



ANNUAL REPORT 2020



ICAR - Krishi Vigyan Kendra, North Goa
ICAR - Central Coastal Agricultural Research Institute

Ela, Old Goa (Goa) - 403 402

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Annual Progress Report 2020

ICAR – KVK, North Goa

(January 2020 to December 2020)

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)
	Office	FAX		
ICAR - KVK, North Goa ICAR – CCARI Ela, Old Goa, Taluka –Tiswadi, Dist. – North Goa, Goa - 403 402	08322285475	08322285475	pckvknorthgoa@gmail.com kvknorthgoa@icar.gov.in pckvk.ccari@icar.gov.in	www.kvknorthgoa.icar.gov.in (53538 hits)

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

Address	Telephone		E mail	Website address
	Office	FAX		
ICAR – Central Coastal Agricultural Research Institute Ela, Old Goa, Taluka – Tiswadi, District – North Goa , Goa – 403 402	08322284677	08322285649	Director.ccari@icar.gov.in	www.ccari.res.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. B. L. Kasinath Principal Scientist and Head	08322285475	8880481234	pckvknorthgoa@gmail.com

1.4. Year of sanction: 1983

1.5. Staff Position (as on 31 December, 2020)

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Level	Current Index		
1.	Senior Scientist and Head	Dr. B. L. Kasinath	Soil Science	14	05	01/06/2020	Permanent
2.	Subject Matter Specialist	Vacant	Horticulture	-	-	-	-
3.	Subject Matter Specialist	Vacant	Agronomy	-	-	-	-
4.	Subject Matter Specialist	Mr. H.R. Chidananda Prabhu	Plant Protection	12	14	02-09-1995	Permanent
5.	Subject Matter Specialist	Mrs. Sunetra M. Talaulikar	Home Science	12	15	26-12-1987	Permanent
6.	Subject Matter Specialist	Dr. Monica Suresh Singh	Agril. Extension	11	2	18-03-2019	Permanent
7.	Subject Matter Specialist	Dr. Sanjaykumar Udharwar	Animal Science	10	8	02-09-2014	Permanent
8.	Programme Assistant	Mr. Shashi Vishwakarma	Soil Science	7	4	20-12-2010	Permanent
9.	Computer Programmer	Mr. Vishwajeet Prajapati	Computer Science	7	4	27-12-2010	Permanent
10.	Farm Manager	Vacant	-	-	-	-	-
11.	Accountant/Superintendent	Mr. Vishwas Sharma	B.E.	6	7	21-05-2012	Permanent
12.	Stenographer	Mrs. Shreya Barve	Stenography	4	9	20-12-2011	Permanent
13.	Driver 1	Vacant	-	-	-	-	-
14.	Driver 2	Mr. Dilkush Velip	-	4	4	26-03-2012	Permanent
15.	Supporting staff 1	Mr. Payak Jorgo Padkar	-	2	12	26-07-2007	Permanent
16.	Supporting staff 2	Vacant	-	-	-	-	-

1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	2.00
2.	Under Demonstration Units	3.00
3.	Under Crops	1.00
4.	Horticulture	8.75
5.	Pond	0.50
6.	Nursery	1.00
7	Fodder plot	1.75
8	Under Buildings	2.00

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2005	495	43.79	-	-	Completed
2.	Farmers Hostel	ICAR	2001	134.275	23.55	-	-	Completed
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)							
	1. Buffalo Unit	Host Institute	2006	100	08.32	-	-	Completed
	2. Goat Unit	Host Institute	2006	90	10.08	-	-	Completed
	3. Poultry Unit	Host Institute	2006	100	-	-	-	Completed
	4. Vermi compost Unit	Host Institute	2006	100	01.36	-	-	Completed
	5. Nursery Unit	Host Institute	2003	10000	-	-	-	Completed
	6. Roof water harvesting Unit	Host Institute	2006	761	-	-	-	Completed
	7. Polyhouse(2 nos.)	RKVY	2012	10000	19.977	-	-	Completed
	8. IATM	RKVY	2012	750	54.00	-	-	Completed
	9. VCO Production Unit	RKVY	2013		10.00	-	-	Completed
5	Fencing							
6	Rain Water harvesting system	KVK	2013	750	10.00	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Other	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Hero Honda – Splendor GA-07-G-0085	2008- 09	38,000/-	27492	Good
Chevrolet Tavera GA-07-G-0211	2010-11	5,81,537/-	236546	Needs Replacement
Tractor with trolley	2019-20	8,93,183/-	360.88 hrs	Good

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
SOIL SCIENCE LAB. EQUIPMENTS			
Spectro photometer	2005	48,828	Non functional
Shaker (two)	2005	73,216	Good
Hot plate	2005	2,967	Non functional
Flame Photometer	2012	49,992	Non functional
Atomic Absorption Spectrophotometer	2012	9,96,213	Non functional
Total		11,71,216/-	
OTHER EQUIPMENTS			
Computer	2006	46,000	Non functional
Motor and pumps	2010	88,644	Good
LCD projector & Computer	2007	97,860	Non functional
FAX machine	2009	15,000	Non functional
Total		2,47,504/-	
AUDIO VISUAL AIDS			
Slide Projector	1995	10,715	Non functional
Overhead Projector	1995	12,300	Non functional
Tri pod screen for slide / overhead / LCD projector	1996	4,780	Non functional
Collar mike	2009	1,687	Non functional
Tri pod screen (wall mounting spring loaded screen)	2009	9,225	Good
Digital Camera	2009	8,990	Non functional
Digital Camera	2010	24,990	Non functional
Canon IR Copier / printer	2017	96,000	Good
Total		1,68,687/-	
TRAINEE'S HOSTEL FURNITURE			
Beds / Cots (16)	2006	65,600	Good
Chairs (36)	2006	61,920	Good
Total		1,27,520/-	

1.8. Details of SAC meetings conducted in the year 2020

Date	Name and Designation of Participants	Salient Recommendations	Action taken

03-03-2020	1. Dr. E B Chakurkar, Director, ICAR – CCARI, Ela, Old Goa	1. OFT be done for Goa Dhan – 3 & Goa Dhan – 4 in combination with Goa Bio-I (Action : PC, KVK)	Conducted during 2020
	2. Dr. Lakhan Singh, Director ATARI, Zone VIII, Pune		
	3. Dr. B N Sawant, Associate Director of Regional Fruit Research Station, Vengurla	2. Number of soil samples to be increased (1500) and ensure timely distribution of soil health cards (Action: Tech. Officer – Soil Science)	In the year 2020, a total of 1504 samples has been analyzed and soil health card distributed
	4. Dr. Veena Kumar, Assitt. Director, Department of Animal Husbandry, Goa		
	5. Mrs. Shobhan Ugudav, ADA (FT), Department of Agriculture, Goa	3. The established bee colonies be maintained and planting of flowering plant be taken up (Action: PC, KVK)	Two bee colonies are being maintained at KVK and multiplication is going on. Further planting of sunflower and drumstick plant has been done.
	6. Mr. K L Nayak, NABARD, Panaji, Goa		
	7. Mr. Premanand Gawas, All India Radio, Altinho, Panaji, Goa	4. Programme of KVK and Success stories be sent to ICAR Website (Action: - SMS – Agril Extension)	The KVK events / programmes are regularly sent to ICAR – ATARI, Pune and Two success stories were also sent.
	8. Smt. Fatima Periera, Progressive Farmwomen, Corlim, Goa		
	9. Smt. Madhavi Gawas, Progressive aFarmwomen, Taliegao, Goa	5. A model nutrition kitchen garden be established at KVK (Action: SMS – Home Science & Farm Manager)	One Garden was developed at KVK to cultivate vegetable near the KVK Entrance
	10. Mr. Omu Gawas, Progressive Farmer, Pilar, Goa		
	11. Mr. Manahor M. Naik, Progressive Farmer, Neura, Goa	6. More radio talks should be given. (Action: All SMS's)	Radio talk - 11 TV programme – 04
	12. Dr. V Arunachalam, Pr. Scientist, ICAR – CCARI, Ela Old Goa		
	13. Dr. Manohara K K, Pr. Scientist, ICAR – CCARI, Ela Old Goa	7. Efforts to be made for micro chipping of different mango varieties in scion block (Action: Farm Manager & PC, KVK)	Due to Corona Pandemic micro chipping of mango varieties not done. It will be done this year after training from IIHR, Bengaluru
	14. Dr. Sujeet Desai Scientist, ICAR – CCARI, Ela Old Goa		
	15. Dr. Chetan kumar H B, Scientist ICAR – CCARI, Ela Old Goa	8. News letter publication should be done quarterly (Action: - SMS – Agril Extension)	One biannual and two quarterly newsletter has been published
	16. Dr. Amiya RAnjan Sahu, Scientist ICAR – CCARI, Ela Old Goa		
	17. Dr. Gopal MAhajan,	9. Training in the processing of Ragi be conducted (Action: SMS, Home science)	Conducted one training on Ragi processing / value addition at Surla village

Scientist, ICAR – CCARI, Ela Old Goa 18. Dr. Susitha Rajkumar, Scientist, ICAR – CCARI, Ela Old Goa 19. Dr. Maruthaduri, Scientist, ICAR – CCARI, Ela Old Goa 20. Dr. Sreekant G B, Scientist, ICAR – CCARI, Ela Old Goa 21. Dr. Nibedita Nayak, Scientist ICAR – CCARI, Ela Old Goa 22. Dr. Maneesha S R, Scientist, ICAR – CCARI, Ela Old Goa	10. Case studies on VCO to be compiled (Action: SMS – Home science & SMS -Agril Extension)	Two Case studies already documented and video recorded.
	11. OFT on finger fillet to be conceptualized in consideration with varieties available with UAS, Bangaluru & ICAR-Indian Institute of Millet Research (Action: SMS – Agril Extension)	Conducted during 2020

