



RESEARCH PAPER

Interstate Water Politics: An Analysis of Indian Case Water Governance in India

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PAPER INFO

ABSTRACT

Received:

April 20, 2020

Accepted:

June 15, 2020

Online:

June 30, 2020

Keywords:

Water-Sharing
Conflict, Water
Scarcity, Inter-
State Water
Disputes, Indian
Water Policy,
Interstate Water
Tribunals, IRWD
Act

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This article examines issues and conflicts related to water among Indian states. Rapidly developing Indian states are competing among themselves for propriety of mutual natural resources in which water is at top. Distribution of water or building water reservoirs over mutually shared rivers are issues among Indian states, even some territorial parts of states demand for separate state-status due to their complaints against mother state for depriving them from water. The paper finds that federal and state governments have worked to address the water problem with legislation and by establishing different water bodies; however, a permanent policy is lacking. A better and viable federal framework according to international standards is needed. Experts claim that if the situation is not addressed efficiently water sharing issues may lead to water scarcity in many areas and consequently serious political crises among and within the states. The Paper suggests that the water problem in India can be solved by involving all stakeholders within a win-win paradigm that will have positive implications for its water sharing approach with its neighbors

Introduction

The policy of Competitive Federalism in India is under process. States are competing for allocation of funding and huge economic projects which could bring both; revenue to the states, and jobs for their inhabitants. Industries are likely to locate in regions or areas where power, reliable infrastructure along with water is available. Though federalism promotes the values of cooperation and individualism at the same time, however, competition animosity has superseded the cooperation in case of sharing the resources like water so a state does not fall behind in attracting funding. India has about thirty major rivers along with more tributaries. Almost all states have rivers flowing within, and the majority of states share one or more rivers with each other. Dispute over water sharing among states is a major problem for Indian Union.

Scholars have noted that conflicts over water sharing were present in South Asia since long for example, one of earliest water conflict in the subcontinent was recorded in famous Gautama Buddha Kappiyam: a conflict over sharing water of the Rohini River between the Sakyan and Koliyan clans which according to Dr. Ambedkar was the cause of Buddha `s leaving home (Mehta, 2012). In the 16th century Akbar ordered to build his dream city of Fatehpur Sikri in North India with the help of famous artisans, but due to water scarceness, he abandoned it just after 13 years (Oudshoom 1997). Dispute over the Kaveri River is centuries old. In the colonial period Presidency of Madras and the State of Mysore contradicted over the sharing of Kaveri water. In 1881 and again in 1924 the British government made Mysore and Madras sign the water sharing agreement. In 1956 this conflict arose again. Even tribunals could not have succeeded to resolve the dispute. Bikram Dit De (2012) claimed that Teesta and Ganges water dispute with Bangladesh has its origin in colonial days.

At present Indian Union has twenty-nine states, most of which share rivers. Major interstate disputes are related to the river water distribution. The two grounds for disputes are; first the building of dams by upstream states without consent of downstream states, second the allocation of water quota among states who share the same river. When a new state is carved out from the old one, the new begins to quarrel over resources in which water sharing is common. Water related interstate disputes are becoming alarmingly intense, although continuous efforts are being made to resolve them. The main reason is that other water related problems also sided with this issue and determined the attitude of states over any water related problem.

India has other major water related issues like the rapid groundwater depletion, continuous increase in all types of water pollution (Pattanayak, 2015), and illegal dumping of waste in rivers and oceans, and finally the overuse and storage of river water is endangering the environment in lower riparian states. The drastic damages of the ecological system could be witnessed due to construction of numerous dams (Cain, 2014). The first section of the article will discuss the nature of water related issues and why they are swelling, and the second section will focus over the inter-state water sharing disputes along with measures taken by the Union government to handle them. The last section will give suggestions to

Section I

Rapid Urbanization & Industrialization

Population in India is not controlled at all even with huge campaigns of population control. According to the UN, in 1947 the Indian population was 330 million and has reached 1.368 billion in 2019. It is estimated that within three to four years, it will leave China behind. Growing population upsurges the per capita water demand, especially with the increase in the middle class, and urbanization. In 1985 about 10% Indian population fell in the middle class, however in 2030, it will be 70 to 90 million families. In 2050 half Indian population will be living in

urban areas. Moreover, economic development has its effects on dietary habits; more vegetables, fruits, poultry, meat, fish and milk are used than before.

