

# ANNUAL PROGRESS REPORT - (2024)

**Geographical Location : Lat N 28° 4' 26.35752''  
Long E 95° 19' 28.22''**



**Presented by**

**Dr Brijendra Singh Rajawat**

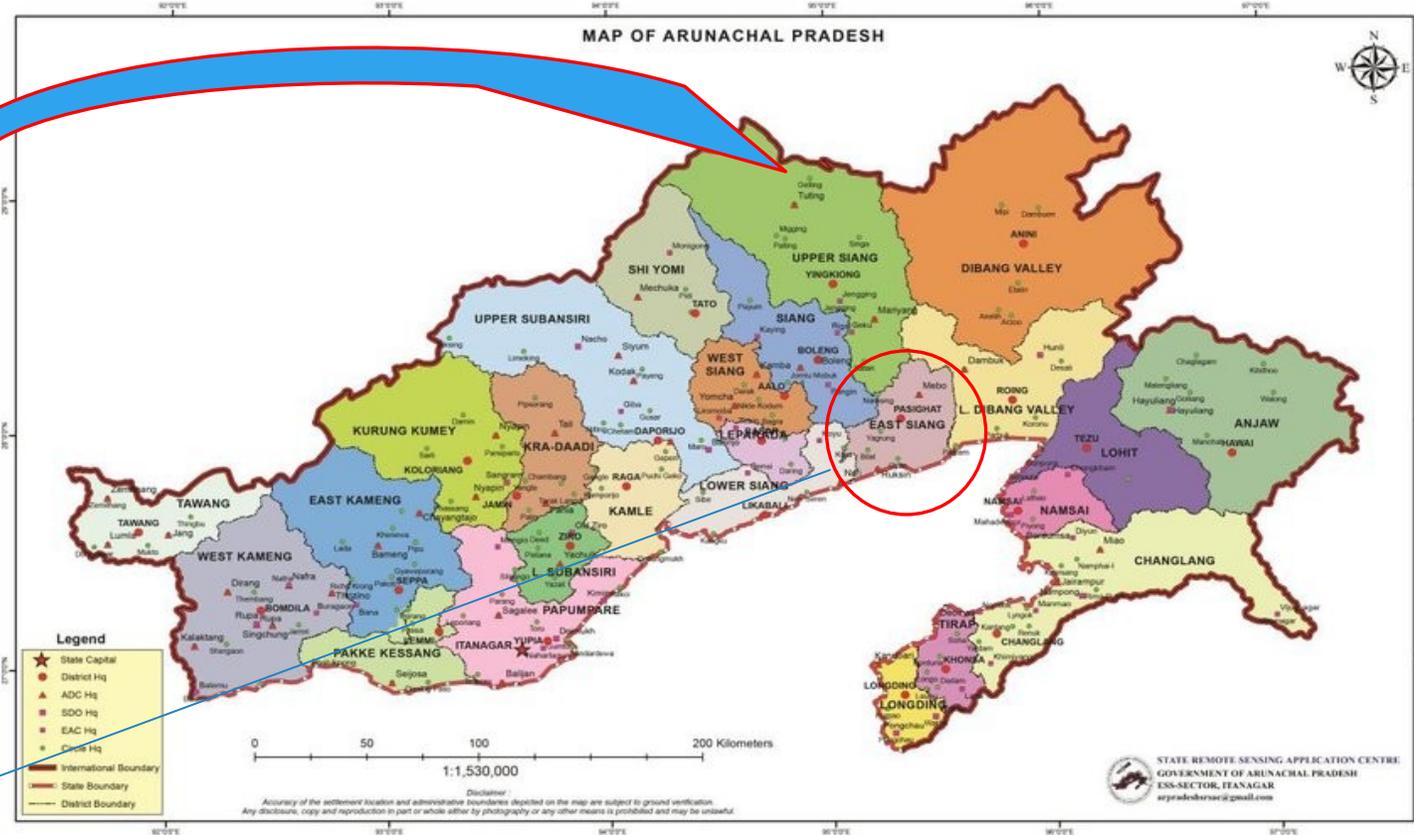
**Principal Scientist & Head**

**KRISHI VIGYAN KENDRA - EAST SIANG**

**CENTRAL AGRICULTURAL UNIVERSITY (IMPHAL)**

**COLLEGE OF HORTICULTURE AND FORESTRY, PASIGHAT, ARUNACHAL PRADESH**





**Total geographical area of the district : 4,005 km<sup>2</sup>**

**No. of sub-division : 03**

**No. of development block : 03**

**Total No. of Village : 78**

**Total Population : 70,956 (2011 Census)**

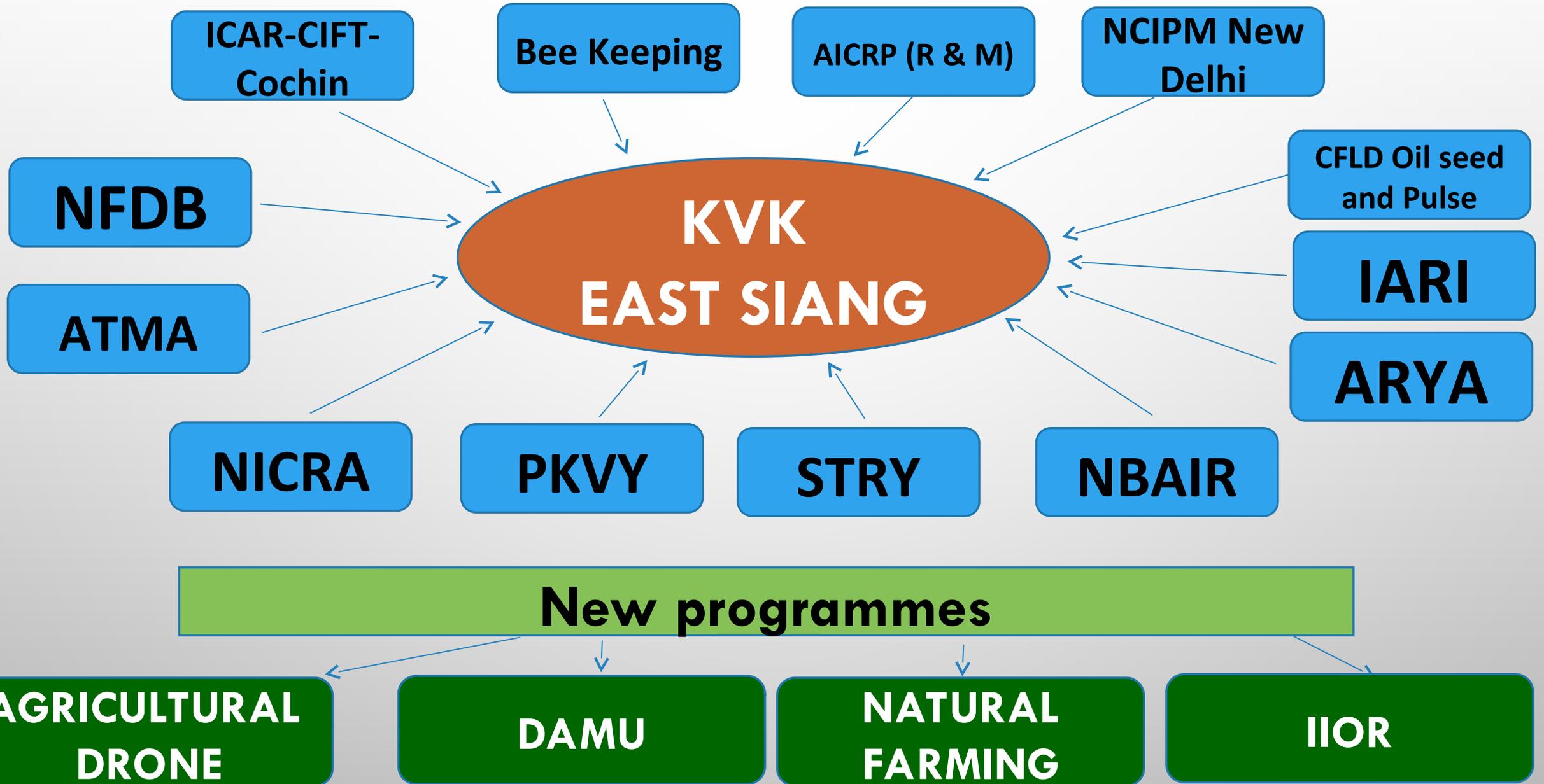
➤ **Altitude between 130 MSL to 2000 MSL**

# MAJOR ACTIVITIES

- **Technology dissemination through technology assessment , demonstration and training.**
- **Capacity building and skill development.**
- **Promotion of Farmers' Producers Organization.**
- **Seed and planting material production.**
- ***Village adoption under 'MERA GAON MERA GAURAV'.***
- ***SWACHHATA ABHIYAN - One Step towards cleanliness.***
- **Soil Health Cards – for soil health management.**
- **Promotion of SHGs.**
- **Involving Youth in Agriculture.**
- **Custom Hiring Centre.**
- **Application of IT in Agriculture (M4Agri.)**
- **Promotion and utilization of underutilized crop (buckwheat, job's tear, ber, some local vegetables).**
- **Promotion of millet cultivation and preparation of value -added product.**
- **Study on Climate Resilient Agriculture.**

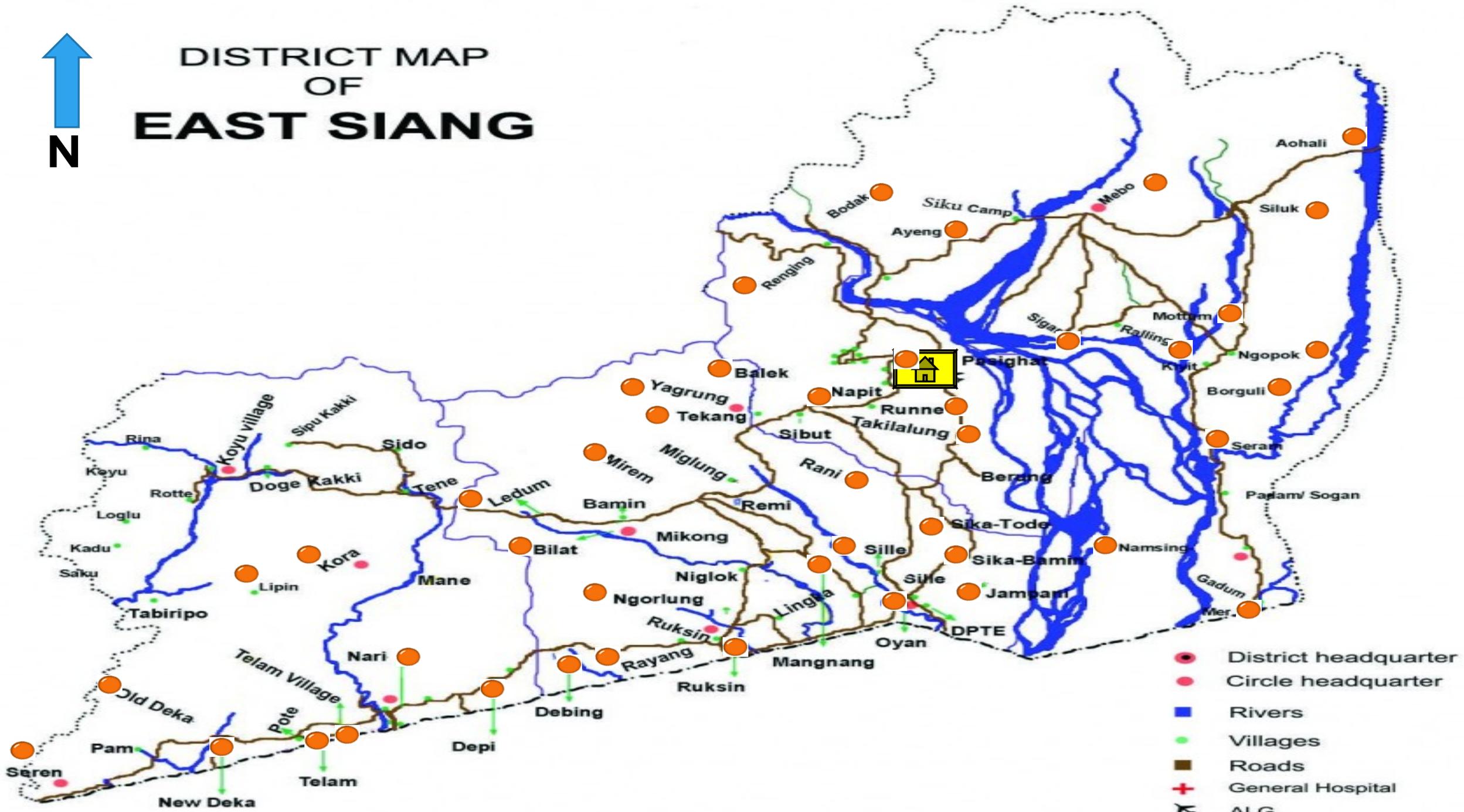


# DIFFERENT PROGRAMMES OF KVK EAST SIANG





# DISTRICT MAP OF EAST SIANG



# DETAILS OF VILLAGES IN THE KVK DISTRICT

Sl. No.	Total No of Villages in the District	Total No of Villages covered by KVKs with interventions	% of Villages Covered
1.	78	43	55.1