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	Names of talukas covered
1.	Rice–Rice / Groundnut / Pulses (Cowpea , long bean) / Vegetables (brinjal, chilli, okra, amaranths, radish, cucurbits, sweet potato, knol khol, cluster bean, etc)	Tiswadi, Bicholim, Pernem, Sattari, Bardez,
2.	Hill Cucurbits during Kharif	Sattari, Bicholim
3.	Coconut mixed crop with spices (pepper, nutmeg, clove, cinnamomn, ginger, turmeric) or banana	Tiswadi, Bicholim, Pernem, Sattari, Bardez
4.	Arecanut mixed crop with spices (pepper, nutmeg, clove, cinnamomn)	Tiswadi, Bicholim, Pernem, Sattari, Bardez
5.	Cashew + pineapple. Mango	Tiswadi, Bicholim, Pernem, Sattari, Bardez
6.	Dairy, poultry, piggery, fishery	Tiswadi, Bicholim, Pernem, Sattari, Bardez

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

a. Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1	Coastal	Hillock neighboring Arabian sea

b. Topography

S. No.	Agro ecological situation	Characteristics
1	Hilly and coastal	Laterite and sandy loam soil, Average rainfall 3000 mm / annum

2.3. Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Harmal	Very deep, light grey to brown sand surface soil	1.0728
2	Mandovi	Deep grayish brown to very dark grayish brown	1.027
3	Panaji	Moderately deep, light brownish grey to dark grayish brown	0.641
4	Kalangute	Deep, very dark brown to dark grey	3.654
5	Padi	Moderately deep, brown to dark yellowish brown	0.105
6	Batim	Deep yellowish brown to dark yellowish brown	8.537
7	Gudi	Deep, light yellowish brown to dark yellowish brown	2.121
8	Pali	Moderately deep, dark yellowish brown	6.996
9	Rock out crops	Builders of basal	0.161
10	Surla	Moderately deep brown to dark brown	1.686

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

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Paddy	34261 (Kharif) 17930 (Rabi)	117206881 (Kharif) 65318990 (Rabi)	34.21 (K) 36.43 (R)
2	Pulses	11477	11258937	9.81
3	Sugarcane	1034	56027290	541.85
4	Coconuts	25545	127571730	4994 Nos.
5	Arecanuts	1677	2666430	15.90
6	Cashew nuts	55612	21966740	3.95
7	Mango	4494	18892776	42.04
8	Banana	2398	23478818	97.91
9	Vegetables	5547	56024700	101.00
10	Groundnut	3720	6997320	18.81

Authentic Source (State / Central Govt): **Goa Statistics, Govt. of Goa.**

2.5. Weather data (2020)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	0.0	33.4	18.1	87.4	40.7
February	0.0	35.2	20.1	88.7	38.2
March	0.0	34.4	22.6	88.2	46.9
April	6.0	35.5	25.3	83.8	54.3
May	0.4	36.3	26.7	78.7	55.2
June	1215.2	31.1	24.1	92.6	80.1
July	1347.7	29.4	24.1	94.2	85.6
August	1060.0	28.9	24.2	93.0	82.6

September	729.0	29.8	24.0	94.8	81.0
October	215.0	31.2	24.0	93.4	70.7
November	0.0	34.4	22.8	78.7	45.1
December	54.2	33.8	21.7	75.6	39.9
Total	4627.5	-	-	-	-

Source: District agriculture department.

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

Category	Population (Nos.)	Production	Productivity
Cattle			
<i>Crossbred</i>	9,604	1.00 Lakh litres(State Production of all Milk animals)	
<i>Indigenous</i>	27,808		
Buffalo	21,956		
Sheep			
<i>Indigenous</i>	116		
Goats	5,629		
Pigs			
<i>Crossbred</i>	895		
<i>Indigenous</i>	12,516		
Rabbits	744		
Poultry			
Backyard poultry	46,703	149 million eggs (State production of all poultry birds)	95 eggs (Avg. state of all laying poultry birds)
Below 5 Months	70,576		
Layer / Boiler farm	2,26,350		
Hens	13,497		
<i>Desi</i>	13,623		
<i>Improved</i>	1,259		
Ducks	188		
Turkey and others	46		
Category		Production (Q.)	Productivity
Fish (Reservoir)			
Fish (Farm ponds)			

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village
Pernem	Mopa , Ibhrampur	Mopa , Ibhrampur
Bardez	Parra	Parra
Sattari	Keri, Nagargaon	Keri, Nagargaon

Major crops & enterprises	Major problem identified	Identified Thrust Areas
Rice-cowpea, Vegetables. Coconut, Cashew, Mango. Banana. Marigold, Dairy, poultry, Piggery, Goatery. Papad making, Crafts.	SOIL <ul style="list-style-type: none"> ▪ Acidic soil ▪ Poor soil fertility & waste land (Mining rejected soil) ▪ Soil fertility degradation. ▪ Soil and water erosion. 	<ul style="list-style-type: none"> • Soil reclamation through amendments. • Soil fertility management through INM, organic farming. • Recommendation of plant nutrient on soil test based report (Soil Health Card). • Conservation farming through growing cover crops and green manure crops, mulching organic waste.
	RICE <ul style="list-style-type: none"> ▪ Monocropping, Fallow land ▪ Salt affected soil ▪ Poor yielding varieties. ▪ Imbalanced nutrients use ▪ Pest and Disease problem 	<ul style="list-style-type: none"> ▪ Multiple cropping. ▪ Popularizing salt tolerant variety ▪ Varietal evaluation ▪ INM ▪ IPM
	CASHEW <ul style="list-style-type: none"> ▪ Poor yielding varieties ▪ TMB, CSRB pests ▪ Underutilization of interspaces in newly plantations ▪ Lack of value addition & processing ▪ Imbalanced nutrients use 	<ul style="list-style-type: none"> ▪ Popularizing high yielding varieties. ▪ IPM ▪ Intercropping ▪ Value addition (squash, candy crunch) ▪ INM
	COCONUT <ul style="list-style-type: none"> ▪ Underutilization of interspaces ▪ RPW, mite pests ▪ Post harvest losses ▪ Imbalanced nutrients use 	<ul style="list-style-type: none"> ▪ Intercropping ▪ IPM ▪ Value addition (Virgin Coconut Oil) ▪ INM
	MANGO <ul style="list-style-type: none"> ▪ Alternate bearing & Old plantation ▪ Imbalanced nutrients use ▪ Post harvest losses 	<ul style="list-style-type: none"> ▪ ICM of improved grafted varieties ▪ INM ▪ Value addition
	VEGETABLES <ul style="list-style-type: none"> ▪ Low margin of profits from traditional vegetable crops/varieties & lack of diversification ▪ Lack of value addition & processing ▪ Imbalanced nutrients use ▪ Pest and Diseases ▪ Pesticide residual problem 	<ul style="list-style-type: none"> ▪ ICM of improved varieties/ High value crops/ technologies – Precision farming techniques. ▪ Value addition ▪ INM ▪ IPM ▪ Organic Farming

	ANIMALS <ul style="list-style-type: none"> ▪ Non availability of fodder round the year ▪ Imbalanced feed management ▪ Non descript local breeds ▪ Infertility in cattle ▪ Unhygienic milk production 	<ul style="list-style-type: none"> ▪ Hybrid Napier grasses Popularization– CO5 ▪ Scientific Feed management through capacity building ▪ Popularization of Improved breeds / cross breeds ▪ Fertility management ▪ Quality milk production
	BIRDS <ul style="list-style-type: none"> ▪ Non descript local breeds ▪ Poor feed management 	<ul style="list-style-type: none"> ▪ Popularization of Grampriya / Srinidhi / CARI-Nirbheek birds ▪ Balanced feeding using locally available ingredients
	OTHERS <ul style="list-style-type: none"> ▪ Lack of awareness ▪ Non utilization of leisure period ▪ Poor income form agriculture ▪ Small holdings ▪ Irrigation during rabi & summers ▪ High labour cost & its non availability & Drudgery in agricultural operations 	<ul style="list-style-type: none"> ▪ Awareness programmes/ capacity building ▪ Entrepreneurship development ▪ Value addition / Post harvesting, Income generating activity ▪ Intensive farming/ improvement in production/ productivity & income. ▪ Water harvesting & management ▪ Farm mechanization

2.8. Priority thrust areas:

S. No	Thrust area
1.	Varietal Evaluation in paddy
2.	CSRB in cashew
3.	Varietal Evaluation in Tomato
4.	Varietal Evaluation in finger millet
5.	Varietal Evaluation in cowpea
6.	Post Harvest Technology in Jackfruit
7.	Post Harvest Technology in Paddy
8.	Varietal Evaluation in Amaranthus
9.	Malnutrition in infants and children
10.	Popularization of Nutrition garden
11.	Popularization of High yielding salt tolerant rice variety
12.	Varietal evaluation of poultry birds

3. TECHNICAL ACHIEVEMENTS

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

OFT	FLD
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1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
8	8	49	49	12	12	92	92

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
70	80	1300	1533	1000	1325	8000	10237

Seed Production (Qtl.)			Planting materials (Nos.)		
5			6		
Target		Achievement	Target		Achievement
-		-	12000		16248

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)			
7		8			
Target		Achievement	Target		Achievement
Dairy and poultry - 8000		9331	Vermicompost - 3500		3629
			Earthworms - 10		12

3.1. B. Operational areas details during the year 2020

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	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
6.1	Soil	<ul style="list-style-type: none"> Acid / Saline soil Poor soil health & waste land Soil fertility degradation. Soil and water erosion. Mine reject soil 	79908 ha of which 15-20%	Mopa , Ibhampur, Parra, Keri, Nagargaon,	Training / Demonstration
6.2	Rice	<ul style="list-style-type: none"> Poor yielding local varieties. Imbalanced nutrients use Leaf mold in rice Post harvest losses 	26889 ha of which 25-30%		Training / Demonstration
6.3	Cashew	<ul style="list-style-type: none"> TMB, CSRB pests Underutilization of interspaces' in newly plantations till start of fruiting. Lack of value addition & 	40586 ha of which 50-60%		Training / Demonstration

