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CONTRIBUTION OF VEER DAM TO INCREASE IN AGRICULTURAL IRRIGATED AREA IN KHANDALA TALUKA, MH

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Abstract:

Maharashtra is considered as a progressive state in India. Agricultural Sector Industrial Sector Political Sector Social Sector We can see that there has been a great change in Maharashtra. The day by day changes in the agricultural sector and its impact on the production is seen as a precursor to development in Maharashtra. When it comes to agriculture or irrigation, we can see that some part of Maharashtra is surrounded by the Sahyadri mountain ranges. The abundant rainfall and rivers originating in these ranges are seen as a boon for agriculture in Maharashtra. For Khandala Taluka in Satara District, Veer Dam is seen as a milestone for irrigation. We can see that the British built this dam. It shows excellent construction and ideal examples of architecture. Two canals have been constructed at this dam. Therefore, there is an increase in the area of irrigation. In India, the problem of growing population is very important and food supply to them is very important. Many irrigation facilities are created on a large scale through government schemes. In the present study we are going to study Veer Dam in Khandala Taluka of Satara District. We will see growth in the irrigation sector.

Key Words: irrigation, agricultural production, area under irrigation.

Introduction:

Agriculture is a very ancient primary occupation. We see humans farming for subsistence. The needs of food, clothing and shelter depended on agriculture from earlier times. In India, we can see that agricultural revolution has come along with the industrial revolution. The agricultural revolution has led to a tremendous increase in production. Modern farming is becoming the need of the hour to meet the growing population's food needs. The population is increasing and the land is limited. Therefore, people should pay attention to how to produce more in the same land. Therefore, attention should be

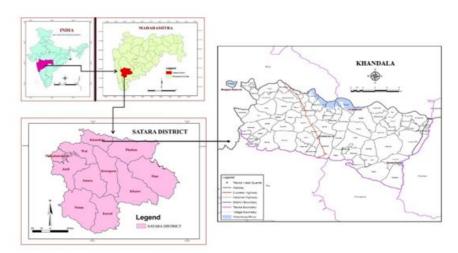
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paid to how production can be taken from agriculture on a large scale by using new irrigation service facilities.

veer dam is located in khandala taluka of satara district in the indian state of maharashtra. veer dam was constructed in 1965 ad. nine megawatts of electricity can be seen generated at veer dam. Veer dam is on the river neera. earlier, water was used to convey water to the fields by means of a slope. therefore, the area under irrigation is very less. currently, various water schemes are seen implemented on this dam with the help of modern technology. mainly some agriculture in maharashtra is dependent on rain. if we consider maharashtra, 16 percent of the land is perennially under water. it is very necessary to increase the extent of bringing maharashtra under irrigation. at the time of formation of maharashtra state, irrigation commission was established and efforts were made to create large irrigation facilities in maharashtra with the help of irrigation schemes, almost 80 percent of agriculture in maharashtra is arable and rain dependent, the worst drought in 1972 was in maharashtra, increasing population, increasing city and the need for water is increasing day by day, so even today we know the scarcity of water, we are going to study this in detail from this research paper.

Study Area

Khandala is a taluka in the Satara district of Maharashtra, India, and is located in the Satara district. The latitude for Khandala, Maharashtra 412802, India is: 18.055596 and the longitude is: 74.016792. Elevation: 658.78 Meters (2161.35 Feet) In this area, veer dam Coordinates 18°13′00″N 74°07′00″E



Khandala is a Taluka located in Satara district of Maharashtra. It is one of 11 Talukas of Satara district. There are 66 villages and 1 towns in Khandala Taluka. As per the Census India 2011, Khandala Taluka has 30230 households, population of 137418 of which 70565 are males and 66853 are females. The population of children between age 0-6 is 14999 which is 10.91% of total population. The sex-ratio of Khandala Taluka is around 947 compared to 929 which is average of Maharashtra state. The literacy rate of Khandala Taluka is 76.08% out of which 80.97% males are literate and 70.91% females are literate. The total area of Khandala is 522.91 sq.km with population density of 263 per sq.km. Out of total population, 86.38% of population lives in Urban area and 13.62% lives in Rural area. There are 9.44% Scheduled Caste (SC) and 1.51% Scheduled Tribe (ST) of total population in Khandala Taluka.

Nature of Research Topic-

We all know how important water is for agriculture. It is the need of the hour to study the causes and remedial plans for the increase in the area under waterlogging due to Veer Dam. This will definitely show the development of the taluka

Need For Research Topic-

Lands in talukas are coming under irrigation day by day. Irrigation sources are becoming increasingly available. Land fragmentation is seen to have a major impact on crop production. Learning the art of modern low water farming is the need of the hour

Importance of Research Topic-

People's attitude towards agriculture is seen as economic. Attention should be given to the use of new modern technologies in the manner in which the water from the reservoir of the dam can be used for agriculture. It is necessary to pay attention to how more agriculture can be done in less water. It is necessary to provide water for agriculture to the villages of drought-prone Khandala taluka by creating maximum sub-irrigation.

Research Objectives-

- 1. To study of irrigation service facilities.
- 2. To study in detail the increase in area under irrigation from dam water

Data Base and Methodology

The study was conducted in khandalaSatara district ofMaharashtra. The present study is based on secondarydata collected District Statistical Office, Department ofAgriculture Satara District. Season and Crop Reportspublished by the Department of Agriculture (1999-00 to2009-10). Socio-economic Review of Satara District,Gazetteer AgriculturalEpitomes. Irrigation Accounts Department Agricultural Statistical informationMaharashtra State etc. were also scanned for settingrelevant information.

