



Review Meeting of Model Village-Mahamadpur



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Presented By:

Dr. D. B. Kachave
Senior Scientist & Head
KVK, Yavatmal

Impact Analysis of Dr. PDKV Interventions in Model Village Mahamdpur

Conducted by
Krishi Vigyan Kendra, Yavatmal

Chief Mentor
Dr. Sharad Gadakh
Hon'ble Vice-Chancellor, Dr. PDKV, Akola

Mentor
Dr. Dhanraj Undirwade
Director, Extension Education, Dr. PDKV, Akola

Dr. Nitin Koshti
Head, Dept. of Ag. Extension Education, Dr. PDKV, Akola

Investigation Team

Principal Investigator

Mr. Mayur B.Dhole : Subject Matter Specialist, Agril. Extn. Edu., KVK, Yavatmal

Co- Investigators

1. Dr. N. R. Koshti : Professor & Head
2. Dr. U. R. Chinchmalatpure .: CEO, DEE, Dr.PDKV,Akola
3. Dr. S. P. Lambe : Associate Professor
4. Dr. Dipak Kachave : Senior Scientist & Head
5. Dr. P.N.Magar : Subject Matter Specialist, Plant protection, KVK, Yavatmal
6. Mr. Rahul Chavan : Subject Matter Specialist, Agril. Engg., KVK, Yavatmal
7. Dr. Gnaesh Kaluse : Subject Matter Specialist, AHDS, KVK, Yavatmal
8. Mrs. S.P. Bhagwat : Subject Matter Specialist, Home Sci.,KVK, Yavatmal
9. Mr. Vishal D. Rathod :Praogramme Assist (Lab Tech), KVK Yavatmal



Vidarbha region in Maharashtra comprises 11 districts. Yavatmal is a very important district among the eleven districts. The area of this district is more than 9 lakh hectares. Livelihood of around 65% rural-population of this region is dependent on agriculture and allied activities. However, agriculture in this region is comparative less productive than the State and National averages.

The concept of a Model Village was envisioned by the Honorable Vice-Chancellor Dr. Sharad Gadakh of Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola. The main objective of this initiative is to adopt one village from each district and ensure its holistic and sustainable development by disseminating the university's agricultural technologies. Under this program, the focus has been on transferring improved agricultural technologies developed by the university to the village level, while also establishing effective coordination among government, semi-government, and private institutions related to agriculture to achieve integrated rural development. This visionary concept was effectively implemented by Dr. Dhanraj Undirwade, Director of Extension Education, under the guidance of the university, through the Krishi Vigyan Kendra Yavatmal. Mahamadpur, a village located about 35 km from Yavatmal in Babhulgaon taluka, was selected under this Model Village initiative.

Earlier, farming in this village was largely traditional. However, the Krishi Vigyan Kendra introduced modern agricultural technologies directly to farmers' fields. Special emphasis was placed on increasing productivity, reducing costs, value addition, and adopting integrated farming systems.

As a result, farmers in Mahamadpur have now started practicing improved and scientific farming methods



Prime Objective

To Double farmers' income within three years.

Specific Objectives

- Increase crop production through Improved technology and Crop Diversification
- Promotion of Farm Mechanization
- Integrated approach for Pest and Disease Management
- Promotion of Modern Method for Irrigation.
- Promotion of Kitchen gardens
- Value addition of Agriculture produce.
- Integrated Farming System- (Subsidiary Income - Sericulture, vermicomposting) organizations and sustainable market systems.
- Promotion of Organic and Natural farming.
- Increasing participation of women by reducing their drudgery.
- Increasing participation of youth in agriculture.
- Animal Husbandry & Dairy Science Timely Agro Advisory Service



Impact of Dr. PDKV Interventions on Agricultural Productivity and Village Development of Model Village Mahamdpur of Yavatmal district

- **Objectives**
- To study the profile of selected farmers of the model village
- To assess the impact of PDKV interventions on agricultural Productivity and village development in model village
- To undertake the in-depth case study of the beneficiary farmers in model village
- To study the constraints faced by villages in adoption of PDKV





A four-point strategy is followed for holistic village development:



1. Double crop productivity using modern techniques to increase income by 33%.

Agronomical Interventions

Deep ploughing during summer, Pre planning of kharif season, Crop rotation diversification, High yielding improved variety, Seed Germination testing, Seed treatment of fungicide, insecticide and bio fertilizer

Use of pair row sowing by dibbling

Entomological Interventions

- Use of IPM throughout crop period, Deep plowing, seed treatment of insecticide, use of IPM tools like Yellow sticky trap, pheromone trap, border trap, light trap, etc., Use of various bio insecticide & fungicide
- Control of various pest and disease in early stage before attained ETL

2. Reduce production costs by 50% through mechanization and efficient resource use (33% income gain).

Farm Mechanization

- Establishment of custom hiring centre, Use BBF seed drill for sowing, Use of Seed dibbler, Inter cultivation through BBF, In situ soil moisture conservation practices, Harvesting through advance harvester

3. Develop value chains from farm to market to boost income by another 33%.

Value addition- Value addition to primary agriculture produce.

4. Adopt Integrated Farming Systems (IFS) to ensure sustainable, diversified income.

IFS- Farming system for nutrition approach model for Food & nutrition Security- Sericulture, Dairy, Goatry, Poultry, Establishment of nutrition garden

- **AHDS Interventions-** Clean milk management, Preparation of milk products, Vermicompost production, Azolla cultivation for livestock, Fodder cultivation



