ANNUAL PROGRESS REPORT
2024

Krishi Vigyan Kendra
Bishnupur District, Manipur

Host Organisation:

Utlou Joint Farming-Cum-Pisciculture Co-operative Society Ltd.

Estd: September, 2003.

Present Staff Position

Sl. No.	Name	Designation	Date of joining	Discipline
1	Dr. Kh. Brajamani Meetei	Sr. Scientist & Head	01-9-2021	Fishery
2	Dr. P. Bijaya Devi	SMS	1-9-2004	Horticulture
3	N. Bandana Devi	SMS	1-9-2004	Home Science
4	Kh. Maipak Singh	SMS	02-05-08	Plant Protection
5	Dr. A. Tarajit Singh	SMS	02-05-08	Agril. Extn.
6	Dr. Sakhen Sorokhaibam	SMS	6-5-2010	Agronomy
7	P. Bidyananda Singh	SMS	10-01-22	Soil Sc.
8	Dr. Pebam Chandrima Devi	Prog. Asstt.	18-12-2024	Animal Sc.
9	Th. Shachimohon Singh	Prog. Asstt.	2-9-2003	Computer
10	Mahesh Maibam	Farm Manager	18-05-22	Agriculture
11	L.Dinachandra Singh	Accountant	1-9-2004	Non-technical
12	E. Ricky Singh	Stenographer	1-7-2025	Non-technical
13	L. Boboshana Singh	Driver	1-9-2004	Technical
14	L. Doren Meetei	Driver (heavy)	2-9-2003	Technical
15	Th. Sanjoy Singh	SSG-4	2-9-2003	Non-technical
16	Th. Sanjit Singh	SSG-4	21-6-2009	Non-technical

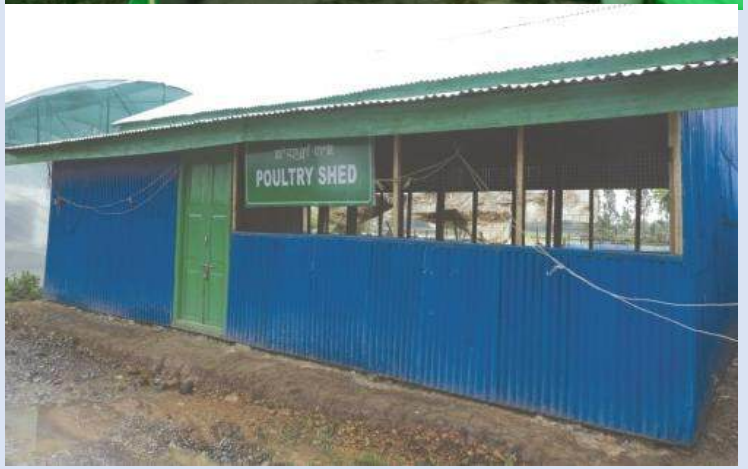
INFRASTRUCTURE FACILITIES

S. No	Infrastructure	Completion Date
1	Administrative Building	6th Sept. 2006
2	Farmers Hostel	2nd August 2007
3	Staff Quarters (6)	2013
4	Demonstration Units (2)	2011
5	Fencing	10th June 2006
6	Rain Water harvesting system	2011
7	Soil Testing Lab	2013
8	Mini food processing machine	2016
9	Vehicle	√ (Running)
10	Tractor	√ (Running)

Administrative Building

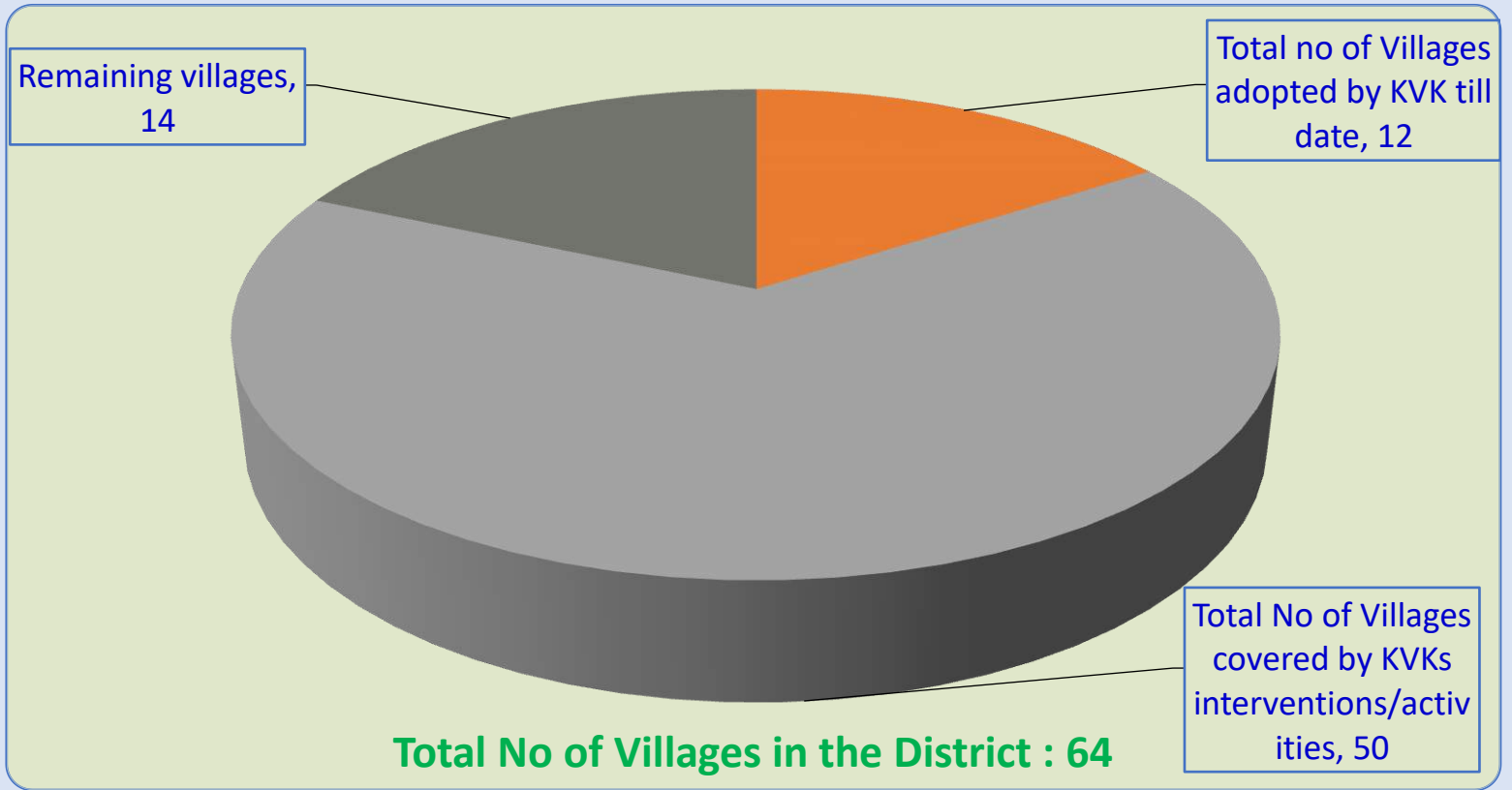

Soil Testing Lab

Demonstration Units



Details of Villages
in Bishnupur District

Sl No.	Total No of Villages in the District	Total no of Villages adopted by KVK till date	Total No of Villages covered by KVKs interventions/activities	% of Villages Covered based on Col. ii & iv
I	II	III	IV	V
1	64	10+2	50	78



