Action Plan for the year 2016-17

Discipline: Agronomy

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Agronomy

KVK Kokrajhar.

On Farm Trials – Discipline: Agronomy

Title: Varietal performance of late sown toria (var.TS-67) .
Thematic Area: Varietal evaluation
Problem Diagnosed: Low productivity of toria due to late sowing

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number	Area	
Crop: Toria Variety: TS-67 Sowing of seeds in mid Nov-mid to Dec,16.) Farmers Practice-Local variety	RARS, shillongani, AAU	Malaguri, Joyma, Sonapur .	3	0.8 ha	**New Technology** 1. Plant height 2. Fruit/plant 3. Yield/plant 4. Yield/plant 5. B:C Ratio **Farmer Practice** 1. Plant height 2. Fruit/plant 3. Yield/plant 4. Yield/plant 5. B:C Ratio

On Farm Trials – Discipline: Agronomy

Title: Weed management in Boro rice
Thematic Area: Integrated Weed Management
Problem Diagnosed: Low yield of summerrice due to severe weed infestation during summer season

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number	Area	
Application of Pretilachlore 0.75 kg/ha or butachlore @ 1.0 kg /ha as pre emergence at 0-3 DAT followed by by paddy weeder at 30 DAT	AICRP project on weed control, AAU, Jorhat	Kadamguri, Daoligauri, Joyma	3	0.8 ha	**New Technology**
					1. Initial and final NPK status of soil
					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 Trials – Discipline: Agronomy

Title: *Utera* cropping of grass pea with Sali rice
Thematic Area: Tillage Management
Problem Diagnosed: Mono cropping due to late harvesting of Sali rice

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number of farmers	Area	
Application of 6 kg DAP to the relay crop (grass pea)and cutting of stubble height of rice at 20 cm	RRPS-34 (NATP), AAU, Jorhat 2004	Kujrabguri, Sonapur, Dotma	3	0.8 ha	**New Technology**
					1. Initial and final NPK status of soil
					2. Plant height, plant population, pod /plant, seed/ pod
					3. Yield
					Farmer Practice
					1. Initial and final NPK status of soil
					2. Plant height, plant population, pod /plant, seed/ pod
					3. Yield

FRONT LINE DEMONSTRATION

Discipline: Agronomy

KVK Kokrajhar.

FLD - (Discipline: Agronomy)

Title: FLD on Hybrid maize
Thematic Area: Varietal evaluation
Problem Diagnosed : Low productivity of Maize due to use of local variety

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment
			Area	Demo	
Crop: Maize var. : Hybrid Sowing time: Nov-Dec. Seed rate: 22.5 kg /ha Fertilizer dose: N: P_2O_5: K_20 /ha:=60:30:30	AICRP on Maize, AAU, Jorhat	Maktaigaon, Balipara, Malaguri	1.0 ha	5	**New Technology** 1.Initial and final NPK status in soil 2.plant height, plant population, seed/ Panicle 3.Seed Yield 4. Date of sowing and harvest **Farmer Practice**

FLD - (Discipline: Agronomy)

Title: FLD on SRI technology during summer Rice
Thematic Area: Integrated Crop Management
Problem Diagnosed : High cost of production in traditional method

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment
			Area	Demo	
Crop: rice var. : HYV/Hybrid Sowing time: Nov-Dec. Seed rate: 5 kg /ha with SRI practice	IARI, 2012	Kathalguri, Goibari, Kalugaon	2.0 ha	8	**New Technology**
					1.Initial and final NPK status in soil
					2.plant height, plant population, seed/ Panicle
					3.Seed Yield
					Farmer Practice
					1.Initial and final NPK status in soil
					2.plant height, plant population, seed/ Panicle
					3.Seed Yield

FLD - (Discipline: Agronomy)

Title: Use of HYV of lentil (HUL-57)
Thematic Area: Varietal evaluation
Problem Diagnosed : Low yield of local varieties

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment
			Area	Demo	
Crop: Lentil var. : HUL-57 Sowing time: Mid Oct- Mid Nov. Seed rate:30 kg /ha Fertilizer dose: N: P_2O_5: K20/ha=10:35:0	RARS, Shilongani	Kujrabguri, amlaiguri, Bajugaon	1.0 ha	6	**New Technology** 1.Initial and final status in soil 2.Plant height, plant population, pod/ plant, seed/ pod 3.Seed Yield 4. Date of sowing and harvest **Farmer Practice**

TRAINING

Descipline: Agronomy

KVK Kokrajhar.

Training for farmer and farm women

- Certified seed production of Sali rice
- Scientific production technology for Kharif pulses
- Scientific production technology for Rabi pulses and oil seeds
- Improved production technology of Maize
- Scientific production technology of Boro rice
- Water management practice for Rabi crops

Training for Extension Functionaries

- Recent Advancement in weed management
- Awareness programme on climate change

Vocational Training

- Integrated Farming System

Action Plan for the year 2016-17

Discipline: Horticulture

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Horticulture

KVK Kokrajhar.

