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### Proposal for Economic Growth of Kolhewadi through Agriculture Development

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Abstract: India is a developing nation in sectors such as Agriculture, Transportation, Education, and Infrastructure. Agriculture is the one of high GDP contributor in Indian economy. In last few decades by green revolution agriculture sector is developed, but it still has lot of bearing in agricultural growth. The aim of research is to identify various problem in agriculture field in study area Kolhewadi, Tal- Sangamner, Maharashtra. And by studying various factors to prepare proposal for economic growth of kolhewadi through agriculture development.

Keywords: Agriculture, Allied Business, Education, Infrastructure, Economic development, Agriculture Market.

#### I. INTRODUCTION

India is associate rural economy and also the agriculture sector still incorporates a heap of bearings on the general growth and development of the country commonly and rural development significantly. The economic division of agriculture to India's gross domestic product is declining with the country's broad-based economic process. [7] Agriculture is demographically the broadest economic section and plays a significant position within the overall socio-economic material of Asian country. Agriculture, with its allied sectors, is without doubt the most resource supplier in Asian country, additional thus within the rural areas. 70% of India's population lives in rural regions, and simple fraction of the individuals creating up these rural populations rely on agriculture and allied activities for his or her livelihoods. Agriculture incorporates a operate to play within the impoverishment reduction, upliftment of ordinary of living of low and conservative individuals and to the expansion of rural areas thanks to most poor lives in rural and far-flung areas that have agriculture because the solely supply of living. It's been found that impoverishment in main developing countries is focused in rural areas; growth within the agriculture sector and within the rural economy has been extremely useful to cut back impoverishment. Agricultural growth is critical to confirm national food security, alleviate impoverishment and cut back rural-urban disparities. Concerning 70% of India's population lives in rural areas and 69% of them rely on agriculture and allied activities with farming and fisheries for his or her resource. [7]So it is necessary to develop agriculture sector in villages for aiming better Economy as well as Social Environment. This paper presents proposal for economic growth of Kolhewadi village through agriculture development, located in Maharashtra, (Taluka- Sangamner, and District- Ahmednagar). The village is 6.0 km away from its Tehsil-Sangamner and 91.0 km from District-Ahmednagar. According to Census 2011 the total population is 5070. The total area of village is 960.00 hectare and about 765.32 hectare area of village is under cultivation.

#### II. METHODOLOGY

The first step for the project is to identify problems with a respect to the selected an area. Then with the objective goals and the study of literature reviews a detailed study is to be carried out. After that data collection by a virtual and physical survey is planned. By separation of data suitable solutions have to be planned for finalizing the proposal.

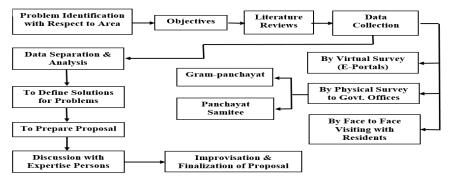


Fig. 1 Methodology

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#### III. STUDY AREA PROFILE AND LOCATION

The village of Kolhewadi is mainly dependent upon agriculture and its allied activities such as, cow farming, goat farming and a poultry farming. According to Census 2011 the total population is 5070. The total number of literate peoples is 3641. The total number of houses in the village is 964. The total area of the village is 960 hectares. All farmers in the study area have cattle and Kolhewadi village is the highest milk producer in sangamner taluka. It has natural resources such as Stone mine, Pravara River, and Hill at gaothan. Pravara River passes through the village about 02 km of a distance. The sugarcane is the main crop cultivation in villages, also wheat, onion, maze etc. are regular cultivating crops.

TABLE I Study Area Profile

Kolhewadi Village Profile		
Sr. No.	Parameters	Description
1	Village	Kolhewadi
2	Taluka	Sangamner
3	District	Ahmednagar
4	Area of Village	960.00 Ha.
5	Area Under Cultivation	765.32 Ha.
6	Distance of Taluka From Village	6 Km.
7	Distance of District From Village	91 Km.

