Structuring of Water Policies in India: An Overview and Way Forward

MAHESHWARI GUPTA* RABIDYUTI BISWAS**

ABSTRACT

Growing contestation on the policy reforms and implementation is quite significant in the last few years. Diverse narratives related to water policy reforms and discourses have achieved considerable scholarly attention. These narratives vary from water rights, challenges of groundwater management, access to clean water and sanitation, gender equity for access to water and sanitation, integrated water resource management to inter-state river management. Adding to the global agenda of water security, climatic change has given a new dimension to the discussion. Availability of freshwater has been severely hit by natural disasters leading to water scarcity in major parts of the world. Therefore, to handle the scenario wisely, the focus of the current water management reform relies on efficient policymaking to strengthen the overall water governance, water planning and water management. This research explores the structuring of the water policies in India focusing on the components of existing National Water Policies.

Keywords: Water Policy, National Water Policy, Policy Implementation.

INTRODUCTION

Discussions on the role of public policy have attained tremendous improvement in the last five decades. Further exploration towards evidence-based and behavioral economies can raise the bar to achieve effective policymaking (Hassel, 2015). Policies in water resource management can be understood as the dynamic outcomes achieved from public-private interactions at different layers and scales through

^{*}PhD Scholar, Department of Physical Planning, School of Planning & Architecture, New Delhi 110002. Email: maheshwari.gupta1990@gmail.com

^{**}Professor, Department of Physical Planning, School of Planning & Architecture, New Delhi 110002.

some timeline (Delft, 2021). The immunity of the water sector towards various socio-economic-environmental uncertainties is not significantly evident; therefore policymaking in water resource management has to be handled rationally and efficiently by the water sector decision-makers to cope up with present scenario (Biswas, 2001).

Water scarcity and its mismanagement is a serious concern worldwide (Sulyova, Vodak, and Kubina, 2021). Physical scarcity of water persists in many parts of India but there are many cities and towns which suffer due to the mismanagement of water resources. The uniqueness of decision-making in water resources lies in its diverse nature and interdependence with other resources. Hence, attaining equilibrium in water governance with multiple actors and institutions makes it a more complex and challenging phenomenon (OECD, 2016). Therefore, effective policymaking could be seen as one of the key principles to unfold the enigma of good governance.

In this paper, the focus is on underlining the shift required from conventional policymaking to utilitarian reforms. There are sections to discuss the current structuring of the water policies in India, theories of policy institutions (Saleth and Dinar, 2004) adapted to establish the limitations of current policies and highlight the potential interventions. This paper is based on a preliminary analysis of the aspects drawn from the literature and successful examples. A major focus is on the National Water Policies and some examples from the National Capital Territory of Delhi (NCTD) to understand the policy translation from top to bottom.

Background

Water policy in India is constantly evolving in synchronization with the global agendas for water security, sanitation and climate change. However, the struggle continues as the Central and state water institutions recommence to have inconsistent, inefficient, sub-standard, and overlapping policies. Water policies in India are also found to be un-implementable in cases such as groundwater rights, metering tube wells, etc. (Shah and Koppen, 2006). The formation of water policy involves various authorities changing with political boundaries of districts, regions, states, etc. on one hand as well as hydrogeological boundaries like basins, sub-basins, and catchments, etc. on the other hand. The implementations of water policy become difficult due to such boundaries and administrative overlapping. Deficiency of common framework and focused understanding of goals are some of the familiar reasons for having an inconsistent water policy structure. Another critical reason for the policy being inefficient is the lack of disaggregation and aggregation in data throughout the institutions. Sometimes data is referred to by different institutions are found to be contradictory (Cronin et al., 2016). The same implies to river basin management, different water institutions use different data, and planning and managing any river basin with reliance becomes difficult. Coordination between different departments such as the Ministry of Water Resources, Rural Development, Agriculture and Urban Development, etc. at the Centre and states make it even more exhausting. The economy is another leading factor in water governance and a significant reason for 'push and pulls' in the policy cycle.

Box-1 indexes the brief of major events in water policy, water planning and management in India in chronology. The series of water policies and programmes provide evidence of the active role of the Indian government in the water sector, however, the challenges seem to grow with the passage of time.

