ANNUAL ZONAL ACTION PLAN

2022

KRISHI VIGYAN KENDRA, IMPHAL EAST

Staff Position

Sl No.	Name of the incumbent	Designation	Discipline
1		Sr. Scientist & Head	-
2	S. Molibala Devi	Subject Matter Specialist	Home Science
3	Md. Abdul Salam	Subject Matter Specialist	Fishery
4	Nandini Chongtham	Subject Matter Specialist	Agronomy
5	Gunajit Oinam	Subject Matter Specialist	Agri. Engg
6	Dr. H. Ramananda Singh	Subject Matter Specialist	Entomology
7	Dr. Priyadarshini Salam	Subject Matter Specialist	Horticulture
8	Dr. Th. Sushilkumar Singh	Programme Assistant	Veterinary
9	Smt. M. Bharti Devi	Programme Assistant	Computer Sc.
10	O. Singhajit Singh	Jr. Steno cum Comp. Operator	
11	Shri. H. Budhi Singh	Driver	NA
12	Shri. Sh. Jiten Singh	Driver	NA
13	Smt. Ch. Tilotama Devi	Supporting staff	NA
14	Shri. Ch. Bijen Singh	Supporting staff	NA
15		Farm Manager	-
16		Office Assistant	-

Recommendations of 14th SAC Meeting held on 12th Jan 2022

Discipline	Suggestion	Action taken
1. OFT :		
Fisheries	Specification on similarity of pond environment like pond depth should be given on all OFTs	Incorporated
Home Science	Addition of another treatment of blanching for 5 minutes-drenching- drying on OFT of Osmo dehydrated pineapple slices	Incorporated
Ag. Engg.	Mention the water volume on OFT of mini sprinkler in onion through treadle pump	Incorporated
2. FLDs:		
Fisheries	Highest and lowest growth on FLD of mixed tilapia and carp culture should be added	Will be incorporated
Horticulture	Check soyabean variety for intercropping with ginger. The variety should be bushy and not spreading type.	Incorporated bushy type variety of soyabean

Sl. No.	Title of the OFT (12 nos.)
1	Performance evaluation of Silver Barb (*Barbonymus gonionotus*) in monoculture system
2	Performance evaluation of Pabda (*Ompok bimaculatus*) in composite culture
3	Seed production of *Anabas testudineus* (Ukabi) and *Clarius magur* (Ngakra)
4	Performance of Osmo dehydrated Pineapple Slices
5	Extraction of fibre from Okra through optimum retting time
6	Nutri-Rich crop diversification in nutritional garden
7	Performance evaluation on Gravity Fed Drip Irrigation system in increasing Tomato Yield
8	Performance evaluation of mini sprinkler in onion through treadle pump: A low cost irrigation option for marginal Farmers
9	Management of Diamond Back Moth and Cabbage Butterfly in Cabbage for Higher Productivity
10	Management of Fall Armyworm
11	Organic Cultivation of King Chilli
12	Assessment of Onion variety- Arka Kirthiman and Arka Bheem

OFT-01

Performance evaluation of Silver Barb (*Barbonymus gonionotus*) in monoculture system

2nd year

Enterprise	Prioritized Problem	Details of technology	Source	Observations
Fisheries	➢ Non practices of minor carp farming by the farmers. ➢ Huge gap in demand and supply of fish in the state.	Stocking density – 120000/ha (fry) Feeding rate – 3 % body weight Feeding interval – twice a day Feed : Floating feed (30-32 % Protein) Culture period: 120 days **T1**= 80000 fingerling/ha; **T2**= 100000 fingerling/ha; **T3**= 120000 fingerling/tank	CIFA, 2018	➢ Survival rate after 120 days ➢ Growth after 120 days ➢ Net return ➢ BCR

Area	**0.75**
Replications	**3**
Cost per Trial	**Rs. 40000**
Total Cost	**Rs. 120000/-**

OFT-02

Performance evaluation of Pabda (*Ompok bimaculatus*) in composite culture

2nd year

Enterprise	Prioritized Problem	Details of technology	Source	Observations
Fisheries	➢ Non culture of Pabda in the district ➢ Huge gap in the production and fish diversity	Stocking density – 10000/ha Feeding rate – 3 % body weight Feeding interval – twice a day Feed : Floating feed (30-32 % Protein) Culture period: 6 months **T1**= 8000 fingerling/ha; **T2**= 10000 fingerling/ha; **T3**= 12000 fingerling/tank	COF, 2018	➢ Survival rate after 120 days ➢ Growth after 120 days ➢ Net return ➢ BCR

Area	**0.75**
Replications	**3**
Cost per Trial	**Rs. 40000**
Total Cost	**Rs. 120000/-**

Scientists
SMS- Fisheries

OFT-03

Seed production of *Anabas testudineus* (Ukabi) and *Clarius magur* (Ngakra)

