# Annual Action Plan 2019-18

# Name of KVK: KVK JAINTIA HILLS

# **Discipline: AGRONOMY**

## A. ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Variety not introduced	Performance evaluation of Groundnut	<b>T 1: Variety-ICGS 76</b> Duration: 120-125 days (semi spreading type) Sowing time: $2^{nd}$ forthnight May Harvesting time $2^{nd}$ forthnight of September Spacing : $30 * 15$ cm T 2: ICGS – 44 Duration: 120-125 days (semi spreading type) Sowing time: $2^{nd}$ forthnight May Harvesting time $2^{nd}$ forthnight of September Spacing : $30 * 15$ cm <b>T 0: No farmer's practice</b>	( ICGS-44) ICRISAT, 1988 ( ICGS-76) ICRISAT, 1989	5	Niriang, Mulum, Namdong	0.5ha	1. Yield and yield attribute 2. B:C ratio
Variety not introduced	Performance evaluation of Potato variety Girdhari	<ul> <li>T 1: Potato variety Girdhari</li> <li>Medium duration</li> <li>Matures 120-140 days</li> <li>Highly resistance to late blight and long dormancy of tubers</li> <li>Spacing: Row to row 60x60 cm and</li> <li>Tuber to tuber 25x25 cm</li> </ul>	CPRS , Upper Shillong (2011)	5	Larnai, Sohmynting, Mulum, Pynthorwah, Namdong	0.5 ha	1. Yield and yield attribute 2. B:C ratio

Bund to bund spacing 90cmx90cm			
T 0: Farmer's variety Kufri Jyoti			

## **B. FRONT LINE DEMONSTRATIONS:**

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of technolog y with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers/ beneficiaries	No. of demo nstrat ions	Name of locations	Paramete rs to be demonstr ated
Integrated Farming System/ Integrated Crop Management	Paddy cum fish culture	<ul> <li>Paddy cum fish culture</li> <li>The rice fish plot of 500sq.mt</li> <li>Perimeter canal of size 1m width &amp; 0.5 m depth for rearing fish</li> <li>Paddy was transplanted in the 2<sup>nd</sup> week of July and after 21 day of transplantation, an amur carp and local common carp of size 10-15cm long was stocked at a density of 4000nos./ha</li> <li>Apparently amur carp obtained an average growth of 200 gm and the local common carp was recorded to be 190gm after 120days culture duration</li> </ul>	ICAR RC For NEH Region, Umiam, ( 2013)	Assess	0.5 ha	5	Mukhla, Niawkmai, Wahiajer, Nangbah, Sahsniang	1. Yield and yield attributes 2. B:C ratio
Nutrient Management	On and farm waste management (Berkeley Composting)	On and farm waste management (Berkeley Composting) • A cage made of iron jar 1 cubic metre • Plastic (6 metre) • Brown material (Paddy	State Agricultura 1 Department 2017	Assess	1 ha	5	Mooshrot , Wahiajer, mookyndur , Khanduli, Sohphoh, Niriang	1. Yield and yield attrib utes 2. B:C ratio

		<ul> <li>straw/any dry leaves)</li> <li>Green materials(any green leave)</li> <li>Fresh cowdung fresh soil- harbour beneficial microbes</li> <li>Jaggery- accelerate the fermentation by increasing micro organism population</li> <li>Green algae – rich source of nitrogen. Add P&amp;K to the compost</li> <li>First turning on the 4th day followed by turning on the alternate days till the 18 days time</li> </ul>						
Crop Production	Popularisation of paddy variety CAUR1	<ul> <li>Popularisation of paddy variety CAUR1</li> <li>Duration: 125-130 days</li> <li>Sowing time: June-July</li> <li>Harvesting time : October - November</li> <li>Average yield: 44 q/ha</li> <li>Climate resilient crop Submergence</li> </ul>	CAU Imp hal ,201 0	Assess	l ha	5	Mooshrot , Wahiajer, mookyndur , Khanduli, Sohphoh, Niriang	<ol> <li>Yield and yield attrib utes</li> <li>B:C ratio</li> </ol>

## C. TRAINING

On/Off campus, Vocational and Sponsored	Target group	No. of training programmeTitle of the tr Programme a of Courses in		Duration (in days)							Gran d Total
sponsorea					ST			General			1
					М	F	Total	М	F	Total	
	Farmer and Farm women	1	On and Off farm waste management (4)	April- March (4 days)	Off	15	15	30			30

