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# Index

- 01) Contributin Of Maharaja Lakshmishwar Singh Of Darbhanga To ..  
Dr. Gopal Kumar (Rosera), Chapra ||14
- 02) Change In Land Revenue System In British Rule  
Smt. S.N.Hosakeri, Bagalkot ||17
- 03) Role of National Cadet Corps in Nation Building  
Mr. Vivekanand Bharat Ingale, Jalgaon ||25
- 04) The Study of Income and Investments of Teachers in Dhule Districts ...  
Prof. Hemant Anil Joshi, Dr. P. P. Chhajed, Dhule ||27
- 05) Dick Diver's search for identity in Fitzgerald's Tender is The Night  
Kalyankar A. S., Beed ||31
- 06) Prevalence Of Helminthosporium Spores Over Sunflower Fields  
G. M. Pathare, Beed ||34
- 07) Socio Emotional Development  
Mrinal Sanwal, Dehradun ||37
- 08) Core Study And Support Of Human Resource Training In Panchayati Raj ...  
Madhav Verma ||42
- 09) Applications Of Mobile Apps In Academic Libraries  
Mr. Nitin Prakash Waghmare, Mr. Sachin Shivaji Tuwar ||48
- 10) Blood Consciousness In D. H. Lawrence's Sons And Lovers  
Mangesh Bhauro Shamkure, Nagpur ||53
- 11) A Study Of Cashless Transactions In Retail Shopping Special Reference ...  
Dr. R. B. Rampure, Dr. Rajesh Goje ||57
- 12) Structural and Infra-red Analysis Of  $Ni_{0.7+x}Zn_{0.3-x}Fe_{2-2x}O_4$  System.  
Rohini M. Mahindrakar, Dilip S. Birajdar (M.S.) ||61
- 13) Geographical Aspects Of Maalgaon Watershed  
Dr. Ghuge Shivilal Pandharinath, Beed ||65
- 14) चित्रपटसृष्टीतील शब्द सुरांचा सांगाती: सैगल  
गजानन ना. केतकर, डॉ. मीनल ठाकरे (भोंडे), अमरावती ||70



## References:-

1. R. Peelamedu, C. Grimes, D. Agrawal, R. Roy, J. Mater. Res. 18 (2003) 2292.
2. A.K.M. Akther Hossain, M. Seki, T. Kawai, H. Tabata, J. Appl. Phys. 96 (2004) 1273.
3. A Goldman, Handbook of Modern Ferromagnetic Materials, Kulwer Academic Publishers, Boston, USA, 1999.
4. R. Valenzuela, Magnetic Ceramics, Cambridge University Press, Cambridge, 1994.
5. V. R. K. Murthy, Phys. Status Solidi A 38 (1976) 647.
6. E. C. Snelling, Soft ferrites: Pro. & Appl. (London ILIFFEE Book Ltd.) (1969) 26.
7. M. Maisnam, S. Phanjobam, H. N. K. Sarma, O. P. Thakur, L. R. Devi, C. Prakash, Ind. J. Eng. & Mater. Sci., 15 (2008) 202.
8. D. S. Mathew, R. S. Juang, Chemical Engineering Journal 129 (2007) 51-65.
9. A. M. abdeen J. of Mag. and Mag. Materials 185(1998) 199-206
10. Moulson A. J, Herbert J. M., Electroceramics Chapman and Hall London (1990)397
11. Lee DBN, Roberts M, Bluchel CG, Odell RA. (2010) Zirconium: Biomedical and nephrological applications. ASAIO J 56(6):550-556.
12. H. Furuhashi, M. Inogaki and S. Naka J. Inorg. Nucl. Chem. 35 (1973) 3009
13. V. Urvi Chhaya, Bimal S. Trivedi and R. G. Kulkarni Hyperfine Interactions (1998)
14. Rezlescu, N. and E. Rezlescu, 1995. Phys. Stat. Sol. (a), 147: 553-562.
15. Rezlescu, N. and E. Rezlescu, 1996 J. Am. Ceram. Soc., 79: 2105-2108.
16. V. B. Kawade, G. K. Bichile, K.M. Jadhav Mat. Lett. 42 (2000) 33
17. A.K. Ghatage, S.C. Choudhari, S.A. Patil J. Mat. Sci. Lett. 15 (1996) 1548
18. R. D. Waldron Phys. Rev. 99 (1955) 1727
19. S.T. Hafner Z. Fur. Crist. 115 (1961) 331

## Geographical Aspects Of Maalgaon Watershed

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### Introduction :

Geographers preferred water as their study to make up the geographic scene. They considered hydrologic cycle precipitation as the first phase. The geographers received sporadic attention to the land phases of the cycle.

