Chapter One

Introduction: Objectives, Significance, Methodology and Scope of the Research

When the well is dry, we will know the worth of water. (Benjamin Franklin, 1846)

Introduction

Since ages, the worth of water in human life remains unarguable. However, in the twenty first century, the changing world witnessing depletion of natural resources, has realised the worth of water for life in a deeper sense. In the process of modernisation the use of water other than for life is justified for developmental purposes. Since the availability of water is limited, the use of water resources for multiple purposes has laid diverse kinds of pressures on the quality and quantity of water resources. Globally, this has created a situation of water scarcity and has raised serious challenges to accessibility and affordability to water. As the problem of uneven and irregular rain is a global phenomenon, it is estimated by the United Nations (hereafter, UN) that by 2025, 1.8 billion people or approximately one third of the world's population, will experience absolute water scarcity, and two-thirds may live under extreme water stress (According to UN report published in 2017). The intensity of the problem of water stress is so grim that the efforts made at various levels to meet the challenges related to its availability and accessibility, are proving to be limited. The basic complexity lies in the physical characteristics of water (of its constant changing of shape into liquid, icecaps and glaciers) acting as an impediment in measuring or tabling water's quantity and availability. Since identified challenges requires to be address intellectually, in academia, the thinking, arguing and studying the requirement of water for life and existence and problems concerning to the same is becoming increasingly common.

Water is directly related to human life and hence water related studies are undertaken in almost all the disciplines. These studies are fundamentally problem oriented and usually aim to solve water related problems within the domain of a specific discipline. Initial readings made for present research found that in natural sciences, water related problems are studied in the context of environment and are explained as part of ecology. Similarly, the problem of water properties and its effect on earth are researched in earth sciences and researchers treat it as part of hydrology. In medical and health sciences problems concerning water are studied with reference to health and hygieneⁱ.

Since the multiple use of water resources has increased the complexities of water related problems, issues that were earlier covered under a single discipline are now studied with an interdisciplinary approach. For example, in scientific investigations, the component of water is studied with reference to water pollution (Sen, 2018; Knox & Canter, 1990), water wastage, health and sanitation (Mckeown & Bugyi, 2015). Similarly, water management related technical problems that are usually thought to be related to engineering, are studied in the social context and investigated as social challenges. For instance, the problems concerning construction of dam are not only studied as part of engineering but investigated as a problem of rehabilitation and injustices happening to a particular community, class or caste. Similarly, the problems of water management are not viewed with reference to water governance but studied as a question of water justice and researched in the context of privatization vs. anti-privatization movements which have emerged at the global level.

The interdisciplinarity adopted in water related studies in the social sciences allows the study of water related issues in different contexts. However, the major focus is given on water stress/scarcity and quality of water resources and their relation with water conflicts and water disputes (Moss, 1967; Anderson, 1983; Gleick, 1993; Rogers, Llamas, Cortina, 2005; Gupta, 2008;

Shiva, 2010; Colopy, 2012; Kallen, 2015; Chellaney, 2015; Steenhuis & Warhaft, 2016)ⁱⁱ. It is found that while studying water related issues, research in the social sciences has significantly drawn attention towards problems concerning *floods, drought, food, irrigation, pollution, management*,(Jairath and Ballobh, 2010; Kumar, 2009; Vaidyanathan, 2001, 2006, 2013; Vaidyanathan, 1999; Mollinga, Doraiswamy and Engbersen, 2001; Sridhar et al 2006; Maloney, Clarence, and Raju, 1994; Iyer, 2002, Shiva, 2002; Chellaney, 2015), *water management and water laws* (Cullet, 2000, 2007, 2009, 2010, 2011, 2013), *water security* (Asthana, 2014)ⁱⁱⁱ and *water availability, management and water privatisation as against commons* (Shiva, 2002; Bakker, 2003, 2010; D'Souza, 2010).

In the twentieth and twenty first century, studies in social sciences have witnessed major changes in water related understanding. Globally, this is recognised as a paradigm shift where water is studied as a subject of *development and environment* (Sharma, 1998; Bogaert, 1997; Mollinga, 2004). The shift has added to the discourse of Rights. Accordingly, water is studied in three contexts. The first context has evolved with the reference of disputes over water resources and in academia it is studied as *rights of lower and upper riparian states* (Rao, 1998; Shiva, 2002; Iyer, 2003, 2009; Chellaney, 2015). The second context is an argument that argues for considering water as a *human right* (Gleick, 1993; Cullet, 2013; Salman and Lankford, 2006) and the third context has emerged in the reference of environmental damages which insists that nature herself has a right over water resources (Shiva, 2010).