Extension Programmes/ Activities

Extension Activity	Programme/Activity			Beneficiaries		
	Target (No.)	Achievement (Nos.)	% achievement	Target (Nos.)	Achievement (Nos.)	% achievement
Celebration of Important days	10	8	80	500	1200	226
Exposure visit	3	3	100	50	80	160
Success stories/ Case studies	1	3	>100	-	-	-
Kisan Mela	1	1	300	200	350	175
Farmers Visit to KVK	10	8	80	700	544	78
Scientist visit to farmers field	50	36	72	100	96	96
Farmers' Seminar	1	1	100	25	25	100
Field day	3	2	66	45	30	66
Soil Health Camps	6	4	66	100	45	45
Animal Health Camps	6	4	66	250	120	48
Workshop/ Seminar	2	2	100	100	60	60
Soil Testing	12	10	83	500	596	119
Water Testing	12	8	67	100	120	120

Inaugural function of PM Vishwakarma Scheme at KVK-Bishnupur

Publications of KVK (2024)

Item	Nos.	Title
Newspaper coverage	11.	1. Lan manungda chinjakta meepal taangdana yenshang napishing athuba matamda puthoknaba hotnaramle, Published on March 11,2024 2. Khangatlaba loumee shingda maru marang yenthokhre, Published on July 21,2024 3. KVK Bishnupur na Front Line Demonstration gi maru marang yenthokhre and KVK Bishnupur District na kumja 2024 gi oiba Horticulture section gi training cum Demonstration ga mari leinana loumee shingda aphaba makhalgi maru marang shing yenthokhre, Published on Sept.19,2024 4. Bishnupur district ki khul mari da koina chat tuna maru marang shing yenthokhre, Published on Sept. 20, 2024 5. Farmers Field Day pangthokhre, Published on Sept.27 ,2024 6. KVK Bishnupur na ICAR-IIHR Bangaluruga khutsamnana Utlou gi Training Hall da pangthok khiba thouramda khujashingda horticulture section gi thagadaba marumarang shing yenthok khre, Published on Oct 9 ,2024 7. KVK Bishnupur distributes vegetable seeds Published in The Imphal Free Press on Oct 9 ,2024 8. Semmitlongi phibam sokchil handanaba mana mashing da nattana Sanarei thaba yaray Published on Dec. 10 ,2024 9. Training pibaga loinana maru marangshing yenthok khre , Published on Dec.21 ,2024 10. KVK Utlou da Awareness pangthokhre, Ningtham maru marang yenthokhre, Published by Poknapham on Dec.21 ,2024 11. Farmers ' training Programme held at KVK Utlou, Published by People Chronicle on Dec.21 ,2024 (Sl.No.1-6 & 8-9 published by the local daily newspaper -Hueiyen Lanpao)
Conference/ Seminar/ workshop proceedings	1	Seed production of Cauliflower cv.Tha-Animakhai chabi: A source of income generation of a Farm woman. During the 2nd Online National Seminar on Agriculture and Farmers Empowerments. 20th-21st July 2024 Organised by Society for Ecological Sustainability ,Odisha in association with 360 RF,SIDVI Foundation and MEADOW Agriculture Private Limited.
Leaflets /folders		Scientific package of practices for Tomato (*Solanum lycopersicum*) cultivation
		Cultivation of field pea in rice fallow (Kalen lourak loiraga hawai mangal thaba)
		Cultivation of lentil in rice fallow (Kalen lourak loiraga hawai masoori thaba)
		Improved cultivation practices of Colocasia
		Value addition of jack fruit through production of chips
Newsletter	1	Achievement of KVK-Bishnupur for the year 2024

Seed Materials produced during 2024

Item	Crop	Variety	Target (q)	Quantity produced (q)	% achievement	Value (Rs.)	No. of farmers
Cereals	Rice	Rice var. RC Maniphou - 12	30	38	>100	152000	47
		Rice var. RC Maniphou 7	30	43	>100	172000	53
		Rice var. RC Maniphou 13	20	41	>100	164000	51
		Rice var. CAUR-1 (Tamphaphou)	15	25	>100	100000	31
Oilseeds	Groundnut	Girnar-3	5	8	>100	80000	10
	Soybean	DSb-19	-	2	>100	16000	5
	Mustard	NRCHB-101	5	2	40	20000	10
Pulses	Blackgram	PU-31	-	2	>100	18000	10
	Field pea	Rachna	5	2	40	16000	2
		Aman	5	2	40	16000	3
Vegetables	1. Broadbean	Local	1	0.85	85	12,750	10
	2. Garden pea	Local Hawai tharak makhyat mubi	0.5	0.5	100	25,000	-
	3, Cauliflower	Local Tha anima khai chabi	-	0.07	-	49,000	-
	TOTAL		**116.5**	**166.42**		**840750**	**232**

Planting Materials produced in 2024

Item	Crop	Variety	Target (No)	Quantity produced (No)	% achievement	Value (Rs.)	Qty. Supplied/ Provided to (No. of farmers)
Vegetables	Broccoli	Green Magic	5,000	5300	>100	7000	20
	Cauliflower	Sweta and Local Tha-animakhaiChabi	5,000	5550	>100	5100	25
	Cabbage	Green Express and Rareball	5,000	12,500	>100	6500	30
	Cucurbits	Watermelon F1- Madhuri, Ridge gourd F1-BTL -01	5,000	710	>100	3500	50
	Tomato	NS-501, Arka Abhed, Arka Rakshak	5,000	7150	>100	7000	10
Spice	Chilli	Barnali	2,000	3450	>100	1400	10
	Onion	Arka Kalyan & Prema	10,000	15,100	>100	3775	10
	Capsicum	US-1147	-	1200		1200	7
Total			39,700	50960		35475	162

Distribution of vegetable seedlings to the farmers of Bishnupur district

Fish seed products

Item	Product Name	Species	Proposed quantity (2023/ Target		Quantity produced		% achievement	Value (Rs.)	Qty supplied and No. of farmers	
			No.	Kg.	No.	Kg.			No.	Kg.
Livestock strains/ fingerlings (Nos. in lakh)	Spawn	IMC & Exotic carp	1200	x	1000	x	83.3	60,000	100	
	fry	IMC & Exotic carp	8.0 lac	x	7.0	x	87.5	4,90,000	200	
	fingerlings	IMC & Exotic carp	7.0 lac	x	5.0lac	x	71.4	10,00,000	200	

Soil & Water Testing/ Soil Health Cards (SHCs) during 2024

Sl. No.	Samples tested/ Analysed	Sample (No.)	Farmer beneficiaries	Village covered	Amount realised (Rs.)	SHCs issued to farmers (Nos.)
1.	Soil sample	142	596	10	16000	596
2.	Water sample	120	120	30	3000	
	Total	262	716	40	19000	596

Soil testing

Soil Collection

Status of Mobile Advisory during 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	350	2300	20	235	12	3540	-	-	70	3540	-	-	102	3540
Voice only	470	300	55	86	-	-	-	-	27	67	-	-	82	153
Voice and Text both	150	90	36	59	-	-	8	12	-	-	55	40	99	111
Total	**970**	**2690**	**111**	**380**	**12**	**3540**	**8**	**12**	**97**	**3607**	**55**	**40**	**283**	**3804**

