



IRRIGATION SYSTEM IN MALSHIRAS TAHASHIL: - A GEOGRAPHICAL CASE STUDY

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Abstract

The agriculture of malshirastahashil has totally depended upon uncertain and irregular rainfall. But if we are wanted to increase agriculture productivity than irrigation system plays a very important role in that particular area. Malshiras is most popular tahashil for development and agriculture sector because of irrigation in Maharashtra state. Due to the two rivers and also two canals the internal irrigation system of malshiras is good condition today and however the agriculture capacity of productivity also increase. Nira and Bhima it is major rivers and flow of them are 84km and 42km respectively in malshiras.

Key words: *Rivers, Canals, irrigation, temperature and rainfall.*

INTRODUCTION :

According to the committee of Dr. C. H. Hanumantrao was declared 148 tahashil of Maharashtra state under the drought prone area with including the malshirastahashil. But manmade water dam, rivers, canals, wells and tub wells have been playing an important role in irrigation system in that type of drought prone area. The tahashil of malshiras under these types of situation, however irrigation system has a good condition in tahashil. Here the Nira right canal is playing an important role for irrigation system in malshiras. 68km flow of that canal is going to within 21 villages, due to that canal increase sugar cane crop in the most of villages in tahashil, however economic condition of the people of malshiras is very good, but some villages having a lot of problem due to decrease agriculture productivity. But the irrigation system has suitable and unsuitable impact of irrigation development within malshiras.

DEFINITION OF AGRICULTURE: -

1. Grigg D. (1969): "the practice of cultivation of soil in order to produce crop is called agriculture."
2. Mr. Carly H.H.: "Agriculture is defined as the purposeful tending of crops and animals."

HYPOTHESIS OF STUDY: -

1. Because of Nira right canals the increase irrigation system in malshiras.
2. Due to the use of highly intensity of water decrease the agriculture productivity.

OBJECTIVES: -

1. To study of irrigation system
2. To find out problem of irrigation system

METHODOLOGY: -

To study of this paper are totally depend on secondary data only, those are gating through Books, Articles, and District hand Book and Internet. The figures of temperature and rainfall has been taken by tahashilheadquarter office.

REVIEW OF LITERATURE: -

So many researchers were studied of this topic, but we review only some authors are following here.

1. C. T. Pawar, (1989): "Impact of Krushna river irrigation system on agriculture in Maharashtra state."
2. B. G. Velapurkar, (1998): "A geographical Analysis of problems and prospective of agriculture in Maharashtra."
3. H. B. Tipe, (2009): "A geographical analysis of agriculture technology in solapur district."
4. Vijay Gorade, (2010): "Geographical study of cotten farming in Amarawati district."

LOCATION OF MALSHIRAS:

The tahashil of malshiras was established in 1875, it is away from 125km of western site for district headquarters of solapur. Geographical location of malshiras has 17°40' to 17°56' north latitude and 74°45' to 75°16' east longitude. Malshirashas been accrued 160801.64 hector geographical areas. In the tahashil here are eight agriculture zones in working status.

IRRIGATION SYSTEM IN MALSHIRAS:

The following table are shoes irrigation system in malshirstahashil.

Table no 1.

Sr. No	Irrigation psalm	Area under irrigation				Area increase in irrigation
		2000-2001		2009-2010		
		Area	%	Area	%	
1	Bhima River	1003	0.90	1250	1.07	+247
2	Nira River	5112	4.59	5490	4.74	+378
3	Ujjani right cannels	6751	6.06	7264.56	6.27	+513.56
4	Nira right cannels	67363.5	60.50	68492.9	59.15	+1129.4
5	Wells	30735	27.60	32516	28.08	+1781
6	Other source	367	0.32	775	0.66	+408
Total		111331.5	100	115788.46	100	+4456.96

(Source: - Socioeconomic review of solapur district 2000 to 2010)

According to table no 1 in the year of 2000 to 2001 area under the irrigation is up to 111331.5 hector for different irrigation psalm. But the area has increase up to 4456.96 hectors and total area under the irrigation that is 115788.46 hector within next 10years. Nira right cannels have increase highly percent area that is 59.15 within 10 years.

