

## PROFORMA FOR PREPARATION OF ANNUAL REPORT (April-2016-March-2017)

### 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	114	6500	3080	9580
Rural youths	62	3428	992	4420
Extension functionaries	16	650	312	962
Sponsored Training	1	10	30	40
Vocational Training	1	68	294	362
<b>Total</b>	<b>194</b>	<b>10656</b>	<b>4708</b>	<b>15364</b>

#### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	42	16.8	
Pulses	100	40	
Cereals			
Vegetables			
Other crops			
<b>Total</b>	<b>142</b>	<b>100.8</b>	
Livestock & Fisheries	30		80
Other enterprises			
<b>Total</b>	<b>30</b>		<b>80</b>
<b>Grand Total</b>	<b>172</b>	<b>100.8</b>	<b>80</b>

#### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops			
Livestock	01	30	15
Various enterprises	02	20	20
<b>Total</b>	<b>03</b>	<b>50</b>	<b>35</b>
<b>Technology Refined</b>			
Crops			
Livestock			
Various enterprises			
<b>Total</b>			
<b>Grand Total</b>	<b>03</b>	<b>50</b>	<b>35</b>

#### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities		
Other extension activities		
<b>Total</b>		

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only							
	Voice only							
	Voice & Text both							
	<b>Total Messages</b>							
	<b>Total farmers Benefitted</b>							

## 6. Seed &amp; Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)		
Planting material (No.)	Hybrid Napier stem cuttings - 8000	8000
Bio-Products (kg)		
Livestock Production (No.)		
Fishery production (No.)		

## 7. Soil, water &amp; plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil		
Water		
Plant		
<b>Total</b>		

## 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	
2	Conferences	
3	Meetings	03
4	Trainings for KVK officials	
5	Visits of KVK officials	01
6	Book published	
7	Training Manual	
8	Book chapters	
9	Research papers	
10	Lead papers	
11	Seminar papers	
12	Extension folder	
13	Proceedings	
14	Award & recognition	
15	On going research projects	

## DETAIL REPORT OF APR-2016-17

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra Central Institute for Cotton Research (ICAR), Post Bag No. 2, Shankar Nagar P.O., Nagpur – 440010 (Maharashtra)	Office 07103– 275549/ 275617/ 275536	FAX 07103– 275529	<a href="mailto:kvkciernagpur@gmail.com">kvkciernagpur@gmail.com</a> , <a href="http://www.kvknagpur.org.in">www.kvknagpur.org.in</a>

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

Address	Telephone		E mail
	Office	FAX	
Central Institute for Cotton Research (ICAR), Post Bag No. 2, Shankar Nagar P. O., Nagpur – 440 010 (Maharashtra)	07103 – 275549 / 275617 / 275536	07103 – 275529	<a href="mailto:cicrngp@rediffmail.com">cicrngp@rediffmail.com</a> <a href="http://www.cicr.org.in/">http://www.cicr.org.in/</a>

#### 1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. R.B. Singandhupe	Anjali Apartment, Plot No. 180 (F2), Trimurtinagar, Nagpur- 440022	09421660322	<a href="mailto:rbsingandhupe@gmail.com">rbsingandhupe@gmail.com</a>

#### 1.4. Year of sanction:

#### 1.5. Staff Position (as on 30<sup>th</sup> March, 2017)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discip-line	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Perman-ent /Temp-orary	Category (SC/ST/OBC/Others)
1	Programme Coordinator	Dr.R.B. Singandhupe	Pr. Sci & I/c KVK	Agronomy	37,400-.67,000 GP-10000	70490	01.06.2011	Permanent	OBC
2	Subject Matter Specialist	Vacant	SMS	Horticulture	-	-	-	-	-
3	Subject Matter Specialist	Vacant	-	Agronomy	-	-	-	-	-
4	Subject Matter Specialist	Dr. S.S Patil	SMS	Extension	15600-39100	105900	30.09.1996	- do -	OBC

					GP-5400				
5	Subject Matter Specialist	Dr.U.V. Galkate	SMS	Veterinary Science	15600-39100 GP-5400	119300	10.01.1997	- do -	ST
6	Subject Matter Specialist	Vacant	SMS	Plant protection	-	-	-	-	-
7	Subject Matter Specialist	Smt.S.N. Chauhan	SMS	Home Science	15600-39100 GP-5400	102800	07.01.1997	- do -	Other
8	Programme Assistant	Mr.Harish Kumbhalkar	Programme Assistant	Soil Science	9300-34800 GP-4200	44900	01.10.2010	- do -	OBC <b>On Study leave</b>
9	Computer Programmer	Smt. Vandana Satish	Programme Assistant (Computer)	Computer Science	9300-34800 GP-4200	46200	29.01.2011	- do -	Other
10	Farm Manager	Dr.P.B. Deulkar	Farm Manager	Veterinary Science	9300-34800 GP-4600	71100	07.04.1997	- do -	SC
11	Accountant / Superintendent	Ejaj Ahmed	Office Suptd.	-	9300-34800 GP-4600	52000	07.12.2010	- do -	Others
12	Stenographer	Vacant	Stenographer	-	-	-	-	-	-
13	Driver	A. K. Sherkar	T-1 (Driver)	-	5200-20200 GP-2000	44900	10.02.1998	- do -	ST
14	Driver	Naresh Raut	T-1 (Driver)	-	5200-20200 GP-2000	27900	29.12.2010	- do -	OBC
15	Supporting staff	Vacant	-	-	-	-	-	-	-
16	Supporting staff	Vacant	-	-	-	-	-	-	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	511.88 sq. m.
2.	Under Demonstration Units	6.60 ha
3.	Under Crops	7.40 ha
4.	Orchard/Agro-forestry	6.00 ha
5.	Others (specify)	-
		20 ha

## 1.7. Infrastructural Development:

## A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	19/03/1999	511.88	-	-	-	Completed
2.	Farmers Hostel	KVK	-	-	-	2012	-	Completed
3.	Staff Quarters	-	-	-	-	-	-	-
4.	Demonstration Units	KVK	Dec 1998	16 X 6 m	590000	-	-	Completed
		CICR	Feb 2006	25 X 30 ft.	40000	-	-	Completed
5	Fencing	CICR	July 1998	18 X 44 m	-	-	-	Completed
6	Rain Water harvesting system	KVK	July 1996	2 acres	10000	-	-	Completed
7	Threshing floor	CICR	July 1999	1.5 acres	7000	-	-	Completed
8	Farm godown	CICR	July 1999	Field Border	-	-	-	Completed
		CICR	Jan 2014	Field No. E-59 & E-60	180000	-	-	Completed
		CICR	June 2001	60mX45mX 3.5 m Capacity- 95 lakh litres	3.5 lakhs	-	-	Completed
		-	-	-	-	-	-	-
		CICR	1996	10'X15' each	80000	-	-	Completed

