

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2021
(January 2021 to December 2021)

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)
Shri Siddhagiri, Krishi Vigyan Kendra, Kaneri, Tal. Karveer, Dist. Kolhapur- 416234	Office	FAX	kvkkolhapur02@gmail.com kvk.kolhapur2@icar.gov.in	https://kvkkolhapur2.icar.gov.in (7034)
	0231-2950401	-		

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

Address	Telephone		E mail	Website address
	Office	FAX		
Shri Kshetra Siddhagiri Mahasansthan, Kaneri Math At post: Kaneri, Taluka: Karveer, Dist: Kolhapur 416234 (Maharashtra)	0231-2671059 0231-2684100	-	siddhagirimath@g mail.com	www.siddhagirimath.org

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Ravindra Singh	0231-2950401	7906314421	ravindrasingh94125@gmail.com

1.4. Date and Year of sanction: 15th March, 2018

1.5. Staff Position (as on December, 2021)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. Ravindra Singh	7906314421	Agricultural Extension	37400-67000	Rs.9000	17-12-2018	--
2.	Subject Matter Specialist	Mr. Pandurang A. Kale	7350844101	Agronomy	15600-39100	Rs.5400	26-12-2018	--
3.	Subject Matter Specialist	Mr. Rajendra S. Waware	9730267038	Soil Science	15600-39100	Rs.5400	01-01-2019	--
4.	Subject Matter Specialist	Ms. Pratibha B. Thombare	9763666814	Home Science	15600-39100	Rs.5400	04-01-2019	--
5.	Subject Matter Specialist	Dr. Chandrakant V. Dhandore	9373548494	Animal Science	15600-39100	Rs.5400	10-01-2019	--
6.	Subject Matter Specialist	Dr. Parag D. Turkhade	9545491147	Plant Protection	15600-39100	Rs.5400	17-01-2019	--
7.	Subject Matter Specialist	Mr. Sunil Kumar	8510900511	Agril. Extension	15600-39100	Rs.5400	21-01-2019	--
8.	Programme Assistant	Mr. Vishvambhar H. Jadhav	9545373455	GPP	9300-34800	Rs.4200	01-11-2019	--
9.	Computer Programmer	Mr. Vitthal C. Muthal	8830302343	Computer Science	9300-34800	Rs.4200	02-11-2019	--
10.	Farm Manager	Mr. Somnath D. Gadade	9975048883	M. Sc.	9300-34800	Rs.4200	25-11-2019	--
11.	Accountant/Superintendent	Mr. Janagarajan Illayaraja	8796411527	M.B.A. (Finance)	9300-34800	Rs.4200	15-11-2019	--
12.	Stenographer	Mr. Vinayak D. Vanjari	8482939077	B.A.	5200-20200	Rs.2400	01-11-2019	--
13.	Driver 1	Mr. Bramhanand J. Khade	9404266497	H.S.C.	5200-20200	Rs.2000	01-11-2019	--
14.	Driver 2	Mr. Omkar R. Patil	9922095658	H.S.C.	5200-20200	Rs.2000	01-11-2019	--
15.	Supporting staff 1	Mr. Rohit N. Naik	9075693410	H.S.C.	5200-20200	Rs.1800	01-11-2019	--
16.	Supporting staff 2	Mr. Shubham H. Shinde	8380945537	H.S.C.	5200-20200	Rs.1800	01-11-2019	--

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	855 (Sq/meter)
2.	Under Demonstration Units	00.40
3.	Under Crops	17.31
4.	Horticulture	06.80
5.	Pond	-
6.	Others if any (Specify)	00.59

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Completion Year	Complete Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Incomplete Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	-	-	-	2019	550	Work In progress
2.	Farmers Hostel	ICAR		-		2018	305	Work In progress
3.	Staff Quarters (6)							
4.	Demonstration Units (2)							
5	Fencing							
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9	ICT lab							
10	Other							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
L.M.V. (Mahindra Bolero-SLE)	2019	793599		Working
Tractor Kubota MAU 4501 (45 H.P.)	2020	626000		Working

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Dell Computer System (07)	2020	245940	Working
Canon Printer (01)	2020	17500	Working
iBall UPS (07)	2020	10382	Working
Dell Laptop (01)	2020	25678	Working
Balram (Farm Implement)	2020	24000	Working

1.8. Details of SAC meeting conducted in the year:

Date	Name and Designation of Participants	Salient Recommendations	Action taken
-	-	-	-

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1	Sugarcane based farming system
2	Paddy/Sugarcane farming system
3	Paddy based farming system
4	Soybean/Jowar/Gram farming system
5	Buffalo-Cattle dairy enterprise
6	Paddy/Wheat/Vegetable farming system

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

a) Soil type

S. No.	Agro-climatic Zone	Characteristics
1	Western Zone	This zone receives heavy rain fall, is covered with laterite soils. It is mainly found in Karveer, Ajara, Bhudargad, talukas. It has the altitude of 600 to 900 meters above sea level. It is having laterite soil drained and shallow having the phospheric and acidic quality. The crops such as vari, nachani, sava, rala etc. are grown in this zone.
2	Central Zone	This zone with more or less assured rainfall is covered with fertile, well-drained, brownish medium black soils of natural reaction. It is found in Karveer, Bhudargad and Ajara talukas. It has attitude of 500 to 600 meters above sea level. In this zone the crops like paddy, jawar, and groundnut are cultivated during kharif season and sugarcane and vegetables are grown where the irrigation water is available.
3	Eastern Zone	The dry eastern zone with precarious rainfall is covered with medium to deep black fertile soils of varying depths. This zone consists of Gandhinglaj, Kagal, Karveer talukas. In this zone the crops like jawar, and groundnut are cultivated on a large scale as well as the crops like paddy, sugarcane and vegetables are grown with the help of irrigation water

b)Topography

S. No.	Agro ecological situation	Characteristics
1	Ghat Zone (Taluka: Chandgad)	Heavy rainfall, Shallow light to medium red, black and laterite hilly soils Crops: Paddy, Finger millet, Sugarcane, Groundnut and Vegetables Rainfall: 5000 mm
2	Sub mountain zone (Taluka: Karveer, Kagal, Gadhinglaj, Ajara, Bhudargad)	Medium to heavy rainfall, shallow black, red soils Crops: Sugarcane, Groundnut, Sorghum, Cashewnut, Vegetables Rainfall: 750-1500 mm

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Laterite soils	Acidic, EC less than 1mmhos/cm, P ^H less than 7.00 Crops: Paddy, Nagli, Mango, Sapota	96006
2	Light red soils	Neutral, E C less than 1 mmhos/cm, P ^H = 7.00 Crops: Sugarcane, Paddy, Groundnut, Vegetables, Flowers, Livestock.	215882
3	Black soils	Alkaline, EC-2mmhos/cm, P ^H more than 7.00 Crops: Sugarcane, Paddy, Groundnut, Vegetables, Flowers, and Livestock.	227232
4	Alluvial soils	Neutral to Alkaline, P ^H : 7.00 to 7.5, E.C. about 1mm, Crops = Sugarcane Maize, Paddy.	167123

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2021)

S. No	Crop	Area (ha)	Production (MT)	Productivity (q./ha)
1.	Kharif Paddy	113800	396000	34.82
2.	Kharif Jowar	6000	9800	16.16
3.	Ragi	21700	36100	16.67
4.	Kharif Maize	3400	13700	40.56
5.	Other Kharif Cereals	1500	700	4.50
6.	Kharif Groundnut	48000	90200	18.78
7.	Soybean	52700	124300	23.61
8.	Green gram	1317	968	7.35
9.	Red gram	1321	498	3.77
10.	Rabi Jowar	15100	32600	21.66
11.	Rabi Maize	7400	28100	37.80
12.	Wheat	4300	9700	22.74
13.	Bengal gram	8900	7500	8.37
14.	Sugarcane	132631	1,24,99,000	940
15.	Mango	2389.10	45530	19.05
16.	Papaya	58.20	1550	26.63
17.	Sapota	279.60	15760	56.36
18.	Cashewnut	3052.10	30170	9.88
19.	Arecanut	6.90	180.4	26.14
20.	Banana	398.50	125800	315.68
21.	Brinjal	745.15	151180.4	202.88
22.	Chilli	1746.35	26530.1	15.19
23.	Capsicum	588	41600	70.74
24.	Tomato	499	83920	168.17
25.	Potato	1126	225230	200.11
26.	Okra	225.30	17620	18.20
27.	Cucumber	157	20640.61	131.46
28.	Onion	297.70	40260.90	135.23
29.	Ridge gourd	269.90	28510	105.63
30.	Cabbage	595.05	114530.50	192.47
31.	Cauliflower	696.55	154610	221.96

32.	Fenugreek	390.90	14880.50	38.06
33.	Coriander	1.00	50.0	50
34.	Ginger	71.00	1860.00	26.19
35.	Turmeric	50	1760	35.20
36.	Garlic	2	100	50
37.	Marigold	113.35	3460.50	30.52
38.	Banana	398.50	125800	315.68
39.	Mango	2389.10	45530	19.05
40.	Cauliflower	696.55	154610	221.96
41.	Tomato	499	83920	168.17
42.	Chilli	1746.35	26530.1	15.19
43.	Brinjal	745.15	151180.4	202.88

Source: District agriculture department.

2.5. Weather data (2021)

Month	Normal Rainfall (mm)	Temperature (° C)		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
Jan-2021	13.74	-	-	-	-
Feb-2021	4.64	-	-	-	-
Mar-2021	2.63	-	-	-	-
April-2021	42.86	-	-	-	-
May-2021	126.40	-	-	-	-
June-2021	399.92	-	-	-	-
July-2021	740.08	-	-	-	-
Aug-2021	141.32	-	-	-	-
Sep-2021	195.27	-	-	-	-
Oct-2021	82.73	-	-	-	-
Nov-2021	51.70	-	-	-	-
Dec-2021	63.69	-	-	-	-
Total		-	-	-	-

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

Category	Population (No.)	Production (Per unit)	Productivity (Per unit)
Cattle			
<i>Crossbred</i>	2,75,113	27,47,216	6.01 ltr/day
<i>Indigenous</i>	72,160	1,08,324	1.6 ltr/day
Buffalo	6,12,998	34,09,240	4.08 ltr/day
Sheep	10,04,130	26,57,920	20 kg/year
Goats	16,25,003	51,94,207	33.48 kg/year
Poultry			
Hens	5,41,230	10,41,530	2.0 kg/bird
<i>Desi</i>	1,19,305	3,18,459	1.5 kg/bird

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Karveer	Kogil budruk	Sugarcane Paddy Soybean Wheat Vegetables Livestock	• Low productivity of sugarcane • Imbalance fertilizer management • Non availability of high yielding varieties of crops • Unaware about soil health management • Crop losses due to pests and diseases incidence. • Lack on farm advisory in vegetables • Lack of marketing structures for crops • Lack of training for starting new enterprises • Improper cattle management • Heavy drudgery work farm women • Malnutrition found in 3-6 year children	• Promotion of INM in sugarcane • Varietal evaluation in sugarcane • Soil health management • Implementation IPM and IDM practices in crops. • Varietal demonstrations in field crops • Hi-tech vegetable production. • Improved practices of cattle management • Use of improved tools and implements for farm activity • Use of balanced nutritional aspects to 3-6 year children • Formation of Farmer producer company for proper marketing of produce • Use of ICT/social media for dissemination of information
Kagal	Shendur	Sugarcane Paddy Soybean Groundnut Jowar Gram Vegetables Livestock	• Low productivity in sugarcane due to improper agronomical practices • Imbalanced fertilizer management in major crops • Low yield due to non-adoption of improved varieties of field crops • Low awareness about bio fertilizers • Crop losses due to pests and disease incidence. • Poor production of vegetables and fruit crops. • Low milk yield in cattle • Heavy drudgery work of farm women • Income generation activities for women • Lack of proper marketing structures • Lack of knowledge about making organic fertilizers • lack of training for starting nursery • Lack of information about new techniques and timely information about crops and weather	• Promotion of Integrated nutrient management • Demonstration on high yielding varieties of agronomical and vegetable crops. • Promotion of soil test based fertilizer management • Promotion of Organic farming • Validation on IPM and IDM technologies. • Awareness about use of bio-agents and bio-pesticide for pest management. • Improved rust resistant/ tolerant varieties of Soybean • Fodder production and nutrition management in cattle. • Use of improved tools implements for farm activity. • Value addition scientific knowledge and skill about value addition of fruits and vegetables • Training Programme on organic input preparation • Capacity building on Hi-tech farming and Nursery raising • Awareness about ICT and Social media tools