On Farm Trials – Discipline: Horticulture

Title: Varietal performance of broccoli variety Everest
Thematic Area: Varietal evaluation
Problem Diagnosed: Low productivity of existing varieties

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
T1- broccoli variety Everest **T2-** Farmers practice **T3**-Check-Recommended variety	Department of Horticulture, AAU, Jorhat	Dotma, Jiaguri and Katribari	0.13	3	**New Technology** 1. Plant height (cm) 2. Head weight (g) 3. Head diameter (cm) 4. Cull head weight (g) 5. Head yield (q) 6. B:C ratio **Farmer Practice** 1. Plant height 2. Head weight (g) 3. Head diameter (cm) 4. Cull head weight (g) 5. Head yield (q) 6. B:C ratio

On Farm Trials – Discipline: Horticulture

Title: Varietal performance of tomato variety Arka Rakshak
Thematic Area: Varietal evaluation
Problem Diagnosed: Low yield of local varieties and susceptible to bacterial wilt

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
T1-Tomato Hybrid Arka Rakshak resistant to bacterial wilt and leaf curl virus **T2**- Farmers practice **T3**-Check variety- Swaraksha	IIHR, Bangalore, 2013	Sarfanguri Dotma Bajugaon	0.13	3	**New Technology** 1.Plant height (cm) 2.Days to 50% flowering & fruiting 3.Yield/ plant (kg) 4.yield/ ha (q) 5.B:C ratio **Farmer Practice (Local Varities)** 1.Plant height (cm) 2.Days to 50% flowering & fruiting 3.Yield/ plant (kg) 4.yield/ ha (q) 5.B:C ratio.

On Farm Trials – Discipline: 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/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
T1-Bunch cover in banana with white propylene bag for effective control of fruit scaring beetle. **T2**-Farmers Practice-Bunch Cover with Gunny bag **T3**-Control-Without cover	Department of Horticulture, AAU, Jorhat	Dotma, Kokrajhar and Goladangi	0.13	3	**New Technology (White propylene bag)** 1. Fingers per hand 2. Hands per bunch 3. Bunch weight (g) 4. Pest incidence (%) 5. Consumer preference 6. B:C ratio **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

KVK Kokrajhar.

FLD - (Discipline: Horticulture)

Title: Varietal performance of Okra hybrid
Thematic Area: Varietal evaluation
Problem Diagnosed : Low yield of local varieties

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Crop: Okra Okra hybrid variety Sankar (AAUOK Hyb 1)	Department of Horticulture, AAU, Jorhat	Bhomrabill Jiaguri Khatribari	0.13 ha	5	1. Plant height (cm) 2. Fruit no/plant 3. No. of ridges/fruit 4. Fruit length (cm) 5. Fruit weight of 10 fruits 6. Fruit yield/plant (kg) 7. Fruit yield/ha (q) 8. Incidence of YVMV (%) 9.Consumer preference 10. B:C ratio

FLD - (Discipline: Horticulture)

Title: Varietal performance of high yielding roselle variety
Thematic Area: Varietal evaluation
Problem Diagnosed : Low yield of local varieties

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Crop: Roselle High yielding Roselle variety RS 09-01	Department of Horticulture, AAU, Jorhat	Jiaguri Khatibari Maktaigaon	0.13 ha	7	1. Plant height at first leaf picking (cm) 2 Duration to first leaf picking 3. Days to 1st fruit picking from sowing 4. Leaf weight (g/plant) 5. No. of leaf harvest 6. Leaf yield (q/ha) 7. B:C ratio 9.Consumer preference

FLD - (Discipline: 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 technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Crop: Tuberose High Mulching with 50 micron black polyethylene film	Department of Horticulture, AAU, Jorhat	Telipara Kadamguri Kusumbil	0.13 ha	5	1. Plant height (cm) 2. Spike length (cm) 3. Rachis length (cm) 4. No. of florets/spike 5. Spike duration (days) 6. No. of bulb/plant 7. Vase life (days) 8. Spike yield/ha (q) 9. Weed biomas 10.B:C ratio

FLD - (Discipline: Horticulture)

Title: Popularization of heat tolerant cauliflower variety
Thematic Area: Varietal evaluation
Problem Diagnosed : Non availability of heat tolerant cauliflower variety

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Crop: cauliflower Heat tolerant cauliflower variety Himani	Department of Horticulture, AAU, Jorhat	Maktaigaon Bajugaon Dotma	0.26 ha	8	1. Plant height (cm) 2. Curd diameter (cm) 3. Curd weight (cm) 4. Disease incidence(%) 5. Consumer preference 6. Yield/ha (q) 7. B:C ratio

TRAINING

Discipline: Horticulture

KVK Kokrajhar.

Training for farmer and farm women

- Organic production technology of cabbage and cauliflower.
- Scientific production technology of pointed gourd and spine gourd.
- Commercial cultivation of banana, pineapple and papaya.
- Commercial cultivation technology of coconut and arecanut.
- Improved cultivation technology of potato with reference to TPS.
- Scientific cultivation of ginger and turmeric.
- Scientific cultivation technology of tapioca and colocasia.
- Multi-storeyed cropping in arecanut and coconut based cropping systems.
- Nursery raising techniques of transplanted vegetable crops
- Protected cultivation techniques of off-season vegetable crops.
- Scientific cultivation technology of chow-chow.
- Different propagation techniques of black pepper and betel-vine.
- Improved cultivation practices of okra and cowpea

Training for Rural Youth

- Training on general tools and implements used in horticulture nursery.
- Processing of vegetables for pickle making.
- Horticulture nursery as a source of self-employment.
- Year round production of vegetables inside low cost polyhouse.

