

Annual Action Plan (2017-18)

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\sum	KOK (A	RAJHAR SSAM)
Gossaigaon Kokrajhar	9	Sub-Districts
Dotoma	4	Towns
Golokganj Bagribari	1068	Villages
Dhubri	11	CD Blocks

- Kokrajhar district of Assam is located on northern part of the mighty Brahmaputra River.
- ✓ Kokrajhar is one of the 27(twenty seven) districts of Assam with 2.85% of the state population and is the gateway to Northeast India.
- ✓ Geographical area: 3165 sq. km
- ✓ The average temperature in summer is around 27.64° C to

<u>ACTION PLAN</u> 2017-18

Discipline: Agronomy



ON FARM TRIAL

Discipline: Agronomy



On Farm Trial– Agronomy

- : Varietal performance of late sown toria (var.TS-67) .
- **Thematic Area** : Varietal evaluation

Title

Problem Diagnosed : Low productivity of toria due to late sowing

Technology/ Social Concept to	Source of technology	Location	No. of propo	trials osed	Parameters of assessment/refinement						
be Assessed	and year of release		Number (No.)	Area (ha)							
Crop: Toria	op: Toria AAU, Jorhat Pathakat			0.8	New Technology						
Variety: TS-67 Sowing of seeds in		Uttar Bash bari, Balajan	Uttar Bash bari, Balajan	Uttar Bash bari, Balajan	Uttar Bash bari, Balajan	Uttar Bash barı, Balajan			1. Plant height		
mid Nov-mid to							Dulujuli			2. Fruit/plant	
Dec,17.)								3. Yield/plant			
Farmers Practice-				4. Yield/plant							
Local variety											5. B:C Ratio
					Farmer Practice						
					1. Plant height						
					2. Fruit/plant						
					3. Yield/plant						
					4. Yield/plant						
					5. B:C Ratio						

	<u> </u>	<u>-arm Irial</u>	l – Agre	onom	V				
Title : Weed management in Boro rice									
Thematic Area : Integrated Weed Management									
Problem Diagnosed: Low yield of summer rice due to severe weed infestation during									
	summer se	ason							
Technology/ Social	Source of	Location	No. of	trials	Parameters of				
Concept to be technology			propo	osed	assessment/refinement				
Assessed	and year of release		Number (No)	Area (ha)					
Application of	AICRP	Kandanapar,	3	0.8	New Technology				
Pretilachlore 0.75 kg/ha or butachlore @ 1.0 kg /ha as pre emergence at 0-3 DAT followed by paddy weeder at 30 DAT	project on weed	Daoligauri, Joyma No. 1	Daoligauri, Joyma No. 1	Daoligauri, Joyma No. 1	Daoligauri, Joyma No. 1	Daoligauri, Joyma No. 1			1. Initial and final NPK status of soil
	Control, AAU, Jorhat				2. Plant height, plant population, pod /plant, seed/ pod				
					3. Weed population				
					4. Yield				
					Farmer Practice				
			1. Initial and final NPK status of soil						
			2. Plant height, plant population, pod /plant, seed/ pod						
					3. Weed population				
					4. Yield				

On Farm Trial – Agronomy

: Utera cropping of pea with Sali rice

Thematic Area: Tillage Management

Title

Problem Diagnosed: Mono cropping due to late harvesting of Sali rice

Technology/ Social Concept to beSource of technologLocation		No. of t propo	trials sed	Parameters of assessment/refinement	
Assessed	y and year of release		Number (No)	Area (ha)	
Application of 6 kg	RRPS-34	Kujrabguri,	3	0.8	New Technology
DAP to the relay crop (pea)and cutting of stubble	(NATP), AAU, Jorbat	Sahajuri, Gurufella			1. Initial and final NPK status of soil
height of rice at 20 2004	2004				 Plant height, plant population, pod /plant, seed/ pod
					3. Yield
					Farmer Practice
					1. Initial and final NPK status of soil
				 Plant height, plant population, pod /plant, seed/ pod 	
				3. Yield	

FRONT LINE DEMONSTRATION

Discipline: Agronomy



FLD - (Agronomy)

: FLD on Toria (Var. TS-46)

Thematic Area : Varietal evaluation

Title

Problem Diagnosed : Low productivity of Toria due to late sowing

Technology/ Social Concept to be	Source of technology	Location	No. of prop	demos osed	Parameters of assessment				
Assessed	and year of release		Area (ha)	Demo (No)					
Crop -Toria	RARS,	Uttar bashbari	1.0 ha	5	New Technology				
<i>Variety</i> -TS -46	Shillongani AAU, Jorhat	and Balajan	and Balajan	^{ani} and Balajan , t	nillongani and Balajan AAU, Jorhat	ngani and Balajan U, nat			1.Initial and final NPK status in soil
Seed rate: 10 kg/ha Sowing time: Oct.15 Nov.15					2.plant height, plant population, seed/ Panicle				
Fertilizer: 40: 35: 15 kg N P_{10} · K O					3.Seed Yield				
Ng N, T ₂ O ₅ , N ₂ O					4. Date of sowing and harvest				
					Farmer Practice				

FLD - (Agronomy)

: FLD on medium duration of rice variety (TTB-404)

Thematic Area : Varietal evaluation

Title

Problem Diagnosed : Monocropping due to late harvest of long duration rice variety