		<ul style="list-style-type: none"> processing. • Old and Senile orchards 			
6.4	Coconut	<ul style="list-style-type: none"> • Underutilization of interspaces' • RPW, mite pests • Post harvest losses. • Old and saline orchard. 	11310 ha of which 60-70%		Training / Demonstration
6.5	Mango	<ul style="list-style-type: none"> • Alternate bearing & Old plantation • Imbalanced nutrition • Post harvest losses. • Imbalanced nutrient. • Old and saline orchards. • Fruit fly • Loranthus 	60-70 %		Training / Demonstration
6.6	Vegetables	<ul style="list-style-type: none"> • Low margin of profits from traditional vegetable crops/varieties. • Lack of diversification. • Lack of value addition & processing. • Improper nutrient. • Improper management. 	3360 ha of which 50-55%		FLD, Training / Demonstration
6.7	Chilli	<ul style="list-style-type: none"> • Root rot disease • Closer spacing • Improper nutrient • Improper management • Low Yielding • Local Variety • Thrips and Viral Diseases 	55-60 %		Training / Demonstration
6.8	Brinjal	<ul style="list-style-type: none"> • Wilt disease • Use of own seed • Improper nutrient • Improper management 	50-55%		OFT, Training / Demonstration
6.9	Cucurbit	<ul style="list-style-type: none"> • Fruit fly pest & leaf spot disease • Use of own seed • Improper nutrient • Improper management 	50-55%		Training / Demonstration

6.10	Onion	<ul style="list-style-type: none"> • Low yield local variety • Improper management • Improper nutrient management 	50-55 %		Training / Demonstration
6.11	Okra	<ul style="list-style-type: none"> • YVMV disease • Use of own seed • Improper nutrient • Improper management 	50-55%		Training / Demonstration
6.12	Sweet Potato	<ul style="list-style-type: none"> • Sweet potato weevil • Poor yielding local varieties • Improper nutrient • Improper management 	50-55%		FLD, Training / Demonstration
6.13	Animals	<ul style="list-style-type: none"> • Non availability of fodder round the year • Imbalanced nutrition • Non descript local breeds 	60-65%		FLD, Training / Demonstration
6.14	Birds	<ul style="list-style-type: none"> • Non descript local breeds • Imbalanced nutrition 	50-55%		OFT, Training / Demonstration
6.15	Other	<ul style="list-style-type: none"> • Lack of awareness • Non utilization of leisure period • Poor income from agriculture and small holdings • Irrigation during rabi & summers. • High labour cost & its non availability. • Drudgery in agricultural operations. • Post harvest loses • Lack of value addition 	50-55%		FLD, Training / Demonstration

3.2. Technology Assessment (Kharif 2020, Rabi 2019-20, Summer 2020)

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

Thematic areas	Cereals	Oilseeds	Pulses	Vegetables	Fruits	Flower	Plantation crops	TOTAL
Integrated Nutrient Management								
Varietal	2			2				4

Evaluation								
Integrated Pest Management				1				1
Integrated Crop Management								
Integrated Disease Management								
Small Scale Income Generation Enterprises								
Weed Management								
Resource Conservation Technology								
Farm Machineries								
Integrated Farming System								
Seed / Plant production								
Value addition				1	1			2
Drudgery Reduction								
Storage Technique								
Mushroom cultivation								
Total	2			4	1			7

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds		1				1
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL		1				1

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	Chili	Application of Jeevamrut	5	5	0.5
Varietal Evaluation	Finger millet	Dapoli-2, KMR-301, GPU-67	5	5	1.0
	Tomato	Arka Rakshak, Konkan Vijay	5	5	0.5
	Paddy	Goa Dhan3, Goa Dhan - 4	4	4	0.4
	Amarant hus	Goa Tambadi Bhaji - 1, Konkan Durangi	5	5	0.5
Integrated Pest Management	Chili	RDF (100:50:50), Soil and foliar application of Jivamrut (1:5)	5	5	0.5
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					

Value addition	Jackfruit	Assessment of ready to cook tender / mature jackfruit	5	5	-
	Drumstick	Evaluation of value-added products using moringa oleifera	10	10	-
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			44	44	3.40

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	Poultry	Breed – Grampriya, CARI - Nirbheek	5	5
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			5	5

C1.Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed
1	2	3	4	5	6
Poultry (2019 continued)	Rice based farming system	Low egg and meat yield in desi poultry birds	Assessment of improved poultry varieties	5	FP: Desi Birds RP: Grampriya Birds AP: CARI – Nirbheek Birds
Dairy	Rice based farming system	Non Availability of Green fodder	Assessment of hybrid Napier fodder varieties	5	FP: Local Grass RP: CO-4 AP: CO-5

Drumstick	-	The effects of malnourishment are irreversible if they occur at a young age. If not death, it leads to permanent disabilities that render the children ill for the rest of their lives. Not only children but adults also fall in the category of malnutrition in India.	Evaluation of value added products using moringa oleifera	10	Evaluation of value added products using moringa oleifera RP: Mathari (salted crackers) AP : Aloo Tikki (potato pattice) AP : Corriander chutney AP : Suji laddo
Jackfruit	-	Non availability of ready to cook tender jackfruit during off season	Assessment of ready to cook tender / mature jackfruit	5	FP : Regular cutting of tender jackfruit RP: Regular cut tender jackfruit treated with preservative (Potassium metabisulphite) and packaging & storage RP: Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage
Finger millet	Rice based farming system	Low productivity of local variety	Assessment of High yielding finger millet varieties	5	Technology option 1- Dapoli No 2 Technology option 2- KMR-301 Technology option 3- GPU-67
Tomato	Rice based farming system	Low productivity and high wilt incidence in local variety	Assessment of tomato varieties in agro-climatic situation of Goa	5	FP :Local variety Technology option 1: Arka Rakshak Technology option 2: Konkan Vijay
Poultry (2020)	Rice based farming system	Low egg and meat yield in deshi poultry birds	Assessment of improved poultry varieties	5	FP: Desi Birds RP: Grampriya Birds AP: CARI – Nirbheek Birds
Paddy	Rice based farming system	Low productivity due to salt affected soils	Assessment of Salt tolerant varieties of paddy	4	FP : Korgut RP:: Goa Dhan – 03 AP : Goa Dhan - 04

Amaranthus	Rice based farming system	Low productivity of local variety	Assessment of yield potential of Red Amaranthus varieties	5	FP : Local variety RP : Goa Tambadi Bhaji - 1 AP: Konkan Durangi
Chili	Rice based farming system	Low productivity high incidents of insect pest and less soil microbial activities	Assessment of application of Jivanrut in chilli	5	FP: FYM application RP: RDF (100:50:50) AP: Soil and foliar application of jivamrut (1:5)

Conti...

Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
7	8	9	10	11	12
1 Egg yield	Egg production (no /year) Desi:52 Grampriya:176 CARI Nirbheek:163	Farmers got more profit by maintaining Grampriya than CARI-Nirbheek and Desi birds with similar management	Farmers are very much satisfied by Grampriya (Dual Purpose) which has high demand in the market than CARI – Nirbheek.	No	Not Applicable
1. Green Grass Yield 2. No of cuttings per year	Green grass yield Local grass : Karad : 18.93 t/ha / year Boro : 61.90 t/ha/ year CO4:329.8 t/ha / year CO5:341.51 t/ha / year No. of cuttings per year Both CO- 4 and CO-5 06 cuttings/ year. In local 2 cuttings/ year	Green grass yield wise CO5 fodder gives more yield than CO4 with same cuttings i.e. 6 cuttings / year . CO5 stem is more succulent than CO4 CO5 contains more CP% 14 than CO4 i.e 10.71%	Farmers are very much satisfied by getting good green grass yield round the year.	No	Not Applicable
Sensory evaluation for acceptability of product using Moringa leaves product.	1) Nil 2) 70 % 3) 20 % 4) 10 %	Incorporation of 20% of drumstick leaves was more accepted.	Incorporation of 20% of drumstick leaves was more accepted.	-	-

Shelf life, CBR	1) 175 days 2) 150 Days 3) 280 days	Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage was accepted by the farmers as it shelf life and cooking quality was good.	Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage was accepted by the farmers	-	-
Lodging percentage, height, no of tiller, yield, BCR	Lodging % 1)25 2)15 3)2-4 4)Nil Height cm. 1)102 2)105-110 3)115 4)87 No of Tiller per plant 1)4-5 2)4-5 3)7-8 4)7-8	KMR-307 was accepted due to its higher yield and lower lodging %.	KMR-307 was accepted	-	-
Wt of fruit, no of fruit/plant, yield, CBR	Trial in progress	-	-	-	-
1 Egg yield 2. Weight at 5 months 3. mortality	Trial in progress	-	-	-	-
Yield, tiller per hill, CBR	Yield	FP-1.22 RP-2.61 AP-2.68 Nos. of Tillers/hills FP - 8 . RP- 13 AP-14.	Goa Dhan -4, is more accepted	-	-
Yield, CBR	In Progress	-	-	-	-
Plant height, yield, CBR	Plant Height (cm) FP: 64.2 cm RP: 76.5 cm AP: 75.9 cm	Jeevamrut was found most effective	Farmer liked performance of Jeevamrut	-	-

