KVK-SENAPATI

Hengbung, Senapati District, Manipur

Host Institute : Foundation for Environment and Economic Development Services (FEEDS)

Estd: 2002

Annual Action Plan - 2024

भाकृअनुप
ICAR

Staff Position

Sl. No.	Name	Designation	Discipline
1.	Dr. Nongmaithem Jyotsna	Senior Scientist and Head	Agronomy
2.	Khangembam Nodiyachand Singh	Subject Matter Specialist	Horticulture
3.	Dr. David Kamei	Subject Matter Specialist	Plant Protection
4.	Dr. Nongthombam Muhindro Singh	Subject Matter Specialist	Vety & A.H.
5.	Deepak Kumar	Subject Matter Specialist	Agri. Extn.
6.	Dr. Telem Ratan Singh	Subject Matter Specialist	Plant Breeding & Genetics
7	Athokpam Brojendro Singh	Programme Assistant	Agro-Forestry
8	Nemnu Hangshing	Programme Assistant	Home Science
9.	Kangjam Homen Singh	Programme Assistant	Farm Manager
10.	Kshetrimayum Ranjit Singh	Office Assistant	-
11.	Mutum Ronel Singh	Stenographer-cum-computer operator	-
12.	Pheiroijam Tomba Singh	Driver	-
13.	Thanginlal Chongloi	Driver cum Mechanic	-
14.	Chungkholam Chongloi	Supporting staff	-
15.	Kamminlal Kipgen	Supporting staff	-

On Farm Testing (Discipline–Wise Summary) for 2024

Discipline	Crop/enterprise	No. of Technology/ Social Concept/ methodology to be		No. of trials proposed	
		Assessed	Refined	Assessment	Refinement
Horticulture	Garden pea	1	-	5	-
	Garlic	1	-	6	-
PBG	Rice	1	-	6	-
	Fingermillet	1	-	6	-
Plant Protection	Maize	1	-	5	-
	Potato	1	-	5	-
Animal Science	Piggery	1	-	6	-
	Poultry	1	-	6	
	Poultry	1	-	6	
Agri. extension	Millets	1	-	50 respondents	-
Total		**10**		**51trials & 50 respondents**	

On Farm Testing (OFT)
Horticulture, OFT 1 (2nd yr. trial)

Title: Performance of garden pea varieies

Problem diagnosis: Low yield of existing variety

Details of Technology

Crop: Garden pea

TO1: Var. Kashi Ageti

Duration- 95-100 days, Potential yield = 95-105 q/ha

Seed rate – 60 kg/ha.Spacing – 30 cm x 15 cm, Seed treatment with Trichoderma @ 2gm/kg seed, NPK- 20:60:40 as basal dose, FYM- 5 tonnes/ ha.

TO2: Var.: Arka Priya Mid season variety, Duration- 90 days, Potential yield- 12t/ha, Resistant to powdery mildew and rust

TO3 (Check): Var.: Arkel , Duration- 90-100 days, Potential yield- 80-90 q/ha

Parameters of assessment

i. Plant height (cm) at 30, 60 DAP
ii. Days of 1st germination
iii. No. of branches at 30 DAP
iv. Plant height at 30 DAP and harvesting.
v. No. of pods/plant
vi. No. of seed/pod
vii. Days to 50 % flowering
viii. Days at 1st harvesting
ix. Soil pH,OC,NPK status (Before & After)
x. Yield/ha
xi. Economics

Area : 1 ha.
No. of trials : 5
Location :
Chinikon, Tongoi

Source: IIVR, Varanasi-2015, IIHR, Bangalore - 2016

On Farm Testing (OFT)
Horticulture, OFT-2 (1st yr. trial)

Title : Performance of Garlic varieties

Problem diagnosis : Low yield of local cultivar

Details of Technology

Crop: Garlic

TO1:

Var.- Yamuna Safed-5 (G-189)

Duration- 150-160 days

Yield potential- 17-18t/ha.

TO2:

Var.- Yamuna Safed-3

Duration – 120- 130 days

Yield potential- 17-20 t/ha

TO3 (Farmer Practice):

Var.- Local cultivar

Dur.- 165-170 days

Yield potential – 12-13t/ha.

Parameters of assessment

i. Days at 1st germination
ii. Plant height at 30 DAP, 60 DAP & harvesting
iii. No of Leaves at 30DAP, 60 DAP
iv. No. of cloves/ bulb
v. Days at 1st harvesting
vi. Soil pH,OC,NPK status (Before & After)
vii. Yield /ha
viii. Economics

Area : 1 ha.
No. of trials : 6
Location : Makhan, Joyland

Source: National Horticultural Research Development Foundation (NHRDF),Nashik 2020, 2012

On Farm Testing (OFT)
PBG, OFT-1 (2nd yr. trial)

Title : Performance assessment of rice varieties

Problem diagnosis : Low yield of existing variety

Details of Technology

Crop: Rice

TO1:
Var. : RC Maniphou 15, Duration- 125-130 days, Potential yield = 7.8t/ha

TO2:
Var.: RC Maniphou 16, Duration- 130-135 days, Potential yield = 7.3t/ha

TO3: (Existing variety)
Var. : RC Maniphou 13,Duration- 125-130 days, Potential yield =7-8 t/ha

Parameters of assessment

1.Plant height(cm)
2.No. of effective tillers/hill,
3.Date of panicle initiation,
4.Number of panicles/m2
5. Number of spikelets /panicles
6.Filled grains/panicle
7.Test weight(g)
8.Grain yield(q/ha)
9.Harvest Index (%)
10.Soil pH,OC,NPK status (Before & After)
11.Economics

