ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2018-19

(1st April 2018 to 31st March 2019)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
MGM KVK, At. Gandheli, Post Aadgaon, Tq. Dist. Aurangabad 431007	Office	FAX	mgmkvk@gmail.com	www.mgmkvk.com
	9404997772	-		

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Website address
	Office	FAX		
MGM Trust, MGM Campus, N6, CIDCO, Aurangabad	02406601100	02402484445	mgmadmn@themgmgroup.com,	-

1.3. Name of the Senior Scientist and Head with phone & mobile no.

Name	Telephone / Contact		
	Office	Mobile	Email
Mr. Sukase K.A.	9404997772	7972914015s	sukasekaka@gmail.com

1.4. Year of sanction: August 2011

1.5. Staff Position (as on March 31, 2018)

				If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Current Pay Band	Current Grade Pay	Date of joining	
1.	Senior Scientist and Head	**Vacant**					
2.	Subject Matter Specialist	Mr. Sukase K.A.	Agronomy	15600-39000-GP5400	21000	16/03/13	Permanent
3.	Subject Matter Specialist	Mr. Chavan T.B.	Plant Protection	15600-39000-GP5400	21000	13/02/13	Permanent
4.	Subject Matter Specialist	Mrs. Deshmukh V. D.	Home Science	15600-39000-GP5400	21000	16/02/13	Permanent
5.	Subject Matter Specialist	**Vacant**	Horticulture				Permanent
6.	Subject Matter Specialist	**Vacant**	Animal Science				Permanent
7.	Subject Matter Specialist	Mr. Wagh S.S.	Soil Science	15600-39000	21000	13/02/17	Permanent

8.	Programme Assistant	Mr. Patil D. P.	-	9300 – 34800-GP4200	13500	16/02/13	Permanent
9.	Computer Programmer	Mr. Kadam A.D.	-	9300 – 34800-GP4200	13500	01/04/17	Permanent
10.	Farm Manager	Mr. Bhosle B. R.	-	9300 – 34800-GP4200	13500	14/02/13	Permanent
11.	Accountant/Superintendent	Mr. Kadam V. B	-	9300 – 34800-GP4300	17140	28/02/13	Permanent
12.	Stenographer	**Vacant**					
13.	Driver 1	Mr. Rajegore S. B.	-	5200-20200-GP2000	7200	23/12/11	Permanent
14.	Driver 2	**Vacant**					
15.	Supporting staff 1	Mr. Kadam V.B.	-	5200-20200-GP1800	7000	01/03/12	Permanent
16.	Supporting staff 2	Mr. Labade G..D.	-	5200-20200-GP1800	7000	18/12/13	Permanent

1.6. Total land with KVK (in ha) :

Sr. No.	Item	Area (ha)
1	Under Buildings	0.90
2.	Under Demonstration Units	2.12
3.	Under Crops	8.00
4.	Horticulture	2.00
5.	Pond	0.52
6.	Other (forestry)	5.60
7.	Nursery	0.40
8.	Under Roads	1.60
	Total	**21.14**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	15/06/2013	675	5464095	April 2012	-	Completed
2.	Farmers Hostel	ICAR	-	-	2000000		305	
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)	ICAR	2016-17		1434567	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-

8	Farm godown	-	-	-	-	-	-	-
9	ICT lab							
10	Other							
	ATIC centre	ICAR	2016-17		500010			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep	2011	742650	210259	Running
Tractor	2012	75356	5492	Running

C) Equipments& AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Digital Camera	2012	25000	Working
LCD Projector	2012	10000	Working
Office Furniture	2012	99562	Good condition
Photocopier with printer and scanner	2012	99850	Working
P.C., HP Laser jet printer	2012	100000	Working
HP laser jet printer 4 GB pen drive	2012	20000	Working

1.8. Details SAC meeting conducted in the year

Date	Name and Designation of Participants	Salient Recommendations	Action taken
14.06.2018	Dr. Lakhan Sing Director ATARI, Zone VIII, Pune	Prepare success stories and case studies to display in seminar hall.	Prepared success stories
		Display photographs of activities in seminar hall.	Selected photographs for printing
		While presenting KVM activities give list of programme along with number of participants.	Prepared chart as per suggestion
		Focus on nutrient imbalance in Maize.	Conducted OFT on Soil test based nutrient management on Maize.
		Conduct activity for FPO	Conducted CITA Sanwad programme and arrange follow up meeting with FPO. Regularly quarterly meeting is scheduled with FPO.
	Dr. T.S. Mote, DSAO and Mr. A.B. Avhale PD ATMA,	Increase income generation from nursery.	Seedling of Mango, Sweet orange, Kagzi lime is prepared on large scale

	Aurangabad	Submit proposal for stationary soil testing laboratory	Project proposal submitted to Commissioner of Agriculture, Pune
	Dr. P.G. Ingole, DEE VNMKV, Parbhani	Promote use of transplanter	Conducted demonstration on farmer's field.
		Compile the monthly messages	Compiled monthly messages
		Promote the use of PGR in cotton	Due to drought condition there is no excess vegetative growth in Cotton.
		Give economics of OFT on Serimore	Worked out economics of use of Serimore.
	Hon. Vijayanna Borade Trusty, MGM, Aurangabad	Introduce concept of community kitchen garden in villages.	
		Conduct training of youth on scouting of Insect pest for control of Pink bollworm	Conducted training of youth on scouting of Insect pest for control of Pink bollworm
	Dr. S.B. Pawar, ADR, NARP, Aurangabad	Prepare buffer of different IFS model	
		Conduct demo on Oil expeller and value	
		Conduct demonstration on shed net activity.	Demonstrated cultivation of Tomato, Cucumber and Capsicum in shed net.
	Sau. Sunita Nage, Farm women representative	Tree plantation at Vaispur in the premises of Hanuman Temple	Arranged meeting of Villagers and prepared layout but due to drought condition tree plantation postponed
		Conduct awareness programme control of Pink bollworm	Conducted awareness programme control of Pink bollworm management at Vaispur
	Shri Vasantrao Khare, Farmers representative	Prepare literature on use of herbicides	Prepared folder
		Introduce oilseed crops in operational area.	We have tried to introduce Soybean but due to problem of Deer and Boar farmers are not ready to cultivate Soybean. Due to drought condition farmers could not sow oil seed crops in rabi season.

2. DETAILS OF DISTRICT

2.1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	**Cotton**: Cotton grown on light to heavy soil under rainfed situation
2	**Maize**: Grown on medium to heavy soil under rainfed situation.
3	**Red gram**: Grown on light to heavy soil under rainfed situation
4	**Pearlmillet:** Bajara under rainfed situation
5	**Wheat** : Grown on medium to heavy soil under irrigated situation
6	**Rabi Sorghum**: Grown on medium soil under rainfed situation
7	**Sugarcane**: Grown on light to heavy soil under irrigated situation
8	**Sweet orange**: Sweet orange grown on medium soil under irrigated situation
9	**Pomegranate**: Grown on light to medium soil under irrigated situation

2.2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

a) Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1.	Western Maharashtra dry zone	Rainfall ranges from 700-900 mm. Soils are medium black calcareous.
2.	Central Maharashtra plateau zone	Low rainfall , medium to heavy soils non CADA area

b)Topography

S. No.	Agro ecological situation	Characteristics
1.	Scarcity zone	Low rainfall light to medium soils.
2.	Central Maharashtra plateau zone-1	Low rainfall, medium to heavy soils non CADA area.
3.	CMP-II	Assured rainfall medium to heavy soils.
4.	CMP-III	Assured rainfall medium to heavy soils.
5.	CMP-IV	Command area heavy soils.

