

ANNUAL REPORT OF KVKS, 2015-16

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Lower Dibang Valley District Arunachal Pradesh Roing- 792 110	-	-	kvkldv@gmail.com

1.2. Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Directorate of Agriculture Government of Arunachal Pradesh Naharlagun- 791 110	0360 2244252	0360 2244252	osd_kvks@yahoo.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. T. J. Ramesha	03803 -223669	9436836352	fishcotj@yahoo.co.in

1.4. Year of sanction: 2004

1.5. Staff Position (As on 31st March, 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr. T.J.Ramesha	Senior Scientist and Head	Aquaculture	PB-4 (37400-67000) with Grade Pay of Rs.9000/-	44804	10/12/08	Temporary	OBC
2	Subject Matter Specialist	Dr. D.Hazarika	Subject Matter Specialist	Animal Science	PB -3 (15600 - 39100)	17550	31/01/2013	Temporary	OBC

					0) with Grade Pay of Rs.54 00/-				
3	Subject Matter Specialist	Ms. Monika Panggam	Subject Matter Specialist	Agrono my	PB -3 (1560 0 - 39100) with Grade Pay of Rs.540 0/-	20440	28/11/2 008	Temporary	ST
4	Subject Matter Specialist	Smti.Tokt el Boko	Subject Matter Specialist	Plant Patholog y	PB -3 (1560 0 - 39100) with Grade Pay of Rs.540 0/-	22822	11/11/2 005	Temporary	ST
5	Subject Matter Specialist	Mrs.Nana ng Tamut	Subject Matter Specialist	Home Science	PB -3 (1560 0 - 39100) with Grade Pay of Rs.540 0/-	18240	19/9/20 11	Temporary	ST
6	Subject Matter Specialist	Mr.Jimm y Mize	Subject Matter Specialist	Aquacult ure	PB -3 (1560 0 - 39100) with Grade Pay of Rs.540	18240	29/9/20 11	Temporary	ST

					0/-				
7	Subject Matter Specialist	Mr.V.K. Pandey	Subject Matter Specialist	Horticulture	PB -3 (15600 - 39100) with Grade Pay of Rs.5400/-	18240	30/9/2011	Temporary	Gen.
8	Programme Assistant	Ms. H. Monpa	Computer Programmer	BCA	PB - 2 (9300-34800) with Grade Pay of Rs.4200/-	12430	1/12/2008	Temporary	ST
9	Farm Manager	Sh. L. Tamut	Farm Manager	B.Sc.(Agri)	PB - 2 (9300-34800) with Grade Pay of Rs.4200/-	12430	10/12/2008	Temporary	ST
10	Accountant / Superintendent	Sh. S.Linggit	Assistant	M.Com	PB - 1(5200-20200) with Grade Pay of Rs.2400/-	12430	25/11/2008	Temporary	ST
11	Stenographer	Smti. Aja Bomjen	Steno Gd-III	B.A	PB - 1(5200-20200) with Grade	9750	1/12/2008	Temporary	ST

					Pay of Rs.190 0/-				
12	Driver	Mr.G.S. Tamang	Driver	Matricul ation	PB - 1(520 0- 20200) with Grade Pay of Rs.190 0/-	8930	23/6/20 06	Temporary	ST
13	Driver	Mr.Gete m Moyong	Driver	ITI	PB - 1(520 0- 20200) with Grade Pay of Rs. 1900/-	8930		Temporary	ST
14	Supporting staff	Smti.Min byak Lego	Peon	Xth Pass.	PB - 1(520 0- 20200) with Grade Pay of Rs.180 0/-	7640	10/4/20 07	Temporary	ST
15	Supporting staff	Mr. T.Pangga m	Chowkider	Xth Pass.	PB - 1(520 0- 20200) with Grade Pay of Rs.180 0/-	7640	2/4/200 7	Temporary	ST
	Total	15							

- 1.6. a. Total land with KVK (in ha) :-7.12
 b. Total cultivable land with KVK (in ha):-5.25
 c. Total cultivated land (in ha):

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Staff Quarters)	651.04 Sq. mtrs
2.	Under Demonstration Units	6000 Sq mtrs
3.	Under Crops (Cereals, pulses, oilseeds etc.)	1 ha
4.	Under vegetables	500 sq.mtr
5.	Orchard/Agro-forestry	-
6.	Others (specify)	

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	26.2.2014	550	88 lakhs	16.10.2011	NA	NA
2.	Farmers Hostel	NA	-	-	-	-	NA	NA
3.	Staff Quarters (6)	NA	-	-	NA	-	NA	NA
4.	Demonstration Units (2)	ICAR	18.01.12(Fishery) 20.4.12(Poultry)	160	12 lakhs	16.10.2011	NA	NA
5	Fencing	ICAR	-	1292 m	15 lakhs	16.10.2011	NA	NA

B) Vehicles

Type of vehicle	Regd. No.	Year of	Cost (Rs.)	Total kms. Run	Present
-----------------	-----------	---------	------------	----------------	---------

		purchase			status
Jeep (Mahindra Max)	AR-16/ 3793	2006	501372.00	99,104 km	Bad Condition
Tractor (Mahindra)	AR-16/ 3791	2010	869494	75335 km	Bad Condition
Tractor (Mahindra)	NA	2005	500000.00	20,000 km	Bad Condition
Power Tiller V.S.T	NA	2010	155000.00		Good Condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Meat Mincer	-	75000 (Received from CIFT, Cochin under NEH Programme)	Good Condition
Weighing Balance	-	- Received from CIFT, Cochin under NEH Programme	Good Condition
Icematic Machine	.-	282000 (Received from CIFT, Cochin under NEH Programme)	Good Condition
Coracles	-	77775 (Received from CIFT, Cochin under NEH Programme)	Good Condition
Computer desk top	2010	45063	Good condition
Computer desk top	2006	NA	Bad condition
Laptop	2010	48672	Good condition
Almirah (Big)	2010	17000	Good condition
Printer-HP	2010	28887	Good condition
Printer-Cannon	2009	7400	Good condition
Xerox Machine	2010	99,788	Good condition
Fax Machine	2010	24,825	Good condition
Almirah (Medium)- 4 nos	2009	15,000	Good condition
Table (Big)- 2 nos	2010	6500	Good condition

Table (Medium)- 6 nos	2010	3500	Good condition
Chairs -5 nos	2010	2500	Good condition
Plastic chairs-10 nos.	2009	540	Good condition
Revolving chair	2010	15000	Good condition
Rice Drum seeder	2009	3500	Good condition
Stabilizers -2nos	2009	6500	Good condition
Soil testing kit – 1 no	2009	-	Good condition
Conoweeder – 2 no	2009	-	Good condition
Type Writer -1 No	2009	-	Good condition
Digital Camera	2010	19,990	Unserviceable
L.C.D Projector	2010	99,225	Good
BSNL Broad Band	2010	5500	Removed
Mini Soil Testing Kit (Mridapariksha)	2016	-	Good Condition

1.8. A). Details SAC meeting* conducted in the year 2015-16

Sl. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation
1.	20.1.2016	1.Mr. Bullo Tama District Horticulture Officer 2.Dr. Emo Lego District Veterinary Officer 3.Mr.Dayum Davi District Fisheries Development	Availability of right quality seed/saplings at right time for season based crop cultivation - Mr.Jatan Pulu Organic Farmer, Yibuk village	Produced 13 kgs vegetable seeds and 240 Nos of vegetable saplings (cauliflower ,cabbage and Tomato) at our farm and distributed to

	<p>Officer</p> <p>4.Mr.Kanagadhileepan</p> <p>Field Officer, Spices Board, Government of India</p> <p>5.Mr.Tata Nada</p> <p>APO (Agriculture &Allied),District Rural Development Agency</p> <p>6.Mr.Tapa Diri</p> <p>IICPD, District Rural Development Agency</p> <p>7.Mr. Toktil Modi</p> <p>I/C District Agriculture Officer</p> <p>8. Mr.Himanshu Shekar, Agriculture Demonstrator, Spices Board, , Government of India</p> <p>9. Mr.Omprakash</p> <p>Nursery Officer, 3 F- Oil Palm Private Agrotech Pvt. Ltd.</p> <p>10. Mr.Nonni Ratan</p> <p>Grafter, Horticulture Nursery, Balek village</p> <p>11. Mr.Jatan Pulu</p> <p>Progressive Farmer, Yibuk village</p> <p>12. Mr.Mipang Lego</p> <p>Progressive Farmer, Kangkong village</p> <p>13. Mrs. Oimang Lego</p> <p>Farm Women, Jia village</p>		farmers/farm women
--	--	--	--------------------

		<p>14. Mrs. Lune Gamno Farm Women, Meka village</p> <p>15. Mrs. Kayiya Pulu Farm Women, Kebali village</p> <p>16. Mrs. Kinako Linggi Farm Women, Kebali village</p>		
			<p>Introduction of button mushroom for self sustenance of SHGs</p> <p>Mr. Yomjan Kamdak, Agriculture Development Officer</p>	<p>Possess no laboratory facilities</p> <p>and unavailability of spawn at nearby sources.</p>
			<p>Establishment of mushroom spawn unit at KVK for round the year availability to farmers</p> <p>- Mrs.Oimang Lego</p> <p>Progressive Farm Women,Jia village</p>	<p>Project formulation is in progress for submission to DBT</p>
			<p>Develop crop calendar for educating farming communities on scientific cultivation</p> <p>- Mr.Jiko Linggi</p> <p>Progressive Farmer ,Abali village</p>	<p>Appraised concerned authorities and budget not allocated</p>
			<p>Providing of women friendly tools (Tubular Maize sheller) among SHGs</p> <p>- Mrs.Oimang Lego</p> <p>Progressive Farm</p>	<p>Active Self Help Group was provided with limited number of maize sheller</p>

			Women, Jia village	
			Educating on preparation of cost effective diets utilizing locally available feed stuff Dr.V.K.sahgel Chairman and District Veterinary Officer	Organised 5 capacity building programmes and distributed Azolla inoculums (4 kgs) and 1000 rootslips of high yielding forage crops

** Attach a copy of SAC proceedings along with list of participants*

2. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No	Farming system/enterprises
1.	Agriculture – Horticulture
2.	Agriculture - Animal Husbandry
3.	Agriculture – Horticulture - Animal Husbandry
	Agriculture - Animal Husbandry –Fishery

2.2 Description of Agro-climatic Zone & major agro-ecological situations (based on soil and topography)

Sl. No	Agro-climatic Zone	Characteristics
1	Sub – tropical Plain Zone	The Climate is characterized by hot summer and moderately cool winter. The mean annual rainfall varies from 2590 – 3390mm and it exceeds PET greater part of the year and soil remains dry only for a month or so. Mean annual soil temperature is 22° C or higher.
2	Mid tropical Hill Zone	The climate is characterized by mild summer and moderate to severe winter. The mean annual rainfall ranges between 2000 to 5000 mm and it exceeds PET for most part of the year. The mean annual soil temperature varies from 18 to 22°C.