Area : 1 ha.
No. of trials : 6
Location : Wainem,Nungang

Source: **ICAR- Manipur Centre- 2021**

On Farm Testing (OFT)
PBG, OFT-2 (1st yr. trial)

Title : Performance of Fingermillet varieties

Problem diagnosis and severity: Low yield of local cultivar

Details of Technology

Crop: Fingermillet

TO1:
- Var. : VL Mandua 378
- Duration- 103-114 days,
- Potential yield = 31.3 q/ha
- Blast resistant

TO2:
- Var. : VL Mandua 376
- Duration- 103-109 days,
- Potential yield = 29- 31 q/ha
- Moderately resistant to blast

TO3 (Farmer Practice):
- Var. : Nepali Kodo
- Duration- 110-120 days,
- Potential yield = 15-20 q/ha

Parameters of assessment

i. Plant height (cm)
ii. No. of tillers/plant
iii. No. of earhead/plant
iv. Grains/earhead
v. Soil pH,OC,NPK status (Before & After)
vi. Test weight(g)
vii. Grain Yield/ha
viii. Economics

Area : 1 ha.
No. of trials : 6
Location : Toribari, Happy land, Namching

Source: VPKAS, Almora, 2021 & 2018

On Farm Testing (OFT)
PP, OFT-1 (1st yr. trial)

Title : Management of leaf blight (TLB & MLB) disease of maize

Problem diagnosis : Leaf blight

Details of Technology

Crop: Maize

TO1: Application of propiconazole and azoxystrobin 0.15%
- 1st spray on first appearance of disease followed by another 2-3 spray at 10 days interval

TO2 (Farmer Practice): Application of carbendazim 50 WP @ 2g/l water

Parameters of assessment

i. No. of infested plants
ii. % Infestation
iii. Average disease controlled %
iv. % disease incidence
v. Crop damage %
vi. Time of disease occurrence
vii. Yield/ha
viii. Economics

Area : 1 ha.
No. of trials : 5
Location : **Khongnem thana and Toribari**

Source: VPKAS, Almora (2019)

On Farm Testing (OFT)
PP, OFT-2 (2nd yr. trial)

Title : IPM of vector transmitted disease of potato

Problem diagnosis : Leaf curl disease

Details of Technology

Crop: Potato

TO1:

1. Quality clean certified seeds
2. Appln. Dimethoate @ 0.03% or Imidachloprid @ 0.035% along with 1-2 need base appln. of carbofuran 1-1.5 kg a.i./ ha. at 10-15 days interval during initial infestation period

TO2 (Farmer Practice): Appln. Of chloropyriphos 20 EC @ 2ml/l water

Parameters of assessment

i. No. of infested plants
ii. % Infestation
iii. Average disease controlled %
iv. Per cent disease incidence
v. Crop damage %
vi. Time of disease occurrence
vii. Yield/ha
viii. Economics

Area: **0.5 ha.**
No. of trials :5
Location : Liyai khunou, Tadubi

Source: ICAR, CPRI, Shimla (2005)

On Farm Testing (OFT)
Animal Science, OFT-1 (1st yr. trial)

Title :**Evaluation of low cost diet for growing piglet**

Problem diagnosis :High cost of conc. feed

Details of Technology

Enterprise : Piggery

TO1:

Kitchen waste, locally available leaves and vegetables (60%) ,conc. feed(40%) and the mixture is boil for 30mins

5% molasses for palatability

TO2 (Farmer practice):

Kitchen waste, locally available leaves and veetables (60%) ,ricebran(40%) and the mixture is boil for 30mins

Parameters of assessment

i. Disease incidence
ii. Av. Live body weight at 3, 4, 5 & 6 months
iii. Acceptance of technology
iv. Economics

Unit : 6
No. of trials : 6
Location :
Island village & Nungsai chiru

Source: ICAR Barapani 2018

On Farm Testing (OFT)
Animal Science, OFT-2 (1st yr. trial)

Title : Comparison of restricted time feeding on performance of broiler chicken

Problem diagnosis : High cost of concentrate feed, Birds are mostly associated with ascites and lamness leading to increase in mortality

Technology Options

TO1: 6 hr restriction

TO2: Ad libitum feeding (Farmer Practice)

Details of Technology

- Ad libitum feeding till 10th day after hatch
- Restriction feeding done from 11th day till 18th day
- Normal feeding continues from 18th till 42 days

Parameters of assessment

i. Mortality rate
ii. Survivability % upto 6 weeks
iii. Average live.b.wt. at 10th, 18th and 42nd days
iv. FCR
v. Economics

Unit : 6
No. of Demo. : 6
No. of farmers : 6
Location :
Moirangpan & New Salem

Source: C.V.Sc. AAU, Khanapara (Guwahati) (2015)

On Farm Testing (OFT)
Animal Science, OFT-1 (1st yr. trial)

Title : Performance of CARI- Nirbheek bird under backyard poultry rearing system

Problem diagnosis and severity: Low productivity of local bird (72 %)

Details of Technology

Enterprise : Poultry

TO1:

Breed : CARI Nirbheek

- Disease resistance along with capability of bearing the stress of sub-optimal feeding and management.
- Av. Wt. of male at 20 weeks- 1847 gm
- Av. Wt. of female at 20 weeks- 1350 gm
- Sexual maturity - 176 days
- Annual Egg production - 198

TO2 (Check):

Breed : **Vanaraja**

- **Av. Body wt at 6 weeks- 650-750 gm**
- **Body wt. at sexual maturity- 2000-2200gm**
- **Sexual maturity – 160-175 days**
- **Annual egg production – 190- 215 eggs**

Parameters of assessment

i. Duration of maturity
ii. Maturity body weight
iii. Av. Live body weight.
iv. Production of egg/bird/year
v. Egg weight
vi. Age on egg laying
vii. FCR
viii. Economics

