

**Indian Council of Agricultural Research
Agricultural Technology Research Institute, Zone-III
Umiam, Meghalaya**

Format for Annual Action Plan Formulation of KVKs, Zone-III for 2017-18

Name of the KVK/District: KhawzawlChamphai District

State: Mizoram

Host Organization: Directorate of Agriculture (Research&Education)

Present Staff Position in KVK

Sl. No.	Name	Gender (M/F)	Category (General/OBC/SC/ST)	Designation	Discipline
1	MALSAWMKIMI	F	ST	SMS	Horticulture
2.	SYED KHALIDUDDIN AHMED	M	General	SMS	Animal Science
3.	F. ZORAMTHARI	F	ST	SMS	Plant Protection
4.	Dr.OM PRAKASH	M	General	SMS	Agronomy
5.	R. VANLALDUATI	F	ST	SMS	Soil Science
6.	ISRAEL LALREMRUATA	M	ST	SMS	Agroforestry
7	LALHRUAITLUANGI	F	ST	Programme Assistant	Home Science
8.	SAMSON SAIRENGPUIA SAILO	M	ST	Programme Assistant	Computer
9.	PRAKASH THAPA	M	OBC	Farm Manager	Agriculture
10	K.VANLALHMANGAIHI	F	ST	Programme Assistant	-
11.	CRUSADE THANGPUII	F	ST	Stenographer	-
12.	LALNUNTLUANGA	M	ST	Driver	-
13.	R.DENGLIANA	M	ST	Driver	-
14.	LALTANPUIA	M	ST	Supporting staff	
15.	VANLALVENHIMA	M	ST	Supporting staff	

Discipline: Agronomy

Name of the concerned Scientist: Dr. Om Prakash **Mobile No: 9436960302**

E-mail address:om2@rediffmail.com

Mandated activities	Thematic Area	Details of Technology	Source and Year of release	Assess/Refine	Area (in acre)	Location	Period and Duration	Number of beneficiaries			
								SC/ST			General
								M	F	Total	
On farm testing	Varietal evaluation	Varietal evaluation of Rice var. Jeera Phool & Samba Mahsuri (BPT-5204). Time of transplanting: June Seed rate :40 kg/ha Observation : 1. No. of hills / sq m 2. No. of tillers / hill 3. No. of effective tillers/ sq m 4. No. of grains / panicle 5. Yield/ha 6. Economics	DRR, Hyderabad, 2010	A	1.0	KVK Farm, Tuisenphai, New champhai	June - Oct.17 150 days	02	01	03	-
	Integrated Weed Management	Comparative study of herbicide and manual weeding on weed mngt. in Rice. Technology:a) Nominee gold (Bispyribac sodium) @25g ai /ha at 15-25 DAT b)Butachlor@2kg a.i /ha as pre emergence Time of transplanting: June Seed rate : 40 kg/ha Observation : 1. No. of weeds / sq m	DWR, Jabalpur ,2012	A	1.0	New champhai, KVK Farm, Phaisen	May-Aug. 17 110 days	02	01	03	-

		2. No. of hills / sq m 3. No. of tillers / hill 4. No. of grains /panicle 5. Yield /ha 6. Economics									
Mandated activities	Thematic Area	Technology/Crop/Cropping system	Source and Year of release	Demon(N o.)	Area (in acre)	Location	Period and Duration	SC/ST			General
								M	F	Total	
Front Line Demonstration	Varietal evaluation	Popularization of Groundnut Variety: GG 20 D.O.T. :June Seed rate : 80kg/ha Observation : 1. Date of sowing 2. Grain yield (qt/ha)	ICAR, Tripura 2012	10	2.5	KVK Farm, Tuimuk, Tuisenphai, Phaisen, New champhai	June-October 130 days	06	04	10	-
	Integrated Nutrient Management	Popularization of AP-3 with <i>Rhizobium</i> inoculation Sowing: November Seed rate : 80 kg/ha Technology: <i>Rhizobium</i> coating @200gm/10Kg seed Observation : 1. Date of sowing 2. Seed yield (qt/ha)	AAU, Jorhat, 2010	10	2.5	Tuisenphai, KVK Farm, Tuimuk, Zotlang	Nov 15-Jan.16 90 days	06	04	10	-
Mandated activities	Target group	Title of the training Programme and No. of Courses in bracket	No. of training	Period of the year	Duration (in days)	On/Off campus	Number of beneficiaries			Grand Total	
							SC/ST	General			