Rapidly growing cities and urban dwellings have put a continuous pressure on the water supply in these areas. Especially in summer water demand is doubled, due to which the states are continuously under pressure. Drinking water scarcity in many states and populous cities has transformed into serious crises that it many times became a reason for the unpopularity of a state government (Singh, 2014). Private companies are involved in the water business to improve the water provision in urban areas by many states. Yet states have not achieved the target of providing safe drinking water to every citizen. Many water utilities are either financially bankrupt or have huge transmissions and distribution losses as high as 50%. Usually it is estimated that 50 to 40 % of drinkable water is wasted in Delhi only during distribution or transmission (Asthana, 2008). Increasing degradation of drinking water is another huge issue. River water in whole India had become undrinkable. Water cleaning projects are introduced by the union and state governments, yet no improvement is seen (Shah, 2004). Water in India is contaminated and about 5 million citizens, mostly in West Bengal are likely drinking water with concentrations of arsenic greater than national standard of 50 ug/1 (Mehta, 2012). Governments have spent millions on pollution cleanup, but no changes have been seen. Therefore, water quality is also an issue due to non systematic treatment of sewage. Industrial and domestic water waste treatment have not been achieved. Beside industrial waste; fertilization and pesticide use is also a major cause of water contamination. A large quantity of untreated wastewater is incorporated in rivers which are polluting both surface and groundwater causing health issues throughout the whole country.

Almost every river is contaminated to some extent. Combination of sewage disposals, industrial effluents, chemicals from farm runoffs, arsenic fluoride has rendered Indian rivers unfit for drinking, irrigation or even for industrial use. Water related disease diarrhea almost affects 4.6 billion annually and about 2 lakhs Indian die every year due to unsafe water related disease. Reasons are simple; water borne diseases have increased due to inclusion of human and animal fasses through leaky pipes, obsolete infrastructure, or unhygienic handling. Industrial waste or agricultural runoffs are the other major causes (Mehta 2012) though Indian water standard goals are set according to the international standards, but could not have been achieved yet. Economic growth has its own side effects. Industrial development has increased both, demand for water as well as generation of waste water at an alarming speed. Manufacturing of products, construction of infrastructure, and power production process also need a continuous delivery of water. Hydroelectricity counts for about 19.3 % in India electricity production. Water is also required for cooling purposes in power generating sources.

Agricultural Water Usage

India as an agricultural country is under pressure to provide food for the growing population. To increase agricultural production, water supply has ever been the focus of policy makers. Major sources of water for agricultural use are rainfall, rivers, dams, water tanks, watersheds, and groundwater. India owns the largest irrigation structure in the world moreover it is the largest groundwater user in the world. India uses more groundwater than China and USA, which is 25% of the total world's ground water, about 230 cubic km per year. Water used in agriculture is also not without problems. Slitting of water reservoirs, rapidly depleting ground water, lack of electricity as per demand, contamination of water by pesticides and fertilizers are some of the major issues (Bharwada & Mahajan, 2002). More than half of under cultivation land are still irrigated by rainfall (Ashok Gulati & Banerjee 2016). Change in climate is altering the ratio and pattern of rainfall, for example water availability by Brahmaputra basin, and in South Pennar Basin have lowest per capita availability of water which used to provide highest rate of water in the past. Moreover, quality of rain is continuously falling.

After independence, rapid construction of dams and the policy of low price of electricity for agricultural use encouraged sinking of electric wells to extract groundwater especially in the Punjab and Haryana. Ground water is the easiest and safest way of water provision for the whole year. However groundwater extraction was done without keeping in mind the environment safety and underground water reservoirs safety, which has resulted in depletion and degradation of ground water reservoirs (Spade, 1994). Now ground water level in whole India and especially in the north-west has been decreasing at an alarming rate. In 2013 alarming groundwater depletion was noted in the Punjab (Kulkarni & Shah 2013).

