हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

Agrisearch with a human touch

Annual Action Plan 2024-25

KRISHI VIGYAN KENDRA, KOKRAJHAR

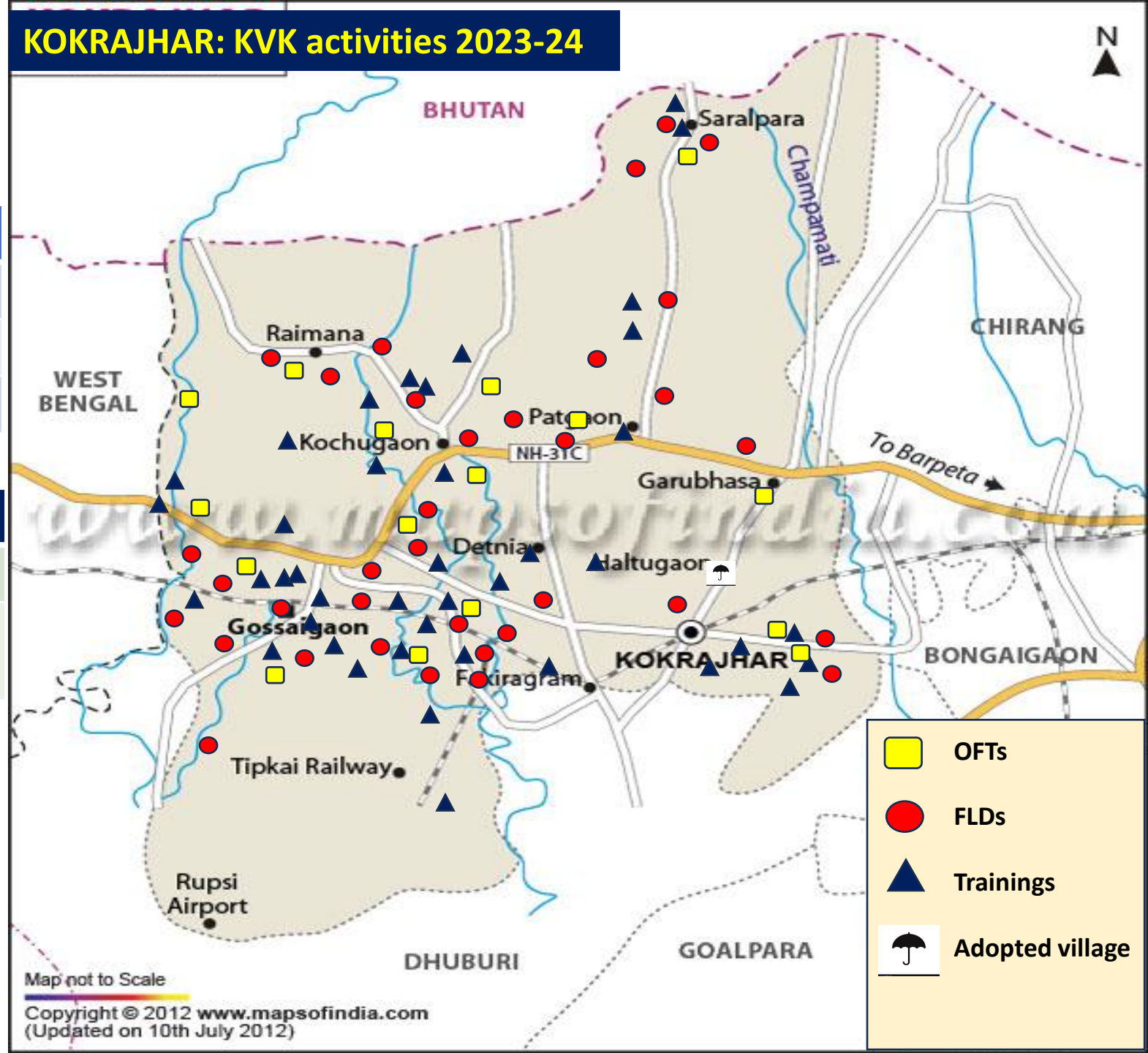
Presented by: Dr. S.K. Paul, Sr. Scientist and Head (i/c)

