

## 1. Water Conservation as a National Movement

### Context:

- India faces several limitations and global challenges in order to realize dreams, expectations and ever rising aspirations of the people.

### Water Crisis - A Major Impediment:

- Interrelated water crisis and food insecurity attract special attention as these attain highest risk values due to burgeoning population, rapid urbanization, industrialization and infrastructure development, expansion and intensification of agriculture, etc.
- Water crisis in many remote rural areas, particularly in the Himalayan region is a cause of drudgery as fetching water from long distances excessively affects women and takes away their considerable time from work, family care and also results in economic opportunities.
- Further, lack of availability and access to freshwater imposes restriction on development works and this also pose threat to water-borne diseases and human health.

### Statistics of Water:

- The mother Earth is predominantly (70%) covered by water, **only 2.5% is freshwater. India harbours only 4% of world's freshwater.** Less than 1% of the freshwater is easily accessible in lakes and rivers.
- India has just 2.4% geographical area of the world while harboring nearly one sixth of the global population and world' highest owner of livestock's. This shows that the need of ecological security by protecting the country's diverse and unique natural heritage.

### Water Conservation:

- Nature, Water and people have intricate relationships. Nature acts as a regulator, a cleaner and supplier of water. Maintaining healthy forests and other natural ecosystems (grasslands and wetlands) directly leads to improved water security not only for wild denizens but for all.
- Water conservation is complex and daunting, particularly in a human dominated country like India having several competing demands. It involves the three major objectives:
  1. **Enhance water availability:** it is achieved by focusing on the protection and restoration of natural ecosystems, increasing green cover, managing riparian forest buffers, adoption of diversified agriculture, water budgeting, recycling and re-use.
  2. **Improve water quality:** by effective law enforcement and stringent regulations, pollution control, restrictions on pouring of sewage, urban waste, industrial wastes,

establishment of STPs and water treatment plants and adoption of bioremediation techniques.

3. **Reducing water-related risks:** adoption of integrated watershed management programme, flood control mechanisms, climate resilient agriculture, promotion of alternate income activities and sustainable livelihoods and disaster management.

### **A National Movement:**

- Considering the magnitude and complexity of water crisis, there is need to adopting holistic, evidence-based, participatory and bottom up approaches.
- In addition, revive traditional methods, tools, techniques and best practices for rainwater harvesting and water use efficiency. 'Nature Based Solutions' are expected to make significant contributions towards concerted efforts aiming at water conservation.

### **Measures taken by Government to de-stress Water Crisis:**

- Ministry of Jal Shakti launched '**Jal Shakti Abhiyan**'- campaign for water conservation and water security. The campaign run through citizen participation while focus on water-stressed districts and blocks in the country.
- **Pradhan Mantri Krishi Sinchaey Yojana – 'Har khet ko pani'** and 'More Crop per Drop' – focuses on improving water use efficiency.
- Other measures such as National Water Mission, National Mission for Clean Ganga, Dam Improvement and Rehabilitation Programme, Ground water management, Flood control and Forecast, Biodiversity Conservation, Wetland conservation, Green India Mission , CAMPA , etc.

### **Way Forward:**

- Sustainable management of water resources requires striking a balance between supply and demand, between water quantity and quality. Water conservation calls for creating an enabling environment for change, synergy between diverse stakeholders, suitable legal and regulatory frameworks, appropriate financing mechanisms and social acceptance.
- **Six priority actions** for water management sustainable in the country through an aggressive national movement:
  1. **Institutions and Governance:** strengthening and augmentation of manpower and financial resources and also a platform to bring in their efforts together for synergistic outcome. Governance at all level, help to establish judicious water use and prevention and resolution on conflicts.

2. **Participatory Approach:** it will help in empowerment of people and efficient management of precious water resources.
3. **Knowledge Management:** collaborations and institutionalizing synergies between various entities for development and exchange of evidence-based knowledge on ecosystem functions and development of suitable technologies to improve water resource management to ensure source sustainability.
4. **Ecosystem-Based Management Approach:** the move from isolationist approaches to holistic approaches is desirable on a priority basis. The awareness and sensitization campaign on massive scale need to be undertaken for educating masses on the significance of maintaining our ecosystem's integrity.
5. **Continuous Care:** Utmost care is required to be taken for retaining the water resources, making them sustainable and ensuring judicious use thereof.
6. **Capacity Development:** specialized agencies can be deployed for preparing the blueprint for budgeting the water resources within the framework of the legislation on the subject and then formulate strategies for its successful implementation.

