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Politics of Water as Natural Resource: Prospects of Commons Perspective

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Abstract

The paper attempts to capture the nuances of the multidimensional politics of water as a natural resource—seen through the politics of perspectives. There are three perspectives/worldviews, namely, commons, entitlement and commodity that are shaping the ongoing debates on water. These three have certain overlaps and at times they are distinct from each other and their interfaces get reflected in policy documents as well as literature produced by the civil society organizations. The paper is divided into three sections namely, politics of perspectives, tracing the genealogy of commons perspective and conceptualizing water as commons. To strengthen the tradition/culture of water as commons in the Indian context, the paper takes two lines of arguments: first, it is deeply rooted in the collective consciousness of the local people and second, it goes beyond the issue of ownership and thus has the potential to question the role of modern institutions viz. state and market. The paper has an interdisciplinary orientation and the method of critical discourse analysis (CDA) is used to engage with the available literature on water and commons. In the light of the growing global crisis over water, the paper asserts the need to engage with the commons perspective.

Keywords: Water, Politics of Perspectives, Commons, Commodity, Civil Society, Collective Consciousness, Critical Discourse Analysis (CDA)

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¹ This paper is a revised version of a presentation, made by the author in the conference on the centenary celebration of Champaran Satyagraha held at NMML on 27-28 April, 2017.

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Introduction:

Veronica Strang² writes,

'Water is always a metaphor for social, economic and political relationships—a barometer of the extent to which identity, power and resources are shared'

With the worldwide growing crisis over water especially in the light of competing claims by three stakeholders namely, state, market and community, the paper intends to explore the prospects of commons perspective. It proposes that the understanding of water as commons is deeply rooted in the collective consciousness.³ Such thinking is not exclusive to India but was also prevalent in other parts of the world at different junctures of time. Due to the fast depleting water resources, the civilizational appeal of the commons perspective needs attention. Its ability to look beyond ownership may seem otherworldly at times but it is very close to Gandhian worldview. Following a landmark judgment from New Zealand, the decision of the Uttarakhand High Court declaring River Ganga and its tributary River Yamuna as legal persons (Shree, 2017), is indeed a step towards recognition of water as commons. Similarly, the declaration of the rights of mother earth in Bolivia in 2010 and the tribals winning their claim over Niyamgiri against Vedanta in Odisha are a few instances of commons perspective.

Water as a natural resource has many specific features which make the politics around it so crucial to engage with. First and foremost, water itself is a living being and it has life-giving character. We cannot imagine any kind of life, be it of plants, animals or human beings without water. Secondly, though water is an abundant

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² Veronica Strang's book *The Meaning of Water* (2004) is an ethnographic work in the context of United Kingdom which gives a detailed picture of water usage and its management. A rising population with its increasing demands for water is leading to privatization in the water sector. Similar phenomena are happening in India and several other developing countries in the last few years.

³ Collective Consciousness is "the set of shared beliefs, ideas and moral attitudes which operate as a unifying force of the society" (Collins Dictionary of Sociology). The term was introduced by Emile Durkheim for the first time in his book *Division of Labour in Society* (1893) and later on also in his other writings like *Rules of Sociological Methods* (1895), *Suicide* (1897) and *The Elementary Forms of Social Life* (1912). To Durkheim, "the totality of beliefs and sentiments common to average members of a society forms a determinate system with a life of its own. It can be termed as the collective/creative consciousness" (Kenneth Allan, 2005; 108). Later, the term was also used by Althusser, the Marxist scholar and Carl F. Jung, famous psychoanalyst in different contexts.

⁴For example, rivers, wells and ponds as waterbodies remain are often considered as living beings. Recently, in New Zealand, a river was granted right to life.

resource, it is also one of the scarcest. There are numerous reasons and interpretations across disciplines to explain how this abundance is getting converted into scarcity (Mehta, 2005; Baviskar, 2007). Although not getting into that debate at the moment, I am interested in stating that natural resources such as air and water are so much a part of our existence as physical beings. We 'consume' them every day, every moment; they are part of our collective unconscious in the Jungian sense. Only when we begin to think about water as a commodity that could be controlled by someone do we think of the problems that would arise.

Another concern with regard to water as a natural resource is the intrinsic link between access to groundwater and access to land in the Indian context. One who has control upon the land also has control upon the water beneath that land (Cullet and Gupta, 2009). The present capitalist production processes adopt technologies that are not only water intensive but also cause wastage and pollution. Along with growing population and rising trends of urbanization, numerous other issues such as pollution, ownership, scarcity, etc. are also intertwined with one another. The multiplicity of issues and actors around water makes 'politics of water' a complex and multilayered phenomenon. This paper is an attempt to underline the relevance of 'commons perspective' viz-a-viz water as a natural resource in present times. To elaborate and defend the significance of the commons perspective, I consider 'politics of water' as part of the larger 'politics of natural resources'. The paper argues that commons perspective is not limited to merely water and it could be seen as an alternative to the dominant paradigm of liberal discourse based on individualism and rationalism.⁶

⁵Carl F. Jung, famous psychoanalyst uses the term 'collective unconscious' to denote the shared contexts and meanings of individual's dreams. The unconscious is the portion of the self of which the individual is unaware, yet it exerts control over the behaviours, desires and drives of that individual. For the purpose of this research Jung's ideas are very important as water as a resource is both – the part of 'conscious' as well as 'unconscious'. Water contains the 70 percent part of human body and thus the very imagination of survival is not possible without it.

 $^{^6}$ The author has dealt with the issue of modern nation-state and its role as a planner and how it affects the politics of water in her another writing. The paper was originally published recently as a guest blog on the SANDRP website on March 14 (International Day of Action for Rivers). It is available on https://sandrp.in/2018/03/14/rivsers-as-commons-reality-or-myth/. The blog was also re-blogged in Counterview with a changed title on 16^{th} March, 2018. It is available on https://counterview.org/2018/03/16/rivers-as-commons-concept-imbibed-in-collective-consciousness-has-dwindled-due-to-modernity/

The paper is divided into three sections: the first part narrates the politics of perspectives and its ramifications on the ongoing debates on natural resources. The second section traces the genealogy of the commons perspective in the light of contested claims over natural resources. While doing so, I go beyond the issue of water and take up the case of land and environment. This is due to two reasons—first, to underline the integrity of human existence, and second, to stress why we cannot look at water in isolation. The third section elaborates on the water as commons in the Indian context to underline the need to take its cognizance. It has two sub-sections – first part underlines the traditional knowledge systems on the water in India with special reference to writings of Anupam Mishra and second part contextualizes the commons vs. commodity debate on water.