Technology/Source of technologyLocation		No. c pro	of demos posed	Parameters of assessment	
to be Assessed	to be and year of Assessed release		Area (ha)	Demo (No)	
Crop- Sali rice	Sali rice AAU, Sahajuri, 1.0 ha		5	New Technology	
<i>Variety:</i> TTB-404 Seed rate: 40	Jorhat	Daoliguri, Gurufella			1.Initial and final NPK status in soil
kg/ha Sowing time:				2.plant height, plant population, seed/ Panicle	
Fertilizer :					3.Seed Yield
60:20;40 kg					Farmer Practice
N:P ₂ O ₅ : K ₂ O					1.Initial and final NPK status in soil
					2.plant height, plant population, seed/ Panicle
					3.Seed Yield

FLD - (Agronomy)

: Use of HYV of lentil (Maitrayee)

Thematic Area: Varietal evaluation

Problem Diagnosed : Low yield of local varieties

Title

Technology/ Social Concept to be AssessedSource of technologyLocation	No. of prop	f demos oosed	Parameters of assessment		
	release		Area (ha)	Demo (No)	
Crop: Lentil	RARS,	Dotma,	1.0	5	<u>New Technology</u>
Variety. : Maitrayee Sowing time: Mid	: Maitrayee Shilongani S time: Mid d Nov. ate:30 kg /ha er dose: N:	Shyamdashg uri, Borobadha			1.Initial and final status in soil
Oct- Mid Nov. Seed rate:30 kg /ha Fertilizer dose: N:					2.Plant height, plant population, pod/ plant, seed/ pod
K20/ha=10:35:0					3.Seed Yield
					 Date of sowing and harvest
					Farmer Practice

TRAINING

Discipline: Agronomy



Training for farmer and farm women

- Seed production technology for rice including SRI technology (1)
- Scientific production technology of fodder crops (1)
- Scientific production technology for Kharif pulses (Blackgram, Groundnut etc.) (1)
- Scientific production technology of potato (1)
- Improved production technology for Rabi pulses and oil seeds (1)
- Scientific production technology of Boro rice (1)
- Water management practices for Rabi crops (1)

Training for Rural Youth

Organic farming for sustainable productivity and profitability (1)

Training for Extension Functionaries

 Crop intensification and diversification in rice based cropping system for sustainable productivity and profitability

Vocational Training

- Entrepreneurship development through Integrated Farming System (IFS)
- Employment generation through post harvest management of tapioca

Action Plan 2017-18

Discipline: Horticulture



ON FARM TRIAL

Discipline: Horticulture



On Farm Trial– Horticulture

: Varietal performance of tomato variety Arka Rakshak

Thematic Area : Varietal evaluation

Title

Problem Diagnosed: Low yield of local varieties and susceptible to bacterial wilt

Technology/ Social Concept	Source of technology	Location	No. of tr proposed	ials to be	Parameters of assessment/refinement			
to be Assessed	and year of release		Number (No.)	Area (ha)				
T1-Tomato	IIHR,	Sarfanguri	0.13	3	<u>New Technology</u>			
Hybrid Arka Rakshak	Bangalore, 2013	Dotma Baiugaon			1.Plant height (cm)			
resistant to	2010				2.Days to 50% flowering & fruiting			
bacterial wilt and leaf curl virus				3.Yield/ plant (kg)				
T 0 F								4.yield/ ha (q)
practice					5.B:C ratio			
					Farmer Practice (Local Varities)			
13-Check variety-					1.Plant height (cm)			
Swaraksha			2.Days to 50% flowering & fruiting					
			3.Yield/ plant (kg)					
					4.yield/ ha (q)			
					5.B:C ratio.			

On Farm Trials – Horticulture

Title: Performance assessment of bunch cover in banana

Thematic Area: Crop management

Problem Diagnosed: Low consumer preference due to poor appearance of banana fruit.

Technology/ Technology/ Social	Source of Location technology	Location	ce of Location ology	Source of technologyLocationNo. c proposition	No. of proposed	trials d to be	Parameters of assessment/refinement
Concept to be Assessed	and year of release		Number (No.)	Area (ha)			
T1 -Bunch cover in Department banana with white of Koł		Dotma, Kokrajhar and	0.13	3	<u>New Technology</u> (White propylene bag)		
propylene bag for effective control of	Horticulture, AAU. Jorhat	Goladangi			1. Fingers per hand		
fruit scaring beetle.	, ,				2. Hands per bunch		
T2-Farmers					3. Bunch weight (g)		
Practice-Bunch					4. Pest incidence (%)		
Cover with Gunny					5. Consumer preference		
Sug					6. B:C ratio		
T3 -Control-Without	- Without				Farmer Practice (Gunny bag)		
					1. Fingers per hand		
					2. Hands per bunch		
			3. Bunch weight (g)				
				4. Pest incidence (%)			
					5. Consumer preference		
					6. B:C ratio		

FRONT LINE DEMONSTRATION

Discipline: Horticulture



FLD - (Horticulture)

Title: Varietal performance of broccoli variety EverestThematic Area:Varietal evaluationProblem Diagnosed:Low productivity of existing varieties

Technology/ Social Concept to be	Source of technology	e of Location		lemos osed	Parameters of assessment/refinement				
ASSESSEU	release		Area (ha)	Demo (No)					
T1- Broccoli variety	Department of	Dotma,	0.13 ha	5	1. Plant height (cm)				
Everest	Horticulture, AAU, Jorhat	Jiaguri and Katribari	Jiaguri and Katribari	Jiaguri and Katribari	Jiaguri and	Jiaguri and	Jiaguri		2. Head weight (g)
T2- Farmers practice							3. Head diameter (cm)		
T2 Chack	Chook				4. Cull head weight (g)				
Recommended variety					5. Head yield (q)				
					6. B:C ratio				

FLD - (Horticulture)

Title: Mulching in tuberose for year round quality flower production and weed management Thematic Area: Mulching Technology Problem Diagnosed : Weed growth during rainy season hampers growth & flower production in tuberose