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
S. No	Soil type	Characteristics	Area in ha
1.	Shallow soils	Depth 22.5 cm particle size 0.02 mm Net drained soils low water holding capacity	46.0 %
2.	Medium black soils	Depth 22.5 to 45 cm. Medium water holding capacity particle size 0.002 mm	19.0 %

3	Deep black soils	Depth 60-90 cm high swelling & shrinkage property poor drainage. High water holding capacity. Particle size 0.002 mm.	35.0 %

2.4. Area, Production and Productivity of major crops cultivated in the district (2018-19)

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Cotton	5065	9923	3.33
2	Maize	493	1720	34.92
3	Pigeonpea	607.25	714.69	11.77
4	Pearl millet	520	579	11.14
5	Greengram	6969	52.84	758
6	Black gram	15.27	10.11	6.62
7	Soybean	293	311	10.63
8	Rabi sorghum	1469	13.01	8.85
9	Wheat	645	1354	21.01
10	Bengal gram	664	732	11.02
11	Linseed	0.02	0.002	1.02
12	Sugarcane	146.44	87.31	60

Source: District agriculture department/Authentic Source

2.5. Weather data (2018-19)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
Month	Rainfall (mm)	Temperature 0 C	Relative Humidity (%)		
		Maximum	Minimum	Maximum	Minimum
January	0.0	29.7	14.2		
February	0.2	32.5	16.3		
March	0.1	36.1	20.2		
April	0.9	39.0	23.7		
May	0.0	39.9	24.6		
June	101.5	34.9	23.0		
July	73.0	30.3	21.8		
August	160.2	29.1	21.1		
September	17.3	30.4	20.9		
October	0.3	32.6	19.7		
November	5.4	30.9	16.4		
December	0.0	29.3	14.0		
Total	**358.9**				

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	**48621**	**18586 Lit/day**	**7 Lit/Cow/day**
Indigenous	**479915**	**83251 Lit/day**	**1.5Lit/Cow/day**
Buffalo	**98849**		

Sheep			
Goats	**354309**		**0.5 Lit/goat/day**
Pigs			
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens			
Desi			
Category		Production (Q.)	Productivity
Fish (Reservoir)			

2.7. Details of Operational area / Villages

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Khultabad	Khultabad	Palaswadi, Thakarwadi	Ginger, Maize, Cotton, Red gram, Vegetables crops	**Cotton:** 1) Imbalance fertilizer application 2) Low plant population 3) Infestation of sucking pest and disease 4) Reddening of cotton **Red gram:** 1. Imbalanced use of fertilizer 2. Lack of knowledge about new high yielding verities 3. negligence in pest management **Maize:** 1.Lack of knowledge of soil test based nutrient management 2. Not following crop rotation **Wheat:** Imbalance use of fertilizers **Rabi** **Bengalgram:** Infestation of disease i.e. wilt **Onion:** Thrips	**Cotton**: INM, Maintenance of plant population, IPM **Redgram:** INM, Varietal evaluation, IPM **Maize:** Soil test based NPK management **Wheat:** Soil test based NPK management, Varietal evaluation. **Bengal gram:** IPDM **Onion:** Seed Production

Paithan	Paithan	Sahtramuli, Bhindon	Cotton, Red gram, Maize, Wheat, Bengal gram and Vegetables crops	**Cotton:** 1) Imbalance fertilizer application 2) Low plant population 3) Infestation of sucking pest and disease 4) Reddening of cotton **Red gram:** 1. Imbalanced use of fertilizer 2. Lack of knowledge about new high yielding verities 3. negligence in pest management **Maize:** 1.Lack of knowledge of soil test based nutrient management 2. Not following crop rotation **Wheat:** Imbalance use of fertilizers **Rabi** **Bengalgram:** Infestation of disease i.e.	**Cotton**: INM, Maintenance of plant population, IPM **Redgram:** INM, Varietal evaluation, IPM **Maize:** Soil test based NPK management **Wheat:** Soil test based NPK management, Varietal evaluation. **Bengal gram:** IPDM

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Cotton	INM, Maintenance of plant population, IPM
Redgram	INM, Varietal evaluation, IPM
Maize	Soil test based NPK management
Wheat	Soil test based NPK management, Varietal evaluation
Rabi Sorghum	Varietal evaluation
Bengalgram	INM, IPDM
Sugarcane	Organic matter decomposition, IPDM
Onion	Seed Production, IPDM
Ginger	IPDM
Sweet Orange	IPDM
Pomegranate	Bahar Management, Nutrient Management, IPDM

Live Stock enterprise	Increase in area under fodder crop and productivity of livestock. Feed cost reduction through exploiting nutrient efficient local resources. Self-employment generation through income generating activity. To increase productivity and to reduce metabolic diseases through proper feeding and balanced diet. Corrective measures for various common ailments in livestock. Better profitability through market driven production.
Health & Nutrition	To improve the knowledge of farm women regarding balanced nutrition
Drudgery & time consuming activity	To demonstrate drudgery reducing technologies for farm and home activities.
Marketing problem of SHG products	To impart improved agricultural technologies to women.
Economic empowerment	To provide Trainings on agri-based entrepreneurship
Health & Nutrition	To improve the knowledge of farm women regarding balanced nutrition

3. TECHNICAL ACHIEVEMENTS

3.1. A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
09	09	90	90	11	09	118	98

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
54	57	1080	1166	70	89	3200	6113

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	-	-	86500

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	-	-	-

3.1. B. Operational areas details during 2018-19

S. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1	Maize	Labor problem for weeding, Crop weed competition reduce yield	90000	Palaswadi	OFT & Training
2	Sorghum	Low productivity of non descript & local varieties Dagdi	20000	Bhindon and Thakarwadi	OFT & Training
3	Cotton	Low yield & adequate knowledge of nutrient application	310000	Palaswadi and Bhindon	OFT & Training
4	Maize	Zn and Fe deficiency and imbalance nutrient application	140000	Palaswadi and Bhindon	OFT & Training
5	Cotton	Infestation of Pink bollworm	350000	Palaswadi and Bhindon	FLD & Training
6	Sericulture	Low yield	100	Pimpalgaon	OFT,FLD & Training
7	Drudgery Reduction	Perceived health hazard of farm women in fertilizer application activity	-	Palaswadi	OFT & Training
8	Post harvest technology	Infestation of grains and pulses in storage techniques	-	Palaswadi	OFT & Training
9	Drudgery Reduction	Commonly observed health problems like backache, pain in neck & joints and fingers etc. while planting seedlings	-	Porgaon	OFT , Training and Demonstration

* Support with problem-cause and interventions diagram

3.2. Technology Assessment

A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	01	-	-	01	-	-	-	-	-	02
Varietal Evaluation	01	-	-		-	-	-	-	-	01
Integrated Pest Management	-	-	-	01	-	-	-	-	-	01
Weed Management	01	-	-		-	-	-	-	-	01
Integrated Farming System	-	-	-	01	-	-	-	-	-	01
Drudgery Reduction	-	-	-	01	-	-	-	-	-	02
Storage Technique	01	-	-		-	-	-	-	-	01
Total	04	-	-	05	-	-	-	-	-	09

A2. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Cotton	To assess the Yield of Cotton by Soil Test Based Nutrient Management with protective irrigation	12	12	4.80
	Maize	To assess the Yield of Maize through Soil Test Based Application of Nutrients	10	10	4.0
Varietal Evaluation	Sorghum	Varietal evaluation in Rabi Sorghum	16	16	6.4
Integrated Pest Management	Cotton	OFT on mass trapping of pink boll worm.	12	12	4.80
Weed Management	Cotton	To assess the performance of Tembotrine 34.4 % SC for control of broadleaf and grassy weeds in Maize	08	08	3.20
Integrated Farming System	Mulberry	Effect of growth hormone (Seri more) on cocoon yield and quality	12	12	4.80
Drudgery Reduction	Maize	Assessment of Fertilizer carrying bag (Sulbha bag) to apply fertilizer	10	10	-
	Vegetable	Assessment of sapling trans-planter and sapling carrier	10	10	-
Storage Technique	Cereals	Introduction of Super Grain Bags to prevent store grain pests during storage	10	10	-
Total			90	90	23.20

B.2. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	-	-	-	-
Total			-	-

C1.Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	**Problem definition**	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	**3**	4	5	6	7	8	9	10	11	12
Cotton	Rain fed	1) Labor problem for weeding 2) Crop weed competition reduce yield	To asses the performance of Tembotrin 34.4 % SC for control of broadleaf and grassy weeds in Maize	08	Post emergence herbicide	Labour cost for weeding Yield (q/ha)	3750 45.5	Post emergengence herbucide is effective for control of grassy and broad leaf weeds in Maize but it require sufficient moisture in the soil	Use of herbicide can save 1weeding	-	-
	Rain fed	1. Low yield 2. Imbalanced nutrient supply 3. Zn deficiency 4. Boron deficiency	To assess the Yield of Cotton by Soil Test Based Nutrient Management with protective irrigation	12	Nutrient Management	Yield B:C Ratio	10.6	With the help soil testing farmers save fertilizers cost of Rs. 990/- and increase yield 8.05 % cost of Rs. 5688. Total additional income of farmers is Rs. 6678/-	cost effective	-	--
Sorghum	Rain fed	Low productivity of non descript & local varieties	Varietal evaluation in Rabi Sorghum	16	Varietal evaluation	Yield B:C Ratio	Parbhani Moti-4.97q/ha PKV Kranti-4.9	Due to shortage of moisture in later stages of crop growth yield is less but improved varieties given more yield as compare to local verities	Parbhani Moti fetches more price in the market due to bold and shiny grains	-	-
Maize	Rain fed	1. Zn deficiency symptoms 2. Fe deficiency symptoms 3. Imbalance nutrient application	To assess the Yield of Maize through Soil Test Based Application of Nutrients	10	Nutrient Management	Yield B:C Ratio	60	With the help soil testing farmers save fertilizers cost of Rs. 684 and increase yield 8.58 % cost of Rs. 4800. Total additional income of farmers is Rs. 5484	cost effective	-	-
Cotton	Irrigated	40 to70% loss in yield in cotton due to PBW	OFT on mass trapping of pink boll worm.	12	Pheromone trap @ 40/ha	Pest incidence in percent (%)	T1- 14 T2- 06	Use of Pheromone traps for mass trapping found effective.	Eco-friendly method of pest management and conserves natural enemies of	-	-