1.1 Background of Right to Water

The listed subjects studied as a part of social sciences clarifies that water related studies developed in social sciences have identified and studied water related issues in wider contexts. Each context has a specific significance in human life. However, amongst all, the impact that research has made on water as a right, has become significant. The researcher believes that the idea comprises all other contexts with appropriate priorities. Since arguing for

water as a right, presents the relations between a State and its inhabitants, the research done in this regard has mainly developed with reference to political studies. This includes studies made in relation to political philosophy, political economy, political institutions which have emerged and developed at the international, regional and national institutions and so on. Since the present study is a part of political science, it takes the discussion on water as a right further and attempts to study the components of Right to Water in the context of the water policies of the union government of India.

1.1.1 The Idea of Right to Water

The purpose of the present investigation is to add to the water discourse. The present study considers water as a right, an argument which has fundamentally evolved in social science research. This research examines the idea of Right to Water in the context of the water policies drafted by the union government of India, in 1987, 2002 and 2012, respectively^{iv}. Importantly, this study draws upon the facts and arguments of previous studies that have commonly concluded that globally, ensuring right to water to all is becoming increasing difficult (Gleick, 1993; Shiva, 2002, Brooks, 2009; 2010; Iyer, 2002; Salman and Lankford, 2006; Bakker, 2010; Cullet, 2010, 2013, D'Souza, 2014, Thielbo"rger, P, 2014, Nandita, 2016)^v.

The interest in the present study evolved on the grounds of this difficulty. The aim of this study is to explore the idea of Right to Water and contextualise the same with reference to water policies^{vi}. Therefore, this study, instead of following popular traditions of water studies, takes a major shift and attempts to recognise the idea of Right to Water in India's policy frameworks. The present research intends to examine if the idea of Right to Water is embraced by India's national water policies of 1987, 2002 and 2012. The present research focuses on the idea of Right to Water and elaborates upon the process of its conceptualisation. While doing so, the study dwells upon the global and Indian perspective of the concept of Right to Water and contextualises the same, critically, with respect to the water policies drafted by the union government of India.

The initial readings of water related literature shows that the discussion on the idea that water as a right has emerged and evolved through various discourses. In political discourse, the idea that water is a right has been argued and studied with two references. Some studies focus on the economic aspects of the fact that water is a right (Embidirujo, 2007; Branco and Henriques, 2010) and some focus on the philosophical aspect of the same (Baxi, 2010; Thielbo rger, 2014)^{vii}. Significantly, the focuse of both kinds of studies is to solve the problems related to water use and management in favor of/for life, development and environment. However, the consensus on the idea that water is a right has not evolved with the same grounding and objectives. As such the arguments and studies that focus on the economic aspects of water are efficiency oriented. The studies made in this regard argue to ensure water efficiency in all situations. According to such studies, efficiency is a tool to ensure justice and so the focus of water management should be on efficiency (World Bank, 1993). In deep contrast to this, philosophical arguments that concerns with ensuring water as a right are purely justice oriented. For such studies, equality is justice (Baxi, 2009). The arguments evolved in this respect emphasise on water equality over water efficiency. Clearly, between the two, contradictions are extreme and arguments overlap each other. In water studies, such contradictions are further classified and studied as neoliberalism (Barlow, 1999; Bond, 2000; Cleaver and Elson, 1995; Lipschutz, 1998; McAfee, 1999; Spiertz and Wiber, 1996) vs. Post-neoliberalism (Bakker, 2010). In water policy studies, this is further framed and analyzed as Washington Consensus and Post Washington Consensus (SandBrook, 2014).

Globally, consent on the idea that water is a right is attempted to be achieved through the institutionalization of the idea and the initiatives are made in this regard at various levels. However, in comparison to initiatives made by regional and national institutions, undertakings made by international organizations like United Nations are found more influential due to their approach and reach^{viii}. The principles offered by the UN though resolutions and declarations insist upon recognizing water as a human right. These ideas are theorized (not in the traditional senses) in the human rights tradition and are recognized as third generation of Human Rights (Salman and Lankford,

2006)^{ix}. The principles offered by the UN Declarations have added humanitarian values in the water management processes. However, the history of water studies provides that the idea has not remained unchallenged for long. The principles and undertaking of the UN that has stimulated the concept of Human Right to Water, has been challenged by the academia. The ideas are fundamentally criticized by the "Water Warriors", a group of water activists and water scholars who have initiated the Global Justice Movement with reference to the individual's rights over water (Shiva, 2001; Bakker, 2001; D' Souza, 2010; Kopper, 2010).

