वार्षिक प्रतिवेदन
ANNUAL REPORT
2024

भाकृअनुप
ICAR

भाकृअनुप - केन्द्रीय तटीय कृषि अनुसंधान संस्थान
ICAR-Central Coastal Agricultural Research Institute

ICAR - Krishi Vigyan Kendra, North Goa

ICAR - Central Coastal Agricultural Research Institute

Old Goa (Goa) - 403 402

वार्षिक प्रतिवेदन

ANNUAL REPORT 2024

ICAR - Krishi Vigyan Kendra, North Goa

ICAR - Central Coastal Agricultural Research Institute

Old Goa (Goa) - 403 402

ICAR - KVK, North Goa, Annual Report 2024

Published by
Dr. Parveen Kumar
Director

Editors
Dr. N Bommayasamy
Dr. Sanjaykumar Vithalrao Udharwar
Shri Rahul Kumar
Ms. Nivya K R
Shri Rahul Kulkarni
Shri Vishwajeet Prajapati

Compilation / Designing / Printing / Technical Assistance
Shri Vishwajeet Prajapati

Correct Citation
ICAR - KVK North Goa 2024. Annual report 2024. ICAR - Krishi Vigyan Kendra, North Goa. 67 p

Content

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2024
(January 2024 to December 2024)

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	0832-2996895	-	pckvknorthgoa@gmail.com kvknorthgoa@icar.gov.in pckvk.ccari@icar.gov.in	www.kvknorthgoa.icar.gov.in (194711 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	0832-2993097	-	director.ccari@icar.gov.in	www.ccari.icar.gov.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. N. Bommayasamy	0832-2996895	9476060101	pckvknorthgoa@gmail.com

1.4. Date and Year of sanction:01-04-1983

1.5. Staff Position (as on December, 2024)

					If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	Current Pay Band	Current Grade Pay	Date of joining	

1.	Senior Scientist and Head	Dr. N. Bommayasamy	9476060101	Agronomy	PB-4	9000	06-10-2023	Permanent
2.	Subject Matter Specialist	Dr. Sanjaykumar Udharwar	8999754149	Animal Science	PB-3	6600	02-09-2014	Permanent
3.	Subject Matter Specialist	Shri Rahul Kumar	9140527628	Agronomy	PB-3	5400	03-06-2024	Probation
4.	Subject Matter Specialist	Ms. Nivya K. R.	9482141363	Floriculture & Landscaping	PB-3	5400	18-11-2024	Probation
5.	Subject Matter Specialist	Vacant	-	Plant Protection	-	-	-	-
6.	Subject Matter Specialist	Vacant	-	Home Science	-	-	-	-
7.	Subject Matter Specialist	Vacant	-	Agril. Extn.	-	-	-	-
8.	Programme Assistant	Mr. Shashi Vishwakarma	9164671418	Soil Science	PB-3	5400	20- 12-2010	Permanent
9.	Computer Programmer	Mr. Vishwajeet Prajapati	9689788318	Computer Science	PB-2	4600	27–12-2010	Permanent
10.	Farm Manager	Vacant	-	-	-	-	-	-
11.	Accountant/Superintendent	Vacant	-	-	-	-	-	-
12.	Stenographer	Vacant	-		-	-	-	-
13.	Driver 1	Vacant	-	-	-	-	-	-
14.	Driver 2	Mr. Dilkush Velip	9823756047	-	PB-1	2800	26-03-2012	Permanent
15.	Supporting staff 1	Vacant	-	-	-	-	-	-
16.	Supporting staff 2	Vacant	-	-	-	-	-	-

1.6. Total land with KVK (in ha): 18 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	105	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. Running	Present status
Ertiga (GA-07-G-2259)	2024	9,00,000/-	16479	Good
Tractor with trolley	2019-20	8,93,183/-	-	Good
Hero Honda – Splendor GA-07-G-0085	2008- 09	38,000/-	28494	To be Condemned

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
SOIL SCIENCE LAB. EQUIPMENTS			
Spectro photometer	2005	48,828	Under condemnation process
Shaker (two)	2005	73,216	Good
Hot plate	2005	2,967	Under condemnation process
Flame Photometer	2012	49,992	Under condemnation process
Atomic Absorption Spectrophotometer	2012	9,96,213	Under condemnation process
Total		**11,71,216/-**	
OTHER EQUIPMENTS			
Computer	2006	46,000	Under condemnation process
Motor and pumps	2010	88,644	Good
LCD projector & Computer	2007	97,860	Under condemnation process
FAX machine	2009	15,000	Under condemnation process
Total		**2,47,504/-**	
AUDIO VISUAL AIDS			
Slide Projector	1995	10,715	Under condemnation process
Overhead Projector	1995	12,300	Under condemnation process
Tri pod screen for slide / overhead / LCD projector	1996	4,780	Under condemnation process
Collar mike	2009	1,687	Under condemnation process
Tri pod screen (wall mounting spring loaded screen)	2009	9,225	Good
Digital Camera	2009	8,990	Under condemnation process
Digital Camera	2010	24,990	Under condemnation process
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 meeting conducted in the year:

Date	Name and Designation of Participants	Salient Recommendations	Action taken
19-02-2024	1. Dr. Parveen Kumar, Director, ICAR – CCARI, Ela, Old Goa 2. Dr. N. Bommayasammy, Sr. Scientist and Head, ICAR KVK-North Goa 3. Dr. Sanjaykumar Udharwar, SMS (Ani. Sci.), ICAR KVK-North Goa 4. Mr. Shashi Vishwakarma, STO, ICAR- – CCARI, Ela, Old Goa 5. Mr. HRC Prabhu, SMS (PP- Retired), ICAR KVK-North Goa	To conduct FLD on Minor millets	Five different minor millet vis finger millet, proso millet, little millet, barnyard millet, and foxtail millet demonstrations at 37 farmers' fields.
		Introduction of small-scale millets processing units at village level	Small scale millet processing units will be introduced in

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	6. Mrs. Sunetra M. Talaulikar, SMS (Home Science- Retired), ICAR KVK-North Goa 7. Dr. Manohara K. K. Sr. Scientist, ICAR – CCARI, Ela Old Goa 8. Dr. Sujeet Desai, Scientist, ICAR – CCARI, Ela Old Goa 9. Dr. Gopal Mahajan, Scientist, ICAR – CCARI, Ela Old Goa 10. Dr. Susitha Rajkumar, Scientist, ICAR – CCARI, Ela Old Goa 11. Dr. Marutha Durai, Sr. Scientist, ICAR – CCARI, Ela Old Goa 12. Dr. Bappa Das, Scientist, ICAR – CCARI, Ela Old Goa 13. Dr. Uthappa A. R. Scientist, ICAR – CCARI, Ela Old Goa 14. Mr. Vishwajeet Prajapati, Tech. Officer (Computers), KVK-North Goa 15. Mr. Omu Gawas, Progressive Farmer, Pilar, Tiswadi 16. Dr. Mathala Juliet Gupta, Scientist, ICAR – CCARI, Ela Old Goa 17. Dr. Amiya Ranjan Sahu, Scientist, ICAR – CCARI, Ela Old Goa 18. Dr. Nibedita Nayak, Scientist, ICAR – CCARI, Ela Old Goa 19. Mr. Trivesh Mayekar, Scientist, ICAR – CCARI, Ela Old Goa 20. Dr. Gokuldas PP, Scientist, ICAR – CCARI, Ela Old Goa 21. Dr. Shirish D Narnaware, Scientist, ICAR – CCARI, Ela Old Goa 22. Dr. Narendra R Nath, AD, AH 23. Mss. Poonam R. Mahale, BTM ATMA, North Goa 24. Mr. Chandrahas Desai, M D, GSHCL, Goa 25. Dr. M A Bale, Goa Dairy, Phonda, Goa 26. Dr. A. V. Khanvilkar, KNPCUS, Shirwada 27. R. Kadam, Farmer, Goa 28. Mr. Manohar Mahadev Naik, Farmer, Goa		current financial years.
		Introduction of new bio control agents from IIHR, Bangalore	Arka Microbial Consortium demonstrated in 12 farmer's field.
		To conduct OFT/FLD on Fodder in coconut orchids	Super Napier fodder demonstrated under coconut plantation in two farmers' fields.
		Popularization of Malabari goat along with Konkan Kanyal	Black Bengal goats were introduced as an alternative because Malabari goats were not available in sufficient numbers.
		To conduct capacity building programme on silage making	Three training sessions were conducted, during which the method of silage preparation was demonstrated to 68 farmers.
		To focus on Processing and value addition	Two training on coconut processing and value addition organized and 20 farm women & 42 farmers and were participated and benefited.

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	29. Mr. Silvesta D costa, Farmer, Goa 30. Mr. O. P. Kulkarni, AD 31. Mr. Gopal Sarate, AM, NABARD 32. Mr Shivram B. N. Gaonkar, Head KVK- South Goa, Goa 33. Mrs. Janice Gomes e Alphonso SMS (Horticulture), KVK- South Goa, Goa 34. Dr. Laximan Sawant SMS (Animal Science), KVK- South Goa, Goa		

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1.	Rice–Rice / Groundnut / Pulses (Cowpea , long bean) / Vegetables (brinjal, chilli, okra, amaranths, radish, cucurbits, sweet potato, knol khol, cluster bean, etc)
2.	Hill Cucurbits during Kharif
3.	Coconut mixed crop with spices (pepper, nutmeg, clove, cinnamon, ginger, turmeric) or banana
4.	Arecanut mixed crop with spices (pepper, nutmeg, clove, cinnamon)
5.	Cashew + pineapple. Mango
6.	Dairy, poultry, piggery, fishery

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

S. No.	Agro-climatic Zone (Planning Commission)	Characteristics
1	Coastal	Hillock neighboring Arabian sea

a) 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 area of jurisdiction of KVK (2024)

S. No	Crop	Area (ha)	Production (000 T)	Productivity (Kg/ha)
	Major Field crops			
1	Paddy	10668 (Kharif) 2290 (Rabi)	22.904 (Kharif) 3.417 (Rabi)	3056(Kharif) 2800 (Rabi)
2	Pulses	3885	3832	986
3	Groundnut	60	95	1583
	Major Horticultural crops			
1	Sugarcane	446	25657	57527
2	Cashewnut	57001	24240	425
3	Coconut (Million nuts)	26782	160.86	6006
4	Arecanut	2099	3978	1895
5	Mango	5090	10079	1980
6	Banana	2495	29531	11836
7	Pineapple	336	5520	16429
8	Vegetables	8689	114535	13182
9	Other fruits (Chickoo, Papaya, Jackfruit, Lemon etc)	4009	37350	9317