			progs				M	F	Total		
On and Off campus training programs	Farmer and Farm women	1. Economics of chemical weed mngt. in Rice (2)	1	April 2017 - March 2018	1 day each	On/ Off	15	05	20	-	20
		2. Scientific cultivation of Field pea (1)	1			Off	25	05	30	-	30
		3. Advantage of chemical weed mngt. In Maize (1)	1			Off	25	-	25	-	25
		4. Scientific cultivation of Rabi Maize (1)	1			Off	25	05	30	-	30
		5. Benefits of <i>Rhizobium</i> inoculation in pulses (1)	1			On	15	10	25	-	25
		6. Package of practices for raising healthy Rice seedlings (1)	1			Off	30	-	30	-	30
		7. Advantage of fodder maize - African Tall (1)	1			On	15	05	20	-	20
		8. Package of practices for cultivation of groundnut(1)	1			On	15	05	20	-	20
		9. Method of water conservation during Rabi season (1)	1			Off	20	5	25	-	25
	Rural Youth	Chemical weed mngt. in non cropped areas (1)	1		1 day	Off	30	5	35	-	35
	Extension Personnel	Economics of chemical weed mngt. in maize (1)	1		1 day	On	15	05	20	-	20

Discipline: Horticulture

Name of the concerned Subject Matter Specialist : MALSAWMKIMI Mobile No:9612624738

E-mail address:sawmi77@gmail.com

Mandated activities	Thematic Area	Name of Technology	Source and Year of release	Assess/Refine	Area (in ha.)	Location	Period and Duration	Number of beneficiaries/ trials						
								SC/ST			General			Grand Total
								M	F	Total	M	F	Total	
On farm testing														
	Integrated Nutrient Management	Influence of Rhizobium inoculation on yield of French bean Treatment : Rhizobium 2kg/ha	S.V Agricultural College, Tirupati 2010.	A	0.75	Tuimuk, Damdai and Tuipui	April 2017– July 2017	3		3				3
	Mechanization													
	Integrated crop management	Comparative study of Kharif, Rabi and summer cultivation of Tomato var. Arka Rakshak in Champhai District Variety: Arka Rakshak IIHR, 2013 Variety: Arka Rakshak Seed Rate 125-175g/Ha NPK kg/ha 120:50:50 kg/ha	Horticulture College and Research Institute, Dr. Y.S.R. Horticultural University,	A	0.75	Damdai, Tuipui and Halsual	March – Feb 2018	3		3				3

		There will be 3 planting time : 1)March 2)June 3)September Seed Rate 125- 175g/Ha Spacing : 60 X 45 cm	A.P. India, 2013											
Mandated activities	Thematic Area	Name of technology	Source and Year of release	Crop/cropping system	Area (in ha.)	Location	Period and Duration	Number of beneficiaries/ demon.						
								SC/ST			General			Grand Total
								M	F	Total	M	F	Total	
Front Line Demonstration	Varietal evaluation	Popularization of Tomato Var. Arka Rakshak IIHR, 2013	IIHR, 2013	Tomato	2.25	Damdiai, Tuisen, Lungsum mual, Tuimuk, Phaisen hnar, Tuipui, Halsual, dulte, chawmgtl ai	June – September	11	4	15				15
	Varietal evaluation	Performance of Garlic var. G 282 Seed rate: 700-800 kg clove /ha TOP: Aug– Sep Spacing: 10 x 7.5	NHRDF , 1992.	A	0.75	Damdiai, Halsual and Lungsum mual	Oct 2017- Jan 2018	3		3				3