A group of scholars, while opposing the idea of Human Right to Water, basically argued against the idea of international institutionalization of the idea that water is a right. These scholars have claimed that the globalization of the idea has created a situation of cross border obligations, which cannot be perceived in favor of water poor states. These scholars point that undertakings made under the internationalisation of the rights over water are so strict that their implementation ultimately goes against the water interests of water poor states as they introduce the same benchmarks for different situations. For the water poor states measures that are decided by water rich states are indeed unachievable because their water related needs and situations of water availability are vastly different from the water rich states. In the global indexes, the unattainability of standardized measures by these states is often considered as a failure of the states. Since these states are the signatories of the declarations, the failure permits international actors to be active in water politics (World Bank and International Monetary Fund) and to intervene in water management processes of water poor states. Since every interference has a cost, the involvement of international actors in the water management process of water poor states, raises serious issues concerning water affordability and dilutes the spirit of right to water (Shiva, 2001, 2010; Bakker, 1999, 2010; Barlow and Clarke, 2002; Grusky, 2002; Mestrallet, 2001 and Shrybman, 2002).

In the view of the serious consequences of the internationalisation of the idea that water is a right, scholars like Karen Bakker (2002; 2010), Ramaswamy

Iyer (2002), Vandana Shiva (2002) and P. Sangameswaran (2007) argue and advocate for consideration of the term Right to Water over Human Right to Water. The fundamental claim of water scholars is that the principles offered by the concept of Right to Water are more real in the sense that while emphasising to ensure availability and accessibility of water to all, they consider the availability of water resources at the local level. This gives confidence to states and local authorities, responsible for distribution and management of water, to take appropriate decisions in favor of right to water to all. The authorisation with water reality empowers and enables the local authorities to fulfill cultural and economic requirements of different societies. The concept of Right to Water in this way ensures water availability, accessibility and affordability of water as per the needs of societies, which indeed is different from one to another. In water talks, the concept of Right to Water is found effective as its principles are not arguing the sameness of needs but understand right to water as per the cultural and economic requirements and hence implementation of the idea ensures right (s) to water to individuals as well as to society.

This study takes off from the arguments that have evolved in favor of the idea of Right to Water and accepts that the idea is effectively inclusive and its study with reference to constitutional, legal, judicial and policy aspects/focus is the need of the time. The idea of Right to Water in present study is taken to be comprehensive and inclusive because the inherent values of the idea encompasses needs of individuals and societies as well as the requirements of various sectors. This includes all the other important issues concerning water uses and water management including food, irrigation, floods, drought, development, management and even environment protection.

1.1.2. Focus on India and its National Water Policies

The present research emphasizes that the idea of Right to Water requires to be studied in the Indian context. The requirement is urgent as regularity of rain cycles has got disturbed due to global warming and climate change. As a result, availability of water is increasingly uncertain, and has reached the level

of water scarcity. The problem of water availability is added along with the needs and requirements of growing population and demands of water resources for developmental purposes. All such problems together have made India's water related problems exceptionally grimmer and made water increasingly inaccessible.

According to a report published in 'MapsofIndia' on 14 March 2017, the per capita availability of water in India has gone down from 6,042 cubic metre in 1947 to about 1,545 cubic metre in 2011^x. Since water availability is decreasing rapidly, a UN report on water conservation published in March 2017, estimated that by 2040 there will be no drinking water available in almost all of India. The new satellite early warning system, has confirmed in 2018, the gravity of the water problem in India and has warned that shrinking reservoirs in India could spark the next day zero crises^{xi}. The problem is even noted by NITI Aayog. While pointing to the problem of water scarcity, the Aayog states that India is undergoing the worst water crisis in its history that has affected both, the urban and rural households. Due to the crisis, 600 people face high to extreme water stress, where 75 percent of households do not have drinking water on premise and 84 percent rural households do not pipe water access^{xii}. Clearly, the problem related to water is more than just water stress and scarcity which has extended due to failure of conservation and protection of water resources and has ultimately affected the availability of drinking water^{xiii}.

Importantly, the problem of water scarcity and management is not always natural but many times assumes an artificial nature as well, as claimed by water scholars like Shiva and Bakker. Water scholars explain that liberalized justification for water use for development over the use of water for life, is one of the factors which has created artificial scarcity. Since the use of water for developmental purposes has caused water pollution and has added to the cost of water use, the problem that was initially merely of availability becomes also the problem of accessibility, acceptability and affordability as well. The question of accessibility, acceptability and affordability has affected commons the most and has suspended the individual's rights over water resources to a larger extent. The researcher thinks that since unfair justifications of water use

and mismanagement of water resources creates situations of water injustice, it is important to study the idea of Right to Water with the perspective of social sciences.

The contextualization of the study with reference to India is important because as a functional democracy, India has to fulfill the biological, cultural, and developmental requirements of various societies and sectors within the available water resources. The goal here is to reduce the visible and non-visible gaps between water haves and have-nots. Since the subject comes under public domain, the idea to ensure water to all needs serious government's initiative. Its distribution and management process requires a national perspective. The present research views this necessity in the light of national water policies and argues that since only ideal policy frameworks can satisfy the needs of distributive justice it is essential to imbibe values of Right to Water in national water policies of India. Such an initiative is important as Indian citizens, unlike citizens of the United States of America, are recognized as national citizens and not as citizens of Indian states.