A Brief note on Methodology:

The writing is partly based on my doctoral research⁷ that explored the politics of water as a natural resource in India through the lens of social movements. The nature of the research was interpretive and I have deliberately taken a middle path—between overgeneralization and over-contextualization. With the growing presence of two other perspectives namely commodity and entitlement, this writing is a reflexive quest to explore the prospects of commons perspective.⁸ It is partly based on the method of critical discourse analysis (CDA)⁹ and has an interdisciplinary orientation. I intend to narrate the 'politics of perspectives' and its implications on natural resources in general and water as a natural resource in particular. It will help in capturing the multidimensional nature of 'politics of water' due to the presence of numerous actors

⁷The title of the thesis is "Politics of Water as Natural Resource: Study of Two Movements (Plachimada and Tarun Bharat Sangh)". It was part of the research done at Centre for Political Studies, Jawaharlal Nehru University. The degree was awarded in 2015.

⁸ I am thankful to Prof. Avijit Pathak to have introduced me to the idea of reflexivity and its importance in social sciences (during the Masters course on Research Methodology in 2005) and to Late Anupam Mishra (Gandhian, Environmentalist and linguist) for sharing his water wisdom which helped me in strengthening the prospects of 'water as commons' in Indian context.

⁹Critical discourse analysis (CDA) is a relatively new method in social sciences for doing analytical research. Some of its tenets could be traced in the critical theory of the Frankfurt school in the before the Second World War (Rasmussen, 1996). The CDA emerged as a group of scholars in the early 1990s, especially during a symposium held in Amsterdam in 1991 (Wodak and Meyer 2001; 3)

(World Bank, IMF, State, NGOs), issues (privatization, anti-dam movements,), and perspectives (namely commons, ecology/entitlement and commodity).

The possible ways of classification of literature on water could be based around discourses, approaches, actors, issues, etc. To elaborate further, there are discourses/ideological leanings such as liberal, Marxist, Gandhian, feminist etc. which shape the nuances of approaches viz. political economy, political ecology, cultural politics, etc. Then, there are levels of policy-making and actors i.e. global, international, national, local, etc. At times, we also come across an overlap between various discourses and approaches and such overlap has its implications on policymaking as well. Above all, the issue of 'claim' or 'ownership' being so central to the ongoing worldwide debate on natural resources gave me the insight to understand the politics of water through the lens of perspectives.

For the purpose of this research, while not getting into the finer nuances and distinction between the terms such a 'commons' and 'natural resources', I intend to adopt a classification of the perspectives on natural resources with the help of existing possible approaches but at the same time, my method tries to reformulate them. I would like to classify the perspectives on natural resources in three groups: first, the 'commons perspective' which considers natural resources as social/collective good; second, the 'ecosystem/entitlement perspective' conceptualizing natural resources as socio-economic good; and third, the 'commodity perspective' considering the natural resources as an economic good. Although, similar classification is used by Ramaswamy Iyer to map the existing worldviews on water (Iyer, 2007) but I have used this framework to highlight the significance of commons perspective. The existing literature on the water while dealing with commons perspective often engage with nature and culture in binary but this paper argues that given the nature of growing water crisis in India, we need to explore the potential of water as commons in a holistic manner.

Part One: Politics of Perspectives

There is a wide range of literature available on Common Pool Resources (CPRs) sometimes also termed as Commons. Many of them also have an interchangeable

usage of the term Common Property Resource (CPR) especially in the context of its management. The literature across disciplines ranging from anthropology, human sociology, forestry, human ecology, economics, political science, history, etc. to name a few of them. There have been area studies, policy analysis, theories on institutional arrangements, etc. The usage of the term 'natural resource' seems to have started much later. However, we also find an overlap in usage of these terms in some of the contemporary literature. As mentioned earlier, let us have a brief overview of three dominant perspectives on natural resources.

1.1 COMMONS PERSPECTIVE:

The notion of 'commons' allows reasonable access to almost everyone with a negligible notion of restriction. The concept is used in different contexts to give different meanings. For example, Ivan Illich who advocated for 'De-Schooling Society' framed it differently in 'Silence is a commons'. He prefers 'environment as commons' to 'environment as a productive resource' because 'by definition resources call for defence by police. Once they are defended, their recovery as commons becomes increasingly difficult' (Cheria and Edwin, 2011; 12). Avijit Pathak argues that modernity with its scientific rationalism tends to generate the fetish of 'objectivity' which deviates man from himself. The scientism with no sense of humility, wonder and enchantment 'reduces nature into a 'resource' – something to be measured and quantified in terms of the principles of positivistic economics' (Pathak, 2006; 30). He seems to be correct in saying that how modernity has given primacy to a scientific and rational worldview which leaves almost no space for emotions. As mentioned earlier, the idea of commons has long been part of the collective consciousness in India and also in other parts of the world.

The term 'commons' for 'natural resources' implies lying outside the property framework. Thus, two major themes of this perspective are: first, the commons perspective considers natural resources as collective good i.e., it is not only for the human beings but for all other living beings as well and, second, it attempts to look beyond the ownership of natural resources. Many arguments are forwarded for such non-ownership thesis viz., God has made the rivers, forests and mountains available

for us in common and thus human beings do not have any right to own them, we can only use them as per our needs but we can't control them. Such a line of thinking has long been held in different parts of the world and even today there are many scholars and practitioners following this long-held belief. However, the basis of belief may vary from person to person or place to place. We will deliberate on this point in the subsequent sections.

1.2 ECOLOGY/ECOSYSTEM AND ENTITLEMENT PERSPECTIVE:

These three different concepts have been clubbed together as there are certain overlaps among them. While 'entitlement' perspective leads to individual or community rights over natural resources such as 'right to land', 'right to water', etc., the 'ecosystem' perspective calls for the very right of forests, rivers, etc. for the humanity at large. This perspective is nuanced and quite different from the commons perspective in various ways. For example, while the commons perspective is more concerned about the 'duty' of human beings to ensure that it is available for others as well, the ecosystem and entitlement perspective draws more upon the 'rights' argument. However, whose rights are to be determined and how remains an intriguing issue. Thus, it certainly leads to different understandings among the adherents of this perspective.

