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MGV'S Arts & Commerce College,
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INDEX

No.	Title of the Paper	Author's Name	Page No.
1	Trends in Goa's Agricultural Growth And its Determinants: A Geographical Study	Dr. Prakash. R. Morakar	05
2	Comprehensive Cost + 50 Percent More: will Indian Farmer's Ever Get It?—A Study of Minimum Support Price	Dr. Dasharath Mehtry	14
3	The Effect of Climate Change on Agriculture in India	Malati Shankar Patgar & Dr. Shridhar Hadimani	20
4	Climate Change and Its Impact on Agricultural Productivity in India	Mr. Balaji Waghmare & Dr. M.V. Suryawanshi	27
5	Impact of Climate Change on Agriculture and Food Security in India	Dr. M. P. Manakari	33
6	A Delineation of Crop Diversification of Bawada Circle in Indapur Tahsil (Pune District)	Mr. S. B. Shinde	40
7	Impact of Educational Attainment on Per Hectare Yield of Sugarcane: A Case Study of Village Chavanwadi in Solapur District	Dr. Arjun H. Nanaware	45
8	Agro Tourism- A Business Model in India	Dr. T. N. Lokhande	51
9	A Study of Levels of Agricultural Productivity in Latur District, Maharashtra (India)	Dr. Mukesh Kulkarni	56
10	"Modern Technique of Water Conversion in Drought Prone Area and Agriculture Development - A Case Study in Sangola Tahsil of Solapur District. (M.S.)"	Prof. S.G. Patil & Dr. B. R. Phule	62
11	Spatio-Temporal Analysis of Fruit Farming Cultivation in Kolhapur District of Maharashtra	Anita Magadum & Dr. R. V. Hajare	71
12	A Geographical Study of Agricultural Development Levels in Indapur Tahsil : Pune District	Mulani Mahammad Sheklal	75
13	A Geographical Study of Agricultural Regionalization for Planning Improvement in Osmanabad District	Dr. Ganesh Jadhav	81
14	A Geographical Study An Importance of the Agro -Tourism Activities with Effect on Socio-Economic Development in Maharashtra	Prof. Jawahar Chaudhari	86
15	Role of Agro-Tourism in the Development of Farmers in Maharashtra	Dr. R.M. Khilare	93
16	Impact of Climatic Changes on Agriculture Development	Dr. Gautam Dalvi	98
17	A Study of Agricultural Problems in India	Dr. D. S. Harwalkar	107
18	Agricultural Land use Efficiency and Changes Therein in Lower Sina Basin	Dr. Arjun Nanaware & Amar Wakde	113
19	Impact of Climatic Changes on the Agriculture And Socio System	Dr. Chandrakant Kamble	118
20	Agri-Tourism as A Source of Earning Income for Farmers	Dr. Rahul Surve & Dr. C.V. Tate	122
21	Agricultural National Policies in India	Vijaya Gaikwad	130
22	Agro Tourism Centers in Solapur – An over Review	Mrs. Z.A. Nayab	134
23	Changing Fruit Agriculture with Climatic Regions in India	Prof. D.S. Gaikwad	139
24	Scope and opportunities of Agro-Tourism in India	Mr. Amol Shinde	147



