

**Krishi Vigyan Kendra, East Sikkim,  
ICAR, Sikkim Centre, Ranipool- 737135, Sikkim**

**1. Name of the Regional Centre / Division/ Section**

Krishi Vigyan Kendra, East Sikkim,  
ICAR, Sikkim Centre  
Ranipool- 737135, Sikkim

**2. Area of Work (with achievements) not more than one page (Last five year summation)**

- a. Training
- b. OFT
- c. FLD
- d. Extn. Activities

**a. Training**

Discipline	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
	NT	NP	NT	NP	NT	NP	NT	NP	NT	NP	NT	NP
<b>Crop Production</b>	04	140	13	234	08	184	32	559	13	1023	<b>70</b>	<b>2140</b>
<b>Horti-culture</b>	03	100	02	65	5	65	11	281	9	242	<b>30</b>	<b>753</b>
<b>Livestock</b>	05	200	06	173	03	101	03	82	09	256	<b>26</b>	<b>812</b>
<b>Plant Protection</b>	05	202	07	134	08	110	03	81	02	55	<b>25</b>	<b>582</b>
<b>Home Science</b>	11	153	05	126	04	75	06	227	06	171	<b>32</b>	<b>752</b>
<b>Agril. Extn.</b>	05	286	08	252	08	252	17	431	14	276	<b>52</b>	<b>1497</b>
<b>R.Y</b>	05	155	14	284	14	284	41	546	05	693	<b>79</b>	<b>1962</b>
<b>Extn. Functioning</b>	02	34	01	30	01	30	02	51	06	194	<b>12</b>	<b>339</b>
<b>Soil Sc.</b>	-	-	-	-	-	-	04	222	08	481	<b>12</b>	<b>703</b>
<b>Sponsor Trng.</b>	-	-	12	329	01	63	07	77	09	315	<b>29</b>	<b>784</b>
<b>Total</b>	<b>40</b>	<b>1270</b>	<b>68</b>	<b>1627</b>	<b>52</b>	<b>1164</b>	<b>126</b>	<b>2557</b>	<b>81</b>	<b>3706</b>	<b>367</b>	<b>10324</b>

**Note: NT –No. of Trainings**

**NP –No. of Participants**

**a. OFT**

Discipline	2007-08	2008-09	2009-10	2010-11	2011-12	Total
<b>Crop Production</b>	03	10	09	12	10	<b>44</b>
<b>Horticulture</b>	-	-	03	07	05	<b>15</b>
<b>Live Stock</b>	01	-	02	05	08	<b>16</b>
<b>Home Science</b>	-	01	01	05	01	<b>08</b>
<b>Plant Protection</b>	01	01	03	05	05	<b>15</b>
<b>Plant Breeding</b>	01	-	-	-	06	<b>07</b>
<b>Extn.</b>	-	-	-	-	01	<b>01</b>
<b>Total</b>	<b>06</b>	<b>12</b>	<b>18</b>	<b>34</b>	<b>36</b>	<b>106</b>

**b. FLD**

Discipline	2007-08	2008-09	2009-10	2010-11	2011-12	Total
<b>Crop Production</b>	01	06	03	07	05	<b>22</b>
<b>Horticulture</b>	-	-	04	06	05	<b>15</b>
<b>Live Stock</b>	01	-	01	05	08	<b>15</b>
<b>Home Science</b>	-	01	01	01	01	<b>04</b>
<b>Plant Protection</b>	-	01	02	05	05	<b>13</b>
<b>Plant Breeding</b>	-	-	-	-	01	<b>01</b>
<b>Extn.</b>	-	-	-	-	01	<b>01</b>
<b>Total</b>	<b>02</b>	<b>08</b>	<b>11</b>	<b>24</b>	<b>26</b>	<b>71</b>