2.3 Soil type/s

Sl. No	Soil type	Characteristics	Area in ha
1	Soils of undulating upland	Moderately shallow to deep, well drained, loamy or coarse loamy in texture with moderate to severe erosion	4715

		hazards. The soils are strongly to moderately acidic in nature (pH 4.5 to 7.2), rice in organic matter (0.8 to 5.2% organic carbon) which decline sharply with depth. CEC is low to medium 93.5 to 23.3 $\text{CmolP}^+\text{kg}^{-1}$). Base saturation is very low to medium. Appreciable amount of Al^{3+} is observed.	
2	Soils of gentle slopes	Deep, well to imperfectly drained, fine/ fine loamy/ coarse loamy or coarse silty with moderate erosion and slight to moderate flood hazard. Soils are moderately to slightly acidic (pH 4.6-5.8) and moderate to high in organic matter content (1.3-3.7% organic carbon).	11779
3	Soils of level to nearly level flood plain	Deep, well to moderately well drained, coarse loamy to coarse silty with moderate flood hazard. Soils on channel bars are moderately shallow, excessively drained and sandy in texture. Soils are slightly acidic to alkaline in nature (pH 5.5-8.4), high in base saturation	7073

2.4. Area, Production and Productivity of major crops cultivated in the district

Sl. No	Crop	Area (ha)	Production (ton)	Productivity (Qtl /ha)
1	Paddy	11560	13872	12

2	Maize	9500	12350	13
3	Millet	1620	1296	8
4	Wheat	290	435	15
5	Pulses	980	882	9
6	Oilseeds	5420	5149	9.5
7	Potato	390	3120	80
8	Ginger	3015	24120	80
9	Turmeric	100	750	75
10	Sugarcane	100	1000	100
11	Vegetables	780	1950	25
12	Chilly	100	110	11
13	Orange	NA	NA	NA
14	Pineapple	NA	NA	NA

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April	894.335	24.46	19.8	77.76
May	1602.13	27.23	23.76	78.5
June	3111.15	27.3	24.9	83.266
July	4831.92	31.1	27.4	82.37
August	6015.75	29.77	25.8	80.03
September	7511.27	28.43	25.17	75.37
October	8755.34	29.93	23.37	82.37
November	8650.21	22.2	18.23	81.77
December	9393.33	18.13	14.93	83.63
January	34.85	18.53	14.46	82.23
February	96.48	17.6	14.77	82.23
March	357.25	20.66	18.1	90.83

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	360	3672 lts	
<i>Indigenous</i>	22979	13788 lts	
Buffalo	2163	3245 lts	
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	15680	109760 kgs	

Pigs			
<i>Crossbred</i>	4078	163120kgs	
<i>Indigenous</i>	9687	290610 kgs	
Rabbits			
Poultry			
Hens	21813	1090700 Nos	
<i>Desi</i>	53908	808620 Kgs	
<i>Improved</i>	14118	28236 Kgs	
Ducks	8636	17272 Kgs	
Turkey and others			

Category	Area	Production	Productivity
Fish	-	-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	47.9 ha	17 Tonnes	300 kgs
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

Note: Pl. provide the appropriate Unit against each enterprise

2.6 Details of Operational area / Villages (2015-16)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	Lower Dibang Valley	Roing-Koronu	Midland	Rice, rapeseed, ginger, maize	Low yield, pest & diseases	Diversified farming (mushroom)

2	Lower Dibang Valley	Roing-Koronu	Meka	Rice, rapeseed, ginger, maize	Irrigation, pest & diseases	Cropping system (rice-legume)
3	Lower Dibang Valley	Roing-Koronu	Jia	Rice, rapeseed, ginger, maize	Low yield, weed	Weed management, diversified farming (mushroom)
4	Lower Dibang Valley	Roing-Koronu	Bolung	Rice, rapeseed, ginger, maize	Low yield, weed, pest & diseases	Weed management, diversified farming (fisheries)
5	Lower Dibang Valley	Roing-Koronu	Rayang	Rice, ginger, citrus, vegetables	Pest & diseases	Nursery management for vegetables
6	Lower Dibang Valley	Roing-Koronu	Injonu	Citrus, maize, rapeseed, vegetables	Weed, pest & diseases	Nursery management for vegetables
7	Lower Dibang Valley	Roing-Koronu	Simari	Citrus, ginger, vegetables	Low yield, pest & diseases	Introduction of improved varieties
8	Lower Dibang Valley	Roing-Koronu	Kangkong	Rice, rapeseed, potato, maize	Low yield, pest & diseases	Introduction of disease tolerant varieties
9	Lower Dibang Valley	Roing-Koronu	Iduli	Rice, maize, rapeseed	Low yield, pest & diseases	Diversified farming (Fisheries)
10	Lower Dibang Valley	Roing-Koronu	Kebali	Millets, Rice, maize, rapeseed	Low yield, pest & diseases	Diversified farming (Fisheries)
11	Lower Dibang Valley	Roing-Koronu	Iphingo	Millets, Rice, maize, rapeseed, Citrus, Pineapple	Low yield, pest & diseases	Diversified farming (Fisheries)
12	Lower Dibang Valley	Roing-Koronu	Rukmo	Rice, maize, rapeseed, Pears, Pineapple	Low yield, pest & diseases	Diversified farming (Fisheries)

13	Lower Dibang Valley	Roing-Koronu	Balek	Rice, maize, rapeseed, Jackfruit	Low yield, pest & diseases	Diversified farming(Fisheries)
14	Lower Dibang Valley	Roing-Koronu	Agam Gite	Rice, maize, rapeseed, Jackfruit, Ginger, Bamboo shoot	Low yield, pest & diseases	Diversified farming(Fisheries)
15	Lower Dibang Valley	Dambuk-Paglam	Dambuk	Rice, maize, orange rapeseed, Jackfruit, Ginger, Bamboo shoot	Low yield, pest & diseases	Diversified farming(Livestock rearing)
16	Lower Dibang Valley	Hunli-Desali	Hunli	Rice, Maize, Millet, Spice	Low yield, pest & diseases	Introduction of high yielding varieties

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2015-16

Discipline	OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)			
	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
	Agronomy	4	3	40	30	2	2	20
Plant protection	3	2	9	6	3	2	9	6
Animal Science	2	2	4	6	2	2	5	5
Horticulture	3	4	9	12	3	1	9	3
Home Science	2	2	14	82	2	2	10	72
Fisheries	2	1	6	3	1	1	3	3
Total	16	14	82	139	13	10	56	109

Note: Target set during last Action Plan Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)	Extension Activities
---	-----------------------------

1.	Integrated Disease Management.	Mandarin Orange	Heavy infestations of Trunk Borer, Bark Eating Caterpillar and Leaf miner.		Management of Trunk Borer, Bark Eating Caterpillar and leaf miner.	Integrated Pests Management in Mandarin Orange.			Chemicals, Gloves, Masks.
2.	Integrated Disease Management.	Banana	High incidence of Panama Wilt .		Management of Panama Wilt Disease.	Integrated Disease Management in Banana.			
3.	Integrated Disease Management	Mandarin Orange	Heavy incidence of Phytophthora Rots.	Management of Phytophthora Rot in Mandarin Orange.		Integrated Disease Management in Mandarin Orange.			Chemicals, Gloves and masks.
4.	Integrated pests Management	Cabbage	Heavy infestation of Diamond Back Moth.	Management of Diamond Back Moth in Cabbage.		IPM in cabbage.			Cabbage saplings.
5	Breed Introduction	Poultry	Low production from local bird	Introduction of Kamrupa poultry	-	Care and Management of poultry	-	Field visit, Diagnostic visit, critical input supply etc.	Eggs and Chicks
6	Meat Production	Rabbit	Demand of high value meat	Rearing of Broiler rabbit in backyard farming	-	Backyard Rabbit farming	-	Field visit, Diagnostic visit, critical input supply etc.	Kids

7	Housing management	Poultry	Poor performance from local bird	-	Rearing of Improved variety poultry bird in backyard farming	Backyard poultry production		Field visit, Diagnostic visit, critical input supply etc.	Eggs
8	Fodder production and quality enhancement	Forage crops	Scarcity of fodder during winter	-	Growth performance of forage crops		-	Field visit, Diagnostic visit, critical input supply etc.	Root slips and stem cuts
9	Varietal Evaluation	Tomato	Low yield of existing Tomato	Varietal performance of Tomato (Var.Kashi Vishesh)		Training cum Method demonstration on cultivation of Tomato		Diagnostic Visit, Field Visit	Seeds
10	Integrated Nutrient Management	Cauliflower	Low yield of existing Cauliflower	INM in Cauliflower		Training cum Method demonstration on cultivation of Cauliflower		Diagnostic visit, Field Visits	Saplings
11	Crop Production	Orange	Fruit drop for low yielding due to lack of management,	Management of fruit drop control in Orange Orchard		Training cum Method demonstration on Management of Orange Orchard		Diagnostic visit, Field Visits	Micronutrients, Lime, Plant growth regulator