Training for Extension Functionaries

- Multi-storeyed cropping models for higher yield and income.
- Scientific cultivation technology of strawberry.

Vocational Training

- Processing of fruits and vegetables for different value added products

Awareness Camp

- Use of tissue culture banana against panama wilt
- TPS as the best planting material for potato cultivation.

Action Plan for the year 2016-17

Discipline: Soil Science

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Soil Science

KVK Kokrajhar.

On Farm Trials – Discipline :Soil Science

Title: Integrated nutrient management of Kharif Black gram
Thematic Area: Soil health
Problem Diagnosed: Poor soil health & low nutrient use efficiency

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number of farmers	Area	
T1- RD of NPK+ Seed inoculated with rizobium and PSB @ 50 gm/kg of seed **T2**- RDF of NPK without seed inoculation **T3**- Farmers practices	AAU	Kujrabguri, Alokjhar, Hatigarh	3	0.6 ha	**New Technology** 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 **Farmer Practice**

On Farm Trials – Discipline :Soil Science

Title: Phosphorus management in Rice- Linseed sequence
Thematic Area: Soil management
Problem Diagnosed: Low availability of phosphorus

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number of farmers	Area	
In Rice **T1**-75% of RD of P2O5 + PSB In Linseed 75% of RD of P2O5 **T2**- Recommended doses of NPK in rice and linseed **T3**- Farmers practices	AAU	Padmabil, Kembelpur Sialmari -2	3	o.6 ha	**New Technology** 1.Initial fertility status of the soil 2.Date of sowing and harvest 3.Incidence of pest and diseases 4.Yield and yield attributing characters **Farmer Practice**

On Farm Trials – Discipline :Soil Science

Title: Effect of Boron on the productivity of wheat
Thematic Area: Soil management
Problem Diagnosed: Poor availability of nutrient and low yield

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number of farmers	Area	
T1: Basal Application of Borax @ 10.0 kg/ha+ RDF **T2**: No Borax application + RDF **T3-** Farmers practices	AAU, Shillongoni	Kembelpur, Rangagaon, Padmabil	3	o.6 ha	**New Technology**
					1. Initial and final NPK status in soil
					2.Nutrient uptake
					3.Plant height, plant stand, pod/plant, seed/pod and seed
					4.yield/ha
					5. B:C
					Farmer Practice

FRONT LINE DEMONSTRATION

Discipline: Soil Science

KVK Kokrajhar.

FLD - (Discipline: Soil Science)

Title: FLD on biofertilizer seed treatment in toria var TS-38
Thematic Area: Soil health
Problem Diagnosed : Low nutrient use efficiency and high cost involved with chemical fertilizer

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Crop: Toria (TS-38) **T1** -75% RD of N and P fertilizer along with seed treatment of biofertilizers (Azotobacter & PSB @ 40 g/kg seed) and RD of K fertilizer **T2** 100% RD of NPK fertilizer without biofertilizers seed treatment	AAU	Shyamdesguri Maktaigaon, Ghoshkata, Banargaon, Amlaiguri	1.5 ha	5	1. Initial and final soil NPK status 2. Plant growth 3.Yield 4. B:C ratio

FLD - (Discipline: Soil Science)

Title: Fabrication of a low cost vermicomposting structure
Thematic Area: Soil health
Problem Diagnosed : High cost of construction materials of concret vermicomposting unit

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T1- Low cost vermicomposting in concrete pits with dimension of 2.5 m (L) X 0.91 m (B) X 0.91 m (D) **T2-** Control (Concrete structure)	AAU, Jorhat	Dawaguri, Sapkata, Howriahpet, Haraputa, Padmabil, Dotma, Ambari, Basbari, Diajijuri, Bhalokjora	10 units	10	1. Duration of composting 2. Count of earthworm spp 3. Total production/cubic m 4. B:C ratio

FLD - (Discipline: Soil Science)

Title: FLD on 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	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T1- Half of RDF+ Vermicompost 2 split dose **T2**-Farmers Practices	AAU, Jorhat	Dhawliguri, Padmabil, Hatibandha, Habrubil, Diajijuri, Kembelpur, Dotma, Restekpur, Joyma	0.2 ha	10	1.Initial and final status in soil (NPK) 2. Growth parameters of crop (Plant height, Leaf no) 3. Yield attributing character(Fruit no/Plant) 4. B:C ratio

TRAINING

Discipline: Soil Science

KVK Kokrajhar.

Training for farmer and farm women

- Management soil acidity for oil seed and pulse crop
- Impact of green manuring crop in soil fertility
- Management of soil fertility for vegetable crops
- 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 crop production
- Influence of sulphur and boron for oil seed crop production
- Integrated nutrient management in field crops
- Integrated nutrient management in boro rice
- Fertility management practices for plantation crops(Coconut)
- Management of soil erosion and conservation
- Uses of soil health card for crop production and soil health management.