Gadhinglaj	Hanmantwadi	Soybean Groundnut Sorghum Chilli Chick pea Sugarcane Vegetables Livestock	• Low productivity of Major agronomical crop under rainfed condition • Imbalanced fertilizer management • Unaware about use of bio fertilizers. • Yield losses due to regular insect pests and diseases. • Incidence of leaf curl and thrips on chili. • Poor vegetable production • Lack of technical knowledge about improved farming tools • Low quality fodder • Lack of information about new schemes • Lack of proper marketing	• Promotion of improved varieties of agronomical crops • Promotion of Integrated Nutrient Management • Promotion of dry land technologies and <i>in situ</i> soil moisture conservation • Validation of IPM practices. • Intensive vegetable production. • Food crop cultivation for food security • Use of improved farm tools and implements for farming • Use of university recommended fodder varieties • Awareness about new marketing strategies, tools and online platforms • Awareness about ICT tools and forming social media/online information groups
Bhudargarh	Bediv (Savatwadi)	Paddy Ragi Sugarcane Cashew nut Livestock	• Low yield of Sugarcane due to non-adoption of improved agronomic practices. • Low productivity of ragi and paddy • Unaware about use of bio fertilizers • Pests and disease incidence in Paddy. • Scarcity of fodder to livestock. • Entrepreneurship development • Low use of ICT tools	• Improved agronomic practices for Sugarcane, Paddy and Ragi production • Promotion of Integrated Nutrient Management • Promotion of Organic farming • Validation of IPM technologies in Paddy and Sugarcane crops. • Fodder production technology. • Scientific knowledge to establish small scale enterprises. • Training and awareness programme for use of ICT
Ajara	Bhadvanwadi	Sugarcane Maize Soybean Paddy Ragi Livestock	• More use of local cultivar declines productivity • Higher cost of production in sugarcane • Low awareness about soil health management • Imbalanced use of chemical fertilizers • Cattle management • Poor nutritional status of women • Rural youth migration • Lack of adoption of hi-tech and nursery techniques • Lack of proper market infrastructure • Lack of proper information on agriculture	• Promotion of new cultivars in major agronomical crops • Integrated nutrient management • Promotion of soil test based fertilizers management • Cattle management practices. • To increase the nutritional status of women • Training about hi tech agriculture and nursery management • Training of farmer about use of ICT • Awareness about new marketing structures and online platforms
Chandgad	Turkewadi	Sugarcane Paddy Cashew Potato Ragi Sweet potato Vegetables Livestock	• Low productivity of major agronomical crops due to local cultivars and improper agronomical practices • Low awareness about sugarcane trash management • Imbalanced use of chemical fertilizers • Reduction in yield due to incidence of pests and diseases • Improper health management in cattle • Difficulties in operating agriculture equipments for farm women • Low awareness about government schemes • Low use of ICT tools for agriculture	• Cost effective crop production technology • Promotion of Integrated Nutrient Management • Sugarcane trash management • Promotion of organic farming • Plant protection measures for cereals. • Introduction of newer variety of vegetables • Availability of technical knowledge of crop production • Proper management practices for dairy animals • Use of modified drudgery reducing implements specially designed for farm women

2.8. Priority thrust areas:

Sr. No.	Discipline	Priority thrust areas
1.	Agronomy	• Cultivation of improved varieties of major agronomical crops • Adaption of integrated crop management practices in major agronomical crops. • Use of Integrated farming system. • Promotion of drip Irrigation system in Sugarcane. • Promote the farmer towards organic farming. • Development of entrepreneurs through seed production. • Promotion of farm mechanization by using improved tools and implements. • Weed management
2.	Soil Science	• Promotion of soil test based Fertilizer Management practices • Emphasis on nutrient use efficiency • Adoption of Integrated nutrient management to maintain the fertility status of soil • Introduction and promotion of organic farming • Promotion of green manuring • Introduction of biofertilizers e.g. Rhizobium, Azotobacter, Azospirillum, Blue green algae, Azolla & PSB for nutrient management • Promotion of vermi composting • Creation of awareness about identification & management of nutrient deficiency • Awareness about fertigation & foliar spray of nutrient • Emphasis on Soil sampling, testing, & interpretation of result • Promotion of Soil health management
3.	Plant Protection	• Increase productivity of the crops by using IPM and IDM technology • Building judgment about selection of pesticides and pesticides formulations • To create awareness about importance of bio-agents, bio-pesticides, botanicals and allelochemicals for the pest management. • Implementation of use of bio-pesticides, botanicals, light traps, sticky traps and pheromone traps. • Awareness and entrepreneurship development in Mushroom Cultivation
4.	Animal Science	• Promotion of fodder & seed production • Nutritional management in Cattle and Buffaloes • Promotion of back yard poultry • Management of animals under drought situation • Ecto and Endo parasite control in livestock • Conservation of green fodder and treatment of crop residues • Management of diseases in livestock
5.	Home Science	• Unawareness about processing of fruits and vegetable • Unawareness about Protein Energy Malnutrition, among Pre-school children • Anemia observed in farm women • Loss of food grains due to insects and pest during storage • Lack of awareness about family hygiene & improvement in nutritional health status.
6.	Agricultural Extension	• Promotion of group approach & strengthening of group farming (FPO/FO/FC etc.) • To motivate farmers to use latest technologies as per their capacity • Promote the use of ICT to increase the access to authorized information sources, problem solving • To identify & use the potential crop/commodity leaders for efficient communication & insuring participation of all the CIG members • Entrepreneurship development of rural youth for income centric agriculture

		• Entrepreneurial motivational training of farmers & youth • Knowledge up gradation about the facilities available at Marketing institutions Viz. APMCs, Maha. Warehouse Corporation & MSAMB, Pune • Awareness creation about Climate Change & its Impact on agriculture • To provide information on Polyhouse, Nursery and hi-tech technologies • To provide on spot advocacy to the farmers • To provide personalized mobile agro advisory
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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
11	09	144	125	18	16	251	232

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
81	101	1800	3310	510	559	6049	15477

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

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

3.1. B. Operational areas details during 2021

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.	Sugarcane	Less weight and girth of cane resulting in low yield of sugarcane& Loss of organic carbon due to burning of trash	28000 ha area under Sugarcane cultivation	Kogil (B), Shendur, Turkewadi & Bhadwanwadi	• Assessment on use of waste decomposer on trash management in Ratoon Sugarcane. • OFT on Management of white grub in sugarcane • FLD on efficacy of Acetobactor, PSB and multimicr onutrient for improvement of fertilizer use efficiency and see the effect on growth and yield of pre-seasonal Sugarcane. • FLD on Integrated Crop Management • FLD on Integrated Nutrient Management with trash management • Training • KisanMela/ Use of ICT/ group approach./ Social Media Use • Technology Mahotasav • Agril. Exhibition. • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
2.	Soybean	Low yields and Imbalanced 11ensitive11 management	35000 ha area under Soybean crop	Shendur, & Hanmantwadi,	• FLD on improved variety Phule Sangam (KDS-726) and INM. • Training • Use of Biofertilizers for seed treatment • FLD on Management of Soybean leaf eating caterpillar • Kisan Mela/ Use of ICT/ group approach./ Social Media Use • Technology Mahotasav • Agril. Exhibition./CIG • Group discussion • Method Demonstration • Field Day • News coverage.
3.	Finger Millet	Low yield under rain feed condition & Crop logging followed by Imbalanced fertilizer management.	18000 ha area under crop	Bediv & Bhadvanwadi	• Assessment on new variety of Ragi of Phule Nachni/KOPN-942 against local variety • Assessment on Foliar spray of 19:19:19 (2%) and INM • Use of ICT/ group approach./ Social Media Use • Group discussion • Method Demonstration • Field Day

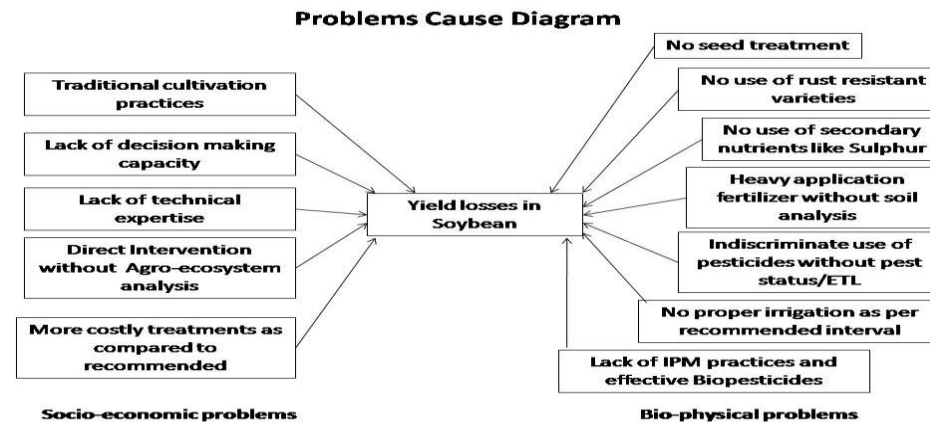
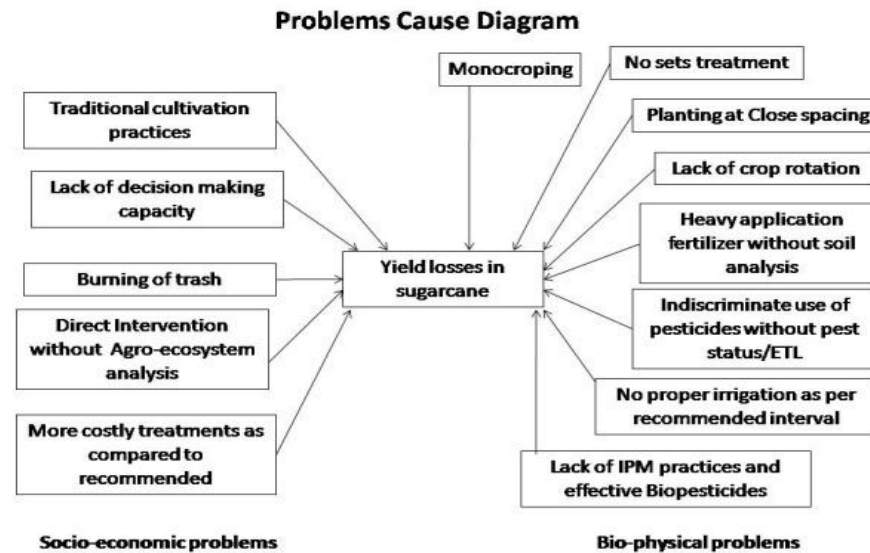
4.	Paddy	Low yield due to improper agronomical practices & incidence of Yellow stem borer, BPH & Blue beetle	38000 ha area under crop	Bhadvanwadi, Sawatwadi Turkewadi	• FLD on Varietal demonstration on Phule Samrudhi and field Day • FLD on management of pests (YSB, BPH) • Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
5.	Sorghum	Low yield under protected irrigation condition	35000 ha area under crop	Hanmatwadi	• Assessment on new improved variety of Phule Revti against to local variety. • Group Discussion • Use of Biofertilisers • Technology Mahotasav • Agril. Exhibition. /Use of ICT/ group approach./ Social Media Use • Field Day • In situ soil moisture conservation
6.	Groundnut	Low productivity of groundnut due to old varieties and improper pod filling	900 ha are under Summer groundnut	Kogil (B), Shendur, Turkewadi & Bhadwanwadi	• Kisan Mela • Technology Mahotasav • Agril. Exhibition. • Radio talk • News articles.
7.	Gram	Reduced yield due to use of Local old varieties and gram pod borer & wilt	9000 hectare area under gram crop	Kogil (B), Shendur, Turkewadi & Bhadwanwadi	• FLD on Management of Chick Pea Pod Borer, <i>H. armigera</i> • Training • KisanMela • Technology Mahotasav • Agril. Exhibition. • Radio talk • News articles.
8.	Tomato	Incidence of leaf curl virus and early blight on tomato	450 hectare area under Tomato crop	Kogil (B) Turkewadi & Bhadwanwadi	• OFT on Management of tomato leaf curl virus and early blight • Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
9.	Brinjal	Poor nutrient management	525 hectare area under Brinjal crop	Shendur, Kogil (B)	• FLD on Management of Brinjal Shoot & Fruit Borer • Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage

10.	Chilli	Severe flower drop	1250 hectare area under Chilli crop	Hanmatwadi Turkewadi	• FLD on management of leaf curl & IPM • Training • Use of ICT/ Social Media Use/ group approach • Group discussion • Method Demonstration • Field Day • News coverage
11.	Other vegetable crops (okra, onion, garlic, coriander, cabbage etc.)		43%	Kogil (B), Shendur, Turkewadi Hanamantwadi &Bhadwanwadi	• Use of ICT/ Social Media Use • Group discussion • Radio talk • News coverage • Field Visit
12.	Fodder crops	Inadequate fodder production throughout the year &Unawareness about improved varieties of fodder crops	80%	Kogil (B), Shendur, Turkewadi Hanamantwadi &Bhadwanwadi	• FLD on Phule Gunwant & Sorghum COFS-29 • Training • KisanMela/ Use of ICT/ group approach./ Social Media Use • Technology Mahotasav • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
13.	Poultry	low Productivity Unawareness about improved breeds of backyard poultry	80%	Swatwadi, Turkewadi Hanamantwadi & Bhadwanwadi	• Assessment on Black Australorp breed • Training • Kisan Mela/ Use of ICT/ group approach./ Social Media Use • Technology Mahotasav • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
14.	Dairy	Low milk yield of dairy animals, Lower Growth rate, &Body weightAffects health of status of animal	70%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi &Bhadwanwadi	• Assessment on Use of Area specific mineral mixture • Assessment on Use of Pro-biotic supplement • FLD on Use of Protocols in Mastitis Management • Training • Kisan Mela/ Use of ICT/ group approach./ Social Media Use • Technology Mahotasav • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage

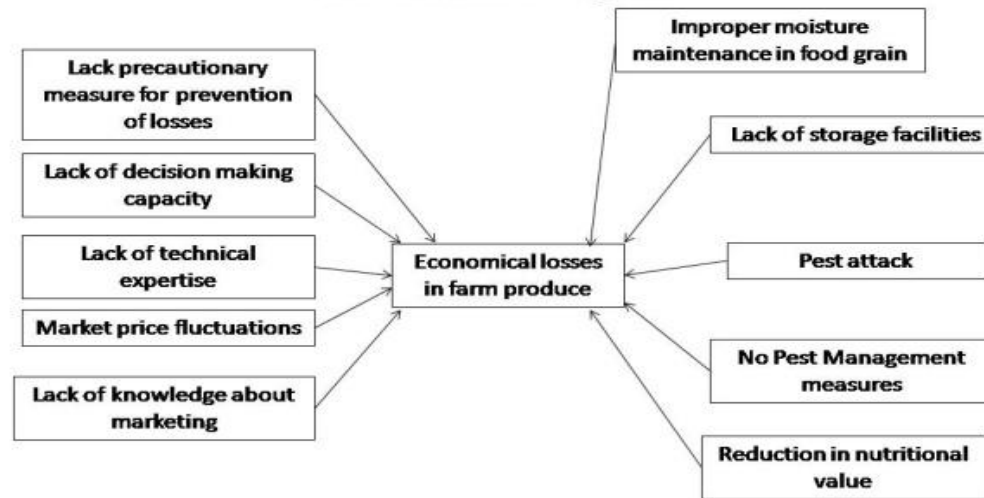
15.	Drudgery reduction	Traditional method of milking cow heavy drudgery & Awkward posture ,Uneasy sitting position and more time consuming & movement of animal while milking, incidence of storage pests, more time consumption and hardworking process, During picking of soybean hand scratches	68%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• To assess the Use of Revolving Stool with Stand for milking activity • To assess the effect of Super Grain Bags to prevent store grain pests during storage • FLD on Spiral Separator for cleaning grains • FLD on Mittens • Training • Use of ICT/ Social Media Use/ group approach • Group discussion • Method Demonstration • Field Day • News coverage
16.	Soybean processing	Unawareness of value addition & Large scale production of soybean	45%	Kogil (B), Hanamantwadi	• Training • Use of ICT/ Social Media Use/ group approach • Group discussion • Method Demonstration • Field Day • News coverage
17.	Establishment of nutrition garden	Less consumption of leafy vegetables, faulty methods of cooking Iron, micronutrients & vitamin deficiency in found in some villages.	35%	Kogil (B), Swatwadi,	• Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • News coverage
18.	Women and child care	Low nutritional & health status of women and children mostly anemia among women of all age group	51%	Kogil (B), Hanamantwadi Swatwadi,	• FLD on Soyanuts processing • Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
19.	Preservation of fruits and vegetables	Production of vegetables and fruits is good but less number of processing units.	55%	Kogil (B),	• Training • Use of ICT/ Social Media Use • Group discussion • Method Demonstration • Field Day • Radio talk • News coverage
20.	Capacity Development	Lack of awareness about mandates and functioning of KVK, Unawareness about facilities available at Maharashtra Warehouse Corporation. & APMC, Lack of awareness about climate change	65%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Training • Use of ICT/ Social Media Use • Group discussion • Radio talk • News coverage • Field Visit

		and its impact on Agriculture & Less use of Social media for effective sharing of Agricultural information Knowledge			
21.	Rural youth	Less awareness for use of available agricultural mobile apps for farming, & Lack of awareness about Organic Farming	70%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Training • Use of ICT/ Social Media Use • Group discussion • Radio talk • News coverage • Field Visit
22.	Agro –processing Entrepreneurship Development	Less awareness about Electronic–National Agricultural Market. (e-NAM), Less motivation for Entrepreneurial development for Agri start up and Technology adoption	55%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Training • Use of ICT/ Social Media Use • Group discussion • Radio talk • News coverage • Field Visit
23.	Vermi-compost farming	Soil infertility and high cultivation cost	35%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Training • Use of ICT/ Social Media Use • Group discussion • Radio talk • News coverage • Field Visit
24.	Soil health management	Less awareness about soil and water testing & soil health	60%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Training • Awareness campaign • Group discussion • Method demonstration • Radio talk • News coverage • Field Visit
25.	Animal health management	Unawareness about Vaccination, de worming % infertility	70%	Kogil (B), Swatwadi, Shendur, Turkewadi Hanamantwadi & Bhadwanwadi	• Awareness campaign • Group discussion • Method demonstration • Radio talk • News coverage • Field Visit

* Support with problem-cause and interventions diagram

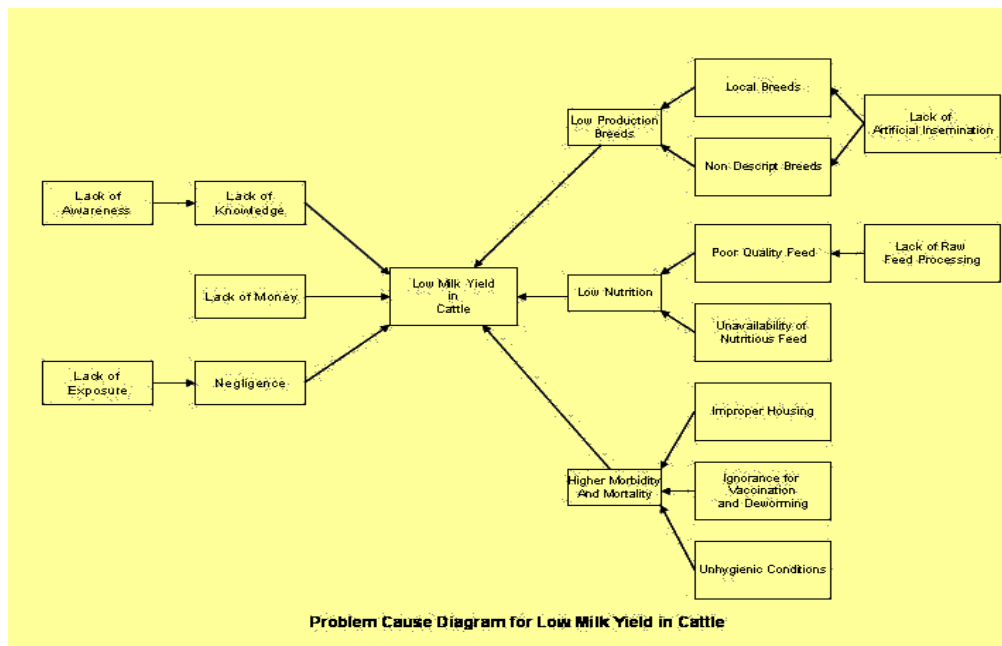


Problems Cause Diagram

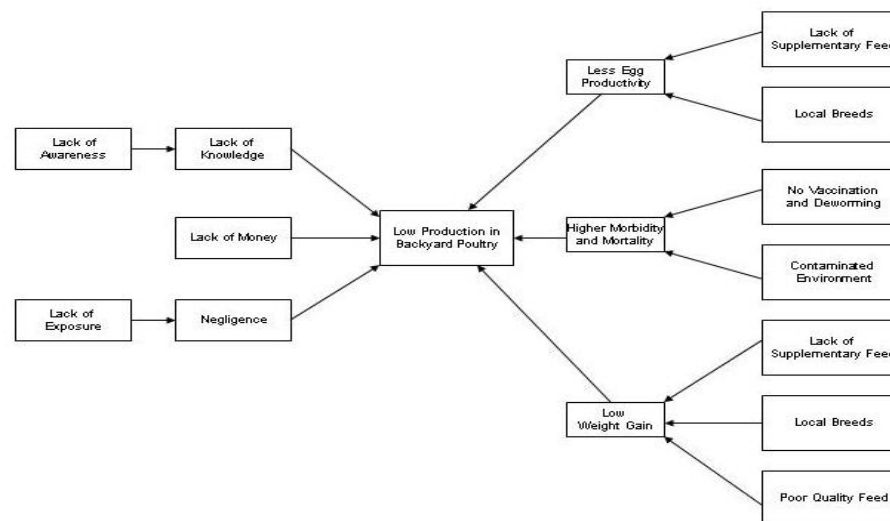


Socio-economic problems

Bio-physical problems



Problem Cause Diagram for Low Milk Yield in Cattle



Problem Cause Diagram for Low Production in Backyard Poultry

3.2. Technology Assessment (Kharif 2021, Rabi 2020-21, Summer 2021)

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
Integrated Crop Management	01	01			01					03
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction	01									01
Storage Technique										
Mushroom cultivation										
Women & Child Care	01									01
Total	04	01	01	02	01					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		01				01
Nutrition Management	01					01
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	01	01				02

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 trial covering all the Technological Options)
Integrated Nutrient Management	Finger millet	To study the effect of INM & foliar spray 19:19:19 (2%) in finger millet.	15	15	6
	Chickpea	Soil test crop response equation for chickpea (30q/ha)	15	15	6
Varietal Evaluation	Sugarcane	To assess the performance new varieties of sugarcane CoSnk15102 & CoSnk15104	10	10	2
Integrated Pest Management	Sugarcane	Management of White Grub in Sugarcane	13	13	0.20
Integrated Crop Management	Finger Millet	To adapt pair row planting technology of Finger Millet with use of urea-DAP briquette	13	13	2.6
Integrated Disease Management	Soybean	Management of Soybean Pod Blight	13	13	0.20
	Tomato	Management Tomato leaf curl virus, bacterial wilt and Early Blight	13	13	0.05
Storage Technique	Super Grain Bags	To assess the effect of super grain bags to prevent store grain pests during storage	15	15	0
Total			107	107	17.05

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				
Nutrition management	Cattle	Use of Pro-biotic supplements	13	13
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Nutrition Security	Women & Child Care	To study the effect of protein energy rich food for malnutrition pre-school children's	15	15
Total			28	28

C. 1.Results of Technologies Assessed

1) 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
Finger Millet	Irrigated	Low yield of finger millet due dense population & imbalance nutrient management.	To assess pair row planting technology of Finger Millet with use of urea-DAP briquette	13	T1: Regular sowing method & no use of fertilizer	Plant Height (cm)	72	The performance assessment is satisfactory. The pair row planting technology with use of urea-DAP briquette found superior over Regular sowing method & no use of fertilizer yielded 21.5 qt. /ha grain production whereas the average No. of tillers recorded 6 as compare to T1 4 tillers.	The Plant height of the T1 is more as compared to T2 Due to dense population. T2- pair row planting technology with use of urea-DAP briquette have more no. of tillers.	No	No
						No. of tillers	04				
						Yield (q/ha.)	18				
					T2: pair row planting technology with use of urea-DAP briquette	Plant Height (cm)	69				
						No. of tillers	06				
						Yield (q/ha.)	20.5				

Contd..

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	B:C Ratio
13	14	15	16	17	18
T1: Regular sowing method & no use of fertilizer	Farmers Practice	18	(q/ha.)	32600	2.3
T2: pair row planting technology with use of urea-DAP briquette	MPKV, Rahuri	20.5	(q/ha.)	40600	2.6

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

1. **Title of Technology Assessed:** To assess pair row planting technology of Finger Millet with use of urea-DAP briquette
2. **Problem Definition:** Low yield of finger millet due dense population & imbalance nutrient management.
3. **Details of technologies selected for assessment:** pair row planting technology of Finger Millet with use of urea-DAP briquette
4. **Source of technology:** MPKV, Rahuri
5. **Production system and thematic area:** Protective Irrigated and Integrated crop management
6. **Performance of the Technology with performance indicators:** The performance assessment is satisfactory. The pair row planting technology with use of urea-DAP briquette found superior over Regular sowing method & no use of fertilizer yielded 21.5 qt. /ha grain production whereas the average No. of tillers recorded 6 as compare to T1 4 tillers.
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** The Plant height of the T1 is more as compared to T2 Due to dense population. T2- pair row planting technology with use of urea-DAP briquette have more no. of tillers.
8. **Final recommendation for micro level situation:** pair row planting technology of Finger Millet with use of urea-DAP briquette easily adaptable to farmers
9. **Constraints identified and feedback for research:** Dense population & imbalance nutrient management.
10. **Process of farmers participation and their reaction:** Problems identified on the basis of PRA survey of selected village, selected farmers in the presence of member of agriculture committee, conducted training program, method demonstration on seed treatment.

2) Results of On Farm Trial

Crop	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
Finger Millet	Medium soil, Rain feed condition	1) Low yield under rain feed condition.	To study effect of Integrated Nutrient Management and foliar spray of 19:19:19 (2%) in Finger Millet	15	T1: Farmers practice: No use of Fertilizers	Yield (q/ha.)	19.00	Spraying of 2% 19:19:19 at pre flowering Stage & INM in finger millet gives 28.52 % more yield.	Spraying of 2% 19:19:19 at pre flowering Stage & INM in finger millet gives 28.52 % more yield over the farmers practice .	Nil	Nil
					No. of fingers (No. of fingers/ ear)	4.5					
		T2: Technology assessed 1.Application of RDF(45: 22.5:00 NPK kg/ha as per soil test value) 2. Spraying of 2 % 19:19:19 at pre flowering Stage.			Yield (q/ha.)	24.42					
					No. of fingers (No. of fingers/ ear)	6.2					

Contd..