12	Varietal evaluation	Bottle gourd	Low yield of existing Bottle gourd		Popularization of Bottle gourd (Var.Narendra Rashmi)			Trail incomplete	Seeds
13	Varietal evaluation	Banana	Low yield of existing Banana		Popularization of HYV of Banana (Var-Dwarf Cavendish)			Un-availability of Planting Materials	
14	Rejuvenation of old Orange Orchard	Orange	low production due to non practicing of management practices		Rejuvenation of Orange Orchard	Training cum Method demonstration		Diagnostic visit, Field Visits	Micronutrients, Lime, Copper Sulphat
15	Feeding Management	Fish (Carps)	Poor Production Higher cost of production	Feeding of fish with fish grow premix as feed supplement.		On farm preparation of feed supplemented with premix.			Feed
16	Catfish culture	Fish (Indian magur)	Fish farming confined to culture of carp species only.	Culture of Indian Magur catfish in semi-intensive system.		Scientific rearing of Catfish			Seed

17	Post harvest processing/ value addition	Fish	Poor quality of product.		Popularisation of CoFiSKI	Method demonstration on fish smoking technique in CoFiSKI			Packaging materials
18	Introduction of improved variety	Toria variety TS-38	Low yield due to lack of awareness on improved variety	1.Varietal performance of Toria variety TS-38	Popularization of high yielding potato variety Kufri Joyti	1.Scientific cultivation of Potato 2.Disease and pest management in Potato	NA	Personal contact, training and demonstration	seeds
19	Integrated nutrient management	Toria Variety TS-36 &TS-38	Inadequate nutrient management	Application of <i>Azotobacter</i> in toria Var. TS-36 & TS-38	NA	Integrated nutrient management	NA	Training and demonstration	Seeds & <i>Azotobacter</i>
20	Crop intensification	Paddy-Toria-Potato	Low yield and lower economic return due to monocropping	Evaluation of Rice-Toria – Potato cropping system	Intercropping of potato with field pea	1.Weed management in paddy 2. INM in paddy 3.Disease and pest management in Potato 3.Integrated nutrient management	NA	Personal contact, training and demonstration	Seeds & Fertilizers

Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

* *Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.*

A.5. Results of On Farm Testing

Sl. No.	Title of OFT	Problem Diagnosed	Name of Technology Assessed	Crop/Cropping system/ Enterprise	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio (if applicable)
1.	Management of Diamondback Moth in cabbage.	Heavy infestation	Integrated pest Management	Cabbage	3	i)No.of Moth/sq.m=0.05 ii)No.of infected plant/sq.m=0.03 iii)Yield/ha=35tonnes/ha.	Easy ways to control the pest.	To take up such technologies in other vegetables.	2.5:1
2.	Management of Phytophthora Rot in Mandarin Orange.	High incidence	Integrated Disease Management	Mandarin orange	3	i)No.of wilted plants/sq.m=0.1 ii)Yield/ha=28q/ha	Try to continue the technologies in the coming year also.	Development of technology for rainfed system.	2.8:1
3.	Introdu	Low production		Kamrupa	4	1.Two months avg.	Adapt	-	NA

	ction of Kamrup a poultry	from local bird		Poultry		body weight 200g 2. No mortality upto 2 months of age. (Trial is ongoing)	well in local condition		
4.	Introdu ction of Broiler Rabbit in backyard farming	Demand of high value meat		Rabbit (NZW)	2	Trial is not success due to high mortality	1. High mortality 2. Prone to attack by predators	-	NA
5.	Varietal performance of Tomato (Var.Kashi Vishesh)	Low yield of existing tomato	Varietal Evaluation of Tomato	Tomato	3	Demo.Plot Plant Height (cm) Avg: 85 No. of fruit/ plant Avg: 15 Fruit wt(g) Avg 60 Yield (q/ha) Avg: 350	Yield higher than the local variety, low disease occurrence	Yield was found to be satisfactory and suitable for local climatic condition	Demo: 3:1
6.	Integrat	Low yield of	INM in	Cauliflower	3	Demo.Plot	Grow up	Shown good	

	ed nutrien t manage ment	existing Cauliflower	Cauliflower			Days to emerging curds-Avg-75 days	faster than the local and bigger in size	result by using balanced fertilizer	3:1
					Curd weight-Avg- 540g				
					Harvesting time- Avg-90 days				
					Yield/ha – Avg-200 q/ha				
					B:C =3:1				
7	Introdu ction of HYV in Banana Var.Dw arf cavendi sh	Low yield of existing Banana	Varietal Evaluation	Banana	3	Demo.Plot	Bigger fruit size and more producti on	Perform well in local climatic condition and early fruiting	Demo-3.5:1
						Plant Height(mtrs)- Avg-1.5			
						Month required from flowering to fruting stage-9-12 month			
						Yield /ha-Avg-20 t/ha			
						3.5:1			

8	Management of fruit drop control in orange orchard	Fruit drop for low yielding due to lack of management	Fruit drop control in Orange Orchard	Orange	3	Fruit length(cm)- Avg-5.3	Interested to adopt new technology for higher production	Reduced the fruit drop by using proper management practices	Demo-3:1
						Fruit width(cm)- Avg-6.1			
						No,of fruit/plant- Avg-320			
						Yield/ha-Avg-8.9 Mt/ha			
9	Drudgery reduction	High drudgery involvement Labor scarcity	2	Paddy	2	Production:300 kgs Mandays:3 days/ha	Easy to operate and more area coverage per unit time	-	12:1
10	Tie and Dye	Lack of knowledge on utilization of dyes	2	Dye plants	2	Resistance to light :50%/year Colour fastness to washing: 60%/year Colour fastness to iron :95%	Good income source as resources are locally available	Package of practices to be developed for cultivation of plants so that they can be conserved	2.25:1
11	Performance of carps	Poor Production	Feeding Management	Fish (carps)	3	Yield: 16 qt/ha/yr Avg. wt. at harvest:	Faster growth	.	1.4:1

	fed upon with fish grow premix as feed additive	High production cost				530 g Survival Rate:80%	of fishes with higher production		
12.	Culture of Indian Magur catfish in semi-intensive system.	Fish farming confined to culture of carp species only.	Culture of catfish (Indian Magur)	Catfish (Indian Magur)	3	1. Yield : 800 kg/200 sq. m concrete tank 2. Avg. wt. of fish at harvest: 194 g 3. Survival Rate : 90% 4. disease/pest occurrence : nil	Good production and income generation potential in short period	-	2.4:1
13	Varietal performance of Toria variety TS-38	Low yield due to lack of awareness on improved variety	Technology Toria Variety TS-38 Local check Local variety	Toria	3	Technology Time of sowing :Mid of October Plant height (cm):99.5 No. of Pods /plant:220.6 Days of maturity:170 No. of branches/plant:9.5	Farmers were very impressed by the yield performance and interested in taking up the new technology	High yield performance along with high income generation than local variety. Found to be suitable for rainfed and irrigated conditions	Technology 3.07 Local check 2.3

						<p>Yield kg/ha:750</p> <p>Local check</p> <p>Time of sowing :1st week of November</p> <p>Plant height (cm):116</p> <p>No. of Pods /plant:210</p> <p>Days of maturity:150</p> <p>No. of branches/plant:6.33</p> <p>Yield kg/ha:520</p>			
14	Application of <i>Azotobacter</i> in toria Var. TS-36 & TS-38	Inadequate nutrient management	<p>Technology</p> <p>Seed treatment with <i>Azotobacter</i> @20gm/kg</p> <p>Control</p> <p>No seed treatment with <i>Azotobacter</i></p>	Toria	3	<p>Technology</p> <p>Time of sowing :Both the Toria var. TS-36 & TS-38 are sown in Mid of October</p> <p>Plant height (cm):99.5/8.5(TS-38/TS-36)</p> <p>No. of Pods /plant:220.7/211.1(TS-38/TS-36)</p> <p>Days of maturity:170/100(TS-</p>	Farmers were satisfied by the yield performance and interested in taking up the new technology if <i>Azotobacter</i> inoculum is easily available	1-4% increased in yield was observed and increased in B:C ratio	<p>Technology</p> <p>3.7</p> <p>Control</p> <p>3.5</p>

						38/TS-36) No. of branches/plant:10/9.5(TS-38/TS-36) Yield kg/ha:755/905(TS-38/TS-36) Control Yield kg/ha:755/860(TS-38/TS-36)			
15	Evaluation of Rice-Toria – Potato cropping system	Low yield and lower economic return due to monocropping	Technology T1:Sole crop of rice T2:Sole crop of Toria T3:Sole crop of potato T4:Rice-toria-potato	Paddy-Toria-Potato	3	T1: Average plant height(cm)=190.2 Average no. of tillers=12.4 Average no. of panicles=24.91 Potato Equivalent Yield q/ha=146(64.9) T2: Average plant height(cm)=109.2 Average no. of pods per	Farmers were very impressed by the yield performance and interested in taking up the new technology	Technology found suitable for the region with assured irrigation facilities.	T1:2.9 T2:4.1 T3:2.4 T4:9.4

						plant=201.5 Average no. of branches per plant=9.5 Length of pod(cm)=5 Nos. of seeds per pod=10 Potato Equivalent Yield q/ha=67(12) T3: Average plant height(cm)=38.9 Average no. of shoots per hill=4.98 Average no. of stolon per plant=7.92 Stolon length (cm)=7.95 Average nos. of tuber per plant=7.9 Potato Equivalent Yield q/ha=107 T4: Equivalent Yield q/ha:320			
--	--	--	--	--	--	--	--	--	--

****Field crops – ton/ha, * for horticultural crops – kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.***

***** Give details of the technology assessed or refined and farmer's practice***

3.2 Achievements of Frontline Demonstrations during 2015-16

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2014-15 and recommended for large scale adoption in the district

Sl. No	Crop/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
1.	Banana	Management of Panama Wilt Disease.	3	3	1
2.	Mandarin Orange	Integrated Pest Management .	3	3	1

