

# Water Conservation Through Decentralised Governance in Rural Jharkhand

Dr. Sharad Suman Mishra

*Assistant Professor, Political Sc., K.K.M College, Pakur, S.K.M University, Dumka, Jharkhand.*

---

## **ABSTRACT:**

*Ground water is continuously going towards the abyss in 1592 development blocks of 256 districts of the country. The main reason for this is the excessive exploitation of ground water and their non-recharging. Through playing with the laws of nature and exploitation of natural resources, human beings have bought disaster in the name of development. In the name of indiscriminate industrialization, water, forest, land and sky were all played with. The rivers, ponds and lakes which used to give us the nectar of life, today the pollutants have caused poison in them. The Jharkhand state due to his large tribal population is one of the most vulnerable state to climate change. Tribals and rural population of Jharkhand have old tradition of wisely and judiciously using water resources and minimise the water wastage. Jharkhand state has promoted participatory community irrigation management. This paper study how decentralized governance through Panchayati Raj and PESA act empowering rural population for water conservation in Jharkhand.*

**KEYWORD-** *Water conservation, MANREGA, Panchayat, Dhoba, PMKSY, Climate Change.*

---

Date of Submission: 10-11-2021

Date of Acceptance: 25-11-2021

---

## **I. INTRODUCTION.**

Water is a scarce resource available in limited quantities. It is the basis of life, society and economy and has many values and benefits. Water is an exclusive source of energy. Without energy the body cannot survive. The role of the energy element present in water is unique in its regulation, be it the temperature of the living being or the rest of the world. Sun, sky, clouds, electricity, rivers, mountains, vegetation... other sources of energy to the body have also emerged from water. Water plays an important role in the origin of life, nourishment of the organism and purification of the body. There is no such thing in the world whose production is possible without water. That is why water is said to be the life force of all creations, not only human beings and human civilization.

Earlier, our ancestors lived in the pure water and clean environment but we have polluted the same environment and this become the reason for our short life. We did all this in the name of boasting and exploiting the precious natural resources that are free of cost. We are wasting lots of water and which are left is contaminated. We did not even spare the environment; we made the air poisonous. In the name of development, we are cutting trees and trees are being planted on papers. Institutions do matter and the development should be sustainable and be rooted in process that are socially inclusive and responsive to changing circumstances<sup>1</sup>. The earth was concretized, so the raindrops could not get deposited in his womb. Situation has become that every third person out of ten in the world does not have pure drinking water. Only less than 15 percent of India's population is getting pure drinking water. The water of 70 percent of the water sources on the earth has become unsafe for consumption. We are paying the price for all this.

Unfortunately, planners and majority of the people are not able to understand how important water is for life, economy, environment and society<sup>2</sup>. In large parts of the country, water scarcity is getting worse. At present, the availability of water in the country has fallen to less than 1,400 cubic meters per year, which is close to the global water shortage. Clean drinking water is considered a fundamental right in Article 21 of the Indian Constitution. Despite this, for years the poor were kept away from clean drinking water and toilets. People and civic organizations need to understand that even though availability of clean drinking water is a fundamental right and the government should ensure it, but it is a huge responsibility and it requires active participation of all the people of the country.

Jharkhand is a forest and mineral rich state. It falls in sub-tropical climate with average annual rainfall of 1200mm. 80% of Jharkhand cultivable land is drought prone. Agriculture is major consumer of ground water. The Government of Jharkhand has established the Department of Water Resources for sustainable and proper use of water resources and its proper management and conservation. The important primary objective of this department is to construct and maintain major, medium and minor irrigation schemes, protection and control from floods, conservation and recharge of ground water. This department protects the right of the state to share

the water of inter-state rivers and river basins. It works in the field of interlinking of various river basins so as to supply water to water scarce areas where water is surplus.

