Privatization of Water Sources and Its Implications in India

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Abstract **- The United Nations has recognized access to water as a basic human right, states that water is social and cultural goodness, not only economic commodities. Since ancient times, water has been universally recognized as a priceless resource. About 50 percent to 90 percent of the body weight of living organisms is water. So, water is as important as living things as the air we breathe. Water is a very important commodity for rural development. At present, due to increasing consumption patterns, water becomes scarce, and this scarcity is a threat that arises to the global population. Water problems, which were only local problems, have now become an international problem. Therefore, the water privatization involves transferring water control and / or water management services to private companies. Water privatization has been recommended by the National Water Policy of the Indian Government to overcome the problem of scarcity of water. Public partners are more responsive, reliable, and cost-effective than private water companies. Water problems are an ecological crisis and try to solve commercially will destroy the earth and increase inequality. Ecological problems must be completed ecologically.**

Index Terms **- Groundwater, Private sector, Surface water, Scarcity, water resources, Water Policy**

I.INTRODUCTION

The United Nations has recognized access to water as a basic human right, states that water is social and cultural goodness, not only economic commodities. Since ancient times, water has been universally recognized as a priceless resource. In 1781, British chemist Henry Cavendisk was the first to find that water was a mixture of hydrogen and air. Two years later, French chemist Andrs Laurent Lavoisier said the water was not an element; proven to be a mixture of oxygen and hydrogen. In 1804, France chemist Joseph Louis K. Lussac and Germanist Germany Alexander Von Humboldt proved that water contained two parts of hydrogen and one part of oxygen.

About 50 percent to 90 percent of the body weight of living organisms is water. So water is as important as living things as the air we breathe. Likewise, in 1800, around 2 hectares of land were irrigated for agriculture that produced food for humans. In 1950, it was 26 Crore hectares. So, according to the demand for irrigation water also increases. It transports land nutrients to leaves through the membrane on the roots during photosynthesis in plants. Without water, modern agricultural discovery will not be useful. Seeds produce high, nothing else includes useless chemical fertilizers. Without ground water it's just a desert. Water is a very important commodity for rural development. Despite a lot of debate about the negative effects of the green revolution technique, large-scale water demand is important hidden from farmers. At present, due to increasing consumption patterns, water becomes scarce, and this scarcity is a threat that arises to the global population. Global water consumption doubles every 20 years, more than double the growth rate of the human population. At present, more than one billion people on earth have lacked access to fresh drinking water. In 2025 the demand for fresh water is expected to increase to 56 percent above what water can be conveyed today if the current trend persists. Seeing the current world environment, India seems that farmers will give up control of local water sources. We can see signs of these people nationally and globally, and rural must be careful not to lose their water rights under anyone who is looking for personal profits.

Objectives:

- To study the availability of water resources in India

- To analyze the impacts of privatization of water sources

II. REVIEW OF LITERATURE

According to the World Resources Institute (2000), 92 percent of which water in India is devoted to this sector, mostly in the form of irrigation. Land accounts for 39 percent of water used in agriculture and the use of surface water often come at the expense of other sectors such as industrial and domestic supply. According to the World Bank, water demand for industry, energy production and other uses will increase from 67 billion m3 to 228 billion m3 in 2025. According to Professor Malin Falkenmark from the Swedish International Institute of Water, 100 liters per day (36.5 cubic meters per year) is a minimum per capita water requirement for our basic domestic needs. In India, from the urban population, 84.9 percent had access to clean drinking water in 1993 compared to 69 percent in 1985, but for rural populations, the figures fell from 82 percent in 1985.4 percent in 1993.

III. SOURCES OF WATER

- Rainfall - with an average annual rainfall of 1,170 mm, India is one of the world-sedated countries. At one extreme is an area like Cherrapunji, in the northeast, which is wet every year with 11,000 mm rainfall, and in the other extreme is a place like Jaisalmer, in the west, which receives almost 200 mm annual rainfall. Although the average rainfall was adequate, almost three-quarters of rain fell in less than 120 days, from June to September.
- Pounded groundwater resources - in India nearly ten times their annual rainfall. According to the Central Tanah Water Council of the Indian government, the country has annual groundwater potential which can be annually exploited by 26.5 million hectares of meters. Nearly 85 percent currently exploited ground water is used only for irrigation. Groundwater accounts for 70-80 percent of the value of livestock produced for irrigation. In addition, ground water is now a four-specific source of domestic water supply in rural areas, and about half of urban and industrial areas. However, according to the International Irrigation Management Institute (Iimi), the water table is almost everywhere in India falling between one to three meters every year. Furthermore, Iimi estimates that India uses its underground water resources at least twice as fast than them refilled. Already, excessive groundwater mining has caused land subsidence in several Uttar Pradesh regions.
- Surface water - there are 14 small river basins, 44 medium and 55 in this country. The main river basin is around 83-84 percent of the total drainage area. This, along with a medium river basin, accounts for 91 percent of the total country drainage. India has the largest irrigation infrastructure in the world, but low irrigation efficiency, around 35 percent