* **Thematic areas as given in Table 3.1 (A1 and A2)**

b. Details of FLDs conducted during reporting period (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement	Farming situation (Rainfed/ Irrigated, Soil type, altitude, etc)	Status of soil (Kg/ha)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1.	Bana	Integrated	Management	Sum	1	1	1		3	-	Rainfed			

	na	Disease Management	of Panama wilt Disease.	mer 2015-16										
2.	Mandarin Orange	Integrated Pest Management	Management of Trunk borer, Bark Eating Caterpillar and leaf miner.	Summer 2015-16	1	1	1		3		Rainfed			
3	Potato	Integrated Crop Management	Intercropping of potato with Field pea.	Rabi-2014-15	1.11	1.05	3		3		Rainfed			
4	Bottle gourd	Varietal Evaluation	Popularization of HYV of Bottle gourd (Var-Narendra Rashmi)	Kharif, 2015	0.5		3	-	3	Demage due to heavy rainfall	Rainfed			
5	Banana	Varietal Evaluation	Popularization of HYV of Banana (Var. Dwarf Cavendish)	Kharif 2015	0.5		3		3	Unavailability of planting material	Rainfed			
6	Orange	Rejuvenation of old	Rejuvenation of old Orange	Rabi,	0.5	1	2		2	Continue	Rainfed	-	-	-

		Orange Orchard	Orchard	2016										
7.	Milk	Value addetion	Processing of milk	2015-2016			11		11					
8.	Milk	Value addetion	Processing of milk	2015-2016			12		12					
9	maize	Drudgery reduction	Maize sheller	2015-2016			14		14					
10.	Potato	Varietal evaluation	Popularization of HYV of potato Var <i>Kufri Joyti</i>	Rabi 2015	3	2	10	0	10	NA	Rainfed	-	-	-
11	Potato	Cropping system	Intercropping of potato with field pea	Rabi 2015	3	2	10	0	10	NA	Rainfed	-	-	-

c. Performance of FLD on Crops

Sl. No.	Crop	Thematic area	Area (ha.)	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Data on parameters other than yield, e.g., disease incidence, pest incidence etc.	Econ. of demo. (Rs./ha.)				Econ. of check (Rs./Ha.)			
				Demo.	Check		H*	L*		GC**	GR**	NR**	BCR**	GC	GR	NR	BCR

									Demo	Local								
1.	Banana	Integrated Disease management.	1	170q/ha	110q/ha	14	170	110	Disease incidence =5%	Disease incidence=27.7%	40,000	170000	130000	3.2:1	40000	170000	130000	3.2:1
2.	Mandarin Orange	Integrated Pests Management.	1	30q/ha	19q/ha	24.5	30	19	Pests incidence=10%	Pests incidence=34%	35,000	60,000	25000	1.4:1	35000	60000	25000	1.4:1
3	Bottle gourd	Varietal Evaluation	1	Trial On going														
4	Banana	Varietal Evaluation	1	Trial On going														
5	Orange	Rejuvenation of old Orange Orchard	1	Trial On going														
6	Potato	Varietal evaluation	2	107	80	25	107.67	106.30	NA	NA	30000	64000	34000	2.1	35000	85600	50600	2.4
7	Potato & Field Pea	Intercropping	2	Potato Equivalent yield: 489.5q/ha	Sole crop of potato: 106.5	78	489.5	480	NA	NA	35000	85200	50200	2.4	70400	111700	303400	15.8

*H-Highest recorded yield, L- Lowest recorded yield

** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

Produce Sale Price must be as per MSP or Registered Marketing Society

Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

d. Extension and Training activities under FLD on Crops

Sl.No.	Activity	No. of activities organised	Date	Number of participants			Remarks
				Gen	SC/ST	Total	
1	Field days						
2	Farmers Training	4	26/07/2015, 24/8/2015, 9/10/2015 and 29-30 th Oct, 2015		40	40	
3	Media coverage						
4	Training for extension functionaries						
5	Any other (Pl. specify)						
	1. Field visit	10			10	10	
	2. Diagnostic visit	10			10	10	
	Total	24			60	60	

e. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Maize-sheller	Maize	27	No. of maize -50 medium size (300g)=15kg	Efficiency- more efficient than traditional method Not much strain on hand	30 minutes	2 hours (120min)	120 minutes=98%	Maize Sheller reduce drudgery in hand and fingers It saves lot of time and energy

* Field efficiency, labour saving etc.

(ii) Livestock Enterprises

Sl. No.	Enterprise/ Category (e.g., Dairy, Poultry etc.)	Thematic area	Name of Technology	No. of farmers	No. of units	No. of animals, poultry birds etc.	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1.	Poultry	Production and Management	Rearing of Improved variety poultry bird in backyard farming	3	3	60	-	-	-	-	-	-	-	-	-	-	-	-	-	Trial is ongoing

2.	Forage crops	Feed and Fodder	Growth performance of forage crops	2	2	1ha	Yield: 800 q/ha	Yield: 300 q/ha	37.5	-	-	5000	10000	5000	2:1	-	-	-	-	Grow well in field condition
----	--------------	-----------------	------------------------------------	---	---	-----	-----------------	-----------------	------	---	---	------	-------	------	-----	---	---	---	---	------------------------------

** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

Produce Sale Price must be as per MSP or Registered Marketing Society

Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

(iii) Fisheries

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	The matric area	Name of Technology	No. of farmers	No. of units	No. of fish/fingerlings	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1.	Smoked fish	Post harvest	Community fish	20	2	20 kg	Time require : 5	Time require:	400 % lesse			300	160	130	4.3	800	2400	1600	2	Despite initial high

		proc essin g/val ve additi on	smok ing kiln.				hour. Prod uct qualit y: light golde n and less carb on. Less firew ood cons ume d	usual ly 1 week at the most. Prod uct qualit y: dark black More firew ood cons ume d	r time is requi re in dem o.			0 0	0 0 0	0 0				0		invest ment in CoFiS Ki, for comm ercializ ation of smoke d fish in market CoFiS Ki is more viable and econo mical.

**** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio**

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

(iv) Other enterprises

d) Plantation crops																					
Production and Management technology																					
Processing and value addition																					
e) Tuber crops																					
Production and Management technology																					
Processing and value addition																					
f) Spices																					
Production and Management technology																					
Processing and value addition																					
g) Medicinal and Aromatic Plants																					

hatchery																						
Pen culture of fish and prawn																						
Shrimp farming																						
Edible oyster farming																						
Pearl culture																						
Fish processing and value addition	1		1							7		3		10		7		3		10		10
IX Production of Inputs at site																						
Seed Production	2	-	2	-	-	-	-	-	-	7	-	15	-	22	-	7	-	15	-	22	-	22
Planting material production																						
Bio-agents production																						
Bio-pesticides production																						
Bio-fertilizer	1	-	1	-	-	-	-	-	-	-	-	10	-	10	-	-	-	10	-	10	-	10

d) Plantation crops																					
Production and Management technology																					
Processing and value addition																					
e) Tuber crops																					
Production and Management technology																					
Processing and value addition																					
f) Spices																					
Production and Management technology																					
Processing and value addition																					
g) Medicinal and Aromatic Plants																					

Management in farm animals																							
Livestock feed and fodder production	1	-	1	-	-	-	-	-	-	15	-	7	-	22	-	15	-	7	-	22	-	22	
Household food security																							
Women and Child care																							
Low cost and nutrient efficient diet designing																							
Production and use of organic inputs																							
Gender mainstreaming through SHGs																							
TOTAL																							

Note: Please furnish the details of above training programmes as Annexure in the proforma given below

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Plant Protection	1. Mushroom Production Technology.	Production Technology of Oyster Mushroom.	13/07/2015	1	KVK, Lower Dibang Valley	RY					10	10		10	10
	2. Integrated Disease Management	Management of Tikka disease in Groundnut.	14/10/2015	1	KVK, Lower Dibang Valley	F&FW				4	6	10	4	6	10

	nt . 3.Inte grate d Disea se Mana geme nt.	Managem ent of Late blight in Potato.	19/10/ 2015	1	do	F&FW				5	5	10	5	5	10
Animal Science	Fodd er Prod uctio	High yielding fodder productio n for dairy	26/6/2 015	One day	KVK, farm	Farmers and Farm Women	-	-	-	1 1	3	14	11	3	14

	n	farmers														
Animal Science	Fodder Production	Scientific fodder production	9/9/2015	One day	KVK, farm	Farmers and Farm Women	-	-	-	-	11	11	-	11	11	
Animal Science	Rabbitry	Backyard Rabbit farming	1/10/2015	One day	KVK, farm	RY	-	-	-	-	11	11	-	11	11	
Animal Science	Disease management	Scientific livestock management for better productivity	18 th to 20 th Feb, 2016	Three days	KVK, training hall	Farmers and Farm Women	-	-	-	19	9	28	19	9	28	
Animal Science	Poultry disease management	Training cum method demonstration on vaccination of poultry against Ranikhet	11/3/2016	One day	KVK, farm	Farmers and Farm Women	-	-	-	1	11	12	1	11	12	

		preparation of fish pickle 5.training programme on pickle making- Papaya and Green Chillies Pickle	15 24/02/16	1 day	KVK Campuses	FW,RY					22	22		22	22 SS
Rural Crafts	Flower making from organ dy ,stock ing and wool yarn	06/07/15 07/07/15	2 days	Kvk campus	FW				36	36			36	36	
	Traini	08/07/15	1 day	Kvk	FW				32	32			32	32	

	ng cum demo nstra tion on weavi ng of bag throg h Loin- Loom			campus						2					
	Traini ng cum demo nstra tion on weavi ng of Neck- tie throg h Loin- Loom	09/07/15	1 day	Kvk campus	FW					1 7	17		17	17	