2nd year

Enterprise	Prioritized Problem	Details of technology	Source	Observations
Fisheries	Insufficient availability of Anabas and magur seed	Breeding season- May-August Brooder size: 100-180 gm Ovatide- 0.5 ml per kg BW Oxytocin -40milli-International Units per kg BW (after 12 h)	COF, 2020	➢ Spawning rate ➢ Fertilization rate ➢ Survival

Unit	**3**
Cost per Trial	**Rs. 20000**
Total Cost	**Rs. 60000**
Unit	**3**

Scientists
SMS- Fisheries

OFT-04

Performance of Osmo dehydrated Pineapple Slices

2nd year

Crop	Prioritized Problem	Details of technology	Source	Observation
Pineapple	Limited value added pineapple products available in the district. Need for more novel pineapple products as pineapple has been identified as priotized crop of the district.	T_1: Soaking pineapple in normal sugar syrup for overnight T_2: Soaking pineapple slices in sugar syrup (60 degrees brix for 20 hours) T_3: Pre treatment of KMS @ 1.5 g/kg of pineapple for 8 hrs before osmosis followed by Blanching for 5 minutes-drenching-drying	**Navsari Agricultutre University, 2017**	1. Shelf life 2. Drying time 3. Acceptability (by Hedonic scale) 4. B:C ratio

Units	**5**
Replications	**5**
Cost per Trial	**Rs. 3000/-**
Total Cost	**Rs. 15000/-**

Scientists
SMS- Home Science, Horticulture

OFT-05

Extraction of fibre from Okra through optimum retting time

1st year

Crop	Prioritized Problem	Details of technology	Source	Observation
Okra	Non exploration of fibre extraction from bio-degradable Okra stalks	T_1: Optimization of water retting time at 10 days T_2: Optimization of water retting time at 15 days **Farmers practice**: Water Retting at 07 days	AAU Jorhat, 2017	1. Fibre recovery/kg of wet stalk 2. Fibre recovery/kg of dry retted fibre 3. Extent of fibre utilization for value addition

Units	**5**
Replications	**5**
Cost per Trial	**Rs. 7000/-**
Total Cost	**Rs. 35000/-**

Scientists
SMS- Home Science, Horticulture

OFT-06

Nutri-Rich crop diversification in nutritional garden

2nd year

Crop	Prioritized Problem	Details of technology	Source	Observation
Chia, Quinoa, seasonal vegetables	Limited nutri rich crops and vegetables in kitchen garden	➢ Incorporation of Chia in 80-100 sq.m area ➢ Incorporation of Quinoa in 50-80 sq.m ➢ Cultivation of nutri rich seasonal fruits and vegetables	ATARI Jabalpur 2019	1. Yield 2. Expected nutrient supplementation/100 g

Trial	**3**
Replications	**3**
Cost per Trial	**Rs. 3000/-**
Total Cost	**Rs. 9000/-**

Scientists
SMS- Home Science, Horticulture

OFT-07

Performance evaluation of mini sprinkler in onion through treadle pump: A low cost irrigation option for marginal Farmers

1st year

Crop	Prioritized Problem	Details of technology	Source	Observations
Onion	High volume requirement of water with flooding system of irrigation on Onion and high cost of irrigation	Crop: Onion; Var.Arka Kirthiman Spacing:20cm x 10 cm Area: 0.75ha Mini-sprinkler: 110 lts /hr Pump: Treadle Recommended overlaping:30% Irrigation Scheduling: Alternate day **Farmer's Practice** Surface Irrigation (Manual)	Kerala Agricultural University, 2015	Water use efficiency (WUE = Crop yield kg/water consumption m^3), Field Capacity, Labour requirement, Yield, BCR

Area	**300 m^2/unit**
Replications	**3**
Cost per Trial	**Rs. 20000/-**
Total Cost	**Rs. 60000/-**

Scientists
SMS- Ag. Engg. Hort, PP

OFT-08

Performance evaluation on Gravity Fed Drip Irrigation system in increasing Tomato Yield

2nd year

Crop	Prioritized Problem	Details of technology	Source	Observations
Tomato	High volume requirement of water with flooding system of irrigation on Tomato, low water use efficiency, High weeding intensity.	Crop: Tomato var. Arka Rakshak Spacing: 45cm x 45 cm Area: 0.75 ha Irrigation Scheduling: Every three days **Farmer's practice** Surface Irrigation	College of Agri. Engg. & PHT, CAU (I), Ranipool, 2012	Water use efficiency (WUE = Crop yield kg/water consumption m3), Weed intensity index, Labour requirement, Yield, BCR

Area	**0.75**
Replications	**3**
Cost per Trial	**Rs. 20000/-**
Total Cost	**Rs. 60000/-**

Scientists
SMS- Ag. Engg. Hort, PP

OFT-9

Management of Diamond Back Moth and Cabbage Butterfly in Cabbage for Higher Productivity

