Krishi Vigyan Kendra, Baksa

Assam Agricultural University

(Estd: 2014)

Annual Progress Report 2023-24

PENETRATION OF KVK ACTIVITIES

Particulars	Number
Subdivisions in the district	3
Blocks in the district	8
Villages in the district	690

Particulars	Number
Villages covered in 2023-24	30
Farmers covered	782
Farm women covered	515
SC/ST farmers covered	799
Rural youths covered	280

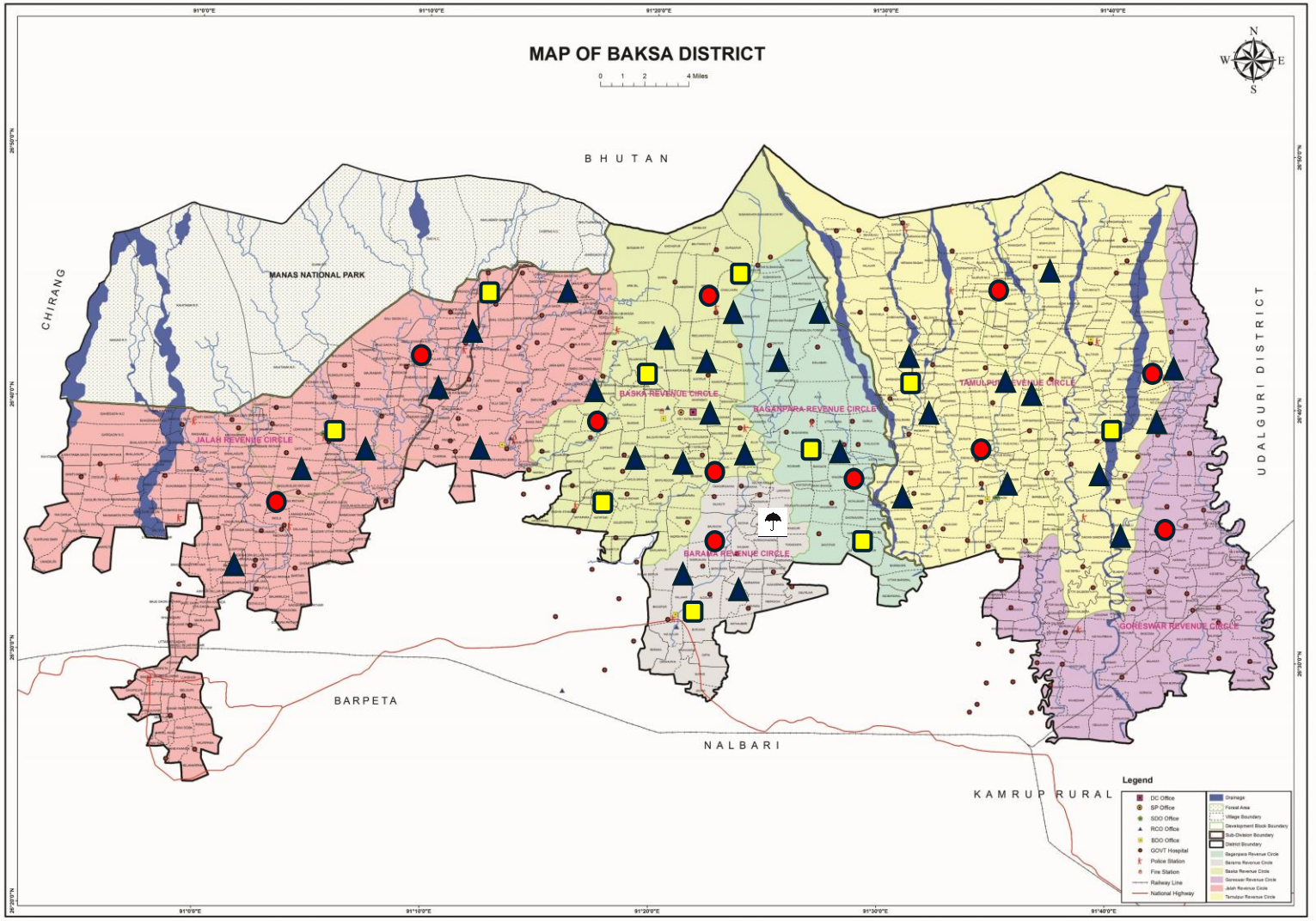

Fig: District Map, Baksa

- OFTs
- FLDs
- Trainings
- Adopted village

On Farm Trial (Discipline: Agronomy)2nd Year

Title of OFT : Assessment of Nano urea formulation on growth and yield attributes of Kharif paddy (**Rice var. Ranjit Sub-1**)

Problem diagnosed : Spiraling cost of chemical fertilizer in large quantity increases the production cost .

Technology details : T1: $N_{50}PK$ + 2 Foilar spray of Nano Urea @ 0.2% at 25 and 50 DAT
T2: $N_{50}PK$ + 2 Foilar spray of Nano Urea @ 0.4% at 25 and 50 DAT
T3: RDF (60:20:40, N: P_2O_5 : K_2O)

Year of release : ICAR and IFFCO, 2018

Farmers' feedback : Fertilizer cost is reduced but labour intensive.

Results with photographs:

Parameters	T1	T2	T3
Date of sowing	15.06.2023	15.06.2023	15.06.2023
Date of harvesting	25.11.2023	25.11.2023	25.11.2023
Days to 50% flowering	122	122	122
Days from 50% flowering to harvest	31 days	31 days	31 days
Avg. Plant height(cm)	160.29	162.33	160.86
Avg. No of Effective tillers/hill	15.42	15.66	15.48
Avg. Length of panicle(cm)	28.02	28.22	28.24
Avg. No. of total grain/panicle	198	202.10	195.66
Avg. Yield(q/ha)	50.56	51.66	51.52
Gross Cost(Rs./ha)	45800	45800	49400
Gross Return(Rs./ha)	96800	98146	91060
Net Return(Rs./ha)	51000	52346	41660
B:C Ratio	2.11	2.14	1.84

Spraying of Nano urea solution

T1: $N_{50}PK$ + 2 Foilar spray of Nano Urea @ 0.2% at 25 and 50 DAT

T2: $N_{50}PK$ + 2 Foilar spray of Nano Urea @ 0.4% at 25 and 50 DAT

T3: RDF (60:20:40, N: P_2O_5 : K_2O)

On Farm Trial (Discipline: Agronomy) 2nd Year

Title of OFT : Assessment of Finger Millet varieties in Baksa district (Finger millet)

Problem diagnosed : Generally farmers are reluctant to cultivate Finger Millet due to lower productivity of existing local varieties.

Technology details : T1: Gossaigaon Marua Dhan-1, T2: VL Mandua-352, T3: Gossaigaon Local

Year of release : 2018

Farmers' feedback : High labour requirement in manual transplanting and difficulties in manual threshing of Finger Millet. Weeding cost is also high.

Results with photographs

Parameters	**T1**	**T2**	**T3**
Date of sowing	20.09.2023	20.09.2023	20.09.2023
Date of harvesting	01.01.2024	01.01.2024	10.01.2024
Days to maturity	104	104	113
Avg. Plant height(cm)	110.65	98.20	108.20
Avg. No of finger/plant	5.20	4.88	5.80
Avg. Yield(q/ha)	**12.20**	**10.44**	**11.80**
Gross Cost(Rs./ha)	29660	29660	29600
Gross Return(Rs/ha)	41760	37320	39580
Net Return(Rs./ha)	12100	7660	9980
B:C Ratio	1.41	1.25	1.34

Gossaigaon Marua Dhan-1

Gossaigaon Local (Open Type)

VL Mandua-352

On Farm Trial (Discipline: Soil Science)

Title of OFT	:	Exploitation of potash solubilizing bacteria in reduction of potassic fertilizers in sali rice (var. *Numoli*)
Problem diagnosed	:	Medium to low K status of soil in Baksa district of Assam
Technology details	:	**T1:** NPK @ 60:20:20 (kg/ha) + Microbial consortia of KSB @3.5 kg/ha **T2:** Recommended dose of NPK @ 60:20:40 (kg/ha) **T3:** Farmers' practice (without proper fertilizer dose)
Year of release	:	2019
Farmers' feedback	:	More pest and disease resistance observed in treated plot.

Soil Fertility Status

	pH	OC%	N (kg/ha)	P (kg/ha)	K (kg/ha)
Initial	5.25	0.60	460.5	38.2	129.5
FinalT1	5.20	0.65	440.5	49.2	141.2
FinalT2	5.05	0.60	390.5	39.2	140.5
FinalT3	5.20	0.68	480.5	59.2	130.5

Results with photographs

Parameters	**T1**	**T2**	**T3**
Date of sowing	22.06.2023	17.06.2023	18.06.2023
Date of planting	21.07.2023	14.07.2023	15.07.2023
Date of harvesting	05.11.2023	08.11.2023	07.11.2023
Plant height(cm)	140	135	130
Effective tillers/hill	14	12.5	11
No. of grain/panicle	165	160	152
Avg. Yield(q/ha)	**47.50**	**46.12**	**44.10**
Gross Cost(Rs./ha)	48500	48100	47900
Gross Return@Rs.2140(Rs./q)	101650	98697	94374
Net Return(Rs./ha)	53150	50597	46474
B:C Ratio	2.10	2.05	1.97

On Farm Trial (Discipline: Horticulture) 1st year

Title of OFT	:	Performance of high yielding and chilli leaf curl virus tolerant chilli var. Arka Tejaswi, Arka Saanvi and Arka Gagan in Baksa district
Problem diagnosed	:	High incidence of chilli leaf curl disease virus
Technology details	:	**T1-** Arka Tejasvi, **T2-** Arka Saanvi , **T3** - Arka Gagan, T4 (Check)- KSP 1469
Year of release	:	2021
Farmers' feedback	:	The farmers were satisfied with the production of the varieties (Arka Tejasvi, Arka Sanvi, Arka Gagan). But the vegetative growth was found to be slower.
Scientist feedback:	:	The three varieties (Arka Tejasvi, Arka Sanvi, Arka Gagan) performed well in the locations. The organoleptic evaluation revealed that the pungency of Arka Saanvi was higher than the other two varieties.