Source: *Goa Statistics, Govt. of Goa, 2023-24.*

2.5. Weather data (2024)

Month	Average RF (mm)	Normal RF(mm)	Normal Rainy days (number)	Temperature (^{0} C)		Relative Humidity (%)	
				Maximum	Minimum	Maximum	Minimum
January	7.6	0	2.0	34.3	21.3	86.2	40.5
February	0.0	0	0.0	35.6	21.2	90.0	42.7
March	0.0	0	0.0	34.9	22.9	88.3	49.3
April	38.8	0	1.0	35.0	25.7	86.8	56.1
May	151.2	0	9.0	34.8	26.0	87.0	60.6
June	832.2	597	26.0	31.3	24.7	93.5	79.5
July	2063.3	1763.4	31.0	29.0	24.0	93.6	90.2
August	959.8	320.2	30.0	30.2	24.5	94.4	81.0
September	422.5	606.3	21.0	30.5	24.0	94.0	77.0
October	353.8	126.2	12.0	32.3	24.1	93.5	70.5
November	51.2	96.8	3.0	34.0	22.3	79.9	47.9
December	0.6	0	1.0	33.5	21.8	83.4	48.1
Total	**4881.0**	**3509.9**	**136**	-	-	-	-

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

Category	Population (No)	Production MT/Yr	Productivity
Cattle	26956	25594.199 MT	5.9 Lit/ cow
Buffaloes	12589		4.9 Lit/Buffalo
Goat	4269	218.91 MT	13 Kg
Pigs	4570	276.66 MT	60.5
Poultry birds	60522	4.66 million No.	96.22 no/ backyard poultry; 150.67 no/ improved backyard poultry

Source: 20th Livestock Census 2019 and Integrated Sample Survey Scheme of Dept. of AHVS, Goa

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Tiswadi Pedne Valpoi Bicholim	Karmali, Cumarjua Sal, Ibrampur, Parcem and Torxem Keri Amona, Mayem	Rice-cowpea, Vegetables. Coconut, Cashew, Mango. Banana. Marigold, Dairy, poultry, Piggery, Goatery. Papad making, Crafts.	**SOIL** ▪ Acidic soil ▪ Poor soil fertility & waste land (Mining rejected soil) ▪ Soil fertility degradation ▪ Soil and water erosion.	▪ 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 ▪ Monocropping, Fallow land ▪ Salt affected soil ▪ Poor yielding varieties. ▪ Imbalanced nutrients use ▪ Pest and Disease problem	▪ Multiple cropping. ▪ Popularizing salt tolerant variety ▪ Varietal evaluation ▪ INM ▪ IPM

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
			CASHEW ▪ Poor yielding varieties ▪ TMB, CSRB pests ▪ Underutilization of interspaces in newly plantations ▪ Lack of value addition & processing ▪ Imbalanced nutrients use	▪ Popularizing high yielding varieties. ▪ IPM ▪ Intercropping ▪ Value addition (squash, candy crunch) ▪ INM
			COCONUT ▪ Underutilization of interspaces ▪ RPW, mite pests ▪ Post harvest losses ▪ Imbalanced nutrients use	▪ Intercropping ▪ IPM ▪ Value addition (Virgin Coconut Oil) ▪ INM
			MANGO ▪ Alternate bearing & Old plantation ▪ Imbalanced nutrients use ▪ Post harvest losses	▪ ICM of improved grafted varieties ▪ INM ▪ Value addition
			VEGETABLES ▪ 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	▪ ICM of improved varieties/ High value crops/ technologies – Precision farming techniques. ▪ Value addition ▪ INM ▪ IPM & IDM ▪ Organic Farming

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
			ANIMALS ▪ Non availability of fodder round the year ▪ Imbalanced feed management ▪ Non-descript local breeds ▪ Infertility in cattle ▪ Unhygienic milk production	▪ Hybrid Napier grasses Popularization– CO5 ▪ Scientific Feed management through capacity building ▪ Popularization of Improved breeds / cross breeds ▪ Fertility management ▪ Quality milk production
			BIRDS ▪ Non-descript local breeds ▪ Poor feed management	▪ Popularization of Grampriya / Srinidhi / CARI-Nirbheek birds ▪ Balanced feeding using locally available ingredients
			OTHERS ▪ 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	▪ 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 salt tolerant paddy
2.	Assess the technology of nutri-hormonal therapy in crossbred dairy animals
3.	Assess the supplement of sodium bicarbonate and bypass fat in enhancing milk fat of cross bred dairy animals
4.	Popularization of fodder variety
5.	Popularization of minor millets (Proso millet, Little millet, Barnyard millet, Finger millet, Foxtail millet)
6.	Popularization of Goya Pig
7.	Popularization of Konkan Kanyal & Black Bengal goats

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
3	3	16	16	6	6	44	44

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
50	59	1600	1852	450	496	22000	24580

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
0.010	0.012	600	613

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg / No.)	
7		8	
Target	Achievement	Target	Achievement
Milk – 1000 Lit Production of calves-01no. Sale of Fodder - 10000no. Sale of Eggs -1000 no. Total poultry birds sale - 300no Poultry Manure-300 Kg	Milk-1777 Lit Production of calves-02no. Sale of fodder-17000no. Sale of Eggs-2271 no. Total poultry birds' sale-632 no. Poultry Manure -400 Kg	Vermicompost – 3800 Jeevamrut - 100	3807.5 140

3.1. B. Operational areas details during 2024

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1.	Soil	• Acid / Saline soil • Poor soil health & waste land • Soil fertility degradation. • Soil and water erosion.	79908 ha of which 15-20%	Mandre, Morjiem Assanora, Corjuem, Parra, Nagargaon, Mauxi, Sancordem	Training / Demonstration

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
		• Mine reject soil			
2.	Rice	• Poor yielding local varieties. • Imbalanced nutrients use • Leaf mold in rice • Post harvest losses	26889 ha of which 25-30%	Mopa, Chodan	Training / Demonstration
3.	Cashew	• TMB, CSRB pests • Underutilization of interspaces' in newly plantations till start of fruiting. • Lack of value addition & processing. • Old and Senile orchards	40586 ha of which 50-60%	Torxem	Training / Demonstration
4.	Coconut	• Underutilization of interspaces' • RPW, mite pests • Post harvest losses. • Old and saline orchard.	11310 ha of which 60-70%	Sal	Training / Demonstration
5.	Mango	• Alternate bearing & Old plantation • Imbalanced nutrition • Post harvest losses. • Imbalanced nutrient. • Old and saline orchards. • Fruit fly • Loranthus	60-70 %	Cumbharjua	Training / Demonstration
6.	Vegetables	• 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%	Diwar	FLD, Training / Demonstration

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
7.	Chilli	• Root rot disease • Closer spacing • Improper nutrient • Improper management • Low Yielding • Local Variety • Thrips and Viral Diseases	55-60 %	Dulapi	Training / Demonstration
8.	Brinjal	• Wilt disease • Use of own seed • Improper nutrient • Improper management	50-55%	Cumbharjua, Pliar , Neura	OFT, Training / Demonstration
9.	Cucurbit	• Fruit fly pest & leaf spot disease • Use of own seed • Improper nutrient • Improper management	50-55%	Chodan	Training / Demonstration
10.	Onion	• Low yield local variety • Improper management • Improper nutrient management	50-55 %	Karmali	Training / Demonstration
11.	Okra	• YVMV disease • Use of own seed • Improper nutrient • Improper management	50-55%	Mayem	Training / Demonstration
12.	Sweet Potato	• Sweet potato weevil • Poor yielding local varieties • Improper nutrient • Improper management	50-55%	Tiswadi, Bicholim, Pernem, Sattari, Bardez	FLD, Training / Demonstration
13.	Animals	• Non availability of fodder round the year • Imbalanced nutrition • Non descript local breeds	60-65%	Ibrampur, Sal, Hassapur	FLD, Training / Demonstration

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
14.	Birds	• Non descript local breeds • Imbalanced nutrition	50-55%	Mopa, Mayem,	OFT, Training / Demonstration
15.	Other	• 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%	Parcem & Torcem	FLD, Training / Demonstration

* Support with problem-cause and interventions diagram

3.2. Technology Assessment (Kharif 2024, Rabi 2023-24, Summer 2024)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	other	Total
Varietal Evaluation	1										1
Total	1										1

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	1					1
Disease of Management	1					1
TOTAL	2					2

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)
Varietal Evaluation	Paddy	Assessment of Salt Tolerant varieties of Paddy Goa Dhan – 4 & Goa Dhan – 5	3	3	1
Total					

B. 2. Technologies assessed under Livestock & fishery assessment

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Dairy cattle	Assessment of enhancing the milk fat and SNF by supplementing sodium bicarbonate and yeast in cross bred dairy animals	07	07
Disease management	Dairy cattle	Assessment of technology of efficacy of Nutri-hormonal therapy in the improvement of conception and pregnancy rates of repeat breeding in crossbred dairy animals	06	06
Total			13	13

C. 1. Results of Technologies Assessed
Results of On Farm Trial

Crop/ Enterprise	Farming situation	Problem definition	Title of OFT	No. of trials
1	2	3	4	5
Paddy	Rice based Farming	Low Productivity in Salt affected Soils	Assessment of Salt Tolerant varieties of Paddy	03
Dairy	Rainfed	Low milk fat and SNF in crossbred cows	Assessment of enhancing the milk fat and SNF by supplementing sodium bicarbonate and yeast in cross bred dairy animals	07
Dairy	Rainfed	Repeat breeding in crossbred cows	Assessment of technology of efficacy of Nutri-hormonal therapy in the improvement of conception and pregnancy rates of repeat breeding in crossbred dairy animals.	06

Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
6	7	a8	9	10	11	12
T1-Korgut T2-Goa Dhan 4	Yield	**Technology** / **Yield t/ha** T1- Korgut / 1.25	Goa Dhan 5 shows the highest yield	Goa Dhan 5 perfor	No	NA