The American study of hydrology taken under economic heads. The Geologist, meteorologists and engineers have been behaviour of water, tried to keep it during floods the work and study of hydrology taken place in the last of the 19th century. The American textbook on hydrology published two years later. The early neglected study of water by geographers resumed in the beginning of the contrary. Running water was the touch stone to an understanding of land forms.

### II: Location :

Beed district located in the central part of the Marathwada region. Beed district lines between 18° 20' to 19° 27' north latitudes and 74° 57' to 76° 57' east longitude. This district has Majalgaon tahsil is the study area located to the north-east direction of Beed district. To the direction of east there is Parali tahsil and Prabhani district to the direction of west there is some part of Georai tahsil and Wadwani towards southern direction. Majalgaon is located in the centre of these Tahsil Godawari river is very important for Majalgaon taluka regarding crops and cultivation. Sindhphana river is so important because dam is on the river, Sindhphana unite Godawari at Manjra



Godawari river cross Majalgaon taluka and flow in parbhani district. Majalgaon is the second largest taluka in population of Beed district. According to 2001 census the population of the tahsil is 901.42.59 km. the density of population is 239 per sq.km. total no. of villages in the tahsil are 124 Rural population is 170968 and uraban population is 44029.

### 3. Geology :

Majalgaon tahsil located in the north-West part of Beed district. Majalgaon tahsil has landed part of the district. A how spur of the western gtiats. The area is under lain by deccan traps. Creatceous ecoene. The trap rocks belong to the type called plateav besalt, and are unifrom in composition corresponding to that dolerite or besalt with an average specific gravity of 2.9. They are dark grey or dark greenish in colour the traps have been distigvished intoo the resicular and non-resicular things.

The resular types are soft and tew to break with more eaje ashbeds are common.

### 4. Relief :

Majalgaon watershed management study is most impotant in the tahsil there are two parts in the tahsil

There are two parts in the tahshil

1. Godawari valley
2. Highest part of hodawari valley

Godawari plain region plain region in the North is is known as hang thdi Godavari and its tribotoy Floewing In this Area Georai, Majlgoan and Parali Tashil are comes in this part. The northern lowland has a general eleration form 550 meteres in the west to a littel under 400 meteres in the east, intersperread with a number of residval hills of summits over 600 metes A discontinious seies of such a low residul hills in the south comprise the watershed between the godawari and the sindhphana rivers.

2. The part is wgh from 250 to 500 meters towards the west of the taluka, in tahshil eastern and northern part is completly of valley and that is plain Godawai and Sindhahana flow in the valley.

### 5. Aims And Objectives :

The following objects are given to investigate the anyalysis of population and agriculture.

1. To examine the Majalgaon watershe and its effect on there population and agriculture.
2. To study the geographical factors associated with these aspects.
3. To investigate occupational structure and distribution of population
4. To study the agriculture development of the area.
5. To study the agriculture development of the area before project and after project.

### Data Base And Methodolgy :

The data has been collected from priorary and secondary source for the period 2004 - 05 to 2009-10 special questionaries has been used to collect data of selected villages. Secondary data has been collected from socio-economic review. District census hand book Godawar Pathbanthare office and crop report etc. date regarding consumption fertilizer high yielding veviety seeds from Z.P. Beed for macro level study ten village selected from Majalgaon tahsil of the district.

### Majalgaon Project :

The Majalgaon irrigation area is part of the jayakwadi schem (240,000 hec.) one of largest irrigation area in maharashtra. The limited water resources hav rechiced The first stage irrigation area to 58000 hac. although it is planned to ultimately irrigate 119000 hec. The first phase of the scheme was finnced by the world bonle and began in the 1970 its main comonents were.

### Selected Villages of Majalgaon Watershed :

In Majalgaon watershed 120 villages located but for the plot to plot study only five villages are selected nearly foor precent of sample village were slected for micro level study. The time period chosen fo anyllysis of general landuse, Agricultural landuse is period from 2004.05 to 2009-2010.



1. Sadola - This village is 2.9 km. and it on the river godawari. The geographical area of this village is 11 er sq.km.
2. Jajid Jawala
3. Kherda (Bu) 4) Shahapur (m)
4. Harki Nimgaon

**Irrigation :**

Irrigation is the most important instrument of the development of agricultural sector. Irrigation can convert dry land or dry agricultural patches into irrigated patches. "Irrigation in an agrarian economy assumes the same importance as blood in the human body."