India was among the first countries to have the National Water Policy (NWP) in 1987. Water policy in India was formulated by the Ministry of Water Resources in 1985 which later on became the Ministry of Water Resources, River Development, and Ganga Rejuvenation in 2014. Now it has been replaced by 'Ministry of Jal Shakti' (Jal Shakti Mantralaya) on 14th June 2019. Ministry of Jal Shakti currently works on two separate departments called Department of Water Resources, River Development, and Ganga Rejuvenation also known as 'Jal Sansadhan, Nadi Vikas Aur Ganga Sanrakshan Vibhag' and another as Department of Drinking Water and Sanitation also known as 'Peya Jal Aur Swachhata Vibhag' which was earlier called as Ministry of Drinking Water and Sanitation formed in 2011.

The making of NWP's in India involves federal government setup aggregating contributions from bureaucrats of several divisions and public leaders. The first National Water Policy (NWP) was adopted in 1987 which got updated in 2002 and later revised in 2012 (Fig. 1). It was more than 30 years after the first NWP came in 1987, but unfortunately,

National Water Policy, 1987

National Water Policy, 2002

National Water Mission under National Action Plan on Climate Change, 2008

National Water Policy (revised) 2012

Proposed New National Water Policy by 2021-22

Fig. 1: Chronology of the existing water policies

Source: Authors

Box-1: Chronology of events related to water provisions in Post-Independent India

1947: Central Water Commission was established under the name of Central Waterways, Irrigation and Navigation Commission, generally known as CWINC and it was stated that: The Commission will act generally as a Central fact-finding, planning and coordinating organisation with the authority to undertake construction work.

1949: The Environment Hygiene Committee in 1949 recommended the provision of safe drinking water supply to cover 90 percent of India 's population for coming 40 years.

1950: The Constitution of India gave ownership of all water resources to the government, specifying it as a state subject, giving citizens the right to drinking water.

1951-56: First Five-Year Plan: Water supply and sanitation was added to the national agenda with sanitation first time mentioned under water supply.

1954: First National Water Supply and Sanitation Programme was launched as a part of health plan.

1956-61: Second Five-Year Plan: Water supply sector was not given much priority in this Plan, but funding was provided to Public Health Engineering Departments (PHEDs).

1956: Amendment of interstate water disputes.

1961-66: Third Five-Year Plan: 'Problem Villages' were identified as those without drinking water source within distance of 1.6 kilometers in the plains or an altitude of 100 meters in hill areas, those endemic to water-borne diseases and those where water sources contain excess salinity, iron, fluoride or toxic elements.

1968: States were given financial authority to sanction rural water supply schemes, which were expanded to include settlements with population less than 20,000. Priority was given to villages with acute scarcity of drinking water.

1969: National Rural Drinking Water Supply Program was launched with technical support from United Nations International Children 's Emergency Fund (UNICEF).

1972 -73: Accelerated Rural Water Supply Programme (ARWSP) was launched by the Government of India to assist States and Union Territories to accelerate the coverage of drinking water.

1975: ARWSP was replaced by the 20 Point Minimum Needs Programme (MNP) which aimed at full coverage of population with safe drinking water.

 $1977\mbox{-}78\mbox{:}$ ARWSP was reintroduced, but funds were provided by the states through MNP.

1980-85: Sixth Five-Year Plan: Importance was given to the water supply sector in keeping with the UN de Mar del Plata declaration of March 1977 about the International Decade of Drinking Water Supply and Sanitation from 1981-90.

1981: India as a party to the International Drinking Water Supply and Sanitation Decade (1981-1990) declaration had set up a national level apex committee to define policies to achieve the goal of providing safe drinking water to all villages.

1985: Rural Water Supply and Sanitation, which was under the Ministry of Urban Affairs and Employment, was handed over to the Department of Rural Development, then under the Ministry of Agriculture.

1986: National Drinking Water Mission (NDWM) was launched in 1986 with following objectives: a) Providing safe drinking water to all villages; b) Assisting local communities to maintain sources of safe drinking water in good condition; and c) Giving special attention for water supply to Scheduled Castes and Scheduled Tribes.

1987: National Water Policy (NWP) was drafted for the first time by the Ministry of Water Resource with an emphasis on domestic water supply, protection of groundwater sources and water quality monitoring and mapping. Drinking water was given first priority under this policy.