25	Disappearance Changes of Traditional Agricultural Effect on Land-Cover Solapur District Dr. Nagnath Dhayagode	151
26	Flood and its Impact: A Geographical Study of Kerala District of India Dr. Raut Prakash Soudagar	155
27	A Geographical Analysis of Crop Concentration in Beed District (M.S.) Dr. Jaideep Solunke	159
28	Role of Agriculture in Regional Development and Associated Agricultural Problems in osmanabad District (Ms) Mr. Vaibhav Ingale	164
29	Impact of Agricultural Deveopment on Rural Settlements of Daund Taluka in Pune District, Maharashtra Dr. D.J. Durgade	171
30	Impact of Climatic Changes on Cropping Pattern of Solapur District Dr. Sangram Chavan	180
31	The Role of Technologies For Future of the Agriculture Development Dr. Babu Raut	183
32	Zone wise Agriculture Land Transformation in Solapur City of Maharashtra Dr. D. S. Narayankar	187
33	A Geographical Study of Agro- Tourism in Maharashtra Mr. D. S. Kadam, Prof. M.S.Jadhav & Mr. V.C.Wardule	192
34	Impact of Climate Change on Crop Diversification in Donaj Village(Ms) Dr. D. N. Ligade & Dr. S. J. Awate	196
35	Regional Disparities Among Agriculture Development in Solapur District (MS): A Geographical Analysis Dr. Govindrao Todkari	202
36	Impact of Chemical Fertilizer on Agriculture Production: A Geographical Analysis of Solapur District Dr. V.K. Pukale	208
37	Attitude of Farmers Towards Utilization of Draught Bullock Power in Dry Land and Wet Land Farming Dr. S. G. Sontakke	214
38	Challenges of Agriculture and Government Schemes in Indian Dr. Sheela Rampure	218
39	Psycho-Social Condition of Indian Agriculture and Indian Farmers Dr. Bajrang Metil	223
40	New Trends in Agriculture Library and Information Science Miss. Sapnarani Ramteke	225
41	Geographical Study of Chemical Fertilisers Use In Agriculture of Osmanabad District Dr. R.V. Tatipamul	231
42	The Study of Meteorological Drought Due to Rainfall Variability in Latur District of Maharashtra State (India) Mr. Kishor Shinde & Dr. Parag Khadke	236
43	Library Resources in Information Center for Agriculture Mr. Rishi Gajbhiye	242
44	A Geographical Study of Rural Settlement Types and Factors Impact the Rural Settlements in Hingoli District Balaji Avhad	251
45	Geographical Study of Fruit Farming in Akkalkot Tahsil of Solapur District Dr. Ankush Shinde	255
46	Agriculture Landuse and Irrigation Facilities of Vinchur Village in South Solapur Tahsil : A Case Study Dr. H. L. Jadhav	259
47	Changes in Agricultural Land Use Pattern of Solapur District Dr. S.A.Nimbargi	263
48	Problems in Indian Agriculture Development Dr. Ramdas Madale	268
49	Problems and Prospects of Ground Water Resources in Pune District of Maharashtra Prof. A. K. Phalphele & Dr. R. S. Dhanushwar	271
50	Monsoon and Indian Climate: A Geographical Study Dr. Sachin Rajguru	276
51	Geographical Study of Major irrigation Project in Marathwada Region Dr. M. T. Musande	286



Geographical Study of Chemical Fertilisers Use In Agriculture of Osmanabad District

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Abstract :

The present paper consists about the use of chemical fertiliser in agriculture of Osmanabad district. Agriculture in Osmanabad district is comes under the drought prone area. Supply of chemical fertiliser for agriculture use common thing, because the irregular monsoon and to increase agriculture production. Now a day's all farmers are using chemical fertiliser for all crops.

Keywords: - Chemical fertiliser, Agriculture, Agricultural production, Drought

Introduction :

Agriculture is mainly depend upon the various factors, out of them climate, soil, rainfall, temperature, water are geographical factors. Timely supply of chemical fertiliser for crop is very essential in modern era. Now a day's all farmers are providing chemical fertiliser for agricultural crop. Growing population need ample of food. To meet the present requirement without chemical fertiliser farmer can't produce agricultural product.

Osmanabad district is an agrarian district. Most of the people in the study area are engaged in agricultural and allied activities. Farmers in Osmanabad district are preferred to grow cash crops like sugarcane, cotton, soyabean etc. All these cash crops need higher amount of chemical fertiliser. The present paper consists about the use of chemical fertilisers in agriculture with Tahsil wise. The data used for the present study are 2010, 2015 and 2017.

Objectives: -

The present paper has certain specific objective. To study chemical fertiliser use in agriculture of Osmanabad district.

Database and Methodology

The present work is based on the secondary data collected from the agriculture development officer from Zilha parishad, socio economic review of Osmanabad district. Some of the relevant data collected from the websites.

Study area :

Osmanabad district is located in Maharashtra state. It is located on east side of marathwada region. The latitudinal extent of study area is 17° 35' to 18° 40' north and longitudinal extend between 75° 16' to 76° 40' east. The total area of district is 7512.4sq.km.

