



*Krishi Vigyan Kendra  
Yavatmal-I*



*Action Plan 2024*



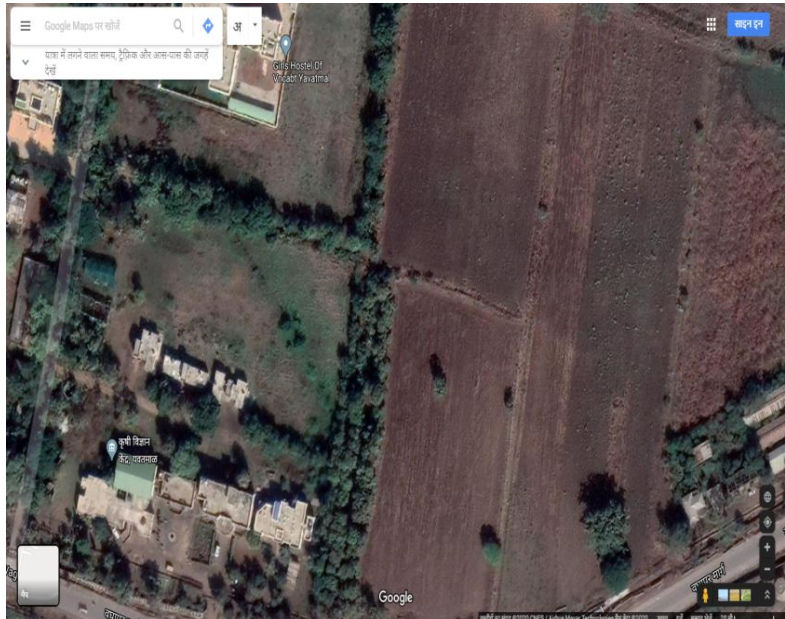
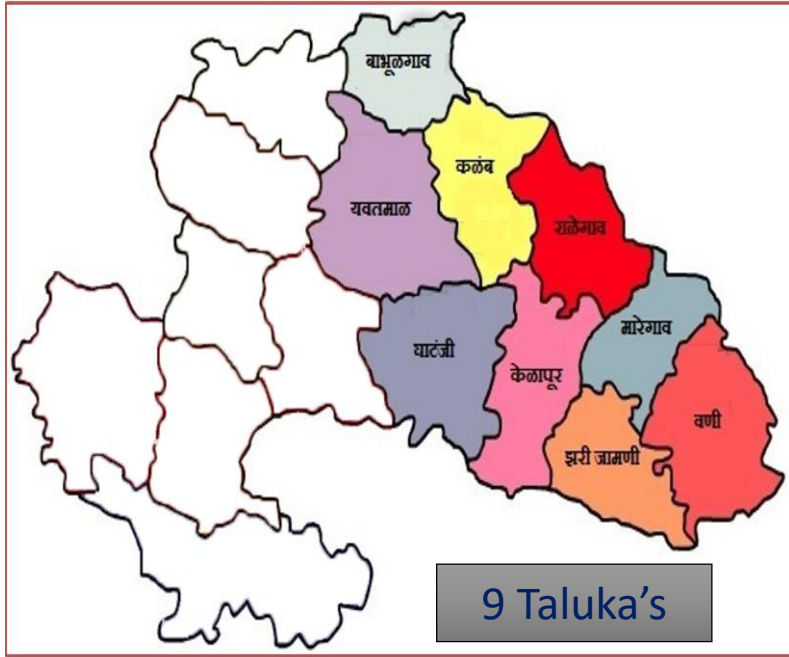
# Annual Action Plan 2024-25



*Presented By:*

***Dr. S. U. Nemade***  
*Senior Scientist & Head*  
*KVK, Yavatmal- I*

## KVK Jurisdiction (09 Taluka)



## District Profile

<b>Geographical area</b>	<b>13,51,966 hectare</b>
<b>Cultivable area</b>	<b>9,60,500 hectare</b>
<b>Area under Forest</b>	<b>2,03,147 hectare</b>
<b>Area under Kharif Crop</b>	<b>8,88,725 hectare</b>
<b>Area under Rabi Crop</b>	<b>1,69,909 hectare</b>
<b>Area under Summer Crop</b>	<b>16,460 hectare</b>
<b>Rainfed Area</b>	<b>8,37,946 hectare (7 to 8 % irrigated)</b>
<b>Marginal (Less than 1.00 ha)</b>	<b>28,640 (6.86 %)</b>
<b>Small (1.00 to 2.00 ha)</b>	<b>1,61,227 (38.63 %)</b>
<b>Large (More than 2.00 ha)</b>	<b>2,27,535 (54.51 %)</b>
<b>Total Taluka's</b>	<b>16</b>
<b>Minimum temp</b>	<b>9.4 °C</b>
<b>Maximum temp</b>	<b>47 °C</b>
<b>Average Rain fall</b>	<b>911. 3 mm</b>
<b>Actual Rain fall</b>	<b>1473.5 mm (161 %)</b>
<b>Number of rainy days</b>	<b>57</b>

# Information about major crops, cropping systems, enterprises and technical staff available in KVK

## Major crops and enterprises :

### **Kharif**

Cotton,, Soybean, Tur,  
Sorghum,  
Green gram, Black gram

### **Rabi /Summer**

: Wheat, Chickpea, Rabi  
Sorghum, Summer  
Groundnut, Sesame &  
Sugar cane



## Cropping systems :

S N	Farming Situation	Cropping System exists
1	Medium to heavy soils, rainfed area	Cotton – fallow Soybean – Chick pea Jower - Wheat – fallow s
2	Light to medium soils, command area and well irrigation	Citrus – vegetable (Intercrop) Cotton – fallow Red gram – fellow Soybean – Chick pea
3	Mostly Rainfed Medium to heavy soils, Surrounded by forest.	Soybean – fallow Cotton – fallow Soybean – Chick pea
4	Light to heavy soils, irrigation through wells, Horticulture crop pocket	Citrus – Vegetable (Intercrop) Cotton – Fallow Soybean- Fallow
5	Mostly rainfed light to Medium soils	Cotton – fallow Soybean – Chick pea Soybean – Wheat