		1	Organic agriculture(4)	April- March (4 days)	Off	15	15	30			30
On/Off		1	Resource conservation practices(4)	April- March (4 days)	Off	15	15	30			30
campus		1	Fodder production (4)	April- March (4 days)	Off	15	15	30			30
		1	Vermi-composting (4)	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	On and Off farm waste management(4)	April-March (4 days)	Off	15	15	30			30
		1	Berkeley compost(4)	April-March (4 days)	Off	15	15	30			30
		1	Vermi-composting (4)	April-March (4 days)	Off	15	15	30			30
	Extension Personnel	1	On and Off farm waste management(4)	April-March (4 days)	Off	20	20	40			40
		1	Conservation agriculture(4)	April-March (4 days)	Off	20	20	40			40
Vocational	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	1	Berkeley compost(4)	April-March (4 days)	Off	15	15	30			30
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
Sponsored	Rural Youth Extension Personnel		-	-	-	-	-	-	-	-	

#### DISCIPLINE: HORTICULTURE

## A. ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Poor performance of local variety	Varietal performance of low chilling peach variety Partap, Flordasun	<b>T 1 : Peach Variety Partap, T 2:</b> <b>Peach Variety Flordasun</b> Time of planting: July Spacing: 3.5 x 3.5 m <b>T 0 : Farmer's practice</b> : local variety Irregular planting without proper spacing	ICAR NEHR Umiam (2010)	2	Lyrnai, Niriang	0.2 ha	1. Yield and yield attributes 2. B:C ratio
Poor performance of local variety	Varietal performance of Guava varieties RCGH-1, RCGH-4 and RCGH-7	T 1 : Guava varieties RCGH-1, T2: RCGH- 4 & T3: RCGH-7 Time of planting: July Spacing: High density planting 1.5m x 2 m T 0 : Farmer's practice: local variety Irregular planting without proper spacing	ICAR NEHR Umiam (2010)	2	Nongkhoh Umladang	0.2 ha	<ol> <li>Yield and yield attributes</li> <li>B:C ratio</li> </ol>
Poor Canopy management of the Peach Orchard	Canopy management of peach	<ul> <li>T 1:</li> <li>Pruning in the month of October-November</li> <li>Application of Bordeaux paste January</li> <li>Integrated Nutrient management using FYM % Kg + Vermi compost 3 Kg + bioinoculation</li> </ul>	ICAR NEHR Umiam	3	Ummulong Niriang Nangbah	1 ha	<ol> <li>Yield and yield attributes</li> <li>B:C ratio</li> </ol>

with azotobazter and PSB
• Installing fruitfly traps (ME) @
4 nos./acre in peach and use of
EPN Heterorhabditis indica
with Metarhizium anisopliae for
soil treatment
T 0: Farmer's practice
• No pruning
No nutrient and pest management

#### **B. FRONT LINE DEMONSTRATIONS**

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of technolo gy with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers/ beneficiaries	No. of demon stration s	Name of locations	Paramete rs to be demonstr ated
Nutrient Management	Organic Nutrient Management of ginger and turmeric	Organic Nutrient Management of ginger and turmeric (Vermicompost + cowdung manure + bio-inoculation with azotobacter and PSB) Time of planting: April Fertilizer dose: (Vermicompost 2.5 t/ha + cowdung manure @ 2.5t/ha + Azotobacter + PSb) The cowdung manure is bio- inoculated with 9.6 kg PSB and used as basal dose and after earthing up Spacing – 30 X 25 cm	ICAR Research complex, Arunachal Pradesh (2011)	Assess	3 ha	10	Shangpung Nongkhroh Nongkynrih Niawkmai Namdong	1. Yield and yield attribute s 2. B:C ratio
Production	Popularization of	Popularization of Double	ICAR	Assess	3 ha	5	Nongkhroh	
technology	Double row	row planting system of	RC for				Khanduli	and yield
	planting system	pineapple	NEH				Saitsama	yiciu

	of pineapple	Spacing 30x60x90cm Mulching with paddy straw Variety: Queen	region, Umiam					attribut es 2. B:C ratio
Vegetable based cropping system	Vegetable based cropping system : Tomato followed by broccoli	Vegetable based cropping system : Tomato followed by broccoli 1 <sup>st</sup> crop: Tomato Nursery in April Transplanted in May Harvesting in July-August 2 <sup>nd</sup> crop : Broccoli Nursery in August Transplanting in September Harvesting in November- December	Indian Institute of Vegetabl e Research, Varanasi (2013)	Assess	3 ha	10	Namdong Umjalasia w Amlarem	1.Yield and yield attributes 2.B:C ratio

## C. TRAINING

On/Off campus, Vocational and Sponsored	Target group	No. of training programm e	Title of the training Programme and No. of Courses in bracket	Duration (in days)	Number of beneficiaries						
					ST			General			
					М	F	Total	Μ	F	Total	
	Farmer and Farm women	1	Seed Production of vegetables (4)	April-March (4 days)	Off	15	15	30			30
		1	Multiple Cropping system (4)	April-March (4 days)	Off	15	15	30			30
		1	Nursery raising of vegetables (4)	April-March (4 days)	Off	15	15	30			30