Nira river irrigation system: The origin of Nira River in pune district, and flow of this river is 84km in malshirastahashil. On the Nira River near the veer city there is one manmade dam as called as veer dam and water storage capacity of that dam has 56 tmc. Nira river covered 5490 hectors area under the irrigation in malshirastahashil.

Bhima river irrigation system: Bhima is also origin in pune district, 42km flow in tahashil of this river and covered 1250 hector s of area under the irrigation. On this river nearby Bhimanagar here is one biggest dam in Maharashtra that is Ujjani the capacity of water storage is 117 tmc.

The people of solapur and osmanabadare depending on ujjani dam water for drinking.

Nira right canal irrigation system: The canal was making before the independence of India. Flow of that canal has 68km in tahashil and covered 68492.9 hector area of irrigation. This canal is lifeline of agriculture and development of malshiras.

Ujjani right canal irrigation system: 43km flow of this canal and second large area covered under the irrigation in malshiras that is 7264.56 hector. This is lifeline of east part of malshiras, and 27 villages having a benefit of irrigation of water.

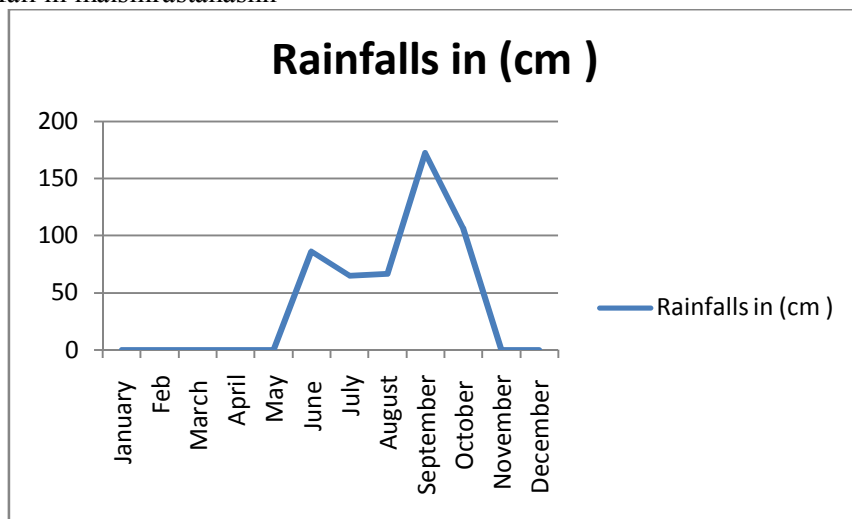
TEMPERATURE AND RAINFALL OF MALSHIRAS:

The average temperature of tahashil it is 32.75° cg this is good for irrigation, but some time specially for summer season it will be increase up to 48° cg. But when the compare with rainfalls which is high, the average rainfalls of the tahashil is 463.4 mm this is very less for the increase of ground water. In the rainy season here is too much rain to fall in specially month of September and October.

Table no: - 2

The following table showing rainfall in malshirastahashil

Sr No	Month	Rainfalls in (cm)
1	January	00
2	Feb	00
3	March	00
4	April	00
5	May	00
6	June	86.5
7	July	64.9
8	August	67.0
9	September	172.7
10	October	107.3
11	November	00
12	December	00



(Source- 2010 district hand book)

According to the graph and table no 2 in tahashil of malshiras having a seven months without raining in every years. In month June rain to start but in September and October which is accrued heavily rain that is 172.7 and 107.3 cm respectively in the specific years.

CONCLUSION: -

The people of malshiras has been use a less quantity of water for irrigation, but the area of under agriculture is increase very fast. The very important of introducing drop irrigation system and create awareness in the farmer, farmers which is understand the importance of water and they can decrease the sugar cane crops and increase the fruits farming production it will be good for future.

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4. Gorade Vijay (2010):- A geographical study of cotton farming in Amrawati district.
5. Gupta S.L (1971):- The cropping Pattern of Haryana.
6. Socioeconomic review of solapur district 2000 to 2010