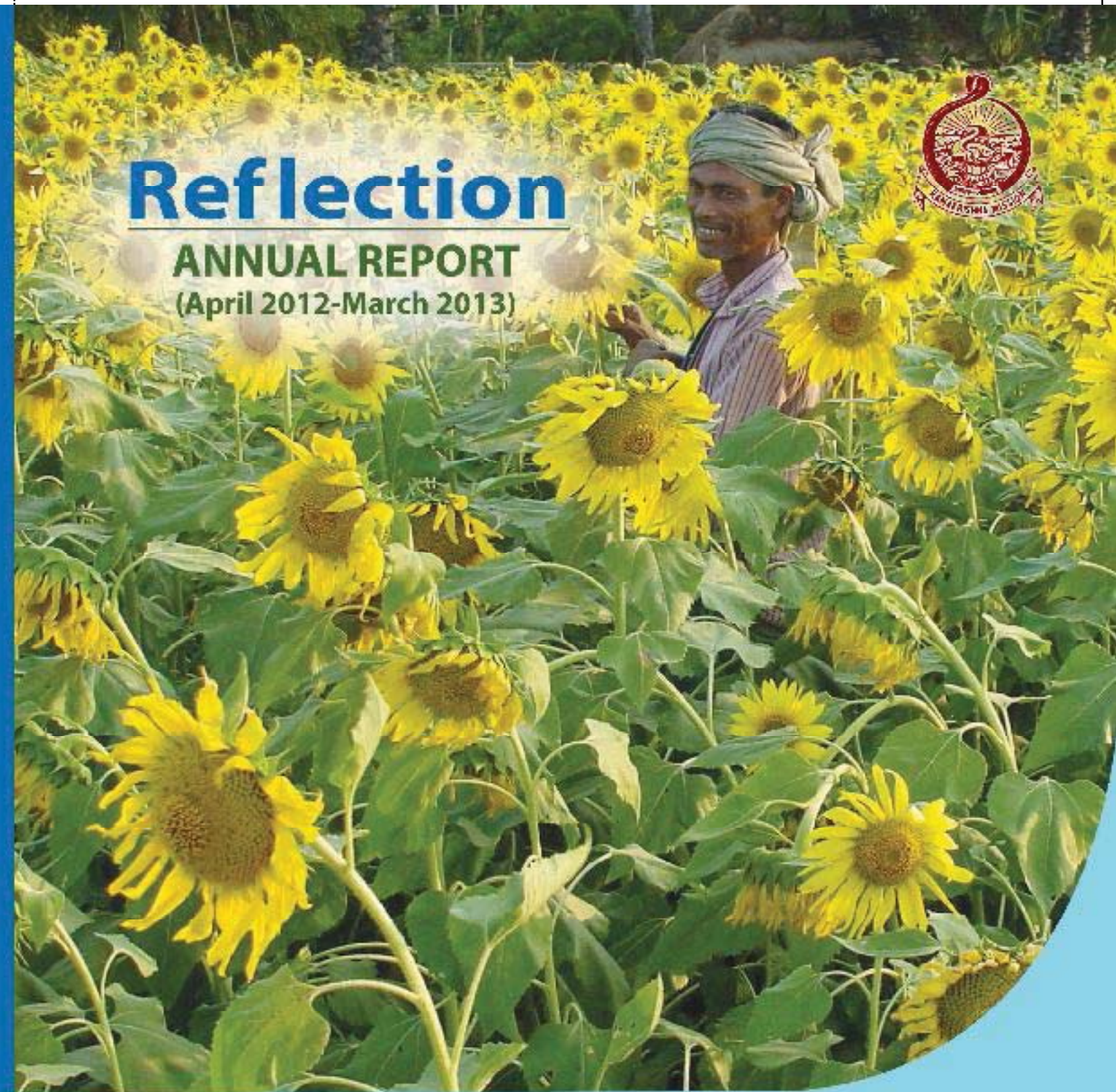




"All nations have achieved greatness by paying proper respect to women and a country can't progress by neglecting its womenfolk, just as a bird can't fly without one of its wings"

- Swami Vivekananda



**Agricultural Training Centre
&
State Agricultural Management & Extension Training Institute (SAMETI)**

RAMAKRISHNA MISSION ASHRAMA

NARENDRAPUR, KOLKATA - 700 103

REFLECTION

ANNUAL REPORT

[April 2012- March 2013]



Agricultural Training Centre

&

State Agricultural Management & Extension Training Institute (SAMETI)

RAMAKRISHNA MISSION ASHRAMA

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FOREWORD

In a letter written on 19 March, 1894 from USA to his brother disciple Swami Ramakrishnananda, Swami Vivekananda laments, indicating India 'A country where millions of people live on flowers of Mohua plant'. The then widespread indigence among our masses was manmade. The usurpers exploited the nation to the hilt to make themselves wealthier at the cost of starving myriads. There was, eventually, acute shortage of food, resulting in malnutrition and intermittent famines. They perpetuated an economy of attrition, in order to extort to the maximum, Swamiji thought there was no relief for the poor, unless they were being fed and educated well first. The idea stole his sleep. He inspired us to gird our loins to fight against foreign oppression and abysmal poverty.

One hundred and twenty years on, situations have changed and we perhaps stand in a better stead in some ways. Still, we have hardly any space to sow our wild oats and stay complacent, boasting sufficiency in food. For, the challenges have worn new dimensions – they have become exorbitantly subtle and tricky at present. Apparently, there is as such no food shortage in the country now. But the unbrioted population growth is a robust threat. To cope with its mounting pressure there is a serious requirement of sustainable supply of adequate quantities of food grains.

Currently, oscillating between capricious monsoon and market, agriculture is seldom free of hindrances for that accomplishment. The ironies of their predicaments are equally manmade as before – one for environment pollution and the other for corporate greed. To bring them to heel is an arduous task. Simple techniques and trainings alone could rescue the farmers from their ominous influences from time to time and set the country on a firm footing of agricultural productivity. They could cut a balance and keep it optimum through skillful peasants at all times. Unfortunately, in spite of great strides the nation has made, our farmers are yet the most vulnerable lot because of various socio-economic factors.

From its inception the Agricultural Training Centre (ATC) of our Ashrama is a humble endeavour to sympathetically stand beside them for their progress and, thereby, ultimately for agricultural development of the country. The ATC with its recent component i.e. the State Agricultural Management & Extension Training Institute (SAMETI) began journey more than four decades ago with a name (suggestive enough of its purpose) Gram Sevak Training Centre. Today, travelling miles, it offers them the latest knowledge and technology through scientific trainings and organizations in collaboration with appropriate central as well as state government departments. By dint of its different forums it takes the fruits of its researches to them, embracing the rural areas of the state of West Bengal. It sticks to the principle pronounced by Swami Vivekananda: if the mountain doesn't come to Muhammad, Muhammad must go to the mountain.

Now, this report of Agricultural Training Centre as well as SAMETI is a reasonably wide window that provides a convenient glimpse of its multifarious activities and highlights its achievements during the year 2012-13. Trust it would enlighten readers with necessary information regarding ATC's significant features.

May Bhagwan Sri Ramakrishna fill us with a holy urge to run ATC more efficiently, for our spiritual emancipation and for the emancipation of our farmers as well.

(Swami Sarvaganda)
Secretary

PREAMBLE

Swami Vivekananda expressed with determination, *“So long as even a single dog in my country is without food, my whole religion will be to feed it.”*

It is true that after our independence, we have enough reasons to be proud of doing some tasks which has lead our country to get rid of the menace of hungry. Nevertheless, at the same time we have to admit that there is no reason to be complacent, when the human development report shows that about 40 percent of our children is still malnourished. We can't deny that it is a 'Himalayan' task to feed to a standing population 123 cores with growth rate of 1.41 percent every year. This becomes more critical when we are with limited and decreasing available land for cultivation. So we have to explore the prospects and potentiality with continuous efforts. Here lies the importance of human resource development, which happens through 'capacity building' of stakeholders of Indian agriculture.

India has a great strength of its vast bio-diversity, huge natural resources, which are said to be God-gifted for Agriculture. Now we have to make our 'Nerve strong' to take the responsibility of converting those resources in to product through wise and effective human interventions.

The Agricultural Training Centre (ATC) being as a part of Ramakrishna Mission, has established its credibility of sincere service to the agricultural and rural communities and so to the State through its 'man making' efforts by different 'Capacity building' programmes. As a result, it has been conferred with the prestige of carrying responsibility of the 'State Agricultural Management and Extension Training Institute (SAMETI)' since 2005. At recent time, it is empowered as the Nodal Training Institute for capacity building in the sector of Agri-clinic Agri-business to give a further boost to the growth and development of agriculture as well as the farmer of the state.

During the reporting period (April 2012 - March 2013), 87 numbers of on station programmes (44 types) have been organized in which 986 nos. of rural level extension workers, 833 nos. of middle level extension functionaries, 664 nos. of apex level extension functionaries and 686 nos. of participants have participated in different in workshop, seminar. A total of 3169 participants attended in different courses with 9904 number of trainee days.

In carrying out these important responsibilities, the institute received strong support and collaboration from all the departments and Universities of the State associated with agriculture, animal resource, fisheries, horticulture etc. Different ICAR institutes including KVKs; MANAGE, SAMETIs of different states also extended their cooperation. The private sectors related to agriculture and allied sectors along with different NGOs also helped a lot to make the plan in to reality.

In the year of 150th Birth Anniversary of Swami Vivekanada, we pray to Sri Sri Ramakrishna and Sri Ma Sarada Devi to inspire all of us in the spirit of Swamiji for building a 'New India'.

Manas Ghosh
Principal & Director

INTRODUCTION

Swami Vivekananda said '*All the wealth of the world cannot help one little Indian village if the people are not taught to help themselves. Our work should be mainly educational, both moral and intellectual*'

The farmers are not getting price of their produce and are becoming less interested in continuing agriculture. Percolating agricultural updates in more than six lakhs villages in the country on regular basis is a tough job. On the other hand, we have to feed some fifty thousand new mouths every day, while the cultivable land is shrinking with a potent threat of degradation of land, polluted environment and loss of biodiversity because of injudicious use of agricultural inputs.

Education on agriculture, particularly to the farming community and extension functionaries becomes very crucial for agriculture and continuous development in India. This was rightly understood at the very beginning of our independence.

Ramakrishna Mission, dedicating in the service of mankind with the motto 'Atmano mokshartham jagadhitayacha' started its journey in 1897, more than hundred years ago. Being head quarter at Belur Math, Howrah, by the side of Ganges, it has been spreading its Mission through its branch centres, all over India and abroad.

In the year 1956, the Narendrapur branch centre was established with the activities on education along with agriculture and rural development in surrounding villages.

Activities on agriculture and rural development of this branch centre got momentum, when Department of Agriculture and Community Development, Govt. of West Bengal came forward to run one of the Gram Sevak Training Centres (GSTC) under this Ashrama in 1967.

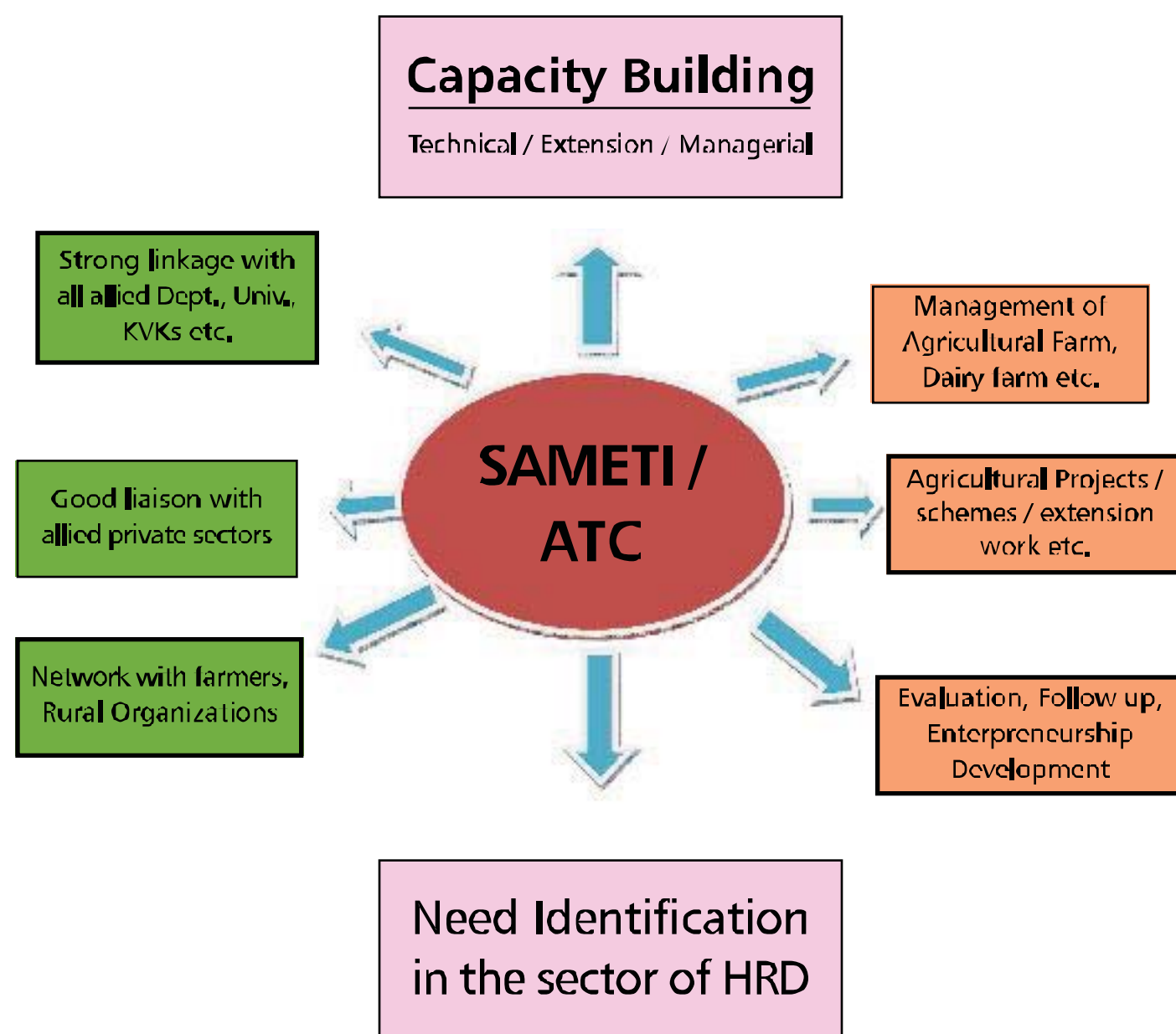
Under the serene atmosphere of the Ashrama, the centre started its 2-yrs course for 'Gram Sevak', the grass root level extension service providers for village community under the State Government.

With the change of need in Rural Bengal, the thrust area also changed. In 1987 the 2-yrs course ultimately modified into 6-month Pre-service and 6-month In-service courses, for the 'Krishi Prayukti Sahayak (KPS)', the grass root level agricultural functionaries. The thrust area became more specific to agricultural technology and its dissemination. The institute renamed as 'Agricultural Training Centre' or in brief A.T.C. All the specific areas of Agriculture like - Agronomy, Soil Science, Plant Pathology, Entomology, Horticulture, Animal Husbandry etc became the learning issues.

Learning by seeing and practicing through well-managed agricultural farm, dairy, poultry, orchard, medicinal plant garden etc, and above all with the 'inspiration of service' of Ramakrishna Mission; the passed out trainees began to produce excellence in Public Service.

Seeing the institute's consistent excellence and effectivity in human resource development, it has been given greater responsibility of 'State Agricultural Management and Extension Training Institute' (SAMETI) in 2005. SAMETI is for updating and upgrading knowledge, skill and attitude of block and district level functionaries of Agriculture and allied sectors in the area of extension and management. This was a part of the nation-wide drive of reformation of extension system in Agricultural Sector.

SAMETI is now a well-known institute in West Bengal, particularly in Agriculture and allied sectors. Keeping pace with the demand from the farming community, public institutions, private sector, NGOs etc; the institute has been trying to provide its most sincere service. The areas like technology dissemination, idea innovation, supporting implementation of State and Central Sector schemes, crucial orientation of the newly recruited persons in the sector of extension, co-ordination among institutions, convergence of activities, linking Private -Public -Farmers and motivating rural youths in entrepreneurship development are now being addressed.



CAPACITY BUILDING PROGRAMME

As a part of its core activities, the institute is offering various types of human resource development activities through different level of training courses, seminar, workshop in close co-ordination with the different departments of state government and others. The total capacity building programme organized in this year can be classified as following:

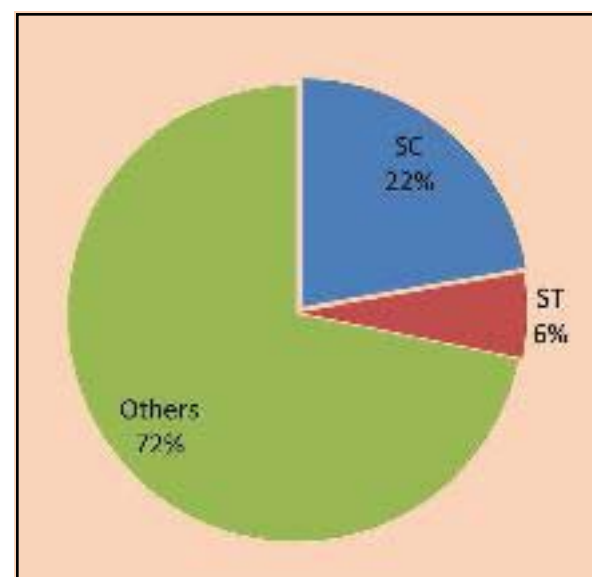
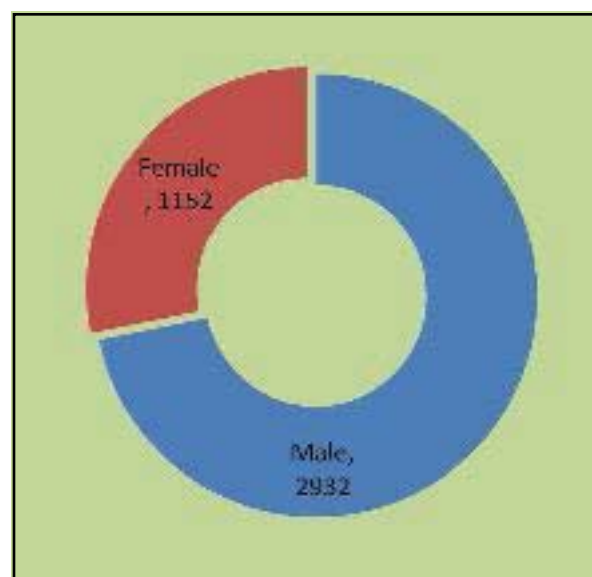
Capacity Building Programmes

- A. Apex level Extension functionaries
- B. Middle level Extension functionaries
- C. Rural level Extension workers
- D. Special Extension courses
 - Post Graduate Diploma in Agricultural Extension & Management (PGDAEM)
 - Agri-Clinic & Agri-Business Centre (AC-ABC)
- E. Workshop / Seminar etc.
- F. Exposure Visit
- G. Field Training
- H. Agricultural Exhibition & 'Mela'

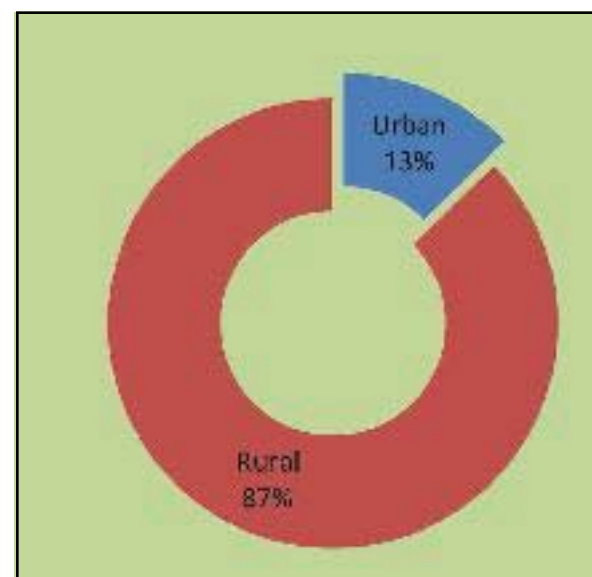
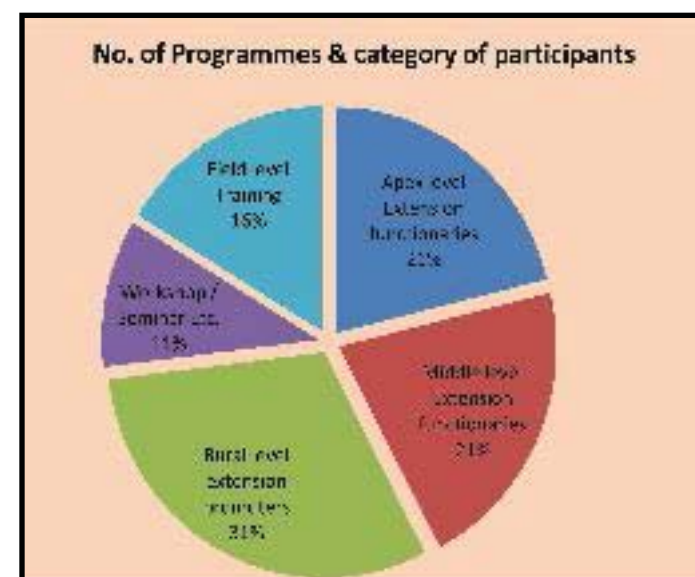
Sl. No.	Programmes for different level	No. of Programme	No. of Types of Programme	No. of participants	No. of Trainee Days
1	Apex level Extension functionaries	22	14	664	1692
2	Middle level Extension functionaries	22	14	833	3815
3	Rural level extension workers	32	6	986	3414
4	Workshop / Seminar etc.	11	10	686	953
	Total (in campus)	87	44	3169	9904
5.	Field Level Training	17	5	915	915
	Total	104	49	4084	10819

"The Man who works for others, without any selfish motive, really does good to himself!"

Sri Ramakrishna



Total Participants in various programmes in 2012-13



A. Programmes For Apex Level Extension Functionaries:

For the apex level extension functionaries, i.e. for the district and block level extension functionaries, the major courses conducted are - Mainstreaming Gender Concerns in Agriculture & Allied Sectors, Hort-Net for monitoring of Horticultural schemes, Review of Extension Reforms, PGDAEM Programmes, Management Practices in Agricultural Extension, Master Trainers Training on Key Technologies for Publicity campaign, Project Planning and Management in Agriculture, Seed production & Quality Assurance, Planning & Management of Sustainable Rural Livelihood, Review Meeting of state level ATMA, Programmes on 12th Plan Perspectives, TOT on Package of practices of Oilseed and Maize & ISOPDM implementation, Refreshers Training of Kissan Call Centre Level II Staff, Internship of Veterinary Final Year Students etc. Totally 22 such programmes (14 types) for this category have been conducted and 664 Apex Level Extension functionaries have participated.

Sl. No.	Title of programme / Training programme	Target Group	Duration (Day)	No. of Course	Male	Female	Total
1.	Mainstreaming Gender Concerns in Agriculture & Allied Sectors	District-Block level extn. officers from 6 districts of South WB	5	1	19	4	23
2.	Hort-Net for monitoring of Horticultural schemes	Dist. Horticulture officers, Dist. Information officers	1	1	35	0	35
3.	Extension Reforms Review	PD & DPDs	2	1	44	1	45
4.	PGDAEM Programmes	Enrolled candidates	5	4	71	0	71
5.	Management practices in agricultural extension	District / Block level extn. officers from 7 districts of WB	3	1	25	0	25
6.	Master Trainers Training on Key Technologies for Publicity campaign	District level Officers of West Bengal	2	1	40	0	40
7.	Project Planning and Management in Agriculture	District level Officers of West Bengal	5	1	18	5	23
8.	Seed production & Quality Assurance	Officers	3	1	30		30
9.	Planning & Management of Sustainable Rural Livelihood	District / Block level Officers of West Bengal	3	1	25	2	27
10.	TOT on Package and practices of Oilseed and Maize & ISOPDM implementation	Officers, NGO executives: from 4 districts of South WB	3	1	35	0	35
11.	Refreshers Training of Kissan Call Centre Level II Staff	Level II Staff of Kissan Call Centre	2	3	21	1	22
12.	Review Meeting of ATMA	DPDs of West Bengal	2	1	30		30
13.	Programmes on 12th Plan Perspectives	State level officers of Agri & allied dept	7	1	95		95
14.	Internship of Veterinary Final Year Students	BVSC student of WUIAS	4	4	132	28	160
				22	623	41	664

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain -- and the whole world is at your feet"
- Swami Vivekananda

"One should desire of God desirelessness. For desire alone is at the root of all suffering."
- Swami Vivekananda

1. Mainstreaming Gender Concern in Agriculture & Allied Sectors

Mainstreaming Gender is one of the issues in respect of proper use of human resources, particularly in agricultural sector. A 5-day training programme on 'Mainstreaming Gender Concern in Agriculture & Allied Sectors' was organized in collaboration with 'National Institute of Agricultural Extension Management (MANAGE)', Hyderabad, during 11-15 June, 2012. Different aspects of gender mainstreaming like, application of PRA for gender analysis, gender issues in agriculture, gender frame work-livelihood analysis, Govt. initiatives on gender, nutrition & health issues for farm women, women and land rights-implication on livelihoods were discussed in participatory mode. The faculties of SAMETI along with experts from University, Developmental organizations, MANAGE etc. acted as resource persons. Twenty three participants from the districts of, Murshidabad, Purulia, Birbhum, Nadia, South 24 Parganas, North 24 parganas etc. comprising block level extension functionaries from the Dept. of Agriculture, Animal Resource Development and NGOs participated in the programme. Theoretical discussion, group exercise, experiential learning process and field exercise were the methods of the training programme.



