

PROBLEMS AND DEVELOPMENT OF AGRICULTURE IN JALGAON DISTRICT

*Devendra A. Maski

**Dr. Sanjay D. Bhais

*Assistant professor, Department of Geography

Sau. Rajanitai Nanasaheb Deshmukh Arts, Commerce and Science College, Bhadgaon Dist. Jalgaon,

**Associate Professor, Head Dept of Geography, Research Guide & BOS member (KBCNMU Jalgaon)

Sau. Rajanitai Nanasaheb Deshmukh Arts, Commerce and Science College, Bhadgaon Dist. Jalgaon.

ABSTRACT: -

Agriculture is one of the primary economic activities of man. Agriculture, the primary form of economic activity includes not only cultivation but Forestry, irrigation and cultivation of crops. agriculture is highly sensitive to climate variability and weather extremes such as droughts, floods and severe storms. While food production may benefit from warmer climate, the increased potential for droughts, floods, heat and cold waves, cyclones, low availability of labor and other factors will pose challenges for farmers. now a day in Jalgaon district farmers are facing many problems in agricultural practices. In Jalgaon district production of crops has declined because farmers are facing many problems. Recent studies indicate the development and problems of agriculture in Jalgaon district.

KEYNOTES: Crop production, Rainfall, Agricultural problem, Crop productivity, Atmospheric condition.

INTRODUCTION:

Agricultural Development became in large in the period of Information Technology. Use of biotechnology is increasing day by day in agriculture. In spite of this, according to the view of farmers, agriculture is not more profitable. From the period of Independence, research is going on the difficulties faced in agriculture. Geographers also include this subject in their research to understand the agricultural problem in Jalgaon district. We should know the geographical and economical and social circumstances of the Khandesh region.

STUDY AREA:

Now the present period farmers are facing various problems in agriculture and decrease of crop production. The irregular rainfall, cyclone, hot and cold waves, labour problems and government policy disturb the local economy of farmers. Jalgaon district is inclusive in drought prone belt and because of this finds out change of cropping pattern and production due to rainfall variation in this region. so selected about the reason for study.

LOCATION:

The Jalgaon district is located near the heartland of India. It occupied a position of great strategic importance in the Tapi rift Valley. It is bordered by high land of Satpura plateau in the north and the Ajanta range in the south. It stretches from 20 degree to 21-degree north latitude and 74 degree 55 minutes to 76-degree 28-minute East longitudes. The total area of the region is given as 11765 sq. km. Jalgaon as district headquarters is located in a well-developed agricultural area in which cotton, sugarcane, banana and vegetable are grown.

OBJECTIVES:

The aim of the present investigation is to:

1. To study agriculture development in Jalgaon district.
2. To find out the effect of various problems on the crop production.
3. To study the various farmers' problems in Jalgaon district.

HYPOTHESIS:

In the recent period, the problems of agriculture in the Jalgaon district is serious. So, the economy of the farmers has been completely changed.

RESEARCH METHOD METHODOLOGY AND DATABASE:

Data is collected from the secondary sources. All agricultural data collected from the agricultural statistical office, Jalgaon. After it analyses the table and diagrams are prepared to represent data.

EXPLANATION:

Jalgaon district is an agricultural district. More population of this district are involved in agriculture activity. Jalgaon is very famous for the production of bananas. But now a days farmers of Jalgaon district are facing various problems in agriculture. In some places of this district heavy rainfall occurs and some places the rainfall is very sporadic. So, the condition of the farmers of this area has been pitiable.

According to relief feature, Jalgaon district is divided into three parts:

1. Mountainous region in North part
2. Tapi river basin in middle part
3. Ajanta Hilly range in southern part

Middle part of Tapi river basin is suitable for agriculture. but Satpura mountainous and Ajanta hilly region is not suitable for agriculture. Out of total geographical area of the Khandesh about 57% area is under agriculture. Because of deep sediment deposited at the surrounding Tapi river bank. So, this region is more suitable for agriculture purposes.

Area of shallow medium black soil in Jalgaon district is 638. 1 thousands hectares and it is very suitable for cotton and banana crops. and the area of deep black soil is 213. 5 thousands hectares is suitable for sugarcane, banana and other cash crops. Due to this cash crop cultivation, this area is considered a rich region.

The area under net crop is 844 4.2 thousand hectares and twice the crop area is 480360 hectare. so agriculture is a major occupation in Jalgaon district.

Water streams of Satpura and tributaries of Tapi river (Girna, Purna, Bhogavati, Aner, Panjara, Waghur etc.) increases underground water level in this region. farmers of this area mainly taking cash crops like sugarcane, cotton and banana etc. Yawal and Raver Taluka are famous for banana production. Irrigation is essential for these crops. So, farmers irrigated their land by Canal, Wells and tube wells.