		cm N:PK(Kg/ha):100: 50:50												
Mandate activities	Target group	Title of the training Programme and No. of Courses in bracket	No. of trainin g progs	Period of the year	Duratio n (in days)	On/Of f camp us	Number of beneficiaries						Grand Total	Remarks
							SC/ST			General				
							M	F	Tot al	M	F	Tot al		
On and Off campus training programmes	Farmer and Farm women	1.Scientific management of mandarin orange(2)	1	2017- 2018	1	Off	20	10				30		
		2. Scientific cultivation of Ginger (2)	1		1	ON	20	10				30		
		3. Scientific cultivation of tomato (2)	1		1	Off	20	10				30		
		4. winter vegetable cultivation (2)	1		1	Off	20	10				30		
		5. Nursery raising technique (1)	1		1	ON	20	10				30		
	Rural Youth	Cultivation technique of Tomato (3)	1	2017- 2018	1	ON	20	10				30		
	Extension Personnel	Ginger cultivation technique (5)	1	2017- 2018	4	ON	15	5				20		
	Civil Society													
	NGO(including school drop- outs)	Scientific cultivation of	1	2017- 2018	1	Off	20	10				30		

		Ginger														
	Others (Pl. specify)															
Vocational training programmes	Farmer and Farm women	Scientific cultivation of M orange (5)	1	2017-2018	4	ON	15	5						20		
Sponsored training programmes																Sponsoring agency
	Farmer and Farm women	Citrus decline and its management (3)	2			off	20	10						30	NABARD	
	Rural Youth	Ginger cultivation technique (3)	2			off	20	10						30	RKVY	

Discipline: Plant Protection (Plant Pathology)

Name of the concerned Subject Matter Specialist:F.ZORAMTHARIContact No: 9862842195

E-mailaddress:fzori@yahoo.com

Mandate activities	Thematic Area	Details of Technology	Source & Year of release	Assess /Refine	Area (ha)	Location	Period & Duration	Number of trials/beneficiaries		
								SC/ST		
								M	F	Total
On farm testing	Integrated Pest Mgmt	<p>Integrated Pest Management of white fly and thrips in tomato</p> <p>Technology:</p> <p>1)Uprooting and destroying of diseased leaf curl plants</p> <p>2)Judicious use of nitrogen fertilizer and irrigation .</p> <p>3)Installation of yellow sticky traps and blue sticky traps @ 12 no/ha to attract and kill insects.</p> <p>4) Application of carbofuran 3% G @ 40 kg/ha and ETL based spraying with Dimethoate 1ml/ltr of water</p> <p>Parameters to be studied:</p> <p>1) No of infested plants at ten days interval</p> <p>2) Leaf curl Disease incidence (%)</p> <p>3) Pest incidence (%)</p> <p>4) Yield Kg/Ha</p>	i) TNAU,2014	Assessment	1.2	Tuipui, Tuisenphai (Khawzawl) Phaizau,Champhai	August 2017-December 2017	3		3

	Integrate d Pest Mgmt	<p>Integrated pest Management of Aphids (<i>Lipaphis erysimi</i>) in Mustard. (<i>Brassica juncea var rugosa</i>) Technology: 1)Early sowing of seeds (i.e before 20th of october) 2)Setting up of yellow sticky traps @ 12 No/ha 3)Destruction of aphid infesting twigs at the initial stage of appearance. 4)Spraying with neem oil 3% from 2nd -3rd week of Dec 5)ETL based spraying with dimethoate @ 625-1000ml/ha /imidacloprid @1 ml/lit of water i) Use of pheromone trap @12/ha for yellow stemborer ii) Application of NeemseedKernelextract@25kg/ha iii)ETL based application ofFlubendiamide @75ml/ha/ Imidacloprid @500ml/ha/ Hexaconozole@1ml/lit Parameters to be studied: 1) No of infested plants at ten days interval 2) Pest incidence (%) 3) Yield Kg/Ha</p>	TNAU, 2010	Assess ment	1.2	Phaizau,Ch amphai and tuisenphai Khawzawl and Tuimuk ,khawzawl	Oct 2017- Feb 2018	3		3
	Integrate d Disease Mgmt	<p>Integrated Disease Management of Late blight of tomato Technology: 1)Raising the crop in raise beds with plastic mulch. 2)Nursery bed treatment with trichoderma herzianum (0.5%) 3)Staking and removal of foliage and fruits up to 30 cm. 4)Protective spraying with mancozeb @ 0.2% or Copper oxy chloride @ 2 gm/lit Parameters to be studied: 1) No of infected plants at ten days interval 2) Disease incidence (%) 3) Yield Kg/Ha</p>	IIHR, 2012	Assess ment	1.2	Tuipui, Tuisenphai (Khawzawl) Phaizau,Ch amphai	August 2017- December 2017	3		3

