Sharing the Blue Resource: Critique on India's Recent Stratagem[1]

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Abstract *Water the 'Blue Treasure' is made available by the natural hydraulic cycle of the atmospheric-oceanic-terrestrial system. Today across the world, rivers, lakes, and aquifers are dwindling faster because of human action. The current paper examines the global and national water crisis and makes an attempt to critically analyse the Indian Government's Draft National Water Policy 2012 which proposes to keep livelihood and ecosystem needs as the first priority, but contradicts this by insisting that water must be seen as an 'economic good'*

Section I of the paper discusses the extent of global water crisis and the rising tide of the water market. On a societal scale, water scarcity raises potential conflicts between the fulfilment of the 'need' and 'right' to water for personal & domestic use, and industrial use. In this context, section II briefly reviews the future demand for water and also describes the context in which the traditional view of treating water as a 'need' or 'social good' got replaced as 'economic good' and finally as a 'human right' in 2010. Access to water is now a human right and it is the state's obligation to provide this vital resource to everyone. Countries who have been signatories to the UN resolution are now required to design appropriate governance structures to ensure that 'Right to Water' is upheld. It is in this context; section III of the paper succinctly presents how right to water is an implied right under Article 21 of the Indian Constitution for safe guarding the rights of its citizens to water. The section further sketches the current water crisis scenario in India and makes an attempt to scrutinise the Draft National Water Policy 2012 and identifies several discrepancies which highlight that government favours privatisation and commodification of water delivery services. Based on the analysis it offers a few recommendations for consideration to enable the government to prepare a plan of action in line with the commitments made at UN so that the right to water can become a reality like all other fundamental rights enshrined in Indian Constitution and the Universal Declaration of Human Rights.

Key Words: Water Crisis, Human Right, Water Policy
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I.a Water Crisis

Modern society's unquenchable thirst, industrial technological capabilities, and sheer population growth from 6 to 9 billion is significantly outstripping the sustainable supply of water. While 70 percent of the earth's surface is covered by water, only 2.5 percent is suitable to drink (UNESCO, 1996). Globalization is undermining the planet's water democracy through overexploitation of groundwater, rerouting and diverting of rivers, and privatization of public supply. Climate change is already having an impact on water supplies and will make the problem worse in the future. The past half century has witnessed more than 500 conflict-related events over water, seven of which have involved violence (UN News, 2006). Solomon (2010) in his book "*Water: The epic struggle for wealth, power and civilization*", argues that water is surpassing oil as the world's scarcest critical resource. Just as oil conflicts were central to twentieth-century history, the struggle over freshwater is set to shape a new turning point in the world order and the destiny of civilization.

Based on global population data calculated in 2000 nearly 80% of the world's population live in areas experiencing a high level of threats to human water security or biodiversity (Gilbert 2010). Globally 780 million people (approximately one in nine people) lack access to an improved water source (WHO & UNICEF 2012). 3.41 million people die from water, sanitation and hygiene-related causes each year (WHO 2008). Dow Live Earth Water Crisis Factsheet (n.d), states "Communities in Africa, Latin America and Asia suffer 1.8 million deaths every year from diarrheal diseases and the death of 5,000 children each day due to inadequate water infrastructure. In these areas, women and children often walk 6 km (3.7 miles) each day to secure available water-which is likely to be unsuitable for drinking. In developing countries, unsafe water causes 80 percent of all illness and disease, and kills more people every year than all forms of violence, including war. Children are especially vulnerable to these consequences. Of the 42,000 deaths that occur each week from unsafe water, 90 percent are children under the age of five. Women and children spend nearly 40 billion hours per year collecting water, which translates to children missing billions of hours of school, continuing a lack of education and ultimately perpetuating a state of poverty (para, 1, 2 & 3)." The Water Crisis Factsheet further highlights that, "The water crisis is not limited to developing nations. In various parts of the world, such as the Western United States and Australia, water scarcity affects the public through enforced water rationing and increased costs. In 60 percent of European cities with

populations greater than 100,000, groundwater is being used faster than it can be replenished (para. 4)."

Water shortage is already a serious problem in many regions of the world. These include southern Spain, the Maghreb, the Middle East, Central Asia, Pakistan, southern India and northern China. In the Americas, the US Mid-West, Mexico and the Andes are the worst-hit areas. Eastern Australia is also badly affected by drought. Individual countries such as Yemen, Uzbekistan and Israel are currently consuming more water than can be replenished by natural means. China and India-the two countries with the largest populations-are also heavily exploiting their available water resources (Wild, Francke, Menzli & Schön, 2007).

According to Cosgrove & Rijsberman, (2000), "Industry consumes just over 10% of the water it withdraws, heavily polluting the fraction that it returns. Industry is a major user in OECD countries and even more so in transition economies, where water use per unit of output is often two to three times higher than in OECD countries and industry can rival agriculture in water withdrawals" (p. 14). As water *users*, industry/businesses compete with individuals over a limited resource, which in areas of water scarcity can negatively impact on individual and community access to adequate water and food. Where business activities pollute water sources, such actions have clear consequences in terms of access to safe drinking water and access to food.