**c. Extension activities**

Activities	2007-08		2008-09		2009-10		2010-11		2011-12	
	NA	NP	NA	NP	NA	NP	NA	NP	NA	NP
<b>Field Days</b>	07	630	03	226	04	108	04	275	08	454
<b>Kisan Mela</b>	01	750	02	510	01	650	-	-	05	183
<b>Kisan Ghosthi</b>	10	300	07	170	02	50	3	210	11	699
<b>Exhibition</b>	-	-	-	-	01	812	-	-	-	-
<b>Film Show</b>	04	390	02	153	01	72	04	100	-	-
<b>Method Demonstration</b>	10	141	06	70	45	45	07	100	-	-
<b>Farmers Seminar</b>	02	72	-	-	03	101	-	-	-	-
<b>Group Meetings</b>	09	270	03	90	06	55	05	101	-	-
<b>Newspaper Coverage</b>	03	-	-	-	-	-	23	-	-	-
<b>Radio Talk</b>	-	-	-	-	-	-	09	-	14	-
<b>TV Talks</b>	02	-	04	-	-	-	-	-	07	-
<b>Scientific visit to farmers field</b>	58	810	31	285	142	426	155	678	-	-
<b>Diagnostic visit</b>	06	60	92	399	45	52	32	545	143	1452
<b>Exposure visit</b>	-	-	02	60	-	-	01	15	02	16
<b>Ex-trainees sammelan</b>	-	-	-	-	02	70	05	120	-	-
<b>Soil health camps</b>	04	117	-	-	-	-	-	-	-	-

<b>Animal health camps</b>	07	159	-	-	02	30	02	70	03	302
<b>Farm science club</b>	06	150	03	130	08	64	08	90	12	292
<b>SHG conveners meetings</b>	09	240	06	180	11	132	07	84	18	468
<b>Celebration of important days</b>	01	60	01	95	02	42	02	90	-	-
<b>Lecture delivered as resource</b>	11	-	06	100	-	-	11	469	100	-
<b>Extension literature</b>	15	240	06	32	-	-	08	-	15	1522
<b>Advisory services</b>	06	180	03	60	-	-	215	545	182	182
<b>Farmers visit to KVK</b>	19	270	14	359	-	-	27	130	185	1003
<b>Mahila Mandal Conveners</b>	08	210	05	84	-	-	05	66	10	278
<b>Popular article</b>	03	-	-	-	-	-	-	-	20	-
<b>Soil test campaign</b>	06	209	-	-	-	-	-	-	-	-
<b>Field visit</b>	-	-	-	-	-	-	-	-	181	1573
<b>Agriculture camp</b>	-	-	-	-	-	-	-	-	7	-
<b>AI of cattle at farmers field</b>	-	-	-	-	-	-	-	-	69	69
<b>Soil sampling at farmers field</b>	-	-	-	-	-	-	-	-	92	92
<b>Treatment of Cattle, Goat &amp; Poultry</b>	-	-	-	-	-	-	-	-	38	128
<b>Establishment of Sikkim Mandarin nursery at KVK</b>	-	-	-	-	-	-	-	-	02	02
<b>Development of vegetable nursery at KVK</b>	-	-	-	-	-	-	-	-	02	02
<b>Development of model IFS at KVK farm</b>	-	-	-	-	-	-	-	-	03	03
<b>Land preparation for upland paddy</b>	-	-	-	-	-	-	-	-	01	01
<b>Awareness camp</b>	-	-	-	-	-	-	-	-	02	75

**Note: NA- No. of Activities**  
**NP- No. of Participants**

### 3. Technology intervention available for farmers.

INM- Green manuring (Daincha & Green gram).