Status of Revolving Fund (RF) during 2024

Rupees in lakhs

Sl. No.	Activities	Opening balance as on 1st Jan, 2024	Income during the year	Expenditure during the year	Net balance in KVK as on 31st Dec., 2024
1	Paddy seed production, Planting materials, Fish seed production	**9.87**	**6.25**	**5.70**	**10.37**
	Total	**9.87**	**6.25**	**5.70**	**10.37**

Revenue(R) generation by KVK from different sources other than ICAR during 2024

Sl. No.	Activity/ Enterprise	Source(s)/ Funding Agency	Revenue generation (Rs.)
1.	Animal feed production unit	Host Institute	200000
2.	Livestock/fishery production	Host Institute	800000
3.	Experimental farm (Rice Crop)	Host Institute	6000
4.	Seed processing unit	Host Institute	70000
5	Planting materials	Host Institute	15000
6	Bioproduct (Vermicompost)	Host Institute	6000
		Total	**1097000**

Functional Linkages established with different Organizations during 2024

Name of organization	Nature of linkage
Dept. of Agriculture, Horticulture and soil conservation, Animal Husbandry & Fishery, Bishnupur, Govt. of Manipur	Seeds & Fertilizer, Vegetable seeds and planting materials, trainings etc.
IGNOU	Programme Post graduate diploma in food safety and quality management.
ICAR-CIFE, Mumbai	Training
ICAR-IIHR, Bangalore	NEH Component programme
Lovely Professional University, Punjab	Training & Internship
Kumbi College, Kumbi	Training & Internship

Awards and recognitions during 2024 (For farmer)

Sl. No	Name of Award/ recognition/ fellowship	Professional Society/ Govt. Dept./ Any Agency	Value of award (Rs.)	Significant Contribution/ achievement
1.	Shri Ningthoujam Ingocha Singh - **A role model vegetable farmer**	ICAR for NEH Region, Manipur Centre, Lamphelpat, Imphal	Citation	outstanding performance in cultivation of horticultural crops & **An innovative method for raising of vegetable nursery by using corrugated Galvanized sheets**
2.	Smt. Kabrabam Ranjita Devi- - **A role model Self Employed youth**	ICAR for NEH Region, Manipur Centre, Lamphelpat, Imphal	Citation	In maximizing the cropping intensity of horticultural crops
3.	Shri Chongtham Khogendro Singh- **A role model vegetable - based farming.**	ICAR for NEH Region, Manipur Centre, Lamphelpat, Imphal	Citation	**In promotion of Vegetable based Cropping system & diffusion of technology, Yard Long Bean (*Vigna unguiculata* L.) variety *ArkaMangala* : A good source of high income generation for the farmers**

Horticulture farmers of Bishnupur district honoured by ICAR, NEH Manipur Centre during Kisan Diwas & National Mushroom Day celebration, 2024 at ICAR Lamphelpat

Live Phone in programme of AIR & DDK,IMPHAL and Field programme coverage by DD Manipur

Local News paper coverage on different activities of horticulture section

KVK Bishnupur distributes vegetable seeds

By A Staff Reporter
IMPHAL | Oct 8

The Krishi Vigyan Kendra (KVK), Bishnupur, in collaboration with the ICAR-Indian Institute of Horticulture Research, Bengaluru, Karnataka, distributed vegetable seeds to residents of 11 villages in Bishnupur district on Tuesday.

The programme was organised by KVK, Bishnupur, under the NEH component programme.

Eleven varieties of vegetables, including tomato (varieties Arka Samrat and Arka Rakshak), cucumber (variety Arka Aveera), French bean (variety Arka Arjun), coriander (variety

(contd on page | 3)

KVK Bishnupur distributes vegetable seeds

(contd from page | 1)

Arka Ishal), pumpkin (variety Arka Suryamukhi), ridge gourd (variety Arka Sujat), brinjal (variety Arka Nidhi), chilli (varieties Arka Meghana and Arka Khyati), radish (variety Arka Nishanth), onion (variety Arka Kalyan), and okra (varieties Arka Anamika and Arka Nikita were distributed during the event.

Speaking at the event, KVK Bishnupur Subject Matter Specialist, Pangeijam Bijaya Devi, stated that the seeds provided are verified and tested varieties.

The objective of the programme is to promote higher yields among farmers. During the programme, farmers were also educated on nursery raising techniques for vegetables. The 'scien-

...which involves the adoption of scientific farming methods to improve crop yields, was also introduced to the farmers.

Bijaya further mentioned that the KVK, Bishnupur, will monitor the farmers' vegetable production to provide expert guidance throughout the planting and growing process. "Farmers will be guided by the KVK from seed plantation to the harvest of vegetables," she added.

Previously, KVK Bishnupur had organised the 'Tribal Sub-Plants' programme three times exclusively for farmers from the hilly areas of Manipur, during which similar scientific farming methods were shared with the participants.

PREPAK greets on 4

ফার্মর্স ফিল্ড দে পাংথোকখ্রে

ট্রেনিং পীবগী লোয়ননা মরু-মরাংশিং য়েংথোকখ্রে

কে ভি কে বিষ্ণুপুরনা ফ্রন্ট লাইনশিংদা মরু-মরাং য়েংথোকখ্রে

Special Programmes

Sl. No.	Name of program	Duration and Date	No. of participants		
			M	F	Total
Celebration of Important Day					
1	Viksit Bharat Sankalp Rath Yatra	15th Nov., 2023 to 26th Jan., 2024	135	165	300
2	Golden Jubilee Celebration of Kvks 2024 & Distribution of Certificates to DFI Fellow Farmer &Torch Prayan - 50th Golden Jubilee Celebration of KVK	13th May, 2024	150	80	230
3	PM KUSUM (MNRE) under 100 days Action Plan of KVKs	30th July 2024	65	45	110
4	Plantation Drive “EK PED MAA KE NAAM” Plant4Mother campaign	21st & 29th August, 2024	45	58	103
5	Krishi Swarna Samriddhi Week (KSSW) and Krishi MelaKisan Mela	05 to10 Dec.,2024	8	15	23
6	World Soil Health Day	05-12-2024	65	50	115
7	Swachh Bharat Abhiyan	16 to 31-12-2024	126	139	265

Celebration of world food day 2024

Golden Jubilee Celebration of Kvks 2024 & Distribution of Certificates to DFI Fellow Farmer

Torch Prayan - 50th Golden Jubilee Celebration of KVK

Plantation Drive “EK PED MAA KE NAAM” Plant4Mother campaign

Celebration of Rashtriya ekta diwas

Celebration of Soil Health Day and Krishi Mela

Progress of activities under PM-Kusum-100 Days Action Plan (31st August, 2024)

Skill development & vocational training of ≥ 5days duration: Target 50,000 farm women and 50,000 youths to be trained.		
Training programs organised	4	
Total farm women Trained	58	
Total youths trained	92	
Diversification through CFLDs.	CFLDs on Pulses/ Oilseeds/ Maize in Kharif season (No. of demonstrations of one acre each)	
CFLDs on Oilseeds	85 (Demo)	99 acre
CFLDs on Maize	25 (Demo)	25 acre
PM KUSUM (MNRE): Target: 100 workshops of one day each and 3000 participants	One workshop organised by each selected KVKs for 30 participants.	
Workshop organised on PM-Kusum	1	
Farmer participated in PM-Kusum workshop	33	
Farmers shown interest in solar system installation	8	

Feedback of Farmers

Farmers' perception on new varieties and technologies (Point-wise).