It is situated about 600 m above mean sea level. Manjra and Terna are major are seasonal river mainly flow in rainy season. Temple of goddess Tuljabhavani at Tuljapur is famous in India. There are eight Tahsil in the district. The Osmanabad district comes under drought prone area. Average annual rainfall in within the district is 730mm. The total population of study area is 1,486,586.



Chemical Fertiliser Use in Agriculture of Osmanabad District :

Osmanabad district comes under the drought prone area. Agriculture is not possible throughout the year. Agriculture in Osmanabad district depending upon the monsoon. In the study area Kharip and rabbi crops are sown in the agricultural area. To gain maximum agricultural production farmers use high amount of chemical fertilisers. The table 1.1, 1.2 and 1.3 shows tahsilwise use of chemical fertilisers in the Osmanabad district.

Table 1.1 Use of chemical fertilisers in Osmanabad district 2010 (in m.tn)

Tahsil	Supply form government institute			Supply from private institute			Kharip &rabbi(government-private)
	Kharip	Rabbi	Total	Kharip	Rabbi	Total	
Paranda	1581	894	2475	2936	1660	4596	7071
Bhum	2174	1294	3403	4037	2282	6319	9722
Washi	1779	1005	2784	3303	1867	5170	7955
Kalamb	2965	1676	4640	5506	3112	8617	13258
Osmanabad	3953	2234	6187	7341	4149	11490	17377
Tuljapur	3360	1899	5259	6240	3527	9766	15025
Lohara	1779	1005	2784	3303	1867	5170	7955
Omerga	2174	1229	3403	4037	2282	6319	9722
Total	19764	11171	30935	36703	20746	57447	88385

(Source: - agricultural development officer, Zilha parishad)

Table 1.2 Use of chemical fertilisers in Osmanabad district 2015 (in m.tn)

Tahsil	Supply form government institute			Supply from private institute			Kharip &rabbi(government-private)
	Kharip	Rabbi	Total	Kharip	Rabbi	Total	
Paranda	1243	294	1537	2767	837	3604	5141
Bhum	1141	465	1606	2539	1322	3861	5467
Washi	1037	412	1449	2309	1171	3480	4929
Kalamb	4429	1057	5486	9858	3008	12866	18352
Osmanabad	4331	1320	5651	9641	3756	13397	19048
Tuljapur	3108	1035	4143	6919	2946	9865	14008
Lohara	895	341	1236	1993	971	2964	4200
Omerga	3271	982	4253	7280	2995	10075	14328
Total	19455	5906	25361	43306	16806	60112	85473

(Source: - agricultural development officer, Zilha parishad)

Table 1.3 Use of chemical fertilisers in Osmanabad district 2017 (in m.tn)

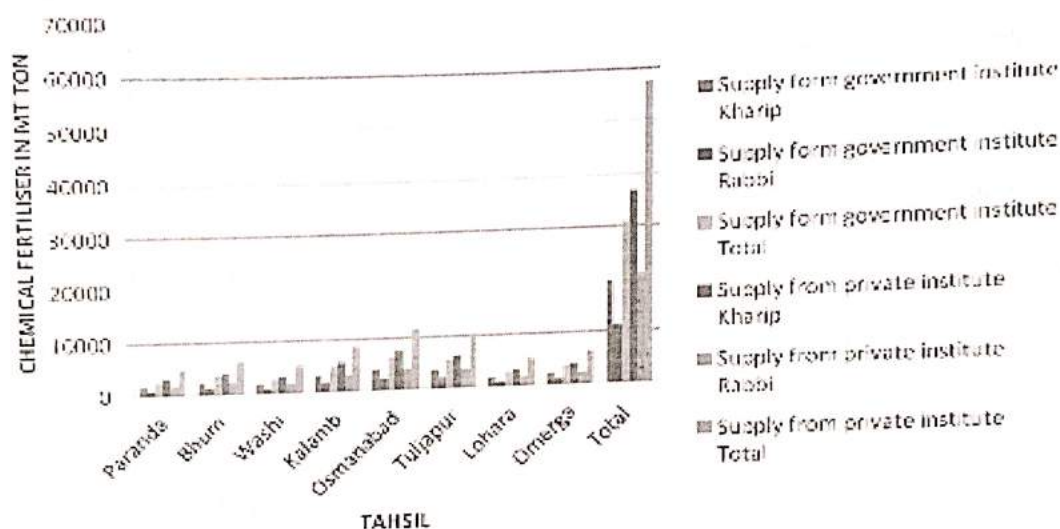
Tahsil	Supply form government institute			Supply from private institute			Kharip &rabbi(government-private)
	Kharip	Rabbi	Total	Kharip	Rabbi	Total	
Paranda	551	377	928	1226	1072	2298	3226
Bhum	701	650	1351	1559	1849	3408	4759
Washi	793	597	1390	1766	1698	3464	4854
Kalamb	1720	1460	13180	38287	4157	7985	11165



