



Water Resource in Marathwada Region: Review on Progress in Irrigation Schemes and Projects

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Abstract

Marathwada region suffered under drought condition start from this century. It is an apart of the scanty rainfall area of central Maharashtra. The region considers with the Aurangabad Division of Maharashtra. It includes district of Aurangabad, Jalna, Parbhani, Nanded, Beed, Osmanabad, Latur and Hingoli. Out of these eight district three are worst affected, namely Beed, Latur and Osmanabad. Present research paper has been discuss the progress in Major, Medium and Minor irrigation projects as well as irrigation schemes like Percolation Tank and Kolhapuri types Bandhare implemented in the region and studies scarcity of water. The data for the study available from secondary sources like District socio-economic review, Magazine, Reports and News Paper etc.

Key words: Irrigation Projects, Irrigation Schemes, Droughts, Scarcity, Groundwater Freshwater.

Introduction:

Water is a key natural resource for human survival. Water plays a vital role in sanitation for our rural and urban communities. Water is also an important economic resource. It is necessary for all forms of agriculture and most of the industrial production processes. Water also provides a wide range of ecosystem and environmental services. It is essential for estimation of pollution caused by industrial effluents and domestic sewage. Pressure on freshwater resources is increasing across the globe. During first eight decades of the twentieth century, consumption of water increased fivefold, 75 percent of which was during the second half of the century. Form a macro perspective, the overall freshwater availability across the globe remains more or less constant. But, from a micro-perspective, the freshwater supplies in many regions and localities are dwindling due to alteration in hydrologic balances, over exploitation and increasing pollution of freshwater resources. Many third world countries are already facing serious water shortages. Increasing freshwater



scarcity is becoming a major constraint in producing food for growing world population, ecosystem protection, and maintaining health, social and food security and peace among nations.

India is not an exception to this impending crisis. The growing population, which is about to touch the billion mark the preference for water intensive agriculture and rapid urban industrialization are putting enormous pressure on the fragile freshwater resources. Growing water scarcity problems pose serious threat to ecosystem management, social sustainability and economic growth.

Geographical Features of Marathwada Region: The Maharashtra state is an integral part of the Union of India on the west coast with a geographical area of 307713 sq. km. It has five regional division namely Konkan, Western Maharashtra, Khandesh (North Maharashtra), Marathwada and Vidarbha. Marathwada region lies in the Upper Godawari basin, which extends from 17°35' north to 20°40' North latitude and from 74°40' east to 78°19' east longitude. The region had 64811 sq. km. total geographical area and having 1.87 crore population according to 2011 census which is 16.66 percent of the Maharashtra state. The regions administrative setup is consisting with eight district and that are divided into 76 Tahsils. However, the net sown area is 75 percent of the total geographical area and it is 12 percent of the Maharashtra state.

Generally, drought is a period of below average precipitation in a Marathwada region, resulting in prolonged shortage in its water supply, in all levels namely atmospheric, surface or groundwater. A drought condition in any region including Marathwada region occurs when there is less than 20 percent of average rainfall for consecutive periods. The region is under the influence of south-west monsoon. Marathwada is a landlocked region. The entire region is drained by the Godawari river and its tributaries such as Purna, Shivna, Dudhana, Sindhaphana and Bindusara are the main rivers in the region. Except Godawari on other is a perennial river. These rivers carry very little water as the summer season. Major dams in Godawari basin are Bhandardara in Ahemadnagar, Jayakwadi Stage-1 in Aurangabad, Upper Dudhana in Jalna, and Lower Dudhana in Parbhani. Sindhaphana and Bindusara in Beed, Manjara in Latur district etc. All the reservoirs receive water during rainy season. Due to the failure of monsoon, many reservoirs are become dry. No water can be supplied until next monsoon. Along with surface water, underground water resource has also been affected. The water crisis in Marathwada has pushed thousand towards the underground industry. It is

draining the underground water and posing ecological challenge. There is severing depletion in groundwater in all the Talukas of the Marathwada region.

