



*Krishi Vigyan Kendra
Yavatmal-I*



Action Plan 2022-23



Annual Action Plan 2022-23

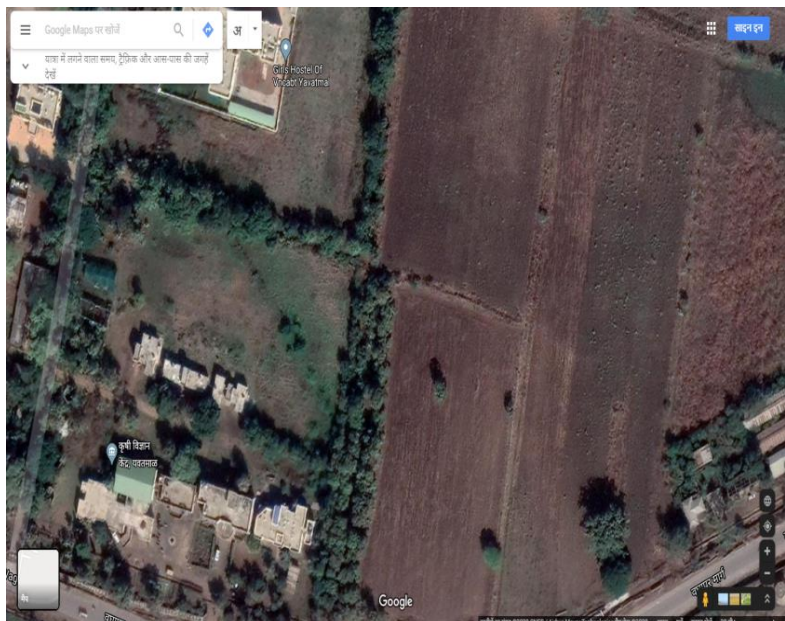
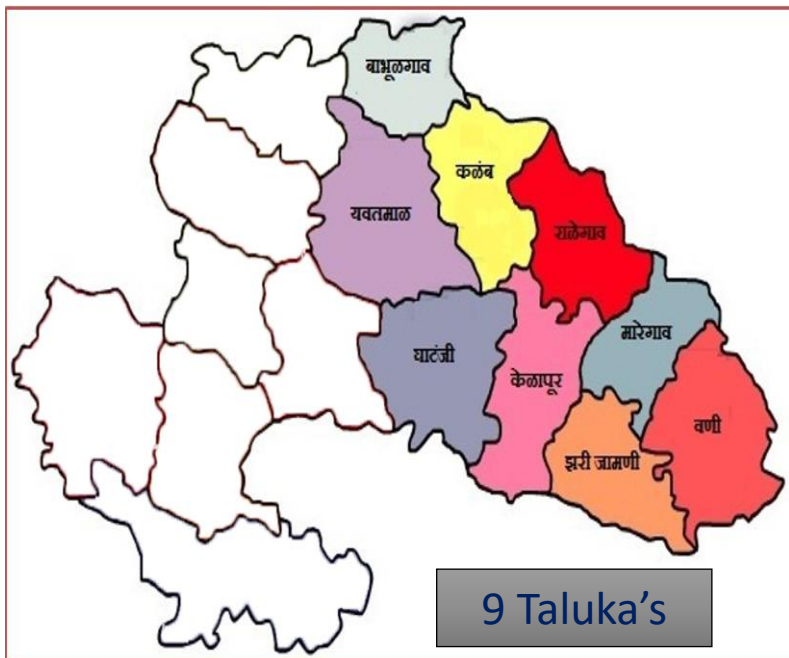


Presented By:

Dr. S. U. Nemade

***Senior Scientist & Head
KVK, Yavatmal- I***

KVK Jurisdiction (09 block)



District Profile

Geographical area	13,51,966 hectare
Cultivable area	9,60,500 hectare
Area under Forest	2,03,147 hectare
Area under Kharif Crop	9,01,997 hectare
Area under Rabi Crop	1,15,010 hectare
Area under Summer Crop	7,000 hectare
Rainfed Area	8,37,946 hectare (7 to 8 % irrigated)
Marginal (Less than 1.00 ha)	28,640 (6.86 %)
Small (1.00 to 2.00 ha)	1,61,227 (38.63 %)
Large (More than 2.00 ha)	2,27,535 (54.51 %)
Total Taluka's	16
Minimum temp	9.4 °C
Maximum temp	47 °C
Average Rain fall	911. 3 mm
Actual Rain fall	1076.9 mm (134 %)
Number of rainy days	57

