



PEOPLE MOVEMENT: WATER HARVESTING AND CONVERSATION FOR UPLIFTMENT

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When people are collective efforts type of organized and unorganized, we call him people's movement. People's movement is becoming in several areas an India. Some of them a people's movement is becoming for water improving. People can well-management and protection of water resources with right leadership and proper legal outline. People's movements are not only occurring for water but also many socio-economic needs. People's movement is famous many names and many areas.

Rainwater harvesting is a technology used for collecting and storing rainwater from Johads, check dam, recharging wells, river parliament etc. The techniques usually found in India arise from practices employed by ancient civilizations within these regions and still serve as a major source of drinking and irrigation water supply in rural areas. Commonly used systems are constructed of three principal components; namely, the catchments area, the collection device, and the people.

Johad: Johad movement is people's movement. Johad is traditional technology of rainwater harvesting in Rajasthan an India and there are knows several names in the country i.e. pond.

Reviving India's rainwater harvesting tradition had started Gopalpura village at Alwar in Rajasthan an India since 1985. Main leader of T.B.S. Rajendra Singh won the Ramon Magsaysay



prize for community leadership in 2001. Rajendra Singh played a catalyzing role in the building of 8,600 Johads in 1,058 villages spread over 6,500 sq. km. People build Johads Cooperation of T.B.S. at Alwar. The area covers parts of the contiguous districts of Alwar, Dausa, Sawai Madhopur, Karoli and Jaipur districts. Johad and other appropriate water structures have also been built in the districts of Jaisalmer, Ajmer. Udaipur and Bharatpur. Johads are building that village, there are beginning local people efforts. Villagers were able to see for themselves the efforts being made by people in nearby villages with little assistance and guidance from T.B.S. (Tarun Bharat Sangh). This not only gave them confidence in their own capacity to undertake such a task but also helped in building the credibility of T.B.S. among the villagers. The problem of drinking water, low productivity resulting poverty and migration was common to all. Johad addressed these very problems.

There is doing rainwater harvesting by Johads in Rajasthan an India whereby ground water level increase several months. Because of there is water level increases in the wells whereby uses many areas e.g. drinking, irrigation etc.

Recharging wells: Likewise people's movement has started at Saurashtra in Gujarat in India. There is rainwater harvesting by wells. People are build wells and then rainwater harvesting whereby ground water level increased. Increase ground water level lack of many difficulties. Recharge wells of 100 to 300 mm. diameter are generally constructed for recharging the deeper aquifers and water is passed through filter media to avoid choking of recharge wells. In the parched region of Saurashtra, Gujarat, the Saurashtra Lok Manch, a voluntary organization, has recharged more than 300,000 wells and tube wells. The organization has been trying to create water literacy among the masses and motivate them to actively take up recharging of wells. Recharging wells is easy, inexpensive and



requires very simple technology. Water from a nearby rivulet or drain is led through a plastic pipe to a pit, where it gets filtered through layers of sand powder, uncrushed sand and crushed stone. A pipe then takes the water to the well.

"We do not need bore wells. By spending a very small fraction of the amount that we would have otherwise spent on digging a well, we can catch still more water," says Bheema Bhat Hardikar, a farmer from Anavatti, Karnataka. He speaks from his three years of experience in rainwater harvesting that has ensured enough water for the nursery on a part of the 25 guntas of land that he owns. *Adike Patrika*, a local magazine, introduced him to the idea and he decided to implement it. A 700 ft storm water drain around the farm has been dug. Ten earthen bunds are built at a cost of Rs 250 across the storm water drain. An infiltration pit near the well collects the runoff from the drain. The excess water from the first infiltration pit flows into the second one and then, back to the drain. He has also constructed small trenches to divert all the runoff from the neighboring areas to the storm drain. All these works have yielded good results (www.rainwaterharvesting.org, 20 April, 2008).

Check dam: Concerned over the water level in the region of Saurashtra, which had receded from 15 m in 1990 to 120-210 metres in 1998, Mansukh Bhai Suvagia, a 37-year-old government servant decided to initiate steps to tackle the problem. With the help of villagers, he launched a Lok Fund scheme and collected more than Rs 1 lakh to build 17 check dams in the area. "These are the cheapest check dams in the whole country," says Suvagia. Well-planned locations and building according to the requirements were the two main reasons for the low cost of construction. Cost was further reduced as the villagers built the dams themselves. Suvagia's wife Rasila helped him out in his work by mobilizing the village women to get involved in the building of the dams. Four dams have been



built in the area with the help of local women. At present, in over 100 villages of the Saurashtra region, money is being raised to build dams. The amount of money collected ranges from Rs 1-5 lakh. Jamka village in Junagadh district is successfully carrying out the work of building check dams. The village is 1,011.7 hectares in area with a population of 3,000 and the area under cultivation is 809.4 hectares. Even though the area has one river and four rivulets, the water supply is inadequate. Moreover, with 1,200 bore wells the water level has gone down to 200 metres in the last 15 years. The villagers started constructing the dams in 1999 and so far, 51 check dams and two ponds have been built to harvest water. As a result, the water situation has improved and the farmers are able to cultivate *kharif* and *rabi* crops even during drought conditions. Mansukhbhai projects the profit as around Rs 3 crore in the years of good rainfall. This includes money from agriculture, livestock and trees used for afforestation. "It puts the government in a very bad light," says Suvagia. He is all set to spread the message to the rest of Saurashtra and has already created awareness in about 500 villages. He feels that CSE is doing a good job of spreading the message of self- help to other parts of the country.