The researcher believes that the obligation of the union government of India is unarguably larger because the entitlement of right to water to all is not just a theoretical question, but an idea that deserves appropriate implementation through efficient machinery. The union governments, in this respect, are expected to work beyond constitutional and legal frameworks as in India, constitutional details on water entitlements are thin and insufficient and a national legal framework in this respect is yet not developed viv. This research claims that in the given situation, rights of individuals over water can be more feasible through policy frameworks. This study emphasises that the flexible feature of policy documents allows to bring in the required changes in favor of Right to Water as it puts moral obligation on the governments to fulfil right to water to all. Since the nature of water keeps changing as per the environment, guaranteeing right to water cannot be fixed, as it can be in case of other rights like right to speech or right to move any part of land etc.

1.2. Statement of the Research Problem

The present study investigates the idea of Right to Water in the context of the water policies of the union government in India^{xv}. As the title suggests, this research embraces two major areas of political studies, i.e. political philosophy and public policy analysis. The present study explores the meaning of Right to Water as a part of political philosophy and examines India's national water policies as part of public policy analysis. The study, to explore the appropriate meaning of Right to Water, focuses on the meanings of rights offered by the major schools of political thought. The aim here is to discover the appropriate space in theoretical discourse to justify that water as a right. Since ideas that are endorsed as a right are commonly argued and institutionalized in the system of global governance, this study further seeks to examine the nature of the theoretical arguments that argue for recognising water as a right and focus on the process of institutionalization of the idea of Right to Water. This study endeavours to trace the evolution of the ideas that insist that water is a right, and while explaining the meaning of Right to Water, draw upon the major elements and scope of the same.

The focus of the present study is India. This research while focusing on India, attempts to explore the Indian government's perspective about the idea of Right to Water. During the process of investigation, the study seeks to interpret the conditional provisions and investigate the legal and administrative frameworks in the context of Right to Water and attempt to understand the perceptions of the Indian judiciary and civil society on the same. Since the core aim of this study is to present a critical analysis of India's national water policies of 1987, 2002 and 2012, the study further examines the suggestions and proposals drawn in the policy documents in the context of Right to Water. The research addresses questions related to fulfillment of Right to Water and for this purpose, studies distributive and management strategies of water policies. To attain such purpose, the study basically explores if India's national water policies integrate the values of Right to Water and whether the national water policies intend to ensures water to all.

1.3. Objective of the Present Research

Arguing water as a right with reference to Right to Water and examining the same in the context of India's national water policies, is an explicit objective of the present study. To ensure the implementation of the idea of Right to Water, the present research aims to offer new paradigms in water policy frameworks. The key objectives of this research are:

- 1. Explore the idea of Right to Water, globally, in theoretical and institutional contexts.
- 2. Examine the status of Right to Water in India, particularly with reference to the Constitutional provisions, legal and administrative frameworks and judicial interpretations and offerings of civil society.
- 3. Critically investigate the water policies of the union government of India covering the period from 1987 to 2012 in the context of Right to Water.
- 4. Offer recommendations for assuring Right to Water in India and to suggest a practical approach to achieve the principle of water democracy.

1.4. Key Research Questions

This study seeks to extend the discussion of the idea of Right to Water and explore the status of the same in India's national water policies. The study in this reference responds to the following research questions-

- 1. What are the contending interpretations of Right to Water? What are the theoretical understandings and implications, in general and as per global and regional standards, on Right to Water?
- 2. What are the provisions relating to Right to Water in the Indian Constitution? What are the major developments in the legal and administrative frameworks offered by union and state governments?

- 3. What role has the judiciary and civil society played to explore and expand the idea of Right to Water?
- 4. What was the water governance framework with regards to Right to Water from 1947 to 1987?
- 5. How were the water policies of 1987, 2002 and 2012 formulated and if and how did these address the issue of Right to Water? To what extent did they commensurate with the global standards and framework to ascertain Right to Water?
- 6. What changes are required in the water policies in India? How do we strengthen the concept of Right to Water in India which can match the idea of water democracy?

This study, to address the above questions, has considered India's National Water Policy documents as a purposeful document and argues that the policies hold a specific idea and intend to fulfill certain values that are important for Indian society, environment and economy. The nature of the key research questions draws out that the present study is a normative inquiry which investigates if India's national water policies are meant to consider water as a right to all. An extensive and rigorous review of the available literature, made during this research endorses that study of such nature has not been done in the past, and hence the significance and relevance of the present research, which intends to minimize the problem concerning water equality and water justice in India, is considerable.

1.5. Conceptual Framework for the Present Research

The aim of this research is to overcome the limitations noted in earlier studies. The present study offers a conceptual approach that helps to understand the idea of Right to Water and provides a foundation to investigate India's national water policies in the context of the same. The idea and elements of this study's conceptual approach are as follows-

• In the approach, water is at the center.