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	Major production systems
Major Intercropping systems	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 30.06.2022)

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.	Agronomy
3	Subject Matter Specialist	Vacant	S.M.S.	Home Science
4	Subject Matter Specialist	Vacant	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	Dr. S.S.Wane	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 – Vermi Compost, Apiculture, Sericulture, Gotary, Poultry & value addition.**
- 4. Farm mechanization – Crop residue management**
- 5. In- situ moisture conservation- BBF**
- 6. Promote organic farming, production & use of Bio pesticide & FPO's**



S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	06	30	07	37
2	Front Line Demonstration	06	49	02	51
3	Cluster Front Line Demonstrations (O & P)	Oilseed -2 Pulses-2	41 82	09 18	50 (O) 100 (P)
4	Training Programmes	52	1210	503	1713
4.1	Farmers / Farm Women	28	722	326	1048
4.2	Rural Youth	15	288	107	395
4.3	Extension Functionaries	09	200	70	270
5	Extension Activities (Major)	12	2182	1103	3285
	Total	83	3719	1703	5422



ON FARM TRIALS

No. of OFTs
6



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Yavatmal-I*



Crop :- Soybean

Season :- Kharif

Agronomy: OFT-1

Title of OFT	Assess the performance of different Soybean variety suitable for Yavatmal District.
Problem Identified	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.
Objectives	To assess the performance of soybean Variety suitable for Yavatmal district.
Micro-farming Situation	Sole Crop
Treatments	T ₁ : Farmer Practice (Used JS-9305) / JS-335
	T ₂ : Phule Sangam (KDS-726)
	T ₃ : PDKV Amba (AMS-100-39)
No. of Trials	07 (0.4 ha. Each)
Source of Technology	JNKV, Jabalpur (2002), MPKV, Rahuri (2016), Dr. PDKV, Akola (2020)
Critical Inputs to be used and its cost in Rs.	Seed (Rs. 25200/-) & Bio fertilizer (Rs 1050/-) Total Rs. 26250/-
Observations to be recorded	Plant Height, No. of Pod Per plant, Seed yield (qha ⁻¹), GMR, NMR & B:C ratio
Village	Kalamb/Ghatanji Talukas



Title of OFT	Assess the productivity of Chick pea by use of PGR spray.
Problem Identified	Low productivity of chick pea due to imbalance nutrient management. Lack of knowledge about PGR and ICM practices.
Objectives	To assess the performance of Gibberellic acid 90% a.i application at flowering and pod development stage.
Micro-farming Situation	Sole crop.
Treatments	T ₁ : Farmers practice (No use of PGR, not follow seed treatment & balanced nutrient)
	T ₂ : Foliar application of 1% Humic acid at flowering and pod development stage.
	T ₃ : 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.
No. of Trials	07 (0.4 ha. Each)
Source of Technology	Dr. PDKV, Akola (2020)
Critical Inputs to be used and its cost in Rs.	Gibberellic acid 90% . Cost of input 5600/- (Rs 800/ Trial)
Observations to be recorded	Plant Height, No. of Pod per plant, Seed Yield (qha ⁻¹), GMR, NMR & B:C ratio
Village	Babhulgaon Taluka



Title of OFT	Management of Wilt in Pigeon pea
Problem Identified	Since recent year wilt incidence in Pigeonpea was found to be severe in Yavatmal District, resulted in yield reduction
Objectives	1) To minimize the incidence of Wilt in Pigeonpea. 2) To show the comparative performance of assessed technology and farmers practice
Micro-farming Situation	Rainfed farming under medium to black soil
Treatments	Farmers Practice (T1) : No seed treatment
	Assessed Practice (T2) : Seed treatment with Carboxin 37.5% + Thirum 37.5% WS @ 3 gm per Kg seed
	Assessed Practice (T3) : Seed treatment with Carboxin 37.5% + Thirum 37.5% WS @ 3 gm fb Seed treatment with Trichoderma viride @ 10 gm per Kg seed
No. of Trials	07
Source of Technology	Dr.PDKV, Akola 2017
Critical Inputs to be used and its cost in Rs.	Carboxin 37.5% + Thirum 37.5% WS and Trichoderma viride and Rs. 10000/-
Observations to be recorded	Per cent infestation, yield (q/ha)
Additional information if any	



