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Jalyukta Shivar Campaign- A Solution to Overcome Water Crisis in Maharashtra

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Abstract: ***Irrigation systems in India since ancient times and continuing through even the Mughal times were highly localized There were check dams, wells, ponds and tanks in every village or shared, governments subsidized these for maintenance this in every village, governments subsidized these for maintenance and system continued through the ages. They become handy during droughts and if these dried, governments sponsored relief for famines. In building the canals and then charging higher for irrigated land, British ignored the traditional systems or irrigation which fell into disrepair and eventually lost out. This led to large parts of the country which could not be covered by canal irrigation losing out the local irrigation and completely relying on rain. After independence, the obsession with large dams and canals continued and not many governments thought of reviving the traditional irrigation which worked for centuries. Meanwhile, droughts, water scarcity, deaths continued. The countryside especially in water starved parts of Maharashtra.***

Water is one of the earth's most precious resources. Though, 70% of Earth's surface is water a major 97.5% of this is salt water and only 2.5% is freshwater. Moreover, less than 1% out of this 2.5% amount of freshwater is accessible (the majority is frozen in ice caps or as soil moisture) with growing population this amount of water is becoming insufficient. Moreover, India and other developing countries are the worst affected by fresh water crisis mainly because of comparatively lack of better planning to manage their respective fresh water reserves both on surface and in the aquifers. Therefore, sometimes we can say that water crisis is manmade problem up to some extent. And this is a long term problem. A combination of measures is required to tackle the issue. Water related problems are not new to the state but there have been some rapid changes in recent years.Maharashtra government has launched the project "Jalyukta Shivar Campaign" in Maharashtra for drought-free state by 2016- 2019.This project involves deepening and widening of streams, construction of cement and earthen stop dams, work on nallas and digging of farm pond. There is need to recharge ground water and create decentralized water bodies to overcome the water scarcity problems in rain fed areas. That's why Government has launched a new programme named Jalyukta shivar campaign if this scheme properly implemented then water scarcity will surely a thing of in Maharashtra.

Keywords: Jalyukta Shivar Campaign,Water Scarcity, Drought-free, Water Crisis.

I. INTRODUCTION

In the state of Maharashtra, inconsistency of rains in the very times of crop growth and discontinuity of rains create drought-like situation and agriculture field is heavily impacted. Considering irrigation facilities in the state, factors mainly challenging development of state are limited irrigation facility (according to report of water and irrigation committee, even if entire irrigation capacity is utilized, 44% area will remain dry land), large coverage of drought-prone area (159 Lacs Hectare which means 52% of cultivable area), large proportion of poor and downgraded land (42.20%), increasing uncertainty in the agricultural field due to uneven, unpredictable, and intermittent rainfall. For last four decades, heavy ups and downs have been observed in the production of crops on dry land in the state.

Figure 1Drought in Maharashtra

Less availability of water is a major factor responsible for this situation. To make water available for assured farming and for drinking, solutions underwater conservation if strategically designed and implemented in integrated manner with coordination of all departments, provision for drinking water and protected irrigation for crops can be definitely made. There is need arises to implement a scheme which will overcome water crisis in Maharashtra. That is why Government has launched a new scheme named 'Jalyuta Shivar Campaign.'

II. INTRODUCTION OF JALYUKTA SHIVAR CAMPAIGN

Jalyukta Shivar scheme is simple; it subsidizes and encourages building and maintenance of the wells, ponds, small canals, check dams and tanks down to the village level. 'Jalyukta' means water filled and 'shivar' is village. The idea was to build the water bodies which fill up when it rains and provides water when rains stop. From objectives of jalyukta shivar campaign, I think it will worked very well and led to less water scarcity. Many Jalyukta Shivar projects are inspired by various programmes of previous governments, including the Integrated Watershed Development program, Vidarbha Intensive Irrigation Development Program, Mahatma Phule Bhumi Abhiyan (Mahatma Phule water And Soil Conservation Programme) and Dry land Farming Mission. The scheme is launched with an objective to take up short and long-term measures to tackle drought. Also public participation is one of the main objectives of Jalyukta Shivar Campaign. We know that, when people consider any scheme as their mission or a movement it is bound to be successful. Objective of Jalyukta shivar Campaign is making all drought-prone villages water neutral (having adequate water) by 2019. By Jalyukta shivar Campign, Government has decided to implement the project in smaller cities to tide over the problem of water scarcity across Maharashtra. Under this scheme, micro-irrigation systems would be encouraged for proficient use of water, hence increasing the irrigated area. Moreover, all the existing water conservation schemes will be now accumulated under this scheme. With several parts of Maharashtra still reeling under the drought, the state government has launched the scheme to combat increasing number of suicide by the farmers of the state. Therefore, The Maharashtra government's flagship Jalyukta Shivar Yojna has been touted as drought- proofing scheme.

III. AIMS AND OBJECTIVES OF JYS CAMPAIGN

Flagship program of the Government of Maharashtra to make 5000 Villages water Scarcity free every year.