## Major farming system:

Major farming system	Micro Farming systems
Agriculture crops	Agri + Horti + Dairy
Rainfed Cotton	Agri + Dairy
Rainfed Soybean	Agri + Goat farming
Rainfed Jawar	Agri + Sericulture
Irrigated Wheat	Agri + Horticulture
Irrigated Gram	Agri. + Horti. + Poultry
Irrigated Summer Groundnut, Sesamum, Rabi Jawar	<b>Major production systems</b>
<b>Major Intercropping systems</b>	Cotton – Chick pea
Cotton + Pigeon pea (8:1) (12:2)	Cotton – Wheat
Soybean + Pigeon pea (10:1)(5:1)	Soybean – Wheat
	Soybean – Chick pea
	Soybean – Rabi Jawar
	Soybean – Summer Groundnut
	Hy. Jawar – Wheat
	Hy Jawar – Chick pea
	Turmeric

## Staff available in KVK (as on 14.03.2024)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline
1	Programme Coordinator	Dr. S.U. Nemade	Senior Scientist & Head	Agronomy
2	Subject Matter Specialist	Vacant	S.M.S.	Horticulture
3	Subject Matter Specialist	S. P. Bhagwat	S.M.S.	Home Science
4	Subject Matter Specialist	Dr. G. U. Kaluse	S.M.S.	A.H. D.S.
5	Subject Matter Specialist	Shri M.B. Dhole	S.M.S.	Extension Education
6	Subject Matter Specialist	Dr. P. N. Magar	S.M.S.	Plant Prot.
7	Subject Matter Specialist	Er. R. T. Chavan	S.M.S.	Agri. Engg.
8	Programme Assistant	Shri V.D.Rathod	Programme Assistant (Lab)	--
9	Computer Programmer	Shri R.M.Deshmukh	Programme Assistant (Computer)	--
10	Farm Manager	Shri K.D.Shirsat	P.A.(Farm)	--
11	Accountant / Superintendent	Shri P. N. Ramteke	ASO	--
12	Stenographer	Shri L.S. Gaikwad	Sr. Clerk	--
13	Driver	Shri A.R.Kadu	Driver Cum Mechanic	--
14	Driver	Shri V.B.Borse	Driver Cum Mechanic	--
15	Supporting staff	Ku. Ashwini Mahurkar	Skill Helper	--
16	Supporting staff	Shri. Bharatshing Sulane	Skill Helper	--



1. Increase sustainability in Production, productivity & reduce cost of cultivation with improving soil health.
2. Crop pest surveillance & timely advisory
3. Entrepreneurship development through subsidiary business – Vermicompost, Apiculture, Sericulture, Goatry, Poultry & Value addition in agro produce (Cereals -millets, vegetable, fruits, Milk, spices & condiments).
4. Farm mechanization – Crop residue management and Promotion of Agricultural Drone for Spraying
5. In- situ moisture conservation- BBF
6. Promote organic, Natural farming & use of Bio pesticide.
7. Capacity building of FPO's.
8. Create awareness & Promotion of Millet cultivation and their consumption
9. Successfully implemented Special Cotton Project on High Density Planting System over 491.5 acres area of cotton
10. Successfully implemented Project Bandhan on Mating disruption technology for the management of pink bollworm in cotton over 120 acres
11. Successfully conducted three (two days) residential training on natural farming



Major crops & enterprises	Major problem identified	Identified Thrust Areas
Cotton	1. Pink Bollworm Management	Integrated Pest & Disease Management
Soybean	1. Lack of suitable high yielding variety 2. In- situ moisture conservation 3. Stem fly & Girdle beetle Management	Varietal Evaluation Integrated Crop Management & BBF Technology Integrated Pest & Disease Management
Chick pea	Wilt Disease	Integrated Disease Management
Pigeon Pea	INM & their cultivation practice Wilt & Phytophthora Disease	Integrated crop Management. Integrated Disease Management
Back yard Poultry	Low egg yield & high mortality	Popularization of high eggs yielding variety
Farm implement	Late onset & early cessation of monsoon rains & prolonged dry spells during the crop period.	Popularizing in-situ soil Moistures conservation practices, paired row plantation, inter cropping and other dry land production technology.
Farm implement	Lack of mechanization. Unavailability of improved tools, implements & machineries at local level.	Popularizing various small Agril. tools to reduce drudgery of farm women



Major crops & enterprises	Major problem identified	Identified Thrust Areas
Cattle	Use of non conventional feeds into the concentrate for livestock. Mineral supplementation through mineral block / uromol.	Up gradation of local breeds Evaluation of Improved breeds
Buffalo	Use of Probiotic feed for increasing milk production. Mineral supplementation through mineral block / uromol. Performance of vaccination and deworming on health of livestock.	Fodder cultivation for self sufficiency in feed & fodder Identifying mineral Deficiency Reducing the cost of feed due to enrichment
Goat	Concentrate feeding of advance pregnancy goat for reducing the mortality and weight gain in kids Performance of home made concentrate on milk yield of livestock.	Popularising Newly evolved Goatry, poultry & cattle breeds Development of Para- veterinary workers
Poultry	Evolution of new breeds of poultry Use of cost reducing technology	Reducing the cost of feed due to enrichment Evaluation of Improved breeds



Major crops & enterprises	Major problem identified	Identified Thrust Areas
Human Nutrition & Health	Poor nutritional status of vulnerable groups i.e. children & rural women Lack of knowledge about human nutrition and diet.	To increase nutritional status of rural family Awareness of farming system for nutrition & nutritional gardening in rural area for their food & Nutrition security.
Drudgery in Agril work	Agril. Equipments are usually designed for men physical requirement.	Awareness regarding Drudgery reducing implements in household and farm activities for rural women.
Economical problems identified in rural area	Poor Socio economic status Illiteracy	Awareness regarding various Income generating activities for economic empowerment. Through entrepreneurship development programme for generating self- employment. Small Scale processing and value addition in agro commodities i.e. fruit and vegetables, spices & condiments, cereals & pulses, milk etc.
Communication & ITK's	Proper & Timely Communication Proper Channel	Effective Transfer of Technology through Group Commodity
Enterprises	Subsidiary business	Entrepreneurship development of Farming Community/ Youth
	Develop Capacity building of Farmer/ Youth	Formation and Management of SHGs/FPO's, Leadership development