<table>
<tr>
<td>T3-Goa Dhan 5</td>
<td></td>
<td><table><tr><td>T2-Goa Dhan 4</td><td>2.41</td></tr><tr><td>T3- Goa Dhan 5</td><td>2.71</td></tr></table></td>
<td>among the three, followed by Goa Dhan 4, and then Korgut.</td>
<td>med better then Goa Dhan 4 and was accepte d by the farmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probiotic bolus 2/day/cow in one group (T-3) and 50-60grams cooking soda/soda bicarbonate powder/day/ cow in another group for 90 days (T-2).</td>
<td>Milk yield, Fat and SNF percent age of milk</td>
<td>Details for 90 days<table><tr><td>Technol ogy</td><td>Milk Yield</td><td>Fat %</td><td>SNF %</td></tr><tr><td>T1</td><td>1083. 28</td><td>3.4 8</td><td>8.47</td></tr><tr><td>T2</td><td>1154</td><td>3.9 1</td><td>8.64</td></tr><tr><td>T3</td><td>1203</td><td>3.8 4</td><td>8.7</td></tr></table></td>
<td>Feeding sodium bicarbonate (T2) resulted in the highest profit (Rs. 31,243) and BC ratio (2.26:1), followed by yeast/probi otics (T3) with a profit of Rs. 28,874 and a BC ratio of 1.99:1. The control group (T1) had the lowest profit (Rs. 19,666) and BC ratio (1.80:1), highlighting the benefits of supplement ation.</td>
<td>Feedin g cookin g soda is more effectiv e than feeding yeast or probioti cs bolus.</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Bypass fat feeding for 45 days and artificial inseminatio n followed by Inj. HCG on 7th or 8th day of post AI in T-3 and Artificial inseminatio n followed by Inj. HCG</td>
<td>Pregna ncy rate,

concep tion rate</td>
<td>Details for 84 days (4 heat periods)<table><tr><th>Technol ogy</th><th>Concept ion rate (%)</th><th>No of animal s conceiv ed / 6 no.</th></tr><tr><td>T1</td><td>16.66</td><td>1</td></tr><tr><td>T2</td><td>50</td><td>3</td></tr></table></td>
<td>Nutri-hormonal therapy showed the highest conception and pregnancy rate (66.66%) & offered the best balance</td>
<td>Farmers were convinced that the combinati on of bypass fat and hormonal therapy (Inj. HCG) resulted in a better conceptio</td>
<td>No</td>
<td>NA</td>
</tr>
</table>

on 10th day of post AI		**T3**	**66.66**	**4**	between conception rate and financial return, suggesting it as the most efficient treatment among the three.	n rate of 66.66%, compared to the recommended practice of using only hormonal therapy after inseminati on.	

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T1 - Korgut	Local	1.25 t/ha	t/ha	1516	1.06
T2 - Goa Dhan 4	ICAR-CCARI, Goa	2.41 t/ha	t/ha	8405	1.19
T3 - Goa Dhan 5	ICAR-CCARI, Goa	2.71 t/ha	t/ha	8012	1.16
Technology option 1 (Farmer's practice)	Local	1083.28	Lit/cow/90days	19666	1.80
Technology option 2	TANUVAS, Chennai	1154	Lit/cow/90days	31243	2.26
Technology option 3	TANUVAS, Chennai	1203	Lit/cow/90days	28874	1.99
Technology option 1 (Farmer's practice)	Local	16.66	% conception/6 cows	51900/cow/305 days	0.29
Technology option 2	ICAR-CCARI Goa	50	% conception/6 cows	13110/cow//305 days	0.82
Technology option 3	ICAR-CCARI Goa	66.66	% conception/6 cows	64950/cow//305 days	1.15

C. 2. 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 Salt Tolerant varieties of Paddy Goa Dhan 4 & Goa Dhan 5
2	Problem Definition	Low productivity in salt affected soils
3	Details of technologies selected for assessment	Goa Dhan 4 & Goa Dhan 5
4	Source of technology	ICAR-CCARI, Goa
5	Production system and thematic area	Rice based farming & Varietal evaluation
6	Performance of the Technology with performance indicators	Goa Dhan 5 performed better than Goa Dhan 4 but Goa Dhan - 4 was accepted by the farmers due to red rice
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Goa Dhan 4 was accepted due to grain quality and yield.
8	Final recommendation for micro level situation	Goa Dhan – 4
9	Constraints identified and feedback for research	-
10	Process of farmers participation and their reaction	Farmers participation through trials and demonstrations. Farmers accepted Goa Dhan 4 for its quality red rice and yield.
11	Good Quality Photo in JPG (separate with proper caption)	 Paddy field at Vadabhat, Tiswadi, village

OFT - 2

Sr. No	Particulars	Details
1.	Title of Technology Assessed	Assessment of Enhancing Milk Fat and SNF by Supplementing Sodium Bicarbonate and Yeast in Crossbred Dairy Animals
2.	Problem Definition	Low milk fat and SNF in crossbred cows
3.	Details of technologies selected for assessment	Sodium bicarbonate (baking soda) and yeast/probiotic bolus help reduce sub-acute ruminal acidosis, promoting proper fat and fiber digestion. Both feed supplements improve overall feed efficiency and nutrient absorption, leading to a more balanced milk composition with higher SNF content.

4.	Source of technology	TANUVAS, Chennai
5.	Production system and thematic area	Dairy and Nutrient Management
6.	Performance of the Technology with performance indicators	Feeding probiotics/yeast increases milk fat and SNF in crossbred cattle.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Feeding sodium bicarbonate (cooking) is more cost effective than feeding yeast/probiotic bolus to lactating cows.
8.	Final recommendation for micro level situation	Feeding sodium bicarbonate (baking soda) is more profitable than feeding yeast/probiotic bolus to lactating cows.
9.	Constraints identified and feedback for research	Yeast/probiotic bolus is more expensive than baking soda.
10	Process of farmers participation and their reaction	Farmers are very satisfied with the feeding of both feed supplements.
11	**Impact of trials:** A field day was organized at Ibrampur to raise awareness and showcase successful trial results. The event was attended by 28 dairy farmers from the village. Among them, 8 progressive farmers adopted the new feeding approach for their lactating crossbred cows. The initiative demonstrated practical benefits, encouraged adoption and horizontal spread of the technology. This effort supports wider publicity and acceptability of the technology.	 Distribution of inputs of the OFT

OFT - 3

Sr. No	Particulars	Details
1.	Title of Technology Assessed	Assessment of the efficacy of Nutri-hormonal therapy in improving conception and pregnancy rates in repeat breeding crossbred dairy animals.
2.	Problem Definition	Repeat breeding in crossbred cows.
3.	Details of technologies selected for assessment	Nutri-hormonal therapy includes bypass fat feeding for 45 days and artificial insemination (AI), followed by an injection of HCG on the 7th or 8th day post-AI in T-3. Alternatively, artificial

		insemination is followed by an injection of HCG on the 10th day post-AI.
4.	Source of technology	ICAR – CCARI, Goa.
5.	Production system and thematic area	Dairy and Animal Disease Management.
6.	Performance of the Technology with performance indicators	Bypass fat + hormonal therapy (Injection of HCG) resulted in a better conception rate (66.66%) compared to the recommended practice of using only hormonal therapy after insemination.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Nutri-hormonal therapy is more profitable and effective than the recommended practice of only hormonal therapy in treating repeat breeding in crossbred cows.
8.	Final recommendation for micro level situation	Nutri-hormonal therapy can be used to treat repeat breeding in crossbred cows.
9.	Constraints identified and feedback for research	There are no significant constraints, except for the timely availability of veterinary staff.
10	Process of farmers participation and their reaction	Farmers found that Nutri-hormonal therapy is easy to implement and effective in treating repeat breeding in crossbred cows.
11	**Impact of the trails:** Repeat breeding affects 15–30% of crossbred cattle in Goa. Nutri-hormonal therapy significantly improved conception rates to 66.66% in treated animals. A field demonstration at Mayem, attended by 24 dairy farmers, encouraged 6 progressive farmers of the village to adopt the therapy. The intervention proved effective, reducing repeat breeding cases by 10–20%.	 Animal Health Check-up

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 2024 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	Paddy	Varietal Evaluation	Goa Dhan-3 and Goa Dhan-4	Farmers field Visits and Trainings	5	20	1.5
2	Millet	Millet evaluation	Finger Millet var. KMR301	Demonstration and trainings	5	12	2.5

3	Fodder	Varietal evaluation	Hybrid Napier-Var. Super Napier	Demonstration and trainings	10	20	1.5

B. Details of FLDs implemented during 2024 **(Kharif 2024, Rabi 2023-24, Summer 2024)** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Proso millet (*var.* DHPM-2769)	Variety Introduction	Popularization of cashew based millet farming var. DHPM-2769	Kharif, 2024	**1**	1	**0**	**7**	**7**	
2	Little millet (var. DHLM-36-3)	Variety Introduction	Popularization of cashew based millet farming var. DHLM-36-3	Kharif, 2024	1	1	0	6	6	The crop experienced damage due to heavy rainfall. which caused the plants to be washed out.
3	Barnyard millet (*var.* DHBM-93-3)	Variety Introduction	Popularization of cashew based millet farming var. DHBM-93-3	Kharif, 2024	1	1	0	7	7	
4	Finger millet (*var.* KMR-301)	Variety Introduction	Popularization of cashew based millet farming var. KMR-301	Kharif, 2024	1	2	0	11	11	
5	Foxtail millet (*var.* DHFT-109-3)	Variety Introduction	Popularization of cashew based millet farming var. DHFT-109-3	Kharif, 2024	1	1	0	6	6	The crop experienced damage due to heavy rainfall. which caused the plants to be washed out.