I.b Rising Tide of Water Market

Water is not evenly distributed throughout the world, and there are great variations in natural abundance. For example, mountain areas produce 80 percent of global water resources yet they have less than 10 percent of the global population (FAO's Water sector policy, 1995). As domestic, industrial, and agricultural demands for fresh water have grown, proposals for bulk water transfers are being made at the international level. Entrepreneurs have created a wide range of markets for water, leading to various forms of international water trading and exchanges. Clay Landry, Director, WestWater Research, a consulting firm that specializes in water rights (as cited in Interlandi 2010), states "The water market has become much more sophisticated in the last two decades, it is gone from parochial transactions — back-of-the-truck, handshake — type deals — to a serious market with increasingly serious players (para. 6)." According to S-Net Global Water Indexes (2011), "The most widely used estimate of the size of the global

water market over the last two years has been in the range of $360 billion with an annual growth rate of 4-5%, suggesting the market is currently in the range of $375 billion. The size of the global private sector market available to investors would be about $229 billion, including private sector utility revenues, equipment, services, and the residential market (para. 1)." According to a 2009 report by the World Bank, private investment in the water industry is set to double in the next five years. The water-supply market alone is estimated to increase by 20 percent (Interlandi 2010). Fresh water has become an issue in international trade negotiations and disputes. The lack of legal precedence governing the trade of water has placed water at the forefront of international concern and tension.

II.a Future Demand for Water

The world's population is not distributed according to the availability of water, there are regions where water scarcity is and will remain critical (Water tight, 2012). The supply of fresh water is limited, but demand is growing steadily due to the following factors:

Firstly the demand for water will continue to increase as the global population grows and exerts increasing pressure on supplies. The world population is predicted to grow from 6.9 billion in 2010 to 8.3 billion in 2030 and to 9.1 billion in 2050 (UNDESA, 2009). With expected increases in population, by 2030, food demand is predicted to increase by 50% and 70% by 2050 (Bruinsma, 2009): Energy demand from hydropower and other renewable energy resources will rise by 60% (UNESCO-WWAP, 2009). If we do not address these issues by creating frameworks at a global level and take action locally, then there is every possibility of increasing threat of conflict as competition for water sources intensifies.

Secondly the water supply infrastructure is in a very dilapidated state in many countries, with large volumes of water being wasted through leakage (Wild, Francke, Menzli & Schön, 2007). Thirdly in many countries the population is suffering not only from a shortage of water, but also from the poor quality of the water that is available. More than 40% of all people globally who lack access to drinking water live in sub-Saharan Africa (WHO&UNICEF, 2012). Fourthly climate change is altering the availability of water resources. Climate change increases the risk of volatility in water supply thus making it impossible to rely on historical data for future planning. In addition to growing water demand, ongoing water pollution is likely to exacerbate water stress-which is a symptomatic consequence of

scarcity-by reducing the amount of potable water leading to water insecurity (Water tight 2012).

To meet the current demand for water, enormous investments are required to upgrade and expand the water infrastructure. For poorer and rapidly growing nations in particular, new technologies need to be developed for treating, distributing and using water. In the above context governments will have to make water distribution choices between encouraging large-scale or small-scale farming? Growing food or cash crops? Distributing water based on the principle of equal access for all types of users, or on prioritization? If there is to be prioritization, who should get the priority: domestic users, farmers, or industries? Should small farmers and small and medium enterprises be given priority over large farmers and large businesses? Should there be subsidies? These choices will have an impact on the economic development of the Nation. This implies that on a societal scale, water scarcity raises potential conflicts between the fulfilment of the 'need' and 'right' to water for personal & domestic use, and industrial use.

II.b Water: Need/ Right or Economic Good?

To many of us access to clean drinking water may seem the most intrinsic of our 'need' which needs to be taken care by the government. Most countries treated it as a social good by subsidizing prices so that it is affordable for everyone, especially the poor. When governments failed to satisfy the 'need' as demand for water outstripped supply from the 1960s through the 1980s, World Banks gave loans to the governments of developing countries to fund the creation and expansion of major public water utilities. But, then, its support for large infrastructure projects drew widespread opposition from the very people who were supposed to benefit from these projects. For example, massive dam projects became extremely controversial because they displaced people, deprived them of livelihood and had undesirable environmental consequences.

In the late eighties World Bank and other multilateral and bilateral institutions changed the track and added public water services to the list of enterprises which should be privatised in the provision of public service and funded the interests of a handful of transnational water corporations to commodify their water resources and put them on sale to the highest bidder. The rights to divert water — from a river or lake or underground aquifer — indeed became sellable commodities; including the plants and pipes that process water and deliver it to our taps (Interlandi 2010). In

collaboration with corrupt governments and the equally corrupt regional development banks in various developing countries, World Bank aggressively promoted the involvement of multinational corporations in the water supply and sanitation sectors. Over the last decade World Bank has lend about $20 billion to water supply projects and has become the principle financer of water privatization (Warburton, 2011). At a global level, the water industry has become highly concentrated with three major multinational corporations controlling more than 40 per cent of the private water market (Ravindran 2005).

Subsequently the highly influential Dublin Principles established at the 1992 United Nations International Conference on Water and Sustainable Development described water as an "economic good". This principle recognizes the basic right of all human beings to have access to clean water and sanitation at an affordable price. The principle was developed on the rationale on the past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource (The Dublin statement, n.d). In other words the declaration postulates that users must pay more for their water usage. This further led to commodification of water. Maude Barlow, Chairperson Council of Canadians Chair, IFG Committee on the Globalization of Water in his Report on "*Blue Gold-The Global Water Crisis and the Commodification of the World's Water Supply*" (1999) mentions, "The push to commodify water came at a time when the social, political and economic impacts of water scarcity were rapidly becoming a destabilizing force, with water-related conflicts springing up around the globe (para. 3)."