- In the approach, water is argued as a right. Since it has inculcated all the popular ideas evolved at the academic and institutional levels, it expands understanding on water resources and establishes it in the context of Right to Water.
- The approach, by applying institutional and academic understandings on policy analysis, extends the discussion on the idea of Right to Water and helps to investigate the same in the context of India's national water policies, drafted respectively in 1987, 2002 and 2012.
- Conclusively, in the approach of all the three aspects of the present research i.e. water, the idea of Right to Water and India's national water polices are interlinked.

The interlinked relations and subject of studies and the flow of this research can be understood from the following figure-

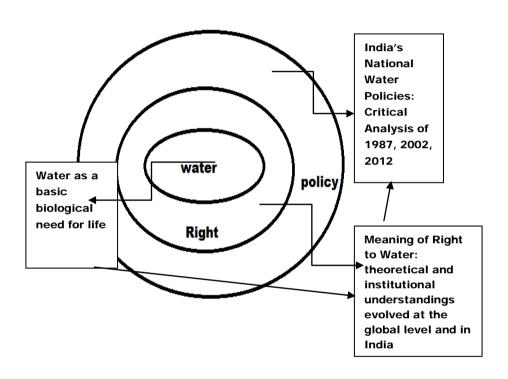


Figure 1.1; Conceptual Approach for the Present Research

Figure 1.1 presents the key aspects of conceptual approach that will be used in the present research. The figure clarifies that in this approach discussions on water will be at the center and will argue water as a basic biological need for life. The figure explains that essentiality of water in human life will be further discussed and argued as a right. To attain a comprehensive understanding of the same, the study will discuss the theoretical and institutional interpretations evolved at the global level as well as in India. The figure expresses that on the basis of the understandings drawn from the theoretical and institutional interpretations, water policies of the union government of India will be

analyzed and evaluated. The researcher argues that the approach as such is important to analyze Right to Water in policy contexts, as it has several advantages as –

- The approach clarifies the elements and steps of the investigations and also identifies links between them.
- The conceptual approach includes definitions of Right to Water and explains the idea beyond narrow narrations.
- The approach allows identification and discussion of the influential academic and institutional discourses that argue and claim water as a right.
- It provides clarity on the aspects that must be discussed while analyzing the idea of Right to Water in the context of union water policies of India.
- The approach enables the researcher to identify and understand the complex ideas and elements of Right to Water and evaluate water policies accordingly.
- Since steps of the investigations are clearly mentioned in the approach, it provides focused investigation on the idea of Right to Water in the context of the union water policies of India. It presents to the readers arguments that are used to justify water as a right and the elements of the arguments used to analyze the same in the context of national water policies.
- As the approach is subjective it allows future researchers to reinterpret the idea and use the approach contextually.

The approach with its subjectivity creates scopes for future research and pinpoint to the relevance of the present research.

1.6. Relevance of the Present Research

The review of literature made for the present study enumerates that in social and policy studies, water is studied more as crises and less as a right. Even the studies which have repeatedly urged to ensure water as a human right, have not provided appropriate and real meaning of right to water. These studies

have followed the argumentative tradition and have neither offered the contents of the idea of Right to Water nor described its possible scope. Moreover, the concept of Right to Water that explains right to water more than just water equality, is not discussed in the context of the water policies drafted by the union government in India. This has created a gap between the entitlement of right to water and policy making. A noticeable ignorance, indicates that for entitlement of right to water, in comparison to the legal documents, policy documents are found to be less effective and assumed as weak tools to ensure individual's claims over water and water resources xvi. The relevance of the present study, in the view of this absence is considerable as it attempts to fill the gap which otherwise deters the real entitlement of right to water.

Previous water studies, while arguing for water as a right used to focus on the multiple aspects of the water policies drafted by the union government of India. The approaches, adopted by the previous water policy studies, are deeply holistic and hence contents of India's national water policies are studied in multiple contexts. The most popular contexts are water privatization (Shiva, 2002; Iyer, 2002, 2004, 2010), food, irrigation, floods, drought, (Kamte, 2014) development and dam constructions and management problems concerning rehabilitation of the victims of dam constructions (Roy, 2001; Shiva, 2002). The studies made with regard to India's water policies are conflicting and dispute oriented (Iyer, 2002) that often diverts the real issues concerning water distribution and management, i.e. how to ensure water equality and water justice to all. The context(s) of this study is important because it entitles individuals to have water as a right by offering meaning of Right to Water and by giving practical suggestions to place its values in India's national water policies. Since the present research attempts to fill the void noted in the water studies by offering a rights perspective to the water policies, the relevance of the research can be viewed in the normative and empirical contexts, which explicitly expands its impact on policy making and policy implementing. The present study contributes to:

- 1. The studies concerns to political philosophy as well as public policy-
- The normative and empirical commitment of the present study has expanded its rationale. The research presents an interdisciplinary analysis. To analyze India's national water policies, the study uses conceptual and theoretical frameworks of Right to Water as a part of political studies and those of water policies as part of policy discourse.
- The study contributes to political philosophy as it offers the meaning of Right to Water. It contributes to water policy analysis as it offers the required background essential to investigate policies in a rights-based.