Training for Rural Youth

- Production technology of bio fertilizer
- Soil fertility management for fruit crops
- On farm soil water conservation measures
- Zinc nutrition in hybrid rice production
- Soil Fertility management of high density planting of banana

Training for Extension Functionaries

- Organic farming and sustainable agriculture
- Soil health management and soil health card

Vocational Training

- **Vermicompost and enriched compost production technology**

Awareness Camp

- **Soil Health campaign**

Action Plan for the year 2016-17

Dicipline: Plant Protection

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Plant Protection

KVK Kokrajhar.

On Farm Trials - Discipline: 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.

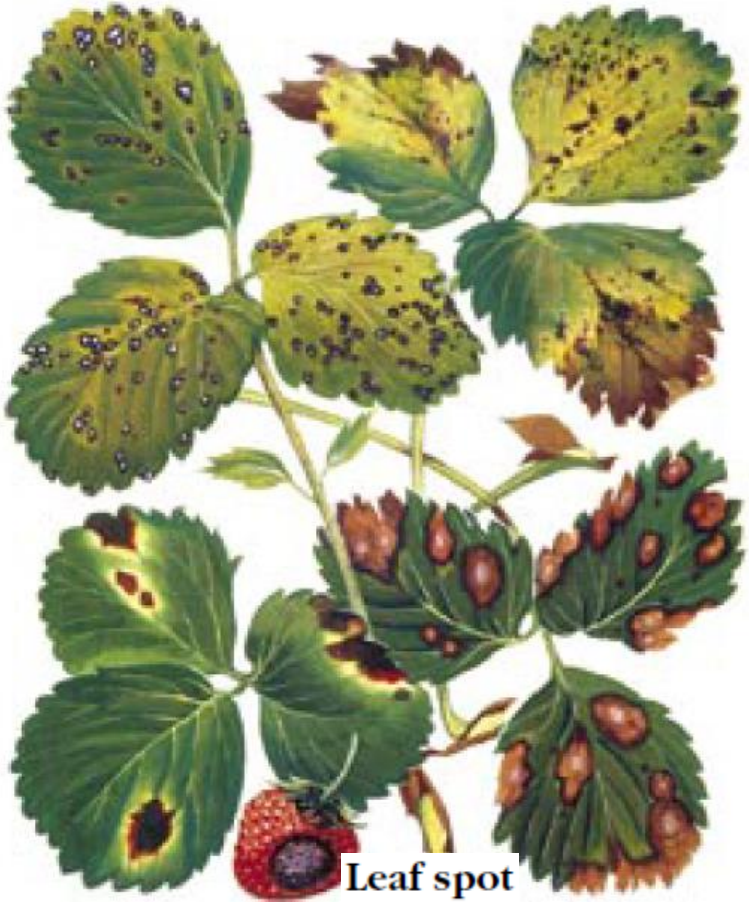
Technology/ Social Concept to be Assessed	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			No of farmers	Area	
T_1-1.Cut fronds leaving a petiole length of 120 cm, 2.Log trapping with toddy for red palm weevil, 3.Use of pheromone traps @ 20 per ha4.Setting up of light traps, 5.Trunk branding with aluminum sheet, 6.Inject attacked palm with Carbaryl 1% 7.Bromodiolone @ 30 bait points/ha, **T2**-Farmers practice **T3**-Without treatment	CPCRI Kasaragodda	1.Joyma 2.MukulDanga 3.Diajajhari 4. Dhauliguri	10	15 coconut plants	1. Insect collected in log trapping (Red palm weevil), 2. Insect trapped in pheromone traps(Rhinocerous beetle/red palm weevil), 3. Number of dropped mature nut, (rodents) 4. Number of dropped small nuts (mite), 5. Number of mature nuts in an inflorescence

On Farm Trials - Discipline: Plant Protection

Title: Management of bacterial wilt of tomato.
Thematic Area: Biological Control.
Problem Diagnosed: Bacterial wilt is a severe problem in all the tomato growing areas of the district. Indiscriminate use of wide ranges of chemicals (as suggested by agro shops).

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number	Area	
T1-Application of Bioveer (*Trichoderma viride*) / Biozium (*T.harzianum*)/ Bio-Time (Combination of *Pseudomonas fluorescens, T.viride* and *Metarhizium anisopliae*) as Seed treatment, Nursery bed treatment, Seedling root dip treatment,Soil application **T2**-Farmers Practice **T3**-Control	DBT-AAU Centre, AAU, Jorhat	1.Kembelpur 2.Alokjhar 3.Shyamdasguri	3	0.3	1. Germination percentage, 2. Seedling count, 3. Incidence of wilt, 4. Mature healthy plant count at fruit setting stage, 5. B:C Ratio 6. Yield

Grey mould.



Leaf spot

Phytophthora crown rot.

Healthy plant

On Farm Trials - Discipline: Plant Protection

Title: Biological management methods of grey mould, leaf spot and phythopthora crown rot disease in strawberry

Thematic 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	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Number	Area	
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.Kadamguri 2. Goladangi 3.Dhauliguri	3	0.4	1. Leaf spot count, 2. Grey mould infected fruit, 3. Rot infected plants, 4. Yield

FRONT LINE DEMONSTRATION

Discipline: Plant Protection

KVK Kokrajhar.