		1	Organic farming(4)	April-March (4 days)	Off	15	15	30			30
On/Off campus		1	Nursery raising of vegetables(4)	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	Seed Production of vegetables(4)	April-March (4 days)	Off	15	15	30			30
		1	Post Harvest Management of horticultural crops(4)	April-March (4 days)	Off	15	15	30			30
		1	Post Harvest Management of horticultural crops(4)	April-March (4 days)	Off	15	15	30			30
	Extension Personnel	1	Post Harvest Management of horticultural crops(4)	April-March (4 days)	Off	20	20	40			40
		1	Nursery raising of vegetables(4)	April-March (4 days)	Off	20	20	40			40
	Others (School children)	1	Nutritional garden(4)	April-March (4 days)	Off	15	15	30			30
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	1	Value addition of horticultural crops(4)	April-March (4 days)	Off	15	15	30			30
Vocational											
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	-	-	-	-	-	-	-	-	-	-
Sponsored	Extension Personnel	-	-	-	-	-	-	-	-	-	-

#### DISCIPLINE: PLANT PATHOLOGY

## A. ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Pest infestation in stored paddy ( <i>Rhyzopertha</i> dominica, Sitophilus oryzae, Tribolium castaneum)- 60%	Eco- friendly management of stored grain pests in paddy (var: Local ) by	$T_1$ - By using insect probe trap (for <i>Rhyzopertha dominica</i> , <i>Sitophilus oryzae</i> , <i>Tribolium</i> <i>castaneum</i> ) $T_2$ - Using of hermetic storage pests $T_0$ - Farmers practice- Sun dryingD.O.S – April	TNAU (2015)	5	Pynthorwah Rymbai	0.5 ha	1.No. of adults/trap 2.Yield q/ha 3.B:C ratio
Powdery mildew in Pea if late sown 70-80%	Integrated management of powdery mildew in Pea (var: Local )	$T_1$ -Early sowing in the month of August and field sanitation and destruction of diseased plants $T_2$ . Spray of wet table Sulphur @ 0.2% at 14 days interval after disease incidence is noticed $T_0$ : Farmers practice- No management practices D.O.S- August	ICAR- NOFRI, Tadong, Sikkim ( 2013)	5	Niriang Wahiajer	0.5 ha	<ol> <li>% of infection</li> <li>Yield q/ha</li> <li>B:C ratio</li> </ol>

## **B. FRONT LINE DEMONSTRATIONS:**

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of technology with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers / benefici aries	No. of demon stratio ns	Name of locations	Paramet ers to be demonst rated
Integrated Pest Management	Monitoring and management of fruit flies in Peach	Monitoring and management of fruit flies in Peach by 1. Installing fruit fly traps (ME) @ 4 nos/acre in Peach during flowering stage 2.Use of EPN <i>Heterorhabditis indica</i> together with <i>Metarhizium</i> <i>anisopliae</i> for soil treatment@ 100gms for 50 kgs manure 3.Prunning in mid –October 4.Application of Bordeaux paste during winter	ICAR Research Complex For NEH Region, Umiam, 2014	Assess	1 ha	2	Nangbah Niriang	1.No. of adults/tra p 2.Yield q/ha 3.B:C ratio
Biological control (Insect/pest/ weeds etc)	Management of white grub in Potato (Var. Kufri Jyoti)	Management of white grub in Potato (Var. Kufri Jyoti) 1.Liming 2- 3 months before sowing @ 200-400 kgs/ha 2.Application of ash and	National Centre for Integrated Pest Management	Assess	2 ha	8	Plongingkha w Sohmynting	<ul><li>1.% of infection</li><li>2.Yield</li></ul>

		Lanata camara leaves at time of planting 3.Mixing Metarhizium anisopliae and EPN in organic manure@ 100 gms/50 kgs manure 15 days before sowing to be applied during planting of tubers and at earthing up and spray of Beauveria bassiana and NPV @10ml/lt water at vegetative stage D.O.S – January	(NCIPM), New Delhi (2010)					q/ha 3.B:C ratio
Income generation	Popularization of Scientific Beekeeping for enhancing farmers income by	Popularization of Scientific Beekeeping for enhancing farmers income by 1.Using movable frame hive and hive accessories 2. Regular inspection 3. Seasonal management 4.Honey extractor equipment	ICAR RC for NEH Region, Umiam (2012)	Assess	1ha	5	Larnai, Jowai	1. Yield /bee box 2. B:C ratio
Income generation	Popularization of all year round Organic Oyster mushroom for enhancing farmers income	Popularization of all year round Organic Oyster mushroom for enhancing farmers income Variety: Pleurotus spp. Date of sowing: February to October Size of plastic: 40 * 60 cms Temperature: 20 – 25 °C	Directorate of Mushroom Research (ICAR), Solan (2013)	Assess	1 ha	10	Mynkre, Sohphoh, Niawkmai	1. Day of pin head initiation 2. Day of fruiting 3.Yield/ba g 4. B:C ratio

