Disaster Management · GS - III

Examine the challenges posed by flash floods in arid and semi-arid regions. Suggest measures to reduce their impact on infrastructure, livelihoods and essential public services.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 03/11/2026	GS - III	Disaster Management

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Flash floods; intense rainfall; arid-region hydrology; surface runoff; early-warning systems; resilient infrastructure; evacuation planning; continuity of essential services

Model Answer

Introduction

Arid and semi-arid regions generally receive limited rainfall, but intense precipitation over a short period can generate destructive flash floods. Limited infiltration, dry or compacted soils and rapid runoff may contribute to sudden flooding.

Major Challenges

1. Rapid Onset: Floodwaters can rise quickly, leaving little time for evacuation and emergency response.

2. Infrastructure Damage: Roads, bridges, drainage systems and electricity networks may be damaged, isolating communities and disrupting essential services.

3. Limited Preparedness: Regions with infrequent rainfall may lack adequate drainage capacity, public awareness and flood-response infrastructure.

4. Social and Economic Disruption: Flooding can displace residents, damage property and interrupt healthcare, education and electoral activities.

Measures to Reduce Flood Risk

1. Early Warning: Strengthen weather forecasting, local alerts and real-time river monitoring.

2. Infrastructure Resilience: Improve drainage, protect vulnerable transport links and restore natural water channels.

3. Preparedness: Prepare evacuation routes, emergency shelters and contingency arrangements for essential services.

4. Coordinated Governance: Improve cooperation among meteorological agencies, local administrations, emergency services and community organisations.

Conclusion

Effective flash-flood management requires risk-sensitive planning, reliable warnings, resilient infrastructure and continuity arrangements for essential public service.

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