FLD (Discipline: Plant Protection)

Title: Light traps for managing insects.
Thematic Area: Mechanical Methods
Problem Diagnosed : Chemical insecticides has deleterious effect on the environment and human health

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Monitor or mass trapping of both sexes of phototrophic insects. Crop: Rice	NCIPM, New Delhi 2015	Joyma Peripur Maktaigaon	0.80 ha	3	1. Count of insect pests in peak reproduction stage, 2. Count of Adult population during start of cropping season, 3. Count of Yellow stem borer/earhead bug/mole cricket 4. Yield

FLD (Discipline: Plant Protection)

Title: Front Line Demonstration of bird scarring device (reflective ribbon) against depredatory birds (Munia and weaver birds) in rice crops.
Thematic Area: Other Beneficial Methods
Problem Diagnosed : Birds control by other methods are not effective

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
1.During sunshine the reflection of sunlight and humming noice produced by the wind scare the bird 2.It also protect the adjacent uncovered plants	RARS, North Lakhimpur	Lotamari Bhalukmari Palashguri Tulshibil Sialmari-1 Kathalguri	10 unit	10	1. Birds repelled, 2. Birds found neglecting the ribbon, 3. Yield, 4. B:C ratio,

FLD (Discipline: Plant Protection)

Title: 'Amulya Amrit' for pest and disease management
Thematic Area: Innovative methods of pest management
Problem Diagnosed : Continuous application of Chemical Methods of pest & disease management has damaged the soil and the eco-system

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
A mixture of cow urine, cow milk, curd, honey, green banana, coconut paste and ghee are kept in sealed container. This mixture is kept in shade covered with wet gunny bags for three days and thereafter the bags removed and the container is opened to release the gas and stirred with stick. The fermented solution is 'Amulya Amrit' Crop: Tomato	ICAR – Farm Innovators 2010	Gokulkata Bhomrabil Gaonsulka Joyma Gendrabil	0.7 ha	5	1. Disease incidence . 2. Insect count, 3. B:C ratio, 4. Yield

FLD (Discipline: Plant Protection)

Title: Management of wilt and rhizome rot in ginger
Thematic Area: Biological method
Problem Diagnosed : Biological control measures are effective against all bio-types of diseases & has long lasting control action

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
Application of Bioveer (*Trichoderma viride*) / Biozium (*T.harzianum*)/ Bio-Time (Combination of *Pseudomonas fluorescens, T.viride and Metarhizium anisopliae*) •Rhizome treatment •Soil treatment	DBT-AAU AAU, Jorhat-13 2015	Hatibandha Tipkai Alokjhar Jomduar Bandarmori	0.4 ha	7	1. Number of disease free plants, 2. Incidence of rot in treated and check plots 3. Cost benefit ratio, 4. Yield

TRAINING

Discipline: Plant Protection

KVK Kokrajhar.

Training for farmer and farm women

- Eco friendly methods of pest and disease management.
- Important diseases/insects of coconut/arecanut and their management.
- Diseases of banana – cause, precautionary measures and management methods.
- Integration of traditional methods of pest management with modern methods.
- Management of mole cricket in paddy and maize.
- Diseases of strawberry and their management.
- Pest diversionary approach in rice.
- IPM –its concepts and application.
- Insect pest and disease management in tomato, chilli and brinjal crop.
- Biological management approach against white fly in okra.
- Rodent management in field and store.
- Late blight of potato – its integrated management methods.
- Important diseases of pulse and its management.

Training for Rural Youth

- General tools against insect pests and rodents – a brief discussion.(1)
- Recent advances in pests and disease management.(1)
- Identification of locally available natural predators and their conservation.(1)
- Artificial queen rearing techniques.(2)

Training for Extension Functionaries

- Introduction to Agro Eco System Analysis.(1)
- Pesticides-uses and misuses and basic precautions in pesticide uses.(1)

Vocational Training

- Production technology of Oyester mushroom.(4)

Awareness Camp

- Indiscriminate use of hazardous chemicals in mushroom production.
- Deleterious affect of chemical pesticides on environment and human health.

Action Plan for the year 2016-17

Discipline: Home science

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Home science

KVK Kokrajhar.

On Farm Trials - Discipline: Home Science (No.1)

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	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
T1- *Bodo Dokhona* Design/Motif in Bed Spread. **T2- Bodo Dhokhona Design** (Size-*1.5mts wide & 2.5 mts*)	Innovative Concept	Maktaigaon Khujrabguri, Habrubil, .	3 unit	3	**New Technology** 1. Color Scheme 2. Principal of design. **Farmer Practice** 1. Colour Scheme 2. Principle Of Design A Balance B.Rhythm C.Harmony D Emphasis E Repeatation . .