In this context, 'claim' is an important issue and the rights argument leads to its variants viz. right of the earth to rights of the individual and groups (viz. indigenous communities, women, poor, developed countries, marginalized populations, developing countries, and several others). As a result, natural resources are taken up as socioeconomic as well as a cultural good. I have combined the two distinct concepts, i.e. 'ecosystem' and 'entitlement' for the formation of this perspective. While in common perspective, natural resources are conceptualized as a collective resource, in the entitlement discourse, one tends to assume that there has to be some agency and structure viz. State and its institutional apparatus to regulate the natural resources to solve the issue of who gets what and how.

1.3 COMMODITY PERSPECTIVE:

The 'commodity perspective' intends to propose 'natural resources as an economic good'. Natural resources such as rivers, forests and mountains, etc. that were for a long time treated as gifts of nature are now being treated as economic goods. However, this process of change in worldviews is marked by a difference in terms of time and space. I take up 'commodity perspective' as the third category in the classification as it helps in understanding a different worldview proposing a distinct kind of social and economic order in the society.

While the commons perspective draws on the non-dual aspect of human beings as well as other living beings and nature, the ecology/ecosystem and entitlement perspective considers natural resources as separate from human beings but essential for the survival of living beings. Thus, the entitlement perspective advances the logic of claim of different user groups ranging from the earth itself to various countries, to individuals. The use of the term 'commodity' has a specific meaning in the context of this research. Here, I would like to take up the definition of this term from Tom Bottomore's *Dictionary of Marxist Thought*:

commodity is the form products take when the production is organized through exchange. In such a system, products once produced are the property of particular agents who have power to dispose of them to other agents (Bottomore, 1983; 101).

With the advent of modernity and especially the classical political economy, the notion of 'property' became central to the organization of society. Such thinking also led to erstwhile 'free for all' to land as property and advent of individual rights, State's rights, community rights, etc. Today, we are living in times of conflicts over natural resources viz. forests, rivers, mines, etc. in India as well as many Latin American and African countries. If we closely look at these struggles, they are actually due to two different world-views of natural resources. For example, the recent protests against the Vedanta mining company in the Niyamgiri hills in Odisha 10 could be seen in this light. To the company, these hills are just the source of 'bauxite', a natural resource as an economic good but for the Dongaria Kondh tribe, these hills are

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¹⁰ For details, kindly see *The Hindu*, May 3, 2013, 'The Significance of Niyamgiri'; *Business Standard*, April 23, 2013, 'Niyamgiri verdict a victory for tribal rights, says Amnesty', *The Times of India*, April 19, 2013, 'Tribal Rights Supreme in Vedanta Case: Locals' Right of Worship Must Be Protected at Project Site, Says SC'.

sacred and not just a source of livelihood. Therefore, one may notice the stark difference between perspectives i.e. 'natural resources as collective good' or 'commons perspective' viz-à-viz natural resource as economic good' or 'commodity perspective'.

Part Two: Tracing the Genealogy of Commons Perspective

As mentioned in the previous section, the 'commons' perspective enables us to take account of all such writings and thinking patterns or worldviews around natural resources which have tried to look beyond the 'ownership' and 'property regimes'. Its reflection could be seen in various religious scriptures, academic writings, policy documents, etc. But due to a wide range of research and literature on 'commons' and lack of unanimity over its meaning, I intend to capture the complexity of the term and the debate over it. For example, Elinor Ostrom's *Governing the Commons*, Pranab Bardhan and Isha Ray's *The Contested Commons: Conversations between Economists and Anthropologists* and Foundation for Ecological Security's (FES) *Vocabulary of Commons* seem to take up the term 'commons' in altogether different ways¹¹ across disciplines.

The paper classifies the 'commons' perspective into three categories: first, Religious Traditions as knowledge systems; second, the relevance of commons perspective in the Modern Framework; and third, the synthesis of 'Tradition' and 'Modern' termed as 'Syncretic' Framework. Other methods of classification could be based on time viz. ancient, medieval and modern or, on the basis of space, viz. east and west or, on the basis of ideology, viz. Liberal, Marxist, Feminist, Gandhian, etc. However, I would like to submit that the above classifications have been amalgamated

¹¹Ostrom, the Nobel laureate uses detailed case studies and seems to be interested in finding institutional alternatives for better management of the commons. Bardhan and Ray's edited book is a product of a seminar held with the financial assistance of Ford Foundation on the same theme. This collection of scholarly articles tries to underline the complexity of epistemological issues behind the notion of the commons, especially due to the methodological differences between economics and anthropology. FES attempts to bring together practitioners, policy makers and academia, working on various domains of commons – physical commons such as forests, grazing resources, protected areas, water, fisheries, coasts, lagoons, irrigation systems as well as 'new commons' such as knowledge, digital and cultural commons, genetic resources, patents, climate, etc. (*Vocabulary of Commons*, the back of cover page). Thus, it is clear that 'commons' could have a range of meanings depending on one's worldview.

to create the present argument to underline the continuous presence of commons perspective and its relevance.

2.1 Religious Traditions as Knowledge Systems

Natural resources as collective goods or commons have its roots in religious traditions. Religion could be understood in various ways through its different layers viz. its philosophy; as an institution; ideology, etc. While exploring the insights for natural resources, religions as knowledge systems enable us to look at such rules and norms which provide the basis of concepts like justice and morality. All the major religions such as Hinduism, Islam, Christianity and Buddhism have something to say about the relationship between human beings and nature.

Many ancient Hindu scriptures such as the *Rigveda*, the *Brihatsamhita*, etc and other texts such as Kalidasa's *Meghdoot* have given a detailed account on water and land. In the Rigveda, the term *apah* (water) is used in different entities, viz, physical, psychological and metaphysical. *Apah* is used in the plural most probably due to its multidimensional notions. Water is useful for not only human beings but also for other living beings. It is offered to God and showers of rain by these gods cleanse the whole atmosphere, rejuvenate it and make the whole environment pure (Jha, 2012). Thus, we may say that water as 'a life giving substance to be commonly available' is a longheld belief in the Hindu tradition. However, there is now a debate that the lower sections of the society that is, the *shudras*, were not allowed to use the same source of water as the Brahmins.

Varahmihir's text *Brihatsamhita* has a chapter titled 'Dakargalam' that discusses the means of exploring the sources of underground water. Different methods such as the smell and types of soil of particular regions, the characteristics of rocks beneath which lies the water source etc. are described. (Jha¹², 2012). I mention this primarily because of its contemporary relevance. Tarun Bharat Sangh (TBS), a voluntary organization

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¹² During the research, I was benefitted by informal conversations with Prof. RamnathJha who is a scholar of Sanskrit. His writings made me aware of influences of the East on great scientist like Fritjof Capra. He mentioned that we are unable to take lessons from our ancient texts as we often discard them in the name of religion and tradition.

working in Rajasthan on water issues follows this tradition by the name *Gajdhar*. We also come across this tradition in the writings of Anupam Mishra.