# INFRASTRUCTURE FACILITIES

Sl. No.	Infra-structure facility	Present Status			Remarks (including quantity and quality at present)
		Existing/ Constructed	On-going	New proposal	
1.	Administrative building	01	-	-	ATIC cum KVK building
2.	Staff Quarters	-	-	New proposal	12 <sup>th</sup> Plan EFC
3.	Farmers' hostel	-	-	New proposal	12 <sup>th</sup> Plan EFC
4.	Demonstration Units	01	-	-	Polythene Lined Rain Water Harvesting Unit
5.	Fencing/boundary wall	-	-	New proposal	12 <sup>th</sup> Plan EFC
6.	Any other	01	-	-	IFS model

## PRESENT STAFF POSITION

Name of the Post	Status	Remarks
Pr. Sc. & Head	01-Filled	
Subject Mater Specialist	05 on duty, 01 St. Leave	
Prog. Assistant(Comp.)	01-Vacant	Vacant
Programme Assistant	01-Filled	
Farm Manager	01-Filled	
Driver	02-Filled	
Supporting Staff	02-Filled	
Account Assistant	01- Vacant	Vacant Since inception
Stenographer	01- Vacant	Vacant Since inception

## ACTION TAKEN REPORT (ATR)

Sl. No.	Recommendation	Action taken
1.	<b>In OFT, Feeding of azolla to poultry, it is suggested to increase the numbers of treatment</b>	The number of treatment was increased 2 to 3 as suggested by the house.
3.	<b>Programme should be initiated on fish base product preparation</b>	Post harvest preparation of fish wafers was conducted under FLD programme
4.	<b>In Plant Protection OFTs it was suggested to use Organic Pesticides.</b>	As suggested CHF <i>Beauveria bassiana</i> was use on maize.
5.	<b>House also opined to find out sustainable organic farming practices in crop production.</b>	Suggestion implemented as awareness programme on natural farming, popularized use of CAU liquid Bioenhancer, seed treatment with CHF <i>Trichoderma</i> under CFLD oilseed
6.	<b>To add new exotic crops in Nutritional Gardening for trail and introduction</b>	Exotic crop such as Pak-Choi, Red Cabbage, Brussels sprouts, lettuce were introduced
7.	<b>The house also suggested to add demonstration on millet based product preparation.</b>	Eting preparation from millets have been demonstrated and popularized, finger millet preparation through transplanting have also been demonstrated.
8.	<b>Promotion double cropping in rice fallow</b>	Toria after rice was implemented



# IFS MODEL DEVELOPED AT KRISHI VIGYAN KENDRA EAST SIANG CHF, CAU, PASIGHAT, ARUNACHAL PRADESH



Teak plantation

Litchi Fruit crops

Solar panel

Vermicomposting

Field crops

Poultry unit

Duckery unit

Rainwater Harvesting Structure

The image features a light gray gradient background with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance. The central text is in a bold, black, sans-serif font.

# ON FARM TRIALS

Target : 11 numbers

## SUMMARY OF OFT

Achievement : 12 numbers

Sl. No.	Title of OFTs
1	Introduction of “Lumsniang” upgraded pig variety in east siang district
2	Introduction of “rainbow rooster” dual purpose poultry in east siang district
3	Feeding fresh azolla in backyard poultry
4	Assessment of CHF- <i>Trichoderma</i> against ginger rhizome rot disease.
5	Assessment of CAU-bioenhancer liquid bio fertilizer in potato.
6	Assessment of CHF <i>lecanicilium lecanii</i> against litchi bug.
7	Assessment of CHF- <i>Trichoderma</i> against Late blight disease of Potato
8	Fried cassava chips
9	Candied pomelo pith
10	Assessment of red skinned and biofortified varieties of potato
11	Growth performance of improved catla in carp polyculture system
12	Performance evaluation of growth and survival of rainbow trout

# Title of OFT- Introduction of Lumnsiang pig variety in East Siang District

Source: ICAR, Barapani, UMIAM, 2017

Enterprise	Problem diagnosed	Technology/ Social Concept	No. of trials	Parameters of assessment	Results in selected parameters	
					T1	T2
Pig	Non availability of improved pig varieties.  High Demand and supply gap in pork market.	T1: Rearing of Lumnsiang pig in traditional practice with scientific inputs in term of housing, feeding and health management  T2: Rearing of non descript pig in traditional practice with scientific inputs in term of housing, feeding and health management	05  (3 piglet/uint)	-Average body wt gain 6 month of age -Age at first furrowing -Litter size	T1	T2
					-30kg	-18kg
					-	-
					On going (started on august)	

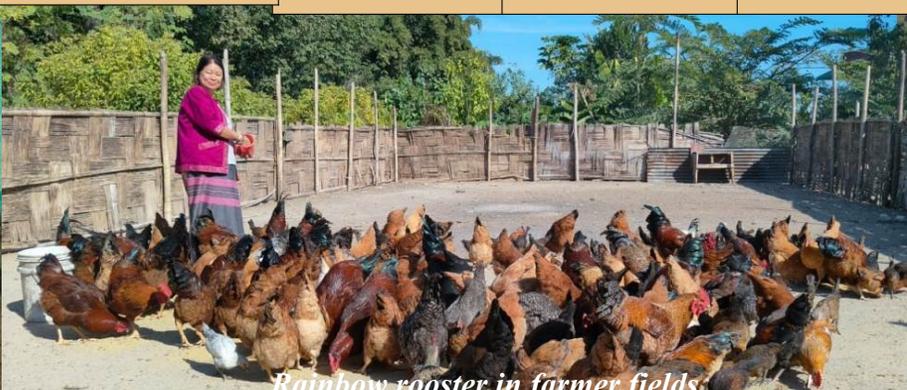


# Title of OFT- Introduction of dual purpose rainbow rooster poultry in East Siang District

**Source: Indbro Research and Breeding Farms Pvt. Ltd., Hyderabad, 2020**

Enterprise	Problem diagnosed	Technology/ Social Concept	No. of trials	Parameters of assessment	Results in selected parameters	
					RR (T1)	VR(T2)
Poultry	Poor production performance of local poultry. Non awareness and availability of improved poultry breed. High demand of coloured poultry bird	T1: Rearing of rainbow rooster in backyard system. T2: Rearing of vanaraja in backyard system. (concentrate mix upto 14 days in intensive system and gradually changing to backyard system supplementing feed with broken rice, maize, kitchen waste along with	05 (50 birds/unit)	Average body wt gain at 6 month of age Male Female Age at first laying: Annual Egg Production	2.3 kg 1.8 kg 165 days 120 nos	2.2 kg 1.9 kg 170 days 125 nos

Village: Rani, Gobo, Mebo.	Economics of Rainbow rooster (50 birds)				Economics of Vanaraja (50 birds)			
	Gross cost	Gross return	Net return	B:C	Gross cost	Gross return	Net return	B:C
	19450/-	53925/-	34475/-	2.7	21200/-	55100/-	33900/-	2.5



*Rainbow rooster in farmer fields.*



*Vanaraja egg*



*Rainbow rooster egg*



Title of OFT: Feeding fresh azolla @ 5% & 10% in backyard poultry (rainbow rooster)

Source: AAU, Jorhat, 2018.

Enterprise	Problem diagnosed	Technology/ Social Concept	No. of trials	Parameters of assessment	Results in selected parameters						
					T1(0)	T2 (5%)	T3(10%)				
Poultry	High cost of poultry feed.  Non-availability of concentrate mix in rural area.	(Azolla pinnata)  T1: Feeding without Azolla T2: Feeding fresh azolla @ 5% T3: Feeding fresh azolla @ 10%  (fresh azolla fed from 4week to 32weeks)	06  (30 birds/unit )	-Average body wt gain at 6 month of age: a) Male: b) Female  - Average Egg production	T1(0)	T2 (5%)	T3(10%)				
					a) 2.0 kg b) 1.7 kg - 33nos	a) 2.3kg b) 2.0kg - 34nos	a) 2.1kg b) 1.8kg - 32nos				
					T1 (0%)				T2 (5%)		
Gross cost	Gross return	Net return	B:C	Gross cost	Gross return	Net return	B:C	Gross cost	Gross return	Net return	B:C
12500	26,620	14,120	2.1	11500	29830	18330	2.5	11,000	27330	16330	2.4



Azolla cultivation for feeding poultry



Direct feeding of fresh Azolla



mixing with concentrate



Source of Technology: UAS, Bangalore, 2015

### Technology details:

### Prioritised Problem: Thrown Waste

No. of Demonstration	No. of farmers
02	36

- Rinse the pomelo and peel off the outer yellow skin, remove the flesh of the fruit from the pith. Cut the pith into 1-inch cubes.
- Add the pith cubes to a large pot, fill the pot with enough cold water to cover the pith cubes. Bring the water to a boil over high heat.
- Turn off the heat, transfer the pith cubes into a large bowl.
- Wash and squeeze the pith to remove the water for at least 3 -4 times to get rid of the bitter taste or until the water turns from green to clear.
- Add sugar and water to a large pan, bring to a boil over high heat, add pith cubes to the pan. Stir for about 10 minutes until there is no water at the bottom of the frying pan. Use the spatula to gently press the pith cubes to squeeze out the excess water.
- Reduce heat to medium high, keep frying for about 20 more minutes until sugar crystal starts sticking on the pan.
- Reduce heat to medium and fry for another 5 -10 minutes until the pith cubes form a crystallized outer layer. Cool and then pack in crystallized container.

