

ACTIVITIES OF KRISHI VIGYAN KENDRA SOUTH TRIPURA (2012-13)

Krishi Vigyan Kendra (KVK) is a district level institution (Farm Science Centre) engaged in transfer of latest agricultural technologies to the end users for bridging the gap between production and productivity. It works through partnership mode with farmers, allied departments and agencies. The KVK, South Tripura was established on 30th May 1984 under the administrative control of the ICAR Research Complex for North Eastern Hill Region. Since inception this KVK has been endeavouring for the upliftment of socio economic condition of the farming community of the district through scientific intervention in the agricultural and allied sectors.

FACULTY

The KVK is having well-experienced faculty (Program Coordinator & SMS) specialized in the discipline of Soil Science, Agronomy, Plant Protection, Home Science, Fisheries and Agril. Engineering. In addition, the resource person/experts in various agricultural and allied sectors field are being invited from ICAR, and development departments, organization, etc.

On Farm Testing (OFT): To refine the generated technologies to suit the local situations, "On Farm Testing" is being carried out with farmers' participation. Technology developed by ICAR, SAUs and other concerned

FACILITIES

Besides demonstration farm (10 ha) of crops, vegetables, fruit orchard, fishery, piggery, poultry and integrated farming system the KVK having facilities like, Soil Testing Laboratory, Library, Computer Room, Horticulture Nursery Greenhouse, etc.

SERVICES

Training Programmes: Training programmes are offered by KVK in the fields of agriculture, plant protection, home science, fisheries and agril. engineering discipline. The programmes are planned in advance of the ensuing agricultural season taking into consideration the cropping pattern and farming system. Training conducted during the year 2012-13 is given below:

Discipline	Courses	Participants
Agronomy	23	635
Fisheries	21	409
Home Science	8	193
Plant Protection	4	75
Agril. Engineering	10	195
Total	66	1507

organization are assessed or refined under local condition (micro-climate). This year six technologies were assessed and two technologies were refined covering an area of 21 hectare as per list given below:

On Farm Trials (2012-13) conducted by KVK, South Tripura

Sl/No.	Name of the Technology	Thematic Area	No. of Trials	Area (ha)
1.	Nutrient management practices under different stand establishment method in rice	Integrated Nutrient Management	67	17.84
2.	Varietal evaluation of potato (var. Kufri Jyoti)	Varietal Performance	5	1.00
3.	Fish culture in small cages	Pond Management	5	--
4.	Popularization of animal drawn potato digger	Farm Mechanization	3	1.32
5.	Household food security through nutritional gardening	Nutritional Gardening	3	--
6.	Drinking water quality	Water purification	3	--
7.	Effect of evaluation of lime in maize-groundnut intercropping system	Soil Amendment	5	1.00
8.	Paddy-cum-fish culture	IFS Modules	2	0.24
	Total		93	21.40

Front Line Demonstrations: The Front Line Demonstrations on oilseeds and pulses have been in implementation, aiming at increasing the productivity of crops like rice, maize, groundnut, mustard, black gram, lentil, vegetable pea, potato, IFS, farm mechanization, agro-forestry,

etc by way of introducing low-cost technologies including introduction of new varieties/hybrids. In the year 2012-13, altogether 329 FLDs were undertaken covering an area of 72 hectare. The details of FLDs are given below:

Front Line Demonstrations Conducted by KVK, South Tripura (2012-13)

Sl. No	Crop/System	Name of Technology	No. of Trials	Area (ha)
1.	Rice	Improved variety of rice (var. Ranjit)	117	36.48
2.		Improved variety of rice (var. MTU-1010)	15	3
3.		Demonstration on Rice (var. Gomati / TRC-2005-1)	40	8
4.	Maize	Improved variety and popularization of maize in the tilla land of South Tripura	18	3
5.		Effect of lime application in maize	15	3
6.		Demonstration of Rabi Maize (var. HQPM-1)	8	1
7.	Pulses	Demonstration of Blackgram (var. PU-31)	6	1
8.		Demonstration of veg pea (var. Arkel)	14	1
9.		Demonstration of Lentil (var. WBL-77)	16	3
10.	Oilseeds	Improved variety of Sesamum	19	3
11.		Demonstration on Rabi groundnut	12	2
12.		Demonstration of Mustard in the Rice fallow	12	2
13.	Fodder	Cultivation of perennial fodder crop - Cumbo Napier	4	0.5
14.	Tuber crops	Demonstration on potato based cropping system	20	1.68
15.	IFS	Pig-cum-fish farming	3	0.48
16.		Duck-cum-fish farming	3	0.48
17.	Farm	Cono Weeder (Interculture)	3	1.92
18.	Mechanization	Location specific Drudgery reduction technology	5	--
19.	Agro-forestry	Demonstration of fruit based Agro-forestry system	3	0.50
		Total	333	72.04