On Farm Trials - Discipline: Home Science (No.2)

Title: Value Added product from '*Mesta*' (*Hibicus Sabdariffa*) Fibre.
Thematic Area: Utilization of Bio Degraded product .
Problem Diagnosed: Least use of Mesta Fibre.

	and year of release				
			Area	No	
Handicraft T1- Wall Hanging from *Mesta* Fibre. T2- Wall Hanging from Jute.	Innovative	Fakiragram, Padmabil,	4 unit	4	**New Technology** 1. Strength of *Mesta* fibre with jute 2. Colour fastness to sunlight. 3. Texture 4.Benefit Cost ratio. **Farmer Practice** 1. Strength of *Mesta* fibre with jute 2. Colour fastness to sunlight. 3. Texture 4. Benefit Cost ratio

On Farm Trials - Discipline: Home Science (No.3)

Title: Detection and treatment of SAM Children (7 month- 3 yrs) and treatment through NRC.
Thematic Area: Technique of child care (Improve BMI)
Problem Diagnosed: Poor Immunity and more susceptible to disease.
High Mortality and morbidity

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
• Plotting **Growth Chart** in MCP Card. •**Mid Upper arm Circumstances.** •**Head Circumference** • Refferal mechanism –**NRC** •**Assam Mix**	AAU	Bajugaon, Tulsibil, Matiajuri, Karimbazar	12 unit	12	**New Technology** 1. BMI calculation 2. Head circumference. 3. Upper arm circumference 4. Weight to age ratio **Farmer Practice** • BMI calculation • Head circumference. • Upper arm Circumference • Weight To Age Ratio • Bilateral Pitting Odema.

Green zone: > 12.5 cm = Normal

Yellow zone: 11.5 to 12.5 cm = Moderate Acute Malnutrition (MAM)

Red zone: <11.5 cm= Severe Acute Malnutrition (SAM)

Immediately refer the child to NRC for admission

Visible Severe Wasting

Front view :

- Outline of ribs easily seen
- Skin of upper arm looks loose
- Skin of thighs looks loose

Posterior view :

- Ribs and shoulder easily seen
- Folds of skin loose around buttocks and thighs

Infrastructure for NRC

IPD room

Play room

Feeding room

Kitchen

On Farm Trials - Discipline: Home Science (No.4)

Title: Construction of Low Cost Bakery and confectionary unit.
Thematic Area: Use of Women friendly tool.
Problem Diagnosed: Poor Immunity and more susceptible to disease.
High Mortality and morbidity

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			Area	No	
Heat conductivity **Heat trapping** **•T1- Heat transfer through Sand.** **•T2- Heat transfer through Oven.**	Traditional method	Padmabil, Kokrajhar, Gossaigoan, Choraikhola, Habrubil.	5 unit	5	**New Technology** 1. Colour of Food product 2. Crispyness of food. 3. Texture 4. Durability of baked item. 5. Time taken 6. Uniformity of baked item 7. Fuel consumption 8. Cost of production. **Farmer Practice** 1. Colour,Cripiness of Food,Texture,Durability , uniformity of Baked Item. 2. Fuel Consumption 3. Cost of Production.

FRONT LINE DEMONSTRATION

Discipline: Home science

KVK Kokrajhar.

FLD - No.1 (Discipline: Home Science) No.1

Title: Application of Natural dye on yarn
Thematic Area: Organic dye introduction/ utilization
Problem Diagnosed : High cost of synthetic dye
Non use of locally available natural dye
unaware about Eco friendly fibre/fabric

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of Demos proposed to be		Parameters of assessment/refinement
			Area	No	
Application of Natural dye on yarn *i)* *Dhatura* Leaves ii) Seed of Annato	AAU Jorhat	Padmabil, Hatibandha, Diajijhiri	7 unit	7	**New Technology** 1. Colour fastness under sunlight 2. Pressing 3. Washing 4.Cost of production **Farmer Practice**

FLD - No.2 (Discipline: Home Science)

Title: Ergonomically design weaving chair for fly-shuttle Weavers

Thematic Area: Drudgery reduction

Problem Diagnosed : Poor body Posteur leads to fatigue.
Frequent moving leads to high energy consumption

Concept to be	technology and year of release		proposed to be		assessment/refinement
			Area	No	
Drudgery reduction technology	AAU Jorhat	Padmabil, Hatibandha, Diajijhiri, Maktaigoan	4 unit	4	**New Technology** Time Height Working Capacity **Farmer Practice** 1. Time 2. Height 3. Working Capacity

FLD - No.3 (Discipline: Home Science)

Title: Flower Base Construction and wall hanging from Waste Materials.
Thematic Area: Utilization of waste material (Bio Degraded/Bio Non Degraded)
Problem Diagnosed : Poor knowledge on reutilization of waste

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of Demos proposed to be		Parameters of assessment/refinement
			Area	No	
Handicraft • Flower Base making • Wall hanging.	AAU Jorhat	Oxiguri, Padmabil, Hatibandha, Diajijhiri, Maktaigoan	8 unit	8	**New Technology** Utility Marketability Durability **Farmer Practice** 1. Waste are treated as waste 2. Unaware of refinement of waste products.

FLD - No.4 (Discipline: Home Science)

Title: Maize Sheller- Rotatory type
Thematic Area: Drudgery reduction
Problem Diagnosed : Use of tradional method of shelling maize

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of Demos proposed to be		Parameters of assessment/refinement
			Area	No	
T1 – Maize Sheller T2- Farmers practice (hand Shelling)	AAU Jorhat	Maktaigoan Batabari, Gaonchulka, Ballimari, Khatribari, Dhauliguri, Chengmari, Jiaguri, Malaguri,	14 unit	14	**New Technology** Utility Time **Farmer Practice** Utility
					Time

TRAINING

Discipline: Home science

KVK Kokrajhar.