Location of the village



A) Mahamdpur Village

Name of Village : **Mahamdpur**

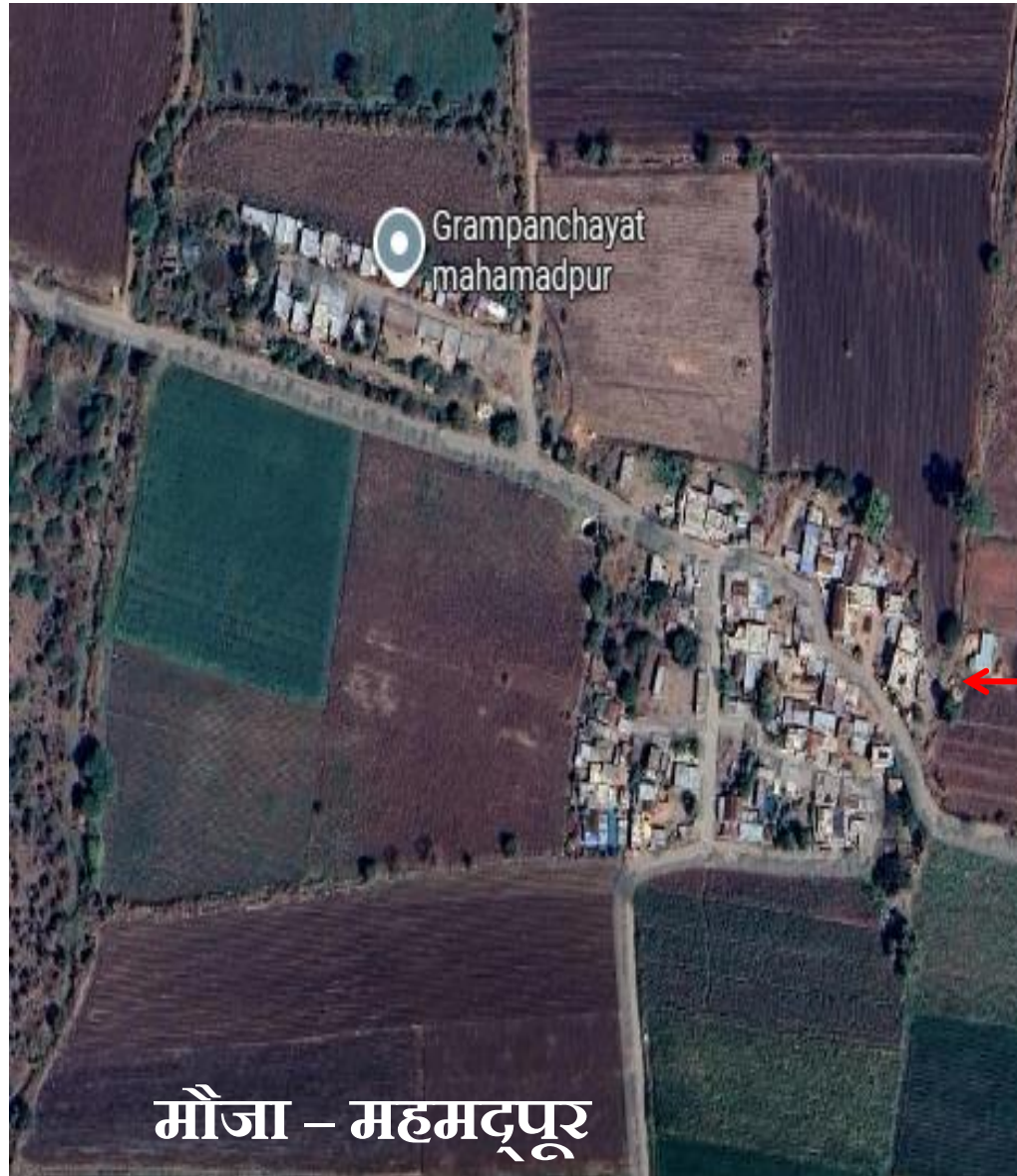
Taluka : **Babhulgaon**

District : **Yavatmal**

Distance of village from district : **33 Km.**



Location of the village



Model Village -Mahamadpur



Established-1962

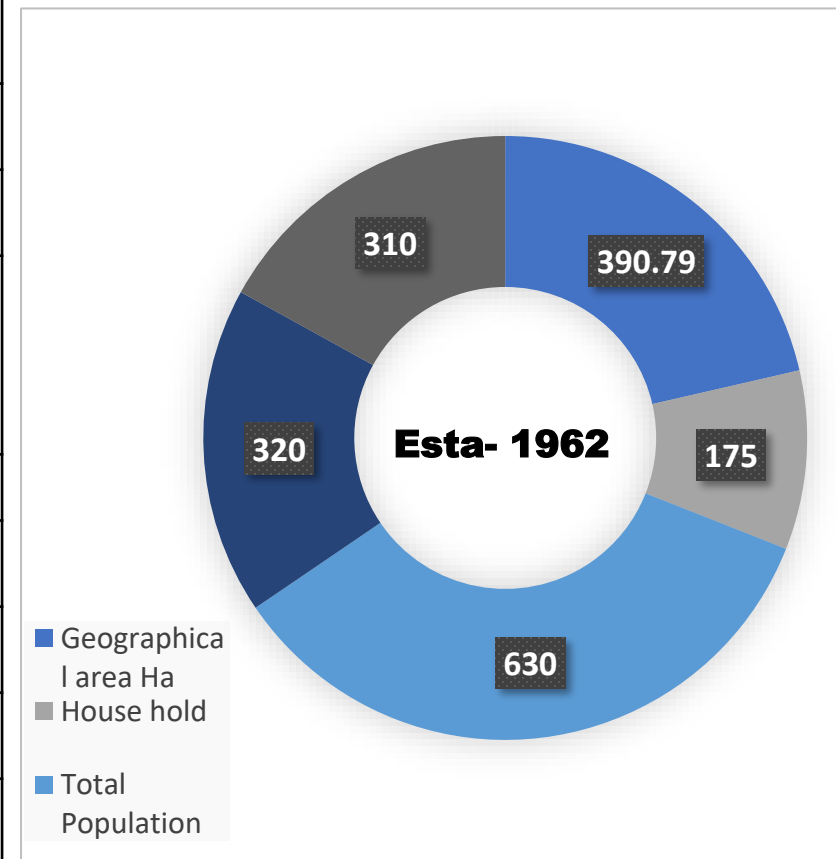
Orientation Meeting





Profile of Model village

Geographical area	390.79 hectare
Area under Kharif Crop	374 hectare
Area under Rabi Crop	74 hectare
Area under Summer Crop	30 hectare
Total Population	630
Female	310
Male	320
Total farmers Families	175
Marginal (Less than 1.00 ha)	47 Nos
Small (1.00 to 2.00 ha)	66 Nos
Medium (2.00 to 3.00 ha)	12 Nos
Large (3.00 to 4.00 ha)	10 Nos
Big (4.00 & above ha)	02 Nos
Farm Labor families	38 Nos



Population of the Village:-Mahamadpur

No of family	175
Agriculture based families	120
Agriculture + Business	13
Agriculture + Service	02
Agriculture + Processing business	02
Farm labourers family	38

Sex	Category	Number			Percentage to total population
		Literate	Illiterate	Total	
1. Male	a) Adults (above 35) yrs.)	176	10	186	29.52
	b) Youth (18 to 35) yrs.)	89	04	93	14.76
	c) Children	38	13	51	8.09
2. Female	a) Adults (above 35) yrs.)	169	10	179	28.41
	b) Youth (18 to 35) yrs.)	62	04	66	10.06
	c) Children	48	07	55	87.30
	Total (male and female)	582	48	640	

Sr. No.	Type of Institute		Number	
			Males	Female
a)		Illiterate		
		Functionally literate (Can read and write)		
b)	Primary School	Studied upto IV std.	19	13
C)	Middle School	Studied upto VII	13	22
d)	High School	Studied upto X std.	04	07
e)	Jr. College	Studied upto X std.	07	09
f)	College	Graduate	05	02
g)	College	Post Graduate	3	00
	Others		0	
		Total	51	55

Sr No	Source of Water
1	Well
2	River
3	Hand pump
4	Bore well

Total number of houses

S.N.	Particulars	No.
1	Pucca House	166
2	Kachha House	07
3	Thatched Roofs	02

Veterinary aid available for livestock

Sr. No.	Particulars	Available in		
		Village	At nearby Village /Town	Distance from Village (km.)
1	Veterinary Dispensary			10 Km
2	Artificial Insemination	Yes		
3	Dairy Society		Babhulgaon	10 Km
4	Veterinary Polyclinic		Babhulgaon	10 Km

Facilities for repairs to machinery like tractors, oil engines, electric motors, implements,

Sr.No.	Type of machinery	Repairs in the village	Facilities available at nearby village	Distance from the Village (km.)
1	Tractor	No	Babhulgaon	10 Km
2	Electrical Motors	No	Babhulgaon	10 Km
3	Oil Engines	No	Babhulgaon	10 Km
4	Implements	No	Babhulgaon	10 Km
5	Equipment's /Machinery	No	Babhulgaon	10 Km

Farm machinery and equipment (For agriculture purpose)

Sr.No.	Machinery / Equipment	Number
1	Tractor	11
2	Power Tillers	09
3	Power Sprayer / Duster	08
4	Sprayers (Knapsack)	53
5	Dusters	00
6	Threshers	06
8	Sprinkler Irrigation Sets	21
9	Others (Rotavator, Seed drill, Plough, 5Tyne cultivator)	03 each
10	V-Pass cultivator	05



base line Socio economic income of model village

No of family	175	(Rs.)	Total income (Rs)
Agriculture based families	131	90000 to 1Lac	1,14,00,000
Agriculture + Business	01	1,00000 to 1,50,000	16,25,000
Agriculture + Service	03	3,00,000 to 5,00,000	8,00,000
Agriculture + Processing business	01	1,50,000 to 2,00,000	3,50,000
Farm labourers family	39	80000 to 90000	32,30,000





- **Cropping pattern**

- The cropping pattern in the Yavatmal district and Mahamadpur is predominantly rainfed and kharif-oriented, with a major reliance on cash crops.

- **Kharif Crops:**

- Cotton is the leading crop, followed by soybean. Other important kharif crops include pigeon pea (tur), green gram, and black gram.

- **Rabi/Summer Crops:**

- The main rabi crops include wheat and chickpea (gram) and in summer sesamum

- **Intercropping System:**

- A traditional intercropping system often used is cotton and pigeon pea (tur) and Soybean and Pigeon pea.

- **Rainfall**

- The average annual rainfall from 1 June to 31 October is 926.80 mm.
- Actual rainfall 2023-24 :1190 mm
- Actual rainfall 2024-25 :1212 mm
- Actual rainfall 2025-26 :1050 mm

- **Soil type**

- Soil type of Mahamadpur is Medium to heavy types.

Model Village : Mahamadpur (Babhulgaon)



PRA Survey

Interaction with Farmer & Data
Collection





Identification of problems in Model village

- Improper Land Preparation- deep ploughing should not done in summer
- Lack of Soil Testing
- Do not use new improved variety/ hybrid
- Do not take seed germination test
- Lack of Seed Treatment
- Improper Spacing and Plant Population
- Indiscriminate Use of Fertilizers

- Unavailability and unawareness of improved farm implements
- Lack of processing of agricultural produce.
- Unavailability of custom hiring center

- Absence of allied agricultural enterprises (subsidiary occupations).
- Lack of improved livestock breeds.
- Neglect of livestock health.
- Lack of nutritious feed.

- Do not use Integrated approach for pest & disease control
- Do not use of Biocontrol agents.
- Lack of Plant Pests and disease diagnosis for effective pest and disease management

unawareness about Nutrition & Health
Drudgery
Economical problems
Less value addition in agro commodities
Loss of grains & seed during storage

- Market linkages
- Farmer linkages with line department



Different Agency



KVK Yavatmal (Dr. PDKV, Akola)

- Technology Partner
- Diagnostic Visit,
- Critical input for demonstration
- Farmers Tours

State Department of Agriculture

- Subsidy partner
- Bio control Lab
- Pocra Project

ATMA, Yavatmal

- Demonstration
- Farmers study Tours.
- Natural farming



Different Agency



Reliance Foundation

- Audio Conference.
- Plant Diagnostic Camp.
- Advisory Text Message
- You tube live, Dial out Conference.

State Animal Husbandry department

- Vaccination camp
- Animal Health Check up
- Subsidy

Sericulture Department

- Established of Sericulture unit- Subsidy
- Trainings.
- Monitoring of Sericulture unit



Intervention of PDKV

Agronomical Interventions

- Deep ploughing during summer
- Pre planning of kharif season
- Crop rotation diversification
- High yielding improved variety
- Seed Germination testing
- Seed treatment of fungicide, insecticide and bio fertilizer
- Use of pair row sowing by dibbling

IFS

- Farming system for nutrition approach model for Food & nutrition Security.
- Sericulture
- Dairy
- Goatry
- Poultry

Entomological Interventions

- Use of IPM throughout crop period
- Deep plowing, seed treatment of insecticide, use of IPM tools like Yellow sticky trap, pheromone trap, border trap, light trap, etc.
- Use of various bio insecticide & fungicide
- Control of various pest and disease in early stage before attained ETL
- Safe use of spraying of chemical
- Use of Biocontrol agents like Trichoderma, Metarhizium, Tricho cards.