Assam Agricultural University, Jorhat

PENETRATION OF KVK ACTIVITIES

Particulars	Number
Subdivisions in the district	3
Blocks in the district	11
Villages in the district	227

Particulars	Number
Villages covered in 2023-24	25
New villages to be covered in the 2024-25	30



Abstract of OFT & FLD

Sl. No.	Discipline	OFT nos.	FLD nos.
1	Agronomy	2	3
2	Horticulture	2	3
3	Animal Science	2	3
4	Community Science	3	2
5	Fishery Science	-	2
Total		9	13

On Farm Trial (OFT)

(Discipline: Agronomy)

Thematic area	:	Nutrient management
Title of OFT	:	Effect of Nano-Urea (liquid) in Sali rice to reduce the application of conventional urea & increasing crop productivity and profitability
Problem diagnosed	:	The application of conventional urea is increasing which is less effective, leads to higher cost of production & affecting soil health
Technology details	:	Application of Nano-Urea in various stages of Sali paddy
Year of release	:	AAU, Jorhat, 2023
Treatments & check	:	T1= N66PK (1/3RD RDN as basal + 1/3rd RDN at active tillering + Recommended P& K) + Two sprays of Nano-Urea @ 4 ml/lit of water at maximum tillering & Panicle initiation T2 / Farmers practice =N100PK (1/3RD RDN as basal + 1/3rd RDN at active tillering + 1/3rd RDN at panicle initiation + Recommended P& K)
No. of trials	:	3
No. of farmers	:	3
Parameters of assessment	:	Growth parameters (Plant height, tiller nos., duration), Yield attributes (Grains per panicle, Panicle length, 1000 seed weight), Grain & straw yield (q/ha), Economics (B-C ratio) and Farmers feedback

On Farm Trial (OFT)

(Discipline: Agronomy)

Thematic area	:	Crop diversification
Title of OFT	:	Performance of Buckwheat variety, Kharupetia-2 in Sali rice fallow
Problem diagnosed	:	Buckwheat is one of the important field crop grown in Kokrajhar district. But, yield obtained was low due to growing of local variety and also monocroping is prevalent in the district.
Technology details	:	Buckwheat variety, Kharupetia-2
Year of release	:	AAU, Jorhat, 2022
Treatments & check	:	T1= Buckwheat variety, Kharupetia-2 T2 / Farmers practice: Buckwheat var. local
No. of trials	:	3
No. of farmers	:	3
Parameters of assessment	:	Growth parameters (Plant height, No. of branches.,duration), Yield attributes (capitulum per plant, No. of seeds per capitulum, 1000 seed weight), Seed & stover yield (q/ha), Economics (B-C ratio) and Farmers feedback

On Farm Trial (OFT)

(Discipline: Horticulture)

Thematic area3	:	Varietal evaluation
Title of OFT	:	Varietal Evaluation of Lai xak variety AAUJLP1 , AAUJLP2
Problem diagnosed	:	Small leaves size and Low yield of local variety
Technology details	:	AAUJLP1 , AAUJLP2
Year of release	:	Under pipeline, AAU, Jorhat
Treatments & check	:	T_1 =AAUJLP1 T_2 = AAUJLP2 T_3 = Farmer's Variety Spacing : 60 cm x 45 cm Fertilizer: 60:60:40 (N: P:K kg/ha) Nitrogen to be applied in split doses 30 DAS, FYM: 2-3 t/ha Sowing time: Mid Sep-October, Seed rate: 700g/ha
No. of trials	:	4
No. of farmers	:	4
Parameters of assessment	:	Days to flowering, Leaf length (cm), Leaf Breadth (cm), Leaves per plant ,Yield (kg/plant) and Yield (q/ha), B:C ratio