# Summary of Action Plan

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	12	80	28	108
2	Front Line Demonstration	08	82	100	182
3	Cluster Front Line Demonstrations (O & P)	Oilseed -2 Pulses-2	41 82	09 18	50 (O) 100 (P)
4	<b>Training Programmes</b>	<b>115</b>	<b>2875</b>	<b>1357</b>	<b>4232</b>
4.1	Farmers / Farm Women	93	2451	973	3424
4.2	Rural Youth	09	214	151	365
4.3	Extension Functionaries	13	210	233	443
5	Extension Activities (Major)	458	1,58,499	52,761	2,11,260
	<b>Total</b>	<b>595</b>	<b>1,61,770</b>	<b>54,920</b>	<b>2,16,048</b>



Name	Designation & Discipline	OFT	CFLD/FLD	Farmer Training	In-service training
Dr. S. U. Nemade	Senior Scientist & Head/ Agromony	2	4	25 (756)	02
S. P. Bhagwat	Subject Matter Specialist (Home Science)	4	2	21 (670)	02
Dr. G. U. Kaluse	Subject Matter Specialist (AHDS)	2	2	11 (930)	01
Dr. P. N. Magar	Subject Matter Specialist (Entomology)	2	2	26 (1280)	02
Er. R. T. Chavan	Subject Matter Specialist (Agril Engg)	2	2	11 (365)	02
Shri M.B. Dhole	Subject Matter Specialist (Extn Edu)	Impact study- 01		09 (265)	02



# ON FARM TRIALS

No. of OFTs  
12



<b>Title of on-farm trial</b>	Assess the performance of different Soybean variety suitable for Yavatmal District
<b>Problem diagnosed</b>	The old variety like. JS-335/ JS-9305 was highly susceptible due to diseases and pest attack that adversely affect on the yield and increasing management cost.
<b>Farming situation</b>	Sole Crop
<b>Production system and thematic area</b>	Varietal Evaluation
<b>Farmers' practices</b>	T <sub>1</sub> : Farmer Practice (Used JS-9305) / JS-335
<b>Details of technologies selected for assessment Treatments</b>	T <sub>2</sub> : AMS-MB 5-18 (Suvarn soya) T <sub>3</sub> : PDKV Amba (AMS-100-39)
<b>Source of technology</b>	JNKV, Jabalpur (2002), Dr. PDKV, Akola (2019 & 2021)
<b>No. of farmers</b>	07
<b>Area of each trial</b>	(0.4 ha. Each)
<b>No of trial</b>	07
<b>Critical input</b>	Seed (Rs. 29400/-) & Bio fertilizer (Rs 700/-)
<b>Performance indicators Observation to be recorded</b>	Plant Height, Crop duration, No. of Pod Per plant, Seed yield (qha <sup>-1</sup> ), GMR, NMR & B:C ratio
<b>Cost of input</b>	Rs. 30100/- + (Training 10000/-)
<b>Total cost</b>	Rs. 40100/-





<b>Title of on-farm trial</b>	Assess the productivity of Chick pea by use of PGR spray
<b>Problem diagnosed</b>	Low productivity of chick pea due to imbalanced nutrient management. Lack of knowledge about PGR and ICM practices.
<b>Farming situation</b>	Sole crop.
<b>Production system and thematic area</b>	Integrated Crop Management
<b>Farmers' practices</b>	T <sub>1</sub> : Farmers practice (No use of PGR, not follow seed treatment & balanced nutrient)
<b>Details of technologies selected for assessment Treatments</b>	T <sub>2</sub> : Foliar application of 1% Humic acid at flowering and pod development stage. T <sub>3</sub> : Two spray of gibberellic acid 90% a.i. @ 15 ppm (8.3 g per ha) at flowering and pod development stage with integrated crop management.
<b>Source of technology</b>	Dr. PDKV, Akola (2020)
<b>No. of farmers</b>	07
<b>Area of each trial</b>	(0.4 ha. Each)
<b>No of trial</b>	07
<b>Critical input</b>	Gibberellic acid 90% . Cost of input 4830/- (Rs 800/ Trial)
<b>Performance indicators Observation to be recorded</b>	Plant Height, No. of Pod per plant, Seed Yield (qha <sup>-1</sup> ), GMR, NMR & B:C ratio
<b>Cost of input</b>	Cost of input 4830/- + (Training 10000/-)
<b>Total cost</b>	Rs. 14830/-





<b>Title of on-farm trial</b>	<b>Management of Wilt in Pigeon pea</b>
<b>Problem diagnosed</b>	Since recent year wilt incidence in Pigeonpea was found to be severe in Yavatmal District, resulted in yield reduction
<b>Farming situation</b>	Rainfed farming under medium to black soil
<b>Production system, thematic area</b>	Integrated pest Management
<b>Farmers' practices</b>	<b>T<sub>1</sub></b> : No seed treatment
<b>Details of technologies selected for assessment Treatments</b>	<b>T<sub>2</sub></b> : Seed treatment with Carboxin 37.5% + Thiram 37.5% WS @ 3 gm fb seed treatment with Trichoderma @ 4 g per kg seed <b>T<sub>3</sub></b> : T1 + Soil application of Trichoderma 2 kg/ acre at sowing fb 30 and 60 DAS <b>T<sub>4</sub></b> : T1+ Ridomil 0.2% spray at 30 & 60 DAS
<b>Source of technology</b>	Dr. PDKV, Akola
<b>No. of trials</b>	07
<b>Area of each trial</b>	(0.4 ha. Each)
<b>Critical input</b>	Carboxin 37.5% + Thiram 37.5% WS and Trichoderma viride and
<b>Performance indicators</b>	Per cent infestation, yield (q/ha)
<b>Observation to be recorded</b>	
<b>Cost of input</b>	Rs. 2000 per trial
<b>Total cost</b>	Rs. 14,000





Title of on-farm trial	Management of Wilt in Chickpea
Problem diagnosed	Incidence of wilt disease in chickpea likely increasing in the district
Farming situation	Irrigated farming under medium to black soil
Production system, thematic area	Integrated Pest Management
Farmers' practices	(T1) : No seed treatment
Details of technologies selected for assessment Treatments	(T2) : Seed treatment with Carboxin 37.5% + Thirum 37.5% WS @ 3 gm fb Seed treatment with Trichoderma @ 10 gm per Kg seed (T3) : Seed treatment with Carboxin 37.5% + Thirum 37.5% WS @ 3 gm fb Seed treatment with Trichoderma @ 10 gm per Kg seed & soil application of Trichoderma 5 kg/ ha 10 days before sowing
Source of technology	Dr. PDKV, Akola and NAU, Gujarat
No. of farmers/trial	07
Area of each trial	(0.4 ha. Each)
Critical input	Carboxin 37.5% + Thirum 37.5% WS and Trichoderma
Observation to be recorded	Per cent infestation, Yield (q/ha)
Cost of input	10000/- per trial
Total cost	Rs. 7000/-