									pests.		
Mulberry	Irrigated	Poor Quality & Low Cocoon Yield	Effect of growth hormone (Seri more) on cocoon yield and quality	12	Use of hormone (Seri more) 2 ampules/100 DFLs	Increased cocoon Yield (%)	T1- 0 T2- 19	Use of growth hormone (Serimore) sowed uniform maturity of cocoons and increase in yield.	Use of growth hormone (Serimore) responsible for uniform maturity of cocoons and also helps in easy harvesting	-	-
Drudgery reducing technology	-	Perceived health hazard of farm women in fertilizer application activity.	Assessment of Fertilizer carrying bag (Sulbha bag) to apply fertilizer	10	Fertilizer carrying bag (Sulbha bag)	Application of fertilizer (Kg/hr)	7 kg in demo and 5.5 kg in check	Demo technology is reduces drudgery by 21.42 % than check	Tested technology is effective than the traditional method. It saves time & increase the output and reduce overall discomfort with the help of belt.	-	-
						Capacity of bag (kg)	7 Kg in demo and 6.5 kg in check	Demo technology is carry more quantity i.e. 7.14% of fertilizer than check		-	-
						Physical work load (Five point scale)	3 point observed in demo and 4 in check	-		-	-
						Overall discomfort (Five point scale)	2 point observed in demo and 3 in check	-			
Drudgery reducing technology	-	Conventional transplanting was manual sapling transplantation which is performed continuously by hand in bending posture. Postural discomfort, heat stress, repetitive strain, time load	Assessment of sapling trans-planter and sapling carrier	10	sapling trans-planter and sapling carrier	1.Time required for transplanter 2.Servival %	By using this transplanter 680 seedling/hr Can be transplant and by traditional method 270 seedling/hr Can be transplant Survival % of transplanter is 96.91% and traditional method is 88.15%	Demo technology is save 8.76% seedlings more than check. Also reduce time of seedling plantation.	Tested technology is very effective. It saves time & increase the output.	-	-
Post harvest technology	-	1.Pest infestation damages in stored	Introduction of Super Grain Bags to prevent store grain pests	10	Super Grain Bags	1.% of Pest infestation in	% of Pest infestation in	Demo technology is 21% more effective	They said that it is very		

		grains in wheat, gram. 2.Fungal infestation due to fluctuation in atmospheric moisture with change in climate 3. Reduce storage life of grains	during storage			grains 2. Increase in shelf life of grain storage	grains by using demo method is 3% and by using traditional method is 24% Increase in shelf life of grain storage by using demo method is 97% and by using traditional method is 76%	than check	useful, time saving and minimizes loss of infestation also save labour of cleaning grains.		

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T1- Two weeding and one hoeing		37.5	Q/ha	14450	1:1.37
T2 - Use of timbotorin @ 286 ml/ha	VNMKV, Parbhani	45.5	Q/ha	23200	1:63
T1- Local variety		3.5	Q/ha	4500	1:1.47
T2- Parbhani Moti	VNMKV, Parbhani	4.97	Q/ha	10180	1:2.04
T3- PKV Kranti	PDKV, Akola	4.9	Q/ha	9900	1:2.02
T1- Application of fertilizers without soil testing and No use of micronutrient (Urea 4 bag + 10:26:26 8 bags)		9.25	Q/ha	15810	1:1.41
T2- 150:75:75 kg NPK + 25 Kg Zinc sulphate + 0.1 % Borax spray at 65 & 80 DAS (Soil test based)	VNMKV, Parbhani	10.06	Q/ha	21498	1:1.58
T1 - Application of fertilizers without soil test based and no use of micronutrient		44	Q/ha	15610	1:1.41
T2- Application of ZnSO4 & FeSO4 with RDF Soil test based	MPKV, Rahuri	48.13	Q/ha	21094	1:1.57
T1- Spraying of insecticide (Farmers Practice) T2- IPM + Installation of Pheromone traps @ 40/ ha	Cotton Res. Station Junagadh, Gujarat	T1- 8.75 T2- 12.5	q/ha	T1- 37875 T2- 58115	T1-1: 4.1 T2- 1:5.4
T1- Farmer's Practice Natural Cocoon formation T2- Spray of Sampurna @ 10ml Ampul/50 DFL	Central Silk Research and Training Institute, Mysore	T1- 0.65 T2- 0.79	q/100DFLS	T1- 14500 T2- 18400	 T1-1: 3.9 T2- 1:4.4
T1: Conventional method T2: Use of Sapling transplanter	VNMKV, Parbhani	-	-	-	-
T1: Use of Gunny bags (Jute bag) T2: Use of Super grain bags	PCI, Mumbai	-	-	-	-
T1 - Traditional method of application of Fertilizer T2 – Use of Sulbha bag	VNMKV, Parbhani	-	-	-	-

C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

OFT: 1

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>To asses the performance of Tembotrine 34.4 % SC for control of broadleaf and grassy weeds in Maize</td></tr>
<tr><td>B</td><td>Problem Definition</td><td>:</td><td>1. Labour problem for weeding
2. Crop weed competition reduce yield</td></tr>
<tr><td>C</td><td>Details of technologies selected for assessment</td><td></td><td>T1- Two weeding and one hoeing
T2- Use of timbotorine @ 286 ml/ha</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>VNMKV, Parbhani</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Weed Management</td></tr>
<tr><td>F</td><td>Performance of the Technology with performance indicators</td><td></td><td>
<table>
<tr><td></td><td>No. of trial</td><td>Yield (Q/ha)</td><td>Net return (Rs./ha)</td><td>B:C ratio</td></tr>
<tr><td>Farmers Practice</td><td>08</td><td>37.5</td><td>14450</td><td>1.37</td></tr>
<tr><td>Demo</td><td>08</td><td>45.5</td><td>23200</td><td>1.63</td></tr>
</table>
</td></tr>
<tr><td>G</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Post emergence herbicide is effective for control of grassy and broad leaf weeds in Maize but it require sufficient moisture in the soil</td></tr>
<tr><td>H</td><td>Final recommendation for micro level situation</td><td></td><td>This is 1st year of this trial.</td></tr>
<tr><td>I</td><td>Constraints identified and feedback for research</td><td></td><td>-</td></tr>
<tr><td>J</td><td>Process of farmers participation and their reaction</td><td></td><td>Group discussion, Timely application of input given.
This herbicide control weeds in Maize which save one weeding</td></tr>
</table>

OFT: 2

<table>
<tr><td></td><td>Title of Technology Assessed</td><td>:</td><td>Varietal evaluation in Rabi Jowar</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>Low productivity of non descript 7& local varities.</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td></td><td>T1- Local and non descript vaiety
T2- Parbhani Moti
T3 - PKV kranti</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>VNMKV, Parbhani</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Varietal evaluation</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td></td><td>
<table>
<tr><td></td><td>No. of trial</td><td>Yield (Q/ha)</td><td>Net return (Rs./ha)</td><td>B:C ratio</td></tr>
<tr><td>Farmers Practice</td><td>16</td><td>3.5</td><td>4500</td><td>1.47</td></tr>
<tr><td>Parbhani Moti</td><td>08</td><td>4.97</td><td>10180</td><td>2.04</td></tr>
<tr><td>PKV kranti</td><td>08</td><td>4.9</td><td>9900</td><td>2.02</td></tr>
</table>
</td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Due to shortage of moisture in later stages of crop growth yield is less but improved varieties given more yield as compare to local verities</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td></td><td>This is 2nd year of trial</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td></td><td></td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td></td><td>Group discussion, Timely application of input given.
This technology is acceptable .</td></tr>
</table>