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					

Proso Millet	Kharif-2024	Rain fed	Lateritic	L	M	M	Groundnut	15-30 July, 2024	15-30 December, 2024	3851.2	67
Little Millet	Kharif-2024	Rain fed	Lateritic	L	M	M	Groundnut	10-15 July, 2024	10-25 December, 2024	3851.2	67
Barnyard Millet	Kharif-2024	Rain fed	Lateritic	L	M	M	Groundnut	12-16 July, 2024	13-20 December, 2024	3851.2	67
Finger Millet	Kharif-2024	Rain fed	Lateritic	L	M	M	Groundnut	11-19 July, 2024	11-18 December, 2024	3851.2	67
Foxtail Millet	Kharif-2024	Rain fed	Lateritic	L	M	M	Groundnut	13-25 July, 2024	14-27 December, 2024	3851.2	67
Super Napier Fodder	Rabi 2024	Irrigated	Lateritic	L	M	M	Fallow	15-22 November, 2024	-	51.8	4

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	The performance of Proso millet (var. DHPM-2769) is considered superior to average millet varieties, demonstrating strong adaptability and resilience under prevailing local agro-climatic conditions.
2	Barnyard millet (var. DHBM-93-3) demonstrated strong adaptability to rainfed farming systems, making it a suitable option for enhancing livelihood security in low-input, resource-constrained environments.
3	Finger Millet Var. KMR301 has higher yield and more suitable than other millets.

Farmers' reactions on specific technologies

S. No	Feed Back
1	Proso Millet (var. DHPM-2769): Farmers appreciated the variety's ability to perform well under rainfed conditions with minimal inputs, making it ideal for smallholders and resource-poor households.
2	Barnyard millet (var. DHBM-93-3): Farmers noted the variety's resilience under low-input conditions and suitability for cultivation on less fertile or sloping land, which is often underutilized.
3	Finger millet (*var*. KMR-301): The farmer is highly satisfied with Finger Millet Var. KMR301, as it has provided a significantly higher yield compared to other millets, and he is now able to sell the millet easily in the nearby market due to its increased demand and popularity

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	-	-	-	-
2	Farmers Training	01 01 01 01 01 01	18.12.24 25.05.24 02.08.24 9.12.24-10.12.24 27.12.24 30.12.24	36 20 35 13 12 14	Training on Integrated Crop Management Latest Fodder production Technology Feed and feeding management of dairy cattle Scientific management of dairy farming Scientific goat farming Scientific piggery farming
3	Media coverage	06	ICAR- CCARI Website and ICAR Website		
4	Training for extension functionaries	01	30.05.24	12	Scientific management of goats

C. Performance of Frontline demonstrations

Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Barnyard millet	Variety Introduction	Popularization of cashew-based millet farming var. DHBM-93-3	DHBM-93-3	7	1	11.5	8.0	9.75	7.26	34.3	39212	99514	60302	2.53	21454	47960	26506	2.23
Proso millet	Variety Introduction	Popularization of cashew-based millet farming var. DHPM-2769	DHPM-2769	7	1	11.08	8.0	9.54	5.8	64.48	38262	121087	82825	3.16	21454	39200	17746	1.82

Finger millet	Variety Introduction	Popularization of cashew-based millet farming var. KMR - 301	KMR-301	11	2	22.62	16.62	19.62	12.52	56.71	24563	122720	98157	4.99	22832	82253	59420	3.60

Barnyard Millet (DHBM-93-3)

Proso Millet (DHPM - 2769)

Finger Millet (KMR - 301)

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal / Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Pig	Cross bred Pigs	Goya Pigs	5	4 (1 male and three pigs)/location	Under progress												
Sheep & Goat	Goat	Black Bengal	4	1 pair (Male and female) / location	Under Progress												

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
IV Livestock Production and Management										
Dairy Management	2	5	0	5	15	13	28	20	13	33
Poultry Management	5	59	47	106	31	30	61	90	77	167
Piggery Management	1	11	3	14	0	0	0	11	3	14
Others (pl specify) Sheep and Goat rearing	1	8	3	11	0	1	1	8	4	12
Total	9	83	53	136	46	44	90	129	97	226
V Home Science/Women empowerment										
Value addition	1	35	0	35	0	0	0	35	0	35
Total	1	35	0	35	0	0	0	35	0	35
IX Production of Inputs at site										
Organic manures production	2	30	51	81	0	12	12	30	63	93
Total	2	30	51	81	0	12	12	30	63	93
GRAND TOTAL	**12**	**148**	**104**	**252**	**46**	**56**	**102**	**194**	**160**	**354**

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										
Crop Diversification	1	14	29	43	0	0	0	14	29	43
Integrated Crop Management	1	0	36	36	0	0	0	0	36	36
Production and management technology	1	5	5	10	0	0	0	5	5	10
Total	3	19	70	89	0	0	0	19	70	89
II Horticulture										
a) Vegetable Crops										
Nursery raising	1	37	22	59	0	0	0	37	22	59
Total (a)	1	37	22	59	0	0	0	37	22	59
Grand Total (a to g)	4	56	92	148	0	0	0	56	92	148
III Soil Health and Fertility Management										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Soil fertility management	1	3	3	6	10	19	29	13	22	35
Others (pl specify) Soil & Water Conservation	1	20	5	25	0	0	0	20	5	25
Total	2	23	8	31	10	19	29	33	27	60
IV Livestock Production and Management										
Poultry Management	3	0	0	0	0	55	55	0	55	55
Animal Nutrition Management	3	35	32	67	5	0	5	40	32	72
Disease Management	3	35	5	40	1	18	19	36	23	59
Others (pl specify)										
Total	9	70	37	107	6	73	79	76	110	186
VI Agril. Engineering										
Farm Machinery and its maintenance	1	17	3	20	0	0	0	17	3	20
Total	1	17	3	20	0	0	0	17	3	20
IX Production of Inputs at site										
Organic manures production	15	301	140	441	44	99	143	345	239	584
Total	15	301	140	441	44	99	143	345	239	584
XI Agro-forestry										
Integrated Farming Systems	1	18	11	29	0	0	0	18	11	29
Others (pl specify)										
Total	1	18	11	29	0	0	0	18	11	29
GRAND TOTAL	**32**	**485**	**291**	**776**	**60**	**191**	**251**	**545**	**482**	**1027**

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										
Crop Diversification	1	14	29	43	0	0	0	14	29	43
Integrated Crop Management	1	0	36	36	0	0	0	0	36	36
Others (pl specify) Production and management technologies	1	5	5	10	0	0	0	5	5	10
Total	3	19	70	89	0	0	0	19	70	89
II Horticulture										
III Soil Health and Fertility Management										
Integrated water management	1	20	5	25	0	0	0	20	5	25

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl specify)Vermicompost production	1	3	3	6	10	19	29	13	22	35
Soil and water conservation	1	20	5	25	0	0	0	20	5	25
Total	3	43	13	56	10	19	29	53	32	85
IV Livestock Production and Management										
Dairy Management	2	5	0	5	15	13	28	20	13	33
Poultry Management	8	59	47	106	31	85	116	90	132	222
Piggery Management	1	11	3	14	0	0	0	11	3	14
Animal Nutrition Management	3	35	32	67	5	0	5	40	32	72
Disease Management	3	35	5	40	1	18	19	36	23	59
Others (pl specify)Sheep and Goat rearing	1	8	3	11	0	1	1	8	4	12
Total	18	153	90	243	52	117	169	205	207	412
V Home Science/Women empowerment										
Value addition	1	35	0	35	0	0	0	35	0	35
Total	1	35	0	35	0	0	0	35	0	35
VI Agril. Engineering										
Farm Machinery and its maintenance	1	17	3	20	0	0	0	17	3	20
Total	1	17	3	20	0	0	0	17	3	20
IX Production of Inputs at site										
Organic manures production	17	331	191	522	44	111	155	375	302	677
Total	17	331	191	522	44	111	155	375	302	677
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems	1	18	11	29	0	0	0	18	11	29
Others (pl specify)										
Total	1	18	11	29	0	0	0	18	11	29
GRAND TOTAL	**44**	**633**	**395**	**1028**	**106**	**247**	**353**	**739**	**642**	**1381**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Bee-keeping	1	27	13	40	0	0	0	27	13	40
Dairying	1	1	34	35	0	0	0	1	34	35
Sheep and goat rearing	1	27	1	28	2	2	4	29	3	32

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Quail farming										
Piggery	1	10	1	11	0	1	1	10	2	12
TOTAL	**4**	**65**	**49**	**114**	**2**	**3**	**5**	**67**	**52**	**119**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Poultry production	1	39	20	59	0	0	0	39	20	59
Others-Repair and maintenance of farm machinery and implements	1	43	59	102	0	0	0	43	59	102
TOTAL	**2**	**82**	**79**	**161**	**0**	**0**	**0**	**82**	**79**	**161**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Bee-keeping	1	27	13	40	0	0	0	27	13	40
Dairying	1	1	34	35	0	0	0	1	34	35
Sheep and goat rearing	1	27	1	28	2	2	4	29	3	32
Piggery	1	10	1	11	0	1	1	10	2	12
Poultry production	1	39	20	59	0	0	0	39	20	59
Repair and maintenance of farm machinery and implements	1	43	59	102	0	0	0	43	59	102
Any other (pl. specify)										
TOTAL	**6**	**147**	**128**	**275**	**2**	**3**	**5**	**149**	**131**	**280**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Any other (pl.specify) Sheep & Goat rearing	1	10	2	12	0	0	0	10	2	12
TOTAL	1	10	2	12	0	0	0	10	2	12

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Any other (pl.specify) Sheep & Goat rearing	1	10	2	12	0	0	0	10	2	12
TOTAL	**1**	**10**	**2**	**12**	**0**	**0**	**0**	**10**	**2**	**12**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Livestock and fisheries										
Livestock production and management	5	0	0	0	13	63	76	13	63	76
Others (pl. specify) Sheep and Goat Rearing	1	10	2	12	0	0	0	10	2	12
Total	**6**	**10**	**2**	**12**	**13**	**63**	**76**	**23**	**65**	**88**
GRAND TOTAL	**6**	**10**	**2**	**12**	**13**	**63**	**76**	**23**	**65**	**88**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Livestock and fisheries										
Sheep and goat rearing	1	27	1	28	2	2	4	29	3	32
Poultry farming	1	39	20	59	0	0	0	39	20	59
Total	2	66	21	87	2	2	4	68	23	91
Grand Total	**2**	**66**	**21**	**87**	**2**	**2**	**4**	**68**	**23**	**91**

The details of training programmes are as follows:

A) For practicing Farmers / Farm women (General category) under KVK Fund in adopted villages of North Goa

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	22.05.24	Importance of azolla feeding for poultry and dairy animals	Off Campus	7	10	4	1	17
2	24.05.24	Latest Fodder production technologies	Off Campus	1	19	0	0	20