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
FP: Desi		52	Nos. / year	500	1.56
Technology option 1: Grampriya	ICAR – CCARI	176	Nos. / year	1680	3.50
Technology option 2: CARI Nirbheek	ICAR – CARI, Izzatnagar	163	Nos. / year	1450	3.02
FP: Karad grass		18.93	t/ha/Year	786	1.26
Boro grass		61.90	t/ha/Year	3380	1.37
Technology option 1: CO-4	TNAU - Coimbatore	329.80	t/ha/Year	34940	1.54
Technology option 2: CO-5	TNAU - Coimbatore	341.51	t/ha/year	38453	1.60
FP : local traditional recipes. (no incorporation of moringa powder for all recipes)	Local	-	-	-	-
Technology option 1 : Mathari (salted crackers)	NIN, Hyderabad	-	-	-	-
Technology option 2 : Aloo Tikki (potato pattice)	NIN, Hyderabad	-	-	-	-
Technology option 3 : Corriander chutney	NIN, Hyderabad	-	-	-	-
Technology option 4 : Suji laddo	NIN, Hyderabad	-	-	-	-
FP : Regular cutting of tender jackfruit	Local	-	-	-	-
Technology option 1: Regular cut tender jackfruit treated with preservative (Potassium metabisulphite) and packaging & storage	ICAR – CCARI, Goa	-	-	-	-
Technology option 2: Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage	ICAR – CCARI, Goa	-	-	-	-
Farmer's practice	-	14.60	q/ha	9400	1.19
Technology option 1- Dapoli No 2	DBSKKV, Dapoli	16.80	q/ha	18200	1.37

Technology option 2- KMR-301	UAS,Bangalore	28.37	q/ha	64480	2.31
Technology option 3- GPU-67	UAS,Bangalore	22.00	q/ha	39000	1.79
FP :Local variety	Local	-	-	-	-
Technology option 1: Arka Rakshak	ICAR – IIHR, Bengaluru	-	-	-	-
Technology option 2: Konkan Vijay	DR. BSKKV, Dapoli	-	-	-	-
FP: Desi	-	-	-	-	-
Technology option 1:Grampriya	ICAR – CCARI, Goa	-	-	-	-
Technology option 2:CARI Nirbheek	ICAR – CARI, Izzatnagar	-	-	-	-
FP: Korgut	Local	1.22	t/ha	15660	1.46
Technology option 1:Goa Dhan 3	ICAR – CCARI, Goa	2.61	t/ha	62650	2.41
Technology option 2:Goa Dhan 4	ICAR – CCARI, Goa	2.68	t/ha	65520	2.47
FP : Local variety	Local	-	-	-	-
Technology option 1 : Goa Tambadi Bhaji-1	ICAR – CCARI, Goa	-	-	-	-
Technology option 2: Konkan Durangi	DR. BSKKV, Dapoli	-	-	-	-
FP: FYM application	Local	8.10	t/ha	79660	1.97
RP: RDF (100:50:50)	ICAR- CCARI, Goa	9.50	t/ha	103530	2.19
AP: Soil and foliar application of jivamrut (1:5)	ICAR – CCARI, Goa	9.39	t/ha	103290	2.22

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

OFT – 1

1.	Title of Technology Assessed	Assessment of improved poultry varieties
2.	Problem Definition	Low egg and meat yield in desi poultry birds
3.	Details of technologies selected for assessment	FP: Desi Technology option 1:Grampriya Technology option 2:CARI Nirbheek
4.	Source of technology	Desi poultry birds ICAR – CCARI ICAR – CARI, Izzatnagar
5.	Production system and thematic area	Rice based farming system, Evaluation of breeds
6.	Performance of the Technology with performance indicators	Egg production (no /year) Desi:52 Grampriya:176 CARI Nirbheek:163
7.	Feedback, matrix scoring of various	Farmers are very much satisfied by Grampriya

	technology parameters done through farmer's participation / other scoring techniques	(Dual Purpose) which has high demand in the market than CARI – Nirbheek.
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Through training and field level demonstration Farmers were satisfied with the performance of the new poultry breeds.

OFT – 2

1.	Title of Technology Assessed	Assessment of hybrid Napier fodder varieties
2.	Problem Definition	Non Availability of Green fodder
3.	Details of technologies selected for assessment	FP: Karad grass & Boro grass Technology option 1:CO-4 Technology option 2:CO-5
4.	Source of technology	Local grasses TNAU - Coimbatore TNAU - Coimbatore
5.	Production system and thematic area	Varietal evaluation
6.	Performance of the Technology with performance indicators	Green grass yield Local grass : Karad : 18.93 t/ha / year Boro : 61.90 t/ha/ year CO4:329.8 t/ha / year CO5:341.51 t/ha / year No. of cuttings per year Both CO- 4 and CO-5 06 cuttings/ year. In local 2 cuttings/ year
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers are very much satisfied by getting good green grass yield round the year.
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Through training and field level demonstration Farmers were satisfied with the performance of the new varieties.

OFT – 3

1.	Title of Technology Assessed	Evaluation of value added products using moringa oleifera
2.	Problem Definition	The effects of malnourishment are irreversible if they occur at a young age. If not death, it leads to permanent disabilities that render the children ill for the rest of their lives. Not only children but adults also fall in the category of malnutrition in India.

3.	Details of technologies selected for assessment	Evaluation of value added products using moringa oleifera Technology option 1: Mathari (salted crackers) Technology option 2 : Aloo Tikki (potato pattice) Technology option 3 : Corriander chutney Technology option 4 : Suji laddo
4.	Source of technology	NIN, Hyderabad
5.	Production system and thematic area	Value addition
6.	Performance of the Technology with performance indicators	Sensory evaluation for acceptability of product using Moringa leaves product. Nil, 70 %, 20 %, 10 %
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Incorporation of 20% of drumstick leaves was more accepted.
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Incorporation of 20% of drumstick leaves was more accepted.

OFT – 4

1.	Title of Technology Assessed	Assessment of ready to cook tender / mature jackfruit
2.	Problem Definition	Non availability of ready to cook tender jackfruit during off season
3.	Details of technologies selected for assessment	FP : Regular cutting of tender jackfruit Technology option 1: Regular cut tender jackfruit treated with preservative (Potassium metabisulphite) and packaging & storage Technology option 2: Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage
4.	Source of technology	ICAR – CCARI, Goa
5.	Production system and thematic area	Value addition
6.	Performance of the Technology with performance indicators	Shelf life 175 days, 150 Days, 280 days
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage was accepted by the farmers
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Regular cut tender jackfruit treated with preservative (Salt and turmeric powder) and packaging & storage was accepted by the farmers as it shelf life and cooking quality was good.

OFT – 5

1.	Title of Technology Assessed	Assessment of High yielding finger millet varieties
2.	Problem Definition	Low productivity of local variety
3.	Details of technologies selected for assessment	FP: Farmers Practice TO1: Dapoli No-2 TO2: KMR-301 TO-3: GPU 67
4.	Source of technology	DBSKKV, Dapoli, UAS, Bangalore
5.	Production system and thematic area	Fallow land mostly on hilly terrain
6.	Performance of the Technology with performance indicators	Results indicated that all selected varieties performed well in comparison to local variety. KMR 301 performed very well in terms of yield as well as other production economy
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	KMR-301 was preferred as it was high yielding. Concern about availability of seeds were raised by farmers.
8.	Final recommendation for micro level situation	Oft should be carried out for 2 nd year
9.	Constraints identified and feedback for research	Non-availability of seeds
10.	Process of farmers participation and their reaction	Through training and field level demonstration Farmers were satisfied with the performance of the new varieties.

OFT – 6

1.	Title of Technology Assessed	Assessment of tomato varieties in agro-climatic situation of Goa
2.	Problem Definition	Low productivity and high wilt incidence in local variety
3.	Details of technologies selected for assessment	FP: Farmers Practice TO1: Arka Rakshak TO2: Konkan Vijay
4.	Source of technology	ICAR-IIHR, Bangalore, DBSKKV, Dapoli,
5.	Production system and thematic area	Rice followed by vegetable, Varietal Evaluation
6.	Performance of the Technology with performance indicators	Trial in progress
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	-
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	-

OFT – 7

1.	Title of Technology Assessed	Assessment of improved poultry varieties
2.	Problem Definition	Low egg and meat yield in desi poultry birds
3.	Details of technologies selected for assessment	FP: Desi Technology option 1:Grampriya Technology option 2:CARI Nirbheek
4.	Source of technology	Desi poultry birds ICAR – CCARI ICAR – CARI, Izzatnagar
5.	Production system and thematic area	Rice based farming system, Evaluation of breeds
6.	Performance of the Technology with performance indicators	Trial in Progress
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	-
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	-

OFT – 8

1.	Title of Technology Assessed	Assessment of Salt tolerant varieties of paddy
2.	Problem Definition	Low productivity due to salt affected soils
3.	Details of technologies selected for assessment	FP : Korgut TO1: Goa Dhan – 03 TO2: Goa Dhan - 04
4.	Source of technology	ICAR – CCARI, Goa
5.	Production system and thematic area	Rice based farming system, Varietal evaluation
6.	Performance of the Technology with performance indicators	Yield - t/ha FP-1.22 TO1-2.61 TO2-2.68 Nos. of Tillers/hills FP – 08 TO1- 13 TO2-14
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Goa Dhan -4, is more accepted
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Through training and field level demonstration Farmers were satisfied with the performance of the new varieties.