Extension activities: Krishi Vigyan Kendra's organized number of extension activities such as Kisan mela (ATMA), Exhibitions, Exposure visits, Field days, Group meetings, Technology Week, Method demonstrations, Soil health camp, Advisory services, Farmer's interaction programmer, Group meetings, etc. Farmers on exposure visit can see KVK farm and demonstration units on various crops, vermicompost, mushroom; horticultural orchards & nursery; integration of livestock with fisheries; and agriculture implements. A list of extension activities conducted during the year 2012-13 is given here:

Nature of Extension Activities	No. of Activities	No. of Farmers
Field Day	2	263
Kisan Mela	2	300
Exhibition	3	1900
Method Demonstrations	6	166
Group meetings	6	109
Lectures delivered	11	242
Scientific visit to farmers field	64	362
Farmers visit to KVK	48	556
Film Shows	6	86
Diagnostic visits	1	6
Soil health camp	1	32
Advisory Services	4	162
Farmer's-Scientist Interaction	2	300
Radio Talk	4	--
Kisan Mobile Advisory Services	98	254
Total	260	4801

MAJOR ACHIEVEMENTS (2012-13), KVK, SOUTH TRIPURA

1. Inauguration of Hi-tech Horticulture Nursery-cum-Green House and Distribution of Piglets & Seeds to the Farmers

Sri Jitendra Choudhury, Rural Development Minister, Govt. of Tripura inaugurated a Hi-tech Horticulture Nursery-cum-Green House established under MGNREGA programme of Bokafa Block at Krishi Vigyan Kendra, Birchandra Manu, South Tripura on 11th June 2012. KVK in collaboration with ICAR also distributed about 1000 kgs of rice seeds (Ranjeet, MTU 1010, Gomati, & Naveen), 150 kgs each of Groundnut (ICGS 76) and Maize (Hybrid) seeds, 30 kgs each of Bhendi (Arka Anamika) & Cowpea (Kashi Kanchan) seeds to about 300 farmers of South Tripura & Gomati district and piglets (Ghungru) to 5 tribal farmers with housing facility under different demonstration projects (NICRA & TSP) of ICAR-NEHR. Sri Himanshu Roy, Chairman, South



Tripura Zilla Parishad, Dr. M. Datta, Joint Director, ICAR (Tripura Centre), Dr. A.K. Singh, Programme Coordinator (KVK), Deputy Directors of Agriculture & Horticulture, DDM of NABARD, Scientists of ICAR, farmers, staffs of KVK and Journalists of Press & Media were present on this occasion. This nursery has the capacity to produce more than 50000 fruits and vegetable planting materials per year.

2. Skill Orientation Programmes on Fish and Mushroom Farming in South Tripura

Two Skill Orientation Programmes on Fish and Mushroom Farming was organized in collaboration with ICAR Research Complex for NEH Region (Tripura Centre) under Tribal Sub Plan (TSP) project. About 30 tribal farm women of South and Gomati district of Tripura were trained practically and 8 sets of spawn and cube making materials were distributed to each woman for production of oyster mushroom in their respective villages. Under backyard aquaculture, about 41 fish farmers of tribal villages of South Tripura district was trained. Each farmer was given 500 fingerlings of Rohu,



Catla, Mrigal, Big Head Carp and Silver Carp for fish production in their pond. Dr. M. Datta, Joint Director, Dr. A.K. Singh, Programme Coordinator, Dr. S. Biswas, Senior Scientist, Dr. B. Debnath, SMS (Fishery), L. Sahoo and C. Debnath, Fishery Scientists of ICAR-NEHR were present during the programme.

3. Nutrient Management for Increased Rice Productivity in Tripura

Krishi Vigyan Kendra of South Tripura district conducted demonstration on Nutrient Management in Rice Crops in two tribal villages (Laxamicherra and Garjee) covering about 30 ha area during Kharif season 2012. The main

objective of the demonstration was to show the different system of nutrient management under all the three system of rice cultivation i.e. SRI (System of Rice Intensification), ICM (Integrated Crop Management) and Conventional (traditional) at one place with optimum use of fertilizer without affecting the soil health.

