IRRIGATION SCENARIO IN AURANGABAD DISTRICT

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Introduction:

Irrigation is essentially the artificial application of water to overcome deficiencies in rainfall for growing crops. Irrigation as a protective measure to supplement rainfall and precaution against the failure of crops, is always practiced in the various parts of the world. Irrigation is very vital to overcome the basic problems of the agriculture. Irregular, uncertain and unevenly distributed rainfall in time, amount and space is not sufficient for growing certain crops. These conditions make irrigation essential and indispensable for the successful crop production. Water is the most important single requirement for the growth of crops. Crops can be raised successfully only if water is available in adequate quantity either from rain or surface flow or below ground. Irrigation is required not only in low rainfall area and during non-rainy season but also during long breaks in rains in good rainfall areas.

Types of Irrigation

The study region come under the rain shadow region in eastern part of Western Ghats, where rainfall is receives inadequate and uncertain. The most of the river get dried in summer or have very less water except the Godavari. The remedies on this, the government has built some major, medium and minor irrigation projects in the district. At present there are two major, seventeen medium and 1934 small irrigation projects in the study region. The following types of irrigation are used for irrigating the agricultural land.

A) Major irrigation projects.

B) Medium irrigation projects.

C) Minor irrigation projects.

D) Well irrigation.

A) MAJOR IRRIGATION PROJECTS

Irrigation projects with a culturable command, area more than 10,000 hectares

are classified as major projects. There is one major irrigation project located in the district, whereas, Nandura Mahademeshwar irrigation project located in Igatpuri tahsil of Nashik district, it has got benefit from this project. Jayakwad major irrigation project is constructed on the Godavari river, near Jaykwadi village for the construction and development of canal Rs. 76617.50 lakh amount was spent, the project was completed 1976.The height of the project and total length of the canal are recorded37.73 meters and 208km respectively.

The maximum storage capacity of Jayakwad project is 2909 million cubic meters where, irrigation potentials of the project is marked about 2,63,860 hectares. Aurangabad Jalna and Beed districts are benefited from this project Nandura MahademesHwar irrigation project was completed 2009. The irrigation potentials of this project are 43500 hectares.

B) MEDIUM IRRIGATION PROJECTS

Irrigation projects with a culturable command are between 2,000 and 10,000 hectares is known as medium irrigation projects. There are 17 medium irrigation projects in the study area. It is observed that highest number of medium irrigation projects are found in Kannad tahsil and lowest in Soygaon, Khuldabad, Gangapur and Paithan tahsils in the period under study. About Rs.32,332.56 lakh amount was spent, for the construction and development of canals of all medium irrigation projects. The total irrigable area of these medium projects about 52,555 hectares. The length of the canal is different. Shivana project canal has 65 km length, followed by Girija project 25.65km Dehknu project 25 km and Anjana-Palsi project 22.65km, whereas the length Lehuki project canal has market only 2.50 km.

C) MINOR IRRIGATION PROJECTS

All ground water and surface schemes having culturable command area up to 2,000 hectares individually, are classified as minor schemes. The central Government is providing loan assistance under. Accelerated Irrigation Benefit programmers for minor irrigation projects of draught prone district of country. The Government of Maharashtra has given more attention towards minor irrigation schemes. The whole irrigation potential of minor schemes was 59937 hectares in 2010. Out of total minor

projects about 722 projects were concentrated in Sillod tahsil. The percentage share of Sillod tahsils is 37.33% and it was the highest among the tahsils.

D) WELL IRRIGATION

A well is a small hole dug in the earth surface from which subsoil water is taken out for irrigation and drinking purposes. It is a cheap, dependable and popular source of irrigation in the study region. In the year 1990-91, there were 65,657 wells, as against 72,603 wells in 2009-10. It means there is 10.57 percent increase of the number of wells in the district, it may be due to several favorable factor, including easy availability of loans from the government and financial institutions, subsides on lift machines, cheap power supply, and above all an acute urge with the farmer to have his own irrigation source, which has emerged as a key factor in the success of modern agricultural technology. About 96.45 percent (63330 wells) wells were in use and 3.55percent (2327 wells) were not use in the year 1990-91.

Bibliography:

1) Singh, Jasbir (1976): "An Agricultural Geography of Haryana Kurukshetra", Vishal Publication, University Campus, Delhi.
2) Hartshorne, R., "Perspective on the Nature of Geography", London, John Murray
3) James, L. Douglas and R.R. Lee, "Economics of Water Resources Planning", New York, McGraw Hill
4) Cantor, L.M. (1967): "A world Geography of Irrigation" Edinburgh Oliver and Boyd
5) Tyagi, B.P. (2000) "Agricultural Economics and Rural Development", 7th Ed., Jayprakash Nath & Co., Meerut
6) Mammoria, C.B. (1999), "Agricultural Problems of India", Kitab Mahal, Alahabad,
7) C. Sivarama Krishnarao and Mohammand Iqbal Ali (1986): "Impact of irrigation on cropping pattern". Kurukshetra August-September 1986