2. 'HORT - Net online Monitoring system in West Bengal'

For upgrading the knowledge and skill of the officers of the Dept. of Horticulture and Dept. of Information of Govt. of West Bengal on Electronic Monitoring system of different horticultural scheme, a 2-day training cum Workshop programme was organized during 07-08 June, 2012 in collaboration with Dept. of Horticulture and NIC, New Delhi. Honourable Minister In-charge of Horticulture and Food Processing Industries, Sri Ujjal Biswas inaugurated the 2-day programme on 'HORTNET- Online Monitoring System' in West Bengal.



Dr. R. Bardhan, Technical Director and Project Director, National Horticultural Mission- National Informatics Centre, Govt of India, Dr. P. Pramanik, Director of Horticulture, Govt. of West Bengal and Dr. K.K. Poddar, State Informatics Officer and Swami Supamananda, Secretary, Ramakrishna Mission Ashrama, Narendrapur were present in the

inaugural function. Thirty five officers from all the districts of West Bengal joined the programme and made it successful.

3. Programme on 'Extension Reforms Review.'

'Support to State Extension Programme for Extension Reforms (ATMA) Scheme' has been revised to make it more appropriate for implementation for better agricultural growth throughout India. Along with the extension

part, it obviously includes the linkage between 'Research and Extension' both at policy making, modality formulation and grass root level implementation. For review of the extension reforms programme, a 2-day workshop was organized at SAMETI on 20-21 December, 2012. Sri Subrata Biswas, Secretary, Dept. of Agriculture; Dr. Paritosh Bhattacharya, Director of Agriculture were present in the workshop. Project Directors, Deputy Project Directors and / or representatives from the district head quarters joined the workshop. Discussions were held on different issues like, 'Review & Operationalisation' of the ATMA scheme, regular report return specially, online submission of achievement data of ATMA programme in website. Forty five participants from most of the districts joined the programme.

4. PGDAEM Programmes



In order to professionalise public extension service for effective delivery and bridge the knowledge gap, MANAGE, Hyderabad launched a Post Graduate Diploma in Agricultural Extension Management (PGDAEM) in distance education mode for the agricultural and allied sector officers. In West Bengal SAMETI is coordinating the course for the West Bengal cadres. During this year two term end examinations and two contact classes were organised in which a total of 74 officers attended the programmes. The details of PGDAEM course is given in subsection D: 'Special Extension Course', of this chapter.

5. Managerial Skills for Extension Personnel

A training Programme on 'Managerial Skills for Extension Personnel' was conducted by SAMETI-West Bengal in collaboration with Extension Education Institute (EEI), (North Eastern Region), during 18-20 September, 2012. The numbers of participants were twenty five from fourteen districts of West Bengal. The participants were the senior level officers of the directorate of Agriculture, Fisheries and Animal Resources Development involved in management position in implementing schemes/ projects in agriculture and allied depts, including ATMA activities. Different sessions on Management and managerial skills, A systematic approach and its' special reference to team work, Leadership: Soft skill and their relevance in management; Delegation of works; Crucial aspects of communication: Co-operation and convergence in integrated agricultural extension etc. were covered during the training programme. Mr. S. Barua and Mr. D. Bortamuly from EEI, (NE Region) Dr. D. Sen, Former Director of Extension, BCKV and faculty of SAMETI-West Bengal were the resource persons for the programme. Swami Suparnananda, Secretary Ramakrishna Mission Ashrama, Narendrapur was present during the inaugural session.

6. Master Trainers Training on Key Technologies for Publicity Campaign

Govt. of West Bengal is in the process of bringing a change in agricultural scenario along with the mobilization of the farming community towards advancement and sustainable agricultural development. With such an

"All the wealth of the world cannot help one little Indian Village if the people are not taught to help themselves!"

— Swami Vivekananda

"Agriculture is the axis of all activity; for it turns earth, and even manure, into gold, conferring upon its cultivator the additional reward of health."

— Paul Christoff

intension, state wise campaign on different key technologies and issues in the form of publicity campaign is one of the best approaches. It was decided that all the districts would go for campaign through mobile van with posters, display, announcements, electronic presentation, oral discussion, meeting farming communities on key technologies like, vermicomposting, SRI methods of rice cultivation, zero tillage of wheat, azolla culture, Drumseeded rice culture etc. Keeping the objective in view, a 2-day training programmes for the master trainers from all the districts were organized during 23-24 November, 2012. The above-mentioned technologies were discussed in the presence of the experts from the state departments, SAME II, KVKs, and Universities with practice / demonstration in the field. District level officers, 40 in number participated in that 'Training of Trainers' programme.



7. Project Planning and Management in Agriculture

A five day training programme on 'Project Planning and Management' was organized during 17-21 December, 2012 in collaboration with National Institute of Agricultural Extension and Management, Hyderabad. The objective of the programme was to equip the candidates with the skill of planning development programmes following rational and logical steps on the basis of available resources and also to meet the objectives. The courses was needed, particularly for the block and district level extension functionaries, when they are with responsibility of preparing projects in bottom up approaches. Dr. N. Balasubramani from MANAGE, Hyderabad along with experts from Universities, Govt. sectors, private sectors, SAME II, etc. took different sessions like Project identification and formulation, Project management techniques, Management of information systems for projects, Financial and economical analysis for agricultural projects, Logical Framework analysis, Project documentation, Project monitoring and evaluation etc. There were 23 participants from department of agriculture, Animal Resource Development, KVKs NGOs, etc. from five districts of South West Bengal.

8. Seed Production & Quality Assurance

Seed is one of the most crucial inputs for better agriculture. Quality of seed, regular supply of the quality seed and to have proper knowledge about the quality regulation of the seeds are the matter of concern. A



3-day National Workshop on 'Seed Testing and Quality Regulation' was organised during 26-28 February, 2013. Thirty participants from all the districts of West Bengal and from the other states like - Jharkhand, Orissa, Assam, Arunachal Pradesh, Meghalaya, Nagaland etc. took part in that programme. During the workshop different relevant aspects like: Current status and future prospects of seed industries in India, Principle - procedure and gradation of seed; Genetic purity and DNA finger printing of hybrids, Seed health and seed pathology, Method of detection of seed-borne viruses, Seed quality regulation in India

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain - and the whole world is at your feet"

- Swami Vivekananda

and its network etc. were discussed by different experts from the University, State Research Institute etc. Dr. Masilamani, Director of National Seed Research and Testing Centre, Varanasi inaugurated the programme and gave the Key note Address. Sri N. Samanta, Additional Director of Agriculture, Govt. of West Bengal and Swami Supamananda, Secretary, Ramkrishna Mission Ashrama, Narendrapur were also present in the inaugural session.

9. Planning & Management of Sustainable Rural Livelihood

Increase in agricultural production not necessarily means increase in livelihood standard of the farm family and also always does not indicate farm as a secured source of income. Sustainability of standard rural livelihood through farm culture is main issue to overcome the problem. To cater these aspects a 3-day programme on 'Planning & Management of Sustainable Rural Livelihood' was organized during 7-9 January, 2013. The areas of discussion were on: concept, need and importance of sustainable livelihood; livelihood options in agriculture, fishery, horticulture, animal husbandry, farm forestry sector; skills required for planning and integration of livelihood options in various schemes of effective management etc. The course was jointly collaborated with MANAGE, Hyderabad, Twenty five block and district level officers from agriculture and allied sectors, KVKs, NGOs working in rural development areas etc. from five districts of West Bengal along with three nominated candidates from Himachal Pradesh joined in the Programme.



10. TOT on Package and Practices of Oilseed and Maize & ISOPOM Implementation

The Agricultural Training Centre, Narendrapur has been implementing the ISOPOM scheme for increase in



productivity and production of pulse, oilseed, and maize for the last six years. Many of the rural youth organizations are participating in implementation of this scheme successfully. In this connection the district officers, NGO executives, progressive farmers etc. participated in a 3-day workshop on implementation of the ISOPOM scheme during 21-23 November, 2012. Planning for rabi cultivation, scope of post harvest activities, marketing and value addition components of the oilseed, pulse and maize were the main topics of discussion. Thirty participants from the districts of Purba Medinipur, Paschim Medinipur, South 24 Parganas, North 24 Parganas etc. participated in the programme.

11. Refreshers Training of Kissan Call Centre Level Staff

Kissan Call Centre is a system of communication directly to the farmers from the experts for different advisory and advocacy. Govt. of India started the 'Kissan Call Centre' (KCC) Scheme in every state with a well equipped IT office, where 20-30 experts in the areas of Agriculture, Horticulture, Animal Resource Development,

"Let New India arise out of the peasants' cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper"

- Swami Vivekananda

Fishery etc. can receive calls directly from the farmers through a toll-free telephone number (18001801551). These experts are designated as Level-1 experts. Agriculture is a dynamic subject. So refresher training of these experts are needed very frequently, as they are directly dealing with the problems of farmers. Govt. of India advised the SAMETI to conduct regular refresher training of these Level-1 experts based on their need. The training needs of these experts were identified through a workshop and a training module of 2-day was prepared. Training programme of these experts was held in three batches during 1-9 March, 2013. The experts provided input on the areas: Betel vine (pest control, fertilizer application and marketing), Animal resource management (management of disease of cattle and poultry during summer season), Pest control and better cultivation of Mango and banana, Pest control of brinjal, pointed gourd and chili in summer season.



12. Review Meeting of ATMA



Implementation of ATMA programme is going on in all the districts of West Bengal. It works with the approach of bottom up planning and implementation with the participation of the grass root level institutions like the Farmers Advisory Committee, Block Technology Team etc. Besides general training, demonstration and exposure visits etc., many other innovative extension approaches are used to make the ATMA as tool of extension approach through convergence, gender sensitive, farmer-oriented and participatory planning-implementation and feedback system. During 18-19 March, 2013, a review workshop was conducted with the Deputy Project

Directors of the District ATMA in two batches. Important issues like regular report-return, Electronic Monitoring System, Financial management, auditing of finance and implementation of field level programmes etc. are discussed in detail. Dr. Paritosh Bhattacharyya, Director of Agriculture, Govt. of West Bengal addressed the participants on that occasion.

13. Programme on 12th Plan Perspectives

Planning is one of the most important components of development. Development of India particularly in the sector of agriculture was proved to be very crucial with respect to Five Year Planning. After the end of the 11th Five Year Plan, the 12th one will start from 2013-14. For the development plan of agricultural sector of West Bengal a workshop was organized on '12th Plan Perspectives' with the participation of all levels of policy makers. Secretary, Department of Agriculture along with Advisor to the Chief Minister in the sector of agriculture; Director of Agriculture; Vice Chancellors of State Agricultural Universities; Director of Extension and Research

"Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land." — Earl of Shaftesbury, William Pitt

of different Agricultural Universities; Director or representatives of different allied directorates; Director, SAMETI; Deputy Directors of Agriculture of different districts; Directors of different ICAR institutes and many others participated in the workshop during 25-26, March, 2013.

A review of different flagship schemes including different big projects under universities etc. were reviewed and thorough group discussion on 'need and prospects of West Bengal agriculture' was determined. Letter on planning was made with details of budgetary provisions under different schemes and the same was appraised in front of the participants.



14. Internship of Veterinary Final Year Students



Practical classes cum orientation in Animal Husbandry Farm management were organized during the reporting period for different group of 15-20 members of students of West Bengal University of Fishery and Animal Sciences. The students were oriented with the day-to-day activities of dairy farm, fodder cultivation and its planning with respect to the resource availability during different seasons, pest and disease management, maintenance of dairy and cost-benefit ratio etc. A total of 4 such programmes were organized for 160 BVSC students out of which 132 were male and rest female students.

B. Programmes For Middle Level Extension Functionaries:

Various training programmes are organized for the middle level extension functionaries under this second category. Mainly the extension workers of Agriculture sector (KPS), Animal Husbandry (Pran bandhu), Farm School Headmasters, IFFCO (Kishan Mitra), AC-ABC trained persons, Rural Entrepreneurs, Farmers' Groups members, P & RD nominated Group leaders etc. are trained in these programmes. The major courses are - Training and Exposure visit of Farm School Head Master, Rural Entrepreneurship Development (five types- Poly House & Nursery Management, Vegetable seed production, Rural Aquaculture Vermicompost production, & Field Practice training, Horticultural extension programme, orientation Programme for Krishak Mitra, dairy poultry training etc. totally 22 such training courses (14 types) have been conducted and 833 middle level extension functionaries have participated.

"The best way to find yourself is to lose yourself in the service of others"

— Mahatma Gandhi

Sl. No.	Title of Training to cover the thrust area	Target Group	Duration (Day)	No. of Course	No. of Trainees
1.	Training and Exposure visit of Farm School Head Master	Farm School Head Master	10	2	56
2.	Rural Entrepreneurship Development				
	a) Poly House & Nursery Management	Rural Entrepreneurs SHG members of nursery management, fisheries, seed production, vermicompost production etc. from 9 districts of West Bengal	2	1	26
	b) Vegetable seed production		1	1	27
	c) Rural Aquaculture		4	1	22
	d) Vermicompost production		2	4	110
	e) Field Practice training		10	1	37
3.	Horticultural Extension	Farmers' Groups members etc.	1	1	298
4.	Krishak Mitra orientation Programme	Krishak Mitra: of IFFCO	3	2	35
5.	Farm Machinery	KPS etc.	1	3	62
6.	EDP training for the Agri-entrepreneurs	Trained persons of AC-ABC	5	1	23
7.	Exchange of experience of Extension activities of Grass root level extension worker	Grass root level extension worker	1	1	50
8.	Training on AC-ABC	Selected Candidates (Agriculturally educated candidates)	60	1	28
9.	Animal Husbandry Training	Group leaders Nominated by P & RD:	5	1	35
10.	Dairy-Poultry Training	Rural Youths	2	1	24
		Total		22	833

1. Training and Exposure visit of Farm School Head Master:

Farm School (FS) is a concept to disseminate innovative technologies of farmers through the method of 'farmer to farmer technology dissemination'. It is the concept also to honour and empower farmer for their contribution of innovation. This Farms school has been accepted as one of the most important tools in the Centrally sponsored scheme for renovation of extension. The skill and knowledge of the 'Farm School Head Master', the achiever farmer, needs to be updated and upgraded both in respect of different advanced technologies as well as skills of pertaining effective training or running a farm school. Two week course on training cum exposure visit has been prepared in consultation with the block and district level extension functionaries, who are supporting to run the schools as well as with some successful FS Head Masters and a programme for 56 Head Masters of different FS of Burdwan



"As long as I live, so long do I learn"

- Sri Ramakrishna



& North 24 Parganas were organized. Detail discussion as well as related exposure visit was made for this mixed group on the aspects of Integrated Farming, Vermicomposting, Bio-farming and use of bio-products, Dairy and poultry management, Rural aquaculture and commercial fishery, Maintenance of guava orchard etc. Exposure visit was made at biotechnological and other aspects to KVK and biotechnology centre of Nimpith, Farmers' guava fields of Baruipur area, Vermicomposting of a successful entrepreneur at Amtala area, Successful fishery and lunput fishery of Purba medinipur, State Animal farm at Contai, Polyhouse floriculture and tissue culture banana at Hooghly district.

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Farm School Head Master	10	2	56	0	56

2. Rural Entrepreneurship Development:

On the basis of demand from rural youth, different rural entrepreneurship development training are being organised to promote rural agricultural entrepreneurship. During the reporting period five types of such programmes were organized namely: i) Poly House & Nursery Management; ii) vegetable seed production; iii) Rural Aquaculture; iv) Vermicompost production & v) field practice training of Agri-preneurs. The topics and sessions of different training programmes were finalised keeping in view the objectives to develop as an entrepreneur. The fishery programme was conducted in collaboration with the Central Institute of Freshwater Aquaculture (CIFA) and on the basis of demand from the Fishery FIGs, aquaculture mobilizing groups, aquaculture feed, rural pond management, disease management, breeding, processing and joint marketing are different topics of discussion and practice. The process of vermicomposting, knowledge about the selected earthworm, vermicompost preparation, production process, expenditure and income pattern etc. along with practical were part of vermicomposting. Accordingly other programmes were also arranged. In total eight programmes were conducted for 222 trainees from nine districts of West Bengal. The details of the programmes area given below:



Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Poly House & Nursery Management	2	1	26	-	26
Vegetable seed production	1	1	27	-	27
Rural Aquaculture	4	1	22	-	22
Vermicompost production	2	4	66	44	110
Field Practice training	10	1	37	-	37
Total		8	178	44	222

"I slept and dreamt that life was joy, I awoke and saw that life was service. I acted and behold, service was joy"

- Rabindranath Tagore

3. Horticultural Extension:



Distribution of Horticultural Inputs on 7th, August, 2012.

When the question of food and nutrition security comes, generally we think about the production of the food grains. Every day the rural people use to take the fruits and vegetables, particularly grown in their household premises which are not considered to contribute to their food and nutrition security. The prospect of replacing food grains by the fruit and vegetables in daily food habit is tremendous and that can make a shift of concept in food security matter. Based on this look, the Dept. of Food Processing Industries and Horticulture has taken a big step through National Horticultural Mission (NHM) in South 24 Pargana district to promote fruit and vegetable production by the rural farmers. Inauguration of the venture took place through the programme on 'Orientation cum

Distribution of Horticultural Inputs' on 7th, August, 2012. Sri Ujjal Biswas, Hon'ble Minister in Charge of Food Processing Industries and Horticulture, Govt. of West Bengal; Dr. Pijush Pramanik, Director of Horticulture, Govt. of West Bengal, Sk. Hydaer Ali Mallik, Karmadhyakshya, Krishi Seva and Samabay, Jila Parishad, South 24 Parganas were present at the programme. Swami Suparnananda, Secretary, Ramakrishna Mission Ashrama, Narendrapur welcomed the delegates. The MIC along with other distinguished guests, distributed some horticultural inputs as token start of the programme. In this rainy season about 4.5 lakh quality saplings of improved variety of mango, guava, litchi and tissue culture banana will be distributed along with other inputs like neem oil, sprayer, micro-nutrients-enzymes, verm compost, rosecan (hari) etc. ATC will take part in this venture by selection of farmers, their skill development and follow up in 10 villages of South 24 Parganas by distributing more than 40,000 quality saplings along with other related inputs. About 300 farmers from different villages of South 24 Parganas participated in that programme.

4. Krishak Mitra Orientation Programme:

Krishak Mitra is the village level extension functionaries of Indian Farmers Fertiliser Cooperative (IFFCO), the development of which originated from the concept offered by former President of India Dr. A.P.J. Abdul Kalam in his vision for development of India. These village youths are selected on the basis of Pro-activeness and experience in agriculture. In service time they are refreshed at six month interval. During training, the last 6-months' performance is reviewed along with their learning. The task orientation as well as the skill development, related with task to be done in next six months, are also the component of the course. SAMFTI is in continuous support of this extension development. Thirty five Krishak Mitras were trained during two training programmes, on different topics, mainly related to insect pest management in paddy, raising of seedlings and cultivation of early varieties of winter vegetables, disease management of cattle during rainy season etc.



Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Krishak Mitra: of IFFCO	3	2	35	-	35

"Let New India a rise-out of the peasants' cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper"

- Swami Vivekananda

5. Training on Farm Machinery:

Farm Machinery is one of the sectors where there is tremendous potentiality for increasing agricultural production and growth of the state. Under Rastria Krishi Vikash Yojana programme, training of the field level extension functionaries were organized through different Agricultural Training Centres. The functionaries were oriented mainly on the advanced agricultural machineries



and implements, farmer-friendly and women worker-friendly machineries, energy efficient farm machineries, which had potentiality of use in the state agriculture. Twenty field level extension functionaries, mainly Krishi Prayukti Sanak, in each batch from Purulia, South 24 Parganas, North 24 Parganas, Birbhum and Bankura participated in three courses.

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
KPS etc.	1	3	60	2	62

6. EDP training for the Agri-entrepreneurs:

Agri-entrepreneurs are one the main components to strengthen the rural marketing channels of rural India. To revitalize the Agri-entrepreneurs, a five day training programme (4-8 Sept, 12) had been organized in collaboration with the 'I Create Foundation' (a specialized organization promoting entrepreneurship of youths). The candidates were strengthened in the areas of preparing bankable projects, how to approach and to convince the bank personnel for approval of projects, paper work and procedures required for agri-business, sources of assistance for license and its formalities etc. A total of twenty three trained AC-ABC candidates joined in that training programme in which 16 were male and rest female.

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Trained AC-ABC candidates	4	1	16	7	23

7. Exchange of experience of Extension Activities of Grass root level extension worker:

On 26th January, 2013 the experience sharing exchange programme was organised on occasion of the Annual Celebration of the institute. In the third day (26 January, 2013) of the Celebration, the Re-union of the Ex-trainees of the Agricultural Training Centre was held in the before noon session. Sri Madhusudan Kundu, Ex-

"Be the change that you wish to see in the world"

- Mahatma Gandhi

Director, SAMET and Ex-Principal of the Agricultural Training Centre of the Ashrama presided over the Re-union function. Sri Asit Baran Saha, Joint Director of Agriculture was the Chief Guest and expressed the overall agricultural situation of West Bengal. Sri Sibabrata Ghatak, Deputy Director of Agriculture (Training), HQ encouraged the Ex-trainees about their extended service towards the farming community. The participants exchanged their experience of their own work. A total of 50 grass root level extension workers attended the programme.

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Extension Worker	1	1	13	7	50

8. Training on Agri-Clinic Agri-business Centre (AC-ABC):

Govt. of India has launched a scheme in the name of 'Agri-Clinic Agri-business Centre' (AC-ABC) to explore the potential of the agriculturally educated unemployed candidates in the extension service and also to offer the opportunity to establish ventures on agriculture and allied sectors through their own business development. This venture also targets to bridge the gap between production and processing, production and marketing, timely and quality supply of inputs and quality production etc. through such entrepreneurship development. MANAGE, Hyderabad, as national level supporting institution to the Govt. of India for HRD in agricultural extension area, has been given responsibility to implement the scheme. SAMET, after



having the responsibility of the Nodal Training Institute (NTI) for conducting this 2-month long training course on Agri-Clinic Agri-business Centre, started the course for the Batch-I from 28 January to 30 March, 2013. Twenty eight numbers of candidates participated in this course.

During this financial year different sessions by the resource persons from Universities, Management Institutes, SAMET, NABARD and other Banks took on the areas like: Entrepreneurial Development (Values & Motivation), Entrepreneurial Management, Enterprise planning & resourcing, Entrepreneur implementation. Besides those, the trainees were exposed to different success ventures

and also to market survey in their respective areas for their targeted business and services. The trainees prepared their detailed project report (DPR) and appraised before completion of the training for submitting to different banks. The details of AC-ABC course are given in subsection D: 'Special Extension Course', of this chapter.

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain – and the whole world is at your feet!"

- J. K. Vasudevan

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
AC-ABC enrolled candidates	60	1	25	3	28

9. Animal Husbandry Training:

In collaboration with the Panchayat and Rural Development department, the leaders of the Farmers Interest Groups, related to animal husbandry are attached with the DRDC went through a 5-day training programme on the aspect of 'Better animal production' during 05-09 November, 2012. Different aspects of cattle and poultry rearing, feed, fodder, disease and their treatments and breed upgradation were the subject of discussion and practice. The management aspects of the dairy and poultry farm was also included. Thirty five leaders from South 24 Pargana district participated in the programme.



Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Dairy Poultry Training	5	1	5	30	35

10. Dairy Poultry Training:

On the basis of demand from different milk cooperatives of the state, a 2-day programme on 'Dairy Poultry training' were conducted during the reporting period. Different aspects like artificial insemination, calf rearing, maintenance of cow, health management of cattle, fodder cultivation etc. were learnt by the trainees both in practical and theoretical manner. Twenty four male trainees from the West Medinipur were trainee in one such course.

Target group	Duration (day)	No. of course	No. of total participants		
			Male	Female	Total
Dairy Poultry Training	2	1	24	-	24

C. Programmes For Rural Level Extension Workers:

The training programme for the rural level extension workers includes 1-5 day skill development training, for progressive men and women farmers, IIC/SIG members and leaders, rural opinion leaders, entrepreneurs etc. Totally 32 such training courses (six types) have been conducted and 986 farmers participated.

"Finish the few duties you have at hand, and then you will have peace"

- Sri Paramahansa

Sl. No.	Title of Training to cover the thrust area	Target Group	Duration (Day)	No. of Course	Male	Female	Total
1.	One day Farmers' skill development training.	Opinion leaders, Progressive farmers	1	12	120	240	360
2.	5 days Farmers skill dev. Trg. (women)	Women SHG members	5	4	0	120	120
3.	5 days skill development training on Animal Husbandry	FIG members	5	13	60	364	424
4.	Cattle Management : Dairy- Poultry	Progressive farmers	30	1	30		30
5.	Animal Husbandry Training	Entrepreneurs	10	1	30	0	30
6.	Orissa Farmers Training & visit	Orissa farmers	5	1	22	0	22
	Total			32	262	724	986

1. 1-day Farmers' Skill Development Training:

For awareness generation and motivation, one day training programme has been emphasized for Progressive farmers and Rural Opinion leaders. In this one day programme, subjects like importance of Home gardening, Integrated nutrient management with special emphasis on Vermicomposting, Scientific nursery management etc. covered. During the financial year a total of twelve courses had been organised in which 360 progressive farmers attended the course out of which 240 were female and rest male.