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: Farmers practice: No use of Fertilizers	MPKV, Rahuri	19.00	q/ha.	46550	3.45
T2: Technology assessed 1.Application of RDF(45: 22.5:00 NPK kg/ha as per soil test value) 2. Spraying of 2 % 19:19:19 at pre flowering Stage.		24.42	q/ha.	63500	4.06

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

- 1 **Title of Technology Assessed:** To study effect of Integrated Nutrient Management and foliar spray of 19:19:19 (2%) in Finger Millet
- 2 **Problem Definition:** 1) Low yield under rain fed condition. 2) Imbalanced fertilizer management 3) No use of foliar spray by farmers
- 3 **Details of technologies selected for assessment:**
 - T1 : Farmers practice : No use of Fertilizers.
 - T2 : Technology assessed : 1. Application of RDF(45: 22.5:00 NPK kg/ha as per soil test value)
 - 2. Spraying of 2% 19:19:19 at pre flowering Stage
- 4 **Source of technology:** MPKV, Rahuri
- 5 **Production system and thematic area:** Integrated nutrient Management
- 6 **Performance of the Technology with performance indicators:**

Performance indicators	T ₁	T ₂
i) No. of fingers/ ear	4.50	6.20
ii) Production (q/ha)	19.00	24.42
iii) B : C ratio	3.45	4.06
- 7 **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:**
 - Before this OFT programme the farmers were illiterate about balanced use of fertilizers in finger millet.
 - They were not doing seed treatment with Azosprillum and PSB @ 25 grams/kg seed.
 - Method of application of Azosprillum & PSB is very easy.
 - The farmers understood that by INM & spraying of 2 % 19:19:19 in finger millet, there was 28.52 % yield improvement over control.
- 8 **Final recommendation for micro level situation:**
Foliar spray of 19:19:19 (2%) at pre flowering stage with INM in finger millet gave 28.52 % more yield over control, the technology should be popularized through state Agril. Department by taking demonstration on large area as low productivity of finger millet has become a major problem
- 9 **Constraints identified and feedback for research:**
 - Unavailability of biofertilizers of good count.

Feedback: Systematic research should be done to develop drought tolerant varieties of finger millet.
- 10 **Process of farmers' participation and their reaction:**
Village Bhadawanwadi, Tal: Ajara was selected by KVK, Kolhapur- II as Focal village especially for conducting various activities of KVK. The bench mark Survey was conducted in the month of March 2019 on the basis of this survey low yield in Finger Millet was identified due to imbalanced fertilizer management. Hence OFT on this crop / topic was undertaken, before implementation of this OFT, farmers were selected by taking Group Discussion they were explained about the technology to be given. The farmers were suggested to use soil test based fertilizer management in finger millet. Only 0.20 ha area was allotted to every farmer. A training programme on Production technology of finger millet with special reference to balanced use of fertilizer was conducted at village Bhadawanwadi for OFT beneficiaries. They were given method demonstration on seed treatment with bio fertilizers during training programme. After sowing various observations pertaining to cost of cultivation, No. of fingers per ear, increase in yield per hectare and B:C Ratio were recorded with the help of farmers participation.

3) Results of On Farm Trial

Crop	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
Chickpea	Medium soil, irrigated condition	Low yield under irrigated condition. Imbalanced fertilizer management.	Soil Test Crop Response Equation for chickpea (30 q/ha)	15	T1: Farmers practice: No use of Fertilizers	Yield (q/ha.)	17.2	Average 293 pods were observed per plant in T2 as compare to 132 pods in farmers practice. Application of fertilizer prescription based on STCR equation resulted in 53.48 % yield improvement over farmers practice.	Average 293 pods were observed per plant in T2 as compare to 132 pods in farmers practice. Application of fertilizer prescription based on STCR equation resulted in 53.48 % yield.	Nil	Nil
						No. of pods/ plant	132				
					T2- Fertilizer prescription based on STCR equation N= (2.75 X TY) - (0.17 x SN kg/ha) P= (3.27 X TY) - (1.97 x SP kg/ha) K= (3.05 X TY) - (0.11 x SK kg/ha) + seed treatment + micronutrient as per Soil Test.	Yield (q/ha.)	26.4				
						No. of pods/ plant	293				

Contd..

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: Farmers practice: No use of Fertilizers	MPKV, Rahuri	17.2	q/ha.	63970	3.69
T2- Fertilizer prescription based on STCR equation N= (2.75 X TY) - (0.17 x SN kg/ha) P= (3.27 X TY) - (1.97 x SP kg/ha) K= (3.05 X TY) - (0.11 x SK kg/ha) + seed treatment + micronutrient as per Soil Test.		26.4	q/ha.	104940	4.54

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

1 Title of Technology Assessed: Soil Test Crop Response Equation for chickpea (30 q/ha)

2 Problem Definition: 1) Low yield under irrigated condition. 2) Imbalanced fertilizer management.

3 Details of technologies selected for assessment:

T1 : Farmers practice : No use of Fertilizers.

T2 : Technology assessed : T2- Fertilizer prescription based on STCR equation $N = (2.75 \times TY) - (0.17 \times SN \text{ kg/ha})$ $P = (3.27 \times TY) - (1.97 \times SP \text{ kg/ha})$ $K = (3.05 \times TY) - (0.11 \times SK \text{ kg/ha})$ + seed treatment + micronutrient as per Soil Test.

4 Source of technology: MPKV, Rahuri

5 Production system and thematic area: Integrated nutrient Management

6 Performance of the Technology with performance indicators:

Performance indicators	T ₁	T ₂
i) No. of Pods/ Plant	132	293
ii) Production (q/ha)	17.2	26.4
iii) B:C ratio	3.69	4.54

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:

- Before this OFT programme the farmers were illiterate Soil Test Crop Response Equation for chickpea
- They were not doing seed treatment with Rhizobium and PSB @ 25 grams/kg seed.
- Method of application of Rhizobium & PSB is very easy.
- The farmers understood that by Application of fertilizer prescription based on STCR equation resulted in 53.48 % yield improvement over farmers practice.

8 Final recommendation for micro level situation:

Application of fertilizer prescription based on STCR equation resulted in 53.48 % yield improvement over farmers practice, the technology should be popularized through .state Agril. Department by taking demonstration on large area as low productivity of finger millet has become a major problem

9 Constraints identified and feedback for research: Cost on chemical Fertilizer is more.

Feedback : Systematic research should be done to develop drought tolerant and wilt resistant varieties and of chickpea.

10 Process of farmers' participation and their reaction:

Village Hanamantwadi Tal, Gadhinglaj was selected by KVK, Kolhapur- II as Focal village especially for conducting various activities of KVK. The bench mark Survey was conducted in the month of March 2019 on the basis of this survey low yield in Chickpea was identified due to imbalanced fertilizer management. Hence OFT on this crop / topic was undertaken, before implementation of this OFT, farmers were selected by taking Group Discussion they were explained about the technology to be given. The farmers were suggested to Soil Test Crop Response Equation for chickpea. They were given method demonstration on seed treatment with bio fertilizers during training programme. After sowing various observations pertaining to cost of cultivation, No. of pods/ plant, increase in yield per hectare and B:C Ratio were recorded with the help of farmers participation.

4) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Paramete rs of assessme nt	Data on the parameter		Results of assessment	Feedback from the farmer	Any refinement needed	Justificatio n for refinement
1	2	3	4	5	6	7	8		9	10	11	12
Sugarcane	Irrigated	Incidence of white grub in sugarcane.	Management of White Grub in Sugarcane	13	T2- Drenching of EPN, H. indica @ 7.5 kg per ha in the month of June . Second need based application at 30-45 days after first.	Per cent clump Mortality	T1	11.65	Highest clump mortality found in Farmers Practice as compared to both the assessed technologies, whereas lowest per cent clump mortality observed in T3 recorded 7.25 per cent.	Both EPN and M. anisopliae found promising to manage white grub when its applied at right time in the field but it good applicable in Suru cultivated sugarcane instead of Adsali and Ratton sugarcane, because it is laborious in Adsali and Ratton sugarcane.	-	-
					T2		7.95					
					T3		7.25	-			-	

Contd..

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	B:C Ratio
13	14	15	16	17	18
T1: Farmers practice -Treatment with application of chemical insecticides like, Phorate 10G, Chlorpyrifos 50 Ec, Fipronil + Imidacloprid, etc	-	110.56	t/ha	145960.45	2.27
T2: Technology assessed -First Soil application of EPN, <i>H. indica</i> @7.5 kg per ha in the month of June Second need based Soil application at 30-45 days after first application.	MPKV, Rahuri (Maharashtra)	122.57	t/ha	141870.25	2.59
T3: Technology assessed - Soil application of <i>Metarhizium anisopliae</i> @ 15 kg/ha.	MPKV, Rahuri (Maharashtra)	126.58	t/ha	141355.15	2.69

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

- Title of Technology Assessed:** Management of White Grub in Sugarcane
- Problem Definition:** Incidence of white grub in sugarcane
- Details of technologies selected for assessment:** **T2-** Technology assessed First Soil application of EPN, *H. indica*@7.5 kg per ha in the month of June
Second need based Soil application at 30-45 days after first application.
T3: Technology assessed Soil application of *Metarhizium anisopliae* @ 15 kg/ha
- Source of technology-** MPKV, Rahuri (Maharashtra)
- Production system and thematic area:** Protective irrigated and IPM.
- Performance of the Technology with performance indicators:** Satisfactory, Both T2 and T3 revealed less incidence of white grub as compared to farmers practices when it is applied at proper time by proper method.
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** Both EPN and *M. anisopliae* has a potential to manage white grub when its applied at right time in the field but it good applicable in Suru cultivated sugarcane instead of Adsali and Ratton sugarcane, because it is laborious in Adsali and Ratton sugarcane.
- Final recommendation for micro level situation:** EPN and *M. anisopliae* found suitable to manage white grub when it applied timely and scientifically. It is recommended in Suru sugarcane cultivation.
- Constraints identified and feedback for research:** Technology application is laborious in ratton and fallen sugarcane
- Process of farmer's participation and their reaction:** Problems identified during KVK's PRA – Prioritized the problems- selection of village-selection of farmers in the presence of members of Agri. Committee of Grampanchayat chaired by Hon'ble Sarpanch-Conducted training programs-Conducted method demonstration on Application of EPN and *M. anisopliae*. Farmers Reaction: Unbiased selection of farmers. They assessed trial carefully and scientifically

5) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameter s of assessment	Data on the parameter		Results of assessment	Feedback from the farmer	Any refinem ent needed	Justificati on for refinement
1	2	3	4	5	6	7	8		9	10	11	12
Soybean	Rain fed	Infection of pod blight disease in Soybean during cloudy & rainy days at pod development stage.	Management of pod blight in Soybean	13	1. Seed Treatment with Thiram 37.5 + Carboxim 37.5 @ 3g/ kg seeds 2. Spraying of Tebuconazole 10 % WP + Sulphur 65 WG @ 2.5 g/ltr water at the time of pod development	Per cent pod infection	T1	14.26	Assessed technology found superior over farmers practices and observed less disease incidence	Seed treatment with suggested fungicide and time of spraying of fungicide is very important and found promising to reduce pod blight of soybean	-	-
							T2	9.28				

Contd..

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	B:C Ratio
13	14	15	16	17	18
T1: Farmers Practice Spraying of fungicide like Carbendazime 50WP		1936	Kg/ha	58899.75	2.55
T2: Technology Assessment 1. Seed Treatment with Thiram 37.5 + Carboxim 37.5 @ 3g/ kg seeds 2. Spraying of Tebuconazole 10 % WP + Sulphur 65 WG @ 2.5 g/ltr water at the time of pod development	VNMKV, Parbhani (Maharashtra)	2105	Kg/ha	67724.65	2.80

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

- 1 **Title of Technology Assessed:** Management of pod blight in Soybean
- 2 **Problem Definition:** Infection of pod blight disease in Soybean during cloudy & rainy days at pod development stage.
- 3 **Details of technologies selected for assessment:** 1. Seed Treatment with Thiram 37.5 + Carboxim 37.5 @ 3g/ kg seeds
2. Spraying of Tebuconazole 10 % WP + Sulphur 65 WG @ 2.5 g/ltr water at the time of pod development
- 4 **Source of technology:** VNMKV, Parbhani (Maharashtra)
- 5 **Production system and thematic area:** Rainfed and IPM/IDM
- 6 **Performance of the Technology with performance indicators:** Excellent, revealed very less percent disease incidence and achieved higher yield
- 7 **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** Assessed technology reduced the disease management cost and got expected grain yield.
- 8 **Final recommendation for micro level situation:** Assessed technology found suitable in Kolhapur location and recommended for application in Soybean crop
- 9 **Constraints identified and feedback for research:** Heavy rainfall during pod development stage is the main constrain for spraying of fungicide, because there is chance of washing out of sprayed fungicides.
- 10 **Process of farmer's participation and their reaction:** Problems identified during KVK's PRA - prioritized problems – selection of village-selection of farmers in the presence of members of Agri. Committee of Grampanchayat chaired by Hon'ble Sarpanch-conducted training programs- conducted method demonstration on seed treatment, sowing and spraying of fungicides. Farmers Reaction:- Unbiased selection and enthusiastically agreed to conduct trial of this new technology.