A. To arrest maximum runoff in the village area.
B. To create decentralized water bodies.
C. To increase the Groundwater level in Drought areas.
D. To create new structure of water conservations.
E. Rejuvenation of the water storage capacity of various existing structure like Village tank, Percolation tank, CNB through repairs and renovations.
F. To increase storage capacity of water bodies by removing silt through people's Participations.
G. To sensitize the concept of water Budgeting.
H. To encourage tree plantation.
I. To create awareness and encourage people of efficient use of water for farming.

Figure 2 State Map of Maharashtra.

There are 184 Talukas with on average more than 20% drop in the rainfall in the year2014, while there are 72 Talukas with more than 3 Meter drop in groundwater level, 116Talukas with more than 2 to 3 Meter drop, and 190 Talukas with more than 1 to 2 Meter drop. This means there are 188 Talukas (2234 villages) where level of groundwater has dropped for more than 2 Meter. High scarcity of drinking water might be faced in these villages. Through the GR dated 25 November 2014, government has declared drought-like situation in 19059 villages from 22 districts. Also, water storage in the state is 81% on average in big projects, 67% on average in medium projects, and 60% on average in small projects. Looking at this fact, drought-like situation is created in some Talukas of 22 districts. In 2011-12, heavy drought situation was created in Western Maharashtra and Marathwada It is observed that after every 2 years, drought situation is created in some areas.

Since last two years, chain cement concrete canal construction programme, Mahatma Phule water and land conservation campaign have been implemented in the state. Similarly, water harvesting activities like sludge extraction in Latur district and well refilling in Nanded district have been successfully conducted. To permanently overcome drought situation, Jalyukta Gaav (waterful village) campaign was implemented in 5 districts from Pune division in the year 2012-13. Under this, action plan was prepared for water harvesting and increasing groundwater level by implementing various schemes collectively through coordination of all departments.

Jalyukt Shivar Abhiyan (JSA) is a flagship program of Government of Maharashtra launched in the year 2014 to provide long-term and sustainable solutions to the water scarcity problem faced by rural communities. The program proposes a planning-based integrated framework to address both drinking water and irrigation water demands of communities. Interventions include building and repairing of water harvesting structures such as continuous contour trench, cement nala bund, earthen nala bund, loose boulder structure, farm ponds, and agricultural interventions (horticulture plots, terracing, etc.).

IV. DETAILS OF JALYUKTA SHIVAR CAMPAIGN

The Maharashtra government in India has launched a water conservation scheme named Jalyukta Shivar Abhiyan to make Maharashtra a drought-free state by 2019. The programme aims to make 5000 villages free of water scarcity every year. The key aim of Jalyukta Shivar Abhiyan is to establish belief in a farmer that “every drop of rainwater is owned by me and it should percolate in my land”.

The flagship programme launched by Chief Minister Devendra Fadnavis, Jalyukta Shivar Abhiyan aims to bring water empowerment to 25,000 drought-affected villages in Maharashtra within next five years. The programme Jalyukt Shivar was initiated by Pankaja Munde .With the passing time, the scheme has been going strong with villages building infrastructure and making the programme one of the largest Government initiatives in terms of public participation. The economic prosperity of a land depends on the water it holds. The fact laid the foundation ofMaharashtra’s flagship scheme, Jalyukta Shivar Abhiyan, which aims to bring prosperity to its land and farmers through water conservation.

V. IMPORTANCE OF JYS CAMPAIGN

A. The economic prosperity of land depends on the water it hold therefore, in this scheme Government is trying to make a belief in farmer that, every drop of rainwater is owned by me and it should percolate in my land. Therefore, through public participation we can achieve our aim of groundwater recharge. Thereby increasing groundwater levels.
B. To minimize scarcity.
C. To increase area under irrigation.
D. To minimization migration.

VI. ADVANTAGES OF JYS CAMPAIGN

A. Command Area Development Approach
B. Convergent action for water conservation (capacity Building, planning, Implementation and Monitoring)
C. Increase in crop yield.
D. Increase economic condition of farmers.
E. Increase in cultivated area.
F. Increase in water Storage capacity.
G. Recharge of ground water table level.
H. Benefit to protective irrigation area.
I. Increase in cropping intensity.
J. Increase in the Agriculture productivity.
K. Reduction in Tanker.

VII. IMPACT OF JALYUTA SHIVAR IN MAHARASHTRA

A. Same level of crop production with almost 40% less rainfall. Water table is raised by three meters in drought –prone Marathwada and second Rabi crop being grown even in drought-prone regions.

B. With this scheme, we have not only been able to reduce the number of tankers(for water supply in districts facing scarcity) but farmers are now able to take two to three crops(for cultivation) and water the plants even during rain gaps.

C. It is observed that, while monitoring the progress of water conservation schemes, namely farm ponds on demand, irrigation wells and desilting of dams, it is found that, these schemes have directly helped farmers and brought about village transformation.

