

# A Study On Jala Shakthi Abhiyan with reference to Gurakonda Village, Devarkadra Mandal, Mahabubnagar District, Telangana State

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#### Introduction

On 1<sup>st</sup> of July, 2019, the central govt. of India has been started Jala Shakthi Abhiyan - A campaign for water conservation and water security in the country. A glimpse at India's water history-way back i.e., the great famine of 1877- was caused by confluence of failed monsoon and colonial avarice and has resulted a cholera outbreak that killed millions in India. This stark event made people think of water management. Since then Govt. of India has taken up many several measures in water conservation. The proposed Jala Shakthi Abhiyan is following on five aspects such as:

- 1) Water conservation and rain harvesting.
- 2) Renovation of traditional and other water bodies.
- 3) Reuse of water and recharging of structures.
- 4) Watershed development.
- 5) Incentive afforestation.

Further, during the course of years the Govt. of India has realized the need to make water conservation and water security as a movement of masses such that the campaign would bring positive change in the people like Swacch Bharath Abhiyan.

#### **Review of Literature**

- Neeraj Sharma and Nishi Kullu: Spatiotemporal Analysis of waterbodies in Ranchi District, Jharkhand using Satellite Data: An Input for Jala Shakti Abhiyan. It has been suggested to undertake large scale mapping of lake and ponds at 1:500/1000 scale using seasonal satellite data for preparing of pre and post-monsoon variation in number and area of lakes and ponds. Maps and statistics generated in present study are useful for planning, monitoring and management of water bodies in the present scenario of urbanization and managemental degradation and climate change.
- L.C. De, ICAR-NRC for Orchinds, Jal Shakti Abhiyan, November 2019, Mission Mode on Rainwater Harvesting, Improvement of knowledge and skill of stakeholders for improving production of orchids.
- Captain (In) Vikas Chawla: Astudy on Implementation of "Jal Shakti Abhiyan" In Sikar District of Rajasthan, Indian Institute of Public Administration Indraprastha Estate, Ring Road, New Delhi. Detailed information about the implementation of Jal Shakti Abhiyan is made a report of sikar district of Rajasthan.

## **Objectives**

- 1) To study the effectiveness of implementation of Jal Shakti Abhiyan in the five main intervention areas in the selected Gurakonda Village Devarkadra Mandal of Mahabubnagar District, Telangana.
- 2) To examine the difficulties in implementation of JSA in Mahabubnagar District.
- 3) To evaluate the possibilities in the improvement of the catchment area and catching the rainwater.
- 4) To know the steps for improving the groundwater and recharging the bore wells and to stop soil erosion.
- 5) To identify the challenges in cropping patterns under the Jala Shakti area and proper utilization of rainwater.

# Research Methodology:

The questionnaire consists of 20 Questions. The Questionnaire is randomly distributed cross the villages. Several walk through survey with villagers such as farmers, youth, students and old people, these were respondents to answer the questionnaire. Questions pertaining to the water resources and sources of water conservation in the village are incorporated in the Questionnaire.

#### **Source of Data**

The primary data as well as secondary data is analyzed using a percentage method to interpret the collected data.

#### **Data Analysis:**

From the analysis it is clear that 100% people of Gurakonda are aware of the Jal Shakthi Abhiyan program in their village. And specially 80% people are aware that 4 check dams have been constructed in regard to the program. Around 40,000 saplings are grown as part of afforestation of the spirit of Jala Shakti Abhiyan.

Students of college, under the said faculty have collected the primary data and subsequently the secondary data the project is done in questionnaire research methodology. The collected interpreted in the opted Research Methodology i.e., Questionnaire with the following objectives the said Jignasa Project is carried out.

- 1)To study the effectiveness of implementation of Jala Shakthi Abhiyan in the five main intervention areas in the selected Gurakonda village Devarakadra mandal Mahabubnagar district.
- 2) To study the challenges in implemented of Jala Shakthi Abhiyan in the district.
- 3) To identify the challenges in the improvement of the catchment area.
- 4) To identify the challenges of catching the rain water.
- 5) To identify the challenges and improve the groundwater and recharging the bore wells.
- 6)To identify the challenges in soil erosion.
- 7) To identify the challenges in cropping pattern under the Jala Shakthi area.
- 8) To identify the challenges of proper utilization of rainwater. As a part of this proposed student's Jignasa study project, the following features have been found out in the case study.