Study of irrigation service facilities.

veer dam is the largest dam on the river nira in maharashtra. this dam has 9 gates. adjacent to veer dam, veer, tal. purandarwatharbudruk ta. khandala, hodi are the villages of khandala taluka. from this dam two canals namely niradawa and niraujava emerge. of these, nira right canal passes through khandala, phaltan, malshiras talukas and nira left canal passes through purandarbaramati, indapur talukas. the dam receives water from three dams namely bhatghar, niradevghar and gunjavani. therefore, despite the low water storage capacity, the nira left and right canals have water even in summer. state highway-131 passes in front of the dam.

large amount of water is released for agriculture from nira-devghar and veer dams. due to high availability of water, mainly sugarcane farmers prefer this crop. also in khandala taluka khandala taluka farmers co-operative sugar factory, rajgad co-operative sugar factory bhor, someshwar co-operative sugar factory someshwarnagar, kisanveer co-operative sugar factory bhuinj. etc. since the farmers of khandala taluka have the option of factory, the area under sugarcane is increasing day by day. at the same time, there are many problems of sugarcane harvesting and transportation problems. if you study all the problems in the following way.

the depth of water near the dam is rs. 3.35 m. and stock. 65,69,500 d. i. was the completion of a large dam at veer-bhade in 1966 has greatly increased the water storage. this dam is 36 m. height and its water storage capacity is 27,84,90,000 d. i. is the water from this dam has benefited baramati, indapur and khandala, phaltan and malshiras talukas of pune, satara, solapur districts respectively. two canals left (neera left bank) and right (neera right bank) have been taken from the dam and the total benefit area of the dam is 33,788 hectares. an area of 22,264 hectares in khandala and phaltan talukas gets the benefit of irrigation from the right canal. since all this region has low rainfall, this dam has gained importance in terms of irrigation and most of the area has been brought under sugarcane cultivation.

Information about the area covered by irrigation

Veer Dam receives water from NiraDeoghar and Bhatghar Dams. NiraDeoghar Dam is 11 TMC. Bhatghar Dam is 24 TMC. Veer Dam is 9.83 TMC. If we combine the storage of all the three dams, it comes to about 45 TMC. A 45-day cycle for Rabi Kharif and Summer season is seen to be available to the

farmers for farming. About 1550 cusecs of water is seen flowing through the right canal of Veer Dam. Two canals left (Neera Left Bank) and Right (Neera Right Bank) have been taken from the dam and the total benefit area of the dam is 33,788 hectares. An area of 22,264 hectares in Khandala and Phaltan talukas gets the benefit of irrigation from the right canal. Since all this region has low rainfall, this dam has gained importance in terms of irrigation and most of the area has been brought under sugarcane cultivation. The change in the last ten years can be seen from the statistics of the land irrigated by Veer Dam in Khandala taluka as follows.

Earlier, Veer Dam and Right Canal coming from Veer Dam used to irrigate 680 hectares of land. We can see that it has become 2669 hectares in the year 2022. Areas under irrigation have increased to a very large extent. This includes the villages of Vathar Shedgewadi Rui Andori Bavkalwadi Balupatlachiwadi padegaon and Khandala in Khandala taluka above the right canal coming from Veer Dam. Veer Dam has provided water for agriculture to villages like BhadeTondal, Loni, Bholi Mane Colony and Shirwal, which are directly flooded above Veer Dam. Also Khandala Phaltan Malshiras Pandharpur Sangola etc. taluks benefit from Veer Dam reservoir.

Conclusion-

From the above we can conclude that after studying the topography of Khandala taluka the importance of Veer Dam for agriculture becomes clear. A study of agriculture makes it clear that we can easily raise some cash crops if irrigation is available. Sugarcane is considered to be the most important crop for raising the socio-economic level. Proper planning of dam water can bring maximum area under cultivation.

Reference-

- 1. Dr. Pramod Wadate Dr. BhagshreeDhobale (2022) Contribution of Various Irrigation Projects to Irrigated Area Growth in Nagpur District: An Analytical Study Peer Reviewed International Research Journal of GeographyISSN: 0971-6785 {Impact Factor 4.567 Renew (IIFS)} Vol. 39, No.1, Jan-June 2022. pp 01-06
- 2. Mr. Mahesh Suresh Jagtap1 Dr. Arvind VamanDalavi (2022)Sugarcane Production In Kahandala Tahsil: A Geographical Analysis International Journal Of Advance And Applied Research Www.ljaar.Co.InIssn 2347-7075 Impact Factor 7.328 Peer Reviewed Bi-Monthly Vol.2 No.20 July Aug 2022.
- 3. https://mr.wikipedia.org/wiki/%E0%A4%B5%E0%A5%80%E0%A4%B0 %E0%A4%A7%E0%A4%B5%E0%A5%80%E0%A4%B0 %E0%A4%A7%E0%A4%B0
- 4. https://vishwakosh.marathi.gov.in/32891
- 5. Roy, S. (2020). Key Developments in Indian Irrigation Sector, Journal of Environmental Science and Engineering, 9, pp. 184-187.