To show the success of demonstration to the farmers of other villages, a **Rice Field Day** was organized on 10th Nov 2012 at Laxamicherra village of South Tripura. Sri Agohre Debbarma, Hon'ble Minister of Agriculture as Chief Guest and Sri Munindra Reyang, Minister of Home (Jail) and Sri Himangsu Roy, Chairman, Zilla Parishad, South Tripura as Guest of Honour attended the Rice Field Day programme. More than 200 farmers from Laxamicherra, Garjee, Sabroom, Dudhpuskarini, Bagama and Mirza village visited the rice field and observed the impact of different system of nutrient and crop management. Other dignitaries who were present in the programme were Dr. M. Datta, Joint director, Dr. R.C. Samui, Principal,



Agriculture College, Dr. A.K Singh, Programme Coordinator, Deputy Director (Agriculture) and Suptd. of Agriculture (Bokafa Block), Scientists of ICAR-NEHR, SMS of KVK (South Tripura) and Coordinators of Farmer's Club.

4. Food grain Storage and Quality Management in Tripura

Krishi Vigyan Kendra (KVK), South Tripura in collaboration with Indian Grain Storage Management & Research Institute (IGMRI) organized two days training-cum-workshop on “Scientific Methods of Food grain Storage, Quality Management & Sustainable Development practices in Agriculture” under FCI's Corporate Social Responsibility programme for farmers of South Tripura and Gomati district during 8-9 January 2013 at Udaipur. The expert from IGMRI, FCI and KVK provided the information on guidelines for procurement, insect-pest management during storage, rodent control, foodgrain storage structure and Good Agriculture Practices (GAP). Jagdish Chandra, Assistant Regional Director (Quality Control Cell, Min. of Food & Public Distribution, Govt. of India, Kolkata); P. Kilam & B.M. Singh (IGMRI, Hapur, U.P.), Beni Gopal



Bhuyan, Area Manager (FCI, Govt. of India, Agartala, Tripura); Dr. A.K. Singh, Programme Coordinator, T.A. Khan, Prog. Asstt. and M. Chakraborti, SMS (Agronomy) of KVK (South Tripura) were the resource person for this programme. Dr. M. Datta, Joint Director and Scientists of ICAR, Tripura Centre was present during valedictory function and certificates distribution. Altogether 50 farmers and farm women from Bagma, Mirza, Dudhpuskarini, Sataria, Chandrapur, Garjee, Laxamicherra, Sabroom and Vaisnavicherra village participated in this programme.

5. Community Fish Smoking Kilm

The Skill Orientation Programmes on Community Fish Smoking Kilm (CoFiSKi) was organized in collaboration with Central Institute of Fisheries Technology & ICAR-NEHR. A fabricated CoFiSKi is installed at KVK, Birchandra Manu, South Tripura by the Scientists of CIFT (ICAR). This was followed by



training-cum-demonstration to about 50 farmers (tribal & non-tribal) including farm women of South Tripura and Gomati district. Sri A.K. Panigrahi, Technical Officer and Smt. Jesmi Debarma, Scientist from CIFT demonstrated the technology practically and given one packet

smoked (dried) fish samples to each farmer. Dr. A.K. Singh, Programme Coordinator, L. Sahoo and C. Debnath, Fishery Scientists of ICAR, SMS & Prog Asstt. of KVK were present during the programme.

6. SAC Meeting of KVK, South Tripura

The 6th meeting of the Scientific Advisory Committee (SAC) was held on 28th June 2012 at Krishi Vigyan Kendra, South Tripura, Birchandra Manu. The members who participated in the meeting were Dr. M. Datta, Joint Director, ICAR (Tripura Centre), Dr. U.S. Saikia, Senior Scientist, ZPD (Zone-III), Dr. G. Singh Yadav, Scientist (ICAR), Dr. A. Chakraborti, SA, Agriculture Department, Mrs. D. Choudhury, Horticulture Officer, Horticulture Department, Sri Diganta Das, DDM, NABARD, Dr. Dilip Majumdar, ARD Department, Govt. of Tripura, Dr. Patel & Dr. D. Das Programme Coordinators of West & North Tripura. Among the farmer members, Biswajit Reyang (Laxamicherra village), Sri Patwory (Garjee village), Smt Priti Roga and Smt. Sangma (Battali village) along with all Subject Matter Specialists also participated in the meeting also participated in the meeting. In the year 2011-12, the KVK had organised 9 On-Farm Trials (OFTs)