3rd year

Crop	Prioritized Problem	Details of technology	Source	Observation
Cabbage	Severe infestation with Diamond Back Moth and Cabbage butterfly affecting yield of Cabbage	**Crop : Cabbage; Variety: Rareball** ➢ Spray of Neem Seed Kernal Extract 0.03% @ 5ml/ha at 10 days interval starting from 20 DAT for 4 times ➢ Farmer Practice	University of Horticulture and Forestry, Solan 2015	1. % damage 2. Yield of the crop 3. B:C ratio

Area	**0.6 ha**
Replications	**3**
Cost per Trial	**Rs.3500/-**
Total Cost	**Rs.10,500/-**

OFT-10

Management of Fall Armyworm

2nd year

Crop	Prioritized Problem	Details of technology	Source	Observation
Maize	Severe infestation of fall army worm affecting growth and yield of maize	**Crop : Maize** **Treatment 1:** ➢ Deep ploughing ➢ Application of sand or ash into plants whorl of affected plants ➢ Application of Bacillus thuringiensis @ 2g/lit **Treatment 2:** Farmer Practice	CAU (I)/DEE – Advisory, 2020	1. % damage 2. Yield of the crop 3. B:C ratio

Area	**0.75 ha**
Replications	**3**
Cost per Trial	**Rs. 4000/-**
Total Cost	**Rs.12,000/-**

Scientists
SMS- PP, Horticulture, Agronomy

OFT-11 Organic Cultivation of King Chilli — 1st year

Prioritized Problem	Details of technology	Source	Observation
King Chilli	➢ Low yield under farmers practice (Reliance on ITKs and not adopting scientific method of cultivation) ➢ Increased resistance of insect pest towards chemical measure	➢ FYM @ 10 t per ha to be applied at final land preparation ➢ FYM should be applied @ 1 kg/pit. ➢ Application of enriched compost @ 10 t/ha or 5 t/ha + biofertilizer. ➢ The pits should be prepared 30 days ahead of transplanting. ➢ Apply *Azotobacter* @ 5 gm, PSB @ 5 gm and Biofor Pf @ 100 gm/pit within 7 days of transplanting. ➢ Sowing: Last week of Feb - 1st week March	Technologies for Organic management of crops in NE India 2019 ICAR- ATARI Umiam	1. Days to germination 2. Plant height 3. No. of branches 4. No. of Fruits/plant 5. Yield/plant 6. BCR

Area	**0.5 ha**
Replications	**3**
Cost/ Trial	**Rs. 10000/-**
Total Cost	**Rs. 30000/-**

OFT-12 Assessment of Onion variety- Arka Kirthiman and Arka Bheem — 1st year

Crop	Prioritized Problem	Details of technology	Source	Observation
Onion	Low yield due to non-availability of suitable high yielding variety of onion	➢ **T1: Onion var. Arka kirthiman** (Potential yield: 45 t/ha, Duration: 125 -130 days) ➢ **T2: Var. Arka bheem :** (Potential yield: 47t/ha, Duration: 130 days, Suitable for both kharif and rabi season) Seed rate: 6 –8 kg/ha; Spacing: 20X10 cm; Sowing time: October Nutrient requirement: 80:50:80 kg NPK / ha Disease management: Seed treatment with Trichoderma Pest management: Use of trap strips, Neem oil @ 5% ➢ **T3: local variety (Nasik red/prema)**	IIHR 2010	1. Bulb weight (gm) 2. Bulb diameter (cm) 3. Bulb yield (q/ha) 4. B C ratio

Area	**0.5 ha**
Replications	**3**
Cost per Trial	**Rs. 3000/-**
Total Cost	**Rs. 9000/-**

Scientists
SMS- Horticulture, PP

Sl. No.	Title of the FLD (16 nos.)
1	Performance evaluation of *Anabas testudineus* (Ukabi) in farm pond
2	Monoculture of Monosex tilapia
3	Popularization of Tractor drawn potato Digger
4	Popularization of rice harvesting brush cutter (Crop Reaper) suitable for small area and hilly region
5	Low Cost Pusa Concentric Onion Storage Structure
6	Popularization of Jackfruit chips for Sustained Income
7	Popularization of nutri rich millet products
8	Popularization of Solar Cabinet Dryer
9	Popularization of hermetic storage system (grain pro's super bags) for increasing quality of grains/seeds
10	Popularization of Integrated Pest Management in rice
11	Popularizing Year round Oyster Mushroom production
12	Popularization on the use of pheromone trap for management of fruit fly in cucurbits
13	Intercropping Of Ginger With Soybean
14	Popularisation of Turmeric variety Megha Turmeric-1
15	Popularization of improved crossbreed pig
16	Popularization of dual purpose poultry – Vanaraja
17	Popularization of improved Backyard Layer Poultry Grammapriya

FLD-01

Performance evaluation of *Anabas testudineus* (Ukabi) in farm pond

2nd year

Problem: Poor growth, low productivity of local Anabas leading to low net return

Technology details:
Stocking density-80000/ha
Stocking time- May
Feeding method – Broadcasting
Feed – Floating feed
Feeding rate : 3-5 % BW

