

Peer reviewed Journal

Impact Factor: 7.265

ISSN-2230-9578

Journal of Research and Development

A Multidisciplinary International Level Referred Journal

June 2021 Volume-11 Issue-15

*Sustainable Development Goals: Initiatives,
Execution and Challenges*

Chief Editor

Dr. R. V. Bhole

'Ravichandram' Survey No-101/1, Plot
No-23, Mundada Nagar, Jalgaon (M.S.)

Guest Editor

Dr. Prof. H. B. Rathod

Principal

Gramin (ACS) Mahavidyalaya,
Vasantnagar (Kotgyal), Tal.
Mukhed

Executive Editors

Dr. V. T. Naik

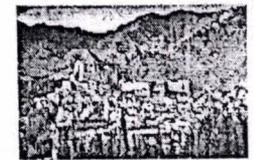
Mr. B. C. Rathod

Co-Editors

Dr. D. K. Kendre

Mr. S. A. Jewale

Dr. U. D. Padamwar



Address

'Ravichandram' Survey No-101/1, Plot, No-23,
Mundada Nagar, Jalgaon (M.S.) 425102

Journal of Research and Development

A Multidisciplinary International Level Referred and Peer Reviewed Journal

1 June-2021 Volume-11 Issue-15

On

Sustainable Development Goals: Initiatives, Execution and Challenges

Chief Editor

Dr. R. V. Bhole
'Ravichandram' Survey No-101/1, Plot, No-23,
Mundada Nagar, Jalgaon (M.S.) 425102

Guest Editor

Dr. Prof. H. B. Rathod
Principal
Gramin (ACS) Mahavidyalaya, Vasantnagar (Kotgyal), Tal. Mukhed

Executive Editors

Dr. V. T. Naik Mr. B. C. Rathod

Co-Editors

Dr. D. K. Kendre
Mr. S. A. Jewale
Dr. U. D. Padamwar

Editorial Board

Mr. Thorve A. B.	Prof. Zamapalwad S. S.	Dr. Chavan V. P.	Dr. Gore S. Y.
Prof. Pawar S. K.	Mr. Pawar D. C.	Shri. Gokule R. G.	Shri. Kalimath S. K.
Prof. Shinde P. R.	Shri. Koturwar P. P.	Shri. Deth S. K.	Sow. Itkapalle A. P.
Dr. Reddy S. M.	Prof. Kalyan G. S.	Mr. Kankute S R.	Dr. Awade N. H.
Prof. Shinde P. A.	Sow. Shendage S. N.	Shri. Patil S. S.	Shri. Pande G. K.
Dr. Pentewar M. S.	Dr. Giri M. A. Shri.	Naik N. U.	Shri. Mathpati G. H.
Prof. Badne R. D.	Shri. Babarao S.	Dr. Kshirsagar S. G.	Dr. Halmandge B. V.

Published by- Principal, Dr. Prof. H. B. Rathod, Gramin (ACS) Mahavidyalaya, Vasantnagar (Kotgyal), Tal. Mukhed

The Editors shall not be responsible for originality and thought expressed in the papers. The author shall be solely held responsible for the originality and thoughts expressed in their papers.