## C. TRAINING

On/Off campus, Vocational and Sponsored	Target group	No. of training program me	Programme and No. of (in	Duration (in days)	Numbe	Number of beneficiaries					
						ST			Genera	al	
					М	F	Total	М	F	Total	
	Farmer and Farm women	1	Eco-friendly management of pests and diseases in Potato (4)	April- March (4 days)	Off	15	15	30			30
		1	Eco-friendly management of pests and diseases in Pea(4)	April- March (4 days)	Off	15	15	30			30
On/Off		1	Eco-friendly management of pests and diseases in Paddy(4)	April- March (4 days)	Off	15	15	30			30
campus		1	Scientific bee-keeping for increasing farmer's income(4)	April- March (4 days)	Off	15	15	30			30
		1	All year round Organic Oyster mushroom production(4)	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	All year round organic oyster cultivation for enhancing farmers income(4)	April-March (4 days)	Off	15	15	30			30
		1	Scientific bee-keeping for increasing farmer's income(4)	April-March (4 days)	Off	15	15	30			30
	Extension Personnel	1	Eco-friendly management of pests and diseases in major crops of Jaintia Hills(4)	April-March (4 days)	Off	20	20	40			40
		1	On farm production of bio pesticides /botanicals for sustainable agriculture(4)	April-March (4 days)	Off	20	20	40			40
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	1	All year round organic oyster	April-March	Off	15	15	30			30

			cultivation for enhancing farmers income(4)	(4 days)							
Vocational		1	Scientific bee-keeping for increasing farmer's income(4)	April-March (4 days)	Off	15	15	30			30
	Extension Personnel	-	-	-	-	-	-	-	-	-	-
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	-	-	-	-	-	-	-	-	-	-
	Extension	-	-	-	-	-	-	-	-	-	-
Sponsored	Personnel										

## **DISCIPLINE: ANIMAL SCIENCE**

## A.ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Low egg production due to breakage and cannibalism	Construction of Innovative Egg Laying Cabin	<ul> <li>T 1: This egg laying cabin being one of the farmer's innovation of East Khasi Hills district of Meghalaya with its main advantages being:</li> <li>Reduce scattering of eggs during the laying period</li> <li>Reduce breakage of eggs</li> <li>Vent pecking has been found to be nil thereby reducing mortality and disease occurrence</li> <li>The height of the cabin is 8 inches at the top and 4 inches at the bottom in the form of a shop. The breadth is 1 foot</li> <li>T 0: Farmer's practice</li> <li>No management practices</li> </ul>	Genesis ( ATARI)	5	Niawkmai, Sahsniang, Nangbah, Nongkynrih, Mulum	-	1.Egg breakage 2.Diseases incidence

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Low productivity due to winter stress and high incidence of diseases	Low cost climate resilient environment- affinitive pigpen model	T 1: Innovative integrated low-cost pigpen was designed and developed with locally available natural resources for high rainfall mid and high altitude temperate region in the context of climate variability. The pig housing model was evaluated and compared with conventional concrete floor pig housing in term of micro- environment, physiological, adaption, performance, water use efficiency, animal welfare and behavior. The depth of the saw dust is kept at a height of 1 foot. T 0: Farmer's practice, no management practices	ICAR RC for NEH Region, Umiam, 2013	5	Wahiajier, Niriang, Nangbah, Nongkynrih, Mulum	-	1.Body weight gain 2.Egg production

## **B. FRONT LINE DEMONSTRATIONS:**

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of technology with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers/ beneficiaries	No. of demo nstrati ons	Name of locations	Paramete rs to be demonstr ated
Breed improvement	Rural poultry production with improved chicken varieties	Rural poultry production with improved chicken varieties In this technology, improved chicken varieties were selected for rearing under low input system with the	ICAR RC for NEH Region, Umiam, 2006	Assess	15 farmers	15	Niawkmai, Sahsniang, Nangbah, Nongkynri, Mulum	1.Body weight gain 2.Egg productio n

following advantages:          • Low input system          • Better survivability	
The improved varieties     are good scavengers	
Attractive colour     plumage	
Escape from predators     Tolerant to diseases	
Better productivity     Egg is highly preferred	
by the farmers due to its colour	