Mandated activities	Thematic Area	Technology/Crop/Cropping system	Source & Year of release	Demon (no)	Area (ha)	Location	Period & Duration	Number of trials/beneficiaries		
								SC/ST		
								M	F	Total
Front Line Demonstration	Pest management	<p>I. Management of shoot and rhizome borer in ginger</p> <p>Details of Technology:</p> <p>i) Spraying of Dimethoate @ 2ml/lit.</p> <p>Parameters to be studied:</p> <p>1. Dead heart (%)</p> <p>2. Reduction of dead heart symptom (%)</p> <p>3. Yield</p>	TNAU, 2005	10	5 ha	Chalrang, Tualte, Tuisenphai and Lungdingram (Chawngtlai)	April 2017- March 2018	10		10
	IPM	<p>II Integrated pests and diseases management in paddy</p> <p>Details of Technology:</p> <p>Use of <i>Pseudomonas</i> as seed treatment, soil application, foliar spray</p> <p>i) Release of egg parasitoids (<i>T.chilonis</i> @ 5cc/ha for leaf folder on 37, 44 & 51 DAT; <i>T.japanicum</i> @ 5cc/ha for stem borer on 30 & 37 DAT)</p> <p>ii) Use of pheromone trap @ 12/ha for yellow stem borer</p> <p>iii) Application of Neem seed Kernelextract @ 25kg/ha</p> <p>iv) ETL based application of Flubendiamide @ 75ml/ha/ Imidacloprid @ 500ml/ha/ Hexaconazole @ 1ml/lit</p> <p>Parameters to be studied:</p> <p>1. Dead heart (%)</p> <p>2. White ears (%)</p> <p>3. Disease intensity (%)</p> <p>4. Yield (kg/ha)</p>	TNAU, 2011	10	1 ha	Tuisenphai: Tuimuk: Phaitha: Phaisen: Phaizau	June 2017- Nov 2017	10		10

Mandated activities	Target group	Title of the training programme & No of courses in bracket	No. Of Training progs	Period of the year	Duration (in days)	On/Off campus	Number of trials/beneficiaries		
							SC/ST		
							M	F	Total
On and Off campus training programmes	Farmer and Farm women	1. Preparation of Bordeaux paste	1	April 17 - March 18	1	off	20	10	30
		2. IPM in ginger	1		1	on	20	10	30
		3. IPM in tomato	1		1	On	20	10	30
		4. Pests and diseases management in Citrus	1		1	Off	20	10	30
		5. Safety use of pesticides	1		1	On	20	10	30
		6. Management of insect pest and diseases in nursery	1		1	Off	20	10	30
		7. Mushroom spawn preparation	2		2	on	40	20	60

	Rural Youth	Mushroom cultivation (Chinese method)	1	April 17 - March 18	1	On	10	10	20
		Preparation of neem extracts	1		1	On	10	10	20
		Mushroom spawn preparation	2		1	On	20	20	40

Mandated activities	Target group	Title of the training programme & No of courses in bracket	No. Of Training progs	Period of the year	Duration (in days)	On/Off campus	Number of trials/beneficiaries			Sponsoring Agency
							SC/ST			
							M	F	Total	
Sponsored training programmes	Farmer and Farm women	1) Pest and Disease management of winter vegetable	1	Nov, 2017	1 day each	Off	20	10	30	RKVY/ ATMA/ Line Dept
		2) Management of storage pests	1	Feb, 2018	1	Off	20	10	30	

	Extension personnel	Mushroom Spawn preparation	1	June, 2017	1	On	10	10	20	RKVY/ ATMA/ Line Dept
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Discipline: Soil Science

Name of the concerned Subject Matter Specialist: R.vanlalduati **Mobile No.:**9612254175

E-mailaddress: duatikawlni@ gmail.com.