IV. DEMAND AND RESOURCE MANAGEMENT

The water harvesting structure used in India is based on ancient models and therefore it is highly adapted to the climate and hydrological conditions that apply in the area. The potential of this system is to supply adequate freshwater for all areas and high sectors. However, since the colonial era - and especially after independence in 1947 - this system has been more abandoned and neglected for the sake of large dam irrigation projects and canals. So far, this 'modern' structure has succeeded in providing water to rural and Indian urban parts; but high economic, social and environmental costs have reduced their overall benefits. Water demand tripled in the last half century. The water level in many countries has dropped due to absorption of water from the groundwater reservoir. Land water tanks have dried up because the government acts to meet increased food demand.

Water demand has increased rapidly in recent years. We cannot see ourselves that ground water down. The world's underground aquifer dries when the world absorbs so much water at the same time. Thus, the production of grains in many countries decreases almost simultaneously. If we compare this with news that the world population increased by 7 crines a year, we can understand the dangers faced. This mainly occurs in China, India and the United States, which accounts for half of worldly results. The Chinese Plains, especially in China, has been hit with a lack of water. The depth of the ground into the pan, which inhibits rooting the World Bank report, said it has

reached kilometers. The very varied climate properties make the most popular alternative ground water for irrigation and the use of domestic water throughout India and accounts for more than 400 km of annual resources that can be utilized in this country. In addition to being accessible, groundwater quality is generally very good in most areas and presents relatively safe drinking water sources for India in rural and urban centers. Agriculture remains an Indian economic center and therefore receives a larger part of annual water allocation. At present, only 85 percent of urban areas and 79 percent of rural populations have access to safe and lack of drinking water to have access to adequate sanitation facilities.

India, which currently has more than one billion populations, is no exception. Haryana, Gujarat, Rajasthan, Andhra Pradesh, including Punjab, Indian food wheat producers, and Tamil Nadu are on the list. The latest studies reveal that groundwater content in Punjab and Haryana decreased by about one meter per year. According to David Seckler, this situation has reduced Indian food production with a fifth.

Water problems, which were only local problems, have now become an international problem through international food grain trade across the national border. This is because a ton of food grains requires tens of thousands of tons of water. Therefore, it's cheaper to import food grains rather than importing water. The government, which routinely divert water to agriculture to meet increasing city and industrial demand, redeeming their declining food needs through imports. Therefore, lack of water will increase and competition for grain in the global wheat market will also increase this will lead to the future water business.

V. DIFFERENT MODELS FOR WATER PRIVATIZATION

Water privatization involves transferring water control and/or water management services to private companies. Water management services can include collection, refining, water distribution, and treatment of wastewater in a community. Traditionally this service has been provided by local government infrastructure such as the municipality or local city council. There are several water privatization models that are currently trending in various parts of the world. Depending on the privatization level, these models can be widely categorized into:

- Service Contracts - In this model, public authorities maintain overall responsibility for system operations and maintenance, and contract specific components. The service contract was 1-3 last year and included services such as reading meters, bills and maintenance. While public ownership is maintained and the structure of community accountability remains, operating transparency can be limited. Contracts are often not legally negotiated and regulatory, and supervision are usually lacking.
- Build, operate, own and transfer or (d) Boot - This privatization model is usually used for the development of system infrastructure e.g. Water treatment plants that need significant finance. Personal operators are needed to finance, build, operate and maintain facilities for a certain period of time (usually more than 20 years). At the end of the term of office, infrastructure can be submitted to the municipality or contracts updated. This model is more common in developing countries. Example (d) Boot includes the Tiruppur project in Indian TN and Cochabamba experience in Bolivia.
- Divestment - in this model, the government or public authority provides full ownership and responsibility of a water system including water sources to private operators under the regulatory regime. It is also done in a renewable 10-20 years Contracts on the entire system. The government moves operations to private hands thus improving efficiency. Competition is limited through the process of bids on the divestiture. The private sector firm is then expected to take the risks and recoup investment/profits. This model cedes tremendous power over an essential resource to corporations. Examples of divestiture include the Rasmada scheme, under which a 22- year lease over a stretch of the Shivnath River in Chhattisgarh was accorded to Radius Water, Inc.