- Introduction of bio-fertilizer like Nalpak and Anandam.
- Cultivation of HY Rice varieties like- Sasharam, Gitanjali, Pusha Sugandha-, SRI in Rice.
- IPM/organic pest and disease management.
- Control of Stem borer & leaf eating caterpillar through Neem Oil.
- Popularization of HQPM and baby corn.
- Production and application of vermicompost.
- Introduction of HYV of millet like VL-315.
- Introduction of HYV of Potato K. Jyoti & K. Megha.
- Use of neem cake & dolomite as soil amendment.
- Rain water harvesting to use in lean period.
- Use of HYV of Mustard like- M-27, TS-38 and TS-46.
- Use of HYV of pulses like- Pratap in Green gram and T-9 in Black gram.
- Relay cropping in Maize like Ricebean and Cowpea.
- Orange rejuvenation.
- Use of disease free planting material
- Rhizome treatment with GF3 botanicals for control of soft rot disease.
- Use of Trichoderma for Organic Disease Management
- Sikkim Mandarin Nursery Management.
- Organic Ginger production technology.
- Broiler Poultry Production.
- Enhancement of the Maize productivity through introduction of HQPM.
- Application of Bordeaux mixture during winter and early summer.
- Spray of neem oil @ 5ml/lit. at bud burst stage.
- Use of pheromone trap for fruit fly control
- Selection of nucellar seedling.
- Secondary nursery management.
- Use of disease resistance varieties of Large Cardamom.
- Removal and destruction of old pseudo stem.
- Production of disease free planting material and its nursery management
- Use of resistant HYV in Banana.
- Use of HYV/Hybrid of Tomato.
- Organic treatment of seed by Trichoderma of vegetable & fruits.
- Cross breeding with Jersey.
- Silage Making.
- Deworming of Cows.
- Cross breeding with exotic Pig breed.
- Introduction of improved dual purpose breed like Vanaraja, Giriraja and Gramapriya.
- Proper brooding in Poultry.
- Vaccination of FMD, swine fever in Cattle and Pig.
- Income generation for empowerment of rural women through cushion and cushion cover making.
- High nutrient efficiency for diet for women & children
- Low cost winning food.

- Post harvest management & preservation of vegetable and fruits.
- Application of Dolomite for reclamation of acidic soil.
- Use of Maize Sheller & Paddy Thresher.
- Use of hand hoe for weeding.
- Use of sprayer & duster.
- Mobilization of social capital through SHG.
- Gender mainstreaming through SHG.
- Formation & Management of SHG.

## KVK Sikkim , Action Photos



Field Day Celebration on Upland Paddy Cultivation



Hon'ble Speaker, Govt. of Sikkim, SLA, observing Jalkund demonstration at Nandok.



Cushion making training sponsored by NASARD



Animal Health Camp at Nandok Village-East Sikkim under NISARA



DDG (Ext.) & ADG (Ext.) visiting the KVK stall in Maize Mela at Namchi



KVK-East Sikkim Celebrates Technology Week, 2009





Training on Organic Cultivation of Potato



Hon'ble Min. PHE in training programme



Technical Guidance on SRI sponsored by NABARD at Farmers Field (Village - Rey mindu)



Cole crops demonstration under NICRA



Backyard poultry Chick distribution under NICRA



FLD ON MAIZE var. Nar, M 909





Crop Evaluation Trial of Deptt. Of F&ADC, Govt. of Sikkim



Dr. S. V. Ngachan, Director chairing the session in International Florishow 2013



Best KVK Award (Zone III) : KVK, East Sikkim has been conferred with this award by ICAR in the 6<sup>th</sup> National Conference of KVKs held during 3-5 December, 2011 at JNKVV, Jabalpur



NICRA Awareness-cum- Convergence Workshop at Nandok Village, East Sikkim



HQPM 1 seed distribution by Shri B. B. Rai, MLA, Ranipool



Biotechnology led organic farming in North Eastern Region DBT, GOI- Demonstration

## **Sponsoring Agency for training programmes**

### **(2008-09) and (2009-10)**

1. MM-1 Sikkim Centre
2. DST- Govt. of Sikkim
3. NAIP-III Sikkim Centre
4. Co-operative Society, Govt. of Sikkim
5. TMI & SRDA- Govt. of Sikkim
6. ATMA (East), Deptt. of FS&ADD, Govt. of Sikkim

### **2010-11**

1. IGNOU, Tripura
2. NABARD, Gangtok, Sikkim
3. SAMETI, Deptt. of FS&ADD, Govt. of Sikkim

### **2011-12**

1. SIBIN
2. Indian Institute of Crop Processing Institute
3. Ministry of Food & Processing Industries, Govt. of India
4. Deptt. of AHLF & VS, Govt. of Sikkim.
5. ATMA, East Sikkim
6. Forest Department, Govt. of Sikkim
7. SAMETI, East Sikkim
8. NABARD, Gangtok
9. Deptt. of FS&ADD., Govt. of Sikkim.
10. Deptt. of Fishery