Title of OFT 2	Management of Wilt in Chickpea
Problem Identified	Incidence of wilt disease in chickpea was noticed in a district
Objectives	1) To minimize the incidence of Wilt in chickpea. 2) To show the comparative performance of assessed technology and farmers practice.
Micro-farming Situation	Irrigated farming under medium to black soil
Treatments	Farmers Practice (T1) : No seed treatment
	Assessed Practice (T2) : Seed treatment with Carboxin 37.5% + Thirum 37.5% WS @ 3 gm fb Seed treatment with Trichoderma @ 10 gm per Kg seed
	Assessed Practice (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
No. of Trials	7
Source of Technology	Dr.PDKV, Akola and NAU, Gujarat
Critical Inputs to be used and its cost in Rs.	Carboxin 37.5% + Thirum 37.5% WS and Trichoderma viride and Rs. 15000/-
Observations to be recorded	Per cent infestation, Yield (q/ha)



Title of OFT	Performance of Tractor operated Stubble Collector developed by PDKV, Akola in Yavatmal Distirct
Problem Identified	Collecting stubbles is laborious job and there is Scarcity of labours.
Objectives	To asses the suitability of stubble collector for collecting the crop residues like cotton and other crops.
Micro-farming Situation	Rainfed
Treatments	Farmers Practice (T1) : Local practice (Manually)
	Assessed Practice (T2) : Tractor drawn stubble collector
No. of Trials	07
Source of Technology	Dr. PDKV Akola (Joint Agrosco 2019)
Critical Inputs to be used and its cost in Rs.	Tractor operated Stubble Collector-Rs. 20,000/-
Observations to be recorded	<ul style="list-style-type: none">- Field capacity (ha/hr), - Fuel Consumption(lit/ha)- Cost of Operation (Rs./ha)



Title of OFT	Performance of drip irrigation at 80% Evapotranspiration in replenishment with polythene mulch (Silver color and 50 micron thickness) in chilli Crop.
Problem Identified	High water requirement and low productivity of chilli.
Objectives	To asses the suitability of drip irrigation with polythene mulch of silver color and 50 micron
Micro-farming Situation	Rabi 2022-23
Treatments	Farmers Practice (T1) - Surface irrigation Method
	Assessed Practice (T2) - Drip irrigation system
	Assessed Practice (T3) - Drip with Mulch
No. of Trials	07
Source of Technology	Dr. PDKV Akola (Joint Agrosco 2018)
Critical Inputs to be used and its cost in Rs.	Silver color and 50 micron thickness Rs. 30000/-
Observations to be recorded	Water Requirement, Labour requirement, Yield Kg/ha



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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
Oilseeds									
Soybean	Kharif 2022	Integrated Crop Management Practices (ICM) in Soybean variety: YELLOW GOLD (AMS-1001)	Rainfed	YELLOW GOLD (AMS-1001)	10	25	Seed & Bio fertilizer	Seed: 108750/-, Bio Fertilizer : 1250/-, Total :- 1,10,000/- (Rs 4400/- Demo)	Plant Height, Seed yield (qha ⁻¹), GMR, NMR & B:C ratio
Sesame	Summer 2022	To demonstrate the new high yielding improved variety suitable for Summer Season.	Irrigated	PKV NT-11	10	25	Seed	Seed: 12,500/- (Rs 500/- Demo)	Plant Height, Seed yield (qha ⁻¹), GMR, NMR & B:C ratio
Pulses									
Pigeon pea	Kharif 2022	To demonstrate the new high yielding, Mid late Variety Resistant to Sterility & Wilting	Rainfed	BDN-716	20	50	Seed, Bio fertilizer & Trichoderma	Seed: 30000/-, Bio Fertilizer : 10250/- Total :- 40250/- (Rs 805/- Demo)	Plant Height, Seed yield (qha ⁻¹), GMR, NMR & B:C ratio
Chick pea	Rabi 2022	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: 1,20,000/- Bio fertilizer: 2500/- Total 1,22,500/- (Rs 2450/- Demo)	Plant height, No. of Pod per plant, Grain yield & B:C ratio



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Front Line Demonstration

No. of FLDs
5



Crop	Season	Purpose of demonstration	Farming situation	Area (ha)	No. of demonstrations	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. 16000/-	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. 12000/-	Per cent pink bollworm infestation, yield (q/ha)



Name of the implement to be demonstrated	Farmin g situatio n	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
Kisan Drone	Kharif	To reduce time of spraying	Aug- Sept 2022	2	05	Kisan Drone	--	Time required hr, Yield, Kg/ha
Borewell Recharging	-	To increase water level in the borewell	Jan 2023	-	02	Borewell Recharging Unit	30000/-	Water Level, m
Drip lateral Coiler	Rabi	To reduce time of lateral coiling -To increase the life of laterals	Feb 2023	4	10	Drip lateral Coiler	10000/-	Time Required , hrs.



