DISCIPLINE WISE FRONT LINE DEMONSTRATION SUMMARY

Discipline	Crop/ Enterprise / Social Concept	No. of Technology/ Social Concept	No. of demos proposed	Area (ha) to be covered/ no. of activity	No. of participants/farmers to be covered
Agronomy	Nano - urea application in kharif paddy.	1	20	8	20
	Promotion of Millet under Natural Farming	1	20	8	20
Horticulture	*ChLCV* resistance variety Arka Gagan	1	20	8	20
	Commercial Cultivation of Marigold Variety Pusa Narangi	1	20	3.2	20
Plant Protection	Mgt of chilli leaf curl	1	20	8	20
	Popularization of integrated management of rhizome rot of Ginger.	1	20	8	20
Animal Husbandry	Azolla feeding in conventional concentrate ration of swine	1	10	10 units	10
	probiotic in feeding of Goat	1	10	10 units	10
Fishery Science	Popularization of Floating grow-out supplementary carp feed (COF: CAU-GCFF) Made with locally available ingredients and fish processing waste	1	10	2.4	10
	Popularization of Livestock-Fish-Horticulture based Integrated Farming System	1	10	2.4	10
Agril. Extension	Impact of MGNREGA	1	20	20 units	20
	Impact of School Nutrition Garden on the nutrient intake of children	1	20	20 units	20
Total		**12**	**200**	**48 ha/ 60 units**	**200**

FRONTLINE DEMONSTRATION (FLD) -AGRONOMY (2nd year)

Title of intervention: **Popularization of nano - urea application in *kharif* paddy.**

Major problems identified

- ❖Excessive use of granular fertilizer reduces the nutrient use efficiency due to several application losses.
- ❖Excess use of chemical fertilizers causes irreparable damage to the soil structure.

Period & Duration:
July-Nov,
(5 month)

Source OF Technology:
IFFCO,2020

Location	Purba Dulucherra, West Kuchainala, Kataluthma
No. of Demos	20
Targeted Area (Ha)	8
No. of Farmers	20

Details of Technology

T1- FFP(50%N,100% PK as basal dose) + 2 sprays of Nano-urea
T1- Farmers Fertilizer Practice (FFP)
Variety - Gomati

Parameters of assessment	Average Plant height (cm), No. of effective tillers, Grain yield/ha (MT/Ha), Straw yield/ha (MT/Ha), B:Cratio, farmers reaction, Pest and disease ocurance

FRONTLINE DEMONSTRATION (FLD) – AGRONAMY (1st year)

Title of intervention: Promotion of Foxtail Millet under Natural Farming

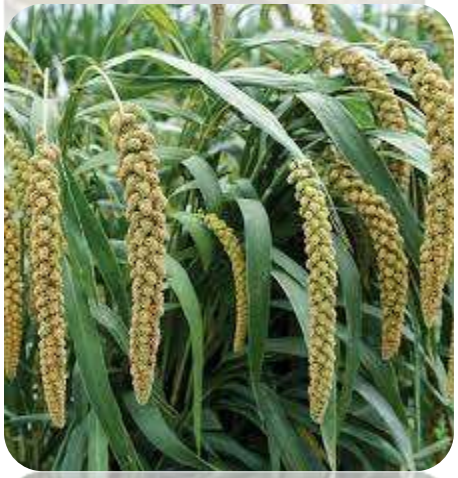
Major problem identified

Excess tillage practice results in high cost of cultivation of farmers

Period & Duration:
March– June (5 months)

Source of technology:
Kurukshetra,2020

Location	Simbhukchak, West Dalucherra , Mendi
No. of Demos	20
Targeted Area (Ha)	8
No. of Farmers	20



Details of the Technology

Foxtail millet – Local kaon/ SiA- 3156
Natural Farming (Use of Beejamrita, jeevamrita, neemastra and mulching)
****-Application of jeevamritha at every 20-30 days intervals.**
-Use of mulches
-Traditional method of weed control such as uprooting/manual weeding
Seed rate- 8 kg/ha

Parameters of assessment	Plant height (cm),Yield (MT/ ha) , Crop duration (days), B: C ratio, Farmers Reaction

Front Line Demonstration (FLD)- Horticulture (1st year)

Title of intervention: Popularization of ChLCV resistance variety Arka Gagan

Major problems identified

- High incidence of ChLCV.
- Poor yield.