3	16.07.24	Clean milk production, detection of subclinical mastitis using CMT and preventive measures in dairy cattle	Off Campus	14	5	1	0	19
4	23.07.24	Importance of deworming and vaccination in dairy animals	Off Campus	6	15	0	17	21
5	02.08.24	Feed and feeding management of dairy cattle	Off Campus	32	3	0	0	35
6	15.10.24	Reproductive Management of dairy animals	Off Campus	16	3	0	1	19
7	09.12.24 and 10.12.24	Scientific management of dairy farming	On Campus	9	4	0	8	13
8	27.12.24	Scientific goat farming	On Campus	8	4	1	0	12
9	27.09.24	Backyard poultry farming for household nutritional security	On Campus	70	26	4	22	96
10	30.12.24	Scientific pig farming	On Campus	11	3	0	0	14
		Sub Total		**174**	**92**	**10**	**49**	**266**

B) For In-service officials under KVK Fund

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	30.05.24	Scientific management of goats	On Campus	10	2	0	0	12
		Sub Total		**10**	**2**	**0**	**0**	**12**

C) For rural youth/ vocational training under KVK Fund in adopted villages of North Goa

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	09.07.24-15.07.24	Scientific management of goats (Seven days duration)	On Campus	31	1	02	2	32
2	26.08.24-30.08.24	Scientific management of poultry (5 days duration)	Off Campus	39	20	0	0	59
3	16.10.24-18.10.24	Sustainable rural livelihood through pig farming (3 days)	On Campus	10	2	0	1	12
4	25.09.2024	Entrepreneurship development on dairy farming	Off Campus	1	34	0	0	35
				71	**57**	**2**	**3**	**138**

D) For practicing Farmers / Farm women (ATMA Sponsored) at ICAR-Krishi Vigyan Kendra, North Goa

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	26.11.24	Scientific management of backyard poultry	Off Campus	1	34	14	0	35
				1	**34**	**14**	**0**	**35**

E) For practicing Farmers / Farm women (TDC-NICRA) at Mayem, Bicholim, North Goa

Sr. No.	Date	Title	On Campus	Male	Female	SC	ST	Total Participants
1	12.12.24	Scientific management of backyard poultry	Off Campus	6	9	0	0	15
				6	**9**	**0**	**0**	**15**

F) For practicing Farmers / Farm women (Scheduled Tribe category) under KVK -STC Fund at ICAR-Krishi Vigyan Kendra, North Goa

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	26.03.24	Scientific management of dairy Farming	On Campus	11	9	0	20	20
2	27.03.24	Scientific management of poultry farming	On Campus	5	5	0	10	10
3	25.11.24	Scientific management of poultry farming	On Campus	8	3	0	11	11
				24	**17**	**0**	**41**	**41**

F) For practicing Farm women (Scheduled caste sub component category) under ICAR -CCARI-SCSP Fund at RIVER Puducherry and KVK-Thrissur, Kerala, Halekot and Wailwada, Karnataka

Sr. No.	Date	Title	On / Off Campus	Male	Female	SC	ST	Total Participants
1	21.02.24	Scientific management of poultry farming	Off Campus	0	15	0	15	15
2	01.03.24	Scientific management of poultry farming	Off Campus	0	20	0	20	20
3	21.10.24	Scientific management of poultry farming	Off Campus	0	20	0	20	20
				0	**55**	**0**	**55**	**55**

Two-day natural farming training cum demonstration

ADG (SWM) inaugurated a two days training on Natural farming

Vocational training on Scientific Management of Goat

Training on Clean Milk Production

Training on Natural Farming

Training on Virgin Coconut Oil

Training on the importance of deworming and vaccination in dairy cattle

Training cum demonstration on Feed and feeding management of dairy cattle

Skill development training on Scientific Management of Backyard Poultry Farming

Backyard Poultry Farming for Household Nutritional Security

Workshop cum awareness on PM KUSUM

Five-day Organic Inputs Production vocational training concluded

Hands on training on beekeeping organized

Capacity Building Cum Distribution Programme of Backyard Poultry under STC at KVK- North Goa

Training on Backyard Poultry Farming in Collaboration with ZAO Ponda

Training on Crop Diversification through Vegetable Farming

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	52	4242	29	4271
Diagnostic visits	49	398	2	400
Field Day	4	65	10	75
Group discussions	31	1053	17	1070
Kisan Ghosthi	3	16	0	16
Film Show	3	16	0	16
Self -help groups	2	62	8	70
Kisan Mela	2	7280	110	7390
Exhibition	5	5433	142	5575
Scientists' visit to farmers field	17	241	30	271
Plant/animal health camps	2	40	5	45
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	2	143	50	193
Method Demonstrations	16	430	49	479
Celebration of important days	3	140	13	153
Special day celebration	11	664	33	697
Exposure visits	1	32	2	34
Awareness Program on NHB schemes	1	97	10	107
Farmers Scientist Interaction	4	99	11	110
PM Kisan Samman Nidhi and webcasting	4	123	16	139
Lecture delivered	95	2887	32	2919
Farmers Visit to KVK	189	890	85	975
Total	**496**	**24351**	**654**	**25005**

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

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	02
Newspaper coverage	29
Popular articles	0
Radio Talks	04
TV Talks	0
Animal health camps (Number of animals treated)	225
Social Media (No. of platforms Used)	04
Others (pl. specify) Lectures given	49
Total	**313**

Animal Health Camp at NICRA (Mayem) village

XXVI SAC Meeting

Celebrated International Womens Day

Celebrated World Water Day

Agri Drone Demonstration

International Labour Day

Hon'ble Chief Minister and Hon'ble Speaker of Goa Legislative Assembly congratulated Padma Shri awardee farmer and ICAR-CCARI team

Hon'ble Prime Minister release 109 climate resilient and bio-fortified crop varieties

Arecanut harvester cum sprayer distributed to Schedule Tribal farming community

Farmers scientist interaction

Live interaction with Hon'ble Union Minister of Agriculture and Farmers welfare and Rural Development, GoI, New Delhi

Plantation drive under # Ek Ped Maa Ke Naam Programme @MissionLiFE

Sustainable Soil Health Management and Input Distribution Programme under KSS Week

Vermicompost Production Technology under KSS Week

Live webcast of Hon'ble Prime Minister 18th release PM Kisan Samman Nidhi

Linkages between Financial Institutions and Self-Help Groups

Mahila Kisan Divas commemorated by ICAR-KVK, North Goa

Celebrated World Food Day 2024

Exposure cum training on organic farming commemorated

Participated in Gram Sabha at PM Shri Kendriya Vidyalaya, Bambolim, Goa

Farmers- Scientist Interaction Program at Mayem

Distributed Poultry Birds under TDC-NICRA to Farmers of Mayem

Celebrated Agricultural Education Day

Celebrated World Soil Day

Distribution of Natural Farming Inputs and Farm Implements to ST Beneficiaries under Tribal Sub Plan

Director of ATARI-Pune and Officials of ICAR-KVK, North Goa, Visited Progressive Farmers' Fields of North Goa

Field Day at Ibrampur

Celebrated of Kisan Diwas

3.6 Online activities during year 2024 - NA

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1					
	Total				
B	Farmers scientist's interaction programme				
1					
	Total				
C	Farmers seminars				
1					
	Total				
D	Expert lectures				
1					
	Total				
E	Any other (Pl. specify)				
1					
	Total				
	Grand Total (A+B+C+D+E)				

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
Vegetables	Palak	Local	-	0.0923	10450	180
	Okra	Local	-	0.0466	6590	139
	Corinder	Local	-	0.0436	5790	133
	Radish	Local	-	0.0518	7390	149
	Cluster bean	Local	-	0.0498	6410	139
	Brinjal	Local	-	0.0024	400	6
	Cowpea	Local	-	0.0045	750	13
	Red Amaranthus seeds	Local	-	0.0069	1150	13
	Yardlong bean seeds	Local	-	0.00189	600	5
	Drumstick	Local	-	0.0003	30	1
Total				**0.30009**	**39560**	**778**

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	Drumstick seedling	-	-	6	180	3
Fruits	Mango graft	Amarapali	-	1	100	1
	Banana suckers	-	-	13	390	5
	Bread fruit plant	-	-	13	1300	3
	Custard apple plant	-	-	3	225	2
	jamun plant	-	-	3	180	1
	Jamun seedling	-	-	1	30	1
	Kokum plant	-	-	1	75	1
	Lemon seedling	-	-	1	30	1
	Mango graft	Mancurad	-	5	500	1
	Mango graft kesar	Kesar	-	1	100	1
	Mango plant	Amarapali	-	2	200	1
	Papaya seedling	-	-	73	2210	10
	Sour soup plant			5	500	3
Ornamental plants	Crotons	-	-	296	11840	66
Plantation	Cashew seedling	Local	-	106	2650	5
	Neem plant	-	-	5	200	3

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
	Neem Seedling	-	-	5	200	3
Spices	Black pepper	-	-	22	550	2
	Black pepper rooted	-	-	21	425	2
	Curry leaves seedling	-	-	1	40	1
	Pepper cutting	-	-	4	120	1
	Pepper seedling	-	-	32	960	2
Fodder crop saplings	Hybrid Napier	Super Napier	-	17100	17100	11
Total				**17720**	**40105**	**130**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
Bio Fertilizers	Vermicompost	3807.5	75990	253
	Jeevamrut	140	2800	4
	Earthworms	0.55	275	4
Total			**76065**	**261**

Production of livestock materials

Particulars of Live stock	Name of the animal / bird / aquatics	Name of the breed	Type of Produce	unit (no. / lit / kg)	Qty	Value (Rs.)	No. of Farmers
Dairy animals							
Buffaloes	04	Godavari	Milk	lit.	1777	113728	-
Buffalo bulls	02	Murrah	Breeding bulls	no	2	80000	02
Calves	02	Godavari	-	no.	02	-	-
Poultry							
Poultry Eggs	Backyard poultry birds	Khadaknath, Srinidhi, Grampriya	Eggs	no.	2271	15897	52
Poultry Birds			Birds for rearing and slaughter	no.	632	171358	106
Poultry manure	Backyard poultry birds	Khadaknath, Srinidhi, Grampriya	Manure	kg	400	2000	16
Total					**5084**	**382983**	**176**