- Introduction of Yard long bean var.Arka Mangala was appreciated by most of the farmers of Bishnupur district after seeing its performance .
- The pods are so attractive and its length is about 60-75 cm which help in increasing the yield than farmers' variety.
- Arka Mangala has long shelf life which is a good characteristic for market.
- Farmers informed that additional income could obtain from the sale of leaves of Arka Mangala by making bundles.
- Arka Mangala being photo insensitive variety, it can grow through out the year to improve the economy of the farmers.
- Improved varieties of groundnut (CAUGS-1) with its improved package of practices were accepted by the farmers as it gives more return per rupee invested as compared with farmers practice and could be used both as feed and fodder.

Important problems and Researchable Issues (Point-wise)

- Land remains fallow during *rabi* seasons as most of the land were occupied by late maturing rice varieties till December first week which led to the untimely sowing of *rabi* crops.
- Hence, development of short duration thermal insensitive rice varieties should be encouraged to enhanced rice based cropping system.
- High cost of organic inputs and not readily available.
- Need to refine the technologies based on organic cultivation or organic nutrient management.

On Farm Testing (Discipline-Wise Summary)

Discipline	Crop / Enterprise	Number of technology/ Social Concept	No. of trials		% of achiev e ment
		Assessed	Target	Achiev ement	
Agronomy	Rice-lentil	Performance of Rice-lentil cropping system under no till condition of Bishnupur district	10	10	100
	Finger millet	Varietal performance of finger millet var. VL- Mandua 379 with improved agronomic practices during kharif season	10	10	100
Horticulture	Garden Pea	Varietal performance of Garden pea var. Kashi Ageti	4	4	100
	Yard long bean	Varietal performance of Yard long bean var. Arka Mangala	4	4	100
Fishery	Pond mngt.	1	3	3	100
Home Sc.	Pineapple	Extraction of pineapple fiber	3	3	100
	Millet	Assessment of multi grain millets cookies	3	3	100
PP	Chilli	IPM in Chilli	3	3	100
	Onion	Management of purple blotch in onion	3	3	100
Soil Sc.	Rice	Assessment of Nano urea application in rice cultivation	5	5	100
	Tomato	Assessment of micronutrient management in tomato	3	3	100
Total	**11**		**54**	**54**	**100**

FLDs (Discipline-Wise Summary)

Discipline	Crop / Enterprise	Number of technology / Social Concept Demonstrated	No. of demonstrations		% of achievement
			Target	Achievement	
Agronomy	Blackgram	Popularization of blackgram var. PU-31 with improved agronomic practices	10	10	100
Horticulture	Broccoli	Popularization of Broccoli cultivation intercropped with Coriander	5 villages (2 Demo/village)	5x2=10	100
	Onion	Popularization on Scientific cultivation of Onion var. Arka Kalyan	5 Villages (2 Demo/village)	5x2=10	100
Fishery	Pond Management	Production technology of Stunted fish fingerlings. Stocking of IMC Fish fry at high stocking density @2,50,000 fry /ha for 10 months with natural feed	10	10	100
Home Sc	Jackfruit	Popularisation of jackfruit chip	10	10	100
PP	Maize	Management of fall armyworm in maize.	10	10	100
	Pea	Integrated pest and disease management in pea.	10	10	100
Soil Sc.	Vermi compost	Popularization of Low cost Vermicomposting technology	5	5	100
	Compost	Popularization of Enriched compost (Made from locally available biomass)	5	5	100
TOTAL	9		80	80	

Common OFT-1
Agronomy

Performance of Rice-lentil cropping system under no till condition of Bishnupur district

Technology details :
- Rice var. RC-Maniphou 16 followed by lentil var. IPL-316

Parameters for assessment	Results/ observation on selected parameters	
	Rice	Lentil
Plant height	95.2cm	30.74 cm
No. of tillers or branches per plant	14.3	3.46
No. of effective tillers/pods per plant	10.9	30.2
No. of Panicles/pods per plant	220	1.21
Test weight(g)	23.5	2.26
Yield/ ha (qt/ha)	57.00	6.85
Cost of cultivation (Rs/ha)	81200	32400

Prioritised Problem- Majority of rice areas remain fallow after the harvest of *kharif* season rice

Rice-lentil cropping system

Rice-Fallow

Economic Analysis of Rice lentil cropping system | **Source: ICAR, NEH Region, Umiam, Meghalaya, 2018** | **Area – 0.5 ha** | **No. of trial – 5 nos**

Technology	Yield (q/ha)		REY (q/ha)	Cost of Cultivation	System productivity (q/ha)	System profitability (Rs/ha/day)NR/365)	Gross return	Net return	B:C
	Rice	Lentil							
Rice-lentil cropping system	57.00	6.85	22.83	113600	79.95	344.90	239490	125890	2.11
Rice- fallow	50.5		-	78500	50.50	200.00	151500	73000	1.93

OFT-2 Agronomy

Varietal performance of finger millet var. VL-Mandua 379 with improved agronomic practices during *kharif* season

Crop	Major problem diagnosed	Severity of problem (%)	Title of OFT	No. of trials
Millets	Lack of suitable varieties with improved package of practices in the District	65	Varietal performance of finger millet var. VL-Mandua 379 with improved agronomic practices during *kharif* season	7

Technology

T_1 - Varietal performance of finger millet var. VL- Mandua 379 with improved agronomic practices during *kharif* season
T_2 - VL Mandua 376
T_3 - Local cultivar closed type finger millet
1) Seed rate: 8 kg/ha 2) Spacing: 22 cm X 8 cm 3) N:P_2O_5: 40:30 kg/ha
Farmers' Practice: Close typed local cultivar millet

Parameters on Assessment/ Refined (Pl. mention)				Results/ observation on selected parameters	Net return (Rs/ha)	B:C Ratio (GR/GC)
Technology	T-1 (VL-Mandua 379)	T-2 (VL Mandua-376)	Farmer's Practice Local cultivar Closed typed millet	Technology		
1. Mean plant height at harvest	95.2	91.5	98.0	T1- 20.40 q/ha	62902	3.18:1
2. Plant population per square metre at maturity	56	56	56	T2 –19.50 q/ha	58852	3.04:1
3. No. of tillers per hill	4.5	4.2	3.8	T3 – 15.60 q/ha	41302	2.43:1
3. No. of fingers/ear head	6.83	6.32	6.02	SEm±: 0.67	9413	0.13
5. 1000 seed weight (gram)	3.01	2.78	2.1	CD $_{0.05}$: 2.09	19016	0.39
6. Seed yield (kg/ha)	2040	1950	1560			
7. Cost of cultivation (Rs./ha)	28898	28898	28898			
8. Price (Rs/kg)	45	45	45			
9. Gross return (Rs./ha)	91800	87750	70200			

