

KRISHI VIGYAN KENDRA

KHAWZAWL, CHAMPHAI DISTRICT

Department of Agriculture, Government of Mizoram



ANNUAL PROGRESS REPORT 2021

Dr. Henry Saplalrinliana
Senior Scientist & Head

kvkchawzawl@gmail.com , www.kvkchamphaidistrict.mizoram.gov.in

1. On Farm Testing (Discipline-Wise Summary)

Discipline	Crop	Number of technology Assessed	No. of trials		% of achievement
			Target	Achievement	
Agronomy	Maize + bean	1	3	Nil	Nil
	Soybean	1	3	3	100
Horticulture	Water melon	1	3	3	100
	Brinjal	1	3	3	100
Agro-forestry	Tephrosia & Potato	1	3	3	100
	Pineapple, Bee	1	2	2	100
Soil Science	Lentil	1	3	3	100
	Paddy	1	3	Nil	Nil
Total		8	24	17	75

2. Agro OFT -1 : Effect of sowing dates and mulching on productivity of Soyabean

Situation: Rainfed, Villages: Chawngtlai & KVK Farm, No. of farmers: 3 No. of trials: 1, Area: 0.4ha Variety : Local

Problems Identified: Low yield due to late sowing & nutrition

Details of Technology	Yield (q/ha)	NR (Rs/ha)	BCR
Technology Option -1: Sowing on 15 May with Mulching	11.50	30500	1.79
Farmers Practice: Sowing after 30 th May	9.85	22100	1.60



OFT- 2 : Maize + Beans - Vegetable pea cropping system for rainfed conditions under organic management system

Situation: Rainfed, Villages: Tuisenphai & Phaitha, No. of farmers: 3 No. of trials: 1,

Problem identified: Lack of cropping system to accommodate more crops for better yield & income

Details of Technology	Remarks
Technology to be Assessed: Technology Option-1: Maize + Bean-V. Pea Technology Option-2: Farmers practice	<i>Could not be initiated due to lockdown and other related issues</i>

Situation: Rainfed, Villages: Ngopa, Neihdawn , No. of farmers: 3 No. of trials: 3 Area: 0.75 ha Variety : Arka Muthu
Problems Identified: Use of traditional varieties with low yield and bush type watermelon not yet identified in the District.

Technology	Vine length (cm)	Days to maturity	Fruit weight(g)	Yield /ha (qtl)	BCR
T1 (Arka Muthu)	1.25 m	75	3.25	320qtl /ha	3.95
T2 (Farmers practice)	1.75 m	90	2.95	135qtl/ha	2.25



Situation: Rainfed, Villages: Tualte, Khawzawl No. of farmers: 3

No. of trials: 3 Area: 0.75 ha Variety : Arka Harshita

Problems Identified: Lack of high yielding variety with bacterial wilt resistant variety

Technology	Plant Height (cm)	Fruit length (cm)	Fruit weight(g)	Yield /ha (qtl)	BCR
T1 (Arka Harshita)	17.45	15	75	220	2.75
T2 (farmers practice)	25	12	45	120	1.85

Feedback: Ideal for off-season crop



6. Agroforestry OFT -1 : Modelling Agroforestry System in *Jhum* field for permanent Agriculture

Details of Technology

- (i) Two rows of banana & pineapple - 1.5x1.5m & 30x60cm
- (ii) Uncleared patch of 5-10m at regular interval
- (iii) Bee box-7m apart
- (iv) Growing of flowering trees/shrubs along the periphery of the farm

Source and Year of technology : ICAR, Umiam, Meghalaya (2017)

Location : Tualte & Biate
Area : 0.88 Ha & 0.76 Ha
No. of trials : 2
Present status : on-going



This OFT is conducted at Tualte and Biate village. So far, all the initial phase of work like land preparation, sowing of crops, weeding etc has been done. At present, pineapple and banana have attained a considerable height and pineapple started bearing fruits which will soon be ready for marketing. 4 nos. of Bee box each have been distributed to the adopted farmers for incorporation in the unclear patch of farm.