Osmanabad	3391	1798	5189	7547	5517	12664	17853
Tuljapur	2212	1388	3600	4923	3952	8875	12475
Lohara	426	374	800	949	1063	2012	2812
Omerga	2340	1298	3638	5209	3694	8403	12541
Total	12134	7942	20076	27007	22602	49609	69685

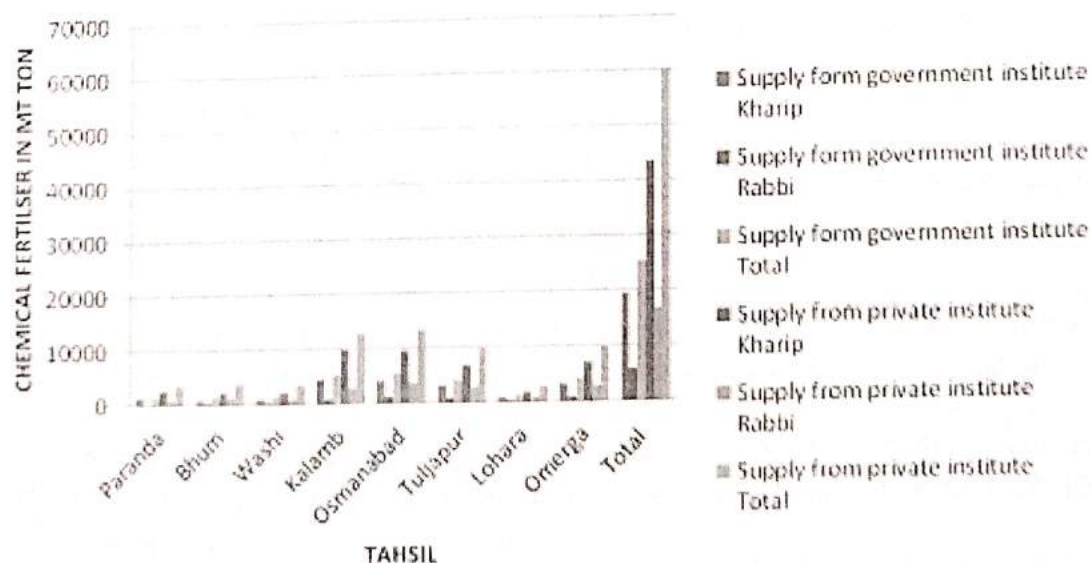
(Source: - agricultural development officer, Zilha parishad)