D. The deployment of manpower under MNREGA helped in creating permanent assets including 1.26 lakh wells.

VIII. BROADER SUGGESTIONS

A. Creating storage is one thing and managing the same are two different things. Sometimes it is observed that, Jalyukta shivar Campaign is silent about management. There is need arises if construction of interventions in Jalyukta Shiar Campaign, is deviate from its working schedule then it should be properly manage by using different functions of management like Controlling, Decision making, Planning etc….

B. Proper attention should pay for avoid excesses of nalla(canal) deepening and widening in Jalyukta Shivar otherwise, Excesses of nalla (canal) deepening and widening may create environmental threats to aquifers.

C. Before commencement of Jalyukta shivar Campaign Local Governing body should have to reassure that, funds will not come in the way of water conservation works.

D. For instance, sugarcane occupies a million hectares, about 5% of farm land, but it consumes 700 TMC or more than half of available water annually, made possible only by large dams. Therefore, need arises to make assure water for farming and for drinking purpose by proper co-ordination of work in Jalyukta shivar campaign.

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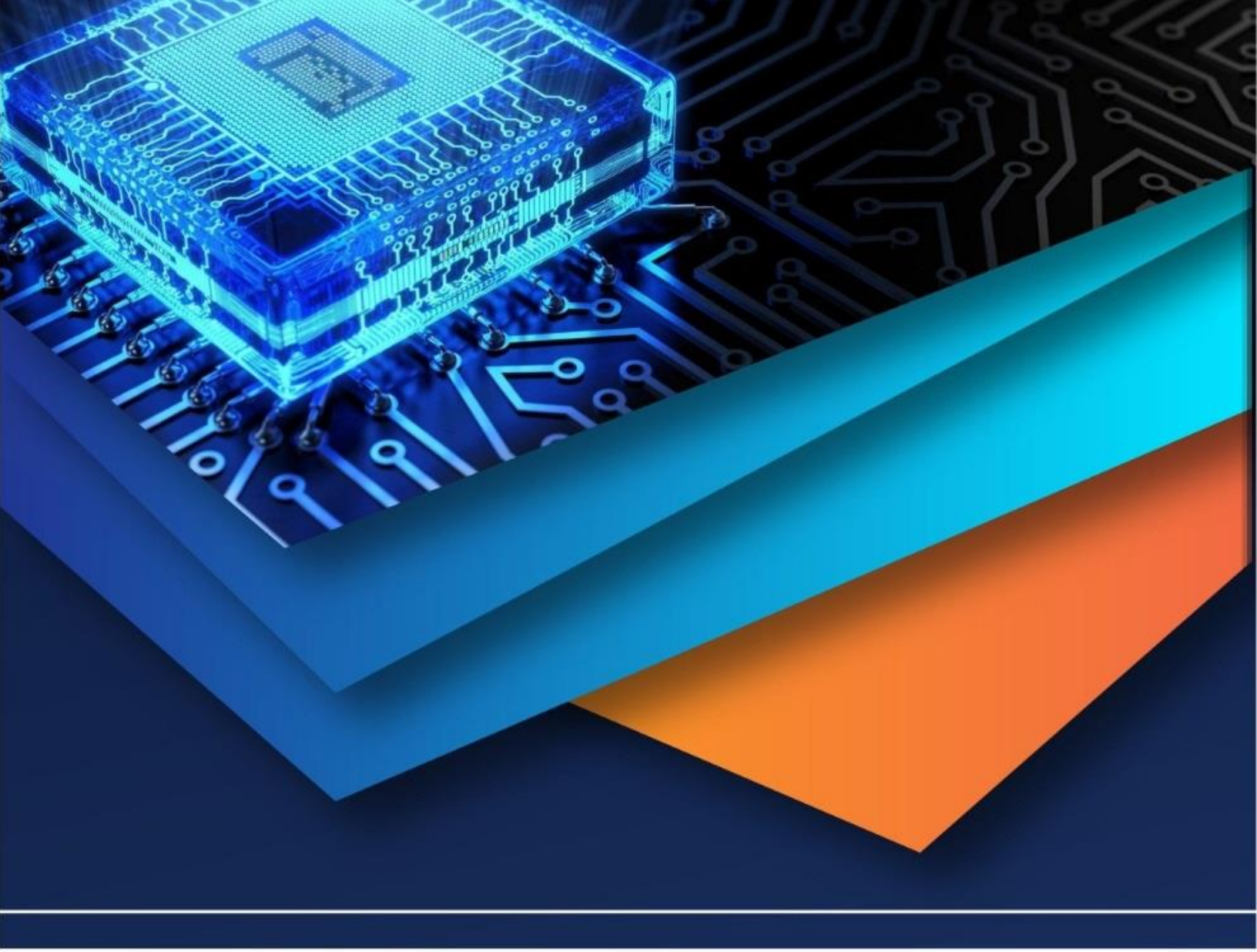

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