The Power Production Projects

Demand for electricity is far ahead of its production due to speedy economic development and growing urban middle class. Dam construction is considered a cheap solution for power generation as well as water provision to canals during the whole year (Naryanamorthy, 2013). About 477 dams are under construction and numerous large and ambitious projects are in the pipeline. Majority of these water reservoirs are either controversial between upstream and downstream states or between India and its neighbours. A huge project of Indian Rivers Inter-link Canals will interlink thirty rivers of India through a civil engineering project of canals and dams. The plan is that through this project flooded areas water could be transferred to water deficient areas, however some states are resisting and refusing to complete their part of Indian Rivers Interlink project. Such projects caused huge migration, extinction and destruction of historical places (Mary, 2006).

In June 2005 World Bank's report stated that performance of river irrigation is poorest. India's water economy is bracing for a turbulent future because cost of

replacement and maintenance of Indian water stock resources, irrigation infrastructure would be about \$ 4 billion a year which is about twice the annual capital budget in a five year plan.

Section II

Inter-State Water Sharing Disputes

According to Gulati and Banerjee (2016) in 2014 and 2015, India faced drought. In this period, Maharashtra's Marathwada region was affected severely especially the Latur district. Reservoirs went down even less than 6%, the situation became serious and the government had to implement section 144. 'Special trains' carrying water were sent to the district. High court was requested to order that IPL matches would not be conducted in Maharashtra to save water. That drought hit other 250 out of 678 districts of India which were about 37% of total districts (Naryanamorthy, 2013). Water became more crucial in summer and monsoon, demand for water increased in many folds. When local administration failed to provide water sufficiently, criticism over governments increased too. Growing media used the opportunity as agenda setting. Protests broke out against the federal government, upstream states or against the state government. Opposition parties also use this situation to increase their popularity among masses, in response the government asked experts and policy makers for their advice who in return accused "the scarcity of water". Is India really water scarce?

Many scholars and technical experts have claimed that the water issue in India and among its states is due to the scarcity. However, there is a difference between water stress and water scarcity. Water stress is when a country's annual water supply is below 1700 cubic meters per person. We call a state water stressed when the water supply is between 1700 to 1000 cubic meter per person. However, when water supply drops below 1000 cubic meters per person then it is called scarcity and it can threaten food production (Mehta 2012, Prhabu, 2012). India is not water scarce, nevertheless it is water stressed due to disorganized planning, mismanagement and inefficient and over usage. However, Indian neighbours like Pakistan are becoming water scarce due to Indian control of River water and torrent water control. Limitless ground water extraction from the western areas near Pakistani Punjab is decreasing the ground water level in Pakistan.

Interstate conflicts over the allocation of water in India have triggered many protests, violence and destructive actions. A severe criticism has erupted that the water policy of Indian government is poor in nature. Inadequate availability of water is criticized, and often blames are laid upon each other. At present water conflicts among states are the biggest challenges (Tortajada, Saklani, & Biswas, 2018). These challenges are considered a threat and hindrance to the economy and social solidarity of India. Politicians and media use the water issue to criticize states and the federal government. States governments also use water related problems against the federal government. Whereas the federal government is

accused of using water tribunal decisions against unfriendly state governments. Experts and political scholars were for a long time advocating federal government to do advance legislation and take the water being a national wealth.

Inter-State Council (ISC)

An Inter State Council (ISC) was established in 1990 under article 263 as a constitutional body to provide a platform to discuss or resolve disputes among states within a timeframe. Prime ministers and chief ministers of all states are its members. However regular meetings of ISC were rarely held. The Modi government under its slogan of cooperative federalism inspired by the US model targeting improvement in performance at sub national level decided to activate this council and ISC met in 2016, and its 13th meeting was held again in May 2018. States are competing for investment opportunities therefore, funding patterns are changed; states have greater autonomy in designing their development programs. 14th Finance Commission report has recommended increased share in taxes from 32% to 42% from Central funds to states, giving much greater fiscal autonomy to them. The autonomy has left little for states to blame the Centre for their poor performances. States are competing in programmes like smart city, Rashtriya Krishi Vikas Yojna (RKVY) or National Agricultural Development Scheme. The main feature of these schemes is that the Union government provides Central assistance if the state is successful in maintaining or increasing the percentage of its expenses on agriculture or related sectors. An improved infrastructure can charm funding from the Union government and investment from the private sector as well. However this continuous progress has kept and increased the intensity of inter-state water rivalry.