Similar to Hinduism, in Islam too there is a rich tradition of commons perspective. Their practice of keeping fast (*roja*) for a month i.e. *Ramzan* and the strict practice of not taking water for the whole day suggests the sense of respect for water. This may have also followed the fact that water has always been a scarce commodity in the Middle East region and such a practice as a long-held belief seemed relevant to the followers of Islam. In Islam, there is a deep sense of 'water ethics.' The Islamic practice of including water as a gift of God thus entails that no individual or ruler can own water and everyone should have access to water (Naff and Dellapenna 2002; 477). On the one hand, it could be seen as the cultural importance of water and on the other hand it also signifies the implicit notion of water as commons. In recent times, many scholars have tried to interpret such principles as a right to quench thirst for human beings and animals from any available water source (Faruqui 2001).

John Passmore¹³ (1980) also deeply studied the relationship between Christianity and the exploitation of nature. He noted that although the concept of stewardship of nature has different connotations as used in the early days of Christianity compared to modern times the commons perspective could be seen as a thematic unifying principle between the two. Along with Hinduism, Islam and Christianity, even Buddhism, Sikkhism and other religions¹⁴ have much to offer on the relationship between human beings and nature. But not going into the details of all these religions, I would only mention that the sense of 'duty' and 'ethics' imbibed in

¹³Passmore noted that separation of man from nature is by no means exclusive in Christianity. He viewed 16th century scientific revolution as responsible for modern exploitative attitudes. The idea behind giving this analysis is to show the proximity between Christianity and the literature on nature and natural resources. Later, Passmore's study influenced the scholars who wrote on themes like 'eco philosophy', 'deep ecology', etc.

¹⁴ 1970s onwards a large number of studies has been done on Religion and Natural Resources. One could see books like Roy A. Rappaport (1979), *Ecology, Meaning and Religion;* FikretBerkes (1999), *Sacred Ecology: Traditional Ecological Knowledge and Resource Management;* N.I. Faruqui, A.K. Biswas and M.J. Bino (eds.) (2001), *Water Management in Islam;* Bron R. Taylor (ed.) (2005), *Encyclopedia of Religion and Nature.* International Society for the Study of Religion, Nature and Culture held its inaugural conference in 2006 and launched its *Journal for the Study of Religion, Nature and Culture* in 2007. Bron R. Taylor from Department of Religion in University of Florida has played a key role in formation of this society.

religions as knowledge traditions give a very different understanding of nature and natural resources.

In recent times, many scholars have studied environmental movements such as *Chipko*, *Narmada Bachao Andolan* by relating them with the essence of Hinduism. Some of the contemporary social movements are also using religion as a tool to mobilize people—*Ganga Bachao Andolan*, *Yamuna Jiye Abhiyaan*, etc. However, there is a huge gap between religions as knowledge traditions and religions being used as a tool by the social movements. It is beyond the scope of this paper to give its details and it now moves on to the modernist framework.

2.2 RELEVANCE OF COMMONS IN MODERNIST FRAMEWORK

In modern times, the commons perspective has appealed to many scholars and activists in India as well as the West and they consider natural resources as a collective good In this category, I would like to place Arne Naess' philosophy of *deep ecology*, Schumpeter's *Small is Beautiful*, Elinor Ostrom's *Governing the Commons*, Pranab Bardhan and Isha Ray's *Contested Commons* and many others. Though written in different contexts, they do have a common line and that is looking beyond the strict rules and regulations for the ownership of the natural resource.

Naess characterized the 'shallow' ecological movement as one that fights pollution and resource depletion in order to preserve human health and affluence while the 'deep' ecological movement operates out of a deep-seated respect and even veneration for ways and forms of life, and accords them an 'equal right to live and blossom' (Weber, 2007; 192). Naess further elaborated on these two concepts by saying that while 'shallow ecology' sees 'natural diversity as a valuable resource' for only humankind, even plant species are to be saved because they are important for human agriculture and medicines; 'deep ecology' sees that 'natural diversity has its own (intrinsic) value' (Naess, 1984; 257). Naess' works are considered very important in ecological studies. His concept of 'deep ecology' took the environmental philosophy and activism towards a new direction.

Ramachandra Guha has criticized the 'persistent invocation of Eastern philosophies' as being forerunners of deep ecology. He complains that the 'intensely political, pragmatic, and Christian influenced thinker......Gandhi has been accorded a wholly undeserved place in the deep ecology pantheon' (Guha, 1989; 76). However, Thomas Weber has refuted Guha by saying that "Gandhi may not deserve a place in the deep ecological pantheon in terms of Guha's objections, however, through Gandhi's strong influence on Arne Naess, the 'father of deep ecology', there is a direct link between the Mahatma and the movement" (Weber, 2007; 195). Even Naess himself admitted about his *ecophilosophy* had influences of Spinoza and Gandhi (Devall and Sessions, 1985; 226). Such remarks by Naess on Gandhi make him and his ideas to be taken seriously in the Indian context while making an attempt to understand the politics of natural resources.

Naess notes that 'ecological preservation is nonviolent at its very core' (Naess, 1988; 25) and quotes Gandhi to make his point, 'I believe in *advaita*, I believe in the essential unity, and for that matter, of all that lives. Therefore, I believe that if one man gains spiritually, the whole world gains with him, and if one man fails, the whole world fails to that extent' (Gandhi, 1924). This kind of philosophy reflects an epistemological difference with modern thinking based on duality, be it mind and body or man and nature. E. F. Schumacher's famous book *Small is Beautiful* (1973) has its subtitle 'A Study of Economics as if People Mattered' that echoes Gandhi's message 'Earth has enough.....not for every man's greed'. In the very first chapter 'The Problem of Production', he argues 'modern man does not experience himself as a part of nature, but as an outside force destined to dominate and conquer it' (Schumpeter, 1973; 3). He further argues that we are inclined to treat everything as valueless that we have not made ourselves and for this reason also accuses Marx's 'labour theory of value' to have the same line of thinking.