2. 5-day Farmers Skill Development Training:

Govt. of West Bengal, Agricultural Dept. has taken a step to orient the farmers through a formal 5-day course for all the advancement happening in the sector of agriculture. Different up dated farm technologies like cultivation practices of pulses and oilseeds, SRI and drumseeder technologies of rice culture, vermicomposting, upgrading of fruit trees through grafting, non-chemical pest management concept, efficient water utilization in plants, Mushroom cultivation etc. are included in the 5-day training module for women SHG members on the basis of their need. The course includes concept building and practical demonstration and exposure visits. During 2012-13 four such courses have been conducted with 120 female progressive farmers.



"I tell you one thing- if you want peace of mind, do not fault with others"

- Frenchi Patti

3. 5-day skill development training on Animal Husbandry:

In collaboration with the Panchayat and Rural Development Department, the leaders of the Farmers Interest Group, related to animal husbandry and attached with the DRDC went through



a 5-day training programme on the aspect of 'Better animal production'. Different aspects of cattle and poultry rearing, feed, fodder, disease and their treatments, breed upgradation were the subject of discussion and practice. The management aspects of the dairy and poultry farm was also included. A total of 13 such



programme were conducted in which 423 dairy farmers attended the training programme out of which 364 were female and rest 60 were male.

4. Training on 'Cattle Management : Dairy- Poultry'

On the basis of demand from different milk cooperatives of the state, a 30-day programme on 'Cattle management for better production' was conducted during the period from 26 February to 27 March, 2013. Different aspects like artificial insemination, calf rearing, maintenance of cow, health management of cattle, fodder cultivation etc. were learnt by the trainees both in practical and theoretical manner. Thirty male trainees from the West Medinipur were trained in this course.



5. Animal Husbandry Training



A 10 day programme on 'Cattle management for higher production' was organized during 04-13 June, 2012 for the village group leaders of 'Nest Dairy'. The objective of the training was to provide better management practices of cattle rearing for higher production and promotion of group activities in production, and marketing. The advanced technologies related to dairy development including, breeding, feeding, health maintenance along with cultivation of green fodder were included in the course. Thirty group leaders from Burdwan district participated in the programme.

6. Orissa Farmers Training & Visit

A team of 22 progressive farmers of Orissa, came to West Bengal & SAMETI during 8th-12th September, 2012, as a part of ATMA Inter-State farmers' training & exposure visit. The team visited different activities of SAMETI as well as the Ashrama. They were also exposed to different ATMA activities at district level as well as agricultural research institutes along with skill development in different aspects.

"You can't cross the sea merely by standing and staring at the water"

- Rabindranath Tagore

D. Special Extension Courses:

I. Post Graduate Diploma in Agricultural Extension Management (PGDAEM):

Transforming subsistence agriculture into profitable agriculture is a great challenge before the extension functionaries in India. It is a well known fact that farmers' need for the latest knowledge has risen as the focus shifted from subsistence to profitable agriculture, whereas, the knowledge of the public extension functionaries has not enhanced adequately due to their engagement in multifarious activities and lack of opportunities for knowledge and skill upgradation. As a result, the knowledge gap between the challenges ahead and existing capabilities among extension functionaries are widened.

In recent times there has been considerable increase in agricultural extension services provided by private sector in the country. However, its services have been limited to selected regions, crops and enterprises with profitability as a motive. The small and marginal farmers in the less endowed regions with rainfed crops and enterprises are left unattended by these private players, as it does not make a profitable business. It is in this context, the public extension has to continue to cover the wet and dry geographies, all the crops and enterprises promoting sustainable agriculture technologies. Given the scenario, the public extension system continues to play a pivotal role for agricultural growth. The extension personnel in the country working at district and block levels in the field of agriculture and allied sectors estimated to be 90,000 in numbers may be transformed into a vibrant and useful knowledge force to bring about the desired changes in the agriculture sector. It further reinforces that any attempt to strengthen and enhance the capability of existing public extension functionaries is a welcome step for agriculture development.

In order to bridge this ever increasing gap in knowledge, a Post Graduate Diploma Programme in Agricultural Extension Management (PGDAEM) at MANAGE has been launched for the agricultural extension functionaries. It is expected that the diploma would create a professional cadre of farm advisors in the country who eventually would take forward the agenda of agricultural extension.

The Programme was earlier opened only for the extension functionaries of agriculture and allied department working in the state Centre and UTs. However, later on, admission to the PGDAEM has been opened to the extension functionaries working with the agribusiness companies, NGOs, agri-preneurs, input dealers, etc. The duration of the programme is of one year spread over two semesters.

National Institute of Agricultural Extension Management (MANAGE) launches the Post Graduate Diploma in Agricultural Extension Management (PGDAEM) in the academic year 2007-08 especially for the public extension functionaries in distance learning mode. The programme is sponsored by Dept. of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India under the scheme of 'Support to State Extension Programmes for extension Returns'.

Objectives of the Programmes:

- ❖ To enhance the techno-managerial competence of extension functionaries.
- ❖ To acquaint the extension functionaries with the latest developments in the field of agriculture and allied sectors.
- ❖ To equip the extension functionaries on latest tools and techniques for participatory decision making
- ❖ To develop the insight into various extension models to enrich the agri-value chain.

"The brain and muscles must develop simultaneously. You never win with an intelligent brain and the whole world is at your feet."

— Swami Vivekananda

Twenty one officers from the department of agriculture, ARD, Fishery, Marketing etc. have completed the course, while 32 officers again enrolled in Semester I during the reporting period.

II. Agri-Clinics And Agri-Business Centres (AC-ABC) Scheme

Inadequate quality manpower has been a bottleneck in effective extension service delivery, while on the other hand, a large number of agricultural graduates and diploma holders have not been finding gainful employment. In response, the Ministry of Agriculture, Government of India, launched the Agri-Clinics and Agribusiness Centres Scheme, a Central Sector Scheme, in association with NABARD in the year 2002, for supporting unemployed agricultural professionals to establish Agri-Clinics and Agri-Business Centres in rural areas as well as to supplement the efforts of public extension by providing extension and other services to the farming community.



SAMETI, Narendrapur has been selected as Nodal Training Institutions (NTIs), by MANAGE in West Bengal to impart a 2-month free residential training in Agri-Entrepreneurship to the selected agricultural professionals and also provide them one-year handholding support for establishing agri-ventures. The trained Agri-preneurs are also assisted through start-up loans and Credit-linked back-ended composite subsidy through banks and NABARD.

Salient features

Graduates in Agriculture and allied disciplines from State Agricultural Universities and Central Agricultural Universities/ Universities recognized by ICAR/ UGC; Diploma holders in Agricultural and allied subjects from State Agricultural Universities or Biological Science Graduates with post graduation in Agriculture and allied subjects and Agriculture related courses at intermediate (i.e. Plus two) level with at least 55% marks are eligible to avail the benefits under the scheme.

During the training, the candidates are imparted basic knowledge on Agri-Enterprise Management, given exposure to potential agri-ventures, guided to choose a project based on market survey and provided an opportunity for hands-on work experience thus enabling them to prepare a Detailed Project Report (DPR) for submission to the banks. Post-training, one year hand holding support is provided by the NTI to ensure successful establishment of agri-ventures.



The project cost ceiling under AC&ABC scheme for the purpose of subsidy has been enhanced from 10.00 lakhs to 20.00 lakhs for individual projects and from 50.00 lakhs to 100.00 lakhs for group projects (with 5 members). The capital interest subsidy is replaced with composite subsidy. The subsidy for general candidates is 36% of the Total Financial Outlay (TFO) and 44% for SC/ ST beneficiaries, women candidates and candidates from North Eastern and Hill States.

Twenty eight agriculturally educated candidates went through this 2-months course in Batch-I during January 28 - March 30, 2013.

"Anyone who has never made a mistake has never tried anything new"

— Mark Twain

E. Workshop / Seminar etc. :

Besides training courses, the institute organised several seminars and workshops for all levels of participants and some of them are - ISOPOM - Review & Planning Workshop, Present day agriculture: problems and way outs, Horticultural Extension workshop, Workshop on 'Research Extension Convergence' Workshop on Planning and Management of IWMP, Workshop on 'EMS of ATMA', Annual Training & Planning Workshop, Seminar on Bridging the gap between Agricultural Production and Marketing, ATC / SAMETI planning & evaluation workshop etc. District & block level extension officers from various departments, KVK representatives, NGO executives, KPS, SG- leaders, Progressive farmers etc. actively participated in these seminars-workshops to make those programmes successful. A total of 11 programmes (10 types) were conducted with 686 participants.

Sl. No.	Title of the Seminar / Workshop	Date	Target Group	Total no. of participants
1.	ISOPOM Workshop	28-30 May, 12	Extension Personnel	55
2.	Present day agriculture: problems and way outs	2nd June, 12	NGO executives and extension workers from 12 districts of West Bengal	219
3.	Horticultural Extension	11th July, 12	NGO extension workers: South 24 pgs	41
4.	ISOPOM Review Workshop	11-12 Sept, 12	ISOPOM implementing farmers, NGO executives : S-24 Pgs, Midnapur East & West	73
5.	Workshop on 'Research Extension Convergence'	02-Nov, 12	District officers, KVK PC, Director of Dep. LG: All dist	75
6.	Workshop on Planning and Management of IWMP	6-8 Nov, 12	Dist. Officers of Water conservation unit: five districts of West Bengal	25
7.	Workshop on 'EMS of ATMA'	22-Nov, 12	PD and ATMA officers of West Bengal	29
8.	Annual Training & Planning Workshop	17th Jan, 13	All Agriculture allied Depts.	24
9.	Seminar on Bridging the gap between Agricultural Production and Marketing	25th Jan, 13	BLEF, DLEF, University students, KPS, NGO executives etc.	111
10.	ATC / SAMETI planning & evaluation	10th & 18th April, 12	SAMETI Faculty members	34
	Total	11 Programmes		686

* BLEF = block level extension functionaries & DLEF = district level extension functionaries

"As long as I live, so long do I learn"

- Sri Ramakrishna

1. ISOPOM Workshop:



A 2-day workshop of district and block level extension functionaries attached to the ISOPOM programme was organized during 29-30 May, 2012. Different field-applicable technologies related to mustard, sesame, sunflower, groundnut and maize were discussed in the workshop. The important aspects like improved maize seed production by the farmers, post harvest activities and market linkage of maize and different produced, creating mechanisation hub for progress of ISOPOM etc. were discussed. Two successful farmers from Patharpratima, South 24 Parganas and Keshpur, Paschim Medinipur shared their experience. Sri Narayan Samanta,

Additional Director of Agriculture, Govt. of West Bengal and Swami Suparrananda, Secretary of Ramakrishna Mission Ashrama, Narendrapur inaugurated the programme. 55 functionaries joined in the programme from different districts of West Bengal.

2. Seminar on 'Present Day Agriculture: Problems and Way Outs'

A Seminar on 'Present Day Agriculture: problems and way outs' was organized on 02.06.12. More than 200 participants, mainly the executives and extension workers of different rural NGOs from 12 districts of West Bengal, participated in that seminar. Sri Gosthonayaban, and Sri Rish krishna Dey, both of them Assistant Director of Agriculture, Govt of West Bengal and well-known writers of different books on agriculture shared their experience and views on the aspects of different problems, the farmers are facing. A close discussion was conducted in question answer session on specific problems of farmers as well as their probable solutions. Lack of proper price, lack of marketing facilities, irrigation, erratic climate, increasing pest problems were the main issues raised by the majority of the farmers.



3. Workshop on Horticultural Extension:

For food and nutritional security, the horticulture has a tremendous role in public life. Besides that, horticultural production is one of the main pillars for the overall agricultural growth. In rural area, farmers along with the field crops also grow different vegetables, fruit, spices etc. Quality input, specially the planting materials, may do a great extent to enhance the productivity and income of the farm family. In South 24 Pargana district, the ATC / SAMETI has taken an attempt to create an extension channel for effective distribution of horticultural inputs to the villagers and its follow up. Nine villages have been selected in consultation with the Dept. of Horticulture; demand of those villages has been assessed by the local NGOs after having some training from the SAMETI. On 11.07.12 a 1-day workshop has been organized with the participation of the NGO executives, progressive farmers etc. from nine selected villages and a road map for effective distribution of horticultural inputs and follow up services was formulated. More than 40 heads participated in that workshop.

"Be the change that you wish to see in the world"

- Mahatma Gandhi

4. ISOPOM Review Workshop :

The Agricultural Training Centre, Narendrapur has been implementing the ISOPOM scheme for increase in productivity and production of pulse, oilseed, and maize for the last six years. Many of the rural youth organizations are participating in implementation of this scheme successfully. In this connection the district officers, NGO executives, progressive farmers etc, participated in a 2-day workshop on implementation of the ISOPOM scheme during 11-12 September, 2012. Review & planning for rabi cultivation, scope of post harvest activities, marketing and value addition components of the oilseed, pulse and maize were the main topics of discussion. Seventy three participants from the districts of Purba Medinipur, Paschim Medinipur, South 24 Parganas, etc. participated the programme.



5. Workshop on 'Research Extension Convergence :

The Centrally sponsored scheme for 'Support to State Extension Programme for Extension Reforms (ATMA) Scheme' has been revised to make it more appropriate for implementation for better agricultural growth. Along with the extension part, it obviously includes the linkage between 'Research and Extension' both at policy making, modality formulation and grass root level implementation. For better linkage and coordinated activities between



different extension institutions and research institutions, a 1-day workshop was organized at SAMETI on 2nd November, 2012. Sri Subrata Biswas, Secretary, Dept. of Agriculture, Govt. of West Bengal; Dr. Paritosh Bhattacharya, Director of Agriculture, Govt. of West Bengal; Director of Extension Education of BCKV and U3KV along with Swami Suparnananda graced the dias. Representatives from the head quarter of different allied department and Zonal Project Director, Zone-II of ICAR office also joined the workshop. The Programme coordinator of the KVKs, Deputy Director of Agriculture (Administration) along with the ATMA programme-dealing officers participated in the discussion. Discussions

were held on different issues like, 'Operationalisation of the 'Research- Extension Convergence' guidelines' jointly published by the ICAR and the DAC, regular report return specially, online submission of achievement data of ATMA programme in website, areas of convergence and joint activities of KVK and ATMA etc. Seventy five participants from most of the districts joined the programme.

6. Workshop on 'Planning and Management of Integrated Watershed Management Programme (IWMP):

For conservation, efficient use and overall management of water, the Centrally sponsored scheme 'Integrated Watershed Management Programme (IWMP)' is in implementation in all the states including ours. For proper

orientation about the programme and its better implementation a 3-day training cum workshop on 'Planning and Management of Integrated Watershed Management Programme' was organized at SAMETI during 06-



08 November, 2012 in collaboration with MANAGE, Hyderabad, Joint Director of Agriculture (Soil Conservation) presided over the inaugural function with the presence of representative of MANAGE, Hyderabad. Twenty five sub-divisional and district level officers from different districts of West Bengal participated in the discussion on the topics like: Present status of watershed projects- problem and prospects, Overview of watershed development programme in the state, Key features of common guidelines of IWMP, Preparation of Detailed Project Report on IWMP, Role of community organization in watershed management, Management of information

system- monitoring and evaluation of IWMP, Livelihood development and improvement of production system under watersheds, Watershed management and soil conservation etc. during the training period. Dr. B. Renuka Rani from MANAGE, Hyderabad, experts from departments of Agriculture, Sri M. S. Kunte, Technical Experts, IWMP Programme and faculty of SAMETI acted as resource persons of the programme.

7. Workshop on 'Electronic Monitoring System of ATMA' :

For good implementation of any programme, proper monitoring is an essential part. In case of implementation of the programme at national levels in all the states, the traditional monitoring is not enough to cope up with the pace of desired implementation. In case of centrally sponsored schemes, GOI has initiated the Electronic Monitoring System to have a quick look on the implementation process throughout the states at any point of time. In case of ATMA programme, still our state is not

in the satisfactory position to send the data in Electronic system. To bridge the gap, a one-day training programme on 'Electronic Monitoring System of ATMA' was conducted on 22nd November, 2012. Background of the ATMA scheme and details of Cafeteria activities of ATMA programmes in relation to monitoring etc. were primarily discussed. The online system of EMS was presented and all components in the monitoring proforma analysed among the participants. Dr. Manoj and Sri Suresh Kumar from SAMETI, Jharkhand supported with their experience on implementation of the EMS. The participants in 14 groups practised the EMS online in internet. Discussions and suggestions were also received for the procedure of collection of data from block level. Twenty nine district level officers associated with the ATMA activities, from different districts, participated the training programme.



"Finish the few duties you have at hand, and then you will have peace."

- Sri Ramakrishna

"Science without religion is lame, religion without science is blind."

- Albert Einstein

8. Annual Training & Planning Workshop:

Every year all the states do an exercise on what are the emerging needs of Human Resource Development in agriculture and allied sectors. This is highly needed to plan the training programmes to be performed by different levels of training institutions of the Govt, Universities, KVKs etc, during the next year. This integrated workshop is needed to address the need of the farming community as well the extension functionaries in the convergent approach. A one-day workshop on 'Annual Training & Planning' was organised on 17th January, 2013. Representatives from the Directorate of the Agriculture, Fishery, Animal Resource Development, Agricultural Universities along with faculties of SAMETI participated in the workshop. A presentation was made on the demand received for training on agriculture and allied sectors during the last year as well as feedbacks from different levels of extension functionaries from all the districts through e-mail. Group work was done on identifying need of training by different department and presentation was made. Different sessions was chaired by Prof. D. Basu, Director of extension education, BCKV; Prof. L. Ghosh, Director of Extension and Research, WBUAFS; Dr. S. Roy, Senior Scientists, Office of the Zonal Project Director - Zone - II, ICAR; etc. A total of 24 participants joined the workshop.

9. Seminar on Bridging the Gap Between Agricultural Production and Marketing:

On the occasion of the annual celebration of the institute, the 2nd day of the celebration was observed with an important seminar on 'Bridging the Gap between Production and Marketing'. Sri Pradip Mazumdar, the Adviser to the Chief Minister of West Bengal on Agriculture and Allied Sector inaugurated the Seminar and offered his address as Chief Guest of the Seminar on 'Present steps and future strategies for bridging the gap between agricultural production and marketing'. Guest of Honour, Dr. P. Jush Pramanik, Director of Horticulture addressed the audience about the 'Initiatives on promotion of market for horticultural production'. Dr. Kamala Kanta Saha, Director of Animal Resource Development shared his experience on 'Production and marketing in Animal husbandry in West Bengal'. Dr. Satinath Das, Faculty, SAMETI shared his experience of 'Implementing project linking producers and buyers/ milk processor'. Dr. Sailen Biswas, Joint Director of Fishery presented the 'Steps to bridge fishery based production and marketing'. Sri Birendranath Roy, an innovative farmer from Birbhum District on organic farming told the audience about his mechanism of production and marketing. Sri Sudipta Mukherjee, Additional General Manager Merchandising, Spencers Retail Ltd. gave his presentation on 'Option to bridge the gap between production and marketing in West Bengal'. The officers from Agriculture and allied department, representatives from KVKs along with University scholars and students, progressive farmers etc. participated in the seminar.



"I can't contain myself when she draws near me and calls me Mother"

- Kumbha Deva

10. ATC / SAMETI - Review & Planning Workshop:

Every organisation has to look back how much it has performed in past and also chalk its plan of work for future based on experience gained and the demand of the people, it is serving. Like previous years, an in-house 'Review and Planning' workshop was organized for SAMETI/ ATC activities on 10.04.12 and 18.04.12. The faculty members shared their yearly programmes performed throughout the year and future planning.



F. Exposure Visit:

During 2012-13, a total of 11 programmes on exposure visits were conducted for 527 farmers in which 505 farmers were from West Bengal and rest 22 from Orissa. The Farmers are made acquainted with the integrated farming system in low-lying areas, low cost vermicomposting, poly house horticulture, cultivation of medicinal plants etc. The farmers were arranged to visit the Jute research institute, Rice research station and several agricultural field of farmers with innovations or diversification. The detail of the programme are given below:

Date	Origin of the Candidate / Group	Total no. of participants
09-April	Howrah, Purulia, Bankura, Hooghly	60
16-April	Burdwan, Purulia, Paschim Medinipur, Hooghly	60
23-April	Howrah, Purulia, Bankura, Paschim Medinipur	71
30-April	BWN, Purulia, Birbhum	45
11-May	BWN, Purulia	59
18-May	Sandesh khali	89
22-May	Bhangore	32
28-May	Nimpith	33
28-May	Malda	30
08-Jun	Belurmath	26
	Total in West Bengal - 10 programmes	505
08-12 September	Orissa	22
Total	Total - 11 Programmes	527

"On this basis- being right! and doing right- the whole world can unite"

- Communist Manifesto

The faculty members of the institute were exposed to different programmes through the year. Glimpses of the exposure visit by the faculty member of the institute were given below:

- * Dr. Manas Ghosh, Director SAMLT, visited Germany during 22-30 April, 2012 to participate in the International Conference on 'Move United for Sustainable Development' organized by 'Welthungerhilfe', the largest NGO in Germany, and the Govt. of Germany. On that occasion he presented a paper on 'Food Security and Climate Change'. He was also honoured by the Minister of Finance of Govt. of Germany for his contribution in the sector of sustainable development.



- * Sri Soumyesh Mandal, Chief Instructor, Dr. Sourendranath Das and Dr. Ashutosh Das were on an exposure visit on ATMA innovative activities in the Karnataka state. They visited the Bio-centre under Dept. of Horticulture implementing the Bio-digester concept in the rural areas of the Karnataka. Besides that they observed the group behaviour in relation to the SAFAL market along with the mechanism in that market.



- * Dr. Ashutosh Das participated the programme on 'ICTs for Agricultural Information Management and Networking' at MANAGE, Hyderabad during 16-20 July, 2012.
- * Dr. Manas Ghosh participated in 2-day National workshop on 'Planning of Annual Training' held at MANAGE, Hyderabad during 12-13 February, 2013.
- * Dr. Musar Ali attended a review workshop on 'Implementation of Agriclinic-Agri-business Scheme' held on 20 March, 2013 at MANAGE, Hyderabad.

"He alone is the true teacher who is illumined by the light of true knowledge"

- Sri Ramakrishna Mission

G. Field Training:

A Total of 17 field programmes were organised in the different districts of West Bengal in which 915 farmers participated. The programmes were mainly technical in nature and based on demand from the field.



Date	Title of Training & Venue	Target Group	M	F	Total no. of participants
13-April	Sunflower Production: Shitka] Nagar, Kakewip	Farmers	44	6	50
16-April	Farmer's Training on Package of Practice, inter-cultural operation of sunflower, Gobindarampur	Farmers	28	3	31
02-May	Post harvest of sesame: Keshpur, Paschim Midnapur	Farmers	43	7	50
03-May	Oilseed cultivation: Patharpratima, S-24 Pgs	Farmers	29	0	29
09-May	Market linkage of maize production	Farmers	49	0	49
24-May	Post harvest and market of sesame	Farmers	45	5	50
13-Jun	Post harvest technologies of oil seed crops: Keshpur, Paschim Midnapur	Farmers	51	0	51
28-Jul	Post Harvest Tech of Oilseed: Baru pur	Farmers	30	20	50
30-Jul	Processing, storing and Marketing of Maize: Patharpratima	Farmers	40	10	50
11-Aug	Processing and Marketing of White sesame: Keshpur	Farmers	38	2	40
16-Oct	Package and Practices of Maize cultivation and its marketing: Banashyamnagar, Pathar Pratima	SHG members	60	20	80
17-Oct	Package and Practices of Maize & sunflower cultivation: Brazaballavpur, Patharpratima, S-24 Pgs	SHG members	11	81	92
18-Oct	Package and Practices of Maize & sunflower cultivation: Keshpur, W-Mdp	SHG members	51	2	53
17-Nov	Package and Practices of Sunflower & Maize cultivation	SGI Farmers: Baduria, N-24 Pgs	45	15	60
02-Jan	Training on cultivation of maize : Pathar Pratima, South 24 Pgs	Farmers	60	8	68
06-Jan	Cultivation practices of White sesamum : Tarakeswar, Hooghly	Farmers	65	5	70
16-Jan	Package of practices of maize cultivation: Pathar Pratima, South 24 Pgs	Farmers	39	3	42
17 Programmes			728	187	915

Men are more valuable than all the wealth of the world

- Anonymous



H. Agricultural Exhibition & Mela:

The 46th Annual Celebration of the Agricultural Training Centre was held during 24 - 27 January, 2013. The Celebration was inaugurated by Swami Suparnanandaji Maharaj, Secretary of the Ashrama. Sri Partha Chatterjee, Hon'ble Minister In-charge of Commerce and Industry, Public Enterprise, Industrial Reconstruction, Information Technology and Parliamentary Affairs visited the exhibition and addressed the students, trainees, stall holders and staff members of the Ashrama on this occasion.

The main theme of the exhibition of this year was 'Bio-village'. The concept of the 'Bio-village' was presented through the live models, demonstrations depicting a real village engaged with the bio-farming in miniature form.