Production of products

Crop	Name of the product	Quantity Kg / Ltrs	Value (Rs.)	No. of Farmers
Coconut	Virgin Coconut Oil	25.8	25800	46
	Desiccated coconut powder	3	300	4
Total			**26100**	**50**

Sale of other KVK produces

Name of the product	Quantity No. /Kg / Ltrs	Value (Rs.)	No. of Farmers
Banana leaf	0.5	2	1
Brinjal vegetable	5	40	3
Coconut shells	164	492	1
Custard apple	2	80	1
Drumstick	1	10	1
Farmers training fees	27	8100	1
Firewood	20	1800	1
Jack fruit	3	60	1
Jackfruit	8	160	2
Jamun Fruit	0.5	30	1
Mango fruit amrapali	55	2800	20
Mango fruit mankurad	21	1150	7
Mango Fruit mixed	97.5	1950	19
Bhendi vegetable	28.9	867	28
Drumstick vegetable	11.5	470	5
Red amarhanthus vegetable	27	540	3
Ridge gourd vegetable	50	1000	34
Pineapple fruit	2.5	75	1
Tulsi leaf	1	20	1
Total		**19646**	**131**

Total Revenue – 5,84,459/-

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

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

B. Literature developed/published

Item	Citation/ Title	Authors name	Number
Research papers (Give Citation)	Histopathological evaluation of testicles from pin-hole castrated piglets.	Udharwar, S. V., Soumya Ramankutty, Deny Jennes, Sajitha I. S., Giggin T., Prasanna K. S., Narnavaware S. D., Bommayasamy N., and John Martin K. D.	1
	Prevalence of subclinical mastitis, associated risk factors and pathogens in dairy cattle of West Coastal India	Susitha Rajkumar, Anandhi M, Shivasharanappa Nayakwadi, Shirish Narnaware, R. Solomon Rajkumar, Udharwar S.V.	1
	The impact of leftover herbicide residue applied to okra on weeds and crops of subsequent blackgram. *Journal of Food Legumes*, 37(3): 305-311.	Bommayasamy, N. and Chinnamuthu, C.R.	1

	Residual rice herbicide effect on weed control, productivity, nutrient uptake and quality succeeding okra. *Plant Archives*, 24 (2):753-760.	Bommayasamy, N. and Chinnamuthu, C.R.	1
	Performance of Medium Duration Rice Cultivars on Growth, Productivity and Profitability under South Andaman Condition of India. *International Journal of Bio-resource and Stress Management*, 15(7): 01-06.	Bommayasamy, N., Ramakrishna, Y. and Pooja Kapoor	1
Technical reports	-	-	-
News letters	-	-	-
Technical bulletins	*'Animal Genetic Resources of Goa,'*	Amiya Ranjan Sahu, Gokuldas P. P, Nibedita Nayak, Satish Kumar, Shirish Narnaware Dr. Udharwar S.V. Praveen Kumar	-
Technical Folder	Marathi folder: *'Shelyathil Bahy Paropjii Niyantran'*	Dr. Udharwar S.V., Suchita Rajkumar, Gokuldas P.P., Amiya Ranjan Sahu and Shirish Narnavare	100
Others (Pl. specify) Extended summary	Impact of nutrient management of groundnut productivity and profitability in Soth Andaman (2024): 100-103	Dr. N. Bommayasamy, Y. Ramakrishna, L. B. Singh, Rahul Kumar, S.V. Udharwar, Rahul Kulkarni and D. Shishira	110
Lahare Hindi Patrika - Article in hindi	Bharat me Prakrutik kheti awasar aur sambhavanao ki disha (2024): 2-6	Mr. Rahul Kumar	50
Lahare Hindi Patrika - Article in hindi	Krishi me Drone ka mahatv (2024): 7-13	Mr. Vishwajeet Prajapati	
TOTAL			**265**

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	No of events (uploaded video/post/story etc.	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel (no of video uploaded)	6	@icar-kvknorthgoa8549	1308
2	Facebook page/ Account (no of Post)	1236	northgoakvk	494
3	Mobile Apps / Web app	01	Marketing Decision Support System	1129
4	WhatsApp groups	35	CCARI-KVK Dairy farmers Team	85
		20	CCARI-KVK Poultry farmers Team	71
		18	CCARI-KVK Poultry farmers Team	20
		30	Coastal Dairy Farming ICAR-CCARI	52
5	Twitter Account	1127	@KNorthgoa	19
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	**Addressing repeat breeding in dairy cattle through Nutri-hormonal therapy developed by ICAR -CCARI Goa** Beneficiary Farmer: Mr. Gyanheshwar Karbotkar, Mayem, Bicholim, North Goa Contact No.: 9764364511
Background	Repeat breeding is a major reproductive disorder in dairy cattle, particularly in crossbred cows. This condition leads to delayed pregnancy, reduced milk production, and increased feeding costs, which can negatively affect reproductive performance, productivity and economic returns. It is often caused by different factors such as nutritional imbalances, negative energy balance, infections, hormonal deficiencies, anatomical defects all of which can contribute to delayed conception. Mr. Gyanheshwar Karbotkar, a progressive dairy farmer from Mayem, Bicholim, Goa, faced this challenge with 2-3 of his crossbred cows each year. Despite maintaining 10-12 Holstein Friesian and Jersey crossbred cows, each producing an average of 10-12 liters of milk per day, he struggled with repeated failures to conceive. This issue resulted in a loss of approximately 900-1000 liters of milk per cow over a span of 100 days, leading to a revenue loss of around Rs. 15,000-16,000 per cow annually. Cows would repeat the estrus for more than 3 cycles. The delay in conception caused significant financial losses due to reduced milk production, particularly when cows failed to conceive after multiple heats and subsequent inseminations. In addition to the loss of milk, the added cost of feeding lactating cows further strained the farmer's resources.

Interventions	Nutri-Hormonal Therapy: To address this important issue, ICAR-CCARI Goa developed a Nutri-Hormonal Therapy that targeted the nutritional and hormonal imbalances in repeat breeding cows. The therapy involved two key interventions namely Bypass Fat supplementation and hormonal treatment. Cows in negative energy balance were supplemented with bypass fat (75 grams daily for 45 days) starting from the third heat, avoiding Artificial Insemination (AI) until next heat. This supplementation helped to shift the cow's energy balance to a positive stage. The energy boost supported animal reproductive system, ensuring proper ovarian function and hormonal regulation, early embryonic development, and reducing the chances of early embryonic death. AI was performed on the fourth heat, followed by administration of Human Chorionic Gonadotropin (hCG) (1500 IU) on the seventh day to further support the cow's reproductive system and promote pregnancy. hCG administration can induce accessory corpus luteum in the ovaries which in turn helps in improving progesterone level in the system. Proper levels of hormones like progesterone can support pregnancy through successful embryo development during the critical early pregnancy period.
Process and Technology	The intervention led to significant improvements in reproductive efficiency. In one case, after following the nutri-hormonal therapy, a crossbred cow conceived after the fourth heat. Pregnancy was confirmed 90 days post-insemination, and the cow delivered a healthy female calf. The cow resumed milk production soon after delivery, leading to a steady increase in milk yield. Another repeat breeding cow, which had been struggling to conceive, became pregnant after three successive heats i.e. on 6th heat. This resulted in a milk production loss of 42 days, compared to the treated cow, which had earlier conception rate due to the Nutri-hormonal therapy. The farmer saw an increase of approximately Rs. 6375/- in profits per treated cow compared to the untreated repeat breeding cows in the form of more yield i.e. 425 Liters.
Impact: Economic Gains:	The total cost of implementing the therapy was Rs. 1,175 for 4 kilograms of bypass fat (Rs. 125/kg) and hCG injections. As a result, there was a significant increase in income with Rs. 5,200 more profit per treated cow compared to the untreated cows. This success led Mr. Gyanheshwar to continue using the therapy for other cows in his herd, and soon, five other farmers in the village adopted the same approach and achieved successful results.
Horizontal Spread:	Following Mr. Karbotkar's success, the technology was adopted by other farmers in the village. Five more farmers reported successful outcomes with improved conception rates and increased milk yields, demonstrating the broad applicability and effectiveness of nutri-hormonal therapy. Nutri-hormonal therapy has proven to be an effective solution for overcoming repeat breeding in crossbred cows, especially those suffering from negative energy balance and hormonal deficiencies. By properly supplementing bypass fat and using targeted hormonal treatment, farmers can reduce the financial losses caused by repeat breeding, enhance reproductive performance, and increase milk production. Mr. Gyanheshwar Karbotkar's experience exemplifies the transformative impact of this technology in sustainable dairy farming.
Scientific Basis of Nutri-Hormonal Therapy	Repeat breeding in dairy cattle often occurs due to a complex interplay of nutritional and hormonal imbalances. Negative energy balance, where the cow expends more energy than it consumes, is a common cause of reproductive failure. This condition lowers progesterone levels, a hormone essential for maintaining pregnancy. The Bypass Fat supplementation helps rectify the energy deficit, which in turn supports hormonal balance and facilitates a healthier reproductive cycle. Progesterone is vital for maintaining the early stages of pregnancy. Without adequate progesterone levels, the embryo cannot implant properly, leading to early embryonic deaths

	and repeat breeding. hCG administration can induce accessory corpus luteum in the ovaries which in turn helps in improving progesterone level in the system. Proper levels of hormones like progesterone can support pregnancy through successful embryo development during the critical early pregnancy period and aids in successful conception, significantly reducing the cycle of repeat breeding.