OFT: 3

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>To assess the Yield of Cotton by Soil Test Based Nutrient Management with protective irrigation</td></tr>
<tr><td>B</td><td>Problem Definition</td><td>:</td><td>1. Low yield 2. Imbalanced nutrient supply
3. Zn deficiency 4. Boron deficiency</td></tr>
<tr><td>C</td><td>Details of technologies selected for assessment</td><td></td><td>T1- Application of fertilizers without soil testing and No use of micronutrient (Urea 4 bag + 10:26:26 8 bags)
T2- 150:75:75 kg NPK + 25 Kg Zinc sulphate + 0.1 % Borax spray at 65 & 80 DAS (Soil test based)</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>VNMKV, Parbhani</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Nutrient Management</td></tr>
<tr><td>F</td><td>Performance of the Technology with performance indicators</td><td></td><td>
<table>
<tr><td></td><td>No. of trial</td><td>Yield (Q/ha)</td><td>Net return (Rs./ha)</td><td>B:C ratio</td></tr>
<tr><td>Farmers Practice</td><td>12</td><td>9.25</td><td>15810</td><td>1:1.41</td></tr>
<tr><td>Demo</td><td>12</td><td>10.06</td><td>21498</td><td>1:1.69</td></tr>
</table>
</td></tr>
<tr><td>G</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>With the help soil testing farmers save fertilizers cost of Rs. 990/- and increase yield 8.05 % cost of Rs. 5688. Total additional income of farmers is Rs. 6678/-</td></tr>
<tr><td>H</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>I</td><td>Constraints identified and feedback for research</td><td></td><td>-</td></tr>
<tr><td>J</td><td>Process of farmers participation and their reaction</td><td></td><td>Group discussion, Timely application of input given.
This technology is acceptable</td></tr>
</table>

OFT: 4

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>To assess the Yield of Maize through Soil Test Based Application of Nutrients</td></tr>
<tr><td>B</td><td>Problem Definition</td><td>:</td><td>1. Zn deficiency symptoms
2. Fe deficiency symptoms
3. Imbalance nutrient application</td></tr>
<tr><td>C</td><td>Details of technologies selected for assessment</td><td></td><td>T1 : Application of fertilizers without soil test based and no use of micronutrient
T2: Application of ZnSO4 & FeSO4 with RDF Soil test based</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>MPKV,Rahuri</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Nutrient Management</td></tr>
<tr><td>F</td><td>Performance of the Technology with performance indicators</td><td></td><td>
<table>
<tr><td></td><td>No. of trial</td><td>Yield (Q/ha)</td><td>Net return (Rs./ha)</td><td>B:C ratio</td></tr>
<tr><td>Farmers Practice</td><td>10</td><td>44</td><td>15610</td><td>1:1.41</td></tr>
<tr><td>Demo</td><td>10</td><td>48.13</td><td>21094</td><td>1:1.57</td></tr>
</table>
</td></tr>
<tr><td>G</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>With the help soil testing farmers save fertilizers cost of Rs. 684 and increase yield 8.58 % cost of Rs. 4800. Total additional income of farmers is Rs. 5484</td></tr>
<tr><td>F</td><td>Process of farmers participation and their reaction</td><td></td><td>This technique is cost effective and helpful for soil health</td></tr>
<tr><td>H</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>I</td><td>Constraints identified and feedback for research</td><td></td><td></td></tr>
<tr><td>J</td><td>Process of farmers participation and their reaction</td><td></td><td>Group discussion, Timely application of input given.
This technology is acceptable .</td></tr>
</table>

OFT: 5

<table>
<tr><td></td><td>Title of Technology Assessed</td><td>:</td><td>Mass trapping of pink boll worm.</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>40 to70% loss in yield in cotton due to PBW</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td></td><td>Installation of Pheromone traps @ 40 per ha</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>Cotton Res. Station Junagadh, Gujarat</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Irrigated and IPM.</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td></td><td><table><tr><th>Treatments</th><th>Yield(q/ha)</th><th>Pest incidence(%)</th></tr><tr><td>T_1-</td><td>8.75</td><td>14</td></tr><tr><td>T_2-</td><td>12.5</td><td>6</td></tr></table></td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Eco-friendly method of pest management and conserves natural enemies of pests.</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td></td><td>-</td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td></td><td>This technology adopted by the number of farmers and implemented on large area.</td></tr>
</table>

OFT: 6

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>Effect of growth hormone (Seri more) on cocoon yield and quality.</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>Poor Quality & Low Cocoon Yield.</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td></td><td>Spray of Sampurna @ 10ml Ampul/50 DFL</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>Central Silk Research and Training Institute, Mysore.</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Irrigate and Use of growth harmone.</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td></td><td><table><tr><th>Treatments</th><th>Yield(q/ha)</th><th>Increase in cocoon yield (%)</th></tr><tr><td>T_1</td><td>0.65</td><td>0</td></tr><tr><td>T_{2-}</td><td>0.79</td><td>19</td></tr></table></td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Use of growth hormone (Serimore) responsible for uniform maturity of cocoons and also helps in easy harvesting .</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td></td><td>-</td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td></td><td>Farmers are using growth hormone for uniform maturity of cocoons.</td></tr>
</table>

OFT: 7

<table>
<tr><td></td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of sapling trans-planter and sapling carrier</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>Conventional transplanting was manual sapling transplantation which is performed continuously by hand in bending posture. Postural discomfort, heat stress, repetitive strain, time load</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td></td><td>Use of sapling trans-planter and sapling carrier</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>VNMKV, Parbhani</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Drudgery reducing technology</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td></td><td><table><tr><th>Name of observations</th><th>Demonstration</th><th>Check</th></tr><tr><td>1.Time required for transplanter</td><td>680 seedling/hr</td><td>270 seedling/hr</td></tr><tr><td>2.Servival %</td><td>96.91</td><td>88.15</td></tr></table></td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Time and labor saving technology</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td></td><td>It should be use for making hole to mulching paper</td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td></td><td>Farmers and farm women accepted this technology and ready to use this technology.</td></tr>
</table>

OFT: 8

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>Introduction of Super Grain Bags to prevent store grain pests during storage</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>1.Pest infestation damages in stored grains in wheat, gram.

2. Fungal infestation due to fluctuation in atmospheric moisture with change in climate
3. Reduce storage life of grains</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td></td><td>Use of Super Grain Bags</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>PCI, Pune</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td></td><td>Preventing Store grain pest</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td></td><td><table><tr><th>Name of observations</th><th>Demonstration</th><th>Check</th></tr><tr><td>1.% of Pest infestation in grains</td><td>3</td><td>24</td></tr><tr><td>2. Increase in shelf life of grain storage</td><td>97%</td><td>76%</td></tr></table></td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Farm women accepted this technology. They said that it is very useful, time saving and minimizes loss of infestation also save labour of cleaning grains.</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td></td><td>-</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td></td><td>-</td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td></td><td>Farm women participated in OFT and accepted this technology.</td></tr>
</table>

OFT: 9

<table>
<tr><td>A</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of Fertilizer carrying bag (Sulbha bag)</td></tr>
<tr><td></td><td>Problem Definition</td><td>:</td><td>Perceived health hazard of farm women in fertilizer application activity.</td></tr>
<tr><td></td><td>Details of technologies selected for assessment</td><td>:</td><td>Fertilizer carrying bag (Sulbha bag)</td></tr>
<tr><td>D</td><td>Source of technology</td><td>:</td><td>VNMKV, Parbhani</td></tr>
<tr><td>E</td><td>Production system and thematic area</td><td>:</td><td>Drudgery reducing technology</td></tr>
<tr><td></td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Name of observations</th><th>Demonstration</th><th>Check</th><th>% difference</th></tr>
<tr><td>Application of fertilizer (Kg/hr)</td><td>7</td><td>5.5</td><td>21.42</td></tr>
<tr><td>Capacity of bag (kg)</td><td>7</td><td>6.5</td><td>7.14</td></tr>
<tr><td>Physical work load (Five point scale)</td><td>3</td><td>4</td><td>-</td></tr>
<tr><td>Overall discomfort (Five point scale)</td><td>2</td><td>3</td><td>-</td></tr>
</table>
</td></tr>
<tr><td></td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>Tested technology is effective than the traditional method. It saves time & increase the output.</td></tr>
<tr><td>G</td><td>Final recommendation for micro level situation</td><td>:</td><td>-</td></tr>
<tr><td>H</td><td>Constraints identified and feedback for research</td><td>:</td><td>-</td></tr>
<tr><td>I</td><td>Process of farmers participation and their reaction</td><td>:</td><td>This technology is accepted by the farmers.</td></tr>
</table>

3.3. FRONTLINE DEMONSTRATION

A. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2018-19 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1.	Red gram	Varietal evolution	Short duration variety BDN-711	Group discussion, Field day	05	75	30