Table No. 1
: Jalgaon District- Irrigation

Sr. No.	Particulars	Area (000 hectares)
01	Area depended on rain	717
02	Net irrigation	213
03	Total irrigation	295
	Total	1225

Source: Agriculture Statistics Department (2010-11)

Table No. 2
: Jalgaon District-Agriculture land

Sr. No.	Particulars	Area (000 hectares)
01	Net crop area	844.20
02	Twice crop area	480.60
03	Total crop area	1324.80

Source: Agriculture Statistics Department (2010-11)

Due to decreasing rainfall in this region, farmers are using high power water pumps for irrigation. so, there is a decreasing underground water level which leads to stopping enough water supply in wells and it becomes dry. For continuous water supply to banana and sugarcane, rich farmers dug more deep wells. So, there is an increasing number of tubewells in this area. In this area wells deepness is upto 200 feet.

In Jalgaon district taking production of kharif and Rabi crops and also fruits. Cotton, Soyabean, Maze, Jawar, wheat, pulses, groundnut are main crops in Jalgaon district. In Rabi season farmers take many wheat, gram, soybean and maize crops and summer season crops are taken in very small areas.

Table No.3
Jalgaon District-Main crops (2010-11)

Sr. No.	Main Crops	Kharip (000 hactares)			Rabbi (000 hactares)			Summer	Total
		Irrigated	Depend on rain	Total	Irrigated	Depend on rain	Total		

01	Cotton	151.2	204.9	356.1	--	--	--	--	356.1
02	Soya bin	--	168.2	168.2	3.9	--	3.9	--	172.1
03	Maize	58.4	--	58.4	--	--	--	--	58.4
04	Pulses	--	35.8	35.8	--	--	--	--	35.8
05	Wheat	--	--	--	25.3	--	25.3	--	25.3
06	Kardai	--	19.2	19.2	--	--	--	--	19.2
07	Ground nut	--	1.6	1.6	--	6.9	--	--	8.5

Source: Agriculture Statistics Department (2010-11)

In the southern part of Jalgaon district i.e Bhadgaon, Chalisgaon, Jamner and Erandol taluka are famous for production of lemon, orange, guava and sapota (chikku). Those villages located at the bank of Girna river take production of fruits due to suitable environment. Except some taluka like parola, Erandol, Jamner of Jalgaon district is famous for banana production. so, the area under banana cultivation is 46 thousand hectares, under lemon 3.5, Orange 2.5 and guava 1.5 thousand hectares. production of these fruits leads to economic development.

Table No. 4:
Jalgaon District- Fruits

Sr. No.	Name of Fruits	Irrigated area	Total area (000 hectares)
01	Banana	46.0	46.0
02	Lemon	3.5	3.5
03	Orange	2.5	2.5
04	Guava	1.5	1.5

Source: Agriculture Statistics Department (2010-11)

The difference between the Productivity of land and production of crops taken by farmers in Jalgaon district depends on average rainfall, total number of rainy days and drought period in monsoon. so, farmers cannot get expected production of crops which result in their economic imbalance. Show the table no.5 it is clear that farmers cultivate the crops like soybean, cotton and maize as major crops. They do not try new experiments in agriculture. but some farmers are using a changing crop system but crop diseases and insects problems decrease crop production.

Table No. 5:

Jalgaon District- Average Production and Productivity of Main Crops

Sr. No.	Crops	Kharip		Rabbi		Summer crops		Total	
		Production	Productivity	Production	Productivity	Production	Productivity	Production (000 tons)	Productivity (Kg/Acre)
01	Soya bin	245.5	1994	64.2	1745	--	--	309.4	1869.5
02	Cotton	948.5	388	--	--	--	--	948.5	388
03	Wheat	--	--	137.7	2919	--	--	137.7	2919
04	Maize	195.1	2815	85.91	2286	2.64	1661	283.6	2254
05	Pulses	26.67	470	--	--	--	--	26.67	470
06	Ground Nut	18.4	1077	--	--	5.65	1747	24.0	1412
07	Kardai	7.68	355	--	--	--	--	7.68	355
08	Banana	--	--	--	--	--	--	31.2	65000
09	Lemon	--	--	--	--	--	--	24.2	7000
10	Orange	--	--	--	--	--	--	34.5	14000
11	Guava	--	--	--	--	--	--	20.8	14000

Source: Agriculture Statistics Department (2010-11)

Farmers in Jalgaon district are trying to cultivate different types of crops. farmers in Chalisgaon and Bhadgaon taluka are trying to increase their economical level by cultivating pomegranate. but farmers in Raver and yawal Taluka are taking production of ginger and turmeric. Due to atmospheric conditions, cyclones have occurred in this region for the last 3 to 4 years. Cyclone effects on banana pros and farmers suffer their economic loss. Because of these losses farmer became economically weak and they had to take loans from banks and the private sector. This is one problem of farmers in Jalgaon district.