Schumacher takes an account of 'two types of mechanization: the use of tools which enhance skill and power, and the use of machines which turn work over to mechanical slaves and then leave the worker in a position of having to tend the slave' (Schumacher, 1973; p. 46). Further, he noted that we are rapidly moving to a world

dominated by large-scale, complex and capital-intensive systems all over. At JP's invitation, Schumacher made his final visit to India in 1973 to deliver the Fourth Gandhi Memorial Lecture at the Gandhian Institute of Studies and to inaugurate an appropriate technology development unit at the institute (Jayaprakash Narayan, 1978; ix). In the lecture, following close to the heels of the oil crisis and the Club of Rome's report named *Limits of Growth*, Schumacher noted that affluence of a small part of the world was pushing the whole world into the three concurrent crises concerning *resources*, *ecology* and *alienation* (emphasis added). He noted that unlike academic economists, Gandhi was an economist in the language of the common people.

Schumacher believed that the crises of resource depletion, ecological destruction and personal alienation suffered by the modern world could be overcome with 'Gandhian works with a spirit of truth and non-violence which inspired Gandhi' (Hoda, 1995; p. 98- 102). Today, many people have started thinking on similar lines. However, the society at large and policymakers do not seem to foresee the twin problems of increasing urbanization and industrialization with their consequences on natural resources. There is an urgent need to think differently with regard to the politics of natural resources in order to redesign our institutional framework of the economy and society.

2.3 SYNTHESIZING THE TRADITION AND MODERNITY:

This category has the characteristics of both the erstwhile discussed frameworks. At times the adherents also seem incoherent in terms of their arguments or spiritual in their outlook but they do offer a new way of looking at many of the problems which we are facing today. This perspective could be insightful in terms of capturing some of the indigenous traditions of natural resources. In this category, I would like to place Mahatma Gandhi's idea of *swaraj*, Vinoba Bhave's *bhoodan* and *gramdaan*, the idea of *sarvodaya* and in the more recent times, Vandana Shiva on ecofeminism and *Beej Satyagraha* and Anupam Mishra's *Aaj bhi khare hain talaab*. The aim of doing this exercise is to capture the varied understandings of the commons. I would like to clarify that many of them have not even used the term 'commons' in their writings or

speeches but I have clubbed them together in this category as per my understanding of this perspective. Let me summarize the essence of Vinoba's movements.

The *Bhoodan Andolan* started by Vinoba Bhave in 1951 was a lifelong project to solve the land problem which the whole of Asia was facing. To him, *bhoodan* was a demand based on social obligation which he named *deeksha* that is, initiation rather than *bhiksha*, for alms. It was to be based on co-operation, non-violence, love and peace. Later on, he also started the *Gramdaan*. Erica Linton came to India from England and visited the gramdan villages in states like Bengal, Bihar, Orissa, Maharashtra, Andhra Pradesh, Kerala, Tamil Nadu, and Uttar Pradesh. She wrote the experiences of her travels in a book titled *Fragments of a Vision* (1971). The foreword to the book was written by E.F. Schumacher. Erica wrote,

After talking with the villagers I came to the conclusion that the maximum number of people have benefitted from Gramdan. They say that as the land is now in the name of the Gram Sabha instead of individual owners, the land has become safe. Now no outsider can come and purchase our land and the land will belong to that person who tills it. And the main thing is that we have gained freedom from the government employee. Now all the work is done through the Gram Sabha (ibid; 38).

Louis Fisher had said, "Gramdan is the most creative thought coming from the east in recent times" (ibid; 39). The lack of political willingness to make Bhoodan a part of the mainstream land reforms ultimately led to the very short span of this movement and many of its flaws gained more publicity over its actual potential. Arthur Castler came to India in 1959, joined the movement and wrote in London's *Observer*, "Vinoba is presenting an alternative based on the Indian traditions to Nehru's western concept of development. Vinoba's insight and intelligence rejected Nehru's social revolution that was based on development, competition and mechanization, something that had been done by Gandhi earlier" (*Anasakti Darshan*, Kanti Shah 2010-11; 35). In this way, Gandhi's core work and philosophy were kept alive. Jayaprakash Narayan remarked, "Through his *Bhoodan-Gramdan*, Vinoba made a unique experiment in

¹⁵This book is the result of a deep study of the *Gramdan* movement and presents its firsthand picture. Erica, in her book, writes, "In some villages *Gramdan* has taken place only on paper, while in some other villages the *Gramdan* concept has been taken ahead to quite an extent. Even though the busy people of the village who are part of the movement do not make a great deal about Gramdan and think it as natural, but for those who are looking at it from the perspective of non-violent revolution at work, it is a great arena for learning" (ibid; 38). Schumacher also writes in the foreword that '*Gramdaan* is a revolution of non-violence. In some villages, it succeeds magnificently, in others nothing happens – nothing at all for ten years or more".

bringing spiritual values within the community. The main aim of the society is the development of humane values, and Vinoba's various programmes showed the way how the new foundation of a society can be based on moral values" (ibid; 33). JP appreciated Vinoba's works on Gandhian lines and the link between swaraj and bhoodan/gramdan.

Vinoba's famous line 'sabai bhoomi gopalki' that is, all the land belongs to the Almighty in its literal sense. It means that it is God-given and thus any individual ownership is not legitimate. The land has been given by nature and the livelihood of each and every person depends on it. Nature has given us water, forest, land, air—all of which is interlinked—and if some people have ownership of these natural resources then it will lead to discord in society and creation of various classes (*Anasakti Darshan*, Prabhat Kumar, 2010-11; 42). However, Vinoba's ideas seem to be drawing more upon spiritual lines than a realistic picture as to how it is going to take place. To illustrate that, I would like to quote his writing (Vinoba, 1946/2010; 26) —

कामना जो व्यक्तिगत होती है, इसे सामाजिक रूप देना, यह कर्मयोग की कामना-नाश की एक युक्ति है. इस प्रक्रिया का उद्येश्य यह है कि व्यक्तिगत वासना को सामाजिक रूप दिया जाये, ताकि वह विस्तृत होते-होते विलीन हो जाये.

(Personal desires should be given a social form, it is one of the ways of diminishing the desires as suggested by *Karmayoga*. The aim of such process is to gradually reduce the personal desires and eventually they will completely disappear.)