Farm Mechanization

- Establishment of custom hiring centre
- Use BBF seed drill for sowing
- Use of Seed dibler
- Inter cultivation through BBF
- In situ soil moisture conservation practices
- Harvesting through advance harvester

AHDS Interventions

- Clean milk management
- Preparation of milk products
- Vermicompost production
- Azolla cultivation for livestock
- Fodder cultivation

Value addition

- Value addition to primary agriculture produce.

Home Science

Establishment of nutrition garden
To minimize the storage loss
Use of Save grain bag for storage of grains & seed
Poor Socio economic status
Income generation activities for empowerment of rural women like Mini dal mill
Mushroom cultivation
Introduction of improved farm tools and technologies to the farm women



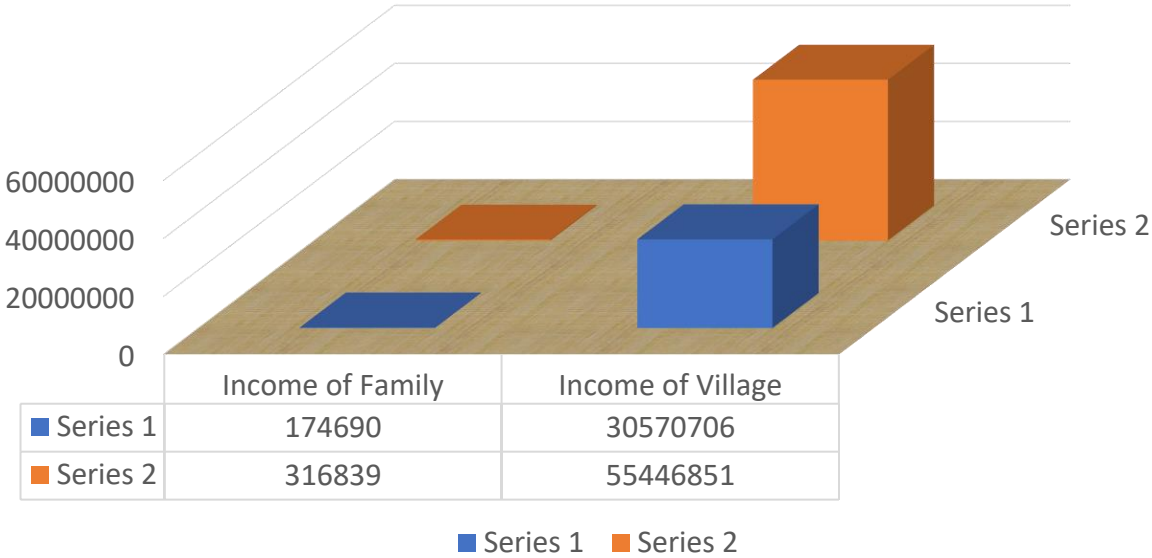
Overall Impact of PDKV Interventions on Farmers of Mahamdpur



Sl. No.	Module	Before	After	Change	% Increase
1	Double crop productivity using modern techniques	104,87,022	300,01,931	195,14,909	185.68 %
2	Reduce production costs through mechanization and efficient resource use	5,35,300	2,55,380	279920	110 %
3	Develop value chains from farm to market	00	68000	68000	100 %
4	Adoption of Integrated Farming Systems (IFS)	17,27,640	65,36,550	48,08,910	278.35 %
		12749962	36861861	24671739	199.18 %

Before and After income of Family and Village

Particular	2022-23	2025-26
Income of Family	174690	316839
Income of Village	30570706	55446851





Adoption of Technology Status

Sr. No.	Technology	Adoption of Technology		Per cent Increase	Adoption percentage of village
		Before intervention (2022-23)	After Intervention (2025-26)		
1	Soil testing	03	50	1667	38
2	Prepatary Tillage (Deep Ploughing)	20	60	300	46
3	Use of Improved Varieties	5	60	1200	46
4	Germination Test	5	40	800	31
5	Seed Treatment with fungicides, insecticides, bio fertilizers.	0	80	--	61
6	Sowing on BBF	0	25	-	19
7	Sowing by dibbling	0	10	--	8
8	Sowing on Ridges and Furrow, Bed, pair row method.	0	10	--	8
9	Integrated Fertilizer Management	0	25	--	19
10	IPM	0	25	--	19
11	IDM	0	25	--	19
12	Contingency crop Management	0	30	--	23
13	Use of Bio pesticides and fungicides	0	40	--	31
14	HDPS in cotton	0	60	--	46



Year wise Yield and Income of Mahamadpur farmers from Agronomical Crops

Sl. No.	Name of farmer	Year	Area (Ha)	Total Yield (Qtl)	Cost of cultivation (Rs./Qt.)	Total Income Rs/ha	Net profit Rs./ha	BC Ratio
Kharif- Soybean								
1	Soybean	2023	136	2038	5105742	8764021	3658279	1.72
	Soybean	2024	137	2232	5162164	10270438	5108274	1.99
	Soybean	2025	138	2515	5215029	12303680	7088651	2.36
	Soybean	2026	140	2438	4190053	12989526	8799473	3.10
2	Tur	2023	61	460	1064893	3040368	1975475	2.86
	Tur	2024	66	537	1058591	3762593	2704002	3.55
	Tur	2025	68	642	1016721	4853975	3837254	4.77
	Tur	2026	70	699	975065	5587297	4612233	5.73
3	Cotton	2023	151	2422	11314628	12667684	1353056	1.12
	Cotton	2024	140	2459	10062626	13119277	3197652	2.65
	Cotton	2025	138	2663	9338347	14489198	5274826	1.59
	Cotton	2026	128	2762	8143265	16230230	8085090	1.99



Year wise Yield and Income of Mahamadpur farmers from Agronomical Crops

Sl. No.	Name of farmer	Year	Area (Ha)	Total Yield (Qtl)	Cost of cultivation (Rs./Qt.)	Total Income Rs/ha	Net profit Rs./ha	BC Ratio
Rabi								
1	Chick pea	2023	65	972	2200500	5085805	2885305	2.31
	Chick pea	2024	63	1028	1974780	5488907	3514126	2.78
	Chick pea	2025	60	1045	1721400	5687539	3966140	3.30
	Chick pea	2026	54	1008	144200	5922640	4475441	4.09
2	Wheat	2023	25	492	500000	991818	491819	1.98
	Wheat	2024	24	510	448960	1085450	636490	2.42
	Wheat	2025	22	499	382500	1135694	753195	2.97
	Wheat	2026	20	489	320000	1265190	945190	3.95
Summer								
3	Sesame	2023	02	20.19	35000	158087	123088	4.52
	Sesame	2024	21	198	338100	1589347	1251247	4.70
	Sesame	2025	27	271	405000	2346353	1941353	5.79
	Sesame	2026	33	372	369600	3454105	3084505	9.35

1. Doubling Crop Production (Enhance 33 Per cent income)

Season/Crop	Before intervention (2022-23)							After intervention (2025-26)							Change in productivity Qt/ha	Change in Production	% Change in production	% Change in income	% Change Net income
	Variety	Area (ha)	Productivity qt/ha	Total Yield (Qtl)	Cost of cultivation (IAKH Rs.)	Total Income (IAKH Rs.)	Net income (IAKH Rs.)	Variety	Area (ha)	Productivity	Total Yield (Qtl)	Cost of cultivation (IAKH Rs.)	Total Income (IAKH Rs.)	Net Income (IAKH Rs.)					
Soybean	JS-335, 9305	136	15	2038	51.05	87.64	36.58	PDKV Amba	140	17.5	2438	41.90	129.8	87.97	308	399	19.6	48.2	140
Cotton	BT Var.	151	16.25	2422	11.31	126.67	13.53	Cotton Normal	39	20.00	763	24.12	44.83	20.69	3.5	376	15.34	29.52	461.75
								HDPS	90	22.5	2000	57.31	117.46	60.15	6.25				
Pigeon pea	Local	60.85	7.5	460	10.64	30.40	19.75	BDN 716	70	10	699	09.75	55.87	46.12	316	237	51.6	83	133



continue

1. Doubling Crop Production (Enhance 33 Per cent income)

Season/Crop	Before intervention (2022-23)							After intervention (2025-26)							Change in productivity Qt/ha	Change in Production	% Change in production	% Change in income	% Change Net income
	Variety	Area (ha)	Productivity (Qtl)	Total Yield (Qtl)	Cost of cultivation (IAKH Rs.)	Total Income (IAKH Rs.)	Net income (IAKH Rs.)	Variety	Area (ha)	Productivity	Total Yield (Qtl)	Cost of cultivation (IAKH Rs.)	Total Income (IAKH Rs.)	Net Income (IAKH Rs.)					
Chickpea	-	65	15	972	22.00	50.85	28.85	PDKV Kanak	54	18.75	1008	14.47	59.22	44.75	491	35.6	3.66	16.45	55.11
Wheat	-	25	20	492	05.00	09.91	04.91	-	20	25	489	03.20	12.65	09.45	655	0	0	27.56	92.18
Sesame	-	02	8.75	20.19	0.35	01.58	01.23	PKV NT-11	33	10	372	03.69	34.54	30.84	327	352	1746	2084	2405
Total		440		6405	202.20	307.7	104.87		572		10532	154.48	616.79	300.1					





Crop Competition

Soybean 2023

Sr. No	Crop	Name of Farmer	yield (q/ha)
1	Soybean	Vitthal Jagannath Mundle	25
2	Soybean	Mangesh Purushhotam Devtale	17.5

