



## GEOGRAPHICAL STUDY ON IRRIGATION IN SANGALI DISTRICT OF MAHARASHTRA

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### ABSTRACT

*Water is a critical input in agricultural. The use of water for agricultural is not rationally in Indian agricultural therefore explanation of irrigation has been major concept in agricultural landscape. Irrigation can change portaiture in agricultural landscapewhere high variability and inadequacy of rainfall. The devise of Irrigation enhance the productivity of agriculture and overcome on drought condition. So the present research paper annotation on need of irrigation entitled by 'A Geographical study on irrigation in Sangali District of Maharashtra.' For the present study, the secondary data are used which is collected from socio-economic abstract of Sangali district. The researcher has attempted represents real situation of irrigation and need of irrigation in Sangli District.*

**Keyword-** rational use, agricultural landscape, agricultural productivity.

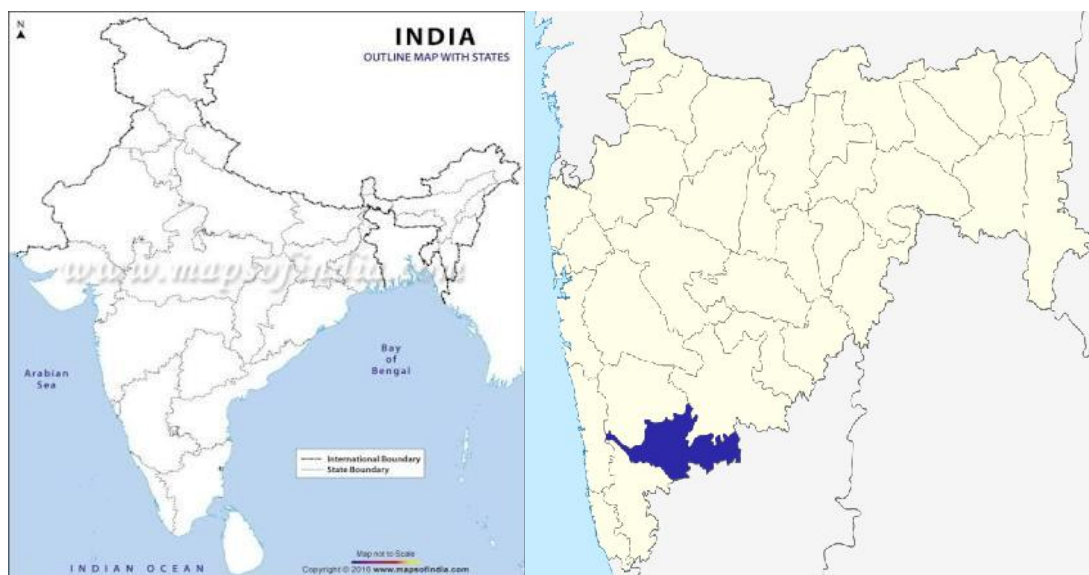
### INTRODUCTION

Agriculture is main source of livelihood of the people in the region. The irrigation is effective technique of raising agricultural production. Irrigation sources and policies are differ in term volume and length of each region. There are number of irrigation sources and lift irrigation schemes in region which supply the water to the Sangli district. Such as rivers, natural reserviors, nallas, wells, Basappawadi project, Ner project. Krishna–Koyana project (Takari-Maisal), Tembhu project, Jihe–Kathapurproject etc. These irrigation projects are categorized in to small, medium and large lift irrigation schemes which are supplying water to the region and improving the economic conditions of the region as well as changing cropping pattern and agricultural productivity.

### STUDY REGION

The Sangli District is one of the most district of Maharashtra states. It is situated between the latitudes 16°45' N and 17°33' N and longitudinal of 73°41' East and 75°41' East. The district is bounded by Satara district on the North western side. Southern is boarded by Belgam and Bijapur district of Karnataa Sate. At the Centers and East Kolhapur district and the Ratnagiri district lies on West of Sangli district. The total area of the district According to 1991 census about 8601.5 Sq.km. The district is divided in to Five Administrative sub division mainly Khanapur, Walwa, Miraj, Tasgon, Palus. The Shirala and Walwa Taluawas included in Walwa Sub Division. The Miraj Sub division Comprises of Jath, KavtheMhanal and Miraj. The Khanapur Sub division includes Atpadi and Khanapur and Palus Sub Division Include Kadegaonand Palus.