VI. PRIVATIZATION OF WATER SOURCES

Water privatization has been recommended by the National Water Policy of the Indian Government to overcome the problem of scarcity of water. If the water is privatized it will be sold to the open market and does not meet the needs of the poor and thirsty. Water is

only available for those who have the power of cash to spend more. In the private sector they do not need to answer people, there is no transparency in their management, and we cannot even know the details of their contract. In the past, farmers' associations in India were involved in building and maintaining water resources. In Tamil Nadu this is called Nattamai, Caval Maniyam, and the Lake Maniyam Lake Board. While lakes and ponds are common in many villages, they are democratically managed by representatives of the Agrarian Union in the villages. Are these groups that collect taxes to farmers; Maintained. The Dalits, who do not have land, are appointed as cysts to ensure neutrality. They were given the power to open and close the pool and lake.

Before England came to South India, the management of Tamil Nadu water resources was the responsibility of the people. 25 percent will be in the village and it will be used for public work. But this self-management system ends when water is taken over by the state during the British government. After the East Indian Company came to India in 1830, farmers had to pay 65 percent of their results into public funds. This, 59 percent went to the East Indian company. About 3 lakh and lakes and ponds, which were built centuries ago, has been destroyed and agricultural production has been affected due to a lack of further maintenance.

73 percent of water is used for agriculture and 20 percent are used by factories. 90 percent of people use river water. 200 rivers in the world are used by two countries or more. We must use water in a number that can be recycled naturally. Excessive water absorption harms natural balance. Water is not human discovery. Don't have a specified limit and it is a general sky. It shouldn't celebrate individual rights. Thus, no one has the right to use too often or pollute water.

- The amount of fresh water available to us is less than 0.5 percent. The remaining water is ice and sea water in the polar area.
- Freshwater resources in the world are replenished by 40,000 - 50,000 kilometers of cubic rainwater accepted every year.
- More than 50 lakh people die every year due to diseases caused by drinking water below the standard.
- In the world one child per 8 seconds dying due to contaminated drinking water.
- One third of the water distributed in the United States comes from ground water tanks. Their water is absorbed 8 times faster than that is hydrated by rainwater.
- In the United States, 180 million liters of water are used per day to make computer chips. Worldwide is 1.5 trillion liters. 30,000 Liter Crore Water into waste water.
- UN children's funds (UNICEF) estimate that two-thirds of the world's population will suffer from a shortage of fresh water and drinking water in 2025.
- More than 100 crores people in the world do not have safe and good drinking water.
- More than 240 crores people do not have adequate sanitation and toilet facilities.
- Water in danger is as big as future commodities as current petroleum products.

In such a situation, the only private sector intention is to maximize the benefits available for him. There is no such thing as any service. Everything business in the world. Two-thirds of our planet is water. But, we face severe water shortages. Water scarcity causes great ecological degradation. Until this year, 28 countries were experiencing water shortages. In 2025, it would rise to 56 countries. In 1990, 13.10 crores suffered water scarcity. Treated to increase to 81.70 crores in 2025. If someone does not have access to 1,000 cubic meters of water per year, the area is estimated in short supply. In 1951, India received an average of 3,450 cubic meters of water per person per year. In 1990 it dropped to 1,250 cubic meters. It is estimated that only 760 cubic meters of water will be available in 2050.

Water is an inseparable part of life in various forms. Natural resources are very important for the survival of all living things on earth. Human life depends on the amount of water available. Humans have the right to water that cannot be canceled. Water is a social property. To commercialize it to violate natural law. At present the world witnesses water commercialization. Large multinational companies use water business to increase their profits. Organizations such as the World Bank and the International Monetary Fund urged third world countries to privatize their water. Meanwhile, privately funded organizations such as the World Water Council, World Water Commission, World Water Forum and Global Water Partnership have

campaigned in supporting water privatization. These organizations support private participation in water resources based on 'boot' (boot). They were reduced by 10-year income tax to encourage the private sector to work in it. Similarly, the state policy of the state government of Andhra Pradesh, Karnataka and Maharashtra gave high priority to the private sector. The state government of Chhattisgarh has submitted certain parts of the Shivnath River to a private company called the radius water on 2 years. This prevents the poor who live on the banks of the river because they use river water: private companies prevent fishermen that depend on the river as well. This project was abandoned after a big struggle.