## B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
TATA Sumo Victa	March 2007	4.30 lakh	240312 km	Running condition
Tractor – Mahindra (Arjun)	March 2009	4.86 lakh	2640km	Running condition

## C) Equipments &amp; AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
1. pH meter	2007	12094	Working condition
2. Chemical balance	2007	8437	Working condition
3. Physical balance	2007	7312	Working condition
4. Ultra pure water system	2007	180000	Working condition
5. Refrigerator	2007	140800	Working condition
6. Flame photometer	2007	41490	Working condition
7. Lab benches	2008	1,53,000	Working condition
8. Computer table with chair	2008	7,200	Working condition
9. Rotary shaker	2008	30,750	Working condition
10. Hot air oven, Hot plate	2008	34,144	Working condition
11. Fume hood chamber	2008	94,900	Working condition
12. Computer with printer	2008	79,916	Working condition
13. Palvalizer	2008	44,651	Working condition
14. Spectrophotometer	2008	2,93,288	Working condition

15. Online UPS	2009	2,37,543	Working condition
16. LCD Projector	2009	89,026	Working condition
17. Soil testing Mobile Van with all necessary equipments	2013	30,05,831	Working condition

#### 1.8. A). Details SAC meeting\* conducted in the year

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	7/9/2016	<ul style="list-style-type: none"> <li>• Dr. K. R. Kranthi, Director, CICR, Nagpur</li> <li>• Mrs. Sandhya Kranthi, HOD Crop Protection, CICR, Nagpur</li> <li>• Dr. R.B. Singandhupe, Principal Scientist &amp; Programme Coordinator, KVK, CICR, Nagpur</li> <li>• Dr. Chari Appa, Principal Scientist, ZPD, Hyderabad</li> <li>• Dr. Vilas Khrche, Associate Dean, College of Agriculture, Nagpur</li> <li>• Dr. V. S. Tekade, Head, Extension Dvn. College of Agriculture, Nagpur</li> <li>• Mrs. Pranita Kulkarni, Demonstration Officer-II, CFNEU, Nagpur</li> <li>• Sh. Manoj Puri, Asstt. Director, Central IPM Centre, Govt. of India, Nagpur</li> <li>• Sh. Shriram Didel, Asstt., Plant Protection Officer, CIPMC, Nagpur.</li> <li>• Sh. Tejasvi Zhade, Farmers Representative, Nagpur</li> <li>• Sh. Chaitanya Thakre, Farmers Representative, Nagpur</li> <li>• Sh. Sudhir N Dhanvijay, AGM, NABARD, Nagpur</li> <li>• Mrs. Sangita Arajpure, AIR, Nagpur</li> <li>• Miss. J. A. Bhutange, Technical Officer Representative of DSAO, Nagpur</li> <li>• R. W. Rewatkar, Live Stock Development Officer, Representative of DAHO, Z.P., Nagpur</li> <li>• Sh. M. P. Goswami, Asstt. Director, CIPMC, Nagpur</li> <li>• Dr. Vaishali V. Banthiya, Nagpur</li> <li>• Dr. U. V. Galkate, SMS, Vet-Sci, KVK, Nagpur</li> <li>• Dr. S. S. Patil, SMS, Extn. KVK, Nagpur</li> <li>• Smt. Sunita Chauhan, SMS, Home-Sci, KVK, Nagpur</li> <li>• Dr. P.B. Deulkar, KVK, Nagpur</li> <li>• Dr. U. A. Nandankar, KVK, Nagpur</li> <li>• Smt. Vandana Satish, Prg. Asstt. Comuter, KVK, Nagpur</li> </ul>	<ol style="list-style-type: none"> <li>1. Director, CICR, Nagpur Stressed on implementation of IFS module on KVK farm</li> <li>2. Inclusion of ICT in Action Plan programme of KVK for the benefit of farmers.</li> <li>3. Promote IPM technologies while cultivation of crops for safe ecosystem.</li> <li>4. Animal treatment camp may be arranged specially for infertility treatment of cows &amp; buffaloes.</li> <li>5. Demonstration of improved varieties of vegetables to be conducted on instructional farm.</li> <li>6. Impact studies of KVK activities may be carried out.</li> <li>7. Advisory services to the stakeholders may be provided through print and electronic media</li> <li>8. More FLD's on livestock should be conducted</li> </ol>	<ol style="list-style-type: none"> <li>1. Under IFS development programme KVK has developed farm pond, fodder cafeteria, nutrition garden, goat unit and vermicompost unit at KVK instructional farm</li> <li>2. KVK, Nagpur is providing (KMAS) Kisan Mobile Advisory Services to the farmers of Nagpur district. As well as weather based agro-advisory is being uploaded on KVK's site every week. Apart from that E-Kapas facility is also provided to the farming community and farmers were advised on insect pest &amp; disease management of crops by through Whats app messages.</li> <li>3. KVK is promoting IPM technologies in cotton, pigeonpea, chickpea, soybean and other crops.</li> <li>4. KVK has conducted two livestock treatment cum infertility camp in adopted villages of Hingna block.</li> <li>5. Demonstration of improved varieties of vegetables which are suitable of Nagpur district were conducted on instructional farm of KVK.</li> <li>6. Impact study on FLD – Oilseed &amp; pulses was conducted.</li> <li>7. Advisory services provided on cotton, soybean, horticultural crops and livestock through leading newspapers like Agrowon, Adhunik Kisan, Krushokonnati etc, in addition to this four radio talks on various agriculture and allied topics.</li> <li>8. KVK has conducted FLD's on</li> </ol>

