

Implementation and Distribution of Integrated watershed Development Programme in Marathwada Region

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Abstract :- Water is the life-blood of the environment, without water no living beings can survive. Water is used for agricultural, domestic, industrial, power generation and other various purposes. This paper summaries observations based on previous assessments of implementation of integrated watershed development programme in Marathwada region. Marathwada is a drought prone area in Maharashtra state. Watershed is a basic hydrologic unit and hydrologic and ecologic govern the quality of soil and water resources within watershed. The in-situ conservation measures in the form of field bonding and ex-situ through check dams complemented each other and improved both surface and ground water availability. The watershed is an important source of drinking water. Ideally, a protected watershed can provide water that is pure enough to drink without any additional treatment.

IWDP the activity of Integrated Wasteland Development Programme (IWDP) has been started by the center and state government since 2009, Under the scheme, the development work of watershed area, in Marathwada area in Marathwada region has been completed in march 2015 VI Batch.

Key words :- Watershed.

Introduction :- Watershed area development ensures supply of water to every field, removes hunger and poverty from poor areas, provide green cover over denuded areas, bring in more rains and improve the environment. Watershed development is also described as a programme that holds the key to solve problems of drinking water. the problem of water for irrigation will also be solved Increase in agricultural production due to watershed development. It strongly suggests that drought can be faced and, in most cases, beaten. Indeed, in the words of our

visionary Fr Hermann Bacher, “**Without Watershed Development there is no solution to Drought**”.

Watershed programmes aim at controlling degradation, conservation and development of natural resources and livelihood enhancement of the farmers and landless. Although watershed approach was known since long, it was only in 1983, when ICAR launched the Model Watershed Programme under the aegis of National Watershed Programme this programme focusses on development of both arable and non-arable lands. Successes witnessed through model watersheds led to the launching of a National Watershed Development Programme for Rain fed Areas.

Watershed programmes has made significant progress in rain fed regions through increase in productivity, improvement in resource quality, diversification of production systems and generation of additional employment. Watershed programmes resulted in yield increase significantly across the Maharashtra and have shown a potential of 20 to 100% increase in the crop productivity from rain fed areas in addition to improving the natural resource-base and environmental benefits. Further, a majority of researchers agree that there is an increase in cropping intensity, household income, availability of fodder and ground water status as reported by Ralegan Siddhi of Maharashtra, Similarly, a number of studies have reported that economic impact of watershed development programmes accrue in terms of favorable benefit cost ratio.

Marathwada Region, which is mainly located in the main drainage of Godavari River is facing severe drought. Actually, the region is facing the recurrent droughts with constant variations of rains and prolonged gaps. However,

the water scarcity this area, especially in Jalna districts is altogether different from the famine of 1972 because we have indiscriminately siphoned the ground water and made no efforts to recharge it. Although, hundreds of tankers are deployed, the major problem is related to the source of water. Many urban areas like Jalna and several townships are facing severe water scarcity.

Study Area :- The absolute location of the region is from 17° 35' to 20° 40' North latitude and 74° 40' to 78° 19' East longitude with the total geographical area of 64,434 Sq.km. Which is 20.95 percent of the state and its population are 1.87 crores which are 16.66 percent of the state as per census of 2011. Its shape is roughly triangular. East-West maximum extension of region is 394 km and North-south extension of region is 330 km. Total Geographical area of region is administratively study region is divided into eight districts that are further divided into 76 tahsils.

Objectives of the study :- Main objectives of the study are as follows:

- To Evaluation of Watershed Development Programme IWMP in Study Region
- To Assess the IWMP work Distribution in Study Region

Hypotheses :- Following hypotheses have been tested in this study

- In the region distribution of watershed area development is disparities.

Database and Methodology :- This study focused on Watershed area Development and these watershed programmes implemented by both the state government and central government. It's Impact on migration for the purpose of analysis, The Secondary Data information has also been collected from the socio-economic reviews of the districts, district census handbooks, statistics office will be referred for the required secondary information.

Methodology :- The data thus collected through primary and secondary sources were processed and represented by statistical and cartographic techniques.

Integrated Wasteland Development Programme :- Under the aegis of the Planning Commission, the National Rainfed Area Authority (NRAA) framed the Common Guidelines, 2008 for watershed programmes for all Ministries, Departments. The provisions in the Common Guidelines and the observations of the Parthasarthy Committee required modifications in the watershed schemes of the Department of Land Resources. Accordingly, the schemes of Drought Prone Area Programme (DPAP), Desert Development Programme (DDP) and Integrated Wasteland Development Programme (IWDP) of the Department of Land Resources were integrated and consolidated into a single modified programme called the Integrated Watershed Management Programme (IWMP) and launched in 2009-10. This program is being implemented as per the Common Guidelines for Watershed Development Projects, 2008 (Revised in 2011). IWMP is extended to all the states of the country. As on 31 December, 2015, The Department of Land Resources has sanctioned 8214 projects covering an area of 39.07 million ha and has released Rs. 12496.9 crore as Central Share to the States except Goa. From 2015-16, the IWMP has become the watershed development Component of Pradhan Mantri Krishi Sinchayee Yojana (WDC-PMKSY). In addition, the Cabinet Committee on Economic Affairs (CCEA) has given its approval to the World Bank Assisted National Watershed Management Project "Neeranchal" 07.10.2015. Neeranchal will support Watershed Development Component of PMKSY.