Results with photographs				
Parameters	**T1**	**T2**	**T3**	**T4**
Date of planting	**24.10.2023**	**24.10.2023**	**24.10.2023**	**24.10.2023**
Plant Height (cm)	46.99	45.72	40.16	51.66
Days to 50% flowering	119	115	112	91
Fruiting behaviour	Downward fruiting	Downward fruiting	Upward fruiting	Downward fruiting
Days to first harvest	136	127	122	135
Number of fruits per plant	Harvesting is going on	Harvesting is going on	Harvesting is going on	Harvesting is going on
Average fruit weight of 20 fruit(g)	82.5	85.1	79.2	81.6
Average fruit length (g)	8.01	8.93	7.80	8.23
Average yield (q/ha)	Harvesting is going on	Harvesting is going on	Harvesting is going on	Harvesting is going on
Disease incidence (%)	**8.90**	**7.78**	**8.06**	**29.67**


ON FARM TESTING
ON
PERFORMANCE OF CHILLI VAR. ARKA TEJASVI,
ARKA SAANVI AND ARKA GAGAN
IN BAKSA DISTRICT
Venue : Nayabasti Year : 2023-24
Krishi Vigyan Kendra, Baksa
Assam Agricultural University


ARKA CAGAN
ARKA JEJASVI
ARKA SAANVI


ON FARM TESTING
ON
PERFORMANCE OF CHILLI VAR. ARKA TEJASVI,
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ON FARM TESTING
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Assam Agricultural University
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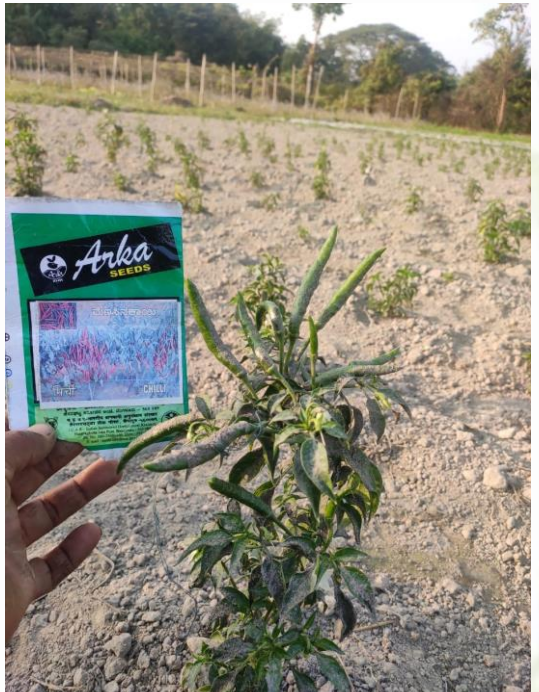

Arka
SEEDS

On Farm Trial (Discipline: Horticulture) 2nd year

Title of OFT	:	Performance of coloured Cauliflower varieties in Baksa district.
Problem diagnosed	:	Low nutrient quality in existing varieties.
Technology details	:	**T1- Carotena, T2- Valentena, T3(check)- Suhasini**
Year of release	:	Syngenta, 2019
Farmers' feedback	:	Farmers were highly satisfied with the coloured varieties due to their premium price. The produce also got good market demand.
Scientist feedback:	:	Highly remunerative crop which has helped the farmers in achieving high return.

Result			
Parameters	**T1**	**T2**	**T3**
Date of planting	**16.11.23**	**16.11.23**	**16.11.23**
Plant spread (cm)	52.3	57.3	71
Number of leaves per plant	8.77	8.36	8.56
Days to maturity from transplanting	87	89	96
Average Weight of untrimmed curd (kg)	0.952	0.922	1.01
Average Weight of trimmed curd (cm)	0.651	0.603	0.733
Average Curd diameter (cm)	15.3	14.8	16.6
Average Yield (q/ha)	144.33	142.12	146.1
Shelf life (days) in room condition	11	8	11

Economic analysis			
Parameters	**T1**	**T2**	**T3**
Gross Cost(Rs./ha)	121170.00	121170.00	104710.00
Gross Return (Rs./ha)	432900.00(@ Rs.30/kg)	397936.00(@ Rs.28/kg)	292200.00(@ Rs.20/kg)
Net Return(Rs./ha)	311730.00	276766.00	187490.00
B:C Ratio	3.57	3.28	2.8


ON FARM TESTING
ON
VARIETAL PERFORMANCE OF COLOURED
CAULIFLOWER VAR.
CAROTENA AND VALENTINA
IN BAKSA DISTRICT
Venue : Barama
Year : 2023-24
Krishi Vigyan Kendra, Baksa
Assam Agricultural University


ON FARM TESTING
ON
VARIETAL PERFORMANCE OF COLOURED
CAULIFLOWER VAR.
CAROTENA AND VALENTINA
IN BAKSA DISTRICT
Venue : Bunbari
Year : 2023-24


ON FARM TESTING
ON
VARIETAL PERFORMANCE OF COLOURED
CAULIFLOWER VAR.
CAROTENA AND VALENTINA
IN BAKSA DISTRICT
Venue : Barama
Year : 2023-24
Krishi Vigyan Kendra, Baksa
Assam Agricultural University


DAY - 1


DAY - 11

On Farm Trial (Discipline: Horticulture) 2nd year

Title of OFT	:	Performance of Sweet potato var. Bhu Sona, Bhu Krishna and Dergaon Red in Baksa district
Problem diagnosed	:	Low production and low nutritional quality in existing varieties. The biofortified varieties(Bhu Sona, Bhu Krishna) will help in meeting the nutrient demand
Technology details	:	**T1-** Bhu Sona, **T2-** Bhu Krishna, **T3**(check)- Dergaon Red
Year of release	:	CTCRI, 2017
Farmers' feedback	:	The farmers were satisfied with the cultivation and production of the two bio-fortified varieties. Among the varieties, Bhu Sona gave high production and also preferred most by the consumers.
Scientist feedback:	:	The harvesting was done during the month of January. Unlike in Upper Brahmaputra Valley Zone, however the demand of sweet potato in this zone during January is less according to the growers. The farmers feel that harvesting at the time of March- April before the onset of monsoon will give good return due to good demand at that time.

Result			
Parameters	**T1**	**T2**	**T3**
Date of planting	**21.09.2023**	**21.09.2023**	**21.09.2023**
Vine length (cm)	213	194.3	186.6
Days to harvesting	109	117	111
Tubers per plant (number)	6.3	7.1	5
Marketable tuber per plant (number)	3.5	3.7	3
Tuber yield per plant (kg)	0.894	0.847	0.755
Tuber length (cm)	18.6	14.93	17.66
Tuber weight (gram)	144.3	124.3	152.3
Avg. Yield(tones/ha)	**17.40**	**16.84**	**17.16**

Economic analysis			
Parameters	**T1**	**T2**	**T3**
Gross Cost(Rs./ha)	105972.00	105972.00	105972.00
Gross Return (Rs./ha)	278400.00 @ Rs.16/kg	247200.00 @ Rs.15/kg	223080@ Rs.13/kg
Net Return(Rs./ha)	172428.00	141228.00	117108.00
B:C Ratio	2.68	2.33	2.11

Qualitative characters					
Treatments	**Vine colour**	**Leaf type**	**Petiole pigmentation**	**Tuber skin colour**	**Tuber flesh colour**
Bhu Sona	Green	Cordate with moderate lobe	Reddish	Orange yellow	Orange
Bhu Krishna	Purple	Cordate with moderate lobe	Purple	Purple	Purple
Dergaon Red	Green	Cordate with slight lobe	Purple	Reddish purple	White

On Farm Trial (Discipline: Plant Protection) 2nd year

Title of OFT	:	Management practice of White fly (leaf curl virus vector) in Chilli (King chilli)
Problem diagnosed	:	Yield loss by white fly through sucking and viral disease transmission.
Technology details	:	Management practice of White fly (leaf curl virus vector) in Chilli. **T1 :** i) Spraying of Imidacloprid 200 SL @ 0.3 ml/l one week after seed germination ii) Dipping of seedlings in Imidacloprid 200 SL @ 0.3 ml/l before transplanting iii) Spraying of Imidacloprid 200SL @ 0.4 ml/l 15 days after transplanting iv) Roughing infected plants **T2:** Farmer Practice: Application of contact insecticide
Year of release	:	ICAR-IIHR, Bengaluru, 2017
Farmers' feedback	:	

Results with photographs: Crop is in bearing stage. Till today no harvesting is done. The treatment likely to be effective as there is no leaf curl disease till today.