Soybean 2024

Sr. No	Crop	Name of Farmer	yield (q/ha)
1	Soybean	Sunil Vitthal Kale	30
2	Soybean	Vitthal Jagannath Mundle	23.75

Soybean 2025

Sr. No	Crop	Name of Farmer	yield (q/ha)
1	Soybean	Pradip Tukaram Gulhane	17.50
2	Soybean	Narayan Ramji Nehare	15

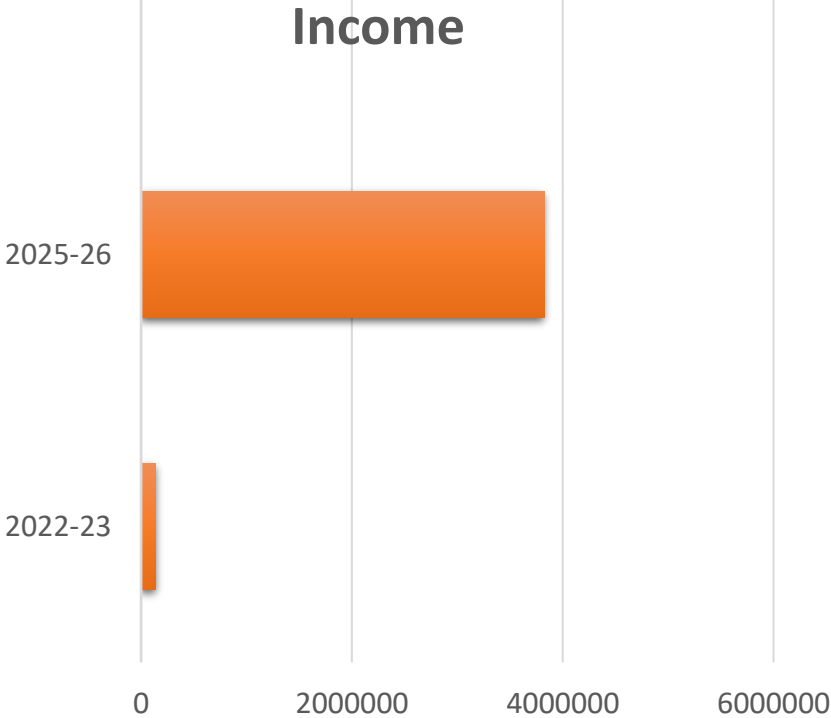
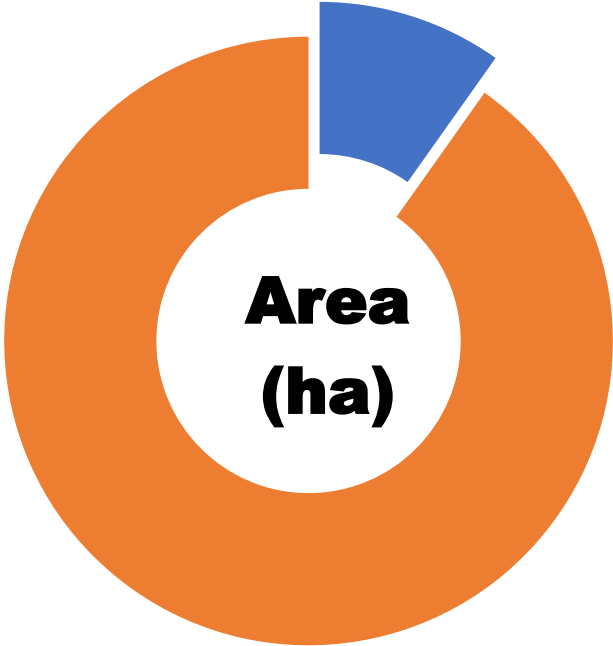


Summer Sesamum

Major Interventions



Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (Rs./ha) 2022-23	Income (Rs./ha) 2025-26	% Change in Income
2	33	1650	123088	3084505	2084



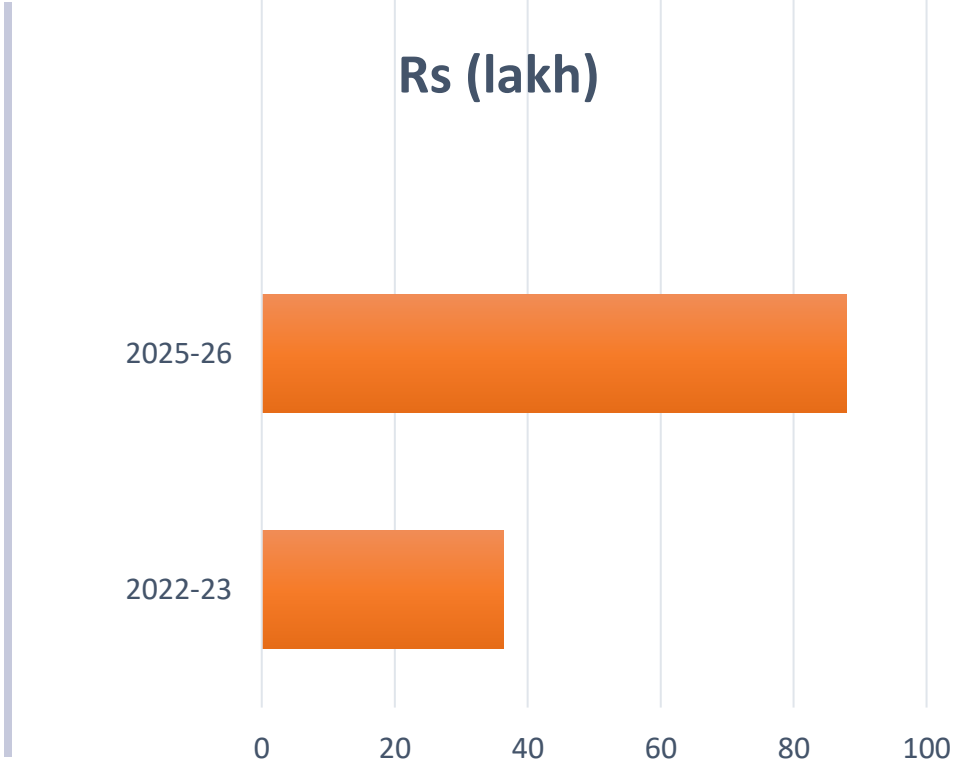


Major Interventions

Soybean

Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (lakh/ha) 2022-23	Income (lakh/ha) 2025-26	% Change in Income
135	140	04	36.58	87.97	140

- 2022-23
- 2025-26

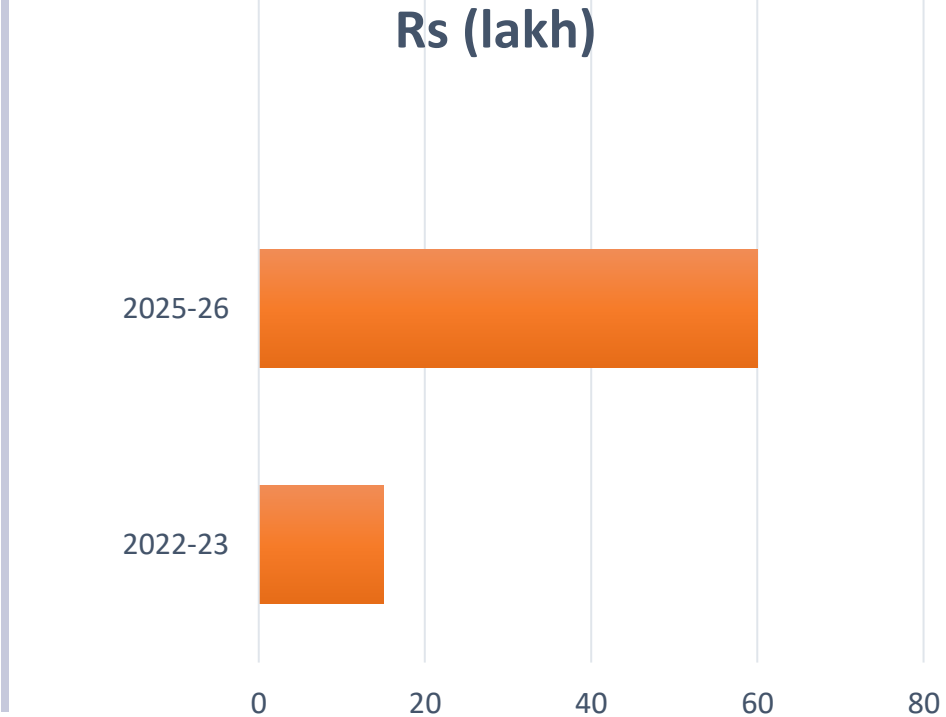
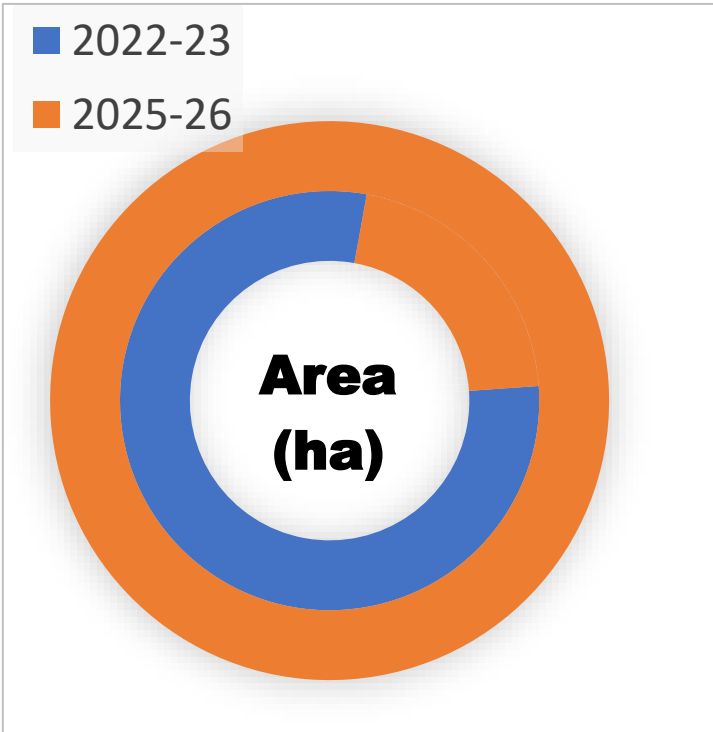