The emphasis of the Dublin Statement on *the economic value* of water rather than water as *a universal right* was highly contested by NGOs and human rights activists. Incidently UN bodies and international development organizations treated water as an implicit rather than explicit part of the human rights framework, one that was embedded in other internationally recognized rights such as the right to life, or right to health (Chowdhury, Mustu, St. Dennis, & Yap 2011). According to Warburton (2011), the paradigm shift from treating water as economic good to human right has been spurred by several movements[2] led by international NGOs, health and

2. 1980's witnessed the first phase of protest movements for water-justice which centred around large dams and their consequential effects on marginalised sections of society and ecology. Post cold war the second phase of water-movements emerged with the structural adjustment programmes and new lending conditions imposed by the WB and WTO agreements like GATS that pushed for privatisation of public water works. The struggles against water

human rights organisations. In tandem with the movement, growing urgency expressed by scientists about a looming global water shortage, influenced United Nations to deliberate further on the issue. The efforts of the activists and scientists established the link between water and poverty to the international community and influenced UN to incorporate improving access of people to safe drinking water in its Millennium Development Goals. As a consequence, countries are required to increase access to safe water supply to its citizens (Prasad, 2007).

In 2002 the UN Committee on Economic, Social and Cultural Rights released General Comment 15, which recommended water be recognized in international law as an independent human right, and that states be legally accountable for supplying "sufficient, safe, acceptable, physically accessible, and affordable water." The UN Economic and Social Council argued that the social and cultural, not just economic, value of water be taken into account, expressing concern that pricing alone cannot ensure equitable access to clean water for all people, nor can it safeguard the needs of local ecosystems. Subsequently, in December 2003, the General Assembly proclaimed the "Water for Life Decade 2005-2015", as a means of promoting the fulfilment of international water commitments by 2015 (Warburton 2011).

According to *History of the Rights to Water and Sanitation at the United Nations,* (n.d) in September 2007, the High Commissioner for Human Rights presented a study to the "*Human Rights Council on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments*." The study highlighted that some 884 million people lacked access to safe drinking water and more than 2.6 billion to basic sanitation. Furthermore, it was observed that 1.5 million children under five years old die each year because of water-and sanitation-borne diseases. In the study, the former High Commissioner expressed her belief "that it is now time to consider access to safe drinking water and sanitation as a human right, defined as the right to equal and non-discriminatory access to a sufficient amount of safe drinking water for personal and domestic uses-drinking, personal sanitation, washing of clothes, food preparation and personal and household hygiene-to sustain life and health (p. 26)."

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privatization in Cochabamba in Bolivia exemplify the second phase. The articulation of the demand for recognition of access to water as a human right emerges prominently during the second phase

Subsequently, in 2008 the UN appointed Ms Catarina de Albuquerque as the independent expert on the right to water, with the task of assessing states' obligations and responsibilities pertaining to this emergent international norm. Consultative sessions with representatives from countries such as Belgium, that recognizes water as a human right in its domestic law; intergovernmental organizations including UNDP and WHO; private sector actors such as Aquafed and the World Business Council for Sustainable Development; NGOs like Amnesty International, Corporate Accountability International, Council of South America Indigenous Peoples and Nations Coalition, and the International Environmental Law Research Center. Bolivia played a leadership role in compiling the text of the human right to water for a vote in the General Assembly. Co-sponsoring countries of the text included Latin American nations, such as Dominica, El Salvador, Nicaragua and Paraguay, and some African nations including Burundi, Congo, and the Central African Republic. Finally on July 28, 2010, the General Assembly adopted a resolution, which "recognized the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights" (GA res 64/292, 2010). The resolution was passed with 122 countries voting in favour, none against, and 41 abstentions. Subsequently, the Human Rights Council, in September 2010, affirmed this recognition and clarified that the right is derived from the right to an adequate standard of living (HRC res 15/9).

II.c Implications of UN Resolution

Access to water is now a human right and it is the state's obligation to provide this vital resource to everyone. Widespread availability of clean and affordable water will improve both individual and social well-being and thereby increase the economic prosperity. In this respect countries, like Sweden, have banned water companies from making profit. Others, like Netherlands and Uruguay, have barred privatisation of their systems. Countries like Senegal, South Africa, Bangladesh, Costa Rica, Nepal, Pakistan and Peru have given direct and implicit recognition for right to water in their constitutions. States like Belgium, Germany and Italy have also incorporated the right to water in national legislation and policy. More importantly for businesses, states and civil society organisations have shown that they are willing and able to take legal action against companies for failing to abide by State regulations established to protect against human rights violations (Prasad 2007).

However, many more countries who have been signatories to the UN res-

olution will have to design appropriate governance structures to ensure that right to water in their own respective countries is exercised both in letter as well as spirit (Medalye & Hubbart, 2008). It is in this context, the case of India is further examined.

III.a India: Implied Right to Water

Although, the Indian Constitution does not directly recognise the right to water, the Indian judiciary has at the national and state level broadly interpreted Article 21 of the Constitution, which recognises the right to life, to include the right to safe and sufficient water. The Indian Constitution safeguards the direct implementation of fundamental rights, which among other civil and political rights include right to life. These fundamental rights are recognised constitutionally as directly justifiable rights (Kumar 2005).