© All rights reserved with the Editors

CONTENTS

Sr. No.	Paper Title	Page No.
1	Role of MSME in Sustainable development Dr. Satish Laxmanrao Kundalwar	1-2
2	The Economic Impacts of Tourism Dr. Ashok Shamrao Patil	3-4
3	To Study Of Population In Parbhani City Dr.B.T.Patil	5-7
4	Role of the Teachers and parents in value education of India Mr. Sanjay Daulatrao Bagul	8-11
5	Sustainable Development-Factors and Aims Dr. A.P.Barve	12-14
6	'Oppression' as a Social Issue in Mahasweta Devi's <i>Draupadi</i> Dr. G.Ramana Reddy	15-17
7	Rainfall Variability In Akola District A Geographical Study Dr. Sunil Ramrao Rapanwad, Mahananda Linguram Dinde	18-20
8	Ground Water Level at Selected Areas in Amravati City Shri Gopal Bhalavi	21-23
9	A Study of Cropping Pattern in Jalna District (MS) Mr. Pramod Deshmukh	24-27
10	Role of Kharif crop weeds in human health Anjali B. Shinde	28-31
11	Role of Meaningful Data in Life of Agriculturist: Case Study form Ahmednagar District of Maharashtra Dr. Ganesh K. Chavhan , Dr. Prakash N. Salve, Dr. Raghunath E. Najan	32-37
12	"Talukawise Male And Female Percentage Of Literacy In Osmanabad District (1981-2001) A Geographical Analysis" Mr.Rajaram D.Davankar	38-40
13	Contribution of Literature in Social Development Gangadhar P. Aaklod, Dr. Umakant D. Padamwar	41-42
14	Gender Sensitization for Sustainable Development Dr. Shaikh M. A. Raheman	43-45
15	Cropping Pattern In Gangakhed Taluka: A Geographical Study Dr. S. H. Kolpe	46-49
16	"Effect of weed bio resources on Growth Development of Cash Crop Sugarcane" Prakash N. Gholap	50-53
17	Landuse Pattern in Solapur District: A Geographical analysis Dr. Dnyanoba Gorakh Shinde	54-56
18	Gender Equality Audit: An Analysis of 'Yuvakbharati' Textbooks of Maharashtra State Bureau of Textbook Production and Curriculum Research-Pune Dr. Samrat Ashok Jadhav	75-61
19	Empowerment Of Women In India Dr. Mahesh L. Dharmapurikar	62-65
20	Online Education in India – qualities and challenges: A study Mr. Rahul Ramakantrao Kulkarni, Dr..Zampalwad S S, Birajdar S P	66-68
21	Literature is the Mirror of Human Life Smt. Poonam Prakashrao Mane	69-70
22	A Comparative Study Between The College Students' Participation In Sports Before Covid-19 Outbreak And During The Outbreak. Sk Rasid Mahammad	71-74
23	Library Services provided during COVID-19 Pandemic to Competitive Exam. Aspirants: A Survey Mr. Guldagad Kiran Dhondiram	75-76
24	Creative Problem-Solving Shri. Raju Laxman Kokare, Shri.Abhijeet Balaso Giri	77-78
25	A Study on Growth of E-Banking in India- An Year Analysis Javalakshmi VA	79-85
26	Laser And Their Applications Sanjay Awadhane , Devidas Kendre	86-89
27	Importance Of Environmental Science & Studies Dr. R.D. Khakre	90-92
28	B. R Ambedkar's Work for Women and Child Workers – A Study Dr. Prashant M. Puranik	93-95
29	Customer Perception Towards E Banking-An Innovative Platform Rotte Sai Akash	96-99
30	The Study Of Crop Diversification Region Of Pune District, (M.H.) Shashikant Raghunath Memane, DR. Dhanushwar Ramesh Shyamrao	100-103

Cropping Pattern in Gangakhed Taluka: A Geographical Study

Dr. S. H. Kolpe

Department Of Geography, Arts, Commerce & Science College, Gangakhed

Abstract:

According to agricultural economists a cropping pattern means the proportion of area under various crops at a point of time (Kanwar, 1972). Cropping pattern is the use of land for the cultivation of crops in other words it is the proportion of area under different crops at a point of time. The cropping pattern emerges through the needs of the Society and helps to eradicate the food problem and to increase the agricultural relations employment to weaker section. There is a considerable variation in the cropping pattern of region such variations is the outcome of the effect environmental and technological factors. It is the out come of the effect of institutional factors also Topography and soil condition also bring out the variation in cropping pattern.

Cropping pattern of the area with assured rainfall different from the areas were it is low or scanty. The present study seeks to analyze the effect of physical and cultural factors. There fore the 888.5 mm. of Parbhani District annual rainfall average of 1084.65 mm. of Gangakhed Taluka. Gangakhed which is on the bank of Godavari river is also called as " South Kashi ". Gangakhed Taluka is East-West distance 30.70 km. and North-South distance 43 km. Gangakhed Taluka total geographical are primary object of present study is to map, describe and analyses some of the future of present cropping pattern in the context to physical condition of the Gangakhed Taluka region of Parbhani District of center Maharashtra.

Introduction:

The present paper examines the cropping pattern of Gangakhed Taluka in Parbhani district. Which are showing the various cropping pattern of all circles in Gangakhed Taluka. Which can form basis for future cropping pattern improvements and planning. The cropping pattern emerges through the needs of the Society and helps to eradicate of food problem and to increase the agriculture relations employment to weaker section. The cropping pattern of region, such variations is the out come of the effect environmental and technological factors. It is out come of the effect of institutional factors also topography and soil condition also bring out the variation in the cropping pattern.