1991: National Drinking Water Mission (NDWM) 1986 became Rajiv Gandhi National Drinking Water Mission (RGNDWM).

1992: 74th Constitutional Amendment Act was passed in 1992 to create Urban Local Bodies (ULBs) to be known as Municipal Corporations, Municipal Councils and Nagar Panchayats and local bodies are assigned with the planning and management of water within their jurisdiction.

1993: Accelerated Urban Water Supply Programme (AUWSP) was launched in 1993 to provide safe and adequate water supply facilities to the entire population of the towns having population less than 20000 as per 1991 Census.

1994-95: Mega-city schemes were launched for five metro-cities.

1994: Panchayati Raj Institutions (PRIs) were assigned the responsibility of providing drinking water as per the provisions of the 73rd Constitutional

1992-97: Eight Five-Year Plan: Problems with the water supply sector were identified and reform agenda was put forward. Emphasis was placed on treating water as a commodity.

1994: Sector Reform Pilot Project (SRPP) was launched in 1994 giving a new approach to the water supply, operationalizing the decentralized delivery of water services by focusing primarily on village level water supply management. The role of the government was envisaged to change from service provider to facilitator. Sector reform projects were introduced in 67 districts across the country on pilot basis.

1997-2002: Ninth Five-Year Plan: The objective of Ninth Plan was to provide 100 per cent water supply coverage in urban and rural areas, 60 per cent sanitation coverage in urban areas and 30 per cent in rural areas. Emphasis was placed on decentralisation and privatisation, both in rural and urban sectors.

2002: RGNDWM scaled up the Sector Reform Pilot Project to the whole country in the form of Swajaldhara Programme for National Drinking Water Supply.

NWP 2002: was revised to accord priority to villages that did not have adequate sources of safe water and to improve the level of service for villages classified as only partially covered. India committed itself to the Millennium Development Goals (MDGs).

2002-07: Tenth Five-Year Plan: The objectives of Ttenth Plan were 100 per cent coverage of urban and rural population, water to be managed as a commodity, change in the role of government from direct service provider to facilitator, leading to privatization.

2003: Provision of Urban Amenities in Rural Areas (PURA): The objective of the scheme is to provide urban amenities and livelihood opportunities in rural

areas to bridge the rural-urban divide, thereby reducing migration from rural to urban areas.

2004: All drinking water programmes were brought under the umbrella of the RGNDWM.

2005: Bharat Nirman Programme (BNP), a five-year Programme to build rural infrastructure, of which drinking water supply was one of six components.

2007: Pattern of funding under the *Swajal dhara* scheme changes from the previous 90:10 Central-community share to 50:50 Centre-State shares. Community contribution was optional.

2007-12: Eleventh Five-Year Plan: The objective of eleventh plan was to cover 63 cities and 5098 towns to be covered under the JNNURM and UIDSSMT programmes, so as to provide adequate drinking water to the people. The approach paper for the Eleventh Five-Year Plan called for a comprehensive approach which encompassed individual health care, public health, sanitation, clean drinking water, access to food and knowledge about hygiene and feeding practice.

2008: National Action Plan for Climate Change (NAPCC) is a Programme launched to mitigate and adapt to the adverse impact of climate change. The action plan was launched with 8 sub-missions. National Water Mission, is one of the eight missions.

2009: Volume I and Volume II launched for the revised Comprehensive National Water Mission under National Action Plan on Climate Change by the Ministry of Water Resources.

2010: Department of Drinking Water Supply was renamed as Department of Drinking Water and Sanitation.

2011: Department of Drinking Water and Sanitation upgraded as separate Ministry of Drinking Water and Sanitation.

2012: Draft NWP 2002 was updated to NWP 2012 and drinking water was given utmost priority.

2012-17: Twelfth Five-Year Plan: The reform agenda for Twelfth Plan has five major thrust areas. It is proposed in the Plan that investments in water supply will focus on demand management, reducing intra-city inequity and on quality of water supplied. The other agenda is to protect the water bodies of each city and to build the infrastructure to enhance the water supply.