Technology/ Social Concept to be	Source of Location technology	No. of prop	demos osed	Parameters of assessment/refinement	
Assessed	release		Area (ha)	Demo (No)	
Crop: Tuberose	Department	Telipara	0.13 ha	5	1. Plant height (cm)
High Mulching with 50 micron black polyethylene film	of Horticulture, AAU, Jorhat	Kadamguri Kusumbil			 Spike length (cm) Rachis length (cm) No. of florets/spike
Without polythene					5. Spike duration (days)
mulch					6. No. of bulb/plant
				7. Vase life (days)	
			8. Spike yield/ha (q)		
				9. Weed biomas	
					10.B:C ratio



Discipline: Horticulture



Training for farmer and farm women

- Organic production technology of cabbage and cauliflower.
- Scientific cultivation of ginger and turmeric.
- Scientific cultivation technology of tapioca and colocasia.
- Multi-storeyed cropping in arecanut and coconut based cropping systems.
- Protected cultivation techniques of off-season vegetable crops.
- Different propagation techniques of black pepper and betel-vine.

Training for Rural Youth

- Scientific cultivation technology of strawberry.
- Processing of fruits and vegetables for different value added products.

Training for Extension Functionaries

Multi-storeyed cropping models for higher yield and income.

Vocational Training

 Processing of fruits and vegetables for different value added products **Action Plan 2017-18**

Discipline: Soil Science



ON FARM TRIAL

Discipline: Soil Science



On Farm Trial– :Soil Science

Title Thematic Area : Integrated nutrient management of Kharif Black gram

: Soil health

Problem Diagnosed: Poor soil health & low nutrient use efficiency

Technology/ Social Concept to be	Source of technolog	Location	No. of t propos	rials sed	Parameters of assessment/refinement					
Assessed	y and year of release		Number (No.)	Area (ha)						
T1- RD of NPK+	AAU	Bashbari,	3	0.6	New Technology					
Seed inoculated with rhizobium and		Alokjhar, Maktaigaon			1.Initial and final NPK status in soil					
PSB @ 50 gm/kg of		gerer			2.Nutrient uptake					
seed			3.Date of sowing and harvest							
T2 - RDF of NPK without seed					4.Plant height, plant stand, pod/plant, seed/pod and seed yield/ha					
inoculation	oculation 3- Farmers ractices									5.Rainfall and temperature throughout the crop growing period
practices			Farmer Practice							
					1.Initial and final NPK status in soil					
					2.Nutrient uptake					
					3.Date of sowing and harvest					
		4.Plant height, plant stand, pod/plant, seed/pod and seed yield/ha								
				5.Rainfall and temperature throughout the crop growing period						

On Farm Trial – :Soil Science

: Phosphorus management in Rice- Linseed sequence

Title : Soil management Thematic Area Problem Diagnosed: Low availability of phosphorus

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of trials proposed		Parameters of assessment/refinement
			Number (No.)	Area (ha)	
In Rice AAU T1-75% of RD of P2O5 + PSB In Linseed 75% of RD of P2O5	AAU	Haraputa,	3	0.6	<u>New Technology</u>
	Kembelpur, Padmabil			1.Initial fertility status of the soil	
T2-Recommended doses of NPK in rice	ended C in rice			2.Date of sowing and harvest	
and linseed					3.Incidence of pest and diseases
practices				4. Yield and yield attributing characters	
					Farmer Practice

On Farm Trial – Soil Science

: Effect of foliar application of urea in Lentil

Thematic Area: Soil management

Title

Problem Diagnosed: Poor availability of nutrient and low yield

Technology/ Social S Concept to be te Assessed an	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number (No.)	Area (ha)	
T1: 2% urea spray at 35 & 75 days after sowing	AAU,	Patakata, Shymdashguri Bajugaon	3	0.6	New Technology
	Jorhat				1. Initial and final NPK status in soil
T2: Recommended doses of NPK	nded				2.Plant height, plant stand, pod/plant, seed/pod and seed
T3 :Farmers practices					3.yield/ha
					4. B:C
					Farmer Practice
					1. Initial and final NPK status in soil
					2.Plant height, plant stand, pod/plant, seed/pod and seed
					3.yield/ha
					4. B:C

FRONT LINE DEMONSTRATION

Discipline: Soil Science



FLD - (Soil Science)

: Bio fertilizer seed treatment in toria var TS-36 Title Thematic Area : Soil health Problem Diagnosed : Low nutrient use efficiency and high cost involved with chemical fertilizer Technology/ Social Source of Location No. of demos Parameters of Concept to be technology proposed assessment/refinement Assessed and year of release Demo Area (ha) (No)

Crop: Toria (TS-36)	AAU, Jorhat	Shyamdesguri, Katribari	1.5	5	 Initial and final soil NPK status
T ₁ -75% RD of N and P fertilizer along with					2. Plant growth
seed treatment of biofertilizers					3.Yield
(Azotobacter & PSB @ 40 g/kg seed) and RD of K fertilizer					4. B:C ratio
T₂ -100% RD of NPK fertilizer without biofertilizers seed treatment					

FLD - (Soil Science)

: Fabrication of a low cost vermicomposting structure

Thematic Area: Soil health

Title

Problem Diagnosed : High cost of construction materials of concret vermicomposting unit

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area (Unit)	Demo (No)	
T ₁ - Low cost vermicomposting in concrete pits with dimension of 2.5 m	AAU, Jorhat	, Haraputa, at Kujrabguri, Garufella, Jiaguri, Borobadha, Mornoi, Bhomrabill no1 Kochugaon	10	10	1. Duration of composting
					2. Count of earthworm spp
					3. Total production/cubic m
(L) X 0.91 m (B) X 0.91 m (D) T₂- Farmers' practice					4. B:C ratio

