



WATER GOVERNANCE IN INDIA: AN ANALYSIS

Yamuna B.Raj* and Dr.B.P.Mahesh Chandra Guru**

*Research Scholar, DOS in Journalism and Mass Communication, University of Mysore, Manasagangotri, Mysuru, Karnataka, India.

**Retired Professor and Dean, DOS in Journalism and Mass Communication, University of Mysore, Manasagangotri, Mysuru, Karnataka, India.

ABSTRACT

The livelihood of people and the sustainability of water resources are basically dependent on sound water governance. Water conservation is the need of the hour since the world is facing the worst kind of water scarcity. There is a need for sound water governance to save the world from water insecurity in India and abroad. Clean water and sanitation is one of the major goals of sustainable development. The population of India is constantly growing and the demand for water is expected to grow from 40 billion cubic metres currently to around 220 bcm in 2025. Enlightened approaches are necessary to facilitate water conservation to meet the demands of the future generations. Water governance is crucial for the optimum utilization of water resources by adopting healthy water conservation practices. There is a need for sustainable management of water resources in India. The judiciary has observed that the government was duty bound to provide safe water to its citizens for full enjoyment of life. It is necessary to improve access to water and sanitation services and honor the fundamental rights of the people. The issue of mismanagement of water resources should be scientifically addressed by the authorities in order to prevent over-exploitation of water resources.

Key words: sustainable development, water resources, water governance

PREAMBLE

Water conservation is an important global challenge and responsibility in the new millennium. It is necessary to protect the water resources to save the mankind and environment from all kinds of threats. Water conservation has several dimensions which are addressed by the stakeholders of sustainable development. Effective water governance is crucial for the protection of water resources which has global responsibilities. The Government of India has formulated certain policies to facilitate water conservation in the post-independence era. Scientists and activists have sensitized the government about the need for sound water governance to save the world from water insecurity in the present times. Adequate scientific investigations are absolutely necessary to facilitate the adoption of water conservation methods on the basis of water governance in India. The contemporary relevance of water governance in India is examined in this article on the basis of qualitative research methodology.

SUSTAINABLE DEVELOPMENT GOALS

The subject of sustainable development has gained global attention since it is a new way of life. The United Nations Organization identified the Sustainable Development Goals in 2015 which include: no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic

growth, industry, innovation, and infrastructure, reducing inequality, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice, and strong institutions and partnerships for the goals.

The UNO has played a crucial role in the formulation and implementation of sustainable development goals. It has sensitized the various national governments to take appropriate action and draw appropriate national development plans in accordance with the SDGs. Various countries have expressed solidarity and prepared grounds to achieve these goals in every context since they are relevant to the world. These goals also represent a planning and follow-up tool for the countries at the national and local levels. The formulation of public policies and adoption of sound measures require the active engagement of various stakeholders of sustainable development across the globe.

WATER CONSERVATION

Water is the most precious commodity which has no substitute. Other commodities such as coal, oil, minerals and metals have substitutes. Water scarcity is affecting the mankind since water resources distribution is extremely skewed in space and time. It is estimated that the available utilizable water resources would be too little to meet the demands of the growing population in future. The population of India is constantly growing and the demand for water is expected to grow from 40 billion cubic metres currently to around 220 bcm in 2025.

Water is absolutely essential for better agricultural production, public needs, civic amenities and development of civilization (Kumari and Singh, 2016:10). It is necessary to change the attitudes and behaviors of the people and conserve water resources responsibly. Enlightened approaches are necessary to facilitate water conservation to meet the demands of the future generations.

About one third of the global population is currently water stressed due to certain compulsions and unhealthy practices adopted by the people. The urban water cycle is distinct from the natural hydrological cycle. Most urban areas in India and rest of the world face shortages of seasonal water due to increasing urbanization, modernization, industrialization, mining, deforestation and other factors (Matto et. al, 2017:11).

Water governance is essential to respond to the challenges of sustainable development. Water scarcity has become central to narratives that sought to focus governance at the river basin scale, to restrict water use in favor of the protection and restoration of water resource ecosystems in the country. There is a conflict of interest between the local and global criteria and sustainable developmental goals (Woodhouse and Muller, 2017:21). Water governance is crucial for the protection of water resources and utilization of water resources for various nation building endeavors.

The goal of water conservation is achieved through reduction of use of water and recycling of waste water for different purposes like domestic usage, industries, agriculture etc. Water scarcity is haunting the mankind due to increasing pollution and undue exploitation of water resources (Balasubramanian, 2019:03). Healthy water conservation practices are necessary to preserve the groundwater and surface water to serve various purposes. Rainwater harvesting is an effective and low-cost solution in the world.