Along with his spiritual ideas, the village-based economy was suggested instead of the centralized and heavy-industrialized one following the Gandhian spirit. However, what would make people prioritize community managed resources over individual ownership of the natural resources such as land being the backbone of the prevalent agrarian economy of India is something not so evident in his framework. The present post-liberalization scenario in India with ever increasing struggles over natural resources certainly reflects that even today land and water remain contested resources. Even though Vinoba's *Bhoodan* is not considered a great success in Indian history, as a thought experiment in Gandhian lines, it certainly has a strong appeal for community ownership of natural resources viz. land, and remains so significant. The next section

will map the available literature on water, which could be placed in the commons perspective

Part three: Conceptualizing 'Water as Commons'

In post-independence India, the development discourse shaped the politics of natural resources. Let me highlight some of the pertinent issues related to water and why the commons perspective is relevant. The Nehru-Gandhi dichotomy over the model of development and the tilt towards large dams led to massive displacement. Numerous anti-dam movements have taken place and Narmada Bachao Andolan (NBA) influenced the civil society organizations worldwide. In recent times, movements against water privatization ¹⁶ and anti-Coke movements have become widespread. MNCs such as Coca Cola, Pepsi and other bottled drinking water companies are extracting groundwater and drawing water from rivers. Thus resulting natives to suffer. In Plachimada (Kerala), a Coca-Cola plant was shut down on the order of the Kerala HC in 2005; the Mehdiganj Coca-Cola plant was closed in 2014; and in November 2016 the Madras HC stopped some companies from drawing water from the Thamirabarani river. However, in March, 2017 the Madras HC revised its decision and allowed the companies to draw water. ¹⁷ All these instances reflect the complex nature of growing contestations over water in India.

Most of the river water sharing states in India are in conflict with each other. To name a few, the Cauvery dispute between Karnataka and Tamil Nadu, the Godavari dispute between Maharashtra, Andhra Pradesh and Karnataka, the Narmada dispute between Rajasthan, Madhya Pradesh, Gujarat and Maharashtra are going on for decades. The conflict between industrial and agricultural usage of water is another problematic area. Politics of water in India is shaped by the role of actors such as the state, civil society organizations, and international organizations (UN, WB-IMF, etc.). In the urban areas, the demand for 'right to water' is gaining momentum and at the same time, even the push for privatization of the water sector is evident. The role of the State has come under attack as civil society members are questioning whether the State is the owner

¹⁶ Numerous scholarly writings and newspaper articles have come up in the recent past.

¹⁷ Pandey (2017) argues that Cola companies are creating numerous problems related to water.

or a trustee. In the neo-liberal era, with the growing assertion of the market as a key player, the Indian society is grappling with new challenges. Two decades back, buying and selling of water in India were beyond anyone's imagination but now it is a harsh reality.

A wide range of literature on water can be found which considers 'water as commons'. Such literature ranges from ancient texts of Hinduism, Islam and Christianity to many contemporary writings on water. I intend to classify them into two categories. The first category is of 'traditional knowledge systems' as the basis of 'water as commons', in which the writings of scholars like Elinor Ostrom¹⁸ (1995), Vandana Shiva¹⁹ (2002, 2012), Anil Agarwal and Sunita Narain²⁰ (1997), Anupam Mishra²¹ (1992, 1995), Nandita Singh²² (2004, 2006) and Nitya Jacob²³ (2008) could be placed. However, there is a difference between their writing on water in terms of issues and concerns that we will be discussing later. Most of these scholars have approached water as commons and acknowledge the local communities to have an important role in its upkeep. There is another line of thinking in the recent past on

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¹⁸ElinorOstrom in her book *Who Governs the Commons* (1995) underlines the significance of collective action and institution building for efficient use of natural resources like forests, water bodies etc.

¹⁹Vandana Shiva's various writings on water and other natural resources like land and forests strongly argue in the framework of 'commons perspective'. Though her organizations Navdanya and Research Foundation for Science, Technology and Natural Resource Policy, Shive has played an active role in various movements in the areas like agricultural diversity conservation, to protect biodiversity, etc. However, her eco-feminist standpoint on natural resources has also gathered criticism from different quarters. I am not going into those details here as we will have a detailed analysis of Shiva's arguments on natural resources in the next chapters.

²⁰ Agarwal and Narain's book *Dying Wisdom: The Rise, Fall and Potential of India's Traditional Water Harvesting Systems* (1997) very well summarizes this perspective. This book was published by the Centre for Science and Environment (CSE), a voluntary organization founded in 1980 by Anil Agarwal which is globally considered as a think tank on environmental issues.

²¹Anupam Mishra, an environmentalist at Gandhi Peace Foundation (GPF) in his books titled *Aajbhi Khare Hain Talaab* (1992) and *Rajasthan ki Rajat Boonden* (1995) has underlined the significance of traditional water harvesting systems. Mishra is not only hopeful of revival of traditional knowledge systems of water but has also inspired a generation to involve in 'panikakaam' to overcome the water related problems. On the issue of 'ownership', he argues that even earlier the notion of 'private property' in land and water was there. However, many richpeople used to contribute a huge sum in making ponds and wells and give them to the society. Mishra argues that the sense of 'water ethics' in earlier times was very different from that of our times. He has extensively written on the self-mechanism of the society being so strong when it came to water – be it the construction of ponds, its different usages, its protection, etc.

²²Nandita Singh in her writings like 'Water Management Traditions: Valuing the Unvalued' (2004) and 'Indigenous Water Management Systems: Interpreting Symbolic Dimensions in Common Property Regimes' (2006) argues that the relationship between water resources and society extends beyond a materialistic mundane relationship. She further argues that traditional 'localized' water management arrangements seem to have been little valued in the modern 'globalized' water development and management context.

²³Nitya Jacob in his book *Jalyatra: Exploring India's Traditional Water Management Systems* (2008) argues that ignorance of the rich tradition of managing and maintaining water resources is the main cause of India's present situation of critical water crisis.

'water as commons' being posed against 'water as commodity'. Such a perspective also paves the way for increasing demands over 'right to water'. In this genre, writings of Maude Barlow²⁴ (2003), C.R. Neelakandan²⁵ (2011), Karen Bakker²⁶ (2007) and also the writings of Vandana Shiva could be placed.

3.1TRADITIONAL KNOWLEDGE SYSTEMS AND WATER WISDOM IN INDIA

As mentioned above a range of literature on water in the Indian context is available which strengthen the notion of water as commons. In this section, I have focused on writings of Anupam Mishra who traced the history of the negligence of traditional knowledge systems on water and parallel growth of modern mechanisms such as big dams and canals during the British regime. His writings have also brought to light the negligence by the post-independence policymakers. In the foreword to *The Radiant Raindrops of Rajasthan*, the English translation of Anupam Mishra's book *Rajasthan ki Rajat Boonden*, Vandana Shiva writes,

"Over the past three decades, Anupam Mishra has created a silent but permanent revolution. He has changed the dominant paradigm of water and shown that water security and insecurity is a product of nature plus culture, not just a given of nature. There can be water scarcity in high rainfall regions and adequate water in low rainfall regions like the Rajasthan desert. Anupam's work on the indigenous water systems of Rajasthan is a work of poetry as well as a work of science. It is the work that has inspired the water conservation movement of Tarun Bharat Sangh, which received the Magsaysay award in 2001."