FLD - (Soil Science)

Title

: Integrated nutrient management of chilli under rice fallow medium land situation

Thematic Area: Soil health

Problem Diagnosed : Degradation of soil health due to inorganic fertilizer based practices

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area (ha)	Demo (No)	
T1- Half of RDF+ Vermicompost 2 split dose	AAU, Jorhat	Padmabil, Habrubil, Restekpur, Haraputa	0.2 ha	4	1.Initial and final status in soil (NPK)
					 Growth parameters of crop (Plant height, Leaf no)
T₂ -Farmers Practices	armers tices				 Yield attributing character(Fruit no/Plant)
					4. B:C ratio
FLD - (Soil Science)

: Nutrient management in Foxtail millet

Thematic Area: Soil health

Title

Problem Diagnosed : Poor management practices

Technology/ Social Concept to be AssessedSource of technology and year of releaseLocat technology and technology and techn	Location	No. of demos proposed		Parameters of assessment/refinement		
	year of release		Area (ha)	Demo (No)		
T1- N:P:K @ 20:10:10 kg/ha as	T1- N:P:K @AICRP on millets20:10:10 kg/ha asRARS Gossaigaonbasal doseAICRP on millets	Restekpur, Basantipur	1.5 ha	5	1. Initial soil test value (NPK)	
Dasal dose						
T2-Check without fertilizer				3. Yield attributing character		
					4. Yield	
					5. B:C ratio	

TRAINING

Discipline:Soil Science



Training for farmer and farm women

- Management soil acidity for oil seed and pulse crop
- Water harvesting and soil- water conservation practices
- Fertilizer use efficiency for field crops
- Production technology of Azolla and its use in crop production
- Importance of micronutrient in sustainable vegetable crop production
- Influence of sulphur and boron for oil seed crop production
- Integrated nutrient management in boro rice
- Uses of soil health card for sustainable crop production .

Training for Rural Youth

- Zinc nutrition in hybrid rice production
- Soil Fertility management of high density planting of banana

Training for Extension Functionaries

Organic farming and sustainable agriculture

Vocational Training

- Vermicompost and enriched compost production technology
- Use Soil test kit and preparation of soil health card

Action Plan 2017-18

Dicipline: Plant Protection



ON FARM TRIAL

Discipline: Plant Protection





On Farm Trial - Plant Protection

Title

Integrated management approach against important insect pests and rodents of coconut.

Thematic Area: Integrated Pest Management

Problem Diagnosed: Insect pests are diverse and needs selective treatments for

management and so is with rodents.

Technology/ Social Concept to be	Source of technology	Source of Location technology	No. of tria	lls proposed o be	Parameters of assessment/refinemen		
Assessed and year of release		Number (No.)	Area (plants)		t		
T1-1.Cut fronds leaving a petiole length of 120 cm, 2.Log trapping with toddy for red palm weevil, 3.Use of pheromone traps @ 20 per ha4.Setting up of light traps, 5.Trunk branding with aluminum sheet, 6.Inject attacked palm with hexaconazoule 1% 7.Bromodiolone @ 30 bait points/ha,	CPCRI Kasaragodda	1.Joyma 2.MukulDanga 3.Bhawraguri	3	15 coconut plants	1. 2. 3. 4.	Insect collected in log trapping (Red palm weevil), Insect trapped in pheromone traps (Rhinocerous beetle/red palm weevil), Number of dropped mature nut, (rodents) Number of	
T2-Farmers practice						nuts (mite),	
T3-Without treatment					5.	Number of mature nuts in an inflorescence Yield	
 2.Log trapping with toddy for red palm weevil, 3.Use of pheromone traps @ 20 per ha4.Setting up of light traps, 5.Trunk branding with aluminum sheet, 6.Inject attacked palm with hexaconazoule 1% 7.Bromodiolone @ 30 bait points/ha, T2-Farmers practice T3-Without treatment 		з.впаwragun			2. 3. 4. 5.	Insect trapped pheromone tra (Rhinocerous beetle/red pall weevil), Number of dropped matur nut, (rodents) Number of dropped small nuts (mite), Number of mature nuts in inflorescence Yield	

On Farm Trial - Plant Protection

: IPM in tomato.

Title

Thematic Area: Biological Control.

Problem Diagnosed: Even though large scale production of tomato is there but there is regular incidence of major insect pests.

Technology/ Social Concept to be Assessed	Source of Location technology	No. of propose	trials d to be	Parameters of assessment/refi		
	and year of release		Number Area (No.) (ha)		nement	
 T1- Mechanical control – hand picking Use of neem cake Need based use of pesticides Use of pheromone trap T2-Farmers Practice T3-Control 	AAU, Jorhat	•Bhumbrabil, •Kathalguri, •Gokulkata •Bhumka •Ballimari	5	0.67	 Fruit drop, Incidence of wilt, Adult count in the trap Mature healthy fruit count, B:C Ratio Yield 	



Lingun



Phytophthora crown rot.



