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GLOBAL ASSESSMENT REPORT

- **About:** The UN Global Assessment Report on Disaster Risk Reduction (GAR) is the flagship report of the United Nations on worldwide efforts to reduce disaster risk.
- **Aim:** The GAR aims to focus international attention on the issue of disaster risk and encourage political and economic support for disaster risk reduction.
- **UNDRR:** The GAR is published biennially by the UN Office for Disaster Risk Reduction (UNDRR), and is the product of the contributions of nations, public and private disaster risk-related science and research, amongst others. It oversees the implementation of the Sendai Framework for Disaster Risk Reduction 2015- 2030, supporting countries in its implementation, monitoring and sharing what works in reducing existing risk and preventing the creation of new risk.
- **Contribution:** The GAR contributes to achieving the Hyogo Framework of Action (HFA) through monitoring risk patterns and trends and progress in disaster risk reduction while providing strategic policy guidance to countries and the international community.
- **SDG Agenda:** The GAR contributes to achieving the Sendai Framework for Disaster Risk Reduction and the 2030 Agenda for Sustainable Development through monitoring risk patterns and trends, as well as progress in disaster risk reduction, while providing strategic policy guidance to countries and the international community.

The GAR Special Report on Drought 2021:

- **Aim:** It explores the systemic nature of drought and its impacts on achievement of the Sendai Framework for Disaster Risk Reduction, the SDGs and human and ecosystems health and wellbeing.

- Definition of Drought: The Intergovernmental Panel on Climate Change (IPCC) defines drought as “a period of abnormally dry weather long enough to cause a serious hydrological imbalance”.
- Drought and water scarcity: Drought is different from water scarcity, where climatologically available water resources are insufficient to satisfy long term average water requirements due to a structural imbalance. On the one hand, an increase in drought frequency or severity, or both, can threaten already water-scarce regions and create new or expand existing regions suffering from water scarcity.
- Causes of Drought: Droughts are caused by changes in persistent atmospheric circulation patterns usually connected to slowly varying atmospheric boundary conditions (e.g. changes in sea-surface temperature, sea-ice cover or land-atmosphere interactions).

Future drought risk in the context of global change:

- In the context of global environmental change, societal change, sustainable development and transformation, future risk scenarios are useful tools to illustrate different potential development pathways and associated risk trends.
- Preventing future risk, a key goal of the Sendai Framework, and enabling risk-informed, climate-resilient development requires a solid understanding of which areas might be affected by drought hazards in the future, alongside possible future exposure and vulnerability pathways.
- At a global scale, more than 60% of forests, croplands and pastures will be exposed to higher drought frequency and severity with less sustainable Shared Socioeconomic Pathways (SSPs).

Drought risk reduction and risk management:

- The governance and management of droughts must shift from prevailing reactive crisis management to prospective and proactive drought risk management.
- Policy and planning mechanisms demand robust short-term to midterm scenarios (i.e. 20-30 years), rather than for longer timescales (e.g. end of century).
- Risk reduction requires prospective and proactive drought risk management, including drought monitoring, forecasting, early warning and measures to reduce vulnerability, coupled with adaptation to a changing climate and actions to increase societal and environmental resilience.
- Climate change demands urgent adaptation action to reduce water demand, for