2. The Idea of Right to Water

- The study contributes to the idea of Right to Water as it aims to explore the meaning of Right to Water, the implementation of which may help in fulfillment of right to water.
- The study elaborates on the Indian perspective of the idea of Right to Water, and in this sense endorses that the idea of rights is not just a gift of west to the rest.
- Since investigation of the present study focuses on India's national water policies, it helps to understand water as a national resource and supports to entitle inhabitants of Indian states to enjoy water as a right.

3. Decision making process of the government

- The major challenge before the government is to understand the meaning and scope of Right to Water. Since one of the objectives of the present study is to explain the same, it may help the government to take the decision in favor of right to water for all.
- The present research understands water distribution as an issue of distributive justice and as an inseparable part of water management. Since this study considers water distribution majorly a concern of the union government, it may provide the required understanding on water supply and

water management to the union government. Significantly, use of these understandings may ensure justice in water management process and may help in shifting towards a rights-based approach in water governance.

• Since this study obligates local governments to ensure right to water to all, one can say that the attempt made in the present research may re-establish the significance of local bodies in the decision-making process, including water planning and water management. In the process of fulfillment of Right to Water, this may redefine the role of local bodies in future.

4. The Idea and Content of Water Policies

- The study provides details on who must get water, why, by whom it is to be provided, and how.
- A fact that water is a right is argued in theoretical discourses but the idea is consistently neglected in the policy framework. The literature available on water governance is concerned more with the technical aspects and has hardly shown concern to ensure right to water in a policy framework. Since this study focuses on policy frameworks, findings of this study may help the government in policy making and to make a policy that can match the ideal principle of 'water for all'.
- Since the investigation has adopted a right-based approach, the findings of this research may prevent inter-sector and inter- community water conflicts and may help to identify and establish appropriate approach in policy priorities.

1.7. Research Method

To pursue the research questions, this study adopts a qualitative approach with a blend of theoretical and empirical dimensions. Notably, an extensive and rigorous literature review is undertaken to place the problem of statement in the proper context and also to identify the research design to address the same. For the literature review, major international, regional and national legal and

non-legal documents that have endorsed water as a right and the documents of India's national water policies, drafted respectively in 1987, 2002 and 2012 are used as the primary sources. Simultaneously, literature (limited) that has commented on these documents and has shown concern to ensure right to water, including articles/chapters in books, comments and reviews in newspapers, magazines and websites are used as secondary sources.

To discuss the findings, this study uses interpretative, explanatory, descriptive and analytical methods of research xvii. The aim is to ensure that the facts and arguments obtained by the study can enable the researcher to answer the key research question as unambiguously as possible. The researcher believes that for research like this, use of each tool has its own significance and together, they address the key research questions of the present study. This can be understood as follows:

To study the available literature in context of the key research questions, initially this research uses the hermeneutic approach (Arunachalam, 2010; Gummesson, 2003; Laverty, 2003; Llewellyn, 1993; Patterson & Williams, 2002). The purpose here is to understand the meanings of Right to Water that have evolved globally and also to interpret the Indian perspective on the same. To bring the investigation beyond philosophical interpretations, this study further uses explanatory (Gerring, 2001; George and Bennett, 2005; Brady and Collier, 2004; Mahoney and Rueschemeyer, 2003; Ragin, 2008) and descriptive methods (Sevilla, Ochave, Punsalan, Regala, & Uriarte, 1992; Tripodi & Bender, 2010) as research tools. To present a critical analysis of India's national water policies in context of the idea of Right to Water, the study further mixes hermeneutic and explanatory approaches and uses these features with the method of critical content analysis. Thus the study, to present the discussions and findings, uses multiple tools and methods of investigation, which makes this research eelectic in nature.

The researcher believe that the hermeneutic approach is useful here because it allows ways of interpretation which helps a researcher to move from what the text says to what it talks about (Ricoeur, 1976) and also from "sense" to

"reference" (Frege, 1948)^{xviii}. For the present research, this helps to understand the philosophical and institutional interpretations of the idea of Right to Water. Furthermore, to understand the policy contents, the hermeneutic approach provides a guide about how a document and policy text should be studied and understood (Denzin and Lincoln, 2013). With the use of hermeneutic approach, this research tries to explore the meaning of Right to Water and further attempts to explore if India's water polices drafted respectively in 1987, 2002 and 2012, integrate the meaning of Right to Water.