Crop/Enterprise	Livestock
Title of on-farm trial	Use of Balanced feeding ration in cow
Problem diagnosed	low milk yield of cow due to Poor Nutritional management
Production system and thematic area	Nutrition Management
Farmers' practices	T1 – Farmers Practice (Roughages + Concentrates )
Details of technologies selected for assessment Treatments	T2-Roughages + Concentrates + Azolla 5%
Source of technology	Dept Animal Husbandry Dr PDKV, Akola 2011
No. of farmers	13
Area of each trial	-
No of trial	13
Critical input	Azolla
Performance indicators Observation to be recorded	Average milk yield / day / cow
Cost of input	3000
Total cost	39000







<b>Crop/Enterprise</b>	<b>Livestock</b>
<b>Title of on-farm trial</b>	Supplementation of probiotic ( <i>Saccharomyces cerevisiae</i> ) to Dairy Calf
<b>Problem diagnosed</b>	i) Low immunity ii) High incidence of scours in calves iii) Low dry matter intake
<b>Production system and thematic area</b>	Nutrition Management
<b>Farmers' practices</b>	T1 – Feeding of calf with locally available feeds & fodder/whole milk
<b>Details of technologies selected for assessment Treatments</b>	T2- T1 + Probiotic @ 20 g/cow/day X 60 days
<b>Source of technology</b>	ICAR-National Dairy Research Institute, Karnal
<b>No. of farmers</b>	13
<b>No of trial</b>	13
<b>Critical input</b>	Probiotic ( <i>Saccharomyces cerevisiae</i> )
<b>Performance indicators Observation to be recorded</b>	Average Body Weight. BCR
<b>Cost of input</b>	6000
<b>Total cost</b>	42000





Title of on-farm trial	Assessment of CIAE Pneumatic Planter in Yavatmal Distirct.
Problem diagnosed	Manual dibbling laborious job and there is Scarcity of labours.
Farming situation	Rainfed
Production system and thematic area	Farm Mechanization
Farmers' practices	(T1) : Manual Dibbling
Details of technologies selected for assessment Treatments	(T2) : CIAE Pneumatic Planter
Source of technology	CIAE BHOPAL
No. of farmers	13
Area of each trial	0.4 Ha
No of trial	13
Critical input	CIAE Pneumatic Planter and Diesel For tractor
Performance indicators Observation to be recorded	Field capacity (ha/hr), - - Cost of Operation (Rs./ha)
Cost of input	-
Total cost	25000/-





<b>Crop/Enterprise</b>	Implements :- Precision Seed Planter Tool
<b>Title of on-farm trial</b>	Performance of Precision Seed Planter Tool developed by CIAE Bhpoal
<b>Problem diagnosed</b>	Sowing and Dibbling is laborious job and there is Scarcity of labours.
<b>Farming situation</b>	Rainfed
<b>Production system and thematic area</b>	Farm Mechanization
<b>Farmers' practices</b>	(T1) : Manual Dibbling
<b>Details of technologies selected for assessment Treatments</b>	(T2) : Precision Seed Planter Tool
<b>Source of technology</b>	CIAE Bhpoal
<b>No. of farmers</b>	13
<b>Area of each trial</b>	0.4 Ha
<b>No of trial</b>	13
<b>Critical input</b>	Precision Seed Planter Tool
<b>Performance indicators Observation to be recorded</b>	Field capacity (ha/hr), - Cost of Operation (Rs./ha)
<b>Cost of input</b>	7000/-
<b>Total cost</b>	10000/-





<b>Title of on-farm trial</b>	Assessment of the nutritional & health status of the farm family adopted under Farming system for nutrition approach model
<b>Problem diagnosed</b>	Malnutrition of various nutrients
<b>Production system and thematic area</b>	Household food & nutrition security
<b>Farmers' practices</b>	<b>Farmers Practice (T1)</b> Mono cropping system (Sole Crop)
<b>Details of technologies selected for assessment Treatments</b>	<b>Assessed Practice (T2)</b> Farming system for nutrition approach model / intercropping
<b>Source of technology</b>	MSSRF, Chennai
<b>No. of farmers</b>	7
<b>Area of each trial</b>	0.40 Ha
<b>No of trial</b>	14
<b>Critical input</b>	Bio-fortified seed of various millets, Legumes, Oilseed vegetable seed & seedlings , Fruit plantation, poultry birds
<b>Performance indicators Observation to be recorded</b>	<ul style="list-style-type: none"> <li>▪Production of crops Consumption pattern</li> <li>▪Health &amp; Nutritional status (Hb, Blood glucose, Height, Weight) Expenditure on various foods groups (Saving in purchasing of millets, legumes oilseed, fruits, vegetable, eggs purchasing medicine &amp; doctors fees)</li> </ul>
<b>Cost of input</b>	22000/-
<b>Total cost</b>	22000/-



<b>Title of on-farm trial</b>	Assessment of heat treatment in improving the shelf life of pearl millet
<b>Problem diagnosed</b>	Pearl millet flour turns bitter & rancid during storage
<b>Production system and thematic area</b>	Value Addition
<b>Farmers' practices</b>	<b>Farmers Practice (T1)</b> Traditional method of raw Pearl millet grain milling
<b>Details of technologies selected for assessment Treatments</b>	<b>Assessed Practice (T2)</b> Dry heat treatment to Pearl millet grains before milling
	<b>Assessed Practice (T3)</b> Blanching of Pearl millet grain before milling
<b>Source of technology</b>	CCSHAU, Hisar & MPKV, Rahuri
<b>No. of farmers</b>	7
<b>No of trial</b>	21
<b>Critical input</b>	Pearl millet flour 10 kg / farmer Rs. 3500/-
<b>Performance indicators Observation to be recorded</b>	1. Increase in shelf life in days 2. Organoleptic acceptability (texture & odour) 3. Spoilage %
<b>Cost of input</b>	Rs. 3500/-
<b>Total cost</b>	Rs. 5000/-