Bandharas (weirs) or check dam, the people of Nagpur district, Maharashtra joined hands with their local administration and successfully harvested 11,000 billion liters of rainwater at virtually no cost. Their initiatives pushed away the usual water scarcity by at least three months. September 12, 2001 arrived with a new dawn, when Ashwini Bhinde, a lady IAS officer in Nagpur's zilla parishad agreed to implement rainwater harvesting in her area at the suggestion of Mohan Dharia, who is working with Vanrai, a Pune-based non-governmental organization.



The results speak for themselves. In just 21 days, they successfully constructed about 222 *bandharas* (weirs) as developed by Vanrai. These *bandharas* comprise of bunding the village *nallahs* with sandbags piled up in the shape of a dam. While Vanrai deposited 80,000 sandbags for the project, the respective gram panchayats also contributed with 60,000 bags. In this region, Kolhapuri *bandharas* used to be popular, but they are not only expensive to build but also difficult to maintain. According to Bhide, "A Kolhapuri *bandhara* requires Rs 50 lakh to harvest 390 TMC of water. Moreover, a regular state project would have taken more than a year to take off. About 1,000 Kolhapuri weirs exist in the district and less than 100 are functioning." On the other hand, *bandharas* like those made by Vanarai make use of the locally available sand and *shram daan* (voluntary labour) by villagers, thus eliminating the money and corruption factors. The notable feature is that members from the state and society worked together (www.rainwaterharvesting.org, 20 April, 2008).

Arvari River (River Parliament): Each 500 Ha of land or 500 people have one representative regardless of land use on the Sansad. The Sansad covers the full river basin and is the supreme authority to make decisions. The people in this level are chosen by the gram sabha (not a PRI institution that is of a village circle) right from the smallest to the largest. Aravari parliament decisions are executed by the Gram Sabha and supervised by the Aravari Sanchalan Samiti made up of 20-22 people, 4 from each geographical cluster. This sees to the day to day implementation of the decisions of the parliament. The structure of the Arvari Sansad evolved from talks with villagers in the Aravari and is their true representative. Man is a small part of nature therefore it is necessary to balance nature's goodness with man's greed. Therefore there is one representative for land and another for people.



Arvari is a small river in the District of Rajasthan. The river had been reduced to a monsoons drain for decades, while the region was reeling under chronic drought condition. Rather it dried up for years. The process of rejuvenation of this river was started in the year 1987 by constructing a small water harvesting structure, called Johad (specially in the rural areas of Rajasthan). These Johads are traditional earthen dams built to harvest each single drop of Rainwater falling on the ground. The first Johad came up in the village Bhanwta. Later seeing the benefits of these Johads even during toughest drought condition both quantitatively and qualitatively in the livelihood of the villagers and also because it had a great impact on the social and economic conditions of the individuals in a way improving their standard of living. Many more villagers from different villages came forward to build these structures in their villages reviving the traditional method of harnessing the rainwater. Johad is not only a physical structure made by rural people through traditional knowledge and wisdom but it is also a symbol of peace, love and unity present in the village society. So it has its on social dimension impact on the lives of the rural people.

As early as in 1988, people of Hamirpur had been involved in arresting the waters, draining through small and big monsoon nallahs, streaking the face of their lands. Beginning with the "Jogiwalla" johad on the monsoon stream, a tributary draining into Aravri in the valley below, many similar Johads were constructed by the people on the various monsoon streams, before they joined the main water course of the Aravari. But the benchmark of consolidated work came in 93 with the campaign to save the Aravalli hills. People of the 3 different states participated and covered the entire 700 kms long stretch of the Aravallis in 14 separate groups. In this somewhat large agenda, the remote village of Hamirpur, also got charged with the inspiration to make a difference, and Shri Ramchander Baba, respected village elder, became the voice of the people. He served as a linking



unit for mobilizing the people of the neighboring villages of Hamirpur, and 4 other villages. Mobilizing the people, streamlining their interests, participating in various village meetings, one of the villages, Kaled became the meeting ground of the united strength and interests of the 5 villages.

The hanging times had reduced the fine tradition of Johads, into mere heavily silted depression sites, while the Aravallis stood in mute desertion, scavenge of trees.

Most of the Johads, in the Aravallis were built on the mountain slopes for arresting and storing the flow of the rainwater. But the absence of forest and adequate tree-cover, to trap rain water, the rain water would swiftly wash down the slopes, taking in its flight, much of the top soil, and even damage the water bodies. All this led to the people taking an oath to protect and conserve their forests and water resources.