## A. TRAINING

On/Off campus, Vocational and Sponsored	Target group	No. of training progra mme	Title of the training Programme and No. of Courses in bracket	Duration (in days)	Num		oeneficiar	ies			Gran d Total
					M	ST M F Total			General		
	Farmer and Farm women		Scientific pig farming (4)	April-March (4 days)	Off	15	15 15	<b>M</b> 30	F	Total	30
		1	Scientific dairy farming(4)	April-March (4 days)	Off	15	15	30			30
		1	Poultry farming(4)	April-March (4 days)	Off	15	15	30			30
		1	Fodder production(4)	April-March (4 days)	Off	15	15	30			30
On/Off campus		1	Goatery farming (4)	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	Scientific dairy farming(4)	April-March (4 days)	Off	15	15	30			30
		1	Poultry farming(4)	April-March (4	Off	15	15	30			30

				days)							
		1	Fodder production(4)	April-March (4 days)	Off	15	15	30			30
		1	Goatery farming (4)								
	Extension Personnel	1	Poultry farming(4)	April-March (4 days)	Off	20	20	40			40
		1	Pig farming (4)	April-March (4 days)	Off	20	20	40			40
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
Vocational	Rural Youth	1	Integrated Farming System(4)	April-March (4 days)	Off	15	15	30			30
Vocational	Extension personnel	-	-	-	-	-	-	-	-	-	-
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
Sponsored	Rural Youth	-	-	-	-	-	-	-	-	-	-
	Extension Personnel	-	-	-	-	-	-	-	-	-	-

# A.ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
Low income of a unit farm area due to mono enterprise	Integratedpou ltry/livestck- cum-fish- cum- horticulture farming	T 1: 1.Fishery component (Fish species: Indian Major carps & Exotic carps. Stocking density: 10000 nos./ha Stocking ratio: Surface feeder 35% Column feeder 20% Bottom feeder 45% 2. Livestock component Piggery: 3-4 piglet/0.1 ha 3. 3. Horticulture components Vegetables in the surrounding area Fruit trees (Papaya/Guava) on the dyke T 0: Farmer's practices – No management practices	COF Tripura, 2013	4	Lyrnai, sohphoh, nangbah, Niawkmai	3 ha	1.Yield and yield attribute 2.B:C ratio

A. FRONT LINE DEMONSTRATIONS:

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of technol ogy with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers/ beneficiaries	No. of demo nstrati ons	Name of locations	Paramete rs to be demonstr ated
Pond management	Pond management Pre and post stocking management of pond for better water quality for fish farming.	Pond management Pre and post stocking management of pond for better water quality for fish farming. (Fish species: Indian Major carps & Exotic carps. Stocking density: 10000 nos./ha Stocking ratio: Surface feeder 35% Column feeder 20% Bottom feeder 45% 1 Application of lime @ 400 Kg/ha 2. Feeding @ 3 % of total weight of fish biomass	ICAR RC NEHR, 2006	Assess	0.7 ha	7	Lyrnai, Sehlama, Wahiajer, Namdong Amlarem Umjalasiaw	1.Yield/un it 2.BC ratio
IFS Modules	Paddy cum fish Popularisation of amur carp and local common carp in rice fish system	Paddy cum fish Popularisation of amur carp and local common carp in rice fish system Paddy: Local Variety Stocking density: 5000 nos./ ha	COF Tripura, 2013	Assess	0.8 ha	10	Niawkmai Nangbah, Sehlama, Wahiajer, Namdong Amlarem	1.Yield/un it 2.BC ratio
Composite Fish Culture	Popularisation of amur carp in composite fish culture	Popularisation of amur carp in composite fish culture Stocking@10000nos/ha Fish sp.(Catla, Rohu, mrigal, Silver carp, grass carp, amur carp) Stocking ratio: Surface feeder 35% Column feeder 20% Bottom feeder 45% Feeding @ 3 % of total weight of fish	ICAR RC NEHR, 2013	Assess	1 ha	8	Mukhla, Nongkynrih , Wahiajer, Amlarem Nangbah, Mookynde ng	1.Yield/un it 2.BC ratio

biomass						
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## **B. TRAINING**

On/Off campus, Vocational and Sponsored	Target group	No. of trainin g progra mme	Title of the training Programme and No. of Courses in bracket	Duration (in days)	Number	r of bene	ficiaries				Gran d Total
Sponsored						ST			Genera	al	-
					М	F	Total	М	F	Total	
	Farmer and Farm women	1	Common carp breeding and seed production (4)	April- March (4 days)	Off	15	15	30			30
		1	Integrated Farming System(4)	April- March (4 days)	Off	15	15	30			30
On/Off		1	Rice fish farming(4)	April- March (4 days)	Off	15	15	30			30
campus		1	Feeding management in fish(4)	April- March (4 days)	Off	15	15	30			30
		1	Pre and post stocking management of pond(4)	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	Common carp breeding and seed production(4)	April-March (4 days)	Off	15	15	30			30
		1	Integrated Farming System(4)	April-March (4 days)	Off	15	15	30			30
		1	Pre and post stocking management of pond(4)	April-March (4 days)	Off	15	15	30			30
	Extension Personnel	1	Integrated Farming System(4)	April-March (4 days)	Off	20	20	40			40
		1	Feeding management in fish(4)	April-March (4 days)	Off	20	20	40			40
	Farmer and	-	-	-	-	-	-	-	-	-	-