OFT – 9

1.	Title of Technology Assessed	Assessment of yield potential of Red Amaranthus varieties
2.	Problem Definition	Low productivity of local variety
3.	Details of technologies selected for assessment	FP : Local variety RP : Goa Tambadi Bhaji - 1 AP: Konkan Durangi
4.	Source of technology	ICAR – CCARI, Goa DR. BSKKV, Dapoli
5.	Production system and thematic area	Rice fallow, varietal evaluation
6.	Performance of the Technology with performance indicators	Trial in progress
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	-
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	-

OFT – 10

1.	Title of Technology Assessed	Assessment of application of Jivamrut in chilli
2.	Problem Definition	Low productivity high incidents of insect pest and less soil microbial activities
3.	Details of technologies selected for assessment	FP: FYM application RP: RDF (100:50:50) AP: Soil and foliar application of jivamrut (1:5)
4.	Source of technology	ICAR- CCARI, Goa
5.	Production system and thematic area	Rice based farming system
6.	Performance of the Technology with performance indicators	Plant Height (cm) FP: 64.2 cm RP: 76.5 cm AP: 75.9 cm
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers liked the performance of Jeevamrut
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Through training and field level demonstration Farmers were satisfied with the performance of Jeevamrut

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 2020 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Cashew	Integrated Pest Management	Cashew stem and root borer management	Capacity building programme, FLDs, awareness programme, electronic media	8	224	34
2	Jackfruit	Value addition	Value addition in Jackfruit	Capacity building programme, FLDs, awareness programme, electronic media	6	18	-
3	Dairy	Clean Milk Production	Teat dip cup, intra mammary tube	Capacity building programme, FLDs, awareness programme, electronic media	12	342	-
4	Feed and Fodder	Green Fodder production	CO-5	Capacity building programme, FLDs, awareness programme, electronic media	11	289	15
5	Poultry	Backyard Poultry	Backyard poultry with Grampriya	Capacity building programme, FLDs, awareness	9	156	-

				programme, electronic media			
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B. Details of FLDs implemented during 2020 (**Kharif 2020, Rabi 2019-20, Summer 2020**) (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
1	Paddy	Varietal Evaluation	Popularization of High yielding salt tolerant rice variety – Goa Dhan -1	Kharif - 2020
2	Sweet Corn	Varietal Evaluation	Popularization of Sweet corn var. COB-1	Rabi-2020
3	Cowpea	Varietal Evaluation	Popularization of cowpea var. Goa Cowpea-03	Rabi-2020
4	Cashew	IPM	Management of Stem & Root Borer	Rabi-2020
5	Cashew	Varietal Evaluation	Popularization of High yielding multiple cashew varieties – Goa Cashew 1, Goa Cashew 2, Goa Cashew 3, Goa Cashew 4	Kharif-2020
6	Watermelon	Varietal Evaluation	Popularization of high yielding variety - Arka Manik	Rabi-2020
7	Fodder	Varietal Evaluation	Popularization of high yielding variety – CO-5	Kharif-2020

Cont...

Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
Proposed	Actual	SC/ST	Others	Total	
2.0	2.0	3	5	08	-
0.5	0.5	2	8	10	-
0.5	0.5	2	8	10	-
01	01	6	4	10	-
1.0	1.0	0	1	01	-
0.5	0.5	2	8	10	-
0.25	0.25	4	6	10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil		
				N	P	K
Paddy	Kharif - 2020	RF	Sandy loam	L	M	M
Sweet Corn	Rabi-2020	Irrigated	Sandy loam	L	M	M
Cowpea	Rabi-2020	Irrigated	Sandy loam	L	M	M
Cashew	Rabi-2020	RF	Lateritic	L	L	M

Cashew	Kharif-2020	RF	Lateritic	L	L	M
Watermelon	Rabi-2020	Irrigated	Sandy loam	L	M	M
Fodder	Kharif-2020	Irrigated	Sandy loam	L	M	M

Conti...

Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
Vegetable / Paddy	09-15 Jul, 2020	Dec, 2020	4627.5 mm	115 days
Paddy	08-15 Dec, 2020	In Progress		
Paddy	10-18 Dec, 2020	In Progress		
-	-	In progress		
-	14-Jul, 2020	In Progress		
Paddy	12-18 Dec, 2020,	In Progress		
-	18-24 Jul, 2020	Sept-2020		

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1 Paddy	Goa Dhan -1 was accepted over Korgut because of higher yield.
2 Fodder	CO-5 was accepted by the farmers as it was more succulent and contains 14 CP % with higher yield

Farmers' reactions on specific technologies

S. No	Feed Back
1 Paddy	Goa Dhan – 1 was accepted by farmers
2 Fodder	CO-5 was accepted by the farmers

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	4	12-Sept, 2020 12-Sept, 2020 17-Nov, 2020 22-Dec, 2020	75	-
2	Farmers Training	9	09 Jul, 2020 08 Dec, 2020 10 Dec, 2020 14 July, 2020 12 Dec, 2020 18 July, 2020 06 Sept, 2020 08 Aug,2020 21 Nov,2020	135	-
3	Media coverage	6	17 Jul, 2020 07 Dec, 2020 19 Dec, 2020 19 Sept, 2020	-	-

			14 Aug,2020 25 Nov,2020		
4	Training for extension functionaries	-	-	-	-

C. Performance of Frontline demonstrations Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check
						High	Low	Average	
Cowpea									
	Varietal Evaluation	Popularization of cowpea var. Goa Cowpea-03	Goa Cowpea-03	10	0.5	In Progress	-	-	-

% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	-	-	-	-	-	-	-

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			Check
					High	Low	Average	
Cereals								
Paddy	Varietal Evaluation	Goa Dhan -1	08	0.5	2.29	1.99	2.14	1.22
Sweet Corn	Varietal Evaluation	Popularization of Sweet corn var. COB 1	10	0.5	In Progress	-	-	-
Watermelon	Varietal Evaluation	Popularization of high yielding variety Arka Manik	10	0.5	In progress	-	-	-
Cashew	Varietal Evaluation	Popularization of High yielding multiple cashew varieties Goa Cashew 1, Goa Cashew 2, Goa Cashew 3,	02	2.0	-	-	-	-

		Goa Cashew 4						
Cashew	IPM	Management of Stem & Root Borer	10	02	12.85	11.15	14.72	6.21

Conti...

% Change in Yield	Other Parameters		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)
75.4	-	-	44360	87740	43380	1.97	34360	50020	15660	1.46
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
137	2.52	12.61	70880	172680	101800	2.44	47430	68310	20880	1.44

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
					Demo	Check	
Poultry	Evaluation of Breeds	Srinidhi	05	05	Avg Egg yield 135.0	Avg Egg yield 51.0	64.7%
Sheep & Goat	Evaluation of Breeds	Konkan Kanyal Goats	03	06	body weight at market age Male 28.25 Kg. Female 22.5 Kg.	body weight at market age Male 18.5 Kg. Female 16.0 Kg.	Male 52.7 % Female 40.62 %
Dairy	Animal Nutrition Management	Bypass fat	10	02	1. Milk yield for 3 months 1245.82 lit 2. Average Fat % - 4.26	1. Milk yield for 3 months 1114 lit 2. Average Fat % - 3.72	1. 11.75 % 2. 14.51%
Dairy	Disease Management	Teat dip cup, Lactifense liquid, Phenyl liquid, Intra-mammary tube	10	02	1. Milk Yield (4 months): 1396 lit	1. Milk Yield (4 months): 1304.35 lit	7.0 %

Conti...

Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	480	1750	1270	2.64	320	810	490	1.53
-	-	3810	11228	7418	1.94	3620	7921	4301	1.18
-	-	19250	50687.56	31437.56	2.63	18000	42561.39	24561.39	2.36
-	-	23038	55840	32802	2.42	21600	50477	28875	2.32

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter
				Demo	Check	
Value Addition	Jackfruit Chips making machine	10	2	15 Kgs	8 Kgs	1.87

Conti...

Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	800	3500	2700	2.28	-	1400	1400	0.1

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)	
					Demonstration	Check
Nutrition Garden	Others	Nutrition garden with HYV and Hybrid varieties	10	4	Tomato -120 Amaranthus-50 Chili – 18 Brinjal -30 Ridge gourd-86 Okra – 24	Tomato 40 Amaranthus-35 Chili – 13 Brinjal -16 Ridge gourd-56 Okra – 14

Conti...

% change in yield	Other parameters		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)
Tomato 200 Amaranthus-42 Chili – 38.4 Brinjal -87.5 Ridge gourd-53.5 Okra –71.4	-	-	4307	12340	9033	2.86	3652	6920	3267	1.89

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

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

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservation										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total										
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
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	1	11	5	16	0	0	0	11	5	16	
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)	1	11	5	16	0	0	0	11	5	16
GT (a-g)	1	11	5	16	0	0	0	11	5	16
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	2	16	10	26	0	0	0	16	10	26
Balance use of fertilizers										
Soil and Water Testing	2	20	18	38	0	0	0	20	18	38
Others (pl specify)										
Total	4	36	28	64	0	0	0	36	28	64
IV Livestock Production and Management										
Dairy Management	5	46	0	46	48	28	20	48	74	20
Poultry Management	2	13	5	18	13	13	0	13	26	5
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Goatery Management	4	41	10	51	22	17	5	22	58	15
Total	11	100	15	115	83	58	25	83	158	40
V Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet	2	0	12	12	12	13	25	12	25	37
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	1	6	12	18	0	7	7	6	19	25
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	0	12	12	0	0	0	0	12	12
Others (pl specify)										
Total	4	6	36	42	12	20	32	18	56	74
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	5	20	30	50	19	34	53	39	64	103
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	5	20	30	50	19	34	53	39	64	103
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										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										

GRAND TOTAL	25	173	114	287	114	112	110	187	311	297
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Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	5	18	63	81	0	0	0	18	63	81
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Organic Farming	3	0	12	12	22	9	31	22	21	43
Total	8	18	75	93	22	9	31	40	84	124
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
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)	8	18	75	93	22	9	31	40	84	124
GT (a-g)	8	18	75	93	22	9	31	40	84	124
III Soil Health and Fertility Management										
Soil fertility management	2	20	16	36	0	0	0	20	16	36
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs	1	12	10	22	0	0	0	12	10	22
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	4	30	14	44	0	0	0	30	14	44
Others (pl specify)										
Total	7	62	34	102	0	0	0	62	34	102
IV Livestock Production and Management										
Dairy Management	18	115	67	182	93	64	29	93	179	96
Poultry Management	3	10	16	26	9	6	3	9	16	19
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	21	125	83	208	102	70	32	102	195	115
V Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	3	0	14	14	0	41	41	0	55	55
Value addition										
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	3	0	14	14	0	41	41	0	55	55
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	10	60	44	104	71	54	125	131	98	229
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	10	60	44	104	71	54	125	131	98	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 Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	4	36	12	48	23	12	35	59	24	83
WTO and IPR issues										
Doubling of farmers income	2	0	0	0	23	14	37	23	14	37
Total	6	36	12	48	46	26	72	82	38	120
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										