According to the Water Resources Department of the Government of Jharkhand, about 1.59 lakh hectare area of the state is covered by water bodies which is 2% of the geographical area of the entire state. Jharkhand has 30168.98 million cubic meters of water available out of which 25876 million cubic meters are available as surface water and 4293 million cubic meters are available as groundwater<sup>3</sup>. The availability of both groundwater and surface water is decreasing over time. In such a situation, proper management of water resources is the dire need of the hour.

### **PRI and Water Conservation Goals in Jharkhand.**

Water governance in Jharkhand has traditionally been in the hands of local communities. The states in India acquired this control during the British colonial period and it continued even after independence. The intentions of the state government to keep control in their hands were good, but the results were not good. With the decline of traditional local self-government, the local water administration, which was in the hands of the traditional group, deteriorated. The comprehensive approach that the state should have taken for proper management of water resources was not achieved. In Jharkhand, under the Panchayati Raj system and after the introduction of PESA laws, the local communities were given water resources administration related privileges. These micro-managements also ensure equitable distribution of water. But neither the state nor the traditional Panchayat system has been able to achieve its results due to limited capacity and lack of vision. In addition, the capacity of local government institutions varies. And often due to this also the system gets down. Due to policy bottlenecks smaller urban local bodies or panchayats are less efficient in water management as compared to larger state systems. Addressing this problem requires building the capacity of local institutions by transferring power and finance from both national and state institutions. The more independent the local organizations are, the more their jurisdiction increases, the better they can do the work of water resources. That is, the local self-government also needs to see its role as a manager. Management will not be proper if local bodies remain as implementers of national and state policies and programs only. Things will not even begin to improve unless the power returns to the people at the grassroots where it belongs<sup>4</sup>.

The state of Jharkhand is likely to be more affected by climate change mainly due to the high tribal population residing here. Due to climate change and changes related to land uses pattern, the geographical conditions like landscapes and watersheds here are under great pressure to change. For better implementation of water conservation measures in Jharkhand, it will be necessary to understand the changes in land use and climate change and their relation to the management of water resources. In the measures taken for water conservation in Jharkhand, the measures taken by saving the forests, increasing the area of forests will be able to give better results. Agriculture in Jharkhand consumes a significant part of the surface water. Jharkhand has also seen a decrease in rainfall in recent years. This reduction has come up significantly, especially in the northern 11 districts of Jharkhand, in which the negative deviation has been found to be up to 15%. Rainfall has played an important role in the recharge of ground water in Jharkhand.

Water conservation initiatives in Jharkhand has solutions from forestry interventions. Water conservation through plantation has many benefits. Plantation in forest areas will facilitate additional water percolation leading to increased ground water recharge. Without trees the surface runoff and soil evaporation increases. And it's leads to low groundwater recharge even despite low transpiration. Panchayati Raj institutions are the backbone of rural development which inculcate the sense of care for rural development and rural management. In order to create sustainable development. The main strategic initiative for reducing runoff and addressing issues of water recharge in degrading land parcels are being executed through Panchayati Raj by empowering local self-government.

In Jharkhand, the local residents have an important attachment to water, forest and land. They have always fought for the safety of their water and forest. The traditional Panchayati system has always contributed significantly in water conservation in Jharkhand. The traditional Panchayat system has been strengthened by PESA laws. Traditionally there have been many water conservation efforts of the people of Jharkhand. The government has also taken many measures in rural areas by making them aware about water conservation through many schemes and efforts.

### **Building Climate Resilience in Jharkhand through Local Governance.**

**Technique of water management from the rivulets from the fields.** - It is a method developed from the experience of the farmers of Jharkhand in which water conservation is done. And this protected water is used to provide better irrigation to the fields in the event of drought. It is being used since last few years. In this method, the water coming from the fields in the many rivulets is collected by making a bund. Depending on the availability of seepage water, such bunds can be built in several parts depending on the length of the rivulets. This stored water is used judiciously for specific Rabi crops grown in the beds.