The Information is given in the table no. 3.7

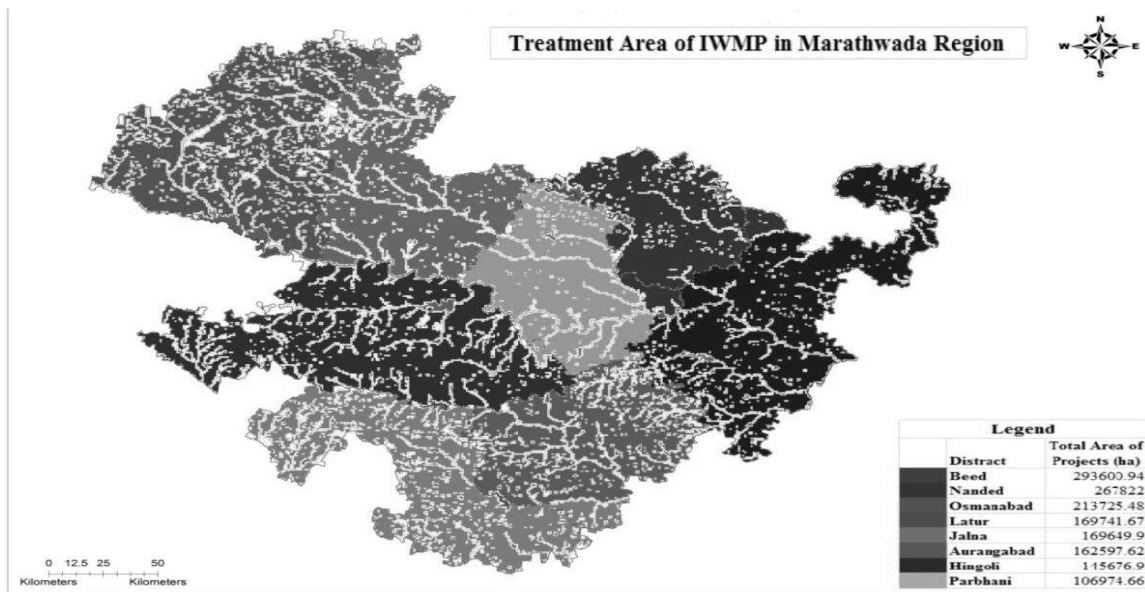
Table no 3.7 IWMP Batch Wise No of Projects and Area of projects in Marathwada Region (2009-2015)

Sr. No.	District	Batch I (2009-10)		Batch II (2010-11)		Batch III (2011-12)		Batch IV (2012-13)	
		No of Projects	Total Area of Projects (ha)	No of Projects	Total Area of Projects (ha)	No of Projects	Total Area of Projects (ha)	No of Projects	Total Area of Projects (ha)
1	Aurangabad	9	48085.97	5	26209	7	36028.77	0	0
2	Beed	18	70503.24	25	105861	12	54665.9	0	0
2	Jalna	8	30709	5	21682	16	75677	6	21436.9
4	Latur	7	17746.15	14	67608	6	21779.41	3	12917.24
5	Osmanabad	8	37351	5	24285	25	106916.2	0	0
6	Nanded	9	44287	26	118236	13	57186.01	3	14693
7	Parbhani	10	38373.29	12	47566	-	-	-	-
8	Hingoli	5	24013	19	78074	5	24207.51	-	-
Marathwada		74	311068.65	111	489521	84	376460.8	12	49047.14
Maharashtra		243	995889.2	370	1613753	215	931071.8	120	526544.97