2012: Dam Rehabilitation and Improvement Project (DRIP): Ministry of Water Resources, River Development and Ganga Rejuvenation through Central Water Commission with an objective to improve safety and operational performance of selected dams.

2014: Namami Gange Programme: is an Integrated Conservation Mission approved as 'Flagship Programme' by the Union Government to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

2015: Pradhan Mantri Krishi Sinchai Yojana (PMKSY): *Har Khet Ko Pan*i (HKKP) was a national mission to improve farm productivity and ensure better utilization of the resources in the country.

2016: Model Bill for the Conservation, Protection, Regulation and Management of Groundwater: An Act to restore and ensure groundwater security through

availability of sufficient quantity and appropriate quality of groundwater to all stakeholders in rural and urban areas.

2016: Draft National Water Framework Bill: The Committee was formed by the Ministry of Water Resources, River Development and Ganga Rejuvenation. The objective behind framing of this bill was to conserve, manage, protect and regulate the use of water.

2018: Hydro-Meteorological Data Dissemination Policy, 2018 has been formulated by this Ministry which deals with the issue of dissemination of hydro-meteorological data collected by CWC and CGWB, classification of hydrometeorological data, Data User Categories, custodian of hydro-meteorological data and procedure for release of classified & unclassified hydro-meteorological data.

2019: Jal Jeevan Mission: is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India.

2019: Atal Bhujal Yojana is a groundwater management scheme launched to improve groundwater management in seven states of India.

2021: launched of the 'Jal Shakti Abhiyan: Catch the Rain' campaign on March 22, 2021 with the tagline "Catch the rain, where it falls, when it falls" on the occasion of World Water Day for conserving water.

2021: Har Ghar Nal Ka Jal (tap water in every home): Scheme for piped water supply to all is under *Jal Jeevan Mission* aims to provide adequate water supply to all households and to conserve water sources.

Source: Updated till November 2021, Compiled by the authors.

these policies were far from helping India to achieve water security (Pandit and Biswas, 2019). The prime objective of the current policy is to manage water resources with efficiency via promoting optimal, equitable, and economical usage of water (Ministry of Water Resources, 2012). It draws attention to the prime objectives of the National Water Mission 2008 (Ministry of Water Resources, 2018).

The water allocation priority has been given importance for drinking water in all water policies. Additionally, there is an attempt to look into water use efficiency, equity, and sustainability in all NWPs but less emphasis has been given on the instruments to achieve them. For example, in the last section of NWP 2012 there are two policy statements under implementation of NWP (stated below) which has an accountable vision to be adopted. But there are no traces found on the preparation of the 'plan of action' for regular monitoring as suggested nor state policies reflect on unified perspective.

"16. IMPLEMENTATION OF NATIONAL WATER POLICY

16.1 National Water Board should prepare a plan of action based on the National Water Policy, as approved by the National Water Resources Council, and to regularly monitor its implementation.

16.2 The State Water Policies may need to be drafted/revised in accordance with this policy keeping in mind the basic concerns and principles as also a unified national perspective."

In 2015, a committee of seven members formed on the restructuring of the Central Water Commission (CWC), functioning since 1947, and Central Ground Water Board (CGWB) functioning since 1971, suggested a united body called National Water Commission (NWC) (Shah, 2016). Some of the objectives of the report were to pass Participatory Irrigation Management (PIM) Act, to bridge the gap between Irrigation Potential Utilised (IPU) and the Irrigation Potential Created (IPC), to empower Water Users Associations (WUAs), to promote participatory groundwater management, strategic planning at river-basins level, etc. The report was criticised for being voiceless on challenges of allocation of water in different sectors, rules for allocation, enforcement, performance checks, etc. at the basin level. It came out to be fragmentary on reinventing institutional and economic reforms. The report also called out for discussing the 'organizational reform' then the 'institutional reform' (Kumar, et al., 2016).

Methodology

The first section of the research contributes to the evaluation of all three versions of existing National Water Policies 1987, 2002, and 2012. Evaluation is based on the theory of 'Water Institution Decomposition'. Components indicated and unfolded are water law, water policy, and water administration. Pre-dominant objectives of the policies are compared to the sub-components of water institutions demonstrating the degree of inclusivity. This critical evaluation has been used to trace the ingredient imbalance in the current water policy structure.