Unit : 6
No. of trials : 6
Location :
Island village & Makhan village

Source: CARI-Bareilly (2004)

On Farm Testing (OFT)
Agri. extension, OFT-1

Title : Assessment of Knowledge level of farmer with regard to fingermillets cultivation practice

Problem diagnosis : Low yield of fingermillet

Details of Technology

Crop: Millets

Survey and Interview method

Parameters of assessment

i. **Impact of the technology**
ii. **% Adopter**
iii. **Level of Adoption (Full/Partial/None)**
iv. **Farmers knowledge level about the cultivation practices**
v. **Training Participation Index**
vi. **Training Effective Index**

No. of respondents:100
Location : Toribari, Thonglang

FLDs (Discipline–Wise Summary) for 2024

Discipline	Crop/enterprise	No. of Technology	No. of demos proposed	Area (ha) to be covered/ no. of items/ activity	No. of Beneficiaries
PBG	Rice	1	7	2 ha	7
	soybean	1	8	2 ha	8
	Field pea	1	8	2 ha	8
Plant protection	Rice	1	6	2 ha	6
	Onion	1	5	1 ha	5
	Cole crops	1	5	1 ha	5
Horticulture	Turmeric	1	6	2 ha	6
	Ginger	1	6	2 ha	6
	Broccooli	1	5	1 ha	5
Animal science	White pekin	1	10	10units	10
	Piggery	1	10	10units	10
	Piggery	1	10	10 units	10
Agril Extension	Paddy	1	-	100 respondents	
Agro-forestry	Tree bean, citrus, hollock, Pulse crop	1	2	1 ha	2
Home Science	Millets	1	10	10 units	10
	Kiwifruits	1	10	10 units	10
Farm Manager	NF	1	3	3 units	3
Total		17	111	16 ha, 53 units &100 respondents	111

Frontline Demonstration (FLD) Horticulture, FLD-1

Title : Popularisation of Turmeric Var. RCT-1 (Megha turmeric 1)

Details of Technology

Crop: Turmeric

- ✓ **Var.-RCT-1,**
- ✓ **Dur- 300-315 days**
- ✓ **Yield potential- 22-25 t/ha.**

Parameters of observation

i. No. of leaves/plant at 60,90,120 DAP
ii. Plant height (cm) at 60,90,120 DAP
iii. No. of fingers/plant
iv. Rhizome wt./plt. (gm)
v. yield/plant
vi. Yield/ha
vii. Soil pH,OC,NPK status (Before & After)
viii. Economics

SOT: ICAR, Umiam, 2015

Area : 2 ha.
No. of Demo. :6
No. of farmers :6
Location :
Chawangkining, Maram Kabanum,

Frontline Demonstration (FLD) Horticulture, FLD-2

Title : Popularisation of Integrated Nutrient Management of ginger

SOT:
ICAR, Manipur, 2014

Details of Technology

Crop: Ginger

- ✓ **Var.-Nadia**
- ✓ **Cow-dung manures @2.5 t/ha. + bio-inoculation with 4 kg, Azotobacter and 4 kg PSB+75% of RD of NPK**

Parameters of observation

i. Plant height
ii. No of Leaves at 60, 90 DAP
iii. Rhizome yield/plant
iv. Date of harvest
v. Soil pH,OC & NPK status (before & after)
vi. Economics

Area : 2 ha.
No. of Demo. :6
No. of farmers :6
Location :
Makhan, Village, Khonglong Kabui & Rajaimei

Frontline Demonstration (FLD) Horticulture, FLD-3

Title : Popularization of high yielding broccoli var T5X0788

Details of Technology

Crop: Broccoli

- ✓Var.- T5X0788
- ✓Duration 60-65 days
- ✓Yield Potential- 15-17t/ha.

Parameters of observation

i. Days to 1st head formation
ii. Curd weight
iii. Days to first harvest
iv. Yield/ha
v. Soil pH,OC,NPK status (Before & After)
vi. Economics

SOT:
BCKV, West Bengal,2012

Area : 1 ha.
No. of Demo. : 5
No. of farmers : 5
Location :
Rikhumai Taphou, Makuilongdi, New Salem

Frontline Demonstration (FLD)
PBG, FLD-1

Title : Popularization of seed production technology of paddy var. RC Maniphou 12

Details of Technology

Crop: Paddy

- -Var. RC Maniphou 12,
- - Seed rate – 60kg/ha,
- - Spacing-20x10 cm
- -NPK @60:40:30 kg/ha.
- - Isolation distance- 3m,
- - Roughing as per requirement (Tillering, flowering & before harvesting)

Parameters of observation

1. Plant height(cm)
2. No. of effective tillers/hill,
3. Date of panicle initiation,
4. Number of panicles/hill
5. Number of spikelets /panicles
6. Filled grains/panicle
7. Test weight(g)
8. Grain yield(q/ha)
9. Harvest Index (%)
10. Soil pH,OC,NPK status (Before & After)
11. Economics

SOT: ICAR, Manipur, 2012

Area : 2 ha.
No. of Demo. : 7
No. of farmers :7
Location :
Nungang,Parengba

Frontline Demonstration (FLD)
PBG, FLD-2

Title : Popularization of Soybean var. MACS 1460

Details of Technology

Crop: Soybean

Var. : MACS 1460
Duration- 100 days,
Potential yield = 20-25q/ha

Parameters of observation

1. Plant height (cm)
2. Branches/plant
3. Days to 50% flowering
4. Days to maturity
5. Pods/plants
6. Seed yield/plant(g)
7. Seeds/pods
8. 100 seed weight
9. Seed yield(q/ha)
10. Soil pH,OC,NPK status (Before & After)
11. Economics