The models represented a farmer's house with different good practices. For rearing of cattle (model) and goat or lamb (live) there was high yielding and protein rich fodder (live) field. Different steps of verm composting were shown with a model of farm women dealing the process. Green manuring along with use of botanical pesticide (Neem) was also in the model form. For sustainable farming, use of trees and medicinal plants as agro-forestry was shown live. Growing of high value vegetable (broccoli, pacchoi, brussels sprout, cherry tomatoes, red cabbage, Chinese cabbage) were shown live in the field as options for better values in bio-farming. Efficient use of irrigation water was presented through family bucket-kit system for high value organically produced crop. A village shop operated by a lady and selling all bio and eco-friendly farm inputs and products was also a part of the presentation.



At the centre of the exhibition a village pond with systematic and scientific uses of all its resources (duckery, fishery, vegetable cultivation, Azolla cultivation, place for poultry, fruit trees etc.) was one of the points of attractions. Another important model got everyone's interest on 'Tathya Mitra Kendra' (Common Service Centre) model shop, where a lady was dealing with computer and people were receiving different information on agricultural relations. After visiting the stall, the Adviser to the CM on Agriculture and allied sector and Secretary of Dept. of Agriculture advised the Principal of ATC to exhibit the same in 'Mati Utsav' (State Agricultural Fair).

Like previous years, the fruit and vegetable show, received every visitor's attention. All total 199 farmers participated in that show. Out of 228 number of produces, there were 127 entries on vegetables, 101 on fruits and other (greens, flower, spice, sugar crop etc.). The high value vegetables and some uncommon fruit like 'Norfall' etc. received everybody's attention. Large number of farmers, technologists, general people paid their visit to that show and eagerness was generated about such quality production and culture practices, specially by the farmers.

The display by the students of Integrated Rural Development and Management Faculty Centre of the Vivekananda University of the Ashrama attracted the academicians and also the agricultural and rural development related personnel. Method of growing of Azolla, Mushroom, different Bio-pesticides and Bio-fertilisers were demonstrated and explained by the students. The eco-friendly pest control concepts, specially the Bio-control demonstration created lot of eagerness among the people.

The 2nd day of the celebration (25 January) was designated for an important seminar on 'Bridging the Gap between Production and Marketing'. Sri Pradip Mazumdar, the Adviser to the CM on Agriculture and Allied Sector inaugurated the Seminar and offered his address as Chief Guest of the Seminar on 'Present steps and future strategies



for bridging the gap between agricultural production and marketing'. Guest of Honour, Dr. Pijush Pramanik, Director of Horticulture addressed the audience about the 'Initiatives on promotion of market for horticultural production'. Dr. Kamala Kanta Saha, Director of Animal Resource Development shared his experience on 'Production and marketing in Animal husbandry in West Bengal'. Dr. Satinath Das, Faculty, SAMEI shared his experience of 'Implementing project linking producers and buyers/ milk processor'. Dr. Sailen Biswas, Joint Director of Fishery presented the 'Steps to bridge fishery based production and marketing'. Sri Birendranath Roy, an innovative farmer from Birbhum District (recommended by Dept. of Agricultural Marketing) on organic farming told the audience about his mechanism of production and

marketing, Sri Sudipta Mukherjee, Additional General manager Merchandising, Spencers Retail Ltd, Gave his presentation on 'Option to bridge the gap between production and marketing in West Bengal'.

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain — and the whole world is at your feet."

— Swami Vivekananda

"Let New India arise out of the peasants' cottage, grasping the plough out of the huts of the fisherman, the cultivator, and the sweeper."

— Swami Vivekananda

The officers from all Agriculture and allied department, Representatives from KVKs along with University scholars and students, progressive farmers etc. participated in the seminar.

In the third day (26 January, 2013) of the Celebration, the Re-union of the Ex-trainees of the Agricultural Training Centre was held in the fore-noon session. Sri Madhusudan Kundu, Ex-Director and Principal of the Agricultural Training Centre and SAMETI of the Ashrama presided over the Re-union function. Sri Asit Baran Saha, Joint Director of Agriculture was the Chief Guest and expressed the overall agricultural situation of West Bengal. Sri Sibabrata Ghatak, Deputy Director of Agriculture (Training), HQ encouraged the Ex-trainees about their extended service towards the farming community. The participants exchanged their experience of their own work.



In the afternoon of 26 January, the Prize Distribution Ceremony was held. Sri Subir Das, Deputy Secretary, Department of Agriculture presided over the Ceremony. The farmers, producing best quality of agricultural produces was awarded and encouraged. Overall 152 of prizes (for vegetable=87 and for fruit etc.=65) were offered to such farmers for their quality services. The agricultural implement operator of the Ashrama farms were also encouraged with considerable amount of hours of operation of agricultural implements.

Sri Subrata Biswas, Secretary, Department of Agriculture, Govt. of West Bengal paid his visit to the Exhibition, SHG stalls etc. in the afternoon of 26th January, 2013 and encouraged the staff members and students



for such quality exhibits.

'Mati Utsav': A State level Festival, focusing different agricultural and rural development aspects and technologies was held at Panagram, Burdwan, organized by the Govt. of West Bengal during 9-15 February, 2013. On the basis of advice of the Secretary, Dept. of Agriculture, SAMETI took part in that state level programme. A demonstrative exhibition on 'Bio-village' concept was displayed in that programme. Different aspects of eco-friendly and sustainable agriculture along with aspects of sustainable livelihood of the farming community was displayed through live demonstrations, models, flexes etc. The demonstration of the integrated farming, vermicomposting, toddler cultivation-dairy, village ICI Kiosk, organic entrepreneur's shop etc. highly attracted the farmers and generated lot of queries for implementation of such system.

"Try not to become a man of success. Rather become a man of value."

— Albert Einstein

II

AGRICULTURAL EXTENSION SERVICE

A. Agricultural Farm : Trial - Demonstration - Seed Production

Throughout the year, need based trial/ demonstrations are carried on targeting different technologies to be spread among the farmers or the efforts targeting solution of field problems of the farmers in the farms of the Ashrama as well as in farmers field guided by the experts of the ATC / SAMETI or with the collaboration of different institute on the basis of the need and supports available.

1. Organic Farming:

Production of crops by using organic preparations and excluding any chemicals were in demonstration in farm land. The crops grown were: paddy, moong and mustard. The organic preparations used were: vermicompost, panchagavya, sashyagavya, kunapajala and sanjivani. The production was satisfactory.

Quality vegetable seedlings were distributed among 63 farmers, who were given an orientation on cultivation of vegetable and later on a visit of those farmers were made to the demonstration plot at farm.

All the above mentioned demonstrations were visited by more than 650 farmers.

Demonstration of the Implement for Dry and direct seeded technique in paddy was also conducted in about 20 bighas of land in Pachar Pratima block (Dudheswar) in Sunarban and got popularity of the technique. Some modifications of the implement have been suggested for more effectivity of the technique and trial is going on in participation of the farmers.

2. Drumseeder method of paddy cultivation:

The Drumseeder has been introduced in West Bengal about 10 years ago and it is gradually becoming popular among the farmers. A demonstration with the guidance of the ATC experts was made in more than 40 bighas of land in Keshpur area of Paschim Medinipur, Boro = 70-80 bigha & khariif = 5 bigha in South 24 district. In spite of little bit more weed problem, the method has been proved advantageous to the farmers in combination of direct seeding machine (Drumseeder) along with Paddy-weeder. Duration of the crop was 9 days less in comparison to the transplanted rice. As per the farmers, the labour requirement was about 10 percent less, tillering capacity is conspicuously high. Druggery of transplanting of seedling can be totally avoided.



3. Farm Activities:

Throughout the year different crops were under cultivation as per season on the farm land of the Ashrama under supervision of the ATC experts. Most of the crops were targeted for quality seed production of different crops for distribution to the farmers. The seed production programme was in collaboration with the State Seed Certification Agency, Tollygunj under Directorate of Agriculture, Govt. of West Bengal.

"Agriculture is the noblest of all alchemy; for it turns earth and even manure into gold, conferring upon its cultivator the additional reward of health."

— Paul Christy



All are breeder seed used for foundation seed production in our Ashrama farm	Paddy	IET 4786 , MTU - 7029, IET- 5656, Swarna Sub- 1, Pratiksha, Sabita (NC-492), Basmati- 2
	Oil seed	Mustard - B-9 Sarana Sesame - Gujrat Til - 2
	Pulses	Mung - Samrat Arhar - UPAS - 120

Sl. No.	Name of the Crop	Varieties	Level of Seed
1	Paddy	IET-4786, IET- 5656, NC- 492, MTU- 7029, Masuri, GB-1	Breeder to Foundation
2	Moong, Arhar	Samrat, B- 1, Sonali , UPAS - 120	Breeder to Foundation
3	Mustard Sesame	B-9 Gujrat til - 2	Breeder to Foundation Foundation to certified

Different demonstrations had also been carried out in the Farm land:

4. Vegetable Production Demonstration:

Early, peak season and late season vegetable production was demonstrated on 13 different vegetable with totally 93 varieties with 7.5 square metre area each. The vegetables are Broccoli (no. of varieties-2), Cabbage (18), Cauliflower (17), Leek (2), Carrot (4), Coriander (1), Spinach (2), Lettuce (2), Salsify (1), Tomato (7), Capsicum (2), Pea (1), Radish (6), Chilli (13) and Ladies finger (7).

5. Tomato Seed Production in Farmers Field:

Eight farmers of Gholia village (Baruipur block, South 24 Parganas) were motivated to go for seed production of tomato. The project was done in six bighas of land and the production was very encouraging (12 Kgs/ bigha). The total seed was purchased by a Private company with high price (Rs.600 / Kg in comparison to the normal tomato. This demonstration has created lot of enthusiasm among the local farmers.



6. Seed Village

For production of quality seed by the farmers themselves in mass scale the 'Seed village' programme has initiated by the Govt. of West Bengal. Thirteen such seed village programme were conducted in Partur Pratima area of South 24 Parganas by the institution with the active participation of the farmers of those areas.

"Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land"

- Lord of Chatham, William Pitt

B. Soil Testing Laboratory & Extension Programme:

Sustainability of agricultural production largely depends on the sustainability of soil health and fertility to a great extent. Naturally use of fertilizers, manures, soil amendments, micronutrients must be based on the need of the respective soil; otherwise cost of cultivation along with degradation of soil health will increase rapidly. Though farmers are now becoming aware about importance of soil testing, unfortunately 'eagerness' could not be transformed to 'activity' due to lack of soil testing laboratories at the door step of the farmers. To bridge the gap ATC, Narendrapur took an initiative to establish small soil testing laboratories at village level with the support from Dept. of Horticultural, Govt. of West Bengal. The village organization (registered under society act) closely associated with rural development activities of Ramakrishna Mission were selected for such venture.

The objectives are -

1. To create awareness about soil health and importance of soil testing among the farmers
2. To create minimum infrastructure at village level for soil testing at the doorstep of the farmers.
3. To provide speedy feedback and recommendation to the farmers.

The Major Instruments provided to the field laboratories are

- i) PH, meter ii) EC meter iii) Colorimeter iv) Flame photo meter v) Shaker vi) Electronic Balance vii) Distilled water plant.

Type of Analysis done

- i) Routine Analysis Done (PH, EC, Org% Available P kg/l Available K mg/l)

Process of collection of soil Sample

Sample collection through Rural development infrastructure, club, S.H.G. etc.

No of laboratories - 5 nos.

- i) Burdwan Deepan Yuba Gnosthi; Block Khandakosh
- ii) Sanid Khudiram Srimiti Sangha, Keshpurs, Midnapur (W),
- iii) Karsabati Guchha Samity, Midnapore (W) Block - Panskura
- iv) Sagar Mongal - 24 pgs (S), Block - Sagar
- v) Patharpratima - 24 pgs(S) Block - Pathar Pratima

Technical Support (Knowledge and Training)

- > One (10+2) standard (Science) person was given training at Ramakrishna Mission Narendrapur Soil Testing laboratory by the expert of ATC, R.K.M Narendrapur in both chemical analysis and sample collection procedure and also basic chemistry in both organic and inorganic.
- > The trained person was engaged in the field laboratory and guided to handle the instruments of the field laboratory and thus came to a standard position.

"I can't contain myself when one draws near me and calls me Mother"

- Sarda Gauri

- Test results with details of the soil sample /field are sent to ATC through e-mail and recommendations are given by the soil scientist and sent to the field through e-mail for the farmers.
- Cross checking of the test results done in the soil testing laboratory by the soil scientist of Agricultural Scientist of ATC Ramakrishna Mission Narendrapur.
- As and when required expert from Soil testing lab, ATC, Ramakrishna Mission Narendrapur attends the field laboratories for maintenance of the instruments and also the test results regularly.

How are responses?

Initially the responses of the Farmers were very low because of the gap of communication.

Later on with Awareness camp in the area and also getting feedback from benefited farmers, the number of sample is increasing gradually. In last 6 month of the reporting period the following number of samples were tested and recommendation given.

1. Burdwan Deepan Yuba Ghosthi; Block Khandakosh = 111
2. Sahid Khudiram Smiti Sangha, Keshpurs, Midnapore (W), = 208
3. Kansabali Guchha Samity, Midnapore (W) Block = Panskura = 198
4. Sagar Mongal = 24 pgs (S), Block = Sagar = 124
5. Patharpratima = 24 pgs(S) Block - Pathar Pratima = 387

In 2012-13, in the Soil Testing Laboratory of the institute, 230 numbers of soil samples were tested.



"As long as I live, so long do I learn"
- Sri Ramakrishna

C. Customs Service Unit:

This unit is one of the important units of the institute. It serves the farmers and trainees of this locality by providing technical competence, extension services and support. The unit is run by technical qualified personnel and having modern agro-equipments viz, tractor, power tiller, trolley, harvester, power reaper, pump set, sprayer, manual transplanter, drum seeder etc. The services like tillage in the institute's farm and farmers' field, trolley services in the farmers' field, demonstration of different agro implements / machineries during different levels of training are available in this unit. Popularisation of farm mechanisation and implementation of mechanised services are the major objectives of the wing. The services offered by this wing are:



The services offered by this wing are:

1. Tillage by tractors at farmers' field in the locality
2. Tillage by power tiller at farmers' field
3. Trolley services to the farmers
4. Demonstration, trial, improvisation of mechanised agri- implements as better option and drudgery reduction to the farmers.

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This unit also extended supports to the ongoing training programmes. A status of the services provided during this year is given below:

Sl. No.	Services	Hours	No. of farmers / units availed the facility
1.	Ploughing hours of power tiller	409 hrs	61
2.	Ploughing hours of tractors	105hrs. 25 mts.	39
3.	Trolley services	141 hrs. 35 mts.	17
4.	Farm implements / machinery demonstrated	Power Reaper, Manual Transplanter, Drum Seeder Dry Seeder	Trial in the farms & demonstration during training



"I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold service was joy"
- Bhubhannath Chakraborty

D. Animal Resource Development - Training, Demonstration and Extension Service:

The animal husbandry is considered as inevitable part of agriculture, particularly when we are raising our voice for Sustainable Agriculture. The Animal Husbandry unit is the important part of the Agricultural Training Centre/SAMETI as component of IIRD in agricultural sector. The unit includes the following components.

In-Campus	Off-Campus / Extension
<ul style="list-style-type: none"> Dairy Farm Poultry Farm Green Fodder Lane Bio-gas Plant Vermicompost Unit Training 	<ul style="list-style-type: none"> Distribution of green fodder cuttings/ Seed Door to door A.I. Veterinary Clinic Setting up live-stock farm in farmer's house

Thrust Areas:

1. Strict implementation of breeding policy.
2. Maintenance of Heifer stock
3. Increase the production & productivity.
4. Improve the quality of milk.
5. Proper Maintenance of breeding cycle.
6. Management of animal health & disease control.
7. Recycling of waste products.
8. Make pollution-free environment through cultivation of green fodder, bio-gas plant, vermicompost etc.
9. Application of modern technology.

Strength of the Dairy unit

The categorized cattle population is one of the strengths of the unit. The total cattle population is systematically maintained with pedigree and follows the scientific breeding policy. For this systematic approach this scientifically maintained herd becomes very valuable for the Graduating and Master student of the University.

Sl. No.	Cattle	No.	Breed				
			Pure Gir	HF X G	HF X S	J X G	J X S
1	Milch cow	73	4	23	25	9	12
2	Dry pregnant cow	8	3	1	2	X	1
3	Training cow	3	X	X	2	X	1
4	Pregnant heifer	9	X	4	3	1	1
5	Heifer above 18 M	10	X	3	3	2	2
6	Heifer above 12 M	11	1	2	2	1	2
7	Heifer above 6 M	14	1	4	5	2	2
8	Heifer below 6 M	18	4	5	5	2	2
9	Male calf below 10 M	15	2	4	4	2	3
	Total	158	16	45	50	19	25

"The Man who works for others, without any selfish motive, really does good to himself" *- Sri Ramakrishna*

Bio-security

Sl. No.	Test	Frequency per year
1.	Milk test for Mastitis	4 times
2.	Blood test for Brucellosis	Once
3.	Blood test for IBR	Once
4.	Blood test for Protozoa	Once
5.	Tuberculin test for Tuberculosis	Once
6.	Stool Examination for Endo-Parasites	Thrice
7.	Disinfectant Spray in cattle sheds	Once in a week
8.	Use of Bio-waste materials in	3 Bio-gas plants

Disease Control

Sl. No.	Preventive measures	Frequency per year
1.	Vaccination against B.O., H.S., Anthrax	Once
2.	Vaccination against F.M.D.	Twice
3.	Vaccination against Theileria	Once
4.	Blood test for Diagnosis of diseases	Once
5.	Routine De-worming	4 times

Management of dairy with its all possible components in profitable manner has become a point of interest for the Dairy management student as well as for the future entrepreneurs in dairy sectors.



Sl. No.	Particulars	Covered area
1.	Bio-gas Plant 6 Cu.M.	3 Nos.
2.	Vermicompost unit	30 tons per year
3.	Green fodder cultivation	7 acres of land
	a) Hybrid Napier	3 acres of land
	b) Para grass	1 acre of land
	c) Seasonal Maize, Cow-pea, Barseem, Oats.	3 acres of land

"You can't cross the sea merely by standing and staring at the water" *- Rabindranath Tagore*

Poultry Unit

Like the dairy unit, the bird or poultry sector also draws attention of the learner. A number of courses for the demanded rural youths are conducted towards successful poultry entrepreneurs.

500 broiler All In - All Out System.

Modern Equipments

1. Milking Machine,
2. Floor Rubber Mat,
3. A.L.Gun-3 in one,
4. Chaff-cutter machine,
5. Cream separator machine

Extension Services:

Besides training and education, the unit also paid good attention to extension activities in surrounding villages. Along with awareness generation about scientific rearing, advisory, vaccination, bred up gradation, different clinical test, disease diagnosis and treatment etc, are provided for animal resource development as well as income generation by the farmers.

Thrust Areas:

1. Improvement of the local cattle breed through cross-breeding.
2. Practical oriented training to the youth for self-employment.
3. Establishment of small, medium and large sized livestock farms.
4. Additional income generation for rural women through rearing of Cow, goat, poultry and ducks in low-cost technology.
5. Distribution of green fodder seeds / cutting
6. Distribution of fodder cuttings to the farmers: 20000 nos.
7. Numbers of animals treated: 2150 nos.
8. F1RD vaccination: 8000 nos.
9. FDRD vaccination: 2000 nos
10. FMD vaccination: 600 nos
11. BQ vaccination: 400 nos.
12. HIS vaccination: 650 nos.
13. Door to door A.I. (Including field A.I workers): 1552 nos.

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain - and the whole world is at your feet"
- Swami Vivekananda

Establishment of Live-stock units

Sl. No.	Particulars	No. of units
1.	House Dairy units	15
2.	House Poultry units	180
3.	House Goat unit	50
4.	Commercial Dairy unit	2
5.	Commercial Poultry unit	2



Sorghum



Maize



Dhaincha



Hybrid Napier



Para grass



Cow pea



Mixed Greens



Berseem

"I'll tell you one thing- if you want peace of mind, do not fault with others"
- Swami Vivekananda

STUDY & EVALUATION

A: Regular Programme Evaluation: An Introspection of ATC & SAMET Programmes:

An Institute providing human resource development support can be regarded as worthy Institute only when the participants of its different programmes excel well in their own domain of activities. In order to make a self appraisal of its performances, Agricultural Training Centre and State Agricultural Management & Extension Training Institute (ATC & SAMETI) always contact its trainees after a considerable period of their training to get impartial feedback from them. All the faculty members of the Institute are actively involved in the evaluation.

Institute's programmes conducted during April, 2012 to January 2013 have been divided into three categories viz. Group: A - category for the members of farming communities, programmes under Group: B - were meant for the grass- roots level extension functionaries and higher level Govt. Officials fell into the Group: C - category. Three different questionnaires were developed to obtain the relevant information. In so far as the methodology of this study was concerned stratified random sampling method was followed in order to select the respondents. Now, category wise feedback received from the ex-participants who attended in the aforesaid three categories of programme is discussed herein below:

Profile of the programmes during the reported period and the number of ex-participants covered under the study are thus:

Sl. No.	Programme category	Category of ex-participants	No. of programmes organized	No. of covered Ex- participants
01	A	Farmers, SHG members, Rural entrepreneurs	45	143
02	B	Grass roots Level Extension Functionaries	14	50
03	C	Higher level Govt. Extension Functionaries	18	45
Total			77	238

CATEGORY : A

A sum total of 45 training programmes were organized by ATC & SAMETI during the reporting period and basically farmers fell into this category. This impact study selected 143 participants from the category A. Following findings are related to different facets of the respondent-farmers.

- i) Age, sex & religion: A substantial portion of the respondents is quite young and it constituted 13.35 per cent belonging to 20 to 35 years of age group, next bulk group of participants fell into the age group of 35 to 50 years, 10.78 per cent respondents were a bit aged i.e. above 50 years and only 3.19 per cent was quite young who did not exceed 20 years of age.

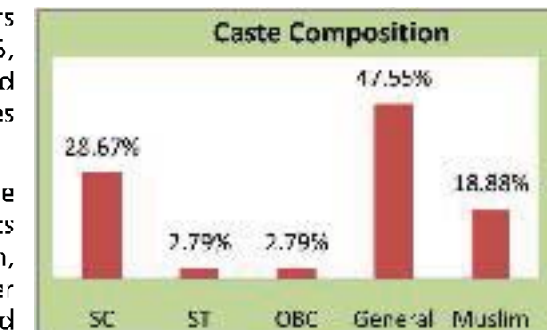


It appears to be the common occurrence that males always outnumber their female counterparts in almost every training programmes. Here in this study, 58.04 per cent is male and the percentage of female trainees was 41.95.

The number of Muslim participants was very meager in number in comparison with Hindu. The study encompassed 81.18 per cent Hindu and the rest 18.18 per cent participants were Muslim.

" You can't cross the sea merely by standing and staring at the water "
 - Kalidasa

Caste composition depicted that nearly half of the respondents hailed from general category and their percentage was 47.55, scheduled caste stood next to them having 28.67 per cent and the percentage of both scheduled tribe and other backward classes comprised of 20.79 per cent each.



- ii) Occupation, family members & monthly income : Since rural people are basically dependent upon agriculture, 83.91% respondents covered under the study having farming their prime occupation, 9.09 per cent respondents involved in small business, 4.19 per cent solely earned from daily wages, 1.39 per cent trainees opted for animal rearing, 0.69 per cent participants prime occupation was identified as fishery and the rest 0.69 per cent was in service.

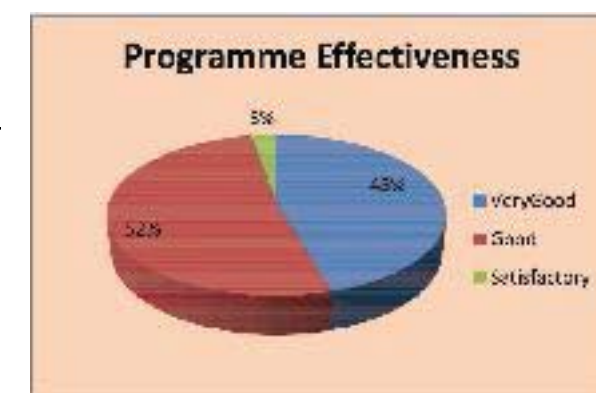
Villagers do not completely dependent on one occupation. Apart from their prime occupations they also earned from other allied sources. Study depicted that 33.56 cent farming families' subsidiary source of occupation was animal rearing, another sizeable portion i.e. 23.07 per cent opted for fishery, agriculture was found to be secondary source of earning to 13.28 per cent, 12.58 per cent farmers earned from daily wages while fishery was supposed to be secondary source of income to 1.48 per cent respondents. So, it transpires from the findings that besides agriculture other allied sectors too were found to be very dominant.

Number of family members & monthly income : Now, nuclear families are observed in rural areas too. Around 1/3rd of the total respondents had small families consisting of only 4 members. 46.15 participants-families had 4 to 6 members and the rest 20 per cent families were comparatively big in size having 6 to 8 persons and above.

Responses from the ex-participants revealed that 3/4th of the total respondents' monthly income was poor indeed. Of them, 22.37 per cent's earning fell into the monthly income category ranging from Rs. 2000 to 3000. 21.67 per cent respondents of Rs.3000 to Rs. 4000 group having better income than the previous group, 13.98 per cent ex-participants belonged to Rs. 4000-Rs. 5000 income group while 17.48 per cent farmers were really downtrodden as they earned up to Rs. 2000 category and finally 24.44 per cent farm families were in better-off condition compared to other farmers since their income came under Rs. 5000 and above per month category.