				detection on mastitis, urea treatment of straws, chelated mineral and area specific mineral mixtures were conducted.
2.	15/3/2017	<ul style="list-style-type: none"> <li>• Dr. K. R. Kranthi, Director, CICR, Nagpur</li> <li>• Dr. R.B. Singandhupe, Principal Scientist &amp; Programme Coordinator, KVK, CICR, Nagpur</li> <li>• Dr. Chari Appa, Principal Scientist, ZPD, Hyderabad</li> <li>• Dr. N. D. Parlawar, Associate Dean, College of Agriculture, Nagpur</li> <li>• Sh. Tejasvi Zhade, Farmers Representative, Nagpur</li> <li>• Sh. Kishor Koradkar, Farmers Representative, Nagpur</li> <li>• Dr. Avinash Jumde, Live Stock Development Officer, Representative of DAHO, Z.P., Nagpur</li> <li>• Dr. Vaishali Bantiya, Asst. Prof. Nagpur Veterinary College, Nagpur</li> <li>• Dr. U. V. Galkate, SMS, Vet-Sci, KVK, Nagpur</li> <li>• Dr. S. S. Patil, SMS, Extn. KVK, Nagpur</li> <li>• Smt. Sunita Chauhan, SMS, Home-Sci, KVK, Nagpur</li> <li>• Dr. P.B. Deulkar, KVK, Nagpur</li> <li>• Dr. U. A. Nandankar, KVK, Nagpur</li> <li>• Smt. Vandana Satish, Prg. Asstt. Comuter, KVK, Nagpur</li> </ul>	<ol style="list-style-type: none"> <li>1. Skill oriented activities to be undertaken by KVK.</li> <li>2. Varietal demonstration of oilseed and pulses should be conducted at KVK instructional farm.</li> <li>3. Varieties of pigeonpea and chickpea developed by Dr. PDKV, Akola may be popularised through FLD among farmers of Nagpur district.</li> <li>4. Pomogranate saplings should be developed and sold to the farmers</li> <li>5. Animal treatment camp may be arrange</li> </ol>	<ol style="list-style-type: none"> <li>1. Skill oriented activities like vegetable processing, polyhouse and greenhouse technology, goat farming, dairy farming, back yard poultry, on spot soil testing, vermicomposting etc. were taken up by KVK.</li> <li>2. Varietal demonstrations of oilseed (soybean) and pulses (pigeonpea, green gram, black gram) will be taken at KVK instructional farm in coming kharif season.</li> <li>3. In coming kharif season KVK will conduct 50 Cluster Front Line demonstrations of pigeonpea PKV-Tara and in rabi season 50 Cluster Front Line demonstrations of Chickpea variety JAKI-9218 in Nagpur district.</li> <li>4. KVK has developed 13000 disease free pomegranate saplings and will be make ready to sale to farmers in coming kharif season.</li> <li>5. Conducted two animal treatment camps</li> </ol>

\* Attach a copy of SAC proceedings along with list of participants

## 2. DETAILS OF DISTRICT (2016-17)

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

S. No	Farming system/enterprise
1	Agri – Horti – Livestock farming system

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

S. No	Agro-climatic Zone	Characteristics
1	AESR-6.3 - Hot moist, semi-arid eco-sub region	Eastern Maharashtra Plateau. Hot moist, semi-arid eco - sub region with medium and deep clayey black soils (shallow, loamy to clayey black soils as inclusions), medium to high AWC and LGP of 120 to 150 days

### 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Very shallow	Low in N, P, organic matter & rich in K	2.05 lakhs
2	Shallow	Low in N, P, organic matter & rich in K	0.64 lakhs
3	Medium deep	Medium in N & P, low in OC & rich in K	0.96 lakhs
4	Very deep	Medium in N & P, low in OC & rich in K, high clay content	2.80 lakhs
		<b>Total</b>	<b>6.45 lakhs</b>

### 2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Kharif Jowar	4900	4300	869
2	Rabi Jowar	1200	500	413
3	Rice	92800	133900	1443
4	Tur	51500	23300	452
5	Gram	66000	45300	687
6	Cotton	196900	53000	269
7	Soybean	129400	48300	373
8	Wheat	81300	103100	824
9	Groundnut (K)	2200	2000	923

## 2.5. Weather data

Date & Month	Met. week	Rainfall (mm)	No. of rainy days	Temperature (°c)		R.H. (%)	
				Max.	Min.	Mor.	Even.
3-9 June,2016	23	0	0	41.90	28.54	59.86	48.76
10-16	24	0	0	40.70	28.60	56.00	40.30
17-23	25	53	2	36.30	26.60	77.10	53.40
24-30	26	73	5	33.14	25.37	85.67	61.01
<b>Total</b>		<b>126</b>	<b>7</b>				
01-07 July	27	186	6	31.29	24.90	88.80	74.01
08-14	28	123	5	29.10	23.96	81.11	81.44
15-21	29	66	4	30.81	24.69	86.97	80.97
22-28	30	80	7	30.49	23.80	91.70	78.94
29-04 Aug.	31	0	0	28.95	24.25	84.64	80.29
<b>Total</b>		<b>455</b>	<b>22</b>				
05-11 Aug.	32	7	2	29.91	24.30	87.37	75.89
12-18	33	0	0	31.07	24.23	82.47	68.09
19-25	34	0	0	31.70	24.07	86.03	64.90
26-01 Sept.	35	53	3	33.16	24.99	88.50	69.89
<b>Total</b>		<b>60</b>	<b>5</b>				
02-08 Sept.	36	2	1	31.84	23.37	82.26	56.90
09-15	37	15	2	31.56	24.74	80.89	63.91
16-22	38	2	1	32.74	24.49	85.40	63.97
23-29	39	66	4	31.83	24.04	87.70	66.53
<b>Total</b>		<b>85</b>	<b>8</b>				
30-06 Oct	40	19	2	31.34	23.91	90.39	68.96
07-13	41	30	2	33.03	36.56	80.59	56.61
14-20	42	0	0	32.76	16.51	82.91	43.60
21-27	43	0	0	32.24	17.19	77.49	34.87
28-03 Nov	44	0	0	30.86	15.97	74.93	37.77
<b>Total</b>		<b>49</b>	<b>4</b>				
04-10	45	0	0	30.97	13.74	75.76	31.09
11-17	46	0	0	29.73	10.80	82.71	43.79
18-24	47	0	0	30.57	11.13	79.91	35.31
25-01Dec	48	0	0	31.26	10.64	73.23	30.31
<b>Total</b>		<b>0</b>	<b>0</b>				
02-08	49	0	0	29.29	10.69	74.16	35.84
09-15	50	0	0	29.29	10.37	57.97	28.76
16-22	51	0	0	27.89	9.46	63.09	31.51
23-31 Dec 2016	52	0	0	29.42	8.67	59.06	31.46
<b>Total</b>		<b>0</b>	<b>0</b>				
01-07Jan2017	1	0	0	28.74	9.77	80.39	34.91
8-14	2	0	0	26.56	8.63	77.03	40.63
15-21	3	0	0	29.77	10.49	82.04	32.83
22-28	4	0	0	30.80	12.43	80.13	44.40
<b>Total</b>		<b>0</b>	<b>0</b>				
29-04Feb2017	5	0	0	31.24	11.74	66.17	44.49
5-11	6	0	0	32.33	13.00	60.84	34.70
12-18	7	0	0	32.04	14.94	69.84	34.87
19-25	8	0	0	35.23	14.51	53.46	32.30
<b>Total</b>		<b>0</b>	<b>0</b>				
<b>Total Rainfall</b>		<b>775</b>	<b>46</b>				