Parameters on Assessment	Results on selected Parameters		
	T1 (1:1:1)	T2 (1:1.5:2)	T3 (1:0.5:0.4)
1. Recovering %	67%		
2. Shelf Life	On going		
3. BC Ratio	2		
4. Drying time (Days)	3	3	3
5. Taste	4	5	3
6. Colour	4	4	3



Source: Central Tuber Crops Research Institute, 2014

No. of Demonstration

No. of farmers

03

41

**Prioritised Problem: Low shelf life of crop**

**Technology details:**

**T<sub>1</sub>: Direct frying without treatment**

**T<sub>2</sub>: Vinegar, Salt and blanching treatment**

- Peel and slice the cassava tubers into either round or longitudinal thin chips.
- Dilute the vinegar to 2 litres with water and add 10 g of common salt.
- Put the cassava slices into the solution and soak for 1 hour.
- Wash the chips in water and blanch in boiling water for 10 minutes.
- Drain and surface dry in sunlight for 30 minutes.
- Deep fry in oil till light yellow.
- Sprinkle the chilli powder, salt and fried curry leaves while hot and mix by turning the chips

Parameters on Assessment	Dark Pink Peel Variety		Light pink Peel Variety		White Peel Variety	
	T <sub>1</sub>	T <sub>2</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>1</sub>	T <sub>2</sub>
1. Acceptability (by Hedonic scale)	2	3	4	5	4	5
2. Shelf Life	6 months					
3. BC Ratio	2.4					
4. Texture	3	4	4	5	5	5
5. Taste	2	3	4	5	5	5
6. Color	3	4	5	4	5	4

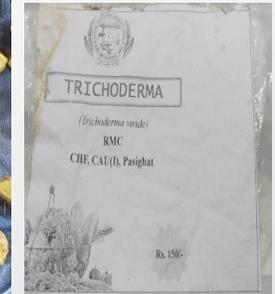


## Title of OFT- Assessment of CHF *Trichoderma* against Ginger Rhizome rot Diseases

**Source: CAU-CHF, Pasighat-2021**

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Results in selected parameters	Net return (Rs/)	B:C Ratio
Ginger (Adi Takeng)	Rhizome rot disease	Management of Ginger Rhizome rot diseases using CHF <i>Trichoderma</i> 1.Seed treatment (slurry) @ 5gram per Kg seed. 2.Repeated spray of CHF <i>Trichoderma</i> @ 0.5% (500g/100 ltr.) at 45 days interval starting from 60 DOS.	Assessment of CHF <i>Trichoderma</i> against ginger rhizome rot disease.	05	<b>Technology</b>			
					Percent disease infestation at treated plot	7% 121.16 qt/ha	141040	2.16
					Percent disease infestation at untreated plot (Farmer's practice)	12% 97.2 qt/ha	106920	1.64

**CAU- Krishi Vigyan Kendra- East Siang, Arunachal Pradesh**



**Prioritised Problem:** High incidence of late blight in potato **Source:** CAU-CHF, Pasighat-2021

**No. of Trials-03**

## Technology assessed:

- # Rhizome treatment @ 5g/kg
- # Followed by spraying @ 3g/litre at 30 and 45 DAS

Parameters on Assessment	Results on selected Parameters	
	Demo	Farmer Practice :
1. Late Blight incidence	8.2%	42.3 %
2. Yield/ ha	152.0 qt/ha	112.0 qt/ha
3. B.C Ratio	2.5	2.0



Title of OFT : Assessment of CHF *Lecanicilium lecanii* against on litchi Sting bug

Source of Technology: CAU- CHF,AICRP on Biocontrol 2022

Prioritised Problem: High incidence of litchi bug, Menace during harvesting

**Technology details:**

#Repeated Spray of CHF *Lecanicilium lecanii* @ 5 g/litre at May and June

CHF *Lecanicilium lecanii* Entomophagus fungus isolated from CHF and mass multiplied under AICRP Biocontrol will be utilized for treatments

No. of tree under spray: 20 tree .  
Number of Spray: 02 (May & June)  
Average no. cadaver recovered per tree after one month: 5 Cadaver



Spray treatment using Rocker sprayer



Litchi Bug Cadavar adhered in litchi

# ASSESSMENT OF CAU-BIOENHANCER LIQUID BIO FERTILIZER IN POTATO

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Results in selected parameters	Net return (Rs/Ha)	B:C Ratio
<b>Potato</b>	Low yield in potato, Reluctant to use chemical fertilizers	Tuber treatment CAU-Bioenhancer at 1:2 ratio Followed by foliar spray with CAU-Bioenhancer at 1:5 ratio at 30 and 45 DAT	Assessment of CAU-bioenhancer liquid bio fertilizer in potato	<b>03</b>	<b>Technology</b>			
					<b>Yield (CAU-Bioenhancer sprayed)</b>	<b>19.17 t/ha</b>	<b>3,35,943</b>	<b>2.30</b>
					<b>Yield (Farmers practice)</b>	<b>18.81 t/ha</b>	<b>3,09,280</b>	<b>1.90</b>



**On station Trial**

**ASSESSMENT OF RED SKINNED AND BIOFORTIFIED VARIETIES OF POTATO**

**Source: CPRI Shimla, 2023**

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Results in selected parameters	Net return (Rs/Ha)	B:C Ratio	
Potato	Low income and lack of nutritional factors in the existing potato varieties	Enriched with Vitamins, minerals and Anti-oxidants	Assessment of Red skinned and Biofortified varieties of Potato	01	<b>Technology</b>				
					<b>Yield (Biofortified and Red skinned)</b>		<b>15.76 t/ha</b>	<b>3,17,064</b>	<b>2.00</b>
					<b>Yield (White skinned)</b>		<b>15.97 t/ha</b>	<b>2,43,514</b>	<b>1.60</b>



**Thematic area : Breed Introduction**

**1<sup>st</sup> year (Ongoing)**

<b>Pond size</b>	<b>0.1 to 0.2 ha</b>
<b>Replications</b>	<b>03</b>

**Title of OFT : Growth Performance of Improved Catla in carp polyculture system**

**Problem diagnosed : Slow growth rate of catla**

**Technology details : Improved Catla is a strain of catla fish from Ganga Riverine stock which was collected from Patna, Bihar which showed significantly higher growth performance than other hatchery and riverine stocks. CIFA ICAR has maintained the genetic stock and release the seeds for farming.**

**Year of release : ICAR, CIFA 2020**

**Treatments & check : T1: Stocking of Improved Catla (25%), Rohu (15%), Mrigal (15%), Silver carp (15%), Grass carp (10%), Kurhi (10%) and Common carp (10%) @ 7,500 nos./ ha**

**T2: Culture of Catla (25%), Rohu (15%), Mrigal (15%), Silver carp (15%), Grass carp (10%), Kurhi (10%) and Common carp (10%) @ 7,500 nos./ ha**

**No. of trials : 03**

**No. of farmers : 03**

- Parameters of assessment :**
1. Growth rate of improved catla and catla (3 months interval)
  2. Yield of catla and total fish yield
  3. Economic parameters
  4. Farmers reaction



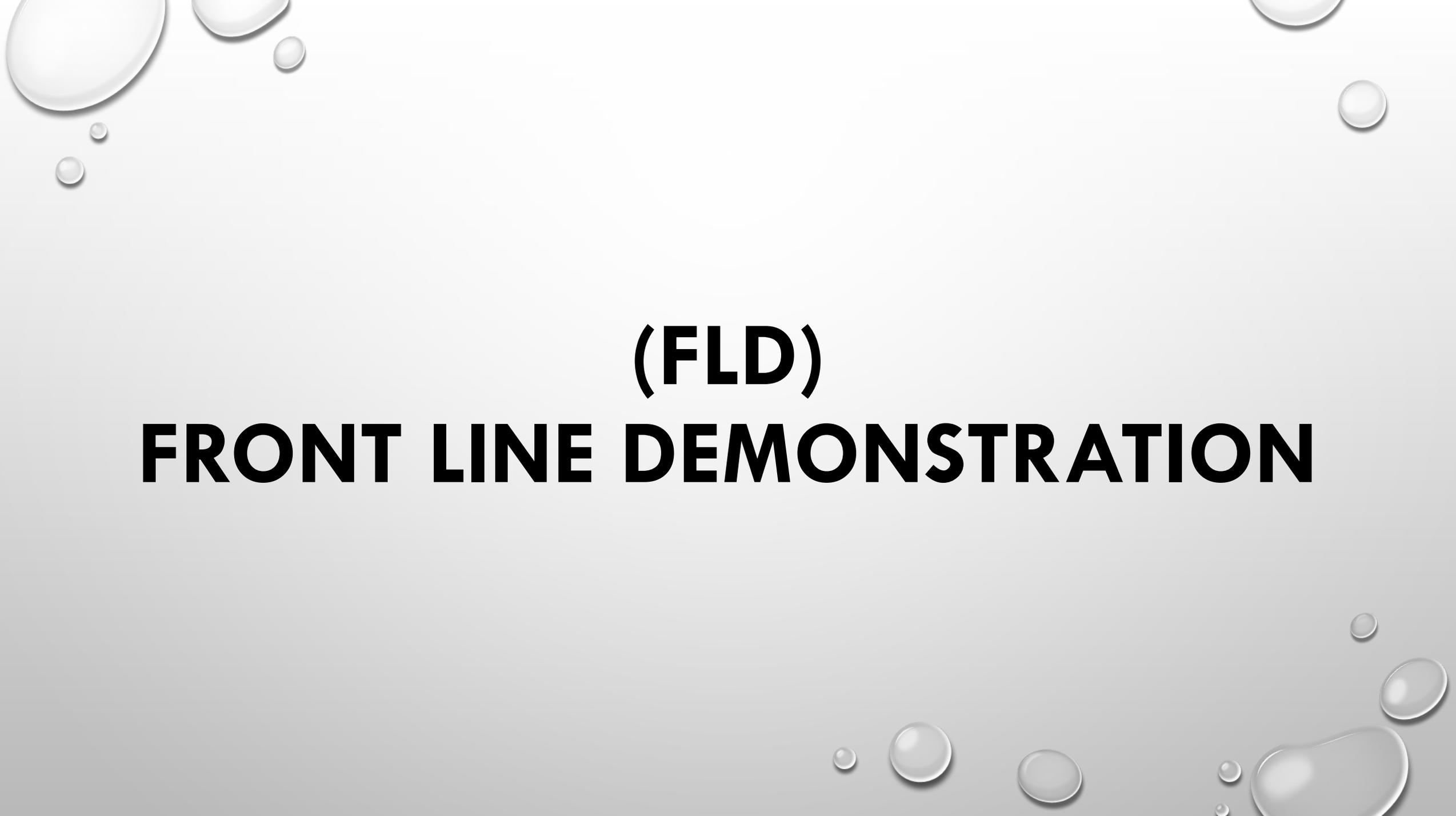


Enterprise	Prioritized Problem	Details of technology	Source	Observations
Fisheries	Low growth and survival of IMC and Chinese Carps in ponds with low water temperature.	<p><b>T1:</b> Stocking density – 5000-7000 fingerling/ha Feeding rate – 5-6 % body weight Culture period: 12 months</p> <p><b>T2=</b> Farmer Practice</p>	DCFRI, Bhimtal 2019	<ul style="list-style-type: none"> <li>➤ Survival rate</li> <li>➤ Avg. Growth</li> <li>➤ BCR</li> </ul>

**Execution details:**  
 Stocking time- March  
 Feeding method – Broadcasting  
 Feed- Pellet feed

Pond size	0.1 -0.2 ha
Replications	03



The background features a light gray gradient with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance.

**(FLD)**  
**FRONT LINE DEMONSTRATION**

Sl. No.	Title of FLDs	Year
1	Promotion of Backyard Poultry Breed – Kadaknath	1 <sup>st</sup>
2	Popularisation of HDK-75 Pig in East Siang District	2 <sup>nd</sup>
3	Popularization of Osmodehydrated Pineapple Rings and Titbits	1 <sup>st</sup>
4	Popularization of value-added product from jackfruit (RTS, Jam, Jelly)	2 <sup>nd</sup>
5	Popularization of Fish Wafers	1 <sup>st</sup>
6	Promotion of Nutritional Gardening	5 <sup>th</sup>
7	Promotion of Packaging of value-added products	1 <sup>st</sup>
8	Promotion of SHGs through Oyster mushroom cultivation	3 <sup>rd</sup>
9	FLD on Done application on spraying of CAU liquid Bioenhancer	1 <sup>st</sup>
10	Popularisation of course gain (finger millet.) cultivation in East Siang district GPU-38	
11	Culture of <i>Labeo gonius</i> in polyculture system	1 <sup>st</sup>
12	Culture of <i>Puntius sarana</i> in carp polyculture system	1 <sup>st</sup>
13	Introduction of Amur common carp in composite fish farming.	1 <sup>st</sup>

Sl. No.	Title of FLDs	Year
14	Integrated Duck-fish-horti farming system	1 <sup>st</sup>
15	CFLDS OILSEED: Toria	
16	CFLDS OILSEED: Soybean	
17	CFLDS OILSEED: Sesame	
18	CFLDS OILSEED: Niger	
19	Popularization of potato cultivation amongst SHGs (NEH Programme)	4 <sup>th</sup>



## Popularisation of HDK-75 Pig in East Siang District

### Technology Details

Rearing of HDK 75 pig in traditional practice with scientific inputs in term of housing, feeding and health management

Major Performance parameters / indicators	Demo	Check	% change in the parameter
1. Average body wt gain at 6 month of age	Male 45kg Female 40kg	18.5kg 12.7kg	On going (started on september, 2024)
2. Age at first furrowing	-	-	
3. Litter size	-	-	