B. Details of FLDs implemented during 2018-19 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstrations			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Pigeonpea	IPDM	IPM	Kharif 2018-19	4.8	4.8		12	12	
2.	Greengram	Cropping system	Cotton + Greengram intercropping	Kharif 2018-19	4.8	4.8		12	12	
3.	Wheat	Nutrient Management	Use Zinc sulphate (St based)	Rabbi-2018-19	10	4.0		10	10	
4.	Onion	Nutrient Management	Use Sulpher (St based)	Rabbi-2018-19	10	4.0		10	10	
5.	Onion	IFS	Seed production	Rabbi-2018-19	12	4.8		12	12	
6	Tomato	INM	StT based application of fertilizer, sedd treatment with bio fertilizer	Rabbi-2018-19	10	4.0		10	10	Due to drought situation

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Pigeonpea	Kharif 2018-19	Rainfed	Medium to heavy	Low to medium	Low	Very high	Cotton, Bengal gram	Last week of June	Last week of December	358.9	
Greengram	Kharif 2018-19	Rainfed	Medium to heavy	Low to medium	Low	Very high	Cotton, Bengal gram	Last week of June	1st fortnight of September	358.9	
Wheat	Rabbi - 2018-19	Irrigated	Medium to heavy	Low to medium	Low	Very high	Maize	1st fortnight of November	Last week of February	358.9	
Onion	Rabbi - 2018-19	Irrigated	Medium to heavy	Low to medium	Low	Very high	Maize	Last week of January	Last week of March	358.9	
Onion	Rabbi - 2018-19	Irrigated	Medium to heavy	Low to medium	Low	Very high	Maize	1st fortnight of January	Last week of	358.9	
Tomato	Rabbi - 2018-19	Irrigated	Medium to heavy	Low to medium	Low	Very high	Maize			358.9	

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Pheromens traps helps for pest monitoring
2	Due to intercropping helps for utilization of row to row space in long duration crop.
3.	Soil testing help for detection of deficiency of major & micronutrients
4.	Soil testing help for detection of deficiency of major , micro and secondary nutrients
5.	Use of flowering crops in seed production of onion helps to attract honey bee

Farmers' reactions on specific technologies

S. No	Feed Back
1	Use of Pheromens traps helps for identification of attack of insect.
2	Due to intercropping farmers get additional income
3.	With the help of soil testing save fertilizer
4	With the help of soil testing save fertilizer and get more yield
5	Due to increase of population of honey bees increase the seed setting observed in Onion seed production.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Media coverage				
4	Training for extension functionaries				

C. Performance of Frontline Demonstrations

Frontline demonstrations on Oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Frontline Demonstration on Pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea	IPDM	IPM	Richa	12	4.8	10.5	7	8.75	6.25	40	11242	43750	32508	1:3.89	10000	31250	21250	I:3.12
Greengram	Cropping Systems	Cotton + Greengram intercropping	Bt cotton + Utkarsh varity of Green gram	12	4.8	9.34	6.64	7.21	6.07	18.78	32250	39655	7405	1.22	31000	33385	2385	1.07

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Wheat	INM	Use Zinc sulphate (ST Based)	10	4.0	25.9	22.7	24.3	21.8	11.47	- -	- -	17564	52140	34576	2.96	18018	47960	29942	2.66
Onion	**INM**	**Use Sulphur (ST based)**	10	**4.0**	**139.3**	**131.5**	**135.4**	**127**	**6.61**	**-**	**-**	**41575**	**108320**	**66745**	**1:2.6**	**41810**	**87500**	**45690**	**1:2.09**
Onion	**IFS**	**Seed production**	12	**4.8**	**15**	**12.5**	**13.75**	**8.75**	**57.14**	**89**	**69**	**30000**	**57750**	**27750**	**1:1.92**	**27000**	**36750**	**9750**	**1:1.36**

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle	-	- -	-	-	-	-	- -	-	-	- -	- -	- -	- -	- -	-	-	-

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demons Ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps	-	- -	-	-	-	-	- -	-	-	- -	- -	- -	- -	- -	-	-	-

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other Enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Sericulture	Cocoon harvester	12	4.8	0.8	0.2	300	02	08	300	24000	23700	1:80	1200	24000	22800	1:20

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Post Harvest Management	Gravity separator	10	Capacity (Kg/hr)	80	19
			Cleaning efficiency - %	7.81	4.7
			Labour requirement – man-hr/qt	2/day	8/day
			Operational cost – Rs./qt	40(for 80 kg)	38(for 19 kg)
Health & Nutrition	Kitchen garden	10	Consumption of vegetable in a month – gram	3750	5000
			Days of consumption of vegetable in a month – Days	15	20
			Monthly expenditure on purchase of vegetables in a month	895	155
Post Harvest Management	Solar dryer	10	Time required for drying		
			Fenugreek leaves	5.3	8
			Spinach	6	7.3
			Coriander leaves	5.3	7
			Drumstick leaves	5.3	7.45
			Onion	9.2	12.3
			Tomato	10	16

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
-	- -	-	-	-	-	- -	-	-	- -	- -	- -	- -	- -	-	-	-

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Demonstration details on crop hybrids

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed crop	-	-	-	-	-	-	-	-	-	-	-	-	-

Note : Remove the Enterprises/crops which have not been shown

D. Performance of Cluster Frontline Demonstrations (CFLD)

CFLD on Oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

CFLD on Pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea	Varietal evalution	Seed of improved varities, Seed treatment of fungicide and biofertilizer, Sulpher, Insecticide for plant protection	BDN-711	32	12.8	4.06	2	3.56	2.13	67.14	7500	16910	9410	2.25	7000	10117	3117	1.44
Chickpea	Varietal evalution	Seed of improved varities, Seed treatment of fungicide and biofertilizer	BDNG-797 (Akash)	60	20	6.5	3.5	5.5	3.75	46.67	11000	22000	11000	2.0	10500	15000	4500	1.42

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production	-	-	-	-	-	-	-	-	-	-
Production of inputs at site	01	19	00	19	00	00	00	19	00	19
Total	**01**	**19**	**00**	**19**	**00**	**00**	**00**	**19**	**00**	**19**
V Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	01	00	19	19	00	00	00	00	19	19
Women empowerment	06	00	179	179	00	00	00	00	179	179
Total	07	00	198	198	00	00	00	00	198	198
VII Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	01	38	00	38	0	0	0	38	00	38
Total	01	38	00	38	0	0	0	38	00	38
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	**9**	**57**	**198**	**255**	**0**	**0**	**0**	**57**	**198**	**255**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	07	156	00	156	00	00	00	156	00	156
Livestock production and management	03	63	00	63	00	00	00	63	00	63
Agro forestry	01	50	00	50	00	00	00	50	00	50
Total	**11**	**269**	**00**	**269**	**00**	**00**	**00**	**269**	**00**	**269**
III Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	04	65	00	65	00	00	00	65	00	65
Production and use of organic inputs	03	41	15	56	00	00	00	41	15	56
Management of Problematic soils	01	13	00	13	00	00	00	13	00	13
Micro nutrient deficiency in crops	01	12	00	12	00	00	00	12	00	12
Soil and Water Testing	03	42	00	42	00	00	00	42	00	42
Total	**12**	**173**	**15**	**188**	**0**	**0**	**0**	**173**	**15**	**188**
V Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	02	00	26	26	00	00	00	00	26	26
Design and development of low/minimum cost diet	01	00	21	21	00	00	00	00	21	21
Value addition	01	00	09	09	00	00	00	00	09	09
Women empowerment	04	00	70	70	00	00	00	00	70	70
Location specific drudgery reduction technologies	1	00	21	21	00	00	00	00	21	21
Total	**9**	**0**	**147**	**147**	**0**	**0**	**0**	**0**	**147**	**147**
VII Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	08	160	00	160	00	00	00	160	00	160
Integrated Disease Management	03	43	00	43	00	00	00	43	00	43
Sericulture	03	62	00	62	00	00	00	62	00	62
Resource conservation	02	42	00	42	00	00	00	42	00	42
Total	**16**	**307**	**0**	**307**	**0**	**0**	**0**	**307**	**0**	**307**
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	**48**	**749**	**162**	**911**	**0**	**0**	**0**	**749**	**162**	**911**

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	07	156	00	156	00	00	00	156	00	156
Livestock production and management	03	63	00	63	00	00	00	63	00	63
Agro forestry	01	50	00	50	00	00	00	50	00	50
Production of inputs at site	01	19	00	19	00	00	00	19	00	19
Total	**12**	**288**	**0**	**288**	**0**	**0**	**0**	**288**	**0**	**288**
III Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	04	65	00	65	00	00	00	65	00	65