Traditional water-harvesting techniques in India are grossly neglected by the people due to lack of environmental illiteracy and concerns in the backward nations. The developed countries have adopted better water conservation measures due to better awareness and preparedness among the masses. There is a need for sustainable management of water resources in the world.

Water conservation and sanitation is one of the thrust areas of Sustainable Development Goals. Water conservation is essential to human health, food and energy security, poverty eradication and many other aspects of human civilization regardless of space and time. About 50 to 70 per cent of the world's natural wetland area is lost over the last 100 years due to increased environmental degradation and pollution. Billions of people in urban, rural and remote areas are deprived of basic civic amenities including water (Raj et. al, 2020:16).

There are increasing threats to environment due to greedy capitalists and irresponsible people. This has resulted in water scarcity because of overexploitation of water resources by the market forces (Aslam et. al, 2021:02). The stakeholders of sustainable development are responsible for conservation of water resources in the present times. It is necessary to educate the masses about water conservation measures and increase the happiness and security of the people.

The stakeholders of sustainable development have realized the importance of better coordination of water resources and adopted sound water governance approaches over a period of time. It is necessary to improve access to water and sanitation services, increase wastewater treatment, enhance water use efficiency, expand operational cooperation across trans boundary water basins, and protect and restore freshwater ecosystems across the globe.

WATER GOVERNANCE IN INDIA

The Constitution of India has ensured the right to life of the people which includes the right to safe and secured water and sanitation. India, water sector is administered by the Government of India through regulatory mechanisms and tools. The government has formulated the National Water Policy in accordance with the Constitutional provisions. The subject of water is included in Entry 17 of List-II i.e. State List. Article 262 of the Indian Constitution provides a role for the Central government in adjudicating conflicts surrounding inter-state disputes on the distribution of water resources.

The Ministry of Water Resources is responsible for the development and management of water resources in India. The sustainability of water resources should therefore be central to the government. The judiciary has observed that the government was duty bound to provide safe water to its citizens for full enjoyment of life. It is, therefore, necessary that the central government by means of Constitutional amendment explicitly incorporates Right to Water as Fundamental Right of every citizen in the country.

Inclusion, sustainability and institutional culture are the basic principles relating to water governance in India (Nayar, 2013:14). There is a need for transformation of institutional culture to facilitate better water governance in the context of change management. Water governance is a widely acknowledged as an important factor for sustainable development. Water governance refers to the political, social, economic and administrative systems in place that influence water's use and management.

The livelihood of people and the sustainability of water resources are basically dependent on sound water governance. It determines the equity and efficiency in water resource and services allocation and distribution which benefit the people and environment. Water governance is intended to strike a balance between water use for social and economic activities and eco-systems. Water policy formulation and implementation of water conservation programs are the key aspects of water governance.

India's water governance regime demands meaningful reformation on the basis of strategic approaches to water resources management. The rate of withdrawal of groundwater and depletion of water resources has risen sharply over a period of time. The farmers in India are known for abuse of water resources to grow certain crops when compared to global averages (Kishore, 2017:09). The irrigation authorities and other officials have remained indifferent towards waste of water resources. The issue of mismanagement of water resources should be scientifically addressed by the authorities in order to prevent over-exploitation of water resources.

The recommendatory nature of central law, regulations and policies; and above all several instruments lacks transparency and accountability. It is necessary to ensure apt arrangements for holistic water administration in the country. The constitutional status of water should be attuned to suit the current requirements (Bhatt and Bhatt, 2018:04). The stakeholders of governance are responsible for ensuring equitable distribution of water resources for the benefit of the masses.

The people have the right to water resources in order to enjoy their right to life absolutely. Water sector needs adequate investment by the government in order to save the mankind from water crisis and facilitate their social and economic development. Water conservation efforts are required to improve people's livelihood opportunities. Inadequate rain water harvesting programs, excessive ground water pumping, inefficient water management and wasteful water management system have caused severe water scarcity in India. About 100 million people in the country are racing to reach zero ground water levels (Niti Aayog, 2018:15).

Water governance reform is highly essential in India. The dominant paradigm is of command-and-control. Water governance has several dimensions including sustainability in India. It is necessary to develop sound legal framework to provide appropriate solutions to India's multiple water problems. It is not possible to solve the problem of water without a paradigm shift in water governance (Shah, 2018:17). Effective water governance is necessary to address the issue of water scarcity and sustain water resources for the future generations. The water conservation, water distribution and water management have assumed importance in the new millennium.