On Farm Trial (OFT)

(Discipline: Horticulture)

Thematic area	:	Varietal evaluation
Title of OFT	:	Varietal Evaluation of Fennel variety Ajmer Fennel-1 (AF-1) and Ajmer Fennel-2 (AF-2)
Problem diagnosed	:	Low yield of locally available seed spice
Technology details	:	Ajmer Fennel-1 (AF-1) and Ajmer Fennel-2 (AF-2)
Year of release	:	ICAR –National Research Centre on Seed Spices, Tabiji, Ajmer 2015
Treatments & check	:	T_1 =Ajmer Fennel-1 (AF-1) T_2 = Ajmer Fennel-2 (AF-1) T_3 = Farmer's Variety Spacing : 30 cm x 20 cm Fertilizer: 50:25: (N: P kg/ha) Nitrogen to be applied in split doses 40 DAS FYM: 20 t/ha Sowing time: October-November Seed rate: 10-12kg/ha
No. of trials	:	4
No. of farmers	:	4
Parameters of assessment	:	Days to flowering, Plant height, No. of umbels, Seed size and shape, Seed yield per plant and Seed yield (q/ha), B:C ratio

On Farm Trial (OFT)

(Discipline: Community Science)

Thematic area	:	Post harvest technology of yarn/fibre
Title of OFT	:	Effect on fiber strength of jute fiber after differential covering material used in retting method and post fiber treatment of jute.
Problem diagnosed	:	Poor spinning process leads to wastage of yarn
Technology details	:	Retting with banana leaf, paddy straw, water hyacinth, weed biomass and microbial consortia
Year of release	:	Department of Textile and apparel designing, AAU, Jorhat.
Treatments & check	:	**T1-** Fibre extracted after retting with banana leaf and mud. **T2-** Fiber extracted after Retting with paddy straw and mud. **T3-** Fibre extracted after retting with water hyacinth and mud. **T4-** Fibre extracted after retting with weed bio-mass. **T5-**Fibre extracted after retting with Microbial Consortia Post- Treatment- **T6-** Fibre were soaked in Tamarind water solution for 20 mins after fiber extraction **T7-** Fibre were soaked in 1% bleaching solution. Matured Jute plant will be used for retting (100-120 days)
No. of trials	:	3
No. of farmers	:	3
Parameters of assessment	:	Color, luster, Tensile Strength , Breaking elongation, Tenacity, hairiness index

On Farm Trial (OFT)
(Discipline: Community Science)

Thematic area	:	Food Preservation and processing
Title of OFT	:	Assessment of Popping quality of different varieties of nutri-cereals
Problem diagnosed	:	Lack of quality assessment in different value-added products of millet.
Technology details	:	Popping of different varieties of nutri-cereals
Year of release	:	IIT, Kharagpur, Department of agriculture and Food technology, 2014
Treatments & check	:	**T_1-** Pops from Sorghum Millet . **T_2-** Pops from Pearl Millet. **T_3-** Pops from Foxtail millet. **T4-** Pops from buckwheat. Pre- treatment After initial moisture determination, the sample were raised to 12%, 15% and 18% moisture by adding pre-determined water to the grains. For each moisture level duplicate 250 g of nutri-cereals were prepared and sealed in air tight container. The samples were permitted to equilibrate for 72 hrs at room temperature before poping. pH- 7 will be maintained for rehydrated sample(constant) using 0.01,0.1 and 1% NaCl and NaOH. Temp – Roasting in sand in 270 degree centigrade.
No. of trials	:	3
No. of farmers	:	3
Parameters of assessment	:	1. Popped yield 2. Expansion volume 3. Proximate composition of unprocessed and popped coarse grains 4. Sensory evaluation and Shelf life

On Farm Trial (OFT)
(Discipline: Community Science)