Cotton (traditional + HDPS)

Major Interventions



	Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (lakh/ha) 2022-23	Income (lakh./ha) 2025-26	% Change in Income
Normal	150	40		13.53	20.69	462
HDPS	0	90	100	0	60.15	



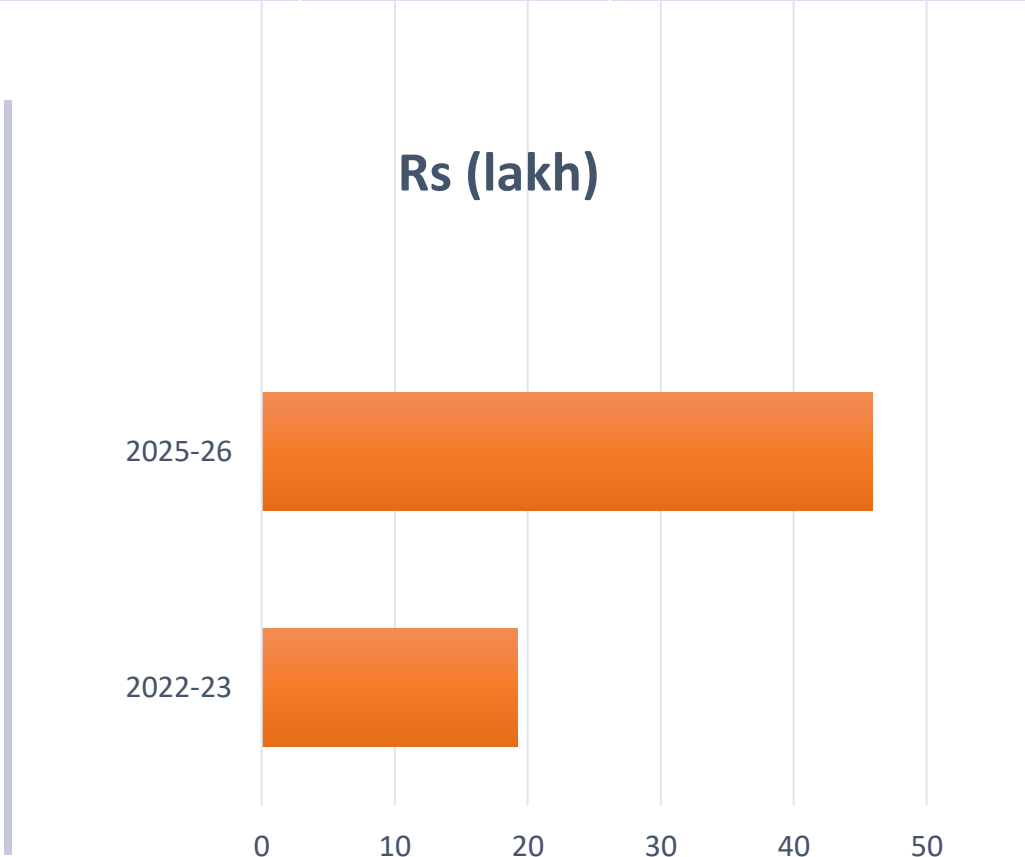
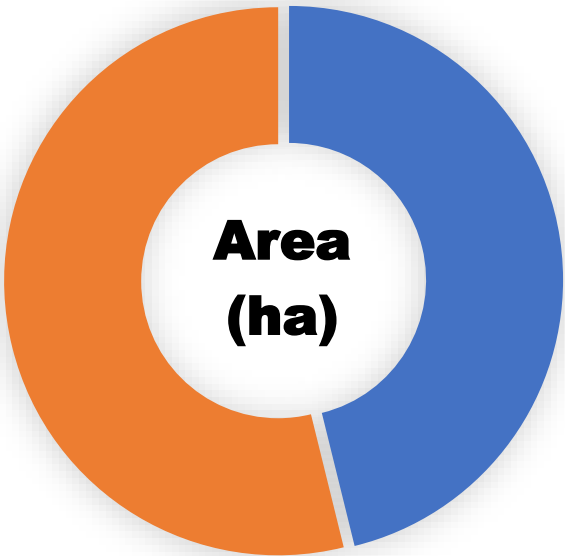
Pigeon pea

Major Interventions



Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (lakh/ha) 2022-23	Income (lakh/ha) 2025-26	% Change in Income
60	70	16	19.75	46.12	133

- 2022-23
- 2025-26



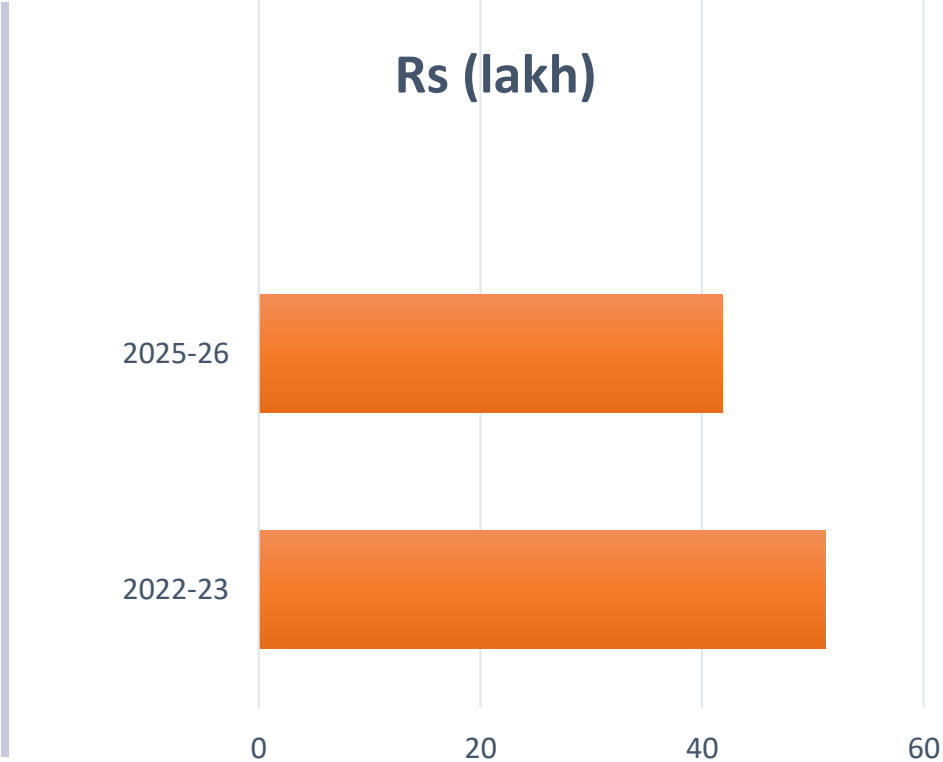
Chick pea

Major Interventions



Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (Lakh/ha) 2022-23	Income (Lakh/ha) 2025-26	% Change in Income
65	54	20	28.85	44.75	55.11

- 2022-23
- 2025-26



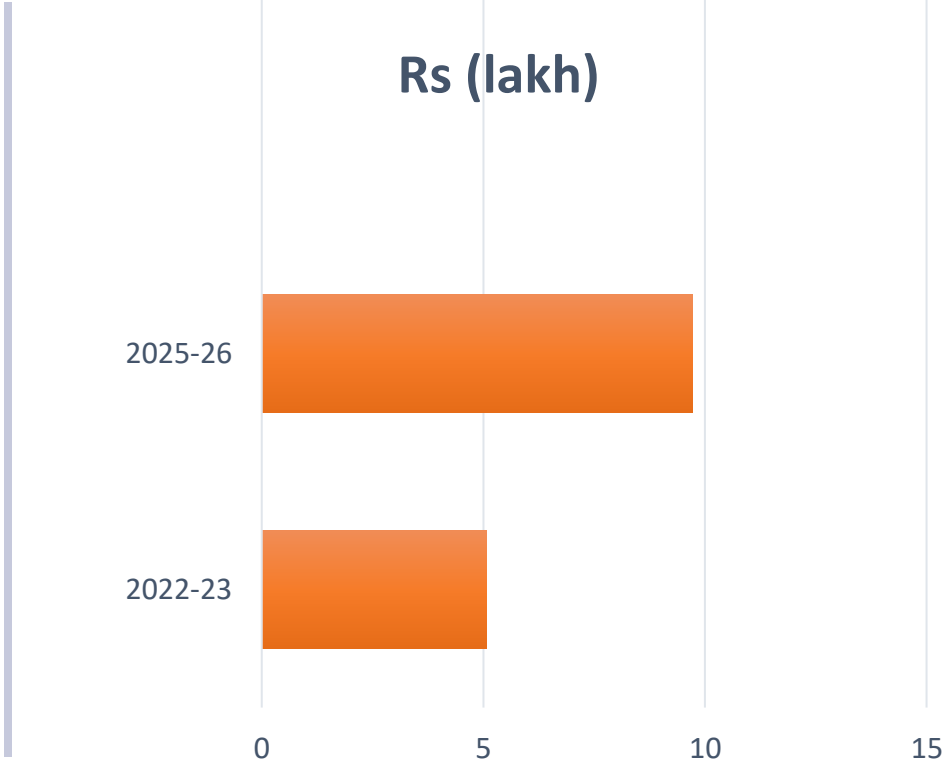
Wheat

Major Interventions



Area (ha) 2022-23	Area (ha) 2025-26	% Change area	Income (Lakh./ha) 2022-23	Income (Lakh/ha) 2025-26	% Change in Income
25	20	-20	04.91	09.45	92.18