Source: **ICAR-VPKAS, Almora, 2018**

Remark : Recommended for FLD

FLD-1 Agronomy

Popularization of blackgram var. PU-31 with improved agronomic practices

Crop	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs/ha)/ (Rs./unit)	Gross Return (Rs/ha) /(Rs./ unit)	Net Return (Rs/ha)/ (Rs./ Unit)	B:C Ratio (GR/GC)
Black gram	H	L	A	qt/ha	%				
	9.2	6.5	8.9	6.8	30.8	28200	71200	43000	2.52:1
Farmers practice – Broadcasting and improper nutrient management						29000	54400	25400	1.87:1

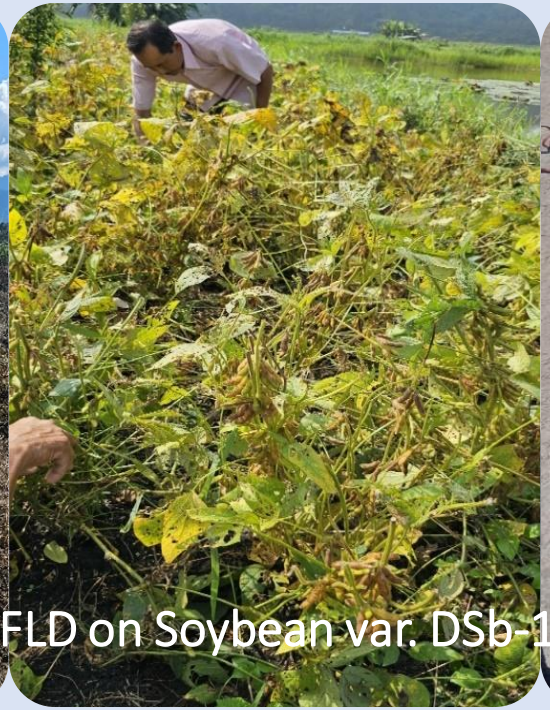
Technology demonstrated

- Popularization of blackgram variety PU-31
- Seed rate: 20 kg/ha
- Spacing: 30cm x10 cm
- Seed treatment with Carbendazim+Mancozeb @ 2g/kg seed
- NPKS@20:40:20:15 kg/ha
- Seed inoculation with Rhizobium@50g+10 g sugar per kg seed

CFLD (Oilseeds)

Crop	Variety	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs/ha) /(Rs./ unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha) /(Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	(Qt/ha)	%				
Groundnut	Girnar-3	16.89	10.52	15.55	12.35	25.91	48500	155500	107000	3.21:1
Soybean	DSb-19	14.80	8.90	13.85	11.55	19.91	40200	124650	84450	3.10:1
Rapeseed	TS-38	12.35	6.50	8.90	6.78	31.27	24300	89000	64700	3.66:1

CFLD on Groundnut var. Girnar 3



CFLD on Soybean var. DSb-19

CFLD on Rapeseed var. TS-38

CFLD (Maizes)

Crop	Variety	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs/ha)/(Rs./unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha) /(Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	(Qt/ha)	%				
Maize	DMH - 1147	35.25	20.5	27.25	16.5	65	43000	109000	66000	2.53:1

Agronomy Training Programmes

(Farmers)

No. of Training prog			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
10	10	100	40	20	-	20	80	80	100

Training and Demonstration on Diversification through CFLD oilseed in Kharif season

(Rural Youth)

No. of Training prog			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
4	4	100	20			20	40	40	100

Training programme on Cultivation of rapeseed & mustard in rice fallow under Krishi Swarna Samriddhi Week (KSSW)

(Extension Personnel)

No. of Training prog.			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
3	3	100	20	-	-	20	20	100

Training programme on Improved cultivation practices of groundnut and soybean






Recognised as Assessor by the National Skill Development Cooperation (NSDC) under the Skill Council of India and assessed Skill Development Programmes under PMKVY in the Job roles of "Organic Grower" and "Mushroom Grower"

OFT-3
Horticulture

Performance of Yard Long Bean var. Arka Mangala

Crop / Enterprise	Major problem diagnosed	Severity of problem (%)	Technology	Title of OFT	No. of trials
Yard long bean var. Arka Mangala	Low yield and short shelf life.	50	To1: Arka Mangala, To2: Yao Seed rate- 25kg/ha, Spacing-45 cmx15 cm, FYM-5 tonnes/ha, NPK-30:60:50kg/ha	Performance of Yard Long Bean var. Arka Mangala	4

Parameters on Assessment/ Refined	Results/ observation on selected parameters	
	Technology	Farmer practice
i. No of days at 50% flowering	i. 49 days	i. 40 days
ii. No. of days at 1st harvest	ii. 58 days	ii. 47 days
iii. Interval of Harvesting	iii. 3 days	iii. 3 days
iv. Avg. no. of Harvesting	iv. 16.5 times	iv. 8.5 times
v. Yield kg/ha	v. 20,053	v. 11,230
vi. Crop duration	vi. 120 days	vi. 80 days
vii. Incidence of Pests and diseases	vii. Aphid, pod borer & rust	vii. Aphid, pod borer & rust
viii. Self life	viii. 5 days	viii. 3 days
ix. Cost of cultivation	ix. Rs 1,42,933	ix. Rs 1,67,000
x. Gross Return	x. Rs 9,02,385	x. Rs 5,05,350

Net return (Rs/ha)		B:C Ratio (GR/GC)	
Technology	Farmer practice	Technology	Farmer practice
7,59,452	3,38,350	6.3 :1	3:1

Fig. 1: Standing crop of Arka Mangala at different locations

Fig. 2: DDK coverage on performance of Arka Mangala

Fig. 3: Harvested pods of Arka Mangala & Yao

Pods sold @ Rs. 45/kg

Remark: The technology will be taken for FLD. as the neighbouring farmers and farmers participated during the Field Day programme were interested to grow at their respective fields

Source: ICAR-IIHR, 2019

Farmers' Field Day Programme

on

Performance of Yard Long Bean var. Arka Mangala at Koijuman on 27- 09-2024 in presence of Smt. S. Sushila Chanu , District Officer, Horticulture & Soil Conservation, Bishnupur

OFT-4

Horticulture

Varietal performance of Garden pea var. Kashi Ageti (Common OFT)

Crop / Enterprise	Major problem diagnosed	Severity of problem (%)	Technology	Title of OFT	No. of trials
Pea var. Kashi Ageti	Reduction & fluctuation in yield due to prolong use of locally available seed material and lack of improved high yielding garden pea variety.	50	To1: Kashi Ageti To2: Arkel Seed rate- 80kg/ha, Spacing-60cmx15 cm, NPK-20:60:40kg/ha	Varietal performance of Garden pea var. Kashi Ageti	4

Parameters on Assessment	Results/ observation on selected parameters	
	Technology	Farmer Practices
i. Days at 1st germination	i. 6 days	i. 6 days
ii. No of days at 50% flowering	ii. 50 days	ii. 53 days
iii. Avg. plant height (cm)	iii. 61.5 cm	iii. 54.5 cm
iv. Avg. no. of days at 1st harvest	iv. 65.5 days	iv. 61.5 days
v. Avg. no. of pods/plant	v. 11.5	v. 10.5
vi. No. of seeds per pod	vi. 8	vi. 8
vii. Yield kg/ha	vii. 5,544	vii. 4,328
viii. Crop duration	viii. 110 days	viii. 106 days
ix. Incidence of Pests and diseases	ix. Aphid, blight & rust	ix. Aphid, blight & rust
x. Cost of cultivation	x. Rs. 81,550	x. Rs. 94,100
xi. Gross Return	xi. Rs. 2,77,200	xi. Rs. 2,16,400