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
A.	For PF						
	October 2022	Different sources to access the information on Agriculture	On + OFF	01	48	32	80
	May 2022	Organizing Method Demonstrations	On + OFF	01	50	20	70
B.	For RY						
	June 2022	Seed production technology in different field crops	On + OFF	01	32	08	40
	Oct 2022	Improved technique of organic farming & method of preparation organic manure	On + OFF	01	33	12	45
	July 2022	Contingency crop planning during Kharif	On + OFF	01	33	12	45
C.	For EF						
	June 2022	Soil preparation	OFF Campus	01	30	10	40
			Total		226	86	320



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
A.	For PF						
	May-22	Importance of bee keeping	On + OFF	01	25	15	40
	June-22	Safe use of pesticides and Importance of Seed treatment in pest and disease management	OFF Campus	01	25	15	40
	July-22	Safe use of pesticides and IPM in cotton, Soybean	OFF Campus	01	25	15	40
	Aug-22	Integrated Pest Management in Cotton and boll rot management	On + OFF	01	25	15	40
	Nov-22	Pest and Disease management in fruit crops	OFF Campus	01	25	15	40
	Dec-22	Pest management in vegetables			25	15	40
	Jan-22	Pest management in chickpea	On + OFF	01	25	15	40
B.	For RY						
	May-22	Importance of bee keeping	OFF Campus	01	25	15	40
C.	For EF						
	June-22	IPM in cotton, Soybean, Pigeonpea and safe use of pesticides	OFF Campus	01	25	15	40
			Total		225	135	360



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
A.	For PF						
	October 2022	Installation and maintenance of micro irrigation systems	On + OFF	01	48	32	80
	September 2022	Use of Plastics in farming practices	OFF Campus	01	50	20	70
	June 2022	Production of small tools and implements	OFF Campus	01	30	10	40
	July 2022	Repair and maintenance of farm machinery and implements	On + OFF	01	32	08	40
	November 2022	Small scale processing and value addition	OFF Campus	01	32	08	40
	December 2022	Post Harvest Technology	On + OFF	01	30	10	40
B.	For RY			01	33	12	45
	January 2023	Repair and maintenance of implements	OFF Campus	01	30	10	40
C.	For EF						
	February 2023	Watershed Management	OFF Campus	01	30	10	40
			Total		395	120	435



S. No	Date	Title of training	Venue	Duration (Days)	No. of participants		
					M	F	Total
A.	For PF						
	June 2022	capacity building of Group Commodity	On	01	20	15	35
	July 2022	Importance of Farmer Producer Company for SHG's groups	Off	01	23	13	36
	August 2022	Different sources to access the information on Agriculture	Off	01	28	12	40
	August 2022	Organizing Method Demonstrations	On	01	25	10	35
B.	For RY						
	October 2022	Small Scale Entrepreneurship development among the Youth	On	01	15	15	30
	December 2022	Knowledge of Govt. Scheme for Self Employment for rural youth	Off	01	20	10	30
C.	For EF						
	August 2022	Multimedia Communication	On	01	25	10	35
	Nov 2022	Role of Extension Worker in dissemination of Technology	On	01	25	10	35
			Total		181	95	176



S. N	Major Extension Activities	No. of activities	Proposed date /week	Venue	participants
1	Field Day	05	November 22, February 22, May 22	Off Campus	160
2	Farmer scientist Interaction	04	June & September 2022	On+ Off	410
3	Kisan Goshthi	10	June to December 2022	On+ Off	240
4	Exhibition (Participation)	02	March to December 2022	On+ Off	1600+
5	Film Show	01	August 2022	Off Campus	150
6	Farmers Seminars	01	May 2022	On+ Off	50
7	Workshop	08	March to December 2022	On+ Off	350
8	Group meetings	05	January to December 2022	On+ Off	310
9	Animal Health Camp	01	September 2022	On+ Off	100
10	Pre Kharif Kisan Mela	01	May 2022	On Campus	90
11	Pre Rabi Kisan Mela	01	September 2022	On Campus	100
12	World soil day	01	December 2022	Off Campus	120



➤ **Renovation of different Demo Unit**

1. Azolla Unit.
2. Hydroponic Unit.
3. Goatry Unit.
4. Vermicompost Unit.
5. Soil Testing Unit.
6. Bee Keeping unit.
7. Bio Control Lab.
8. Millet Processing unit.
9. Solar Tunnel Dryer unit.
10. Implements Park.
11. Training Hall (Renovation)

➤ **Establishment of Instructional farm.**

1. Farm Pond.
2. Generate Irrigation Facility.
3. Need to Farm Fencing.
4. Crop Cafeteria.
5. Custard Apple, Acid lime & Drum stick plantation.
6. Farm Mechanization- Sprayer Assembly
7. Drone Demonstration
8. Seed Production Programme.