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

Category	Population	Production	Productivity
<b>Cattle</b>			
<i>Crossbred</i>	88180	2500-3000 l/lactation	-
<i>Indigenous</i>	890755	800-900 l/lactation	-

<b>Buffalo</b>	103965	1500-1800 l/lactation	-
<b>Sheep</b>			
Crossbred	-	-	-
<i>Indigenous</i>	9168	Wool prod.: 200-250 g/shearing	-
<b>Goats</b>	336219	Avg. Milk yield: 750 ml/day Avg. Body wt. at market age: 20 kg/8 months	-
<b>Pigs</b>			
Crossbred	<b>239</b>	Avg. Body wt. at market age: 90-100 kg in 5 to 6 months	-
<i>Indigenous</i>	<b>9258</b>	Avg. Body wt. at market age: 50-70 kg in 5 to 6 months	-
<b>Rabbits</b>	-	-	-
<b>Poultry</b>			
<b>Hens</b>			
<i>Desi</i>	170326	Egg Prod. (Annual): 60 Body wt at market age: 1.5 kg/1.5 yr	-
<i>Improved</i>	14916	Egg Prod. (Annual): 110 Body wt at market age: 1.5 kg/6 month	-
Ducks	-	-	-
Turkey and others	-	Egg Prod. (Annual): 250-280 Body wt at market age: 150-180 g in 5 wks	-

<b>Category</b>	<b>Area</b>	<b>Production</b>	<b>Productivity</b>
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

## 2.7 Details of Adopted Villages (2016-17)

Year of adoption:

Sl.No.	Taluk/mandal	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
	Umred, Bhivapur, Hingna, Parshioni	Umred & Bhivapur	Chargaon, Gumgaon, Shivmadka, Badegaon, Ambazari, Narhar, Saleghat, Waghdhara & Dhanoli	Soybean, Cotton, pigeon pea, wheat, chickpea, jowar, vegetable crops like tomato, chilli, brinjal, okra & tinda, orchard- Nagpur mandarin	<b>Crop Production:</b> <b>Low productivity of cotton, Soybean, Pigeon pea &amp; chick pea under rainfed situation :</b> 1. Imbalance use of nutrients in cotton 2. Water stress in cotton and soybean. 3. Poor germination and low plant population in soybean. 4. Weed menace. 5. Fusarium wilt in pigeon pea and chickpea. 6. Reddening of leaves in cotton. 7. Phosphorous fixation in vertisol .	Plant density optimization, Integrated nutrient management, In situ water conservation and sucking pest management Weed management, IPM and INM Disease management, <i>Helicoverpa</i> management, INM Pests & Disease management , Nursery management and INM Nursery management Insect pests & disease management , Nursery management and INM Drudgery Reduction ,skill development Nutrition management Value Addition, Income generation Activity Skill Development ,Energy resource management Conservation of Agro Waste Supplementation of by-pass fat to avoid negative energy balance in just calved cows Disease management New improved breeds of poultry Nutrition management and deworming Feed management Ecto & endo parasitic management, feed management

					<p><b>Horticulture :</b>  <b>Low yield &amp; poor fruit quality of Nagpur mandarin and low productivity of vegetables &amp; flowers.</b></p> <ol style="list-style-type: none"> <li>1. Non availability of disease free saplings of citrus</li> <li>2. Irregular bearing in Nagpur mandarin.</li> <li>3. Scarcity of water &amp; poor management</li> <li>4. Unawareness of inter cropping cultivation in orchards</li> <li>5. Improper fertilizer schedule.</li> <li>6. Low production in tomato due to damping off disease.</li> <li>7. Low production &amp; poor quality in Okra due to Yellow vein Mosaic virus &amp; fruit borer respectively.</li> <li>8. Poor flower quality in roses due to improper pruning &amp; thrips &amp; mites incidence.</li> <li>9. Low productivity &amp; poor fruit quality in brinjal due to sucking pests &amp; fruit borer.</li> <li>10. Water logging condition in citrus orchard during rainy season.</li> <li>11. Low productivity in chilly due to sucking pest incidence.</li> </ol>	
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					<p><b>Plant Protection :</b>  <b>Low productivity &amp; poor quality in rainfed cotton, pigeonpea, soybean, vegetables, chickpea and citrus</b></p> <ol style="list-style-type: none"> <li>1. Incidence of sucking pests and bollworms in cotton.</li> <li>2. <i>Fusarium</i> wilt in chickpea and pigeonpea.</li> <li>3. Incidence of <i>Helicoverpa armigera</i> in pigeonpea &amp; chickpea</li> <li>4. Incidence of girdle beetle, semiloopers, stemborer and hairy caterpillars in soybean</li> <li>5. Incidence of <i>Phytophthora</i>, Thrips, mites, , psylla and fruit moth in citrus.  Incidence of shoot and fruit borer in brinjal</li> </ol>	
	Hingna	Nagpur	Gumgaon, Shivmadka, Badegaon, Waghdhara & Dhanoli	Dairy, Goat & back yard poultry as livestock farming	<p><b>Veterinary Science</b></p> <p>Lower productivity, High cost of inputs, reproductive problems viz. infertility, delayed maturity, anoestrus, etc., low body weight gain, Ecto &amp; endoparasitic infestation, low genetic potential and imbalanced nutrition in poultry</p>	Nutrition management, Feed & fodder management, Storage technique, Disease management