- iii) Programme effectiveness : Three parameters were framed to have the opinion of the respondents regarding effectiveness of the training programmes they attended at ATC & SAMETI. Training programme was supposed to be good to 51.74 per cent respondents, very good felt by 45.45 per cent farmers while only 2.79 per cent respondent-families considered the training programmes attended by them was satisfactory.



- iv) Topics preferred: Preference of topics varied from training course to training course and covered a wide range. Prominent among those scored high frequencies were vermi composting, improved technologies, cattle rearing, mushroom cultivation, pest management, first aid for Animals, organic manure and vegetable cultivation.

" The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain - and the whole world is at your feet "
 - Swami Vivekananda

- v) Application of gained knowledge: Three areas of application have been suggested by the ex-participants. Conceptual clarity developed stood apex of all. It was felt by 70.62 per cent respondents, 60.13 per cent thought their skill enhanced where as 4.89 per cent did not specify the areas of application.
- vi) Enhancement of income: Income enhancement acts as one of the important indicators for measuring the effective outcome of the training courses. Study showed that 43.35 per cent participants admitted the growth of their income while 56.64 per cent did not experience such enhancement.

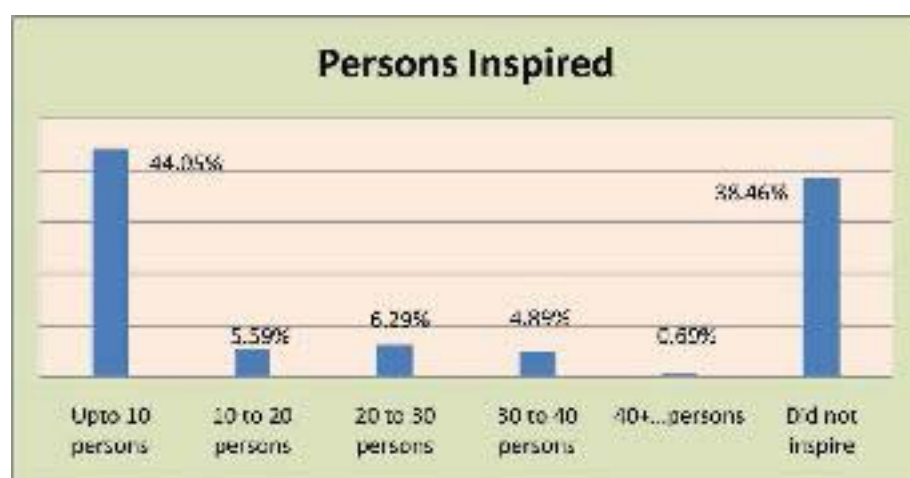
In the arena of monthly enhancement of income it was observed that 25.96 per cent found to increase up to Rs.500 per month, Rs.500 to Rs.1,000 was enhanced for 11.18 per cent, 3.49 per cent's earning was increased to Rs.1,000 to Rs.2,000, 2.79 per cent farmers were able to maximize their earnings Rs.2,000 & above.

Amount of Monthly Income enhanced

Sl. No.	Amount in Rs.	Number	Per cent
01	Up to 500	37	25.96
02	500 - 1000	16	11.18
03	1000 - 2000	05	03.49
04	2000 - ...	04	02.79
05	No enhancement	81	56.64
Total		143	99.96

- vii) Persons sought Advice & inspired : This yardstick also indicates that how far the ex-trainees have been able to establish their acceptance as knowledgeable persons to other in their locality. Study findings showed that 51.04 per cent became successful to do so since fellow farmers came to them for different sorts of clarification but none came to 48.95 per cent farmer respondents. It may be concluded that latter group of trainees established themselves neither knowledgeable nor sensitive to the fellow farmers.

Experience showed that after going back to their respective areas ex-trainees motivated their fellow farmers a lot by their changed practices in the field which were learnt during their tenure of training programme. 61.53 per cent were reported to inspire while 38.46 per cent farmers did not notice such thing among their neighbouring farmers.



"The tree laden with fruits always bends low.
If you wish to be great, be low and meek"

- Sri Ramakrishna Das

Respondents were further probed to count the number of persons inspired by them. Findings depicted that 44.05 per cent noticed that around 10 persons were motivated, 6.29 observed 20 to 30 farmers, 5.59 per cent found 10 to 20 persons and it was indeed highly encouraging for 4.89 respondents who noticed 30 to 40 persons for being motivated and only 0.69 per cent was able to inspire 40 and above farmers. So, it was undoubtedly an achievement both for the farmers mentioned above and obviously also the Institute.

- viii) Problem faced & their nature in implementing acquired knowledge : When farmers initiated application of gained knowledge in their own fields started to come across multiple problems. Farmers' responses showed 55.24 per cent admitted to face problems and 44.75 did not have any problem on the other hand.

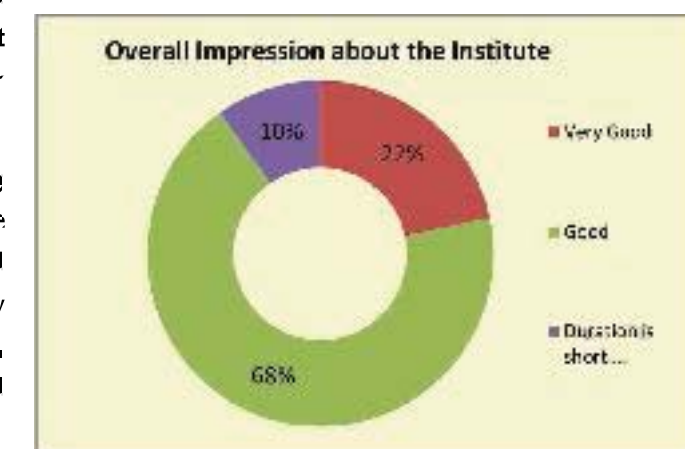
In the domain of problems, 8 problems to a great extent have been marked by the ex-participants. The perennial problem which scored maximum responses was financial, next to that was low productivity. Besides these two marketing, lack of further improved training, higher input price, diseases, cooperative loan & irrigation facility were acted as barriers to the farmers to implement their acquired knowledge.

- ix) Assistance types & sources etc. : Mere attending the training course did not equip the farmers solely, as a result an overwhelming number of participants felt for further assistances. 72.72 per cent respondents as has been reported sought ample sorts of help whereas 27.27 per cent did not require any help at all.

With regard to nature of assistances, study revealed that further improved training was supposed to be the prime barrier to them. So, 27.97 percent sought opportunity for undergoing further training. Major group of assistance seekers have been suffering from financial stringency, they constituted 21.69 percent, 9.79 percent desired to have inputs, 9.79 percent sought help for marketing facilities and finally 'Technical help' was felt by 4.19 per cent ex-trainees.

Three sources have been suggested by the ex-participants for obtaining the required help. Different Govt. departments and Agricultural Training Centre were supposed to be equally reliable sources of assistance. 30.76 per cent ex-trainees preferred Govt. departments and 30.06 per cent opted for ATC and 11.88 per cent found fellow farmers to be very much helpful for them.

- x) Overall Impression about the Institute : Encouraging opinion have been received from the respondent while asked about the overall impression of the courses and the training institute. 21.67% responded as 'Very Good', 68.53% expressed it as 'Good' why 9.79% said, 'duration of the course is short enough to understand the input satisfactorily'.



"Finish the few duties you have at hand, and then you will have peace"

- Sri Ramakrishna Das

CATEGORY : B

Category B comprises of the middle level extension functionaries. Altogether 14 types of programme held at the premises of AIC & SAMETI organized by the Institute. A total of 50 ex-participants have been covered under the purview of this impact study.

a) Age, Sex, Religion & Caste : Half of the total responses was youth belonging to the age group of 20 to 35 years of age, 42 per cent responds were from 35 to 50 years and the rest only 8 per cent was a bit aged i.e. above 50 years of age.

As regards sex division of the participants, male participants constituted 98 per cent while a very meager percentage i.e. 02 per cent of the total participants was female.

General caste in percentage was 59.09, other backward classes covered 22.72 percentage and scheduled caste category respondents constituted 18.18 per cent.

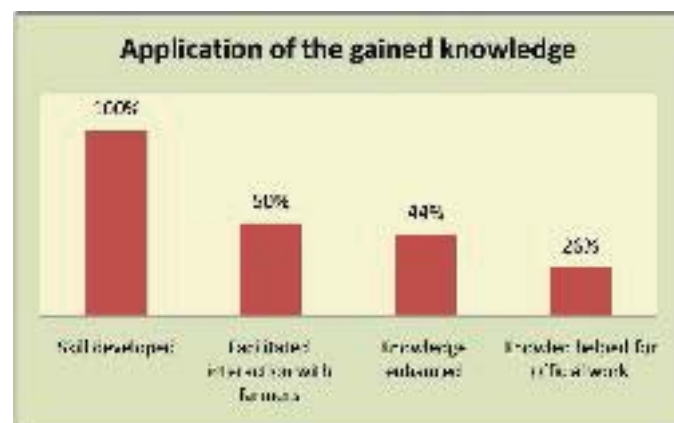


b) Effectiveness of programme and opinion regarding training inputs: Three yardsticks were suggested to the respondents for obtaining their remarks about effectiveness of the programme. Responses in this regard were very positive as Very Good was opted for by 74 per cent trainees, good category was marked by 18 per cent respondents and only 8 per cent marked the programme they attended was satisfactory.



In response to the aspects of the training programmes they like liked most, it was evident that a few topics viz, sunflowers, maize, white sesame, insect pest and disease management, SRI & drum-seeder, floriculture were preferred by majority of the participants.

c) Application of gained knowledge: Four areas of application have been identified by the respondent-trainees. Out of these four areas skill developed was acknowledged by 100 per cent participants, interaction with farmers was facilitated to 50 per cent respondents, 44 per cent's knowledge enhanced and 26 per cent thought that gained knowledge helped them in their official assignment. So, training programme as has been reported helped the participants to go for application of gained knowledge to a great extent. Participants were found to go for application of their gained knowledge in more than one area.



"Science without religion is lame, religion without science is blind."

- Albert Einstein

d) Persons sought advice : Respondents have been divided into 5 groups in accordance with the number of persons contacted by them to have their advice on different issues. Responses showed that 30 per cent trainees were contacted by 10 to 20 farmers, 28 per cent respondents helped more than 40 persons to meet their queries, around 10 farmers approached 22 per cent ex-trainees, 10 per cent gave advice to 20 to 30 persons and the same quantum of ex-trainees extended their advice to 30 to 40 villagers.

Number of persons sought advice

SL No.	No. of persons	Number	Per cent
01	Up to 10	11	22
02	10 - 20	15	30
03	20 - 30	05	10
04	30 - 40	05	10
05	40 + ...	14	28
Total		50	100

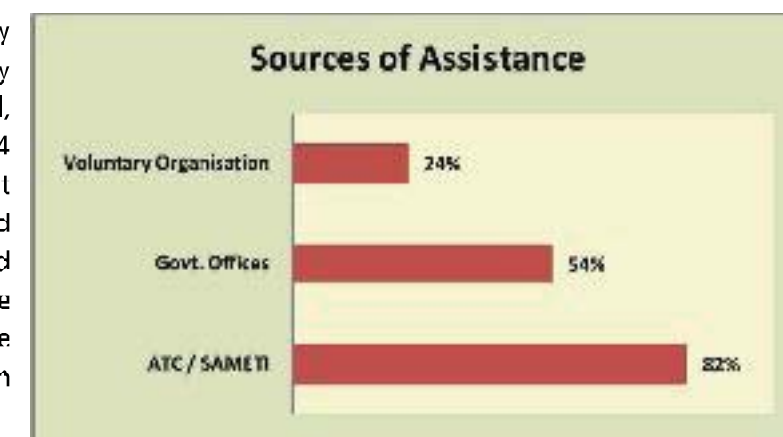
c) Problems faced and their nature : As regards problems being faced by the ex-trainees, 74 per cent respondents were found to come across numerous problems where as 26 per cent discarded to face problems at all in applying their knowledge.

In the sphere of nature of problems, low productivity, non-availability of raw materials, marketing, selling of produce and opportunity for attending improved training programmes and so on so forth were faced by majority of the ex-trainees, certain other problems viz. water logging, pest management, staff shortage have also been marked by a few ex-trainees.

f) Assistance - types and sources: Out of the total respondents, 86 per cent ex-trainees strongly advocated for ample types of advice from different sources and 14 per cent did not seek any advice on the other.

Domain of assistances included advanced training, technical advices related to different issues, market linkages, supply of quality seeds etc. Some assistances like providing vaccine & medicine, exposure visit, irrigation facility and financial assistance obtained attention from ex-trainees which are comparatively few in number in comparison with former types of assistance.

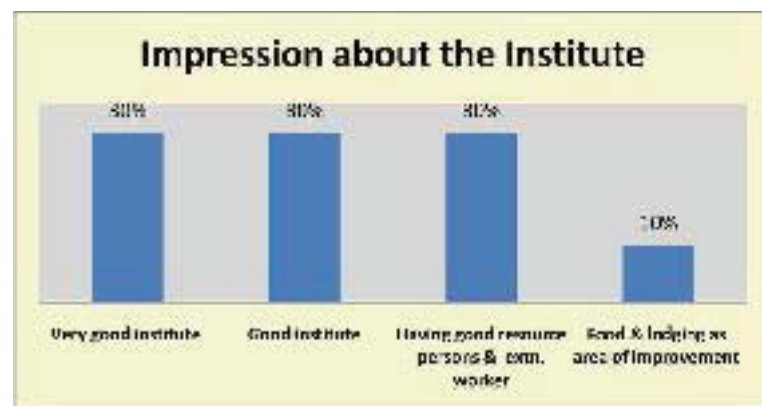
As regards sources of assistance, the study revealed that 82 per cent respondents highly relied on Agricultural Training Centre / SAMETI, Narencapur to meet their requirements, 54 per cent contacted Govt. officials, 24 per cent emphasized upon voluntary organizations and only 2 per cent respondent-trainees marked IFFCO for meeting their assistances. Here multiple responses were received i.e. one respondent sought assistance from more than one source.



"On this basis- being right and doing right- the whole world can unite"

- Swami Vivekananda

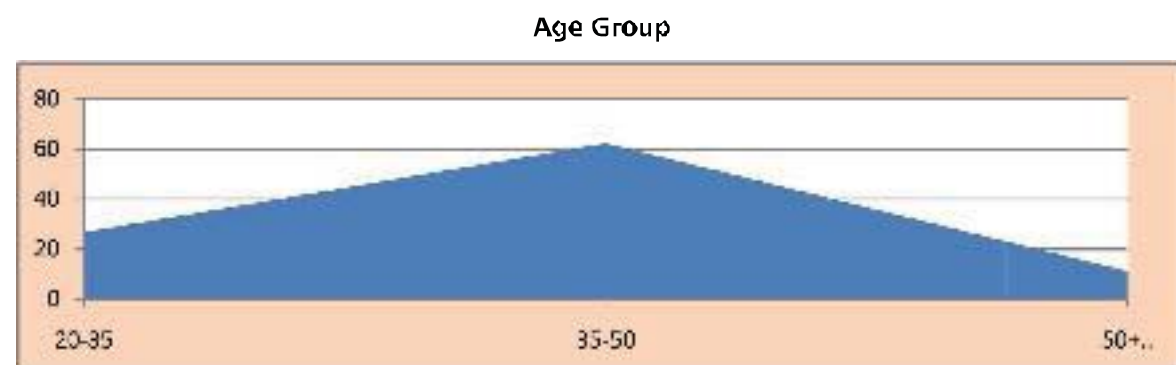
- g) **Impression about ATC & SAMETI**: Agricultural Training Centre & SAMETI, Narendrapur happened to be Very Good institute to 30 per cent ex-trainees, 30 per cent considered it as Good Institute, having good extension workers as well as good resource persons earmarked by equal number of participants. 'Food and lodging as area of improvement' is mentioned by 10 percent ex-trainees.



CATEGORY: C

There were 18 number of programmes organized under this category. All the higher Govt. Officials were contacted for having their feedback regarding the program they attended at the Institute. The programmes were seemed to be highly encouraging as far as the responses of the ex-trainees are concerned.

- i) **Age, Sex & Religion**: With regard to the age group of the extension functionaries, all the 45 respondents have been clubbed into three age groups. Age group wise number of functionaries showed that concrete opinions have been received from majority of the respondents as they seemed to be matured. Nearly 3/4th of all the functionaries belonged to the age group of above 35 years while a negligible portion i.e. 26.66 per cent fell in the 20 to 35 years age group category.



Only 11.11 per cent is female extension functionaries and the rest are males who have been covered under the purview of this impact study. Females' representation in most of the programmes conducted by ATC & SAMETI has been observed to be almost same proportion as has been evident in this category.

As regards religion, study reveals 95.55 percent participants of the different programmes hailed from Hindu religion while 04.45 respondents were Muslim. Amongst Hindus, nearly 3/4th i.e. 74.41 per cent respondents were from general category, only 9.30 per cent belonged to other backward classes and the remaining 16.27 per cent represented scheduled caste category.

Men are more valuable than all the wealth of the world

— Swami Vivekananda

- ii) **Effectiveness of training programmes**: Responses regarding effectiveness were found in three different parameters viz. very good, good and satisfactory. Very good category bagged 44.44 per cent, programmes were considered to be good to 48.88 per cent respondents where as 6.66 per cent participants opined the programme as satisfactory. So, it appears that the programmes conducted by the Institute were found to be effective to an overwhelming per cent of extension functionaries.
- iii) **Training inputs & application of knowledge gained**: Out of the total 18 programmes organised under this category, different topics were covered. All the respondents were probed to mention the topics liked most by them. It transpired from their responses that all the topics were found to be very relevant. Though the liking of topics varied from trainee to trainee out almost all the topics encompassed equal number of responses with a negligible variation.
- iv) **Advices sought by others**: With reference to this aspect 77.77 per cent ex-participants acknowledged to be consulted by other fellows for different sorts of assistance while 22.22 per cent participants have not been contacted by any person.

Advice sought

Participants were further asked about the number of persons sought advices from them. It was reported that 33.33 per cent participants were asked for assistance by up to 10 persons; 17.77 per cent trainees told that more than 40 persons sought their advice, 10 to 20 persons contacted 15.55 per cent ex-trainees while 11.11 per cent respondents met 20 to 30 fellow people. So, majority of the responds as it was evident were asked on different issues having liaison with their training inputs.



- v) **Problems encountered & assistance**: In terms of post training problems being faced by the ex-trainees as it is evident from the study that 62.22 per cent respondents admitted to come across some problems while 37.77 percent didn't face any problem at all. Former group of people happened to seek assistances also.

In the sphere of nature of problems, it was observed that types of problems encompassed a wide range. Prominent amongst those were linkages with other farmers, management of project, non-availability of inputs, marketing, lack of irrigation facility, non-availability of adequate fund etc.

Ample shorts of assistance have been suggested by the ex-participants. Assistances have got different dimensions viz. change of Govt. policies, training on project management, proper support from higher officials, training on improved technologies, input supply in time, providing staff members and so on.

Four sources of assistance have been identified by the respondent-trainees. Out of these four sources, Govt. was preferred to 44.44 per cent ex-trainees, 8.88 per cent relied on Agricultural Training Centre, Narendrapur, 6.66

"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain — and the whole world is at your feet."

— Swami Vivekananda

percent felt to have intervention of MANAGE, Hyderabad and the rest 2.22 per cent only contacted private agencies. So, govt. departments have been found to be much more reliable to majority of the trainees in so far as the support services are concerned.

Sources of Assistance

Sl. No.	Sources	Number	Per cent
01	Govt.	20	44.44
02	ATC	04	08.88
03	PVT.	01	02.22
04	MANAGE	03	06.66
05	Not Applicable	17	37.77
Total		28	97.97

- vi) Impression about SAMETI & ATC : Ten types of opinion regarding the Institute have been expressed by the respondents. The Institute was supposed to be good to 60 per cent ex-trainees, 31.11 per cent participants considered the Institute as very good, 35.55 per cent participants opined to improve food and accommodation arrangement of the Institute. Resource Persons chosen for different trainings have been felt to be wise to 6.66 per cent and 2.22 per cent respondents suggested for improvement of total planning of the programmes.

Considering the findings viewed by all the three categories of respondent, it may be stated that the programmes conducted by ATC & SAMETI have created a durable impact over them. Certain insufficiencies have been marked by the respondents. Those drawbacks ought to be taken care of by the Institute.

B : An Impact Study on Vermi Village Project:

L PROGRAMME

Agricultural Training Centre, Ramakrishna Mission Ashrama, Narendrapur, Kolkata has been striving for promotion of organic manure preparation & application among the farmers with a view to enhancing the soil health and reducing the reliance on application of chemical fertilisers by the resource poor farmers, a project was implemented in the name of 'Vermi Village' with fund from RKVY.

The objectives of the project were • To create awareness about importance of use organic matter • To create source of organic matter • To disseminate the technology of vermicomposting • To create options of extra income generation from local resources.

The process followed to implement the project are:

- Selection of villages keeping in view of the keen interest of farmers for adoption of such practice.
- Organise a week-long training on vermi compost making at ATC, Narendrapur for the intending farmers.
- Conduct follow-up training at the farmers' fields.
- Construction of Vermi compost pits for the trainee-farmers
- Beneficiary-farmers' contribution for the construction of pits by way of giving their own labour.
- Initiation of Follow-up measures for smooth implementation of the programme.

"Do not let worldly thoughts and anxieties disturb your mind"

— Sri Ramkrishna Das

II. IMPLEMENTATION

Two villages namely Teurhat and Ramrudrapur were chosen considering the deep interest of the functionaries of village-based voluntary organizations working in the concerned two villages. These two villages are located in two different Development Blocks of south 24-Parganas district.

50 farmers from Teurhat and 40 farmers from Ramrudrapur village were selected by the concerned voluntary organizations from the interested farmers both male and female.

After conducting Awareness Camp and other propaganda, training on Vermi Compost Preparation for 5-day duration in two batches was organized involving 90 (ninety) men and women farmers at ATC, Narendrapur. Thrust on practical aspects was given much more in the training programme. Altogether 8 follow-up training programmes for one day duration were held in both the villages in order to make them more acquainted with the techniques in their own areas.

In so far as the 'modus operandi' was concerned, it was decided that besides providing cost of the compost pit construction, a very small amount of the cost would be borne by the beneficiary-farmers. Moreover, construction cost in cash would not be handed over to the farmers rather a purchase committee comprising of the villagers would be formed to purchase construction materials locally on the basis of lowest price offered by the builders. All these procedures were followed in implementing the programme.

III. BRIEF PROFILE OF THE VILLAGES

a) TEURHAT

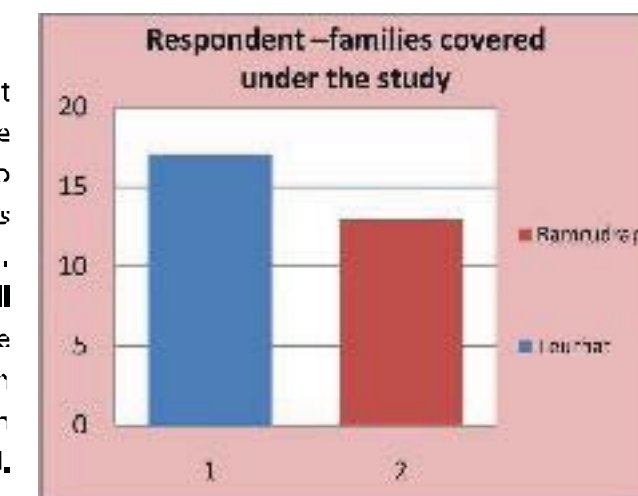
Teurhat village wherefrom 50 farmers were selected as beneficiaries falls under Nabagram Gram Panchayat of Baruipur Development Block in South 24-Parganas district. Total population of the village is 1600 consisting of 375 households. Farming is the prime source of earning to almost all the villagers as the village is located in remote area. A very insignificant number of villagers sustain on vegetables selling & wage labour.

b) RAMRUDRAPUR

This village is one amongst the villages under Jangalia Gram Panchayat of Joynagar Development Block in south 24-Parganas district. Altogether 400 households are there and the village is situated in the remotest part of the Gram Panchayat. An overwhelming portion of villagers earn their livelihoods from cultivation, cattle rearing happens to be the source of earning to a handful families while a few villagers are also worked as masons.

IV. EVALUATION TEAM

A three-member team comprising of Sociologist, Plant Pathologist & Entomologist was formed to conduct the impact study. All of them went together to those two villages on 21.12.12 & 28.12.12. These three persons are the faculty of Agricultural Training Centre, Narendrapur. They visited the vermi compost pits as well as fields of 30 farm-families. All these 30 families were covered under this impact study. 17 families were drawn from Teurhat and the rest 13 families were chosen from Ramrudrapur village through random sampling method.



"Do not afraid; the master is behind you, and I am too, as your mother"

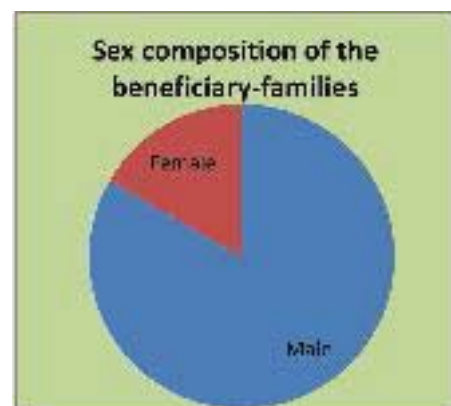
— Swamiji Prati

V. STUDY FINDINGS

a) Age, Sex & number of Family Members :

Altogether 30 farmers from the aforesaid two villages were probed for this study. Of them, 25 were males where as only 5 respondent-beneficiaries were female. Age group of them ranges from 25 years to 45 years & above. Study shows that 17 farm families belong to the age group of 45 years & above and 9 farmers fall under 35 to 45 years of age. So, it appears that experienced farm families have been involved in this practice. Only 4 respondent-families have been found below 35 years of age.