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

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

A. Practicing Farmers

a)
b)
c)

B. Rural Youth

a)
b)
c)
d)

C. In-service personnel

a)
b)
c)

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) -
ii. No. of farm families selected per village:
iii. No. of survey/PRA conducted:
iv. No. of technologies taken to the adopted villages
v. Name of the technologies found suitable by the farmers of the adopted villages:
vi. Impact (production, income, employment, area/technological– horizontal/vertical)
vii. Constraints if any in the continued application of these improved technologies

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
ATMA	Exhibitions / trainings, Meetings
Goa Milk Producer's Cooperative Union, Curti, Ponda-Goa	Animal Health Camps, Meetings
Department of Animal Husbandry and Veterinary Services	Animal Health Camps, Meetings
Department of Fisheries	Trainings and Meetings
Directorate of Social Welfare, Govt of Goa	Meetings
SAMETI	Trainings
Goa State Hort. Corporation	Meetings
Goa College of Agriculture, Old Goa	Training
NABARD, Panaji- Goa	Meetings,
All India Radio	Agriculture Information Programme / Dissemination
Door darshan -DD Kisan	Agricultural information programs/ Dissemination
Directorate of Agriculture, Govt. of Goa	Training, NHM, RKVY, Diagnostic visits, Lectures, Roving survey
Botanical Society of Goa	Fruit Festival
Sikeri and Sri Ram Goshala	Demonstrations
Goa Science Centre	Agriculture Science Exhibition
RIVER Puducherry	SCSP Trainings
KVK Thrissur, Kerala and Vijayanagaram, Andhra Pradesh	SCSP and STC programs
Directorate of Cashew nut and Cocoa Development, Kochi Kerala	Input Distribution and Trainings
Goa Bagayatdar Society, Ponda-Goa	Agriculture Input purchase
PM SHRI Kendriya Vidyalaya, Bambolim	Trainings, and awareness programs
Old Goa Education Society, Old Goa	Trainings, and awareness programs

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 (State Govt./Other Agencies)	Amount (Rs.)
-	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
01	**Meetings**	1	1	0	8
02	**Research projects**				
03	**Training programmes**	02		02	86
04	**Demonstrations**				
05	**Extension Programmes**				
	KisanMela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify) Field Day	01	4	01	26
06	**Publications**				
	Video Films				
	Books				
	Book chapter				
	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

1	Awareness program on National Horticulture Board schemes in collaboration with NHB Pune and the Department of Agriculture, Government of Goa, on 12th January 2024. A total of 97 farmers participated in the program.	Awareness program	No	No	No

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 (Skill development/RPL)

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. Innovative Farmers Meet

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

9. Farmers Field School (FFS)

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

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

- Goa Dhan 5 performed better than Goa Dhan 4 and was accepted by the farmers
- Farmers gave positive feedback, stating that feeding cooking soda is more effective than feeding yeast or probiotics bolus. The recommended practice was found to be better than the alternative.
- Farmers were convinced that the combination of bypass fat and hormonal therapy (Inj. HCG) resulted in a better conception rate of 66.66%, compared to the recommended practice of using only hormonal therapy after insemination.

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

Agronomy:

Goa Dhan-5 paddy variety: Farmers, received remarkable results from the Goa Dhan-5 paddy variety, which has been highly beneficial in terms of income and yield which was more than 2.7 t/ha. This variety has consistently shown impressive yield performance, outperforming other paddy varieties in the region. Goa Dhan-5 is well adapted to the unique climatic conditions of Goa, especially the saline-affected Khazan lands, where it thrives even under challenging conditions. These lands, which were often left barren or underutilized due to soil salinity and waterlogging. The variety's ability to withstand such adverse conditions has significantly improved farm productivity.

Finger Millet variety KMR 301: This variety has proven to be a breakthrough for famers. It has outperformed other millet varieties in terms of yield i.e. 1.9 t/ha, showcasing superior adaptability to the local agro-climatic conditions. KMR 301 is not only higher yielding but also enjoys better market demand due to its consumer preference. The grains are highly sought after in the local markets, making it an economically viable crop for farmers to grow. Its nutritional value, including high fiber and essential minerals, has made it a popular choice among consumers, thus ensuring steady marketability and higher income for the farmers.

Animal Science:

Farmers really happy with the mastitis control measures promoted by KVK, like Dry Cow Therapy and post-milking Teat Dipping. These practices have completely eliminated mastitis in their crossbred cows. As a result, they have been able to produce clean milk, which sells for a premium price in the dairy society. Their lactating cows also maintain their value, unlike the mastitis-affected ones, whose prices drop by 20-30%. Farmer used to loss 10-20% milk production in mastitis-affected cows.

Hybrid Napier Fodder CO-5: farmer consider this fodder as a game-changer. It thrives in Goa's hot and humid climate, and farmers get seven cuttings a year, each with 25-40 tillers. The green fodder yield was over 350 MT per hectare, which is far better than the local Boro Grass. The leaf-to-stem ratio is also much higher, making it an excellent choice for feeding their livestock.

11. Technology Week celebration during 2024: Krishak Swarn Samrddhi Week

Period of observing Technology Week: From 26.09.24 to 02.10.24
Online / Offline: Offline
Total number of farmers visited :214
Total number of agencies involved : 02
Number of demonstrations visited by the farmers within KVK campus:-96

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	-
Lectures organized			
Livestock	02	104	Poultry, Azolla, Dairy and goats
Crop	02	110	Paddy, Vegetables and organic manure and millets
Exhibition	-	-	-
Film show	-	-	-
Fair	-	-	-
Farm Visit	-	-	-
Diagnostic Practical's	-	-	-
Supply of Literature (No.)	-	-	-
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	04	214	-

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

A. Introduction of alternate crops/varieties

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

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

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

D. Animal health camps organized

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

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

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

F. Large scale adoption of resource conservation technologies

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

G. Awareness campaign

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

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Salt Tolerant Paddy Goa Dhan–4	24	14	16630	51100
Bacterial wilt resistant tomato var. Arka Rakshak	24	18	121000	274432
Brinjal var. Goa brinjal-1	22	19	130440	226800
Cowpea var. Goa Cowpea-03	20	44	59200	101093
Management of Stem & Root Borer in cashew	30	65	21740	109110
High yielding yard long bean variety Arka Mangala	20	22	78008	95232
Sweet corn var. COB-F-1	20	24	75310	99900
High yielding watermelon variety Arka Manik	20	32	121088	147993
Groundnut var. DH-256	33	46	126580	151200
Proso millet (var.TNAU 202)	7	16	41900	65000
Kodo millet (var. RK 390-25)	7	14	41900	171000
Finger millet (var. GPU-67)	7	36	47320	61000
High yielding Fodder var. Super Napier	54	62	17000	178100

Improved poultry var. Grampriya	49	41	190	1208

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

B. Cases of large-scale adoption
(Please furnish detailed information for each case)

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	Dairy	Nutrition Management	Popularization of Hybrid Napier CO-5 Fodder	Method Demonstration, Capacity building programme, Awareness programme	20	34	0.68

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

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2024	NIL	NIL	NIL
Feb 2024	NIL	NIL	NIL
March 2024	NIL	NIL	NIL
April 2024	NIL	NIL	NIL
May 2024	NIL	NIL	NIL
Jun 2024	NIL	NIL	NIL
Jul 2024	NIL	NIL	NIL
Aug 2024	NIL	NIL	NIL
Sept 2024	NIL	NIL	NIL
Oct 2024	NIL	NIL	NIL
Nov. 2024	NIL	NIL	NIL
Dec. 2024	NIL	NIL	NIL

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
North Goa	Text only	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	farmers Benefited	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Voice only	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	farmers Benefited	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Voice & Text both	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	farmers Benefited	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Total Messages	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Grant total of farmers Benefited	Nil	Nil	Nil	Nil	Nil	Nil	Nil

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Pulses	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Oilseeds	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Fibers	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Spices & Plantation crops									
	-	-	-	-	-	-	--	-	-
Floriculture	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Fruits	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Vegetables	-	-	-	-	-	-	--	-	-
	-	-	-	-	-	-	--	-	-
Others (specify)									

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

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

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Buffalo	Godavari	Milk	1777	180000	210728	-
2	Backyard Poultry	Vanaraja, Kadaknath, Srinidhi Grampriya	Birds and Egg sale	2271 eggs and 632 birds and 400 kg manure	120000	171358	-

E. Utilization of hostel facilities

Accommodation available (No. of beds): 16 – **Revenue generated – Rs. 1.80 Lakhs**

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2024	103	66	21,000
February 2024	75	65	28,400
March 2024	23	39	15,000
April 2024	14	25	6,200
May 2024	24	29	9,200
June 2024	52	37	15,200
July 2024	7	7	1,300
August 2024	85	31	13,900
September 2024	102	63	25,700
October 2024	17	44	15,200
November 2024	39	41	15,800
December 2024	49	48	13,100
Total	**590**	**495**	**1,80,000**

F. Database management

S. No	Period of Database	Database target	Database created
1	**2024**	Database of daily market price of major horticulture crops of Goa- Market Decision Support System	Database created with records of market rate for Blackpepper, Arecanut, Cashewnut and Coconut for the year 2024

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

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

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? No ~~If yes,~~

Nutritional Garden developed at KVK farm - NA

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
	Vegetable crops		
	Fruit crops		
	Others if any		

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
	Vegetable crops		
	Fruit crops		
	Others if any		

H. Details of Skill Development Trainings/RPL organized - Nil

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
-	-	-	-	-	-	-	-		

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

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

B. Utilization of KVK funds during the year 2024-25 (Rs. in lakh) (Till February, 2025)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	16400000	13568569	10568481
2	**Traveling allowances**	100000	99440	99080
3	**Contingencies**	1350000	1379278	1329171
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and Equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		17850000	15047287	11996732
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			

3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		17850000	15047287	11996732

C. Status of revolving fund (Rs. in lakh) for the Five years – No Revolving funds

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2020 to March 2021	-	758466	-	-
April 2021 to March, 2022	-	1055014	-	-
April 2022 to March 2023	-	1056499	-	-
April 2023 to March 2024	-	193693	-	-
April 2024 to March 2025	-	584459	-	-

17. 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
Dr. Udharwar S.V.	SMS (Animal Science)	Micro Observer training for the ensuing the Lok Sabha Election 2024	Govt. of Goa	Offline	05.03.2024
Dr. N. Bommayasamy	Senior Scientist and Head	Micro Observer training for the ensuing the Lok Sabha Election 2024	Govt. of Goa	Offline	21-03-2024
Dr. N. Bommayasamy	Senior Scientist and Head	Micro Observer training for the ensuing the Lok Sabha Election 2024	Govt. of Goa	Offline	02-05-2024
Dr. Udharwar S.V.	SMS (Animal Science)	Micro Observer training for the ensuing the Lok Sabha Election 2024	Govt. of Goa	Offline	4.05.2024
Dr. N. Bommayasamy	Senior Scientist and Head	10th MDP for newly recruited Senior Scientists and Heads of KVKs (I phase)	ICAR-NAARM, Hyderabad	Offline	27.11.2024 to 11.12.2024
Dr. N. Bommayasamy	Senior Scientist and Head	10th MDP for newly recruited Senior Scientists and Heads of KVKs (II phase)	ICAR-KVK, Myrada, Erode, Tamil Nadu	Offline	14.11.2024 to 23.12.2024
Dr. N. Bommayasamy	Senior Scientist and Head	10th MDP for newly recruited Senior Scientists and Heads of KVKs (III phase)	ICAR-ATARI, Pune	Offline	27.12.2024 to 31.12.2024

