM, NCDC) and their core department/policy makers/decision makers has to be included in the capacity building approaches.
3. Whenever possible, capacity building efforts should use leverage systems for scaling up their impacts and include training of trainers as well as convincing of key decision makers.
4. Developed training modules (or other training resource material) should be integrated into Human Capacity Building Programmes covering joint planning, orientation, knowledge and skills transfer and practical implementation. The implementation needs observable impacts.
5. Any Human Capacity Development programme has to focus on promotion and institutionalisation of 'organisational learning' vis a vis individual learning in the addressed institutes.
6. Training modules should be modular and include theoretical as well as practical skill related sections.
7. The development of content of capacity building programmes needs to be anchored in the processes of the training institutions.
8. Training and knowledge management is required for documentation, management information processing, quality assurance and control and follow up of training programmes.

Output in detail: EPDRM - Publications

30 training modules, three resource books and five posters, prepared by Indian and international experts, are substantial contributions to the standard training programmes of the cooperating apex training institutions and their cooperating training providers. To support the effectiveness of the regular and standardised human capacity building programmes, four web based *Training and Knowledge Management Platforms* are used to announce and document training offers and to provide background material for trainers and target groups.

Capacity building and training management Resource books



Resource book: Lessons Learned and Tools Applied - A Work- ing Book on Capacity Building Approaches in India

Human Resource Development in the Environmental Sector in India.
152, GIZ.

Bemmerlein-Lux F.A., P. Bank, S. Killguss, S. Hoffmann, S. Chatterji (2011)



Resource booklet: The Human Resource Development Platform

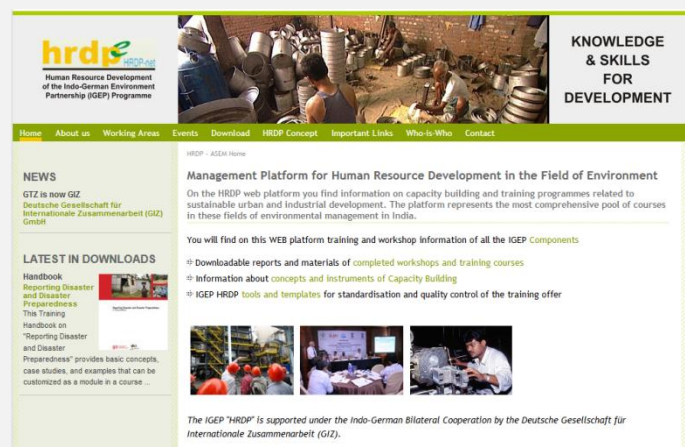
Uses and advantages

23 p. InWEnt/GIZ – Capacity Building International, Germany gGmbH
Hoffmann S. (2010); Editors: Ch. Kamlage, S. Mallinger

Training and knowledge management platforms of GIZ-IGEP are web-based systems with tools to support the planning, implementation, delivery and monitoring of large-scale capacity development programmes of IGEP and its components.



<http://www.igep.in/>



<http://www.hrdp-net.in/>

Industrial and chemical Disaster Risk Management

Training modules and material of the Disaster Management Institute (DMI), Bhopal: The modules were checked by the director of the European Process Safety Centre (EPSC) and officially launched by MoEF.

Online: <http://www.hrdp-idrm.in/e5783/e17327/>

Theme - 1 Confined Space Safety Industrial Disaster Risk Management



Confined Space Safety

All hazards found in a regular workspace can also be found in a confined space. However, they can be even more hazardous in a confined space than in a regular work site.

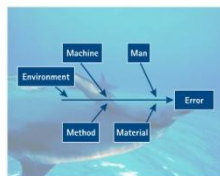
Theme - 2 Safety in Transportation of Hazardous Substances by Road Industrial Disaster Risk Management



Safety in transportation of hazardous substances by road

The rapid increase in the transportation of hazardous chemicals has enhanced the accident potential during transit.

Theme - 3 Hazards Identification and Control Measures in Chemical (Industrial) Workplaces Industrial Disaster Risk Management



Hazards Identification and Control Measures in Chemical (Industrial) Workplaces

This Module provides the information on various methods of hazards identification and control measures at chemical (industrial) workplaces.