On Farm Trial (Discipline: Plant Protection) 2nd year

Title of OFT	:	Assessment of Multiple disease resistant Tomato hybrid, Arka Abhed, Arka Rakshak with Trishul
Problem diagnosed	:	Multiple disease like leaf curl, late blight and bacterial wilt
Technology details	:	Assessment of Multiple disease resistant Tomato hybrid, Arka Abhed, Arka Raklshak with Trishul
Year of release	:	IIHR, 2018
Farmers' feedback	:	

Results with photographs: The crop is in the field . Only the 1st harvest is done. So, the final result is awaited

Parameters	Arka Abhed	Arka Rakshak	Trishul
Date of planting	25.11.2023	25.11.2023	27.11.2023
Per cent incidence of leaf curl(%)	-	-	8.5%
Yield(1st harvest)	30	27	22
Average fruit weight	136g	125g	90.5g
Gross Cost (Rs./ha)			
Gross Return (Rs./ha)			
Net return (Rs/ha)			
B:C Ratio (GR/GC)			

On Farm Trial (Discipline: Animal Sc) 1st year

Title of OFT : Feeding of Tapioca root as Pig feed

Problem diagnosed : High cost of pig feed

Technology details : T1 : 30 % boiled Tapioca root + Concentrate feed

T2 : Farmers practices

Year of release : 2020

Results with photographs :

Traits	Treatment	Farmers practices
Average body weight at 3 month	16.50 Kg	15.50 Kg
Average body weight at 5 month	42.75 Kg	40.15 Kg
Average body weight at 6 month	52.75 Kg	51.25 Kg
Age at first heat	220 days	230 days
Litter size and litter weight at Birth	8 and 8.5 Kg	7.5 and 7.7 Kg
Litter size and litter weight at weaning	7 nos and 65 Kg	6.5 nos and 55 Kg
B:C ratio	2.7	1.9

Farmers' feedback : As the cost of production reduce, the farmers are highly satisfied with the feeding of Tapioca root

On Farm Trial (Discipline: Animal Sc) 2nd year

Title of OFT : Effect of Egg Yolk colour by feeding dry Marigold flower as supplement

Problem diagnosed : Pale colour of egg yolk of bird reared in intensive system

Technology details : T1 : Feed + Marigold (3%)
T2 : Feed + Marigold (6%)
T3 : Normal feed

Year of release : 2020

Results with photographs :

Av. Body weight	Demo (g)	Local (g)
1 month	250.00	222.50
2nd month	355.50	335.75
		Ongoing

Farmers' feedback : The growth rate of the chicks is very good, the farmers are highly satisfied

Front Line Demonstration (Discipline: Agronomy)

Title of FLD	:	FLD on Popularization of Medium duration Rice (Var. Numoli) - Toria(TS-38) cropping sequence
Technology details	:	Medium duration Rice(Var. Numoli)- Toria(Var. TS-38) cropping sequence
Horizontal spread of technology	:	15%

Results of Rice with photographs:

Parameters		Rice
i.	Date of sowing	30.06.2023
ii.	Date of harvesting	12.11.2023
iii.	**Days to 50% flowering**	**110**
iv.	**Days to maturity**	**136**
v.	Avg. Plant height (cm)	125.00
vi.	Avg. No of effective tillers/hills	12.80
vii.	Avg. No. of total grain/panicle	161.55
viii.	Avg. No. of filled grain/panicle	140.87
ix.	Avg. No. of unfilled grain/panicle	24.87
x.	**Avg. Grain yield (q/ha)**	**49.50**
xi.	Gross cost(Rs./ha)	47,600
xii.	Gross Return(Rs./ha)	88,345
xiii.	Net Return(Rs./ha)	40,745
xiv.	B:C Ratio	1.85

Results of Toria with photographs:

Parameters		Toria
i.	Date of sowing	21.11.2023
ii.	Date of harvesting	20.02.2024
iii.	Days to maturity	84
iv.	Avg. Plant Height (cm)	101.30
v.	Avg. No of branch/plant	4.16
vi.	Avg. No of siliqua/plant	175.40
vii.	Avg. No of seed/siliqua	15.68
viii.	**Avg. Grain yield (q/ha)**	**8.45**
ix.	Gross cost (Rs./ha)	24000
x.	Gross Return (Rs./ha)	49250
xi.	Net Return (Rs/ha)	25250
xii.	B:C Ratio	2.1

Rice Equivalent Yield (REY) (q/ha): $\frac{\text{Yield of Toria crop x Price of Toria crop}}{\text{Price of Rice}}$

Yield of Toria: 8.45q/ha
Price of Toria : Rs. 5450/q
Price of Rice : Rs. 2040/q
REY: 22.57 q/ha

Front Line Demonstration
(Discipline: Agronomy)

Title of FLD	:	Popularization of Hybrid Maize Variety- DKC9081
Technology details	:	Var. DKC9081, High yielding Rabi hybrid with high yield potential of 50q /ha
Results with photographs	:	At Milking stage
Horizontal spread of technology	:	30%

Front Line Demonstration (Discipline: Horticulture)

Title of FLD : Nutrient management in ratoon cabbage

Technology details : **Fertiliser dose for main crop:**
Urea - Recommended dose(35.2 kg, SSP- 50.4 kg, MOP- 13.6 kg)
Fertiliser dose for ratoon cabbage:
50% of Recommended dose

Farmers Feedback : The farmers were satisfied with the technology. The ratoon cabbages were previously used for cattle feeding due to their small size. With the proper fertiliser application, it can be now marketed.

Horizontal spread of technology : 21%

Results with photographs	
Parameters	**Result**
Planting time	23.10.2023
Average Head weight (gm) of main crop	953
Average Head weight (gm) of ratoon crop	293
Head diameter (cm) of main crop	19.4
Head diameter (cm) of ratoon crop	13.2
Sprouting time for ratoon crop (days)	6.7
Average yield of main crop (t/ha)	20.6
Average yield of ratoon crop (t/ha)	15.4
Gross Cost(Rs./ha) (Main+ Ratoon)	207000.00
Gross Return (Rs./ha) (Main + Ratoon)	653000.00
Net Return(Rs./ha)	446000.00
B:C Ratio	3.15

Fertiliser application in ratoon crop

Front Line Demonstration (Discipline: Horticulture)

Title of FLD : Popularisation of HYV Turmeric var. Megha Turmeric- 1 in Baksa district

Technology details : HYV Turmeric var. Megha Turmeric-1

Horizontal spread of technology : 18%

Results with photographs	
Parameters	**Result**
i. Date of sowing	22.04.2023
ii. Date of harvesting	17.02.2024
iii. Crop duration (days)	291
iv. Number of leaves on main shoot	8
v. Avg. Plant height (cm)	167.75 cm
vi. Avg. Rhizome weight	0.51 kg
vii. Avg. Rhizome length	12.55 cm
viii. Avg yield (q/ ha)	241.4
ix. Gross cost(Rs./ha)	166800.00
x. Gross Return(Rs./ha)	410380.00
xi. Net Return(Rs./ha)	243580.00
xii. B:C Ratio	2.4

Front Line Demonstration (Discipline: Horticulture)

Title of FLD	:	Popularising Arecanut based Multiple cropping system (Crop: Turmeric, Pineapple, Banana, black pepper)
Technology details	:	Popularization of Arecanut based Multiple cropping system. (Black pepper, Turmeric, Pineapple)
Horizontal spread of technology	:	Ongoing

Front Line Demonstration (Discipline: Plant Protection)

Title of FLD : Round the year cultivation of Oyster mushroom

Technology details : Cultivated in steam treated rice straw.

Results with photographs :

Enterprise	No. of demonstrations	Items	Yield (Kg/bed)	Gross Cost (Rs./ unit)	Gross Return (Rs./ unit)	Net Return (Rs./ Unit)	B:C Ratio (GR/GC)
Oyster Mushroom	5	109 Kg spawn	2.1 Kg/bed	60/bed	210/bed	150/bed	3.5

Horizontal spread of technology : More than 200 nos of new growers cultivating Oyester Mushroom this year.

Front Line Demonstration (Discipline: Plant Protection)

Title of FLD : Rearing of honey bee with Toria

Technology details : Rearing of honey bee with Toria to increase the productivity of Toria and Honey

Results with photographs :

Crop Enterprise	No. of demonstrations	No of Bee Box	Yield (Qt/Ha)	Gross Cost (Rs./ unit)	Gross Return (Rs./ unit)	Net Return (Rs./ Unit)	B:C Ratio (GR/GC)
Honey Bee	10	10	12 Kg/box/year	2,000 /box	4,800 /box	2,800 /box	2.4

Horizontal spread of technology : Honey being the ODOP of Baksa district this year more than 150 rearers started bee keeping.

Front Line Demonstration
(Discipline: Animal Sc)

Title of FLD : Popularization of Hybrid Napier (Var CO4) fodder cultivation

Technology details : Hybrid Napier Var CO4, cultivation practices as per package of practices

Results with photographs : Date of planting : 10.04.2023
Average Period for first cutting from planting : 85 days
Average period for subsequent cutting : 45 days
Green fodder Yield : 142 q/ha
Average plant height : 310 cm
B:C : 3.5

Horizontal spread of technology : Newly cultivation started in Thamna, Bhalukamari, Adalbari, NizJuluki

Front Line Demonstration
(Discipline: Animal Sc)

Title of FLD : Popularization of rearing of new Pig Breed HD-K75

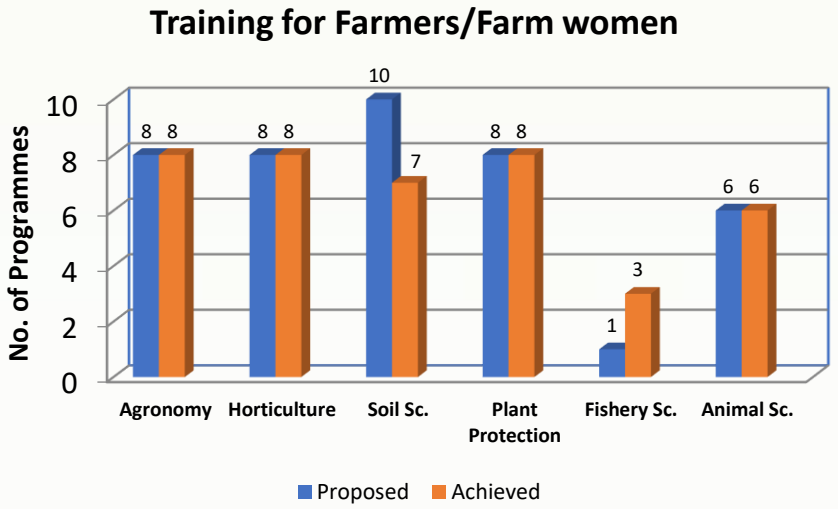
Technology details : HD-K75, Breeding, Feeding and General management practices as per package of practices

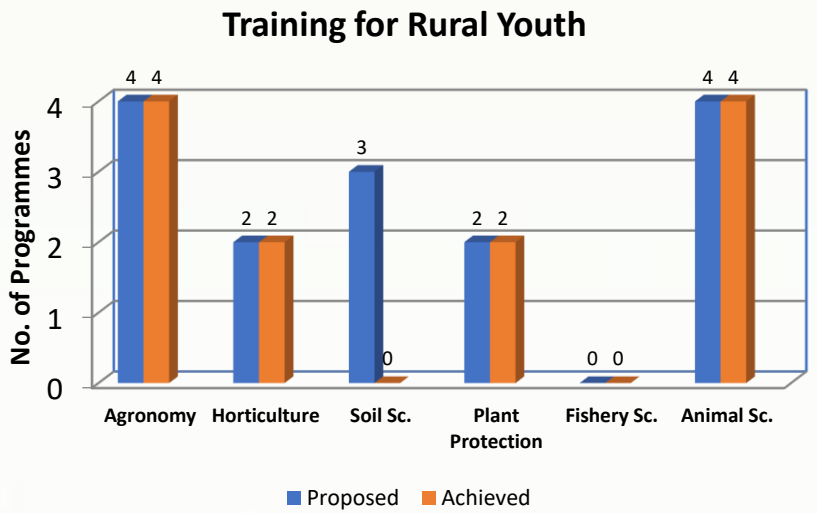
Results with photographs :
1. Average body weight at 3 month : 15.50 Kg
2. Average body weight at 4 Month : 27.25 Kg
3. Average body weight at 5 month : 41.75 Kg
4. Average body weight at 6 Month : 52.50 Kg
5. Average age at sexual maturity : 235 days
6. B:C : 2.25

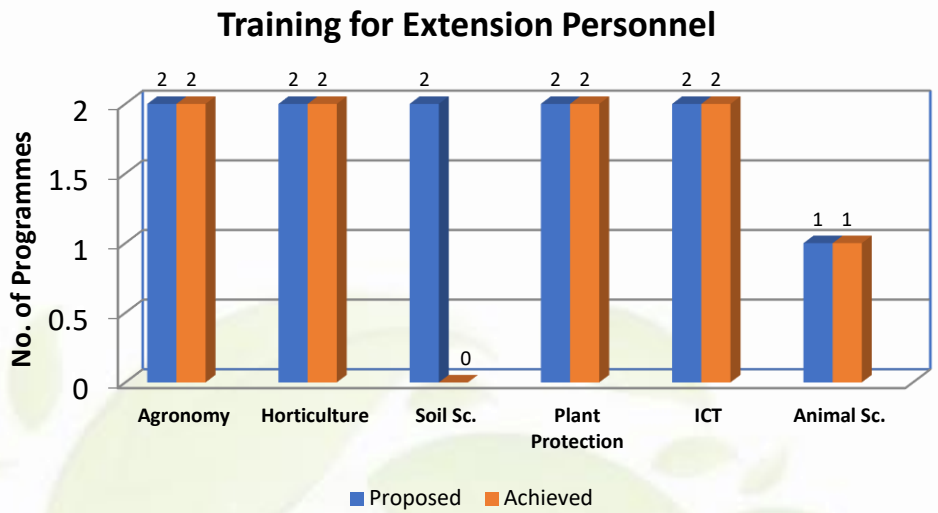
Horizontal spread of technology : Pig farm of HD-K 75 started in Deulkuchi, Khandikar, Baganpara, Barama, Santipur area

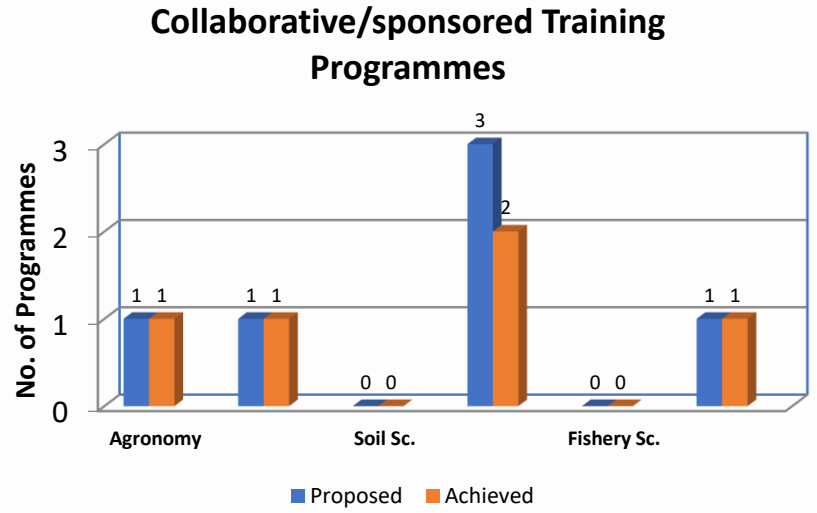
Training Programme conducted

Discipline	Farmers Numbers				Cast							
	No of training	Male	Female	Total Farmers	Gen		OBC		SC		ST	
					M	F	M	F	M	F	M	F
Plant Protection	12	95	84	179	7	12	15	15	25	13	52	40
Animal Science	12	190	91	281	52	2	21	2	26	3	91	84
Agronomy	12	140	148	288	51	26	10	17	24	22	55	83
Horticulture	12	175	128	303	41	12	50	33	33	3	89	42
Soil Science	7	135	18	153	23	0	72	7	7	0	33	11
Fishery Science	3	27	26	53	0	0	0	0	0	0	27	26
ICT	2	20	20	40	12	10	3	5	0	2	5	3









Training Programmes

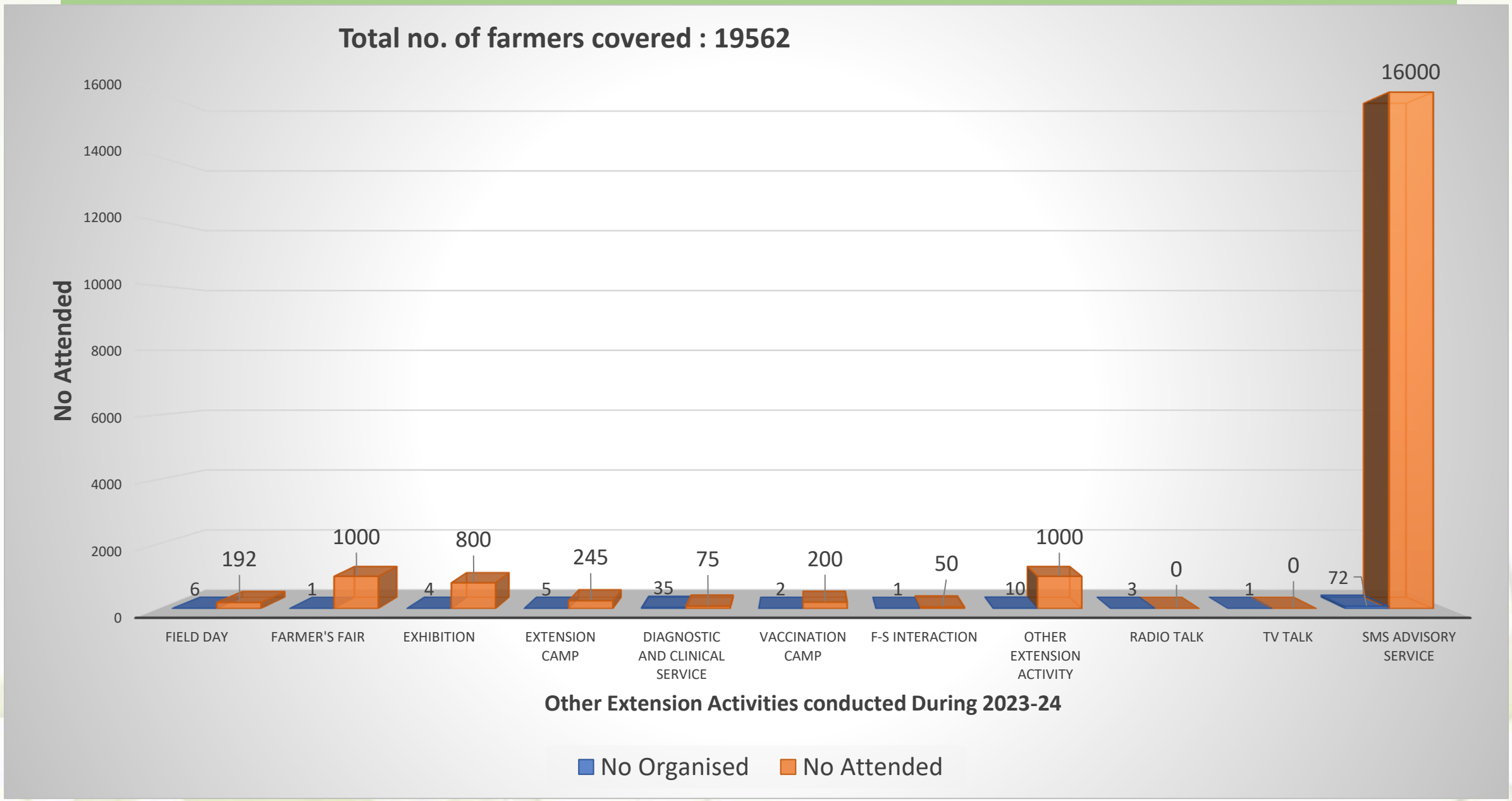
b) Vocational/ Skill training programmes/Certificate course:

Discipline	Target group					
	Farmers/ farm women		RY		EF	
	Nos. Proposed	Nos. achieved	Nos. Proposed	Nos. achieved	Nos. Proposed	Nos. achieved
Agronomy	-	-	-	-	1	1
Plant Protection	-	-	-	-	3	3
Animal Science	-	-	1	1	-	-
Horticulture	-	-	1	1	-	-
Total			2	2	4	4

Percentage of trainees who started their own enterprise:

Sl. No.	Discipline	No. of trainees	Nos. converted to Entrepreneurs
1	Plant Protection	179	5
2	Animal Science	281	4
3	Horticulture	303	8
4	Agronomy	288	3
Total		1051	20

Other Extension Activities




ORIENTATION PROGRAMME
2023/3/16 11:51


ANIMAL HEALTH CAMP


CELEBRATION OF HINDI DAYS


CELEBRATION OF 95TH ICAR FOUNDATION DAY
AND TECHNOLOGY DAY 2023


KRISHI VIGYAN KENDRA, BAKSA


ANIMAL HEALTH CAMP


01.10.2023

Revenue generation:

Sl. No.	Activity	Quantity produced	Revenue earned (Rs.)
1.	Seed & planting material	1. Seed a. Rice (Numoli) : 490 kg b. Toria(TS-38) : 657 kg c. Turmeric rhizomes : 1250 kg **TOTAL SEED : 2397 kg** 2. Cuttings a. Hybrid napier : 23160 nos. b. Sweet potato : 5830 nos. c. Black pepper : 890 nos. d. Tapioca : 20000 nos. e. Assam Lemon : 245 nos. f. Arecanut seedlings : 419 nos. g. Banana Suckers : 36 nos **TOTAL cuttings : 50580 nos.**	Rs. 250010.00
3.	Bioinputs	1. Vermicompost : 12455 kg 2. Earthworm. : 15.3 kg	Rs. 209775.00
4.	Others		Rs. 20400.00
5	TOTAL		Rs. 480185.00

* Sale upto 06.03.2024
* Some amount left to be credited

Achievements under International Year of Millets

Sl. No.	Type of publication	No. of villages covered	No. of farmers/farm women involved
1	Demonstration conducted	6	60
2	Post Harvest/Processing/Value addition programmes	2	50
3	Other programmes	4	300

Demonstration Programme

Training of value addition

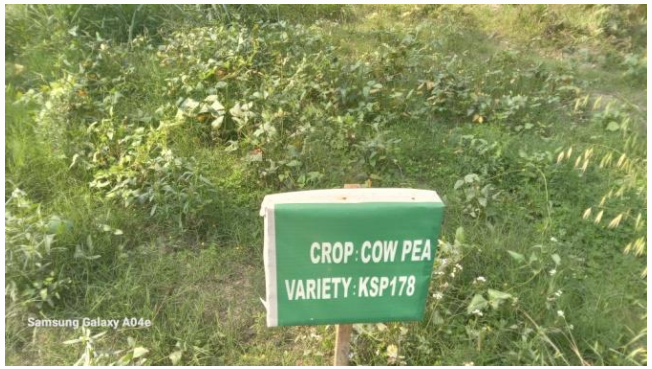
Training and Field day programme under Millet

Demonstration on Fodder Cafeteria

Fodder Cafeteria

Australian Red Napier

Oat var. Sudha Gold



Cowpea var. KSP178

Guinea var.Gutan

Sateria var. PSS1

Congo Signal var. DBRS7

Maize var. African tall

Hybrid Napier var. CO4

Convergence with other organizations/ departments:

Sl. No.	Organization/ department	Type of activity	Nos. Organized
1	Coconut Development Board	District Level seminar	1 nos.
2	Coconut Development Board	Area Expansion Programme	2 nos.
3	Coconut Development Board	Vocational Training	2 nos
4	World Wildlife Fund for Nature	Capacity building training	1 nos.
5	24th Assam Police Battalion	Demonstration of Nutritional garden	1 nos.
6	District Line Departments	Training , awareness camp	
7	Baksa District Administration	All activity in Baksa district	

Area Expansion Programme

Friends of Coconut tree training

Nutrition Garden at 24th APBN

Handicraft training from coconut byproducts

District level workshop in collaboration with CDB

MEGA PROJECT ON RAPESEED & MUSTARD VALUE CHAIN DEVELOPMENT THROUGH PROMOTION OF SCIENTIFIC CULTIVATION IN ASSAM

- KVK, Baksa, was allocated 40 ha (300 Bighas) for the Rapeseed & Mustard demonstration programme under this project.
- This project aims to enhance the entire value chain of Rapeseed and Mustard, emphasizing scientific cultivation practices.
- Two specific varieties were allotted for cultivation in this programme: Toria variety TS-38 and Mustard variety PM-28

SEED DISTRIBUTION PROGRAMME

CEREMONIAL SEED SOWING PROGRAMME WITH SEED DRILL


MEGA PROJECT ON
Variety : TS-38, PM-28
Season : Rabi 2023-24
Organized


MEGA PROJECT ON
Variety : TS-38, PM-28
Season : Rabi 2023-24
Organize :
Krishi Vigyan Kendra, Baksa

Field Visit

COMMUNITY NURSERY PROGRAMME

Area- 1.5 ha
Crop- Paddy
Variety- Numoli
Season- Kharif 2023-24
No. of Farmers-12

Photographs of entrepreneurs with annual turnover

Mr. Ajit Das a progressive farmer living in a remote village of Baksa district of Assam. Till 2015 he had no particular source of income and was searching for an opportunity for his livelihood. In the year 2015-16 he got a training from Krishi Vigyan Kendra, Baksa on "Scientific Mushroom Cultivation" and from then he started cultivating Mushroom with the guidance of KVK, Baksa. Mushroom being the potentiality in the district he has expanded his farm area in successive years. He was sponsored to attend an advance training on Mushroom production at Solan, Himachal Pradesh by Krishi Vigyan Kendra.

Name	Mr. Ajit Das
Postal Address	2 no Bangalipara, PO: Niz Bangalipara, Pin: 781333
E.Mail	halumushroom@gmail.com
Mobile No.	8471968088
Date of birth	01.01.1980
No of family member	3
Land Holding	1.6 acre

In the year 2015-16 he got a training from Krishi Vigyan Kendra, Baksa on "Scientific Mushroom Cultivation" and from then he started cultivating Mushroom with the guidance of KVK, Baksa. He started Spawn production unit under the guidance of KVK, Baksa. During lockdown period the surplus production of fresh Mushroom processed into dry product and sold through packaging in the brand name of “Halu Mushroom”.

At present, he is maintaining 15000 cylinders yearly and able to earn a net return of Rs. 12 lakhs by selling both fresh and dry Mushroom.

As the quality Spawn is scares in the locality, so, he has planned to set up sophisticated Spawn production laboratory. Formation of FPC to provide a common platform among the Mushroom growers is an another strategy to make the venture more profitable.

Details of Village adoption during 2023-24

No. of village adopted : 2

Interventions initiated :

- One PRA has been conducted.
- Two nos. of trainings was conducted.
- Two On farm trials(OFT) on Coloured cauliflower and Disease resistant tomato varieties(Arka Rakshak and Arka abhed) was conducted.
- Two Frontline Demonstration(FLD) on Nutrient management in ratoon Cabbage and Medium Duration Rice variety Numoli-Toria var. TS-38 cropping system.

Village adoption 2023-24 Village: Heramjhar

Geo Position:
26.41’52.944” N
91.9’5.122” E

KVK Interventions-

- Trainings
- Awareness programmes
- On Farm testing
- Frontline Demonstration
- Method demonstration

Total population: 971

Total household : 216

Literacy rate : 73.22%

Geographical area:

45.47hectares

Total male population: 475

Total female population:496

- One PRA has been conducted in 2023.
- Two nos. of trainings was conducted.
- Two On farm trials(OFT) on Coloured cauliflower and Disease resistant tomato varieties(Arka Rakshak and Arka abhed) was conducted.
- Two Frontline Demonstration(FLD) on Nutrient management in ratoon Cabbage and Medium Duration Rice variety Numoli-Toria var. TS-38 cropping system.

Change in income	Employment generation	starting of enterprise	Group mobilization
20%	15%	2023	Initiated group formation

Achievements under Natural Farming

Sl. No.	Type of activity	No. conducted	Salient findings
1	Demonstration in KVK farm	1. Demonstration of Fruit Based 5 layer Natural Farming Model.	• The tolerance of plants against disease and pest was significant. The tomato grown as intercrop in the fruit based model showed greater tolerance towards blight disease which has destroyed other plants in the nearby plots.
2	Demonstration	2 nos. of method demonstration of input preparation	
3	Awareness camps	1	
4	Training programmes	2	

Healthy tomato plants exhibiting tolerance

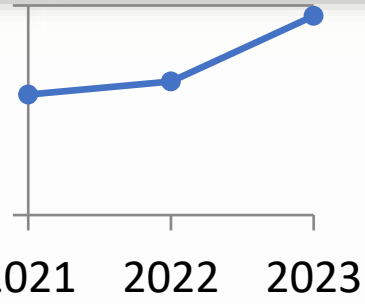
Blight infected tomato plants in nearby plot

The Inspiring Journey of Utsav Nath- A Progressive Agriculturist

Name	Mr. Utshab Nath
Fathers Name	Sukleswar Nath
Address	Nathpara, Baksa Assam- 781346
Phone No.	9706703683
Adhaar No.	668913785189

Background

Farming has been their traditional profession and being a son of a awardee farmer, he has whole heartedly devoted his life into farming. As a modern day farmer, he have developed a positive attitude towards adoption of modern technologies as disseminated by KVKs and state departments.



Impact and outcome

- Increase of cropping intensity through the introduction of Numoli variety.
- Increase in production of vegetables through introduction of improved varieties
- Fetched higher income from the high value crops like coloured cauliflower varieties

Intervention of KVK

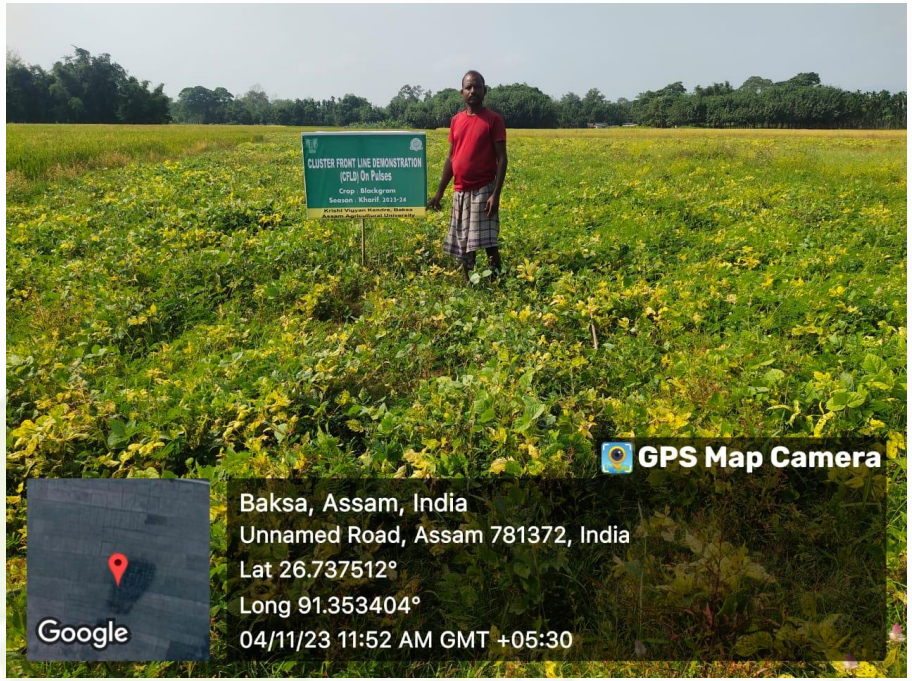
Rice being a long duration crop, he faced problem in starting the Rabi vegetables. Moreover, the traditional varieties of vegetables have become less productive and disease and pest prone. With these issues in hand, he approached KVK for rightful solutions.

- Introduced the medium duration rice variety Numali.
- Demonstration of high value horticulture crops like biofortified varieties of cauliflower.
- Demonstration of disease resistant tomato varieties.
- Training on scientific cultivation of vegetables and cereals.

Cluster Frontline Demonstration

Cluster Frontline Demonstrations on Kharif Pulse

Crop	Blackgram (var SBC 40)	Parameter	Demo
Name of the technology demonstrated	INM in Blackgram	Yield (q/ha)	6.9
No.of farmer	25		
Area(ha)	10		



Cluster Frontline Demonstrations on Kharif Oilseed

		Parameter	Demo
Crop	Sesamum (var. ST-1683)		
Name of the technology demonstrated	INM in Sesamum	Yield (q/ha)	6.85
No.of farmer	40		
Area(ha)	16		

Cluster Frontline Demonstrations on Rabi Oilseeds

Crop	Toria (Var. TS 38)	Parameter	Demo
Name of the technology demonstrated	INM in Toria	Yield (q/ha)	7.85
No.of farmer	150		
Area(ha)	60		

Cluster Frontline Demonstrations on Rabi Pulse

Crop	Lentil	Parameter	Demo
Name of the technology demonstrated	INM in Lentil	Yield (q/ha)	Ongoing
No.of farmer	25		
Area(ha)	10		

STATUS & PERFORMANCE REPORT OF TWO FPC

i. Shewali FPC, Barama

ii. Seujidhora FPC, Nagrijuli)

SHEWALI FARMER PRODUCER COMPANY (Barama)

Awareness Programme

Baseline Survey

Seed Distribution Programme of Rapeseed and Mustard

Sowing of Rapeseed and Mustard with Seed drill

Joha Rice Bag

Vermicompost Bag

SEUJIDHORA FARMER PRODUCER COMPANY (Nagrijuli)

Awareness Programme

Baseline Survey

Title : Impact study of Cluster Front line demonstration programme on Pulse crop-A study in Baksa district of Assam.

- **No of sample size :** 60
- **Thematic area :** Impact assessment study
- **Location/no of farmers: (30 beneficiaries+30 non beneficiaries)**
- **Parameters on assessment /refined:**
  - i. Extent of technology adoption
  - ii. Economic impact of before and after technology intervention
  - iii. Horizontal spread/area coverage of the technology
- **Methodology of the study:** collection of data by personal interview method and percentage method is used to analysis the result.
- **Observation:**
  - i. Variety
  - ii. sowing time
  - iii. seed treatment
  - iv. fertilizer management
  - v. Irrigation
  - vi. Intercultural operation
  - vii. plant protection

Impact assessment of pulse crop under CFLD

Table . 1: Extent of technology adoption

Sl no	Parameters	Adoption (before CFLD)		Adoption (after CFLD)		Increase in adoption	
		No	Percent	No	Percent	No	Percent
1.	variety	0	0	53	88.33	53	88.33
2.	sowing time	22	36.66	50	83.3	28	46.60
3.	seed treatment	0	0	48	80.0	48	80.00
4.	fertilizer management	0	0	45	75.0	45	75.00
5.	Intercultural operation	18	30.0	42	70.0	24	40.00
6.	Irrigation	25	41.6	43	71.66	19	31.66
7.	plant protection	19	31.66	47	78.33	28	46.66

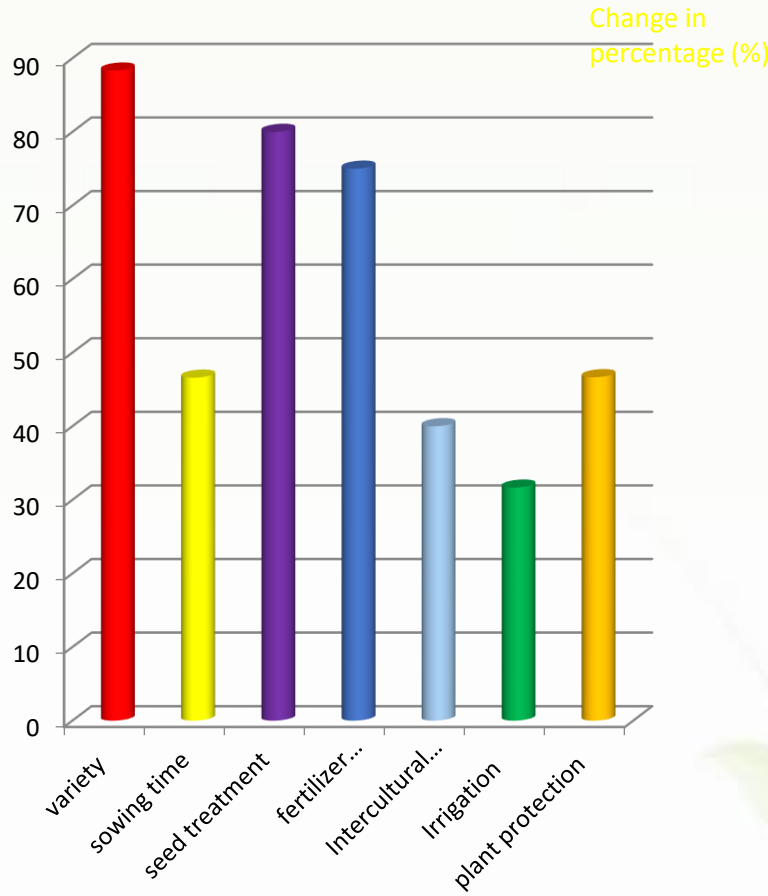


Table . 2: productivity of crop Before and after technology intervention

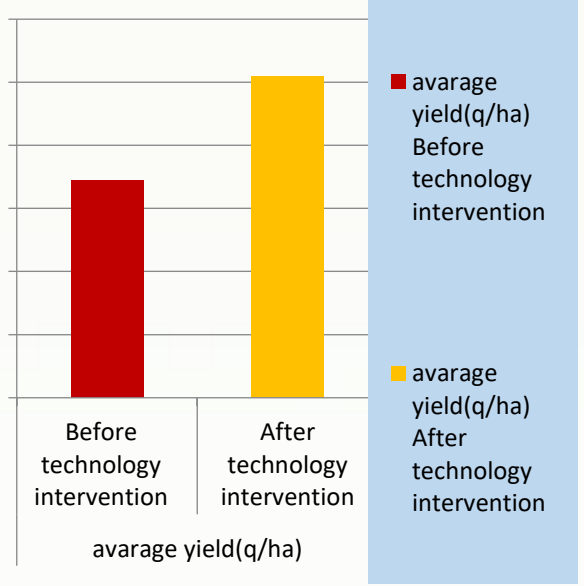
Average yield of field pea crop (q/ha)			
Before technology intervention	**After technology intervention**	**Average increase in yield (q/ha) after intervention**	**% increase in yield**
6.7	9.8	3.1	46.26

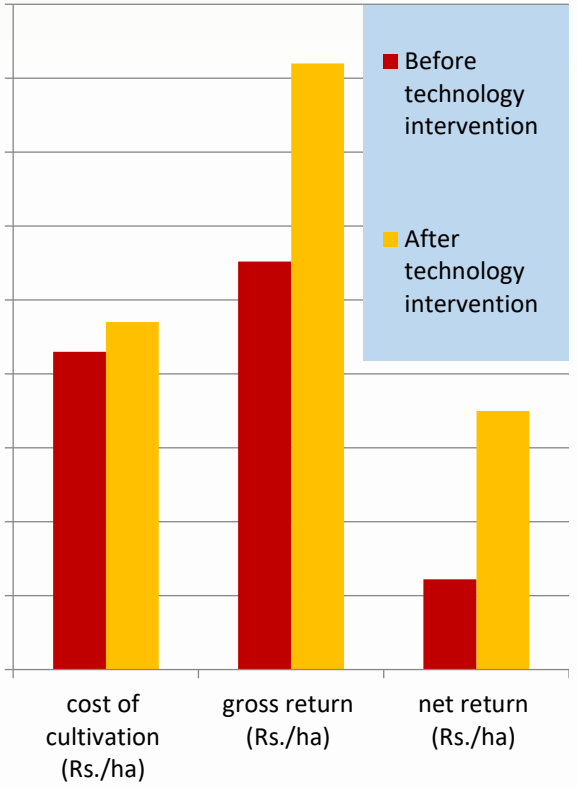
Table . 3: **Economic impact of crop** before and after intervention

Parameter	Before technology intervention	After technology intervention	% increase in Income
cost of cultivation (Rs./ha)	20500	23700	
gross return (Rs./ha)	25600	40500	58.20%
net return (Rs./ha)	5100	16800	
B:C ratio	1.28	1.74	

Table . 4: Horizontal spread of crop from CFLD

Number of villages			Area covered (ha.)		
Initial	**Final**	**Percent**	**Initial**	**Final**	**Percent**
4	9	125%	20	50	150%





Impact study on vocational/skill trainings with special emphasis on entrepreneurship development

No of sample size : 60

No of village: 3

Thematic area : Impact assessment study

Parameters on assessment /refined:

1.Impact on knowledge gain , enterprise development

2.Factor affecting the impact of training

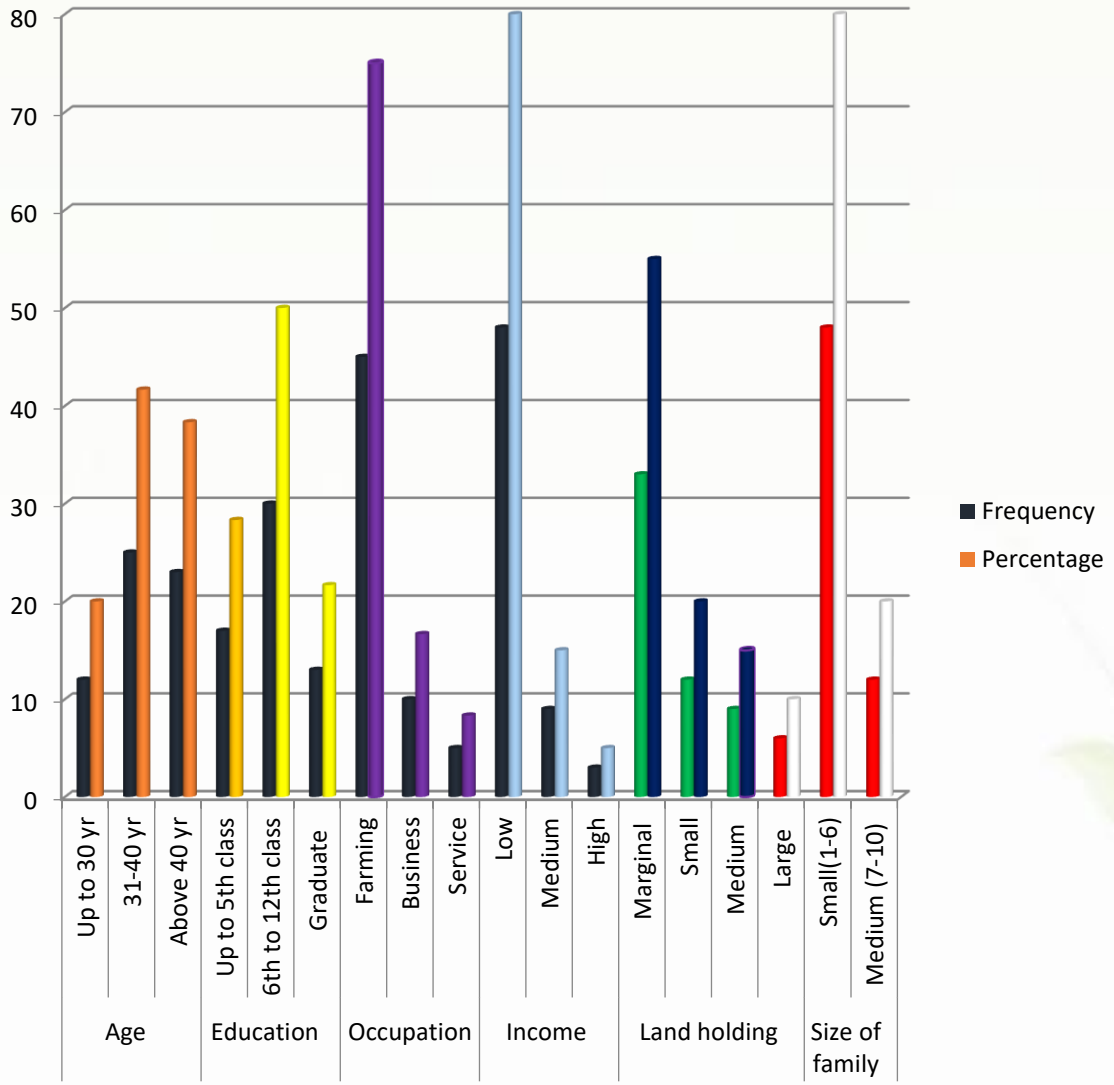
3.Reason for establishment & non establishment of enterprise after receiving training

Methodology of the study: collection of data by personal interview method and percentage method is used to analysis the result.

Socio-economic profile of mushroom growers

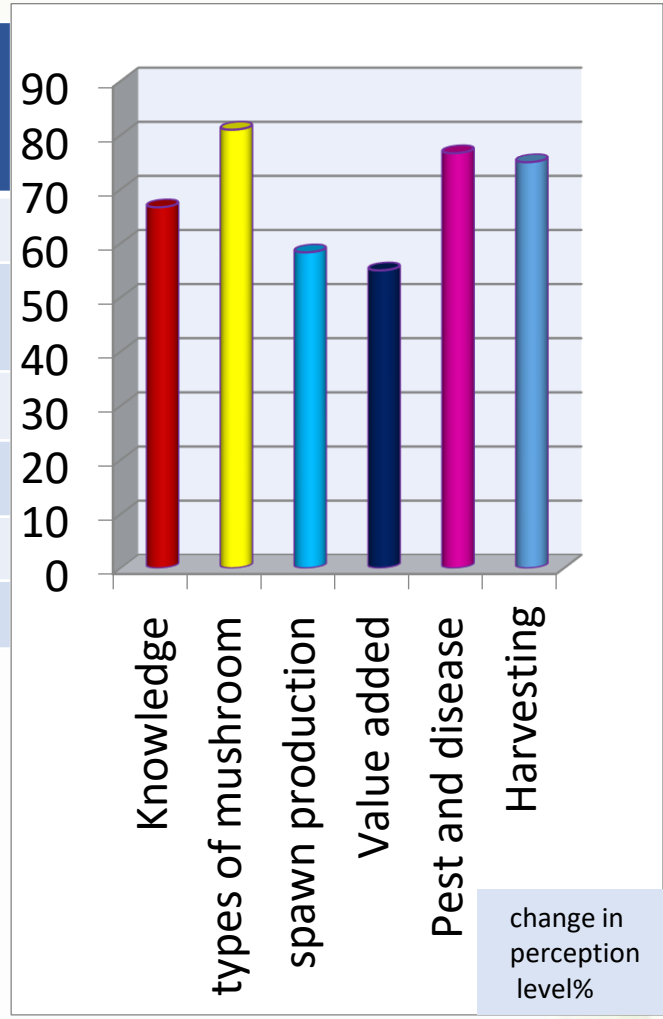
N=60

Particulars	Categories	Frequency	Percentage
Age	Up to 30 yr 31-40 yr Above 40 yr	12 25 23	20.00 41.66 38.33
Education	Up to 5th class 6th to 12th class Graduate	17 30 13	28.33 50.00 21.66
Occupation	Farming Business Service	45 10 5	75.00 16.66 8.33
Income	Low Medium High	48 9 3	80.00 15.00 5.00
Land holding	Marginal Small Medium Large	33 12 9 6	55.00 20.00 15.00 10.00
Size of family	Small(1-6) Medium (7-10)	48 12	80.00 20.00



Impact on gain in knowledge after acquiring training

Training courses Mushroom production (N=60)	Pre-test Knowledge before training (%)	Post-test Knowledge before training (%)	Change in perception level (%)
	Percent	Percent	
Knowledge of Species of Mushroom	15(25.00)	55(91.66)	66.66
Materials and Techniques used for different types of mushroom production	8(13.33)	57(95.00)	81.00
spawn production	0	35(58.33)	58.33
Value added products of mushroom	5(8.33)	38(63.33)	55.00
Pest and disease infestation in mushroom	0	46(76.66)	76.66
Harvesting and storage process	10(16.66)	55(91.66)	75



Data collection

Reasons for establishment and non establishment

Reasons	Frequency	Percentage	Ranking
Personal interest	8	13.33	6
Encouragement during training	12	20.00	3
Provide employment to others	6	10.00	6
Financial support to the family	15	25.00	2
To became financially independent	24	40.00	1
Augment of the standard of living	9	15.00	4
Build confidence and self reliance	12	20.00	3

Reasons	Frequency	Percentage	Ranking
Non fulfillment of training need	9	15.00	9
Skill gap	16	26.66	7
Financial constraint	55	91.66	1
High material cost to start the enterprise	48	80.00	4
Lack of proper guidance	8	13.33	8
Lack of confidence	44	73.33	5
Shortage of time	49	81.66	3
Health problem	37	61.66	6

PRA Report

Village : Bagulamari, Rampur, Heramjhar

Background information

Village: Bagulamari

Block: **Damdhama Development Block**

District: Baksa

Distance from KVK : 25 km

GPS location: Latitude: 26.760576° N

Longitude: 91.368656° E

Topography

Up land	**: 0%**
Medium land	**: 90%**
Low land	**: 10%**

General information

Total population : 480

Total household : 103

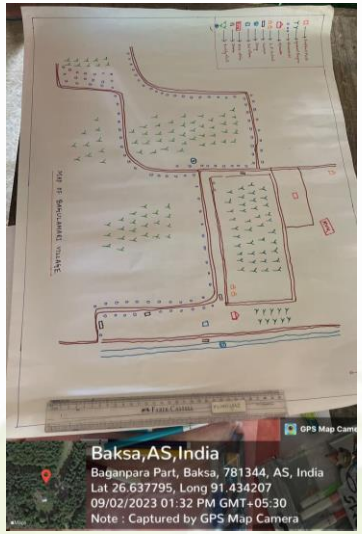
Literacy rate : 46.9%

Geographical area:

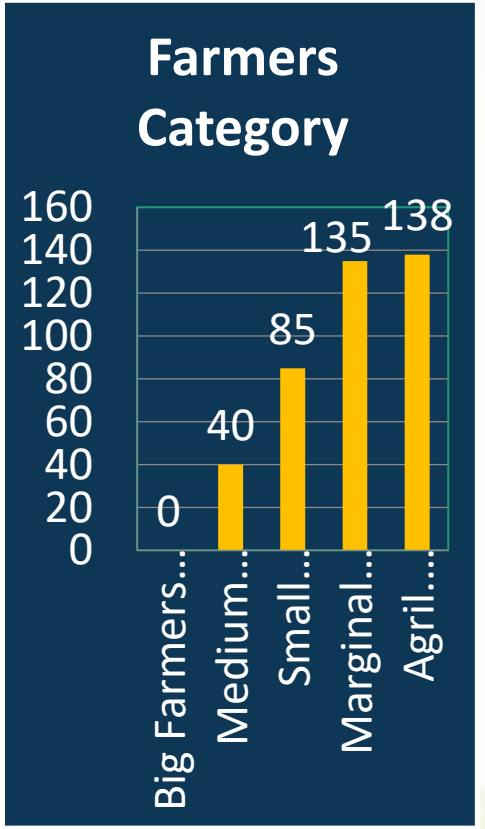
101.47hectares

Total male population:

Total female population:211



VILLAGE MAP



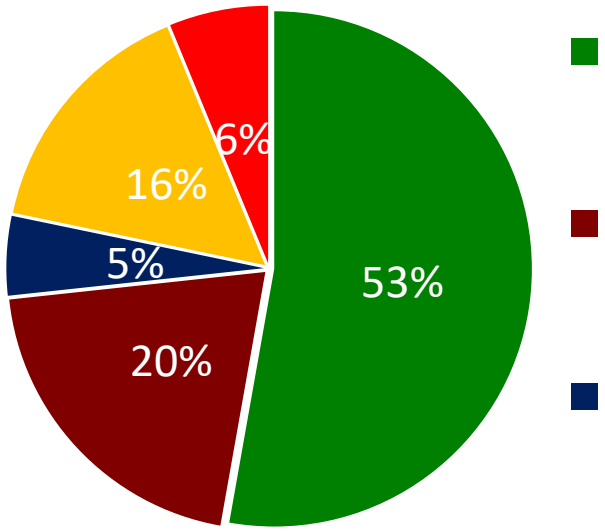
RESOURCE FLOW

Main Source of Income: Farming (Agriculture and Allied)

Source of Finance: Mostly, own investment; only a few has KCC loan.

Source of Inputs: Mostly purchased from local market and some are being provided by DAO, KVK under various schemes/projects.

Source of Income



Problems faced during agricultural operation:

a. Lack of proper scientific knowledge
b. Low knowledge & skill in fertilizer application
c. Lack of seed treatment.
d. Lack of knowledge about scientific feeding management to livestock.
e. Disease and pest problems in field crops as well as in horticultural crops
f. Lack of storage facility
g. Lack of knowledge on recent scientific technology for management of their agricultural activities.
h. Low mechanization for carry out their agricultural operation timely and smoothly

Extension Need

1.Awareness Programme among the farmers about modern agricultural practices.
2. Training on Fishery and Animal Husbandry aspects
3. Training and demonstration on agriculture and animal husbandry sector
4. Exposure visit
5. Training on Integrated Nutrient Management & Integrated Pest Management

SWOT ANALYSIS

- ✓ Suitable soil & climatic conditions for crop cultivation.
- ✓Availability of *Dong* for irrigation.
- ✓ surrounding area covers international boundary
- ✓Adoption of improved technology and post harvest management
- ✓Nos. of rural youth start to engage in cultivation

- ✓ Lack of proper storage facility for perishable goods.
- ✓ High cost of transportation.
- ✓ Lack of agricultural finance.

- ✓ Efficient utilization of land & water resources.
- ✓ Chances of network programmes both by KVK & line department
- ✓ Value addition of most of the perishable produce.
- ✓Formation of cluster approach and farmers club

- ✓ Socio-economic backwardness of the farmers.
- ✓Improper management practices
- ✓ Drought & any other natural calamities.

PRA Report

Background information

Village:Rampur
Block: **Barama**
District: Baksa
Distance from KVK : 30 km
GPS location: Latitude: 26.760576° N
Longitude: 91.368656° E

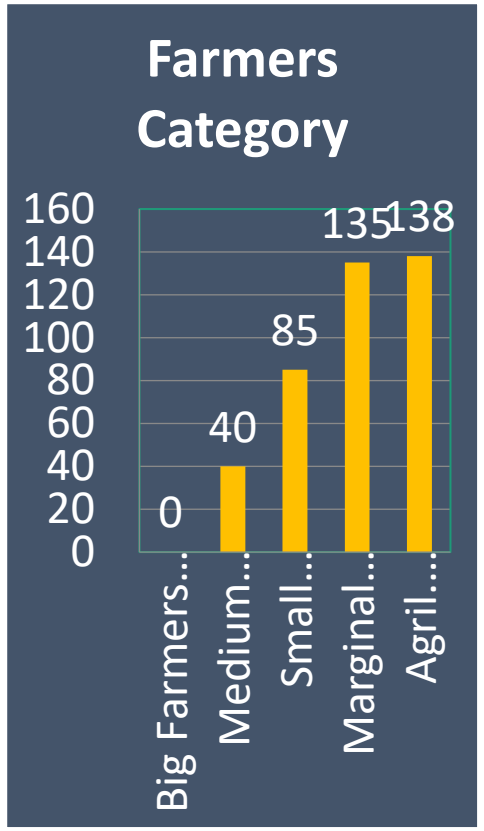
Topography

Up land	**: 5%**
Medium land	**: 85%**
Low land	**: 10%**

Demography information

Total population : 2114
Total household : 433
Literacy rate : 66.41%
Geographical area: 488.7 ha
Total male population: 1033
Total female population:1081

VILLAGE MAP



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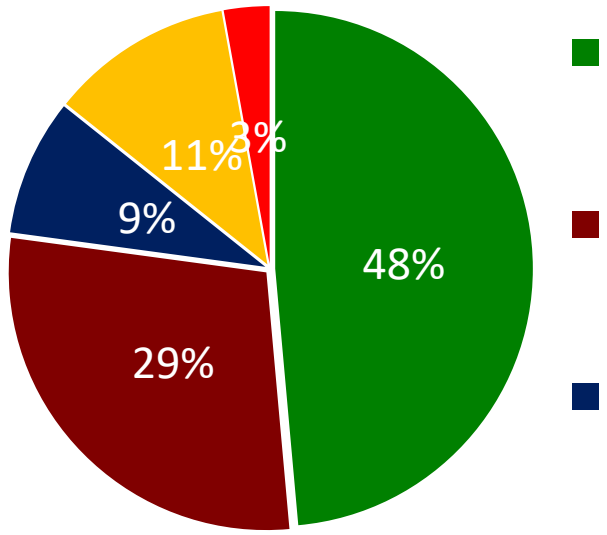

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- ✓ Socio-economic backwardness of the farmers.
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- ✓ Drought & any other natural calamities.

THANK YOU