The second section of the paper highlights the trend in the policymaking process. Based on the literature review, the most common steps involved in policy making process are taken into account to evaluate the current stages adopted by water institutions in India. For ease of understanding, the stages are clubbed into two categories 'Problem analysis' and 'Solution analyses'. This section provides a quick overview of the traditional yet evolving trend in the policy process.

The concluding section summarizes the need for relooking into the current water policy structure. Based on observatory analysis in the result and discussion section, it provides with few basic yet significant steps to be considered during the process of preparation of water policies. This section also emphasizes the importance of policy efficiency to achieve a water-secure future.

ANALYSIS, RESULTS AND DISCUSSIONS

Section-1: For a better understanding of effective policymaking, the concept of water institution has been elaborated in this section. 'Water institution' can be decomposed into three components: Water Law, Water Policy, and Water Administration (Saleth and Dinar, 2004). The components have a few parameters based on legal, political, and administrative aspects such as legal accountability of sector officials, economy, poverty and water, organizational balance, functional balance, etc. On the assessment of existing policies based on these parameters, it was found apparently that NWP 1987, NWP 2002, and NWP 2012 lack in 'Water Law' component of water institution, resulting in weak legal strength, whereas it reasonably qualifies for 'Water Policy' losing out on a significant portion of 'Water Administration'. The existing water policies have been relooked on the basis of some of identified evaluated components. Few important components which demand urgent considerations are legal accountability and interlinking of multisectoral policies. The analyses of the policies based on the identified components are explained in Table 1.

Acknowledging water resources as a state subject in India, the state has the liberty to draw its strategies based on the functions required within their boundaries; it may or may not agree to adopt the principles of national policies directly. For example, in the case of the National Capital Territory of Delhi (NCTD), the procurement of water in Delhi is governed by Delhi Jal Board formed in 1998 under the 'Delhi Water Board Act by Delhi Legislative Assembly. So, the provision of water supply and sanitation is solely the responsibility of the Delhi Jal Board. Delhi does not own any approved water policy till now but has four versions of "Draft Water Policy for Delhi" which came in 2012, 2016, 2017, and 2018, respectively. The Draft Water Policy for Delhi (WPD) was initiated by Delhi Jal Board and undertaken by the experts from the Natural Heritage division of 'The Indian National Trust for Art and Cultural Heritage (INTACH). The prime objectives of the WPD 2018 were based on five principles like: (i) Demand Management, (ii) Optimization of available resources, (iii) Recycling, (iv) Augmentation of internal resources and building resilience to climate change and (v) Equity (Delhi Jal Board, 2016). WPD in similarity to the NWPs found to be providing over ambitious statements such as achieving minimum 80% of recycled water by 2027. Successful examples are exhibited from the countries managing their water resource very efficiently such as Singapore, Israel, Western Australia, etc. which is appreciated but it is notable that our country's context and challenges are way different from others. Hence we see the translation of objectives from the national water

TABLE 1: EVALUATION OF NATIONAL WATER POLICIES BASED ON IDENTIFIED COMPONENTS. (ADOPTED FROM SALETH AND DINAR, 2004).

Components	National Water Policy 1987	National Water Policy 2002	National Water Policy 2012	
Legal:	Water Law			
Distinction of water sources, accountability of sector officials, scope for private and user participation; Framework for integrated use of water sources.	have been discussed. No legal definition for private-user participation. No framework for integrated use of water sources.		Proposed need for 'Water Framework Law' to govern the exercise of legislative or executive powers by the Centre, States and local governing bodies. Acts modification is proposed for regulation of ground water. Proposed need for comprehensive legislation for optimum development of interstate rivers and river valleys to facilitate interstate coordination.	
	Water Policy			
Project selection criteria, Linkages within Law and Policy and with other policies Economy: Pricing, funds, private sector and user participation, poverty and water	Impact Assessmen been encouraged. • No direct link with	ed on Environment Impat (SIA), rehabilitation of the control of th	pact Assessment (EIA), Social of disadvantaged groups has other policies. e policies has been suggested. • Provisions included from NWP 1987 and 2002. • Pricing of water should ensure its efficient use and reward conservation. • Equitable access to water for all and its fair pricing, for drinking and other uses such as sanitation, agricultural and industrial, should be arrived at through independent statutory. • Allocation and pricing on economic principles to be utilized more gainfully. • Statutory powers to be given to Water Users Associations to collect and retain portion of water charges, manage quantum and maintain distribution in their jurisdiction.	