The implied constitutional right to water was first recognised by the Kerala High Court in 1990 in *Attakoya Thangal v. Union of India*, where the Court observed that, "The right to sweet water and the right to free air are attributes of the right to life, for these are the basic elements which sustain life itself." In some cases courts have made it clear that the government has an obligation to provide water as seen in *Subhash Kumar v. State of Bihar* (1991) where the Court stated that "The right to life 'includes the right of enjoyment of pollution free water and air for full enjoyment of life' and in *Narmada Bachao Andolan v. Union of India* (2000) the Court stated that 'Water is the basic need for the survival of the human beings and is part of right of life and human rights as enshrined in Article 21.' In the case of *Shajimon Joseph v. State of Kerala* (2006) the Court stated that the government 'is bound to provide drinking water to the public' and that this should be the foremost duty of the government. Additionally, the judges ruled that the failure of the state to 'provide safe drinking water' to citizens amounted to a violation of Article 21 of the Constitution.

Indian Courts have subsequently held that in realising the right to water, the State has an obligation to protect against the pollution of water and the over use of ground water. Similarly in 2004 the Supreme Court of India in *M C Mehta v Union of India*, recognised that groundwater is a social asset and that priority is to be given to the domestic and agricultural uses wherever groundwater is required for these.

The issue of the exploitation of ground water was explored in the dispute

between a village in India and Hindustan Coca-Cola Beverages Pvt Ltd (Venugopal 2007). In this case, the Perumatty Village Council refused to renew Coca-Cola's licence, accusing the company of excessive exploitation of ground water leading to acute water scarcity in the area. Coca-Cola challenged the Village Council's refusal to renew the license in the High Court of Kerala. The High Court considered the question of the over exploitation of ground water as well as the justification for the Village Council's decision to revoke the license and concluded that the government had a duty to act to "protect against excessive groundwater exploitation and the inaction of the State in this regard was tantamount to infringement of the right to life of the people guaranteed under Article 21 of the Constitution of India. Although the High Court ruled that the amount of water extracted by the Coca-Cola plant was illegal, it ordered the Village Council to renew the license. On appeal in 2005, the Divisional Bench of the High Court affirmed that the Village Council was not justified for commercial reasons in cancelling Coca-Cola's license, without further scientific assessment of the impact of Coca-Cola's production on ground water. While the Village Council did renew the license in 2006, it imposed 13 preconditions on the license including preventing the use of ground water in the area for industrial purposes or producing beverages. The Coca-Cola factory has remained closed since 2004 and the legal battle is still ongoing with the case currently on appeal to the Supreme Court.

The Supreme Court has also made explicit the State's duty to protect the pollution of water sources by third parties in *Vellore Citizens Welfare Forum v. Union of India* (1996). In this case, the Court held that several tanneries had violated citizens' right to clean water by dumping untreated effluents into agricultural lands and polluting local water sources. Accordingly, the Court ordered the government to implement the precautionary & polluter-pays principles and ensured that the compensation reached the individuals and families affected by the pollution. The Court also ordered the tanneries to set up the pollution control devices and those that refused to do so, were ordered to be closed (Compendium of summaries-ESCAP, n.d). Indian case law recognises 'Right to Water' as significant for businesses, especially water users, as it confirms that the State has an obligation under Article 21 of the Constitution to respect the 'right to water' by preventing third parties from excessive groundwater exploitation and water pollution. Further, Indian case law affirms the need to prioritise water usage for domestic and agricultural purposes.

India's vote for the UN resolution implies that Indian government has

acknowledged water as a 'Human Right'.

III.b Water Crisis in India

India is facing a reduction in its clean water resources due to the intensive and unplanned exploitation of groundwater, industrial and mining activities due to construction of large numbers of big dams, increased water contamination, and factors relating to climate change. At the same time, it is experiencing an unprecedented increase in the demand for water due to a growing and urbanising population, unfettered economic growth, and an explosion in water-intensive industries such as thermal power plants and extractive industries (Status of Water Quality in India, 2010).

Gupta & Biswas (2012) state "For countries like India and Egypt, some 90% of water is used for agriculture. No food or electricity can be produced without water. People cannot survive without food (another human right) and food cannot be produced without water" (para. 3). Millions of marginalised communities are struggling and resisting to defend their rights over natural resources land, water, forest and minerals across the country today. They often face the worst impacts of the modernisation and development processes in modern India. Out of nearly 100 million displaced people, nearly 60 per cent are adivasis and dalits, the majority of which have been displaced by the construction of dams (Kumar et al). This section of the population is further deprived with regard to access to safe drinking water. A brief review of the water crisis scenario in the country is elucidated in the following paragraphs.

i) Depletion of Water Resources

According to Maplecroft's Water Security Risk Index 2012, India is one of the two BRICS countries, along with South Africa, that have the highest water security risk. India is home to 17% of the world's population but has only 4% of water (Sinha 2012). According to UN MDG statistics (2010) India's usage of its total water resources has increased from 26.3 % in 1990 to 40.1% 2010. Currently 80 per cent of that usage-750 billion cubic meters (bcm)-goes to irrigation. While the remaining 20 per cent is shared between domestic, energy, industrial and other users (Kumar and Furlong 2012). Approximately 15 per cent of India's food is being produced using non-renewable groundwater. Since aquifer depletion is concentrated in many of the most populated and economically productive areas, the potential social and economic consequences of continued unbridled exploitation of water are huge (World Bank-P Notes, 2008).