Role of Federal Government in Water Disputes

Intensity of Inter-State water disputes caused criticism over the federal government. Prabhu (2012) commented that an inconsistent water policy has caused difficulty to implement a holistic policy in India. However, if we observe keenly it has served well to both Indian interests internationally and internally. Direct grievances against the Union have not arisen. According to the Indian constitution states are responsible for dealing with their own water issues. However the Union government has the mandate and is responsible constitutionally to resolve the inter-state issues that arise out of water use of interstate rivers. The Union government has established departments to provide the technical support for large projects in power generation, irrigation, navigation and drinking water. There are about eleven water related institutions at Central level named ministries, departments, boards, and commissions. Jurisdictions on water issues are made by commissions such as Central Water Commission (CWC), and Central Groundwater Authority. Moreover, all state governments also have similar departments at state levels such as the department for drinking water, minor irrigation, hydropower projects, and environment monitoring departments.

Indian constitution has acknowledged water as a state subject; however the federal government can also work beside states to increase the availability, quantity, and quality of water in public interest. It had established numerous ministries and departments to deal in different water related fields. A general opinion in India is that there is no mechanism which could provide a permanent and efficient resolution of water disputes among states. Article 262 of the constitution provides opportunity to states to work on their own before engaging in any adjudication under IRWD Act (Inter State River Water Disputes Act) passed by Parliament in 1956. It stated that when states could not mutually solve an issue between themselves then a tribunal by the federal government would be set up to solve it. This mechanism is for every individual case, and not as a permanent guide for every case. However water related treaties with neighboring countries requires ratification from Indian Parliament.

Tribunals have taken a long time during which states went on a no return stage. Biswas (2018) criticized the tribunal method, saying that it heightened state rivalries because it does not provide a sustainable and long term solution. Tribunals have failed to resolve river water disputes. They are ambiguous and inconsistent in their working while disputes require uniform and logical decisions to be accepted. Sometimes tribunal worked against international practices or against earlier verdicts given by other interstate tribunals on the same river to the same parties, thus leaving disputed states unsatisfied. Affected states often express their suspicion of impartiality of Award and rationale or fairness of the trail.

The Water Policy of Indian Government

First Indian water policy was introduced in 1987 by the union ministry of Water Resources. It was revised twice, first in 2002, and then in 2012. In 2012 it was decided to use water as an economic good. It was planned to improve the quality and usage efficiency. Privatization in water supply, especially in the field of drinking water was encouraged. However, critics claimed that it did not prove reasonably successful. Water should be treated as a social welfare commodity and not as an economic one (Narasiman & Gaur, 2010). The policy also did not give clear rules related to commercial use of water, especially about groundwater, which is rapidly depleting (Levermann et al, 2009). Many states did not approve the new policy in 2012.

Constitutional Status of Water Dealing

The race to develop water projects has become a cause of contention between upstream and downstream states (Lachman et al, 2016). Water was made a state subject in Indian Constitution of 1949. Under the II State List, in the 7th Schedule of the constitution. If two states have disagreement and could not reach a decision, article 131 provided the apex court to decide between conflicting states. However in 1956, Inter-State Water Dispute Act was passed by parliament which

provided under article 262 to the federal government to set up a tribunal to decide between disputing states.

Inter-State River Water Dispute Tribunals (IRWD)

The Tribunals were to be set up to deal with case by case. In 1969, three tribunals were set up to decide inter-state disputes over the waters of Godavari, Krishna, Narmada, Ravi and Beas rivers. It should be noted that the tribunal method did not prove effective and only three Awards which are mentioned above, could be finalized, others are still in process. Following tribunals were established under the IRWD Act of 1956.