and 215 Frontline Demonstrations (FLD) in field crops, vegetables, home Sc., IPM and fishery. Besides field trials, KVK organized 102 training programmes covering 1636 farmers and farm women; 325 rural youth and 241 extension personnel, and 220 extension activities. In addition, KVK produced improved seeds of field crops (2.45 q) and horticulture planting materials (5300 nos.) and tested 560 soil samples. The members appreciated the progress made by the Krishi Vigyan Kendra.

7. Success Story

i) Successful Entrepreneurial Initiative on Duck-cum-Fish Farming

KVK, South Tripura established a successful IFS module on "Duck-cum-fish Integrated Farming" at Bagma village. The total farming system area is based on approximately 0.20 ha area (0.16 ha area pond water area and 0.04 ha area under duckery unit). The total expenditure imputed for the demonstration unit was approximately Rs. 33,000 and a net profit of Rs 47,000 was realized from this entrepreneurial demonstration during year 2012- 2013. The demonstration was undertaken under the NICRA Project.



ii) Expansion of Maize Farming in South Tripura

During the year 2011-12, maize var. RCM-1-3 was popularized in Dudhpushkarini, Mirza, Chandrapur, Murasinghpara, Palatana, Laxmicherra, Garji of the district covering an area of 7 hectares. Again in the year 2012-13, FLD has been extended in the villages like Ratanpur and Sabrum covering an area of another 7 hectares. Using the improved composite variety RCM-1-3 with scientific package of practices, farmers obtained average yield up to 25.31q per hectare and increase in yield over local check (18 q/ha) was 40.61%. In case of hybrid variety DMH-849, yield obtained was 41.7 q/ha which was 32.85 per cent higher over local check (28 q/ha). Similarly, the hybrid



var. HQPM-1 yielded 45.66 q/ha and increase in yield over local check (28 q/ha) was 38.67 per cent. Farmers could earned from Rs. 21000 to 50000 per ha after selling the maize cobs.

8. New Projects launched

i) A value chain on Jackfruit and its value added products

This project has been designed with the three major objectives viz., i) Identification of superior jackfruit genotypes for fresh fruit/table purpose, vegetable use, and value added or processed product development; ii) exchange of

ii) Establishment of Eco-Hatchery for Quality Singhi and Kaoi Fish Seed Production

A RKVY project has been designed based on the suggestions made by farmers to help them with quality seed by establishing a hatchery that will be managed by KVK and with the active participation of farming community. The hatchery

germplasm/quality planting materials between North East and South; and iii) supply chain development and marketing promotion. The project shall be implemented in collaboration with UAS, Bangalore under the financial assistance by Department of Bio-Technology (DBT), Govt. of India.

will mainly focus on species that are in need of farmers like Singhi and Kaoi and gradually aim to introduce easy to culture other species also. Most importantly, the proposed facilities will serve as a training resource for the rural youth in the district.

9. Publications

Technical Books

- i) Management of Soil Health and Fertility: Experience of On-Farm Demonstration in Tripura, A.K. Singh, M. Chakraborti, Baharul Majumder and M. Datta, KVK, South Tripura
- ii) Homestead Farming System – Small Farm, Big Return, A.K. Singh, N.P. Singh, M. Datta and S.V. Ngachan, KVK, South Tripura

Technical Report

- i) Technological Intervention by KVK for Sustainable Agriculture Development in South Tripura during 11th Five Year Plan (2007-2012), A.K. Singh et al.

Technical Folders

- i) Scientific Cultivation Practices of Maize (In Bengali বিজ্ঞান সম্মত পদ্ধতিতে ভুট্টার চাষ).