<b>Title of on-farm trial</b>	Assessment on high yielding varieties of oyster mushroom cultivation.
<b>Problem diagnosed</b>	No use of high yielding varieties
<b>Production system and thematic area</b>	Varietal evaluation of oyster mushroom
<b>Farmers' practices</b>	T1 : local use pleurotus sojarkaju
<b>Details of technologies selected for assessment Treatments</b>	T2 : Pleurotus Florida
	T3 : Pleurotus Ostreatus
<b>Source of technology</b>	National research center for mushroom, solan
<b>No. of farmers</b>	07
<b>No of trial</b>	21
<b>Critical input</b>	Spawns of pleurotus sojarkaju , Pleurotus Florida , Pleurotus Ostreatus
<b>Performance indicators Observation to be recorded</b>	yield/ bag No of days required for harvesting Economics B:C ratio
<b>Cost of input</b>	Rs. 12000/-
<b>Total cost</b>	Rs. 15000/-



<b>Title of on-farm trial</b>	Assessment of Application of custard apple seed powder packed in cotton cloth @ 15g/kg of stored pigeon pea is recommended for management of pulse beetle.
<b>Problem diagnosed</b>	Damage & wastage of pigeon pea during storage due to insect
<b>Production system and thematic area</b>	Storage loss minimization techniques
<b>Farmers' practices</b>	<b>T1:</b> Sun drying of pulses
<b>Details of technologies selected for assessment Treatments</b>	<b>T2:</b> Application of custard apple seed powder packed in cotton cloth @ 15g/kg of stored pigeon pea is recommended for management of pulse beetle.
<b>Source of technology</b>	Dr. PDKV, Akola
<b>No. of farmers</b>	07
<b>No of trial</b>	14
<b>Critical input</b>	custard apple seed powder
<b>Performance indicators Observation to be recorded</b>	No. of insect found % of grain damage
<b>Cost of input</b>	Rs. 1000/-
<b>Total cost</b>	Rs. 2000/-



# Cluster Front Line Demonstration

No. of CFLDs  
4





Crop	Season	Purpose of demonstration	Farming situation	Variety	Area (ha)	No. of demo	Critical Inputs Identified	Cost of critical inputs (Rs)	Parameters of observation
<b>Oilseeds</b>									
Soybean	Kharif 2024	Integrated Crop Management Practices (ICM) in Soybean variety: PDKV Amba (AMS-100-39)	Rainfed	PDKV Amba (AMS-100-39)	10	25	Seed & Bio fertilizer	Seed: 105000/-, Bio Fertilizer : 2500/-, Total :- 1,07,500/- (Rs 4300/- Demo)	Plant Height, Seed yield (qha <sup>-1</sup> ), GMR, NMR & B:C ratio
Sesame	Summer 2024	To demonstrate the new high yielding improved variety suitable for Summer Season.	Irrigated	PKV NT-11	10	25	Seed	Seed: 12,500/- Bio Fertilizer : 1250/-, (Rs 550/- Demo)	Plant Height, Seed yield (qha <sup>-1</sup> ), GMR, NMR & B:C ratio
<b>Pulses</b>									
Pigeon pea	Kharif 2024	To demonstrate the new high yielding, Mid late Variety Resistant to Sterility & Wilting	Rainfed	BDN-716	20	50	Seed, Bio fertilizer & Trichoderma	Seed: 32000/-, Bio Fertilizer : 2500/- Total :- 34500/- (Rs 690/- Demo)	Plant Height, Seed yield (qha <sup>-1</sup> ), GMR, NMR & B:C ratio
Chick pea	Rabi 2024	To demonstrate the new high yielding, bold seeded variety of chickpea & balance use of nutrients with area spray on the yield of chickpea	Rainfed	AKG 1109 (PDKV Kanchan)	20	50	Seed, Rhizobium, PSB & Trichoderma	Seed: 70000/- Bio fertilizer: 5000/- Total 75000/- (Rs 1500/- Demo)	Plant height, No. of Pod per plant, Grain yield & B:C ratio



# Front Line Demonstration





# Other than CFLD

Crop	Season	Purpose of demonstration	Farming situation	Area (ha)	No. of demo	Critical Inputs Identified	Cost of critical inputs (Rs)	Parameters of observation
Oilseeds Soybean	Kharif	Management of Stem fly and Girdle beetle in Soybean	Rainfed farming under medium to black soil	5.2	13	Thiamethoxam 30% FS, 5% NSKE, Thiamethoxam 12.6% + Lamda cyahalothrin 9.5%	Rs.18000	Per cent infestation, yield (q/ha)
Cotton	Kharif	Management of pink bollworm in cotton	Rainfed farming under medium to black soil	5.2	13	Trichogrammatoidea bactrae @ 1 lakh eggs/ hectare	Rs.19500	Per cent pink bollworm infestation, yield (q/ha)





# Agril. Implements

Name of the implement to be demonstrated	Farming situation	Purpose of demonstration	Month of implementation	Area to be covered (ha)	No. of farmers to be covered	Critical Inputs Identified	Cost of critical inputs (Rs)	Parameters of observation
Use of BBF Planter for sowing of soybean	Rainfed	For sowing crop on bed and in-Situ moisture conservation.	June/July 2024	6.00	15	BBF Planter For sowing purpose with Diesel For Tractor	10000/-	1. Cost of operation(Rs/ha) 2. Crop Yield (qt/ha)
Kisan Drone	Kharif	To reduce time of spraying	Aug- Sept 2024	6.00	15	Kisan Drone	--	Time required Ha Efficiency





Name of animal	Name of breed	Purpose of demonstration	Month of implementation	No. of demonstrations (Units)	No. of animals to be covered per unit	Critical Inputs Identified	Cost of critical inputs (Rs)	Parameters of observation
Cattle	ND	Mineral supplement effect	March 2024	13	26	Mineral lick blocks	13500	1. Body wt. 2. . Milk yield 4. BC Ratio
Poultry	Grampriya a	Comparative study with local breeds	August 2024	13	30	Grampriya chicks	1350	1. Body weight at first production :2. Egg production :3.Mortality%