This tribunal was set up in 1969 to resolve the issue of Godavari and Krishna water distribution among states of Karnataka, Orissa, Maharashtra, Andhra Pradesh, and Madhya Pradesh. There are numerous large and small dams built over these rivers by contradicting states. The Award created more resentments than resolution of the dispute. This tribunal was set up to resolve the dispute over use of River Krishna also among undivided Andhra Pradesh, Karnataka and Maharashtra in 1969. The Award was given in 1976. It has the same results as the Godavari Dispute. This tribunal was set up in 1969 to settle the quota for Rajasthan, Maharashtra, Gujarat, and Madhya Pradesh from Narmada River. Rajasthan was non riparian, but it was granted a share of water from Sardar Sarovar Dam, which was resented by others. The Ravi-Beas Tribunal was set up in 1986 to decide the share of Punjab, Haryana, and Rajasthan. Tribunal reported in 1987, whereas in 2004 government of the Punjab under Punjab termination of Agreement Act (PTAA) and discharged the state government from its obligations under 1981 agreement. Government of India considered the act against the Indian Constitution. The tribunal was constituted in 1990 to determine the water quota from Cauvery Basin among Pondicherry, Tamil Nadu, Kerala, and Karnataka. All are critical for the dam making by the upstream states because it has drastically reduced the portion of water in downstream states. The award was given in 2007 but the state parties have filed a petition in apex court.

Krishna Water Dispute Tribunal II, This tribunal was constituted in 2004 to decide the Water quota from River Krishna among Maharashtra, Telangana Maharashtra, and Andhra Pradesh, Orissa and Chhattisgarh and its first decision was declared in 2010. It was unacceptable as usual. The Supreme Court had stopped the publication of the award in 2011 by giving the ruling that an application was submitted in the apex court. The term of Krishna tribunal II was extended for two years, then again for one year. The government of Telangana filed a petition in the Supreme Court and the matter still exists. In 2010, a tribunal was set up to decide the dispute related to Vamsadhara River water between Orissa and Andhra Pradesh. The Tribunal was made controversial when state parties blamed the impartiality of members of the tribunal. In 2013, the first judgment came out however it was soon criticized and the next decision yet has to come. Orissa filed Special Leave to Appeal in 2014 therefore the decision is still pending.

The Disputed Water Projects

Most interstate conflicts are over building the power generation projects, reservoirs, or changing the course of river flow. Every Tribunal has a long story behind it of feelings of deprivation, victimization, and deception from the upstream states in downstream states. On the other hand, upstream states felt that they were bullied and blackmailed by downstream states that created hindrances to stop their water project resulting in slowing their progress.

The Following are some examples of disputed projects.

Kelo Project

A recent tussle is between Orissa and Chhattisgarh over Mahanadi. Chhattisgarh as upstream state and is building dam under Kelo project and Orissa already a water stressed state is aggrieved and complained that it was not consulted before starting the project and filed a case in High Court which directed both Union and State governments to explain their efforts over Mahanadi *Bachao Munch* campaign. All political parties exploited the issue during 2019 elections. Still no solution has been reached.

Dibang and Babhli Dams Project

The Dibang dam project in Arunachal Pradesh was planned in 2006. This huge project will provide hydro-electricity as well as work as a store of monsoon flood waters of Brahmaputra in Assam. State government expressed its concerns moreover forest advisory committee of environment rejected it on the ground of its negative effects on ecological life and climate in a biodiversity rich area of Himalaya in 2013 and then again in 2014, however in July 2019 Modi cabinet allocated funds for the project which will be completed in nine years.

Babhli Project/ Barrage is a controversial reservoir made by Maharashtra across Godavari River. If this project was allowed to complete hundreds of thousand acres of Telangana would become barren therefore, it took the case to the Supreme Court. The Apex court decided in favour of Maharashtra

Sutlej Yamuna Link Canal (SYL) Project

This project was planned to link both rivers, the problem started when in 1966 Haryana was carved out of the Punjab. Yuma River also went to Haryana because it was located in it. However, when in 1976 Congress government gave a ruling related to water sharing between both provinces Punjab became aggrieved. In 1979 Haryana approached Supreme Court, soon Punjab challenged it with another civil suit which converted into a battle between two states. Same but more controversial strategy was adopted by the Punjab when it passed the Punjab Termination of Water Agreement legislation in 2004, and again in 2016 the Punjab

Sutlej Yuma Link Canal (SYL) Canal (Rehabilitation and Re-vesting of Proprietary Rights) Bill in response to growing pressure from Centre and judiciary to complete SYL Canal construction. Both cases show that state governments could go to fight for even to violate Indian constitution.