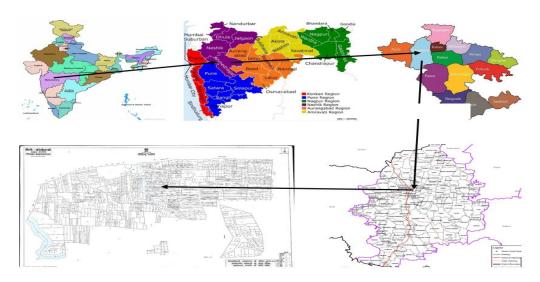


Fig. 2 Study area location

#### IV. DATA COLLECTION

TABLE II
Details of Population (As Per Census 2011)

Census Description	Data
Population of Village	5070
No. of Houses	964
Population of Female (%)	48.35 %
Total Literacy Rate (%)	72.43 %
Literacy Rate of Female (%)	31.89 %
Population of Schedule Tribe (%)	0.51 %



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Table III
Occupation Detail by no. of Families

Occupation	No. Of Families
Farming	825
Cattle Milk Business	825
Goat Farming	4
Poultry Farming	7
Fish Farming	2
Nursery & Polyhouse Farming	7
Cold Storage Unit	1
Job and Farming	430
Workers	140

Table IV
Agriculture Produce in a year.

Crops	Percent's (%)
Vegetables	26
Sugarcane	24
Wheat	10
Maze	8
Bajara	5
Grass- Animal Fodder	27

Table V Average No. of Livestock Per Family

Animal	No.
Cows	7
Calves	3
Goat	4
Buffalo	1
Bullocks	-

Table VI Average Daily Milk Production

No. of Dairy Units / Milk Collection Centres	Avg. Daily Milk Collection in Study Area
13	35,000 Litres

TABLE VII
General Collected Data

Description	Number	
Fertilizer Shops	4	
Medical for Animal Drugs	4	
Veterinary Doctors	5	
No. of Dairy Units / Milk Collection Centres	13	
No. of Families Have Tractors & Tractor Units	84	
Silage Maker Machine	3	
No. of Farmers Have Milking Machine	60	

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#### V. DATA ANALYSIS

#### A. Base Map

The base map shows the boundary of Kolhewadi village with all major roads connecting to adjacent villages. The Gramtal is the area where all general amenities are located like grocery shops, medicals, hospitals, government offices, banks, schools, etc. The forest area is declared a forest by the government. The Pravara River which is shown in the map passes through the boundary of the village. And the remaining an area is agricultural land where people living in their respective land. The area is described in hectors and in percent in following table,

TABLE VIII
Area Distribution of Village

Area Name	Area in Hectors	In Percentage (%)
Total Area	960	
Area Under Cultivation	765	79.7 %
Area of Hill & Stone Mine	53	5.52 %
Area of Forest	10	1.05%
Area of Gramtal	15	1.56 %

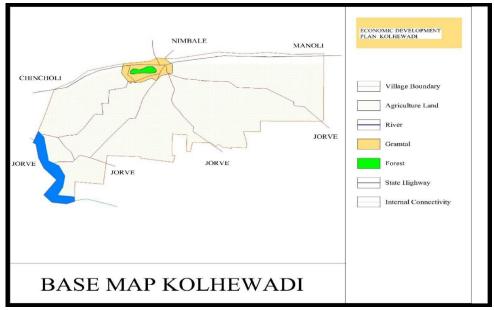


Fig. 3 Base Map of Kolhewadi

#### B. Ward Map

TABLE IX
Area Distribution of Village

Ward No.	Total Population	Population of Voters
1.	740	675
2.	866	728
3.	1155	869
4.	1232	927
5.	1077	791
Total	5070	3990