- 2022-23
- 2025-26





Year wise Farm families and Village Income from crop commodity

Year	Farm Income per family (₹)	Farm Income of village (₹)	(%) Increase over base year
2022-23	81,150	1,04,87,022/-	---
2023-24	1,26,745	1,64,11,791/-	56 %
2024-25	1,66,751	2,28,61,420/-	105 %
2025-26	2,31,750	3,00,01,931/-	185 %



Crop Production increase in Rs Yearwise

Farming Income

Income during
2022-23

Rs. 104.00 lakh

Income during
2023-24

Rs. 164.11 lakh

Income during
2024-25

Rs. 228.61 lakh

Income during
2025-26

Rs. 300.01 lakh

Rs. 59.24 lakh



Rs. 64.5 lakh



Rs. 71.4 lakh



2. Reduce production costs by 50 % through Mechanization and efficient resources use (33 % income gain)

Name of Equipment's	Before intervention (2022-23) Manual				After intervention (2025-26)				Savin g of time (Hrs)	% change in time saving (hrs)	Saving of total expense s (Rs/Ha)	% Change in saving of total expenses (Rs)	No OF Farmer Used	Area	Remark
	Cost /ha (Rs)	Time spend	Labour expenses (Day/hr)	Total expense s (Rs)	Cost /ha (Rs)	Time spend	Labour expenses (Day/hr)	Total expens es (Rs)							
Seed dressing drum	300	4	300	300	50	1	60	110	3	75	190	63.3	30	22	
Dibbler	2400	32	2400	2400	300	8	300	300	24	75	2100	87.5	22	8	
BBF planter (Saving of SEED)	2000	1	2000	2000	2550	1.7	2140	2140	-0.7	-70	-140	-7	10	4	(Saving in Seed of Rs 3200/ Ha)
Sprayers (Small Tractor)	2550	4	2500	2500	1120	2	1120	1120	2	50	1380	55.2	12	20	
Intercultural (Small Tractor)	2400	8	2400	2400	1500	3	1500	1500	5	62.5	900	37.5	15	20	
Bed Maker	3000	8	3000	3000	1800	2	1800	1800	6	75	1200	40	30	22	
Weedicides	7500	60	7500	7500	2500	2	0	2500	58	2900	5000	200	20	20	
IPM	7500	10	5000	7500	4000	06	3000	4000	4	66	3500	87	32	25	

Custom Hiring center

1. BBF

2. Manual Precision Seed Planter (Rotary Dibbler)

3. PDKV Solar Animal Deterrent devices

4. Dibbler





On Farm Bio Lab

Intervention	On Farm Bio- Lab (Expected)
Lab before Intervention	No Lab
Production of Bio inputs	00 Kg
Average Rate Rs.	00
Net Income of village Rs.	00
Intervention	Trichoderma, Neem Seed Extract, Biostimulants
Lab before Intervention	1
Production of Bio inputs	100 kg
Average Rate Rs.	200.00
Income of village after Intervention Rs.	2,00,000
Total Expenditure	75,000
Total increased income of village Rs	1,25,000

3. (A) Increasing the income through Value Addition (Enhance 33 percent income) Production to marketing chain

Interventions	Quantity before interventions (Kg/Qtl/Tonne/)	Cost (Rs) before interventions	Income (Rs) Before interventions	Quantity after Interventions (Kg/Qtl/Tonne/)	Cost (Rs) After interventions	Income (Rs) After interventions	% Change in income (Rs.)
Dal milling *	0	0	0	11	130 per Kg	1,43,00/-	(Rs 23000/-) 19.16 %
Processing other Farmers**	0	0	0	300 q	150 per Kg	45000	(Rs 45000/-) 100 %

* Started Dal Processing in 2025

Till 11 q Dal was Prepared with the rate of 130/- of Rs. With 1,43,00/-

Tur Purchased 16 q with the rate @ 7500/- q of Rs.1,20,000/-

Net Profit 23,000 Selling of Dal

** Profit by Tur Dal Processing from farmers Own Tur – 45000/-(@450/qt)

Total Income generated by Value addition - 68000/-



4. Development of Integrated Farming System

Before intervention 2022-23									After intervention 2025-26						% Change in Net Income
Interventions	UNIT	No. of Milch Cows/Buffalos	Total expenses (Rs)	Total Milk yield (Lit)	Average Rate of milk/Lit (Rs.)	Gross income (Rs)	Net income (Rs)	Unit	No. of Milch Cows/Buffalos	Total expenses (Rs)	Total Milk yield (Lit)	Average Rate of milk/Lit (Rs.)	Gross income (Rs)	Net income (Rs)	
Dairy	02	Cows-15Milking -10	237600	7200	55.00	396000	122400	04	Cows-45 Milking -30	874800	24300	60	14,58,000	5,83,200	376
	02	Buffalo-23 Milking-18	8,55,360	25,9,20	55.00	14,25,600	5,70,240	04	Buffalo-80 Milking-55	35,64000	99000	60	59,40,000	23,76,000	316
Geatry	UNIT	No. of Goat	Total expenses (Rs)	Total Wt of Goat (Kg)	Average rate of Goat (Rs/ Kg)	Gross income (Rs)	Net income (Rs)	Unit	No. of Goat available	Total expenses (Rs)	Total Wt of Goat (Kg)	Average rate of Goat (Rs/ Kg)	Gross income (Rs)	Net income (Rs)	% Change in Net Income
	02	80	4,20,000	2800	300.00	8,40,000	4,20,000	06	174	10,65,750	6090	350.00	21,31,500	10,65,750	154



4. Development of Integrated Farming System

Before intervention 2022-23									After intervention 2025-26						%
Inter venti ons	U ni t	No. of Poultry bird	Total expenses (Rs)	Bird Weight	Average Rate of milk/Lit (Rs.)	Gross income (Rs)	Net income (Rs)	Unit	No. of Poultry	Total prodn of poultry in year	Rate/bird (Rs)	Total expen ses (Rs.)	Gross income (Rs)	Net income (Rs)	Chan e in Net Incom
Poul try	1	2050	6,15,000	3075 Kg/batc h 12,300/ Batch	100	12,30,000	6,15,000	03	5100	15,30,000	7650 Kg/batch 30600/ Batch	100	30,60,000	15,30,000	149
Ver mico mpo sting	0	0	0	0	0	0	0	Unit	Qty. produced (Qt/Y/bed	Qty used	Rate/Qt// (Rs.)	Total expen ses (Rs.)	Gross income (Rs)	Net income (Rs)	
								1	20 Qt/Yr/bed 05 bed-	100	12000	60000	1,20,000	60,000	--
Seri cultu re	0	0	0	0	0	0	0		4	0	Expected			9,21,600	--
Nutri tion Gar den	0	0	0	0	0	0	0		30			3000	15000	12000	
							17,27,64 0							65.36,550	





Nutrition Garden

Intervention	Before	After
Nutrition Garden	0	30
Expenditure (Seed)	0	3000
Income	0	15000
Saving of Rs	0	12000