Umred, Bhivapur, Kalmeshwar, Nagpur Tahsil	Umred, Bhivapur, Kalmeshwar, Nagpur	Umred, Panchgaon, Shivapur, Selu , Khapri, Panjari		<p><b>Home Science :</b> <b>Lack of technical know - how in different enterprises in agriculture &amp; allied fields, malnutrition in children &amp; women, value addition, drudgery in farmwomen.</b></p> <ol style="list-style-type: none"> <li>1. Practicing conventional methods in weeding, fertilizer application and harvesting of crops.</li> <li>2. Practicing conventional techniques in back yard poultry, goat rearing and milk production.</li> <li>3. Malnutrition in farmwomen &amp; children.</li> <li>4. Lack of awareness about value addition.</li> <li>5. Woman's facing drudgery while weeding and harvesting of crops.</li> <li>6. Unawareness regarding use of non-conventional fuel conservation devices among rural women. Lack of involvement of farmwomen in decision making.</li> </ol>	<ul style="list-style-type: none"> <li>• Promoting technique of processing of protein, iron rich farm and horticultural produces for reducing malnutrition and anemia.</li> <li>• Promoting techniques of handling agricultural &amp; household tools for reducing drudgery problem of rural farm women.</li> <li>• Empowerment of farmwomen.</li> <li>• Imparting knowledge &amp; skill in agriculture and allied enterprises like goat keeping and value addition.</li> <li>• Value addition of farm produces.</li> </ul>
				<p><b>Extension :</b></p> <ol style="list-style-type: none"> <li>1. Lack of knowledge about improved technologies in agriculture and allied fields.</li> <li>2. Lack of knowledge regarding recycling of farm waste.</li> <li>3. Unawareness regarding rainwater harvesting. Lack of marketing knowledge.</li> </ol>	

## 2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Cotton	Plant density optimization, Integrated nutrient management, In situ water conservation and sucking pest management
Soybean	Weed management, IPM and INM
Pigeon pea and chickpea	Disease management, <i>Helicoverpa</i> management, INM
Santra Orchards	Pests & Disease management , Nursery management and INM
Onion	Nursery management
Tomato ,Brinjal and chilly	Insect pests & disease management , Nursery management and INM
Cotton ,Soybean , Rice, Wheat harvesting tool	Drudgery Reduction ,skill development

Anaemic child, Nutrition Garden,	Nutrition management
Soybean, Aonla , Karvand , Rose Petals Processing	Value Addition, Income generation Activity
Use of Non conventional devices	Skill Development ,Energy resource management
NADEP Compost Making	Conservation of Agro Waste
Cow	Nutrition management
	Feed and fodder management
Goat	Disease management
	Integrated farming system
Poultry	Breed evaluation
	Nutrition management

### 3. TECHNICAL ACHIEVEMENTS

#### 3.A. Details of target and achievements of mandatory activities by KVK during 2016-17

OFT (Technology Assessment)				FLD (crop/enterprise/CFLDs)			
1				2			
Number of technologies		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Crop Production							
				60	56.80	150	142
Veterinary Science							
1	1	30	30	80	80	30	30
Home Science							
02	02	20	20	03	03	60	60

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	1	2	25	47	1	1	30	41
Rural youth								
Extn. Functionaries	0	1	0	16				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
			0	8000 stem cuttings	5

### 3.b. TECHNOLOGY ASSESSMENT

#### Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management				
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				

Weed Management				
Resource Conservation Technology	Cotton	Cotton Pallets -An alternative cooking fuel	10	10
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction	Maize, Okra, Cotton	Drudgery reduction of farm women through improved maize Sheller, Okra plucker & cotton harvesting bag	30	30
Storage Technique				
Others (Pl. specify)				
<b>Total</b>				

#### Summary of technologies assessed under **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management	Dairy	Feeding of area specific mineral mixture to lactating cows	30	15
Production and Management				
Others (Pl. specify)				
<b>Total</b>				

#### Summary of technologies assessed under various **enterprises** by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrient management	Adolescent Girls	Assessment of protein rich diet provided under Sabla for reducing protein calorie malnutrition in adolescent girls 11-14 (yrs )	10	10
Resource Conservation Technology	Cotton	Cotton Pallet- An alternative cooking fuel	10	10


### 3.c. TECHNOLOGY ASSESSMENT IN DETAIL

(From technology please give full details under the broad thematic areas such as varietal evaluation, Nutrient management, pest and disease management, weed management, Integrated Crop Management, cropping systems, improve tools and implements, livestock enterprises, gender specific technologies etc)

(The format for preparing the same is furnished below)

1. Thematic area: Feed and fodder management
2. Title: Feeding of area specific mineral mixture (ASMM) to lactating cows of Nagpur district.
3. Scientists involved: Dr. U. V. Galkate
4. Details of farming situation: The 15 farmers selected for this trial were having 1-4 cross bred jersey cows. 2 cows of each farmer were selected for assessing the effect of feeding of ASMM. All the farmers were feeding commercially available mineral mixture in varying quantity to their cows. One cow of each farmer fed with commercial mineral mixture available in local market was observed as farmer's practice and other experimental cow was fed with ASMM daily.
5. Problem definition / description: In a Nagpur district, analysis of soils, plants and blood samples of livestock for estimation of mineral content revealed wide gap between availability and requirement of minerals in livestock. Deficiency of minerals in the diet leads to prolonged inter-calving period, delayed ovulation, low milk yield in cows and late maturity in heifers
6. Technology Assessed:
  - T1 – Feeding of mineral mixture available in local market @ 50 g/cow/day in addition to its daily diet for 100 days
  - T2 - Feeding of area specific mineral mixture (ASMM) @ 50 g/cow/day in addition to its daily diet for 100 days
7. Critical inputs given: Area Specific Mineral Mixture prepared for Nagpur district as per formulation given by MAFSU supplied as critical input @ 50g/cow/day for 100 days
8. Results:
  - Results revealed 5.71% increase in milk yield with achievement of 96.67% conception rate in T2 group as compared to 76.67% T1 group. Inter-calving period reduced by 57 days.