Study also depicts that majority of the farm families is nuclear. The numbers of families having 4 members are 13 in number, 11 families have 6 & above number of members while 6 farm families have been found to have 4 to 6 members.



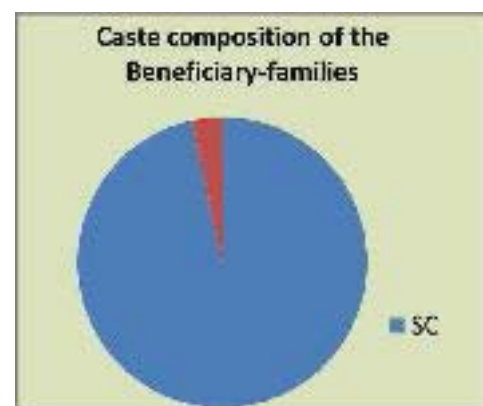
Number of Family Members

Sl. No.	No. of Members	Village	Teurhat	Ramrudrapur	Total
01	Up-to 4		06	07	13
02	4-6		05	01	06
03	6 & above		06	05	11
Total			17	13	30

b) Religion & Caste:

In so far as the religion is concerned 29 farmers are Hindu where as only 1 respondent family belongs to Muslim Community.

As regards caste composition, majority of the farmers appears to be scheduled caste. This study has incorporated 29 scheduled caste families and the rest 1 family does not fall in the caste category since that family is Muslim.



c) Major & Subsidiary Occupation :

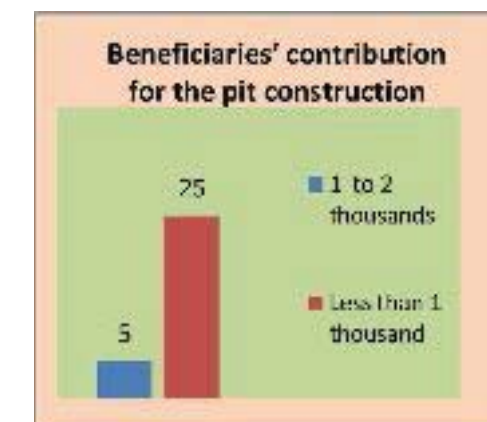
All the respondent families were asked about their major as well as subsidiary occupations. A rare happening is observed in this study that all those families have only single source of earning. 16 families as it is evident are solely dependent on cultivation, 3 families opted for small business while 11 farm-families earn from cattle rearing.



"If you must be mad, be it not for the things of the world.
Be mad with the love of God!"
- Sri Ramkrishna Chakravarti

d) Farmers' contribution towards pit construction :

It was decided that entire cost of the pit would not be provided to the farmers rather a small portion of the cost has to be borne by them. Though almost total cost of compost pit was provided to the farm families, yet a very small amount was borne by the beneficiaries. Farmers' contribution has been reported to be ranged from Rs.1,000 to Rs.2,000. In case of 25 families, the amount was less than Rs.1,000 while 5 farmer-beneficiaries spent nearly Rs.2,000. Agricultural Training Centre, Narendrapur has provided Rs. 45,000 for each compost pit.



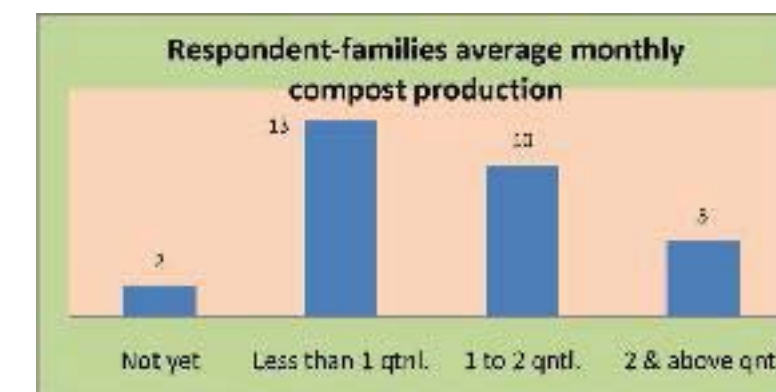
e) Tenure of practice and quantum of production :

In the sphere of involvement in producing vermi compost, it is seen that 12 families started producing compost immediately after the construction of pits, 16 farmers have been producing for the last one year and only 2 families have started production very recently.

Duration of Producing Vermi Compost

Sl. No.	Duration	Village	Teurhat	Ramrudrapur	Total
01	Just after the construction of pit		10	02	12
02	Last one year		07	09	16
03	Less than one year		-	02	02
Total			17	13	30

With regard to the quantum of production as has been reported, 5 farmers have become able to produce more than 2 quintals in a month. 10 families have been restricted to 1 to 2 quintals per month, production strength happens to be less than 1 quintal to 13 families and the production is nil for 2 farmers who have just initiated their efforts.



"Purify the spectacles of your mind, and you will see that the world is God!"
- Sri Ramkrishna Chakravarti

VI. TENTATIVE EARNINGS FROM THE COMPOST PRODUCTION

An attempt has been made to estimate the cost of the compost produced by the beneficiary-families. But the actual cost of compost could not be calculated as neither farmers have kept record of accurate quantity of compost nor they have sold their produce. Farmers were probed of amount of chemical fertilizers have been curtailed by them. They reported to reduce the application of chemical fertilizers in their fields amounting to Rs.2,000 to Rs.8,000 per annum.

So, on the basis of their responses, it is evident that 14 farmers have earned Rs.4,000 & above, 14 families earning from the compost has become upto Rs.4,000 range while there is no earning in case of 2 families who have just ventured.

Earning from the Compost Produced in a year

Sl. No.	Village	Teurhat	Ramrudrapur	Total
	Amount (in Rs.)			
01	No earning yet	-	02	02
02	Up-to 4000	09	05	14
03	4000 & above	08	06	14
Total		17	13	30

So, in conclusion, it may be claimed that the Vermi compost Programme has produced a very positive impact over all the farmers of Teurhat and Ramrudrapur village. Both the quantity and quality of their produce after the application of vermi compost are highly satisfactory as acknowledged by them. Evaluation team members have physically observed the condition in the farmers' field. Many of them now are trying to maximize the quantity of compost. A large number of farmers who have not been brought under the purview of the programme approached the evaluation team members on the days of their visit to bring them under the programme. They have also requested to extend whole-hearted support in case of new initiative is undertaken for them by the Agricultural Training Centre / SAMLETI, Ramakrishna Mission Ashrama, Narendrapur, Kolkata.



"As long as I live, so long do I learn"

— Sri Ramakrishna

IV LEARNING FROM SUCCESS

A. SUCCESS STORIES:

1. Sri Subash Chandra Paira:

Sri Subash Chandra Paira was a small farmer in Raksasdhali village of Pathar pratima block of South 24 parganas District of Sundarban Area, who traditionally used to grow paddy and some vegetables in his meager land throughout the year for maintaining his family. But it was not enough for a family of 5 members, so life was almost miserable and he was ardently finding any avenues to augment his family income. He has total four bighas of cultivable land, which he could not ever cultivate properly due to his poor financial condition. Price of seeds, fertilizers and pesticides had increased leaps & bounce which was out of his reach. The earning of his family during that time was only Rs. 10,000 per annum from paddy cultivation.



Then, he came in contact with ATMA in the district and contacted SAMEETI, R.K. Mission, Narendrapur through his local youth club and selected for having training on methods and importance of cultivation of Sunflower, Pulses and Maize in Sundarban area. This training changed the mind set up of Sri Paira. He pledged to cultivate new profitable commercial crops, instead of traditional.

Last year, instead of cultivating traditional crops, he started to grow sunflower in 66 decimal lands (2 bighas). He used PAC-361 variety seed and sown it in the month of January and harvested it in the month of May. He got total 634 kg of sunflower seeds from this sunflower cultivation which gives him after extraction 182 kg of sunflower oil (350 gm oil / per kg seeds) and 400 kg of oil-cakes. It means he earned Rs.16380 from selling of oil (Rs. 90/per kg) and Rs.4000 from selling of oil-cakes (Rs.10/per kg), total Rs.20380.

He earned Rupees 15000 as profit from this cultivation after deducting all the expenditures incurred for this cultivation, extraction and for marketing purpose.

Before sunflower cultivation he gets only Rs. 2500 per bigha as profit from boro paddy cultivation. But now he is getting Rs.7500 profit per bigha from sunflower cultivation which helps him to ameliorate his economic condition.

This year Sri Paira cultivated sunflower in 4 bighas of land to earn more profit. Sunflower oil has also good demand in local area.

Seeing the cultivation of sunflower in Sri Paira's land, the other neighboring farmers also came forward to start this profitable sunflower cultivation in the region.

"I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy"

— Rabindranath Tagore

2. Sri Madhusudan Naskar:



Sri Madhusudan Naskar is a very dynamic and aspiring youth of 29 years, who lives in Chandchali village of Canning block of South 24 parganas district. His father was a farmer but was unable to do hard work in the field for his physical problem, so he depends on hired labours to cultivate his 4 bighas of agricultural land. It was barely enough to feed his family of four members.

After passing IIS, unlike other boys Sri Naskar tried to find a job in his nearby town. But he could not. At that time he had a chance to join in a 5 day Agri-entrepreneurship training at SAMETI, R.K. Mission Narendrapur. This training actually helped him to change his mind set up, instead of being a job seeker, he then opted to be a job creator. He has been motivated towards the direction of bring out his potential human excellence.

As a result, few months later Sri Naskar started a broiler Poultry business of 100 birds at his house with the help of bank loan of Rs. 80,000/ from WB Cooperative bank, Canning branch. Six month he continued his business with only 100 bird in chain system. But then profit was very less, it was only Rs 5000/ per month and during that time, selling of birds was very tuff work. Afterward he expanded his farm and increased the number of birds gradually.

Currently he is rearing 4000 birds in his poultry farm in chain system and joined hand with a Private limited company for buying inputs of his poultry farm and selling birds to them for chicken. Now he earns profit of Rs 20,000 per month from this poultry business and able to augment the economic condition of his family. He has already repaid 80% of his bank loan with interest. Now bank manager is asking him to get further loan to expand his business.

In near future, Sri Naskar wants to open another business unit along with his poultry business which is manufacturing of 'poultry feeds'. He used to spend maximum money for buying this feed for his poultry farm. So if he can be able to manufacture poultry feed, it will help him both ways to earn more profit.

3. Ms. Moushumi Das:

Ms. Moushumi Das is a house wife, who lives with her in-laws, husband and her one daughter at Nischintapur village of Budge Budge block of South 24 parganas.

Her husband used to run a small grocery shop in Nischintapur local Market which was the main source of income of their family and this earning was too meager for them to maintain their family properly. So, Ms. Das decided to do something that will help her to earn and supplement her family income.



Once she went to local block office and requested BDO to give her an opportunity to earn and stand on her own feet. BDO asked her to form a SHG group with likeminded women of her locality. Later keeping in mind all the government norms & formalities, she formed a 15 member SHG group and became a leader of that group. After few days, Agriculture Officers of Budge-Budge block sent her to participate in a 5 days farmers' training at Agricultural Training Centre / SAMETI, R.K. Mission Narendrapur. She was inspired in production of vermi compost from this training and expressed her desire to take further specialized training on vermi-compost from this Training Centre and finally she took 2 days training on vermi compost from ATC, Narendrapur.

"Be the change that you wish to see in the world!"

- Mahatma Gandhi

After training, she constructed 2 vermi compost pits in her house and started to grow vermi compost. Last year she produced 25 quintal vermi compost and sold it at the rate of Rupees 6/ and earned rupees fifteen thousand (Rs.15000/) from this vermi compost business. Selling of vermi compost is not a problem as BDO office directly helped her to sell. She used cow dung, green leaves and peels of vegetables, water hyacinth and azolla as raw materials for manufacturing this vermi compost. She expenses Rs 3000/ for manufacturing 25 quintal of vermi compost. So her net profit from this vermin compost business is Rs.12000/. She also started growing seasonal vegetables in her Kitchen garden throughout the year and able to earn additional Rs.200/ per month from this kitchen garden. Now she is very happy as she is contributing some money to her family to supplement her family income.

She is so confident that she opted to start a food processing unit soon in her house. She got 'Krishi Sanmar' award this year from W.B. Government for her courageous achievement. The value of this award is Rs. 50,000/.

4. Sri Surojit Sardar:



Surojit Sardar, son of late Basudave Sarkar lived in Rajarampur village of Paschim Rameswarpur of south 24 parganas District. After his father's death, he tried utmost to have a job in any factory or any private firms, but he could not and became frustrated. Meanwhile he was advised by his friend to join a 5 day 'Farmers' training' course at Agricultural Training Centre / SAMETI, R.K. Mission, Narendrapur which might be revealed many options for him to settle in life or help him to select out a way for self reliance or stand on his own feet.

Sri Sardar contacted SAMETI, R.K. Mission Narendrapur and finally join the training program. During training he has been inspired and felt very interested to do something with his own effort. After completing the training he decided to start his own business for earning money instead of seeking job in any private or public organization.

Finally he opted to set forth manufacturing vermi compost in his house.

He constructed six vermi-compost pits in his house with his own cost and able to produce 1800 kg vermi compost each time from 6 pits. He produces 4 times in a year. Thus, he produced yearly total 7200 kg. vermi-compost and sold it at the rate of Rs.6 / per kg. He spent Rs.1875/ for six pits in each time for purchasing cow dung, earthworms and other residue materials and water hyacinth for preparing it and spent total Rs 7500/ for producing 4 times in a year.

His total profit from this six vermi-compost production units is Rs. 35,700/ per year and he is happy with this initial earning.

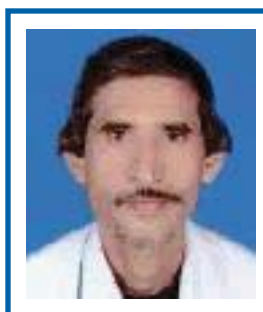
Now he wants to increase more production to augment his monthly income. He wants to construct additional fourteen (14) pits with the help of Bank loan. Local UBI Bank has agreed to provide fund for construction of pits and purchasing earthworms. Currently the local farmers are well aware about the importance of using vermi-compost in their agricultural fields. So selling of vermi-compost is not at all a problem. Again Sri Sardar is trying to reduce the cost of production of vermin compost by using low cost or no cost waste materials. If he become succeeded then the cost of vermi-compost will be in reduce rate i.e. rupees four to five per kg. One of the important business tricks is ensured maximum sale by offering minimum price and Sri Sardar is trying to do that.

"The Man who works for others, without any selfish motive, really does good to himself"

- Sri Ramakrishna

5. Sri Nandadulal Ghosh

Sri Nandadulal Ghosh is a small farmer of Imlibari village of Satjalia, Gosoba of South 24 parganas district who has been awarded this year as 'Kishak Ratna' by the State Government on 14th march 2013 in the occasion of 'Kishak day'. He received cash prize of Rs. 10,000 for his honest effort to grow more crops as progressive farmers.



In 2010, the youth organization 'Rupayan' of Gosaba Block of south 24 parganas sent him to attend a training program on 'Vermi-Compost' at SAMETI, R.K.Mission, Narendrapur. After training he was inspired and decided to produce vermi-compost commercially as it is very useful substitute manure of high price chemical fertilizers. It is low cost and organic. But people of his locality are not very aware of it. So he needs to motivate the local farmers and stretch out extension work in the region in favour of using vermi-compost.

Nandadulal then constructed ten (10) brick vermi-compost pits in his house with his own money and spent Rs.10000/ for it as non recurring cost of his business. He then collects earthworms from Agricultural Training Centre, R.K.Mission and other inputs like cow dung, green leaves and water hyacinth from his village for starting vermi-compost production commercially. But unfortunately within two month his right hand was broken by an accident. He could not give sufficient time to produce vermi-compost and in consequence, in 2011 he could not get good return from it. Whatever vermi-compost he got, he used it in his own 3 bighas of land and gave it to his relatives.

But last year again he concentrated his mind in production of vermi-compost and able to produce 10,000 kg vermi-compost. Since he had been able to motivate the neighboring farmers and make them aware about the importance of using vermi-compost in agriculture field, the local farmers came forward to purchase it all. They purchased it at the rate of Rs 6/ per kg which was reasonable price to them. Nandadulal spent Rs.2/ for producing one (1) kg of vermi-compost and sold it at Rs 6/ per kg. Thus he earned profit of Rs. 4/ from selling of 1 kg of vermi-compost.

Therefore, in 2012, he earned total profit of Rs. 40,000/ from this vermi-compost production unit and he wants to sustain it as a profitable venture along with his crop cultivation work.

6. Sri Swapan Kumar Sani:



Sri Swapan kumar Sani is a marginal farmer who lives in Kaluabrindebou village of Debra Block of Paschim Midnapur district. He subsists on agriculture and engaged in traditional farming like aman paddy, jute, red sesame and some common vegetable cultivation. Meager land and this conventional agricultural practice do not fulfill all the needs of his family. So he was opted to cultivate new crops that would have good market value and would also help to increase yield as compared to traditional crops.

Getting connected with the local youth club, Pasang Yuba Sangha, affiliated to a cluster organization of R. K. Mission Lokasiksha Parishad, Narendrapur, he has been working in agriculture and other development fields for a decade.

With the help of this organization he attended a one day workshop of ATMA project at Block office on 'commercial crop' cultivation. Coming from that workshop 2 years ago he started to grow tube rose and some vegetables instead of traditional paddy cultivation. It helped him to increase his income but indeed not a big difference than earlier.

As he had shown interest for cultivating new crops, the organization sent him to a 2 days farmers training under 'SOPOM' project of Agricultural Training Centre at R.K.Mission, Narendrapur where he learnt the importance, demand and detail about cultivation of maize, sunflower and white sesame. He was inspired to cultivate white sesame during training. He received seeds of white sesame from SOPOM Project and started growing white sesame in his 2 bighas of land. When he cultivated red sesame he did not have good profit, because the cost of production and harvesting was Rs 3500/ for 2 bighas and the total production was 4.5 quintals and the selling price of red sesame was Rs. 3200/ per quintal. Now he is getting good profit from the cultivation of white sesame, because he got total 5.5 quintal seeds from same land and sold it at the rate of Rs 3600/ per quintal and earned profit Rs.16000/ from white sesame cultivation. Previously it was Rs.10500/. Currently he is growing white sesame, along with other crops, vegetables and tube rose.

Sri Sani feels happy as a farmer for cultivating high value crops and earns good profit annually.

7. Sri Mahadev Das:

Sri Mahadev Das is a farmer of 58 years of age who lives in remote Khirinda village of Pingla Thana of Paschim Midnapur district. Few years ago he used to cultivate paddy, muster, potato and some vegetables along with a small quantity of red sesame in his land. But in spite of giving hard labour he could not earn sufficient profit from this cultivation.



Two years ago he came in contact with Pasang Yuba Sangha's agri-assistance centre, it insisted him to join a workshop on 'crop diversification' at Agricultural Training Centre / SAMETI, R K Mission, Narendrapur.

He participated in the workshop and felt interested to cultivate white sesame in a small area of 1bigha of land at this initial year. He got seeds and other necessary inputs from SOPOM project for this white sesame cultivation.

First year the yield was almost good, it was 2 quintals per bigha but the problem was no trader there to buy it that time. Selling of white sesame is not at all a problem now, because many traders have come forward to buy white sesame with good rate of price. Last year Mahadev cultivates white sesame in his 1 acre area of land and got 6.3 quintals of white sesame seeds after harvesting which he sold at the rate of Rs 3800 per quintal and earned Rs. 19000 as profit from cultivation of white sesame.

Seeing this good return from cultivation of white sesame, the other neighboring farmers came forward to initiate cultivation of white sesame instead of red sesame. Along with white sesame, Sri Das is cultivating mustard seed, paddy, potato and some vegetables which helped him to increase his family income.

Now he is very happy, he has been recognized as a progressive farmer in his local area. Other farmers used to come to him for agricultural advice.

"I tell you one thing- if want peace of mind, do not fault with others"

- Swami Anand

"You can't cross the sea merely by standing and staring at the water"

- Rabindranath Tagore

8. Sk. Samsul Jamal:



Sk. Samsul Jamal is a successful agri. Entrepreneur who lives in Monikhar village of Kalna block-1 of Burdwan District. His father was a poor farmer who strives day and night to earn the bread of his family. Sk. Jamal stopped going school when he was a student of class VIII and started to help his father in agricultural work. During that time their family income from agriculture and dairy farm was Rs 4000 per month.

Immediately, along with cultivation he started rearing cattle in a very small scale and used to put cow dung in their land as fertilizer for increasing yield. Use of costly fertilizer in agricultural field was indeed beyond their capacity. Therefore, Sk. Jamal had tried to produce vermi-compost as alternative source of fertilizer for their land. Based on

layman knowledge, he set up six small vermi compost pits in his house and able to produce few kilos of vermi compost initially for his own use.

But this is not enough, he wants to grow more vermi compost commercially because it has good demand in his locality. Now he needs to learn more about preparation of vermi compost to expedite commercial production. By this time he contacted SAMET of R.K.Mission, Narendrapur and took training on vermi compost. He was deeply inspired by this training. He learnt from this training how to prepared best vermi compost in low cost, using low cost or no cost local ingredients. Finally he decided to produce vermi-compost commercially in large scale.

Currently he has invested 2 lakhs of rupees for constructing 60 new vermi compost pits and meeting other working costs of this vermi compost production unit. Production has started 9 months ago. He has been using cow dung, agricultural residues and water hyacinth as raw materials for manufacturing Vermicompost. Previously from agriculture and dairy farm his total earning was Rs 4000 per month but now he has been able to earn Rs 30,000 per month from agriculture, dairy and vermi compost business. Marketing of vermi-compost is not at all a problem for him, because the local farmers are keen to buy it from him at the rate of Rs.5/ per kg. Sk. Samsul Jamal has got 'Krishak Ratna' award this year from the State Government on 'farmer's day'.

9. Sri Chittaranjan Mondal:

Sri Chittaranjan Mondal is an educated and progressive farmer of Srinagar village of Chandrakona block (Khirpai) of Paschim Midnapore district. He has good habit of experimenting cultivation in his field with new crops and new methods of practices. Generally he used to cultivate paddy, sesame, mustar, pulse and some vegetables. Currently he becomes a member of Keshpur Khudiram Seva Kendra associated with the ISOPOM project of Agricultural Training Centre of R.K.Mission, Narendrapur.

Sri Mondal learnt about the activities of ISOPOM project and showed interest to cultivate white sesame and maize in his own land.

Last year he undertook one day training under this project for cultivating Maize & white sesame from Agricultural Training Centre, R.K.Mission. After training he inspired himself and opted to initiate cultivation of white sesame in his 4 bighas of land, taking seeds and other assistance from the ISOPOM project.



"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain and the whole world is at your feet"

— Swami Vivekananda

He spent Rs.7000 for cultivating, harvesting and transporting white sesame and sold it at the rate of Rs 3800 per quintal. He got 11 quintal seeds of white sesame and earned a profit of Rs.32000/. He got 5.5litter oil from 10 kg seeds of white sesame and 4kg. oil cake after extraction. He used 30 kg seeds for extraction of oil for his family consumption and used oil cake of white sesame for his cattle feed.

From next year, Mr Mondal decided to cultivate both white sesame and maize in his land for earning more profit instead of cultivating traditional crops.

10. Sri Nilkamal Jana:

Sri Nilkamal Jana is a small farmer of forty years old who lives in village parakata of Keshpur block of Paschim Midnapur district. He lives in a joint family with his old aged parents and two brothers. Total member of his family is sixteen. Their family occupation is agriculture. For a long time, traditional crops have been cultivated in their 15 bighas of agricultural land. During this time their annual earning from agriculture was Rs. 150,000/-. But they were finding new crops to grow for increasing yield as well as higher profit.



Once, with a view to find some new high yielding crops, Nilkamal went to his local organization Keshpur Sahid Khudiram Seva Samity wherein he learnt about different programmes of Agricultural training Centre, R.K.Mission, Narendrapur. He took training on cultivation of ground nut, sunflower, maize, white sesame etc under this project from Agricultural Training Centre and initiated cultivation of ground nut, white sesame and sunflower.

Last year, instead of cultivating traditional crops, he started to grow ground nut in 2 bighas, white sesame in 8 bighas and sunflower in 5 Khatas of land. He used certified seeds which he received from ISOPOM project and sown it timely in the field and undertook all care till harvest.

Sri Jana spent Rs.6500 for cultivating ground nuts in 2 bighas, and got 7 quintal ground nut from this land which he sold at the rate of Rs.50 per kg and got Rs. 35000. He got 40 kg sunflower seeds from sunflower cultivation in 5 khatas of land and got 16 kg sunflower oil after extraction, the market value of which is Rs. 1650. From white sesame cultivation he also earned Rs 20,000 as profit last year.

He also cultivated potato and mustard last year. Now their total earning has increased 15% as compared to previous years when he cultivated traditional crops. He is happy with this improvement in his income from agriculture.

11. Sri Lakshmikanta Pandit:

Sri Lakshmikanta Pandit, a sixty years old small farmer, lives in Srinagar village of Chandrakona (Khirpai) block of Paschim Midnapur district. He is the head of his family consisting of ten members. He has 5 bighas of cultivable land of his own and sometimes he used to cultivate crops by hiring land from other farmers of his village. But still he did not reach to his desire earning to meet the family needs in spite of hard working. His total earning per month from cultivation was Rs.14000/ only.