Theme - 4 First aid in Emergency Industrial Disaster Risk Management



First Aid in iDRM

It's an old saying that "An Ounce of Prevention, is Worth a Pound of Cure", especially in an emergency situation when seconds count. Here are a few selected first aid tips that may be useful in a disaster situation!!

Theme - 5 Personal Protective Equipments Industrial Disaster Risk Management



Personal Protective Equipment

Personal Protective Equipment (PPE) means any device or appliance designed to be worn or held by an individual for protection against one or more health and safety hazards.

Theme - 6 Accident Causation : Models and Theories Industrial Disaster Risk Management



Accident Causation: Models and Theories

In order to understand the accident causation, it is necessary to consider what is meant by "safety". Depending on one's perspective, the concept of safety may have different connotations.

Theme - 7 Human Factors vs Accident Causation Industrial Disaster Risk Management



Human Factors in Accidents and Prevention

It has been estimated that up to 90% of all workplace accidents have human error as a cause by a number of studies. The term 'human failure' is used in this module to refer to errors and violations, newspaper headlines tend to use 'human error' as a blanket term for both.

Theme - 8 Organisational Commitments in Reducing Accidents Industrial Disaster Risk Management



Organisational Commitments in Reducing Accidents

Many disasters have occurred because organizations have ignored the warning signs of precursor incidents or have failed to learn from the lessons of the past.

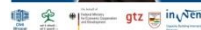
Theme-9
Job Safety Analysis
Industrial Disaster Risk Management



Job safety analysis

The purpose of a job safety analysis is to ensure potential hazards, related to a specific project or activity, are anticipated, and abated before beginning work.

Theme - 10
**Guide to the District Collector:
What I Must Know as District Collector? and Why?**
Industrial Disaster Risk Management



What should I Know as District Collector and Why?

District Collectors are the most powerful government officials of the district. They are entrusted the task of handling laws and orders, revenue collection, taxation, the control of planning permission and the handling of natural and man-made emergencies.

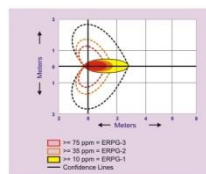
Theme - 11
Risk Assessment and Management
Industrial Disaster Risk Management



Risk Assessment and Management

In the safety field, it is generally recognised that consequences are only negative and, therefore, the management of safety risk is focused on prevention and mitigation of harm.

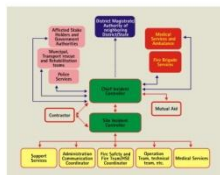
Theme - 12
**Consequence Analysis:
A Vital Need for Emergency Planning**
Industrial Disaster Risk Management



Consequence analysis: application in emergency planning

The module highlights the important consideration for consequence modelling and insists that consequence analysis should be done by considering all possible variables, as one variable may change the impact zones.

Theme-13
On-site Emergency Management Plan (OnSEMP)
Industrial Disaster Risk Management



On-site emergency plan

As per Indian regulations there are the regulatory provisions that an On-site Emergency Management Plan will be prepared by industrial units..

Theme-14
Off-site Emergency Management Plan (OffSEMP)
Industrial Disaster Risk Management



Off-site emergency management plan

As per Indian regulations there are the regulatory provisions that an Off-site Emergency Management Plan by District Collector for his/her District.

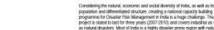
Theme - 15
Industrial Disaster Response
Industrial Disaster Risk Management



Industrial Disaster Response Guide

Response mechanism defines basic roles, responsibilities and operational concepts for response across all levels of Government, NGOs and the private sector.

Human Resource Development Programme.



Toe the Line for Behavioural Change

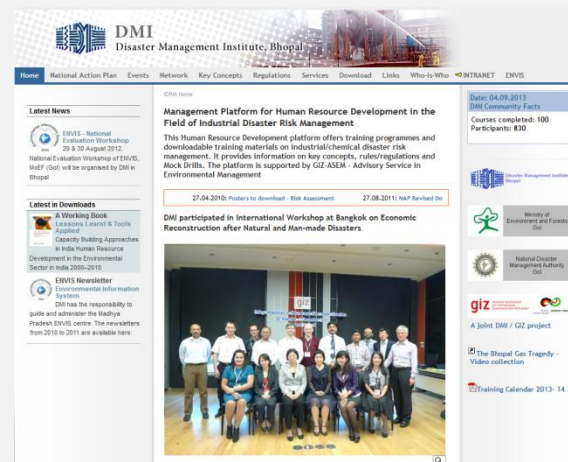
Toe the line for behavioural change: a capacity development system for disaster risk management