Net return (Rs/ha)		B:C Ratio (GR/GC)	
Technology	Farmer practice	Technology	Farmer practice
1,95,650	1,22,300	3.4:1	2.3:1

Pods sold @ Rs. 35.5/kg

Source :
ICAR-IIVR, 2015

FLD-2 Horticulture

Popularization on Scientific Cultivation of Broccoli Intercropped with Coriander

Crop Enterprise	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local
	H	L	A	qt/ha	%
Broccoli var. Green magic & Coriander var. Gold	192	147.2	172.30 & 28.8 (Coriander leaf)	126.24	36

Technology demonstrated	➢ Broccoli var. Green magic intercropped with coriander ➢ Seed rate of Broccoli - 350g/ha, ➢ Spacing-60cmx45 cm, ➢ Seed rate of coriander 10 kg/ha ➢ Application of Vermicompost- 5 tons/ha

Gross Cost (Rs/ha)/(Rs./ unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha)/(Rs./ Unit)	B:C Ratio (GR/GC)
1,33,500	6,03,050+1,34,400 =7,37,450 (included the return from coriander)	6,03,950	5.5:1

Farmer practice: Sole cultivation of Broccoli

Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha	B:C Ratio (GR/GC)
1,22,700	4,41,841	3.4:1 319141	3.6:1

❑ Rate of vermicompost – Rs. 15/kg

❑ Broccoli head sold @ Rs. 35/kg









Farmers' Field Day Programme

on

Popularization of Broccoli intercropped with Coriander at Kumbi Terakha

in presence of Hon'ble MLA, Kumbi Constituency & Respected DOs, Dept. of Agriculture and Hort. & Soil Conservation, Bishnupur

FLD-3

Horticulture

Popularization on Scientific cultivation of Onion var. Arka Kalyan

Crop Enterprise	Technology demonstrated	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local
		H	L	A	qt/ha	%
Onion Var. Arka Kalyan	Onion : Var. Arka Kalyan Seed rate : 10 kg/ha, Spacing : 15 cmx10 cm FYM : 5 tons/ha NPK : 120:60:40kg/ha	321.20	272.75	267.15	221.30	20.7

Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio (GR/GC)
1,30,000	6,67,875	5,37,875	5:1

Farmer practice: Onion(ON-12)

Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio (GR/GC)
1,40,000	5,53,250	4,13,250	3.9:1

- Onion bulbs sold @ Rs. 25/kg

Farmers' Field Day Programme

on

Popularization on Scientific cultivation of Onion var. Arka Kalyan at Toubul village, Bishnupur district

Horticulture Training Programmes

(Farmers)

No. of Training prog.			Participants (Nos.)			Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Total		
5 (15)	6 (16)	>100	120	24	144	100	>100


Training and seed distribution programme for FLD

(Rural Youth)

No. of Training prog.			Participants (Nos.)			Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Total		
5(15)	5(15)	100	60	15	75	75	100


Training programme of OFT on Scientific cultivation of Yard Long Bean & Garden Pea 2

(Extension Personnel)

No. of Training prog.			Participants (Nos.)		Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Total		
1(6)	1(3)	100	30	30	30	100


Scientific cultivation of vegetable crops under rice based cropping system for income generation and distribution of vegetable seeds




Vegetable based cropping system and cultivation of solanaceae vegetable


Training and seed distribution programme for FLD

Training programmes on OFTs and FLDs

Lecture delivered as Resource person

Distribution of vegetable seeds under NEH programme, ICAR-IIHR












OFT-5
Fishery
1st year

Growth Performance of *Ompok pabda* in monoculture Fish farming

Livestock	Major Problem diagnosed	Severity of problem (%)	Technology/ Social Concept	Title of OFT	No. of trials
Fishery (Pond Mgmt)	Prioritization for aquaculture diversification in Manipur.Culture method for rearing of *O. bimaculatus* is very necessary to ensure reliable and regular supply of the fish and to maintain the stock of the fish at a level of conservation and rehabilitation	70	Technology T1: Stocking Pabda @ 6000/ha Fingerlings following recommended practices of fish farming. T2: Stocking rohu @ 6000/ha Fingerlings following recommended practices of fish farming. Culture Period : 8 months Area : 0.09 ha	Growth Performance of *Ompok pabda* in monoculture fish farming	3

Parameters of assessment/refinement	Results/ observation on selected parameters	Net return (Rs/Ha)	B:C Ratio (GR/GC)	Remark for recommendation for FLD
Technology				
1. Survival rate (%)	75	**2,11,314**	3.44	Continuing for further trial
2. Fish Yield (Kg/ha)	297.75			
Farmers' Practice :				
1.Survival rate (%)	80	**1,36,741**	**2.83**	
2.Fish Yield (Kg/ha)	1055.89			
ICAR- NEH, Lembucherra (2016)				

FLD-4
Fishery

Production technology of Stunted fish fingerlings

1st Year

Enterprise	Breed	No. Of farmers	No. Of animals/ poultry birds etc.	Performance parameters/ indicators	Data on parameters in relation to technology demonstrated per 0.25 ha		% Change /increase over local
					Demo	Local	
Nursery management	Indian major Carps	5	5,00,000/ha	Survival rate	70	57	22.8
				BC Ratio	3.5:1	2.5:1	
Source: : CoF , CAU, Lembucherra, Tripura (2022)							

Fishery Training Programmes

(Farmers)

No. of Training prog.			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
4	4	100	60	40	50	30	180	150	>100

5 Days Vocational Training programme on "Indigenous Preparation of Fermented Fish" under 100 days Action Plan

(Rural Youth)

No. of Training prog.			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
4	3	75	40	40	-	-	80	80	100

Training programme on Freshwater Pearl Culture under 100 days action plan of KVKs

(Extension Personnel)

No. of Training prog.			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
2	2	100	20	40	-	60	40	>100

T=Target A=Achievement

OFT-6
Home Sc. OFT
1st Year

Extraction of Pineapple Fibre

Crop/	Major problem diagnosed	Severity of problem (%)	Technology/ methodology/ Social Concept (details)	Location	Title of OFT	No. of Trials
Pineapple fibre	Post harvest, pineapple leaves are a problematic agro waste.	70%	T1-NINFET -SATHI retting accelerator @ 0.5% along with 0.5%of DAP. T2-NINFET SATHI retting accelerator @ 0.75%along with 0.5%of DAP. T3- Control farmer practice (water retting)	Oinam Leimaram & Ngakhalawai	Extraction of pineapple fibre	3

Kew	Fresh leaf (kg)	Retting	Colour	Texture	Length	Fibre yield (g)	Gross return	Net return	BC ratio
T1	13	10 days	Good	Soft	40 cm	250	187	77	1.7:1
T2	13	13 days	Good	Soft	38 cm	210			
T3	13	20 days	Average	Soft	30 cm	198			

Source: ICAR- NINFET, 2021

To be carried out next year as well i.e. in 2025 for second trial

Leaf

Retting (T1)

Retting after 10 days

End product

Pineapple fibre Yarn

Twisting fibre

After Treatment

Treatment : Soap-20% Soda ash-5%

Separation of leaf

OFT-7
Home Sc. OFT
2nd Year

Assessment of multi grain millets cookies (Common)