Conflicts over water have increased the sense of deprivation and anger among minority groups. It might be started balkanization of states for water, especially important for human survival and integral for economic development. Water has assumed a role of weapon. This is true in case of Ravi Beas conflict between Haryana and Punjab over the construction of Link Canal towards Haryana as a part of Inter-Link Canal Project. On the other hand Punjab is continuously involved in the dispute with Haryana on water allocation, both are immediate competitors. This dispute has been affecting progress in both states affecting their development and overall economic progress. Such issues have made states ignore mutual problems like sex crimes against women and children.

Inter-State River Water Dispute Tribunal (Amendment 2002) Act 1956

After receiving much criticism over the Tribunal method and their intentions of reconsidering the old decisions, the federal government decided to amend the Act. The Union government amended the 1956 Act of IRWD Tribunals in 2002. This amendment provided that tribunals cannot reopen the older cases already settled by older tribunals. After the publication of an award by a tribunal in an official gazette, it shall have the same status as any of the Supreme Court decree. Though the tribunals and central government were given more power in this amendment, however, it failed to bring any positive change in efficiency of tribunals or water conflict resolution.

Inter-State River Water Dispute Tribunal Act 1956 (Amendment 2019)

Recently Indian Parliament has passed the Interstate River Water Disputes (Amendment) Bill 2019. The bill was introduced in Lok Sabha on July 25 2019, and it was passed in five days i.e. on July 31 2019. According to this new amendment interstate water conflict will be dealt in two tier method under amended 1956 ISWD Act. State governments have to request the Central government to set up a water disputes tribunal for adjudication within a year of receiving a complaint. The Union government will set up a Dispute Resolution Committee (DRC), extendable for six months. This DRC will have to present its report to the Central government in a given time. If DRC cannot resolve the dispute, then the Central government will refer the case to the Inter-State Water Dispute Tribunal within three months of receiving the report of DRC. Second notable change is that tribunal setup by Central government would be one but will have many branches. This bill has critics also; local and opposition political parties have taken it as centralization of powers. The lawyers associated with disputes said that the problem was that the issue was kept even after the tribunal had given the award. Rivers are a complete ecosystem, while, tribunal took a river as a water channel. This approach failed to

meet both the grievances of people and states. The effectiveness of the new amendment could be observed after some time.

Disputes and Dealing with Neighbors

At present India have conflicts over river water sharing with almost all of its neighbors i.e. Bangladesh, Bhutan, China, Nepal and Pakistan (Prabhu 2012). In China's case India and in that of Bangladesh and Pakistan, later are lower riparian. Water supply depends upon upstream infrastructure. Ganges and Brahmaputra Rivers originated from China. China is building a dam in Tibet, and there is no water treaty between India and China (Holslag, 2012). BJP was in opposition then and demanded from the Congress government to ask compensation from China for taking water from Brahmaputra. Whereas, Farakka Barrage over Ganges by India, and Teesta River dispute has made Bangladesh aggrieved by Indian water policy. India takes more water than natural requirement therefore water flow level and lack of data sharing between both countries is detested by Bangladesh, which is facing floods and contamination dangerous arsenic water for its public consumption. In this case Bikramadit Je (2012) accused Bangladesh for not accepting undue construction of Indian Barrages.

Similarly Pakistan is a lower riparian to India and had signed Indus Water Treaty in 1960 with it. This treaty has given the rivers of Ravi, Beas, and Sutlej to India; however it gave Pakistan right over rivers of Chenab, Jhelum and Indus. Yet India is continuously violating the treaty by constructing dams over Chenab, and Jhelum as these Indus tributaries are reserved for downstream Pakistan, which is dangerously becoming water scarce. Salar Dam over Chenab, Wullar Dam of Lake Wular over Jhelum, KishanGanga, Baglihar, all are made without consent of Pakistan over the rivers whose water was granted to Pakistan (Baqai, 2005). Water flow to Chenab has decreased more than 40 percent in 2011 after Indian dam construction. Tarbela Dam of Pakistan is under danger along with the environmental security of the area (Wang Xu 2012).