On Farm Trial- Plant Protection									
Title: Biological management methods of grey mould, leaf spot and phythopthora crown rot disease in strawberryThematic Area: Biological control .Problem Diagnosed: The occurrence of leaf spots, grey mould and crown rot detected in some pockets is seen as problems that needs immediate attention.									
Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refi nement				
			Number (No.)	Area (ha)					
 T1-Application of Bio-Time (Combination of Pseudomonas fluorescens, T. viride and Metarhizium anisopliae) Seedling root dip treatment, Soil application T2-Farmers Practice T3-Control 	DBT-AAU Centre, AAU, Jorhat	1.Kusumbil 2. Milan Bazar 3.Bhawraguri	3	0.4	 Leaf spot count, Grey mould infected fruit, Rot infected plants, Yield 				

FRONT LINE DEMONSTRATION

Discipline: Plant Protection



FLD (Plant Protection)

The influe : IPM in jute. Thematic Area : Integrated Pest Management. Problem Diagnosed : Large mortality of young as well as mature plants with insecticides as the only mode of management.									
Technology/ Social Concept to be Assessed	Source of technology	of Location gy	No. of demos proposed		Parameters of assessment/refinem				
	and year of release		Area (ha)	Demo (No)	ent				
 Application of T. viride @ 2.5 kg/ha in soil at the time of final ploughing One manual weeding and thinning 3-4 weeks after emergences followed by wheel hoeing at 4-5 weeks after emergence. Spraying of Neem oil @ 5 ml/L water + sticker Spraying of Quinalphos 25 EC @ 2.5 ml/L Crop: Jute 	AAU	Palasguri Padmabil Sapkata	0.65	5	 Count of dead/wilted young saplings, Count of adult weevil, Black rot wilted plants Yield 				

FLD (Plant Protection)

Title: Performance of year round production of Oyster mushroom.Thematic Area: Product evaluation (Efficacy)Problem Diagnosed: There is huge demand of raw mushroom in the area but availability is during November to April.									
Technology/ Social Concept to be Assessed	Source of technology and	Location	No. of demos proposed		Parameters of assessment/refinement				
	year of release		Area (ha)	Demo (No)					
 All weather mushroom production chamber, Spawn storage unit, 	Department of Plant Pathology AAU, Joraht	Harwaputa Dalgoan Malaguri Saraibil Patakata	5	5	 Oyester mushroom size, Flush period, Yield, B:C ratio, 				

FLD (Plant Protection)

: Management of wilt and rhizome rot in ginger.

Thematic Area : Biological method

Title

Problem Diagnosed : Large scale death of plants due to incidence of rhizome rot with less effectiveness of prevalent fungicides.

Technology/ Social Concept to be Assessed	Source of L technology and year of	urce of Location N nnology year of		demos osed	Parameters of assessment/refineme nt	
	release		Area (ha)	Demo (No)		
 Application of Bioveer (<i>Trichoderma viride</i>) / Biozium (<i>T.harzianum</i>)/ Bio-Time (Combination of <i>Pseudomonas</i> <i>fluorescens</i>, <i>T.viride and</i> <i>Metarhizium anisopliae</i>) Rhizome treatment Soil treatment Crop: ginger 	DBT-AAU AAU, Jorhat 2015	Hatibandha Tipkai Alokjhar Jomduar Bandarmori	0.67	5	 Number of disease free plants, Incidence of rot in treated and check plots Cost benefit ratio, Yield 	

TRAINING

Discipline: Plant Protection



Training for farmer and farm women

- IPM on rice crop.
- Management of important insects and diseases of coconut/arecanut.
- Diseases of banana cause, precautionary measures and management methods.
- Preservation of ITK for pest and disease management.
- Management of stored grain pests.
- Management of important insect pests diseases of chilli.
- Late blight of potato its integrated management methods.

Training for Rural Youth

- Scope of entrepreneur development through biopesticide production.
- Recent advances in pests and disease management.

Training for Extension Functionaries

Recent development in pest management strategy.

Vocational Training

- Production technology of honeybee.
- Production technology of oyester mushroom.

Action Plan 2017-18

Discipline: Home science



ON FARM TRIAL

Discipline: Home science



OFT -Home Science

Title: Product Diversification of Handwoven Dhokhona design for bed spread.Thematic Area: Weaving.Problem Diagnosed: Low Market Value of Handwoven fabric. Non inclusion of elements and principal of design										
Technology/ Social Concept to be Assessed	Source of technolog y and	Location	No. propos	of trials sed to be	Parameters of assessment/refinement					
	year of release		Unit	No						
T1- Bodo DokhonaFarDesign/MotifInBed Spread.	Farmers ITK	Maktaigaon Khujrabguri, Habrubil,	3	3	New Technology					
					1. Color Scheme					
					2. Principal of design.					
T2- Bodo Dhokhona Design					Farmer Practice					
(Size-1.5mts wide & 2.5 mts)	Design Ints wide &			 Colour Scheme Principle Of Design A Balance B. Rhythm C.Harm ony D Emphasis E. Repeatation 						

OFT-Home Science

Title: Treatment of mal- nourished children (SAM/MAM) through nutritionally rich value added product of buckwheat.Thematic Area: Technique of child care (Improve BMI)Problem Diagnosed:Poor Immunity and more susceptible to disease. High Mortality and morbidity in the district.(NHM data)								
Technology/ Social Concept to be Assessed	Source of technology and year of	Location	No. of propos be	trials ed to	Parameters of assessment/refinement			
	Telease		Unit	No				
T1-		Simaltapu PGR	4		New Technology			
Treatment of mal- nourished children	AAU	No.1 Palashguri		4	1. BMI calculation			
through buckwheat		Hasraubari			2. Head circumference.			
after malting process.					3. Mid Upper arm circumference			
T2-					4. Weight to age ratio			
Without treatment.	t i i i i i i i i i i i i i i i i i i i				5. Bilateral Pitting Odema.			
			6. Plotting growth chart in MCP card.					