Name of the Enterprise	Purpose of demonstration	Month of implementation	No. of demonstrations	No. of farmers	Critical Inputs Identified	Cost of critical inputs (Rs)	Parameters of observation
Nutritional Garden	To improve the nutritional status of rural family member To increase the consumption of fruits & vegetable in daily diet of the rural family member	June & Sept 2024	50	50	Vegetable seed kit & seedlings of various Vegetable , fruit seedlings & medicinal plant . compost pit	Rs.15000.	▪Yield of Fruits & vegetable ▪Consumption of Fruits & vegetable per day ▪Economics Saving on purchase of fruits & vegetable
Storage loss minimization techniques	To minimize storage loss & increase the shelf life of grain/seed	Sept 2024	50	50	Save grain bag	Rs. 5000	No. of insect found % of grain damage



### Specific Objective of Study :-

- To study the Profile of beneficiaries farmers .
- To study the impact of Chick Pea Crop (PDKV-Kanak) front line demonstration beneficiaries farmers.
- To study the Constraint faced by farmer in adoption of demonstrate of technology

### Methodology :-

**Location of Study:** Present study was conduct in the following villages of Yavatmal district where Front Line

Year	No's of Demonstration	Village	Thasil
Rabi 2023	11	Mahamadpur	Babhulgaon
	25	Titwi	Ghatanji
	02	Waghdhara	Maregaon
	03	Gugaldhara	
	09	Shivnala	





Titwi, (Ghatanji)



Mahamadpur (Babhulgaon)





**Independent Variable**




Variable
Age
Education
Landholding
Irrigation Availability
Farming Experience
Annual Income
Extension Participation
Scientific Orientation

**Dependent Variable**



- Impact of front line demonstration on Change in Knowledge
- Impact of front line demonstration on Change in Adoption
- Impact of front line demonstration on Change in Annual Income





S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
<b>A.</b>	<b>For PF</b>						
	Oct 2024	Weed Management	On + OFF	3	75	21	96
	Oct 2024	Resource Conservation Technologies	On + OFF	4	100	20	120
	June 2024	Cropping Systems	On + OFF	1	25	5	30
	May 2024	Crop Diversification	On + OFF	2	50	16	66
	August 2024	Integrated Farming	On + OFF	2	50	16	66
	June 2024	Water management	On + OFF	3	50	16	66
	Oct 2024	Seed production	On + OFF	2	50	16	66
	July 2024	Nursery management	On + OFF	0	0	0	0
<b>RY</b>	Sept 2024	Integrated Crop Management	On + OFF	4	100	20	120
	August 2024	Fodder production	OFF Campus	1	25	5	30
<b>EF</b>	June 2024	Production of organic inputs	On + OFF	3	75	21	96
			<b>Total</b>	<b>25</b>	<b>600</b>	<b>156</b>	<b>756</b>



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
<b>A.</b>	<b>PF</b>						
	May-24	Importance of bee keeping	On + OFF	05	180	40	220
	June-24	Safe use of pesticides and Importance of Seed treatment in pest and disease management	OFF Campus	02	100	40	140
	July-24	Safe use of pesticides and IPM in cotton, Soybean	OFF Campus	03	80	20	100
	Aug-24	Integrated Pest Management in Cotton and boll rot management	On + OFF	02	45	25	70
	Nov-24	Pest and Disease management in fruit crops	OFF Campus	02	100	50	150
	Dec-24	Pest management in vegetables		03	100	30	130
	Jan-24	Pest management in chickpea	On + OFF	02	100	50	150
<b>B.</b>	<b>RY</b>						0
	May-24	Importance of bee keeping	OFF Campus	03	100	50	150
<b>C.</b>	<b>EF</b>						
	June-24	IPM in cotton, Soybean, Pigeon pea and safe use of pesticides	OFF Campus	04	120	50	170
			<b>Total</b>	<b>26</b>	<b>225</b>	<b>135</b>	<b>1280</b>



S. No.	Date	Title of training	Venue	Duration (Days)	No. of participants		
					Male	Female	Total
PF	03.02.23	Training programme on programme on Profitable Goat farming & its management.	ON	01	68	10	78
	02.03.23	Training programme on Summer management of Livestock's	OFF	01	95	09	104
	09.06.23	Lumpy skin disease( LSD) Housing , care , & Management of affected livestock's.	OFF	01	65	17	82
	12.07.23	Training Programme on Housing, care & Management of Indian goats.	OFF	01	102	25	127
RY	13.07023	Training programme on Mastitis in Goats & its Diagnosis.	OFF	01	182	18	200
	19.08.23	Training programme on Housing , care, & Management of livestock's during rainy season.	OFF	01	190	20	210
	01.11.23	Training programme / Demonstration on Azolla production Technology.	OFF	01	92	21	113
	21.11.23	Training programme on winter care & management of livestock's	OFF	01	113	27	140
EF	30.11.23	Training programme on programme on Profitable Goat Farming with BAIF	OFF	01	130	12	142
	04.12.23	Training programme on azolla production and its feeding importance in livestock's	OFF	01	55	05	60
	07.12.23	Winter housing, care , and shed management of Livestock's	OFF	01	73	10	83
	13.07023	Training programme on Mastitis in Goats & its Diagnosis.	OFF	01	182	18	200
			<b>Total</b>	<b>12</b>	<b>1347</b>	<b>192</b>	<b>1539</b>



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
PF	January 2024	Drone Technology for Agriculture	ON	01	25	05	30
	March-24	Ground water recharging	ON	01	25	05	30
	April-24	Water harvesting structures and its importance	OFF	01	25	05	30
	May- June 24	In situ moisture conservation techniques BBF	ON+OFF	01	25	05	30
	October 24	Different Irrigation methods for enhancing crop production.	OFF	01	25	05	30
	November-24	Micro-irrigation systems and its maintenance. Fertigation, acid treatment and maintenance of drip irrigation system	ON+OFF	01	30	-	30
	December24	Use of Small Tractors and Implement	ON+OFF	01	25	05	30
	December24	Fertigation, acid treatment and maintenance of drip irrigation system	OFF	01	30	-	30
RY	February -2024	Use of agricultural implements for farm mechanization	ON	01	30	10	40
	November-24	Post-harvest management for agricultural products -Dal Mill Demonstration	ON	01	33	12	45
EF	February 2024	Improved farm Machinery	ON	01	30	10	40
			<b>Total</b>	<b>11</b>	<b>303</b>	<b>62</b>	<b>365</b>