6) 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
Tomato	Irrigated	Incidence of leaf curl virus and early blight on tomato	Assessment of Tomato hybrid Arka Rakshak for the management of tomato leaf curl virus, early blight and bacterial wilt	13	T1: Farmers practice– Cultivation of local varieties of tomato and indiscriminate use of pesticides	Leaf curl virus (%)	5.60	Assessed technology found superior over farmers practices and observed less disease incidence and higher average yield as compared to farmers practice	Hybrids have a potential to achieve good yield and also found resistance to leaf curl virus, early blight and bacterial wilt. Therefore reduced the disease management cost and got expected fruit yield. The Incidence of leaf miner is found more on this variety.	No	No
						Early blight (%)	6.95				
						Bacterial wilt (%)	2.52				
						White fly (No./leaf)	3.25				
					T2: Technology assessed- Cultivation of Arka Rakshak hybrids of Tomato	Leaf curl virus (%)	0.96				
						Early blight (%)	1.69				
						Bacterial wilt (%)	1.26				
						White fly (No./leaf)	3.14				
					T3- IPM technology	Leaf curl virus (%)	1.96				
						Early blight (%)	1.46				
						Bacterial wilt (%)	1.85				
						White fly (No./leaf)	3.21				

Contd..

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	B:C Ratio
13	14	15	16	17	18
T1: Farmers practice– Cultivation of local varieties of tomato and indiscriminate use of pesticides	-	13.92	t/ha	150824.85	3.60
T2: Technology assessed- Cultivation of Arka Rakshak hybrids of Tomato	IIHR, Bengaluru (Karnataka)	15.63	t/ha	180874.79	4.38
T3- IPM technology	NCIPM, New Delhi	15.86	t/ha	183179.86	4.35

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

- 1 **Title of Technology Assessed:** Management of tomato leaf curl virus, early blight and bacterial wilt.
- 2 **Problem Definition:** Incidence of leaf curl virus and early blight on tomato
- 3 **Details of technologies selected for assessment:** Cultivation of Tomato hybrid Arka Rakshak which is resistance to tomato leaf curl virus, early blight and bacterial wilt.
- 4 **Source of technology:** IIHR, Bengaluru (Karnataka)
- 5 **Production system and thematic area:** Protective irrigated and IPM/IDM
- 6 **Performance of the Technology with performance indicators:** Excellent, revealed very less percent disease incidence and achieved higher yield. In Assessment, farmers cultivated Tomato Arka Rakshak hybrid which is resistant to To LCV, early blight and Bacterial wilt where as in farmers practice farmers taken Tomato variety UAS Agri 2638. In farmers practice higher disease intensity was observed as compared to assessed plots. Observation recorded for early blight, Tomato leaf curl virus and Bacterial wilt. It is observed that PDI of early blight was high in farmers practice as compared to Assessed practice. Per cent Tomato leaf curl virus was also recorded lower in assessed practice. Similarly, the incidence of Bacterial wilt was also observed higher in farmers' practices as compared to assessed practice. The average fresh tomato fruit yield 15.86 ton per ha was recorded in assessed practices ie. IPM technology followed by T2 which recorded 15.63 t/ha fruit yield.
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** Hybrids have a potential to achieve good yield and also found resistance to leaf curl virus, early blight and bacterial wilt. But this variety is more susceptible to leaf miner as compared to other. Though disease management cost is less but need to manage leaf miner.
- 8 **Final recommendation for micro level situation:** Arka Rakshak variety of Tomato found suitable against three diseases in Kolhapur location and recommended for cultivation with IPM for leaf miner
- 9 **Constraints identified and feedback for research:** Availability of seeds of hybrid in local markets and most of the farmers purchased ready seedlings of any variety from nearest nursery.
- 10 **Process of farmer's participation and their reaction:** Problems identified during KVK's PRA- prioritized problems– selection of village-selection of farmers in the presence of members of Agri. Committee of Grampanchayat chaired by Hon'ble Sarpanch-conducted training programs- conducted method demonstration on raising of nursery and planting of seedlings. Farmers Reaction:-Unbiased selection and enthusiastically agreed to conduct trial of this new disease resistant hybrid.

7) Results of Technologies Assessed

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
Dairy	Semi stalls feeding management.	Low milk yield in CB cows	To study the effect of Pro-biotic on milk production in CB cow	13	T1: Farmers practice: No use of Pro-biotic	Milk Yield (ltr/day/cow)	5.4	Milk yield increased and Ruminant digestion improved	Easy handling to farmers, Milk yield increase, cost of production is very low, Body coat of animal shiny	No	Nil
						Fat (%)	3.4				
					T2:Improved Technology:- Use of Pro-biotic 50 ml/(diluted M)/cow/day	Milk Yield (ltr/day/cow)	6.1				
						Fat (%)	3.6				

Contd.

Technology Assessed	Source of Technology	Production (milk lit/day)	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: Farmers practice: No use of Pro-biotic	NDRI, Karnal	5.4	(Ltr/day/cow)	60	1.14
T2:Improved Technology:-Use of Pro-biotic 50 ml/(diluted M)/cow/day		6.1	(Ltr/day/cow)	95	1.21

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

- Title of Technology Assessed:** To study the effect of Pro-biotic on milk production in cross breed cow.
- Problem Definition:** Low milk yield in cross breed cows
- Details of technologies selected for assessment:** Use of Pro-biotic on milk production in cross breed cow.
- Source of technology:** NDRI, Karnal
- Production system and thematic area:** Animal Nutrition Management
- Performance of the Technology with performance indicators:** Milk yield increased and Ruminant digestion improved
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** Easy handling to the farmers, milk yield increased, and cost of production is very low, Body coat of animal shiny.
- Final recommendation for micro level situation:** Milk yield increased due to Ruminant digestion.
- Constraints identified and feedback for research:** Care should be taken during fermentation process.
- Process of farmers participation and their reaction:** Problem identification –Selection of village – Selection of farmers – Training – Inputs distribution – Diagnostic visit – Observation taken **Farmers reaction:** Eagerly adopted, Milk yield increased and Ruminant digestion improved

8) Results of Technologies Assessed

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
Super Grain Bags	-	1) Pest infestation damages the quality of grains 2) Fluctuation in moisture content due to change in temperature spoilage grains during storage	To assess the effect of Super Grain Bags to prevent store grain pests during storage	15	T1: Farmers Practice – Use of Gunny bags (Jute bags)	Pest infestation per kg in grains weight	Grain damage 11.20 %	Result shown that 2.35% pest infestation in assessed practice against 11.20% of infestation in traditional practice, also increase shelf life up to one year in assessed practice where 6 month in regular method	Enhance grain life in a much safer and it is pesticide free. Low cost technology, easily available, reusable and can use for multi grain purpose	No	No
					T2: Technology assess - Use of Super Grain Bag	Pest infestation per kg in grains weight	Grain damage 2.35 %				

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

- 1 **Title of Technology Assessed:** To assess the effect of Super Grain Bags to prevent store grain pests during storage
- 2 **Problem Identification:** Pest infestation damages the quality of grains & Fluctuation in moisture content due to change in temperature spoilage grains during storage
- 3 **Details of technologies selected for assessment:** Use of super grain bags for grain storage.
- 4 **Source of technology:** PCI, Ltd, Pune
- 5 **Production system and thematic area:** Drudgery Reduction
- 6 **Performance of the Technology with performance indicators:** Result shown that 2.35% pest infestation in assessed practice against 11.20% of infestation in traditional practice, also increase shelf life up to one year in assessed practice where 6 month in regular method.
7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** Enhance grain life in a much safer and it is pesticide free. Low cost technology, easily available, reusable and can use for multi grain purpose.
- 8 **Final recommendation for micro level situation:** Use of supergrain bags for grain storage reduced grain losses and pest infestation.
- 9 **Constraints identified and feedback for research:** It should be available in the local market and should be available in the different sizes to store grain according to grain quantity.
- 10 **Process of farmer's participation and their reaction:** Selection of village – Problem identification –selection of farm women – training – input distribution – demonstration – data collection.

9) Results of Technologies Assessed

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the paramet er	Results of assessment	Feedback from the farmer	Any refineme nt needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Soybean	-	Nutritional deficiency & Low body Weight in pre- school children	To study the efficiency of protein energy rich food for Malnutrition pre-school children	15	T1: Farmers practice: Normal diet	Average Weight Gain (kg/Child/90 days)	1.3	Increased weight up to 2.9 kg within a 90 and also increase the Mid Upper Arm Circumference 0.5cm by using improved technology	All the row materials are easily available at local level & Method of preparation of Soya nuts is very easy. Farm woman's was happy for the soya nuts available in their own house and now they realized that Soya nuts are very nutritious, children are like to consume these soya nuts.	No	No
					T2: Improved technology: Soya Nuts 30gm/d ay(3 Month)	Average Weight Gain (kg/Child/90 days)	2.9				

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

- Title of Technology Assessed:** To study the efficiency of protein energy rich food for Malnutrition pre-school children
- Problem Identification:** Nutritional deficiency & Low body Weight in pre-school children
- Details of technologies selected for assessment:** Use of soyanuts for weight gain.
- Source of technology:** VNMAU, Parbhani
- Production system and thematic area:** Women and Child care
- Performance of the Technology with performance indicators:** Result shown that within a 90 days 2.90 kg weight increased in improved technology against 1.3 kg weight increased in traditional practice and also increases the Mid Upper Arm Circumference 0.5cm by using improved technology.
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:** All the row materials are easily available at local level & Method of preparation of Soya nuts is very easy. Farm woman's was happy for the soya nuts available in their own house and now they realized that Soya nuts are very nutritious, children are like to consume these soya nuts.
- Final recommendation for micro level situation:** It is beneficial to preschool children's who has low body weight. It helps to increase the body weight of preschool children's hence it is needed to give more focus on daily use of soya nuts in the rural areas.
- Constraints identified and feedback for research:** No
- Process of farmer's participation and their reaction:** Selection of village – Problem identification – Selection of Anganwadi – selection of preschool children's – training – input distribution – demonstration– data collection.

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 2021 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		
1.	Soybean	INM	To improve productivity of Soybean by using liquid bio-fertilizers formulation as a seed treatment and STBF management in to increase area under Soybean-Sugarcane cropping system.	The technology was highlighted in different meet to the extension personnel for popularization through FLD, Kisan Sammelan, advisory, input supply, field day, krishi saptah & other extension activities.	04	275	125
2.	Sugarcane	INM	Use of Acetobactor (Plant health) and PSB (soil health) and mult micro nutrient and multi-macro nutrient for improvement of fertilizer use efficiency on growth and yield of Sure Sugarcane in	The technology was highlighted in different meet to the extension personnel for popularization through FLD, Kisan Sammelan, advisory, input supply, field day, krishi saptah & other extension activities.	03	250	150
3.	Sugarcane	Resource conservation Technology	Sugarcane crop residues management for improvement of soil health in	The technology was highlighted in different meet to the extension personnel for popularization through FLD, Kisan Sammelan, advisory, input supply, field day, krishi saptah & other extension activities.	07	670	450

B. Details of FLDs implemented during 2021 **(Kharif 2021, Rabi 2020-21, Summer 2021)** (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/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Soybean	INM	To improve productivity of Soybean by using liquid bio-fertilizers formulation as a seed treatment and STBF management in Shendur village of Kagal tashil.	Kharif 2021	5.2	6	0	15	15	-
2.	Sugarcane	INM	Use of Acetobactor (Plant health) and PSB (soil health) and mult micro nutrient and multi-macro nutrient for improvement of fertilizer use efficiency on growth and yield of Sure Sugarcane in Kogil Village of Karveer tahsil.	Rabi 2020-21	5.2	6.0	0	15	15	-
3.	Sugarcane	Resource conservation Technology	Sugarcane crop residues management for improvement of soil health in Shendur village of kagal tashil.	Rabi 2020-21	5.2	6.0	0	15	15	-
4.	Soybean	IPM	Management of Soybean defoliators	Kharif	3.00	3.00	02	13	15	-
5.	Brinjal	IPM	Management of Brinjal Shoot & fruit Borer, <i>Leucinodes orbonalis</i> (Guenee)	Summer	1.50	1.50	04	11	15	-
6.	Chick Pea	IPM	Management of Chick pea pod Borer, <i>H. armigera</i>	Rabi	3.00	3.00	00	15	15	-

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 2021	Rainfed	Medium	Low	Medium	Medium	Sugarcane	Kharif 2021	Sept 2021	-	-
Sugarcane	Rabi 2020-21	Irrigated	Medium	Low	Medium	Medium	Soyabean	Rabi 2020	Nov 2021	-	-
Sugarcane	Rabi 2020-21	Irrigated	Medium	Low	Medium	Medium	Sugarcane	-	July 2021	-	-
Soybean	Rainfed	Medium/Black Soil	Low	medium	High	Rabi Sorghum	First week of June2021	Sep. 2021	-	-	-
Brinjal	Irrigated	Medium/Black Soil	Low	medium	High	Sugarcane	Second week of January 2021	March-April 2021	-	-	-
Chick Pea	Protected irrigated	Medium/Black Soil	Low	medium	High	Soybean	Second Week of October 2021	Ongoing	-	-	-

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1.	Need to develop improved tractor drawn machineries for sowing of Soybean on BBF method and fertigation techniques for Soybean.
2.	Need to develop short duration and fertilizer responsive varieties
3.	Need to develop small machinery that can be worked for trash cutting.
4.	Assessed technology is feasible in Kolhapur region and should be applied on large area. Use of Pheromone Traps, Bird perches and timely spraying of Botanicals revealed low infestation of defoliators
5.	Assessed technology is feasible in Kolhapur region and should be applied on large area. Use of Pheromone Traps, Trichocards, Field Sanitation and timely spraying of Botanicals revealed low infestation of Brinjal Shoot & Fruit Borer