Duration:
(5 months)

Location	Salema, Kamalpur, Gandacherra
No. of demos	20
Targeted Area (Ha)	8 ha

Source of technology:
IIHR Bangaluru, 2021,

Details of the Technology

T1. Arka Gagan (fruits erect solitary, 8-9 x 1- 1.1cm, firm, highly pungent, green and turn red on maturity, smooth turn slightly wrinkled on maturity, tolerant to chilli leaf curl virus, yield potential 80-100q green chilli/ acre

(Standard cultivation practice will be followed)

Parameters of assessment	Incidence of ChLCV (PDI), Yield (t/ha), Plant hight (cm), Canopy (cm), pungency (SHU), days to 50% flowering, crop duration (days). Cost of production (Rs/ha), Total return (Rs/ha), Net return (Rs/ha), B:C ratio, farmers reaction

Dhalai Farmers produced

FRONT LINE DEMONSTRATION (FLD)- HORTICULTURE (2nd Year)

Title of Technology: Popularization of Commercial Cultivation of Marigold Variety Pusa Narangi

Major problems identified

- Rate of the flower is high as it comes from outside the district or State
- Non availability of improved variety
- less commercial cultivation of Marigold

Period & Duration: Nov– Feb (4 months)

Source of Technology : IARI, New Delhi

Location	Kamalpur, Salema
No. of Demos	20
Targeted Area (Ha)	3.2
Nos of Farmers	20

Details of the Technology

- Marigold variety - Pusa Narangi Gainda.
- (FYM 2500 kg , Vermicompost 4000 kg , Oil Cake 250 kg, Urea 125 kg , SSP 375 kg , MOP100 kg)/ acre.
- $ZnSO_4$ 0.5% on 30th and 45th day after transplanting .
- Nipping/tipping- 30 days after planting terminal portion is tipped / removed to encourage the branching
- Pest and disease control measures

Parameters to be recorded	Yield (lakhs/Ha) Pest disease incidence percentage (if any) B: C ratio, Farmers Reaction

FRONT LINE DEMONSTRATION (FLD)- PLANT PROTECTION (2nd year)

Title of intervention: Popularization of integrated management of Chilli Leaf Curl disease

Major problems identified

- ❖Recurrent occurring of chilli leaf curl disease.
- ❖Lack of proper management practices against chilli leaf curl disease

Period & Duration:
Oct-April, (7 month)

Source OF Technology:
ICAR-IIVR, 2017 and NDU A & T , 2018

Location	Kulai, Avanga, Debicherra
No. of demos	10
Targeted Area (Ha)	8

Details of the Technology

Seed treatment *Trichoderma viride* (6g kg^{-1} seed)+ soil treatment of *T. viride* (10gm^{-2}) and sprays of Neem oil @ 2 ml/l at 7 days interval till fruit formation followed by spraying of imidacloropid @ 0.25 ml/l at 15 days interval.

Treatments	Mean percent of disease incidence	Disease index (days after planting DAP)			Mean yield (MT/ha)	Cost of production (Rs/ha)	Total return (Rs/ha)	Net return (Rs/ha)	B:C ratio	Feed back
		60 DAP	90 DAP	Final						

FRONT LINE DEMONSTRATION (FLD)- PLANT PROTECTION (1st year)

Title of intervention: ***Popularization of integrated management of rhizome rot of Ginger.***

Major problems identified & Percentage of Severity

- Lack of preventive measures such as seed & Soil treatment
- difficult to manage at later stages.