Table No. 6:

Jalgaon District- Atmospheric Condition

Sr. No.	Particular	Frequent	Rare	None
01	Drought	--	Yes	--
02	Floods	--	--	Yes
03	Cyclone	--	Yes	--
04	Hailing	--	--	Yes
05	Hot waves	--	Yes	--

06	Cold waves	--	--	Yes
07	Fog	--	--	Yes
08	Insect appearance	Yes	--	--

Source: Agriculture Statistics Department (2010-11)

Table No. 7

Jalgaon District- Rainfall

Sr. No.	Particular	Average rainfall (mm)	Average days
01	South-west monsoon (June-Sept.)	639.8	33
02	North-East (Oct.-Dec.)	73.4	04
03	Winter rain (Jan.-Feb.)	16.8	02
04	Summer rain (Mar-May)	20.0	01
05	Average annual rainfall	750	40

Source: Agriculture Statistics Department (2010-11)

Normally starting of the monsoon in the district in the second week of June and end of monsoon in 3rd week of October. water streams coming down on Satpura mountain and goes under the foot plane of Satpura. so, it increases the underground water level in this area. under ground water level helpful to increase irrigation of crops and production of sugarcane, cotton and Banana is taken. Mainly Yawal and Raver taluka are famous for banana production. Due to the sweet taste of Banana, there is more demand from various parts of the country. banana crops required more irrigation. so, farmers use well irrigation for the production of Banana crops.

Irrigation leads to Agricultural Development. but irrigation facilities are available in only some part of Jalgaon district. In the Northern side of Ajanta Hills and Girna river valley, irrigation facilities are less. The Waghur river and Padalsare project are Still in incomplete condition. So, these projects are not useful for irrigation to agriculture in Jalgaon district. So, in Jalgaon district, Rain farming is going on in a large area.

Sugarcane and banana production is taken in irrigated areas but transportation is one problem for these crops. Banana is a perishable crop so it should be transferred to market as early as possible. In other parts of the country bananas are transported by Railway and road. Sometimes Railway Wagons are not available for farmers so bananas are not reached in the market in time. So farmers suffer from economic loss. on the other hand more sugar factories in Jalgaon district are shut down due to these circumstances land of under sugarcane crop is also decreasing. so farmers are moving towards other crop production.

Due to heavy rainfall and cold waves in this area, insects attack on banana crops so there is a decrease in production of bananas. In this area Banana is the only crop there are no surrounding big trees to prevent Thunder. Except for the west part of Jalgaon district, the remaining average rainfall is about 600 to 800 mm. so this area is known as a semi arid climate zone. The irregularity and uncertainty of Southwest monsoon

affect the economical condition of people in Jalgaon district. This is the main problem from ancient times in India in agricultural view.

Regur black soil is suitable for cotton in Jalgaon district. The 22% cultivated area is under cotton crop in Jalgaon region. so it is a very important crop in Jalgaon district. Mainly farmers cultivate to Cotton with the help of rainy water. so uncertainty of rain cotton production decreases and small scale farmers suffer from economic bad conditions. various diseases and insects affect the decrease of cotton production. so farmers use more pesticides and chemical fertilizers for growing crops. more pesticides and fertilizers increase the salinity of soil and underground water also polluting by pesticides and chemical fertilizers. More use of these materials affect the environment; other crops also suffer from low and high risk of these problems.

Unbalanced expenditure and production is another problem in agriculture. Crop production is less than expenditure due to the traditional system, fragmentation of forms, limitation of use of machines. So expenditure is increasing day by day in agriculture. The farmers and their families do not include their work power and capital investment in Jalgaon district like to Indian farmers. Another problem of Indian and Jalgaon district farmers is that they are not getting enough market price for their agricultural production.

CONCLUSION:

It is essential to study this issue by agriculturalists, economists and industrialists. We can help farmers with the help of focusing on agricultural income, capital investment, diseases and peasant's problems, information of weather and climate change and market. It can be helpful to farmers for future plans.

With the help of modern technology such as Remote Sensing we can search land use, growing crops, disease on crops and its Extension. So research must have knowledge of this modern technology, because they can help farmers.

Rural people of Jalgaon district migrate toward Gujarat and Mumbai every year. Educated young population in rural areas are not interested in agriculture work, they are interested in government, semi government or private sector jobs. A lot of jobs and work are available on farms but labour is not available. Rural educated people wasted their time in a village but they are not interested in agriculture work. This type of typical condition is going on in agriculture villages of rural India.

References:

1. **Surendra Singh:** "Geography" Tata McGraw Hill Education Pvt. Ltd. New Delhi, 2011.
2. **K Siddhartha:** "Economic Geography" National Book Trust, 2003
3. **C. B. Memoria:** "Economic and commercial geography of India" Shiv Lal Agrawal and Co. New Delhi, 1982.
4. **T. C. Sharma and O. Continuo:** "Economic and commercial geography of India" Vikas Pub. House Pvt. Ltd. New Delhi, 1982.
5. **Asha A. Bhende & Tara Kanitkar:** "Population Studies" Himalaya Pub. House Delhi 1994.
6. **Dr. Shankar R. Chaudhary:** "Paryavaran v Arthik Kriya" Himalaya publishing house Delhi, 2002.
7. **Majid Husain:** "Crop combination in India" Concept Publication, New Delhi.