Mandated activities	Thematic Area	Details of Technology	Source and Year of release	Assess/Refine	Area (in ha)	Location	Period and Duration	Number of beneficiaries						
								SC/ST			General			Grand Total
								M	F	Total	M	F	Total	
On Farm Testing	Nutrient Management	Potassium nutrition on yield and quality of Grapes variety <i>Bangalore blue</i> Treatments: K ₂ O doses (g/vine) 0-K ₂ O 300-K ₂ O 400-K ₂ O 500-K ₂ O Parameters to be recorded i. Soil Fertility Status ii. Bunch weight (g) iii. Yield (q/ha)	IIHR, Bangalore 2010	A	0.5 ha	Champhai, Zotlang, Mualkawi	March 2017- August 2018	2	1	3				3

	Soil health	Low cost Vermicomposting Earthworm spp. <i>Eisenia foetida</i> Parameters to be recorded i. Nutrient content N,P,K and Micronutrients ii. Yield (kg/unit)	TNAU,2009	A	0.5 ha	Ruantlang, Mualven, Khawzawl	June 2017-September 2017	3			3			3
	Soil management	Effect of organic manures on growth and yield of Broccoli Treatments Vermicompost @ 10t/ha Parameters to be recorded i. Soil fertility status ii. Yield	TNAU 2014	A	0.5 ha	Khawzawl, Zotlang, Chawngtlai	September 2017-February 2018	3						3

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Mandated activities	Thematic Area	Technology/Crop/Cropping system	Source and Year of release	Demon (No.)	Area (in ha)	Location	Period and Duration	Number of beneficiaries						
								SC/ST			General			Grand Total
								M	F	Total	M	F	Total	
Front Line Demonstration	Soil health	Popularisation of Azolla in Champhai District Parameters to be recorded i. Soil fertility status ii. Yield (q/ha)	IARI, New Delhi, 2014	10	1 ha	Zotlang, Tlangsam, Khawzawl	June 2017-December 2017	10		10				10
	Soil health	Low cost Vermicomposting	TNAU,20	A	0.5 ha	Ruantlang,	June 2017-	3			3			3

		Earthworm spp. <i>Eisenia foetida</i> Parameters to be recorded ii. Nutrient content N,P,K and Micronutrients ii. Yield (kg/unit)	09			Mualveng, Khawzawl	September 2017							
Mandated activities	Target group	Title of the training Programme and No. of Courses in bracket	No. of training progs	Period of the year	Duration (in days)	On/Off campus	Number of beneficiaries						Remarks	
							SC/ST			General				Grand Total
							M	F	Total	M	F	Total		
On and Off campus training programmes	Farmer and Farm women	1)Nutrient deficiency symptoms and their management in Rice (1)	1	April 2017 to March 2018	1 day	On campus	20	10	30				30	
		2)Nutrient deficiency symptoms and their management in Citrus (1)	1		1 day	On campus	20	10	30				30	
		3)Nutrient deficiency symptoms and their management in Vegetables (1)	1		1 day	Off campus	20	10	30				30	
		4)Importance of soil Management(1)	1		1 day	Off campus	20	10	30				30	
		5)Importance of Integrated Nutrient Management(1)	1		1 day	On campus	20	10	30				30	
		6)Methods of fertilizer application(1)	1		1 day	Off campus	20	10	30				30	
		7)Soil fertility management(1)	1		1 day	On campus	20	10	30				30	
		8)Role of organic farming(1)	1		1 day	On campus	20	10	30				30	

