ASSAM DOWNTOWN UNIVERSITY

Assignment - 5

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Subject: Disaster Management
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1. Explain the key strategies involved in disaster management planning in India.

Key strategies include:

- **Risk assessment:** Identifying hazards, vulnerabilities, and capacities.
- **Prevention & mitigation:** Building safe structures, flood embankments, enforcing building codes.
- **Preparedness:** Mock drills, early warning systems, training communities.
- **Response planning:** Clear roles for rescue teams, medical support, evacuation plans.
- **Recovery & rehabilitation:** Rebuilding infrastructure, providing financial support, restoring livelihoods.
- **Coordination:** Cooperation among government, NGOs, and communities.

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2. Describe the major provisions of the Disaster Management Act, 2005.

Major provisions:

- Established **NDMA (National Disaster Management Authority)**.
- Created **SDMAs** at the state level and **DDMAs** at the district level.
- Emphasized **prevention, preparedness, and mitigation**, not just relief.
- Set up **National Disaster Response Force (NDRF)** for specialized rescue operations.
- Mandated **disaster management plans** at national, state, and district levels.
- Provided legal framework for **coordination, funding, and responsibilities**.

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3. How does community involvement contribute to effective disaster management?

Community involvement is powerful because:

- Locals are **first responders** before official help arrives.
- They understand local **geography, risks, and needs**.
- Community groups can organize **evacuations, shelters, and first aid**.
- Helps reduce panic through **awareness and training**.
- Promotes **ownership**, making disaster management more sustainable.

Example: Coastal villages in Odisha successfully evacuate before cyclones due to strong community systems.

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4. Discuss the role of technology in disaster preparedness and response.

Technology helps at every stage:

- **Early Warning Systems:** cyclone alerts, tsunami warnings.
- **GIS and satellite mapping:** identifies flood-prone or earthquake zones.
- **Drones:** assess damage, locate victims, deliver supplies.
- **Mobile apps:** NDMA, weather apps for alerts and safety tips.
- **Social media:** fast communication, rescue updates.
- **AI & data analytics:** predicting disasters like floods or heatwaves.

Technology makes disaster response **faster, accurate, and life-saving**.

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5. What are the key components of a District Disaster Management Plan (DDMP)?

A DDMP includes:

- **District hazard and risk profile**
- **Roles and responsibilities** of officials
- **Resource inventory:** shelters, hospitals, equipment
- **Communication plan**
- **Evacuation routes and safe zones**
- **Response & relief procedures**
- **Training and mock drill schedule**
- **Coordination with NGOs and community groups**

DDMP is the **ground-level action plan** for handling disasters.

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6. Compare the roles of NDMA and SDMA in the disaster management framework.

NDMA (National Level)

- Makes **national policies, guidelines, and action plans**
- Coordinates with ministries, armed forces, and NDRF

- Allocates resources at national scale
- Ensures nationwide preparedness

SDMA (State Level)

- Prepares **state-specific disaster plans**
- Coordinates with district authorities
- Focuses on **local hazards** like floods, landslides, droughts
- Implements NDMA guidelines at state level

In short:
NDMA = policy + national coordination
SDMA = state-level planning + implementation

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7. Explain the process involved in formulating a Disaster Risk Reduction (DRR) Plan.

Steps include:

1. **Risk Identification:** studying hazards like floods, earthquakes, cyclone zones.
2. **Vulnerability Assessment:** identifying weak populations, unsafe buildings.
3. **Capacity Assessment:** available hospitals, trained teams, equipment.
4. **Setting goals and priorities:** what to reduce and how.
5. **Developing strategies:** mitigation, preparedness, awareness.
6. **Implementation:** training, drills, infrastructure measures.
7. **Monitoring & review:** updating the plan regularly.

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8. How has India’s approach to disaster management evolved over time?

Earlier:

- Focus was on **relief, rescue, and compensation**.
- Response was **reactive**.

Now:

- Shift toward **prevention, preparedness, and mitigation**.
- Strong legal backing through **DM Act 2005**.
- Advanced technologies (satellites, NDMA, NDRF).
- Community-based disaster management.
- Integration of DRR into development projects.

India has moved from a **relief-centric** model to a **resilience-based** model.

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9. What is the significance of integrating disaster risk reduction (DRR) into development planning?

DRR in development is important because:

- Prevents creation of **new risks** (unsafe buildings, poor drainage).
- Ensures **sustainable development**.
- Protects investments (roads, bridges, industries).
- Reduces future losses and saves lives.

- Helps climate-resilient development.

Example:
Building flood-resistant roads saves money in long-term repairs.

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10. Describe the organizational structure of disaster management in India.

India's structure works at **three levels**:

1. National Level

- NDMA (policy and planning)
- NDRF (specialized rescue force)
- NEC (National Executive Committee)
- Various ministries involved

2. State Level

- SDMA headed by Chief Minister
- State Disaster Response Force
- State-level departments

3. District Level

- DDMA headed by District Collector
- Local police, fire services, health teams
- NGOs and community groups involved

This structure ensures **top-to-bottom coordination** and efficient disaster management.