A report published by CRISIL in 2011 titled 'Bracing for a Crisis' highlights that India's population has increased from 361 million in 1951 to 1.21 billion in 2011. The per capita availability of water in the country as a whole has plummeted from 5,177 cubic meter per annum in 1951 to 1,544 cubic meter per annum in 2011, a drastic reduction of 70% in 60 years. With the per capita availability of water falling below the global threshold of 1,700 cubic meters, India has already acquired the unfortunate status of a 'water-stressed' nation. The situation is expected to deteriorate further as per capita water availability is expected to decline further to 1,342 and 1,140 cubic meters per annum by 2025 and 2050, respectively.

According to the Central Ground Water Board, groundwater has not been developed evenly across India, and this has led to exploitation of water levels and seawater intrusion in some areas of the 5,723 sites assessed, 839 are 'over-exploited', 226 are 'critical' and 550 are 'semi-critical' (Ground water development, 2011). Some aquifers in central India that took 10,000 years to accumulate water have dried up in the past 30 years (Chaudhary 2012). Way back in 1999 the National Commission on Water had reported that overall water balance in the country is precarious. It had stated that a crisis-like situation already exists in different parts of the country, and by 2050, India's total water demand will exceed all its available sources of water supply.

According to a report by the 2030 Water Resources Group, by 2030, demand for water in India will reach almost 1.5 trillion m^3, compared with India's current water supply of approximately 740 billion m^3. Domestic demand for rice, wheat and sugar for a growing population will be the main driving factors. As a result, most of India's river basins could face a severe deficit by 2030. The Ganges, the Krishna and the Indian portion of the Indus are likely to face the biggest absolute gap. The report further observes that India is also partially dependent on water flowing into the country from the north. China, Pakistan, Bhutan, Nepal, Bangladesh and Myanmar each share transboundary water resources with India. With an engrained legacy of land border disputes, this creates a significant localised risk for agriculture, industry and communities in the north and northeast regions of India.

Population growth, urbanisation and changing lifestyle present serious challenges to water security. The rapid increase in the Indian middle class who has resources to avail and access lifestyle products and services which require water and exerting more stress on the available water resources (Sinha 2012).

ii) Quality of Water

Apart from the consideration of availability of adequate quantity of water, the main problem in India is that of poor water quality, and its consequent health impacts. More than 21% of communicable diseases in India are due to unsafe water which also is the single largest reason for child mortality in the 0-5 age group. According UNICEF Report (2006) about 1.5 million children below the age of five years die each year from water-borne diseases specially diarrheoa. India's current waste water management systems are inadequate. UN MDG statistics highlight that in 2008 the total percentage of the population with access to improved sanitation facilities was 31 per cent[3]. According to the World Health Organization, half of India's morbidity rate is related to water. Availability of safe drinking water and sanitation is still a major issue in both urban and rural India. Microbial, fluoride, nitride, arsenic and salinity contaminants have created water quality problems all over the country (Fletcher, 2002). The phenomenal growth of the bottled water industry in India during the last decade is a direct result of poor water quality. It is estimated that the poor water quality in India is reducing its GDP by some 5% to 7%. Globally less than 8% of water is used for drinking. In India, it is even less (Gupta & Biswas, 2012).

iii) Waste Water Systems

The municipal wastewater system in India currently has the capacity to deal with 11,000 million litres per day. Current estimates show that 38,000 million litres per day of wastewater are generated in Indian urban centers with more than 50,000 people. This category holds 70 per cent of the urban population. Wastewater produced by urban centers' is estimated to increase to more than 50,000 million litres per day by 2050, while rural wastewater generation will cross 50,000 (Status of Water Quality in India, 2010).

iv) Pollution by Industry

The industrial and energy sectors have contributed greatly to the pollution load in India. Poor environmental standards have resulted in industries such as thermal power stations, chemicals, metal and mineral mining companies, leather processing and sugar producers to introduce toxic and organic wastewater into ground and surface water. Industries and power companies are expected to increase their demand for water to 18 per cent of total requirements by 2025, with corresponding increases in pollution

3. (Access to improved sanitation in rural areas is 21% l & urban is 54%).

(Kumar et al., 2012).

III.c Impact of Past Policies

The first 'National Water Policy' (NWP) was published in 1987 in response to a severe drought. The main principles outlined in this policy were, conjunctive use of water from surface and sub-surface sources; supplemental irrigation; water-conserving crop patterns; water-conserving irrigation and production technologies; raising canal water charges and promoting user participation in canal management. The NWP was altered and updated in 2002. Some of the major changes to the policy were an explicit recognition that there was a role for the private sector to play and change from concentration on new projects to maintenance of existing ones (Vargese 2012). The Report on India's Water Economy (2005) states that, "The state has generally responded by proposing new supply schemes (a new dam, a desalination plant or a rainwater harvesting scheme) which will "solve the supply problem". What is becoming increasingly apparent is that in the growing number of areas where water is already scarce, it is a zero sum game. These schemes increasingly solve one person's problem at the expense of someone "downstream" (p. 8). Such measures are generally expensive and seldom generate sufficient revenue to cover their cost. Thus, the fiscal burden for such interventions inevitably falls on taxpayers, adding more pressure to public budgets (Sinha 2012).