OFT-Home Science

Title: Application of natural dye on yarn.Thematic Area: Organic dye introduction/ utilizationProblem Diagnosed:High cost of synthetic dye. Poor awareness on eco- friendly fiber/
fabric. Non use of locally available natural dye

Technology/ Social Concept to be Assessed	Source of technology and year of	Location No. c propo		Location	No. of trials proposed to be		Parameters of assessment/ refinement
	release		Unit	No			
Application of natural	Application of natural AAU, Jorhat M ye on yarn with Si Spinach leaves. Si Plaintain B	Maktaigoan	12	12	New Technology		
dye on yarn with •Spinach leaves. •Plaintain •Basil leaves		Sapkata Shyamdasguri Batabari Giyaguri Diajijhiri Padmabil			1.Colourfastness to sunlight, washing and pressing.		
•Onion					2. Intensity of colour in the yarn		
T1- With alum							
T2- Control (Without treatment).							

FRONT LINE DEMONSTRATION

Discipline: Home science

KVK Kokrajhar.

FLD:Home Science

itle: Ergonomically design weaving chair for fly-shuttle WeaversIhematic Area: Drudgery reductionProblem Diagnosed: Poor body Posteur leads to fatigue.Frequent moving leads to high energy consumption									
Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of Demos proposed to be		Parameters of assessment/refinement				
			Unit	Demo (No)					
Drudgery reduction	AAU Jorhat	Padmabil Hatibandha Diajijhiri Maktaigoan	4	4	New Technology				
technology					Time				
					Height				
					Working Capacity				
					Farmer Practice				
					 Time Height Working Capacity 				

FLD: Home Science

: Maize Sheller- Rotatory type

Thematic Area : Drudgery reduction

Title

Problem Diagnosed : Use of tradional method of shelling maize

Technology/ Social Concept to be AssessedSource of technology and year of releaseLocation	No. of Demos proposed to be		Parameters of assessment/refinement		
	Telease		Unit	Demo (No)	
T1 – Maize Sheller	AAU Jorhat	Khatribari	16	8	<u>New Technology</u>
T2- Farmers practice		Goan Chulka Malagury Chengmari Panowary Maktaigoan Sapkata			Utility
(hand Shelling)					Time
					Farmer Practice
					Utility
					Time



Discipline: Home science

KVK Kokrajhar.

Training for farmer and farm women

- Drudgery reduction technology of Farm women
- Flower base making from waste materials.
- Preservation of fruits through pickling
- Value Addition of Fabric through tie and dye
- Glass painting

Training for Rural Youth

- Hygiene and sanitation for adolescent Girls
- Artificial Flower Making
- Block printing.

Training for Extension Functionaries

- Deficiency diseases and diet for rural folk
- Malnutrition/obesity in children and its treatment through diet.

Vocational Training

- Value addition of Fabric through Embroidery.
- Carpet and table mate weaving.

Awareness Camp of Home Science

- Importance of early and exclusive breast feeding for infant.
- Awareness camp on De-worming and Vitamin A.

Awareness Camp of Home Science

- Awareness camp on Hand Washing Practices (UNICEF).
- Importance of early and exclusive breast feeding for infant.
- Awareness camp on De-worming and Vitamin A.

Action Plan 2017-18

Discipline: Fisheries Science





Discipline: Fisheries Science



On Farm Trial - : Fisheries Science

Title

: Performance evaluation of *in situ* grown Dhaincha in highly erodible light textured soil of homestead pond.

Thematic Area:Pond Management.

Problem Diagnosed: Water retention capacity of soil is poor

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of trials proposed		Parameters of assessment/refinement	
			Number (No.)	Area (ha)		
T ₁ : Sowing of Dhaincha @ 60 kg/ha at the pond bottom T ₂ : Farmer Practice (Without treatment)	FRC,AAU, Jorhat,2013	Katribari Maktaigaon Hatigarh	3	0.39	New Technology	
					1. Length-weight data & FCR	
					2. Water quality parameter such air and water temperature, pH, D.O, Free CO2, Total Alkalinity, Total Hardness , Nitrate, phosphate and Ammonia	
					3. Monthly average rainfall and evaporation	
					4. Water depth at the time of stocking & rearing period	
					5. B:C ratio analysis	
					Farmers Practice	
					1. Length-weight data & FCR	
					2. Water quality parameter such air and water temperature, pH, D.O, Free CO2, Total Alkalinity, Total Hardness, Nitrate, phosphate and Ammonia	
					3. Monthly average rainfall and evaporation	
					4. Water depth at the time of stocking & rearing period	
					5. B:C ratio analysis	

On Farm Trial -: Fisheries Science

Title:Study on growth and production of Mozambique tilapia (Oreochromis mossambicus) with bronze feather back (Notopterus chitala) in shallow homestead ponds.Thematic Area: Feed Management Problem Diagnosed: High cost of feed											
Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed		Parameters of assessment/refinement						
Assessed			Number (No.)	Area (ha)							
T₁: Introduction of	FFSc, AAU,2012	Tulsibil Katribari Hatigarh	3	0.39	New Technology						
Mozambique tilapia					1. Length-weight data and FCR						
mossambicus) with					2 Date of stocking						
bronze feather back					3. Disease infestation						
(Notopterus chitala) for					4. B:C ratio analysis						
@100:1					Farmers Practice						
					1. Length-weight data and FCR						
T ₂ :Farmers practices					2. Date of stocking						
					3. Disease infestation						
					4. B:C ratio analysis						

On Farm Trial -: Fisheries Science

Title:Effect of Tulsi (Ocimum tenuiflorum) treatment on sensory quality of dry fishThematic Area: Value additionProblem Diagnosed: Off odour and flavor