The location of Gangakhed Taluka in center Maharashtra. In Parbhani district, the location to Gangakhed is south of district Gangakhed Taluka lies between 18°60' to 18° 65' North latitude and 76° 45' to 76° 47' East longitude. It has total Geographical area of 66013 Hector with 106 villages, three circles and one urban center. The region under study 40412 urban and 123633 rural population. The region is totally located on the Balaghat plateau. The region under study is a part of Balaghat plateau of Maharashtra. The average height of the region 350 to 450 meters above mean sea level. The river Godavari and Masali is the main source of water following from west to east in the taluka. Climate is the principal aspect of the physical environment affecting almost every aspect of our life. The climate of Gangakhed Taluka is tropical monsoon. Rainfall is significant climatic element that influences the agricultural economy of the study region.

Objectives:

- To know the existing pattern of crop and changes there in.
- To investigate the pattern of crop concentration.

Methodology:

The collected data and information will analyzed by statistical and cartographic techniques. The analyzed data will be represented in the form of maps, diagrams and tables. The extensive field work will under taken for investigation of cropping pattern. The corpping pattern for the study region will work out with the help of following formula.

$$C_p = (Ca/N) \times 100$$

Where, 'Cp' represents the cropping pattern,

'Ca' is the cropped area under crops 'a' in an enumeration unit,

'N' means the total cropped area in the same unit.

Cropping Pattern in the study region:

There are two Agricultural harvests in Gangakhed taluka, namely kharif and rabbi season. The Kharif harvests consists mainly of quick Maturing Crops, Sown in Mid-June and harvested in month of September October. This harvest is uniformly important over the entire study region. The Rabbi harvest includes a large number of crops. Such as Jowar, Wheat, Pulses and oil seeds. Sown in October November and harvested in March.

Table No. 1.1, Cropping Pattern In Gangakhed Taluka; 1999 – 2003 (circle wise)

Sr. No.	Crops	Gangakhed	Makhani	Ranisawargaon
01	Jowar	25.79	34.04	40.15
02	Rice	01.12	01.02	01.00
03	Wheat	01.30	01.16	01.11
04	Bajra	03.02	03.12	03.40
05	Tur	06.36	05.93	05.75
06	Mung	04.11	03.71	04.00
07	Udid	01.46	01.48	01.36
08	Sunflower	00.29	00.52	00.22
09	Groundnut	01.38	01.12	00.92
10	Sesamum	00.32	00.19	00.14
11	Soyabin	04.55	04.02	03.50
12	Sugarcane	01.02	01.02	00.62
13	Cotton	40.96	35.54	33.67
14	Other Crops	08.32	07.13	04.16
Gross Cropped Area		100.00	100.00	100.00

Source : Compiled by the Author.

Table No. 1.2, Cropping Pattern In Gangakhed Taluka; 2003 – 2007 (circle wise)

Sr. No.	Crops	Gangakhed	Makhani	Ranisawargaon
01	Jowar	16.03	23.77	24.81
02	Rice	00.83	00.74	00.69
03	Wheat	03.01	03.10	02.79
04	Bajra	03.30	03.44	03.23
05	Tur	04.95	05.65	05.41
06	Mung	04.41	03.47	03.20
07	Udid	01.61	03.22	02.21
08	Sunflower	00.28	00.28	00.29
09	Groundnut	01.66	01.32	01.17
10	Sesamum	00.09	00.09	00.09
11	Soyabin	32.23	24.81	32.56
12	Sugarcane	01.42	01.44	01.18

13	Cotton	22.80	18.73	17.97
14	Other Crops	07.38	09.94	04.40
Gross Cropped Area		100.00	100.00	100.00

Source : Compiled by the Author.