S. No	Date	Title of training	Venue (On/Off)	Duration (Days)	No. of participants		
					Male	Female	Total
<b>A.</b>	<b>For PF</b>						
1	Jan 2024	Production technology Of oyster mushroom	On	01	15	15	30
2	Feb 2024	Processing & value added products making from various millet	On	01	00	30	30
3	Feb 2024	Production technology Of oyster mushroom	OFF	01	15	15	30
4	March 2024	Eco friendly holy color	On	01	15	15	30
5	April 2024	Scientific & Improved storage techniques for storage of food grains	OFF	01	15	15	30
6	May 2024	Importance of Farming system for nutrition approach, Seasonal planning & Management	OFF	01	15	15	30
7	June 2024	Nutrition Gardening: Seasonal planning & Management	OFF	01	15	15	30
8	July 2024	Nutritional importance of various millets in daily diet & low cost recipe preparation	On	01	15	15	30
9	July 2024	Introduction of various improved hand operated farm implements to the farm women & its use in farm activity	OFF	01	15	15	30
10	Aug 2024	Nutritional importance of Soybean in daily diet & low cost recipe preparation	On	01	15	15	30
11	Sept 2024	Importance of balance diet & and dietary remedies to avoid malnutrition in women & child	OFF	01	15	15	30
12	Oct 2024	Various heat treatment to improve the shelf life of pearl millet flour	OFF	01	15	15	30
13	Nov 2024	Production technology Of oyster mushroom	On	01	15	15	30
14	Dec 2024	Processing & value addition in Agro commodities	OFF	01	15	15	30



S. No	Date	Title of training	Venue (On/Off)	Duration (Days)	No. of participants		
					Male	Female	Total
<b>B.</b>	<b>For RY</b>	<b>Vocational training programmes</b>					
1	Sept 2024	Value addition and processing of various millets & soybean	On	06	15	15	30
2	Oct 2024	Value addition and processing of Spices & pickles	On	06	15	15	30
		<b>Sponsored training programme</b>					
1	Nov 2024	Mushroom Production	On	05	15	15	30
2	Dec 2024	Processing & Value addition in fruits & vegetable	On	05	15	15	30
3.	May 2024	Processing & Value addition in milk	On	05	15	15	30
<b>C</b>	<b>For EF</b>						
1	July 2024	Nutrition gardening	On	01	0	50	50
2	Nov 2024	Wonder grain minor millet for healthy life & various value added product from millet	On	01	0	50	50
			<b>Total</b>	<b>21</b>	<b>360</b>	<b>400</b>	<b>760</b>



# Training programme

S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
<b>PF</b>							
1	June 2024	Capacity building of Group Commodity	Off	01	20	15	35
2	July 2024	Importance of Farmer Producer Company for SHG's groups	On	01	20	10	30
3	Aug 2024	Different sources to access the information on Agriculture	off	01	18	12	30
4	Aug 2024	Organizing Method Demonstrations	Off	01	15	10	25
<b>RY</b>							
2	Jan 2024	Small Scale Entrepreneurship development among the Youth	On	01	15	15	30
3	Feb 2025	Knowledge of Govt. Scheme for Self Employment for rural youth	Off	01	20	10	30
<b>PF</b>							
3	Nov 2024	Role of Extension Worker in dissemination of Technology	On	01	15	10	25
			<b>Total</b>	<b>09</b>	<b>158</b>	<b>107</b>	<b>265</b>





# Major Extension Activities

S. N.	Major Extension Activities	No. of activities	Proposed date /week	Venue	participants
1	Farmer Scientist Forum meetings	12	March to December 2024	On+ Off	450 +
2	Field Day	05	November 24, February 24, May 24	Off Campus	160
3	Farmer scientist Interaction	04	June & September 2024	On+ Off	410
4	Kisan Goshthi	10	June to December 2024	On+ Off	240
5	Exhibition (Participation)	02	March to December 2024	On+ Off	1600+
6	Film Show	01	August 2024	Off Campus	150
7	Farmers Seminars	01	May 2024	On+ Off	50
8	Special day Celebrated	05	January to December 2024	On+ Off	310
9	Animal Health Camp	01	September 2024	On+ Off	100
10	Pre Kharif Kisan Mela	01	June 2024	On Campus	190
11	Pre Rabi Kisan Mela	01	September 2024	On Campus	163
12	World soil day	01	5 December 2024	Off Campus	120
13	Awareness Campaign	02	January to December 2024	On+ Off	240



S. N.	Major Extension Activities	No. of activities	Proposed date /week	Venue	participants
1	Self Help Group Conveners meetings	02	Jan- Dec 2024	Off	100
2	Mahila Mandals Conveners meetings	03	Jan- Dec 2024	On	100
3	Celebration of special days (specify) Rashtriya Mahila Kisan Day	01	15 Oct 2024	Off	100
4	World food day	01	16 Oct 2024	On	100
5	International womens day	01	8 March 2024	On	100
6	National Nutrition Month (Millet food festival )	03	Sept 2024	OFF	300
7	Swachata Abiyan	01	Octo 2024	ON+ OFF	253
8	Parthenium Week	01	Aug 2024	ON+ OFF	67
9	National Balika week	01	January 2024	On	130
10	National Breast feeding week	01	August 2024	Off	120
11	Group meetings/ Method Demonstration	05	Jan- Dec 2024	Off	400
12	Lectures delivered as resource persons	05	Jan- Dec 2024	On/off	400
13	Radio/ TV talks/Newspaper coverage	05	Jan- Dec 2024	-	-



**Soil Testing Lab**



**Bee Keeping unit**



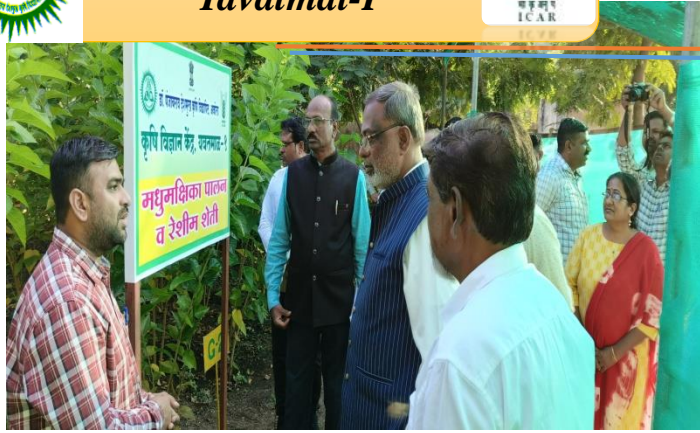
**Poultry demo Unit**



**Triachogramma unit**



# Demonstration Units-12



**Sericulture unit**



**Crop Cafeteria**



**Instructional farm**



**Implements park**



**Crop Cafeteria**



**Goat unit**



**Azolla unit**



**Vermi compost unit**



**Botanical pesticide production unit**



Name of the demonstration unit	Name of the product	Production target for the year 2023	Net profit expected (Rs)	Remarks if any
Dairy	Hydroponic	--	--	--
Goatary	Goat manure	1.5 tonn	40000	-
Vermicompost	Vermi culture			
Sericulture	Sampling			
Others,	Azolla	500 Kgs	40000/-	Low cost technology spreaded at the doorstep of farmers
Mushroom	Oyster	60 beds /60 kg	50000/-	4.00 Lakh