Thematic area	:	Food Preservation and processing
Title of OFT	:	Increasing shelf life of Tomatoes by using edible coating under refrigerated condition
Problem diagnosed	:	Post harvest loss of tomato
Technology details	:	Coating of tomato with various preparations
Year of release	:	Faculty of agriculture engineering, Bidhan Chandra Krishi Biswavidyalaya, West Bengal, 2023
Treatments & check	:	T_1- Coating with 95% aloe vera Juice + 1% clove oil. T_2- Coating with 1% corn starch+ 1% clove oil. T_3-Coating with 3% Tapioca starch+ 1% clove oil T_4- Coating with 3% sweet potato starch + 1% clove oil. FP-Uncoated tomatoes (control). Technology details: Fully matured harvested tomatoes will be collected and washed and dried in shades for 1 hour and categories as per numbers of treatments, weighting 250g each sample. Coating of tomatoes will done with 95% of aloevera juice and 5% stabilizer and no preservative will be used + 1% clove oil. Corn starch solution will be prepared by adding soluble corn starch 1g in 100ml of boiling distilled water. For, coating of tomato with sweet potato starch, 3 g of potato starch is heated to 80 degree centigrade for 8 mins + 1% clove oil and cool down to 37 degree centigrade. For coating of tomato with Tapioca starch 3 g of Tapioca starch is heated in 100ml of distilled water + 1 % clove oil and cooled at 37 degree centigrade. The physiological characteristics will be studied after 3,5,7,11,21 and 30 days at refrigerated condition. Coating method: Dipping Temp and storage condition – All samples after treatments along with control samples were stored in 5 degree centigrade in refrigerator.
No. of trials	:	3
No. of farmers	:	3
Parameters of assessment	:	1. Physiological loss in weight 2. Decay percentage 3. Sensory evaluation and Shelf life

On Farm Trial (OFT)

(Discipline: Animal Science)

Thematic area	:	Breed Introduction
Title of OFT	:	Introduction of Indbro Asseel poultry breed in backyard system of rearing.
Problem diagnosed	:	Low productivity of local poultry
Technology details	:	Indbro Asseel, INDBRO RESEARCH AND BREEDING FARMS PVT. Ltd.
Year of release	:	2021
Treatments & check	:	T1- Indbro Asseel T2- Farmers' practice- performance of indigenous poultry
No. of trials	:	8
No. of farmers	:	8
Parameters of assessment	:	1. DOC 2. Monthly body wt gain 3. Body weight at market age 4. Dressing percentage 5. Disease incident 6. B:C ratio 7. FCR

On Farm Trial (OFT)

(Discipline: Animal Science)

Thematic area	:	Breed Introduction
Title of OFT	:	Assessment of comparative performance of BV-380 and Srinidhi poultry under backyard system of rearing.
Problem diagnosed	:	Low productivity of the indigenous poultry
Technology details	:	BV-380 & Srinidhi
Year of release	:	ICAR-Directorate of Poultry Research, Hyderabad
Treatments & check	:	To1- BV-380 To2- Srinidhi
No. of trials	:	8
No. of farmers	:	8
Parameters of assessment	:	1. DOC 2. Monthly body wt gain 3. Body weight at market age 4. Days of first egg laying, 5. Avrg. Egg production and egg weight. 6. Disease incident 7. B:C ratio

Front Line Demonstrations

Front Line Demonstration (FLD)

(Discipline: Agronomy)

Title of FLD	:	Popularization of Finger millet variety Gossaigaon Maruadhan
Technology details	:	T1: Finger millet var. Gossaigaon Maruadhan T2: Farmer's Practice
No. of demonstrations proposed	:	5
No. of farmers	:	15
Area (Ha)/ No. of animals or birds etc.	:	5.0
Observations to be recorded	:	Growth parameters, yield, pest & disease, economics and farmer's feedback

Front Line Demonstration (FLD)

(Discipline: Agronomy)