"Finish the few duties you have at hand, and then you will have peace"

— Sri Ramakrishna

His neighboring friend who is also a progressive farmer of well to do condition advised him to contact the ISOPOM Program Coordinator of Agricultural Training Centre, R. K. Mission, Narendrapur for getting technical help under ISOPOM Project.

Sri Pandit then, met the coordinator and requested him to get the benefit of ISOPOM project through joining in ISOPOM training Program. Finally he took training and started cultivation of white sesame in his land. It brings a breakthrough in his family income. Year before last year he cultivated white sesame in 3 bighas out of his 5 bighas of land and got 8 quintals of white sesame from this cultivation. He sold it at the rate of Rs 3600/ per quintal and earned Rs. 28,800/ last year from cultivation of white sesame. As a result his annual and monthly income has increased reasonably than before. This is third year he is cultivating white sesame and every year he has been able to increase his earning from cultivation of white sesame. He is now happy with this earning and wants to increase land area for the same.

Now-a-days, selling of white sesame is not a problem, in local market the traders of nearby towns come to buy it with good price. The scope of extracting oil from white sesame is also available in their local market but Sri Pandit does not do it.

12. Ms. Radha Rani Das:

Ms. Radha Rani Das lives in Vaturia village of Nandigram block of Purba Midnapure district. She lives with her mother in law, husband, one son and one daughter in her in-laws house. Her husband works as labour in agriculture field to earn their livelihood. They have very meager agricultural land for cultivation. So they mainly depend on work as hired labour for earning their bread. It was hand to mouth condition. Radha Rani was a house wife, but she was enthusiastic to find avenues for earning and supplementing her family income.

One day she went to local block office and asked block officer about her willingness to increase family income by doing something. Few days later she was called from block office to participate in a 5 days farmer's training, sponsored by Agricultural Department, Govt. of WB. at Agricultural Training Centre / SAMETI, RK Mission, Narendrapur. She was very much inspired from this training to initiate any kind of income generation activities which might help her to supplement her family income.

Finally, she decided to start a business of manufacturing vermi compost as agricultural inputs - organic manure. But at the same time she realized that if she started this production unit alone it might create possibility of failure of her business. Group effort is better than alone. Therefore, she began to organize other like-minded women from her locality (who were also interested to join in income generation activities) to form a SHG group and started this business jointly with an aim to supplement family income of the group members.

Ms. Das became the secretary of this ten members (10) SHG group. With her constant hard work and appeal, the State Bank of India, Ropara branch agreed to provide them loan of Rs.1.20 lakhs for initiating their vermi compost production. The block development officer of Nandigram block also helped them in selling the vermi compost at a reasonable price.

They constructed total six vermi-compost pits in their houses and purchased earthworms of Rs.1500/ for culture. They used water hyacinth, cow dung, earthworms and other agricultural residues for preparing compost. They spend Rs.7600/ per year for producing 7800 kg vermi compost and sale it at the rate of Rs. 6/ per kg.

Now, per month they are earning a profit of Rs.15000/ from this business and each member of the group is getting Rs.1500/ per month as share of that profit.

Each member of the group is now very happy now as they are being able to earn and supplement their family income.

"He alone is the true teacher who is illumined by the light of true knowledge"

- Sri Ramakrishna Paramahansa

B. Success Stories in You Tube : Diversification of Crops through ISOPOM

Success Story (Dry seeder): Feed back from farmers

13. Sri Mahim Naskar:

Address: Vill-Arapunch, Block-Sonarpur, South 24 Parganas District, West Bengal

"It is often late for the onset of monsoon rain. It will be late to go for Aman paddy if we wait for monsoon rain. So, we sow seeds directly using dry seeder taking the advantage of pre-monsoon rain. This will help to harvest Aman paddy 8-10 days earlier than conventional transplanting enabling us to go for winter vegetables earlier or in time."

(Link: <http://youtu.be/rfgdCZSp32s>)



14. Sri Yadav Gucchait:

Address: Vill-Dakshin Shibgong, Block-Patharpratima, South 24 Parganas District, West Bengal

"There is heavy weed infestation in dry land. For this, I applied Glycol @7 ml per litre of water before sowing. Weeds did not grow well as a result. Also there was weed infestation later on, meanwhile rain came and we used cono-weeder to control weeds. In respect of cost for weed control, the cost in dry seed seeding is one-tenth in comparison with transplanting. So, we are benefited and have saved more money."

(Link: http://youtu.be/k_4s-ktW17U)



15. Sri Bablu Khatua:

Address: Vill-Ramgopalpur, Block-Patharpratima, South 24 Parganas District, West Bengal

"It is economic to cultivate using dry seeder to raise Aman paddy. We have seen that the crop becomes very good, tillers are more and crop yields more. I have got profit using dry seeder in this year and I shall motivate surrounding farmers in future so that they become benefited using dry seeder like me. This method of cultivation is very economic."

(Link: <http://youtu.be/8oyea3aKN3I>)



16. Sri Bhojanath Maity

Address: Vill-Dakshin Shibgong, Block-Patharpratima, South 24 Parganas District, West Bengal

"I sowed Aman paddy using dry seeder machine. The crop matured 10-12 days earlier. I decided to go for Sunflower cultivation in advance. I shall be able to harvest sunflower earlier. There will be chance to occur pre-monsoon hailstorm. I am cultivating earlier so that I can harvest the crop avoiding pre-monsoon hailstorm."

(Link: <http://youtu.be/4fPbPEZpFH0>)



"One should desire of God desirelessness. Desire is the obstacle to liberation."

- Sri Sri Gauri

Success Story (Drum seeder): Feed back from farmers

17. Farmer- Sri Satyaranjan Maity:

Address: Vill-Govindarampur, Block-Kakdwip, South 24 Parganas District, West Bengal.

"I cultivated land using drum seeder after attending training at Ramakrishna Mission Ashrama, Narendrapur and cultivated last year too. This technology helps to cover more area with less water and yield becomes more than conventional transplanting. So, it is different from conventional transplanting. Weed infestation is more; it is the main problem where less water is used. Weeds can be controlled operating cono-weeder nicely in rows, the weeds die, puddled and converted into organic matter also."

(Link: http://youtu.be/cs_jin8g3Y)



18. Farmer - Sri Joydev Maity:

Address: Vill-Govindarampur, Block-Kakdwip, South 24 Parganas District, West Bengal.

"Weed infestation is our main problem. We used cono-weeder to control weeds. We used it after 10-12 days of sowing when the weeds just started to raise heads. We have controlled it completely and Weeds did not appear again. The crop condition becomes good if weeds can be controlled which is the main difficulty. We are successful in this respect."

(Link: <http://youtu.be/deXV90ayVq4>)



19. Farmer - Ms. Durgeshnandini Khatua:

Address: Vill-Rakshak khali, Block-Patharpratima, South 24 Parganas District, West Bengal.

"We used to make plan for using drum seeder after harvesting Aman paddy because, we the females remain in the house at that time. The male persons migrate to potato store, Delhi and other places for earning. For this reason we accepted it mentally to use drum seeder as one person can sow 7-8 bighas of land in a day using drum seeder. So, it is very much helpful for women community."

(Link: <http://youtu.be/8g5FccOYK>)



20. Farmer- Ms. Alok Guichait:

Address: Vill-Dakshin Shibgong, Block-Patharpratima, South 24 Parganas District, West Bengal.

"Male persons of our house migrate outside for seeking jobs. So, I faced a lot of difficulty in raising boro paddy and winter vegetables. So, I used drum seeder to sow germinated paddy seeds directly in the puddle fields. Labour requirement is very less in cultivation using drum seeder. Instead of manual transplanting; the machine itself sows the seeds from drums when it is operated. So, more labours are not required. With the help of 2-4 people of our own we can cultivate the crop and can harvest too. So, I shall extend this technology among our women community to raise boro paddy with less labours."

(Link: <http://youtu.be/p9svln7QS18>)



21. Farmer - Ms. Gita Guichait:

Address: Vill-Dakshin Shibgong, Block-Patharpratima, South 24 Parganas District, West Bengal.

"My experience from cultivation using drum seeder is that it is more economical than transplanting. We can engage ourselves in home-works after cultivation using drum seeder in less time. So, we have understood its benefit and we shall try to use drum seeder as long as possible."

(Link: <http://youtu.be/Z0xxuFHqi68>)



22. Farmer - Sheikh Julfikar Hossain:

Address: Vill-Ucchahar, Block-Keshpur, Paschim Medinipur District, West Bengal.

"The conventional method is the transplanting method. It is required to prepare seed bed in this method. It requires extra time and labour to prepare seed bed. Besides, seed requirement is more in seed bed in case of transplanting. On the other hand, seed requirement is less in direct sowing, it saves labour. Sometimes no requirement is there, as we ourselves do the work. Disease and insect pest infestation is hardly seen in this method. The plants become healthy, mature 10-12 days earlier. We don't abstain from using this technology due to such advantages. I have been practising the same for 2-3 years, getting good quality paddy and more yield also than transplanting."

(Link: <http://youtu.be/Z3M84E-98Jo>)



23. Farmer - Sri Yadav Guichait: Address: Vill-Dakshin Shibgong, Block-Patharpratima, South 24 Parganas District, West Bengal.

"I have cultivated paddy following transplanting method with hired labour and spent Rs. five thousand. I have received only Rs. one thousand as profit from transplanted paddy. On the other hand, I have earned profit for Rs. three thousand while used drum seeder. The yield was twenty two maunds while used drum seeder and eighteen maunds in transplanting. It is evident that there is no benefit for spending money and deploying labor in transplanted paddy cultivation. So, I have decided to cultivate three bighas of land in this year using drum seeder and the surrounding farmer-friends are coming to me for advice so that they become benefited. I am providing necessary advice to them. They will adopt this technology and I shall extend cooperation too."

(Link: <http://youtu.be/91WGHAIn70M>)



"The Man who works for others, without any selfish motive, really does good to himself"

- Sri Ramakrishna

"The brain and muscles must develop simultaneously. Train nerves with an intelligent brain - and the whole world is at your feet."

- Swami Vivekananda

V METEOROLOGICAL OBSERVATION & ANALYSIS

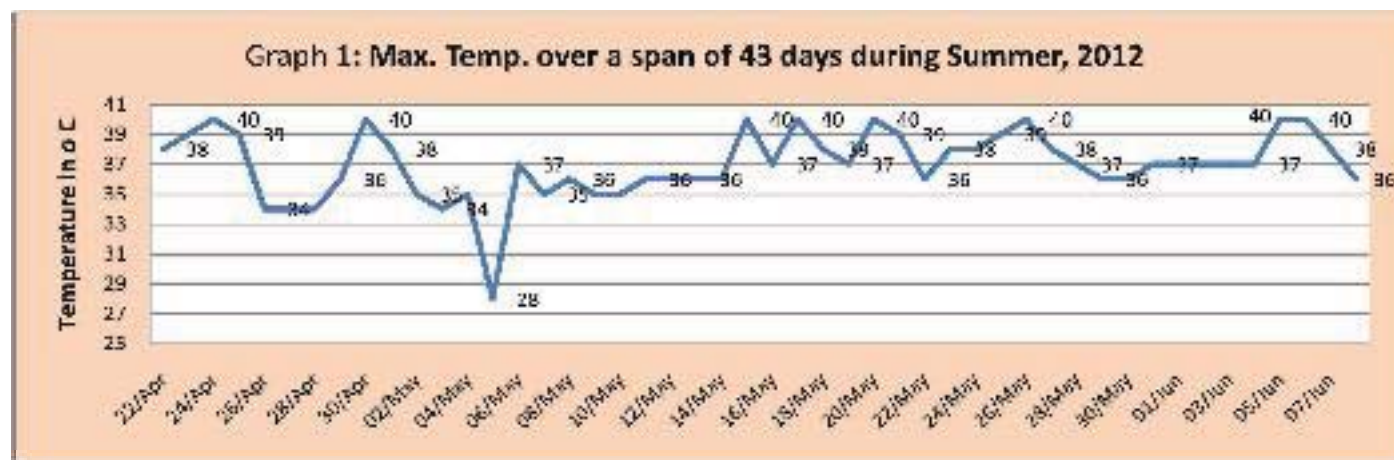
Weather Records of Agricultural Training Centre Farm: 2012-13 (April- March)

In case of India, nobody can deny that still the country's agriculture is weather dependent. In other countries, where the climatic patterns are like India, the climatic factors play a great role in agricultural production.

Variability of climate on regional basis or even area-specific weather variation is very crucial for crop production. The Agricultural Training Centre in its farm within Ramakrishna Mission Ashrama, Narendrapur records the weather parameters daily basis sincerely through simple meteorological instruments to measure Maximum and Minimum temperature, Relative humidity and Rain fall on daily basis for the last four years.

The detailed observation and analysis of the data collected during 2012 - 2013 (April- March) are given below.

Hottest day: This year the maximum temperature went up to 40° C, which recorded 41° C last year. In contrast to previous year's maximum temperature day, generally one/ two days in Summer season, this year the thermometer touched the maximum limit seven times (days) on 24th and 30th in April; 15th, 20th and 26th in May and 5th and 6th in June covering a period of 43 days (Graph 1).



Hottest Week: The hottest week was 7th week (13- 19 May, 2013).

Both the weekly average maximum temperature and weekly average minimum temperature touched the highest limit of the year; 38.29° C and 29.14° C respectively. The daily maximum temperature during that week ranged from 36° C - 40° C and there was no rainfall in those seven days.

Coldest Day: The coldest day with lowest minimum temperature recorded on 9th and 10th January, 2013 with the thermometer reading at 7° C. In contrast to the last few years record this was the lowest temperature at

Daily Temperature during Hottest Week

	Max. Temp	Min. Temp
13-May	36	26
14-May	36	27
15-May	40	30
16-May	37	30
17-May	40	30
18-May	38	29
19-May	37	29

“One should desire of God desirelessness. Desire is the obstacle to liberation.”
— Sri Sri Prani

Daily Temperature during Coldest Week

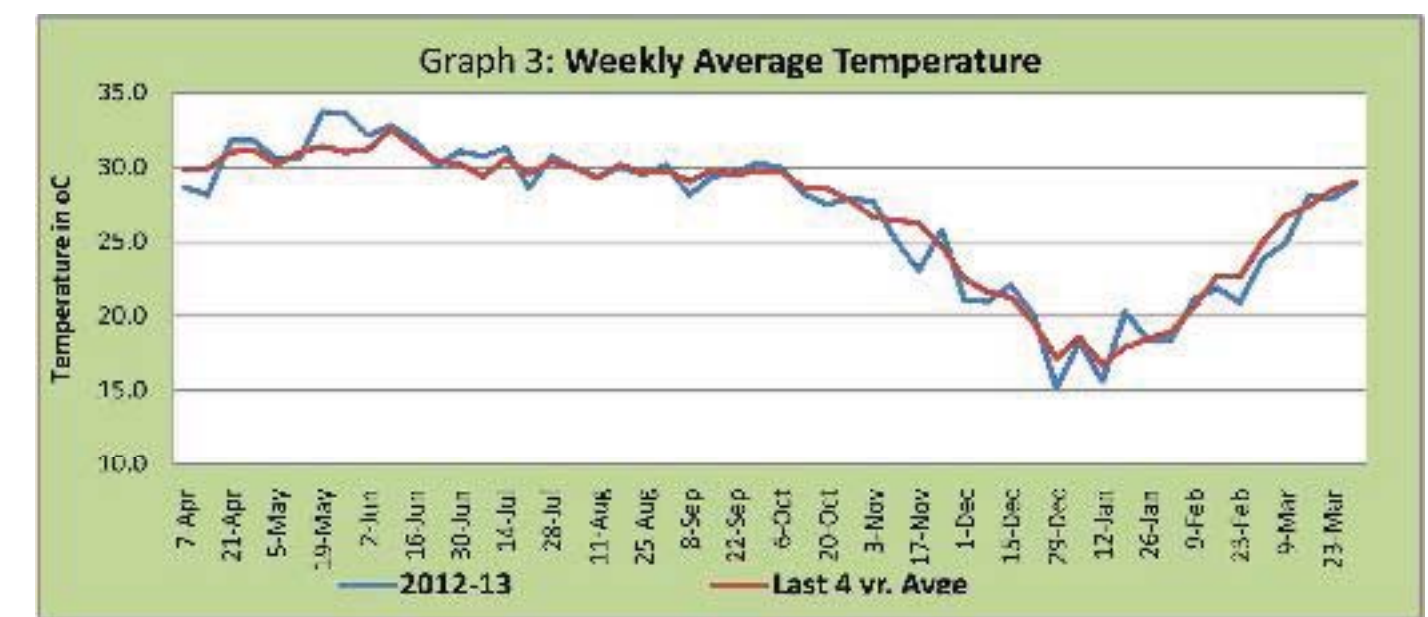
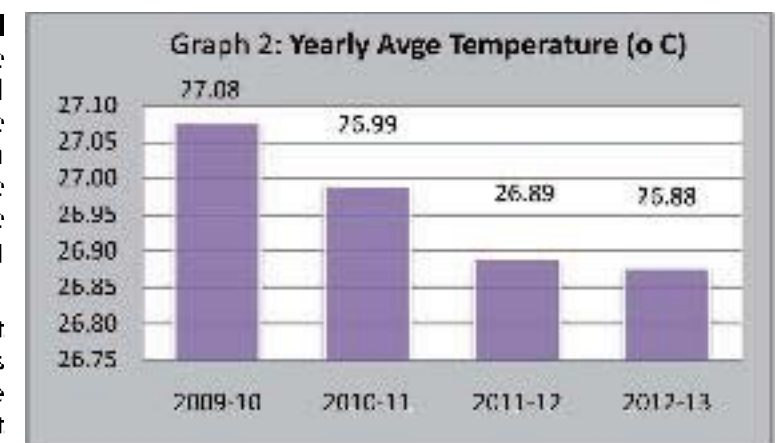
	Min. Temp	Max. Temp
6-Jan	14	25
7-Jan	14	24
8-Jan	13	21
9-Jan	7	19
10-Jan	7	19
11-Jan	8	28
12-Jan	8	20

Narendrapur, The lowest temperature during 2009, 2010 and 2011 were found 9° C, 8°C and 8° C respectively. Those are recorded in 3rd, 2nd and 2nd week of January respectively.

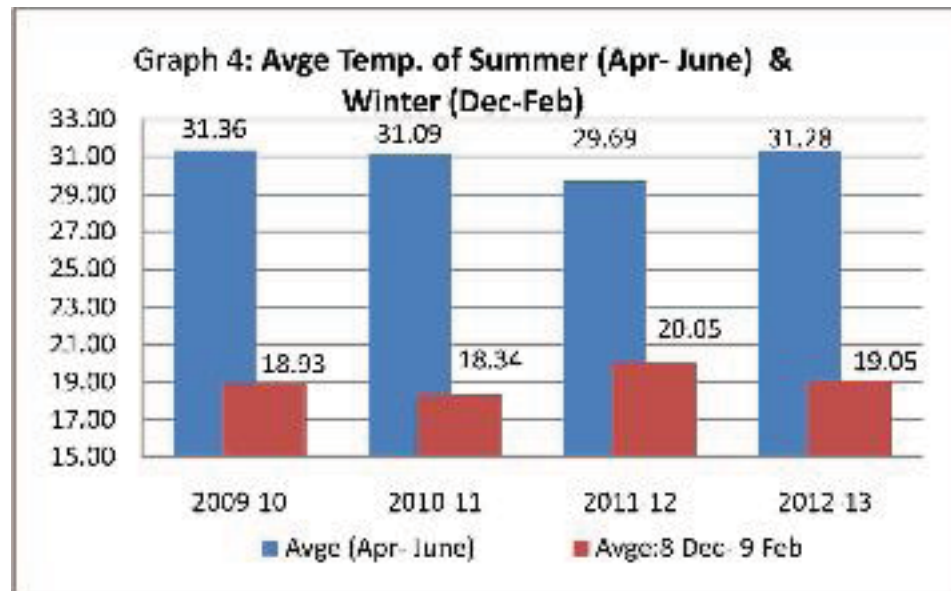
Coldest Week: The week 6-12 January, 2013 showed the lowest of the weekly average of the minimum temperature as on 9.13° C. In terms of weekly average of daily temperature (Max. temp + Min. Temp/2), 23-29 December, 2012 showed lowest value of 15.14° C.

temperature trend: The four year's data is not at all to be considered to draw a conclusion. But if any one wants to see what the data is saying, it is observed that in the contrast to the worldwide gradual increase of temperature, the thermometer of the AIC farm gives the opposite trend. The temperature within the Annual temperature average (\sum daily average temperature / 365) within the Ashrama is decreasing (Graph 2).

When we compare the weekly temperature throughout the year of the reporting year with last four years average temperature; it is found that the temperature of the reporting year during summer and winter went more extreme, i.e the reporting temperature during summer is higher than four years average, while the winter temperature of the reporting year is lower than the four years average. During the rest of the year the reporting year data kept parity with the four year's average (Graph 3).

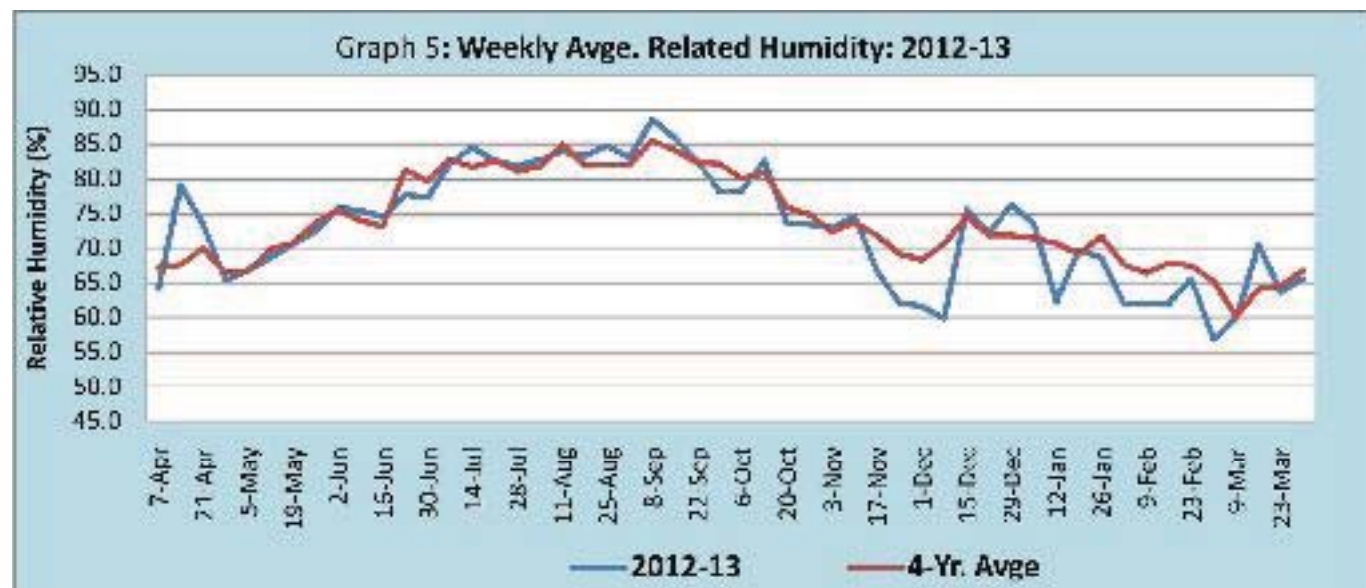


“All the wealth of the world cannot help one little Indian Village if the people are not taught to help themselves.”
— Swami Vivekananda



The same trend to some extent was found to be true in last individual four years also (Graph 4); the year when summer temperature went higher, the winter temperature also became lower.

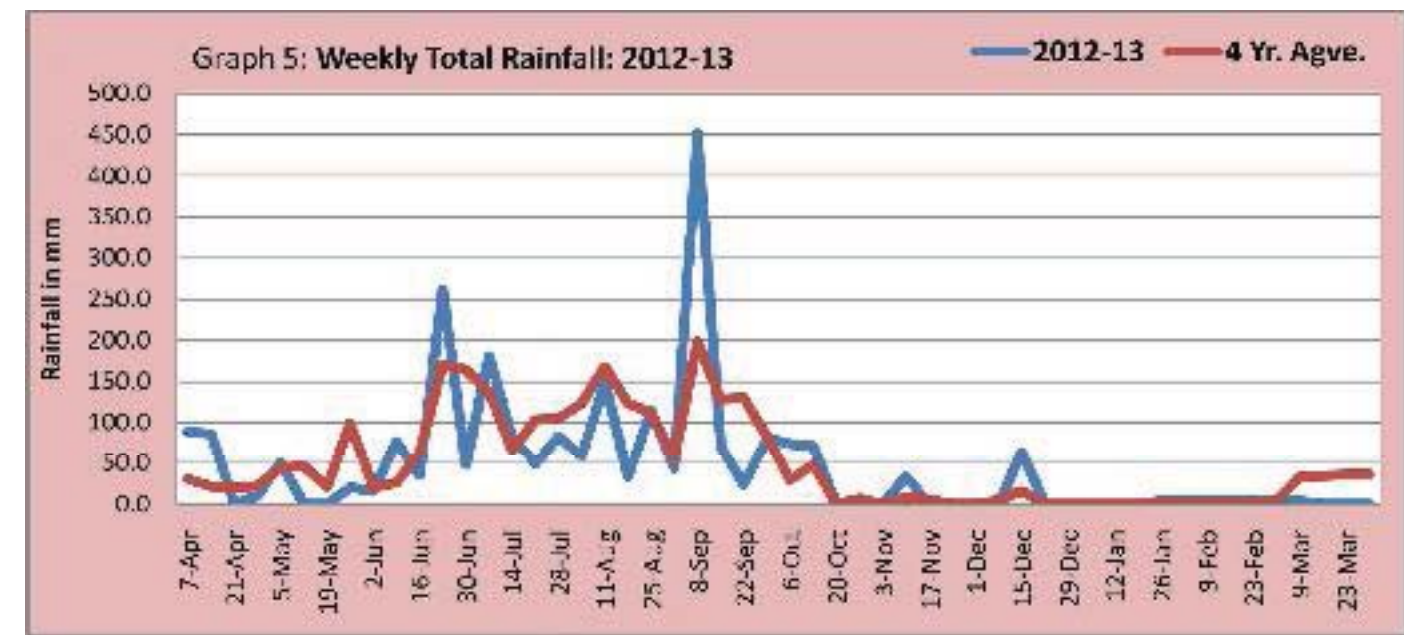
Relative Humidity: The graph of the weekly average of the relative humidity (RH) throughout the year shows that in the reporting year the RH was low during the month of Middle of November, 2012 to first week of April, 2013.