Production and use of organic inputs	03	41	15	56	00	00	00	41	15	56
Management of Problematic soils	01	13	00	13	00	00	00	13	00	13
Micro nutrient deficiency in crops	01	12	00	12	00	00	00	12	00	12
Soil and Water Testing	03	42	00	42	00	00	00	42	00	42
Others (pl specify)										
Total	**12**	**173**	**15**	**188**	**00**	**00**	**00**	**173**	**15**	**188**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	03	00	45	45	00	00	00	00	45	45
Design and development of low/minimum cost diet	01	00	21	21	00	00	00	00	21	21
Value addition	01	00	09	09	00	00	00	00	09	09
Women empowerment	09	00	245	245	00	00	00	00	245	245
Location specific drudgery reduction technologies	1	00	21	21	00	00	00	00	21	21
Total	15	0	341	341					341	341
VII Plant Protection										
Integrated Pest Management	09	198	-	198	-	-	-	198	-	198
Integrated Disease Management	03	43	-	43	-	-	-	43	-	43
Sericulture	03	62	-	62	-	-	-	62	-	62
Resource Conservation	02	42	-	42	-	-	-	42	-	42
Total	17	345		345				345		345
GRAND TOTAL	**57**	**806**	**360**	**1166**	**0**	**0**	**0**	**806**	**360**	**1166**

Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Sericulture	01	20	00	20	00	00	00	20	00	20
Capacity building and group dynamics	01	48	00	48	00	00	00	48	00	48
TOTAL	02	68	00	68	00	00	00	68	00	68

Training for Rural Youths including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
TOTAL										

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Capacity building and group dynamics	01	48	00	48	00	00	00	48	00	48
TOTAL	01	48	00	48	00	00	00	48	00	48

Training programmes for Extension Personnel including sponsored training (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Household food security	**01**	**00**	**19**	**19**	**00**	**00**	**00**	**00**	**19**	**19**
TOTAL	**01**	**00**	**19**	**19**	**00**	**00**	**00**	**00**	**19**	**19**

Training programmes for Extension Personnel including sponsored training (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-

Training programmes for Extension Personnel including sponsored training – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Household food security	**01**	**00**	**19**	**19**	**00**	**00**	**00**	**00**	**19**	**19**
TOTAL	**01**	**00**	**19**	**19**	**00**	**00**	**00**	**00**	**19**	**19**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	-	-	-	-	-	-	-	-	-	-
Crop production and management	-	-	-	-	-	-	-	-	-	-
Total										
GRAND TOTAL										

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	-	-	-	-	-	-	-	-	-	-

Details of trainings organized under ASCI

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production	01	18	01	19	00	00	00	18	01	19
Sericulture	01	20	00	20	00	00	00	20	00	20
TOTAL	02	38	01	39	00	00	00	38	01	39

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	111	25172363	-	25172363
Diagnostic visits	03	63	-	63
Field Day	02	61	-	61
Group discussions	05	113	-	113
Kisan Mela	03	240	25	265
Exhibition	03	2508	78	2430
Scientists' visit to farmers field	36	359	-	359
Farmers' seminar/workshop	01	231	-	231
Method Demonstrations	16	279	-	279
Celebration of important days	3	191	37	228
Swacha Bharat Abhiyan	2	725	31	756
Nutritional Week	01	73	-	73
Monthly Farmers Workshop (KVM)	10	434	23	457
Webcasting of Hon PM	04	288	37	325
Total	**200**	**25178401**	**231**	**25178415**

Details of other extension programmes

Particulars	Number
Extension Literature	04
Newspaper coverage	57
Total	**61**

3.6. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of Seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	-	-	-	-	-	-
Total	-	-	-	-	-	-

Production of Planting Materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial	-	-	-	-	-	-
Vegetable seedlings	Brinjal		Gaurav	4000	4000	3000
	Green chili	Tejapur		4000	4000	3000
	Tomato		Arka Rakshak	4000	4000	2000
	Cucumber		Shinefit	4000	4000	0
	Capsicum		Paledin	4000	4000	0
	Sweet orange	Nucelar		10000	500000	3000
	Mango	Kesar		5000	250000	500
	Lime	K. Lime		2000	40000	1000
	Pomegranate	Super Bhagva, Bhagva		35000	77000	2000
	Guava	Lalit		500	15000	500
	Bouganvilles	Local		7000	70000	-
	Jasmin	Benglore cutting		2000	30000	1000
	Merigold		Namdhari	5000	5000	-
Total				**86500**	**1007000**	**16000**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Others	Vermicompost	1950	29980	Utilized at KVK farm
Total		1950	29980	Utilized at KVK farm

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals	-	-	-	-
Total	-	-	-	-

4. Literature Developed/Published (with full title, author & reference)

A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

B. Literature developed/published

Item	Title	Authors name	Number
Extension literature	Method of Soil Sampling	S.S. Wagh	500
	Green Manuring	S.S. Wagh	500

	Cotton + Green gram	K.A. Sukase, S.S. Wagh	500
	Pearl millet + Pigeeon pea	K.A. Sukase, S.S. Wagh	500
TOTAL			**2000**

C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette) and Video Clippings developed	Title of the programme	Number
-	-	-	-

D. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs: The Success Stories / Case Studies need not be restricted to the reporting period). At this point please give titles of the success stories/ case studies. Detailed case study documents may be given at the end as an Annexure.

The Broad outline for the case study may be Title, Background, Interventions (Process and Technology) and Impact (Horizontal Spread, Economic gains and Employment Generation) etc.

E. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

A district level informal group of progressive and innovative farmers voluntarily come to KVK to hold a meaningful seminar on need based topics on 21st of every month from November 2016. It is a regular event without any discontinuity. Farmers from Aurangabad and adjoining district involve in this seminar to fulfill their technological needs with the support of KVK and expert of reputed scientific institute including SAUs. Total 26 monthly seminars are organized till Feb 2019.

MGM Krishi Vigyan Kendra, Aurangabad-II			
Krishi Vigyan Mandal Programme			
Sr. No	Date	Programme	Participants
16	21/04/2018	Recharging of Well & Tube well	14
17	21/05/2018	Cotton, Pigeon pea & Maize cultivation	12
18	21/06/2018	Doubling farmer income technology	23
19	21/07/2018	Preparing of Bakery products	39
20	21/08/2018	Cotton , Maize Pest and Dieses management	52
21	21/09/2018	Clustered apple cultivation	130
22	21/10/2018	Gram cultivation	28
23	21/11/2018	Water management	24
24	21/12/2018	Fodder management in drought condition	35
25	21/01/2019	Bamboo cultivation	89
26	21/02/2019	Sericulture	38

F. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

5.1. Indicate the specific training need analysis tools/methodology followed for

A. Practicing Farmers

a) PRA of adopted villages
b) Group discussion
c) Data from line department

B. Rural Youth

a) PRA of adopted villages
b) Group discussion
c) Data from line department

C. In-service personnel

a) Data from line department

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

i) PRA
ii) Problem identified from Matrix
iii) Field level observations
iv) Farmer group discussions
v) Others if any

For FLD:

i) New variety/technology
ii) Poor yield at farmers level
iii) Existing cropping system
iv) Others if any

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) – Palaswadi , Tahkarwadi tq- Khultabad, Bhindon tq- Aurangabad, Sahstramuli, Tq- Paithan from 2018-19
ii. No. of farm families selected per village : 20
iii. No. of survey/PRA conducted :1 per village
iv. No. of technologies taken to the adopted villages:20
v. Name of the technologies found suitable by the farmers of the adopted villages: Pigeon pea variety of BDN-711, IPM in Redgram & cotton, INM in Cotton & Maize,
vi. Impact (production, income, employment, area/technological– horizontal/vertical)
vii. Constraints if any in the continued application of these improved technologies:
Due to drought situation in the year 2018-19

5.4 . No. and Name of villages adopted for Doubling Farmers Income. Indicate whether benchmark survey of the villages are done or not.

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
S.A.O. office	For collection of basic data
T.A.O. Office	
Bio Control lab	
Mahabij	
Vasantrao Naik MKV, Parbhani	Technology inventory for preparation of action plan of 2013 - 14
Sericulture	For development of Sericulture and agri preneurship.

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
-	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

If yes, role of KVK in preparation of SREP of the district?