Source: AICRP on Pig, AAU, Khanapara, Guwahati, 2017 No. of Demonstration: 10 unit (2 pig/unit)

Village: Rani, Rayang, & Kiyit



## FLD on Promotion of Backyard Poultry Breed – Kadaknath

### Technology Details

- Feeding: concentrate mix upto 14 days in intensive system and gradually changing to backyard system supplementing feed with broken rice, maize, kitchen waste along with scavenging.
- Body wt: 1.25 kg (M), 1.1 kg (F) at 6months
- Annual egg production : 120nos

Major Performance parameters / indicators				Demo	Check	% change in the parameter	
1.Average body wt. gain in 6months:							
Male				1.2kg	1.1kg		9%
Female				1.0kg	0.9kg		11%
2.Average Age at first laying:				24.5wks	23wks		6%
3.Average annual egg production:				90no's	60no's		50%
4.BCR				3.7	2.5		
Economics of the demonstration (50 birds)				Economics of local check (50 birds)			
Gross cost	Gross return	Net return	B:C	Gross cost	Gross return	Net return	B:C
20000	74000	54000	3.7	17000	44000	27000	2.5

Source: ICAR, Directorate of poultry research, Hyderabad

No. of Demonstration: 30 unit (50 birds/unit)

Village: Rani, Mebo & Kiyit



CAU- Krishi Vigyan Kendra- East Siang, Arunachal Pradesh

Title of FLD :Osmodehydrated Pineapple Rings and Titbits

No. of Demonstration	No. of farmers
04	49

**Prioritised Problem:** Post harvest loss and lack of storage facility

**Technology details:**

- Select good quality fruits & wash in water or in dilute hydrochloric acid . (1 part acid: 20 parts water) .
- Peel the skin and cut in slices (5.0 mm thickness) or tit bits. At the same time, sugar syrup of 45°B is prepared.
- Blanch the slices or titbits in hot water for 20 minutes and cool lightly, then put in to the solution then soaked in water overnight.
- Sugar syrup of 55°B is prepared newly then soaked again overnight.
- The product is dried in solar drier.



Source: CAU, Imphal



Parameters on Assessment

Results on selected Parameters

1. Recovering %	65%
2. Shelf Life	10 Months (When kept airtight)
3. B.C Ratio	2.3
4. Drying time (Days)	3 -4 days



**Prioritized Problem:** High wastage during peak season due to the perishable nature of crop and lack of PHT

No. of  
Demonstration

No. of  
farmers

Source : CCS, CAU (2016)

03

52

### Technology details (RTS):

- Cutting of fruit and removal of bulbs
- Extraction of pulp by grinding bulbs without seed
- Homogenize the pulp using a homogenizer or blender
- Boil pulp for 5 minutes in stainless steel boiling pan
- Filter the extract using muslin cloth
- Prepare a 50% sugar syrup solution by dissolving 500 g sugar in a small amount of water and make the volume up to 1 litre
- Combine fruit juice and sugar syrup at 30: 70 ratio and make up 1 litre
- Add preservative KMS @ 0.05 %
- Fill the RTS in pre sterilized glass bottles and crown corking
- Pasteurize the bottled product at 80°C for 30 minutes
- Cool and label the product

### Technology details (Jam):

- Cut the well ripe jack fruit into small pieces
- Boil the pieces with water and pulp into fine paste
- Add the jack fruit paste and sugar and cook on pan with little water, if required
- Stir continuously till jam consistency and do drop test
- Packing in sterilized bottle

Performance parameters/ indicators	Data on parameters in relation to technology demonstrated		Remarks
	Demo	Local	
Acceptability by Hedonic scale	RTS: 4; Chips: 5; Leather: 4	New Introduction	Products were well accepted, need to popularize further and the



Title of FLD: Popularization of Fish Wafers

No. of Demonstration	No. of farmers
02	29

**Prioritized Problem: Unavailability of suitable technology for fish value addition**

**Technology details:**

- Add cornflour, Tapioca starch and salt and rest of water and blend the whole mass of one hour
- Spread the homogenized mass uniformly in aluminum trays in a thin layer of 1-2 mm thickness and cook in steam for 3-5 minutes
- Cool to room temperature
- Cut the cooked material into desired shapes and dry under sun or preferably in artificial dryer (at 45°C to 50°C) to a moisture content below 10%
- Pack in suitable lots of dried product in sealed polythene bags or glass bottles and store in cool dry place till marketing



Performance parameters/ indicators	Data on parameters in relation to technology demonstrated		Remarks
	Demo	Local	
Recovery Percentage %	72%	New Introduction	Products were well accepted, need to popularize.
Color	4		
Taste	5		



PROMOTION OF NUTRITIONAL GARDENING

Technology details:

PLOT NO.	CROPS (MONTHS)
PLOT NO.1	Mustard Leaf ( Oct-Dec); Late cabbage (Jan-April); Coriander(May); Bhindi (June-Sep)
PLOT NO.2	Chinese cabbage + Lettuce (Oct-Dec); Coriander (Jan-Feb); French Bean (March-June); Amaranthus (July-Sep)
PLOT NO. 3	Broccoli (Oct-Jan);Chilli (Feb-July); Palak (Aug-Sep)
PLOT NO.4	Red Cabbage (Nov-Jan); Brinjal (Feb-July); Early Cauliflower (Aug-Oct)
PLOT NO.5	Radish + Carrot+Methi (Oct-Jan); French Bean (Feb-June);Amaranthus (July-Sep)
PLOT NO.6	Turnip +Beet root (Oct-Jan); Chilli (Feb-May); Bhindi (June-Sep) (Relay cropping )
PLOT NO.7	Matar ( Oct-Jan); Methi (Feb-March); Tomato (April-July); Coriander (Aug-Sep)
PLOT NO.8	Tomato (Oct-Jan); Bhindi ( Feb-May); Summer Squash (June-Sep)
PLOT NO.9	Potato (Oct-Jan); Cowpea (Feb-April); Colocasia (May-Sep)
PLOT NO.10	Perennial Local Vegetables ( Onyer; Oyik; Osik;)

Source : College of Horticulture and Forestry, Pasighat

Performance parameters/ indicators	Data on parameters in relation to technology demonstrated	Remarks
1. Knowledge increase on nutrition garden	90% Increase in knowledge	There is a need for further promotion as large no. of households are still unaware of its benefits
2.% of reduction in daily expenditure	71%	
3. BC ratio	2.15	

Details of Demonstration	
No. of Demonstration	No. of farmers
45	45



Source : Indian Institute of Packaging, Kolkatta

No. of Demonstration	No. of farmers
02	23

**Prioritized Problem: Unattractive packaging as well as lack of knowledge**

**Technology details**

- Different types of packaging materials for various types of value added products. (Kraft paper packaging, Corrugated boxes, Rigid boxes, Shrinkwrap, Poly bags, Bottles).
- Packaging labels and tags



Performance parameters/ indicators	Data on parameters in relation to technology demonstrated	
	Demo	Local
Consumer acceptability and preference	The demonstrated packaging technology with proper labeling was well accepted Packaging material: Kraft paper Stand up pouch,	Plastic roll and plastic containers were used
B:C	1.5	0.5



**FLD on Promotion of SHGs through Oyster mushroom cultivation.**

Crop	Technology demonstrated	No. of SHGs Demonstrated	No. of farmers	Yield			B:C ratio
				Gross Cost (Rs)	Gross Return (Rs)	Net return (Rs)	
Oyster Mushroom	Low cost oyster mushroom cultivation using paddy straw following hanging bag method. (10x12 sqft)	12	150	15920.00 per 160 beds (unit 10x12 sqft house)	38400.00 With yield average of 1.2 kg/bed	22480.00 /batch	2.41



FLD on Drone application on spraying of CAU liquid Bioenhancer.

Source : Geruda Aerospace Pvt. Ltd. Chennai 2016

Technology Demonstrated	No. of demo.	No. of farmers	Area (ha)	Performance parameters/ indicators	Data on parameters in relation to technology demonstrated		Labour reduction (Man days)	Cost reduction (Rs. Per ha.)
					Drone	Manual		
<p>Agri-Drone for spraying CAU liquid Bioenhancer</p>  	02	37	5	<ul style="list-style-type: none"> <li>❖ Field capacity (ha/hr)</li> <li>❖ Width of spraying (m)</li> <li>❖ Application rate ( Lit/ha)</li> <li>❖ Labour requirement (mandays/ha)</li> <li>❖ Time taken for operation</li> <li>❖ Cost of spraying (Rs/ha)</li> <li>❖ B:C ratio</li> </ul>	<p>04 (at 6m/s flying speed with 4 nozzles flat fan type)</p> <p>4 m</p> <p>30 lit</p> <p>2</p> <p>(2X0.25Hrs= 0.5 hrs)</p> <p>1000</p> <p>2.00</p>	<p>0.125 ( Knapsack sprayer single nozzle)</p> <p>0.75 m</p> <p>215 lit</p> <p>8</p> <p>6 x 8 hrs =48hrs</p> <p>4000</p> <p>1.00</p>		



**Popularisation of course grain (finger millet.) cultivation in East Siang district**

CDU 28

Crop	Technology demonstrated	Area (ha)	No. of farmers/Demonstration	Yield ( t/ha)		%increase in yield	B:C
				Demo	Check		
Finger millet	Popularisation of finger millet var. GPU-38 cultivation in East Siang district by transplanting seedling methods	5	10	11 (Transplanting)	9 (Broadcasting)	22%	1.75





# FRONT LINE DEMONSTRATION (FISHERIES)



FLD-11

**Prioritized Problem:** Low total production per unit area due to slow growth of *Labeo rohita* in carp poly culture system.

1<sup>st</sup> year  
(Ongoing)

Crop / Enterprise	Technology/ Social Concept to be Demonstrated	Source of tech and year of release	No. of Dem o.	Area (ha)/ activity to be covered	No. of farmers to be covered	Parameters of demonstration
Pond Management	Culture of <i>Labeo gonius</i> in carp polyculture system . [Silver carp: Catla : Rohu: Mrigal: Minor carp =10:25:25:10:30]	POP on Fisheries and Aquaculture in Assam, AAU, Jorhat, 2017	05	1.0	05	Stocking density: No.s/ha
						Yield per unit area: q/ha
						Average growth in kg

### Technology details:

Stocking density-10,000 fingerlings/ha  
 Stocking time- April-June.  
 Feeding method – Broadcasting  
 Feed – Pellet feed  
 Feeding rate : 3-5 % BW





# FRONT LINE DEMONSTRATION (FISHERIES)



FLD-12

Prioritized Problem: Poor growth of Mrigal, Low total production level per unit area

1<sup>st</sup> year  
(Ongoing)

Crop / Enterprise	Technology/ Social Concept to be Demonstrated	Source of tech and year of release	No. of Dem o.	Area (ha)/ activity to be covered	No. of farmers to be covered	Parameters of demonstration
<b>Feeding Management</b>	Culture of <i>Puntius sarana</i> in carp polyculture system.  Combination of catla, silver carp, rohu and olive barb at a ratio of  Catla 1.5: Silver carp 1.5: Rohu 1: Olive barb1	POP on Fisheries and Aquaculture in Assam, AAU, Jorhat, 2017	05	1.0	05	FCR
						Average growth
						Survival rate in %
						Benefit Cost Ratio

### Technology details:

Stocking density – 10,000 fingerlings/ha

Stocking time- May-June

Feeding method - Broadcasting

Feeding rate – 3-5% BW

Feed- Pellet feed





# FRONT LINE DEMONSTRATION (FISHERIES)



FLD-13

Prioritized Problem: Poor growth, low productivity of existing common carp

1<sup>st</sup> year (Ongoing)

Crop / Enterprise	Technology/ Social Concept to be Demonstrated	Source of tech and year of release	No. of Demo.	Area (ha)/ activity to be covered	No. of farmers to be covered	Parameters of demonstration
<b>Pond Management</b>	Introduction of Amur common carp in composite fish farming.	ICAR Research Complex for NEH Region, Barapani, Meghalaya, 2020	05	1.0	05	Stocking density: No.s/ha
						Yield per unit area: q/ha
						Benefit Cost Ratio