Title of FLD	:	Popularization of Foxtail millet variety AAU-GSG-Cawn-1
Technology details	:	T_1: Foxtail millet var. AAU-GSG-Cawn 1 $T_{2:}$ Farmer's Practice
No. of demonstrations proposed	:	5
No. of farmers	:	15
Area (Ha)/ No. of animals or birds etc.	:	5.0
Observations to be recorded	:	Growth parameters, yield, pest & disease, economics and farmer's feedback

Front Line Demonstration (FLD)

(Discipline: Agronomy)

Title of FLD	:	Popularization of Hybrid maize (Rabi) variety Indam 1201
Technology details	:	T1: Hybrid Maize (rabi) var. Indam 1201 T2: Farmer's Practice
No. of demonstrations proposed	:	5
No. of farmers	:	15
Area (Ha)/ No. of animals or birds etc.	:	3.0
Observations to be recorded	:	Growth parameters, yield, pest & disease, economics and farmer's feedback

Front Line Demonstration (FLD)

(Discipline: Horticulture)

Title of FLD	:	Popularisation of Ridge gourd variety Arka Vikram and Arka Prasan
Technology details	:	Spacing : 1.5-2.5m x 60cm-1.2m NPK @ 20:30:30 kg/ha Seed rate: 1.5 Kg/ha
No. of demonstrations proposed	:	4
No. of farmers	:	4
Area (Ha)/ No. of animals or birds etc.	:	0.26 ha
Observations to be recorded	:	Plant height, No. of fruits/plant, Av. Fruit weight, Yield/plant, Yield/ha, Pest & disease incidence, B:C ,Farmers reaction,

Front Line Demonstration (FLD)

(Discipline: Horticulture)

Title of FLD	:	Demonstration on Organic cultivation of Ginger
Technology details	:	Variety: Nadia/available Ginger variety Spacing: 25 cm x 25 cm Planting time: March-April Seed rate : 10-15q/ha Seed rhizomes treatment with Pseudomonas fluorescens @ 20 g/lit for 30 minutes Application of FYM, Trichoderma sp., neem cake mixture @ 100 g per pit at the time of planting. Azospirillum @ 2.5 kg /ha / PGPR mix I as basal is applied and 120 DAP.
No. of demonstrations proposed	:	4
No. of farmers	:	4
Area (Ha)/ No. of animals or birds etc.	:	0.26 ha
Observations to be recorded	:	Plant height (cm), No. of Finger/plant, Av. rhizome weight(g), Yield/plant (kg), Yield/ha (q/ha), Pest & disease incidence, B:C ,Farmers reaction,

Front Line Demonstration (FLD)

(Discipline: Horticulture)

Title of FLD	:	High density and meadow orcharding of guava
Technology details	:	Spacing: 3.0mx3.0m accommodating 1111 plantsha-1 1. Topped the tree to a uniform height of 60 - 70 cm from the ground level 2. Retain 3 to 4 shoots (equally spaced) 3. Prune the shoots after 3 - 4 months of shoot emergence (Cutting back to 50% of their total length 4. Further prune the shoots after 3-4 months of emergence (Cutting back to 50% of their total length) 5. Continue shoot pruning during the second year for desired tree shape 6. After second-year shoot pruning is done during Jan-Feb for rainy season fruiting and May – June for winter season fruiting
No. of demonstrations proposed	:	4
No. of farmers	:	4
Area (Ha)/ No. of animals or birds etc.	:	0.26 ha
Observations to be recorded	:	No. of fruits/plant, Av. Fruit weight, Yield/plant, Yield/ha, Pest & disease incidence, B:C ,Farmers reaction,

Front Line Demonstration (FLD)

(Discipline: Community Science)

Title of FLD	:	Low cost Solar tent dryer to dry chilly
Technology details	:	T1- Low cost solar tent dryer Farmers Practice: Open drying
No. of demonstrations proposed	:	3
No. of farmers	:	3
Area (Ha)/ No. of animals or birds etc.	:	3
Observations to be recorded	:	Utility and drying time required. Farmers reaction B:C ratio

Front Line Demonstration (FLD)

(Discipline: Community Science)