Human Resource Development Programme in industrial Disaster Risk Management in India – HRDP iDRM: Dr. Rakesh Dubey & Dr. Christina Kamlage (2008): Published by ISDR for the intern. Conference Davos Private Sector Activities in Disaster Risk Reduction - Good Practices and Lessons Learned – p. 15-19. Online: <http://www.hrdp-idrm.in/e5785/#e11545>.

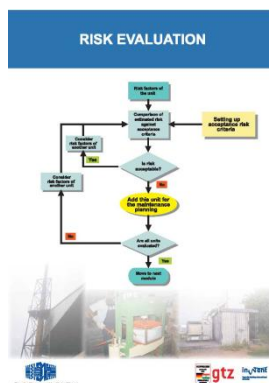
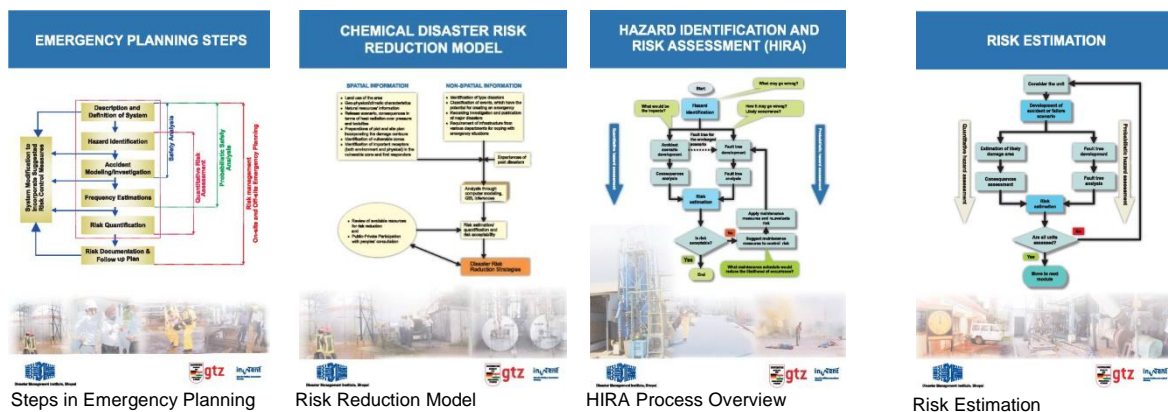
Toe the Line for Behavioural Change - a Capacity Building System for Disaster Risk Management. Dr. Rakesh Dubey, Dr. Christina Kamlage, Dr. Jürgen Bischoff, Florian Bemmerlein-Lux, Dr. Sandhya Chatterji (2008); RiskWise UN Publication, p. 73-76. Tudor Rose publ. – ISBN 0 9536140-9-3. Online: <http://www.hrdp-idrm.in/e5785/#e11545>.

<http://www.hrdp-idrm.in>



Training and knowledge management platform of DMI supports the planning, implementation, delivery and monitoring of DMIs capacity development programmes. It is managed by content managers of DMI.

Posters for Industries, industrial associations, and Chief Inspectors of Factories and Boilers in India



Risk Evaluation

All posters downloadable
for print:

<http://www.hrdp-idrm.in/e5785/e7397/>

Environmental Knowledge and Disaster Risk Management

Training modules and material of the National Institute of Disaster Management Institute (NIDM), New Delhi

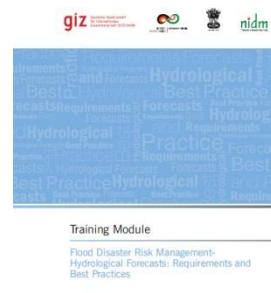


Environmental Legislation for Disaster Risk Management

108 p.

ISBN: 978-3-944152-12-7

Anil K. Gupta, Sreeja S. Nair
and S. Singh



Flood Disaster Risk Management- Hydrological Forecasts: Requirements and Best Practices

88 p.