Source: CIFA, Bhubaneswar, 2018

Details of demonstration	
No. of demonstration	Area (ha)
03	0.75
Cost of the demo= Rs. 150000/-	

FLD-02

Monoculture of Monosex tilapia

2nd year

Problem: Poor growth low productivity of mixed tilapia and carp culture leading to low net return

Technology details:
Stocking density – 100000/ha
Stocking time- May-June
Feeding method - Broadcasting
Feeding rate – 3-5% BW
Feed- Floating

Source: CIFA, Bhubaneswar, 2013

Details of demonstration	
No. of demonstration	Units
05	05
Cost of the demo= Rs. 120000/-	

Team members
SMS – Fisheries

FLD-03

Popularization of Tractor drawn potato Digger

1st year

Prioritised Problem: High Cost of harvesting and more time consumption

Technology Details

- Crop: Potato
- Tractor Power:35HP
- Number of row : 2,
- Row spacing 24-26 inch,
- Weight : 550Kg,
- Separation of potato: vibrating rod chain (Conveyor)

Parameters:

- Field Capacity
- Cost of Harvesting
- Labour Requirement

Farmers' Practice (Manual)

Team members
SMS – Agril. Engg, Hort.

Source- CIAE, 2013

Details of Demonstration		
No. of Demonstration	Area (ha)/Units	No. of farmers
03	1.5	03

Cost of the demo- Rs. 25000/-

FLD-04

Popularization of rice harvesting brush cutter (Crop Reaper) suitable for small area and hilly region

1st year

Prioritised Problem: High cost of harvesting and more time consumption

Technology details

- Crop: Paddy
- power : 2hp,
- Engine type: 2-strock
- Colling system:Air cooled
- Fuel Engine: Petrol

Parameters:

- Field Capacity
- Cost of Harvesting
- Labour Requirement

Source- TNAU, 2015

Details of Demonstration		
No. of Demonstration	Area (ha)/Units	No. of farmers
03	1.5	03

Cost of the demo-Rs. 36000/-

Team members
SMS – Agril. Engg, Agronomy

FLD-05

Demonstration on Low Cost Pusa Concentric Onion Storage Structure

2nd year

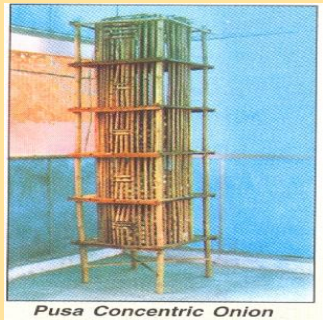
Prioritised Problem: High rotting percentage and fungal infestation of onion under normal storage condition

Technology details

- ✓A concentric cylinder structure: 5 tier
- ✓Capacity: 250 Kg (5 tier)
- ✓Material: Bamboo and Wooden Planks.
- ✓Inner and outer walls : 25mm dia bamboo
- ✓Base of tier: 740 mm x 740 mm perforated wooden planks.

Parameters of Demonstration

- ➢Rotting percentage
- ➢No.of infested (fungal) onion per 250kg
- ➢ PWL



Pusa Concentric Onion Storage Structure

Source- IARI, 2012

Details of Demonstration		
No. of Demonstration	**Area (ha)/Units**	**No. of farmers**
03	**03**	**03**

Cost of the demo- Rs. 25000/-

Team members

SMS – Agril. Engg, Plant protection, Horticulture

FLD-06

Popularization of Jackfruit chips for Sustained Income

3rd year

Prioritised Problem: Non utilization of Jackfruit into value added production

Technology details

- ▪Cutting of fully matured, unriped jackfruit descedded bulbs into longitudinal finger like pieces
- ▪Blanched in hot water with 1% KMS for 5 minutes
- ▪Dried in dryer @ 40-50º for 10-15 minutes
- ▪Deep fry into oil till golden brown colour
- ▪Cool and sprinkled with required salt and chilli powder
- ▪Packing in a tight material

Parameters of demonstration

- ➢Acceptability by hedonic scale
- ➢B.C. Ratio

Team members

SMS – Home Science

Source- ICAR Barapani (Process Protocol for Preparation of Jackfruit Chips), 2012

Details of Demonstration		
No. of Demonstration	**Area (ha)/Units**	**No. of farmers**
10	10	10

Cost of the demo- Rs. 30,000/-

FLD-07

Popularization of nutri rich millet products

1st year

Prioritised Problem: Non usage and limited use of millet as value added products

Technology to be demonstrated

- ✓ Millet based cake, cookies and bakery products
- ✓ Millet based namkeen snacks : spirals, bhujia, cullets

Parameters:

- ➢ Acceptability test by hedonic scale
- ➢ Nutrient supplementation/ 100 g of the product
- ➢ B:C ratio