Farmers' reactions on specific technologies

S. No	Feed Back
1.	Integrated Nutrient Management Practices in soybean gives 38.86 % more yield.
2.	1. Use of bio fertilizers and multi-micro nutrient and multi-macro nutrient with INM in Sugarcane gives 23.40 % more yield. 2. Around Rs 8500 per ha was saved on chemical fertilizers due to use of Bio fertilizers and multi-micro nutrient and multi-macro nutrient
3.	1. Around Rs.12950 per ha saved on chemical fertilizers .2. Improved trash management practices helps in getting 16.02. % more yield. 3. Due to use of trash management technologies full decomposition was observed 43 days earlier as compare to no use of technologies.
4.	Technology is good for adaptation but Microbial insecticides not get easily available
5.	Technology is good for adaptation but Tricho-cards should be available at a time.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	20	-	481	-
2	Farmers Training	81	-	2871	-
3	Media coverage	58	-	7645	-
4	Training for extension functionaries	08	-	188	-

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										
Soybean																		
Soybean	Varietal evaluation	To improve productivity of Soybean by using improved variety Phule Sangam (KDS-726)	Phule Sangam (KDS-726)	15	6	35	19	24.07	18.3	31.57	30000	108315	78315	3.6	30000	82350	52350	2.7
Soybean	Integrated Crop Management	To assess the performance of foliar application of growth regulator chlormequat chloride 50 % on yield of soybean	Phule Sangam (KDS-726)	13	5.2	35	19	25.8	23.75	8.63	30000	116100	86100	3.87	30000	106875	76875	3.56
Soybean	IPM	Management of Soybean Leaf Defoliators	JS 335	15	3.00	23.25	14.10	19.45	18.16	7.10	36125	97250	61125	2.69	36950	90800	53850	2.46
Soybean	Integrated Nutrient Management	To improve productivity of Soybean by using liquid bio-fertilizers formulation as a seed treatment and STBF management	KDS 726	15	6.00	37.5	24.5	29.3	21.1	38.86	32250	147965	115715	4.59	33000	106555	73555	3.23

* 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											
Chickpea																			
Chickpea	IPM	Management of Chick Pea Pod borer, <i>Helicoverpa armigera</i> (Hub.)	Jaki 9218	15	3.00	Ongoing Yield available	therefore data not	-	-	-	-	-	-	-	-	-	-	-	-

* 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 Farmer s	Are a (ha)	Yield (q/ha)				% Chang e in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Chec k		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Averag e												
Cereals																			
Paddy																			
Paddy	Varietal evaluation	To improve productivity of Rice by using improved variety Phule Samrudhi	13	5.2	71	45	54.4	45	21.11	No.of Tillers/Plant		50000	136250	86250	2.72	50000	112500	62500	2.25
										16-17	12-13								
Rabi Sorghum	Variety Introduction	Use of improved variety of Rabi sorghum Phule Revti against local variety	15	6	34	18	28	22.5	24.44	Plant Height (cm)		35000	126000	91000	3.6	35000	101250	66250	2.8
										205-215	195-200								
Brinjal																			
Brinjal	Integrated Pest Management	Managemen t of Brinjal Shoot and Fruit Borer, L. Orbonalis	15	1.5	220.26	256.85	245.26	231.14	6.11	5.68	9.25	60250/-	245260/-	185010/-	4.07	60900/-	231140/-	170240/-	3.80
Commercial Crops																			
Sugarcane																			
Sugarcane	Integrated Nutrient Management	To improve productivity of sugarcane by adaption suitable plant spacing and INM on the basis on soil testing	15	3	1550	1125	1382.5	1150	20.22	No.of nodes/cane		102500	414750	312250	4.04	118500	345000	226500	2.91
										26	21								
										Average wt. of cane (kg)									
										2.3	1.8								
Sugarcane	Integrated Nutrient	Use of Acetobactor	15	6	1590	1210	1450	1175	23.40	No. of	No. of nodes/	110500	420500	310000	3.81	118500	340750	222250	2.88

	Management	, PSB and multi-micro and macro nutrient for improvement of fertilizer use efficiency on growth and yield of Suru Sugarcane								node s/Cane (At harvest) 26.5	Cane (At harvest) 21								
Sugarcane	Crop Residues Management	Sugarcane crop residues management for improvement of soil health	15	6	1125	918	1050	905	16.02	Days required for full decomposition of trash 103	Days required for full decomposition of trash 146	73950	311750	237800	4.22	86900	262450	175550	3.02
Fodder Crops																			
Sorghum (F)																			
Fodder Sorghum	Fodder Crops	Introduction of Multi cut Sorghum COFS -29 in irrigated area in Kharif Season	13	2	1620	1570	1590	1420	11.97	3	5	47870	78690	30820	1.64	43643	68050	24407	1.55

* 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 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)
Buffalo																	
Pandharpuri Buffalo	Animal Nutrition Management	Use of area specific mineral mixture	13	13	6.3	5.2	21.15	8.1	5.9	960	1340	380	1.39	820	1010	190	1.23

**** BCR= GROSS RETURN/GROSS COST**

Category	Name of Technology	No. of demonstrations	Technology Demonstration	Parameters of assessment	Data on the parameter
Drudgery	Soybean mitten	15	T1: Farmers Practice	Work output	46.66
				Time Saving	26.66
				Physical injury	13.33
			T2: Technology assess – Use of soybean mittens	Work output	53.33
				Time Saving	73.33
				Physical injury	86.66
Drudgery	Spiral Separator	15	T1: Farmers Practice	Output (hr/person)	34
				Cleaning (%)	80
				Splits (%)	5
			T2: Technology assess – Use of Spiral Separator	Output (hr/person)	212
				Cleaning (%)	94
				Splits (%)	0.5
Drudgery	Milking Stool and Stand	15	T1: Farmers Practice	Time required for Milking (rating)	Moderate: 100%
				Discomfort during milking (rating)	Severe : 93.33
				Pain frequency (rating)	Always : 80 %
			T2: Technology assess – Use of milking stool and stand	Time required for milking	Less duration:80%
				Discomfort during milking (rating)	Very mild:86.66 %
				Pain frequency (rating)	Never: 93.33
Value addition	Solar dryer	15	T1: Farmers Practice	Moisture/100 gram	1.48
				Drying Time	3.5 hr
				Temperature	48 °C
			T2: Technology assess – Use of milking stool and stand	Moisture/100 gram	2.91
				Drying Time	6.0 hr
				Temperature	28 °C

[illegible]

FLD on Other Enterprise: Kitchen Gardening

Nutrition garden components	Thematic area	Area (sq mt)	No. of Farmer	No. of Units	Yield (Kg)- supply of vegetables, fruits, etc from KG in the year		% change in yield	Household size (number)		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demons ration	Check*		Demo	Check	Gross Cost	Gross Return/S avings*	Net Return	BCR (R/C)	Gross Cost	Gross Return/ Savings*	Net Return	BCR (R/C)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*check maybe family adopting different Nutrition garden model/ no adoption of Nutrition garden model
Savings from produce of Nutrition garden used for home consumption

3.4. Training Programmes(Online programmes if any should be included under On Campus category)

Farmers' Training including sponsored training programmes (on campus)[illegible]

[illegible]

Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics	4	114	21	135	21	5	26	135	26	161
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (ICT)	1	28	6	34	4	2	6	32	8	40
Total	5	142	27	169	25	7	32	167	34	201
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	41	1507	281	1788	48	28	76	1555	309	1864

[illegible]

Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Soil fertility management	02	44	5	49	0	0	0	44	5	49
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	30	0	30	02	0	02	32	0	32
Production and use of organic inputs	01	26	0	26	0	0	0	26	0	26
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	02	36	0	36	0	0	0	36	0	36
Soil and Water Testing	01	28	02	30	02	0	02	30	02	32
Others (pl specify) Resource Conservation Technologies	04	75	02	77	0	0	0	75	02	77
Total	11	239	09	248	04	0	04	243	09	252
IV Livestock Production and Management										
Dairy Management										
Poultry Management	2	48	0	48	0	0	0	48	0	48
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	5	5	10	61	15	76	66	20	86
Disease Management	1	26	0	26	0	0	0	26	0	26
Feed & fodder technology	1	11	0	11	0	0	0	11	0	11
Production of quality animal products										
Others (pl specify)										
Total	5	90	5	95	61	15	76	151	20	171
V Home Science/Women empowerment										

[illegible]

Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Soil fertility management	02	44	5	49	0	0	0	44	5	49
Integrated water management	02	133	33	166	0	0	0	133	33	166
Integrated Nutrient Management	05	108	09	117	02	0	02	110	09	119
Production and use of organic inputs	04	195	42	237	9	17	26	104	59	163
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	02	36	0	36	0	0	0	36	0	36
Soil and Water Testing	02	49	04	53	02	0	02	51	04	55
Others (pl specify) Resource Conservation Technologies	04	75	02	77	0	0	0	75	02	77
Total	21	640	95	735	13	17	30	653	112	765
IV Livestock Production and Management										
Dairy Management	1	18	0	18	2	0	2	20	0	20
Poultry Management	2	48	0	48	0	0	0	48	0	48
Piggery Management										
Rabbit Management										
Animal Nutrition Management	2	30	5	35	61	15	76	91	20	111
Disease Management	1	26	0	26	0	0	0	26	0	26
Feed & fodder technology	2	64	3	67	0	0	0	64	3	67
Production of quality animal products										
Health Care Management	4	260	50	310	0	0	0	260	50	310
Total	12	446	58	504	63	15	78	509	73	582
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet	1	0	13	13	0	0	0	0	13	13
Designing and development for high nutrient efficiency diet	1	0	21	21	0	0	0	0	21	21
Minimization of nutrient loss in processing	1	0	30	30	0	0	0	0	30	30
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	2	0	53	53	0	25	25	0	78	78
Women empowerment	1	0	60	60	0	0	0	0	60	60
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	2	0	36	36	0	4	4	0	40	40
Post-harvest technology	2	0	32	32	0	0	0	0	32	32
Total	10	0	245	245	0	29	29	0	274	274
VI Agril. Engineering										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										

Integrated Pest Management	08	191	15	206	00	00	00	191	15	206
Integrated Disease Management	01	23	00	23	00	00	00	23	00	23
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	09	214	15	229	00	00	00	214	15	229
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics	4	114	21	135	21	5	26	135	26	161
Formation and Management of SHGs										
Mobilization of social capital	1	18	4	22	1	0	1	19	4	23
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)	1	28	6	34	4	2	6	32	8	40
Total	6	160	31	56	26	7	33	186	38	224
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	81	2165	517	2547	116	73	189	2281	590	2871

[illegible]

Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping	01	12	05	17	01	00	01	13	05	18
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	2	0	35	35	0	6	6	0	41	41
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying	2	63	0	63	0	0	0	63	0	63
Sheep and goat rearing										
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										
Nutrition Security	1	0	11	11	0	7	7	0	18	18
TOTAL	7	113	61	174	1	13	14	114	74	188

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

[illegible]

implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs	01	7	2	09	0	0	0	7	2	9
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers	1	5	2	7	2	0	2	7	2	9
Capacity building for ICT application										
Management in farm animals										
Animal Diseases Management	1	26	1	27	2	0	2	28	1	29
Household food security										
Value Addition	1	0	19	19	0	3	3	0	22	22
Women empowerment	1	0	18	18	0	0	0	0	18	18
TOTAL	8	126	55	181	4	3	7	130	58	188

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Animal Health Care Management										
Household food security										
Any other (pl.specify)										
TOTAL	0	0	0	0	0	0	0	0	0	0

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management (Pest Management in Organic Farming)	01	36	01	37	00	00	00	36	01	37
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs	02	52	12	64	0	0	0	52	12	64
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs	01	7	2	09	0	0	0	7	2	9
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers	1	5	2	7	2	0	2	7	2	9
Capacity building for ICT application										
Management in farm animals										
Animal Diseases Management	1	26	1	27	2	0	2	28	1	29
Household food security										
Value Addition	1	0	19	19	0	3	3	0	22	22
Women empowerment	1	0	18	18	0	0	0	0	18	18

TOTAL	8	126	55	181	4	3	7	130	58	188
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Sponsored training programmes

[illegible]

Details of vocational training programmes carried out by KVKs for rural youth (4 or more days)

[illegible]

Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
Vermicomposting	01	15	0	15	0	0	0	15	0	15
Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
Repair and maintenance of farm machinery and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation	01	02	13	15	01	00	01	03	13	16
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dyeing etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total	2	17	13	30	1	0	1	18	13	31
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total	5	116	40	156	5	2	7	121	42	163

3.5. Extension Programmes

Activities	No. of programs	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	143	3938	60	3998
Diagnostic visits	36	282	43	325
Field Day	20	437	44	481
Group discussions	16	275	26	301
Kisan Ghosthi	8	399	12	411
Self -help groups	0	0	0	0
Kisan Mela	2	317	73	390
Exhibition	2	612	43	655
Scientists' visit to farmers field	111	744	20	764
Plant/animal health camps	3	113	21	134
Farmers' seminar/workshop	13	3265	26	3291
Method Demonstrations	12	201	12	213
Celebration of important days	7	473	10	483
Special day celebration	3	66	19	85
Exposure visits	1	22	0	22
Farmers Visits to KVK	126	1055	0	1055
Scientist Farmers Interface Meet	3	280	14	294
Lecture Delivered	19	992	24	1016
Swachha Bharat Mission Activity	27	1118	18	1136
Awareness about Crop Insurance Scheme	1	26	0	26
Live Telecasting	2	318	5	323
Celebration of Parthenium Awareness Week	3	50	7	57
Soil Health Card Distribution	1	14	3	17
Total	559	14997	480	15477

Note- Advisory services include social media, website, telephonic calls etc.