Total										
GRAND TOTAL	34	176	179	361	139	130	269	315	309	630

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	5	18	63	81	0	0	0	18	63	81
Soil & water conservation										
Integrated nutrient management										
Production of organic inputs										
Organic Farming	3	0	12	12	22	9	31	22	21	43
Total	8	18	75	93	22	9	31	40	84	124
II Horticulture										
a) Vegetable Crops										
Production of low value and high volume crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
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	1	11	5	16	0	0	0	11	5	16
Processing and value addition										
Others (pl specify)										
Total (d)	1	11	5	16	0	0	0	11	5	16
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)										
GT (a-g)	9	29	80	109	22	9	31	51	89	140
III Soil Health and Fertility Management										
Soil fertility management	2	20	16	36	0	0	0	20	16	36
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs	1	12	10	22	0	0	0	12	10	22
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers	2	16	10	26	0	0	0	16	10	26
Soil and Water Testing	6	50	32	82	0	0	0	50	32	82
Others (pl specify)	11	98	62	166	0	0	0	98	62	166
Total										
IV Livestock Production and Management										
Dairy Management	5	46	0	46	48	28	20	48	74	20
Poultry Management	2	13	5	18	13	13	0	13	26	5
Goatery Management	4	41	10	51	22	17	5	22	58	15
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	11	100	15	115	83	58	25	83	158	40
V Home Science/Women										

empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet	2	0	12	12	12	13	25	12	25	37
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	1	6	12	18	0	7	7	6	19	25
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	3	0	14	14	0	41	41	0	55	55
Value addition										
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	0	12	12	0	0	0	0	12	12
Others (pl specify)										
Total	7	6	50	56	12	61	73	18	111	129
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	15	80	74	154	90	88	178	170	162	332
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	15	80	74	154	90	88	178	170	162	332
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											
Formation and Management of SHGs											
Mobilization of social capital											
Entrepreneurial development of farmers/youths	4	36	12	48	23	12	35	59	24	83	
WTO and IPR issues											
Doubling of farmers income	2	0	0	0	23	14	37	23	14	37	
Total	6	36	12	48	46	26	72	82	38	120	
XI Agro-forestry											
Production technologies											
Nursery management											
Integrated Farming Systems											
Others (pl specify)											

Total										
GRAND TOTAL	59	349	293	642	253	242	495	602	535	1137

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	1	5	2	7	0	0	0	5	2	7
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
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	2	0	32	32	0	0	0	0	32	32
Fry and fingerling rearing										
Kitchen Garden	1	5	8	13	0	0	0	5	8	13
Nutrition Garden	3	17	20	37	0	13	13	17	33	50
TOTAL	7	27	62	89	0	13	13	27	75	102

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	4	22	14	36	18	14	32	40	28	68
Mushroom Production	3	23	10	33	26	9	35	49	19	68
Bee-keeping										
Sericulture										
Repair & maintenance of farm machinery and implements										
Value addition	6	7	129	136	0	2	2	7	131	138
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
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										
Any other (pl.specify)										
TOTAL	13	52	153	205	44	25	69	96	178	274

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	5	27	16	43	18	14	32	45	30	75
Mushroom Production	3	23	10	33	26	9	35	49	19	68
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	6	7	129	136	0	2	2	7	131	138
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
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	2	0	32	32	0	0	0	0	32	32
Fry and fingerling rearing										
Kitchen Garden	1	5	8	13	0	0	0	5	8	13
Nutrition Garden	3	17	20	37	0	13	13	17	33	50
TOTAL	20	79	215	294	44	38	82	123	253	376

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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										
Livestock feed and fodder production										
Household food security	1	0	20	20	0	0	0	0	20	20
Any other (pl.specify)										
TOTAL	1	0	20	20	0	0	0	0	20	20

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
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										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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										
Livestock feed and fodder production										
Household food security	1	0	20	20	0	0	0	0	20	20
Any other (pl.specify)										
TOTAL	1	0	20	20	0	0	0	0	20	20

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Ma	Fem	Tot	Ma	Fem	Tot	Ma	Fem	Tot

		le	ale	al	le	ale	al	le	ale	al
Crop production and management										
Increasing production and productivity of crops										
Commercial production of vegetables										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity Building and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition										
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
Repair and maintenance of farm machinery and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										

Grand Total										
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3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	652	4821	104	4925
Diagnostic visits	163	652	55	707
Field Day	4	68	7	75
Group discussions	12	138	12	150
KisanGhoshi	5	62	5	67
Film Show	26	504	34	538
Self-help groups	5	89	3	92
KisanMela	-	-	-	0
Exhibition	2	190	5	195
Scientists' visit to farmers field	128	1235	71	1306
Plant/animal health camps	4	124	0	124
Farm Science Club	-	-	-	0
Ex-trainees Sammelan	1	45	2	47
Farmers' seminar/workshop	2	20	74	94
Method Demonstrations	57	647	19	666
Celebration of important days	6	345	30	375
Special day celebration	2	227	16	243
Exposure visits	7	40	0	40
Webinar	8	176	10	186
Lecture delivered	35	245	53	298
Soil Health Camp	4	104	5	109
Total	1123	9732	505	10237

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

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	10
Newspaper coverage	12
Popular articles	3
Radio Talks	11
TV Talks	3
Animal health camps (Number of animals treated)	157
Social Media (No. of platforms Used)	4
Poster Presentation	2
Total	202

3.6 Online activities during year 2020

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webexetc)	Title of Program	No. of Programmes	No. of Participants/ Views

A	Farmers training				
1	Nutrition education	Video conferencing	Nutrition Education	1	13
2	Virgin Coconut oil Production	Video conferencing	VCO Production	1	90
3	Nutri-sensitive agriculture	Video conferencing	Nutri-sensitive agriculture	1	81
4	Scientific management of Goats	Video conferencing	Scientific management of Goats	2	60
5	Scientific management of Backyard Poultry	Video conferencing	Scientific management of Backyard Poultry	1	18
6	IPM in Vegetables	Video / Audio conferencing	IPM in Vegetables	2	32
	Total			8	294
B	Farmers scientist's interaction programme				
1					
	Total				
C	Farmers seminars				
1	International Potato Conclave	Video conferencing	Potato Conclave	1	37
2	Artificial Insemination and Mastitis management	Video conferencing	Artificial Insemination and Mastitis management	1	42
3	Natural Farming	Video conferencing	Natural Farming	1	25
4	PM Kisan Saman Nidhi	Video conferencing	PM Kisan Saman Nidhi	1	48
	Total			4	152
D	Expert lectures				
1	Gandhian Philosophy	Video conferencing	Gandhian Philosophy	1	22
	Total			1	22
E	Any other (Pl. specify)				
1					
	Total				
	Grand Total (A+B+C+D+E)			13	468

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						
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
Total						

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial	Cashew	Goa Cashew - 1		120	6390	56
Vegetable seedlings						
Fruits	Mango	Mankurad		367	29360	126
		Amarpali and other		311	21770	98
	Papaya	Local		382	17190	213
Ornamental plants	Rose, Hibiscus, etc.	Local		1408	55124	745
Medicinal and Aromatic	Tulsi, Lemon, Aloe vera, etc.	Local		143	4290	64

Plantation						
Spices	Black pepper	Penniur -1		217	8680	167
Tuber						
Fodder crop saplings	Fodder Slips		CO5	13300	13300	188
Forest Species						
Others						
Total				16248	156104	1657

Production of value added products

Crop	Name of the product	Quantity	Value (Rs.)	No. of Farmers
		Kg / Ltrs		
Coconut	Virgin Coconut Oil	56.5 ltrs	56500	241
Total		56.5 ltrs	56500	241

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilisers	Vermicompost	3629.2	72584	392
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others				
Total		3629.2	72584	392

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes	Murrah	1	9500	1
Milk	Murrah	4175.0 ltrs	230398	154
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers	CARI-Nirbheek	36	12050	12
	Grampriya	39	15550	15

	Chicks	2848	118320	354
	Eggs	6407	40530	286
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		9331	426348	822

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

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

Date of Start – Jan to June – 2020, 6 months, Digital

Date of Start – Jul to Sept – 2020, 3 months, Digital

Date of Start – Aug to Dec – 2020, 3 months, Digital

B. Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters			
Technical bulletins			
Popular articles	Popular Article (Sankali housewife turned to poultry farmer) published on Success Story of a women poultry farmer from Sankali village, by Times of India on 3rd August 2020 .	Dr. Sanjaykumar Udharwar	
	Popular article on " Shelyathil Lasikaran" published in Mrughdhara marathi magezine , March 2020, Page number 38,39	Dr. Sanjaykumar Udharwar	
Extension literature	Nutritious Recipes	Mrs. Sunetra Talaulikar	1000
	Care and Management of Kids (Marathi)	Dr. Sanjaykumar Udharwar	1000
	Vaccination in goats (Marathi)	Dr. Sanjaykumar Udharwar	1000
	Gestational Table in Buffalo	Dr. Sanjaykumar Udharwar	1000

	(Marathi & English)		
	Importance of mineral and vitamin mixture feeding in dairy cattle (English)	Dr. Sanjaykumar Udharwar	1000
	Artificial insemination in dairy Animals (Marathi)	Dr. Sanjaykumar Udharwar	1000
	Important ruminant diseases and its preventive measures (English)	Dr. Sanjaykumar Udharwar	1000
	Backyard poultry birds developed by ICAR	Dr. Sanjaykumar Udharwar	1000
	Scientific feeding of dairy animals.	Dr. Sanjaykumar Udharwar	1000
Others (Pl. specify)			
TOTAL			

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	KVK North Goa	117
2	Facebook page/ Account	North Goa KVK	453
3	Mobile Apps	Jackfruit	5
4	WhatsApp groups	Taluka Names of North Goa District	4012
5	Twitter Account	KVK North Goa	5
6	Any other (Pl. Specify)	-	-

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).