	Farm women										
	Rural Youth	1	Post harvest processing/ Value addition	April-March (4 days)	Off	15	15	30			30
Vocational	Extension Personnel	-	-	-	-	-	-	-	-	-	-
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
Sponsored	Rural Youth	-	-	-	-	-	-	-	-	-	-
Sponsoreu	Extension Personnel	-	-	-	-	-	-	-	-	-	-

DISCIPLINE: AG.EXTENSION

A. ON FARM TESTING

Problem identified with extent of severity	Title of OFT	Technology details	Source of technology with year of release	No. of trials	Name of locations	Area (ha)/ No. of units/ No. of farmers	Parameters to be taken:
No study has been conducted on the merit and demerit of organic farming	A study on perception of farmers towards organic farming	<ol> <li>Random sampling of farmers</li> <li>Data collection: Interview schedule</li> <li>Five point Likert scale</li> <li>Average, frequency &amp; percentage</li> </ol>	-	60 sample s	West Jaintia Hills	-	<ol> <li>Selection of farmers: Random sampling</li> <li>Profile of farmers</li> <li>Five point Likert scale</li> </ol>
No evaluation was conducted before	Impact assessment on performance of Tomato and Broccoli in vegetable based cropping system where FLD was conducted during 2017-18	<ol> <li>Selection of farmer: Random sampling</li> <li>Technology gap = Potential Yield - Demonstration Yield</li> <li>Extension gap= Demonstration Yield- Framers yield</li> <li>Extension Index % = (Technology gap/extension gap) x 100</li> </ol>	ZPD, ICAR, Zone III, 2009	60 sample s	West Jaintia Hills	-	<ul> <li>1.Socio-personal characteristics</li> <li>2. Yield gap analysis – Technology gap,</li> <li>Extension gap &amp;</li> <li>Extension Index</li> <li>3. Problems faced by farmers</li> </ul>

B. FRONT LINE DEMONSTRATIONS:

Thematic area	Title of FLD	Name of technology to be demonstrated with details	Source of techno logy with year of release	Whether assessed/ refined the technology earlier in local situation or not	Area (ha)/ No. of units/ No. of farmers/ beneficiar ies	No. of demon stratio ns	Name of locations	Parameters to be demonstrated
Impact Assessment	Impact assessment on performance of paddy where FLD was conducted during 2014-15	Impact assessment on performance of paddy where FLD was conducted during 2014-15 1. Selection of farmer: Random sampling 2. Technology gap = Potential Yield – Demonstration Yield 3. Extension gap= Demonstration Yield– Framers yield 4. Extension Index % = (Technology gap/extension gap) x 100	ZPD, ICAR, Zone III, 2009	-	60 samples	-	Nangbah, Larnai, Nongkynr ih, Mulam, Sohphoh	1.Socio-personal characteristics 2. Yield gap analysis – Technology gap, Extension gap & Extension Index 3. Problems faced by farmers
	Impact assessment on performance of ginger where FLD on package of practices and biological control of ginger var. Nadia was conducted during 2016-17	<ul> <li>Impact assessment on performance of ginger where FLD on package of practices and biological control of ginger var. Nadia was conducted during 2016-17</li> <li>Selection of farmer: Random sampling</li> <li>Technology gap = Potential Yield – Demonstration Yield</li> <li>Extension gap= Demonstration Yield – Framers yield</li> <li>Extension Index % = (Technology gap/extension gap) x 100</li> </ul>	ZPD, ICAR, Zone III, 2009	-	60 samples	-	Nangbah, Larnai, Nongkynr ih, Mulam, Sohphoh	1.Socio-personal characteristics 2. Yield gap analysis – Technology gap, Extension gap & Extension Index 3. Problems faced by farmers

C. TRAINING

On/Off campus, Vocational and Sponsored	Target group	No. of train ing prog	Title of the training Programme and No. of Courses in bracket	Duration (in days)	Number	of bene	ficiaries				Gran d Total
Sponsored		ram				ST			Genera	al	-
		me			М	F	Total	м	F	Total	
	Farmer and Farm women	1	Training on formation of SHG	April- March (4 days)	Off	15	15	30			30
		1	State and Centrally sponsored Agricultural and rural development schemes	April- March (4 days)	Off	15	15	30			30
On/Off		1	Importance of ICT in Agricultural development	April- March (4 days)	Off	15	15	30			30
campus		1	Agripreneurship development in agriculture	April- March (4 days)	Off	15	15	30			30
		1	Importance of ICT in Agricultural development	April-March (4 days)	Off	15	15	30			30
	Rural Youth	1	Management and importance of Self Help Group	April-March (4 days)	Off	15	15	30			30
		1	Entrepreneurship development for rural youth	April-March (4 days)	Off	15	15	30			30
		1	State and Centrally sponsored Agricultural and rural development schemes	April-March (4 days)	Off	15	15	30			30
		1	Importance of ICT in Agricultural development								
	Extension Personnel	1	Capacity building for ICT application	April-March (4 days)	Off	20	20	40			40
		1	Public private partnership	April-March (4 days)	Off	20	20	40			40
	Farmer and Farm women	-	-	-	-	-	-	-	-	-	-
	Rural Youth	-	-	-	-	-	-	-	-	-	-