**List of special programmes under taken by the KVK which have been financed by State Govt./ Other Agency.**

<b>Sl. No</b>	<b>Year</b>	<b>Name of the Scheme</b>	<b>Date/ month of initiation</b>	<b>Funding Agency</b>	<b>Amount (Rs.)</b>
<b>1</b>	2009-10	Store Grain Pest Management	March 2010 (3 days)	IGNOU Tripura	85,000.00
<b>2</b>	2010-11	Training Programme on Poultry farming as a component of Integrated Farming System	25.03.11	SAMETI East Sikkim	13,500.00
<b>3</b>		Marketing of agricultural produce	5 & 6 July 2011	IGNOU Tripura	25,000.00
<b>4</b>		Dairy Management	7 & 8 July 2011		
<b>5</b>		Feeding Management of Pig & Poultry by using locally available low cost feed resource	26.03.11	SAMETI East Sikkim	13,500.0
<b>7</b>	2011-12	DBT led organic farming in NE Region	Sept.2010	Deptt. Of Biotechnology. Govt. of India	20,06,000.00
<b>8</b>		National Initiative on Climate Resilient Agriculture	March 2010	ICAR	30,35,000.00
<b>9</b>		National Agriculture Innovative Project (NAIP-III)	March 2009	NAIP-ICAR	2,50,000.00
<b>10</b>		Frieswal Progeny Testing Project	August 2009	Project Directorate cattle (ICAR)	8,50,000.00
<b>11</b>		Exposure visit of progressive farmers/farm women to CRRI, Cuttack and other ICAR institute in Bhubhaneshwar (\$ nos)	14-21 March 2012	NABARD (R.O.)Gangtok	81,000.00
<b>12</b>		Training entitled “Skill Development Programme on Cushion Cover Making at Nandok”	12-17 March 2012	NABARD (R.O.)Gangtok	21,200.00

## Details of Linkage

Activities	Convergence activities with different line departments
<b>Projects</b>	
Development and maintenance of rice knowledge management portal (RKMP)	NAIP I
Collection, documentation and validation of ITKs under sustainable farming system	NAIP III
Frieswal Progeny Testing Project during August 2009	Project Directorate on cattle, Merrut, (ICAR)
DBT led organic farming in NE Region during Sept.2010	Deptt. Of Biotechnology. Govt. of India
National Initiative on Climate Resilient Agriculture during March 2010	Indian Council of Agricultural Research (ICAR)
<b>Workshops/Summer school/ Technology week/ Seminar/ Meetings etc.</b>	
<b>Technology Week 2009</b>	Conducted in collaboration with NHB, SIMFED, Sikkim Milk Union and NABARD.
<b>Summer school</b> on <i>Entrepreneurship development under sustainable farming system</i> was organized during 2009	Sponsored by ICAR
Organized a day long workshop on <i>Awareness and Convergence Workshop</i> under NICRA at Nandok village, East Sikkim on 11 <sup>th</sup> April, 2012 to develop awareness among all the stakeholders including farmers (200 nos.) regarding the <i>Climate Resilient Agriculture</i>	All the line Departments attended the workshop. Shri K. T. Gyalsen, Hon'ble Speaker, Sikkim Legislative Assembly, Sikkim Inaugurated the programme as a Chief Guest.
State Level Stake Holders' Workshop on "Bridging Research to Extension: Strategies & Policies" (11-12 Oct. 2012) at ICAR RC for NEH Region, Sikkim Centre, Gangtok	All the Stakeholders including officials of different line departments of state and central Govt., NGOs, marketing agencies, farmers etc.
<b>Sponsored trainings</b>	
Store Grain Pest Management during March 2010 (3 days)	IGNOU Tripura
Marketing of agricultural produce on 5 <sup>th</sup> & 6 <sup>th</sup> July 2011	IGNOU Tripura
Dairy Management on 7 <sup>th</sup> & 8 <sup>th</sup> July 2011	IGNOU Tripura
Training for Butchers and other Meat and Poultry workers on "Slaughter House Improvement for Better	Training programme Sponsored by Indian Institute of Crop Processing Technology (IICPT), National Meat and Poultry