Technology/ Social Concept to be Assessed	Source of technology	Location	No. of trials proposed		Parameters of assessment/
	and year of release		Number (No.)	Area (Unit)	refinement
T ₁ : Dip treatment of dry fish	FFSc, AAU,Jorhat, 2014	Hatigarh Goladangi Mulandubi	3	3	New Technology
of 55% moisture content in 5% Tulsi Solution and again					1. Sensory analysis
drying up to final moisture content of 10%					2. Percentage change in income
I_2 : Dip treatment of dry fish of 55% moisture content in 10% TulsiSolution and again drying up to final moisture content of 10% T_3 :Control (without treatment)					3. B:C ratio analysis

FRONT LINE DEMONSTRATION

Discipline: Fisheries Science


: Fertilizer Management of Composite fish culture

Thematic Area

Title

: Pond Management

Problem Diagnosed : Unscientific management of fish culture

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of c propo	demos osed	Parameters of assessment/refinemen		
			Area (ha)	Demo (No)			
T₁ : Application dose of organic and inorganic	FRC,AAU, 2010	Tulsibil Katribari	1.33	10	 Length-weight data & FCR 		
fertilizers i.e., 2000 kg of cow dung/ha initially and 1000kg of cow dung/ha monthly, 25kg/ha of		Hatigarh Tengavita			2. Date of stocking and application of fertilizer		
	Pakiiyuii			3. Disease infestation			
Urea and 20kg/ha SSP					4 B:Cratio analysis		
monthly, 180 kg/ha rice- bran and mustard oil cake at 1:1 ratio throughout culture period.							5. Farmer Reaction
T ₂ : Farmer practice							

Title Thematic Area Problem Diagnose : Scientific species combination and ratio in composite fish culture

: Composite fish culture (Other)

Problem Diagnosed : Inappropriate stocking with incompatible species

Technology/ Social Concept to be	Source of technology	of Location ogy r of e	No. of prop	demos bosed	Parameters of assessment/refinement				
	and year of release		Area (ha)	Demo (No)					
T ₁ : Culture of IMC Catla-15%, Rohu-15%,	FRC,AAU, 2010	Bajugaon Tulsibil	0.66	5	1.Length-weight data & FCR				
Mrigal-20% and exotic carp Silver carp-20% ,Grass carp10% and Common carp-20%	Mokrambil Kokingabari Chota Gorjan			 Water depth at the time of stocking & rearing period 					
@Stocking ratio:					3. Date of stocking				
1.5:1.5:2:2:1:2									4. Disease infestation
respectively					5. Farmers' reaction				
T ₂ :Farmer practice					6. B:Cratio analysis				

: Post stocking management of fish pond

Thematic Area : Pond Management

Problem Diagnosed : Unscientific fish culture

Title

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/ refinement
			Area (ha)	Demo (No)	
T₁: Regular application of lime @ 1250 kg/ha/year, Cow dung	FRC,AAU, 2012	Tulsibil, Kurchakati, Usatari, Teteliguri, Silguri	0.65	5	 Length-weight data & FCR
@ 1000 kg/ha/month, Urea @ 25kg/ha/month and SSP @ 20kg/ha/month, supplementary feed @ 3690kg/ha/year (rice-bran and mustard oil cake at 1:1 ratio). T_2 : Farmer practice	2012				 Water depth at the time of stocking & rearing period
					3. Unit wise production of fish
					4. Date of stocking
					5. Disease infestation
					6. Farmers' reaction
					7. B:Cratio analysis

: Multiple stocking and multiple harvesting

Thematic Area : Pond management

Problem Diagnosed : Low production and income

Title

Technology/ Social Concept to be Assessed	Source of technology and year of	Location	No. of demos proposed		Parameters of assessment/refinement
	release		Area (ha)	Demo (No)	
T ₁ :Stocking of fish seed in high quantity (12000 , nos/ha/yr) and harvest of marketable size of fish after 4 month and restocking of equal quantity of fish seed of	FFSc .AAU &	Tulsibil Hatrigarh Goladangi South Kurusatti Gorufella	0.66	5	1. Total production
	2012 G S K				2. Water depth at the time of stocking & rearing period
					3. Length-weight data
					4. Date of stocking
same species that were harvested					5. Disease infestation
T_2 :Farmer practice					6. Farmers' reaction
					7. B:Cratio analysis



Discipline: Fisheries Science



Training for farmer and farm women

- Management of Composite fish culture
- Common Carp breeding
- Quality fish seed and its importance in fish culture
- Integrated fish cum pig farming
- Periphyton based aquaculture system
- Scientific species combination and ratio in composite fish culture
- Seed production of Major carp

Training for Rural Youth

- Integrated fish cum horticulture (2)
- Integrated paddy cum fish culture (2)
- Nutritional requirements of finfish (2)

Training for Extension Functionaries

- Fish preservation methods (2)
- Fish farming Technologies for flood prone areas (2)

Vocational Training

- Integrated Fish Farming System (IFS)
- Fish Diseases in Inundated waters of Assam

Action Plan 2017-18

Discipline: Animal Science





Discipline: Animal Science

KVK Kokrajhar.

On Farm Trial – : Animal Science

Title

: Introduction of Rani pig under backyard management condition in Kokrajhar district

Thematic Area : Breed introduction

Problem Diagnosed: Low productivity of the local pig

Technology/ Social Concept to	Source of technolog y and year of release	Location	No. of t propo	trials sed	Parameters of assessment/refinement
be Assessed			Number (No.)	Unit (No.)	
Breed- Rani pig	ICAR- Maki National Ald Research Gui Centre on pig,Rani	Maktaigaon	3	3	New Technology
		Alokjhar Gurufella			1.Growth rate performance
					2.Weight gain at 8 months of age
					3. Disease resistance capacity
					4.Adaptability with the local condition
					Farmer Practice

On Farm Trial – : Animal Science

Title: Studies on the impact of calcium and phosphorus mixture supplement
on milk production and general health management of cross bred Dairy
Animals.