TITLE OF THE SUCCESS STORY – 01:

Progressive Vegetable Grower

FARMER DETAILS :



Omu Gawas
Pilar, Tiswadi, Goa

DETAILS OF SUCCESS STORY:

BACKGROUND:

Shri Omu Gawas was cultivating vegetables on 0.2 ha farm during rabi & summer and paddy during kharif. In rabi he used to get very low yield due to poor crop management such as using local varieties , no scientific management of pest & diseases & nutrient management. He got 43,000 from vegetable cultivation.

INTERVENTION PROCESS:

In the year 2019 he was trained by KVK in Integrated Pest & Disease Management as well as Integrated Nutrient Management. Also KVK was instrumental in providing hybrid vegetable seeds to him.

INTERVENTION TECHNOLOGY:

KVK provided him training on Integrated Pest & Disease Management as well as Integrated Nutrient Management. Also KVK was instrumental in providing hybrid vegetable seeds to him.

IMPACT HORIZONTAL SPREAD:

Training was given to more than 200 farmers and other stake holders during 05 training and among which 15 implemented the technology of IPM and INM in vegetables

IMPACT ECONOMIC GAINS:

Omu Gawas did Scientific Vegetable cultivation under the guidance of KVK, North Goa. He used hybrid vegetable seeds. Also he was trained by KVK in production of Jivamrut & Panchagavya. After that he started growing his vegetables organically. Every 10 day he started spraying Jivamrut to his vegetable field. That resulted in robust growth of vegetables along with bumper yield. During COVID – 19 lockdown he was able to sell his vegetable at farm gate on a higher price. This led to high profit for him even after lockdown people have started coming to his farm for buying vegetables fresh & organic. Now from the same plot he is earning about Rs. 68,000 per annum.

GLIMPSES OF SUCCESS:



TITLE OF THE SUCCESS STORY – 02:

Empowering farm women through Value Addition of Jackfruit for Livelihood Security.

FARMER DETAILS :



Mrs. Kalpana Dhananjay Marathe

Nagargaon, Sattari, North Goa, Goa

DETAILS OF SUCCESS STORY:

BACKGROUND:

Mrs. Kalpana Dhananjay Marathe 46 years old woman blessed with 02 sons from Nagargaon which is an adopted village of KVK.

INTERVENTION PROCESS:

She was motivated to take up value addition of jackfruit as an enterprise activity. Since the farmer has 15 no of jackfruit trees and fruits are not utilized completely due to lack of technology for processing & value addition

INTERVENTION TECHNOLOGY:

Method demonstration and capacity building of jackfruit chips and other value added products were taken in the farmers field.

IMPACT HORIZONTAL SPREAD:

Cooking competition was organized in this village during the year where in different value-added products were exhibited by the farmers of this village who attended training and 10 farm women were motivated by learning from experience of Mrs. Marathe.

IMPACT ECONOMIC GAINS:

Farmer earned Rs. 45,000/- during the summer season of this fruit by making different value added products of jackfruit like papad, chips, leather, etc.

GLIMPSES OF SUCCESS:



Success Story

Women participation plays a very important role in the upliftment of economic, social and educational status of the society. Based on the village baseline survey conducted in adopted villages of this KVK women were motivated to form into self help groups.

Shiv Shakti Self Help Group, Surla was motivated by KVK and given hands on training on different activities to start as an enterprise.

1. Vermicomposting and vegetable nursery raising
2. Jackfruit and kokum processing
3. Preparation of other eatable items like chakli, chivda, lado etc.

This group is having 26 members and they contribute Rs. 200/- per member as membership on maintenance of records and register and linked to micro credit facility from bank. Members take all the activities as group activity during the seasonal festival like vegetable nursery, vermicomposting, eatable items, etc. They get Rs. 5000/- per member per month.

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

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
1	Arecanut	Additional setup for better dust removal during Arecanut peeling	To reduce the dust pollution during the process of arecanut peeling.
2	Vermicompost	Adding of Jivamrut for vermicomposting process.	This process speeds up the decomposing process.

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

A. Practicing Farmers

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions
- v) Input from line departments

B. Rural Youth

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions
- v) Input from line departments

C. In-service personnel

- i) Input from line departments
- ii) Training need assessment

17. Indicate the methodology for identifying OFTs/FLDs

For OFT:

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions
- v) Input from line departments

For FLD:

- i) New variety/technology
- ii) Poor yield at farmers level
- iii) Existing cropping system
- iv) Input from line departments

5.3. Field activities

Name of villages identified/adopted with block name (from which year) – 2019

- Nagargaon, Sal, Pilar, Mopa, Cumbarjua,
- ii. No. of farm families selected per village :20 Nos. each
 - iii. No. of survey/PRA conducted : 03 Nos.
 - iv. No. of technologies taken to the adopted villages : 18 nos.
 - v. Name of the technologies found suitable by the farmers of the adopted villages:
Management of Cashew Stem and root borer
Bypass fat for cattle.
Production technology Virgin coconut Oil.
 - vi. Impact (production, income, employment, area/technological– horizontal/vertical)

S. No	Technology demonstrated	Production	Income	Employment Generation	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha / No. of Units
1	Management of Cashew Stem and Root Borer	10.52 q/ha	Rs. 115720/-	Man days / year 45	98	1318	736
2	Popularization of Bypass Fat Technology	1349 ltrs / 100 days / animal	55484/-	-	132	661	618
3	Popularization of Virgin Coconut Oil Production technology	18000 ltrs / year 1200 ltrs / year	18,00,000/- 1,20,000/-	900 80	15	189	03 – Commercial, 05 Home scale

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
ATMA	Exhibitions / trainings, Meetings
Goa Dairy	Animal Health Camps, Meetings
Department Of AHVS	Animal Health Camps, Meetings
SAMETI	Trainings
Goa College of Home Science, Panaji	Training
Goa Chamber of Commerce and Industry, Panaji	Training
All India women's Conference	Training
Green Growth Institute, Sangolda	Training & Demonstration
CPCRI, Kasargod	Training, Workshop and Meeting
Directorate of Agriculture, Govt. of Goa	Training, NHM, RKVY, Diagnostic visits, Lectures, Roving survey
All India Radio	Agriculture Information Programme
Almeida High School, Ponda	Training
G.V.M College, Ponda	Training
Dempe College, Panaji	Training
Botanical Society of Goa	Fruit Festival
Goa Science Centre, Panaji	Agriculture Exhibition
Forest Department, Govt. of Goa	Training

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

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
ASCI	March, 2020	ASCI	3,60,800/-
SCSP, STC	March – May 2020	ICAR	6,50,000/-
ATMA	October, 2020	ATMA	20,600/-
IFFCO	September, 2020	IFFCO	30,000/-

Department of Agriculture	July, 2020	Department of Agriculture	8,500/-
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C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Meetings	04	03	-
02	Research projects				
03	Training programmes	Trainings	06	04	-
04	Demonstrations	Demonstrations on Dairy farming, VCO production, Income Generating Activities, IPM	03	04	-
05	Extension Programmes				
	Kisan Mela				
	Technology Week				
	Exposure visit	Exposure visits	02	00	-
	Exhibition	Vegetable Expo	02	00	-
	Soil health camps	Soil Testing	05	05	-
	Animal Health Campaigns	Animal Health Campaigns	02	02	-
	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
-	-	-	-	-	-

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

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

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
-	-	-	-	-	-

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
-	-	-	-	-	-

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

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

7. Convergence with other agencies and departments:

8. Innovator Farmer's 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.	Brief report
-	-	-	-	-

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

- Farmers found Grampriya more profitable than CARI – Nirbheek.
- Farmers accepted the CO-5 over CO-4 due to less thorny spikes and more succulent leaves.
- Salt Tolerant Variety Goa Dhan – 1
 - The variety grows well in Coastal Saline Soils (pH < 8.5 and EC > 4 dSm⁻¹)
 - Grains are short bold type and preferred by the local farmers.
 - Crop matures in 135 days
 - No Lodging was observed in the demo plots.
- Cashew – Infestation was 2.52 % in treated plants compared to 12.61 % in check plants.
- Coconut – Disease incidence reduced to 2.58 % treated plants compared to 21.33 % in check plants.
- Amaranthus : Yield increase was 11.9 %
- Dolichos Beans : Variety was accepted by farmers as it fetched higher selling price.
- Mastitis Management : Farmers observed Nil incidence of mastitis in treatment group
- Bypass fat: Farmers observed increase of 0.5-1.0% of fat percentage and 14.3% milk yield.
- Goat : Farmers observed higher body wt. gain during marketable age (10 months).
- Poultry: Farmers accepted Srinidhi birds due to high egg laying and higher body wt. at 05 months.
- VCO – Technology is getting popularity in Goa as it is having medicinal value, still awareness is required for marketing of product due to its higher cost in domestic market. 04 Commercial units has been established in Goa. There is scope for export.
- Jackfruit – This technology is gaining importance since lot of jackfruit gets waste in villages and it's a simple technology which can give good income to farm women

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

- More research work is required on stem and root borer IPM in cashew
- Production of more seeds of paddy of salt tolerant varieties.