SOT:
Agharkar Research Institute, Pune-2017

Area : 2 ha.
No. of Demo. : 8
No. of farmers :8
Location :
S.Loushing, Loikoiching, New Salem

Frontline Demonstration (FLD)
PBG, FLD-3

Title : Popularisation of Fieldpea Var. VL Matar 47

Details of Technology

Crop: Fieldpea

- Var. : VL Matar 47
-Duration- 150-155 days,
- Potential yield = 14.2 -16. 2q/ha

Parameters of observation

1. Plant height (cm)
2. Branches/plant
3. Days to 50% flowering
4. Days to maturity
5. Pods/plants
6. Pod length (cm)
7. Seeds /pod
8. 100 seed weight(g)
9. Seed yield(q/ha)
10. Soil pH,OC,NPK status (Before & After)
11. Economics

SOT: VPKAS-Almora, 2011

Area : 2 ha.
No. of Demo. : 8
No. of farmers : 8
Location : L.Phaijang, Hengbung & Moirangpan

Frontline Demonstration (FLD)
PP, FLD-1

Title : Management of leaf blast diseases of rice

SOT:
CRRI, Cuttack, 2012

Details of Technology
Crop: Rice

i. Appln. of Azoxystrobin + Difenoconazole @ 0.1%, 1st spray at tillering stage and 2nd spray at panicle initiation stage.
ii. Appln. Of P. fluorescence and Bt @ 4-5 ml per litre water .

Parameters of observation
i. No. of infested plants
ii. % Infestation
iii. Average disease controlled %
iv. % disease incidence
v. Crop damage %
vi. Time of disease occurrence
vii. Yield/ha
viii. Economics

Area : 2 ha.
No. of Demo. : 6
No. of farmers : 6
Location : Saikul, T.Khullen

Frontline Demonstration (FLD)
PP, FLD-2

Title : IPM of thrips and leaf miner of spring onion

Details of Technology

Crop: Onion

i.Use of yellow and blue sticky trap@15 traps/acres
ii.Appln. of Beauveria bassiana @5g or 5ml per litre water at 2 WAT followed by consequence spray at 1 month interval (prophylaxis appln.)
iii.Appln. of neem oil 0.3% at 20 DAT followed by 2-3 sprays at 25 days interval (prophylaxis appln.)
iv.Appln. of imidachloprid@0.05 % when it reaches ETL.

Parameters of observation

i. No. of infested plants
ii. % Infestation
iii. Average pest controlled %
iv. % pest incidence
v. Crop damage %
vi. Time of pest occurrence
vii. Yield/ha
viii. Economics

SOT:
NIPHM, Hyderabad, 2014

Area : 1 ha.
No. of Demo. : 5
No. of farmers : 5
Location :
Rikhumai, Siangai Namdai, Makhan

Frontline Demonstration (FLD)
PP, FLD-3

Title : Organic management of DBM and cabbage butterfly on cole crops (cabbage, cauliflower and broccoli)

Details of Technology

Crop: Cabbage, cauliflower and broccooli

i. Appln. of *Metarhizium anisopliae* @ 5g/l water at 1 week after transplanting followed by another 2 spray at 10 days interval
ii. Yellow and blue sticky trap@15 traps/acres
iii. Appln. of neem oil @ 0.5% at 2-3 WAT followed by 2-3 spray at 10 days interval

Parameters of observation

i. No. of infested plants
ii. % Infestation
iii. Average pest controlled %
iv. % pest incidence
v. Crop damage %
vi. Time of pest occurrence
vii. Yield/ha
viii. Economics

SOT: ICAR, Umiam, 2019

Area : 1 ha.
No. of Demo. : 5
No. of farmers : 5
Location :Tungjoy, Ngari Khullen

Frontline Demonstration (FLD)
Animal Science, FLD-1

Title : Popularisation of White Pekin duck for meat purpose

Details of Technology

Enterprise: Duckery

Breed: White Pekin

- Av. Live body wt. at 4 weeks = 1300-1500 gm
- Av. Live body wt. at 6 weeks = 2300-2500 gm

Promising features:

- Meat purpose duck
- Fast growing

SOT:
Central Poultry Development Organisation, Bangalore, 2015

Parameters of observation

i. Live body weight gain in Kg (monthly)
ii. Weight at sexual maturity (g)
iii. Feed conversion efficiency
iv. Economics

Unit : 10
No. of Demo. : 10
No. of farmers :10
Location :Teraphai, Mayangkhang

Frontline Demonstration (FLD)
Animal Science, FLD-2

Title : Feeding of growing piglets with AAUVETMIN for enhancing farm income

SOT:
AAU, CVSc
Khanapara 2013

Details of Technology

Enterprise: Piggery

- ✓ Supplementation of AAUVETMIN @20 gm per pig/day

Parameters of observation

i. Disease incidence
ii. Acceptance of technology
iii. Percent mortality rate
iv. Live b. wt. (monthly)
v. Economics

Unit : 10
No. of Demo. : 10
No. of farmers :10
Location :
Mapao Khunou & Nungsai Chiru

Frontline Demonstration (FLD)
Animal Science, FLD-3

Title : Popularisation of chemical castration of piglets

Details of Technology

Enterprise: Piggery

Glacial acetic acid= 17ml
Distilled water =83ml to make 100ml vol.
$KMnO_4$= 0.25gm
Administer @ 2ml/testicel

Parameters of observation

i. Acceptance of technology
ii. Labour efficiency
iii. Size of testicel at 0, 7th, 14th,21st & 28th days.