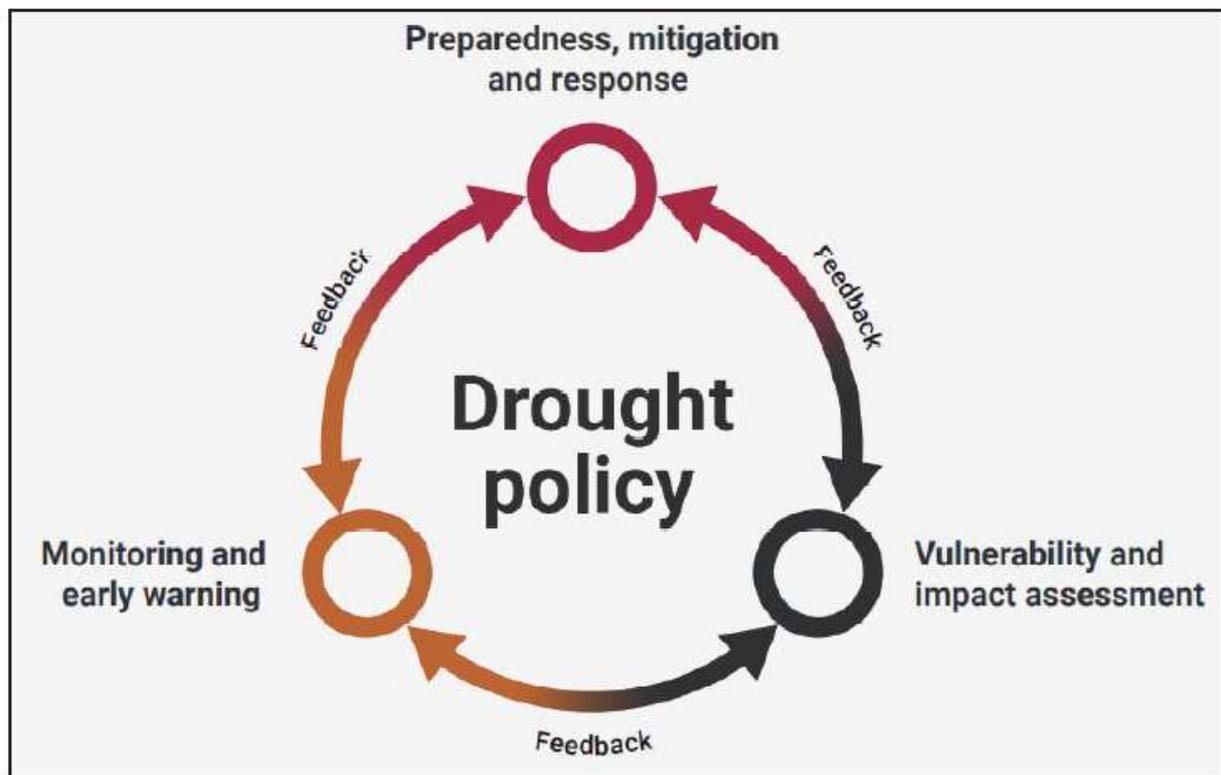
example, by more efficient irrigation methods, cultivating drought-resistant varieties and adequate water pricing.

- Public awareness-raising and development of water-saving practices and policies to promote and enforce sustainable land and water management are needed for successfully introducing required changes.



The IDMP approach comprises three pillars of integrated drought management:

- Drought monitoring and early warning systems;
- Drought vulnerability and impact assessment;
- Drought preparedness, mitigation and response.



Case Study on Drought in India:

- The case study from the report focuses on the Deccan Plateau region of India (about 43% of southern and eastern India):
- Major droughts have occurred across the region and over large areas of India in 1876-1878, 1899- 1900, 1918-1919, 1965-1967, 2000-2003 and 2015-2018.
- The Deccan region sees the highest frequency (>6%) of severe droughts (SPI of -1.5 to -1.99) in all of India.
- The impact of severe droughts on India's GDP is estimated to be about 2-5% per annum, despite substantial decreases in the contribution of agriculture to GDP over the period 1951-2003.
- The Government of India is the main authority at national level to: collate information to monitor drought conditions; issue advisories; and coordinate with other ministries of the central government, state governments and relevant agencies to respond and mitigate drought impacts.
- "Drought declaration" is the most important step in governmental response to a drought situation and arises from information in the national agricultural drought assessment and monitoring system.
- Significant drought conditions occur once in 3 years (Mishra and Singh, 2010).

The Sendai Framework for Disaster Risk Reduction 2015-2030:

- It was the first major agreement of the post-2015 development agenda and provides Member States with concrete actions to protect development gains from the risk of disaster.
- It was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction (WCDRR).
- It recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.
- The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.

The Sendai Framework and the SDGs:

- Both the Sendai Framework and the Sustainable Development Goals (SDGs) outcomes are a product of interconnected social and economic processes. As such, there is a lot of synergy between the two policy instruments. In fact, Sendai Framework monitoring is intended to complement monitoring of 11 SDG indicators.

Conclusion:

- Overdependence on groundwater resources and lack of water-retaining structures have significantly increased vulnerability in Indian cities during severe drought events. Under pressure of drought, farmers feel the need to raise and harvest one crop. This leads to repeat plantings and cost spirals. However, institutions treat drought as discrete, episodic and outlier events, choosing to respond only when drought emergencies arise. This leads to perpetuation and aggravation of drought vulnerabilities, agrarian crisis and natural resources degradation.