Quality Meat and Safer Environment” was organized on 8 <sup>th</sup> November, 2011.	Processing Board, New Delhi Ministry of Food Processing Industries, New Delhi & Deptt. of AH, LF & VS, Govt. of Sikkim
Training to the Extension Functionaries (EF) on “Poultry Based Integrated Farming System” on 25 <sup>th</sup> March 2011, “Computation of Economic Ration of Livestock Using Locally Available Resources” on 26 <sup>th</sup> March 2011 and “Feeding of dairy cattle” on 28 <sup>th</sup> March 2012	Sponsored by SAMETI, Deptt. of FS &AD, Govt. of Sikkim on
Training entitled “Skill Development Programme on Cushion Cover Making at Nandok” during 12-17 March, 2012	NABARD (R.O.)Gangtok
One week long training programme from 31 <sup>st</sup> may – 5 <sup>th</sup> June, 2012 on “Livelihood Improvement through Poultry, Piggery, Goatery and Dairy Farming” for the farmers of the Indo-Nepal and Indo-Bhutan border.	Organized by Sashastra Seema Bal, Gangtok Sector in collaboration with KVK, ICAR, east Sikkim, Ranipool.
Training programme on “Hands on Agriculture” for newly recruited 18 nos. of Field Asstt. under Deptt of FS&AD, Govt. of Sikkim from 29 <sup>th</sup> October-29 <sup>th</sup> November, 2012 (one month).	Sponsored by Deptt of FS&AD, Govt. of Sikkim
Imparted an Experiential Learning programme for final year B. Sc Horticulture students of <b>Sikkim University</b> from July-December, 2012 at the Saramsa Farm of KVK, Ranipool.	Sikkim University, Gangtok
<b>Exposure visit</b>	
Exposure visit of progressive farmers/farm women to CRRI, Cuttack and other ICAR institute in Bhubhaneshwar (15 nos) during 14-21 March 2012	NABARD (R.O.)Gangtok
<b>Demonstrations</b>	
Rabi demonstration programme (2010-2011) on mustard and cole crops.	Under the financial assistance of ATMA, East Sikkim.
<b>HQPM Programme:</b> HQPM seeds have been distributed in 17 villages covering an area of 34.61 ha with 573 farmers. The average yield of HQPM-1 was observed to be 53 q/ ha against the local check 42.3 q/ha.	ICAR Research Complex for NEH Region, Umiam, Meghalaya
Varietal trial conducted at KVK- East Sikkim farm on paddy, Finger millet and mustard (2012-13)	Collaboration with FS&ADD, Govt. of Sikkim.



Varietal trial conducted at KVK- East Sikkim farm on Soybean (2012-13)	Collaboration with ICAR Sikkim centre, Tadong, Gangtok
Technology demonstrations under ATMA (2012-13): Demonstration on Vivek QPM, upland paddy, HYV of Banana, acidic soil management through dolomite in maize, mixture supplement to dairy cattle, yield estimation of finger millet through broad casting and line sowing, organic nutrient management in Dalley chilli, HYV of okra and Azolla incorporation in paddy	Under the financial assistance of ATMA, East Sikkim.
<b>Short Term Researchable Issues (2010-2011)</b>	
<ul style="list-style-type: none"> <li>• Organic amendment of soil through oilcakes (neem cake, GN cake, castor cake)</li> <li>• Compost accelerator</li> <li>• Varietal performance testing (Var. TS-46 under late sown condition)</li> <li>• Medicinal value of local buckwheat</li> <li>• Varietal performance of Straw Berry cultivation.</li> <li>• Organic management of disease/ pest in ginger by using botanicals.</li> <li>• Enhancing the crop intensity and testing the suitable cropping sequence</li> </ul>	Sponsored by ATMA, East Sikkim
<b>Short Term Researchable Issues (2011-2012)</b>	
<ul style="list-style-type: none"> <li>• ITK validation for red ants control in cole crops</li> <li>• Organic control of leaf blight in tomato</li> <li>• Control of ginger rot through <i>Trichoderma</i> spp.</li> <li>• Management of rice blast by application of Tulsi/ Bael extract @25 gm/litre of water</li> <li>• Brewery waste for animal feed</li> <li>• Fish farming in Jalkund</li> </ul>	Sponsored by ATMA, East Sikkim
<b>Short Term Researchable Issues (2012-2013)</b>	
<ul style="list-style-type: none"> <li>• Blight disease management in large cardamom through <i>Trichoderma</i> sp.</li> <li>• Varietal performance of pineapple under low hills</li> <li>• Formulation of balanced ratio for dairy cattle by incorporation of spent malt.</li> <li>• Winter management of backyard poultry.</li> <li>• Drought resistant variety of mustard</li> </ul>	Sponsored by ATMA, East Sikkim