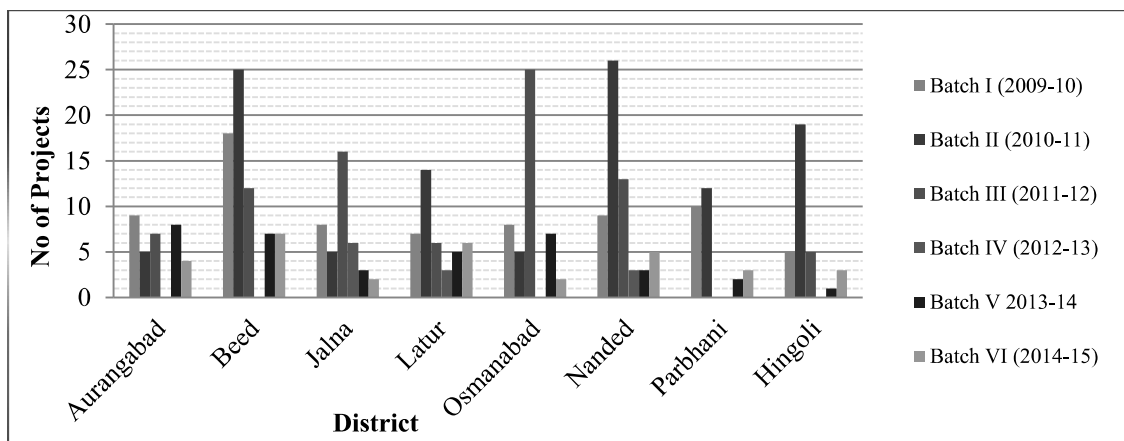
Sr. No.	District	Batch V 2013-14		Batch VI (2014-15)		Total	
		No of Projects	Total Area of Projects (ha)	No of Projects	Total Area of Projects (ha)	Total No of Projects	Total Area of Projects (ha)
1	Aurangabad	8	34410.66	4	17863.22	33	162597.62
2	Beed	7	33312.61	7	29258.19	69	293600.94
2	Jalna	3	10667	2	9478	40	169649.9
4	Latur	5	23593.64	6	26097.23	41	169741.67
5	Osmanabad	7	34487.05	2	10686.23	47	213725.48
6	Nanded	3	12548.67	5	20871.32	59	267822
7	Parbhani	2	6987	3	14048.37	27	106974.66
8	Hingoli	1	5182.26	3	14200.13	33	145676.9
Marathwada		36	161188.9	32	142502.7	349	1529789
Maharashtra		116	519299.85	122	541950.56	1186	5128509

Source: <http://iwmpmis.nic.in>, and vasundhara panlot vikas yantrana, Agricultural Office, Pune.

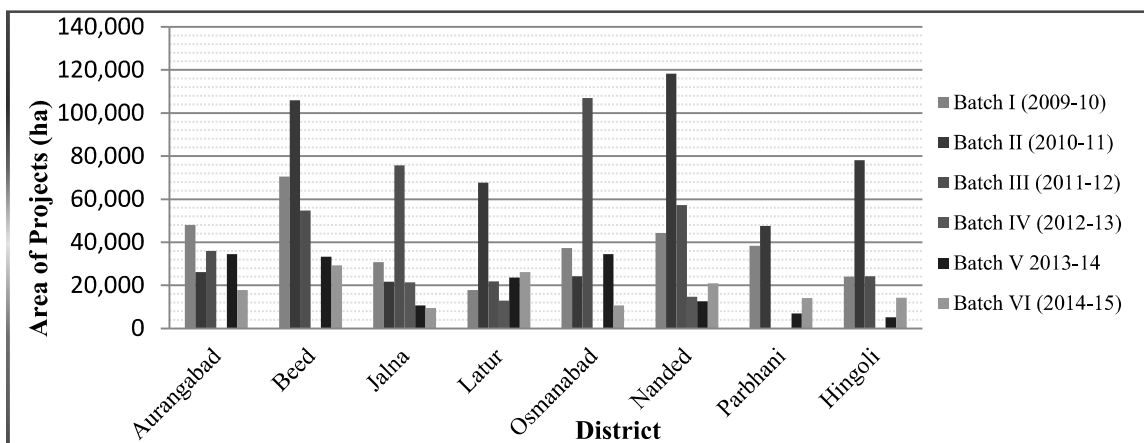
Map No 3.5 Treatment area of IWMP in Marathwada Region



Graph No. 3.4, IWMP Batch Wise No. of Projects in Marathwada Region (2009-2015)



Graph No. 3.5, IWMP Batch Wise Area of Projects in Marathwada Region (2009-2015)



The above table 3.7 and graph no 3.4, and graph no. 3.5 indicates In Marathwada region under the watershed scheme 349 mega project were selected by the year of 2015 most of this project in Beed district the Parbhani district is lowest in districts. There for development watershed through this scheme is done in Beed district on most area (293600.94 hectars) the lowest work is done In Parbhani district. Batch wise study shows that most project have been selected in batch IInd from 2010 to 2011 through the IWMP scheme because of this region the area is the selected project have been mostly done in the area for watershed development. While studying the works of watershed is development done by IWMP in Marathwada, the highest work percentage was in 19.77 percent in Beed district. Followed by Nanded district with 16.91 percent and Osmanabad district having 13.47 percent work. The lowest 7.74 percent watershed area development works have been done in Parbhani district.

Conclusion :- Under the IWMP schemes, the highest 19.2 percent watershed area development works in Beed district were carried out where as the work of watershed area development was lowest 7.0 percent in Parbhani district. In the numerical terms, 293600.94 hector Area works were carried out through IWMP schemes in the Marathwada region, the highest number of Project in Beed District.

The total drought prone area and watershed development work cannot be compared. There is no similarity between district wise geographical expansion and watershed area development area in Marathwada region.

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