Source : Indian Institute of Millet Research, Hyderabad, 2020

Team members
SMS – Home Science, Horticulture

Details of Demonstration

No. of Demonstration	Units	No. of farmers
10	10	5 SHG groups

Cost of the demo- Rs.7000/unit

FLD-08

Popularization of Solar Cabinet Dryer

4th year

Prioritised Problem: Unhygienic and open state of long hours of sun drying of agricultural produce hindering income generation

Technology details:

The dryer with four main component that is flat plate collector, drying trays, exhaust fan and solar PV module

Specification: Dimension: 1500mm x 1000mm x 800 mm, 2 trays of 1400mm x 900mm at bottom and 900mm x 400mm at the centre, double wall black painted GI sheet filled with thermocol in between the wall attached with force convection with a capacity of 10-15 kg/batch with a drying time of 1-2 days

Parameters :

- ➢ Drying time (in days)
- ➢ Quality of Products

Source- COA,,CAU,Imphal 2014

Details of Demonstration

No. of Demonstration	Area (ha)/Units	No. of farmers
05	05	05

Cost of the demo- Rs.1,35,000/-

FLD-09

Popularization of hermetic storage system (grain pro's super bags) for increasing quality of grains/seeds

4th year

Prioritised Problem: High infestation rate of storage grain/seeds pest under uncontrolled storage condition

Technology details

✓EVOH (ethylene-venyl alcohol) incorporated as a barrier structure with a 7 to 9 layers structures packing and storing material

✓Reusable plastic sealing tapes at 2 (two) levels for each bag making it airtight

Parameters:

- Relative humidity (before andafter storage)
- Pest infestation (before and after storage)incidence
- Germination percentage

Team members

SMS – Home Science, Horticulture, Plant protection, Agronomy

Source-Pest Control of India, 2015

Details of Demonstration

No. of Demonstration	Units	No. of farmers
10	10	10

Cost of the demo- Rs. 7000/-

FLD-10

Popularization of Integrated Pest Management Practice in rice

3rd year

Problem: Injudicious use of chemicals and inorganic sources for pest management in rice

Technology details:

1. Remove seedling tips before transplanting to destroy the egg masses of yellow stem borer
2. Avoid excessive use of nitrogenous fertilizers
3. Use pheromone trap (Scripo Lure @ 4acre) for monitoring yellow stem borer
4. Need based spray of imidacloprid @ 1ml/3 litres of water against plant hoppers

Parameters:

- Time of incidence of major insect pest
- Yield
- B:C ratio

Source: IARI 2013

Details of demonstration

No. of demonstration	Area (ha)
06	2.5

Cost of the demo = Rs. 10,000/-

FLD-11

Popularizing year round Oyster Mushroom production

3rd year

Problem: Wastage of paddy straws by burning causing environmental hazards

Technology details:

1. Chopped the paddy straw (2-3 inch length)
2. Soak the chopped straw for 4-5 hrs
3. Allow it to drain excess water till it reach 60% moisture level.
4. Spawning with layer method (3-4 layers each 10-15cm straw) in polybags with 1cm diameter hole with10cm apart between each holes.
5. Allow the spawn to run in dark for 7-10 days.
6. After mycelium have fully impregnated, spray water 2-3 times during day time.
7. Pin head developed will fully matured in 2-3 days.

Parameters:

- Yield
- B:C ratio

Source: CHF, CAU, Pasighat, A. P., 2010-11

Details of demonstration	
No. of demonstration	Units
10	10

Cost of the demo= Rs. 30,000/-

Team members

SMS-Plant Protection, Agronomy

FLD-12

Popularization on use of pheromone trap for management of fruit fly in cucurbits

3rd year

Problem: Reduction in the quantity and quality of the produce due to fruit fly infestations

Technology details:

Installation of cue lure for monitoring and mass trapping to reduce the male population

Team members

SMS-Plant protection, SMS-Horticulture

Parameters:

- No. of insects per trap
- Percent infestation of cucumber by fruit borer
- Yield
- B:C ratio

Source: IARI, 2013

Details of demonstration	
No. of demonstration	Area (ha)
10	1

Cost of the demo = Rs. 10,000/-

FLD-13

Intercropping of Ginger with Soybean

1st year

Prioritised Problem: ineffective utilization of land and resource, monocropping practice, growing of less renumerative crops

Technology details:

T1: Ginger var. Nadia (Plantation during April/May)

- Spacing : 30cm x 15 cm
- NPK: 100:90:90
- Sowing of soybean in between the rows of ginger in the month of June/July

T2**: Soybean var. DSB 19, DSB 32**

Parameters:

i. Av. No. of tillers / hill
ii. Av. No of leaves / plant
iii. Yield of ginger
iv. Yield of Soybean
vi. B:C

Source- ICAR, Barapani, 2012

Details of Demonstration

No. of Demonstration	Area (ha)	No. of farmers
03	01	04

Cost of the demo- Rs. 30,000/-

FLD-14

Popularization of Turmeric variety Megha Turmeric-1

2nd year

Prioritised Problem: Unavailability of high yielding, high tolerance to disease (leaf spot and blotch), wider adaptability and processing variety of turmeric