SOT:
ICAR, 2007

Unit : 10
No. of trials : 10
Location :
Mapao Khullen & New Sailem , Karong

Frontline Demonstration (FLD)
Agri. Extension, FLD-1

Title : Farmer's perception towards natural farming

Methodology used:
Interview method (Questionnaire/ Perference matrix)

Parameters of observation

i. Impact of the technology
ii. % Adopter
iii. Level of Adoption (Full/Partial/None)
iv. Farmers knowledge level about natural farming practices
v. Training Participation Index
vi. Training Effective Index
vii. Level of preference (Low, medium, high)

No. of respondents : 100
No. of Village : 4
Name of village: Molhoi, Leilon, Thonglang , Toribari
No. of farmers : 100

Frontline Demonstration (FLD)
Agro. Forestry, FLD-1

Title : Reclamation of degraded land with MPTS

SOT:
RFRI, Jorhat. 2015

Details of Technology

Crop: Treebean, citrus, Terminalia

- ✓ Tree bean – 8mx8m as main crop
- ✓ Terminalia as Boundary planting
- ✓ Citrus species – Inter Space planting between tree bean

Parameters of observation

i. Plant height (ft)
ii. Adaptibility
iii. Farmer's reaction
iv. DBH (inch)

Area : 1 ha.
No. of Demo. : 2
No. of farmers : 2
Location :
Laikoiching, Joyland

Frontline Demonstration (FLD)
Home Science, FLD-1

Title : Promotion of value added product of millets(Laddu, cookies)

Details of Technology

1. Laddu: 1 cup millet flour,1/2 cup melted ghee, ½ tsp. cardamom powder, 3 tbsp. milk, ½ cup sugar powder.

Technology

*Roast the millet for 5-10 mins and blend to fine powder and add cardamom powder and sugar. Pour heated ghee in prepared powder and add milk and mixed well. Then make the ball

2. Cookies: ½ cup millet flour ,½ cup whole wheat flour,½ cup butter, ½ cup sugar powder, 1 teaspoon milk powder, ½ teaspoon flavor

Technology:

*Beat 50g butter &Sugar powder (30gm) till fluffy,add millet flour 100g (Ragi, Sorghum, Bajara) till soft dough and add 5ml vanilla essence. Spread out dough on butter paper & roll it. Cut into shapes &perforate it . Bake it for 15 min at 180^{o} in pre heated oven

SOT:
Indian Institute Millet Research, Hyderabad,2016

Parameters of observation

- ✓ Shelf life
- ✓ Sensory acceptability
- ✓ Nutritive value
- ✓ Moisture content(%)
- ✓ BC ratio

Unit : 10
No. of Demo. : 10
No. of farmers :10
Location :
Karong Hengbung, Saikul

Frontline Demonstration (FLD)
Home Science, FLD-2

Title : Promotion of Value addition of Kiwi fruit for the preparation of Candy and Jam

SOT:
Dr. Y. S. Parmar University of Horticulture and Forestry,Solan, 2007

Details of Technology

Crop: Kiwi fruit

- ✓ **Candy:** Osmotic dehydration using sugar syrup of slice kiwi at 60 degree brix
- ✓ Tray drying of Osmo-dried slices
- ✓ **Jam:** kiwi fruit: citric acid: sugar (1:0.08:1)

Parameters of observation

1. Shelf Life
2. Acceptability (by hedonic scale)
3. Nutritive value
4. **Moisture content(%)**
5. BCR

Unit : 10
No. of Demo. : 10
No. of farmers :10
Location : Purul, Makuilongdi

Frontline Demonstration (FLD)
Farm Management, FLD-1

Title : Promotion of Beejamrit and Jeevamrut on cabbage in natural farming

Details of Technology

Beejamrit :

For 100 kg seed use water 20 liters, Use cow urine 250 ml for one liter of water, Use Cow dung 250 grams for one liter of water, Use Lime 2.5 g per liter of water, Use soil-like dikes or clay bundles, which do not have any stone

Jeevamrut:

Water- 200 Litres, Cow Dung - 10 Kilograms, Cow Urine - 10 Litres, Pulse Flour - 2 Kilograms, Jaggery- 2 Kilograms, Soil - A handful

-Soil application-Take 1l of plain water and add 50ml of jevvamrut and spray over the soil. Repeat every 15 days

-Foliar application- Take 1l of plain water and add 25ml of jeevamrut spray over leaves. Repeat for every 10 days

SOT:
NF Training Centre, Gurukul Kurukshetra, 2020

Parameters of observation

- ✓ Average size of head (LxB)
- ✓ Average weight of head (g)
- ✓ Disease incidence
- ✓ Soil pH,OC,NPK status (Before & After)
- ✓ Yield (t/ha)

Unit : 10
No. of Demo. : 10
No. of farmers :10
Location :
Longa koireng,
New Salem
Molhoi,
Makuilongdi

Training programmes (Discipline wise summary for farmers) for 2024

Discipline	Course (no)	Farmer beneficiaries (no)				Total
		On	Off	Spon.	Voc.	
Horti	4	-	80	-	-	80
PBG	4	-	80	-	-	80
PP	3	40	20	-	-	60
Vety.	4	-	80	-	-	80
Agril. Extn.	3	40	20	-	-	60
Farm manager	4	-	80	-	-	80
Agro-forestry	4	-	80	-	-	80
H . Sc	4	80	-	-	-	80
Total	30	160	440			600