Another major decision was construction of a 'bandh' on the main watercourse of river Aravari. Many Johads had come up on the tributary streams, of the main watercourse in the past few years, raising the water level in the wells. The site selected was at the point where the "Naharwala" nallah draining along the western slopes of the village met up the rivulet. This concave shaped johad has a catchment area of about 1103 sq. kms. The work continued for 2 years, till the monsoons of 97, but the effect of the rising paal and the arrested waters were felt within the first year itself.

The dead, dry, watercourse of the Aravari which had flowing water only during the rainy days in the monsoon months, came alive for the full year of 95. The people of Hamirpur had not even imagined such an outcome and the miracle started to create ripples. The people in the downstream of the river, got equally inspired to enliven the river in their midst. The TBS team was also equally



surprised by the unexpected turn of events and humbly admits that they had no idea, that they were getting involved in reviving a big river, when they began to work in the region. The restoration of Aravari to life is also the story of various watersheds linked to each other. The curtain falls on the journey of the reborn river Aravari. It is the life line of hope and prosperity for the 75 villages, situated along its banks.

Today there are more than 200 Johads in the catchment of Aravari. The successful water harvesting and conservation of water in the upstream of the river, in the region of Bhanwta, followed by the scores of Johads along the drainage of the river, has inadvertently recharged the main river channel. The rippling effect of the water conserved and the excess discharged, released a breath of fresh life into the channels of the rivulet, which became the river. But the happiness and prosperity of the village Hamirpur was soon shrouded in the politics of the Govt. policies. The rejuvenated life in the river resulted in the thriving of the rich aquatic life. Fishes of all shapes and sizes began to thrive in the river.

But towards the end of '96, fisherman noticed big fishes in the river and approached the Rajasthan Govt.'s fishery Department for acquiring fishing rights. Obtaining the contract, Latif arrived at Hamirpur, but the people were outraged and refused to give into the demands of the contractor. The villagers impressed upon Latif that the fishes were the gift of God and that in no way would tolerate, endangering of any life form in their region. Latif returned to Alwar and lodged a complaint before the officer of Rajasthan Fishery Department. In November 1996, the officials of the fishery Department. And police came to Hamirpur and conducted a survey and threatened the villagers of dire consequences, if they refused Latif to fish. The villagers explained to the officials of



all the problems, and the officials came to know of the TBS support to them. It made the villagers realize that the issue would not be settled easily, and the people launched "Save the Aquatic Life Satyagraha". In December, 96, the department of fisheries sent a notice to TBS, stating the river belonged to the Rajasthan Govt. After that people resolved to fight for their rights, and after 2 months long people's agitation, the villagers soon won the support of many social, human rights organizations. Finally the Govt. had to withdraw and cancel the fishing contract.

The people have declared Aravari a bio-diversity protected area. People insist on the principle of, live and let live, even in relation to the fish and call it 'Jeeva Daya' mercy for all living beings. The people of Hamirpur and scores of villages along its banks, understand the eternal truth that the river is also for the good of the people and the people for the welfare of the river, and respect the river for what it is.

In 1988, many more Johads were built in several villages such as Bhiriavas, Dumoli, Khadata, Khatala, Samatsar, Chosla, Lalpura. This trend continued during the years 1989 to 1991. More Johads were constructed in Villages such as Palasana, Joge-ki-dhani, Hamirpur, Samra, Natala, Kaled, Jagnathpura and many others. And till date altogether more than 350 Johads have been built in the catchment area of the Arvari River. Water in the Johads raised the water table in the entire catchment area of the river Arvari.

So Arvari Parliament was formally formed on 26th January 1999 to manage the river & its waters judiciously. The Arvari Sansad met for the first time in Hamirpur today on 26th January 1999(Republic Day). It has the representation of 72 villages. This parliament has also framed 11 rules



for the use of Arvari water. This parliament meets 4 times a year and if required they could meet in an emergency situation.

The parliament met for the second time on June 5th -7th, 1999, in the village Samra. It was clear that the villagers were determined to carry out all what they had planned. A Liquor company was interested in setting a beer factory in the region as barley is the main crop here and water was not available in plenty. "The villagers got together to ensure that no industrial concern exploited the river's resources".

In the Third Session held in village Bhanwta-Kolyala on December 28-29, 1999, the parliament reviewed implementation of the Rules. The Fourth meeting was held on June 10, 2000 in Devka-Devra village. The relationship between the members of the parliament and the village assemblies was discussed.

The Fifth Arvari meeting was held in Jaipur District village Barana Ki Dhani. To do water conservation work for the Drought Proofing due to severe Drought condition existing in the villages of Rajasthan for Last four years.

Conclusion:

Collective action of the 'people' in role of agents of water movement and other concern of water has successfully resulted in developing indigenous are eco-friendly technologies and maintain water harvesting 'structures' and accountability to grass root bodies with proper rules, policies, accounts etc. The main examples of people movement for water are johad (digging of water holes), river parliament (rain harvesting and interlinking of local rivers), bund (holding water by constructing small scale dam), recharging well. Even these technologies have been turning into economic



enterprise. Johad, a case in point, is managed by TBS which offers this technology to water scarce peoples in other regions on a nominal price. Earlier Farmers were not able to cultivate even one single crop a season but now they are able to cultivate a maximum of two crops a season. Agricultural production has increased.

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