Technology details:

- Variety: Megha Turmeric 1
- Spacing: 30 x 30 cm
- Planting time: April- May
- FYM: 20 t/ha
- NPK: 120:90:90 kg/ha

Parameters:

1. Days to maturity
2. Average yield of rhizome/clump (kg/plant)
3. Average yield/ha

Team members

SMS – Horticulture & Plant Protection

Source-ICAR (RC) for NEH Region, Umiam, Meghalaya,2013

Details of Demonstration

No. of Demonstration	Area (ha)	No. of farmers
03	0.5	04

Cost of the demo- Rs. 40,000/-

FLD-15

Popularization of improved crossbreed pig (Duroc x Hampshire)

1st year

Prioritised Problem: unproductivity of local breed and unacceptable size of Hampshire pig

Technology details:

Farrowing capacity (8-12 piglets)
Body weight at maturity (150-180 kg)

Source- Deptt. Of Animal Science, COA, 2018

Details of Demonstration

No. of Demonstration	Area (ha)/Units	No. of farmers
05	2 Piglets /farmer	05

Cost of the Demo- Rs. 40000/-

Demonstration parameters

- Age of 1st farrowing
- Litter size
- Meat production
- BCR

Team members

Prog. Asstt. (Animal Science)

FLD-16

Popularization of Dual Purpose Poultry Breed - Vanaraja

1st year

Prioritised Problem: Low productivity of chicken meat and egg in local poultry breed

Technology Details

- Feeding:
  Starter: 0-56 days ; Grower: **57-150 days** layer mesh 151 onwards
- Feed supplement: Probiotics, Calcium, Vitamins and Mineral mixture
- Body wt: 2 kg (M), 1.8 kg (F) at maturity
- Egg laying capacity: 150 /year

Details of Demonstration

No. of Demonstration	Area (ha)/Units	No. of farmers
20	20 chicks/ farmer	20

Cost of theDemo- Rs. 30000/-

Source-CPDO, Bangalore, 2016

Parameters of demonstration

- Weight of day old chick
- Growth
- Weight at maturity
- Egg production
- BCR

Team members

Programme Asst-Animal Science

FLD-17

Popularization of improved Backyard Layer Poultry Grammapriya

1st year

Prioritised Problem: Unproductivity of local breed

Source- Project Directorate of Poultry, Hyderabad, 2015

Demonstration parameters

- Body weight at 6 weeks
- Body weight at maturity
- Egg Production (28-72 week)
- Egg production in nos. (160-180)
- BCR

Details of Demonstration		
No. of Demonstration	Area (ha)/Units	No. of farmers
05	20 poultry birds /farmer	05
Cost of the Demo- Rs. 60000/-		

Team members
Prog. Asstt. (Animal Science)

Other Demonstration

1. KSHAMTA:

- Establishment of vermicomposting units – 03 nos.
- 3 days training programme on cultivation of important fruit crops and insect pest and disease management
- Demonstration on improved crossbred pig for sustainable income generation
- Hands on practice on mushroom cultivation and its value chain management
- Popularisation of dual purpose poultry- Giriraja

2. NARI:

- Demonstration on Nutritional Garden
- Production of mushroom for enhanced nutrients intake
- Exhibition on Nutri Rich foods
- Training Programme on establishment of nutritional garden

Other Demonstration

3. One Crop One district :

- More pineapple suckers will be planted in an area of 2500 m2 during Aug- Sep in addition to pineapple suckers planted in an area of 5000 m2
- Hands on practice on plant protection measures and intercultural operations of pineapple
- Training programme on value added pineapple products

Other Activities

Farmers Producer Organization (FPO)

No. of FPO formed : 01
Name of the FPO : Hingminashi FPO, Imphal East, Manipur
Sponsored by: NABARD, Imphal Centre
Total members : 200

Farmers Producer Organization (FPO)

No of FPO: 1 no
Name of the FPO: Hingminnashi FPO, Imphal East, Manipur
Sponsored by: NABARD, Imphal Centre
Total members: 200 nos.