Another tool, i.e. explanatory approaches, used in the present research addresses the question of why. The use of this method helps the researcher to investigate the idea of Right to Water beyond theoretical interpretations. Importantly, it has allowed the researcher to explain words in the context of reality and to determine priorities for future research (Mouton & Marais, 1996). In the process of policy analysis this has allowed the researcher to identify what Right to Water is not and to describe and explain what it is xix.

In the present research, the descriptive approach is used as a supportive method to explanatory approach. This helps the researcher to understand "what exists" in a given condition (Sevilla, Ochave, Punsalan, Regala, & Uriarte, 1992; Mouton & Marais, 1996) and provides the required scope to present in-depth description of India's national water policies in the context of the idea of Right to Water.

The third research tool in the present research is critical content analysis. Like hermeneutics, explanatory and descriptive approaches, critical content analysis are also used as a part of qualitative research. For the present research, content analysis offers valid interpretations from the texts (Weber, 1985) and allows to carry out text-driven analysis of India's national policy documents in the context of the idea of Right to Water^{xx}.

Since content analysis of India's national water policies in the context of the idea of Right to Water is the core objective of the present research, expectations from the critical content analysis as a research tool, are many. For the present research this method provides a description of "what," "why"

"how," "to whom" and "by whom" and their consequences in terms of "with what effects. The method further presents systematic, objective and qualitative measures of policy contents in favor of Right to Water and helps to answer the question: if India's national water policies proposes to ensure right to water to all.

It is important to note that in the present research, to understand and explain the idea of Right to Water and to study its status in India's national water policies, the four methods are used with different weightage. Here, the key methods that are used to a greater extent are explanatory, descriptive and critical content analysis, while hermeneutic approach is relatively used in a limited sense.

1.8. Limitations of the Present Research

Research needs to be innovative so that it can contribute to the subject in a concrete way and can add to the available knowledge. In the view of such requirement, it is important for a researcher to focus on the key issues concerning the research questions and research objectives. Obviously, while so doing the researcher has to ignore the issues that are not directly linked with the research problem. The selection of what to do and what not to address, is important to attain correct findings and effective conclusions. This indeed helps to make the research study focused, precise and useful. With the objective of carrying out effective work, the present study also has some limitations. For instance, this study has not discussed the water policies made by Indian States. The intention of the present study is to examine national water policies and hence water policies of States are not analyzed. Thus, this study will remain limited in the context of comparative analysis of water policies, drafted by different States.

The study, while discussing the idea of Right to Water, will not provide argumentative discussions on neoliberalism and Post-neoliberalism and will not elaborate on the ideas like riparian rights and ideas concerning water debates/conflicts. Since the focus of the present research comes under the policy domain, legal arrangements are not discussed with reference to the idea

of Right to Water. It is important to note that although the researcher has understanding about the significance of field work in policy analysis, however since purpose here is to analyze the contents of the three national water policies of 1987, 2002 and 2012, in the context of the idea of Right to Water, the field work is been ignored.

1.9. Scheme of Chapterisation

This research contains six chapters; each chapter addresses a specific research problem.

Chapter 1: Introduction: Objectives, Significance, Research Design and Scope of the Research

"Introducing the present research"

The first chapter of the present research seeks to explain the background, significance, objectives, research questions, research design and the scope of the present study. The chapter presents on the key interests of the present study and highlights the rationale of the same.

Chapter 2: Review of Related Literature

"Focusing on the previous studies"

Chapter Two presents the literature review. The focus of this chapter is to highlight, summarize, review and comment on the literature available on India's national water policies in the context of the idea of Right to Water.

Chapter Three: The Concept of Right to Water: Background, Understandings and Major Elements

"Exploring the idea of Right to Water"

Chapter Three is the foundation of the present research. To make a critical analysis of India's national water policies, it proposes the meaning, background, understandings and elements of Right to Water and while so

doing, addresses the first and second research questions of the present research.

Chapter Four: Background and Evolution of the Understanding of Right to Water in India

"Seeking Indian perspective on the idea of Right to Water"

This chapter is a continuation of Chapter Three and focuses on the Indian perspective on Right to Water. To present discussions on the idea of Right to Water in the Indian context, the Chapter presents historical descriptions and analyses the status of right to water in pre- and post-independent India.

Chapter Five: A Critical Analysis of the National Water Policies of 1987, 2002 and 2012 in the Context of Right to Water

"Investigating India's national water policies in the context of Right to Water"

This chapter consists of a detailed analysis of India's national water policies, drafted respectively in 1987, 2002 and 2012. The chapter recognizes distributive and management strategies as the key aspects of water policies and examines them in the context of the idea of Right to Water.

Chapter Six: Concluding Observations and Recommendations

"Presenting the concluding words"

This chapter presents concluding observations, provides recommendations for future research and suggests measures for policy making.