## Technology details:

Stocking density – 10,000 fingerlings/ha

Stocking time- May-June

Feeding method - Broadcasting

Feeding rate – 3-5% BW

Feed- Pellet feed

Amur common carp could be incorporated as an alternative species against existing common carp and Mrigal and it can be culture with Catla and Rohu by following the Stocking ratio 40: 35: 25 would improve fish production





# FRONT LINE DEMONSTRATION (FISHERIES)



FLD-14

1<sup>st</sup> year (Ongoing)

Crop / Enterprise	Technology/ Social Concept to be Demonstrated	Source of tech and year of release	No. of Demo.	Area (ha)/ activity to be covered	No. of farmers to be covered	Parameters of demonstration
<b>Pond Management</b>	Integrated Duck-fish-hort. farming system. The rearing of duck is combined with fish culture by constructing duck housing units on the pond embankment or over the pond in such a way that the wastes are directly drained into the pond.	POP on Fisheries and Aquaculture in Assam, AAU, Jorhat, 2017	05	1.0	05	Yield of Duck meat & egg
						Yield of Fish
						Benefit Cost Ratio

**Technology details:**  
 Stocking density – 10,000 fingerling/ha  
 Stocking density (duck) – 300 ducks/ha  
 Stocking time- May-June  
 Feeding method - Broadcasting  
 Feeding rate – 3-5% BW  
 Feed- Pellet feed



# OILSEED PROGRAMME



Programme	Crop	Area (ha) allotted	No. Demonstration	Area(ha) conducted	Number of Demonstration	Total farmers
CFLD Oilseeds	Toria	50	125	50	110	85
	Sesame	50	125	50	78	65
	Niger	10	25	5	10	10
Oilseed Model Village	Soybean	50	125	5	92	92
	Toria	100	250	100	192	192
	Sesame	50	125	50	65	65
IIR programme					5	115

# CFLDS OILSEED: Toria

Crop	Technology demonstrated	Area (ha)	No. of farmers/ Demonstration	Yield			B:C ratio
				Demo	Check	% Yield Increase	
Toria	Performance of Toria var.TS-38	50	78	8.2 q/ha	7.5 q/ha	9.33	1.9



# CFLDS OILSEED: Soybean

Crop	Technology demonstrated	Area (ha)	No. of farmers/Demonstration	Yield			B:C ratio
				Demo	Check	% Yield Increase	
Soyabean	Performance of JS-20-116	50	92	5.8 q/ha	5.2 q/ha	11.53	2.0



Training on soybean cultivation



At Sigar Village



At Borguli Village



# CFLDS OILSEED: Sesame

Crop	Technology demonstrated	Area (ha)	No. of farmers/ Demonstration	Yield			B:C ratio
				Demo	Check	% Yield Increase	
Sesame	Varietal Evaluation of Sesame var. Champawati	50	74	5.3 q/ha	4.8 q/ha	10.4	2.1



At Motum village

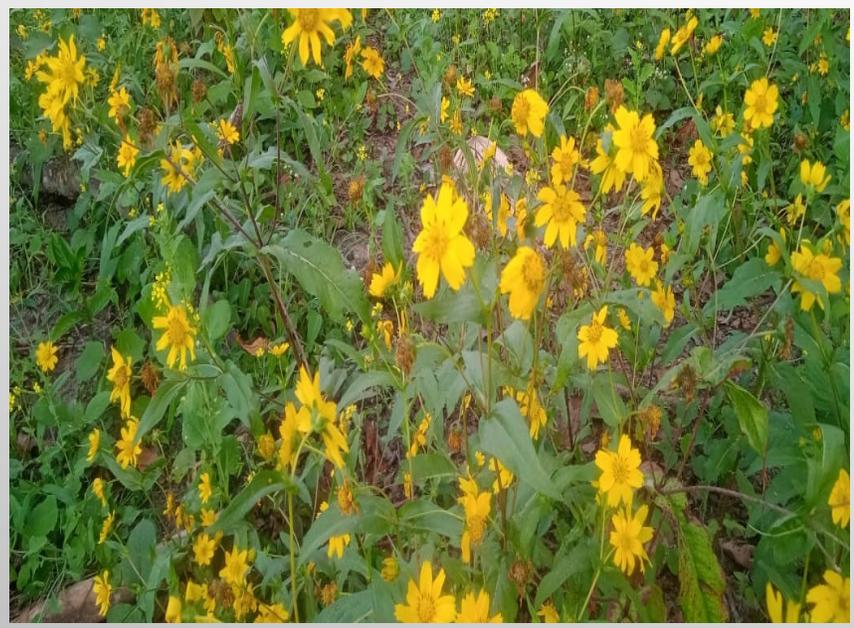


At Takilaung village



# CFLD OILSEED: Niger

Crop	Technology demonstrated	Area (ha)	No. of farmers/Demonstration	Yield			B:C ratio
				Demo	Check	% Yield Increase	
Niger	Performance of NG-1	5	10	3.6 q/ha	3.4 q/ha	5.88	1.6



# FARMERS PARTICIPATORY SEED PRODUCTION

CFLD OMV: SESAME VAR. SHT-1  
TORIA VAR TS-38

Certified Seed Source: RRS,  
Silongani, AAU



# ICAR-IIOR PROGRAMME

Training

Demonstration

Total farmers

1

5

115

## Evolution of Different Variety of Sesame



S/no	Sesame Seed var.	1000g wt	Yield qt/ha
1	Local variety ( adi totok)	2.654g	4.8
2	IIOS-4101	2.496g	5.5
3	GT-10	2.576g	6.1
4	IIOS-3101	2.973g	5.6
5	SHT-1	2.593g	5.8



Mini Oil speller for community use

**Popularization of potato cultivation amongst SHGs (NEH Programme)**

Source: IARI, New Delhi NEH Program

Crop	Technology demonstrated	Area (ha)	No. of farmers/Demonstration	Yield ( t/ha)		B:C
				Demo	Check	
Potato	Popularization of potato cultivation amongst SHGs (NEH Programme) <i>Var. K. Pukhraj</i>	05	20	20.76	15.42 (Bengal Joyti)	2.4



The image features a light gray background with several realistic water droplets of varying sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance. The word "TRAINING" is centered in a bold, black, serif font with a double-line outline.

# TRAINING

# TRAINING PROGRAMMES JANUARY TO DECEMBER 2024

Type of Beneficiaries	No. of course	Number of beneficiaries On Campus								
		Male			Female			Total		Grand Total
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On	
Farmer/Farm Women	39	390	24	-	973	84	-	1363	108	1471
Rural Youth	15	152	-	-	252	-	-	404	-	404
Extension personal	03	46	16	-	-	10	-	56	26	82
<b>Total</b>	<b>57</b>	<b>558</b>	<b>40</b>	<b>-</b>	<b>1225</b>	<b>94</b>	<b>-</b>	<b>1783</b>	<b>134</b>	<b>1957</b>
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus								
		Male			Female			Total		Grand Total
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.	
Farmer/Farm Women	27	378	-	-	956	-	-	1334	-	1334
Rural Youth	4	68	-	-	115	-	-	183	-	183
<b>Total</b>	<b>31</b>	<b>446</b>	<b>-</b>	<b>-</b>	<b>1071</b>	<b>-</b>	<b>-</b>	<b>1517</b>	<b>-</b>	<b>1517</b>
<b>Grand Total</b>	<b>88</b>	<b>1004</b>	<b>40</b>	<b>-</b>	<b>2296</b>	<b>94</b>	<b>-</b>	<b>3300</b>	<b>134</b>	<b>3434</b>



# TRAINING PROGRAMMES HOME SCIENCE

Type of Beneficiaries	No. of course	Number of beneficiaries On Campus									Grand Total
		Male			Female			Total			
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On		
<b>Farmer/Farm Women</b>	12	45	-	-	226	56	-	271	56	327	
<b>Rural Youth</b>	03	48	-	-	42	-	-	90	-	90	
<b>Extension Personal</b>	02	-	16	-	-	10	-	26	-	26	
<b>Total</b>	<b>17</b>	<b>93</b>	<b>16</b>	<b>-</b>	<b>268</b>	<b>66</b>	<b>-</b>	<b>387</b>	<b>56</b>	<b>443</b>	
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus									Grand Total
		Male			Female			Total			
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.		
<b>Farmer/Farm Women</b>	06	33	-	-	234	-	-	267	-	267	
<b>Rural Youth</b>	02	45	-	-	60	-	-	105	-	105	
<b>Total</b>	<b>08</b>	<b>78</b>	<b>-</b>	<b>-</b>	<b>294</b>	<b>-</b>	<b>-</b>	<b>372</b>	<b>-</b>	<b>372</b>	
<b>Grand Total</b>	<b>25</b>	<b>171</b>	<b>16</b>	<b>-</b>	<b>562</b>	<b>-</b>	<b>-</b>	<b>759</b>	<b>-</b>	<b>815</b>	



# TRAINING PROGRAMMES (Home Science)



# TRAINING PROGRAMMES FISHERIES

Type of Beneficiaries	No. of course	Number of beneficiaries On Campus								
		Male			Female			Total		Grand Total
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On	
Farmer/Farm Women	09	141	24	-	187	28	-	328	-	328
Rural Youth	05	58	-	-	109	-	-	167	-	167
Extension personal	00	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>14</b>	<b>199</b>	<b>-</b>	<b>-</b>	<b>296</b>	<b>-</b>	<b>-</b>	<b>495</b>	<b>-</b>	<b>495</b>
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus								
		Male			Female			Total		Grand Total
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.	
Farmer/Farm Women	01	17	-	-	53	-	-	70	-	70
Rural Youth	00	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>01</b>	<b>17</b>	<b>-</b>	<b>-</b>	<b>53</b>	<b>-</b>	<b>-</b>	<b>70</b>	<b>-</b>	<b>70</b>
<b>Grand Total</b>	<b>15</b>	<b>216</b>	<b>24</b>	<b>-</b>	<b>349</b>	<b>-</b>	<b>-</b>	<b>565</b>	<b>-</b>	<b>565</b>



# TRAINING PROGRAMMES: FISHERIES



*Off Campus Training*



*On Campus Training*

# TRAINING PROGRAMMES VETY. & A.H.

Type of Beneficiaries	No. of course	Number of beneficiaries On Campus								Grand Total
		Male			Female			Total		
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On	
Farmer/Farm Women	09	55	-	-	199	-	-	254	-	254
Rural Youth	04	23			66			89	-	89
Extension personal	00	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>13</b>	<b>78</b>	<b>-</b>	<b>-</b>	<b>265</b>	<b>-</b>	<b>-</b>	<b>343</b>	<b>-</b>	<b>343</b>
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus								Grand Total
		Male			Female			Total		
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.	
Farmer/Farm Women	10	79	-	-	243	-	-	322	-	322
Rural Youth	02	23	-	-	55	-	-	78	-	78
<b>Total</b>	<b>12</b>	<b>102</b>	<b>-</b>	<b>-</b>	<b>298</b>	<b>-</b>	<b>-</b>	<b>400</b>	<b>-</b>	<b>400</b>
<b>Grand Total</b>	<b>25</b>	<b>180</b>	<b>-</b>	<b>-</b>	<b>563</b>	<b>-</b>	<b>-</b>	<b>743</b>	<b>-</b>	<b>743</b>





# OFF CAMPUS TRAINING PROGRAMMES (VETY.& ANIMAL SCIENCE)



*Napit*



*Runne*



*Rani*



*Silluk*



*Rayang*



*Ngopok*



*Bodak*



# ON CAMPUS TRAINING PROGRAMMES (VETY. & ANIMAL SCIENCE)



# TRAINING PROGRAMME CONDUCTED UNDER **PLANT PROTECTION**

Type of Beneficiaries	No. of course	Number of beneficiaries On Campus								
		Male			Female			Total		Grand Total
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On	
Farmer/Farm Women	08	114			334			448		448
Rural Youth	1	8			21			29		29
Extension personal	0	-			-			-		-
<b>Total</b>	<b>09</b>	<b>122</b>			<b>355</b>			<b>477</b>		<b>477</b>
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus								
		Male			Female			Total		Grand Total
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.	
Farmer/Farm Women	09	244	-	-	360	-	-	604	-	604
Rural Youth	-	-								
<b>Total</b>	<b>09</b>	<b>244</b>	<b>-</b>	<b>-</b>	<b>360</b>	<b>-</b>	<b>-</b>	<b>604</b>	<b>-</b>	<b>604</b>
<b>Grand Total</b>	<b>18</b>	<b>366</b>			<b>715</b>			<b>1081</b>		<b>1081</b>