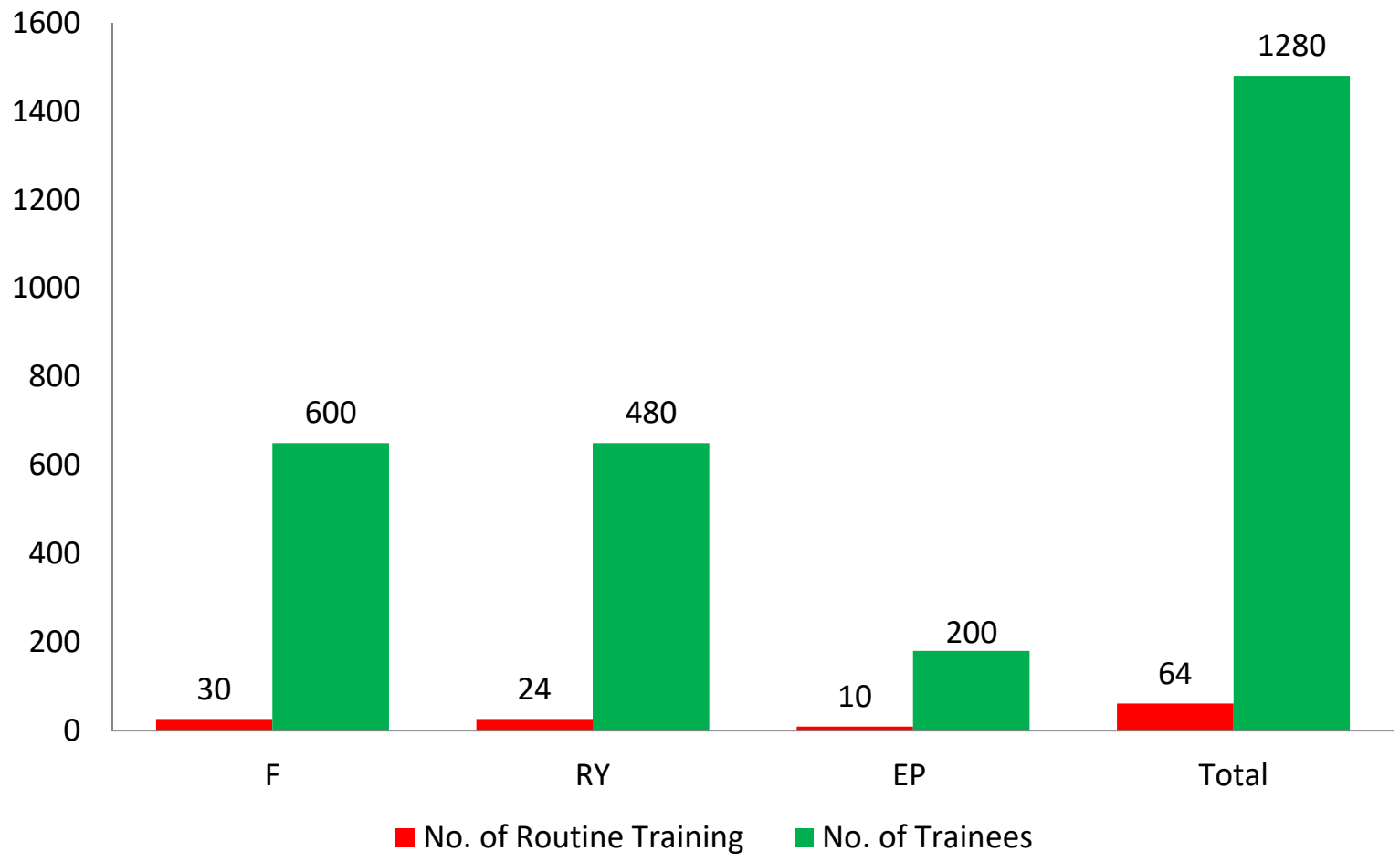
Training programmes (Discipline wise summary for Rural youth) for 2024

Discipline	Course (no)	Rural youth beneficiaries (no)				Total
		On	Off	Spon.	Voc.	
Horti	3	-	40	-	20	60
PBG	3	-	40	-	20	60
PP	3	20	-	20	20	60
Vety.	3	-	40	-	20	60
Agril. Extn.	3	20	20	20	-	60
Farm manager	3	-	40	-	20	60
Agro-forestry	3	-	60	-	-	60
H . Sc	3	20	-	20	20	60
Total	24	60	240	60	120	480

Training programmes (Discipline wise summary for Extension personnel) for 2024

Discipline	Course (no)	Extension personnel beneficiaries (no)			Total
		On	Off	Spon.	
Horti	1	-	20	-	20
PBG	1	-	20	-	20
PP	2	20	20	-	40
Vety.	1	-	20	-	20
Agril. Extn.	2	20	20	-	40
Farm manager	1	-	20	-	20
Agro-forestry	1	-	20	-	20
H . Sc	1	20	-	-	20
Total	10	60	140	-	200

Summary of Training Programme for 2024



Extension Programmes/Activities for 2024

Sl. No.	Extension Programme/ Activity	Nos. Proposed	Beneficiaries (No.)				Total
			Farmers	Extn. Personnel	Rural Youth	Others	
A.	**Field trips and Visits**						
1	Diagnostic visit	245	350	-	120	-	470
2	Exposure visit	2	30	-	30	-	60
B.	**Group activities**						0
1	Celebration of important days	7	700	50	400	50	1207
2	Field day	5	160	5	50	10	230
3	Ex- trainees meet	15	200	-	10	-	225
4	Group meeting /discussion	10	150	-	50	-	210
5	PRA	5	90	-	60	-	155
6	Farmer Clubs' meeting	5	160	-	40	-	205
C.	**Mass outreach program**						0
1	Method demonstration	20	300	-	150	-	470
2	Film show	10	150	20	50	10	240
3	TV talk	5	-	-	-	-	5
4	Radio talk	10	-	-	-	-	10
5	Field publicity	20	600	20	300	30	970
7	Exhibition/mela	1	250	20	150	30	451
8	Advisory services/ telephone talk	120	-	-	-	-	120