<ul style="list-style-type: none"> <li>• Varietal trial on Buck wheat</li> <li>• Multi locational trial on horse-gram</li> </ul>	
<b>Resource person trainings</b>	
Organic production technology of baby corn on 10 <sup>th</sup> Feb, 2011 at Pakyong, Gangtok	Organized by SAMETI and sponsored by ATMA
Slaughter house improvement for better quality meat and safer environment for butchers of Sikkim on 26 <sup>th</sup> July, 2011	Indian Institute of Crop Processing Institute, Ministry of Food Processing Industry, Govt of India
Dairy management and production on 18 <sup>th</sup> November, 12	Deptt. of A.H. LH & VS, ATMA, East Sikkim under ATMA
Backyard poultry production on 19 <sup>th</sup> November, 12	Deptt. of A.H. LH & VS, ATMA, East Sikkim under ATMA
Bio- security in poultry farming on 28 <sup>th</sup> November, 12	Deptt. of A.H. LH & VS, ATMA, East Sikkim under ATMA
Workshop on “Poultry farming with improved birds” on 8 <sup>th</sup> February, 12	Invited by Deptt. of Forest, Govt. of Sikkim
Training to the EF of Deptt. of AH, LF & VS, Govt. of Sikkim on “Hatchery Management” on 23 <sup>rd</sup> May, 12 “Scientific feeding and disease management of pig” on 25 <sup>th</sup> June, 12 and “Preparation value added chicken meat” on 29 <sup>th</sup> August, 12	Invited by Deptt. of AH, LF & VS, Govt. of Sikkim
Training for the farmers and rural youth of different villages of East Sikkim on “Scientific pig farming” on 8 <sup>th</sup> June, 12, “Production and processing of value added poultry products” on 22 <sup>nd</sup> June, 12, “Scientific goat farming” on 26 <sup>th</sup> June, 12, “Production of clean milk and demonstration of milking method” on 25 <sup>th</sup> July, 12 and “Scientific dairy management” on 30 <sup>th</sup> August, 12	Invited by Deptt. of AH, LF & VS, Govt. of Sikkim under the sponsorship of ATMA, East Sikkim
Training to the farmers on “Rural Poultry Production with Improved Birds” in different villages of East Sikkim viz. Barapathing, Lok Chujasenpur, Lingtam Q-khola on 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> August, 12 and North Sikkim viz. Lower Dzongu, Lingdam and 4 <sup>th</sup> Mile on 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> 2013 respectively.	Invited by Deptt. of Forest., Govt. of Sikkim under IWMP project
Training programme on “organic disease and pest management” during 27 <sup>th</sup> -28 <sup>th</sup> February, 2013	Organized by Sibin (NGO) and sponsored by NHP

Training on tillage management in paddy on 5 <sup>th</sup> May, 2012	Deptt. of FS &AD, Govt. of Sikkim
Training on Ginger and Sikkim mandarin on 9 <sup>th</sup> July, 2012	Under ATMA, east Sikkim
Training on SRI at Rey Mindu 9 <sup>th</sup> May, 2012	NABARD sponsored under UPAS, Gangtok
<b>Exploration and collection of germplasms</b>	
An exploration and Collection of <i>Alliums spp.</i> (Wild and Cultivated) germplasm from four districts of Sikkim including Sub Division of Darjeeling, West Bengal was made during September 07-22 <sup>nd</sup> , 2012	A collaborative mission under undertaken by NBPGR, R/S Bhowali; Directorate of Onion and Garlic Research, Rajguru Nagar, Pune (MS) & KVK (ICAR, Sikkim Centre), Ranipool, East Sikkim
An exploration and Collection of <i>cucurbitaceous crops</i> (Wild and Cultivated) germplasm from four districts of Sikkim was made during October, 2012.	IIVR, Varanasi, NBPGR, New Delhi in collaboration with KVK, East Sikkim, Ranipool