Popular article

- i) Rakamari Sak Sammandhe Kichu Katha”(Bengali), Souvenir of flower show 201, Agartala

Newspaper coverage

- i) Chasbash o Krishi Vigyan Kendra”, Dainik Sambad, 16 May 2012
- ii) Pukhure jal udbhit o aagasha niyantran, Dainik Sambad, 13 June 2012

10. Participation in Seminar, Workshop, Meetings, Trainings, etc.

Dr. A.K. Singh, Programme Coordinator attended-

- KVK review meeting during 10-11 April, 2012 at ICAR Research Complex for NEH Region, Umaim, Meghalaya
- Annual Zonal Workshop of KVK, Zone-III during 25-27 April 2012 at Imphal, Manipur
- SAC meeting of KVK South Tripura on 10th May 2012 at Chebri, Khwai, West Tripura
- Valedictory function of training on “Capacity building on pig farming under climate change scenario & distribution of piglets under NICRA on 25th May 2012 at ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra
- Workshop on “Frontier in Dairy Farming in Tripura” under NICRA on 5th June 2012 at ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra.
- Orientation programmer of SMS of KVK during 15-16 June, 2012 at AAU, Khanapara, Guwhati as Resource person organized by ZPD, Zone-III.
- Seed variety release ceremony on 22nd June 2012 at ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra.
- Workshop on “Agriculture Industries” on 3rd July 2012 at College of Fisheries, Lembucherra, West Tripura
- ATMA governing meeting on 23 July 2012 at DM Office, Udaipur, Tripura
- HRD programme on “Entrepreneurs development in Agriculture & Allied sectors” during 7-8 Aug, 2012 at IIE, Guwahati, organized by ZPD, Zone-III.
- ZPD Technical core committee meeting during 8-9 Oct 2012 at ZPD, ICAR, Umaim, Meghalaya
- Training programme on “National Project on Soil Health and Fertility Management” at ICAR, Lembucherra as resource person on 10th Oct 2012
- National Conference of KVK during 20-22 Nov 2012 at Punjab Agriculture University, Ludhiana, Punjab
- ATMA Kisan Mela during 13 & 22 Dec 2012 at Belonia and Udaipur.
- Launching of DBT project on “A value chain on Jackfruit and its value added products” on 27th Dec 2012 at UAS, Bangalore
- Farmer-Scientist Interaction Programme on “Scientific Method of Food Grain Storage, Quality Management and Sustainable Development Practices in Agriculture” under FCI’s Corporate Social Responsibility Programme as resource person on 9th Jan 2013 at Udaipur.
- District Agriculture Contingency Plan meeting for Tripura & KVK Interface Meeting on 28 Jan 2013 at ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra
- Action plan formulation meeting of KVK during 4-6 March 2013 at AAU, Khanapara, Guwahati organized by ZPD, Zone-III.

Mandira Chakraborti, SMS (Agronomy) participated in-

- Orientation programme of SMS of KVK during 15-16 June, 2012 at AAU, Khanapara, Guwhati organized by ZPD, Zone-III.
- Training programme on “National Project on Soil Health and Fertility Management” at ICAR, Lembucherra on 10th Oct 2012
- Training programme on “Tuber Crop” on 16th Oct 2012 at ICAR, Lembucherra organized by CTCRI with Tribal Farm Woman of South Tripura.
- Meeting on “National Food security Mission” on 27th Nov 2012 at Belonia DM office
- Farmer-Scientist Interaction Programme on “Scientific Method of Food Grain Storage, Quality Management and Sustainable Development Practices in Agriculture” under FCI’s Corporate Social Responsibility Programme on 9th Jan 2013 at Udaipur.

Biswajit Debnath, SMS (Agronomy) participated in-

- Orientation programme of SMS of KVK during 19-20 June, 2012 at AAU, Khanapara, Guwhati organized by ZPD, Zone-III.
- Training on “Advances in Fishery Management & production in North East “during 5-7 Oct 2012 at CIFRI, Regional Centre, Guwahati, Assam.

- Training on “Climate Change and Agriculture “during 15-19 Oct 2012 at ICAR Research Complex for NEH Region, Umiam, Meghalaya

Diganta Sharmah, SMS (Plant Protection) participated in-

- Orientation programme of SMS of KVK during 15-16 June, 2012 at AAU, Khanapara, Guwhati organized by ZPD, Zone-III.

T.A. Khan, Programme Assistant (Agril. Engg) participated in –

- Training on “Planning & Management of Integrated Watershed Management project, Climate change & Agriculture “during 6-8 Nov 2012 at ICAR Research Complex for NEH Region, Umiam, Meghalaya.
- District Agriculture Contingency Plan meeting during 17-19 Jan 2013 at ICAR Research Complex for NEH Region, Umiam, Meghalaya