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before (base year)	After (current year)
-	-	-	-	-	-

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

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	Training	4	Training	4	104
2	Input Distribution	7	Agricultural minor implements and Khadaknath birds distributed	7	222

20. Details of Progress of ARYA Project - Nil

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	
-		-	-	-	-	-	-	-

21. Details of Swachhta Action Plan (SAP) -

S. No.	*Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants
1	*Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc*	36	875

Swachhta Pakhwada:

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of participants	Others	Total
1	North Goa	17.09.24	Swachhata Run and Tree Plantation	01	39	-	40
2	North Goa	18.09.24	Swachhata Workshop	0	50	-	50
3	North Goa	19.09.24	Swachhata Samvad	0	23	-	23
4	North Goa	20.09.24	Swachhata program related to waste management	0	24	-	24
5	North Goa	21.09.24	Human Chain to aware about cleanliness	0	32	-	32
6	North Goa	22.09.24	Mega cleaning drive	0	35	-	35
7	North Goa	23.09.24	Swachhata program by Shramdhan	0	28	-	28
8	North Goa	24.09.24	Swachhata hi seva campaign	0	15	0	15
9	North Goa	25.09.24	Swachh Bharat Mission	0	56	0	56
10	North Goa	26.9.24	Preventive health checkup camp	0	25	0	25
11	North Goa	27.09.24	Awareness on good health	0	35	0	35
12	North Goa	28.09.24	Safety tools awareness and distribution	0	25	0	25
13	North Goa	29.09.24	Mayem Village -cleaning	0	30	0	30
14	North Goa	30.09.24	Cleaning and demonstration of waste to best	0	20	0	20
15	North Goa	01.10.24	Workshop on waste to wealth	0	115	0	115
Total				01	552	0	553

Swachhata special Campaign 4.0

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of participants	Others	Total
1	North Goa	02.10.24	Celebration of Swachh Bharat Diwas on the occsaion of Mahatma Gandhi Jayanti	0	27	0	27
2	North Goa	3.10.24	Swachhata Pledge	0	34	0	34
3	North Goa	4.10.24	The Horticulture, Animal Science and Fisheries sections were cleaned by removing waste materials, furniture and scrap.		15	0	15
4	North Goa	07.10.24	weeding activity was conducted at the institute in which 4 registers have been weeded out.	0	6	0	6
5	North Goa	8.10.24	cleaning of Crop Science Field Lab	0	11	0	11
6	North Goa	9.10.24	Scrap collection	0	8	0	8
7	North Goa	10.10.24	5 physical files have been weeded out.	0	6	0	6
8	North Goa	11.10.24	pruning of plants and trimming shrubs outside boundary walls of the Institute campus was conducted	0	14	0	14
9	North Goa	14.10.24	Disposal of e-waste	0	10	0	10
10	North Goa	15.10.24	cleanliness in the IPR room and its surroundings	0	13	0	13
11	North Goa	16.10.24	Scrap disposal	0	8	0	8
12	North Goa	17.10.24	Cleanliness in the laboratories	0	50	0	50
13	North Goa	18.10.24	process of condemnation of unused capital items done	0	8	0	8
14	North Goa	21.10.24	weeding activity	0	8	0	8
15	North Goa	22.10.24	Maintenance activities across office buildings, guest houses, and other facilities located in Blocks A, B, and C of ICAR - CCARI, Goa	0	7	0	7
16	North Goa	23.10.24	cleaning drive was successfully conducted in the residential quarters area.	0	7	0	7

17	North Goa	24.10.24	Swachhta rally	0	30	0	30
18	North Goa	25.1024	cleaning activity was organized outside the boundary walls of ICAR- CCARI Old Goa	0	15	0	15
19	North Goa	28.1024	Extensive cleaning drive was conducted in the main building of the institute.	0	17	0	17
20	North Goa	29.10.24	Cleaning and Weeding Drive	0	10	0	10
21	North Goa	30.10.24	Cleaning of the office	0	18	0	18
Total				0	322	0	322

22. Books published 2024-25 - Nil

Title of the Book	Authors	ISBN No	Publisher	Pages No	Description/review of the book (one paragraph)
Nil	Nil	Nil	Nil	Nil	Nil

23. Footfall in KVKs

State	Name of KVK	No. of Footfalls			
		Farmers	Officials	VIPs	Total
Goa	North Goa	785	38	18	841

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

Awards and Recognitions

Sr. No.	Name of the Scientist / Farmer*	Name of the Award/ Recognitions	Awarding Agency	Conferred on	Photos
1.	Shri Sanjay Anant Patil	Padma Shri Award - 2024	Ministry of Home Affairs, Govt. of India	09th May, 2024	

2.	Ms. Anitha Mathew Vallikkappen	IARI – Innovative Farmer Award -2024	ICAR – IARI, PUSA, New Delhi	06th June, 2024	
3.	Shri Angelo Barreto	Best Farmer Award -2024	DCCD, Kochi	14th June, 2024	
4.	Shri Vinod Gopal Barve	Millionaire Farmer of India	Krishi Jagran	2nd December, 2024	
5.	Shri Uday Dattaram Prabhudesai	Millionaire Farmer of India	Krishi Jagran	2nd December, 2024	
6.	Shri Rahul Kulkarni	Director's Appreciation Award	ICAR – CCARI, Goa	15th Aug-2024	

7.	Dr N. Bommayasamy Dr. Udharwar S.V. Mr. Rahul Kumar Mr. Rahul Kulkarni Shri Vishwajeet Prajapati	Appreciation certificate	CRDA - Cotton Research and Development Association, India Cotton Research and Development Association	15th Nov-2024	 
8.	Dr N. Bommayasamy	Appreciation certificate for rapporteur	ICAR – ATARI VIII, Pune	06th September, 2024	
9.	Dr N. Bommayasamy	Best Presentation certificate	ICAR – ATARI VIII, Pune	06th September, 2024	

External funded research projects

Title of the project	Funding agency	Duration		PI/CO-PI	Budgets (In Lakhs)
		From	To		
TDC-National Innovations in climate Resilient Agriculture	ICAR-CRIDA	20.12.2021	31.03.2025	**N.Bommayasamy**, Sanjaykumar Udharwar, Rahul Kumar	33.83
Out scaling of Natural Farming through KVKs	ICAR, New Delhi	04.10.2022	31.03.2025	**N.Bommayasamy**, Rahul Kulkarni, Rahul Kumar	10.65
Agri drone under sub mission on agricultural mechanization	ICAR, New Delhi	31.03.2022	31.03.2024	**N.Bommayasamy**, Rahul Kulkarni, Vishwajeet Prajapati	36.2
District Agro Met Advisory	IMD, New Delhi	2018	31.03.2024	**Bappa Das, HRC Prabhu**	58.10697
Mission for Integrated Development of Horticulture-Front Line Technology Demonstration (as PI)	MIDH	March, 2023	March, 2026	**N.Bommayasamy**, Omar D'Souza	10.00
MIDH- Stake holders meet on cashew	MIDH-DCCD	March, 2023	March, 2025	**N.Bommayasamy**, Omar D'Souza	2.00

TDC-National Innovations in climate Resilient Agriculture

Out scaling of Natural Farming through KVKs

Agri drone under sub mission on agricultural mechanization

Mission for Integrated Development of Horticulture-Front Line Technology Demonstration (as PI)

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	44	739	642	1381
Rural youths	6	149	131	280
Extension functionaries	1	10	2	12
Sponsored Training	6	23	65	88
Vocational Training	2	68	23	91
Total	**59**	**989**	**863**	**1852**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	-	-	-
Pulses	-	-	-
Cereals	25	4	-
Vegetables	-	-	-
Other crops	-	-	-
Hybrid crops	-	-	-
Total	25	4	-
Livestock & Fisheries	09	-	09
Other enterprises	10		10
Total	19	-	19
Grand Total	**28**	**4**	**19**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	1	3	3
Livestock	2	13	13
Various enterprises			
Total	3	16	16
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	**3**	**16**	**16**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	106	1912
Other extension activities	496	24580
Total	**602**	**26492**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	1127	103	-	1	-	-	1230
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	1242		-	-	-	-	1242
	Total Messages	**2369**	**103**	**-**	**1**	**-**	**-**	**2473**
	Total farmers Benefitted	**1821**	**228**	**-**	**1129**	**-**	**-**	**3178**

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	0.30009	39560
Planting material (No.)	17720	40105
Bio-Products (kg)	3948.05	76065
Livestock Production (No.)		
Buffalo Unit	-	**210728**
Sale of Milk	1777	1,13,728
Sale of males	02	80000
Poultry Unit	-	**1,89,255**
Sale of Eggs	2271	15,897
Sale of Birds	632	1,71,358
Manure	400	2000
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	425	Nil
Water	22	Nil
Plant	10	6250
Total	**457**	**6250**

8. HRD and Publication

Sr. No.	Category	Number
1	Abstract	0
2	Workshops	3
3	Conferences	1
4	Meetings	29
5	Trainings for KVK officials	07
6	Visits of KVK officials	189
7	Book published	0
8	Training Manual	0
9	Book chapters	0
10	Booklet	01
11	Leaflets/ Folder/ Pamphlet	02
12	Research papers	0
13	Technical Bulletin	00
14	Popular article	10
15	Lead papers	0
16	Seminar papers	0
17	Extension folder	0
18	Proceedings	01
19	Award & recognition	09
20	On-going research projects	5
21	Other (Extended summary)	0


ICAR - Krishi Vigyan Kendra, North Goa
ICAR - Central Coastal Agricultural Research Institute
Old Goa (Goa) - 403 402
Drone Demonstration
under Agri-Drone Project of SMAM


ICAR - KRISHI VIGYAN KENDRA - NORTH GOA
ICAR - CENTRAL COASTAL AGRICULTURAL RESEARCH INSTITUTE, GOA
TDC-NICRA
ROUND THE YEAR FODDER PRODUCTION