Mishra's works on traditional water harvesting and storing systems seem to take us on a journey to the past as well as making us aware of the problems we are facing today. His writings give us an insight to the complex nature of social and cultural realities in the Indian context. His comprehensive and poetic language is different from the other scholarly writings of our time. He argues that 'in the arid desert state of Rajasthan, water is an invaluable resource and is respected, even revered. It is surprising that over

²⁴ Maude Barlow is a renowned Canadian Water Activist. Her famous book along with Tony Clarke named as *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water* (2003) remains a bible for the water activists worldwide fighting against privatization in water sector.

²⁵ C R Neelkandan is a renowned social activist of Kerala who has been involved in various struggles like Silent Valley, Plachimada, Enron and at present the Endosulfan issue in Kasargaod. His article 'Water as Commons' in *Vocabulary of Commons* (2011) cites an interesting analogy of Water for the Earth as blood for the human body. This article has raised plethora of issues around water – role of development, market, privatisation of water systems, business of bottled water, etc. This writing as well as his in-depth interview by the author were immensely helpful for this research.

²⁶ Karen Bakker in her article 'The 'Commons' versus the 'Commodity': Alter-globalization, privatization, and the struggle for the human right to water' (2007) explores the conceptual possibilities of debate between these competing discourses on water.

ninety per cent of the villages in Rajasthan have access to drinking water and even more surprising is the fact that most of this water is harnessed by traditional methods as opposed to government interventions or international engineering solutions' (Mishra, 2012; 3).

The use of terms such as 'respect' and 'reverence' distinguishes Mishra's approach from other contemporary scholars on water. To him, the traditional methods of water harvesting like *tankas* or *kunds* (reservoirs) and *baolis* (step-wells) are still very useful. He stresses on the rediscovery of traditions for efficient management of water as suited to the local circumstances. There are numerous such experiments which are practised in India.²⁷ Some of them are Pani Panchayats in Maharashtra, Aravari River Parliament by Tarun Bharat Sangh and the Chauka system in Lapodia village (by Laxman Singh) in Rajasthan, Megh Paine Abhiyan by Magadh Jal Jamat in Bihar and many others. These experiments of community management based on commons perspective in India are the signs of hope in an alternative vision of development.

Although Mayank Kumar has criticized the texts *Dying Wisdom* and *Aaj bhi Khare Hain Talaab* as present-day advocates of the 'golden age' which question the British rule but they overlooked the autocratic nature of the medieval rule (Kumar 2007; 90). Some environmental historians also argue Mishra's narrative of the effects of British 'colonial hydrology' as being overly simplistic (Levi and Mishori, 2015; 17). However, such criticisms do not seem to help much since in a modernist framework we often tend to ignore the potential of traditional knowledge. To me, the engagement or dialogue between the two i.e. tradition and modernity seems very important as we get to see in the writings of Anupam Mishra on water.

3.2 Water: Commons versus Commodity Debate

It is important to note that the arguments of scholars such as Bakker and Barlow mentioned earlier help social activists in general and water activists, in particular, to make their ideas appeal to common masses. They question the idea of privatization in the water sector in the form of private sector participation (PSP) and

²⁷Himanshu Thakkar in his article 'The Future of Water in India' (2017).

public-private partnership (PPP), etc. and their implementation in different parts of the world. They call it the corporate theft of the world's water by the multinational companies (MNCs). One of the most famous cases of this kind was the water wars in Cochabamba²⁸ (Bolivia) in 2000 where privatization led to massive protests by the local people. The leader of who spearheaded this movement, Oscar Olivera formed a network called the Coalition in Defense of Water and Life. This struggle later influenced numerous other struggles worldwide, the Plachimada struggle in Kerala for example, as mentioned earlier (Shree, 2012).

Maude Barlow and Tony Clarke argue that the bottled-water industry is one of the fastest growing and least regulated industries which are buying up the freshwater rights and drying up crucial supplies. Bakker writes about the governance failure leading to the world's urban water crisis. She has also explored the nuances of debate between commons and commodity perspective on water in the global south paving way for 'human right to water' (Bakker, 2007). Similar to Barlow and Clarke who argue against corporate theft of water in the global context, Vandana Shiva has underlined the situation of India as a developing country and the pressures from World Bank and International Monetary Fund (IMF) to facilitate privatization in the water sector. Some of the most fundamental problems developing countries are facing are non-availability of clean potable water and providing water to a large population, thus, the pressure for privatization in the water sector will definitely lead to a serious crisis.

Majority of the developing countries from the southern hemisphere are still dealing with the issue of socio-economic justice and in this scenario, any attempt to privatize something as essential as water will add to the agony for millions of people. In addition, they are also facing the compulsions of constructing large dams ignoring the traditional water harvesting systems which is being seen as inefficient. Shiva's work is also considered important for her theoretical explorations around eco-feminism. She argues that women play a key role in the conservation of nature such as forests, rivers,

²⁸Jim Shultz has written numerous articles such a 'Bolivia's Water War Victory', 'The Politics of Water in Bolivia', etc.

etc. and also strongly advocates for commons perspective of water through traditional knowledge systems.

Conclusion:

Politics of water is complex and revolves around the competing claims and varied perceptions. Whether water is a commodity/economic good or a social good remains at the centre of the debate. In the present context, when India is on the verge of completing thirty years of adopting the new economic policy (NEP) and most of the social sectors such as health and education have been opened up for privatization, even water seems to be not an exception. However, unlike other sectors, water privatization has to face a lot of resistance from civil society groups. At the same time, there are numerous successful experiments of decentralized water harvesting in different parts of India which offer a solution for water conservation and management as mentioned in the earlier section. The interdependence between communities and commons and, commons as an intersection of history, culture, society and religion is so central to that vision. The perspective of water as commons is based on the thought of human being's dependence on nature rather than vice-versa. As a paradigm, such worldview does not create a binary or duality of nature and culture but treats them in unison. The act of water conservation has to be duty-bound rather than based on owning and governing water.

References:

Agarwal, Anil and Sunita Narain. 1997. Dying Wisdom: Rise, Fall and Potential of India's Traditional Harvesting Systems. New Delhi: Centre for Science and Environment (CSE).

Bakker, Karan 2007. 'The 'Commons' versus the 'Commodity': Alter-globalization, privatization, and the struggle for the human right to water', *Antipode*, 430-455.