India faces the worst water crisis in history due to lack of adequate fund allocation, political will, proper management of water, clear vision, awareness among people, uncontrolled privatization of economy and other factors (Borah, 2018:05). The government is responsible for taking effective measures like rain water harvesting, water pollution control, effective ground water management policies, proper irrigation technologies, reduction of misuse and wastage of water resources which have become the major dimensions of water governance in the country.

The goal of national development can be achieved effectively on the basis of judicious conservation of water and other natural resources. People are entitled to take active part in the

decision making process concerning equitable distribution of water resources. Sustainable use of water resources is related to ecosystem activities in general and nation building activities in particular (Ahmed and Araral 2019:01). Government organizations, community based organization, non-government organizations, corporate houses and other institutions are required to facilitate meaningful collaboration for conservation of water resources.

India is confronted with many challenges in the water sector, including the lack of reliable information on water, absence of any initiative to restructure the water institutions, a distressed groundwater lifeline, push for large dams, increasing footprint of the urban water sector, and the sorry state of its rivers. There is a need to address the democratic deficit in water governance in the country. The water governance ought to be made transparent, accountable and participatory in every sub-sector, including management of rivers, groundwater, floods, and biodiversity, among others (Thakkar, 2019:20). Sound water governance and adoption of the policy of judicious distribution of water resources in accordance with the law of nature is highly essential.

There is a dire need for effective water governance in India since the country faces serious water stress in recent years. Water governance is the basis for proper water management in the country. It practically needs a serious scientific understanding coupled with the cooperative approach rather than a competitive one (Girish and Pandya, 2019:08). The stakeholders of water governance need a proper mechanism to achieve high water usage efficiency, control groundwater depletion and facilitate optimum utilization of available water resources.

There is a need for rethinking water governance strategies since water crisis has assumed alarming proportion. It is estimated that about 21 major Indian cities are expected to run out of groundwater in the near future affecting about 100 million people. Water governance is crucial in a cooperative and competitive federalism in the country (Chokkakula and Pandya, 2019:06). The policy makers should ensure a more useful and productive discourse about water governance challenges in the country in order to adopt practically viable approaches to water governance.

Water governance is based on inclusiveness centric distribution and utilization of water resources and improvement in the efficiency of water resources management. The Ministry of Water Resources is responsible for providing meaningful legal and policy framework to facilitate a paradigm shift from mere water supply infrastructure creation to service delivery of clean water (Mehta, 2020:12). Active people's participation is necessary in the noble and transformative mission to improve the lives of people through judicious distribution of water resources. There is also a need for people's movement for rainwater harvesting, rejuvenation of water bodies, watershed development and reforestation.

The people have a right to clean water and sanitation in modern society. Water governance is based on the increased stakeholder participation at various levels. People are also responsible for persuading the authorities to adopt effective water resource governance model (Syali, 2020:19). Adequate infrastructure development on constructional activities in pristine river ecosystems is necessary in India. The country needs a bottom-up approach for effective water governance and sustainable management of water resources.

Inter-state water disputes are posing great challenge to federal water governance in India. They are impeding the coordinated efforts in the process of political negotiations under the existing

institutional mechanisms. The Government of India is responsible for creating the space for the political actors in the country (Modak and Ghosh, 2021:13). The focus should be on strengthening the existing and evolving institutional mechanisms, and accommodating political sensitivities to find a long-term and mutually beneficial path for the governance of interstate river water in India.

There is a silent water war being waged in India in the form of conflicts over the colonial engineering paradigm and holistic paradigm of integrated water governance. The current water governance paradigm is based on structural interventions over water flows which has become unsustainable (Ghosh, 2021:07). There is a need for great involvement of policy makers, bureaucrats, professionals, scientists and technocrats in the formulation of water governance policy and implementation of sustainable water resources development initiatives in the country.

Water is an essential resource for the integrated development of the country. The climate change impacts have resulted in serious consequences on availability of water in India. Water and climate change related policies need to be coherent in order to address climate change induced effects on the environment (Srishti and Schwarz, 2021:18). Increased investment in the development and management of water resources is imperative in India. A human rights-based approach supported by good governance is at the core of water governance in the present times.