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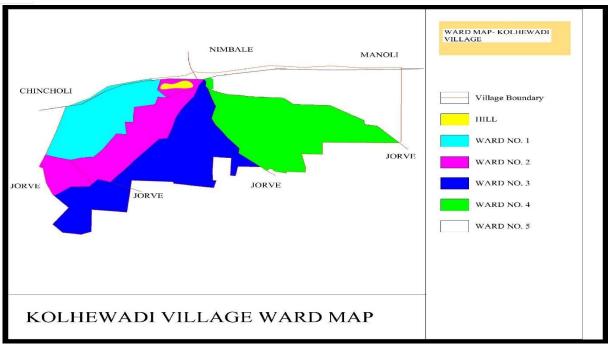


Fig. 4 Ward Map of Kolhewadi

#### C. Infrastructural MAP

The map is showing the basic infrastructure of Kolhewadi Village, There is total three school including two primary school and one high school. Village have four number of a water tank with the capacity 1 lakh litter per tank. The Gram-panchayat and post office is located in gaothan / gramtal.

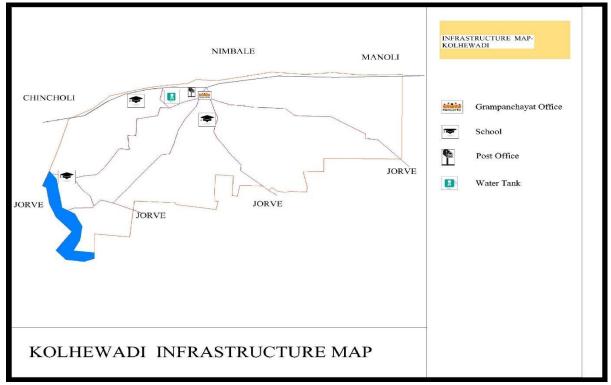


Fig. 5 Infrastructural Map of Kolhewadi

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#### D. Head Of Household

Male and Female head of houses Surveyed families is given in a detail with the pie chart figure below, There are total 964 families means houses are in village, from those about 92% means 887 families head is male and remaining 8% means 77 families head is female.

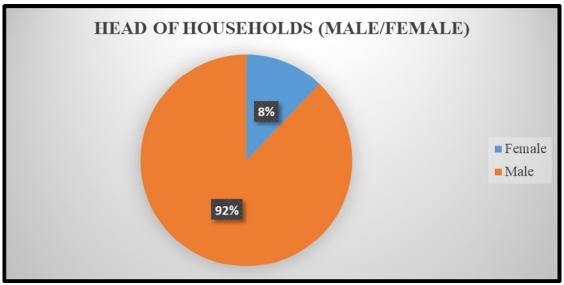


Fig. 6 Head of Household

#### E. Families Livelihood

The families live hood is separated with a percentage, and the details are shown with the pie chart as below,

As shown in a figure, the maximum percentage is farming on own land or on leased land. These 84% farmer families are also doing a milk business. There are 4% and 2% families, some members are salaried private and government employees respectively. The 4% families have their business. And 2% families have allied agriculture business except milk production. And there are 4% skilled wage workers from which some are construction site labourers and remaining are farm workers.

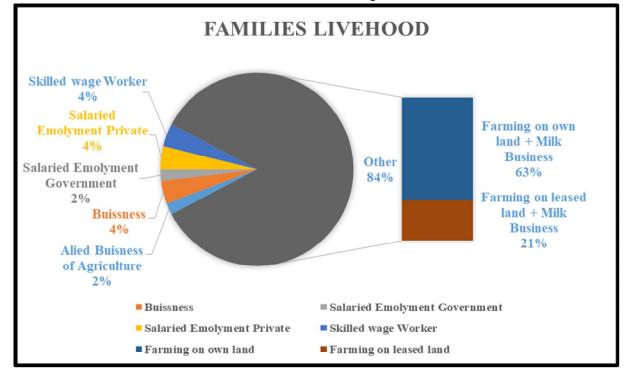


Fig. 7 Families Live hood

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#### F. Agricultural Produce