11. Technology Week celebration during 2020: No, If Yes

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			

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
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. 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)
Management of Stem and root borer in cashew	12	85	21,880/-	1,03,800/-
Production of Virgin Coconut Oil	06	52	-	20450/- per month
Soil test based nutrient management	1300	90		
Popularization of Vermicomposting	130	86	10100/-	24500/-
Value addition in Jackfruit	44	67	1,200/-	2,800/- per day
Popularization of Mushroom Cultivation	21	63	700/-	3,400/-
Popularization of Beekeeping	33	47	-	4,600/-
Popularization of Grampriya Birds				
Popularization of Fodder Varieties CO-5 (Hybrid Napier)	35	96	680/-	39,500/-
Feeding of Bypass fat	25	87	30500/-	39400/-
Mastitis control measures in cattle	41	98	26300/-	32200/-

B. Cases of large scale adoption

(Please furnish detailed information for each case)

S. No	Crop / Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha / No. of Units
1	Cashew	IPM	Management	Method	98	1318	736

			of Cashew Stem and Root Borer	Demonstration, Capacity building programme, Awareness programme			
2	Dairy	Nutrition Management	Popularization of Bypass Fat Technology	Method Demonstration, Capacity building programme, Awareness programme	132	661	618
3	Coconut	Value addition	Popularization of Virgin Coconut Oil Production technology	Method Demonstration, Capacity building programme, Awareness programme	15	189	03 - Commercial, 05 Home scale

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

13. Kisan Mobile Advisory Services : Nil as other social media was used such as whatsapp, twitter, etc.

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2020	-	-	-
Feb 2020	-	-	-
March 2020	-	-	-
April 2020	-	-	-
May 2020	-	-	-
Jun 2020	-	-	-
Jul 2020	-	-	-
Aug 2020	-	-	-
Sept 2020	-	-	-
Oct 2020	-	-	-
Nov. 2020	-	-	-
Dec. 2020	-	-	-

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

14. 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	
1	Nursery	2000	0.1	Grafts and other planting material	2948	2948 Nos.	57,500/-	1,16,934/-	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Cashew			4.50	Local	Planting material & Nuts	120 Nos. 850 kgs	63520	91390	
Mango			3.50	Mancurad	Planting material & Fruits	678 Nos. 2400 Kgs	90500	194750	
Coconut			0.75	Local	Nuts	5474 Nuts	18570	52650	
Vegetables									
Others (specify)									
Fodder			1.75	CO-4 & CO-5	Fodder and Slips	5450 qtl	68000	141260	
Nursery			1.0	Ornamental & Medicinal	Planting Material	1551 Nos.	17275	49500	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	3629	28710	78584	
	Earthworms	12.00			

C. 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	
1	Buffalo	Murrah	Buffalo milk	4175	2,17,322/-	2,30,398/-	
		Murrah	Bull	1		9,500/-	
2	Poultry Birds	CARI Nirbheek	Hens	36	1,15,540/-	1,86,450/-	
		Grampriya	Hens	39			
			Chicks	2848			
			Eggs	6407			

E. Utilization of hostel facilities

Accommodation available (No. of beds): 16 – **Not in use due to COVID-19**

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2020	-	-	-
February 2020	-	-	-
March 2020	-	-	-
April 2020	-	-	-
May 2020	-	-	-
June 2020	-	-	-
July 2020	-	-	-
August 2020	-	-	-
September 2020	-	-	-
October 2020	-	-	-
November 2020	-	-	-
December 2020	-	-	-

F. Database management

S. No	Database target	Database created
1	Farmers Details	4060 farmers data created

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

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

H. Performance of Nutritional Garden at KVK farm

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

If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
	Vegetable crops	Amaranthus, Tomato, Pumpkin, Ridge gourd, Bitter gourd, Long beans, bottle gourd, Drumstick,	285
	Fruit crops	Papaya, Banana, Sapota, Lemon	
	Others if any		

Nutritional Garden developed at Village Level

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
05	Vegetable crops	Amaranthus, Tomato, Pumpkin, Ridge gourd, Bitter gourd, Long beans, bottle gourd, Drumstick	150
	Fruit crops	Papaya,	
	Others if any		

H. Details of Skill Development Trainings organized

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
1	North Goa	Friends of Coconut	200 hrs	4	2	8	6	12	8
2	North Goa	Group Farming Practitioners	200 hrs	6	3	7	4	13	7

15.FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Canara Bank	Old Goa	000321	ICAR Research Complex for Goa	0321201000277	403015014	CNRB0000321
With KVK							

S. No.	Particulars	Sanctioned	Released	Expenditure
24.1	Recurring Contingencies			
24.1.1	Pay & Allowances	145.00	93.85939	115.99493
24.1.2	Traveling allowances	0.50	1.00000	0.04096
24.2	General			
24.2.1	Office Contingencies	11.36	5.54908	5.61273
24.2.2	Technical Programme	8.50	3.36000	2.92934
	Total General	19.86	8.90908	8.54207
24.3	Capital			
24.3.1	IT/AV	3.00	3.00000	0
24.3.2	Furniture and Equipment	2.50	1.00000	0
	Total Capital	5.50	4.00000	0
24.4	Revolving Fund			
24.5	GRAND TOTAL (A+B+C)	170.86	107.76847	124.57796

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

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				
April 2019 to March 2020				
April 2020 to December, 2020				

16. 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
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Dr. B. L. Kasinath	Principal Scientist	Contemplative Perspectives on Seed : Conservation, Quality Assurance and supply Systems	ICAR – IISS, Mau, UP	Online	10 th Sept, 2020
Dr. B. L. Kasinath	Principal Scientist	Harnessing the potential of Tropical Tuber Crops under Changing Climate	ICAR – CTCTI, Thiruvanthapuram, Kerela	Online	27 th Oct, 2020
Dr. B. L. Kasinath	Principal Scientist	Advances in sustainable agriculture	Society of Krishi Vigyan	Online	26-28 Sept, 2020
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Attended 3 days online international workshop on " An approach to wildlife anesthesia, surgery and management "	Nanaji Deshmukh Veterinary Sciences University ,Jabalpur ,Madyapradesh.	Online	11th July to 13th July 2020
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Attended one day National online workshop on Sensitization workshop on Animal husbandry	Post graduate Institute of Veterinary and Animal Sciences ,Akola ,MAFSU,Nagpur, Maharashtra	Online	28th November 2020
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 3 days International online Training programme on " Recent advances in nutritional management of dairy cows in changing paradigm"	Post graduate Institute of Veterinary and Animal Sciences ,Akola ,MAFSU,Nagpur, Maharashtra	Online	6th to 8th October 2020.

Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 7 days International online Training programme on "Advances in equine health management "	College of Veterinary and Animal Sciences ,Parbhani ,MAFSU,Nagpur, Maharashtra	Online	25th to 31st October 2020.
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 7 days International online Training programme on " Recent advances in Health management of ruminants"	College of Veterinary and Animal Sciences ,Parbhani ,MAFSU,Nagpur, Maharashtra	Online	3rd to 9th November 2020.
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 7 days International online Training programme on " Advances in Diagnosis and medical management of farm animal diseases"	Post graduate Institute of Veterinary and Animal Sciences ,Akola ,MAFSU,Nagpur, Maharashtra	Online	25th November to 1st December 2020.
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 3 days online Training programme on " Basics of small animal laparoscopy"	College of Veterinary and Animal Sciences ,Mumbai ,MAFSU,Nagpur, Maharashtra	Online	24th to 27th May 2020.
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 5 days online Training programme on " Profitable dairy farming"	College of Veterinary and Animal Sciences ,Udgir ,MAFSU,Nagpur, Maharashtra	Online	6th to 10th August 2020.
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 5 days online National Training programme on " Piggery farming"	Post graduate Institute of Veterinary and Animal Sciences ,Akola ,MAFSU,Nagpur, Maharashtra	Online	15th December to 19th December 2020.

Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 8 days online MOOCs programme on "Innovative ideas for entrepreneurship development in livestock development in livestock sector"	MANAGE, Hyderabad.	Online	14th September to 21st September 2020
Dr. Sanjaykumar Usharwar	SMS (Animal Science)	Completed 10 days online MOOCs programme on "Cyclone Management"	MANAGE, Hyderabad.	Online	27th July to 5th August 2020
Shri Shashi Viwakarma	Technical Officer (Soil Science)	Motivation, positive thinking and communication skills	NAARM, Hyderabad	Online	15-17 Dec, 2020
Shri Vishwajeet Prajapati	Technical Officer (Soil Science)	Motivation, positive thinking and communication skills	NAARM, Hyderabad	Online	15-17 Dec, 2020

17. 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	After
Ibhrampur	15	Vermicomposting, IPM in cashew and chilli, clean milk production, backyard poultry, hybrid vegetable cultivation, Scientific dairy management, post harvest and value addition in locally available fruits	15	157000	198000
Mauxi	10	Vermicomposting, IPM in cashew and chilli, clean milk production, backyard poultry, hybrid vegetable	10	65000	82000

		cultivation, Scientific dairy management, post harvest and value addition in locally available fruits			
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18. 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
-	-	-	-	-	-

19. 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	
-	-	-	-	-	-	-	-	-

20. Details of SAP

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Cleaning awareness	9	92
2	Vermicomposting	11	68
3	Microbial based Agricultural Waste	8	65
	Total	23	225

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	59	602	535	1137
Rural youths	20	123	253	376
Extension functionaries	1	0	20	20
Sponsored Training	0	0	0	0
Vocational Training	0	0	0	0
Total	80	725	808	1533

2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds			
Pulses	10	0.5	-
Cereals	18	2.5	-
Vegetables			
Other crops	11	2.5	-
Hybrid crops	10	0.25	-
Total			
Livestock & Fisheries	10	-	40
Other enterprises	20	-	12
Total			
Grand Total	79	5.75	52

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	7	39	39
Livestock	1	5	5
Various enterprises			
Total	8	44	44
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	8	44	44

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1123	10237
Other extension activities	202	-
Total	1325	10237

5. Mobile Advisory Services

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

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	-	-
Planting material (No.)	16248	1,56,104/-
Bio-Products (kg)	3629	72,584/-
Livestock Production (No.)	9331	4,26,348/-
Value added product (No.)	56.5 Ltrs	56,500/-
Total		7,11,536/-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	1504	Under adopted villages
Water	26	4,270/-
Plant		
Total		4,270/-

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	2
2	Conferences	-
3	Meetings	8
4	Trainings for KVK officials	17
5	Visits of KVK officials	-
6	Book published	-
7	Training Manual	2
8	Book chapters	3
9	Research papers	-
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	10
13	Proceedings	1
14	Award & recognition	-
15	On going research projects	-