	Training cum demonstration on Tailoring	10/07/15	1 day	Kvk campus	FW					16		16	16		
Fisheries	Fish smoking in Cofiski	Method demonstration on smoking of fish in Cofiski	25.3.15	1	Kvk farm	Farmer and farm women				7	3	10	7	3	10
Agronomy	crop management	Scientific cultivation of Groundnut	14/10/15	1	KVK Farm	Farmer & Farm women					10	10		10	10
Agronomy	crop management	Scientific cultivation of Potato	19/10/15	1	KVK Farm	Farmer & Farm women					10	10		10	10
Agronomy	Pest and disease	Pest and disease management	29/10/15-30/10/	2	KVK Farm	Farmer & Farm women				5	5	10	5	5	10

	se mana geme nt	ent in Potato	15												
Agronom y	Pest and disea se mana geme nt	Pest and disease managem ent in Groundnu t	11to12 /11/15	2	KVK Farm	Farmer & Farm women				4	6	10	4	6	10
Agronom y	Prod uctio n of organ ic input s	Vermicom posting	13/7/1 15	1	KVK Farm	Farmer & Farm women					10	10		10	10
Agronom y	Prod uctio n of organ ic input s	compostin g	14/7/1 15	1	KVK Farm	Farmer & Farm women					10	10		10	10

Agronomy	Production of Biofertilizers	Azolla production technology	15/7/15	1	KVK Farm	Farmer & Farm women					10	10		10	10	

Annexure 2: Details of Training Programme (Off Campus including Sponsored Off Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Plant Protectio	1.IPM	Managem ent of Trunk	26/07/2015	1	libuk	F&FW				5	5	10	5	5	10

n	2.IDM	Borer in Mandarin Orange. Managem ent of Phytoptho ra Rot in Mandarin Orange.	5/8/2015 to 6/8/2015	2	Kebali	F&FW				5	7	12	5	7	12
	3.IDM	Managem ent of Rhizome Rot disease in Ginger.	24/08/2015	1	libuk	F&FW				5	5	10	5	5	10
	4.IPM	Integrated pests managem ent in Paddy.	27/08/2015	1	Balek	F&FW				6	4	10	6	4	10

	5.IPM	Managem ent of Diamond Back moth in Cabbage.	04/11/ 2015	1	Mayu	F&FW					18	18		18	18
Animal Science	Poultr y produ ction	Backyard poultry farming	30/9/2 015	One day	Jia village	Farmers and Farm Women	-	-	-	1	12	13	1	12	13
Animal Science	Poultr y produ ction	Backyard poultry productio n	9/10/2 015	One day	Rukmo village	Farmers and Farm Women	-	-	-	8	4	12	8	4	12
Animal Science	Poultr y and pigger y produ ction	Backyard poultry and Piggery productio n	4/11/2 015	One day	Multip urpose hall, Mayu village	Farmers and Farm Women	-	-	-	-	18	18	-	18	18
Animal	Poultr	Care and	12/11/ 2015	One day	Rukmo	Farmers and Farm Women	-	-	-	3	14	17	3	14	17

Science	y produ ction	managem ent of poultry	2015		village										
Animal Science	Poultr y produ ction	Backyard poultry farming	24/12/ 2015	One day	Mayu village	Farmers and Farm Women	-	-	-	8	21	29	8	21	29
Animal Science	Feed and fodder produ ction	Role of livestock in organic farming	24/2/2 016	One day	Ansai Samiti hall, Roing	EP	-	-	-	1 5	7	22	15	7	22
Horticult ure	Veget able Produ ction	Training on cultivation of Tomato & its managem ent	22-4-15	1	Jia	Farmer& Farm women				3 0	34	64	30	34	64
	Spice produ ction	Training on cultivation of Turmeric and	2-2- 2016	1	Parbuk	Farmer & Farm women				1 5	30	45	15	30	45

		Ginger and its management													
	Nutrient management in Organic Farming	Training on Nutrient management in organic farming for Horticulture crops	22-9-2015	1	Multipurpose hall, Roing	Farmer & Farm women				30	20	50	30	20	50
	Spice Production	Training on cultivation of Turmeric & Ginger & its management practices	28-1-2016	1	Jia	Farmer & Farm women				28	50	78	28	50	78
	Spice Production	Training on Scientific cultivation of	24-12-2015	1	Multipurpose Hall, Roing	Farmer & Farm women				7	22	29	7	22	29

		Turmeric and its management under Jai Kishan Jai Vigyan Diwas(SAGY)													
	Kitchen Gardening	Training cum method demonstration on importance of kitchen gardening and its management under Mera Gaon Mera Gaurav	9-10-15	1	Multipurpose hall, Roing	Farmer & Farm women				2	34	2	34	36	36
	Vegetable Production	Training cum Demonstration on cultivation of	5-11-2015	1	Kera-aa	Farmer & Farm women				5	20	25	5	20	25

		Cauliflower													
	Kitchen Gardening	Training on importance of kitchen gardening and its management	30-9-2015	1	Jia	Farmer & Farm women				1	12	13	1	12	13
	Vegetable Production	Training cum Demonstration on Nursery raising of vegetable crops	9-10-2015	1	Mayu-2	Farmer & Farm women				5	20	25	5	20	25
	Orchard management	Training cum Demonstration on Fertilizer application by basin/Ring method in fruit plants	21-4-15	1	Balek	Farmer				10		10	10		10

	Orchards Management	Training cum Demonstration on management of Orange orchards	9-4-2015	1	Balek	Farmer				14			14	14	
	Spice Production	Training on cultivation of Turmeric and its management	1-12-2015	1	Anchal samiti Hall	Farmer & Farm women				50	30	80	50	30	80
Home Science	Value addition	1. Training cum demonstration on preparation of value added products from Jackfruit 2. Training cum demonstration on	08/05/15	1 day	Mayu Village	FW				11	11		11	11	
			10/05/15	1 day	Mayu - ii village	FW				12	12		12	12	

		preparation of value added products from m Papaya													
	Development of high nutrient efficiency diet	Training programme on preparation of diet for Anaemia	21/12/15	1 day	Balek village	FW, RY					9	9		9	9
Fisheries	Integrated fish farming	Integrated fish farming (fish cum duck)	1. 04/11/15 2.	1 1	Kee ra village Chidu	F and FW					18	18		18	18

		module)	14/04/15		village	F and FW				10	6	16	10	6	16
Agronomy	Drudgery Reduction	Women friendly farm implements	7/11/15	1	Balek	Farmer & Farm women				9	3	12		12	12
Agronomy	Soil testing	Soil sampling and processing	9/11/15-14/11/15 14/4/16-21/4/16	13	Jia, Kankong, Balek, Kebali, Rukmo, Meka	Farmer & Farm women				129	121	250	129	121	250
Agronomy	Weed management	Weed management in Paddy	7/8/15	1	Balek	Farmer & Farm women				4	6	10	4	6	10
Agronomy	INM	INM in paddy	20/8/15	1	Balek	Farmer & Farm women				6	10	16	6	10	16
Agronomy	Production of Biofer	Azolla production technology	4/11/15	1	Keraahati	Farmer & Farm women					18	18		18	18

Off	F/FW	22-9-15	1	Horticulture	Nutrient management in Organic Farming	Training on Nutrient management in Organic Farming for Horticulture crops	-	-	-	30	20	50	30	20	50	ATMA	Expenditure borne under Agency
Off	F/FW	2-2-2016	1	Horticulture	Spice Production	Training on cultivation of Turmeric & Ginger & its management practices	-	-	-	15	30	45	15	30	45	Spice Board of India	Expenditure borne by organisation
Off	F/FW	1-12-15	1	Horticulture	Spice Production	Training on cultivation of Turmeric and its management	-	-	-	50	30	80	50	30	80	Spice Board of India	Expenditure borne by organisation
Off	F/FW	28-1-2016	1	Horticulture	Spice Production	Training on cultivation of Turmeric & Ginger & its management practices				28	50	78	28	50	78	Spice board of India	Expenditure borne by organisation
On	FW,RY	06/07/15-16/07/15	10 DAYS	Home Science	Rural Crafts Value addition	Skill development programme for tribal women					36			36	36	National Council Of Rural Institute(NCRI) ,Hyderebad	Expenditure borne by organisation
On	FW,RY	24/02/16	1 DAY	Home Science	Food processing	Preparation of pickle from papaya and green chillies					22			22	22	Deptt of Women and Child dvelopment (WCD,Roin g	Expenditure borne by organisation

13.	Farmers seminar/ workshop															
14.	Method demonstration			22				37	42	79				20	32	52
15.	Celebration of important days			2												
16.	Exposure visits			1												36
17.	Electronic media (CD/DVD)															
18.	Extension literature															
19.	Newspaper coverage			11												
20.	Popular articles															
21.	Radio talk															
22.	TV talk															
23.	Training manual															
24.	Soil health camp															
25.	Awareness camp															
26.	Lecture delivered as resource person			7												80
27.	PRA															
28.	Farmer-Scientist interaction															
29.	Soil test campaign			5				50	34	84				50	34	84
30.	Mahila Mandal Convener meet															
31.	Kishan Mela															
31.	Any other (Please specify)			100				90	80	170				90	80	170

	Farmers visit to kvk																
Grand Total																	

3.5 Production and supply of Technological products during 2015-16

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
CEREALS	Paddy	CAU-R1	0.5	900		10	10
OILSEEDS	Toria	TS-36 TS-38	0.8	6400	-	20	20
PULSES							
VEGETABLES	Cabbage	Rare Ball (F1)	1000 Seedlings			5	5

FLOWER CROPS							
OTHERS (Specify)							
	Potato	Kufri Joyti	0.5	650	-	3	3

A1. SUMMARY of Production and supply of Seed Materials during 2015-16

Sl. No.	Major group/class	Quantity (ton.)	Value (Rs.)	Number of recipient/ beneficiaries		
				General	SC/ST	Total
1	CEREALS	0.5	900		10	10
2	OILSEEDS	0.8	6400		20	20
3	PULSES					
4	VEGETABLES	1000 Seedlings(Cabbage)			5	5
5	FLOWER CROPS					

Forest Spp.							
Plantation crops							
Medicinal plants							
OTHERS (Pl. Specify)	Forage crops	Hybrid Napier, Guinea and Setaria	10000 root slips and stem cuts			50	50

B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2015-16

Sl. No.	Major group/class	Numbers (In Lakh)	Value (Rs.)	Number of recipient beneficiaries		
				General	SC/ST	Total
1	Fruits					
2	Spices					
3	Ornamental Plants					