- 1) **Jowar** : Jowar is a staple food which is grown both as kharif and Rabbi crop. It is locally called Kharif, Jowar and Rabbi Jowar. The changes in Jowar cropping area also noticed in the Taluka. The positive change is observed in all over Taluka. But the only two circles are high positive changes namely Makhani and Ranisawargaon circle, and the remaining circle namely Gangakhed circles is registered the low positive change of cropping area.
- 2) **Rice** : Cropping pattern of Rice cultivation has decreased from 0.09 to 01 percent during the last six year. The significant decrease (above 0.92 percent) in the pattern of Rice has been found Gangakhed and Makhani circles. Where as the circle of Ranisawargaon have recorded low decrease (under 0.84 percent) of the cropping pattern under Rice cultivation.
- 3) **Tur** : Changes in Tur cropping pattern are observed in the region. Table showing changes of cropping pattern in the bring out an over all decrease in area. Only one out of the three circles have shown low increase of pattern under Tur but it is not very significant.
- 4) **Udid** : The changes of pattern in Udid crop are also observed in the study region all circles in Gangakhed Taluka is noted the negative. Changes of pattern the negative change (over 2%) is observed in Makhani and Ranisawargaon circles. The remaining Gangakhed circle is found (below 1%) decrease pattern under Udid crop.
- 5) **Sunflower** : The circles possessing more than 0.31 percent of the area under sunflower have been grouped in the high category. These are one circle in this group with Makhani. The dominance of sunflower is said to be moderate if the percentage range between 0.25 to 0.5%. These are two circles Gangakhed and Makhani. The Ranisawargaon circle having 0.25 percent of their area under Sunflower fall in the low group.
- 6) **Groundnut** : The pattern of change in groundnut Hector is observed in all the circles of the Gangakhed Taluka. All the three circles have shown some decrease in the areas under groundnut. All over decrease during the period is 0.92 to 1.60 percent pattern of area under Groundnut. The medium negative change over 1.04 percent is observed in Ranisawargaon circle. The remaining circles, Gangakhed and Makhani circles in significant decrease (below 1.37%) is found the pattern of area under Groundnut.
- 7) **Cotton** : The area under Cotton shows spatial difference. In Ranisawargaon circle it has gone down by 25.82 percent while in Gangakhed circle there is a increase of 31.88 percent. Recently two forces are working upon the Cotton production. The monopoly purchase system of Cotton has discouraged many farmers from producing, Cotton, while the new varieties of cotton which area raised with the help of irrigation some farmers to grow cotton. The farmers are responding to this situation. According to the resources at their hand it has resulted in varied change in the cotton area in different circles.
- 8) **Soyabin** : The changes of pattern in soyabin crop are also observed in the study region all circles in Gangakhed Taluka is noted the positive changes of pattern. The pattern of Soyabin occupies about 16.94 percent area under this crop.
- 9) **Wheat** : Two circles having 1.95 to 2.13 percent of their total cropped area under wheat are place in the medium category. This pattern is located of Gangakhed land Makhni circles area. The medium cropping pattern of wheat in them is due to environmental and Socio-economic factor. And the only one circle is the low category. It is found in Ranisawargaon circle which is 1.95 percent lack of irrigation poor soil and other facilities deter wheat cultivation this area.
- 10) **Sugarcane** : The period under investigation has with nesses phenomenal growth in the area under Sugarcane, the pattern of Sugarcane has increased significantly during the period under investigation and this is mainly due to the increased irrigation facilities in recent year's in all over circles of the Gangakhed Taluka. Two circles, Gangakhed and Makhani recorded above 1.22percent, while Ranisawargaon circles have recorded an increase of 0.9 percent. The remaining circle the proportion of area increases under Sugarcane pattern is below 0.62 percent.
- 11) **Other Crop's** : In the study of cropping pattern, including the other crops mean's all crops which cultivation in all season. It is include, fruits and vegetable, Kardi, Gram and other minor crops they serve local needs. Bajara is the most important food crops in the region. Mung is another important pulse growth

in the region. Sesamum is an edible oil seed. Its oil is also valuable for preparation of perfumes and medicines. All these crops are account for a small percentage of the total area.

Conclusion:

In this paper we will saw the not positive changes of cropping pattern in this region unless the make positive changes of cropping will introduced by the Government at different time periods. Which provided the essential background to promote the changes of cropping pattern in the region. The process of agricultural expansion farm credit and co-operative movement introduced in the Taluka. These credit societies will provided the opportunity to farmers to install pipelines and pumping set for irrigation, besides this general use of the land resources the specific use of it for particular crop is important aspect of the crop land use planning. Hence it would be worth to study further the continuing process of these agricultural changes in the region.

References:

1. *Debashis Das (1983) : Cannal and it's benefits effects on cropping pattern. A case study of village Vol 12.*
2. *Gupta J. P. (1977) : Distribution pattern's of multiple cropping in upper Ganga Khadar Vol 13. Merrut.*
3. *More K. S. (1980) : Changing Pattern of Agricultural Land use in Kolhapur District.*
4. *Sing Jasbir (1974) : An Agricultural atlas of India. A Geographical analysis Vishal Publication, Kurukshetra, India.*
5. *Weaver J. C. (1954) : Changing Patterns of Crops Land Use in the Middle West, Economic Geography Vol.*