Training for farmer and farm women

- Deficiency diseases and diet for rural folk
- Hygiene and sanitation for adolescent Girls
- Value addition of Fruit (Jam)
- Drudgery reduction of Farm women
- Household Nutrition security through nutritional Gardening
- Value addition of Vegetable through pickle making. (Mixed vegetable Pickle)
- Training on Bakery and confectionary.(Cake and biscuit)
- Preparation of Supplementary food (Assam Mix)
- Value Addition of Fabric through Stencil Printing
- Preparation of Tomato Sauce, green chilli sauce
- Glass painting
- Training of Eligible couple on family Planning Practices.

Training for Rural Youth

- **Artificial Flower Making**
- **Block printing on table mate**
- **Value addition of prawn**

Training for Extension Functionaries

- Importance of Vitamins and minerals in diet specially for diet of PW, Lactating Women and Adolescent Girl.
- Malnutrition/obesity in children and its treatment through diet

Vocational Training

- Value addition of Fabric through Embriodery (F/FW)(2 days)
- Construction of Children Garments and value addition through Tie and dye. (RY)(4 Days)

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 for the year 2016-17

Discipline: Fishery

KVK Kokrajhar.

ON FARM TRIAL

Discipline: Fishery

KVK Kokrajhar.

On Farm Trials - Discipline: Fishery

Title: Performance evaluation of Low cost polyethylene 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	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			No	Area	
T-1:Use of low cost black polyethylene (LDPE, 5 micron thickness)@Rs 200/sqm for water harvesting structure. **T-2**: Application of high dose of organic manure @10,000 kg/ha at the depth of 1-1.5m **T-3**: Farmer Practice	CIFE, MUMBAI	Hatigarh, Kadamguri, Titaguri	3	0.15 ha	**New Technology** a)Length-weight data & FCR b) Water quality parameter such air and water temperature, pH, D.O, Free CO2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia b) Monthly average rainfall and evaporation c) Water depth at the time of stocking & rearing period d)Qualitative and Quantitative analysis of plankton e) B:Cratio analysis **Farmer Practice**

On Farm Trials - Discipline: Fishery

Title Study on Bi-culture of Mozambique tilapia (*Oreochromis mossambicus*) with bronze feather back (*Notopterus chitala*) in shallow homestead ponds.
Thematic Area: Feeding Management
Problem Diagnosed: High cost of fish feed

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			No	Area	
T-1.Bi-culture of Mozambique tilapia with bronze feather back chital in 400-500 m2 shallow ponds of 1-1.5m depth @100:1 **T-2:** Monoculture of tilapia in 400-500 m2 shallow ponds of 1-1.5m depth @ 2nos/sqm **T-3:**Monoculture of chital in 400-500 m2 shallow ponds of 1-1.5m depth @ 1nos/sqm	CIFRI, BARRACKPORE	Kajak para, padmabil& Rajapara	3	0.15 ha	**New Technology** a) Length-weight data & Food Conversion ratio(FCR) b)Water quality parameter such air and water temperature, pH, D.O, Free CO2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia c) Water depth at the time of stocking &rearing period d)Qualitative and Quantitative analysis of plankton e) B:C ratio analysis **Farmer Practice**

On Farm Trials - Discipline: Fishery

Title Study on growth of indigenous minor carps Mali (*L calbasu*) and Kurhi (*L gonius*) as an alternative of Common carp (*Cyprinus carpio*) under composite carp culture technology

Thematic Area: OTHERS (Poly culture of carps)

Problem Diagnosed: Common carp has some drawbacks i.e.; browsing of pond embankment, prolific breeding nature etc. This results in economic loss to the farm.

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of trials proposed to be		Parameters of assessment/refinement
			No	Area	
T-1: Culture of IMC Catla-25%, Rohu-20%, Mrigal-15%,and minor carp of Mali-20%, Kurhi-20% @ Stocking density 5500 nos/ha **T-2:**Culture of IMC Catla-15%, Rohu-15%, Mrigal-20% and exotic carp Silver carp-20% ,Grass carp10% and Common carp-20% @ Stocking density 5500 nos/ha **T-3** :Farmers practices	FRC,AAU	Koklingbari Nayagaon Dawaguri	3	0.39 ha	**New Technology** a) length-weight data and FCR b) Water quality parameter such air and water temperature, pH, D.O, Free CO2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia d) B:Cratio analysis **Farmer Practice**

FRONT LINE DEMONSTRATION

Discipline: Fishery

KVK Kokrajhar.

