



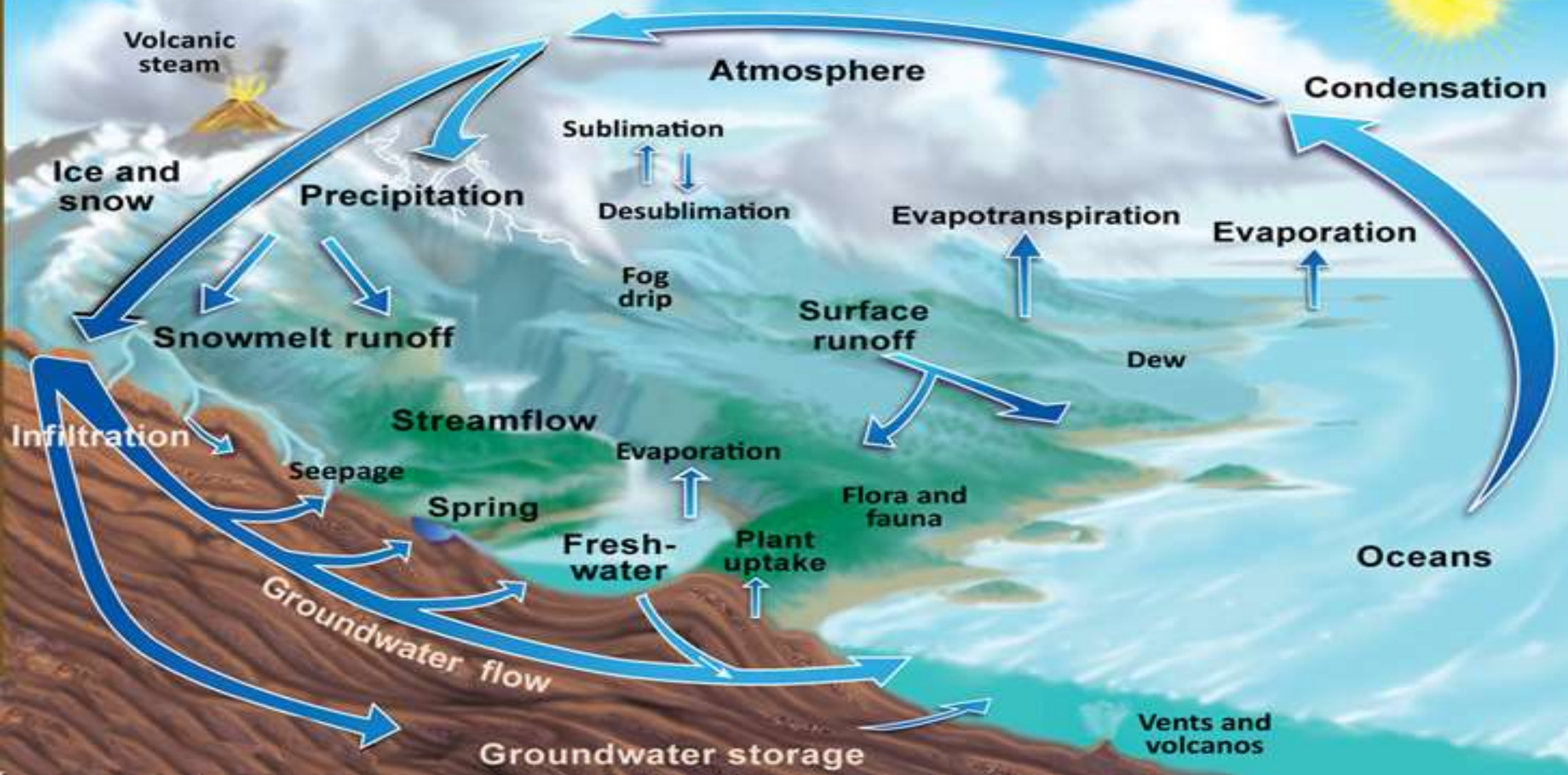
Water Governance -for **Water Security, Safety & Sustainability**

Dr.M.Ariz Ahammed IAS

National Water Mission

Ministry of Water Resources, River Development & Ganga Rejuvenation

The Water Cycle





Water Governance-National Perspective

State List- entry 17 of List-II subject to the provision of Entry 56 of List-I i.e. Union List.