- **Proposed to Establish Bio fertilizer production unit.**
- **Proposed to Establish Nursery unit**
- **Proposed to Establish Biomass processing unit. (Pallet Making Machine)**
- **Proposed to Establish Mushroom production unit.**

➤ **Awareness and linkages of Extension Activities.**

1. Public Private Partnership (AFARM, AFPRO, Reliance, UMED, all Line Dept.)
2. Argo Advisory (SMS, Voice Messages, What's app Group, News. Monthly Sandesh)
3. Collection of 5000 farmer profile data



Bee Keeping unit



Soil Testing Lab



Triachogramma unit

Demonstration Units

Action Plan 2022-23



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 2022	Net profit expected (Rs)	Remarks if any
Dairy	Hydroponic	--	--	--
Gotary	Goat	2 goat	18,000	--
Vermicompost	Vermi culture	35 kg	8,000	Based on farmers demand
Sericulture	Sampling	20,000	6,000	--
Others,	Azolla culture	150 kg	7,000	--
	Bee Keeping	10 kg	3,000	



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Instructional Farm

Action Plan 2022-23

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	Soybean	4.5	AMS-100-39 (PKKV Amba)	27-28 June 2022	Last week of September 2022	45
2	Soybean	2.00	AMS-MB-5-18 (Suvarna Soya)	1-2 July 2022	Last week of September 2022	15
3	Soybean	2.00	AMS-1001 (PDKV Yello Gold)	2-3 July 2022	Last week of September 2022	15
4	Sesame	0.50	AKT-64	26 June 2022	Last Week of September 2022	02
8	Crop cafeteria	0.50	Millet & Cotton Crop	26 June 2022	Last week of September 2022	--



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Sponsored Project

Action Plan 2022-23

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	"IRM: Dissemination of Pink bollworm management strategies"	Training programme	--	6,20,000	Dr. S. U. Nemade Dr. P. N. Magar
2	PROJECT BANDHAN-2.0	Pink Bollworm Management Technology	--	--	Dr. S. U. Nemade Dr. P. N. Magar

Details of activities planned in DFI villages

Name of DFI village selected	Total No. of families in the village	Interventions planned during 2021	No. of families to be covered under the intervention	Present annual income of the family (Rs/annum)	Expected annual income of the family after intervention (Rs/annum)
Shiroli	766	OFT, FLD & Training	15	95,000/-	1,10,000/-
Murali	479	OFT, FLD & Training	40	1,05,000/-	1,25,000/-
Papad	773	Organic Farming	20	83,000/-	1,03,000/-
Udarani	154	Subsidiary business	20	1,09,000/-	1,29,000/-
Rampur	151	OFT, FLD & Training	20	1,16,000/-	1,30,000/-



No. of new FPOs / FPCs to be formed (No. members)	No. of already formed FPOs / FPCs if any with major commodities (No. of members)	No. of farmers	Type of support to be provided by KVK
01 (160)	Pulses processing (Dal mill)	530	Technical
	Organic Manure & Selling of Vermiculture	450	Technical
	Organic fertilizer& Selling of earth worms	200	Technical



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
Madani	01	00	Integrated Crop Management Livestock , Fish farming, Sericulture & IPM technology
Shivani	01	00	Farm Mechanization , Organic farming, Vermi compost, Dairy unit & Integrated Crop Management



Details of collaborative applied research projects planned if any

Name of the research project	Funding agency	Collaborating organizations	Year of commencement
Biofertilizer production unit	ATMA	ATMA	2022-23
Bio mass Pallet Making	ICICI, Foundation, ATARI, Pune	ICICI, Foundation,	2022-23
Construction of 1 Farm pond	DSAO Yavatmal	DSAO Yavatmal	2022-23
Roof of water harvesting	ICICI Foundation	ICICI, Foundation,	2022-23
Kisan Drone Project	GOI, (ATARI Pune)	ATARI Pune	2022-23



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THANK YOU!