**Spur structure-** Spur structure is also one of the many methods adopted by the local communities and farmers of Jharkhand for water conservation and better use of water resources. In this method, after the rice is planted, the farmers create a temporary barrier-like structure to divert the flow of water to the places where there is runoff water. For this, woods of the forest are used. Stones are also used to reduce the flow of soil with water. This technique is mainly used in the fields of plateau and hilly areas<sup>5</sup>. The cost is very less and the maintenance is done by individual farmers every year.

**Mukhyamantri Jan Van Yojana-** To maintain environmental balance in the state of Jharkhand, it is necessary to increase the forest cover area. In order to increase the forest cover in the state, by promoting plantation on private land, the pressure on the notified forests of the state can be reduced along with increasing the source of income of the farmers. To fulfill these objectives, "Mukhyamantri Jan Van Yojana" in the state is implemented.

**MNREGA-** MGNREGA is a flagship rural-jobs programme of the Government of India. MGNREGA with its prime objective of improving the rural livelihood-security has had a comprehensive span in the state since its inception in 2005. In MANREGA related work progress Jharkhand bagged the top position followed by Telangana, Lakshadweep, Tamil Nadu, Chhattisgarh and Puducherry. Under this scheme many initiatives undertaken at the ground level which helped the state get a prominent position these can be summarized as follows:

System of irrigation developed throughout the year by merging the several small streams to create larger ones

Moisture retained in the fields at all times by digging trenches around the fields.

Water level raised by digging wells from house-to-house through MNREGA. Due to this, the use of surface water is fully used in the cultivation of vegetables. Apart from this, the level of ground-water also rises

**Dhobas:** Many experiments were done on what efforts should be made for water conservation in Jharkhand. And it was discovered that a small rainwater harvesting structure called Dobha can be used effectively for better agro-forestry in many plateau areas<sup>6</sup>. Talking about the Chota Nagpur plateau, it receives an average of 140 cm of rainfall. Non availability of water is the most important obstacle in the establishment of agro-forestry here. To overcome this obstacle, Dobha is constructed for rain water harvesting before monsoon. Polythene sheets are used on the inner sides of the dobha structure. The soil obtained from the excavation in Dobha is mainly used for making beds around the grafted trees. Dobha structure can be used for 3 years. Covering the dobha with thatch after monsoon reduces evaporation. These dobha structures are helpful in providing life saving irrigation. Thousands of 10-foot dhobas were dug to make water available to the farmers without any means of irrigation.

**Pradhan Mantri Krishi Sinchai Yojana (PMKSY) -** Development has to be an effort of by and for the people. True development has to be people-centered" (South Commission 1990: 10-11)<sup>7</sup>. The main objective of the Pradhan Mantri Krishi Sinchai Yojana is to achieve convergence of all those investments in irrigation. And to expand the cultivable area in such a way that, assured irrigation system can be guaranteed on the expanded land. Using efficiency to reduce wastage of water in the fields. Adopting such a process of irrigation in which every drop of water can be used properly. Adoption of more crop per drop system. Enhancing the recharge of water sources in the fields. And to treat the municipal waste water in the urban area in such a way that that water can be reused, and attract greater private investment in precision irrigation systems. The scheme is being implemented by the Ministries of Agriculture, Water Resources and Rural Development. The Ministry of Rural Development is to mainly undertake rain-water-conservation, construction of farm ponds, water harvesting structures, small check-dams, contour bunding etc<sup>8</sup>.

#### **PMKSY (Watershed) by the Department of Land Resources, MoRD-**

Under this scheme different types of specific structures for water harvesting such as check dams, nala-bund, farm ponds or dobhas or tanks for water, constructed in fields.

Capacity-building, entry point activities, ridge-area-treatment, drainage-line-treatment, soil and moisture conservation, nursery raising, afforestation, horticulture, pasture- development, livelihood-activities for the asset-less persons and production system and micro enterprises for the small and marginal farmers etc are the focus point. Effective rainfall management like field bunding, contour bunding/trenching, staggered trenching, land levelling, mulching was executed properly. If we talk about the financial year 2019-20, the efforts made in the entire state under the construction of water shed, about 32 farm ponds were made. And seven structures were developed to recharge ground water.