Entry 17 of List II (State List): “Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to provisions of entry 56 of List I.”

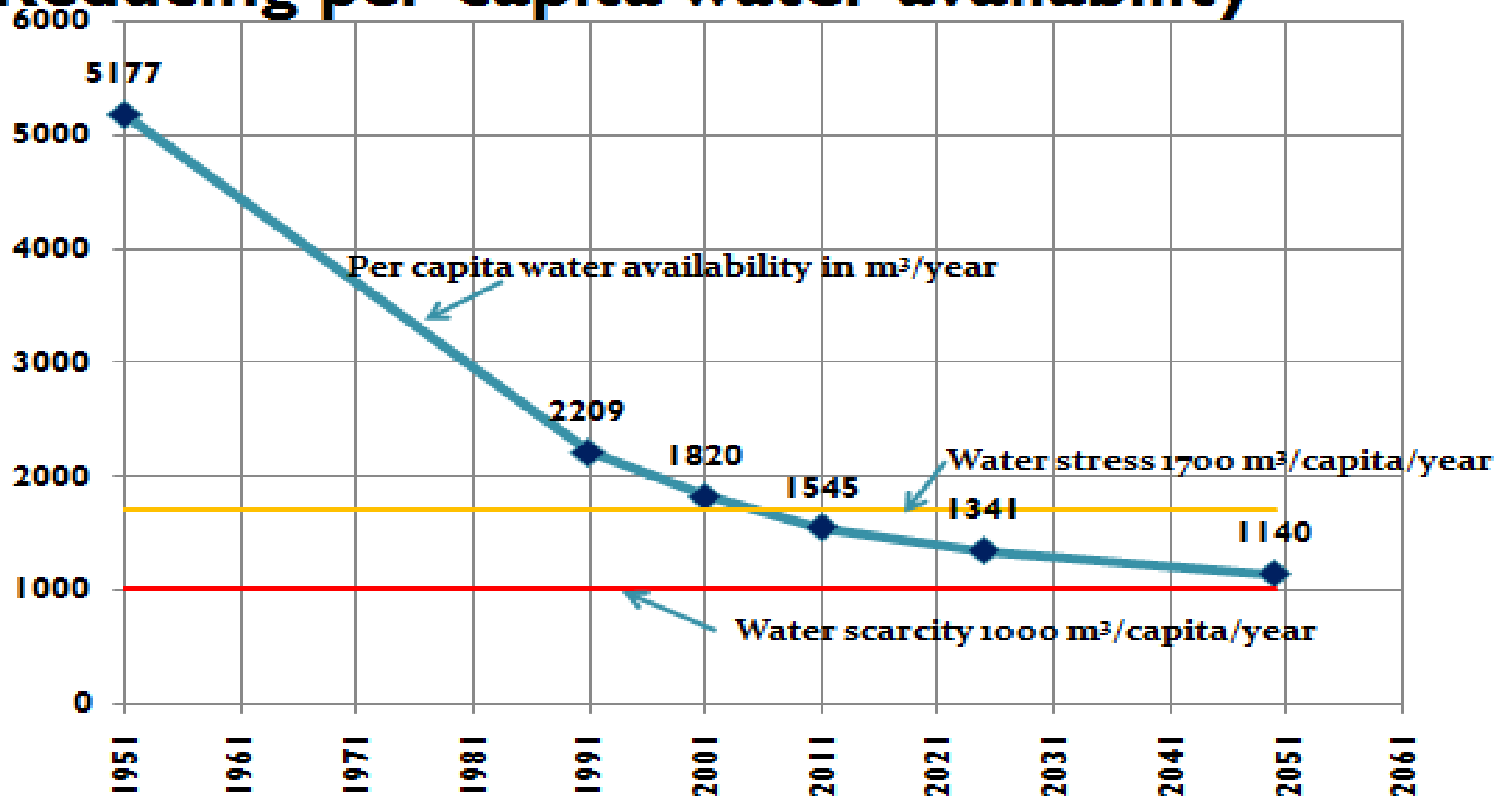
Entry 56 of List I (Union List): “**Regulation and development of inter-state rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.**”