		9)Balance fertilizer application(1)	1		1 day	campus	20	10	30				30	
		10) Integrated Nutrient Management in Winter Vegetables	1		1 day	Off campus	20	10	30				30	
	Rural Youth	1) Management practices for sustainable Agriculture(1)	1	April 2017 to March 2018	1 day	On campus	20	10	30				30	
		2) Role of soil testing in ensuring balanced use of fertilizers in increasing food grain production(2)	1		1 day	On and Off campus	45	15	60				60	
		3) Soil health management(1)	1		1 day	Off campus	15	15	30				30	
Sponsored training programmes														Sponsoring agency
	Farmer and Farm women													
	Rural Youth													
	Extension Personnel	Soil health management	1	April 2017 to March 2018	1	On Campus	20	10	30				30	

Discipline: Animal Science

Name of the concerned Subject Matter Specialist: Syed Khaliduddin Ahmed **Mobile No:** 9862310702

E-mailaddress: skhalidahmeds@gmail.com

Mandated activities	Thematic Area	Details of Technology	Source and Year of release	Assess /Refine	Area (in ha)	Location	Period and Duration	Number of beneficiaries			
								SC/ST			General
								M	F	Total	
On farm testing	Breed Comparison	Evaluation and Comparison of Burmese local Sows with Improved Crossbreed (Hampshire cross) Sows with respect to Oestrus cycle, inter Furrowing Intervals & litter size Parameters: a) Age at first furrowing b) Litters size at furrowing c) Wt. of litter (weekly interval till weaning) d) Mortality till weaning	-	A		Khawzawl	24 months	02	02	04	-
	Fodder Production	Introduction of Bajra as Fodder crops: Observations: a) Duration of Cutting b)Yield t/ha c) Economic Analysis			0.4 ha			02	01	03	-
	FLD										
Mandated activities	Thematic Area	Technology/Crop/Cropping system	Source and Year of release	Demon(No.)	Area (in ha)	Location	Period and Duration	Number of beneficiaries			
								SC/ST			General
								M	F	Total	

Activity Calendar of the KVK (Month-wise target to be completed) for the year 2017-18

KVK: Khawzawl, Champhai District

Activity/ Month	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
OFT (Nos.)													
i. Number of Technologies	2	2	3		2	1	2						
i. Number of Trials	9	7	9		6	3	6						
ii. Area (ha)/ items (no.)	2 ha	0.4	1.5 ha		1.2 ha	0.5 ha	1.95 ha						
FLD (Nos.)													
i. Number	1		4	40				1					
ii. Area(ha)/ items (no.)	5.0ha		7.25 ha	6				2.0ha					
Training programme													
A. Farmer													
i. No. of course		4	6	4	4	5	5	5	4	4	4	3	
ii. No. Of participants		105	150	90	90	110	145	145	110	110	110	90	
B. Rural Youth													
i. No. of course		2	2	3	2	2	2	1	1	1			
ii. No. Of participants		40	40	75	40	40	40	20	20	20			
C. Extension personnel													
i. No. of course		1	1	1		1							
ii. No. Of participants		20	20	20		20							
Extension Activities													
No. of course	3	5	4	6	3	6	7	2	5	2	5	3	
No. Of participants	120	300	250	445	155	575	689	105	134	150	267	167	
Seeds production (tonnes)					0.1		0.4	1.2				0.5	
Planting materials (Nos.in lakh)		0.01				0.02	0.12						

Livestock strains (No. in lakh)													
Fingerlings (No. in lakh)													
Bio-agents/ products (tonnes)													
Bio-fertilizers/ Vermicompost etc. (in Tonnes)			1	1	1	1	1	0.5					
Soil , Water, Plant, Manures Testing (No. of samples to be tested)		25	25	25	25	25	25	50	50				
Soil , Water, Plant, Manures Testing (No. of farmers benefitted)		25	25	25	25	25	25	50	50				
Soil , Water, Plant, Manures Testing (No. of villages covered)		1	1	1	1	1	1	1	1				
Mobile Agro-Advisory (No. of Messages)	20	20	20	20	20	20	20	20	20	20	20	20	20
Mobile Agro-Advisory (No. Of Farmers)	20	20	20	20	20	20	20	20	20	20	20	20	20
Mobile Agro advisory Services (Voice)	10	10	10	10	10	10	10	10	10	10	10	10	10



Signature

For Senior Scientist and Head