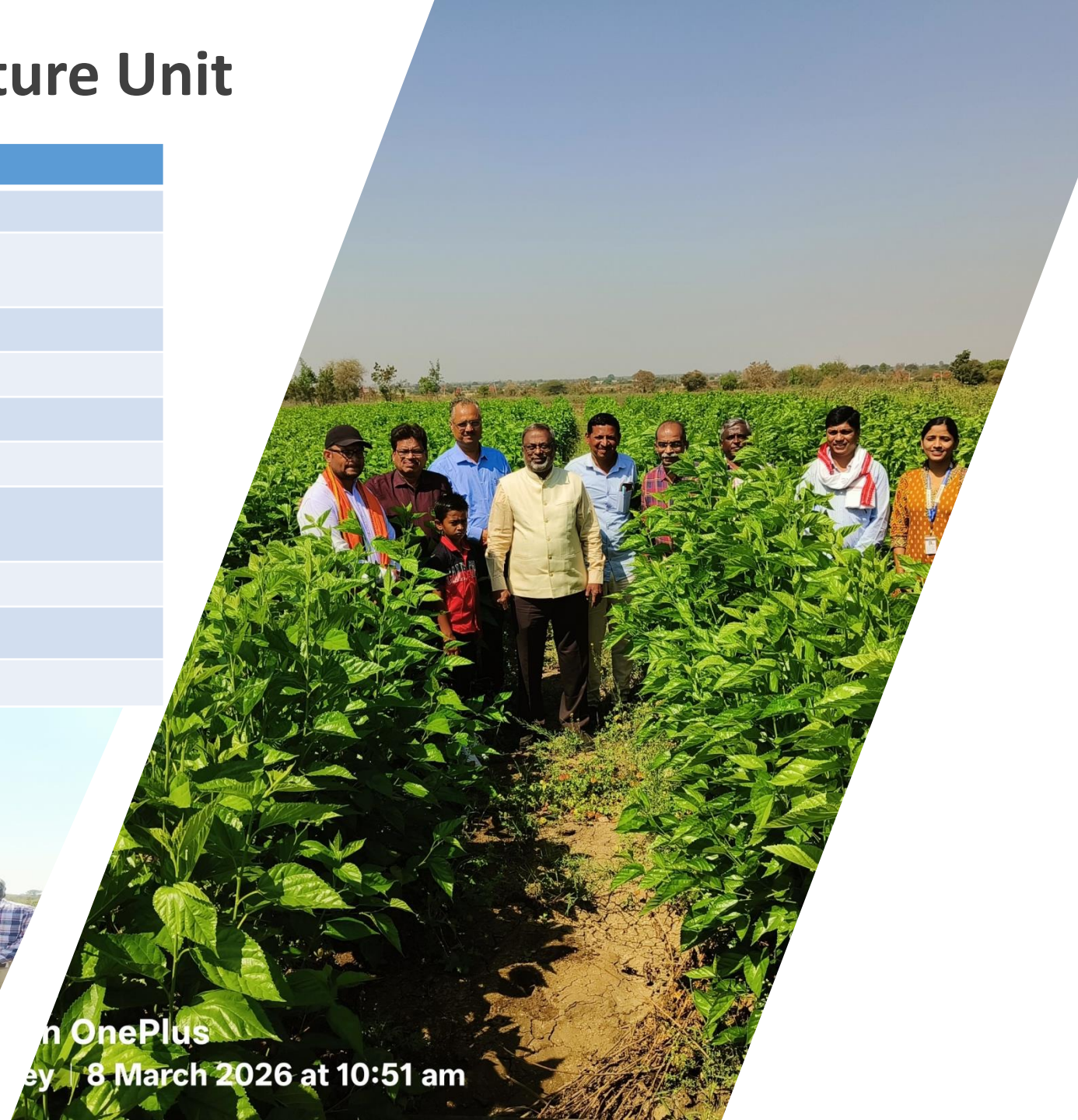






Sericulture Unit

Intervention	Sericulture (Expected)
Area before Intervention	00.00 ha
Average Productivity (KG cocoons per year for four crops)	00 Kg
Average Rate Rs.	350
Net Income of village Rs.	00
Intervention	V1 (5X3X2 ft), ICM
Area after Intervention	1.6 ha (Cover 04 Farmer)
Productivity after (KG cocoons per year for four crops) (Per Crop 80 Kg/per acre)	1280.00 kg (80KgX4CropX4Farmer)
Average Rate Rs.	450.00
Income of village after Intervention Rs.	9,21,600/-
Total increased income of village Rs	9,21,600/-



Shot on OnePlus
8 March 2026 at 10:51 am



Overall Impact of PDKV Interventions on Farmers of Mahamdpur



Sl. No.	Module	Before	After	Change	% Increase
1	Double crop productivity using modern techniques	106,30,706/-	303,70,301/-	197,39,595/-	185.68%
2	Reduce production costs through mechanization and efficient resource use	5,35,300/-	2,55,380/-	279920/-	110 %
3	Develop value chains from farm to market	00	68000	68000/-	100%
4	Adoption of Integrated Farming Systems (IFS)	17,27,640	65,36,550	48,08,910	278.35%
	Total income of Village	1,25,56,146	3,70,80,231	2,45,24,085	195.31 %
	Family income of Village	1.75 lakh	3.16 lakh	141.00	55.13 %

Success Story

Traditional Farmer to Value Addition – A farmer's Journey of Prosperity

Name of Farmer	Arvind Kale, Mahamadpur
Age	44 Yrs
Education	12 th
Mobile No's	7499142174
Introduction	Increasing Farmers' Income through Dal Mill Value Addition In Model Village of Yavatmal district, a remarkable initiative has demonstrated how value addition can significantly enhance farmers' income. Under the concept of strengthening the production-to-marketing chain, a local Dal Mill was established in 2025 to process Tur (pigeon pea) into Dal.
Before Intervention	Farmers used to sell raw Tur at lower market prices, resulting in limited profits. However, with the introduction of Dal Mill
After Intervention	➤ Farmers collectively purchased 16 quintals of tur at 7,500 per quintal (1,20,000 total). Using the dal mill, they processed the produce and prepared 11 quintals of dal. The processed dal was sold at 130 per kg, generating 1,43,000 income. After deducting expenses, they earned a net profit of 23,000 from processing. ➤ He also provided processing services to other farmers, generating at 45,000 Rupees extra income. Total income through value addition reached at 68,000 Rs in just two months.
Impact	Farmers achieved nearly 33% increased and created local employment opportunities. Strengthened confidence in agri-based entrepreneurship



Success Story

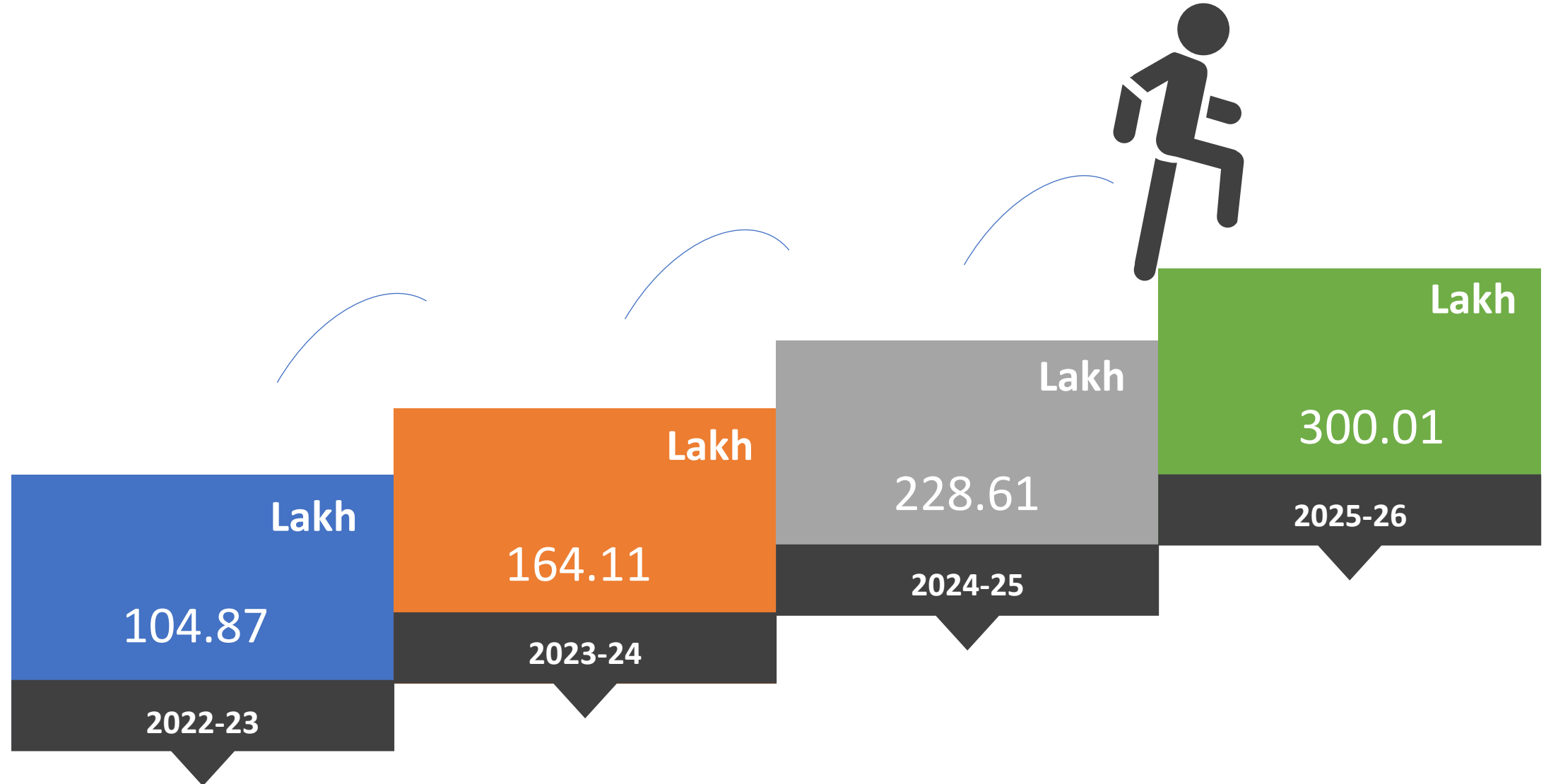
A Profitable Subsidiary for Farmers In the Model village

Name of Farmer	Atish Solunkee, Mahamadpur
Age	40Yrs
Education	15 th
Mobile No's	7498779853
Before Intervention	Initially, farmers in the village depended on seasonal crops, which provided limited and uncertain income. There was no practice of sericulture,
Intervention	Farmers started mulberry cultivation on 0.4 hectares land Construction of low-cost rearing units (50×20×10 ft) Training, technical guidance and support of KVK & line Dept.
Impact	Cocoon production: 240 kg/year (4crops) Average price: ₹700/kg Total Income 168,000/-