Vocational	Extension personnel	-	-	-	-	-	-	-	-	-	-
	Farmer and Farm women	-	_	-	-	-	-	-	-	-	-
Sponsored	Rural Youth	-	-	-	-	-	-	-	-	-	-
sponsoreu	Extension Personnel	-	-	-	-	-	-	-	-	-	-

#### **D.EXTENSION ACTIVITIES**

Specific activity	No. of	Period of the year	Duration (in days)			Num	ber of l	oenefic	ciaries (No	.)	
	activities				SC/ST	- -		Gene	ral	Grand	Total
				M	F	Tota 1	M	F	Total	M	F
Diagnostic visit	144	April 2019-March 2020	1 day	72	72	144	-	-	-	72	72
Advisory services/ telephone talk	144	April 2019-March 2020	1 day	72	72	144	-	-	-	72	72
Training Manual							-	-	-		
Celebration of Important days	4	World Environment Day World Food Day World Farmer's Day World Soil Day	4 days	50	50	100	-	-	-	50	50
Exhibition	1			50	50	100	-	-	-	50	50
Exposure visit	1	April 2019-March 2020	1 day	10	10	20	-	-	-	10	10
Extension literature (Leaflet/ folders/ Pamphlets)	6	April 2019-March 2020	1 day	-	-	-	-	-	-	-	-
Extension / technical bulletin	-	-	-	-	-	-	-	-	-	-	-
News letter	2	April 2019-March 2020	1 day	-	-	-				-	-

News paper coverage	6	April 2019-March 2020	1 day	-	-	-				-	-
Research publications											
Success stories/ Case studies	6	April 2019-March 2020	1 day	-	-	-				-	-
Farm Science Clubs' Convenors meet	-	-	-	-	-	-	-	-	-	-	-
Farmers' Seminar	1	April 2019-March 2020	1 day	50	50	100				50	50
Farmers' visit to KVKs	200	April 2019-March 2020	1 day	100	10 0	200				100	100
Ex-trainees' meet	-	-	-	-	-	-	-	-	-	-	-
Field day	10	April 2019-March 2020	1 day	10	10	20				10	10
Film show	24	April 2019-March 2020	1 day	120	12 0	240				120	120
Radio Talk	12	April 2019-March 2020	1 day	-	-	-				-	-
TV talk	-	-	-	-	-	-	-	-	-	-	-
Kishan Goshthi	-	-	-	-	-	-	-	-	-	-	-
Group Meeting	12	April 2019-March 2020	1 day	60	60	120				60	60
Kishan Mela	-	-	-	-	-	-	-	-	-	-	-
50 Soil Health Camps	-	-	-	-	-	-	-	-	-	-	-
Animal Health Camps	-	-	-	-	-	-	-	-	-	-	-
Awareness camp	1	April 2019-March 2020	1 day	50	50	100				50	50
Mobile Agro-Advisory (Messages/ Beneficiaries)	48	April 2019-March 2020	1 day	400	40 0	800				400	400
Method demonstration	10	April 2019-March 2020	1 day	50	50	100				50	50

Scientist	ts' visit to farmers' field	24	April 2019-March 2020	1 day	12	12	24				12	12
Worksho	op/ Seminar	-	-	-	-	-	-	-	-	-	-	-
Soil Test	ting	1000	April 2019-March 2020	1 day	500	50 0	1000				500	500
Water T	esting	12	April 2019-March 2020	1 day	6	6	12				6	6
Plant Te	sting	12	April 2019-March 2020	1 day	6	6	12				6	6
Manure	Testing	-	-	-	-	-	-	-	-	-	-	-
Distribut	tion of SHCs	-	-	-	-	-	-	-	-	-	-	-
Advisory	y services/ telephone talk	144	April 2019-March 2020	1 day	72	72	144				72	72
OTHER	RS	-	-	-	-	-	-	-	-	-	-	-
Publicat	tions	-	-	-	-	-	-	-	-	-	-	-
i.	Extension literature (Leaflet/ folders/ Pamphlets)	6	April 2019-March 2020	-	-	-	-				-	-
ii.	News letter	2	April 2019-March 2020	-	-	-	-				-	-
iii.	News paper coverage	6	April 2019-March 2020	-	-	-	-				-	-
iv.	Success stories/ Case studies	6	April 2019-March 2020	-	-	-	-				-	-