Details of Technology	
T01	: Contour cropping of Tephrosia & Potato
T02	: Sole Potato Spacing (Tephrosia) 15cm x 3m, Potato - 60cm x 20cm
Source and Year of technology : Assam Agricultural University, Jorhat, Assam (2015)	

Location : Tualte & Biate
Area : 3 Ha
No. of trials : 3
Remarks : This OFT could not be taken up due to Covid-19 pandemic which result in late arrival of potato seeds at propose location.

8. Soil Science OFT – 1 : Enhancing Lentil Productivity through Sustainable Nutrient Management Practices

Situation : Irrigated, Villages: Ngopa, Khawzawl, No.of Framers-3,No.of Trials-3,Variety:HUL-57
Problems identified: Improper Nutrient Management

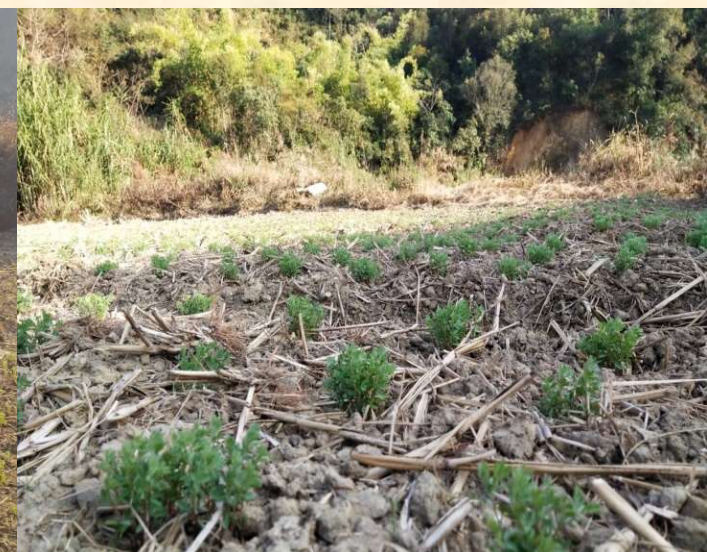
Source of technology and year of release-
ICAR, Tripura, 2018

Details of Technology

T01

**NPK-10:18:33 Kg/ha+ 200 kg lime/ha+ 3 times
foliar spray of 2% urea+0.5% ZnSo₄+0.2%
borax**

**T02-Farmer Practice(No treatment)
Spacing : 20cm X 20 cm**



Present status: On-going

Crop stage: flowering stage

Location-Ngopa & Khawzawl

**GPS Bearing-
23° 50'101"N, 93° 20'889" E,825 m**



9.

Soil Science OFT - 2 :

Root-dipping in SSP-MC Slurry method of P management in lowland Paddy

Situation: Rainfed

Problems identified: Production of rice is mainly constrained by iron (Fe) induced phosphorus deficiencies

Source of technology and year of release-College of Post Graduate Studies, CAU, Umiam, 2016