Barlow, Maude and Tony Clarke. 2002. Blue Gold: The Battle against Corporate Theft of the World's Water. New Delhi: Left Word.

Baviskar, Amita. 2007. *Waterscapes: The Cultural Politics of a Natural Resource*. Ranikhet (Uttarakhand): Permanent Black.

Black, John. 1970. *The Domination of Man: The Search for Ecological Responsibility*. Edinburgh: Edinburgh University Press.

Cheria, Anita and Edwin. 2011. Vocabulary of Commons. Anand(Gujarat): FES.

Cullet, Philippe and Joyeeta Gupta. 2009. India: Evolution of Water Law and Policy, in Joseph Dellapenna and Joyeeta Gupta eds., *The Evolution of the Law and Politics of Water*, Dordrecht: Springer Academic Publishers, pp. 159-175.

Devall, Bill and George Sessions. 1985. *Deep Ecology: Living as if Nature Mattered*. Salt Lake City, UT: Gibbs Smith.

Faruqui, N.I., A.K. Biswas and M.J. Bino (eds.). 2001. *Water Management in Islam*. Tokyo, New York and Paris: United Nations University Press.

Guha, Ramachandra. 1989. 'Radical American Environmentalism and Wilderness Preservation: A Third World Critique', *Environmental Ethics*, 11, 71-83.

Hoda, Surur. 1995. 'Schumacher on Gandhi' in Manmohan Choudhuri and Ramjee Singh (eds.), *Mahatma Gandhi: 125 Years*. Varanasi: Sarva Seva Sangh/ Gandhian Institute of Studies.

Iyer, Ramaswamy. 2007. *Towards Water Wisdom: Limits, Justice and Harmony*, New Delhi: Sage Publications.

Jacob, Nitya. 2008. Jalyatra: Exploring India's Traditional Water Management Systems. New Delhi: Penguin Books.

Jha, R. N. 2012. "The Concept of Apah (Waters) in the Rigveda: Water and Everyday Life" in Padam Nepal and Anup Shekhar Chakraborty(eds.) *Politics of Culture, Identity and Protest in North-east India*, edited by. Hauz Khas Enclave, New Delhi: Autherpress.

Kumar, Mayank. 2007. Ecology and Traditional Systems of Water Management: Revisiting Medieval Rajasthan, in Mahesh Rangrajan (ed.) *Environmental Issues in India: A Reader*, New Delhi: Pearson, pp. 70-96.

Kundan Pandey. 2017. 'Thirst for Closure', *Down to Earth*, 16-31 March, pp. 12-14.

Levi, Ricky and Daniel Mishori. 2015. Water, the Sacred and the Commons of Rajasthan: A Review of Anupam Mishra's Philosophy of Water, *Transcience*, Vol. 6, Issue 2, pp. 1-25.

Linton, Erica. 1972. Fragments of a Vision: A Journey through India's Gramdan Villages. Sarva Seva Sangh Prakashan.

Mehta, Lyla. 2005. The Politics and Poetics of Water: Naturalising Scarcity in Western India, New Delhi: Orient Longman.

Mishra, Anupam. 1995. *Radiant Raindrops of Rajasthan*. New Delhi: Gandhi Peace Foundation (GPF) and Research Foundation for Science, Technology and Education (RFSTE).

----- 1995. Aaj bhi Khare Hain Talaab, New Delhi: Gandhi Peace Foundation (GPF).

----- 1995. Rajasthan ki Rajat Boondein, New Delhi: Gandhi Peace Foundation (GPF).

Naess, Arne. 1984. 'Identification as a Source of Deep Ecological Attitudes', in Michael Tobias (ed.), *Deep Ecology*. San Diego: Avant Books.

----- 1988. 'Self-Realisation: An Ecological Approach to Being in the World', in John Seed, Joanna Macy, Pat Fleming and Arne Naess (eds.), *Thinking Like a Mountain: Towards a Council of All Beings*. Philadelphia: New Society Publishers.

Naff, Thomas and Joseph Dellapenna. 2002. 'Can there be confluence? : A Comparative Consideration of Western and Islamic fresh water law', *Water Policy*, 4: 465-489.

Narayan, Jayaprakash. 1978. 'Foreword', in M. M. Hoda, Future is Manageable: Schumacher's Observations on Non-Violent Economics and Technology with a Human Face. New Delhi: Impex India.

Ostrom, Elinor. 1995. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press.

Passmore, John. 1980. Man's Responsibility for Nature. London: Duckworth.

Pathak, Avijit. 2006. *Modernity, Globalization and Identity: Towards a Reflexive Quest*, Aakar Books, New Delhi.

Patkar, Medha. 2017. 'Access Denied', Down to Earth, 16-31 March.

Rasmussen, D. M. (ed.) (1996), *The Handbook of Critical Theory*, Blackwell Publications, Oxford.

Sangameswaran, Priya. 2014. Neoliberalism and Water: Complicating the Story of 'Reforms' in Maharashtra, New Delhi: Orient Blackswan.

Schumacher, E. F. 1973. Small is Beautiful: A Study of Economics as if People Mattered. London: Abacus.

Shree, Ruchi. 2017. 'Are we serious about our rivers?', OPED, *The Pioneer*, 30 March.

----- at *India Water Portal* (2012), "Plachimada against Coke: People's Struggle for Water" (published by SOPPECOM), http://www.conflicts.indiawaterportal.org/node/147

Singh, Nandita. 2004. 'Water Management Traditions: Valuing the Unvalued', Presented at 18th European Conference on Modern South Asian Studies at Lund University, Sweden, 6-9 July 2004 Panel No. 21: "Localities, Situated Knowledges and Globalizations"

------ 2006, 'Indigenous Water Management Systems: Interpreting Dimensions in Common Property Resources Regimes', *Society and Natural Resources*, No. 19, 357-66.

Strang, Veronica. 2004. The Meaning of Water, Berg Publishers.

Thakkar, Himanshu. 2017. 'The Future of Water in India' in Ashish Kothari and K. J. Joy (ed.) *Alternative Futures: India Unshackled*, New Delhi: Authors Upfront.

Weber, Thomas. 2007. *Gandhi: As Disciple and Mentor*. New Delhi: Cambridge University Press.

White, Lynn Jr. 1967. 'The Historical Roots of Our Ecological Crisis', *Science*, 155, 10 March, 1203-07.

Wodak, Ruth and Michael Meyer (eds.) (2001), *Methods of Critical Discourse Analysis*, London: Sage Publications.