**Location Map:**



**OBJECTIVE:**

To find out the need of irrigation in the Sangli district.

**RESEARCH METHODOLOGY:**

The present research paper is based on secondary data. The secondary data have been collected from Socio-economic review, District statistical abstract, District Irrigation Department, District Agricultural office, of Sangli district. To the analysis of the need of irrigation the statistical method used suggested by More K. S. and Mustafha R. R. (1984). In order to assess the need of irrigation, the following formula has been adopted.

$$\text{Need of Irrigation} = \frac{\text{Pr} \times \text{Ac}}{\text{R}}$$

Where :

Pr = Percentage of rural population in a areal unit

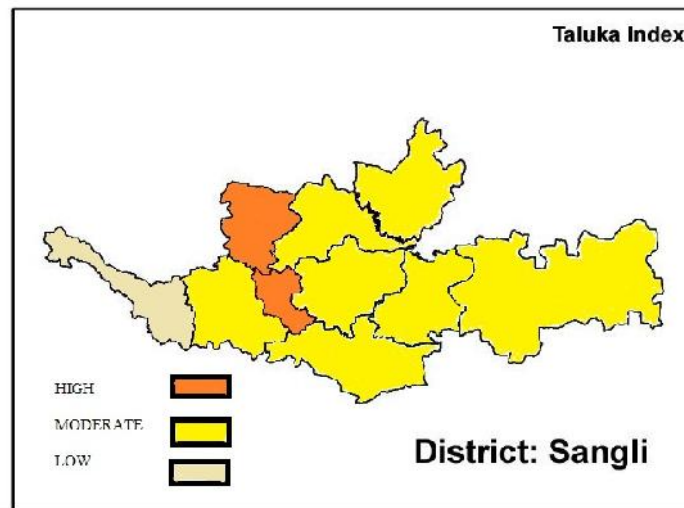
Ar = Percentage of cultivated area in a areal unit

R = Average annual rainfall

Sr.No	Areal unit	% of rural population	% of cultivated area	Index
1	Shirala	93.27	57.62	5.34
2	Walava	72.93	88.29	9.46
3	Palus	92.38	85.01	13.15
4	Kadegaon	93.01	84.12	17.04
5	Khanapur	73.48	83.21	10.25
6	Aatpadi	89.97	73.80	11.75
7	Tasgaon	74.35	87.16	10.85
8	Miraj	47.06	86.76	6.4
9	K.Mahankal	93.30	70.05	11.90
10	Jat	77.05	85.69	11.83

Source: Socio-Economic Abstract of Sangli District-2012

Need of irrigation	Number of tahsil	Name of tahsil
High (above 12)	02	Palus, Kadegaon
Moderate (6 to 12)	07	Walava, Khanapur, Aatpadi, Tasgaon, Miraj, K.Mahankal, Jat
Low (below 06)	01	Shirala,



**1. High need of irrigation:** The value of tahsil above 12 is called high need of irrigation in study region. The two tahsils of study region are required high need of irrigation. These tahsils are Palus, and Kadegaon, It is suggested that for the development of agriculture is require better facilities of irrigation.

**2. Moderate need of irrigation:** The moderate need of irrigation is

observed in three tahsil these are Walava, Khanapur, Aatpadi, Tasgaon, Miraj, K.Mahankal, Jat. The average rainfall is low and area under barren land is high as compare to other tehsil.

**3. Low need of irrigation:** The low need of irrigation is observed in Shiralatahsil. It is happened due to the very high rainfall as compared other tehsil.

#### CONCLUSION:

The research paper analyzed the need of irrigation. It is necessary to achieve the growth of irrigation for nine tehsil to put weightage on irrigation management such as drip, sprinkler irrigation rainwater harvesting, and irrigation program.

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