## E.SEEDS AND PLANTING MATERIALS PRODUCTION

Crop						Seed	productio	on in tonne	•				
	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total

	~												·
Paddy CAU R1	-	-	-	-	-	-	-	-	-	2 Qt.	-	-	2 Qt.
Groundnut ICGS 76	-	-	-	-	-	-	-	-	-	2 Qt.	-	-	5 Qt.
Local Maize	-	-	-	-	-	-	-	-	-	5 Qt.	-	-	2 Qt.
French bean	-	-	-	-	-	-	-	-	-	-	-	-	-
Pea	-	-	-	-	-	-	-	-	-	1 Qt.	-	-	1 Qt.
Planting materials													
(Nos. in lakh)													
Ginger	-	-	-	-	-	-	-	-	-	5 Qt.	-	-	5 Qt.
Turmeric	-	-	-	-	-	-	-	-	-	5 Qt.	-	-	5 Qt.
Livestock strains	-	-	-	-	-	-	-	-	-	500	-	-	500
(No. in lakh)										nos.			nos.
Fingerlings (No. in	-	-	-	-	-	-	-	-	-	-	-	11510	11510
lakh))												nos.	nos.
Bio-agents/ products													
(tonnes)													
Bio-fertilizers/	-	-	-	-	-	-	-	-	-	1000	-	-	1000
Vermicompost										Kg			Kg
etc./Berkeley										-			-
compost (in Tonnes)													

## F. ANY OTHER

	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Soil , Water, Plant,	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-
<b>Manures</b> Testing	100	100	100	100	100	100	100	100	100	100	50	50	1000
(No. of samples to be	Wate	Wate	Water	Water-	Water-	Wate	Water	Water-	Water	Water-	Water-	Water	Water-
tested)	r- 1	r- 1	- 1	1	1	r- 1	- 1	1	- 1	1	1	- 1	12
	Plant	Plant	Plant-	Plant-	Plant- 1	Plant	Plant-	Plant- 1	Plant-	Plant-	Plant-	Plant-	Plant-
	- 1	- 1	1	1	Manures	- 1	1	Manures	1	1	1	1	12
	Man	Man	Manur	Manur	-	Man	Manur	-	Manur	Manur	Manur	Manu	Manure
	ures-	ures-	es-	es-		ures-	es-		es-	es-	es-	res-	S-
Soil, Water, Plant,	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-	Soil-
<b>Manures</b> Testing	100	100	100	100	100	100	100	100	100	100	50	50	1000
(No. of farmers	Wate	Wate	Water	Water-	Water-	Wate	Water	Water-	Water	Water-	Water-	Water	Water-
benefitted)	r- 1	r- 1	- 1	1	1	r- 1	- 1	1	- 1	1	1	- 1	12

	Plant	Plant	Plant-	Plant-	Plant- 1	Plant	Plant-	Plant- 1	Plant-	Plant-	Plant-	Plant-	Plant-
	- 1	- 1	1	1	Manures	- 1	1	Manures	1	1	1	1	12
	Man	Man	Manur	Manur	-	Man	Manur	-	Manur	Manur	Manur	Manu	Manure
	ures-	ures-	es-	es-		ures-	es-		es-	es-	es-	res-	S-
Soil, Water, Plant,	Soil-	Soil-	Soil-1	Soil- 1	Soil- 1	Soil-	Soil-1	Soil- 1	Soil-1	Soil- 1	Soil- 1	Soil-	Soil-1
Manures Testing	1	1	Water	Water-	Water-1	1	Water	Water-1	Water	Water-	Water-	1	Water-
(No. of villages	Wate	Wate	-1	1	Plant-1	Wate	-1	Plant-1	-1	1	1	Water	1
covered)	r-1	r-1	Plant-	Plant-1	Manures	r-1	Plant-	Manures	Plant-	Plant-1	Plant-1	-1	Plant-1
	Plant	Plant	1	Manur		Plant	1		1	Manur	Manur	Plant-	Manure
	-1	-1	Manur	es		-1	Manur		Manur	es	es	1	s-1
	Man	Man	es			Man	es		es			Manu	
	ures-	ures				ures						res	
No. of SHCs to be	-	-	-	-	-		-	-	-	1000	-	-	-
distributed to													
farmers													
Mobile Agro-	4	4	4	4	4	4	4	4	4	4	4	4	48
Advisory (No. of													
Messages)													
Mobile Agro-	60	60	60	60	60	60	60	60	60	80	80	100	800
Advisory (No. of													
Farmers)													

Signature Sr. Scientist cum Head