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	00
Extension Literature	14
Newspaper coverage	21
Popular articles	08
Research Papers	01
Radio Talks	03
TV Talks	04
Animal health camps (Number of animals treated)	2 Camps (274 Animal Treated)
Social Media (No. of platforms Used)	05
Total	58

3.6 Online activities during year 2021

S.N.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1	Farmers training	Google meet	Training Program on Care & Management of Animal During Summer Season	01	54
2	Farmers training	Google meet	Farmers & Farm Women Training on Agriculture and allied sector schemes	01	28
3	Farmers training	Facebook	Farmers & Farm Women Training on Formation and management of FPOs	01	63
4	Farmers training	Google meet	Online Training Program on Importance of Soil & Water Testing	01	23
5	Farmers training	Google meet	Training program on year round fodder production in rain feed area	01	56
6	Farmers training	Facebook	Training Program on Deshi Cow Based Organic Farming	01	188
7	Farmers training	Google meet	Training program on mass awareness campaign on promotion of animal husbandry sector & Loose housing system	01	25
8	Farmers training	Google meet	Training Program on Rice Production Technology	01	63
9	Farmers training	Zoom Meet	Lecture delivered as resource person on world bee day program	01	113
10	Farmers training	Google meet	Training program on management of white grub in sugarcane	01	28
11	Farmers training	Facebook	Skill development training on climate smart technologies	01	53
12	Farmers training	Google meet	Training Program on Integrated Nutrient Management in Soybean	01	28
13	Farmers training	Google meet	Training Program on Soybean Production Technology	01	64
14	Farmers training	Facebook	Training Program on Water use Efficiency under Jal shakti Abhiyan	01	128
15	Farmers training	Facebook	Training Program on Water Use Efficiency in Livestocks Under the Jal Shakti Abhiyan	01	128
16	Farmers training	Google meet	Training Program on Biofertilizers and Organic Fertilizers	01	53
17	Farmers training	Google meet	Training Program on Management of Fall Army Worm in Maize	01	29
18	Farmers training	Google meet	Training Program on Organic Farming	01	11
19	Farmers training	Facebook	Training Program on Sustainable Development through Integrated Farming System Model under Bharat Ka Amrut	01	95

			Mahostav		
20	Farmers training	Facebook	Rural Youth Training on available mobile apps and portals for animal husbandry sector	01	42
21	Farmers training	Google meet	Training Program on Organic Farming in Crops, Fruits and Vegetables	01	23
	Total			21	1295
B	Farmers scientist's interaction programme				
1	0	0	0	0	0
	Total				
C	Farmers seminars				
1	Farmers seminars	0	0	0	0
	Total	0	0	0	0
D	Expert lectures				
1	Expert lectures	Google meet	Lecture delivered in webinar on entrepreneurship in agriculture, KVK Gir Somnath	01	33
2		Google meet	Lecture Delivered as a Resource Person on Key Points in Goat Farming & Health Management of Goatary	01	21
3		Google Meet	Lecture delivered as a resource person on Animal Husbandry & Milk Enterprise	01	22
	Total			03	76
E	Webinar/Workshop	Facebook	Webinar on Bhoomi Suposhan	01	546
1		Zoo Meet	Webinar on use of mobile apps and portals for agriculture and allied sector	01	278
2		Facebook	Webinar on Bhoomi Suposhan and Sanrakshan Abhiyan	01	846
3		Google Meet	Webinar on World Milk Day-2021	01	29
4		Facebook	Webinar on Bhoomi Suposhan & Water Conservation	01	810
5		Facebook	Webinar on National Fish Farmers Day-2021	01	27
6		Facebook	Webinar on Sustainable development through Integrated Framing System Model (Celebration of ICAR Foundation Day-2021)	01	32
7		Facebook	Method Demonstration on Seed Treatment	01	26
8		Facebook	Method Demonstration on Soybean Seed Germination Test	01	37
9		Facebook	Online Pre-kharif Kisan Workshop	01	314
10		Whatsapp	Whatsapp live chat program on care & management of animals during summer season	01	21
11		Google Meet	Online Soil Health Campaign	01	94
12		Google Meet	Workshop on Rice Production Technology	01	63
13		Facebook	Facebook Live on Commercial Crops Clean & Green India	01	134
14		Google Meet	Workshop on Soybean Production Technology	01	64
15		Google Meet	Farmers Awareness Campaigning-cum-Kisan Gosthi Program on Balance Use of Fertilizers	01	83
16		Facebook	Online Awareness campaign On Crop Insurance Scheme	01	26
17		Youtube	Live Webcasting of PM Program on Climate Resilient Varieties	01	212
18		Youtube	Live Telecasting of Pre-Vibrant Gujarat Summit-2021 on Natural Farming	01	106
	Total			19	3748
	Grand Total (A+B+C+D+E)			43	5119

3.7. 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						
	Rice	Deshi Variety	-	10	80,000/-	107
Oilseeds						
	Soybean	Phule Sangam & Phule Kimaya	-	35	3,85,000/-	132
Total				45	4,65,000/-	239

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						
-	-	-	-	-	-	-
Fruits						
-	-	-	-	-	-	-
Ornamental plants						
-	-	-	-	-	-	-
Medicinal and Aromatic						
-	-	-	-	-	-	-
Plantation						
-	-	-	-	-	-	-
Spices						
-	-	-	-	-	-	-
Tuber						
-	-	-	-	-	-	-
Fodder crop saplings						
-	-	-	-	-	-	-
Forest Species						
-	-	-	-	-	-	-
Others						
-	-	-	-	-	-	-
Total	-	-	-	-	-	-

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
Bio Fertilizers				
-	-	-	-	-
Bio-pesticide				
-	-	-	-	-
Bio-fungicide				
-	-	-	-	-
Bio Agents				
-	-	-	-	-
Others				
-	-	-	-	-
Total	-	-	-	-

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals	-	-	-	-
Cows	-	-	-	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
Poultry	-	-	-	-
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
Piggery	-	-	-	-
Piglet	-	-	-	-
Others (Pl. specify)	-	-	-	-
Fisheries	-	-	-	-
Indian carp	-	-	-	-
Exotic carp	-	-	-	-
Others (Pl. specify)	-	-	-	-
Total	-	-	-	-

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

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

S.N.	Date of start	Periodicity	Number of copies distributed
1	January, 2021	Jan to March, 2021	100
2	April, 2021	April to June, 2021	100
3	July, 2021	July to Sep, 2021	100
4	October, 2021	Oct to Dec, 2021	100

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	Exploring agro-ecological bases of contemporary water management innovations (CWMIIs) and their out scaling.	Sanjay Gupta, D.U.M. Rao, M.S.Nain & Sunil Kumar	01
Technical reports	-	-	-
News letters	Siddhagiri Sheti Ved	KVK	04 Quarterly
Technical bulletins	-	-	-
Popular articles	Spirullina Ki Kheti, Beej Pramanikaran prakriya, Water Apple: A thirst quenching fruit, Lumpy skin disease: Control System, Organic Jaggery Production Using Modern Machinery, Bhoomi Suposhan: Importance & Useful Components	Dr. Ravindra Singh Mr. Pandurang Kale Mr. Sunil Kumar	08
Extension literature	-	-	-
Books Chapter	Supply Chain Management of Agricultural Commodities	Sunil Kumar, Pratibha Thombare, Pandurang Kale & Dr. Ravindra Singh	01
	Farmers Producer Organizations: Schemes & Initiatives in India	Sunil Kumar, Pratibha Thombare, Pandurang Kale & Dr. Ravindra Singh	01
TOTAL			15

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	Youtube Channel	1062
2	Facebook page/ Account	Facebook Page	3649
3	WhatsApp groups	Whatsapp Groups	1135
4	Website	KVK Website	7112
5	Twitter Account	Twitter	-

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).

Success Stories/Case Studies-1

- Situation analysis/Problem statement:** Shri Adinath Annappa Kinikar is an innovative farmer of Shri Siddhagiri Krishi Vigyan Kendra, Kaneri, Kolhapur, Maharashtra practicing natural farming Multi-cropping along with vermi compost production. He is preparing and using Vermi compost, vermin wash, Jeevamrut, Dashparni Ark, Gir-Gokrupa Amrutam and Pheromone traps for crops. He is rearing desi cattle. He has grown various crops.
- Plan, Implement and Support:** Shri Adinath Annappa Kinikar has grown various crops according to agro climatic condition of Kolhapur region. Under field crops he has grown Sugarcane, Soybean crops and Lady's Finger and chilli for vegetable crops.
- Output:** Shri Adinath is growing various fruits crops and trees in their farm. Shri Adinath has got the net income of Rs. 2,36,500 from various crops. He has grown Mango, Guava, Custard Apple, Banana, Sapota and Papaya. From these crops he got Rs. 2,73,000. Shri Adinath is growing various vegetables crops in their farm. He has grown Brinjal, Tomato, Cabbage, Cauliflower, chilli and coriander. From these crops he got Rs. 73,000. From the animal enterprise, from Cow rearing and Vermicompost he has received Rs. 1,08,000. He is preparing all the inputs required from crops from the urine of cow and buffalo and various urine based cultures for spraying on crops.
- Outcome:** He has developed a mixed horticulture block of half acre where different fruit crops (Mango, Sapota, Lemon, Papaya, Guava, Custard Apple, Banana and Drum stick has been planted along with ginger, brinjal, chilli, cabbage and other seasonal vegetables)
- Impact:** Practiced green manuring of dhaincha/sesbania, sunhemp, cow pea, green gram, black gram and sunflower. Practiced water conservation technologies including mulching of crop residue, bed sowing and ridge sowing along with drip irrigation. Pioneered in natural farming through crop diversification. Impacted about 100 farmers.



Success Stories/Case Studies-2

Situation analysis/ Problem statement: Shri Babasaheb Shankar Koot is an innovative farmer of Shri Siddhagiri Krishi Vigyan Kendra, Kaneri, Kolhapur, Maharashtra practicing Multi-cropping which is purely organic.

Plan, Implement and Support: He is preparing and using jeevamrut, Dashparni Ark, Gir-Gokrupa Amrutam for crops. He is rearing desi cow like Gir and Khillar etc.along with desi poultry breeds. He has grown various crops as depicted in table 1. He is one of the exemplary farmers for doubling the farmers' income by 2022 as vision of Hon'ble Prime Minister, Shri Narendra Modi.



Output: Shri Babasaheb Shankar Koot has grown various crops according to agro climatic condition of Kolhapur region. Under field crops he has grown Sugarcane, Soybean crops and Lady's Finger and chilli for vegetable crops. ShriKoot has got the net income of Rs. 2,28,000 from these crops.

Shri Babasaheb Koot is growing various fruits crops and trees in their farm. He has grown Mango, Guava, Custard Apple, Banana, Sapota and Dragon Fruit. Among the tree he has high value wood tree of Sagwan. From these crops he got Rs. 16,67,000.



Parameters	Natural Farming	
Crop	Sugarcane (4 acre)	Soybean (4 acre)
Yield (Q)	1641.81	42.8
Gross Expenditure (Rs.)	1,80,400	40,800
Gross Return (Rs.)	5,41,530	1,92,600
Net Profit (Rs.)	3,61,130	1,51,800
B:C Ratio	3.00	4.72

Outcome: In totality he is getting an annual income of Rs. 17,34,400.

Impact: he has impacted organic farmers and providing regular training and advisory to 500 farmers in a year.

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

Scientist-farmer interface meeting in every month since July 2020 has been implemented. In this apart from adopted villages of KVK, other village in each month has been selected for the first Tuesday of month. Farmers problems were discussed and adding them to KVK database to reach other villages of KVK jurisdiction.