**Village wise trends in percentage of net irrigated area to net shown area 2004-05 to 2009-2010**

Sr. No.	Name of village	Net sown		Irrigated area		totally	
		04-05	09-10	04-05	09-10	04-05	09-10
1.	Sadola	1836	1836	596	897	55.46	48.8
2.	J.Jawala	409.6	433	0.5	180	0.13	4.15
3.	Kherda B.	640	640	187	228	29.22	35.62
4.	Shahapur	210	240	35	48	16.67	20
5.	H.Limgaon	1333.7	133.7	225	422	16.67	31.64

Source I computer by another reveals that area under irrigation differs from village to village in 04-05 to 09-10 out of the total net sown area below 20% net shown area was found under irrigation in Jawala (J) shahapur village, where as 20% to 40% net sown area was observed under irrigation in Kherda (Bk) H. Nimgaon and above 40% net shown area was observed under irrigation in Sadola. Only one village Sadola has 32.46% Area under irrigation if means their are very high growth irrigation growth under the period of investigation.

Table No. 1.2

## Sources of Irrigation in selected village

Sr. No.	Name of village	Wells		Borewells		canal or	
		04-05	09-10	04-05	09-10	04-05	09-10
1.	Sadola	22	44	5	25	0	1
2.	J.Jawala	20	31	5	15	0	0
3.	Kherda B.	13	27	9	17	0	1
4.	Shahapur	13	27	11	25	0	1
5.	H.Limgaon	25	45	9	29	0	1

Source : Computed by author

1. Wells : Where 20 to 50 wells observed in limgaon (H) Shahapur, Kherda, Jawala and Sadola village.

b. Borewells : In Majalgaon watershed increase number of borewells high borewell joint in (H) Limgaon, Sahapur, Sadola village their are most of villages used borewells irrigation or vegetable and fruit farming on borewell they were apply drip and sprinkler irrigation.

**C. Cannal for percolation tanks :**

In study area every village have on canal or parcolation tank irrigation except Kherda (Bk.) village during their was no single canal or parcolation tank.

**General Landuse of Selected village in Majalgaon Watershed :**

Landuse is the surface utilization of a development and vacant on a specific point of a given time and space this leads on back to the village form and the farmer to fields. Gardens, pastures follow land, forest and to the isolated forested (freeman) 1968 as geography deals with the spatial relationship between these aspects and planning.

**1. Area under forest :**

The proportion of forest area was below 1% in Sadola, Shahapur, which above 1% there is not area under forest was experienced in Jawala, Kherda, Limgaon (H), village during the period 2004-05 later in 2009-2010 are on village have forest area like in Sadola (0.10) means there is very much low area under forest in selected village in Majalgaon watershed area.

**Trends Triberieal landuse in selected village in Majalgaon watershed 2004-05 to 2009-10 (area in hectores)**

Sr. No	Landuse Category	Year	Sadola	J. Jawla	Kherda (Bu)	Shahapur (M)	H. Nimgaon
1	Area Under Forest	2004-05	03	0	0	0	0
		%	01	0	0	0.49	0
		2009.10	02	0	0	0	0
		%	0.1	0	0	0	0
		vol.c.in%	0	0	0	0.49	0
2	Area not Available for cultivation	2004-05	50	5	11	15	0
		%	2.44	0.93	1.69	3.65	0
		2009.10	49	4	11.69	12	0
		%	2.39	0.74	0	2.92	0
		vol.c.in%	0.05	0.19	0	0.73	0
3	Other cultivated land	2004-05	100	3.81	0	39	0
		%	4.8	0.7	0	9.49	0
		2009.10	107	0.41	0	19	0
		%	5.22	0.08	0	194.42	0
		vol.c.in%	0.42	0.62	0	-4.82	0



Sr. No	Landuse Category	Year	Sadola	J. Jawla	Kherda (Bu)	Shahapur (M)	H. Nimgaon
1	Follow land	2004-05	60	122	1	145	73.14
		%	2.93	22.58	0.15	35.25	52
		2009.10	55	103	1	140	73
		%	26	1906	0.15	54.06	52
	vol.c.in%	-0.25	-3.52	0	-1.22	0	
2	Net swon Area	2004-05	1836	409.6	6.4	210	1333.7
		%	89.6	75.79	98.16	51.09	94.8
		2009.10	1836	433	640	240	1333.7
		%	89.6	50.12	98.6	58.39	94.8
	vol.c.in%	0	4.33	0	73.3	0	
3	Total Geogra phical area	2004-05	2049	540.41	652	411	1406.84
		%	100	100	10	100	100
		2009.10	2049	540.41	652	411	1406.54
		%	100	100	100	100	100