### **Findings:**

- 1) Increase in catchment area from 200 acres to 500 acres
- 2) Production of crops has been increased.
- 3) Increased ground level water.
- 4) 40,000 saplings planted in Gurakonda.
- 5) Each and every family has soaking pits.
- 6) 4 check dams were constructed across the flow of Krishna river at Gurakonda.
- 7) Paddy is being Cultivated by 90% of land owners.
- 8) There is no cropping rotation.
- 9) Most of the crop sold at the village local market.
- 10) Only 10% of the land allotted for production of onions and groundnut.

### **Suggestions:**

- 1) Crop rotation and changing cropping pattern needed.
- 2) Vegetables and millets should be added to cultivation.
- 3) Commercial crops should be encouraged.
- 4) Development of Horticulture allied activities.
- 5) Development of agro based activities with food processing units should be given importance.
- 6) Fisheries and aquaculture should be given importance too.

#### **Conclusions:**

- 1. As per the data given obtained by the researcher, the progress achieved in construction of water conservation and harvesting structures is significant. The target set under JSA for construction of large waterbodies, check dams and farm ponds of various types have all been met fully, and a total structure has been created.
- 2. In case of rooftop rainwater harvesting structures with storage, the target has been surpassed by a wide margin. The awareness generated by the block officials, Panchayat members and locals regarding the importance of harvesting, conservation. There exists storage of 7 clean rain water which could be used for drinking and cooking all year round. During the field visit. Some part of the credit also goes to the successful implementation of JSA in the District earlier.
- 3. In case of Renovation of Traditional Water Bodies, the target set by the District in terms of renovation of non-functional structures and construction of new traditional structure, has been fully achieved. A total of 6 traditional structures were renovated/constructed in the district as planned. There was also widespread support from the local bodies for returning to traditional methods of water conservation, which was being neglected for some time due to over dependence on groundwater.
- 4. The Reuse of Water and Bore-well recharge structures has been another success story in the district as part of JSA. The target set by the district for the construction of new percolation tanks, Soak pits, Bore-well recharge structures and RT RWHS (with recharge) has been surpassed. As against 6 new recharge structures planned, a total of 10 structures were finally constructed under the other structures planned, a total of 10 structures during JSA has far exceeded the target. This is primarily due to the low cost of the structure and understanding of individuals regarding huge benefits.
- 5. The watershed development and soil conservation department was observed to be very active in Devarakadra District. The funding schemes under the department were also consisted very attractive by the locals, with only 10% of the cost of structure to be done by the beneficiaries. The construction of the trenches, staggered Trenches, bunds and channels etc., has been completed as per the planned target of a staggering 1,100 meters.

- Despite restricted funds, considerable work has been undertaken towards Watershed Development.
- 6. A major trust was given to afforestation by the District Administration of Devarkadra. Widespread 20 campaigns, rallies and organization of public events drew large scale participation in tree plantation drives. Consequently, the target set for saplings planted and seedlings raised alongwith nurseries, with the number of saplings planted finally surpassing the planned targets. A total of 3,350 saplings were planted and 12,000 seedlings were raised in nurseries in the District itself as part of JSA, a huge achievement in itself.

#### **References:**

- Ministry of Jal Shakti (2019). Jal Shakthi, A water conservation Campaign. 209, New Delhi. Ramappa, K.B, Reddy, Balappa & K. Patil, Savita.
- Chandrasekhar, M. (2018). Bridging the gap between intent and achievement: The case of MGNREGA in a village in Rahasthan. (Unpublished mater's thesis). Punjab University, Chandigarh, India.
- Manivannanan, S, Thilagam, V. Kasturi & Khola, O.P.S (2017). Soil and water conservation, 16 (4). 312-319.
- Agarwal, Tarunika Jain. (2017). Sustainable Water Resource Management in India: a Financial Perspective. Journal of Commerce & Management Thought, 8(3),467-482.
- Food and Agriculture Organization of the United Nations. (2017). Water for Sustainable Food and agriculture. 2017, Rome.
- Arora, Rajiv Kumar (2013). Management of depleting groundwater resources in Gurgaon: A case study in common property resources management. (Unpublished master's thesis). Punjab University, Chandigarh, India.
- Water conservation in India: An institutional perspective. Eco. Env. & Cons, 20(1). 303 31. Narain, P, Khan, M.A & Singh, G. (2005).
- Das, D. C. (2008). System approach to watershed modeling for sustainable development, including forestry. International Forestry Review, 10 (2), 281-291.

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