Crop/ Livestock/ Other enterprise	Major problem diagnosed	Severity of problem (%)	Technology/ methodology/ Social Concept (details)	Location	Title of OFT	No. of Trials
Millets	Non availability of diversified value added product	80%	Beat 50g butter and sugar powder 30g till fluffy ❖ Add millet flour (Ragi, sorgum, bajra @ 30:40:30) till soft dough and add 5ml vanilla essence. ❖ Spread out dough on butter paper and roll it ❖ Cut into shape and perforate it ❖ Bake it for 15 min at 180 degree in preheated oven	Oinam Leimaram & Ngangkhalawai	Assessment of multi grain millets cookies	3

Perameter	Observation	Shelf life	Gross income
Colour Taste Appearance Texture Flavour	Brown Good Good Crispy Good	3 months	500

Net income	Product recovery / kg	B.C. ratio
295	850g	2.4:1

Sl No	Parameters	Result
1	Moisture % (g/100g)	2.35±0.27
2	Protein (NX 6.25) % (g/100g)	3.16±0.06
3	Fat % (g/100g)	16.74±0.23
4	Crude fibre % (g/100g)	1.07±0.06
5	Total Ash % (g/100g)	1.54±0.01
6	Carbohydrates (by difference) % (g/100g)	75.14
7	Energy value (kcals/100g)	463.86

Source:
ICAR-IIMR Hyderabad 2018

FLD-5
Home Sc. FLD

Value addition of jackfruit (Chips) 2nd year

Crop/ Other enterprise	Major problem diagnosed	Severity of problem (%)	Technology/ methodology/ Social Concept (details)	Location	No. of demo
Value addition	Under utilized fruits	70%	Preparation with blanching ❖ Cutting of fully matured unripe jackfruit. Peeling and deseeding ❖ Deseeded bulbs cutting longitudinal into finger like pieces ❖ Blanching into hot water with 1% KMS for 5 minutes ❖ Dried in drier @ 42°C	Oinam Leimaram & Ngakhalawai	10

Parameters	Yield	Gross return	Net return	B.C. ratio
Self life :3 months Taste : Good Colour : Good	End Product recovery from 20 kg is 16 kg Cost of end product per kg is Rs 240 @ 16 kg	3840	2480	2.82:1

Source: TNAU, 2017

Home Sc. Training Programmes

(Farmers)

No. of Training prog.			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
5	5	100	55	70	-	-	125	125	100

One month certificate course on food processing in collaboration with Kumbi college

(Rural Youth)

No. of Training prog.			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
7	7	100	30	45	0	100	175	175	100

(Extension Personnel)

No. of Training prog.			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
3	3	100	30	45	-	75	75	100

T=Target A=Achievement

5 days vocational training programme on Food processing of seasonal fruits under 100 days action plan of KVK

Lecture Delivered as Resource Person

Chief Minister Economic Revival Mission on Food processing

One week faculty development programme
on women empowerment at YK College, Wangjing

Faculty development programme
on food processing at Thambal Marik College, Oinam

Agril. Extn. Training Programmes

(Farmers)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
10	10	100	120	60	0	0	180	200	90

(Rural Youth)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
10	10	100	90	130	0	0	220	240	92

(Extension Personnel)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
4	4	100	20	30	0	50	50	100

T=Target A=Achievement

OFT-10
Soil Science

Assessment of Nano urea application in rice cultivation (Second year)

Crop / Enterprise	Problem with severity	Technology/ Social Concept/ methodology to be	Source of technology and year release	No. of trials proposed to be	Parameters of assessment/ refinement
		Assessed		Assess	
Rice var. RC Maniphou - 13	N losses from urea application and low inherent soil fertility	Nano urea application in rice T1: Nano urea @ 3 ml/lit water at tillering and panicle initiation stage + 50 % N (30 Kg/ha) at basal dose + 100 % P2O5 (40 Kg/ha) at basal dose + 100 % K2O (30 Kg/ha) at basal and tillering stage	TNAU (2020)	5	➢ pH ➢ OC % ➢ Av. N,P,K kg/ha Before & after crop. ➢ Yield (q/ha) ➢ B.C Ratio
Farmer Practice(T0): Farmer practice (Application of fertilizer without Nano Urea)					

Parameters on Assessment							Gross Cost (Rs/ ha)/	Gross Return (Rs/ha)	Net return (Rs/ ha)	B:C Ratio (GR/ GC)
Technology (Rice)	Initial fertility kg/ha	pH	OC %	Sowing date	Harvest date	Yield Qt/ha				
T1	N-420.7 P-19.47 K-150.9	5.9	1.09	17/06/24	01/11/24	47.94	68946	155805	86859	2.26:1
T2	N-415.9 P-21.23 K-145.8	5.7	1.03	17/06/24	01/11/24	40.5	74143	131625	57482	1.77:1

OFT-11
Soil Science

Assessment of micronutrient management in tomato

Crop / Enter-prise	Problem with severity	Technology/ Social Concept/ methodology to be	Source of techno and year release of (if any)	No. of trials proposed to be	Parameters of assessment/ refinement
		Assessed		Assessed	
Tomato Var: Arka Rakshak	Low yield due to imbalance use of micronutrients	Tomato T1: 100 % N, 50 % P_2O_5 & 50 % K_2O ZS @ 5 Kg/ha, BX @ 5 Kg/ha & AM @ 0.5 Kg/ha as soil application ZS @ 0.25 % (525 ppm), BX@ 0.25 % (262 ppm)& AM @ 0.10 % (1300 ppm) 3 time at 15-20 days interval as foliar application	Division of System Research and Engineering, ICAR, NEHR, Umiam, 2023	3	➢ Soil pH, OC, NPK status ➢ Date of sowing ➢ Date of transplanting ➢ Yield (q/ha) ➢ B:C Ratio
		T2: Farmer's Practice			

Parameters on Assessment							GC (Rs/ ha)	GR (Rs/ha)	NR (Rs/ ha)	B:C Ratio
Techno-logy (Rice)	Initial fertility kg/ha	pH	OC %	Sowing date	Transplanting date	Yield Qt/ha				
T1	N-296.6 P-43.72 K-248.7	5.43	1.25	20/05/24	15/06/24	323.7	74328	485550	411222	6.53:1
T2	N-301.7 P-42.80 K-238.4	5.41	1.23	20/05/24	15/06/24	264.3	80237	396450	335113	4.94:1

FLD-8

Soil Science

Popularization of **Lowcost Vermicomposting technique** (Second year)

Crop Enterprise	Technology demonstrated	Demonstrated nutrient contents %		Demonstration Yield (Kg/Unit)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs./ unit) (2x1x1)m	Gross Return (Rs./ unit) (2x1x1)m	Net Return (Rs./ Unit)	B:C Ratio (GR/GC)
		Demo	Check	H	L	A	Kg/Unit)	%				
Vermi compost	pH	6.6	6.3	1230	1134	1182	867	30.8	7700	35460	27760	4.61:1
	OC	18.4	17.2									
	N	1.50	1.47						10500	26010	15510	2.47:1
	P	1.20	1.16									
	K	1.4	1.35									

Source: AAU, 2015

FLD-9

Soil Science

Popularization of Enriched compost (Made from locally available biomass) (Second year)