River Boards Act, 1956 (Under Art.246, List 1, Entry 56)

Art.262. Adjudication of disputes relating to waters of inter-State rivers or river valleys

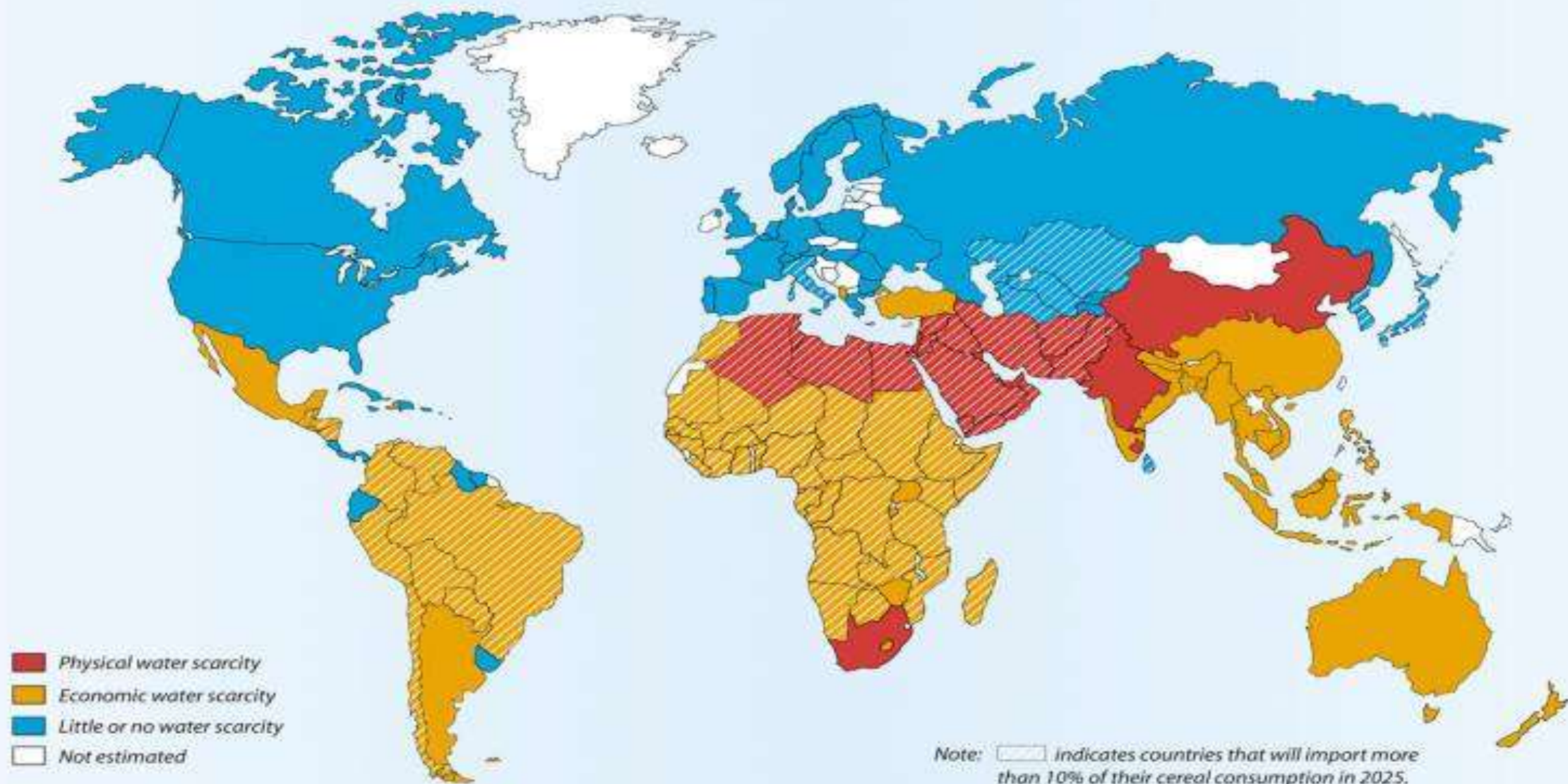
Inter State Water Disputes Act, 1956 –provides for setting up of Tribunals