4	VEGETABLES					
5	Forest Spp.					
6	Medicinal plants					
7	Plantation crops					
8	OTHERS (Specify)					
TOTAL						

C. Production of Bio-Products during 2015-16

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)		General	SC/ST	Total
			BIOAGENTS					
BIOFERTILIZERS	Azolla	<i>Azolla Caroliniana</i>		1.2	1200	-	120	120
BIO PESTICIDES								

C1. SUMMARY of production of bio-products during 2015-16

Sl. No.	Product Name	Species	Quantity	Value (Rs.)	Number of Recipient beneficiaries	Total number of
---------	--------------	---------	----------	-------------	-----------------------------------	-----------------

	Others (Specify)	Forage crops	Hybrid Napier, Guinea and Setaria	10000 root slips and stem cuts			50	50
--	------------------	--------------	-----------------------------------	--------------------------------	--	--	----	----

D1. SUMMARY of production of livestock during 2015-16

Sl. No.	Livestock category	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	CATTLE							
2	SHEEP & GOAT							
3	POULTRY							
4.	PIGGERY							
5	FISHERIES							
6	OTHERS (Forage Crops)	-	10000 root slips and stem cuts	-	-	-	50	50
	TOTAL							

3.6. Literature Developed/Published (with full title, author & reference) during 2015-16

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):_____

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies
Research papers			
1.			
2.			
3.			
Training manuals	<p>Title : Scientific Livestock Management for better productivity (Prepared & Published by NRC on Yak)</p> <p>Chapters Contributed</p> <p>1.Livestock based Aquaculture</p> <p>2.Integration of fish and Livestock based farming for improving livelihood of tribal farming communities</p> <p>3. Climate changes:some important issues in livestock production</p> <p>4. Some important diseases of livestock and their management strategies</p>	<p>Dr.T.J.Ramesha and Dr.Dipankar Hazarika</p> <p>Dr.T.J.Ramesha ,Dr.Dipankar Hazarika and Dr.L.N.MURTHY</p> <p>Dr.Dipankar Hazarika</p> <p>Dr.Dipankar Hazarika</p>	50
Technical Report			
1.	Inventory of Agriculture of Lower Dibang Valley District	Dr.T.J.Ramesha,Mrs.Toktel Boko, Miss.Monika Panggam,Mrs.Nanang Tamut,Dr.Dipankar	2

		Hazarika,Mr.V.K.Pandey and Mr.Jimmy Mize	
2.			
3.			
Book/ Book Chapter			
Popular articles			
Technical bulletins			
Extension bulletins			
Newsletter	KVK News Letter	Dr.T.J.Ramesha,Mrs.Toktel Boko,Miss.Monika Panggam,Mrs.Nanang Tamut,Dr.Dipankar Hazarika,Mr.V.K.Pandey and Mr.Jimmy Mize	300
Conference/ workshop proceedings	-	-	-
Leaflets/folders	Paneer making from cattle milk	Mrs.Nanang Tamut	100
	Kitchen Gardening	Mr. V.K.Pandey	100
	Integrated Fish Farming (Fish-Duck farming)	Mr.Jimmy Mize	100
e-publications			
Any other (Compendium)	Sustainable livelihood through Agribased farming systems for women empowerment	Dr.T.J.Ramesha,Mrs.Toktel Boko,Miss.Monika Panggam,Mrs.Nanang	100

		Tamut,Dr.Dipankar Hazarika,Mr.V.K.Pandey and Mr.Jimmy Mize	
TOTAL			752

N.B. Please enclose a copy of each. In case of literature prepared in local language, please indicate the title in English

(C) Details of Electronic Media Produced: *Not Applicable*

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number produced
1			

3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

1. Case study on spice crops

Arunachal Pradesh has tremendous potential for growth of horticulture sector which could be judged from the fact that 21.49% (18 lakh Ha) has been identified suitable for horticulture crop cultivation out of TGA of 8374300 Ha. The State has all kinds of agro-climatic conditions ranging from tropical to temperate enabling the farmers to grow different kinds of crops such as Apple, Kiwi, Walnut, Plum, Pears and Peach, dry fruits, Orange and other Citrus fruits, Pineapple, Banana, Ginger , Turmeric, Chilly Tomato and important Medicinal and Aromatic plants. However , the current prioritised crops commercially being grown are Apple, Kiwi, Mandarin Orange, Pineapple, Large Cardamom and Ginger.

The State has covered about 1.09 Lakh Ha under various horticulture crops which constitutes only about 5% of total available area. The current production is about 3.65 Lakh MT. Under Spices, total area expanded is 16370 Ha with production of 12946 MT. Ginger and large cardamom are the two prioritized crops. Under Ginger, an area of 2450 Ha was brought under cultivation which gave production of 12250 MT during 2011-12, while large cardamom covered the area of 13920 ha with production of 696 MT. Future

expandable area under Large Cardamom lies in Siang belt, Lower Subansiri, Lohit, Anjaw, Changlang, Tirap etc while ginger can be grown in large area in Lower Dibang Valley, Lohit West, East and Upper Siang, Papum Pare etc.

Two field visits were organized by KVK, Lower Dibang Valley, Arunachal Pradesh in collaboration with Spices Board Field Office, Tinsukia on 17th and 18th of Nov, 2014. A team consisting of Block Development Officer, Mr. Angite Linggi, Dr. T.J. Ramesha, Programme Co-ordinator, Mr.V.K.Pandey SMS (Horticulture), Ms, Anu Anie Mathews, Scientist-C and Ms. Subhadra S., Jr. Stenographer visited two Large cardamom plantations plots in Hunli area of the district on 17th Nov, 2014.

Large cardamom plantation –I

Name of the Farmer: Ms. Elisa Mendo

Area: 1.5 ha

Cultivation Practice

Plants are of 4- 5 years of age. Average tillering is about 62 per clump. Large cardamom was grown in open conditions. Shade trees were discarded because according to the owner, leaf litter falling on the spikes leads to rotting of the spikes. Sucker multiplication is practiced from existing plantations. Initial planting materials were distributed by Horticulture Department, Lower Dibang Valley, Govt. of Arunachal Pradesh. Manuring and irrigation are not done. The large cardamom is intercropped with buck weed, paddy, bamboo and vegetables. The vegetative growth was less when large cardamom was intercropped with bamboo. Leaf yellowing was noticed in all plants along with blights due to exposure to sunlight. Spikes were harvested when they are fully matured and capsules were extracted on the same day. Normally, harvesting will be over by September-October. The capsules were dried under sun mostly. Sometimes they use smoked choola. The average productivity is 5-10 kg/plant (wet yield) or 3kg/plant (dry yield). Rodent damage on spikes is observed. This year's produce was sold @Rs.700/kg dry.

Suggestions made

The farmer was advised to plant more shade trees to increase the shade. In addition, composting using local materials and dung of cow/mithun (a semi-domesticated animal grown by the locals)/ goat has to be undertaken. The advantages of raising planting materials from seeds were also explained. The farmer was also informed of the benefits of applying manures as well adoption of better post harvesting practices like using modified bhatti for curing and tail cutting.



Field Visit to farmer's plot

Large cardamom plantation –II

Name of the Farmer: Mr. Gane Miso

Area: 1.5 ha

Cultivation Practice

Plants are of 4 years of age and were raised as a mono crop under shade trees without shade management. Average tillering is about 21 per clump. Almost 70% shade was observed in the field resulting in lanky tillers. Tillering was also less than average. Leaves were dark green in colour. Plants were propagated through suckers taken from existing plantation. The land was very sloppy making it difficult for intercultural operations. Manuring and irrigation are not done. Spikes were harvested when they are fully matured and capsules were extracted on the same day. Harvesting was done during September-October. The capsules were dried under sun mostly. Sometimes they use smoked choola. This year since the plants started yielding, a total yield of around 96 kgs (dry yield) was obtained. Rodent damage on spikes is observed. This year produce was sold @Rs.700/kg dry.

Suggestions made

The farmer was advised to reduce the shade. Directions were given for making compost using locally available materials and dung of cow/mithun/ goat. The farmer was also informed of the benefits of applying manures as well adoption of better post harvesting practices like using modified bhatti for curing and tail cutting.



Field Visit to farmer's plot

Large cardamom plantation –III

Name of the Farmer: Mr. Amume Miso

Area: 4 Acres

Cultivation Practice

Planting was undertaken round the year. No intercultural operations were done. Harvesting was done during Sep- Oct in lower elevations and in higher elevations, it extends upto November. Rodent damage of spikes is a problem. Soils prone to erosion were less productive. Improper drying has resulted in inferior quality produce fetching lower price. The spikes which are in the periphery were plucked using hand and the inner ones were removed using knife. The traditional harvesting knife is not used by the farmer.



Interaction with Spice Grower

On 18th Nov.2014, a team comprising of Dr. T.J. Ramesha, Programme Co-ordinator, Mr. V.K.Pandey, SMS (Horticulture). Mrs. Toktel Boko, SMS (Plant Pathology), Ms. Anu Anie Mathews, Scientist-C and Ms. Subhadra S., Jr. Stenographer visited two plantations plots in Jia village.

Name of the Farmer: Mrs. Pasu Boko

Area: 9 Acres

Main crops: Orange, ginger, black pepper and mustard

Black Pepper:

The vines have survived *Phytophthora* foot rot that occurred in 2012. The vegetative growth was good but only few spikes were produced. Seed setting is also less. Incidence of pollu beetle was also observed.

Demonstration was given on in situ composting in trenches, application of cowdung slurry along with leaf litter almost one meter apart from the collar region. The farmer was advised to carry out irrigation of vines during winter.



Inspection of plot



Demonstration on compost making

Ginger

Plants looked healthy and though not really mature, they are harvested as demands from market are there for vegetable ginger. Local variety with small rhizomes and Nadia variety were grown.