Extension Programmes/Activities for 2024

Sl. No.	Extension Programme/ Activity	Nos. Proposed	Beneficiaries (No.)				Total
			Farmers	Extn. Personnel	Rural Youth	Others	
D.	**Camps and Campaigns**						
1	Soil health camp	2	100	10	60	30	202
2	Animal health camp	2	100	10	60	30	202
3	Awareness camp	5	250	-	50	50	355
E.	**Publications**						0
1	Extension literature (Leaflet/ folders/ Pamphlets)	16	600		350	50	1016
2	Extension / technical bulletin	5	100	50	100	50	305
3	News letter	1	300	50	100	50	501
4	Print media coverage	20	-	-	-	-	20
5	Research publications	2	-	-	-	-	2
6	Success stories/ Case studies	2	-	-	-	-	2
	Total	**290**	4240	235	2010	390	**7165**

Seed Materials

Seed Materials	Crop	Variety	Proposed quantity (ton) to be produced (both at KVK farm and farmers field)	Current Value (Rs.)	To be provided/ supplied to (Expected No. of farmers)
Cereals	Rice	RC Maniphou 13	5.0	Rs. 30/kg	95
Oilseeds	Soybean	Dsb 19	1.3	Rs. 60/kg	58
	Groundnut	ICGS-76	3.0	Rs. 80/kg	45
	Rapeseed	TS 38	1.1	Rs. 60/kg	75
Pulses	Blackgram	PU 31	0.6	Rs. 80/kg	25
	Fieldpea	Aman	1.0	Rs. 80/kg	20
Spices	Turmeric	Lakkadong	9.0	Rs. 15/kg	40
	Ginger	Nadia	1.0	Rs.40/kg	8
		Total	**22 ton**		**358**

Planting Materials

Planting Materials	Crop	Variety	Proposed quantity (Nos.) to be produced (both at KVK farm and farmers field)	Current Value (Rs.)	To be provided/supplied to (Expected No. of farmers)
Fruits	Pomegranate	Bedena	1500	Rs. 10/seedling	15
	Kiwifruit	Allison, , Monty, Hayward	1000	Rs. 80/seedling	10
	Lime	Kachai lemon	5000	Rs. 10/seedling	30
	Citrus	Aurintofolia	1000	Rs. 10/seedling	10
	Papaya	Honey dew	1500	Rs. 10/seedling	20
Forest Species	Mimusops elengii	Ornamental	1000	Rs. 10/plant	10
	Cassia javanica	Ornamental	1000	Rs. 10/plant	10
	Tectona grandis	MPTS	1000	Rs. 10/plant	10
	Perkia roxbhurghii	MPTS	3000	Rs. 10/plant	20
	Acacia glouca	MPTS	1000	Rs. 10/plant	10
	Terminaliya myriocarpa	MPTS	1000	Rs. 10/plant	10

Planting Materials (contd.)

Planting Materials	Crop	Variety	Proposed quantity (Nos.) to be produced (both at KVK farm and farmers field)	Current Value (Rs.)	To be provided/ supplied to (Expected No. of farmers)
Vegetables	Cabbage	Rareball	5000	Rs.2/plant	15
	Broccoli	Green Magic	5000	Rs.5/plant	10
	Tomato	Arka Rakshak	2000	Rs.2/plant	15
	King Chilli	Local improved	8000	Rs.5/plant	10
	Tree tomato	Local improved	5000	Rs.3/plant	10
	cauliflower	Snow white	4000	Rs.2/plant	10
	Brinjal	Pusa purple lon	3000	Rs.2/plant	10
Flowers	Statice,petunia, hybrid marigold	-	10000	Rs.10/plant	30
Spices	Large cardamom	Varlangey	2200	Rs.12/plant	5
		Total	**62200**		**270**

Bio-products

Item	Product Name	Species	Proposed quantity to be produced (both at KVK farm and farmers field)	
			No.	Kg.
Bio-agents	Vermiworm	Eisenia foetida & Eudrillus eugenia	-	20
Bio-fertilizers	Vermicompost	-		3000
Livestock strains/ fingerlings	Fingerlings	Rohu & Grass carp,catla	300000	
	Piglet	Cross bred Hampshire	50	-
Mushroom	Spawn	Oyster		1000
Total			**300050**	**4020**

Production and Revenue generation by KVK from different sources during 2024

a. Seed production

Sl. No.	Crop	Production and revenue generation	
		Production (q)	Revenue (lakh)
A.	Oilseeds		
	1. Toria	3	0.18
	2. Soyabean	5	0.30
	3. Groundnut	6	0.48
B.	Pulses		
	Blackgram	3	0.24
C.	1.Mushroom (oyster)	4.3	0.602
	Total	**21.3**	**1.802**

b. Planting Materials/ Seedlings produced during 2024

Sl. No.	Planting materials	Production and revenue generation	
		Production (No.)	Revenue (lakh)
A.	Vegetables		
	1. cabbage	3000	0.06
	2. brocolli	3000	0.09
	3. tomato	2000	0.04
	4. kingchilli	5000	0.25
	5. Tree tomato	4000	0.12
	6. cauliflower	3000	0.06
	7. Brinjal	3000	0.06
B.	Fruits		
	1. lime	2000	0.2
	2. pomegranate	1000	0.1
	3. papaya	1000	0.1
C.	Ornamental plants/ trees		
	1. Mimusops elengii	500	0.05
	2. Cassia javanica	500	0.05

b. Planting Materials/ Seedlings produced during 2024. Contd..