III.d Formation of Draft National Water Policy (NWP) 2012

The growing demand for water is, unlikely to be met by primarily focusing on either the new water resources, or expanding the existing water resources. The need is to change the way water resources are used, consumed, priced and managed, as the societal needs change. It is in this context the Ministry of Water Resources; Government of India on January 31, 2012 released the Draft National Water Policy (NWP) 2012. The Draft Policy seeks to replace the current one that was adopted in 2002. The objective of the Draft Policy is to take cognizance of the existing situation and to propose a framework for creation of an overarching system of laws and institutions and for a plan of action with a unified national perspective.

The draft NWP (2012) addresses the same issues that have been underlined in previous policies. It accords pre-emptive priority for safe and clean drinking water and sanitation for all, and prioritizes meeting water requirements for ecosystems. Recycling and reuse of water is incentivized. The

policy stresses water use efficiency improvements across sectors — in agriculture, industry and urban domestic sector, and improvements in rural water supply, waste water treatment and re-use of treated waste water. To a great extent the policy advocates privatisation and commodification of the water sector.

III.e Areas of Policy Discrepancy

A closer look at the policy shows several areas of discrepancy which require immediate attention.

a) Articulation of Water

Despite India being a signatory to the United Nations General Assembly Resolution on the Right to Water in 2010 water is not articulated strongly enough as a fundamental human right. In fact, while the draft water policy suggests that "water for such human needs should have a pre-emptive priority over all other uses," it does not give any clear guidelines stipulating either quantity and quality of water or other parameters that mandate specific service standards. Without any safeguards and legally binding mechanisms for ensuring that water supply systems are accountable and effective, there is very little chance that this pre-emptive prioritization will result in ensuring access to water for all in India. It is important to note that the 2002 policy, too, had emphasized ecosystem needs, and stated that minimum flows will be maintained in rivers. Vargese (2010) draws attention to the fact that in the absence of legally binding mechanisms or safeguards to protect the minimum flows over the last ten years, the situation has, if anything, worsened. Rivers have turned into sewers and aquifers depleted at a higher rate; wetlands and other water bodies have been encroached upon; riverbeds have been mined for sand, reducing the rate of water percolation into aquifers.

b) Role Shift

While Draft NWP 2012 recommends a few institutional mechanisms to support the prioritization of basic human needs and ecosystem needs, it does suggest various institutional mechanisms to strengthen the current treatment of water as an 'economic good'. The policy states, "That the *Service Provider* role of the state has to be progressively shifted to that of a regulator of services and facilitator for strengthening the institutions responsible for planning, implementation and management of water resources. The water related services should be transferred to community and/or private sector with appropriate *Public Private Partnership* model"

(Section 13.4, p. 29). It is significant to note the clause relating to the same theme in the 2002 policy, states: "Private sector participation should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible (NWP 2002, p. 6)." The move from a provisional statement in the earlier policy to a definite decision in 2012 is of enormous significance to prove that the government is keen on the role shift which is barely justified. Rather, it goes against all the accumulated evidence of the last ten years to prove the follies which privatisation has created in the water sector (Dharmadhikary 2012).

The Indian Government's latest thinking is in line with John Briscoe, Senior Water Advisor, World Bank. Besides advocating for an economic valuation of water, he also effectively advocated that the state renege its responsibilities to supply water to its people. For example, in *India's Water Economy: Bracing for a Turbulent Future (2005)*, he argued that "the role of the Indian water state must change from that of builder and controller to creator of an enabling environment, and facilitator of the actions of water users, large and small" (p. 7). It appears that the government has seriously considered his advice and accordingly the draft NWP 2012 proposes a limited role for the state in public services. While other parts of the world are bringing water services back into the public realm due to negative experiences with privatization, India's proposed new policy is heading in the opposite direction by suggesting that the 'State' should function simply as a regulator or facilitator, and that service delivery should be handed over to local communities or private sector, instead of exploring how to make 24/7 delivery possible by strengthening the capacity of the public sector.

c) Cost Recovery

The draft policy advocates "full cost recovery" of water used as the means for achieving efficient use of water. For example, as a means for reducing water use in agricultural sector, it proposes doing away with the irrigation subsidy. This totally disregards the possible impacts of this approach on local food security or rural livelihoods. While full cost recovery will in general help meet the costs of water delivery, it does not deter water use amongst those who can afford to pay! In that sense, full cost recovery works particularly against lower-income groups, and groups that use water for activities that have low economic returns, such as subsistence agriculture. Full cost recovery needs to be accompanied by protection of the right to water for basic needs, including that for basic livelihood strategies.

d) PPP/Privatisation

Many problems of PPP/privatised projects emerge from the essential contradiction between the motives of a private company and the societal obligations. Often, an argument is advanced by the Government and other votaries of privatisation that we are not privatising water, but only involving private parties in managing it and providing related services. In effect, this argument has little relevance as the projects with private sector participation lead to many major problems even without privatising the water or water resource. There are evidences to support that most private water projects will result in some sort of de facto ownership of water by the private operator, mostly through earmarking of the water for them or by creating a first right on the water resource. This is essentially because no private operator would undertake a project unless it is assured of its raw material i.e water. The most well known case is the case of Sheonath project in Chhattisgarh where the private operator had been allowed to construct an anicut (dam) on the Shoenath river to supply water to the Borai Industrial Estate. The operator promptly stopped the people from using any part of a 23 km stretch of the river, including for purposes like bathing, fishing and for small crops. Similar earmarking of resources is a part of most private projects (Krishnakumar 2003; Das & Pangare 2006).