Action Plan:

- Capacity building training programme for sustainable fish production based integrated farming commodities and its value chain management (2 nos.)
- Establishment of 2 Bio-floc Units
- Promotion of cage culture

No. of Prog : 53
No. of Farmer : 1309

Training Programmes

Discipline	No. of trainings to be proposed											
	Farmer/FW		Rural Youth		Ex. Personnel		Sponsored		Vocational		Total	
	C	P	C	P	C	P	C	P	C	P	C	P
Agril. Engg.	02	50	05	125	-	-	-	-	-	-	07	175
Fisheries	04	100	06	150	-	-	03	60	01	20	14	330
Home Science	02	50	04	100	2	50	-	-	-	-	18	200
Horticulture	04	109	02	45	-	-	-	-	-	-	06	154
Plant Protection	02	50	04	100	-	-	-	-	-	-	06	150
Animal Science	08	200	04	100	-	-					12	300
									Total		**53**	**1309**

Details of Training Programmes

1. Agril. Engineering

Topic	NO. of days	Location	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Importance and scope of water harvesting and micro irrigation	03	OFF	PF	May, 2022	-	-	-	-	-	-	20	5	25	25
Increased production and productivity through Farm mechanization (seed drill, paddy reaper, drum seeder etc.)	04	ON	RY	Jun 2022	20	5	25	-	-	-	-	-	-	25
Construction of Low cost Vermicomposting and Mushroom House	04	OFF	RY	Jul 2022	-	-	-	-	-	-	20	5	25	25
Use of small tools and implements for rabi crop for drudgery reduction with demonstration	04	OFF	RY	Aug 2022	-	-	-	-	-	-	20	5	25	25

1. Agril. Engineering

Topic	NO. of days	Location	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Increased productivity and production through Farm mechanization (seed drill, reaper, drum seeder etc.)	3	ON	PF	Nov.2022	-	-	-	-	-	-	20	5	25	25
Construction of vermicomposting structure with demonstration (pucca and pit method)	3	OFF	RY	Dec,2022	-	-	-	-	-	-	20	5	25	25
Importance and scope of water harvesting and micro irrigation	3	ON	RY	Jan,2023	20	5	25	-	-	-	-	-	-	25

2. Fisheries

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Pond preparation and management of fish culture	03	OFF	RY	Apr. ,2022	-	-	-	-	-	-	20	5	25	25
Composite fish culture	03	OFF	PF	May, 2022	-	-	-	-	-	-	20	5	25	25
Bio floc culture system	03	ON	RY	June, 2022	20	5	25	-	-	-	-	-	-	25
Nursery and rearing pond management	03	OFF	RY	Jul y,2022	-	-	-	-	-	-	20	5	25	25
Paddy cum fish culture	03	OFF	RY	Aug., 2022	-	-	-	-	-	-	20	5	25	25
Pre and post stocking of intensive fish farming	03	ON	PF	Sept, 2022	20	5	25	-	-	-	-	-	-	25
Common fish disease management	03	OFF	RY	Oct, 2022	-	-	-	-	-	-	20	5	25	25
Common fish disease management	03	ON	PF	Nov, 2022	20	5	25	-	-	-	-	-	-	25
Integrated fish farming	03	ON	RY	Jan, 2023	-	-	-	20	5	25	-	-	-	25
Integrated fish farming	03	OFF	PF	Feb, 2023										

3. Home Science

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Post harvest management and value addition of fruits and vegetables	4	OFF	RY	May, 212	-	-	-	-	-	-	10	15	25	25
Mushroom cultivation and its value chain management for enhance income generation	3	ON	PF/FW	June, 22	5	20	25	-	-	-	-	-	-	25
Preparation of value added jackfruit products for income generation	3	OFF	RY	July, 22	-	-	-	-	-	-	10	15	25	25
Utilization and value addition of soybean for nutritional and income generation purpose	4	ON	PF/FW	Aug, 22	5	20	25	-	-	-	-	-	-	25
Preparation of value added products of aromatic black rice	3	ON	RY	Sept., 22	-	-	-	-	-	-	-	25	25	25
Extraction of banana fibre and its utilization into value added products	4	ON	RY	Dec., 22	-	10	10	-	-	-	-	15	15	25

4. Horticulture

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Nursery management & techniques of Horticultural crops	3	ON	PF/FW	July, 22	11	6	17	-	-	-	5	3	8	25
Off season production technology of vegetable crops	3	OFF	PF/FW	Aug, 22	12	4	16	-	-	-	5	4	9	25
Scientific cultivation of high value low volume crops	4	OFF	RY	Aug., 22	8	2	10	-	-	-	6	4	10	20
Cultivation of important horticultural crops under protected condition	4	ON	RY	Sept., 22	16	3	19	-	-	-	6	-	6	25
Income generation through flower cultivation	3	OFF	PF/FW	Oct., 22	3	11	14	-	-	-	2	9	11	25
Production technology of bulbous vegetable crops (onion, garlic, chives)	4	OFF	PF/FW	Nov., 22	15	5	20	-	-	-	5	-	5	25

5. Plant Protection

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Insect pest and disease management of French Bean	3	OFF	RY	May, 22	17	5	22	-	-	-	-	3	3	25
Scientific mushroom cultivation and its value chain management	4	OFF	RY	Aug, 22	15	3	18	-	-	-	5	2	7	25
Insect pest management in garlic and onion	3	ON	RY	Sept., 22	12	11	23	-	-	-	3	4	7	25
Insect pests and diseases of Potato and their management	3	ON	PF/FW	Oct., 22	14	5	19	-	-	-	6	-	6	25
Insect pest management of tomato and its management	3	ON	RY	Oct., 22	12	3	15	-	-	-	8	2	10	25
Integrated pest management ok King Chilli cultivation and its value chain management	3	ON	PF/FW	Nov., 22	15	3	18	-	-	-	5	2	7	25