# TRAINING PROGRAMME UNDER **PLANT PROTECTION**



# TRAINING PROGRAMMES **HORTICULTURE**

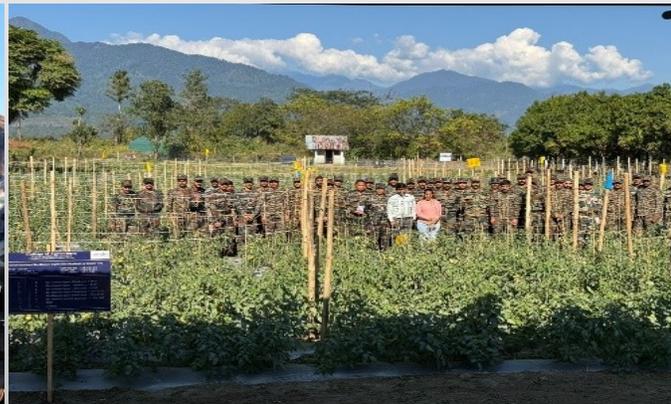
Type of Beneficiaries	No. of course	Number of beneficiaries On Campus									Grand Total
		Male			Female			Total			
		On	Sp.	Voc.	On	Sp.	Voc.	On	Sp. On		
<b>Farmer/Farm Women</b>	01	05	-	-	27	-	-	32		32	
<b>Rural Youth</b>	02	15	-		14	-	-	29	-	29	
<b>Extension Personal</b>	01	46	-		-	-	-	46	-	46	
<b>Total</b>	<b>04</b>	<b>66</b>	-	-	<b>41</b>	-	-	<b>107</b>	-	<b>107</b>	
Type of Beneficiaries	No. of course	Number of beneficiaries Off Campus									Grand Total
		Male			Female			Total			
		Off	Sp.	Voc.	Off	Sp.	Voc.	Off	Sp.		
<b>Farmer/Farm Women</b>	01	5	-	-	66	-	-	71	-	71	
<b>Rural Youth</b>	00	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>01</b>	<b>05</b>	-	-	<b>66</b>	-	-	<b>71</b>	-	<b>71</b>	
<b>Grand Total</b>	<b>05</b>	<b>71</b>	-	-	<b>107</b>	-	-	<b>178</b>	-	<b>178</b>	



# TRAINING PROGRAMME UNDER HORTICULTURE



# 07DAYS CAPACITY BUILDING PROGRAMME FOR DEFENCE PERSONNEL



# **OTHER EXTENSION ACTIVITIES**



Golden Jubilee celebration of KVK's



National Agriculture Education Day



Jai Kisan Jai Vigyan week



World Soil Day



PM Kisan Samman Nidhi Live program



International Yoga Day



Food Safety Day



World Milk Day



National handloom Day



World Egg Day

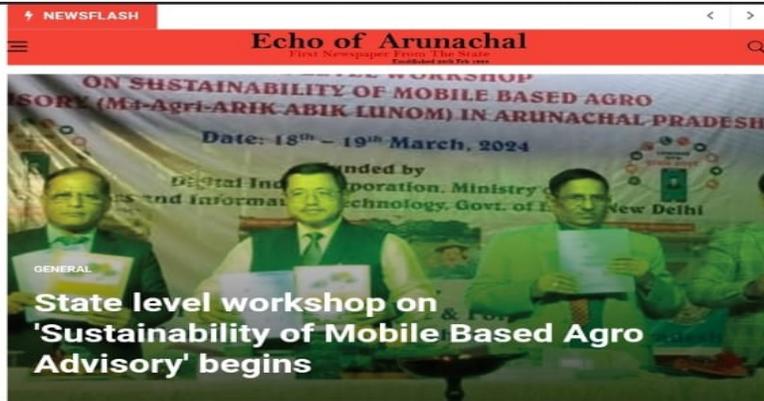


World Fisheries Day



Constitution Day

# M4AGRI SPONSORED PROGRAMME



Pasighat, Mar 18: The two days State level workshop on "Sustainability of Mobile Based Agro Advisory (M4-Agri-Arik-Abik-Lunom)" was inaugurated by East Siang Deputy Commissioner Tayi Taggu at the College of Horticulture and Forestry (CHF), CAU, Pasighat on Monday.

A total of 251 farmers from nine districts including East Siang, West Siang, Upper Siang, Lower Siang, Siang, Leparada, Lower Dibang Valley, Namsai and Shi-Yomi are participating in the workshop, funded by Digital India Corporation (DIC), Ministry of Electronics and Information Technology (MeitY), Govt of India.

In his speech, the DC narrated the revolution of digital intervention in common life the benefit of which is now being practiced by the farming community of the state through m4agri app of mobile based agro-advisory system "ARIK ABIK LUNOM". This is transforming the knowledge to wealth of farmers.

The principal investigator, Prof Saroj Kumar Pattanaik presented an overview about the implementation of the project in local dialects of Adi and Galo tribes. Prof BN Hazarika, Dean, CHF, CAU, Pasighat informed the farmers about the digital revolution showcasing the availability of mobile phones in each individuals as an integral part of life.

Dr AK Tripathi, Dean, COA, CAU, Pasighat told the participants about integration of various mobile applications of agriculture for the benefit of farming community.

Sony Malhotra, representative of Digital India Corporation presented various flagship programs undertaken by Govt of India for the wellbeing of farming community.

The inaugural session was concluded with the vote of thanks by Dr LD Hatai, Co-PI of the project.



# PM KISSAN SAMMAN NIDHI: 18<sup>TH</sup> JUNE 2024



# REGIONAL CITRUS BIODIVERSITY FAIR 2024



**02 day Regional Citrus Biodiversity Fair organized by AICRP on Fruits, CHF in collaboration with KVK East Siang Pasighat on 10<sup>th</sup>-11<sup>th</sup> December, 2024**

# PROMOTION AND UTILIZATION OF UNDERUTILIZED CROP –BUCKWHEAT 19<sup>TH</sup> FEBRUARY 2024



# Recipe Competition 30<sup>th</sup> September, 2024 on the occasion of National Nutrition Month



# TECHNOLOGY WEEK- 22<sup>ND</sup>-28<sup>TH</sup> OCTOBER 2024



# ANGLING COMPETITION ON 21<sup>ST</sup> NOVEMBER 2024



# NUTRITION WEEK (1<sup>ST</sup> -7<sup>TH</sup> SEPTEMBER, 2024)



1<sup>st</sup> -7<sup>th</sup> September, was observed as nutrition week. During the during program, Presentation on recommended nutritional intake, medicinal uses of the commonly consumed local vegetables, visual display of the different food groups, importance of nutritional gardening, value addition of various horticultural crops to add varieties to the diet were carried out in the inaugural program. The week is being collaboratively observed with College of Horticulture and Forestry.



**JANA JATIYA GAURAV DIVAS (26<sup>TH</sup> NOVEMBER 2024)**



**WORLD'S FISHERIES DAY (21<sup>ST</sup> NOVEMBER 2024)**



**WORLD'S SOIL DAY (05<sup>TH</sup> DECEMBER 2024)**

# PROMOTION OF SHGS



# Promotion of SHGs Programme,

55 SHGs were participated

The small garden tools were provided under ICAR NEH programmer.



# CONDUCTED RHWE & RAWE PROGRAMME OF CAU (I)





# ANIMAL HEALTH CAMP AND VACCINATION PROGRAM



GPS Map Camera

East Siang, Arunachal Pradesh, India  
Unnamed Road, Arunachal Pradesh 791104, India  
Lat 28.078286°  
Long 95.396035°  
22/10/24 12:03 PM GMT +05:30

Google



GPS Map Camera



GPS Map Camera

East Siang, Arunachal Pradesh, India  
Unnamed Road, Arunachal Pradesh 791104, India  
Lat 28.077516°  
Long 95.395647°  
22/10/24 12:13 PM GMT +05:30

Google

# ADVISORY SERVICE PROVIDED IN CONSTRUCTION AND RENOVATION OF



***New pond construction at Takilalung village (Mr. Akuluk Lomtum)***

***Pond renovation at Ledum village (Mr. K. Saroh)***



***Advisory service in pond construction as well as aquaculture practices in Tebo village (Mr. Omi Tamut)***

# SPONSORED TRAINING PROGRAMMES

SL. NO.	NAME OF THE TRAINING	LOCATION	DATE	PARTICIPANTS			REMARKS
				M	F	TOTAL	
1	Integrated Farming System for Sustainable Livelihood	On campus	19/02/24	60	28	88	CHF
2	Training cum exposure visit under WDC-PMKSY for watershed committee, user group, SHG	On Campus	26/11/24 to 27/11/2024	05	32	37	BDO



# COLLABORATIVE TRAINING PROGRAMME WITH CHF, CAU (I), Pasighat

Sl. No	Name of the Training	Location	Date	Participants			REMARKS
				Male	Female	Total	
1	Farmers Scientist interaction	Padu Village	07/11/2024	32	43	75	CHF



# DIAGNOSTIC VISITS

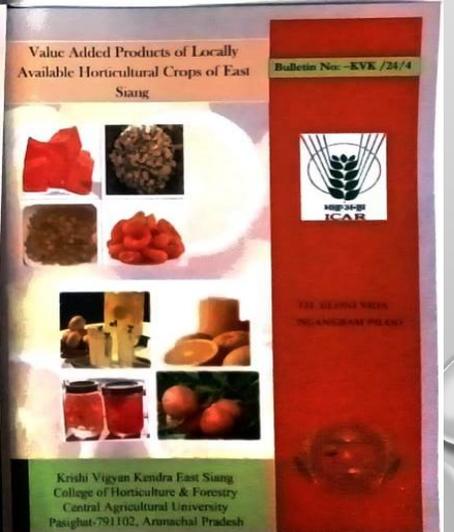
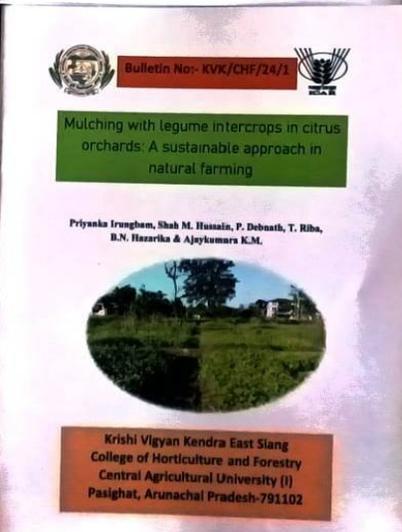
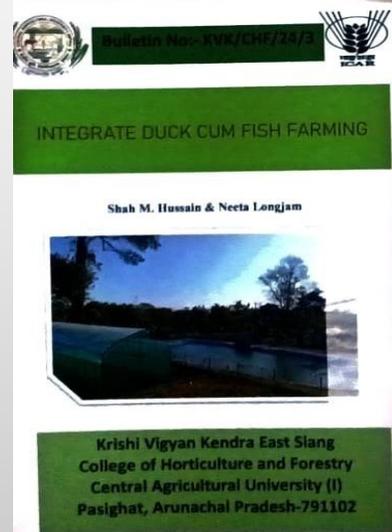
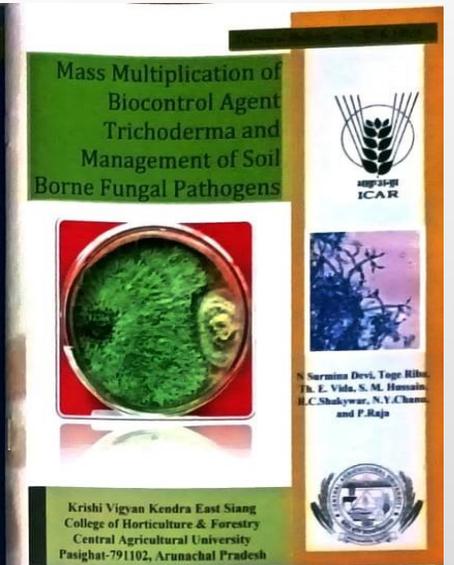
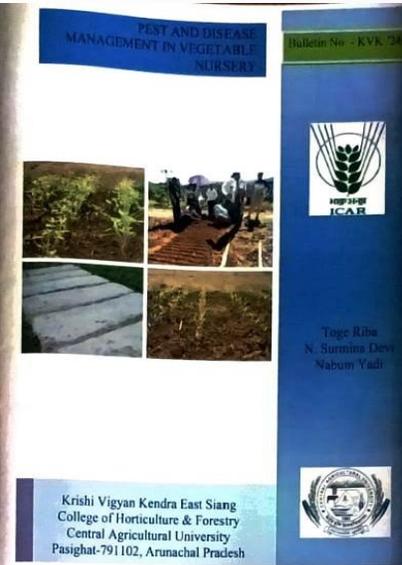
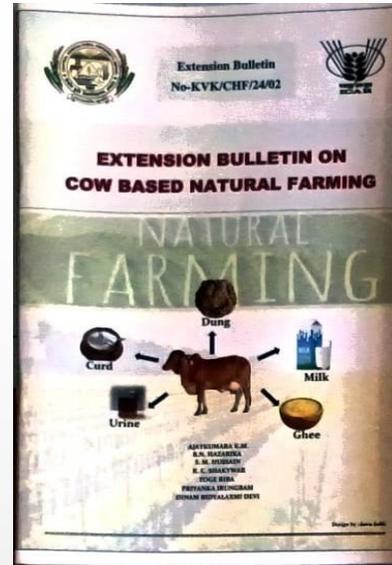