(contd. Table 1)

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	1	· ·	
	groups and weaker sections are included. • Equity and	from government agencies, and users in planning, design, development and	
	social justice	management of	
	promoted in	schemes, role for	
	water allocation in an irrigation	women, water user's associations	
	system but not	and involvement of	
	explained for	municipalities and	
	domestic water	Gram Panchayat	
	distribution and allocation.	in operation, maintenance and	
	anocation.	management	
		of water	
		infrastructure.	
		• Transparency and subsidy on water	
		rates for poorer	
		sections of the	
		society has been	
		recommended. Water Administra	tion
Organizational functional balance,			
	No policy on regulation of organisations and functional balance.		Institutional arrangements were promoted at the
Accountability,		accountability and no	national level to deliberate upon issues relating to water
Water pricing	separate water pricing body has been allocated.		and evolve consensus.
body,	Data sharing, coding, classification,		In additions to the points
Data validity, Science and	processing and free exchange of data		from NWP 1987 and
Technology	at national and state level has been promoted for reliable future projections.		2002, updated provisions included:
	Effective and econ	*. /	Water framework law,
	resource via prome	oting research in areas	Adaptation to climate
	such as hydromete		change,
	and ground water	hydrology, river ydraulics, harvesting	Demand management and water use efficiency,
		recharge, recycling	Conservation of river
	and reuse, cropping system and other		corridors, water bodies
	conservation techniques.		and infrastructure,
			• Trans-boundary Rivers, International agreements
			with neighboring
			countries on bilateral
			basis for exchange of
			hydrological data. • Database and information
			system.
			Research and training
		TT 6 4	needs.
			ques such as construction
		chnologies, seismic design of saster management, use of	
	remote sensing, environment		
		of logging and soil sal	

Source: Complied by authors.

policies to state water policies is not evident in this context. The stages involved are not coherent. Although the scale is hugely different, the adoption of each policy from higher to lower order could be the key to policy implementation in a segregated yet layered manner.

Section-2: Evaluating framework of existing policy based on the common stages involved in 'Policy Process' (Hill, 1993). Stages are grouped in set of two with three each as 'Problem Analysis' and 'Solution Analysis' (Fig. 2).

Define the Problem Objectives Alternatives Assess Alternative Compare and Rank alternatives Alternatives Alternatives Objectives Alternatives Alternative Define the Problem Objectives Alternatives Assess Alternative Evaluate, Compare and Evaluate the policy Objectives Alternatives Assess Alternative Evaluate, Compare and Evaluate the policy Objectives Alternatives Assess Alternative Evaluate, Compare and Evaluate the policy Objectives Alternatives Objectives Objectives

Fig. 2: Analysis of existing water policies based on common stages in policy process

Source: Authors

It is observed from analysis in Fig. 2 that existing water policies lack hold on major stages of 'Solution Analysis'. Stages in solution analysis guide to address the challenges of proposed policies and prepare for evaluation, comparison, and alternatives. Although since 2008 onwards water policies have included a section at the last about implementation, monitoring, and evaluation of the policy, however, there is no such monitoring of policies is evident nor there exist any committee dedicated to guiding the policy implementation on the ground. Hence, based on the preliminary study to understand the limitations, we suggest that the initiatives towards assessment, evaluation, comparison, and ranking of alternatives shall additionally help to maintain and monitor the implementation of policies on the ground.

The draft NWP 2012 was available on the Ministry of Water Resource website to invite comments from people, unlike two earlier national policies. The draft was circulated to all the states and Union Ministries. More than 600 comments were considered by the general public and policy was revised and discussed with the Consultative Committee of Parliament (Pandit and Biswas, 2019). Therefore, it is understandable that policy may not necessarily provide the rationale for each policy statement. However, it has now become important to

find the underlay on the policy being inefficient irrespective of extensive consultations. Since all the states and Union Territories owned the NWP 2012 and got equal opportunity to participate. However, the challenges faced by states to draw on objectives and transfer the goal to the action and implementation are to be re-thought. Or there could be some reform dictating the governance arrangements for renewed policy agreements between Centre and state to monitor the successful implementation. It is possible if these action and policy agreements stay unaffected by the changes in government. Additionally, there could be detailed guidance for each state based on its diverse political, social, and economic profile. This responsibility is equally shared by states and Union Territories to update the state policies on regular basis with effective monitoring strategies in place.