Indian policy to provide electricity subsidy to use ground water sparingly in the states along Pakistan border has caused severe decrease of groundwater in both Pakistani province and Indian state of Punjab. Ratio of wells sinking near Pakistani border is ironically higher than any other area of India.

UJH Multipurpose Project

PM Modi while addressing a rally for election campaign in Haryana on 15th Oct 2019, declared that three rivers now flow to Pakistan, which actually belong to Indian farmers. His government will not let Pakistan use a drop of water from Chenab, Indus and Jehlum. His government has started to act upon the plan. UJH Multipurpose Project is another plan to halt water flow to Narowal district of Punjab, Pakistan by lifting ten million gallon water for Kandi belt. The Dam will generate 196 MW of electricity and would store about 925 cubic meters of water.

This project, on completion will leave hardly any water from the Uch River to flow to Pakistan.

Mahakali Treaty

While India has made Bhutan to sign agreements to build hydropower projects in Bhutan with its help and investment, which are generating about 25% GDP through royalty paid by India on electricity, Bhutan is providing it. India and Nepal signed a Mahakali Treaty in 1996 to build three dams and barrages over the Sharda River mutually. Sharda River makes a boundary between India and Nepal. Though often the opposition in Nepal accused Indian government of taking the advantage.

Section III

Conclusion and Suggestions

India is in the process of transition from developing to developed state. Population is concentrating in large cities where safe water has become a social issue. India is not a water deficit state; the stress over water supply is due to inefficient use and ever increasing demand due to rapid economic development. The dry season during crop growth, multiplies the sense of insecurity in the states. On the other hand, mismanagement and inefficiency add fuel to the fire. This situation increases the pressure over state governments which in trying to avoid criticism indulge in a race of building water reservoirs.

The major problem is not to store water, it's the increasing pollution, which increases, many folds when more than 70% water is stored and only less quantity is allowed to flow. Helsinki convention bars an upstream state to stop more than 30% of flowing water. It is estimated that 80 % of rural illnesses and 20% of children under the age of 5 year die due to unsafe drinking water. The lower riparian states are facing low quantities of water which contains fluorides, and other toxic materials. Water management in present days focuses on efficiency (Lachman et al, 2016). Whichever party first succeeds in getting and controlling the bulk becomes benefitted. Water conservation for precipitate water consumption is disingenuous and leads to mutual distrust and consequently reinforces other differences. The race to develop water projects has become a cause of contention. Traditional riparian system has weaknesses. It is not difficult to decide proportions in river water, but who will make states act upon the rules?

India needs to depoliticize water related policies and issues taking water as welfare commodity and 'common good'. The interstate grievances could not be met without involving interest of all stakeholders. No matter what is the nature of a tribunal or how powerful or quick they are going to decide, unless the ecological system, cultivators, state parties, neighboring states all are not included. Unless a holistic as well as a genuine effort is not present, there will be no resolution to disputes. Water-sharing is not a local issue in India. As it is already mentioned

that its five neighbors are also involved in the issue. Internal water policy has implications for external actions. Only economic development cannot include India in the group of civilized states; but respect and implementation of international Conventions at national level will help. The best solution of conflict is to act upon treaties.

Ross (2016) has pointed out that International Law is explicit about water distribution internally and internationally. Why then Indian constitution confused and the government reluctant to practice these laws to improve interstate disputes. India emphasized to use Indian traditions as common practice instead of European. A nondiscriminatory water policy practiced with neighbors will undoubtedly provide the federal government the moral stand for its internal actions. India can conduct international conventions related to water-sharing at internal levels, such convention will not only provide a better solution for the international community, but also will provide a guideline and healthier way-out for interstate water distribution policy. It will also encourage Indian Union to respect its water related agreements with its neighbors. If India wants to save its federation then it must have to follow a proper water policy not at internal as well as its neighbors.

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