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	-	2	-	-
02	**Research projects**	-	-	-	
03	**Training programmes**	-	-	04	-
04	**Demonstrations**	-	-	40	-
05	**Extension Programmes**	-	-	-	-
	Others (Pl. specify)	Web casting of Inauguration of Kisan Sanman Nidhi Yojana		01	
06	**Publications**				
07	**Other Activities** (Pl.specify)				

D. Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
	-	-	-	-	-

E. Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
	-	-	-	-	-

F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
	-	-	-	-	-

7. Convergence with other agencies and departments: Activities may be specified under DAESI, YCMOU study centres and others

8. Innovator Farmer's Meet

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	Yes
	Brief report in this regard	

ATMA formed 13 Farmers producer organization (FPO) in Aurangabad District other farmers group also egar to form new FPO. To strengthen with the help marketing guidance and to help other farmers group

to form FPO MGM Krishi Vigyan Kendra organizes Inovative farmers meet namely CITA (Center for International Trade in Agriculture) Sanvad on 17 July 2018 in coordination with Yashvantrao Chavan Pratisthan, Mumbai, Divisional office Aurangabad. Representative of FPO and 231 farmers attended this programme.

9. Farmers Field School (FFS)

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
-	-	-	-	-

10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:

Use of Pheromens traps helps for identification of attack of insect.
Due to intercropping farmers get additional income
With the help of soil testing save fertilizer
With the help of soil testing save fertilizer and get more yield
Due to increase of population of honey bees increase the seed setting observed in Onion seed production.

10.2. Technical Feedback from the KVK Scientists (Subject wise) to the research institutions/universities:

Pheromens traps helps for pest monitoring
Due to intercropping helps for utilization of row to row space in long duration crop.
Soil testing help for detection of deficiency of major , micro and secondary nutrients
Use of flowering crops in seed production of onion helps to attract honey bee

11. Technology Week celebration during 2018-19: Yes,

If Yes

Period of observing Technology Week: From 20/09/2018 to 22/09/2018
Total number of farmers visited : 746
Total number of agencies involved : 08
Number of demonstrations visited by the farmers within KVK campus:05

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Lectures organized	3	746	Bamboo, Custered apple and Sweet Orange
Exhibition	1	746	
Farm Visit	3	522	Fruit crop, fodder crop, vegetable crop
Supply of Literature (No.)	1	746	
Total number of farmers visited the technology week	3	746	

12. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
-	-	-	-

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	-	-
Total	-	-

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of	No.of participants

		interactions	
Total	-	-	-

D. Animal health camps organized

State	**Number of camps**	**No.of animals**	**No.of farmers**
-	-	-	-
Total	-	-	-

E. Seed distribution in drought hit states

State	**Crops**	**Quantity (qtl)**	**Coverage of area (ha)**	**Number of farmers**
-	-	-	-	-
Total	-	-	-	-

F. Large scale adoption of resource conservation technologies

State	**Crops/cultivars and gist of resource conservation technologies introduced**	**Area (ha)**	**Number of farmers**
-	-	-	-
Total	-	-	-

G. Awareness campaign

State	**Meetings**		**Gosthies**		**Field days**		**Farmers fair**		**Exhibition**		**Film show**	
	No.	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**
Total												

13. IMPACT

A. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	**No. of participants**	**% of adoption**	**Change in income (Rs.)**	
			Before (Rs./Unit)	**After (Rs./Unit)**

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

B. Cases of large scale adoption- full cases may be given at the end as Annexure. (Please furnish detailed information for each case and)

C. Details of impact analysis of KVK activities carried out during the reporting period

14. Kisan Mobile Advisory Services

Month	**No. of SMS sent**	**No. of farmers to which SMS was sent**	**No. of feedback / query on SMS sent**
April 2018	09	882937	
May	04	629367	
June	05	629514	
July	05	305882	
August	12	1871202	
September	04	618623	
October	13	2024296	
November	13	2010658	
December	09	2344009	
January 2019	08	2319265	
February	08	2319403	
March	09	2632769	

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
MGM KVK Aurangabad II	Text only	44	12	9	2	6	26	99
	Total Messages	44	12	9	2	6	26	99
	Total farmers Benefitted	**7826723**	**1966806**	**1419757**	**467892**	**1739457**	**5167290**	18587925

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

A. Performance of demonstration units (other than instructional farm including value added products)

Sl. No.	Demo Unit	Year of Establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	2018-19	-	Kaweri	-	300	65000	82358	-
2	Silage	2018-19			50 (t)		37500	250000	-
3	Vermicompost	2018-19	0.029	-	-	1950	18300	29940	-
4	Kitchen garden	2018-19	0.02	-	-	-	2904	5353.5	-
5	Sericulture	2018-19	4.0	V-1	200 DFL	130 kg	10000	390000	-
6	Azolla	2018-19	-	-	-	9 kg	-	1800	-

B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Sunflower	03/11/18	16/03/19	0.1	PBNS 12	Seed	50	1000	25000	
Dhencha	20.07.18	25/09/18	2	Local	Green Manuring	150 qt.	20000	-	
Spices & Plantation crops									
Floriculture									
Rose	23.06.2015		0.13	Gladiater	Mother block		5000	-	
Rose	22/06/15		0.13	Floribanda	Mother block		5000	-	
Jasmin	24/08/13		0.13	Bengalore Cutting	Mother block			-	
Kakada	11/11/16		0.13	Mukhed local	Mother block			-	
Marry gold	14/07/18	05/10/18	0.13	Calcutta Cutting	Flower	1000Kg	8000	20000	
Tuber Rose	28/06/17	15/02/18	0.20	Single bud	Flower	15000 sticks	10000	35000	
Fruits									
Mango	02.12.2013	After five years	0.40			10,000 seedling	20000	-	
Pomegranate	04.12.14	After two	0.40	Ganesh, Arakta,	Mother block	32000 seedling	26000	-	

		years		Mrudula, Ganesh 137, Bhagawa					
Lime	22.06.15	After five years	0.20	Akola lime	Mother block	1000	5000	-	
Guava	07.08.14	After five years	013	Lalit, Safeda, Sweta	Mother block	1000	5000	-	
Custered apple	16.11.17	After five years	0.10	Bala Nagar	Mother block	-	6000	-	
Sweet orange	29.09.13	After five years	0.40	Nuselar, Sat gudi, Kalol gold	Mother block	10000	27000	-	
Rangpur lime	05.08.15	After five years	0.20	Rangpur Lime	Fruit	50000	12000	-	
Sapota	28.08.13	After five years	0.10	Kali patti	Mother block	-	6000	-	
Anola	01.07.16	After five years	0.10		Mother block	-	5500	-	
Ber	23.06.18	After five years	0.13	Maharun, Umaran, Kadaka, Chiwara, NB1,Viliachi	Mother block	-	5000	-	
Ber	26.06.15	After five years	0.13	Apple ber	Mother block	-	5000	-	
Tamarind, Anola & Fig	26.06.15	After five years	0.13	Pratistha, Doulata bad, N7	Fruit		6000	-	
Vegetables								-	
Kharif – Leafy Vegetable	05/07/18	29.08.17	0.10	Improved	Vegetable	1000 kg	2000	5000	
Turmeric	29/06/18	02/04/19	0.10	Selam	Vegetable	04 qt	8000	24000	
Bitter gourd	07/07/18	04/09/18	0.05	Vidya	Vegetable	440 kg			
Ridge Gourd	07/07/18	12.08.18	0.05	Surekha	Vegetable	450			
Brinjal	07/07/18	17.09.18	0.10	Gourav	Vegetable	1000 kg		-	
Okra	07/07/18	10.08.18	0.10	Sonal	Vegetable	600 kg			
Rabi – Leafy Vegetable									
Sweet corn	27/10/18	11/02/19	0.20	Synjenta	Vegetable	10 qt	3000	15000	
Cabbage	15/08/18	30/09/18	0.1	Phule basvanti	Vegetable	200 kg & 500	2000 &	10000 &	

						kg	2000	3000	
Vegetables (05 types)	05/10/18	05/11/18	0.20	East - West Seed	Vegetable	-	-	-	
Shed net 01	13.02.18	01.04.18	01	Capsicum	Vegetable	645	-	-	
Shed net 02	16.02.18	25.04.18	01	Tomato	Vegetable	1967	10000	15000	
Shed net 03	10.03.18	15.04.18	01	Cucumber	Vegetable	1173	5865	5000	
Others (specify)-									
Sustainable goat project	-12.11.14	After 6-12 month	0.40	Ber, Drumstick, Indian fig tree, Aradu, Mulbery, Pimpal, Shevari, Subabhul	Fodder	8 tn	12000	-	-

C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
-	-	-	-	-	-

D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
-	-	-	-	-	-	-	-

E. Utilization of hostel facilities

Accommodation available (No. of beds):

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)