Thematic Area: Feed managementProblem Diagnosed: Poor quality feeding system

Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of trials proposed		Parameters of assessment/refinement
			Number (No.)	Unit (No.)	
Mineral supplement as critical input @30gram/day/nos	College of Veterinary Science,AAU, Khanapara,	Gorufela Hogmabil Kembelpur	5	5	<u>New Technology</u>
					1.Milk production performance
					2. Resistance to deficiency diseases
					3.Reproductive performance
					4.Health status of new born calf
					Farmer Practice

FRONT LINE DEMONSTRATION

Discipline: Animal Science



FLD-:Animal Science

Title : Introduction of Khaki Chambel duck under local condition in Kokrajhar district Thematic Area : Breed Introduction Problem Diagnosed: low productive quality of locally available duck						
Technology/ Social Concept	Source of technology and	Location	No. of trials proposed		Parameters of assessment/refinement	
to be Assessed	year of release		Number (No.)	Demo (Unit)		
Breed- Khaki	State Institute	Bazugaon	5	30	New Technology	
Chambel duck	of Rural Devlopment, Assam,	No.2 Hatigarh sirfunguri			1. Growth rate performance	

2. 1st day egg layed

4. Resistance Disease

Farmer Practice

condition

3.Adaptability with the local

Khanapara Guwahati-22

FLD – :Animal Science

Title

: Preventive health care management of poultry reared under backyard condition

Thematic Area : Disease control

Problem Diagnosed: high economic lose due to outbreak of disease

Technology/ Social Concept to	Source of technology and	Location	No. of propo	trials sed	Parameters of assessment/refineme
be Assessed	year of release		Number (No.)	Demo (Unit)	nt
Vaccination schedule Mineral supplement	College of Veterinary Science,AAU, Khanapara, Guwahati-22	Karigaon Pattakata Hatibandha Bhomrabill Kodomguri	5	5	New Technology
					1.Growth performance
					2. Mortality rate

FLD – :Animal Science

Title

: Incorporation of creep feeding method to over come the piglets mortality in early weaning period

Thematic Area : Feeding management

Problem Diagnosed: High piglet mortality due to malnutrition

Technology/Source of technology		Location	No. of propose	trials d to be	Parameters of assessment/refinement
to be Assessed	and year of release		Number (No.)	Demo (Unit)	
Mineral mixture Colleg with 20% crude Veteri protein @ Science Khana Guwah	College of Veterinary Science,AAU, Khanapara, Guwahati-22	Alokjhar No.2 Borbadha Maktaigaon Karigaon	5 nos	10 nos	<u>New Technology</u>
					1.Growth performance
					2. Mortality rate
					3. Good quality piglet
					Farmer Practice

Training for farmer and farm women

- Introduction of improved backyard dual purpose bird in Kokrajhar.
- Upgrading of local goat through Artificial Insemination with Bettal Buck Semen
- Use of brooding practices to reduce the mortality in poultry farming
- Common diseases and its management of the poultry diseases.
- Importance of Mineral on the Milch breed/Cross bred during lactating period.

Training for Rural Youth

- Up gradation of indigenous cattle through A.I with high yielder breed of cattle.
- Scientific management of newborn piglets to reduced the neonatal mortality rate
- Integrated cattle cum crop/fodder cultivation system.

Training for Extension Functionaries

- common diseases of poultry, its diagnosis , management and control measures.
- Role of backyard poultry on the improvement of socio-economic condition of farm women

Vocational Training

Scientific commercial broiler Farming

SEED PRODUCTION



Action Plan for Seed Production at KVK Farm during 2017-18

Season	Crop	Variety	Area	Estimated Production (Qt)
Kharif	Paddy	Ranjit Sub-1	0.25 ha	10.0 q
		Gitesh	0.50 ha	20.0 q
		TTB 404	0.75 ha	36.0 q
	Mesta	HC-583	0.50 ha	Seed- 4.0 q Fibre- 8.0 q
	Sesame	SG-1	0.25 ha	1.5 q
	Turmeric	Megha Turmeric-1	0.05 ha	15.0 q
	Ginger	Nadia	0.05 ha	7.5 q
Rabi	Niger	NG-1	1.00 ha	5.0 q
	Buckwheat	Local	1.00 ha	12.0 q
	Linseed	Shekhar	0.50 ha	4.0 q

Target for seed production, Planting material for the

year 2017-18

Activity	Target
Seed production	50 tones
Planting materials	10000 nos
Fingerlings (Ornamental)	2000 nos
Bio pesticide (Bioveer)	100 kg

Extension Activities proposed for the year 2017-18

Activity	Target
Diagnostic visit	110
Advisory services/ telephone talk	400
Training Manual	9
Celebration of Important days	6
Exhibition	4
Exposure visit	9
Extension literature (Leaflet/ folders/ Pamphlets)	16
Extension / technical bulletin	16
News letter	1
News paper coverage	26
Research publications	9
Success stories/ Case studies	12
Farm Science Clubs' Convenors meet	4
Farmers' Seminar	4

Extension Activities proposed for the year 2017-18

Activity	Target
Ex-trainees' meet	2
Field day	22
Film show	4
Radio Talk	24
TV talk	3
Kishan Goshthi	4
Group Meeting	15
Kishan Mela	3
Soil Health Camps	1
Awareness camp	10
Method demonstration	25
Scientists' visit to farmers' field	175
Workshop/ Seminar	8

Extension Activities proposed for the year 2017-18

Activity	Target
Soil Testing	8000
Water Testing	50
Plant Testing	100
Manure Testing	50
SMS Service	150
Farmers' Scientist Interaction	15

Thank you... for patience listening