Table : Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Average Milk Yield (l/cow/day)</i>	<i>Net Returns (Rs./cow/lactatio)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
<i>Feeding of commercial mineral mixture @ 50g/cow/day X 100 days</i>	30	8.75	21720	1.54	<i>Given as below</i>
<i>Feeding of commercial mineral mixture @ 50g/cow/day X 100 days</i>		9.25	24315	1.69	

<b>Data on other performance indicator</b>		
	<b>T1</b>	<b>T2</b>
i) Inter calving period (days)	<b>397</b>	<b>340</b>

ii)	Onset of oestrus after parturition (days)	<b>115-120</b>	<b>55-60</b>
iii)	No. of cows conceived	<b>23</b>	<b>29</b>
iv)	Conception rate (%)	<b>76.67</b>	<b>96.67</b>
v)	Incidence of metabolic diseases (%)	<b>6.67</b>	<b>0</b>
vi)	Fat content in milk (%)	<b>4.0</b>	<b>4.5</b>

#### Description of the results:

The results indicated that there was slight improvement in milk production but significant improvement in reproductive performances with no occurrence of metabolic diseases due to inclusion of specific mineral premix in the daily diet of cows under trial.

Constraints faced: Non availability of area specific mineral mixture in the market

9. Feed back of the farmers involved: Increased milk yield as well as number of days in milking of treated cattle. Animals maintained on area specific mineral premix showed heat symptoms within 55-60 days after calving. Technology is easily and highly acceptable among farmers as no extra efforts to be done in addition to their routine dairy management practices.

10. Feed back to the scientist who developed the technology: Technology of feeding area specific mineral mixture to the cows worked very well under the micro farming situation of villages of Nagpur district

#### Home Science

1. Thematic area: Resource Conservation Technology

2. Title: Cotton Pallets -An alternative cooking fuel

3. Scientists involved: Sunita Chauhan

4. Details of farming situation: Burning wood as cooking fuel is expensive, creates pollution, health hazards and drudgery to rural women.

5. Problem definition / discription: Decreasing availability of fuel wood.  
Causing health hazards and drudgery.

6. Technology Assessed: Cotton pallet prepared from cotton stalk / residue used as fuel as an alternative cooking fuel. Burning wood as cooking fuel is expensive, creates pollution, health hazards and drudgery to rural women.

7. Critical inputs given: Cotton Pallet Rs 1500/-

8. Results Food cooked through cotton pallet is cost effective & eco-friendly by 56% & 58% respectively.

Description (N=10)	Traditional method	Cooking with Bio briquettes	% saving over farmers practice
Rice & Dal (g)	250	250	
Quantity of coal required (g)	310	260	19

Cost of coal (Rs)	8.7	3.9	56
Time required for cooking (minute)	29	23	21
Ash recovered (%)	06	2.5	58

Description of the results: (one page) in addition you can use graphs also  
Constraints faced:

9. Feed back of the farmers involved: Cotton pallets are cost effective & eco –friendly. It requires specific designed cooking stove . Increase in outlets for selling pallets.
10. Feed back to the scientist who developed the technology:, Technology of preparation of pallets is adopted by entrepreneurs .

### 3.d. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years

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	Soybean	INM	INM		2	42	16.8
	Pigeonpea	INM	INM+IPM		1	50	20
	Chickpea	INM	INM+IPM		1	50	20
2.	Cotton	Drudgery Reduction	Use of KVK, CICR, Cotton harvesting bag	Method demonstration	35	1200	

\* Thematic areas as given in Table 3.1 (A1 and A2)

b. Details of FLDs implemented during the current year (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	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Soybean	INM	INM	Kharif		20	16.8				High Seed cost
2	Pigeonpea	INM	INM	Kharif		20	20				
3	Chickpea	INM	INM	Rabi		20	20				

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					
Soybean	Kharif	RF	Vertisole	low	low	Medium	cotton	30/6/16	10/10/16		
Pigeonpea	Kharif	RF	Vertisole	low	low	Medium	Medium	30/6/16	6/2/17		
Chickpea	Rabi	Irrigated	Vertisole	low	low	Medium	Soybean	26/11/16	17/3/17	-	-







<b>Sheep</b>																	
<b>Goat</b>	Disease management	Single oral dose of liq. Closantel (15%) @ 1ml/10 kg b. wt.	10	40	Body wt. gain in 2 months (kg) 4.20	3.12	34.62	Incidence of diarrhea (%) 10	45	450	840	390	1.87	446	625	179	1.40

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST







			ated					High	Low	Average			Cost	Return	Return	(R/C)	Cost	Return	Return	(R/C)
Pigeonpea	ATARI	INM+IPM	INM+IPM	PKV-TARA	Maroti	50	20	19.6	11.36	13.37	10.9	22.66	24360	67518	43158	2.77	23490	55045	31555	2.34
Chickpea	ATARI	INM+IPM	INM+IPM	JAKI-9218	Vijay	50	20	25.75	16.75	20.69	15.6	32.62	29575	120002	90423	4.05	26560	90480	63920	3.4
Soybean	ATARI	INM+IPM	INM+IPM	JS-9560	JS-335	42	16.8	24.8	17.5	21.4	16.23	31.85	34625	45444	10819	01:01.3	40125	59920	19795	01:01.5

### 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)			
<b>Cattle</b>																				
<b>Buffalo</b>																				
<b>Dairy</b>																				
<b>Poultry</b>																				
<b>Sheep</b>																				
<b>Goat</b>																				

\* 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 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.)				
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	

\* 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 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)		
Women	Cotton Harvesting Bag	10	10	12	16	25	5.4	4.2	735	945	210							

**FLD on Women Empowerment**

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check





Processing and value addition										
Others (pl specify)										
<b>Total (d)</b>										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (e)</b>										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (f)</b>										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
<b>Total (g)</b>										
<b>GT (a-g)</b>										
<b>III Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers	1	43	0	43			0	43	0	43
Soil and Water Testing										
Others (pl specify)										
<b>Total</b>	<b>1</b>	<b>43</b>	<b>0</b>	<b>43</b>			<b>0</b>	<b>43</b>	<b>0</b>	<b>43</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	2	32	3	35	16	3	19	48	6	54
Poultry Management										
Piggery Management	1	17	1	18	0	0	0	17	1	18
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)	2	68	0	68	32	0	32	100	0	100
<b>Total</b>	<b>5</b>	<b>117</b>	<b>4</b>	<b>121</b>	<b>48</b>	<b>3</b>	<b>51</b>	<b>165</b>	<b>7</b>	<b>172</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and	1	2	4	6	5	17	22	7	21	28



