F. Database management

S. No	Database target	Database created

G. Details on Rain Water Harvesting Structure and micro-irrigation system

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	-	-	-	-	-	-	-

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute							
With KVK	SBI	Samarth Nagar, Aurangabad	Samarth Nagar,	MGM Krishi Vigyan Kendra	32029168895	000271	SBIN0007919

B. Utilization of KVK funds during the year 2018-19 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	80.96	60.00	81.21
2	**Traveling allowances**	0.50	0.50	0.50
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.25	2.25	2.23
B	POL, repair of vehicles, tractor and equipments	1.0	1.0	1.44
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.05	0.02	0.02
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	1.10	1.10	2.20
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.80	0.80	0.71
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.60	0.60	0.60
G	Training of extension functionaries	2.30	2.30	2.29
H	Maintenance of buildings	-	-	-
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	-	-	0.03
k	Farm maintenance	2.15	1.33	3.04
TOTAL (A)		**91.71**	**69.90**	**94.27**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND(Host organization)		00	22.67	12.20
GRAND TOTAL (A+B+C)		91.71	92.57	101.47

C. Status of revolving fund (Rs. in lakh) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2016 to March 2017	0.69	3.81	3.16	1.34
April 2017 to March 2018	1.34	7.16	5.59	2.91

April 2018 to March 2019	2.91	11.70	3.45	11.15
	4.94	22.67	12.20	15.40

17. Details of HRD activities attended by KVK staff during year

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
-	-	-	-	-

18. List the other collaborative research/ extension projects and also write brief key achievements of the projects.

- **Pro SOIL**
- **NARI (Please indicate the name of one adopted village and give the activities carried over on nutri sensitive agriculture)**
- **VATICA**
- **Seed Hub**
- **Others (if any)**

19. Please include any other important and relevant information which has not been reflected above (write in detail).

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	58	806	360	1166
Rural youths	02	68	-	68
Extension functionaries	01	-	19	19
Sponsored Training	02	38	01	39
Vocational Training	-	-	-	-
Total	63	912	380	1292

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	-	-	-
Pulses	22	9.6	-
Cereals	10	4.0	-
Vegetables	22	8.8	-
Other crops	12	4.8	-
Total	66	27.2	-
Other enterprises	30	-	-
Total	30	-	-
Grand Total	96	27.2	-

3. Technology Assessment

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Technology Assessed			
Crops	06	70	70
Other	03	30	30
Total	09	100	100

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	89	6113
Other extension activities	61	-
Total	140	6113

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Awar e-ness	Other enterprise	Total
	Text only	44	12	09	02	06	38	111
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	44	12	09	02	06	38	111
	Total farmers Benefitted	**7826723**	**1966806**	**1419757**	**6789535**	**1739457**	**467892**	

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Planting material (No.)	86500	1007000

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	226	-
Water	-	-
Plant	-	-
Total	**226**	**-**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	04
3	Meetings	05
3	Visits of KVK officials	02
4	Extension folder	04

PoCRA activities performed by KVKs in Maharashtra during 2018-19
(KVKs in Vidarbha and Marathwada)

Name of the KVK : **KVK, AURANGABAD - II**

1. Name of the District: Aurangabad
2. No. of blocks covered: 9 (Out of 9)
3. No. of PoCRA villages covered in 1st phase : 77
4. No. of FFS conducted during 2018-19 : 154

Particulars	Kharif	Rabi	Total
No. of FFS	154	16	170
No. of rounds per FFS (Days)	08	06	14
Total No. of FFS Days			

5. No. of facilitators engaged during 2018-19 : 11

6. FFS wise Climate resilient technologies identified in the district

Technology identified		
Cotton + Green gram (Kharif)	Pearl millet + Red gram (Kharif)	Chickpea (Rabi)
1. Climate resilient varieties 2. Seed treatment 3. INM 4. IPM 5. In situ moisture consevation	1. Climate resilient varieties 2. Seed treatment 3. INM 4.In situ moisture consevation	1. Climate resilient varieties 2. Seed treatment 3. INM 4. IPM 5. In situ moisture conservation

7. Financial provisions (As per revised guidelines email dated 11/10/2018) and actual amount received at KVK level.

FFS expenditure for Vulnerable villages other than Saline villages (0.4 ha)						
Sr No	**Activity / Item**	**Unit**	**Cost Norms (Rs)**			
			Financial allocation for 1st year	No. of activities carried out	Total receivable amount (Rs)	Actual amount received at KVK level (Rs)
A.	**Support to SDAO**					
1	Demonstration on Climate Resilient Seed & cultivation technology	Input cost Lump sum	3000	-	-	Nil
2	IPM & INM	Input cost Lump sum	2000	-	-	Nil
3	FFS kit & Stationary	Lump sum	2000	-	-	Nil

4	Refreshment (30 persons & 8 events)	1st yr-Rs. 35 per person, 2nd Yr- Rs 40 per person, 3rd Yr- Rs 45 per person	8400	-	-	Nil
5	Incentive to achiever farmer	Lump sum	2,800	-	-	Nil
6	Crop cutting, Field day & contingency	Lump sum	2,000	-	-	Nil
7	Honorarium to Facilitator for 8 training cum visit days	Rs. 1000 per event	8000	-	-	Nil
8	Travel & communication exp. for Facilitator for 8 training cum visit days	1st yr-Rs. 300 per vist, 2nd Yr- Rs 400 per visit, 3rd Yr- Rs 500 per visit	2400	-	-	Nil
	Sub-total		**30600**	-	-	Nil
B	**Support to Krishi Vigyan Kendra (KVK)/ Technology Provider**					
1	Technical Literature/ Informative material	Lump sum	1000	2	6979	6979
2	Documentation	Lump sum	500	-	-	Nil
3	Technical Support & contingency	Lump sum	2000	-	-	Nil
	Sub-Total		**3500**	-	-	Nil
	Total		**34100**	**2**	**6979**	**6979**

PoCRA activities carried out during 2018-19

S. No.	Activity	No. of activities	No. of man-days used	No. of KVK staff involved other than facilitators	Expenditure if any (Rs)
1	To prepare and publish advertisement for facilitators	01	01	01	10343
2	Selection and appointment of facilitators (Walk-In-Interviews)	01	06	03	-
3	Participation of FFS Coordinator in ToT at RAMETI with facilitators	01	03	01	-
4	Allotment of villages to facilitators	01	01	02	-
5	Field level monitoring visits of KVK head, coordinator and Subject Matter Specialists	04	08	02	-
6	Organizing capacity building trainings of facilitators at KVK level	02	02	03	-
7	Organizing training of PoCRA farmers On / Off campus other than FFSs	-	-	-	-
8	Participation in field days / awareness programmes in PoCRA villages	-	-	-	-
9	Participation in meetings at PMU level	01	02	02	-
10	Participation in district level joint meetings with ATMA /	02	02	02	-

	SDAO / DSAO				
11	Participation in Audio / Video conference at district level	03	03	02	-
12	Participation in HRD trainings organized under PoCRA	02	07	01	-
13	Preparation of FFS schedule / reports / bills, etc	08	15	01	-
14	Preparation of literature as soft / hard copy	02	05	02	-
15	Report preparation and submission of bills	03	01	02	-
16	Any other (Please specify)	-	-	-	-

Status of payment of facilitators

FFS Round (No.)	Bill submitted (Month)	Payment credited in the account of facilitators (Month)	Delay by (No. of months)
Kharif FFS			
Rabi FFS			

8. No. of farmers covered through _____ FFS training days @ 20 farmers attendance on an average = **_____No.**

9. Institutional charges / TA / DA / POL received at KVK level if any : _____ Rs

10. No. of villages proposed in second phase for the year 2019-20 : **194 No.**
11. General observations and comments on each component:

    11.1 Attachment and accessibility of facilitators : Good

    11.2 Involvement and cooperation of host farmers : Good

    11.3 Involvement and cooperation of Agril. Assistants in terms of presence in FFS, making logistic arrangements, etc : Not good

    11.4 Timely availability of critical inputs from SDAO / ATMA : Inputs purchase timely but responsibility of distribution of input given to facilitator. To get inputs facilitator have to travel from his residence to ATMA office, this activity taken time and extra expenditure to facilitator.

    11.5 Controlling system on facilitators and overall coordination at district level: Facilitator controlling was responsibility of KVK & right of payment was at ATMA office. Due to this reason controlling and coordination become difficult.

    11.6 Stability of facilitators and problems thereof : Some facilitator leaved job in mid season at that time ATMA asked to KVK to appoint new facilitator by following procedure

    11.7 Overall impression and feedback of beneficiary farmers about involvement of KVKs in FFS component: Not assessed

12. Any other point not covered above: