KVK, Baksa
Assam Agricultural University
(Estd: 2014)

Annual Progress Report 2022-23

DISTRICT PROFILE OF BAKSA

General Information:

The district Baksa is located at the Lower Brahmaputra Valley Zone of Assam, situated in the foot hills of Bhutan surrounded by Udalguri district in the East, Chirang district in the west and Bhutan in the North and Kamrup, Nalbari and Parts of Barpeta to the south. Agriculture and allied activities are the backbone of the people of Baksa.

Geographical Area	: 2,400 Sq. Km
No. of Blocks	: 8 Nos.
Nos. of Agril. Sub-Division	: 2 Nos.
ADO Circle	: 13 Nos.
Gross Cropped Area	: 1,64,862 Ha
Net Cropped Area	: 99,890 Ha
Fallow Area	: 4,186 Ha
Cropping Intensity	: 165.04 %
Irrigated Area	: 37,477 Ha
Rainfed Area	: 1,27,385 Ha
Total Farm family	: 91,599

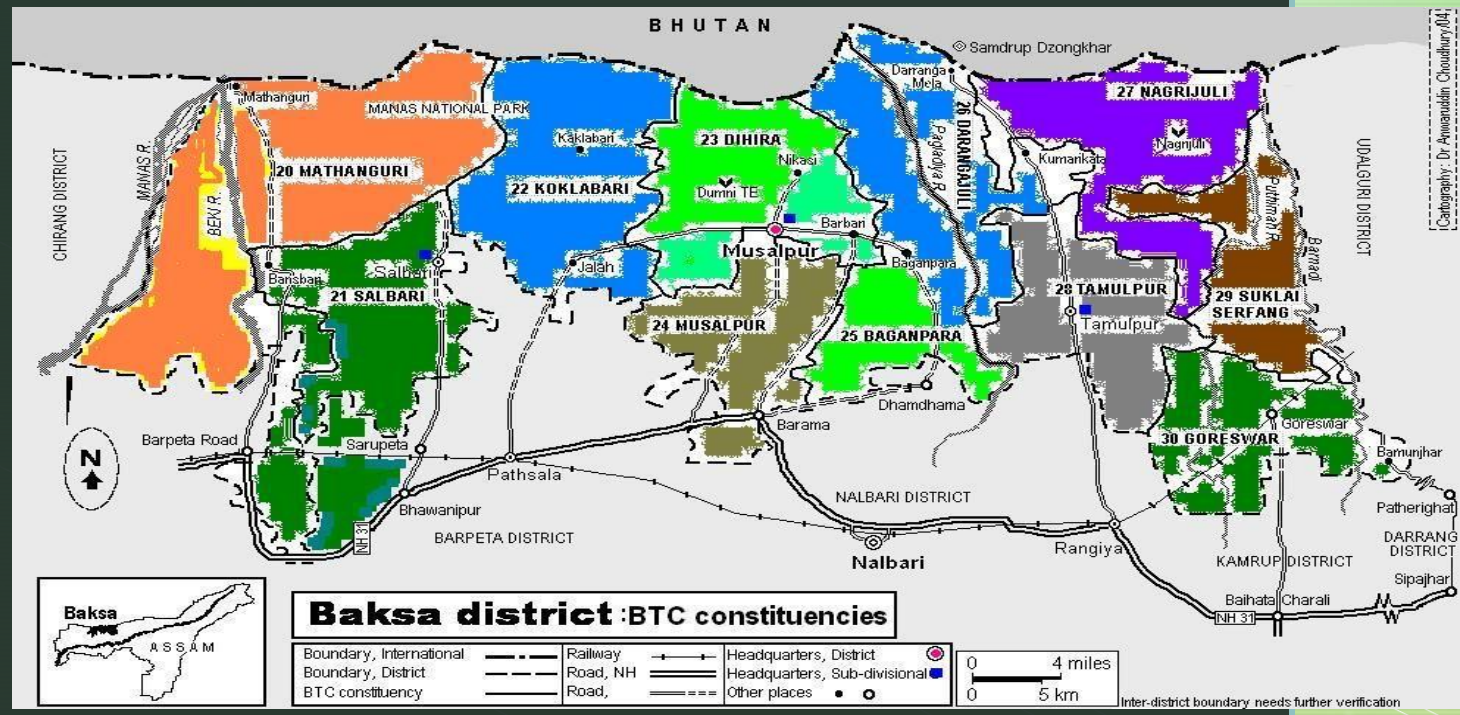
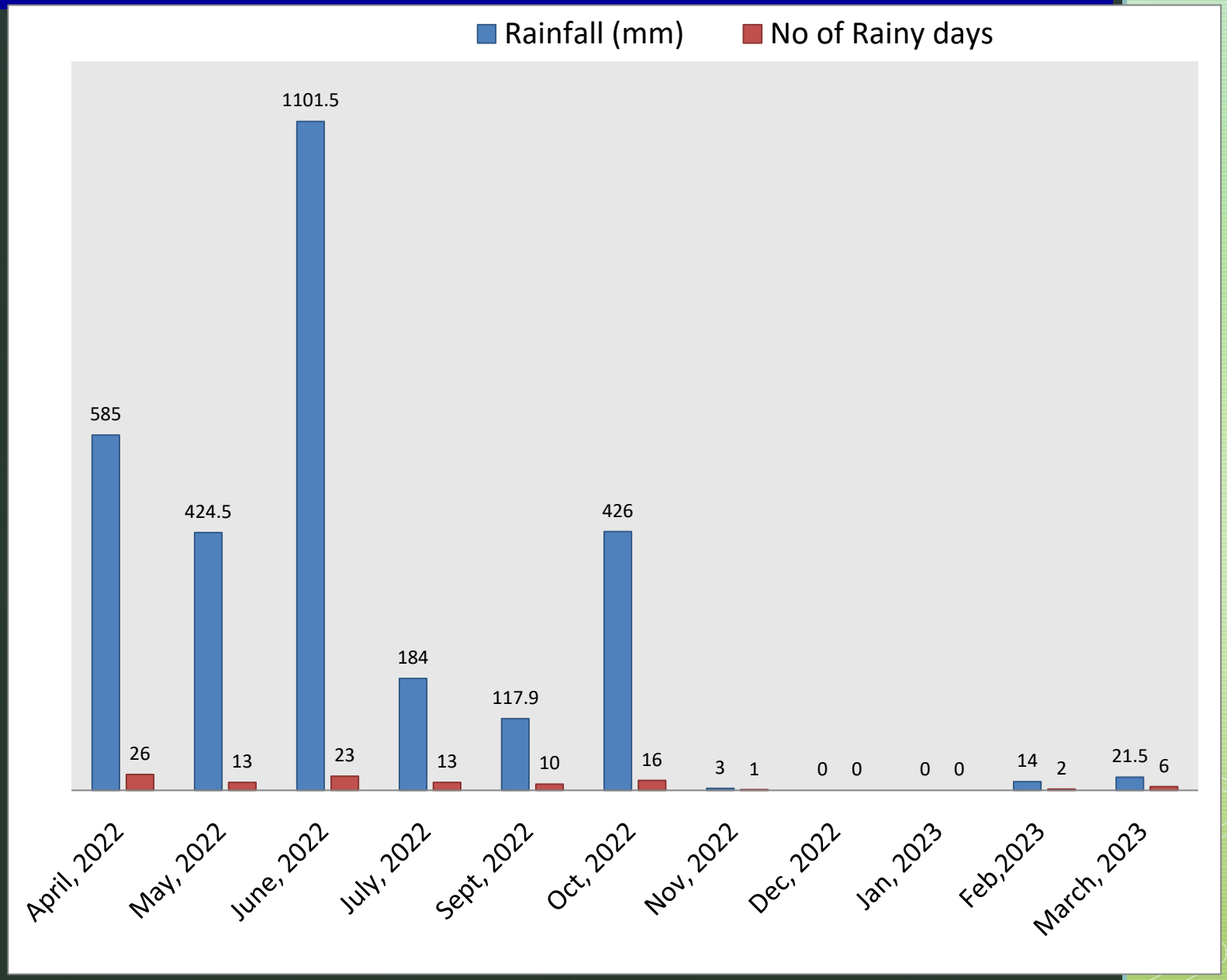


Fig: District Map, Baksa

Rainfall Data

Month	Rainfall (mm)	No of Rainy days
April, 2022	585	26
May, 2022	424.5	13
June, 2022	1101.5	23
July, 2022	184	13
Sept, 2022	117.9	10
Oct, 2022	426	16
Nov, 2022	3	1
Dec, 2022	0	0
Jan, 2023	0	0
Feb,2023	14	2
March, 2023	89	13



Staff Position

Sl. No.	Name	Designation	Discipline
1	Dr. Utpal Jyoti Sarma	Head	Soil Science
2	Mr. Sunil Kr. Bhattacharya	SMS	Pl. Protection
3	Dr. Debajit Deka	SMS	Animal Science
4	Dr. Roji Chutia	SMS	Agronomy
5	Mr. Kanku Deka	SMS	Soil Science
6	Ms. Gariyasi Tamuly	SMS	Agrometeorology
7	Mr. Rocktim Baruah	SMS	Horticulture
8	Mr. Dipen Kr. Borah	Office Supdt. Cum Accountant	Office Suppt. Cum Acctt.
9	Mrs. Smritirekha Sarma	Prog. Asstt. (Comp.)	Computer
10	Ms. Jyotismita Borah	Prog. Asstt. (Agri.)	Agril. Economics
11	Mr. Lakhan Sarkar	Farm Manager	Agronomy
12	Mr. Latumoni Gogoi	Agromet Observer	
13	Mr. Niranjan Deka	Driver cum Mechanic	

PROGRESS REPORT

On Farm Testing (Discipline-Wise Summary)

Discipline	Crop / Enterprise	Number of technology/ Social Concept		No. of trials		% of achievement	Reasons for shortfall, if any
		Assessed	Refined	Target	Achievement		
Agronomy	Paddy	1	-	3	3	100	
	Finger millet	1	-	3	3	100	
	Balckgram	1	-	3	3	100	
	Chick pea and Linseed	1	-	1	1	100	
Soil Science	Paddy	1	-	5	5	100	
	Potato	1	-	3	3	100	
	Paddy	1	-	3	3	100	
Plant Protection	Chilli	1	-	3	3	100	
	Tomato	1	-	3	3	100	
Horticulture	Cauliflower	1	-	5	5	100	
	Sweet potato	1	-	5	5	100	
Animal Science	Pig	1	-	3	3	100	
	Poultry	1	-	2	2	100	
Total		**13**		**42**	**42**		

OFT under Agronomy

Title: OFT on Assessment of Nano urea formulation on growth and yield attributes of Kharif paddy

Crop	Problem with severity	Treatment	Area	No of Farmer
Rice var. Ranjit Sub-1	Spiraling cost of chemical fertilizer in large quantity increases the production cost .	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)	1.17ha	3

Result

Parameters	T1	T2	T3
Date of sowing	20.06.2022	20.06.2022	20.06.2022
Date of harvesting	20.11.2022	20.11.2022	20.11.2022
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	199.86	203.65	202.32
Avg. No. of filled grain/panicle	158.88	163.75	161.12
Avg. No. of unfilled grain/panicle	47.91	43.33	46.55
Avg. Yield(q/ha)	**49.56**	**50.66**	**50.52**
Gross Cost(Rs./ha)	47300	47300	47600
Gross Return@Rs.2040(Rs./ha)	101102	103346	103060
Net Return(Rs./ha)	53802	56046	55460
B:C Ratio	2.14	2.18	2.16

Title: OFT on assessment of Finger Millet varieties in Baksa district

Crop	Title	Problem with severity	Treatment	Area	No of Farmer
Finger millet	OFT on assessment of Finger Millet varieties in Baksa district.	Generally farmers are reluctant to cultivate Finger Millet due to lower productivity of existing local varieties.	T1: Gossaigaon Marua Dhan-1 T2: VL Mandua-352 T3: Gossaigaon Local	0.60 ha	3

Result				Farmers Feedback
Parameters	**T1**	**T2**	**T3**	
Date of sowing	18.08.2022	18.08.2022	18.08.2022	High labour requirement in manual transplanting and difficulties in manual threshing of Finger Millet.
Date of harvesting	15.12.2022	11.12.2022	17.12.2022	
Days to maturity	120	116	122	
Avg. Plant height(cm)	112.65	98.20	116.50	
Avg. No of finger/plant	7.20	6.88	7.00	
Avg. Yield(q/ha)	**15.92**	**13.44**	**14.86**	
Gross Cost(Rs./ha)	29600	29600	29600	
Gross Return@Rs.3000/q	47760	40320	44580	
Net Return(Rs./ha)	18160	10720	14980	
B:C Ratio	1.61	1.36	1.51	

Title:Scaling up productivity in strategic chickpea based inter cropping system

Crop	Title	Problem with severity	Treatment	Area	No of Farmer
ChickPea, Linseed	OFT on Scaling up productivity in strategic chickpea based inter cropping system		T1: Chickpea+Linseed (6:2) ratio T2: Sole Chickpea T3: Sole Linseed	200 m2	3

Parameter	Chickpea	Linseed
Date of sowing	18.11.2022	18.11.2022
Date of harvest	25.03.2023	16.03.2023

Treatments	Yield of Chickpea (kg/ha)	Yield of intercrop (kg/ha)	Chickpea EY (kg/ha)	LER
T1 - Chickpea + Linseed (6:2)	876	319	1242	1.20
T2 - Sole Chickpea	1026	-	1026	1.00
T3 - Sole Linseed	-	910	1044	1.00

Treatments	Chickpea EY (kg/ha)	Gross returns (Rs/ha)	COC (Rs/ha)	Net returns (Rs/ha)	B:C ratio
T1 - Chickpea + Linseed (6:2)	1242	64957	27860	37097	2.33
T2 - Sole Chickpea	1026	53660	28000	25660	1.92
T3 - Sole Linseed	1044	54601	26899	27702	2.03

MSP price of Chickpea: Rs. 52.30/-per kg and linseed: Rs. 60/-per kg

OFT on Performance of Bio-fertilizer in Kharif blackgram,Var - IPU02 - 43.

Crop	Problem with severity	Treatment	Area	No of Farmer
Blackgram	Degradation of soil microbial poplation due to constant use of chemical fertilizers which results in declining fertility	**T1-** Seed Inoculation with Rhizobium and PSB each @50gm/Kg seed + RDF(10:35:15Kg/ha $N:P_2O_5:K_2O$) **T2-** RDF(15:35:15 Kg/ha $N:P_2O_5:K_2O$) **T3-** Farmers Practice (Random use of chemical Fertilizers)	1.17 ha	3

Remarks: The vegetative growth of the crop was satisfactory but in reproductive phase the crop was totally damaged due to the heavy infestation of YMV

Control measure taken:

I. **Uprooting of infected plants**
II. **Two Spray of Thiomethoxem @0.5 g/ltr at 10 days interval.**

OFT under Soil Science

Title: Exploitation of potash solubilizing bacteria in reduction of potassic fertilizers in sali rice

Crop	Problem with severity	Treatment	Area	No of Farmer	Farmers Feedback
Sali Rice (var. Numali)	Medium to low K status of soil in Baksa district of Assam	**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)	1.17 ha	03	More pest and disease resistance observed in treated plot.

Soil Fertility Status					
	pH	**OC%**	**N (kg/ha)**	**P (kg/ha)**	**K (kg/ha)**
Initial	5.2	0.60	450.5	35.2	132.5
FinalT1	5.12	0.62	440.5	49.2	141.2
FinalT2	5.05	0.59	395.5	39.2	140.5
FinalT3	5.20	0.68	480.5	59.2	130.5

Result			
Parameters	**T1**	**T2**	**T3**
Date of sowing	22.06.2022	17.06.2022	18.06.2022
Date of planting	21.07.2022	14.07.2022	15.07.2022
Date of harvesting	05.11.2022	08.11.2022	07.11.2022
Plant height(cm)	140	135	130
Effective tillers/hill	14	12.5	11
No. of grain/panicle	165	160	152
Avg. Yield(q/ha)	**47.30**	**46.12**	**44.10**
Gross Cost(Rs./ha)	47290	47100	47900
Gross Return@Rs.2040(Rs./q)	96492	94084.80	89964
Net Return(Rs./ha)	49202	46984.80	42064
B:C Ratio	2.04	1.99	1.88

Title: Effect of furrow application of lime on growth and yield of potato in acid soil

Crop	:	Potato
Thematic area	:	Acid Soil Management
Problem diagnosed	:	Decrease in productivity due to soil acidity and poor use of soil amendments
Technology	:	T1:Furrow application of lime @2-4 q/ha along with recommended dose of NPK fertilizer T2:Applicationof 25% of lime requirement along with RDF
Farmers practice against which the OFT is tested	:	Farmer's practice (T3:RDF with out lime application)
Source of technology	:	ICAR, NEH Barapani
No. of trials/locations	:	03

Parameter for assessment	**Data on parameter assessed with unit**		
	T1	**T2**	**T3**
Crop Yield	**135 q/Ha**	**140 q/ Ha**	**105 q/ Ha**
Gross Cost	69000	77500	61500
Gross Return @1100/q	148500	154000	115500
Net Return	79500	76500	54000
B:C	2.15	1.99	1.87
Remarks/Feedback:	**Farmers are highly satisfied with the performance of the technology.**		

Soil Fertility Status

	pH	OC %	N (kg/ha)	P (kg/ha)	K (kg/ha)
Initial	**5.2**	**0.70**	**450.5**	**42.2**	**132.5**
T1 (Final)	**5.6**	**0.78**	**475.5**	**48.5**	**134.5**
T2 (Final)	**5.4**	**0.75**	**460.0**	**50.2**	**139.5**

Lime Requirement (Kg/ha)

	L1	L2	L3
T1	**300**	**300**	**300**
T2 (Based on Line requirement)	**1111**	**3211**	**865**

Fertilizer prescription equations for targeted yield of winter Rice Ranjit Sub-1

Problem Diagnosed	Non availability of customized fertilizers recommendation
Technology assessed	T1- Farmer's practice T2-Targeted Yield 60 q/ha- In organic(Only N,P and K fertilizer based on soil test values) T3- Targeted Yield 60 q/ha- Integrated(N, P and K fertilizer + FYM @ 5 t/ha.)
No. of locations	Kharua, Shantipur, Shantipur 0.5 bigha/treatment/Location (T1, T2, T3)
Area	0.6 ha (4.5 bigha)
Source of Technology	AAU, Jorhat-13
Variety	Ranjit Sub 1

Targeted Yield Equations for Rice:

FN : 6.36*T-1.61*STVN-0.34*M

FP : 1.35*T-2.65*STVP-0.45*M

FK : 3.92*T-1.39*STVK-0.18*M

where

FN, FP & FK : Fertilizer NPK, T= Targeted Yield;

STVN, STVP, STVK- Soil test values for NPK

M : NPK from organic sources

Location	Shantipur			Shantipur			Kharua		
	T1	T2	T3	T1	T2	T3	T1	T2	T3
N (kgha^{-1})	40	30	23	40	30	23	40	33	26
P (kgha^{-1})	20	11	5	20	11	5	20	16	10
K (kgha^{-1})	20	51	47	20	51	47	20	110	105

Parameters	Initial		
	L1	L2	L3
Av. N (kgha^{-1})	485.5	480.5	485.5
Av. P (kgha^{-1})	44.5	40.5	44.5
Av. K (kgha^{-1})	132.5	90.12	132.5

Results			
Parameters	T1	T2	T3
Date of Sowing	18.06.22	17.06.22	22.06.22
Date of transplanting	15.07.22	14.07.22	21.07.22
Date of harvesting	25.11.22	22.11.22	23.11.22
Plant height (cm)	132	139	142
Effective tillers/hill	15.4	16.2	16.5
No. of grain/panicle	144	157	165
Av. Yield (q/ha)	**45**	**49**	**51.5**
GR @ Rs.2040.00 (Rs/q)	92250.00	100450.00	105060.00
GC (Rs./ha)	43100.00	42500.00	41100.00
NR (Rs./ha)	49150.00	57950.00	63960.00
B:C Ratio	2.14	2.36	2.55

OFT under Plant Protection

Title: Management practice of White fly (leaf curl virus vector) in Chilli (King chilli)

Crop	Problem diagnosed	Treatment	Area	No of Farmer
Chilli	Yield loss by white fly through sucking and viral disease transmission.	**T1 :** i) Spraying of Imidaclorpid 200 SL @ 0.3 ml/l one week after seed germination ii) Dipping of seedlings in Imidaclorpid 200 SL @ 0.3 ml/l before transplanting iii) Spraying of Imidaclorpid 200SL @ 0.4 ml/l 15 days after transplanting iv) Roughing infected plants **T2:** Farmer Practice: Application of contact insecticide	0.4 ha	03

Result/ Observation

Parameters	T1	Farmers Practice	Remarks
i. Date of planting	27.11.2022	29.11.2022	Imidacloprid 200 SL is
ii. Per cent incidence of leaf curl(%)	5%	**27.1%**	well response against the
iii. Yield(q/ha)	**105q**	**76 q**	leaf curl of chilli
iv. Average fruit weight	6.5 gm	6.5 gm	The crop king chilli is
iv. Gross Cost (Rs./ha)	4,50,000	4,20,000	sensitive to water
v. Gross Return (Rs./ha)	21,00,000	15,20,000	logging. So, it is difficult
vi. Net return (Rs/ha)	16,50,000	11,00,000	to grow in open condition
vii. B:C Ratio (GR/GC)	4.7	3.62	during rainy season

Title: Assessment of Multiple disease resistant Tomato hybrid, Arka Abhed, Arka Raklshak with Trishul

Crop	Problem diagnosed	Treatment	Area	No of Farmer
Tomato	Multiple disease like leaf curl, late blight and bacterial wilt	T1: Arka Abhed T2: Arka Rakshak T3(check): Trishul	0.4 ha	03

Result/ Observation

Parameters	Arka Abhed	Arka Rakshak	Trishul
i. Date of planting	10.11.2022	10.11.2022	11.11.2022
ii. Disease incidence (%)	-	-	**11.2%**
iii. Yield(q/ha)	**352**	**347**	**280**
iv. Average fruit weight	136g	125g	90.5g
iv. Gross Cost (Rs./ha)	1,35,000	1,36,000	1,48,000
v. Gross Return (Rs./ha)	2,81,600	2,77,600	2,24,000
vi. Net return (Rs/ha)	1,46,600	1,41,600	76,000
vii. B:C Ratio (GR/GC)	2.08	2.04	1.51

OFT under Horticulture

Title: Performance of coloured Cauliflower varieties in Baksa district

Crop	Treatment	Area	No of Farmer	Remarks(Ongoing)
Cauliflower	**T1- Carotena (Rich in Anthocyanin)** **T2- Valentena (Rich in Vitamin A)** **T3(check)- Suhasini**	0.15 ha	03	Planted on November, 2022

Result				Farmers Feedback
Parameters	T1	T2	T3	Farmers were highly satisfied with the coloured varieties due to their premium price. The produce also got good market demand.
Date of Transplanting	24.11.2022	24.11.2022	24.11.2022	
Average Plant spread (cm)	61.3	59.3	55.6	
Average Number of leaves per plant	8.77	8.36	7.56	
Average Days to maturity	55	59	65	
Average Weight of untrimmed curd(kg)	1.13	0.983	1.28	
Average Weight of trimmed curd (cm)	0.883	0.795	0.933	
Average Curd diameter (cm)	12.3	13.6	15.3	
Average Yield (q/ha)	**153.99**	**153.12**	**155.1**	
Gross Cost(Rs./ha)	114405	114405	69580	
Gross Return (Rs./ha)	452422(@ Rs.26/kg)	398112(@ Rs.26/kg)	198528(@ Rs.10/kg)	
Net Return(Rs./ha)	338017	283707	128948	
B:C Ratio	3.95	3.47	2.85	

Title: Performance of Sweet potato var. Bhu Sona, Bhu Krishna and Dergaon Red in Baksa district

Crop	Problem diagnosed	Treatment	Area	No of Farmer
Sweet Potato	Low production and low nutritional quality in existing varieties. The biofortified varieties(Bhu Sona, Bhu Krishna) will help in meeting the nutrient demand	**T1- Bhu Sona** **T2- Bhu Krishna** **T3(check)- Dergaon Red**	0.13 ha	03

Result				Farmers Feedback
Parameters	T1	T2	T3	
Date of Planting	26.10.2022	26.10.2022	26.10.2022	The farmers were satisfied with the cultivation and production of the two bio-fortified varieties. Among the varieties, Bhu Sona gave high production also preferred most by the consumers.
Average Vine length (cm)	211	191.3	187.6	
Days to harvesting	109	117	111	
Average Tubers per plant (number)	6.3	7	5	
Average Marketable tuber per plant (number)	3.4	3.9	3	
Average Tuber yield per plant (kg)	0.894	0.847	0.755	
Average Tuber length (cm)	18.01	14.93	17.66	
Average Tuber weight (gram)	142	121	151	
Avg. Yield(tones/ha)	**16.90**	**16.24**	**16.66**	
Gross Cost(Rs./ha)	94500	94500	73300	
Gross Return (Rs./ha)	253500@ Rs.15/kg	227360@ Rs.14/kg	199920@ Rs.12/kg	
Net Return(Rs./ha)	180200	154060	126620	
B:C Ratio	2.68	2.4	2.11	

Introduction of Newly released HDK75 pig breed under agro climatic condition of Baksa District .

Livestock	Problem with severity	Technology	No. of trials	No of farmers	Result			Remarks
					Traits	Demo	Local	
Pig	Performance evaluation	Introduction of Newly released HDK75 pig breed under agro climatic condition of Baksa District . T1 : HDK75 Pig T2 : Ghungroo Pig	3	3	Body weight at 2 month(Kg)	10.75	8.25	Farmers are satisfied with the productive performance of HDK75 as compared to local variety of Pig
					Body weight at 3 month (Kg)	23.55	18.75	
					Body weight at 4th month (Kg)	32.85	24.55	
					Body weight at 5th month (Kg)	44.50	34.80	
					Body weight at 6th Month (Kg)	55.70	46.50	
					Av. Age at first heat (days)	235.70	244.75	Ongoing

Local

OFT on effect on Egg yolk colour by feeding dry marigold as supplement

Livestock	Problem with severity	Technology	No. of trials	No of farmers	Result			
					Traits	Demo		Control
						T1	T2	
Poultry	pale colour of Yolk	T1 : Feed + Marigold (3%) T2 : Feed + Marigold (6%) T3 : Normal feed	2	2	Weight 1 month (g)	350.25	352.25	225.75
					Weight at 2nd month	445.25	448.25	322.50
					Weight at 3th month	550.25	555.25	511.75
					Weight at 4th month	725.50	735.50	580.75
					Weight at 5th Month	875.50	880.50	725.00
					Average age at first egg laying	165.70	160.00	185.50
					Egg Weight	52 gm	52 gm	50 gm
					Yolk colour	Yellow	Yellow	Pale
								Ongoing

Front Line Demonstration

Sl No	Discipline	Title	No of Farmers
1	Agronomy	Popularization of Rice(Medium duration, Shraboni)- Toria (TS-38) cropping sequence	4
2		Popularization of Medium duration Rice(Numali)- Toria (TS-38) cropping sequence	6
3		Large Scale Demonstration of rice variety, Surma Dhan	2
4		Demonstration on Participatory Pulse seed production programme.	25
5		Popularization of hybrid Maize variety DKC 9081	4
6		Demonstration on Mustard variety DRMR 150-35	10
9	Horticulture	Popularization of Arecanut based Multi-cropping system.(Black pepper, Turmeric, Pineapple)	3
10		Popularising Nutritional Garden	3
11		Popularising Arecanut variety Kahikuchi	3
12	Soil Science	Micronutrient management in rice in rice - pulse cropping sequence	5
13		Integrated Nutrient Management in Toria (var. TS 36)	5
14	Plant Protection	Cultivation of Oyster mushroom	5
15		Rearing of honey bee with Toria to increase the productivity of Toria and Honey	10
16	Animal Science	Popularization of crossbred pig (Hampshire 75% X Local 25%)	1
17		Rearing of Khaki campbell Duck in backyard system	2
18		Popularization of cultivation of Oat as Fodder crop	10
	Total FLD	**18**	

FLD under Agronomy

Popularization of Medium duration Rice (Var. Shraboni) - Toria(TS-38) cropping sequence

Crop	Area (ha)	No. of Demo	Result/ Observation			
			Parameters	Rice	Parameters	Toria
Rice and Toria	2.00	4	i. Date of sowing	22.06.2022	i. Date of sowing	19.11.2022
			ii. Date of harvesting	08.11.2022	ii. Date of harvesting	12.02.2022
			iii. Days to 50% flowering	**113**	iii. Days to maturity	86
			iv. Days of maturity	**140**	iv. Avg. Plant Height (cm)	103.15
			v. Avg. Plant height (cm)	136.00	v. Avg. No of branch/plant	4.20
			vi. Avg. No of effective tillers/hills	13.25	vi. Avg. No of siliqua/plant	181.24
			vii. Avg. Length of panicle(cm)	24.33	vii. Avg. No of seed/siliqua	15.88
			viii. Avg. No. of total grain/panicle	169.33	**viii. Avg. Grain yield (q/ha)**	**8.15**
			ix. Avg. No. of filled grain/panicle	145.67	ix. Gross cost (Rs./ha)	24000
			x. Avg. No. of unfilled grain/panicle	22.67	x. Gross Return (Rs./ha)	40750
			xi. Avg. Grain yield (q/ha)	**44.12**	xi. Net Return (Rs/ha)	16750
			xii. Gross cost(Rs./ha)	47,600	xii. B:C Ratio	1.70
			xiii. Gross Return(Rs./ha)	90,004		
			xiv. Net Return(Rs./ha)	42,404		
			xv. B:C Ratio	1.89		

N. B. – Price of Rice @2040/q, Price of Toria @ Rs 5000/q **REY=19.98 q/ha**

Popularization of Medium duration Rice(Var. Numoli)- Toria (Var. TS-38) cropping sequence

Crop	Technology	Area (ha)	No. of Demo	Result/ Observation			
				Parameters	Rice	Parameters	Toria
Rice and Toria	Medium duration Rice(Var. Numoli)-Toria(Var. TS-38) cropping sequence	5.00	2	i. Date of sowing	25.06.2022	i. Date of sowing	22.11.2022
				ii. Date of harvesting	09.11.2022	ii. Date of harvesting	13.02.2022
				iii. Days to 50% flowering	**114**	iii. Days to maturity	84
				iv. Days to maturity	**138**	iv. Avg. Plant Height (cm)	102.45
				v. Avg. Plant height (cm)	125.00	v. Avg. No of branch/plant	4.16
				vi. Avg. No of effective tillers/hills	12.80	vi. Avg. No of siliqua/plant	180.40
				vii. Avg. Length of panicle(cm)	24.87	vii. Avg. No of seed/siliqua	15.68
				viii. Avg. No. of total grain/panicle	171.55	**viii. Avg. Grain yield (q/ha)**	**8.05**
				ix. Avg. No. of filled grain/panicle	148.87	ix. Gross cost (Rs./ha)	24000
				x. Avg. No. of unfilled grain/panicle	24.87	x. Gross Return (Rs./ha)	40250
				xi. Avg. Grain yield (q/ha)	**49.80**	xi. Net Return (Rs/ha)	16250
				xii. Gross cost(Rs./ha)	47,600	xii. B:C Ratio	1.68
				xiii. Gross Return(Rs./ha)	87,475		
				xiv. Net Return(Rs./ha)	39,875		
				xv. B:C Ratio	1.84		

N. B. – Price of Rice @2040/q, Price of Toria @ Rs 5000/q **REY=19.73q/ha**

Popularization of Hybrid Maize variety – DKC 9081

Crop	Area(ha)	No. of Demo	Result	
			Parameters	Observation recorded
Maize Var. DKC-9081	1.0	4	i. Date of sowing	02.12.2022
			ii. Date of harvesting	30.03.2023
			iii. Duration of crop(days)	119
			iv. Length of cob(cm)	22.2
			v. No of seed/cob	640
			vi. Avg. Grain yield (q/ha)	52.35
			vii. Gross cost (Rs./ha)	34950
			viii. Gross Return (Rs./ha)	65437
			ix. Net Return (Rs/ha)	30487
			x. B:C Ratio	1.87

Demonstration on medium duration Rice

Crop	No of Farmers	Area (ha)	No. of Demo	Result/ Observation			
				Parameters	Surma Dhan	Parameters	Ranjit sub 1 (Check)
Rice	2	0.52	2	i. Date of sowing	10.07.2022	i. Date of sowing	22.06.2022
				ii. Date of harvesting	23.11.2022	ii. Date of harvesting	23.11.2022
				iii. Days to 50% flowering	**107**	**iii. Days to 50% flowering**	**123**
				iv. Days to maturity	**136**	**iv. Days to maturity**	**155**
				v. Avg. Plant height (cm)	118.15	v. Avg. Plant Height (cm)	161.29
				vi. Avg. Grain yield (q/ha)	**50.23**	**vi. Avg. Grain yield (q/ha)**	**52.80**
				vii. Gross cost(Rs./ha)	47,600	vii. Gross cost (Rs./ha)	47600
				viii. Gross Return(Rs./ha)	86,006	viii. Gross Return (Rs./ha)	100898
				ix. Net Return(Rs./ha)	38,406	ix. Net Return (Rs/ha)	53298
				x. B:C Ratio	1.81	x. B:C Ratio	2.12

Popularization of Mustard variety DRMR 150-35

Crop	No of Farmers	Area (ha)	No. of Demo	Result	
				Parameters	Observation recorded
Mustard Var. DRMR 150-35	16	33.33	5	i. Date of sowing	15.12.2022
				ii. Date of harvesting	15.03.2023
				iii. Days to maturity	91
				iv. Avg. Plant Height(cm)	207.65
				v. Avg. No of branch/plant	7.12
				vi. Avg. No of siliqua/plant	182.22
				vii. Avg. No of seed/siliqua	12.75
				viii. Avg. Grain yield (q/ha)	**7.65**
				ix. Gross Return(Rs.)	38,250
				x. Gross cost(Rs.)	24,000
				xi. B:C Ratio	1.59

Demonstration on Participatory Pulse seed production

Crop	No of Farmers	Area (ha)	No. of Demo	Result/ Observation	
				Comment	Control measure taken:
Blackgram Var. IPU-02-43	25	15	5	**The vegetative growth of the crop was satisfactory but in reproductive phase the crop was totally damaged due to the heavy infestation of YMV**	**I. Uprooting of infected plants II. Two Spray of Thiomethoxem @0.5 g/ltr at 10 days interval.**

FLD under Horticulture

Popularizing Strawberry var. Winter Dawn in Baksa district

Crop	No. of demonstrations	Area (ha) to be covered	No. of farmers to be covered
Strawberry	3	0.13	3

Parameters	Result
Date of planting	7.11.2022
Days to first harvest	69
Plant spread (cm)	29.3
Number of leaves	21.1
Number of runners	4.66
Average Fruit length(cm)	3.9
Average fruit weight (gram)	36.8
Average yield (t/ha)	**18.3 ton/ha**
Gross Cost(Rs./ha)	1244000
Gross Return (Rs./ha)	4575000 (@ Rs. 250/kg)
Net Return(Rs./ha)	3331000
B:C Ratio	3.7

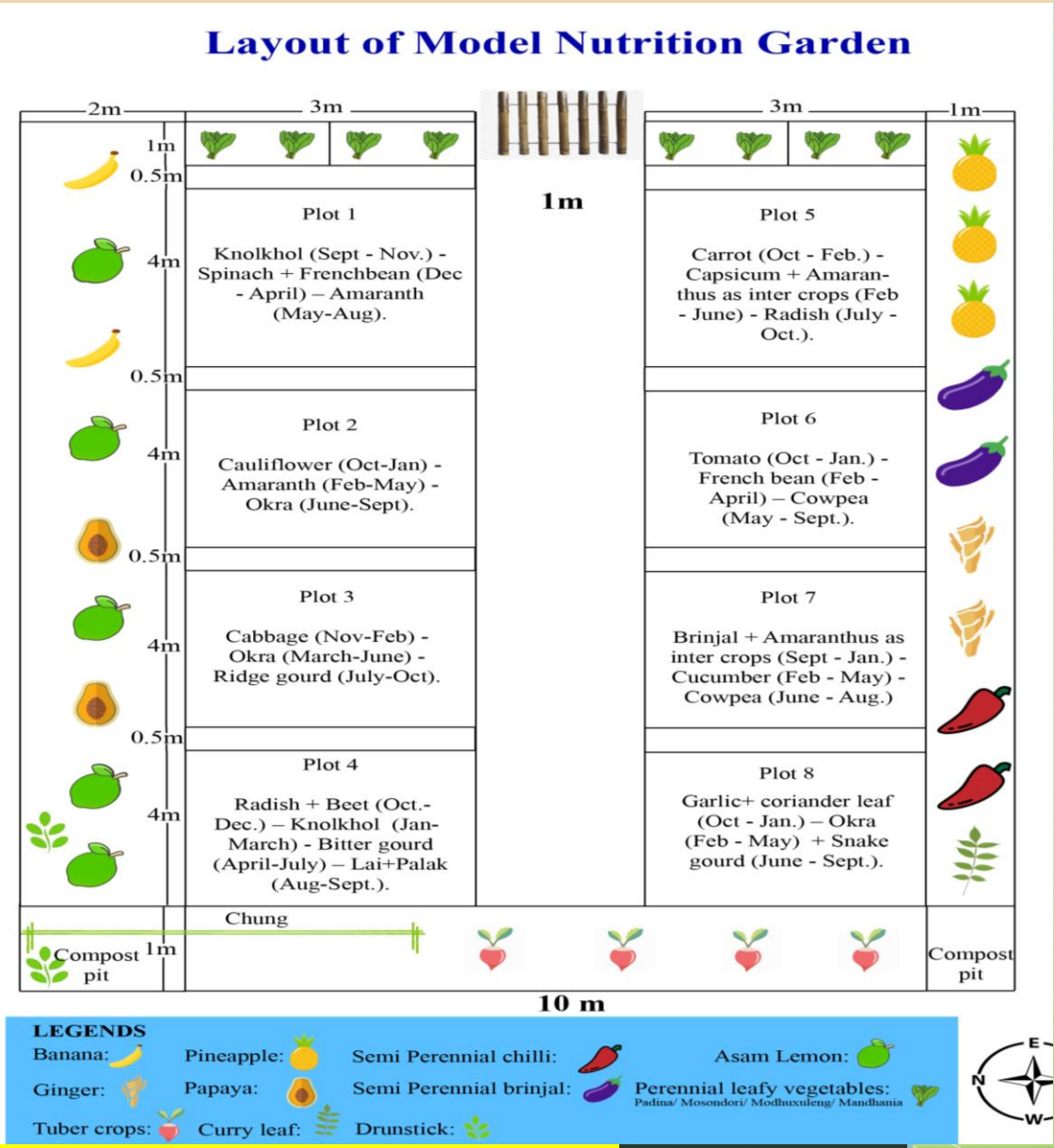
Popularization of Nutritional Garden

From Plot size of 12 sq mt (Rabi Vegetables)

Crops	Yield (kg/12 sqmt)
Cabbage	50kg
Frenchbean	45kg
Tomato	75kg
Carrot	50kg
Spinach	20kg
Radhish	35kg
Brinjal	35kg
Cauliflower	40kg

Total vegetable production	
Particulars	**Production**
Before intervention	200kg
After intervention	380kg
% change	90%

Nutrional supplement for 4member family	
No. of Adults	4
No.of children	2
Time spent	3hrs/day
Vegetables harvested per day	1 Kg



Size: 20m X 10m
Individual plot Size: 4m X 3m

Change in nutritional status from Rabi vegetable production

Essential nutrients	After intervention	Before intervention	% change
Beta carotene	200mg	80mg	60
Iron	4000mg	1200mg	70
Vitamin C	25000mg	8000mg	68
Riboflavin	21.85mg	8.13mg	63

Popularization of Arecanut based Multiple cropping system

Crop	No. of demonstrations	Area (ha)	No. of farmers	Observed parameters/Data collected		
				Parameter	**Demo**	**FP**
Arecanut, Black pepper, Turmeric, Pineapple	3	0.33	3	**Yield of Arecanut**	92 q/ha	92 q/ha
				Yield of Pineapple	260 q/ha	-
				Yield of Banana	170 q /ha	-
				Gross cost	Rs. 182000/ha	Rs. 50000/ ha
				Gross return	Rs. 630000/ha	Rs. 158000/ha
				Net return	Rs. 448000/ha	Rs. 108000/ha
				B: C ratio	3.4	3.0

Popularization of Arecanut variety Kahikuchi

Crop	No. of demonstrations	Area (ha)	No. of farmers	Remarks
Arecanut	3	0.39	3	Ongoing (Planted at July,2022) The seedlings are yet to be transplanted in main field.

FLD under Soil Science

Micronutrient management in rice in rice - pulse cropping sequence

Crop	Technology	No. of demonstrations	Area (ha)	No. of farmers
Rice(var. Numali) – Lentil(PL-9)	Technology- T1: Application of ZnSO4@25kg/ha +RDF in Rice (60:20:40 N: P: K) T2: Application of RDF in pulse (15:20:15 N:P:K)	5	1.0	5

Soil Status

Parameters	Initial	T1 (At harvest)	T2 (At harvest)
pH (1:2.5)	5.6	5.45	5.42
OC(%)	0.60	0.68	0.62
Avl N (kgha-1)	330.5	358.5	348.5
Avl. P (kgha-1)	44.5	49	47
Avl. K (kgha-1)	142	149	138
Avl. Zn (ppm)	0.38	0.45	0.37

Parameter for assessment	Rice	Parameter for assessment	Lentil
Date of Showing	18.06.2022	Date of Showing	25.11.2022
Date of Harvesting	07.11.2022	Date of Harvesting	15.03.2023
Grain Yield	46.20 q/Ha	Grain Yield (q)	3.37
Plant Height	125 cm	Plant height (cm)	32.88
No of true grain/Panicle	210 No	No of branch	6.20
No of panicle/hill	14 No	/plant	82.95
Gross Cost(Rs./ha)	52243	No of pod/plant	22000
Gross Return @Rs. 2040 (Rs./q)	94248	Gross Cost(Rs./ha)	34100
Net Return(Rs./ha)	42005	Gross Return	12100
B:C	1.80	Net Return(Rs./ha)	1.55
		B:C	
Remarks/Feedback:	Farmers are highly satisfied with the performance of		

FLD on Integrated Nutrient Management in Toria (var. TS 36)

Thematic area	**Nutrient Management**
Problem diagnosed	Lack of awareness on fertilizer application, the soil health deteriorate and cost of cultivation is increasing . Present FLD was proposed to create awareness about the application of chemical fertilizer.
Technology	N: P_2O_5: K_2O: 45:22.5: 30 kg/ha along with Azotobecter and PSB each @40 g/kg seed
Farmers practice (Check)	Without proper fertilizer dose and Bio fertilizer

Parameter for assessment	**Data on parameter assessed with unit**		**Change in the parameter assessed(%)**
	Demo	**Local Check**	
Yield(q/ha)	8.5	7.0	1.82
Plant Height(cm)	88	75	
No of Siliqua/plant	195	170	
No of seed /siliqua	16	14	
B:c	1.75	1.48	
Remarks/Feedback:	Satisfied with the performance with the technology.		

Area covered with location

Location	**Area covered (ha/nos.)**
Kharua	**0.26**
Bunbari	**0.26**
Batachara	**0.13**
Total	**0.65**

Soil Fertility Status

	pH	**OC %**	**N (kg/ha)**	**P (kg/ha)**	**K (kg/ha)**
Initial	**5.2**	**0.75**	**450.5**	**35.2**	**132.5**
T1	**5.12**	**0.59**	**395.5**	**52.2**	**145.2**
T2	**5.10**	**0.68**	**410.5**	**48.2**	**138.2**

FLD under Plant Protection

Round the year cultivation of Oyster mushroom

Enterprise	Technology demonstrated	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	Cultivated in steam treated rice straw.	5	109 Kg spawn	2.1 Kg/bed	60/bed	210/bed	150/bed	3.5

Rearing of honey bee with Toria

Crop Enterprise	Technology demonstrated	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	Rearing of honey bee with Toria to increase the productivity of Toria and Honey	10	10	12 Kg/box/ year	2,000 /box	4,800 /box	2,800 /box	2.4

FLD under Animal Science

Popularization of crossbred pig (Hampshire 75% X Local 25%)

Livestock	Breed	No. Of farmers	No. of pigbirds etc.	Result			Remarks
				Av. Body weight	Demo (g)	Local (g)	
Pig	Hampshire	03	9	2 month	9.75	8.15	Ongoing
				3 month	17.75	14.50	
				4th month	29.45	21.50	
				5th month	42.65	33.25	
				6th Month	54.75	41.05	
				Age at first heat (Days)	225.50	215.50	

Rearing of Khaki campbell Duck in backyard system

Livestock	Breed	No. Of farmers	No. of poultry birds etc.	Result			Remarks
				Traits	Demo	Local	
Duck	Khaki Campbell	10	100	Body weight at 1 month (g)	255.75	245.55	
				Body weight at 2 month (g)	365.15	340.50	
				Body weight at 3 month (g)	550.65	525.75	
				Body weight at 4th month (g)	825.85	775.15	
				Body weight at 5th Month (g)	950.70	920.65	
				Body weight at 6 month (g)	1200.50	1150.00	
				Average age at first egg laying (days)	178.70	182.50	
				Egg weight (g)	60 g	62 g	Ongoing

Popularization of cultivation of Oat as Fodder crop

Crop	No. of demonstrations	Area (ha)	No. of farmers to be covered/ benefitted	Parameters recorded
Oat Variety - Kent	10	0.86 ha	10	1. Date of sowing: 24.10.2022 2. Date of harvesting: 02.03.2023 3. Duration of crop: 130 days 4. Avg. plant height: 122.20 cm **5. Avg. Green fodder yield: 386.15 q/ha**

Popularization of Hybrid Napier fodder cultivation

Crop	No. of demonstrations	Area (ha)	No. of farmers to be covered/ benefitted	Parameters recorded
Hybrid Napier Variety –CO4	4	0.26 ha	4	1. Date of sowing: 24. 02.2023 2. Date of harvesting: 05.05.2023 3. Duration of first cutting : 3-4 months 4. Avg. plant height: 415.00 cm **5. Avg. Green fodder yield: 1750 q/ha**

Training Programmes (Farmers)

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Vocational	Total		
Agronomy	**5**	**5**	100%	0	**102**	-	-	**102**	100	102%
Soil Science	**6**	**6**	100%	0	**160**	-	-	**160**	150	106%
Horticulture	**7**	**7**	100%	0	**178**	-	-	**178**	175	101.8%
Plant Protection	**10**	**10**	100%	0	**212**	-	-	**212**	200	106%
Animal Science	**5**	**5**	100%	0	**125**	-	-	**125**	125	100%
Fishery Science	-	-	100%	0	-	6	-	120	120	100%
Total	**33**				**777**	6		897		

T=Target A=Achievement

Training Programmes (Rural Youth)

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Vocational	Total		
Agronomy	3	3	100%	-	60	-		60	60	100%
Soil Science	3	3	100%	-	76	-		76	75	101%
Horticulture	3	3	100%	-	75	-		75	75	100%
Plant Protection	1	1	100%	-	25	-		25	25	100%
Animal Science	5	5	100%	-	125	-		125	125	100%
Total	15	15			361					

T=Target A=Achievement

Training Programmes (Extension Personnel)

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Vocational	Total		
Agronomy	**4**	**4**	100%		**100**			**100**	**100**	100%
Soil Science	**2**	**2**	100%		**40**			**40**	**40**	100%
Horticulture	**1**	**1**	100%		**25**			**25**	**25**	100%
Plant Protection	**1**	**1**	100%		**22**			**22**	**20**	102%
Animal Science	**1**	**1**	100%		**25**			**25**	**25**	100%
Total	**9**	**9**			**212**			**212**		

T=Target A=Achievement

Vocational Training Programmes (Summary)

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Vocational	Total		
Agronomy	**1**	**1**	100%		**20**			**20**	**20**	100%
Soil Science	**1**	**1**	100%		**25**			**25**	**25**	100%
Horticulture	**1**	**1**	100%		**25**			**25**	**25**	100%
Plant Protection	**0**	**0**	-		**0**			**0**	**0**	-
Animal Science	**1**	**1**	100%		**25**			**25**	**25**	100%
Total	**4**	**4**			**95**			**95**		

T=Target A=Achievement

Cluster Frontline Demonstration

Cluster Frontline Demonstrations on Kharif Oilseed

Crop	Sesamum var. ST -1683	Result	
		Parameter	Demo
Name of the technology demonstrated	INM in Sesamum	i. Avg. Plant height(cm)	135.33
		ii. Avg. No of capsule/plant	114
		iii. Avg. No of seed /capsule	59.66
		iv. Avg. Yield (q/ha)	6.42
		v. Gross Cost (Rs./ha)	35320
		vi. Gross Return (Rs./ha)	60990
		vii. Net Return(Rs/ha)	25670
		viii. B:C Ratio	1.73
No.of farmer	30		
Area(ha)	10		

Cluster Frontline Demonstrations on Rabi Oilseed

Crop	Toria, Var. TS-38	Parameter	Demo
Name of the technology demonstrated	INM in Toria	i. Avg. Plant height(cm) ii. Avg. No of siliqua/plant iii. Avg. No of seed /siliqua iv. Avg. Yield (q/ha) v. Gross Cost (Rs./ha) vi. Gross Return (Rs./ha) vii. Net Return(Rs/ha) viii. B:C Ratio	103.10 181.30 15.55 8.12 24,000 40,600 16,600 1.69
No.of farmer	127		
Area(ha)	50		

Cluster Frontline Demonstrations on Rabi Pulse

Crop	Lathyrus (var- Prateek)	Parameter	Result
Name of the technology demonstrated	INM in Lathyrus	i. Avg. Yield (q/ha)	6.20
		ii. Gross Cost (Rs./ha)	23,100
No. of farmer	40	iii. Gross Return (Rs./ha)	34,100
		iv. Net Return(Rs/ha)	11,000
Area(ha)	10	v. B:C Ratio	1.48

Cluster Frontline Demonstrations on Rabi Pulse

Crop	Lentil (var- PL 9)	Parameter	Demo
Name of the technology demonstrated	INM in Lentil	i. Plant height(cm)	37.20
		ii. No of pod/plant	89.35
No.of farmer	106	iii. No of seed /pod	2.00
		iv. Yield (q/ha)	4.95
		v. Gross Cost (Rs./ha)	27,500
Area(ha)	40	vi. Gross Return (Rs./ha)	49,500
		vii. Net Return(Rs/ha)	22,000
		viii. B:C Ratio	1.80

Cluster Frontline Demonstrations on Rabi Pulse

Crop	Field Pea(Var. HFP 715)	Parameter	Demo
Name of the technology demonstrated	INM in Field Pea	i. Avg. Plant height(cm)	115.20
		ii. Avg. No of pod/plant	11.25
No.of farmer	102	iii. Avg. No of seed /pod	6.55
		iv. Avg. Yield (q/ha)	9.65
		v. Gross Cost (Rs./ha)	30,500
Area(ha)	30	vi. Gross Return (Rs./ha)	48,250
		vii. Net Return(Rs/ha)	17,750
		viii. B:C Ratio	1.58

Programmes under GKMS

GRAMIN KRISHI MAUSAM SEWA (DAMU)

AUTOMATIC WEATHER STATION

RAINFALL

RELATIVE HUMIDITY I & RELATIVE HUMIDITY II

MAXIMUM TEMPERATURE

MINIMUM TEMPERATURE

WIND SPEED

CLOUD COVER

WIND DIRECTION

AWS Unit

FARMERS' AWARENESS PROGRAMME (GKMS)

Sl. No.	Title	Block
1	Apps under IMD and Weather Forecasting	Dhamdhama
2	Weather in relation to crops, livestock and fishery	Goreswar
3	Lightning and its effects on agriculture and human life	Baska
4	Apps under IMD and Weather Forecasting	Tamulpur
5	Apps under IMD and Weather Forecasting	Gobardhana
6	Lightning and its effects on agriculture and human life	Jalah
7	Apps under IMD and Weather Forecasting	Nagrijuli
8	Weather and disease-pest relationship in agriculture	Barama

GRAMIN KRISHI MAUSAM SEWA (DAMU)

AGRO-ADVISORY SERVICE

AGRO-ADVISORY BULLETIN (***5- days forecast*** *every Tuesday & Friday)*

DISTRICT LEVEL
105 nos

BLOCK LEVEL
735 nos

DISSEMINATION

FARMERS via *8 WHATSAPP GROUPS*	FARMERS via *m-kisan portal*	LINE DEPARTMENTS *via mail*	upload in DSS & AGRIMET IMD website

FARMERS FEEDBACK COLLECTION → *uploaded & sent* to agrimet imd

বতৰ বিজ্ঞান বিষয়ক সভা

প্ৰতিদিন সেৱা, ধমধমা, ২২ ফেব্ৰুৱাৰী ঃ বাক্সা জিলাৰ কৃষি বিজ্ঞান কেন্দ্ৰৰ উদ্যোগত ধমধমা আৰু গোৰেশ্বৰ উন্নয়ন খণ্ডত অলপতে বতৰ বিজ্ঞান বিষয়ক দুখন সজাগতা সভা অনুষ্ঠিত হৈ যায়। সভাত কৃষি বিজ্ঞান কেন্দ্ৰৰ কৃষি বতৰ বিজ্ঞান বিশেষজ্ঞ গৰীয়সী তামুলীয়ে ভাৰত বতৰ বিজ্ঞান বিভাগৰ অন্তৰ্গত গ্ৰামীণ কৃষি মৌচম সেৱাৰ বিষয়ে ব্যাখ্যা কৰি কৃষকসকলক সজাগ কৰে। লগতে বতৰ বিশেষজ্ঞগৰাকীয়ে ভাৰত বতৰ বিজ্ঞান বিভাগৰ এই সেৱাৰ অন্তৰ্গত কৃষকসকলক জিলা আৰু খণ্ড পৰ্যায়ত আগবঢ়োৱা কৃষি পৰামৰ্শৰিলী পত্ৰিকাৰ বিষয়ে জনায়। সভাৰ মূল লক্ষ্য ভাৰত বতৰ বিজ্ঞান বিভাগৰ অন্তৰ্গত মেঘদূত, দামিনি, মৌচম আদি বিভিন্ন এপৰ জৰিয়তে পাঁচ দিনৰ আগলি বতৰা লাভ কৰা আৰু বতৰৰ লগত কৃষি, পশুপালন অথবা মীনপালন সম্বন্ধে কৃষকসকলক পৰামৰ্শ আগবঢ়োৱা। ৫০ জনকৈ কৃষকে অংশগ্ৰহণ কৰা সজাগতা সভা দুখনত বাক্সা কৃষি বিজ্ঞান কেন্দ্ৰৰ কেইবাগৰাকীও কৃষি বিজ্ঞানী উপস্থিত থাকে।