FLD (Discipline: Fishery)

Title: Nutrient Management of Composite fish culture
Thematic Area: Pond Management
Problem Diagnosed : Unscientific management of fish culture

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T-1: Application dose of organic and inorganic fertilizers i.e., 2000 kg of cow dung/ha initially and 1000kg of cow dung/ha monthly. 25kg/ha of Urea and 20kg/ha SSP monthly, 180 kg/ha rice-bran and mustard oil cake at 1:1 ratio throughout culture period. **T-2**: Farmer practice	FRC,AAU	Ghoskata,Dingdinga& Kairabani	1.33 ha	10	a) Monthly length-weight data b) Water quality parameter such air and water temperature, pH, D.O, Free CO_2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia c)Qualitative and Quantitative analysis of plankton d) B:Cratio analysis

FLD (Discipline: Fishery)

Title: Feeding carps with balanced diet
Thematic Area: OTHERS(Semi intensive culture of carps)
Problem Diagnosed : In-appropriate of feeding of carp

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T-1 Introduction of Sushma a balanced diet formulated and manufactured by FRC, AAU Requirement : One kg feed per fish to grow up to one kg with in one year Depth : 1.5 - 2.5 m Stocking density : 5500/ha Stocking materials : Stunted yearlings (carried over seed) Stocking time : April-May Pond size: 450 - 800 m2 Feeding method : Bag feeding **T-2**: Farmer practice	FRC,AAU	Kochumbil Fakrigram Bhauraguri	0.66 ha	5	a)Water quality parameter such air and water temperature, pH, D.O, Free CO_2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia b) Water depth at the time of stocking & rearing period c) Plankton growth d) Date of stocking e) Measurement of monthly length-weight data f)Disease infestation g) Farmers' reaction

FLD (Discipline: Fishery)

Title: Scientific species combination and ratio in composite fish culture
Thematic Area: OTHERS (Composite fish culture)
Problem Diagnosed : Inappropriate stocking with incompatible species

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T-1: Culture of IMC Catla-15%, Rohu-15%, Mrigal-20% and exotic carp Silver carp-20% ,Grass carp10% and Common carp-20% @ Stocking density 5500nos/ha Depth : 1.5 - 2.5 m Stocking density : 5500/ha Stocking materials : Stunted yearlings (carried over seed) Stocking time : April-May Pond size: 450 - 800 m2 Feeding method : Bag feeding **T-2**:Farmer practice	FRC,AAU	Alangmari, Dambruguri Khagrabari	0.66 ha	5	a) Monthly length-weight data b) Water quality parameter such air and water temperature, pH, D.O, Free CO_2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS c) Water depth at the time of stocking & rearing period d) Plankton growth e) Date of stocking f) Disease infestation g) Farmers' reaction

FLD (Discipline: Fishery)

Title: Raising air-breathing fishes like Magur (*Clarias batrachus*) in small swallow ponds
Thematic Area: OTHERS(Air-breathing fish culture)
Problem Diagnosed : Low water level of fish pond

Technology/ Social Concept to be	Source of technology and year of release	Location	No. of demos proposed		Parameters of assessment/refinement
			Area	Demo	
T-1: Culture of Magur in shallow ponds Pond size:<200sqm Depth :1-1.5m depth Stocking density: 7nos/sqm of size sized fish (5-10 g) Feed : 3-5% body weight **T-2:** Farmer practice	FRC,AAU	Bhawlaguri, Balimari Batabari	0.10 ha	5	a) Water quality parameter such air and water temperature, pH, D.O, Free CO_2, Total Alkalinity, Total Hardness, Turbidity, Transparency, TS, TDS and Nitrate, phosphate and Ammonia b) Water depth at the time of stocking & rearing period c) Plankton growth d) . Date of stocking e) Monthly length-weight data f)Disease infestation g) Farmers' reaction

TRAINING

Discipline: Fishery

KVK Kokrajhar.

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
- Scientific construction of a fish pond
- Water quality management in fish culture.
- Integrated Poultry-Pig-Fish-Horticulture Crop Farming System
- Periphyton based aquaculture system
- Scientific species combination and ratio in composite fish culture
- Diversification of fresh water prawn in composite fish culture
- Carp seed raising in homestead pond
- Construction of Rain water harvesting structure for fish culture
- Air-breath fish culture

Training for Rural Youth

- Livestock component as a part of integrated fish farming (2)
- Problem and Prospect of Beel fisheries development in Kokrajhar district (1)

Training for Extension Functionaries

- Recent advances in fish farming(2)
- National aquatic animal disease surveillance programme (2)
- Assam Fisheries Rules (1)

Vocational Training

- Aquarium construction and maintenance
- Entrepreneurship Development though Mega seed production of Exotic ornamental Species.

Awareness Camp

- Conservation of Indigenous ornamental of Assam
- Responsible Fisheries and Aquaculture practice in Assam

Seed Production

KVK Kokrajhar.

Target for seed production, Planting material for the year 2016-17

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 2016-17

Activity	Target
Diagnostic visit	110
Advisory services/ telephone talk	304
Training Manual	9
Celebration of Important days	4
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
Farmers' visit to KVKs	145

Extension Activities proposed for the year 2016-17

Activity	Target
Ex-trainees' meet	2
Field day	22
Film show	4
Radio Talk	24
TV talk	3
Kishan Goshthi	0
Group Meeting	11
Kishan Mela	1
Soil Health Camps	1
Awareness camp	10
Method demonstration	25
Scientists' visit to farmers' field	144
Workshop/ Seminar	7

Extension Activities proposed for the year 2016-17

Activity	Target
Soil Testing	1500
Water Testing	50
Plant Testing	100
Manure Testing	50
SMS Service	150
Farmers' Scientist Interaction	2

Thank you…
for patience listening