ISBN: 978-3-944152-15-8

A. Vogelbacher, Bavarian Water
Agency

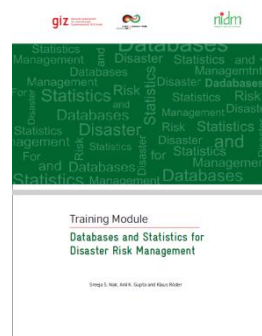


Flood Disaster Risk Management: Gorakhpur Case Study

116 p.

ISBN: 978-3-944152-14-1

Anil K. Gupta, Sreeja S.
Nair, Shiraz A. Wajih and
Sunanda Dey



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Sreeja S. Nair, Klaus Röder & Anil
K. Gupta

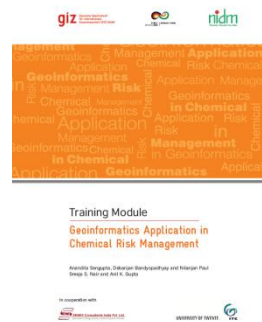


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Claudia Bach, Anil K. Gupta,
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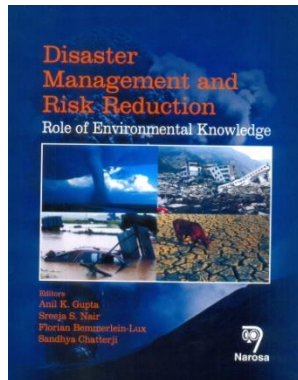


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Bandyopadhyay, Nilanjan Paul,
Sreeja S. Nair and Anil K. Gupta



Resource book:

Disaster Management and Risk Reduction - Role of Environmental Knowledge

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2013: Editors- Anil K. Gupta, Sreeja S. Nair, Florian Bemmerlein-Lux and Sandhya Chatterji

NAROSA Publishing House Pvt. Ltd.



Resource book:

Environmental Knowledge for Disaster Risk Management

316 p.

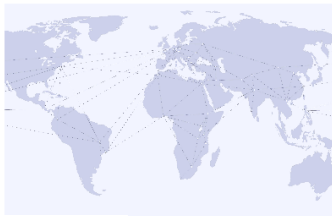
ISBN: 978-81-8487-251-4

2013: Editors- Anil K. Gupta, Sreeja S. Nair

ekDRM Secretariat, NIDM, GIZ & ifanos c&p

Improve Disaster Risk Management in India

By Using Knowledge-Base and Statistics
Manual for blended-learning Course



On behalf of
Federal Ministry
for Economic Cooperation
and Development

inVent
Cooperating Institution
Germany

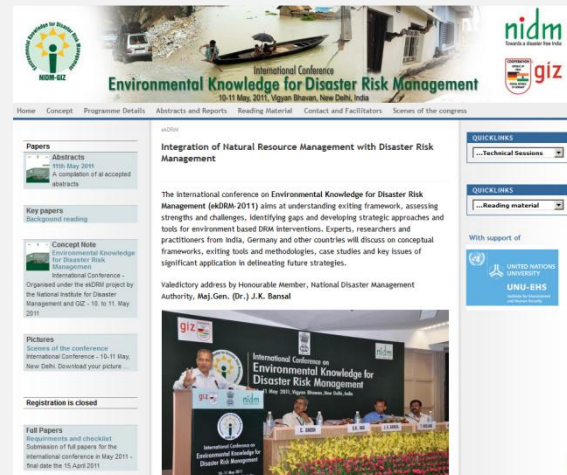
Manual for Blended Learning Course:

Compiled for the participants of the blended learning course on "Improve Disaster Risk Management in India by 'Using Knowledge-Base and Statistics'".

The Web based course shows to Disaster Risk Management professionals in India the use of statistical information for their field of work.