Dharmadhikary (2012) discusses how private projects also create restrictions on the access of people to other water resources. In several cases, there have been attempts to shut down public standposts. In Khandwa (M.P.) BOT project where the city's water supply has been handed over to a private company for 25 years, the agreement with the private company includes a restriction that no competing facility will be allowed. What constitutes a competing facility is not defined, so this can well be stretched to mean private wells and other common water sources. This has been seen in other parts of the world, for example in Cochabamba in Bolivia.

It is evident since the last decade that governments at both, central and at state levels have tried to push privatisation in the water sector in a big way. High profile attempts to introduce privatisation in cities like Delhi and Mumbai had to be given up. Dharmadhikary (2012) points out that the Nira Deogarh project near Pune, slated to be the first privatised irrigation project could not move beyond the call for Expressions of Interest. A condition of the World Bank loan to the state of Madhya Pradesh requiring it to privatise 25 minor irrigation projects and a medium-size one has remained a non-starter since 2004. This failure of privatisation is essentially due to its inherent limitations and the fundamental contradiction

between water as a crucial element for 'survival & sustenance' and water as a means of 'profit'. Projects that did take off ran into huge problems. The flagship project of Tiruppur water supply-touted as a model in the early 2000s-today languishes due to lack of off-take and falling revenue, and has been asking for Government bailout. Only a handful of projects are trudging along.

There have been cautionary statements from high profile experts with regard to use of market mechanisms for water management. For instance the Chawla Committee[4] emphasised that there are multiple dimensions of water use and allocation "with the primary use being that of life-support". The Committee feels there is urgent need to have comprehensive national legislation on water (CANR 2011). Similarly in November 2011, the Planning Commission's Working Group on Urban and Industrial Water Supply and Sanitation for the Twelfth Five-Year-Plan (2012-2017) submitted its report. The Report (as cited in Dharmadhikary 2012) recommends that "Current PPP contracts in this sector must be carefully evaluated for lessons learnt before more schemes are sanctioned (para. 15). In fact, the real question is whether to make water systems work we need privatisation or more accountability? Such accountability would need to be in the form of a fundamental right of every citizen to water, legislative support to mandate quantity and quality of water and agreements/MoUs that require utilities to ensure quality of service. It is surprising that all this evidence, all the doubts and reservations have been ignored by the Government to bring in an unequivocal push for privatisation.

The attempts to push privatisation has not only led strong protests and large scale resistance, but has time and again suggested to make the public sector more accountable, efficient, and unambiguously enshrine water as a fundamental right, thus asserting the social obligation of the State for its provision.

e) Incentivisation

It is of importance to note that in the Draft NWP Policy in the area of water quality conservation, the important "polluter pays principle" has disappeared. It has been replaced with "incentives" for effluent treatment and reuse of water. Vargese (2012) emphasises that while reclaiming wastewater it is

4. Committee on Allocation of Natural Resources constituted by Government of India on 31 January 2011, under the chairpersonship of Shri Ashok Chawla, former Finance Secretary, Government of India

necessary to bridge the water deficit, in the absence of strong regulations to limit polluting activities, such incentives to polluters (to treat effluents), might work as a perverse incentive to pollute more. Such a tech-fix approach is symptomatic of the industrialized societies that squander away their resources. These are also opportunities for some of the worst water polluters to profiteer: Companies such as Dow Chemicals are developing patented water purification technology.

f) Sectoral Priority

There is no explicit list of prioritisation amongst various water uses in the Draft Policy 2012. Section 3, on *Uses of Water* indicates that water for human survival and for ecological needs would have the highest priority. Section 3.3 adds: "After meeting the minimum quantity of water required for survival of human beings and ecosystem, water must be used as an economic good with higher priority towards basic livelihood support to the poor and ensuring national food security" (p. 9). In other words, water needed for basic livelihood support for poor and for food security has been treated as an economic good. In the context of NWP treating water as an economic good, the use of economic principles, suggests that net marginal returns from the use of water is to be a basis for fixing prices when used for "production" for affordability. For instance the marginal returns from the use of water in manufacturing are much higher than that of crop production. This means, the manufacturing sector will be able to pay prices much higher than what irrigators can pay. So, if we blindly follow this "affordability" criterion without rules and mechanisms for water allocation, industries might be able to walk away with all the water in some really water-scarce basins. This will be at the cost of living of millions of farmers.

g) Pricing

The implications of the above are hidden in Section 7 (p. 17) that deals with pricing of water. Section 7.1 says: "Over and above the pre-emptive uses for sustaining life and eco-system, water needs to be treated as an economic good and therefore, may be priced to promote efficient use and maximizing value from water (p. 17)." The words "maximising value from water" essentially mean monetary value, and indicate a shift to commercialisation of water. Such an objective of maximisation of value jeopardises livelihoods and food security related activities, as these often do not create as much monetary value as other activities.