Total income of Model Village





Assessment of Social changes in farmers of the model village farmers after interventions:

Sr. No.	Statement	After interventions (N= 175)					
		Full extent/No.	%	Some what/No.	%	No change	%
1	Developed Self-image in family	123	70.29	41	23.43	11	6.29
2	Developed Self-image in community	139	79.43	27	15.43	9	5.14
3	Developed feelings of Self independence:	73	41.71	53	30.29	15	8.57
4	Developed feeling of economic security	109	62.29	37	21.14	29	16.57
5	Developed ability to take risk	124	70.86	17	9.71	34	19.43
6	Developed ability to understand and solve problems	145	82.86	21	12.00	9	5.14
7	Developed ability to try new varieties	103	58.86	53	30.29	11	6.29
8	Developed enthusiasm to try new Varieties	128	73.14	33	18.86	14	8.00
9	Developed aspirations	157	89.71	3	1.71	15	8.57
10	Feelings of overall satisfaction	143	81.71	23	13.14	9	5.14



Assessment of Social changes in farmers of the model village farmers after interventions:

Sr. No.	Statement	After interventions N= 175					
		Full extent/No.	%	Some what/No.	%	No change	%
11	Developed Communication Skill	131	74.86	29	16.57	15	8.57
12	Participation in Group activities	94	53.71	63	36.00	18	10.29
13	Developed good relationship with university scientists	98	56.00	49	28.00	7	4.00
14	Developed good relationship with KVK scientists	91	52.00	46	26.29	4	2.29
15	Developed good relationship with Agril. Deptt personnel	87	49.71	31	17.71	27	15.43
16	Developed good relationship with Horticulture Deptt personnel	68	38.86	25	14.29	82	46.86
17	Developed good relationship with Fishery Deptt. personnel	147	84.00	18	10.29	10	5.71
18	Developed good relationship with NABARD personnel	32	18.29	18	10.29	125	71.43
19	Developed good relationship with Bank personnel	41	23.43	87	49.71	80	45.71
20	Developed self confidence in farming and allied activities	134	76.57	20	11.43	37	21.14



Socio-Economic Improvements in Model Village

Improvement in Lifestyle	Increased income and exposure through visits to various government institutions have led to an overall improvement in the standard of living.
Development of Scientific Temper	Interaction with different departments in the village and the transfer of their technologies, along with visits to Dr. Panjabrao Deshmukh Krishi Vidyapeeth and other institutions, have helped inculcate a scientific outlook among the people.
Increase in Employment	With the introduction of new technologies in the village, income has increased, which has naturally led to greater employment opportunities.
Economic Stability:	Earlier, farming in the village was primarily dependent on natural conditions. Now, with the integration of allied agricultural activities and small-scale industries, it has contributed significantly to achieving economic stability.



Suggestion given by farmers

- Availability of improved critical inputs eg. Seed, Biofertilizer, IPM inputs, improved implements.
- Technology about Processing / value addition of agriculture products.
- Develop market channel for processed product.
- Protection of crops from wild animals.
- Ensure better price (MSP) for farm produce
- Availability of electricity during day time
- Organic product marketing PGS (Participatory Guarantee System)
- Availability of climate resilient Technology



- **Climate Change**
- **Decline in soil fertility, Imbalance use of fertilizer**
- **Availability of Agriculture Inputs.**
- **Economic constraints : Unavailability of loan from authorized institutions**
- **Irrigation Facilities**
- **Social constraints : Less literacy, Youth apathy in agriculture,**
- **Migration of youth toward urban area.**
- **Timely Unavailability of labour in agriculture.**



Feedback of the Farmers





Way Forward.....

- *Over the past three years, agricultural technologies have started reaching the village. Today, these technologies have reached farmers' fields to some extent and have also taken root in their minds. However, it is essential to ensure that these technologies reach a maximum number of farms. Additionally, it is important that all agriculture-related institutions come together to provide improved technologies in the village. The agricultural development achieved in Mahamadpur today should be replicated in the future by selecting model villages in all sixteen talukas of Yavatmal district and transforming them on the lines of Mahamadpur.*

मॉडेल व्हिलेजमधून गावांचा सर्वांगीण विकास : डॉ. गडाख

♦ यवतमाळ, १४ मार्च

मॉडेल व्हिलेज संकल्पनेच्या माध्यमातून शेतकरी बांधवांचे उत्पन्न वाढवून गावांचा सर्वांगीण विकास साधण्यासाठी विदर्भातील प्रत्येक जिल्ह्यात एक गाव 'मॉडेल व्हिलेज' म्हणून विकसित करण्याचा मानस असल्याचे प्रतिपादन डॉ. पंजाबराव देशमुख कृषी विद्यापीठ, अकोलाचे कुलगुरू डॉ. शरद गडाख यांनी केले.

कृषी विज्ञान केंद्र, यवतमाळअंतर्गत मॉडेल व्हिलेज उपक्रमात दत्तक घेतलेल्या महमदपूर (ता. बाभूळगाव) येथे ८ मार्च रोजी मान्यवरांनी भेट देऊन विविध कृषी उपक्रमांची पाहणी केली. यावेळी संचालक (विस्तार शिक्षण) डॉ. धनराज उंदीरवाडे, संचालक (संशोधन) डॉ. श्यामसुंदर माने, विभाग प्रमुख डॉ. नितीन कोष्टी, सहयोगी संशोधन संचालक डॉ.



दत्तक ग्राम महमदपूर येथे शेतीची पाहणी करताना डॉ. शरद गडाख व मान्यवर

श्रीकांत अमरशेट्टीवार, कृषी विज्ञान केंद्राचे वरिष्ठ शास्त्रज्ञ तथा प्रमुख डॉ. दीपक कच्छवे, तालुका कृषी अधिकारी ऋतिका डेरे, सरपंच जिजाबाई गाडेकर, पोलिस पाटील रसिका मेश्राम, कृष्णा ठाकरे उपस्थित होते.

या भेटीदरम्यान कृषी विज्ञान

केंद्राने दत्तक घेतलेल्या महमदपूर या आदर्श गावामध्ये मागील तीन वर्षांत राबविण्यात आलेल्या कृषी तंत्रज्ञानामुळे गावकऱ्यांच्या उत्पन्नात झालेली वाढ जाणून घेतली. तसेच गावामध्ये करण्यात आलेल्या तुती लागवड, तिळ लागवड, गहू व कापूस लागवड, दुग्ध व्यवसाय, दाल

मिल, पोषण बाग (न्यूट्रिशन गार्डन), अवजार बँक उपक्रमांची पाहणी करून माहिती घेतली.

कुलगुरू डॉ. गडाख यांनी सांगितले की, मॉडेल व्हिलेज म्हणून यवतमाळ जिल्ह्यातील कृषी विज्ञान केंद्रांतर्गत महमदपूर या गावाची निवड करण्यात आली आहे. या

गावांमध्ये शेतीचा सर्वांगीण विकास, पिकांची उत्पादकता दुप्पट करणे, लागवड खर्च ५० टक्क्यांपर्यंत कमी करणे, प्रक्रिया मूल्यवर्धन यास प्रोत्साहन देणे तसेच एकात्मिक शेती प्रणालीअंतर्गत शेळीपालन, दुग्ध व्यवसाय, कुक्कुटपालन, मधुमक्षिका पालन, रेशीम संगोपन या पूरक व्यवसायांना चालना देणे हा या योजनेचा मुख्य उद्देश आहे. या कार्यक्रमास सुमारे ५० ते ६० महिला शेतकरी उपस्थित होत्या.

मान्यवरांनी कृषी विज्ञान केंद्र, यवतमाळ येथेही भेट देऊन कुलगुरू यांच्या अध्यक्षतेखाली शेतकरी-शास्त्रज्ञ मंचची मासिक सभा आयोजित करण्यात आली. यावेळी शास्त्रज्ञ डॉ. प्रमोद मगर, सहायक प्रा. स्नेहलता भागवत, राहुल चव्हाण, डॉ. गणेश काळूसे, अधिकारी व कर्मचारी उपस्थित होते.

◀(तभा वृत्तसेवा)

Thank you

Recommendation-

In Collaboration with line Dept, in support with NGO's for development of **Model Village** for 1. improved technologies of university such as improved varieties, cultivation practices, 2. cost reducing measures, 3. integration farming system modules including dairy, poultry, goatery, sericulture, 4. value addition ,It is observed increased farmers income by more than double. So Government to request such concept will be implement in district.

शिफारस :

संबंधित विभागांच्या सहयोगाने आणि स्वयंसेवी संस्थांच्या (NGOs) मदतीने 'आदर्श गाव' विकसित करण्याच्या उपक्रमांतर्गत—

१. विद्यापीठाने विकसित केलेली सुधारित तंत्रज्ञाने (उदा. सुधारित वाणे, लागवड पद्धती),
२. उत्पादन खर्च कमी करण्याच्या उपाययोजना,
३. ३. एकात्मिक शेती पद्धतीचे घटक (ज्यामध्ये दुग्धव्यवसाय, कुक्कुटपालन, शेळीपालन आणि रेशीम उद्योग यांचा समावेश आहे),
४. मूल्यवर्धन (Value Addition) या बाबींचा समावेश होता—शेतकऱ्यांचे उत्पन्न दुप्पटीपेक्षाही अधिक वाढल्याचे दिसून आले आहे. त्यामुळे, ही संकल्पना जिल्ह्यात राबविण्यात यावी, अशी शासनाकडे शिफारस करण्यात येत आहे