NEWSPAPER CUTTING

POPULARIZATION OF MEGHDOOT, MAUSAM AND DAMINI APP amongst *FARMERS*

Special Programme

Biotech Kisan Hub project for Mushroom Production

Objectives	Target	Achieved
Mass scale farmers Mushroom cultivation training	4	4
Mass scale farmers value added product training	10	10
Mass scale farmers production of Mushroom at farmers level through intervention	10	10
Ground level farmers clustering at district level like FPO, Co-operative	-	-

Millet promotion Through R & D Activities

Crop	No of Farmers	Area (ha)	No. of Demo	Result/ Observation			
				Parameters	Gossaigaon Marua Dhan 1	Parameters	Gossaigaon local (Open type)
Finger Millet Var. Gossaigaon Maruadhan	10	1.00	1	i. Date of sowing ii. Date of harvesting iii. Days to maturity iv. Avg. Plant height (cm) v. Avg no of finger/plant **vi. Avg. Grain yield (q/ha)** vii. Gross cost(Rs./ha) viii. Gross Return(Rs./ha) ix. Net Return(Rs./ha) x. B:C Ratio	24.08.2022 20.12.2022 119 114.55 7.10 **15.72** 29600 47160 17560 1.59	i. Date of sowing ii. Date of harvesting iii. Days to maturity iv. Avg. Plant Height (cm) v. Avg no of finger/plant **vi. Avg. Grain yield (q/ha)** vii. Gross cost (Rs./ha) viii. Gross Return (Rs./ha) ix. Net Return (Rs/ha) x. B:C Ratio	18.08.2022 17.12.2022 122 116.50 7.00 **14.86** 29600 44580 14980 1.51

Popularization of Foxtail millet var. AAU-GSG-Cawn 1

Crop	No of Farmers	Area(ha)	No. of Demo	Result	
				Parameters	Observation recorded
Foxtail millet	32	15	8	i. Date of sowing	09.03.2023
				ii. Avg. Plant Height (cm)	132.6
				iii. Avg. No of tillers/plant	3.2
				iv. Avg. length of panicle(cm)	24.50
				v. Avg. duration of the crop(days)	102
				vi. Avg. Grain yield (q/ha)	7.20
				vii. Gross cost (Rs./ha)	15830
				viii. Gross Return (Rs./ha)	25200
				ix. Net Return (Rs/ha)	9370
				x. B:C Ratio	1.59

Selling price of Millet Rs. 35/Kg

Impact Assessment

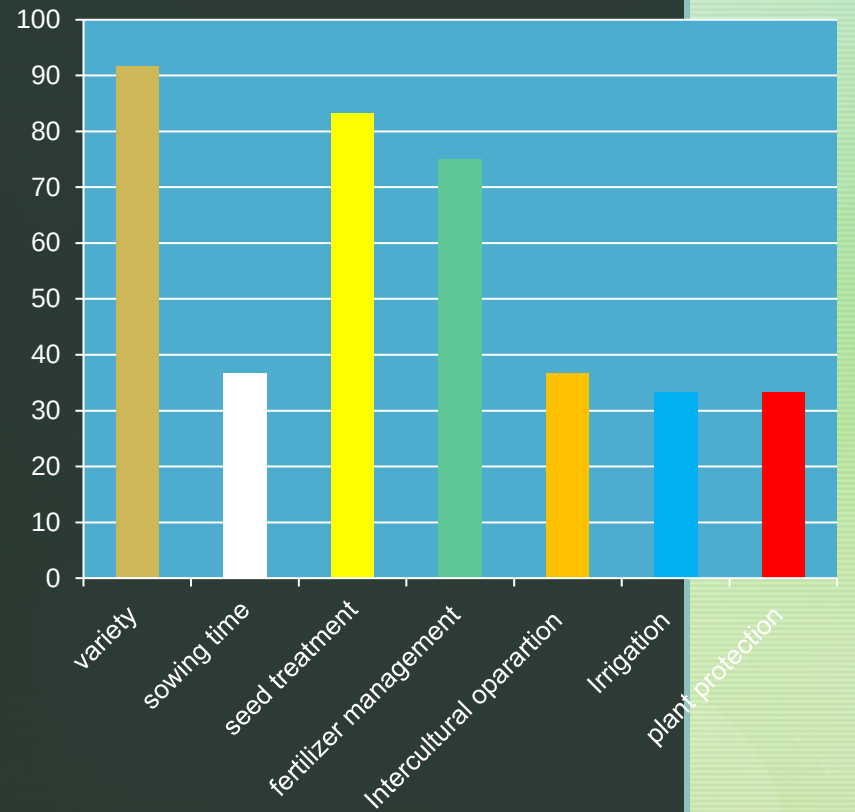
Title : Impact study of Cluster Front line demonstration programme on Pulse crop-A study in Baksa district of Assam.

- **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:**
  1. Variety
  2. sowing time
  3. seed treatment
  4. fertilizer management
  5. Irrigation
  6. Intercultural operation
  7. 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	55	91.6	55	91.6
2.	sowing time	28	46.6	50	83.3	22	36.6
3.	seed treatment	0	0	50	83.3	50	83.3
4.	fertilizer management	0	0	45	75.0	45	75.0
5.	Intercultural oparartion	20	33.3	42	70.0	22	36.6
6.	Irrigation	25	41.6	45	75.0	20	33.3
7.	plant protection	30	50.0	50	83.3	20	33.3



Data collection

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**
6.9	10.2	3.3	47.8

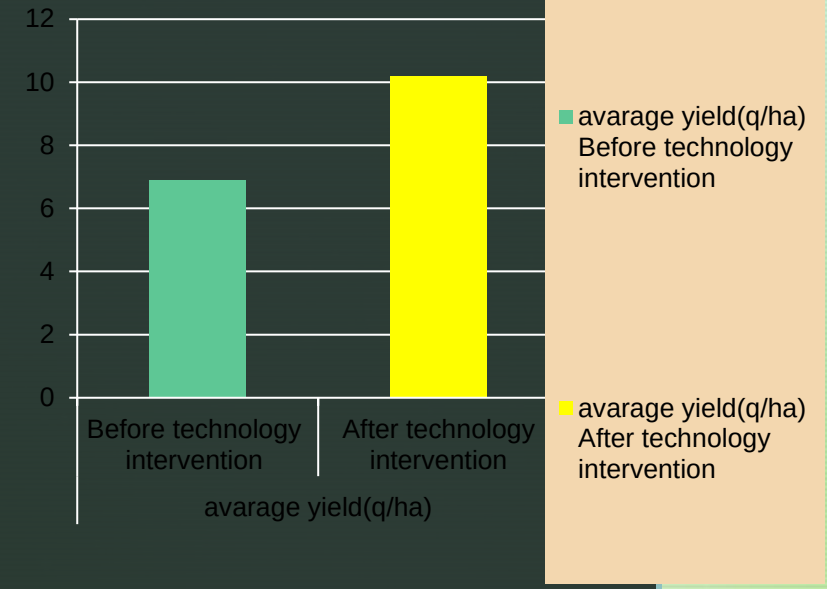


Table . 3: Economic impact of crop before and after intervention

Parameter	Before technology intervention	After technology intervention	% increase in Income
cost of cultivation (Rs./ha)	21500	23500	
gross return (Rs./ha)	27600	41000	48.6
net return (Rs./ha)	6100	17500	
B:C ratio	1.28	1.74	

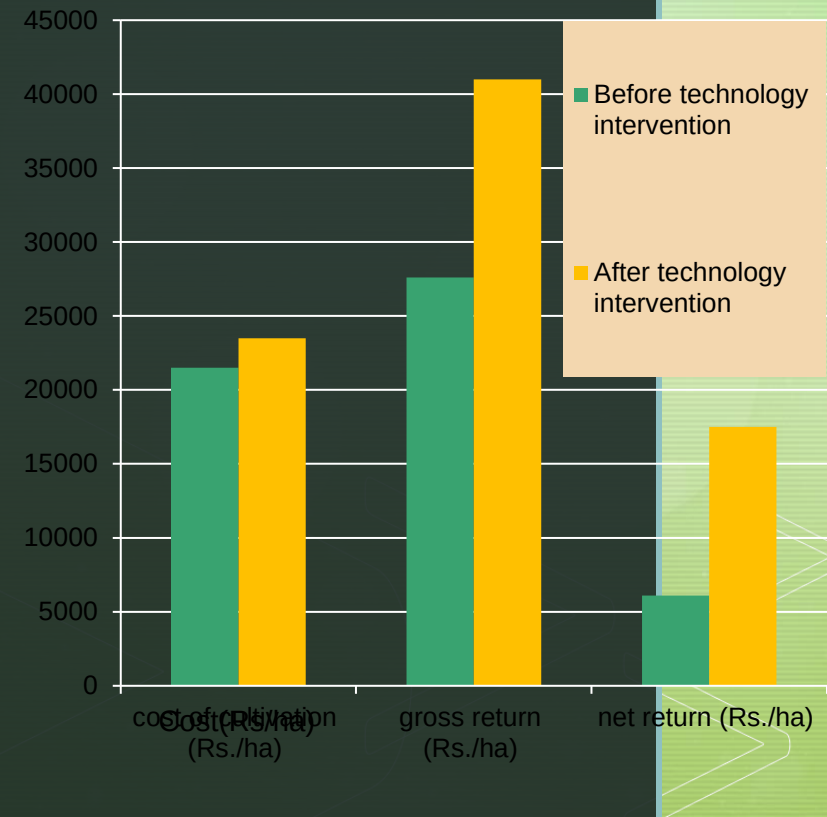


Table . 4: Horizontal spread of crop from CFLD

Number of villages			Area covered (ha.)		
Initial	Final	Percent	Initial	Final	Percent
4	10	150%	20	60	200%

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

No of sample size : 60

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, percentage method and Garrett ranking technique is used to analysis the result.