Advisory services at filed level

Conclusion

Based on the survey it can be concluded that Farmers have been growing spice crops following traditional method with no proper space, fertilizer input, no intercultural operation, poor production ending up with poor quality end product . As at present consumers are paying more attention towards health concern demanding more of organic produce, the produce from North East will certainly meet the appropriate demand. Hence in this regard, growers have to be educated providing technical inputs through organizing capacity building, demonstration and exposure visit programmes besides extending financial support.

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Rice	During Milking stage, use rotten crab in plastic panel trap @ 100 traps/ ha which attracts and controls (60%) Gundhi bugs effectively.	Gundhi Bug control
2	Grains	1) Storage Godom of 3ft hight and covered with the plate planks to	Rodent menace (Martin Meme)

		<p>prevent climbing</p> <ol style="list-style-type: none"> 2) MRA are grinds into paste and mixed with the edible items. These are placed on the run way. The MRA are Colocasia type found in the ice covered areas. 3) Bow and Arrows 4) Grepa (Triangular shaped placed in the log in river/ streams. When rat pass it traps down. 5) Plate stone trap (Drapa). 	
1	Pig	Smearing of whole body with lard, kerosene oil and ointment from mixture from garlic and mustard oil.	Control of Ecto parasitic infection (leech)
2	Ginger	<ol style="list-style-type: none"> 1) Band placement of concentrated ashes without informing family members. 2) Spring onion locally called Aero Elompra are grind into paste and oils are extracted filtered & sprayed. 3) Collection and destruction of infected part. 	Control of Ginger Rhizome rot
3	Grains	Sun dried before the full moon in the bamboo basket covered with <i>Ko Patta</i> (local leaves).	Storage moths Khapra beetle (Martin Meme)
4	Grains	<ol style="list-style-type: none"> 6) Storage Godoun of 3ft hight and covered with the plate planks to prevent climbing 7) MRA are grinds into paste and mixed with the edible items. These are placed on the run way. The MRA are Colocasia 	Rodent menace (Martin Meme)

		<p>type found in the ice covered areas.</p> <p>8) Bow and Arrows</p> <p>9) Grepa (Triangular shaped placed in the log in river/ streams. When rat pass it traps down.</p> <p>10) Plate stone trap (Drapa).</p>	
5	All Agricultural crops	<p>Liquid Manure Preparation</p> <p>1) Any green plants are chopped into 2-4cm pieces mixed with fresh cow dung and water. It is let decomposed in the tank. Ready for use within 15-20 days</p> <p>2) For spraying purpose farm, mustard cake or other wastes are let decomposed and filtered and required concentration is prepared for spray. This give best result.</p>	Pest and disease control
6	All Agricultural crops	<p>Liquid Manure Preparation</p> <p>1) Extracting oils of any hot and highly pungent plants like citronella, Garlic, Onion, Ginger, Chlli, Neem leaves, Tobacco etc and spraying on the foliar part of the plants.</p> <p>2) Well decompose pseudostem banana are mixed with the cow urine in 200 litres tank capacity. Within 15-20 days it is ready for application in the pest and disease infested field.</p>	Pest and disease control

7	Rice	During melting stage, use rotten crab in plastic panel trap @ 100 traps/ ha which attracts and controls (60%) Gundhi bugs effectively.	Gundhi Bug control
8	Pig	Feeding Pig through Bamboo Feeder Made of local Bamboo- TAPUBA, 10-15 yrs old, felled down from own field by cut opening the upper portion of the segmented stem is being used as pig feeder by the owner	Feeding Pigs
9	Pig	Smearing of whole body with lard, kerosene oil and ointment from mixture from garlic and mustard oil.	Control of Ecto parasitic infestation (Leech)
1.	Paddy	Use of dried fern leaves in granaries	For storage pests management
2.	Paddy	In paddy field use of farmers put rinds of pumelo in standing water	For management of Caseworm infestation
3.	Paddy	Use of dead frog and crop in paddy field	For management of gandhibug infestation

3.10 Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women

Need based training courses are identified on the basis of farmers demand on specific subjects matter.

- Rural Youth

Need based training courses are identified on the basis of scopes and income generating activities in the area and after interacting with youth organizations, SHGs, NGOs and farmer organizations

- Extension personnel

Need based training courses are identified after interacting with the extension functionaries of agriculture and allied departments

3.11 Field activities

- i. Number of villages adopted : 6
- ii. No. of farm families selected : 400
- iii. No. of survey/PRA conducted: 5

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

1. Year of establishment :2016
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Mini Soil Testing lab (Mridapariksha)	1	95000
Total		1	95000

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	Grid Samples- 15	181	4	-
Water Samples	NA	NA	NA	NA
Plant Samples	NA	NA	NA	NA
Petiole Samples	NA	NA	NA	NA
Total	15	181	4	-

3.13. Details of SMS/ Voice Calls sent on various priority areas

Persistent problem in uploading message inspite of being registered user

Message type	Crop		Livestock		Weather		Marketing		Awareness		Other Ent.		Total	
	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary
Text only														
Voice only														
Voice and Text both														
Total														

3.14 Contingency planning for 2015-16

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total

Flood	Introduction of new variety or crop				
	Introduction of submergence tolerant varieties like Jalashree and short duration rice varieties like Luit etc	3		5	5
Drought like situation	Introduction of Resource Conservation Technologies				
	Zero tillage in field crops	0.5		2	2
Flood	Distribution of seeds and planting materials Seed Production	1		2	2
	Any other (Please specify)				

a. Livestock based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Number of birds/ animals to be distributed	No. of programmes to be undertaken	No. of camps to be organized	Proposed number of animals/ birds to be covered through camps	Number of beneficiaries proposed to be covered		
					General	SC/ST	Total
Disease Outbreak	1000 birds	5	5	200		50	50

4.0. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period only)

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Backyard Poultry Farming (Vanaraja bird)	100	70	-	3000/10 birds
High yielding fodder production	50	20	-	10800/ Cow /year (10% increased in milk yield)
Azolla	150	19	-	700/2 sq.mtr area(selling @Rs.10/kg)
Vegetable Production	199	60	-	28000/25 sq.m/year
Mushroom Production	100	80	-	3000/Unit
Value Addition	98	30	-	2350/10 kg final product

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

Fodder Production for sustainable development of livestock sector

Availability of green fodder in winter season is a major problem among the livestock farmers of the district. As per survey done by KVK personals feed cost is the major problem among the livestock farmers. Seeing the requirement for quality perennial fodder production KVK introduced improved variety forage crop (Hybrid Napier) collected from Assam Agriculture University, Jorhat at different areas of the district and popularized among the livestock farmers.



Extension Activities:

Capacity building programmes were organized for selected farmers and extension personals were trained at periodical intervals and demonstrated the round the year production of quality fodder. Method demonstrations were done by KVK experts at farmers' field by the method of "Teaching by doing". Periodical field visit and diagnostic visits were also done to collect information and on field suggestion if any problem arise. Exposure visit of farmers to KVK, Haradanahalli, Karnataka (Zone-8) were also organized at established fodder banks outside the state.



Critical Input Supply:

Following the training and demonstration programme farmers were provided fodder root slips and stem cuts for implant at their own field. A total of 32,950 root slips and stem cuts were provided for 80 farmers. Farmers were also technically guided about package and practices of quality fodder production.



Outcome:

Due to easy accessibility and low production cost farmers were well accepted the enterprise and it is popularized among the livestock and fishery farmers of the district. Influences from the activities published on news paper local farmers and milk union society from neighboring district of Assam also brings fodder root slips to establish fodder plot at their farm site. Feedback from the farmers includes faster growth, increase in milk yield from dairy cattle after feeding with Napier grass, round the year production and well accepted by livestock and fish.

4.3 Details of impact analysis of KVK activities carried out during the reporting period**5.0. LINKAGES ESTABLISHED****5.1 Functional linkage with different organizations**

Name of organization	Nature of linkage
1.CH&F , CAU Pasighat East Siang Arunachal Pradesh	Participation as External Examiner, Technical Support and Critical Input Supply and Training.
2.NABARD, Itanagar	Financial Assistance
3.Directorate of Agriculture, Naharlagun	Technical Support and Critical Input Supply.
4.AAU Jorhat	Training and Extension
5.NFDB, Hyderabad	Financial Support
6.Line Departments	Financial Assistance and Critical Input Supply
7. Essomi foundation Trust ,Roing	Joint Implementation
8.IIHR,Bangalore	Technical Support and Critical Input Supply
9. CAU ,Imphal	Technical Support and Critical Input Supply
10. ICDS , Roing	Conducting Training and Demonstration

11. Director of Industry, Roing	Conducting Training and Demonstration
12. Director of Handicraft and Textile, Roing	Joint Implementation
13. CIFT, Cochin	Training, Demonstration and Contribution for Infrastructure Development
14. IIVR, Varanasi	Technical Support and Critical Input Supply
15. ICAR, Basar	Joint Implementation
16. ICAR, Barapani	Technical Support and Critical Input Supply
17. UAS, Bangalore	Technical Support and Critical Input Supply
18. DGR, Junagadh	Exposure Visit and Contribution for Infrastructure Development
19. CIPHET, Ludhiana	Exposure Visit & Critical Input Supply
20. CIAE, Bhopal	Exposure Visit & Critical Input Supply
21. Jindal Power Corporation Limited, Etalin, Dibang Valley, Arunachal Pradesh	Conducting Training and Demonstration
22. District Rural Development Agency, Roing	Conducting Training and Demonstration
23. District Administration	Training and Financial Assistance
24. National Council of Rural Institute (Ministry of Human Resources and Development), Hyderabad	Conducting Training, Demonstration and Financial Assistance
25. ICAR-National Research Centre on Yak, West Kameng, Dirang, Arunachal Pradesh	Training, Demonstration and Contribution for Infrastructure Development
26. Child Development Project Office, Roing	Conducting Training and Demonstration