6. Animal Science

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Scientific rearing of dairy - cow		ON	PF	Jan., 22	20	5	25	-	-	-	-	-	-	25
Duck Farming as a resource of Income		ON	FW	Feb., 22	5	20	25	-	-	-	-	-	-	25
Schemes of National Livestock Mission, NABARD		OFF	RY	March., 22	-	-	-	-	-	-	20	5	25	25
Scientific Rearing of Goat		OFF	FW	April, 22	-	-	-	-	-	-	5	20	25	25
Disease Management of Poultry		ON	RY	May, 22	25	-	25	-	-	-	-	-	-	25
Feeding Management of Dairy Cow		OFF	PF	June, 22	--	-	-	-	-	-	25	-	25	25
Choice of Breed for Backyard poultry and its economics		ON	FW	July., 22	-	25	25	-	-	-	-	-	-	25

6. Animal Science

Topic	NO. of days	OFF/ON	Category	Month	No. of Participants									GT
					SC			ST			Others			
					M	F	T	M	F	T	M	F	T	
Scientific preparation of livestock and poultry feeds		OFF	RY	Aug., 22	-	-	-	-	-	-	13	12	25	25
Scientific rearing of commercial broiler farming		ON	PF	Sept., 22	20	5	25	-	-	-	-	-	-	25
Importance of Dual purpose of birds		OFF	PF	Oct., 22	-	-	-	-	-	-	13	12	25	25
Economic importance of oig breeding		ON	RY	Nov., 22	13	12	-	-	-	-	-	-	-	25
Cultivation of fodder and silage making		ON	PF	Dec., 22	13	12	25	-	-	-	-	-	-	25

Activities (Programmes : 1340 & Beneficiaries : 8840)

Activity/ programme	No. of activity/ prog	Beneficiary (No.)	Activity/ programme	No. of activity/ prog	Beneficiary (No.)
Field trips and Visits			**Publications**		
1. Exposure Visits	06	180	1 Popular Articles	10	
2. Diagnostic Visit	300	400	2. Extension Literature	12	
3. Scientist Visit to Farmer's Field	300	700	**Others**		
Group activities			1. Field Day	09	300
1. Group Meeting	20	400	2. Method demonstration	30	480
2. Ex-Trainee Meeting	10	200	3.Farmer's Seminar	01	50
Mass outreach program			4. Advisory Service	500	500
1. Technology Week	01	100	5. TV Talk	05	
2. Jai Kishan Jai Bharat	01	120	6. Radio Talk	07	
3. Mera Goan Mera Gaurav	06	440	7. Resource Person	15	2150
4. Kishan Gosthi	02	200	8. Proposed farmer's club to be form	10	150
5. Awareness Programme	06	600	9.Celebration of Important Days	08	250
6. Interaction Programme	20	800	10.Newspaper coverage	20	
Camps and Campaigns			11.Film show	10	
1.Swatchata Bharat Campaign	05	160	12.Technology showcasing	06	
2. Soil Health Camp	05	220	13.Mass awareness	04	400
3. Agri Mobile Clinic	05	500			

Other Demonstrations

Materials	Crop	Variety	Quantity
A. Seed materials (q)			
Cereals	Paddy	CAU-R1	100 qt
Oilseeds	Rapeseed Mustard	TS-38; NRCH-101	10 qt; 10 qt
Pulses	Greengram	IPM 2-3	10 qt
	Blackgram	PU-31	20 qt
B. Planting materials (No.)			
Spice	Onion	Bhima Dark Red/ Bhima Shakti	10000
Vegetable	Cauliflower	White Treasure/white Excel	10000
	Cabbage	Rareball	15000
	Tomato	Arka Rakshak	12000
	Peas	Makhyat mubi	80 kg
	Strawberry	Winter dawn	1000
	Coriander		10 kg
Plantation crops/ forest	Tree beans	Local	500
Bio-agents (Kg)	Earthworm	*Eisenea foetida*	10 kg
Bio-fertilizers (kg)	Vermicompost		1000 kg
Livestock strains/ fingerlings (No.)			
1.	Fish Spawn	Indian Major carp	1 million
2.	Fish Fry	Indian Major carp	50000
3.	Fish Fingerling	Indian Major carp	10000
4.	Poultry chicks	Giriraja	600 chicks
5.	Piglets	Cross Bred	60 piglets
6.	Weaner kid	Local goat	60 kids
7.	Native Poultry	Kadaknath	50 chicks

Soil testing and SHCs

Sample	No. of samples to be tested	No. of SHCs proposed to be supplied to farmers
Soil sample	50	50
Water sample	200	200
Plant sample	-	-
Total	**200**	**200**

Thank You