Period & Duration:
April – Feb (11 months)

Source OF Technology: ICAR Research Complex for NEH region, Sikkim, 2016

Location	Jamthum ,Ashapurna Roaja Para VC, South Kachucherra
No. of demos	10
Targeted Area (Ha)	8

Details of the Technology

Treat the rhizome seed with *Trichoderma harzianum* @ 50 gm /kg of seed + three periodic drenching of Copper Oxy Chloride (COC) @ 0.3% at 20 days interval.

Treatments	Mean percent of disease incidence	Disease index (days after planting DAP)			Mean yield (MT/ha)	Cost of production (Rs/ha)	Total return (Rs/ha)	Net return (Rs/ha)	B:C ratio	Feed back
		100 DAP	200 DAP	Final						

FRONTLINE DEMONSTRATION (FLD)- ANIMAL SCIENCE (2nd year)

Title of intervention: Popularization of Azolla feeding in conventional concentrate ration of swine

Major problems identified

- Production cost is very high due to higher feeding cost.

Period & Duration: April – jan (10 months)

Source OF Technology: CVSc, Proddatur, Andhra Pradesh, India, 2013

Location	Halholi, Hererkhola, Mendi
No. of demons	10
Targeted Area (Ha)/ Unit	3
Nos of farmers	10

Details of the Technology

After weaning (900 g of concentrate ration + 76.5 g of dried Azolla) will be given and data to be recorded every month

Parameter	Avg. Body wt. gain (Kg)	Feed Conversion Ratio (FCR)	Cost of production (Rs)	Total return (Rs)	Net return (Rs)	B:C ratio	Farmers feed back

FRONTLINE DEMONSTRATION (FLD)- ANIMAL SCIENCE (2nd year)

Title of intervention:* *Popularization of probiotic (Sacharomyces cerevisiae based combined probiotic) in feeding of Goat

Major problems identified & Percentage of Severity

- Lower body weight and growth performance
- Disease occurrence (eg: Diarrhoea)

Period & Duration:
April – Feb (11 months)

Source OF Technology: **Marathwada Agricultural University, Parbhani, Maharastra, 2010**

Location	Kalachari , Dabbari, Mendi
No. of demos	10
Targeted Area (Ha)/ Unit	3
Nos of farmers	10

Details of the Technology

Saccharomyces Cerevisiae based combined probiotic supplemented to goat kids (3 months old) and to be fed to the animals through concentrate feeds at the rate of 1 gm per kg of concentrate feed and data to be recorded monthly

Treatments	Avg. Body wt. gain	Feed Conversion Ratio (FCR)	Cost of production	Total return	Net return	B:C ratio	Disease occurance	Farmers feedback

FRONTLINE DEMONSTRATION (FLD)- FISHERY SCIENCE (2nd year)

Title of intervention: *Popularization of Floating grow-out supplementary carp feed (COF: CAU-GCFF) Made with locally available ingredients and fish processing waste*

Source of technology: CoF (CAU,Imphal), Lembucherra, Tripura) 2015,ICAR-CIFT, Cochin

Major problems identified

- High cost of artificial feeds.
- Water quality deteriorating problems.
- Waste management in fish processing areas

Location	Salema, Dabbari
No. of Demos	10
Targeted Area (Ha)	2.4 Ha
Nos of farmers	10

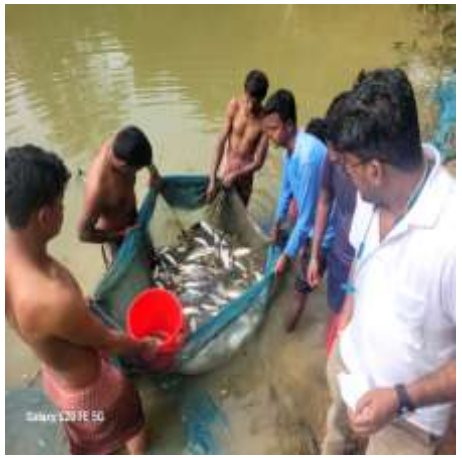
Details of the Technology

T-1: Farmer Practice (MOC:RB = 1:1), **T-2:** Floating feed developed by CAU

**The apparent feed conversion ratio (AFCR) has been found to be 1.8-2.2. (Culture period six months, stocking density 15000 ha-1, daily feeding rate: 4-3% biomass d-1, feeding frequency; twice a day (@ 9-10 am, and 3-4 pm, half of ration on each occasion)

