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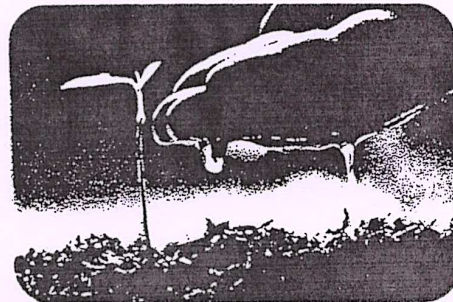
One Day

National Conference

on

Water & Soil Management for Sustainable Development

(21st March, 2017)



Organized by
Department of Geography,
Dr. Babasaheb Ambedkar
Marathwada University, Aurangabad (MS)



PRINCIPAL
Govt. College of Arts & Science
Aurangabad

No	Name of the Author (s)	Article Title	Page No.
22	Mr. Bhagwan A. Markad & Dr.M.V. Suryawanshi	A Geographical Study of Population in Different Age Group of Aurangabad District	64
23	Dr.Patil S.A. & Mr. Narwade Vinod	Geographical Assessment of Water Quality Utilization and Management of Ground Water in Aurangabad District (MS)	66
24	Mr. Narwade M.V. & Dr.Waghmare S.	A STUDY OF SOIL SALINITY PROBLEMS IN INDIA	69
25	Nawghare Rahul D.	Women's Employment in Small Industries of Marathwada Region : A Study	72
26	Dr.A. I. Khan & Adv. Patekar G.U.	"Socio-Economic Status of Agricultural Women's in Drought Hit Area of Jalna District"	74
27	Dr.A. I. Khan & Mr. Maksudkhan Fattiyabkhan Pathan	A Survey on Area, Production and Productivity of Mango in Aurangabad District	77
28	Dr.S.B.Jadhav,Dr.M.V.Suryawanshi, & Mr. Rajesh S. Kamble	A STUDY OF SOCIO-ECONOMIC CHARACTERISTICS OF RATNAGIRI DISTRICT	81
29	Dr.M.V.Suryawanshi & Miss Kondekar Rupali Mahavir	A GEOGRAPHICAL STUDY OF POPULATION GROWTH AND DISTRIBUTION IN AUGANGABAD DISTRICT	85
30	Mr. Sangole S.B. & Mr. Jawle K.A.	Water Pollution	88
31	Dr.A. I. Khan & Mr. Sardar Swapnil Anandrao	Drainage Water Management-Sub Surface Dams to Mitigate Water Scarcity	91
32	Sarwade Maya	Soil Conservation	96
33	Dr.Gajhans D.S. & Dr.Savant S.B.	Density of Scheduled Caste Population in Jalna District: A Geographical Analysis	99
34	Dr.Gajhans D.S. & Sameena Firdos Shaikh Ismail	Spatial Pattern of Sex Ratio in Aurangabad District	102
35	Mr. Shoukat Fakir & Mr. Agale N.K.	ROLE OF WATERSHED MANAGEMENT IN SOIL AND WATER CONSERVATION	105
36	Smt. Rajashri S. Sonawane & Mr. Patil R.A.	Marathwada Sugar Industry- Problems & Prospects	108
37	Dr.Kishor Shamrao Suryawanshi & Kiran Dilip Khalangre	Aurangabad Municipal Corporation: Drainage Issues	110
38	Dr.Vanmala R. Tadvi & Deepali V. Ausarmal	Changing Face of Irrigation Projects in Nandurbar District: Achievements and Failures	113
39	Dr.Gajhans D.S. & Mr. Usare B.R.	Cropping Pattern and Its Changes in Beed District - A Geographical Study	116
40	Dr.M.V.Suryawanshi & Mr. Wagh V.K.	CHARACTERISTICS OF POPULATION IN JALGAON DISTRICT	119
41	Waghmare Balaji & Dr.M.V.Suryawanshi	Assessment of Soil Erosion using Geographic Information System (GIS) and Remote Sensing	122
42	Dr.P.R. Wani & Dr.Sunita S. Shinde	Soil Management for Sustainable Agriculture Development	125
43	Dr.Milind Suryawanshi & Dr.B. J. Ugle	Techniques of Soil Erosion Measurement and Control	128

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Cropping Pattern and Its Changes in Beed District - A Geographical Study