Aim and Objective:

To find out the position and development of irrigation projects and schemes in Marathwada region

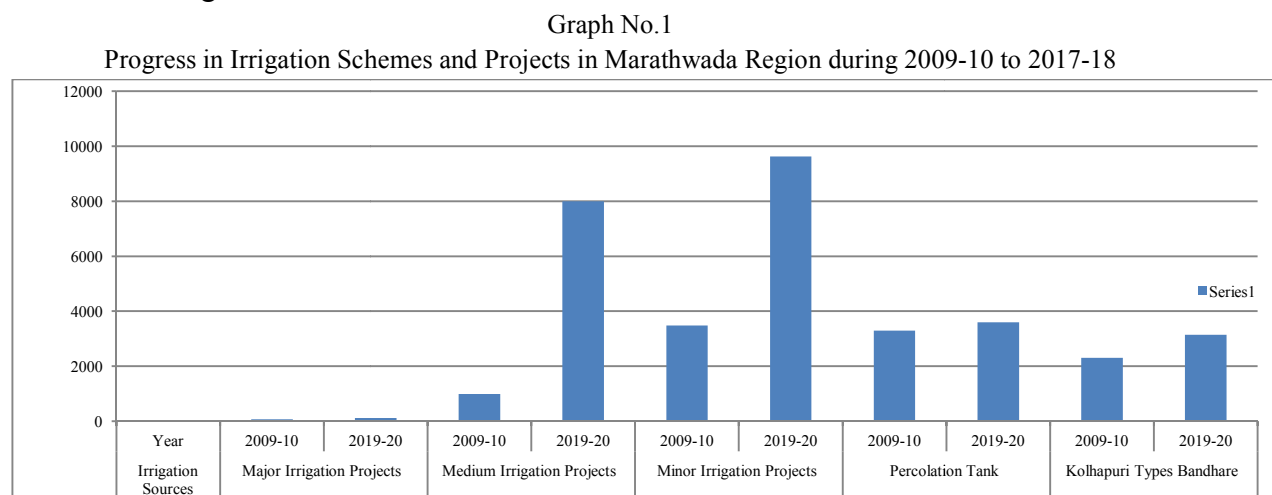


Table -1
Progress in Irrigation Schemes and Projects in Marathwada Region during 2009-10 to 2017-18

Sr. No.	District	2009-10					2017-18				
		Major Irrigation Projects	Medium Irrigation Projects	Minor Irrigation Projects	Percolation Tanks	Kolhapuri Types Bandhare	Major Irrigation Projects	Medium Irrigation Projects	Minor Irrigation Projects	Percolation Tanks	Kolhapuri Types Bandhare
1	Aurangaabd	2	3	61	510	500	4	16	3920	2171	915
2	Jalna	-	7	59	517	200	1	7	95	1932	304
3	Parbhani	1	5	71	39	28	1	6	347	126	55
4	Nanded	4	10	174	62	58	4	11	241	96	241
5	Hingoli	2	2	164	110	233	2	-	51	83	35
6	Beed	1	1	69	895	306	2	16	202	1585	1148
7	Osmanabad	1	1	50	385	763	2	18	1389	669	102
8	Latur	2	23	146	292	221	2	11	183	1150	345
Total of Region		13	31	794	2810	2309	18	85	6428	7817	3145

Source: District Socio economic Review

Discussion:

Table 1 shows that the progress in irrigation in Marathwada region during the year 2009-10 to 2017-18. There are 13 Major irrigation projects, 31 Medium irrigation projects and 794 Minor irrigation projects in the region during the year 2009-10, and it is increased,



Major irrigation projects 13 to 18, Medium irrigation projects 31 to 85 and Minor irrigation projects 794 to 6428. The progress in Major, Medium and Minor irrigation projects are 38%, 174% and 709% respectively during the observation period. The tremendous changes found in progress in irrigation schemes in the Marathwada region. There are 2810 Percolation Tanks and 2309 Kolhapuri Types Bandhare in the region during the year 2009-10. And it is increased, Percolation Tanks 2810 to 7817 and Kolhapuri Types Bandhare 2309 to 3145. The progress in irrigation schemes Percolation Tanks and Kolhapuri Types Bandhari are 179.25% and 36.20% respectively during the investigation period in year 2009-10 to 2017-18.

Concluding Remarks:

There is no proper management policy in Marathwada region in context to irrigation development. The progress in Percolation Tank and Kolhapuri Types Bandhare are very poor, compare to Minor Irrigation Projects. The irrigation schemes are very cheapest way to fulfill the need of water for irrigation as well as rural population uses. It is also helpful to increase the underground water level for sustainable ecology. To construct new Major irrigation projects are creates many problems like economic, social, environmental, rehabilitational etc. Hence, there is an urgent need to take effective measures massively to undertake the schemes like 'Pani Adva Pani Jirva' and 'Jalyukta Shivar' etc.

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