Crop / Commodity	Quantity to be processed	Name of the product to be prepared	Quantity to be prepared (kg or lit)	Net profit expected (Rs)
Millet	200 kg	Semolina	150 kg	--



Distoner



Polisher



Palwalizer



Shifter



Total land with KVK : 11.47 ha

Land under cultivation : 09.87 ha

S. No.	Name of crop	Area (ha)	Variety	Date of sowing / Planting	Date of harvest	Expected yield (q)
1	Custard Apple	0.50	Balanagar	June 2022	--	--
2	Acid lime (lemon)	0.37	PDKV Lime, Phule sarabati	June 2022	--	--
3	Soybean	4.50	AMS-100-39 (PKKV Amba)	27-28 June 2023	Last week of September 2023	60
4	Soybean	3.00	AMS-MB-5-18 (Suvarna Soya)	1-2 July 2023	Last week of September 2023	36
5	Mulberry	0.25	V-1	25-30 June 2023	-	
6	Drumstick	0.25	PKM-1	25-30 June 2023		
7	Sunflower	0.50	PDKV SH-952	June 2023	2 <sup>nd</sup> week of October 2023	07
8	Crop cafeteria	0.50	Millets & Soybean	June 2023	Last week of September 2023	--
	Nutritional Garden	2 R	Green leafy vegetable, Cucurbits, Other vegetable, Roots & tuber	5 June 2024	Sept 2024	35-40 kg



S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	CICR, Nagpur	"HDPS Cotton project"	--		Dr. S. U. Nemade Dr. P. N. Magar
2	State Agriculture Department	CROPSAP : Pest Surveillance	--	40,000/-	Dr. S. U. Nemade Dr. P. N. Magar
3	ATARI Pune	Drone Demonstration	--	6,00,000/-	Dr. S. U. Nemade Dr. P. N. Magar Er. R. T. Chavan





## Different Project in KVK

**1 Special Cotton Project (HDPS)**

**2 RKVY (Rashtriya Krishi Vikas Yojana)**

**3 CFLDs Oilseed and Pulses**

**4 Drone in Agriculture**

**5 Project Bandhan (PB-Knot)**

**6 Panjabrao Deshmukh Natural Farming mission**

**7 CROPSAP Project**



Sr. No.	Technology demonstrated	No. of Farmers	Area (ha)
1	<b>Targeting Technology to Agro-Ecological Zones</b> <b>Large Scale Demonstrations of Best Practices to Enhance Cotton Productivity</b>	169	491.52
	<b>Villages:</b> Kalamb, Ralegaon, Babhulgoan, Ner, Yavatmal, Darwha, Digras & Arni		





Sr. No.	Technology demonstrated	No. of Farmers	Area (ha)
1	Production Technology of Chick pea	10	04.00
	<b>Villages:</b> Koli & shari (Ghatanji)		





Season	Crop	Village	Variety	No. of Farmers	Area (ha)
<i>Kharif</i>	Pigeonpea	(Mawalani & Mahamdpur)	BDN-716	50	20.00
<i>Rabi</i>	Chickpea (TSP)	(Gugaldhara, Shivnala, Waghdhara (Maregaon) & Mahamdpur (Babhulgaon) Titavi (Ghatanji)	PDKV- Kanak	50	20.00





Season	Crop	Variety	No. of Farmers	Area (ha)
<i>Kharif</i>	Soybean (Mahamdpur)	PDKV Amba (AMS-100-39)	25	10.00
<i>Summer</i>	Sesame (Mahamdpur & Mawalni)	PKV-NT-11	50	20.00





# PROJECT BANDHAN

Area Covered-120 Acre  
Mahamdpur (Babhulgaon)  
Mawalni (Kalamb)





**Demo-38**  
**Farmers-1160**





As Per Directives of Res. DEE Dr. PDKV Akola Constructed A farm pond with Help of Agriculture Department Yavatmal with subsidy of **3,39,000/-** Farm Pond of **34x34x4.7** meter with capacity of **52 lakh liters of water can be stored** which can be irrigate 5 ha of land with **pressurize irrigation**







No. of new FPOs / FPCs to be formed/ supported by KVK	No. members	No. of already formed FPOs / FPCs supported by KVK	No's of members	major commodities	Type of support
01	336	02	671	Processing & Value Addition	Technical & Administrative
Dashkranti Utpadak Company, Kalamb	<ul style="list-style-type: none"> <li>➤ Painganga Farmer Producer Company, Amboda</li> <li>➤ Sita Mata Farmer Producer Company, Mudana</li> </ul>				

## Propose IFS Models In adopted villages

Name of adopted village	No. of IFS models identified	No. of IFS models developed	Major components and area of IFS models
Mawalni	01	01	Agril + Dairy + Horticulture
Mahamadpur	01	01	Agril + Dairy + Horticulture



## Details of collaborative applied research projects planned if any

Name of the research project	Funding agency	Collaborating organizations	Year of commencement
Poultry Demonstration unit	ATMA	ATMA	2024-25
Sericulture	Sericulture Dept	Sericulture Dept	2024-25



## Basic Information of Adopted Villages



Details	Mahamadpur (Babhulgaon)
Population	435
	Male -229
	Female -206
Geographical Area of Village (Ha)	389.71
Area Under Kharif	218.53
Area Under Rabi	110.47
Area Under Summer	60.70
Major Component	ICM, IPM technology, Farm Mechanization, Promote through Sericulture & Livestock , Organic farming, Linkages with Line Dept.





**Thank You!**



*Thank You*