OFT-2 could not be taken up due to non availability of microbial consortium

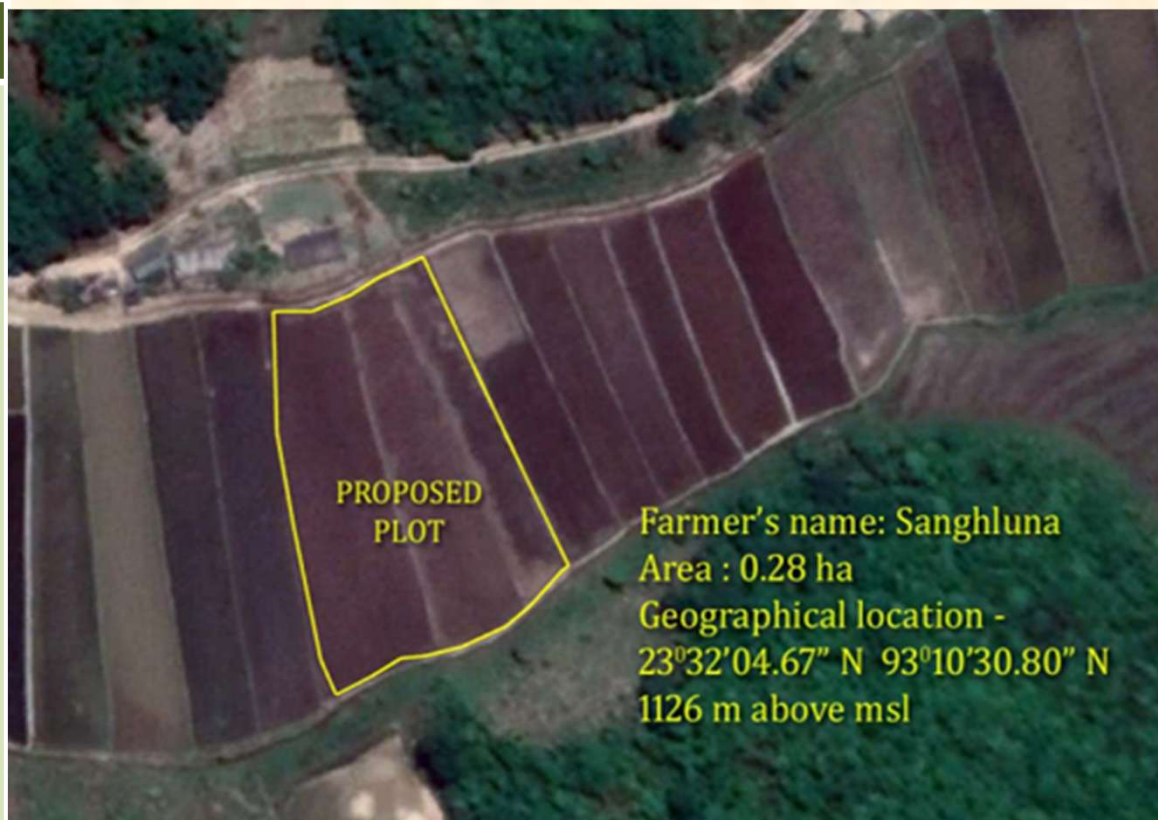
Details of Technology

Technology

**T01-
Step-I**
A mud slurry bed (45 sq.m) is prepared 7.0 kg SSP is to be mixed thoroughly with mud. Roots of uprooted rice seedling bundles need to be washed free of adhered mud and then roots are to be dipped in the SSP amended mud slurry bed for over-night.

Step-II
5 kg finely grounded dry compost along with 500ml liquid MC biofertilizer are to be mixed thoroughly with mud in the slurry bed. The SSP slurry treated roots of rice seedling bundles are to be dipped in to MC amended mud slurry bed and incubated for 2 h.

T02-Farmer Practice(No treatment)



10.

FLDs (Discipline-Wise Summary)

Discipline	Crop	Number of technology Demonstrated	No. of demonstrations		% of achievement
			Target	Achievement	
Agronomy	Field Pea	1	10	10	100
	Potato	1	30	30	100
Horticulture	Tomato	1	15	15	100
	Onion	1	15	15	100
Agroforestry	Tephrosia + Pineapple	1	3	3	100
Soil Science	Composting	1	10	10	100
	Potato	1	10	10	100
Total	-	7	93	93	100

11.