Water pricing is a broad-term and has got many connotations. There is a need to make distinction between price of water (as a "resource") and

charges for water-related services (like domestic water supply, irrigation water supply). While the first could consider the resource cost (value in alternative uses), the second concerns the cost of appropriation and supply. How these concepts affect the pricing of water from different sources and in different sectors (economic, social and environmental) needs to be spelt out. Since in the case of groundwater, the resource is mostly in the private domain, only "the resource cost" needs to be considered. Whereas in the case of surface water from public irrigation schemes, both cost of appropriation, distribution and delivery, and the resource cost need to be considered. These aspects do not find mention in the document. Also, the criteria that will be used for pricing of water for domestic uses, which are "non-economic", need to be explicitly stated. Can we go by the "long-term marginal cost" pricing principle? In that case, the resource cost and environmental degradation due to its use will have to be considered along with the cost of production and supply of water. While this will ensure cost recovery and efficient use, how do we ensure that the poor are able to access water of sufficient quantity? If NWP 2012 is unlikely to protect the basic right to water, it begs the question: Who are the advocates and beneficiaries of these policies?

h) Trading in Water Entitlements

While the Draft Policy does not explicitly talk about such trading in water entitlements, it should be noted that the first Water Regulatory Authority in the country, set up in Maharashtra, under World Bank pressure, has the explicit mandate to facilitate such trading in water entitlements. The provision in the Draft Water Policy (Sec 13.1, p. 27) calls for setting up Water Regulatory Authorities in each state, read with the provision of treating water as an economic good to maximize value should leave us in no doubt that what is being envisaged is a transition to a full-fledged market system for the operation of the water sector. This is likely to pose a grave risk to both livelihoods of the poor as well as food security of the country. In this sense, the Draft Policy is not only clearly anti-poor and anti-farmer, but also more generally a threat to the interests of the larger population.

Agenda Ahead

There is no dispute on the fact that Government of India is concerned about water security. But, the problem is only perceived as that of supply management. The concerns today are no longer limited to water security and access to water, but are also linked with energy justice and food security for all, as comprehensively defined in the right to life and dignity in the

Indian Constitution. The approach is also misplaced since the vast majority of India's population is dependent on natural resources. There is an unfortunate focus on urbanisation and urban-centric development, which neglects the largest chunk of population residing in rural areas. After the release of the final draft of NWP 2012, each Indian state is expected to draft its own State Water Policy (SWP) within two years. The overarching perspective of SWP must take the ecology and social justice perspective, with all other perspectives subordinate to these. The drawing up of any new policy must be participatory and as inclusive as possible. There must be special emphasis on including marginalised groups in the process including the tribals, poor rural and urban communities and so on. This will ensure that decentralised community-controlled water systems that respect the local agro-ecological conditions of the area are institutionalised. Additionally, the issue of pollution and water treatment should be given top priority.

The 'Right to Water' has been recognised as part of international law and States are required by the Covenant on Economic, Social and Cultural Rights to legislate for that right. Pressure must be brought on the Indian government at the national and international level to legislate for this right. A 'Right to Water Act' would mean that current government policy, which is now an impediment to people accessing this right could be challenged and future policy would have to be written with a view to respect this right. The drive to achieve water justice and equity must look beyond the access to drinking water in rural and urban areas and take back the right over water from corporations that are selling our water to us in bottles and other products.

More concrete and immediate action is required to put a moratorium on to the approval of any more thermal power plants, big dams and mining in ecologically sensitive areas. In addition, hydro and energy projects that have already got clearance, but have high social and ecological costs and are opposed by communities, should also be put on hold. Until there is a thorough review of the all the planning and approval mechanisms, the government should say "no" to big infrastructure projects. The futures of the water and energy industries are inextricably linked. Increased energy demand will require more water, which utilities may struggle to provide. Increased water demand, especially in areas of scarcity, will lead to higher energy costs and additional investment in water infrastructure. This symbiotic relationship can no longer be ignored. There is an urgent need for closer collaboration between these two sectors. In the energy industry,

when planning and developing new project, the impact on water resources and requirements should be minimized. At the same time, the energy requirements of individual water projects should be kept as low as possible. There is a complete lack of holistic planning within the different ministries at the centre and State levels, which are granting permissions for big highways, dams, thermal power plants, mining, steel plants and other infrastructure projects.

Communities can decide for themselves the best use of the natural resources if provided enough support by the government. The micro-level planning to conserve water, restoration of the small dykes and traditional water structures, promotion of less water and chemical-intensive agriculture will improve village level economies. A mixed use of different energy sources and decentralised production of electricity will also mean a reduction in the number of thermal power plants needed. A combination of these measures will ensure, to a large extent, access to water, land and forests in rural areas. This requires a strong political will from the government. Even though the government has adequate knowledge to implement many of these measures, changes are blocked by the larger economic policy direction being pushed by the international financial institutions in close collaboration with the Indian multinational corporations that are seeking to exploit and increase their profits.

If there has to be any bias towards a section in water allocation then it should be towards the poor, farmers, fisher folk and other sections of society whose lives and livelihood are directly related to water. The right to clean water is a fundamental human right of everyone and cannot be held hostage to the profit motives of corporations. The government of India should prepare a plan of action in line with the commitments made at UN so that the right to water can become a reality like all other fundamental rights enshrined in Indian Constitution and the Universal Declaration of Human Rights.

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