Crop Enterprise	Technology demonstrated	Demonstrated nutrient contents %		Demonstration Yield (Kg/Unit)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs./ unit) (3x2x1)m	Gross Return (Rs./ unit) (3x2x1)m	Net Return (Rs./ Unit)	B:C Ratio (GR/GC)
		Demo	Check	H	L	A	(Kg/Unit)	%				
compost	pH	7.3	6.9	2548	2314	2431	2058	18.1	6780	36465	29685	5.38:1
	OC	19.7	17.4						6540	20580	14040	3.14:1
	N	2.1	0.5									
	P	3.9	0.15									
	K	1.3	0.5									

Source: ICAR research complex for NEH Region, Umiam, 2014

Soil Sc. Training Programmes

(Farmers)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
12	12	100	20	20		20	60	60	100

(Rural Youth)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
3(9)	3(9)	100	20	20	-	20	60	60	100

(Extension Personnel)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
2(4)	2(4)	100	15	15	-	30	30	100

T=Target
A=Achievement

Vermicomposting Training programme

Training programme on Compost Making

5 Days Vocational Training programme on "Preparation Vermicompost

Lecture delivered as Resource person

As resource person for Van Dhan Vikas Kendra Manipur on vermicomposting

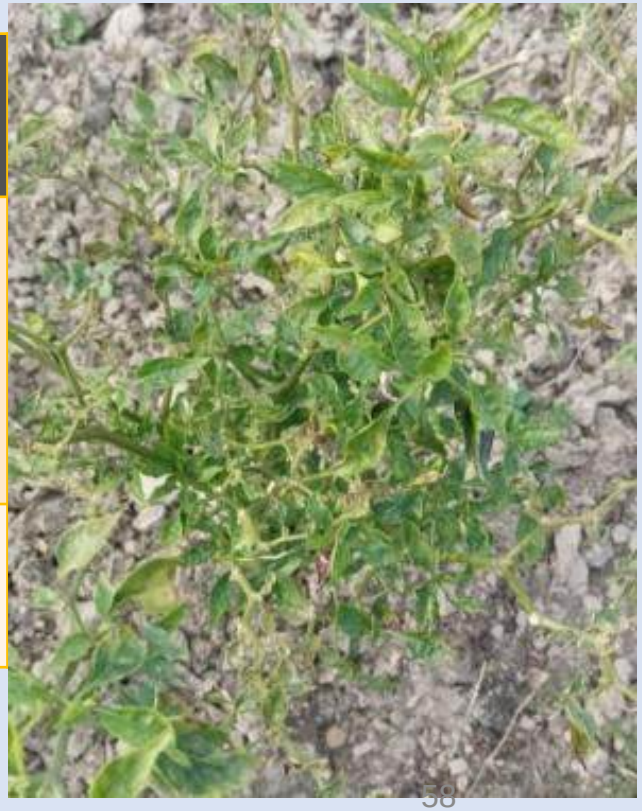
Chief Minister Economic Revival Mission on Vermicomposting

OFT-8
Plant Protection

IPM in Chilli.

Crop / Enterprise	Problem diagnosed	Severity of problem (%)	Technology (give details)	Title of OFT	No. of trials
Chilli Var. Sakata-653	Fruit borer & sucking pest.	50-60	T1: 20 sticky traps/acre; three times application of Beauvaria bassiana @2g/l at 10 days interval . T2: Spraying of Emamectin benzoate @ 0.3ml/l T3: (Farmer Practice: Neem based insecticides.	IPM in chilli	3

Parameters on Assessment/ Refined	Results/ observation on selected parameters	Net return (Rs/ha)	B:C Ratio (GR/GC)
1. Fruit damages %. 2. Yield	**T1:** i) Fruit damages recorded up to 13-14%, ii) 2-3 thrips/leaf was observed . Iii)Yield is 98.1qt/ha . **T2:** i) Less than 10% fruit damages. ii) 2thrips /leaf was recorded with the yield of 102q/ha.	268,500 288,500	4.35:1 4.6:1
Farmer practice	i) Fruit damages recorded up to 31%. ii)Thrips population- 4-7/leaf . iii)Yield is 47.3qt /ha	132,000	2.57:1



Source: ICAR-VPKAS, 2019

OFT-9
Plant Protection

Management of purple blotch in onion.

Crop / Enterprise	Problem diagnosed	Severity of problem (%)	Technology (give details)	Title of OFT	No. of trials
Onion Var. Prema	Purple blotch	30	T1: Spraying of mancozeb @ 0.25% + propiconazole @ 0.1% thrice at 10 days interval from 30 days DAT T2: Spraying of mancozeb 75% T3: (Farmer Practice): Spraying of neem oil.	Management of purple blotch	3

Parameters on Assessment/ Refined	Results/ observation on selected parameters	Net return (Rs/ha)	B:C Ratio (GR/GC)
1. Fruit damages %. 2. Yield	T1: i) % disease index recorded upto 7% ii)Yield -149q/ha T2: i) % disease index upto 11-12% ii) Yield -137q/ha.	135,900 117,500	2.55:1 2.33:1
Farmer practice	i) Disease index is 26.7% ii)Yield is 96.0qt /ha	58,850	1.69:1

Source:
ICAR-DOGR, 2018

FLD-6
Plant Protection

Management of fall army worm in maize.

Crop	Technology demonstrated	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase	Gross Cost (Rs/Ha)/ (Rs./ unit)	Gross Return (Rs/Ha) / (Rs./ unit)	Net Return (Rs/Ha) / (Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	Qt/Ha)	%				
Maize	Application of Emamectin benzoate 5SG @0.4g/l at the interval of 10 days. Source: IIMR, PAU Ludhiana,2019	37.5.	27.7	31.4	24.0	30.4	60,000 64,500	1,09,900 84,000	49,000 19,500	1.82:1 1.30:1

FLD-7
Plant Protection

Integrated pest and disease management in pea.

Crop Enter prise	Technology demonstrated	Demons tration Yield (Qt/Ha)			Yield of local Check	% increase	Gross Cost (Rs/Ha)/ (Rs./ unit)	Gross Return (Rs/Ha) / (Rs./ unit)	Net Return (Rs/Ha) / (Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	Qt/Ha)	%				
Pea (Var:Rachna)	**Pre sowing-** summer plough, removal of residue of previous crop. **Seedling & veg stage**: collection and destruction of insects larvae. **Seed treatment** with Trichoderma viridae @5-10/kg before sowing.& application of neem oil 0.15 EC @ 3ml/l to control aphids. Source: ICAR-NOFRI Year:2013	12.4	8.5	9.9	6.8	45.6	21,000 20,400	39,600 27,200	18,600 6,800	1.88:1 1.33:1

Plant Protection Training Programmes

(Farmers)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Vocational	Total		
4	4	100	40	40	-	-	-	80	80

3 days training programme on Mushroom Cultivation

(Rural Youth)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Voc.	Total		
5	5	100	40	40	-	20	-	100	100

2-Days Regional Level Workshop Cum-Training Programme on Honey Processing

(Extension Personnel)

No. of Training prog. (No. of courses/topics)			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
T	A	% of A	On	Off	Spon.	Total		
2	2	100	30	-	-	-	30	100

T=Target A=Achievement

Lecture delivered as Resource person

Collaborative Programmes with other NGOs

Bee Keeping Programmes

Thank You

Thagatchari

Thank You

Thagatchari