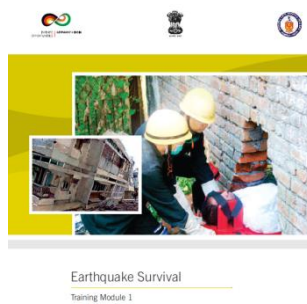
Training and knowledge management platform for NIDM:

<http://www.ekdrm.net>



Civil Defence and Disaster Risk Management

Training modules and material of National Civil Defence College (NCDC), Nagpur



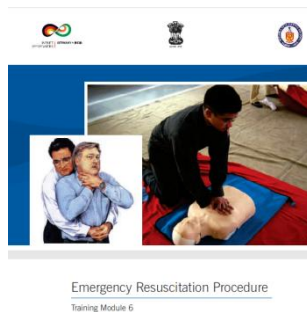
Earthquake Survival

62 p.
ISBN: 978-3-944152-00-4
The module covers a range of precautionary steps that are necessary for each individual and the community. It also guides common people to undertake volunteer action that can increase their survival during an earthquake.



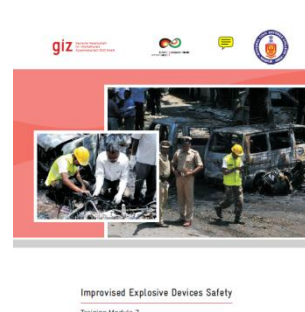
Elementary Fire Safety

40 p.
ISBN: 978-3-944152-02-8
The module covers precautionary steps that are necessary for each individual and the community. It guides common people to undertake volunteer action that can increase their survival during fire.



Emergency Resuscitation Procedure

35 p.
ISBN: 978-3-944152-05-9
The module guides common people to undertake volunteer action that can increase their survival with skills like managing the 'cardiac chain of survival', 'cardiopulmonary resuscitation' or 'automated external defibrillation'.



Improvised Explosive Devices Security

56 p.
ISBN: 978-3-944152-06-6
The Improvised Explosive Devices (IEDs) present a very unique set of problems as they are made with no specific guidelines and pose a very high element of risk to the bomb disposal personnel as well as general public.



Flood and Water Safety

56 p.
ISBN: 978-3-944152-07-3
India is one of the most disaster prone countries in the world and major damages occur due to floods every year. Out of the 40 million hectares of flood prone areas of India, a total of 14.37 million hectares is reported to be protected in various states.

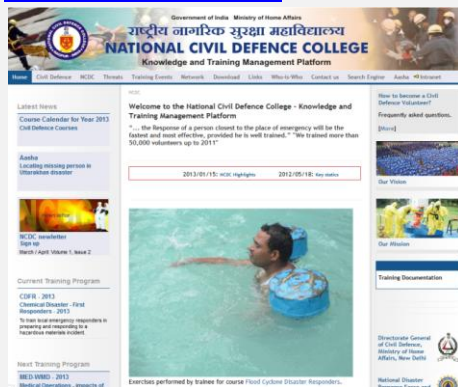


Disease Control

91 p.
ISBN: 978-3-944152-10-3
This module focuses on preventions and protections. It supports trainers to

- ❖ To know and understand methods of preventive and protective disease control.
- ❖ To know and understand safety measures necessary for survivors of residing places.

<http://www.cddrm-ncdc.org>



Training and knowledge management platform of NCDC supports the planning, implementation, delivery and monitoring of the standard Civil Defence capacity development programmes. It is managed by content managers of NCDC.

Sustainable Urban Habitat - Adaptation to Climate Change for Cities – Training modules and material for the GIZ project in cooperation with the *Maharashtra Environmental Engineering Training and Research Academy, Nashik (MEETRA)*



How to use a City Sanitation Plan as a tool for urban development?

A training course for urban decision makers and operating staff

Training manual

How to use a City Sanitation Plan as a tool for urban development?

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Training manual



Basic Training on Municipal Solid Waste Management for Urban Local Bodies

A training course for elected representatives, decision makers and operative staff

Text- and Workbook for Participants

Basic Training on Municipal Solid Waste Management for Urban Local Bodies

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Text- and Workbook for Participants.

Media and Disaster Risk Management

Training course comprising of 9 modules and material for education and training of Journalists



Reporting Disaster and Disaster Preparedness
A Training Handbook

Reporting Disaster and Disaster Preparedness

November, 2012. 121 p.

Dr. Harpreet Kaur, Ms. Naghma Firdaus, Ms. Patralekha Chatterjee

The Training Handbook provides basic concepts, case studies, and examples that can be customized as a module in a course or an entire course as part of the overall curriculum of a journalism course in Indian universities and institutes.