Title of FLD	:	Banana Comb/Hand cutter
Technology details	:	T1- Cutting with banana hand cutter Farmers Practice: Cutting with Sickle
No. of demonstrations proposed	:	5
No. of farmers	:	5
Area (Ha)/ No. of animals or birds etc.	:	5
Observations to be recorded	:	Number of fruit damaged Utility. Farmers reaction B:C ratio

Front Line Demonstration (FLD)

(Discipline: Fishery Science)

Title of FLD	:	Integrated Duck Fish Culture
Technology details	:	Raising of duck in the pond periphery @ 30 Duckling/0.13 ha Stocking of the fish pond with fish yearling @ 1200 nos./ 0.13 ha Maintenance of water quality parameters Zero to negligible feeding to the fishes
No. of demonstrations proposed	:	3
No. of farmers	:	3
Area (Ha)/ No. of animals or birds etc.	:	0.39 ha
Observations to be recorded	:	Growth of fishes and ducks Number of egg/ duck, B:C ratio

Front Line Demonstration (FLD)

(Discipline: Fishery Science)

Title of FLD	:	Paddy cum Fish Culture
Technology details	:	Stocking of fish yearling in ponds adjacent to paddy field Cultivation of submergence tolerance paddy variety. No use of chemical fertilizer. Zero to negligible feeding to the fishes.
No. of demonstrations proposed	:	3
No. of farmers	:	3
Area (Ha)/ No. of animals or birds etc.	:	0.39 ha
Observations to be recorded	:	Growth of fishes, Production of paddy, BCR

Front Line Demonstration (FLD)

(Discipline: Animal Science)

Title of FLD	:	Popularization of Performance of broiler duck for meat production
Technology details	:	Broiler duck (White pekin) ducklings as quality ducklings inputs
No. of demonstrations proposed	:	5
No. of farmers	:	5
Area (Ha)/ No. of animals or birds etc.	:	40
Observations to be recorded	:	Weight of day old ducklings Monthly body wt. gain. Body weight at market age Dressing percentage Disease incidence. B:C ratio

Front Line Demonstration (FLD)

(Discipline: Animal Science)

Title of FLD	:	Performance of Kamrupa poultry.
Technology details	:	Kamrupa chicks as quality chick inputs
No. of demonstrations proposed	:	12
No. of farmers	:	12
Area (Ha)/ No. of animals or birds etc.	:	30
Observations to be recorded	:	1. Body weight of DOC 2. Monthly body weight gain 3. Age at 1st laying 4. Hens house egg laying 5. Occurrence of diseases 6. B:C ratio

Front Line Demonstration (FLD)

(Discipline: Animal Science)

Title of FLD	:	Popularization of performance of HDK-75 Pig
Technology details	:	To1: HD-K75 Pig variety, To2: Local pig breed/variety
No. of demonstrations proposed	:	3
No. of farmers	:	3
Area (Ha)/ No. of animals or birds etc.	:	3/unit
Observations to be recorded	:	1. Birth weight of piglet 2. Monthly body weight gain 3. Body weight at weaning 4. Litter size 5. Occurrence of diseases 6. BC ratio

Training programmes

a) Short duration trainings:

Discipline	Target group (nos. proposed)			Total No. of trainings
	Farmers/ farm women	RY	EF	
Agronomy	5	3	2	10
Horticulture	5	3	2	10
Animal Science	5	3	2	10
Community Science	5	3	2	10
Fishery Science	5	3	2	10
GRAND TOTAL	**25**	**15**	**10**	**50**

b) Vocational/ Skill training programmes:

Discipline	No. of trainings	Target group (nos. proposed)		
		Farmers/ farm women	RY	EF
Agronomy	2	1	1	-
Horticulture	2	1	-	1
Animal Science	2	1	1	-
Community Science	2	-	1	1
Fishery Science	2	1	1	-
Total	**10**	**4**	**4**	**2**

c) Sponsored training programmes:

Sl. No	Title of the training	Sponsoring agency
1	Scientific cultivation and value addition of mushroom	DBT-Biotech KISAN, TERI, Guwahati
2	Scientific cultivation and value addition of mushroom	DBT-Biotech KISAN, Bodoland University
3	Awareness cum training on Ganoderma disease management	ICAR-CPCRI

Other Extension Activities:

Sl. No.	Type of programme	No. of programmes proposed	No. of farmers
1	Method Demonstration	14	250
2	Field Day	10	300
3	Diagnostic visit	62	150
4	Exhibition	5	300
5	Advisory service		200
6	Publication		12
7	Celebration of important days	15	800
8	Exposure visit	4	100
9	News paper coverage	26	-
10	Research publications	4	-
11	Success stories	12	-
12	Farm Science Clubs' Convenors meet	4	200
13	Farmers' Seminar	4	-
14	Ex-trainees' meet	2	250
15	Film show	4	400
16	Radio Talk	24	-
17	TV talk	3	-
18	Kishan Goshthi	4	300
19	Group Meeting	15	375

Other Extension Activities:

Sl. No.	Type of programme	No. of programmes proposed	No. of farmers
20	Kishan Mela	3	375
21	Soil Health Camps	1	100
22	Awareness camp	10	220
23	Method demonstration	25	600
24	Scientists' visit to farmers' field	175	175
25	Workshop/ Seminar	8	250
26	Soil Testing	500	500
27	Water Testing	50	50
28	Plant Testing	50	50
29	Manure Testing	50	50
30	SMS Service	110	1400
31	Farmers' Scientist Interaction	15	275

Revenue generation:

Sl. No.	Activity	Quantity produced	Revenue earned (Rs.)
Seed Production			
1.	Sali Paddy	82	311600.00
2	Finger Millet	7	28000.00
3	Sesamum	2	36000.00
4	Mesta, Niger, Toria & Buckwheat	5	10000.00
Planting material production			
5	Black peeper	2000	50000.00
6	Assam Lemon cuttings	2000	80000.00
7	Sweet potato cuttings	8000	16000.00
8	Dragon fruit, Guava, Jack fruit, Drumstick etc.	6000	18000.00
Livestock production			
9	Piglet	20	70000.00
10	Poultry	120	36000.00
11	Rabbit	16	4000.00

Convergence with other organizations/ departments:

Sl. No.	Organization/ department	Type of activity
1	Department of Agriculture	Capacity Building, Kisan mela, Farmers Scientist interaction
2	Department of Animal Husbandry	Capacity Building, Farmers Scientist interaction, Animal Health Camp
3	Department of Fisheries	Capacity Building, Farmers Scientist interaction, Implementation of PMMSY
4	Department of Sericulture	Capacity Building, Farmers Scientist interaction,
5	Bodoland University	Biotech KISAN, Capacity Building, Kisan mela
6	TERI, Guwahati	Biotech KISAN, Capacity Building, Kisan mela
7	NABARD	Capacity Building
8	DIC, Kokrajhar	Capacity Building, CMAAA

External funding/ Resource mobilization:

Sl. No.	Name of the organization	Purpose	Fund (Rs)
1	TERI, Guwahati	Mushroom Production	500000.00
2	Bodoland University	Biotech KISAN	500000.00
3	ICAR-CPCRI	Ganoderma disease management in Arecanut	620000.00

Publications proposed

Sl. No.	Type of publication	Number	
1	Research paper	5	
2	Abstract	10	
3	Book	2	
4	Chapter of Book	8	
5	Training Manual	20	
6	Bulletin	10	
7	Newspaper article	35	

Extension Videos to be developed

Sl. No.	Type of publication	Number	
1	Extension Training Video	10	
2	Success story video	5	
3	Any other		

- No. of PRA survey to be conducted during 2024-25: 2

- Village adoption plan during 2024-25: Swachhta Action Plan, Technology Dissemination of Agriculture and Allied Sector

THANK YOU

ধন্যবাদ