CONCLUSION

The water crisis in India has assumed unprecedented proportions in the new millennium. It practically threatens the basic right to water of the citizens and caused threats to the livelihoods of the millions of people. The Government of India is responsible for bringing about the Constitutional amendment explicitly in order to incorporate Right to Water as Fundamental Right of every citizen and also includes the water in either the Union List or the Concurrent List. Environmentalists have noted non-significant association between the water, society and economy. The Government of India realized the gravity of water crisis and established a separate ministry for water resources in order to tackle water issues with a holistic and integrated perspective. The ministry has set a target of providing piped water connection to every household in India by 2024. It is imperative to the Government of India to reform the water governance in order to identify appropriate pathways to realizing the constitutional obligation of right to water in a rapidly industrializing economy and urbanizing society.

REFERENCES

1. Ahmed, Masood and Eduardo Araral (2019) Water Governance in India: Evidence on Water Law, Policy, and Administration from Eight Indian States, *Water*, 11(10):2071, www.mdpi.com
2. Aslam, Sumaira., Hira Aftab., José Moleiro Martins., Mário Nuno Mata., Hamza Ahmad Qureshi., Ana Maria Adriano and Pedro Neves Mata (2021) Sustainable Model: Recommendations for Water Conservation Strategies in a Developing Country Through a Psychosocial Wellness Program, *Water*, 13(14), www.mdpi.com
3. Balasubramanian A. (2019) Water Conservation Practices, Research Gate, April, www.researchgate.net
4. Bhatt, Neelkanth and Kapil Bhatt (2018) An Analysis of Water Governance in India: Problems and Remedies, *International Journal of Advance Engineering and Research*, 4(9): 279-284, www.researchgate.net

5. Borah, Chayanika (2018) Water Scarcity and Water Governance in India: A Study, Mizoram University Journal of Humanities & Social Sciences, IV(2): 170-177, WWW.mzuhssjournal.in
6. Chokkakula, Srinivas and Ashwin Pandya (2019) Rethinking water governance strategies, The Hindu, August 12, www.thehindu.com
7. Ghosh, Nilanjan (2021) India's Enduring War of Water Governance Paradigms, Observer Research Foundation, Issue Brief No. 446, February, www.orfonline.org
8. Girish Chadha and Ashwin B. Pandya (2019) Water Governance and Management in India: Issues and Perspectives, Springer, March 25, www.books.google.co.in
9. Kishore, Roshan (2017) India's water governance regime is crying for reforms, Mint, March 22, www.livemint.com
10. Kumari, Mamta and Jagdeep Singh (2016) Water Conservation: Strategies and Solutions, International Journal of Advanced Research and Review, 1(4): 75-79, www.ijarr.in
11. Matto, Mahreen., Shivali Jainer., Mritunjay Kumar and Chhavi Sharda (2017) Water Efficiency and Conservation in Urban India, Centre for Science and Environment, New Delhi, India, www.cdn.cseindia.org
12. Mehta, Rajesh (2020) Water governance: India's unsung success, The American Bazaar, September 02, www.americanbazaaronline.com
13. Modak, Sayanangshu and Ambar Kumar Ghosh (2021) Federalism and Interstate River Water Governance in India, *ORF Occasional Paper No. 294*, January, Observer Research Foundation New Delhi, India, www.orfonline.org
14. Nayar, Vibhu (2013) The Water Crisis—Rethinking Water Governance, Journal of Land and Rural Studies, 1(1): 75-94, WWW.journals.sagepub.com
15. Niti Aayog (2018) Composite Water Management Index Report, Government of India, New Delhi, India.
16. Raj, Yamuna B., Sapna M. S., Mamatha N. and Mahesh Chandra Guru B.P. (2020) Water Conservation Communication in India: An Exploration, International Journal of Research in Humanities, Arts and Literature, 8(9): 95–104, www.impactjournals.us
17. Shah, Mihir (2018) Reforming India's Water Governance to meet 21st Century Challenges: Practical Pathways to Realizing the Vision of the Mihir Shah Committee, Project Report, International Water Management Institute, Gujarat, India, www.iwmi-tata.blogspot.in
18. Srishti Singh and Rixa Schwarz (2021) Outlook on Climate Governance and Water Policy in India with a focus on Participatory Approaches, Hanns-Seidel-Stiftung India, www.cceindia.org
19. Syali, Manini (2020) Youth Action for Water Governance: The Indian Experience on the attainment of Goal 6 of the Sustainable Development Agenda, Oxfam, August 12, www.asia.oxfam.org
20. Thakkar, Himanshu (2019) Challenges in Water Governance: A Story of Missed Opportunities, Economic and Political Weekly, IIV (15): 12-14, www.indiawaterportal.org
21. Woodhouse, P. and Muller, M. (2017) Water Governance – an historical perspective on current debates, World Development, 92(1): 225-241, www.research.manchester.ac.uk