The Pravara River is 2-3km away from Kolhewadi. So there is ample water for drinking and irrigation purposes. In the study area Kolhewadi the most cultivated crop is grass and other fodder crops which are used as a cattle's feed because the villagers have more cattle for milk production. The second most cultivated crops are vegetables and sugarcane. Sugarcane is used as a fodder and also for selling in sugar factories located in Sangamner taluka. Then Bajrai, Maze, Wheat were also cultivated. Percentage Wise cultivation of crops is detailed in figure below,

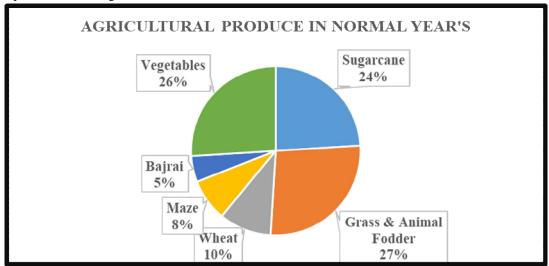


Fig. 8 Agriculture Produce in normal years

#### G. Average Agricultural Land per Family

The landholding (In Acres) of families are shown and described by bar chart. The average landholding for surveyed families is 2-3.5 Acres. The families who are small landholders, are working on leased lands. About 21% of surveyed families are working on leased land. Kolhewadi village is the highest milk producer in Sangamner taluka. So nearly every family have milk cattle's like Cow, Buffalo, Goat, etc.

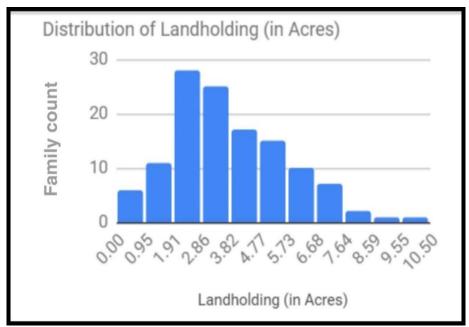
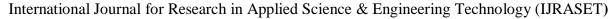


Fig. 9 Distribution of Landholding in acres





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#### H. Livestock with Families

The type of livestock with the number of families is described below in the form of bar chart, so as shown in chart 825 families have cow's livestock and 62, 565, and 760 families have buffalo, goats and calves livestock respectively.

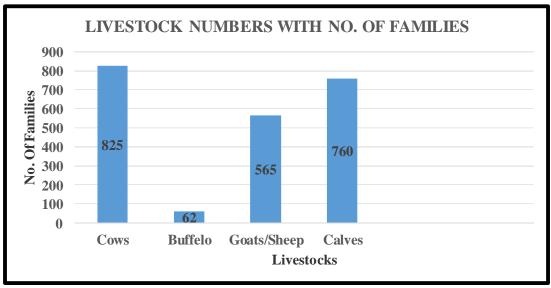


Fig. 10 No. of livestock's available with families

#### VI. RESULT

The kolhewadi village has full potential for agriculture development, the Pravara River passing by the boundary of a village, so they have an ample amount of water for the irrigation. Farmers in the study area is already doing a good business, but they should have one organized a proposal for to get various new ideas about new modern techniques and to increase their production and respectively boost their economy.

#### VII. CONCLUSION

The economic growth of Kolhewadi village by agricultural development is easily done by adopting various modern farming techniques and irrigation processes, the FCC center will guide farmers at every stage of a farming. Also, by starting various allied businesses like a milk processing plant, jaggery plant, cold storage, the food processing unit by farmers will help them to increase their income, and it will also generate huge employment in the village level. The formation of the market at a cluster level in the study area will give access to market availability to farmers, it will help farmers to sell their goods at best price as soon as possible, and it also generates employment. So, all these things will result in economic growth of kolhewadi, it will improve a wealthiness of farmers, and it also effects on the standard of living.

#### VIII. ACKNOWLEDGMENT

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