## II. CONCLUSION

Jharkhand follows an alternate development paradigm where “Gram Uday” (Development of the villages) is followed by “Jharkhand Uday” (Development of Jharkhand). With very high percentage (75.95 per cent) of population residing in rural areas of the state, the government policies in the last fiscal years have specifically targeted the challenges and issues of the rural populace of the state. The test of any programme of decentralization is arguably the actual powers and functions that are

devolved to the institutions of local government and the autonomy they enjoy in the exercise of these<sup>9</sup>. For self-reliance in the matter of water, it is necessary that we should implement local water management policies. It should be cooperative, not government controlled. It should be empowered to take local community initiatives. Governments should remove statutory administrative barriers and be an ally, pave the way to these communities. Not only drinking water, hand over the entire responsibility of making and implementing a comprehensive, self-supporting and time-bound action plan of local water management and economic and technical-administrative powers to the local ward or gram panchayat committees related to water. Let them decide for themselves the location, design, construction material and process of their water structures. Let them decide whether they want to drink water from the tap or from a well, hand pump or pond<sup>10</sup>. Self-reliance, in the matter of water will be possible only through cooperation. In Jharkhand’s tribal areas cooperative water management has made water conservation/enrichment activities a tradition. In order to ensure purity, water was recognized as a cultural element rather than a mere material commodity of consumption.

## REFERENCES

- [1]. World Bank, World Development Report, New York: Oxford University Press, 1999.
- [2]. Dey P, Agroforestry- Theory and Practice. In: Proc Annual Workshop on Natural Resource Management, edited by Ashish Majumder, (Regional Centre- National Afforestation and Eco-development Board, (Ministry of Environment & Forest, Govt of India), 2003, 22-24.
- [3]. Government of Jharkhand. (2011, September 26). *Jharkhand state water policy* -[www.wrdjharkhand.nic.in](http://www.wrdjharkhand.nic.in). Water Resource Department Jharkhand. Retrieved September 11, 2021, from <http://www.wrdjharkhand.nic.in/pdf/JharkhandPolicyEnglish.pdf>
- [4]. Rastogi, A., & Srivastav, S. (n.d.). *Supporting native traditions of water conservation for building climate resilience in Jharkhand*. [www.nwm.gov.in](http://www.nwm.gov.in). Retrieved August 17, 2021, from <http://www.indiaenvironmentportal.org.in>
- [5]. Ayer, Mani Shankar, „Panchayati Raj: The way Forward“, Economic and Political Weekly.Mumbai. (Aug. 3-9, 2002).Vol. 37. No 31 pp. 3293-3297.
- [6]. Agarwal A & Narain S, Dying Wisdom: Rise, Fall and Potential of India's Water Harvesting Systems, (Centre for Science and Environment, New Delhi), 1997.
- [7]. Altieri MA & Koohafkan P, Enduring Farms: Climate Change, Smallholders and Traditional Farming Communities, (Third World Network, Penang, Malaysia), 2008.
- [8]. South Commission, The Challenge to the South: The Report of The South Commission, New York: Oxford University Press, 1990.
- [9]. Jharkhand Economic Survey, ‘Rural Development and Panchayati Raj’. 2020-21: Chapter IV. pp. 166.
- [10]. Jayal, Gopal. Nirja(eds). „Local Governance in India: Decentralization and Beyond“. Oxford University Press. New Delhi: 2006, pp. 9.
- [11]. Anonymous, Climate change and indigenous peoples. United Nations Permanent Forum on Indigenous Issues, UNPFII, (Online) URL: [http://www.un.org/esa/socdev/unpfi/en/climate\\_change.html](http://www.un.org/esa/socdev/unpfi/en/climate_change.html), 2007.

Dr. Sharad Suman Mishra. "Water Conservation Through Decentralised Governance in Rural Jharkhand." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 10(11), 2021, pp 10-13. Journal DOI- 10.35629/7722