A. SITUATION IN THE DEVELOPED WORLD

Privatization that has been carried out in the US, Britain and Canada gave an example of problems with the private sector. In Washington DC, when government-owned utility services experienced severe cash flows to improve and improve their infrastructure, it is considered a full privatization, public-private ownership, a model of public sustainability and choosing for the last for personal participation. In Atlanta Georgia, a contract to provide water by United Water (RWE subsidiaries) canceled after increased consumer protests with low quality water, or without water. In the UK, privatization comes with a large government subsidy. The government removed the debt of water companies of $ 11 billion and gave them $ 3.6 billion further to help companies meet the requirements of the new UE environment. To complete the agreement, new companies are guaranteed to be private monopoly for 25 years and are given a special exception from paying taxes on their profits.

B. DISCUSSION ON WATER PRIVATIZATION

- Hikes Prices are not affordable for poor people - Water privatization always causes price increases in almost all regions of the world where water has been privatized. This is because there are many costs involved in improving water utilizing water, purification and distribution.In developing countries such as India, the increase in water prices is also an indirect consequence of the conditions imposed on the government by the World Bank and the IMF in return for structural adjustment loans. For example, severe flooding in Orissa in 2001, the World Bank demanded a water rate increase as a measure of recovery costs on water use. Rates for water irrigation have doubled or even tripled. The increase in consumer costs for water can make water that is safe is not affordable for the poor and vulnerable population. Families are often forced to exchange water, food, school and health care. This cost recovery requirement means that the cost of users paid by water consumers must cover all water system costs, which usually include operating costs, maintenance and capital expenses, and sometimes the cost of serving utility utilities.
- Unsustainable water mining - Many potential risks appear once resources as a fundamental for life because water is privatized. One of the main reasons for opposing water privatization is the threat of unsustainable water mining by water companies in an effort to maximize profits. These companies, which are only answered to their shareholders, have an agenda stated to generate profits.
- Creation of water monopoly - Privatization by definition eliminates public control over the resources in question. Public control over water is very important not only because water is needed for the survival and fulfillment of humans, but also because of the severe and worsening water crisis that is faced with the world. As soon as government institutions submit water systems to private companies, it becomes very difficult and expensive to reverse decisions.
- Companies are responsible to shareholders, not consumers - In many cases, the agreement made by water companies with government institutions including exclusive access to distribution for 25 or 30 years, effectively giving monopoly sanctions. This private monopoly tends to damage accountability and produce poor customer service. The company is under small pressure to respond to consumer concerns, especially when the product in question is needed for consumer life.
- Potential export of bulk water - Realizing the $ 2 billion water market fully in India, private companies in madness to access freshwater sources they can sell with large profits. For example, a large market for drinking water in the

city of Chennai which starving against water constantly encourages several private companies to mine surrounds villages for groundwater. Mathur villagers in North Chennai sued several bottled water companies in 1995 to illegally extract groundwater. At the time of this case was taken in 1999, more than 60 private companies that supplied water by tanker trucks had immersed additional illegal wells in Mathur. Privatization opens the door to bulk water exports as control of this rare resource transferred from the local community to profit-minded global companies. Bulk water exports will have ecological consequences and dangerous environments.

- Corruption and lack of transparency - Indian government agencies are famous for the lack of accountability and transparency in providing service contracts to subsequent private companies, potential large profits and long-term monopolies on important supply of resources such as water double increase incentives for private companies in this sector to offer bribes to secure a contract.

VII. CONCLUSION

Privatization of water is not new for Indians. The average person needs one liter of water a day for drinking, cooking, washing and bathing. But today, the average person in the United States consumes 250 to 300 liters of water per day. Somalia in Africa, meanwhile, received less than 9 liters of water a day. In India, ground water is still private and abstraction is a daily event here, regardless of whether the factory or super-rich has land. Personal Companies are more interested in supplying water to urban areas that are less dense than in areas that are less populated because that's where some connections in one pipe can be made profitably. Instead of privatizing the water system, the municipality can partner together through public-public partnerships. Public partners are more responsive, reliable, and cost-effective than private water companies. Inter markal cooperation, the inter menal agreement and mass purchase consortium can improve public services and reduce costs, while allowing people to maintain local control. We need to plan ahead and make a dedicated public funding source that will help public utilities protect our valuable country water resources. Above all, Ecologist Vandana Siva is true when he said, "Water problems are an ecological crisis, and try to solve commercially will destroy the earth and increase inequality. Ecological problems must be completed ecologically."

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