Source : Computere by authoer :

## 2. Area hot available for cultivation :

This grow includes A) The lan put non aggricualtural uses and B borren and on cultivable land. These area which are not available for crop cultivation show a close association with other unclutivated land and net shown area in the selected village in 2009.10 out of total geograhical area below 2% area was observed under this category in Jawala, Kherda, above 2% geographical area was recorderal under Shahapur and Sadola village and H.Limgaon has not found this category area during 2009-10 out of total geographical area below 2% area was observed under this category in Jawala, Kherda, above 2% geographical area was recorderal under Shahapur and Sadola village and H.Limgaon has not found this category area during 2009-10.

Only one village Kherda have recorded 0% negativ chang about 0.05 to 0.71% in area not available for cultivatin was recorded Sadola (0.05) Jawal (0.19%) Shahpur (0.73) during the period the under investigation.

## 3. Other Unclutivation land :

Below 2% geographical area was observed under other cultivable land in Jawala whicle 2% to 5% aea was found shahpur village and above 5% unclutivated land noticed in Sadola (5.22%) during 2009-2010.

About 07 to 4.87 negative change observed in Jawala, Sahahpur village, while 0-42 to 38.81 positive change experinced in Sadola.

## 4. Following land :

All villages have sufficient area of follow land below 5% total geographical area of follow land noticed in Sadola, Kherda where as 5% to 10% fallow land area was found in Sadola (19.06%) Shahapur (34.66%) during period 2009 -2010.

## 5. Net Sown Area :

All the selected village having more ne sown area in 2009-2010. the highest net sown area was recorded in Kherda B. (98.60%) and the lowest net sown area was found (J) Jawala (50.12%)

Ont of total geographical area below 80% geographical area was observed under this category in Sadola, Jawala village and baove 90% geographical area under net sown was exprincced in Kherda (98.60%) H.Limgaon (94.80%) during period 2009 - 10.

About 0.93% to 7.3% positive change was found in Jawala Shahapur village have constand 50% **Agricultural land use of selected village in Majalgaon Watershed :**

The area under differnt crop like Jawar, Wheat, Bajara, Othercreats, gram, Tur, other pulses, groundnut other oil seeds, cotton, sugarcane, and other fooder crops, were considered at the time of village survey. The area under rice was very limited hence its area is included in other cereals, simple percentage was obtained by dividing total area under crops into area under different crops.

Jawar and cotton is important cast crop in the selected village moderate rainfall black cotton, Jawar soils supports to the growth of cotton and jawar cultivation in the Majalgaon watershed cotton, and jawar war ralking first in cropping patern in selected villages. The percentage shure.

Below 40% was found in Jawala, Sahapur village while 40% 50% area under cotton, and Jawar was niticed in Kherda (H) Limgaon village.

## Conclusion :

1. Due to Godawari rivers there is change in agricultueal structure in the district.



2. Agricultural Activities are highly concentrated along the river bank.
3. Out of 120 villages five villages were selected for micro level survey below 80% Area was found net sown area in selected village.

**Problems :**

1. The system organized by the irrigation authorities or the farmers is universally poor.
2. Most of the farmers are unable to use pesticides because they are poor and yield of cotton is lossed.
3. Behavioural and attitudianl changes are found.
4. To search Majalgaon watershed where formal organization of irrigators exists.

**Sygerestions:**

1. Kolhapuri type bondhare and field tank should be built to over come the problems of erratic rainfall.
2. Computer farming should be under takn to stop to soild erosion
3. Lift irrigation plant should be constucted in the region.

**Reference :**

1. Ali mohanmmmed (1975) agricultural landuse nad nutrition in kheri sitapupr and nutrition in Kherisitapur and barabanki district (U.P.) P.H.D. thesis, aligrah muslim university aligah.
2. Maharastra state gazzeteers of Beed district 2001 P-460
3. Maharastra State Gazzeteers of beed district 2001 P-143-146
4. Mukharji R.K.(1939): Economic problem of modern india, me millan and co Ltd london p-64
5. Veva Astey (1931) the economic development of India longman gren and lo london new Year P-20
6. Freeman T.W. (1968) Geography and planning, hutchinson, university library london P-70. □□□