USE OF CHEMICAL FERTILISER IN OSMANABAD DISTRICT-2010



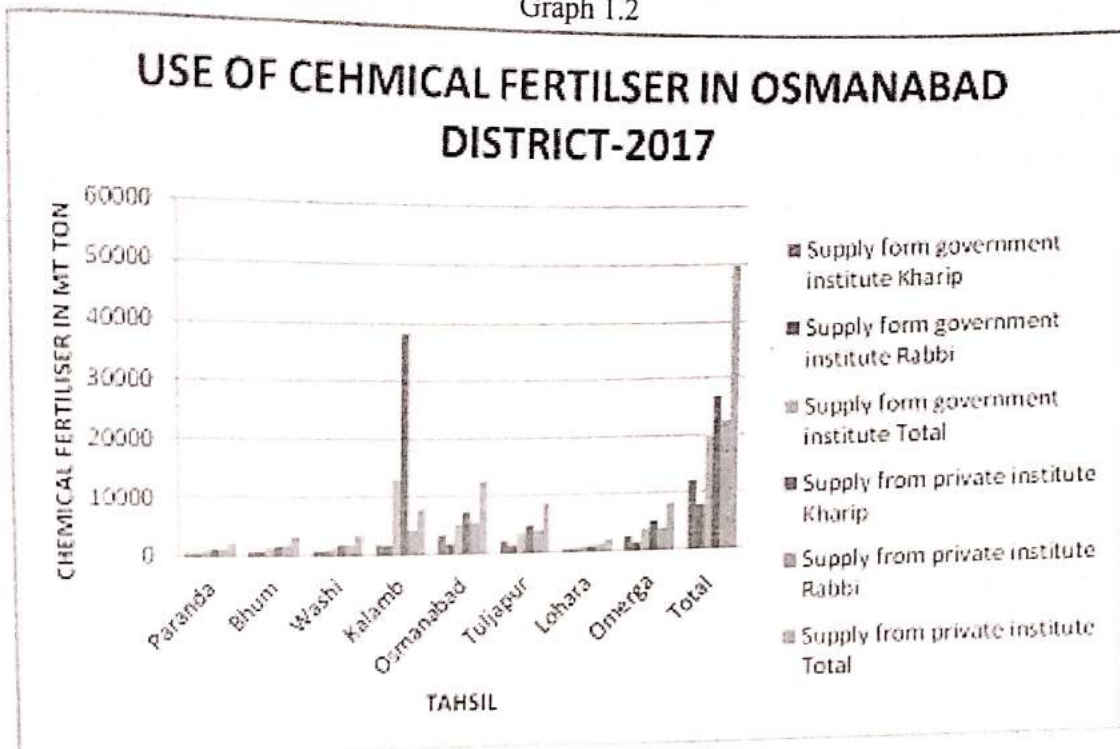
Graph 1.1

USE OF CHEMICAL FERTILISER IN OSMANABAD DISTRICT-2015





Graph 1.2



Graph 1.3

The total uses of chemical fertiliser in 2010 were 88385 metric ton. In 2015 use of chemical fertiliser reduced at 85473 metric ton. In 2017 it again reduced drastically and reached at 69685 metric ton. It is because of reduction in rainfall in last 7 year and continues drought conditions in the study area.

There are lot of variations in use of chemical fertiliser in Tahsil wise. In 2010 highest chemical fertiliser uses in osnambad Tahsil and lowest in Paranda Tahsil. In 2010 highest chemical fertiliser used in Kharip season compare to rabbi season. In 2015 total fertiliser used in whole district was reduced compare to previous year of 2010. It is due to erratic rainfall and gap between spell of mansoon. In 2015 highest use of chemical fertiliser were observed in Osmanabad Tahsil again and raised compare to 2010. The lowest chemical fertiliser uses were observed in the Lohara Tahsil.

In 2017 total use of chemical fertiliser was 69685 metric ton. It is reduced drastically. The highest uses of chemical fertiliser were observed in again in Osmanabad Tahsil and lowest in Lohara Tahsil again. In 2017 high chemical fertiliser used in again in Kharip season.

Conclusion

The present paper deals with the Tahsil wise use of chemical fertiliser in Osmanabad district. It shows variation in Tahsil wise use and reduction in total use of chemical fertiliser in last 7 year.

1. The highest chemical fertiliser use observed in district in 2010 with 88385 metric ton.
2. The uses of chemical fertiliser were drastically reduced continuously in 2015 and 2017 in the study area.
3. In the study area use of chemical fertiliser are very high in Kharip season in 2010, 2015 and 2017.
4. Osmanabad Tahsil shows highest use of chemical fertiliser in 2010, 2015 and 2017.



5. In the whole district in the rabbi season use of chemical fertiliser is low compare to Kharip season. It is due to shortage of water, lack of irrigation sources.
6. Graph show continuously reduction in use of chemical fertiliser except in Osmanabad Tahsil in 2015.

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