Sl. No.	Planting materials	Production and revenue generation	
		Production (No.)	Revenue (lakh)
D.	Tree species		
	1. Tectona grandis	1000	0.1
	1. Parkia roxbhurghii	2000	0.2
	1. Acacia glouca	1000	0.1
	1. Terminaliya myriocarpa	1000	0.1
E.	Flowers		
	1. Statice,	2000	0.2
	1. petunia	2000	0.2
	1. margiold	1500	0.15
F.	Others (Pl. Specify)		
	Large cardamom	2000	0.24
	Total	**18000**	**0.83**

c. Livestock strains/ Fingerlings produced during 2024

Sl. No.	Livestocks	Production and revenue generation	
		Production (No.)	Revenue (lakh)
A.	Livestock strains (nos. in lakh)		
	1. piglets	0.0004	2.4
D.	Fisheries/ Fingerlings (nos. in lakh)		
	1. IMC & Exotic fingerling	0.50	0.5
	Total	**0.50004**	**2.9**

d. Other Sources

Sl. No.	Items	Production and revenue generation	
		Production (q)	Revenue (lakh)
A.	Vegetables		
	1. Broccoli	4.5	0.18
	1. Cabbage	10	0.10
B.	Others		
	1. Vermicompost	15	0.225
	1. Vermiworm	0.1	0.05
	Total	**29.6**	**0.555**

Status of Revolving Fund (RF) of KVK (in lakh) during 2024

Sl no	Activities under RF	Opening balance as on 1st April, 2024	Income during the year	Expenditure during the year	Income to be generated	Net income in KVK as on 31st March, 2025
1	Livestock, fishery, agri input and others	8.06387	10.00	8.00	10.00	10.00
	Total:		**10.00**	**8.00**	**10.00**	**10.00**

Soil & Water Sample Analysis / Soil Health Cards (SHCs) for 2024

Sl. No.	Samples	Nos. of samples targeted	Target of Farmer beneficiaries	Village to be covered	Amount to be realised (Rs.)	Expected SHCs to be issued to farmers (Nos.)
1.	Soil sample	200	300	23	-	300
2.	Water sample	50	50	10	-	
	Total	**250**	**350**	**33**	**-**	**300**

Mobile Advisory for 2024

Message type sent	Crop		Livestock		Weather		Marketing		Awareness		Other Enterprise		Total	
	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary
Text only	38	375	21	336	8	120	8	175	4	135	4	150	83	1291
Voice only	120	480	30	230	200	50	40	120	10	110	10	70	140	1060
Voice and Text both	-	-	-	-	-	-	-	-	--	-	-	-	-	-
Total	**158**	**855**	**51**	**566**	**208**	**170**	**48**	**295**	**14**	**245**	**14**	**220**	**223**	**2351**

Contingency Planning for 2024

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Hailstorm Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total
Delayed monsoon	DSR	15	-	55	55
Early cessation of monsoon	Introduction of early varieties of winter pulses and oilseeds	10	-	42	55
Drought	Growing of blackgram & ricebean	10	-	35	35
Cold wave (frost injury)	Irrigation in late evening	10	-	38	38

b. Livestock based Contingency Planning for 2024

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Number of birds/ animals to be distributed	No. of programmes to be undertaken	No. of camps to be organized	Proposed number of animals/ birds to be covered through camps	Number of beneficiaries proposed to be covered		
					General	SC/ST	Total
In case of crop failure	500 birds	2	4	5000	-	110	110
	30 piglets	2	2	700	-	350	350

Functional linkages to be established with different organizations during 2024

Sl. No.	Name of organization	Nature of linkage
1	ICAR, Manipur Centre	Technical input & logistic support & discussion & meeting.
2	Central Agricultural University	Technical input & logistic support, Mela & join awareness camp, discussion & meeting.
3	Ministry of Science & Technology, GoI	Provision of Societal based scheme & projects.
4	IIHR, Bangalore	Technical support & guidance
6	NABARD-Senapati	Training & information sharing, formation of farmer club & awareness programme on financial inclusion.
7	CRIDA, Hyderabad	Agro Metrological advisory & preparation of contingent crop plan.
8	State Line Dept.	Training, demonstration, diagnostic visit & field visit, review of SREP, information sharing & input & financial support, meeting & join soil & animal health campaign/camp.
9	SFAC, Manipur	Sponsored training & information sharing

Functional linkages to be established with different organizations during 2024 (contd.)

Sl. No.	Name of organization	Nature of linkage
10	DRDA, Senapati	Sponsored training, join discussion & meeting.
12	TD, Dept., Govt. of Manipur	Selection of beneficiaries & information sharing & consultancy.
13	Nehru Yuva Kendra	Join training programme, awareness camp, exposure visit, meeting & information sharing.
14	District Vety Office, Senapati	Participation in meeting and joint animal health care programme
15	NFDB, Hyderabad	Sponsored training, join discussion & meeting
16	DIC	Participation in meeting.
17	RCOF	Joint training & participation in meeting.
18	NGOs	Training & meeting.
19	ATMA, Senapati	Training , exposure visit, meeting & information sharing,

Natural Farming Activities proposed during 2024

Activity/ Items	No. of programme/ activity	No. of participants
1. Awareness programme		
a. Exhibition	2	200
b. Kisan Goshi	2	50
c. Campaign	3	150
d. Publication (Extension materials, posters, leaflets etc.)	5	300
2. Training	4	160
3. Demonstration	10	10

MGMG Activities proposed during 2024

Activity/ Items	Number	No. of participants	
		ST	others
No of villages	6	100	20
No of visit	18	80	10
No of demonstration	12	120	-
No of farmer visit	6	120	20
Total:	42	420	50

THANK YOU
(THAGATCHARI)