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2015-16

Name of the scheme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
Skill Development programmes for tribal farm women	Exposure Visit, Training and Demonstration	6 th July to 16 th July	National Council of Rural Institutes (Ministry of Human Resources and Development), Hyderabad	1,52,076
Groundnut Production	Exposure Visit, Training and Demonstration	20-24 th Sept 2015	Directorate of Groundnut Research, Junagadh, Gujarat	9,57,906
Ornamental fish farming	Training	3.7.2015	Regional office of Marine Products Export Development Authority, Guwahati	Expensed was borne by sponsoring agency
Scientific livestock management for better productivity	Training	18 th to 20 th Feb, 2016	Directorate of NRC on Yak, West Kameng, Arunachal Pradesh	Expensed was borne by sponsoring agency

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No-Yes

Sl. No.	Programme	Nature of linkage	Remarks
1	1	Resource Person	

5.4 Give details of programmes implemented under National Horticultural Mission-*Not Applicable*

S. No.	Programme	Nature of linkage	Constraints if any

5.5 Nature of linkage with National Fisheries Development Board – *Not Applicable*

S. No.	Programme	Nature of linkage	Remarks

6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2015-16

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estd.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
2	Polyhouse	2014	30 Sqmtr	Seasonal Vegetables	Saplings	1130	600	2260	Distributed to farm women from 8 SHGs from different villages
1.	Potato	2015-16	1	Potato (Var Kufri	Tuber	106.9	35000	856000	Higher crop return

ii.									
Fruits									
i. Banana									
ii.									
Vegetables									
i.									
ii.									
a. Others (specify)									
i. Fodder Production		First Cutting at 2 months and subsequent cuttings at 45 days interval	100 sq.mtr	Hybrid Napier,	Fodder	12 qtl	-	-	Distributed to livestock and Fish farmers to promote for scientific farming
ii.		First Cutting at 2 months and subsequent cuttings at 45 days	100 sq.mtr	Setaria,	Fodder	4 qtl	-	-	

		interval						
iii.		First Cutting at 2 months and subsequent cuttings at 45 days interval	100 sq.mtr	Congosignal	Fodder	4 qtl	-	-
iv.		First Cutting at 2 months and subsequent cuttings at 45 days interval	100 sq.mtr	Guinea	Fodder	11 qtl	-	-

6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Azolla (A caroliniana)	250 kgs	Rs. 200 towards operational cost	2500 (@ Rs.10/kg)	Distributed to 10 livestock and fish farmers

6.6. Utilization of hostel facilities (Month-Wise) during 2015-16- *Not Applicable*

Accommodation available (No. of beds) :

Months	Title of the training course/Purpose of stay	Duration of Training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total					
Grand total					

Note: (Duration of the training course X No. of trainees)=Trainee days

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location/ Branch	Account Number
With Host Institute	State Bank of India	Naharlagun	11362151457
With KVK	State Bank of India	Roing.	11362151457
Revolving Fund	State Bank of India	Roing.	11362158918

7.2 Utilization of funds under FLD on Maize (Rs. In Lakhs) if applicable-Not Applicable

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31 st March, 2015
	Year	Year	Year	Year	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of KVK funds during the year 2015 -16

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	1,21,37,000	1,21,37,000	1,21,36,000
2	Traveling allowances	2,20,000	2,20,000	2,14,390
3	Contingencies	15,20,000	15,20,000	15,19,000
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees			

<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
TOTAL (A)		1,38,77,000	1,38,77,000	1,38,70,134
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		Nil	Nil	Nil
C. REVOLVING FUND		34,944	34,944	20,000
GRAND TOTAL (A+B+C)				

7.4 Status of Revolving Fund (Rs. in lakhs) for last three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2013 to March 2014	114944	Nil	80,000	34,944/-
April 2014 to March 2015	34,944/-		Nil	34,944/-
April 2015 to March 2016	34944	Nil	20,000	14,944

Note: No KVK must leave this table blank

8.0 Please include information which has not been reflected above.

(Write in detail)

8.1 Constraints

(a) Administrative

- No water supply
- Inadequate staff quarters
- Condemned vehicle in service(Need to be replaced)
- Urgent need of new vehicle, laptop for SMS
- Small bus for farmers
- Generator
- Office furnitures
- Office appliances(IT)
- Video camera and cybershot/handycam
- V-SAT
- Meteorological Research station
- Establishment of Village Resource Centre
- Ambulance for animal husbandry and Fisheries

-

- (b) Financial

- Inadequate fund under contingencies
 - Unavailability of fund for farm development

- (c) Technical

- Uncertainty in power supply affecting on time submission of *information*

Programme Coordinator

Minutes of Fourth Scientific Advisory Committee Meeting of KVK, Lower Dibang Valley .

The Scientific Advisory Committee Meeting (SAC Meeting) of KVK, Lower Dibang Valley District was held on 20.1.2016 at KVK Conference Hall. Mr.D.Davi, District Fisheries Development Officer had chaired the session. The programme commenced with welcome address by Dr.T.J.Ramesha,Senior Scientist & Head and Member Secretary of the SAC Meeting.

The Senior Scientist & Head presented Action Taken Report in respect of earlier SAC Meeting conducted on 25.2.2014 at Anchal Samithi Hall, which was then chaired by Dr.V.K.Sahgel,District Veterinary Officer . In addition to that the Head has also presented the plan of action for the ensuing year before the participants comprising of developmental department officers, progressive farmers, rural youths and farm women of active self help groups.

SAC Members

1. Mr. Bullo Tama, District Horticulture Officer
2. Dr. Emo Lego , District Veterinary Officer
3. Mr.Dayum Davi, District Fisheries Development Officer
4. Mr.Kanagadhileepan ,Field Officer, Spices Board, Government of India
5. Mr.Tata Nada ,APO (Agriculture &Allied),District Rural Development Agency
6. Mr.Tapa Diri , IICPD, District Rural Development Agency
7. Mr. Toktil Modi , I/C District Agriculture Officer
8. Mr.Himanshu Shekar, Agriculture Demonstrator, Spices Board, , Government of India
9. Mr.Omprakash,Nursery Officer, 3 F- Oil Palm Private Agrotech Pvt. Ltd.
10. Mr.Nonni Ratan ,Grafter, Horticulture Nursery, Balek village

11. Mr.Jatan Pulu, Progressive Farmer, Yibuk village
12. Mr.Mipang Lego, Progressive Farmer, Kangkong village
13. Mrs. Oimang Lego, Farm Women, Jia village
14. Mrs. Lune Gamno, Farm Women, Meka village
15. Mrs. Kayiya Pulu, Farm Women, Kebali village
16. Mrs. Kinako Linggi, Farm Women, Kebali village

KVK Staff

1. Dr.T.J.Ramesha, Senior Scientist &Head
2. Mrs. Toktel Boko,SMS (Plant Protection)
3. Mrs.Nanang Tamut, SMS (Home Science)
4. Dr.Dipankar Hazarika,SMS (Animal Science)
5. Mr.Sangam Linggi, Assistant
6. Mrs.Aja Bomjen , Stenographer

Resolution No.1

Mr.Bullo Tama, District Horticulture Officer(DHO), stressed on that indigenous plants should be made use of in preparation of modern fabrics and also felt the need to conserve indigenous plant species for future generation. Also suggested SMS (Horticulture) to take up trials in respect of Medicinal and Aromatic plants.

Besides, the DHO shared his experiences on zero energy cool chambers established at the place of Zero, Lower Subansiri district of Arunachal Pradesh. He also felt the need of strict impose of Quarantine Act before introducing new varieties to specific areas.

Resolution No.2

Mr. Jatan Pulu, progressive farmer, Yibuk village advised to conduct farmer-scientist interaction for different crop seasons. Progressive farmer expressed that with the usage of improved farm implements obtained for demonstration from KVK, he could get higher production and income from Ginger and Potato crops.

Also suggested to develop irrigation system and production of manures for effective maintenance of demonstration units at KVK farm so that instructional farm can be used as tool for educating farming communities. Besides he appealed scientists to monitor pest and disease in fields through organic approach.

Resolution No.3

Mr. Tata Nada, APO (Agriculture & Allied), District Rural Development Agency advised scientists to provide advisory services based on soil analysis report so that farming communities can reap higher production and economic returns.

Resolution No.4

Mr. D. Davi, District Fisheries Development Officer, urged scientists to impart skill based training programmes in respect of utilization of indigenous plants for preparation of modern fabrics and also to educate farmers on importance of indigenous plant species so that it can be conserved for future generations.

Resolution No.5

Mr. Kanaga Dilepan, Field Officer, Spices Board, Government of India delivered a presentation on objectives and mandated activities of Spices Board as well as called upon farmers to come forward and utilize financial support rendered from the office to bring more area under scientific cultivation of spice crop and also on post harvest handling of the harvested produce for better quality which in turn earn attractive income.

The programme was successfully ended with proposal of vote of thanks by Dr. Dipankar Hazarika, Subject Matter Specialist (Animal Science).

All the scientists actively participated in the meeting and provided technical inputs.

Dr.T.J.Ramesha

Senior Scientist &Head

Krishi Vigyan Kendra, Lower Dibang Valley

Copy to

1. Mr. Bullo Tama, District Horticulture Officer
2. Dr. Emo Lego , District Veterinary Officer
3. Mr. Dayum Davi, District Fisheries Development Officer
4. Mr. Kanaga Dileepan , Field Officer, Spices Board, Government of India
5. Mr. Tata Nada ,APO (Agriculture &Allied),DRDA
6. Mr. Tapa Diri ,IICPD,DRDA
7. Mr. Toktil Modi ,I/C District Agriculture Officer
8. Mr. Himanshu Shekar,Agriculture Demonstrator, Spices Board, Government of India
9. Mr. Omprakash, Nursery Officer, 3 F- Oil Palm Private Agrotech Pvt. Ltd.
10. Mr. Nonni Ratan ,Grafter, Horticulture Nursery, Balek village

11. Mr. Jatan Pulu, Progressive Farmer, Yibuk village
12. Mr. Mipang Lego, Progressive Farmer, Kangkong village
13. Mrs. Oimang Lego, Farm Women, Jia village
14. Mrs. Lune Gamno, Farm Women, Meka village
15. Mrs. Kayiya Pulu, Farm Women, Kebali village
16. Mrs. Kinako Linggi, Farm Women, Kebali village