Garrett Ranking:

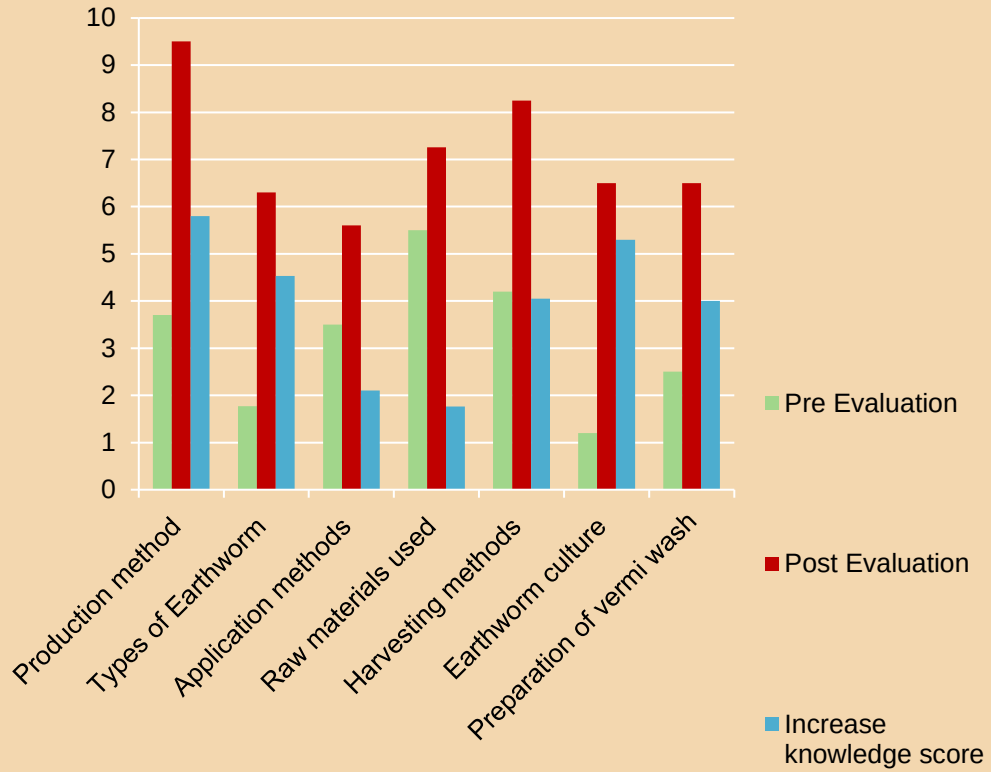
Percent position= 100(Rij-0.5)/Nj

Rij= Rank given for the ith variable by jith respondent

Nj= Number of variable ranked by jth respondent

Impact on gain in knowledge after acquiring training

Training courses Vermicompost Production technology (N=60)	Mean knowledge score of the trainee		Increase knowledge score after evaluation
	Pre Evaluation	Post Evaluation	
Production method	3.70	9.50	5.80
Types of Earthworm	1.77	6.30	4.53
Application methods	3.50	5.60	2.10
Raw materials used	5.50	7.26	1.76
Harvesting methods	4.20	8.25	4.05
Earthworm culture	1.20	6.50	5.30
Preparation of vermi wash	2.50	6.50	4.00



Factor affecting the impact of training

N=60

Sl no.	Socio-Economic parameters	Correlation coefficient (r) value
1.	Age	0.38**
2.	Education	-0.21**
3.	Income	-0.12**
4.	Occupation	-0.11**
5.	Type of family	0.25**
6.	Size of family	-0.38**
7.	Land holding	0.17**
8.	Access to market	0.18**
9.	Access to input	0.32**

** *significant at 1% & 5% probability levels*

Economic impact on vermicompost production technology

Particulars	After training(year/tank)
Volume of production	20q
Cost of production	Rs.5200
Gross income	Rs.20000
Net income	Rs.14800
B:C	1 : 3.84

Reason for establishment

Reasons	Garrett Score	Rank
Personal interest	48	5
Encouragement during training	56	4
Provide employment to others	38	7
Financial support to the family	66	2
To became financially independent	78	1
Augment of the standard of living	64	3
Build confidence and self reliance	39	6

Reason for non establishment

Reasons	Garrett Score	Rank
Non fulfillment of training need	39	9
Skill gap	56	7
Financial constraint	87	1
High material cost to start the enterprise	69	4
Lack of proper guidance	45	8
Lack of confidence	73	3
Non cooperation of the family/family does not want to spend the money	75	2
Shortage of time	68	5
Health problem	58	6

Other Extension Activity

Extension Activities (KVK)

Activities	No. of programmes	No. of farmers
Advisory Services	37	4700
Diagnostic visits	15	60
Group discussions	3	50
Exhibition	4	-
Farmers -Scientists interaction	1	50
Scientists' visit to farmers field	42	155
Method Demonstrations	6	105
Celebration of important days	6	250
Awareness camp	12	800
Swachata Awareness programme	18	600
Number of SMSs sent by KVKs to farmers through Farmers Portal	76	96111
Electronic Media (Video Clip)	5	-
News paper coverage	10	-
TV Talk	1	-
Radio Talk	4	-
PRA	1	20

Status of Mobile Advisory during 2022-23

Message type sent	Crop		Livestock		Weather		Marketing		Awareness		Other Enterprise		Total	
	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary
Text only	21	27780	5	7680	8	8625	0	0	5	5435	2	2141	41	51661
Total	**21**	**27780**	**5**	**7680**	**8**	**8625**	**0**	**0**	**5**	**5435**	**2**	**2141**	**41**	**51661**

Special Programmes

Sl. No.	Name of program	Duration and Date	No. of participants			Chief Guest/ Special Dignitary
			M	F	Total	
1	Kisan Bhagidari Prathamikata Hamari	26.04.2022	199	55	254	
2	Exhibition at 61st Bodoland Sahitya Sabha from	02.05.2022 to 04.05.2022	0	0	1500 approx	
3	World Environment Day	05.06.2022	32	19	51	
4	International Day of Yoga	21.06.2022	9	8	17	
5	Field day on demonstration on summer paddy var. CR Dhan 311	22.06.2022	16	2	18	
6	Celebration of 94th ICAR foundation day	16.07.2022	90	30	120	
7	Awareness programme on Natural farming	14.07.2022	15	0	15	
8	Celebration of Poshan Abhiyan and plantation programme	17.09.2022	54	10	64	
9	PM kisan Samman Sammelan	17.10.2022	230	15	245	
10	Awareness programme on Swacchata Abhiyan	Round the year	0	25	25	
11	Exhibition at Baksa Day celebration	30.10.2022	0	0	500 approx	
12	Exhibition at Rangia on account of Ex- Servicemen rally	02.12.2022	0	0	1000 approx	
13	World Soil Day	05.12.2022	23	0	23	
14	Participatory Rural Appraisal programme at Nikashi	14.12.2022	22	12	34	
15	Kisan Day	23.12.2022	7	13	20	
16	Exhibition at Bodoland University, Kokrajhar on account of 1st Bodoland International Knowledge festival, 2023	27.02.2023 to 02.03.2023	0	0	25000 approx	
17	Exhibition on Kisan Mela under CSS-ATMA at DAO, Mushalpur	10.03.2023	0	0	1000 approx	
18	Field day on demonstration on Mustard var. DRMR 150-35	17.03.2023	2	16	18	

Feedback of Farmers

Farmers' perception on new varieties and technologies -

i. Mushroom being the profitable venture more youth come forward to adopt the technology for livelihood.

ii. Rice variety Numoli found suitable in terms of productivity and duration which enable farmers timely growing of succeeding Rabi crops.

iii. Low cost Vermicompost production widely accepted by the farmers.

iv. More farmers show their interest in growing cauliflower varieties- Valentena and Carrotena due to their premium price.

v. In case of Nano Urea application although the cost is low but, it is labour intensive.

ধন্যবাদ