FLDs (Discipline-Horticulture)

Crop Enterprise (PL give name of crop and its variety)	Technology demonstrated	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs/ha)/ (Rs./ unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha) / (Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	(Qt/ha)	%				
Tomato	Popularisation of Tomato variety Arka Abhed	435	395	420	320	31.25	1,73,195	8,40,000	6,66,805	4.8



Crop Enterprise (Pl. give name of crop and its variety)	Technology demonstrated	Demonstration Yield (Qt/Ha)			Yield of local Check	% increase/ change in avg. yield over local	Gross Cost (Rs/ha)/ (Rs./ unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha) / (Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A	(Qt/ha)	%				
Onion	Popularization of Onion variety NHRDF Red 4	On going								



Villages covered : Tuipui, Tualte No. of trials : 10, No. of farmers : 10, Area : 5 ha
 Source and year of release: IARI, New Delhi, 2
 Problem identified: Low yield of unidentified local cultivar

Details of Technology	Yield(q/h a)	Gross Cost(Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	Remarks
Technology Popularization of Field Pea Variety: Pusa Pragati	-	-	-	-	Seed distribution and Training completed in Village Tuipui & Tualte

Present crop stage: Flowering and pod initiation stage



14.

AGRONOMY FLD-2: Demonstration of Potato Variety: Kufri Jyoti

Source of seed: Under NEH Programme, 2020 (IARI, New Delhi)

Villages covered: Biate, Neihdawn, Tuipui, No. of Demonstration:40, No. of farmers:40, Area:2ha

Details of Technology	Yield(q/ha)	Gross Cost(Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	Remarks
Technology Demonstration of Potato Variety: Kufri Jyoti					Training & Seed distribution completed On going



15. AGROFORESTRY FLD-1: Contour cropping of *Tephrosia candida* in Pineapple field for supplement of soil nutrient in *jhum* field

Details of Technology
❖ Contour cropping of <i>Tephrosia candida</i> and Pineapple ❖ Pineapple spacing 30cm x 60 cm, <i>Tephrosia candida</i> – 15 cm x 3 m ❖ Maintaining 1m height of <i>Tephrosia candida</i> above ground level
Source and Year of technology : Assam Agricultural University, Jorhat, Assam (2015)

Location : KVK Farm, Khawzawl
Area : 0.25 ha
No. of trials : 1
Present status : On going



17. Soil Science FLD-2 : Integrated Nutrient Management in Potato

Crop Enterprise (Pl. give name of crop and its variety)	Technology demonstrated	Demonstration Yield (Qt/Ha)			Yield of local Check (Qt/ha)	% increase/ change in avg. yield over local	Gross Cost (Rs/ha)/ (Rs./ unit)	Gross Return (Rs/ha) / (Rs./ unit)	Net Return (Rs/ha) / (Rs./ Unit)	B:C Ratio (GR/GC)
		H	L	A						
Potato	To1 NPK-150:100:120 Kg/ha Vermicompost-2.5t/ha T02-Farmer Practice(No treatment) Spacing : 30cm X 30 cm	172	165	168.5	151	11	1,33,064	4,12,500	2,79,436	3.1



Land preparation



Training on INM& IPM conducted at Chawngtlai



Field day conducted at Biate and Tuipui



18.

Training Programmes -Farmers & Rural Youth

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Vocational	Total		
Agronomy	8	9	100	60	210	-	-	270	250	108
Soil Science	8(10)	8(10)	100	40	62	30	-	132	100	132
Horticulture	7(14)	7(14)	100	60	120	60	20	260	120	216
Agroforestry	5(10)	5(8)	80	46	98	40	10	194	240	82
Total	-	-	-	206	490	130	30	856	710	120

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)					Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Voc.	Total		
Agronomy	2	2	100	40	-	-	-	40	30	
Soil Science	2(3)	2(3)	100	-	-	30	15	45	30	150
Horticulture	2(4)	2(4)	100	-	40	-	-	40	40	100
Agroforestry	2 (4)	2(4)	100	20	60	-	-	80	80	100
Total	-	-								

19. Training Programmes –Extension Personnel

Discipline	No. of Training prog. (No. of courses/topics)			Participants (Nos.)				Target Beneficiary (nos.)	% achievement (over target beneficiaries)
	T	A	% of A	On	Off	Spon.	Total		
Soil Science	1(1)	1(1)	100	8	-	-	8	8	100
Horticulture	1(2)	1(2)	100	10	-	-	10	10	100
Agro forestry	1(1)	1(1)	100	10	-	-	10	10	100
Total	3(6)	3(6)	-	10	-	40	50	45	-