NWP's has been supported by water sectors, industries, and other stakeholders. But for policy to continue to be effective, it needs to be reflective of the lessons learned from past experiences. More than three decades of having an NWP provides with a wealth of knowledge for finding the reason to be called unimplementable. Lack of implementation of policies on the ground can be understood with a case example demonstrated in Fig. 3. The chain of policy statements taken top-down discussed inequitable water distribution in NCT Delhi. Since Delhi is a city-state, the objectives from the draft state policy are directly applicable. The purpose of reviewing the chain of policy transfer from NWP to state policy to ground reality is not to find deficiencies but opportunities. It is acceptable that policies at a higher level underscore inevitable and basic guiding principles, but the question here is to find

Draft Water Policy for Delhi 2012 NWP 2012 followed by 2016, 17 & 18 Current state of policy Objective f- Promote equity and social justice among implementation 1.3 Public policies on water resources need to be governed by certain basic allocation and management. Spatial distribution of per capita supply: In some areas the per capita supply is grossly insufficient e.g. Mehrauli and Narela has approximate supply around 30 LPCD, while in many areas it is grossly supplied e.g. in NDMC, Cantonment, Karol Bagh, Civil lines and Rohini varies from 200-500 LPCD. 7. Groundwater Development: Exploitation of groundwater resources should be so regulated as not to exceed recharging possibilities, and also to ensure social equity principles, so that there is some commonality in approaches in dealing with planning, development and 15.3 The policy is built around 5 pillars : management of water resources. These basic principles are: o Optimization of available resources (ii) Principle of equity and social ju must inform use and allocation of water. (iii) Good governance through transparent informed decision making is crucial to the o Augmentation of internal resources and building resilience to climate change o Equity objectives of equity, social justice and Source: Draft Master Plan for Delhi 2041, 2021 Statement 12 : Promoting Innovation In The Water sustainability, Meaningful intensive sector

12-01 NCT Delhi will devise innovative
projects/approaches involving technical, social,
regulatory, governance innovations to improve
sustainability, service delivery, affordability and equity
in the water sector Sector participation, transparency and accountability should guide decision making and regulation of water resources

Fig. 3: Policy statements referring to equitable supply of water from top down

Source: Compiled by authors from NWP 2012, WPD 2016, Draft MPD 2041.

what could be the better way to handle the crises. The blame game of policies between Centre and state is not taking us anywhere nor helping the consumers who have to manage their lives in 30 Litre Per Capita Per Day (LPCD) of inadequate supply. Having a policy in place is not enough until its implementation is ensured.

Way Forward

Ministry of Jal Shakti is inviting the concept of public participation and working closely with various NGOs, water warriors, etc. in spreading awareness about water conservation by several schemes and campaigns. Moving out from the inter-governmental process of policymaking and shifting towards a multi-stakeholder approach shall also intervene efficiently in the current policy structure. As discussed in the table NWP 2012 has evolved with important recommendations based on water pricing, climate change, and water framework law, there is an opportunity to take these visions further with concrete implementation policies. The major challenge lies around the failure in the implementation of policies than providing solutions to the issues through bare statements. Just adding a few sections from national and international agendas in each new policy in regards to the burning issues such as climate change, global pandemics, etc. are apparently not going to be enough for the current scenario. It has been reported that the new NWP (not yet public) prepared by the 13-member committee aims at quality and water security for all. Also, it is announced by the head that the policy "needs to be implemented by 2030 if India's water woes are to be solved" (Paliath, 2021). We hope the new National Water Policy to be more efficient, inclusive, and effective on-ground realities to achieve sustainable water resource management in India. Hence, within the capacity of the Centre and states, there could be various approaches that can take us a step ahead. Further research can shed light on the matrix of possibilities for restructuring the water policies in India.

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Footnote

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