Reducing per capita water availability



* As per Falkenmark Water Stress Indicator

Projected Water Scarcity in 2025



DTP Unit, IWMI-January, 2000

Water Dimensions

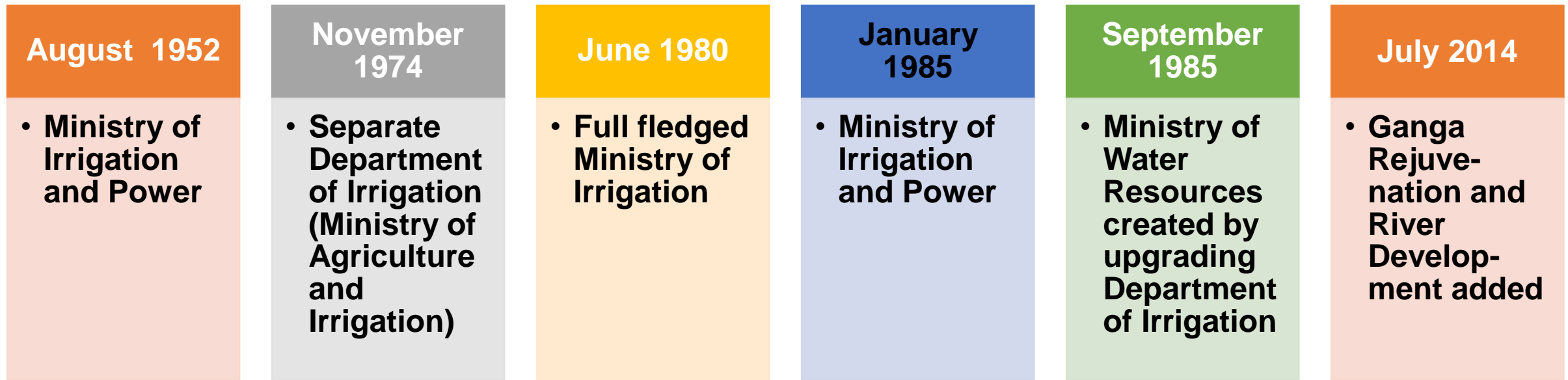


Water governance- Distributed

No single coordination Agency

Supply/Source side	Demand/ Consumption side
1. Climate- Precipitation	1. Forestry & Wildlife
2. Glaciers	2. Farm Sector
3. Springs	a. Agri-Horticulture-Irrigated and Rainfed
4. River Basins	b. Livestock, Birds and others
5. Projects-Storage/ Irrigation/ Multi-purpose	c. Fisheries and others
6. Wetlands	3. Industry and Infrastructure
7. Tanks	a. Thermal Power Plants/
8. Coastal zone	b. Textiles and Jute
9. Ground Water Resources	c. Paper and Pulp
10. Waste Water	d. Iron and Steel
	e. Others
	4. Establishments & Institutions- Education, Health etc.
	5. Drinking Water and Domestic use -Rural & Urban

Evolution of Ministry of Water Resources, River Development & Ganga Rejuvenation



Evolution timeline



Governance

Supply

Water
Sustainability /
GapsChallenges/
Water Budget

Demand

Technology

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Way forward: Water Security, Safety & Sustainability

Challenges

- Identification of Stakeholders
- Convergence- Common understanding
- Single Identified Agency for management
- Harmonising –Science (Hydrology/Geology) and Administrative units
- Measurement
- Re-engineering of Governance

Way forward-Institutionalisation

- State Water Budgeting