20. Projects undertaken

Project source	Project name	Project incharge	Sanctioned Amount
IFAD, SCRAM	Fostering climate resilient agriculture in upland hills system (FOCUS)	Israel Lalremruata	4,00,000/-
NFSM	Cluster Frontline Demonstration on Pulses(Field Pea)	Dr. Om Prakash	1,80,000/-
KSHAMTA	KSHAMTA	Dr Malsawmkimi	Rs 25,000/-
DBT	Collection, Maintenance, Long Term Conservation, Morpho-Phenological and Molecular Characterization of Citrus Germplasm of North East Region	Dr Malsawmkimi	Rs 56,90,000/-
NARI	Nutri-Sensitive Agriculture Research Innovation	R.Vanlalduati	50,000/-
PKVY	Paramparagat Krishi Vikash Yojona	R.Vanlalduati	33,0000/-

Sl. No	WORK / ACTIVITIES PERFORMED	MONTHLY ACTIVITIES PERFORMED DURING THE YEAR 2021												Area/Unit	Amount utilised (In Lakh)	Amount received (In Lakhs)	Amount utilised (In Lakhs)
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec				
1	Construction of tree guard for trees planted along farm internal/ approach road													320 nos	0.148	3.05235	3.05235
2	Establishment of indigeneous farming model													0.5 ha	0.55835		
3	Clearing of farm approach/internal road													1.5 km	0.232		
4	Weeding, Hoeing of fruit plantation site													1 ha	0.304		
5	Weeding, Hoeing of jackfruit plantation													1 ha	0.168		
6	Weeding, repair of farm terrace and farm bunds													1.5 ha	0.264		
7	Cultivation of mizo cotton													0.25 ha	0.360		
8	Intercultural operation of existing crops													0.25 ha	0.136		
9	Repair of drainage channel													0.5 km	0.168		
10	Diversion of perennial water sources from Kawihthruang Hnar to KVK Farm													2.5 km	0.356		
11	Repair of existing farm fences													300 m	0.180		
12	Cultivatio of Soyabean for soil reclamation													0.5 ha	0.178		
Total		0.072	0.15035	0.684	0.172	0.376	0.112	0.328	0.184	0.296	0.176	0.286	0.216		3.05235		

22. UTILIZATION OF KVK FUNDS DURING THE YEAR 2021-22(upto 31st December 2021)

Sl. No.	Budget/Expenditure Head	Sanctioned (In lakhs)	Released (In lakhs)	Expenditure (In lakhs)
A. RECURRING CONTINGENCIES				
1	Pay & Allowances	116.47852	116.47852	116.47852
2	T.A	2.25	2.25	2.25
3	HRD	0.50	0.50	0.50
4	KSHAMTA	0.25	0.25	0.25
5	NARI	0.25	0.25	0.25
6	Hydroponics	0.50	0.50	0.50
7	Contingencies	12.25	12.25	12.25
	TOTAL :	132.47852	132.47852	132.47852

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance
April 2020 to (till date)2021	1,40,015/-	84,381/-	68,000/-	2,24,396/-
April 2019 to March 2020	87,625/-	54,190/-	5,000/-	1,36,815/-
April 2018 to March 2019	48,625/-	42,680/-	3,680/-	87,625/-

- **Best Farmer Award from IIHR Bengaluru on September 2021**
- **Installation of Solar Cold Storage Structure (10 ton capacity) through MISTIC, Department of Science & Technology**
- **Distribution of Potato seeds (170qtls) at Biate, Neihdawn and Farkawn arranged from external sources.**
- **Initiation of Mushroom spawn production unit through SHGs involvement**
- **Commencement of Citrus Field gene bank at KVK farm under DBT project**
- **Award for best implementing KVK under CFLD Pulses from ICAR ATARI.**











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