# OTHER EXTENSION ACTIVITIES

Sl. No.	Name of Activity	Targets (Numbers)	No. of programmes (Achieved)	Beneficiaries						Grand Total
				SC/ST		Others		Total		
				M	F	M	F	M	F	
1	Field Days	05	07	87	105	-	-	87	105	192
2	Kisan Gosthi	02	02	76	186	-	-	76	186	262
3	Diagnostic visit	50	75	598	502	-	-	598	502	1100
4	Farmers visit to KVK	150	1135	452	683	-	-	452	683	1135
5	Method demonstration	15	30	123	468	-	-	123	468	591
6	Group discussion	10	25	561	612	-	-	561	612	1173
7	Advisory /helpline service	189	229	659	815	-	-	659	815	1474
8	Lecture delivered	26	35	315	489	-	-	315	489	804
9	News paper coverage	05	06	Mass	Mass	-	-	Mass	Mass	Mass
10	Soil & Plant Analysis	20	38	38	-	-	-	38	-	38
11	Film Show	15	15	245	458	-	-	245	458	703
12	International Women Day	01	01	10	32	-	-	10	32	42
13	Scientist visit to farmer`s field	60	176	289	331	-	-	289	331	620
14	Jai Kisan Jai Vigyan week	01	01	-	-	46	-	46	-	46
15	World Soil Health Day	01	01	26	42	-	-	26	42	68
16	Animal Health Camp	01	01	23	44	-	-	23	44	67
17	Celebration of other important days	15	24	542	763	-	-	542	763	1305

# PUBLICATION

Publications	
Popular Article	:01
Research Paper	:01
Bulletins	:06
Abstract	:02



# DISTRIBUTION OF SEED AND PLANTING MATERIALS

Categories	Name of Crops	Quantity	Variety	Area Covered	Beneficiaries (No.)
Vegetables	Carrot	2 kg	Pusa Krishna	5 ha under Nutritional Garden	45
	Tomato	0.5 kg	Kashi Aman// Arka Abhed		
	Chilli		Kashi Ratna/ Arka Meghana /Arka Kyathi		
	Broccoli	250 g	Laxis		
	Amaranthus	1 kg	Kashi Suhawani		
	Winged Bean	1 kg	Kashi Annapurna		
	Basella/Indian Spinach	2 kg	Kashi Poi-1		
	Chinapodium/Bathua	1kg	Kashi Bathua-4		
	Methi	3 kg	NSC-99IUS		
	Faba Bean		Kashi Sampada		
	Radish	5 kg	Kashi Lohit		
	Onion	2 kg	Arka Kalyan		
	Palak	5 kg	Arka Anupama		
	Coriander	6 kg	Arka Isha		
	Garden Pea	20 kg	Arka Priya/Kashi Agethi		
Cabbage	300 g	Sona Solid/NSC 88			
	Potato	60 q	Kufri Pukhraj	5 ha	20
Pulses	Soybean	250	JS-20-116	5 ha	92
Oil seed	Toria Var.	800 kg	TS-38	150 ha	277
	Sesame	250 kg	SHT-1	100 ha	130

# STATUS OF MOBILE ADVISORY

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								
Text only	145	330	40	92	-	-	35	180	45	148	49	108	314	858
<b>Total</b>	<b>145</b>	<b>330</b>	<b>40</b>	<b>92</b>	<b>-</b>	<b>-</b>	<b>35</b>	<b>180</b>	<b>45</b>	<b>148</b>	<b>49</b>	<b>108</b>	<b>314</b>	<b>858</b>

**WHATAPP GROUP : 11**

## Mera Gaon Mera Gaurav

“Mera Gaon Mera Gaurav”	No./Area (ha)/Quantity	Beneficiaries (No.)		
		SC/ST	Others	Total
(i) No. of Villages covered	05	150	-	150
(ii) No. of Visits made	39	191	-	191
(iii) No. of Demonstrations	08	210	-	210
(iv) No. of farmers’ meeting	13	142	-	142

# **KVK INSTRUCTIONAL FARM STATUS**

# ACHIEVEMENTS IN FARM DEVELOPMENT

A. TOTAL LAND ALLOCATED TO KVK (IN HA)	:	<b>10.0</b>
B. TOTAL AVAILABLE LAND WITH KVK (IN HA):		<b>2.2</b>
C. TOTAL CULTIVATED LAND (IN HA)	:	<b>1.2</b>

Sl. No.	Item	Area (ha)
1	Under Buildings (Administrative building)	0.4
2	Under Demonstration Units (Integrated Farming System Model) i. Rain Water Harvesting Unit ii. Under Crops (Cereals, pulses, oilseeds, seasonal vegetables etc.) iii. Protected Cultivation of Vegetables	0.2 0.2 02 UNITS
3	Orchard/Agro-forestry	0.8

	2024-25
Initial fund (Rs.)	5,13,782.00
Closing balance (Rs.)	10,00,637.00

**FUND RECEIVED & EXP. UNDER MAIN SCHEME**

<b>Year (2024-25)</b>	<b>Fund Received</b>	<b>Fund Exp.</b>
<b>Pay and Allowances</b>	<b>165.28 lakh</b>	<b>162.99 lakh</b>
<b>Recurring cont.</b>	<b>37.0 lakh</b>	<b>29.79 lakh</b>

**FUND MOBILIZATION OTHER THAN MAIN SCHEME OF KVK**

<b>Year (2024-25)</b>	<b>Fund</b>
<b>Swachhata Action Plan</b>	<b>20,000.00</b>
<b>ARYA</b>	<b>2,70,000.00</b>
<b>NICRA</b>	<b>10,93,000.00</b>
<b>Natural Farming</b>	<b>1,70,000.00</b>
<b>IIOR</b>	<b>65,000.00</b>
<b>Total</b>	<b>16,18,000</b>

## **INVOLVEMENT OF KVK EAST SIANG, CHF, CAU, PASIGHAT IN MAJOR PROJECTS OF THE UNIVERSITY**

**Digital India Corporation: “Customization, Enhancement & Deployment of Digital Solution for Empowerment of Citizens of North East India”**

**Financial out lay : 148.50 Lakhs for Arunachal Pradesh.**

**ICAR-Directorate of Groundnut Research: “Promotion of Groundnut Cultivation for enhancing income of farmers in Arunachal Pradesh”.**

**Financial out lay : 10.00 Lakhs.**

**COLLECTION , Conservation and Morphological characterization of citrus germplasms of NE India. (DBT)**

**Financial out lay : 11.00 Lakh.**

# Agriculture Drone Demonstration

Number Of Demonstration

09

Number of Farmers covered

310



# IFS MODEL DEVELOPED AT KRISHI VIGYAN KENDRA EAST SIANG CHF, CAU, PASIGHAT, ARUNACHAL PRADESH





# HANDS ON TRAINING FOR RAWE AND RHWE USING FACILITIES GENERATED



# IMPLEMENTS UNDER SUB-MISSION ON AGRICULTURAL MECHANIZATION



Total Revenue Generated amounting Rs. 1,56,000.00

**ARYA**

# ARYA Project units



Low cost poly house at Balek village



Low cost Vermicompost unit at takilalung



Low cost green house unit at Motum Village



# ARYA Project: Nursery Enterprise



# ARYA Project: Community Nursery at Motum Village



# MUSHROOM DEMONSTRATION UNDER ARYA PROJECT



# ARYA Project KVK East Siang

## YOUTH EMPOWERMENT THROUGH-

SL. NO.	NAME OF ENTERPRISE	YEAR OF START
1	PROTECTED CULTIVATION	2019
2	POULTRY FARMING	2020
3	AQUACULTURE	2020
4	INTEGRATED FARMING SYSTEM	2023
5	PROCESSING AND VALUE ADDITION	2023
6	<b>Mushroom cultivation</b>	2024

<b>❖ Total youth selected</b>	<b>200</b>
<b>❖ Total village selected</b>	<b>09 (Mangnang, Sille, Napit, Mirem, Runne, Tekang Yagrung, Ledum, Sikabamin, Borguli, Rani, Mirbuk)</b>

# ACHIEVEMENTS : 2024-25



Sl.No.	Indicators	Protected Cultivation	Poultry Farming	Aquaculture	Integrated Farming System	Processing and Value addition	Mushroom Cultivation	Horticulture (Exotic Fruit)
1	<b>Training Programs Conducted (No.)</b>	02	04	01	01	03	04	01
2	<b>Rural youth trained (No.)</b>	61	55	32	41	37	110	10
3	<b>Entrepreneurial Units Established (No)</b>	03	02	02	01	04	3	-
4	<b>Total Entrepreneurial Units (Till December 2024 from the beginning)</b>	18	22	12	04	06	5	-
5	<b>Total Functional/ sustainable Units from beginning</b>	15	12	10	03	06	3	-
6	<b>Groups formed under ARYA if any (No.)</b>	05	04	01	-	01	4	1
7	<b>Number of youth Associated with each group</b>	14	13	14	-	15	12	4

# ACHIEVEMENTS 24-25



Sl. No.	Indicators	Protected Cultivation	Poultry Farming	Aquaculture	Integrated Farming System	Processing and Value addition	Mushroom Cultivation	Horticulture (Exotic fruit)
8	No. of units established in the village/ nearby areas after success of this unit	02	6	05	03	2	2	-
9	Any product has been branded? If so, name of the branded product	-	-	-	-	01 Perme Brothers Enterprise	-	-
10	Research publications (No)	-	-	-	1	-	-	-
11	Other publication (success story, case study, etc.)	2	1	1	1	1	1	-
12	Awareness created (No. of press release/TV or Radio talk, etc.)	1	-	1	-	-	1	-
13	WhatsApp Group Created by Group: (Yes/No)	1	1	1	1	1	1	1

# Impact since the inception of ARYA project (Year of Start: 2019)



SL.N o.	Key Success Indicators	Protected Cultivation	Poultry Farming	Aquaculture	Integrated Farming System	Processing and Value addition
1	No. of youth trained	170	210	124	95	32
2	No. of youth established their own entrepreneurial units	15	20	14	03	02
3	Average size of each entrepreneurial unit (e.g. No. of goats/poultry bird/behive boxes/pigs etc., per enterprise unit)	100 m2	200 birds/unit	0.1 ha	0.5 ha	-
4	Average net income earned (Rs/unit/year)	81,500	1,92,000	19,000	87,000	1,20,000
5	Average no of youth employed (per unit)	1	1	1	1	1

**INTERVENTIONS**

**UNDER**

**KVK-NICRA PROJECT**



# NICRA INTERVENTION UNDER KVK EAST SIANG



Details	List of demos under each theme	Area (ha)	No. of demos	No. of farmers benefitted
NRM	1. Sowing of short-Duration Sesame Variety 'Champawati in residual soil moisture	4	6	6
Crop	1. Protected cultivation of high value vegetable crops.	0.0483	07	07
	2. Mushroom cultivation	0.0056	03	45
Livestock	1. Back Yard Poultry Farming activities with modified housing.	50 birds/unit	20	20



Vegetable seedlings grown under polyhouse



Short-Duration Variety 'Champawati' – Sown in Late August to Utilize Residual Soil Moisture



Distribution of poultry chicks, feed and equipments.