Parameters of assessment	Growth rate, Yield (t/ha), FCR Cost of production (Rs/ha), Total return (Rs/ha) Net return (Rs/ha), B:C ratio, Farmers reaction

Feed ingredients: Rice bran, Mustard oil cake, Corn, Wheat, Rice, Wheat bran, Dry fish meal.



FRONTLINE DEMONSTRATION (FLD) - FISHERY SCIENCE (2nd year)

Title of intervention:* *Popularization of Livestock-Fish-Horticulture based Integrated Farming System

Major problem identified

- **Poor pond productivity**
- **Low income from single enterprise**
- **Under utilization of productive area**

Period & Duration:
July–March
(9 months)

Source of technology: ICAR_CCARI, 2015

Location	**Debbicherra, Srirampur, mendi**
No. of Demos	10
Targeted Area (Ha)	2.4
No. of Farmers	10

Details of the Technology

• Carp Fingerling to be stocked @ 8500 fingerlings/ha, species ratio of 40 % surface, 30 % column and 30 % bottom feeders.
•Vegetables (Bottle Gourd)
•Livestocks:- Duck (300 nos/ha)

Parameters of assessment	**Growth rate, Fish Yield (t/ha), Vegetable production (t/ha), Meat production, Egg production, Cost of production (Rs/ha), Total return (Rs/ha) Net return (Rs/ha), B:C ratio, Farmers reaction**

FRONT LINE DEMONSTRATION (FLD)
Agricultural Extension (2nd Year)

Title of Technology: Impact of Agricultural workers under MGNREGA on uplifting of Rural community

Source of Technology: Annamalai University, Tamil Nadu, 2016

Location: Baralutma, Maharani

Duration:
April – February (11 months)

No. of samples : 50

Major problems identified:
- ❖Household issues
- ❖Time management
- ❖Low wages

Parameters of assessment:
- ❖ Social acceptability of MGNREGA
- ❖ Adoption and diffusion rate of unskilled works
- ❖ Management of time
- ❖ Percentage increase in livelihood security
- ❖ Percentage increase in income.

Step wise methodology:
- ❖Survey of the locations
- ❖Selection of samples (Purposive sampling)
- ❖Ice – breaking
- ❖Detailing management of time
- ❖Detailing benefits of unskilled labour
- ❖Minimising wage gap
- ❖Analysing livelihood generated through MGNREGA
- ❖Evaluation of activities
- ❖Feedback

FRONT LINE DEMONSTRATION (FLD)
Agricultural Extension (1st Year)

Title of Technology: Impact of School Nutrition Garden on the nutrient intake of children

Source of Technology: University of Agricultural Sciences, Dharwad, 2017

Location: Salema, Baralutma, Bamancherra

Duration: April – February (11 months)

No. of samples : 3 schools

Major problems identified:

❖Lack of proper nutrition among school going children

❖Less income in the family

❖Lack of proper knowledge about balanced diet

Parameters of assessment:

❖Area reserved by schools to nutrition garden & quantity of vegetables harvested

❖Additional nutrient intake by children through nutrition garden

❖ Yield & economics of selected vegetables grown at Nutrition garden.

Step wise methodology:

❖Identification of schools having vocational agriculture

❖Calculation of area under Kitchen/Nutritional garden

❖Calculation of vegetables harvested per day

❖Calculation of total quantity of nutrients with minimum & maximum production of vegetables

❖Total contribution of nutrients