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End Notes-

References of all mentioned disciplines are taken from the work Domoso, Marica C. (2009). Water Interactions with Energy, Environment and Food and Agriculture: Encyclopedia of Life Support Systems. United Kingdom: Eolss Publishers.

Similarly, "Water stress" refers to the ability, or lack thereof, to meet the human and ecological demand for water. Compared to scarcity, "water stress" is a more inclusive and broader concept. It considers several physical aspects related to water resources, including water scarcity, but also water quality, environmental flows, and the accessibility of water. Importantly, the degree of stress is measured with the reference to per capita availability of water resources, in a country or region i.e. Availability of Water Resources (AWR), specifies that 1700m³ means that only occasional and local stress, less than 1000m³ indicates a condition of stress and 500³ or less than it means serious condition and threat to life. The other measure i.e. Basic Water Requirement, measures water availability differently. For instance, Gleick, 1996 has estimated water requirement of an individual as 50 liters. For details see: Ramaswamy R. lyer (2007), Towards Water Wisdom: Limits, Justice and Harmony, Sage Publications, New Delhi and Peter Schulte (2014) Defining Water Scarcity, Water Stress, and Water Risk: It's Not Just Semantics, available at http://pacinst.org/water-definitions/.

Here, the researcher has used all the both terms because Indian states are not facing the same problems, in some states there is Water scarcity, which refers to the volumetric abundance, or lack thereof, of water supply. This is typically calculated as a ratio of human water consumption to available water supply in a given area. Water scarcity is a physical, objective reality that can be measured consistently across regions and over time.

iii A report published on www.cna.org (2017) provides that the problem of water stress has added to the problem of instability and conflicts have increased due to the activities of non-state actors. The report has predicted that the condition of water stress can be exploited by non-state actors, violent extremist's organizations, insurgents and other belligerents.

It is important to note that throughout, in this research Right to Water, i.e. caps indicates

It is important to note that throughout, in this research Right to Water, i.e. caps indicates to the concept, and right to water i.e. without caps indicates to the right itself.

^v The reasons revealed by the past studies are mainly three. The first reason lies in the unevenness of rainfall and the situation of water scarcity due to global warming. The second reason is rise of water needs due to population explosions and the third reason is global acceptance of the idea of multiple uses of water and encouragement to use water for development purposes over water for life.

^{vi} It is important to note that throughout, Right to Water (Capital letters of R and W), represents to the idea and concept, whereas right to water (r and w as small letters), indicates to the right itself.

vii In some studies, a fact that water is a right is studied as a part of political philosophy and political economy.

The researcher argues for this as maximum nations are signatories of the UN's resolutions and declarations.

There are some scholars who argue that the idea of human right to water was first argued in theoretical discourses and then adopted by the United Nations (for instance D'Souza, 2010). Since the objective of this research is not to throw light on the debate, the researcher here ignores and puts both the arguments.

^{*} Available at : https://www.mapsofindia.com/my-india/india/world-water-day-2017-indias-wake-up-call. Retrieve on 13/9/2017.

xi For details see: www.wire.in/enviornment; date 14/4/2018.

xii For details see: https://timesofindia.indiatimes.com/city/ahmedabad/gujarat-tops-niti-aayogs-water-management-index/articleshow/64589595.cms. Retrieve at 19/6/2018.

In the documents released by UNICEF, India is perceived a "water-rich" country, as the long-term average rainfall for the country (1 160 mm) is the highest in the world for country of comparable size. For details, see UNICEF, FAO and SaciWATERs. 2013. Water in India: Situation and Prospects. Manuel Couret Branco and Pedro Damião Henriques (2010) Review of Radical Political Economics 42(2) 142 –155 Union for Radical Political Economics.

xiv The researcher is aware that a Bill called Water to All which ensure the rights of Individuals over water is in process, since 2016. However, as it is not yet passed by the Indian legislature it would not be technically correct to accept it as a major addition.

xv Since water policies drafted by the union government of India are addressed as National water policies in the study, to present the analysis of water policies in the context of Right to Water, both terms are used, which however **do not** convey different meanings.

xvi This idea is mainly discussed by Phillip Cullet (2003).

xvii As it is the best way to understand how individuals create meanings through their experiences (Dobuzinskis, 1997).

Here, sense refers to the directly ostensive meanings found in the immediate text, while reference refers to non-ostensive meanings found outside the text.

xix This researcher has presented in the context of the selection of the international and regional declarations and sections of India's national water policies, drafted respectively in 1987, 2002 and 2012.

xx This is argued in the context of Weber's (1985) understanding of the meaning of critical content analysis; he states that the meaning of content is inherent in a text, that the meaning of content is a property of the source of a text and lastly, the meaning of content emerges in the process of analysis, when a researcher is analyzing a text, relative to a particular context.