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Abstract:

Cropping pattern means the proportion of area under crops at a point of time. Cropping pattern change in proportion of area under different crops at two different times. The cropping pattern differs from macro and micro region. Ecological situation, socio-economics and technological situation affected on changes of cropping pattern. Irrigated crops, the choices are directly affected on the specific purpose for the irrigated crops are to be grown and these are also conditioned by the geographical factors and modified by emergent social and economic circumstances (Mamoria 1979). Spatial agriculture land use pattern is tahsilwise different from in study region. The spatial pattern of land use and changes there in during 20 years are presented here. Firstly, it attempts to provide a picture of spatial pattern of land use and cropping by way of tahsil level studies. Secondly, it attempts to measure the changes in agriculture land use pattern during the study period.

Keywords: - technological situation, ecological situation, agriculture land use.

Introduction:

Nature is making farmers to accept the changes but instead of making merely targets, the agriculture department should come forward with the changing cropping pattern to cope with the raining pattern. Considering the scenario of last 15 years for adaptation to climate change, the farmers have voluntarily shifted from sorghum (Jowar) to cotton as cash crop and now with frustrating scenario in cotton they are shifting towards soybean. The farmers in the belt of 30 thousand hectares in Beed district shifted very smoothly towards soybean and in this grim situation also, they are the winners of the climate change with lucrative price they got for their crop. Actually, intensive watershed development project can only save this region from unprecedented pattern of the rainfall. Presently, 8 watersheds in the region are over exploited and 19 watersheds are semi critical at this juncture. Actually, there are high yielding bore wells in the region. This recharge of the aquifer is possible within shortest time. Time had come to use this technology instantly. There are 19464 domestic dug wells in Marathwada Region. Most of the dug wells are not in use or used for dumping waste material. There is a need to take intensive drive to clean all these domestic dug wells. The cropping pattern of the District is largely determined by physical, socio-economic and technological factors. Among the technological factors irrigation in association with other inputs, seem to have been responsible for bringing about changes in cropping pattern of the District. Agriculture & allied activities are the main sources of livelihood for majority of rural masses and control the economy of the district

Study Area:

Beed district is located in the central part of Maharashtra in Aurangabad division and forms a part of Marathwada region. The district lies between 18°28' and 19°28' North Latitudes and 74°54' and 76°57' East Longitudes. The district is bounded by Aurangabad and Jalna in the North, Parbhani and Latur in the East, Ahmednagar and Osmanabad in the South and Ahmednagar in the West. Godavari is the most significant river that flows on the borderline of Goda and Majalgaon Tehsils. The total area of Beed district is 10693 Sq.Kms and it is 3.47% of Maharashtra State. Further division of area is 40.25 Sq.Kms in urban parts and 10652.75 Sq.Kms in rural area. According to the 2011 census the total population of Beed district is 2,885,962 with 1352468 male and 1233494 female. In 2001 census, Beed had a population of





2,161,250 of which males were 1,116,356 and remaining 1,044,894 were female. Beed District population constituted 2.30 percent of total Maharashtra population. In 2001 census, this figure for Beed District was at 2.23 percent of Maharashtra population.

The objectives of the paper:

1. To study the importance the cropping pattern in agriculture.
2. To study the main causes of the changes in cropping pattern.
3. To study temporal Changes in cropping pattern in study region.

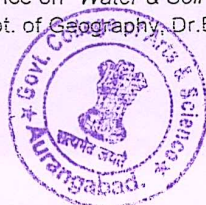
Data base and Methodology:

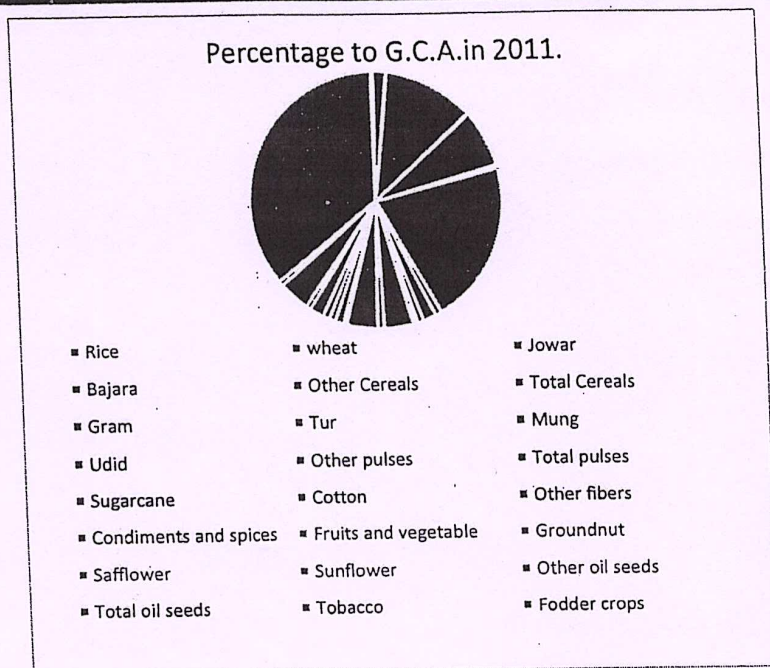
The present study is based on secondary data. The data has been obtained from the related articles, research papers, reports, policies and plan documents of Government of India and Maharashtra. Some data has been obtained from websites of Govt. of India and Govt. of Maharashtra, beed.nic.in, been undertaken to know the environmental status. Secondary data will be collected from social economic review district census handbook, gazettes, decennial census Reports of Government of India.

The main causes of the changes in cropping pattern. 1) The uncertain weather, rainfall in the areas where the variability of rainfall. (2) In the tradition bound subsistent farming systems the farmers grow several crops to meet the family requirements. 3) The farmers and agricultural workers remain busy in the sowing, weeding, harvesting and marketing of different crops throughout the year.

Beed district- Area under different crops and changes.

Crops	1991-2001		2001-2011		Volume of change 1991-2011.
	Area in hectare	% to G.C.A.	Area in hectare	% to G.C.A.	
Rice	6280	0.68	4710	0.50	-0.18
wheat	37931	4.09	44115	4.71	+0.62
Jowar	263239	28.37	302622	32.29	+3.92
Bajara	210599	22.70	188804	20.14	-2.56
Other Cereals	11905	1.28	9552	1.02	-0.26
Total Cereals	529954	57.12	549803	58.66	+1.54
Gram	16735	1.80	20849	2.22	+0.42
Tur	44485	4.80	44350	4.73	-0.07
Mung	15391	1.66	18931	2.02	+0.36
Udid	7446	0.80	8675	0.93	0.13
Other pulses	14085	1.52	5552	0.59	-0.93
Total pulses	98141	10.58	98358	10.49	-0.09
Sugarcane	20470	2.21	21539	2.30	+0.09
Cotton	90920	9.80	104088	11.11	+1.31
Other fibers	2044	0.22	986	0.11	-0.11
Condiments and spices	10282	1.11	8406	0.92	-0.21
Fruits and vegetable	28657	3.09	29480	3.15	+0.06
Groundnut	24320	2.62	20361	2.17	-0.45
Safflower	19672	2.12	21296	2.27	+0.15
Sunflower	30475	3.28	47259	5.04	+1.76
Other oil seeds	52099	5.62	14666	1.56	-4.06
Total oil seeds	126566	13.64	103582	11.04	-2.60
Tobacco	130	0.02	101	0.01	-0.01
Fodder crops	52099	5.62	14666	1.56	-4.06
Total gross cropped area	927712	100	937224	100	----





Conclusion:

The table indicates that Out of total geographical area (1068605 ha) of Beed, the total gross cropped area is 927712 ha .About 73.91 percent of total gross cropped area is under Kharif crops, and 26.01 percent is under rabi crops. About 57.12 percent of the gross cropped area is cultivated for different cereal crops such as Sorghum, Bajra, Maize, Wheat, 10.58 percent area for pulses (Pigeon pea, Gram, Green gram, Black gram), 13.64 percent area for oilseeds (Soybean, Safflower, Sunflower, Groundnut), 9.80 percent area for cotton, 2.21 percent area for sugarcane and other area for Fruits, Vegetables etc. Proportion of Bajra is maximum in Kharif season followed by Cotton, Pigeon pea, Soybean, Sugarcane, Kh.Jawar etc. Similarly proportion of R. Jowar is maximum in rabi season. Wheat, Sugarcane, Gram, rabi Jowar is cultivated on irrigated area.

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