Entrepreneurial development of farmers/youths	2	38	18	56	19	7	26	57	25	82
WTO and IPR issues										
Others (pl specify)										
<b>Total</b>	<b>9</b>	<b>225</b>	<b>65</b>	<b>290</b>	<b>79</b>	<b>34</b>	<b>113</b>	<b>304</b>	<b>99</b>	<b>403</b>
<b>XI Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
<b>Total</b>										
<b>GRAND TOTAL</b>	<b>54</b>	<b>1132</b>	<b>396</b>	<b>1528</b>	<b>412</b>	<b>344</b>	<b>756</b>	<b>1544</b>	<b>740</b>	<b>2284</b>

### 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
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops	1	14	3	17	6	4	10	20	7	27
Commercial fruit production										
Integrated farming	2	58	19	77	16	9	25	74	28	102
Seed production	2	46	17	63	12	8	20	58	25	83
Production of organic inputs	1	17	8	25	6	5	11	23	13	36
Planting material production	2	44	0	44	16	0	16	60	0	60
Vermi-culture	2	46	5	51	14	10	24	60	15	75
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	3	14	17	13	14	27	16	28	44
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing	2	44	10	54	14	5	19	58	15	73
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl. specify)										
<b>TOTAL</b>	<b>13</b>	<b>272</b>	<b>76</b>	<b>348</b>	<b>97</b>	<b>55</b>	<b>152</b>	<b>369</b>	<b>131</b>	<b>500</b>

**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	1	21	6	27	4	3	7	25	9	34
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production	2	31	16	47	17	10	27	48	26	74
Integrated farming	2	31	16	47	17	10	27	48	26	74
Seed production	1	25	0	25	7	0	7	32	0	32
Production of organic inputs										
Planting material production										
Vermi-culture	2	57	14	71	27	9	36	84	23	107
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	36	0	36	19	0	19	55	0	55
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products	2	14	4	18	9	1	10	23	5	28
Dairying	3	54	6	60	24	2	26	78	8	86
Sheep and goat rearing	4	69	13	82	26	7	33	95	20	115
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
<b>TOTAL</b>	<b>18</b>	<b>338</b>	<b>75</b>	<b>413</b>	<b>150</b>	<b>42</b>	<b>192</b>	<b>488</b>	<b>117</b>	<b>605</b>

**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
Nursery Management of Horticulture crops	1	21	6	27	4	3	7	25	9	34
Training and pruning of orchards										
Protected cultivation of vegetable crops	1	14	3	17	6	4	10	20	7	27







Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
<b>Total</b>										
<b>Post harvest technology and value addition</b>										
Value addition	1	23	124	147	11	23	34	34	147	181
Others (pl. specify)										
<b>Total</b>										
<b>Livestock and fisheries</b>										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
<b>Total</b>										
<b>Income generation activities</b>										
Vermicomposting										
Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
Repair and maintenance of farm machinery and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
<b>Total</b>										
<b>Agricultural Extension</b>										
Capacity building and group dynamics										
Others (pl. specify)										
<b>Total</b>	<b>1</b>	<b>23</b>	<b>124</b>	<b>147</b>	<b>11</b>	<b>23</b>	<b>34</b>	<b>34</b>	<b>147</b>	<b>181</b>
<b>Grand Total</b>	<b>1</b>	<b>23</b>	<b>124</b>	<b>147</b>	<b>11</b>	<b>23</b>	<b>34</b>	<b>34</b>	<b>147</b>	<b>181</b>

## 5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	93	21942	0	21942
Diagnostic visits	55	866	0	866
Field Day	5	643	16	659
Group discussions	12	316	6	322
Kisan Ghosthi	45	1833	0	1833
Film Show	4	186	5	191
Self -help groups	6	136	5	141
Kisan Mela	2	1589	25	1614
Exhibition	4	85265	15248	100513
Scientists' visit to farmers field	55	866	0	866
Plant/animal health camps	4	682	16	698
Farm Science Club	7	124	3	127

Ex-trainees Sammelan	3	82	0	82
Farmers' seminar/workshop	2	115	3	118
Method Demonstrations	11	513	31	544
Celebration of important days	2	854	11	865
Special day celebration				
Exposure visits	3	129	5	134
Others (pl. specify)				
<b>Total</b>	<b>313</b>	<b>116141</b>	<b>15374</b>	<b>131515</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	
Extension Literature	400
News paper coverage	5
Popular articles	2
Radio Talks	6
TV Talks	4
Animal health amps (Number of animals treated)	216
Others (pl. specify)	
<b>Total</b>	<b>633</b>

### Messages sent

#### MOBILE ADVISORY SERVICES THROUGH MKISAN PORTAL

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)

No of registered farmers:

Types of Messages	Type of messages													
	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only														
Voice only														
Voice & Text both														
<b>Total Messages</b>														
<b>Total farmers Benefitted</b>														

#### MOBILE ADVISORY SERVICES THROUGH OTHERS

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)

No of registered farmers:

Types of	Type of messages
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Messages	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only														
Voice only														
Voice & Text both														
<b>Total Messages</b>														
<b>Total farmers Benefitted</b>														

## 6. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Gosthies			
Lectures organised			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Distribution of Literature (No.)			
Distribution of Seed (q)			
Distribution of Planting materials (No.)			
Bio Product distribution (Kg)			
Bio Fertilizers (q)			
Distribution of fingerlings			
Distribution of Livestock specimen (No.)			
Total number of farmers visited the technology week			

## 7. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs (give quantity of seed in quintals only)

Crop	Name of the crop	Name of the variety /hybrid	Quantity of seed produced (q)	Value (Rs)	Seed supplied to farmers		Supplied to other agencies (q)
					Quantity (q)	No of farmers	
Cereals	Wheat	AKAW-3722	52 Kg	780			
		AKW-1071	92 kg	1380			
		AKAW-4627	68 kg	1020			
		AKAW-4210-6	60.5 kg	907.5			
		AKW-381	61 kg	915			
		AKDW-2997-	45 kg	675			



Fruits	Pomegranate	Bhagwa	13000	390000			
Ornamental plants							
Medicinal and Aromatic							
Plantation							
Spices							
Tuber							
Fodder crop saplings							
Forest Species							
Others							
<b>Total</b>			<b>13000</b>	<b>390000</b>			

