

**Postgraduate Diploma in Disaster Management  
Semester – II,**

**PGDDM 201            Vulnerability and Risk Management**

**UNIT-I**

Vulnerability: concept and types; Physiographic, Environmental, Socio-economic, Gender and age and Rural-urban vulnerability, Risk: concept and components; Risk analysis: quantitative and qualitative approaches; Uncertainty in risk analysis; Significance of people participation in risk and vulnerability assessment

**UNIT-II**

Disaster preparedness: concept, elements and significance, people and infrastructure centric preparedness plan and measures, Institutional mechanism, community based disaster preparedness plan, utilization of disaster risk analysis for DRR planning and strategies, landuse planning and development regulations in relation to disasters: concepts and objectives .

**UNIT-III**

Institutional arrangements for forecast: India Meteorological Department(IMD), Warning protocols, National forecasting and Early Warning System, Forecast of rainfall, flood, cyclones, Tsunami Warning(INCOIS), Disaster Management Support(DMS).Disaster vulnerability in India; Risk planning and management in India

**UNIT-IV**

Role of development planning in disaster management( preventive measures and development of risk resilient infrastructure), Mitigation: definition, elements and measures to minimize the impact of droughts and floods, Environmental impacts, climate change adaptation measures, Trigger mechanism, resource analysis and mobilization, Crisis management Plan, and Standard Operating Procedure(SOPs)

**Suggested Readings:**

1. Disaster Risk Reduction in South Asia, Pardeep Sahni, Madhavi Malalgoda Ariyabandu, 2003.
2. Community-Based Disaster Risk Reduction, Rajib Shaw, 2012.
3. Natural Disaster Risk Management and Financing Disaster ..., Reinhard Mechler, 2004.
4. Disaster Risk Management Systems Analysis: A Guide Book, Stephan Baas, 2008.
5. Disaster Management and Preparedness, Taylor and Francis, Collins Larry R. and Schneid Thomas D., 2000.
6. Managing Disaster Risk in Emerging Economies, Arnold, Margaret and Kreimer, Alcira (eds.), 2000.
7. Living With Risk: A global Review of Disaster Reduction Initiatives, Vision, United Nations, 2004.
8. Disaster Management and Preparedness, Taylor and Francis, Collins Larry R. and Schneid Thomas D., 2000.

9. Disaster Mitigation Experiences and Reflections, Prentice Hall of India, New Delhi, Pardeep Sahni, et.al. (eds.), 2002.
10. Assessment of Research on Natural Hazards, Cambridge, the MIT Press, MA., White, Gilbert F. and J. Eugene Hass, 1975.
11. NOAA Coastal Services Center, Linking People Information and Technology,,: Risk and Vulnerability Assessment Tool , at,<http://www.csc.noaa.gov/rvat/criticalEdd.html>.
12. National Disaster Management Authority, [www.nidmindia.nic.in](http://www.nidmindia.nic.in).
13. Risk assessment and comparisons: An Introduction, Science 17, pp 267-270, Willson , R; and E. A. C.Crouch, 1987.
14. Natural Hazard Risk Assessment and Public Policy: Anticipating and Unexpected, Springer; New York. Petak, W. J. and Atkisson, A, A., 1982.
15. Disaster management in India; Website of Ministry of Home Affairs, Government of India
16. Mapping Vulnerability: "Disasters, Development and People",Greg Ankoff, Georg Frerks, 2013.
17. NOAA Coastal Services Center, "Linking People Information and Technology,,: "Risk and Vulnerability Assessment Tool".
18. Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies, J. Birkmann, 2006.
19. Disaster Risk and Vulnerability Mitigation through Mobilizing Communities and Partnerships,David Etkin, Chowdhury Emdadul Haque, 2012.

**Postgraduate Diploma in Disaster Management  
Semester – II,**

**PGDDM 202                      Post Disaster Response**

**UNIT-I**

Concept of Rescue and evacuation reconstruction and Rehabilitation as Means of Development; Role of various Agencies in Disaster Management and Development , Tasks of Relief and Rehabilitation, Medium and Long Term Rehabilitation Aspects; relief mechanism (Needs Assessment, relief Administration and Distribution, Management of relief Centers, external Support etc), Disaster Induced Migration.

**UNIT-II**

Creation of Long term Job opportunities and Livelihood options; Funding Arrangements for Reconstruction; Nature of Damage to Houses and Infrastructure due to Disasters; Damage and Loss Assessment (DALA); Post Disaster need Assessment (PDNA); Rehabilitation: Physical and social Infrastructure; Relocation and Reconstruction Housing; Introducing the concept of Build back better in all reconstruction works; Role of Housing and urban & regional Development Authorities.

**UNIT-III**

Dealing with Victims psychology and trauma, medical Aid Therapy and Counselling-Psycho Social issues; role of information Dissemination: Capacity Building for Reconstruction and Rehabilitation, Skill Enhancement for Livelihood Development, Training and Awareness Program; Participative Rehabilitation Process, Some Case studies.

**UNIT-IV**

Role of Various Agencies in recovery Measures, Linking of Relief and Rehabilitation with Development; Project formulations for recovery and resource mobilization; Monitoring and Evaluation of Rehabilitation Work; Constraints in Monitoring and Evaluation: Long Term Recovery; Long Term Disaster Planning; Repair and retrofitting: superficial repair, structural repair, structural strengthening of habitable spaces, public buildings roads, bridges, dams etc.

**Postgraduate Diploma in Disaster Management  
Semester – II,**

**PGDMM 203**

**Disaster Finance**

**UNIT-I**

Financing the Relief Expenditure: Funding Relief- Short term and long term; National disaster Mitigation Fund; Recommendation of Finance Commission; national Disaster Response Fund(NDRF); Disaster Response reserve; capacity Building Grant; Environmental Relief Fund; Plan and Non-Plan Schemes;

**UNIT-II**

Fiscal Response to Public Finance and Budgetary Guidelines, Insurance Linked financing; role of Micro Finance; Role of other Agencies in Financing Disaster Components - NABARD, Nationalized Banks, World Bank, ADB, DFID etc.

**UNIT-III**

National Institute of Disaster Management (NIDM); Disaster Management Centres in the States; Training of the National Disaster Response Force (NDRF); Incident Response System (IRS); National Fire Service College(NFSC) Nagpur, national fire Service College(NFSC), Nagpur Capacity Building - Setting up of EOC at state, District and Block Level, Training and Capacity Building of all Stakeholders, Mock Drills, Capacity, Development of the First Responders; Drills for First Aid and Health Care.

**UNIT-IV**

International agencies; United Nations and its specialised agencies like UNDP, UNISDR; UNOCCIA; FAO; Global Facility for Disaster Risk Reduction (GFDR); International Federation of Red Cross and Red Crescent Societies (IFRC), GFDRR; WHO; IPCC; Yokohama, Hyogo framework for action, Sendai Framework for DRR(2015-30)