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

- Problem identified/ Job description
- Questionnaire
- Observations

B. Rural Youth

- Questionnaire
- Observations

C. In-service personnel

- Job description
- Observations
- Present need/requirements

5.2 Indicate the methodology for identifying OFTs/FLDs

For OFT:

- PRA
- Problem identified from Matrix
- Field level observations
- Farmer group discussions
- Other if any

For FLD:

- New variety/technology
- Poor yield at farmers level

- iii) Existing cropping system
- iv) Other if any

5.3. Field activities

(i) Name of villages adopted/identified with block

Sr. No.	Name of village	Block	Year
1	Shendur	Kagal	2019-20
2	Bediv	Bhudargad	2019-20
3	Hanmantwadi	Gadhinglaj	2019-20
4	Bhadvanwadi	Ajara	2019-20
5	Turkewadi	Chandgad	2019-20
6	Kogil Budruk	Karveer	2020

(ii) No. of farm families selected per villages

Sr. No.	Name of village	Block	Farm families selected
1	Shendur	Kagal	320
2	Bediv	Bhudargad	45
3	Hanmantwadi	Gadhinglaj	80
4	Bhadvanwadi	Ajara	110
5	Turkewadi	Chandgad	70
6	Kogil Budruk	Karveer	230

6. LINKAGES

A. Functional linkage with different organizations

Sr.	Name of organization	Nature of linkage
1	ATMA	Training Programme Skill Oriented Training Programme for Rural Youth (STRY)
2	AGRI DEPARTMENT	Resource person in programme arranged under unnat sheti samruddh shetkari scheme
3	SAU	Collaborative programme with scientists of medicinal and aromatic plant unit, MPKV Rahuri.
4	Mahatma PhuleKrishiVidyapeeth, Rahuri (MPKV)	Review and planning of KVK activities including action plan, policies and implementation for agricultural field problems, ZREAC meeting, collaborative programmes at district and university level.
5	National Agricultural Research Project (NARP)	Conduct of SAC meeting, field diagnostic visits and publicity of front line demonstrations and on farm advice, conduct of Krishimela, field days and other extension activities.
6	State Department of Animal Husbandry	Jointly implementation of various programs of Livestock
7	Doordarshan	Broadcasting of technical information regarding agriculture and KVK activities.
8	Indian Council of Agricultural Research (ICAR)	Procuring scientific and technical information, strengthening of KVK activities, to keep liaison between ICAR authorities and host institute
9	All India Radio – Kolhapur	Broadcasting of radio talks for farmers of Kolhapur district on technical issues and Information.
10	Local village panchyat and Zilla Parishad	Involvement for the conduct of front line demonstrations, on farm testings, training programmes, rallies and other related programmes.
11	MAVIM (Mahila Arthik Vikas Mahamandal) – Kolhapur	Jointly implementation of programs related to women
12	AGROWON& Local News papers	Publicity of KVK programmes, Popular articles and Organizing joint training programmes
13	Co-operative sugar factory	Transfer of technology for sugarcane production, supply of planting materials
14	Co-operative dairy	Jointly organizing training programmes and animal health camps
15	Private agriculture college	Jointly implementation of RAWE activities in KVK adopted villages

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, and 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.)
FLD on Mustard	December, 2020	ICAR-DRMR, Bharatpur	49,950/-

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? **Yes**

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	-	-	-	-
02	Research projects	-	-	-	-
		-	-	-	-
03	Training programmes	-	-	-	-
		-	-	-	-
04	Demonstrations	-	-	-	-
		-	-	-	-
05	Extension Programmes	-	-	-	-
	KisanMela	-	-	-	-
	Technology Week	-	-	-	-
	Exposure visit	-	-	-	-
	Exhibition	Wild Vegetables	01	01	-
	Soil health camps	-	-	-	-
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify)	-	-	-	-
06	Publications	-	-	-	-
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl.specify)	-	-	-	-
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
	Agri-preneurs development	-	-	-	-

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
Nil	Nil	Nil	Nil	Nil	Nil

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
Nil	Nil	Nil	Nil	Nil	Nil

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
Nil	Nil	Nil	Nil	Nil	Nil

G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
01	PKVY	ICAR-ATARI, Pune	3,30,000/-	1,68,745/-	-

H. Details of linkage with NFSM

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

I. Details of linkage with SMAF (Sub-mission on Agro forestry)

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

7. Convergence with other agencies and departments: -**8. Innovative Farmers Meet**

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

9. Farmers Field School (FFS)

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

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

- Integrated Nutrient Management Practices in soybean gives 38.86 % more yield.
- Use of bio fertilizers and multi-micro nutrient and multi-macro nutrient with INM in Sugarcane gives 23.40 % more yield. 2. Around Rs 8500 per ha was saved on chemical fertilizers due to use of Bio fertilizers and multi-micro nutrient and multi-macro nutrient
- Around Rs.12950 per ha saved on chemical fertilizers .2. Improved trash management practices helps in getting 16.02. % more yield. 3. Due to use of trash management technologies full decomposition was observed 43 days earlier as compare to no use of technologies.
- Technology is good for adaptation but Microbial insecticides not get easily available
- Technology is good for adaptation but Tricho-cards should be available at a time.

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

- Need to develop improved tractor drawn machineries for sowing of Soybean on BBF method and fertigation techniques for Soybean.
- Need to develop short duration and fertilizer responsive varieties
- Need to develop small machinery that can be worked for trash cutting.
- Assessed technology is feasible in Kolhapur region and should be applied on large area. Use of Pheromone Traps, Bird perches and timely spraying of Botanicals revealed low infestation of defoliators
- Assessed technology is feasible in Kolhapur region and should be applied on large area. Use of Pheromone Traps, Trichocards, Field Sanitation and timely spraying of Botanicals revealed low infestation of Brinjal Shoot & Fruit Borer

11. Technology Week celebration during 2021: No

Period of observing Technology Week: From to

Online / Offline: -

Total number of farmers visited : -

Total number of agencies involved : -

Number of demonstrations visited by the farmers within KVK campus: -

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	-
Lectures organized	-	-	-
Exhibition	-	-	-
Film show	-	-	-
Fair	-	-	-
Farm Visit	-	-	-
Diagnostic Practical's	-	-	-
Supply of Literature (No.)	-	-	-
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	-	-	-

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
Nil	Nil	Nil	Nil

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Maharashtra	-	-	-
Total	-	-	-

D. Animal health camps organized

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

E. Seed distribution in drought hit states (Seed distribution/sold by KVK)

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

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Maharashtra	-	-	-
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)
Soybean: Phule Sangam (KDS-726)	225	80	50,000/-	70,000/-
Farming System for Nutrition Garden	200	75	8,500/-	14,000/-

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

B. Cases of large scale adoption

(Please furnish detailed information for each case)

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
Jan 2021	7	1099077	-
Feb 2021	6	1145790	-
March 2021	5	803658	-
April 2021	5	379763	-
May 2021	9	1230858	-
Jun 2021	14	1017336	-
Jul 2021	9	1010	-
Aug 2021	9	1043	-
Sept 2021	8	1078	-
Oct 2021	9	1078	-
Nov.2021	9	1078	-
Dec.2021	9	1078	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Kolhapur-II	Text only	23	19	96	-	-	-	138
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	23	19	96	-	-	-	138
	Total farmers Benefitted	212658	82973	1078	-	-	-	296709

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
-	-	-	-	-	-	-	-	-	-

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. (qt/ton)	Cost of inputs	Gross income	
Cereals									
Sorghum	11.10.2020	17.02.2021	01	Phule Revati	Grain	25	29,222	1,02,500	
Rice	13.07.2021	19.10.2021	02	Phule Samruddhi & 11 Different Deshi Varieties)	Grain	90	89,470	3,55,500	
Oilseeds									
Mustard	17.11.2020	08.03.2021	0.4	NRCHB-101	Grain	3.75	9,783	31,031	
Soybean	21.06.2021	11.10.2021	2.64	Phule Sangam	Seed	59.4	87,769	6,23,568	
Others (Cash Crop)									
Sugarcane-Ratoon	29.12.2020	25.11.2021	02	CO-86032	Jaggery	200 ton	1,68,235	6,40,000	
Others (Fodder)									
Fodder Crop	21.05.2021	Through year cutting	2.4	Super Napier	Fodder	228 ton	1,73,678	4,75,000	

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

Sl. No.	Bio Products	Name of the Product	Qty (kg/lit)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
1	Bio- Fertilizers	-	-	-	-	-
2	Bio- Fungicides	-	-	-	-	-
3	Bio- pesticides	-	-	-	-	-
4	Bio-Agents	-	-	-	-	-

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	
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Accommodation available (No. of beds):

F. Database management

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

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? Yes

If yes,

Nutritional Garden developed at Village Level (Area under nutritional garden)

H. Details of Skill Development Trainings organized

[illegible]

17. FINANCIAL PERFORMANCE**18. 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	State Bank of India	Kolhapur	07958	Shri Sidhagiri Math	38316771849	416002006	SBIN0007958
With KVK	State Bank of India	Kolhapur	07958	Shri Sidhagiri Math KVK	37762625343	416002006	SBIN0007958

B. Utilization of KVK funds during the year 2021-22 (Rs. In lakh)(Till Dec, 2021)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	144	119.67	108
2	Traveling allowances	1.00	0.50	0.45
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	5.00	3.50	0.52
B	POL, repair of vehicles, tractor and Equipments			0.90
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			1.50
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	6.00	4.01	0.75
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			0.50
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			0.40
G	Training of extension functionaries			1.35
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		156	127.68	114.37
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)		NIL	NIL	NIL
C. REVOLVING FUND		NIL	NIL	NIL
GRAND TOTAL (A+B+C)		156	127.68	114.37

C. Status of revolving fund (Rs. In lakh) for the Four years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2018 to March 2019	NIL	0.34	0.00	0.34
April 2019 to March 2020	0.34	43.54	40.49	3.40
April 2020 to March 2021	3.40	70.78	70.85	3.32
April 2021 to December, 2021	3.32	56.63	55.83	4.12

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates
Mr. Rajendra Waware	SMS, Soil science	Integrated Farming System: A Tool for enhancing income & nutritional security	ICAR-Research Complex for Eastern Region, Patna	Online	05-07 Oct, 2021
Mr. Rajendra Waware	SMS, Soil science	Sustainable Organic Farming: Technique & Certification	College of Agriculture, Tripura	Online	17-18 May, 2021
Dr. Parag Turkhade	SMS, Plant Protection	Promise of Biological Control for Sustainable Pest Management	Rajasthan College of Agriculture, Udaipur (Rajasthan)	Online	17 May, 2021
Dr. Parag Turkhade	SMS, Plant Protection	Mushroom Training Courses on Road Map for KVK's to enhance mushroom production & consumption.	ICAR-IIHR, Bengaluru (Karnataka)	Online	9-11th Aug, 2021
Dr. Parag Turkhade	SMS, Plant Protection	Short Term Beekeeping	Central Bee Research & Training Institute, Pune (Maharashtra)	Online	4-8 th Oct, 2021
Mis. Pratibha Thombare	SMS, Home Science	Promoting Agricultural Entrepreneurship amongst Rural Youth and Women	Maharana Pratap University of Agriculture and technology, Udaipur, Rajsthan	Online	15 th March, 2021
Mr. Sunil Kumar	SMS, Agril. Extension	Value chain and marketing of horticultural products and entrepreneurial development	College of horticulture and forestry, CAU, Imphal	Online	04-06 Feb, 2021
Mr. Sunil Kumar	SMS, Agril. Extension	Behavioral skill for extensionists and scientists	EEI Anand & MANAGE Hyderabad	Online	27-30 April, 2021
Mr. Sunil Kumar	SMS, Agril. Extension	Building public private partnerships for agricultural innovations	MANAGE Hyderabad	Online	29-30 March, 2021

20. Details of progress in Doubling Farmers Income (DFI) villages adopted by KVKs

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before (base year)	After (current year)
Shendur, Tal. Kagal	889	- Technology Demonstration - On farm Testing - Training - Promotion of Organic Farming - FSN activities	35	61,000/-	93,600/-
Turkewadi, Tal. Chandgad	720	- Technology Demonstration - On farm Testing - Training - Promotion of Organic Farming	27	68,400/-	1,01,388/-

21. Details of activities planned under NARI /PKVY / TSP / KKA, etc.

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	PKVY	01	Training Program, Awareness Program, Exposure Visit, Input Distribution	05	50
2.	FSN/NARI	01	Training Program, Awareness Program, Input Distribution, Field Visit	17	200

20. Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

21. Details of SAP

S. No.	Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Tree Plantation & Cleanliness drive Cleaning & Tree Plantation at KVK Campus Tree Plantation Swachata Pakhwada Activities, Tree Plantation, Agricultural Waste Management, Swachata Awareness Campaign, Waste to Wealth	31	772

21. 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	81	2281	590	2871
Rural youths	07	114	74	188
Extension functionaries	08	30	58	88
Sponsored Training	0	0	0	0
Vocational Training	05	121	42	163
Total	101	2546	764	3310

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	58	20.2	0
Pulses	15	03	0
Cereals	28	11.2	0
Vegetables	15	1.5	0
Other crops	30	12	0
Hybrid crops	13	02	0
Total	159	49.9	0
Livestock & Fisheries	13	0	3
			Livestock/Farmer
Other enterprises	60	06	0
Total	73	06	03
Grand Total	232	55.9	03

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	06	82	82
Livestock	01	13	13
Various enterprises	02	30	30
Total	09	125	125
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	09	125	125

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	559	15477
Other extension activities	58	7645
Total	617	23122

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Kolhapur-II	Text only	23	19	96	-	-	-	138
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	23	19	96	-	-	-	138
	Total farmers Benefitted	212658	82973	1078	-	-	-	296709

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	Rice- 10 qt	80,000/-
	Soybean- 35 qt	3,85,000/-
Planting material (No.)	-	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	-	-
Water	-	-
Plant	-	-
Total	-	-

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	13
2	Conferences	00
3	Meetings	03
4	Trainings for KVK officials	02
5	Visits of KVK officials	36
6	Book published	01
7	Training Manual	00
8	Book chapters	02
9	Research papers	01
10	Lead papers	00
11	Seminar papers	00
12	Extension folder/Literature	14
13	Proceedings	00
14	Award & recognition	02
15	On-going research projects	00