### Production of Bio-Products

	Name of the bio-product	Quantity Kg	Value (Rs.)	Supplied to farmers		Supplied to other agencies
				kg	No of farmers	kg
<b>Bio Products</b>						
Bio Fertilisers						
Bio-pesticide						
Bio-fungicide						
Bio Agents						

Others						
<b>Total</b>						

#### Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Supplied to farmers		Supplied to other agencies (No)
				No	No of farmers	
<b>Dairy animals</b>						
Cows						
Buffaloes						
Calves						
Others (Pl. specify)						
<b>Poultry</b>						
Broilers						
Layers						
Duals (broiler and layer)						
Japanese Quail						
Turkey						
Emu						
Ducks						
Others (Pl. specify)						
<b>Piggery</b>						
Piglet						
Others (Pl. specify)						
<b>Fisheries</b>						
Indian carp						
Exotic carp						
Others (Pl. specify)						
<b>Total</b>						

## 8. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	3812	10306	72	640416
Water				
Plant				
Manure				
Others (pl. specify)				

<b>Total</b>	<b>3812</b>	<b>10306</b>	<b>72</b>	<b>640416</b>
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## 9. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	Number of members attended
7/9/2016	22
15/3/2017	12

Note: please attach the proceedings of sac meeting along with the list of participants

## 10. PUBLICATIONS

### Publications in journals

S. No	Authors	Year	Title	Journal

### Other publications

S.No	Item	Year	Authors	Title	Publisher
1	Books				
2	Book chapters / manuals				
3	Training manuals				
4	Conference, proceeding papers, popular articles, Bulletins, Short communications				
5	Technical bulletin/ Folders				
6	Reports				
7	others				

### Newsletter/Magazine

Name of News letter/Magazine	Frequency	No. of Copies printed for distribution
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### 3. Training/workshops/seminars etc details attended by KVK staff

Trainings attended in the relevant field of specialization (Mention Title, duration, Institution, Location etc.)

Name of the staff	Title	Duration	Organized by

## 11. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)

## 12. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC

Introduction of alternate crops/varieties

Crops/cultivars	Area (ha)	Extent of damage	Recovery of damage through KVK initiatives if any
Total			

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		

<b>Total</b>		
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## Farmers-scientists interaction on livestock management

<b>Livestock components</b>	<b>Number of interactions</b>	<b>No.of participants</b>
<b>Total</b>		

## Animal health camps organised

<b>Number of camps</b>	<b>No.of animals</b>	<b>No.of farmers</b>
<b>Total</b>		

## Seed distribution in drought hit states

<b>Crops</b>	<b>Quantity (qtl)</b>	<b>Coverage of area (ha)</b>	<b>Number of farmers</b>
<b>Total</b>			

## Large scale adoption of resource conservation technologies

<b>Crops/cultivars and gist of resource conservation technologies introduced</b>	<b>Area (ha)</b>	<b>Number of farmers</b>
<b>Total</b>		

## Awareness campaign

	<b>Meetings</b>		<b>Gosthies</b>		<b>Field days</b>		<b>Farmers fair</b>		<b>Exhibition</b>		<b>Film show</b>	
	<b>No.</b>	<b>No.of farmers</b>	<b>No.</b>	<b>No.of farmers</b>	<b>No.</b>	<b>No.of farmers</b>	<b>No.</b>	<b>No.of farmers</b>	<b>No.</b>	<b>No.of farmers</b>	<b>No.</b>	<b>No.of farmers</b>
			45	1833	5	659	2	1614	4	100513	4	191
<b>Total</b>			<b>45</b>	<b>1833</b>	<b>5</b>	<b>659</b>	<b>2</b>	<b>1614</b>	<b>4</b>	<b>100513</b>	<b>4</b>	<b>191</b>

### 13. Awards/rewards by KVK and staff

Recognitions & Awards/Special attainments and Achievements of Practical Importance			
Recognitions & Awards (Team Award/individual)			
Item of Recognition	Year	Awarding Organization National / International / Professional; Society	Individual/ collaborative
Special Attainments & Achievements of Practical Importance (patents, technologies, varieties, products, concepts, methodologies etc. )			

Category	Title	Year	Individual/ Collaborative	Additional Details/Information

**14. Details of sponsored projects/programmes implemented by KVK**

<b>S.No</b>	<b>Title of the programme / project</b>	<b>Sponsoring agency</b>	<b>Objectives</b>	<b>Duration</b>	<b>Amount (Rs)</b>

**Please attach detailed report of each project/programme separately**

## 15. Success stories

### Template for preparing success stories/case studies

1. **Situation analysis/Problem statement:** A brief statement of the problem, in terms of number/area affected, productivity loss, quality decline, income reduction etc. Supporting statement on climatic situation and natural resources available/unavailable should also be given.
2. **Plan, Implement and Support:** Activities implemented by KVKs to tackle the problem(s) with basket of technologies/alternatives, step by step activities like OFTs, FLDs, extension efforts/strategies, facilitation in the form of critical inputs (quality seeds, planting material, livestock, bio-products etc.) machinery, literature, and technical support in terms of consultancy, advisories, training, exposure visits, farmer and scientist interfaces etc.
3. **Output:** Results achieved among participating farmers, groups in terms of gain in knowledge and skills, productivity in the demonstration field/enterprise, reduction in problem in terms of pests and disease attacks, increased economic benefits, increase in volume of production, processed products quantity and quality etc.
4. **Outcome:** Horizontal spread of problem-solving technology(ies) in the neighboring villages, blocks and districts in terms of area and number of farmers; economic benefits accrued to secondary level beneficiaries, reduction in use of chemical inputs like pesticides, fertilizers, concentrate feed, improvement in quality of produce realized, improvement in the family economic status etc. estimated outcome (in monetary value) of technology.
5. **Impact:** Large scale/macro level (district/state) evidences related to technological benefits (changes in area and cropping system, livestock number, use of farm machinery & tools, changes in production and productivity of the district/state), economic benefits (contribution to district/state GDP, district agricultural economy) social benefits (education of children, status in the society, house construction etc.), environmental benefits (tolerance to temperature, drought/dry spell etc.), institutional development like processing units, market system, storage structures, industries etc.), etc..

Note: Include the following

*Data and illustrations (figures, flow-charts etc.) at each level*

*Action Photos and images as proof of activities (jpeg format in separate file)*

*Secondary data to substantiate the outcome and impact, indicate source of data*

*Write-up: three pages, A4, Times New Roman 12 font, single spacing*

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