Rainbow rooster under NICRA



Low cost egg incubator cum hatchery management





# TRAINING PROGRAMMES CONDUCTED UNDER NICRA



Thematic area	No. of programmes	No. of Farmers		Thematic area	No. of programmes	No. of Farmers	
		Male	Female			Male	Female
Mushroom cultivation	02	06	55	Protected cultivation	05	10	60
Livestock	02	4	25	Farm mechanization	01	15	35



Training cum demonstration on vaccination of poultry



Raising of community nursery



Training programme on nutritional kitchen garden



Training programme on insects pests of vegetable crops under polyhouse cultivation



Hands on demonstration on Oyster mushroom cultivation



Establishing a Community Nursery for Rabi Vegetable at Motum Village



**Interaction with Farm families of Silluk village near the Custom Hiring Centre**



**Official visits to NICRA intervention and KVK office**

# CROP CAFETERIA UNDER NATURAL FARMING DEMONSTRATION



**INTERVENTIONS**

**UNDER**

**NATURAL FARMING**

**PROJECT**

# NATURAL FARMING

## Proposed Programme

- ✓ A model farm development is under progress at KVK East Siang.
- ✓ Off campus Input preparation demonstration will be conducted.



# NATURAL FARMING

## AWARENESS CUM DEMONSTRATION PROGRAMME ORGANIZED

Programme	Location	Number	No. of Participant
Awareness Programme	On campus	02	34
	Off campus	01	22
Demonstration	On campus	04	62
	Off campus	01	23
Training Programme	On campus	01	37
	Off campus	01	29
	<b>Total</b>	<b>10</b>	<b>207</b>

# OFT-1: EFFECT OF JEVAMRITA ON GROWTH AND DEVELOPMENT OF ASSAM LEMON. DAT JANUARY 2023

Treatments	Plant height (cm)		Stem girth (cm)		Canopy spread (cm)			
	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	North-south		East-west	
					1 <sup>st</sup> Year	2 <sup>nd</sup> Year	1 <sup>st</sup> Year	2 <sup>nd</sup> Year
T <sub>1</sub> (Jevamrit)	93.04	137.6	0.612	2.326	71.2	135.4	76	138.4
T <sub>2</sub> (No Jevamrit +No Mulching)	72.2	131	0.508	2.006	51	118.6	61	142
T <sub>3</sub> (Jevamrit+ Mulching)	129.4	203.6	1.046	4.12	101	209.2	129	212.8
T <sub>4</sub> (Mulching )	109	145.4	0.98	3.052	69.6	141.6	98	165.2
C.D.	26.676	43.632	0.143	0.72	20.754	41.834	24.867	56.688
SE(m)	8.563	14.005	0.046	0.231	6.662	13.428	7.982	18.196
C.V.	18.974	20.283	13.01	17.969	20.35	19.858	19.613	24.719



OFT-2: Effect of Jeevamrit on growth and development of pineapple(kew) as inter crop in different plantation crop: som *Michelis bombaysis* tree and litchi *litchi cinensis*

Intercrop	Treatments	Plant height (cm)		No. of leaves		Leaf length (cm)		Leaf width (cm)	
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year						
Pineapple intercrop with Som	T <sub>1</sub> (Jeevamrutha)	111.2	114.1	32.7	34.7	94.9	95.9	5.27	5.42
	T <sub>2</sub> (No Mulching + No Jeevamrutha)	106.9	108.8	27.6	30.2	93.2	93.6	5.21	5.35
	T <sub>3</sub> (Jeevamrutha + Mulching)	112.9	115.8	34.2	37	99.30	101.2	5.47	5.63
	T <sub>4</sub> (Mulching)	110.2	113.7	29.5	32.2	98.70	100.7	5.37	5.49
Pineapple intercrop with Litchi	T <sub>5</sub> (Jeevamrutha)	93.8	99.1	29.7	39.1	81.50	83.4	5.24	5.39
	T <sub>6</sub> No Mulching + No Jeevamrutha	69	73.9	22.6	27.3	65.10	67.1	3.92	4.25
	T <sub>7</sub> Jeevamrutha + Mulching	91.1	100.4	31.4	40.4	83.5	87.6	5.34	5.53
	T <sub>8</sub> (Mulching)	87.2	93.6	28.1	30.4	79.2	79.5	5.18	5.34
	C.D.	12.859	17.77	7.86	10.84	10.644	17.47	0.443	0.446
	SE(m)	4.539	4.73	2.09	2.88	3.757	4.65	0.157	0.157
	C.V.	14.68	14.60	22.45	26.90	13.669	16.59	9.657	9.389





**Fig. 1:** Assam lemon + different natural farming treatments



**Fig. 2:** Pineapple intercrop with litchi crop



**Fig. 3:** Pineapple intercrop with Som tree



## ACTIVITY UNDER NATURAL FARMING



# NF INPUT PREPARATION DEMONSTRATION



## LINKAGES WITH OTHER INSTITUTION

NAME OF THE ORGANIZATION	NATURE OF CONTRIBUTION OF KVK
College of Horticulture & Forestry, Pasighat, CAU	Technical, Administrative and financial support to the KVK
ICAR Research Complex for NEH Region, Umiam, Meghalaya	Sharing knowledge and technology
ICAR Research Complex for NEH Region, AP Centre, Basar	Sharing knowledge and technology
Zonal Coordination Unit, Zone- III, Umiam, Meghalaya	Funding, Monitoring and evaluation
Central Agricultural University, Imphal, Manipur	Technical, Administrative and financial support to the KVK
Dept. of Statistics, Govt. of Arunachal Pradesh	Supply of statistics of the district.
District Fisheries Development Officer, East Siang	Collaborative programmes for self sufficiency in fish production.
District Horticultural Officer, East Siang	Joint training programme, supply of seed/ planting material
District Agricultural Officer, East Siang	Agricultural database, guidance and technical supports
Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar	Updating knowledge and expertise in fisheries
National Bureau of Fisheries Genetic Resources, Lucknow	Updating knowledge and expertise in fisheries
Indian Institute of Vegetable Research, Varanasi	Seed, literature and technical support
Health and Family Welfare, Govt. of Arunachal Pradesh	Collaborative programs, Awareness in AIDS and other STD
Assam Agricultural University, Jorhat	Supply of planting material/seed, knowledge and technology
Other KVKs	Discussion and sharing of experiences
Gram Sevak Training Centre, Pasighat	Supply of planting material, sharing knowledge and technology
Fisheries Development Promotion Forum Arunachal Pradesh	Resource person and member in advisory committee
National Fisheries Development Board	Funding and technical support
N.D.U.A. & T., Faizabad, Uttar Pradesh	Seed, literature and technical support
ATMA, East Siang District	Promotion of local medicinal and aromatic plants
Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar	Updating knowledge and expertise in fisheries
Banaras Hindu University, Varanasi	Sharing knowledge and technology
The Sulphur Institute (TSI)	Sharing latest information on sulphur fertilizer
State Agricultural Marketing Extension Training Institute (SAMETI), Department of Agriculture, Pasighat, East Siang, Govt. of Arunachal Pradesh	Training & Extension, Dissemination of Technology i.e. improved seeds & seedlings, biofertilizers & biopesticides etc. Implementation of collaborative programmes at district level.
ICDS, Pasighat	Collaborative Program
NBAIR	Funding

# LINKAGES WITH OTHER INSTITUTION



Acting as Resource Person in training programme organized by GTC and SAMETI East Siang



Attended Meeting organized by the Ministry of Agriculture Govt. of A.P held at Civil Secretariat Itanagar



Programme organized in collaboration with Arunachal State Rural Livelihood Mission



Acting as a resource person in DFDO office East Siang



ATMA EAST SIANG SPONSORED PROGRAMME



The image features a light gray background with a subtle gradient. In the top-left and bottom-right corners, there are several realistic water droplets of various sizes, rendered with soft shadows and highlights to give them a three-dimensional appearance. The text 'SUCCESS STORIES' is centered in the middle of the page.

# **SUCCESS STORIES**

## Success Case-1 Processing and Value Addition



- ❑ Mrs. Oyom Siram Perme, 42 years from Rani Village of East Siang district has started her entrepreneurship on value added products after acquiring skills on processing, value addition and packaging. She makes about 10 different varieties of pickle, dehydrated products of local horticultural crops (elephant apple, black pepper, bamboo shoot, mango).
- ❑ From the products she makes, earns her about Rs. 10,000 -15,000/- in a month getting a turnover of Rs. 1,50,0000 annually on an average.
- ❑ The products are sold out in the locality, nearby villages as well as in Pasighat market, she also has buyers coming to her home to buy her products.
- ❑ On certain occasion she gets bulk orders as well
- ❑ With packaging and labeling intervention her products has become more presentable and attractive enabling to sell more.
- ❑ During the year 2024 -2025 her income has increased to over 2 lakhs and she has also started preparing candies of various crops such as ginger, aonla, pineapple, papaya, pomelo.

## Success Case-2 Processing and Value Addition (An Engineering Graduate)



□ Ms. Ponung Tapak Rseti, 34 years from Tigra Mirbuk Village of East Siang is another youth among the 32 youths trained on processing and value addition who started entrepreneurship.

□ She makes various horticultural value added products such as chips from tuber crops, candies, dehydrated products, chilli powder, turmeric powder, ginger powder, baked products from millets, pickles etc.

□ She has a monthly earning of Rs. 8,000/- getting a income of Rs. 96,0000 annually.

□ She sells the products in the locality, nearby villages and also in Pasighat market.

□ In 2024 -2025 her earning has increased to Rs. 1,40,000 annually.

## Success Case-3 Oyster Mushroom



- ❑ Ms. Oman Taki Siram, 42 from Rani Village East Siang, has been trained on Oyster mushroom cultivation using paddy straw as substrate under ARYA Project of KVK East Siang in year 2021.
- ❑ She was supported with mushroom spawn, packaging polythene and low cost housing under ARYA Project.
- ❑ In Year 2024 she improved mushroom housing by self and spawn is supported from ARYA project.
- ❑ She prefers hanging method of bags as it can accommodate more and has capacity of 130 bags per batch.
- ❑ An average yield 2.3 kg per bag is obtained in winter session with 4 plucking, 3 batch in a year
- ❑ Selling Rate is Rs 250/kg and her income is Rs 74750.00 per batch.

# Success Case-4

## Vegetable Nursery under protected cultivation



- ❑ **Mr. Ojing Ering from Napit Village East Siang , Has been train on nursery raising under protected cultivation. A pre fabricated polyhous has been provided under ARYA Project in year 2022**
- ❑ **Initaill he was supported with sesaional vegetable seeds,Plant protection bioagents and manure etc. under ARYA Project.**
- ❑ **In Year 2023 he raised Rabi vegetable nursery of cabbage,cauliflower,brinjal,capsicum,king chilli etc and eran Rs 35000.00 by selling seedlings**
- ❑ **During summer he cultivate king chilly and earn Rs. 20000 by selling king chilli.**
- ❑ **In 2024 he took up vegetable nursery early in the month of August which recive Rs. 45000 followed by 2<sup>nd</sup> batch of nursery in the month of September with an income of Rs.30000 by selling**



Mr. Bani  
Rupok: Motum  
Village  
Taking  
Vegetable  
cultivation  
under  
protected  
condition and  
open  
condition  
under ARYA  
Project



**THANK YOU (Airudo)**



**KRISHI VIGYAN KENDRA EAST SIANG**  
*Central Agricultural University (Imphal)*  
*College of Horticulture and Forestry*  
*Pasighat, Arunachal Pradesh-791102*