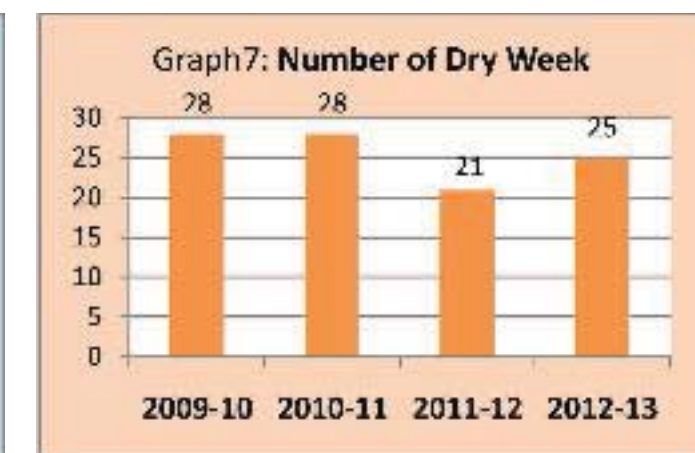
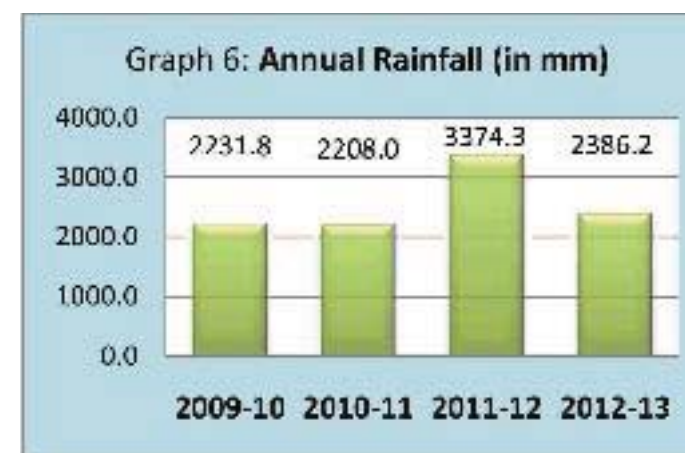
On the other hand, the higher range was found from 2nd week of July to 3rd week of October, 2012. In contrast to last four years average data, contrasting deviation was found during April, 2012 (higher than average) and during last fortnight of November, 2012 (Graph 5). The average daily humidity during the year was 73 percent which is almost normal to the average

“The tree laden with fruits always bends low
If you wish to be great, be low and meek”
— Sri Ranganatha Das

Rainfall: The total annual rainfall at Narendapur area during the reporting year was 2386 mm, which was normal. The onset of monsoon was 7th June, 2012 and about 70 percent rainfall occurred during 17th June to 14th September, 2012 (Graph 5).



In the reporting period the peak weeks of rainfall were found during 3rd week of June, 1st week of August and the highest week of rainfall was during 1st week of September, 2012. This trend corroborated the average data of last four years. Number of dry weeks was 25 which also matched with the average data.



“I can't contain myself when one draws near me and calls me Mother”
— Savitri Devi

Graph 8 : Trend of Weather in last 4 years (2009-10 to 2012-13)

Weather parameter	Year	2009-10	2010-11	2011-12	2012-13
Mean Max. (Red) / Min. (Green) Temp. in a Day	2009-10	30	31	32	33
	2010-11	31	32	33	34
	2011-12	32	33	34	35
	2012-13	33	34	35	36
Mean Max. (Red) / Min. (Green) / Avg. Temp.	2009-10	27	28	29	30
	2010-11	28	29	30	31
	2011-12	29	30	31	32
	2012-13	30	31	32	33
Mean Max. Rainfall in a Day (Days)	2009-10	100	105	110	115
	2010-11	105	110	115	120
	2011-12	110	115	120	125
	2012-13	115	120	125	130
Dev. of Over-cum-spoon (Red) & Under-spoon (Blue)	2009-10	15	16	17	18
	2010-11	16	17	18	19
	2011-12	17	18	19	20
	2012-13	18	19	20	21
Day W. precedes / follows by Vile of rainfall (mm)	2009-10	24	25	26	27
	2010-11	25	26	27	28
	2011-12	26	27	28	29
	2012-13	27	28	29	30

"Do not let worldly thoughts and anxieties disturb your mind"
- Sri Ramkrishna

VI EXTENSION PROGRAMME

- A. ISOPOM Project
- B. IRRI Project
- C. Horticulture Extension Programme

A: ISOPOM Project

The population of this State is 913 millions (2010-11). We have been able to meet up requirement of oilseed by 48 percent from the production of the State. Again we will have to increase the production of cereals gradually due to increase of population. The production and productivity of major cereals like paddy and wheat are almost stagnant; on the other hand there is a great scope for increase of maize in our state. Maize is used worldwide for about 3500 products of different uses as feed (61%), food (17%) and also serves as a source of basic raw material of number of industries (22%) viz., starch, ethanol, oil, alcoholic beverages, food sweeteners, pharmacy, cosmetics etc. No other cereal can be used in such many ways as maize. The recent projections of International Food Policy Research Institute (IFPRI) have indicated that there will be 85 and 45 per cent increase in global demand for poultry and pork during 25 years (between 1995 and 2020) for which maize is the major source of feed that indicates growing demand for it globally. Our country is the 5th largest poultry producer in the world with a very high growth rate of 7.94 per cent during 2000-01 to 2006-07 (NAAS, 2008). The poultry growth rate is very high and 49 per cent of the total maize production is consumed as feed in poultry sector in our country. This sector has also further enormous growth potential (about 15 per cent p.a.) that would raise the further demand of maize. It is evident that the demand of this crop is increasing day by day in our state. There is also immense scope for increase of both area and production of maize and it is becoming an important cereal crop in the state.



In such perspectives, steps were taken by the state government to increase the area and productivity of oilseed and maize crops and accordingly a programme entitled "Integrated Scheme on Oilseeds, pulses, Oil-palm and Maize (ISOPOM)" was launched. This programme has been also initiated at this Training centre of Ramakrishna Mission Ashrama, Narendrapur since its inception.

The basic objectives of this programme is to promote the farmers to diversify their cropping systems with crops like pulses, oilseeds and maize in order to reduce the deficits of oilseeds and increase the food-grains mainly pulses and maize in our state. Since 2009-10 pulse crops have been shifted to National Food Security Mission (NFSM). Block demonstration are conducted in the farmers field to motivate them through demonstrating the performance of the

"On this basis- being right and doing right- the whole world can unite"
- Swami Vivekananda

particular crop/variety through judicious use of inputs like quality seeds, fertilizers, plant protection chemicals and adoption of latest production technology on oilseed and maize crops. Financial assistance is also provided for distribution of plant protection equipments, supply of rhizobium culture, distribution of gypsum/ lime as soil amendments, distribution of delivery pipes for carrying water, farm machinery like pump set, thresher and seed bins for scientific storing of seeds etc. The farmers are motivated towards improved cultivation through organizing farmers' trainings. The efforts have been taken to implement such programme through youth organizations majority of which are associated with Ramakrishna Mission Lokasiksha Parishad of this Ashrama.



After implementation of ISOPOM Programme, area and production of oilseed particularly sunflower and maize have been remarkably increased since the inception of the scheme in our state. The area of maize has been increased from 65 to 98 thousand hectare as well as record increase of production (190 to 364 thousand tones) and productivity (2984 to 3722 kg per ha) from 2007-05 to 2011-12 have been noticed.

Various activities in connection with implementation of this scheme by our training centre are very much encouraging. These are as under:

A. Crop Demonstration Centres (DCs): Oilseed and maize crops demonstration centres, 41686 in number, have been conducted so far and besides demonstrations 32071 more farmers have been benefited since inception from our inputs, machineries given to them

Oilseed and Maize Crops Demonstration:

Year	Mustard DC	Ground nut DC	Sesame DC	Sunflower DC	Maize DC	Total DC
2004-05	1965	730	150	945	0	4110
2005-06	3000	900	975	1613	1573	8061
2006-07	1245	795	368	750	1519	4677
2007-08	870	525	270	938	1146	3749
2008-09	938	1215	660	938	375	4126
2009-10	916	475	233	938	375	2937
2010-11	375	375	750	1125	750	3375
2011-12	450	1125	765	2138	750	5228
2012-13	450	1125	1973	1125	750	5423
Total	10209	7285	6444	10510	7238	41686

"Be as devoid of vanity as the cast away leaf carried by the high wind"

- Sri Ramakrishna Das

B. Information Service: Technical literature in the form of folders have been published and distributed among the farmers to back up demonstration and training programmes. Two thousand copies folders each for Tori Mustard, Yellow Sarson, Sunflower, White Sesame and Maize have been published in Bengali. Besides these CDs on "Sunflower" has been developed so as to broaden the information base of the farmers.



C. Sustainability: Selection of low cost technology and people's participation as well as involvement of village youth clubs were the key factors for sustainability of the scheme. Further linkage with state agriculture department and local Panchayat also ensured sustainability. Agricultural officers and Krishi Prayukti Sahayaks of the area under project were also involved in demonstration, training programmes and workshop organized at the beginning of Rabi season particularly.



All the stake holders, helped in implementation of the project activities in line with Mission's philosophy of self help and development of the farmers. More than twenty cluster organizations and 262 constituent youth organizations are participated in all activities such as selection of farmers, selection of demonstration site, organizing the farmers ensuring participation of the farmers in training programmes. The members of the organizations were trained helping in formation of farmers groups. Such groups served dual role i.e. as knowledge base for the farmers, and as leaders in development process. Above all, village level youth clubs through which the programmes are being implemented are permanent feature of the village. Infrastructures of these clubs are maintained and run by the villagers themselves. Hence, education and training imparted to the village youths were translated into practice which leads to the sustainability of the project.

D. Market linkage: The main hurdle of our farmers is that they fail to get good price from their produce, especially for new introduced crops like maize and white sesame. In order to solve such problems contact was made with various companies and we have been successful to link their produce with the markets and the farmers cultivating maize and white sesame are getting good price now. We are pioneer in motivating farmers to grow white sesame in various blocks of Paschim Medinipur districts such as Keshpur, Chandrakona-I, Chandrakona-II, Dashpur, Sapong, Pingla etc. since 2008-09. Now, a well established market has been developed and farmers are getting more remunerative price from their produce. About 2000 bighas of white sesame were cultivated in the last year and the farmers received 20-25 percent more price than conventional brown sesame like Tilattama, Rama etc. Similarly maize areas are being increased. We organized training workshop in Patharpratima block where farmers were trained on preparation feed for cattle, poultry and fishes as most of the coastal farmers belong to such enterprises. The farmers are preparing feed from their produce & sell in the market. So, the market sale price of maize has been increased 20 per cent or more than earlier. It is very laborious and hard job to separate maize grains from the cob manually. In order to solve such problems we have been successful to install two maize

"Do not afraid; the master is behind you, and I am, too, as your Mother"

- Swamida Prani

shellers in Patharpratima block, one at Rakshaskhali and another at Dakshin Shyong village. Such machine can separate maize grain from the cob @ 1 ton per hour. So, the farmers are very much benefited as the cost for post harvest operations are reduced.

- E. **Farmers' Service Centres:** Farm machineries like pump set, maize sheller, power thresher, delivery pipes, sprayer etc. are being provided to the farmers. But we are not getting sufficient number to cover all the farmers under the working areas of our youth organizations. But we should serve all the farmers. With this considerations we



have developed Farmers' Service Centres in most of the organizations where farm machineries, plant protection equipments, delivery pipes etc. are kept ready and provided to the farmers against a small service charge. Such service charges are 40-50 percent less than the local charges. Registers are maintained and money is collected through receipt. The collected fund are divided into three portions. One portion is kept for maintenance of machineries and purchase of extra machineries if required, the second portion is given to one of the workers who is maintaining the entire system and the rest portion is kept for development purposes of the organizations. In such ways the farmers are being served

as well as the youth organizations engaged in such purposes are being benefited containing the ISOPOM scheme in a sustainable manner.

We have extended our activities related to implementing ISOPOM in eight districts so far (South 24 parganas, North 24 Parganas, Howrah, Purba Medinipur, Paschim Medinipur, Burdwan, Bankura and Purulia) of this state as per operation strength of our network through the youth organizations.

B. Labour Productivity And Community Ecology Working Group (LPCEWG), IIRI PROJECT, A Collaborative Project:

Rice contributes 42 per cent of total food grains production and 15 per cent of the total cereal production in the country. West Bengal is known as bowl of rice because it constitute major food item and is being cultivated in major portion of the agricultural land.

The State is the highest rice producing and consuming state of the country. In the last few years, however, production has been stagnated as seen from yield trends, growth rates, and the analysis of long-term experiments. Yield has stabilized at the level which is much below the potential existing rice productivity. So, it is necessary to motivate the farmers so that they can adopt the improved technologies leading to increase the production and productivity in order to improve the livelihood of the resource poor farmers.



"If you must be mad, be it not for the things of the world
Be mad with the love of God!"

— Sri Ramakrishna Paramahansa

Table: Trend in production and productivity of rice in West Bengal from 2004-05 to 2011-12

Year	Production (000 tonnes)	Productivity (Kg/ha)
2004-05	9974	2441
2005-06	9858	2397
2006-07	14746	2593
2007-08	17720	2573
2008-09	15037	2533
2009-10	14341	2547
2010-11	13390	2708
2011-12	14605	2688

It is evident that there is a wide variation in the production and productivity at district level on account of varied agro-climatic conditions in which rice is grown. In the State there are three principal methods of rice establishment: broadcasting, transplanting and wet seeding. Transplanting is the most conventional method for raising paddy in the State.

In project areas, under coastal belt many farmers have adopted HYV paddy, they have come forward in mechanical implement and machineries like tractor, power tiller, pump sets etc. Despite these advance practices they faced many problems causing decline in production and productivity both in Winter and Summer paddy cultivation. The critical problems being faced by them are given here.

Constraints in Aman or Winter Paddy cultivation:

Due to climate change the crops are suffered for insufficient rain, late rain, excess rain, flood, unprecedented hailstorm etc. The State is mainly dependent on monsoon rainfall for cropping. Late arrival of monsoon being a common feature which causes late to go for wet seedbed preparation. Again the farmers are forced to go for late transplantation due to insufficient rains. As a result opportunities for subsequent crops such as Sunflower, Potato, Mustard, Maize etc. are reduced and yields become less. In some cases the farmers are also forced to go for late boro cultivation for which the crop often becomes damaged in ripening stage due to hail storm known as *kalbaishakhi*.



Constraints in Boro or Summer paddy cultivation:

There is serious depletion of underground water and the farmers are compelled to pump ground water for raising boro paddy and winter vegetables. As ground water table is going down, the farmers are forced to excavate the soil to bring down the motor, even 20 feet from the surface causing serious depletion of underground water. Again, the cost of irrigation is gradually increasing due to steep climb of global fuel like diesel and petrol prices. The farmers are really unable to irrigate the crops in such situation. Besides, the male farmers are migrating to the developing urban and industrial sectors to find the job after harvesting Aman paddy and as a result the availability of farm labour is gradually decreasing during the peak periods of farm operations. So, Motivation of farmers towards direct seeding rice technology is the only options. But the technique and technology of Aman paddy are different from Boro or summer paddy.

"I slept and dreamt that life was joy. I awoke and saw that life was service.
I acted and benefited, service was joy"

— Rabindranath Tagore

How such emerging critical problems can be solved or at least minimized?

Direct seeding rice (DSR) technology using dry seeder for raising Aman paddy or drum seeder for raising boro paddy is the most important among the options:

So, it is very much necessary to motivate the farmers for wide adoption of DSR technology. With such considerations the Project, Labour Productivity and Community Ecology Working Group (LPCWEG) was undertaken in collaboration with International Rice Research Institute, Philippines in order to increase the production, productivity of paddy reducing the cost of cultivation and finally to improve the livelihood of the resource poor farmers through dissemination of direct seeding technology in paddy cultivation.

Location of the Project: West Bengal, South 24 Pgs District

District	Latitude	Longitude
South 24 Parganas	22° 06' - 22° 20' N	88° 20' - 88° 60' E

Blocks covered: Coastal belt of Baruipur, Kakdwip and Patharpratima.

Technical details for raising Aman paddy using dry seeder:

Before land preparation, the fields infested with weeds will be sprayed with non-selective herbicides, glyphosate eg. Glycel/Round up @ 7 ml/litre of water 3-4 days before sowing. All the weeds will die. Then seeds are sown taking the advantage of pre-monsoon rain. So, there will be no problem if rain occurs late. Then the land will be prepared by ploughing followed by laddering. The drums are filled with 3/4th level in each drum with dry seeds and the seeds will be sown in line while pulling the dry seeder machine. The seeds will germinate, the seedlings will come up automatically after arrival of monsoon, as well as, the land will be mostly free from weeds. However, cono-weeder can be operated with thin film of water if necessary in the later stages. For the reason, it is advised to raise the bund of the field to store rain water while monsoon occurs. This practice will facilitate operating the cono-weeder easily. Hand weeding will help to control weeds between hills.



Fertilizer should be applied in accordance with soil test result keeping in view of variety, duration of the crop. Insect pest and disease infestation are less and it is advised to apply bio- or chemical pesticide after proper survey and surveillance. The cost of cultivation of direct seeded rice using dry seeder is less, it does not require raising seedlings, and the expenses regarding seed and plant protection chemicals are less than transplanting. It results in reduction of labour cost as well as increase of productivity by 10 per cent or more, the crop matures 7-12 days earlier than the conventional transplanting.

Technical details for raising Boro paddy using drum seeder:

The direct seeding in wet using drum seeder can offer relief in terms of both the labour and water problems. Paddy seeds are sown directly in wet land using drum seeder. It requires less water, agricultural labour and less agri-inputs like seeds, pesticides etc. Seeds are sown directly and seed bed raising is not required. The machine is suitable for seeding sprouted rice seeds in rows on well-prepared puddle soil directly in the field. The capacity of each drum is 2.0 kg. The machine with 4 drums weighs only 5.0 kg when it becomes empty. One person can sow seeds in lines on one hectare of land per day. Seeds can be sown to raise boro crops in irrigated land using this machine. It is desirable to sow seeds by 15th of December to avoid cold injury during winter. Puddled land should be prepared

"As long as I live, so long do I learn"

- Sri Ramakrishna

nicely by ploughing followed by laddering before sowing seeds. The land should be leveled to avoid water stagnation. Excess water should be drained before days of sowing. Seed treatment is required before sowing. The seeds are placed for germination after soaking 8-10 hours in water dissolved with Carbandezim eg. Bavstin/Derosal @ 2 gm/kg of seed. 1.5 litre of water is required to soak one kg seed properly. The radicals of the germinated seeds should be of proper length (4-5 mm). Before loading them in the drums, the sprouted seeds should be lightly dried for 1-2 hours in a shady place. Sprouted paddy seeds are filled to 3/4 level in each of 4 drums to facilitate seed drop. The triangle mark on the drum indicates the forward motion of the machine. Irrigation is not necessary within 4-5 days after sowing. It is advised to provide light irrigation just to moist the soil. It is not necessary to provide more than 1 inch of water in each irrigation. Fertilizer should be applied on the basis of soil test. Weeds are major constraints in direct seeded rice using a drum seeder. The cono-weeder becomes helpful to control weeds in the paddy fields at 15-20 days of sowing. Two weedings using at 7-10 days interval yield good result. Hand weeding is necessary to control weeds between hills. Insect pest and disease infestation is less and it is advised to apply bio- or chemical pesticide after proper survey and surveillance. The cost of cultivation of direct seeded rice using drum seeder is less, it does not require raising seedlings, the expenses regarding seed, irrigation water, and plant protection chemicals are less than transplanting. It saves labour and the yield can be increased by 10 per cent or more, the crop matures 7-12 days earlier than the conventional transplanting and pre-monsoon hailstorm can be avoided.



From outcome of focus group discussions with both male and women farmers the following points should be considered for successful implementation of DSR in West Bengal.

- Slight modification in making holes both in dry and drum seeder is required - diameter of alternate holes of the drum seeder may be adjusted particularly for long and coarse grain.
- Searching and making available for cold tolerant short duration HYV of paddy is the urgent need, as sometimes during growth period the temperature comes down even to 10° C in winter.
- Use sufficient quantity of organic matter in soil and application of ash after sowing will help better growth of the crop particularly in boro paddy. Such practice helps to retain the soil temperature and protect the crop from cold injury.
- Non selective herbicides such as Glyphosate can be applied in the fields infested with weeds before sowing seeds using dry seeder. This will be followed by ploughing, laddering, leveling and sowing of dry seeds taking the advantage of pre-monsoon rains. The land will be free from weeds.
- The boundary of the land should be raised to store monsoon rain water in order to facilitate operating cono-weeder to control weeds in DSR dry. The cono-weeder can work better when a thin film of water is present in the field.
- Weeding at 13-14 DAS is the must in DSR wet using cono-weeder. Herbicide application is not required at all to control weeds when rice plants are in the field.
- Testing of soil and water before cultivation and water before irrigation.
- Land should be properly leveled and puddled. This is very much needed for proper water management.

"Be the change that you wish to see in the world"

- Mahatma Gandhi

- Shifting to salt tolerant crops like sunflower, Khesari etc. other than boro paddy can be practiced, especially where there is serious scarcity of irrigation water.
- We should take the advantage of pre-monsoon rain to sow seeds in DSR-dry methods.
- The seeds should be sown within 15th of December in DSR wet where drum seeder will be used.

In overall sowing time and weed control measures are very critical points to be considered in successful implementation of DSR which can save labour, water, cost of cultivation enabling the farmers to get 10-20 % more yield but in less duration (7-12 days earlier than conventional transplanting).



Activities of the Project, LPCEWG:

Items	No. of Programmes	No. of farmers present	No. of female farmers present
Farmers Training/Capacity Building	19	904	81
Training of Trainers (TOT)	2	65	0
Focus Group Discussion	3	72	30
Training cum Workshop	3	150	6
Seminar at Block Krishi Mela	1	200	25
Field Day	2	89	36
Communication activities : Telecast through E TV.	4 (two for DSR-Wet and two for DSR-Dry)		
Publication:	4		
Presentation : one at Krishi Mela and another in Womens' Farmers Training	2	235	55

Female participation in the training programme is not encouraging. So, we have decided that separate training/focus group discussion would be conducted involving women farmers only and accordingly we have organized some women farmers' training programme separately.

Development of CDs:

Two CDs have been developed, one with using drum seeder and the other with using dry seeder. Two video CDs also have been developed primarily regarding seed treatment of paddy in dry and wet method.

"The Man who works for others, without any selfish motive, really does good to himself"

— Sri Ramakrishna

Demonstrations: (1 bigha =33 cents; 7,5 bighas=1 Hectare)

DSR (Dry) demonstrations using dry seeder were conducted in 18 bighas of land with 22 farmers' plot in Patharpratima and Kakdwip block. Thirteen bighas of land were cultivated using dry seeder by one farmer named Bablu Khatua of Patharpratima block, who obtained record yield of that area (3.3 MT/ ha from locally improved very good quality of fine grained Dudhesar variety). It was covered through telecast by media, ETV (Link:<http://youtu.be/8oyea3oKN3I>). Direct Seeded Rice (Wet) demonstration using drum seeder were conducted in 101 bighas of land with 66 farmers in Patharpratima, Kakdwip and Baruipur block of South 24 Parganas district. We have already started to extend the technology to other areas motivating the farmers. It may be noted that five farmers of Medinipur district used drum seeder and some farmers of Howrah and Bankura districts used dry seeder in paddy cultivation. The results are very encouraging except a few. Drum seeder is available with some company at Kolkata. But dry seeder machine is not being manufactured by any company. We invited some company and demonstrated to motivate the company to go for large scale manufacturing of dry seeder machine. Fruitful result has not yet been achieved, may be due to high initial cost of the raw materials. However, many farmers are taking such machine from us manufactured by our mechanic, the cost is about Rs. 4500/- per machine. Such expenditure consists of cost of raw materials and labour only. The machine is becoming popular day by day observing our DSR telecast of E TV. So, time has come to go for large scale manufacture of dry seeder machines.

Water Harvesting Structures (Land shaping): Two water harvesting structures have been prepared. The farmers have been economically benefited from multi sources—paddy, vegetables on bunds, oilseeds, pulses, fishes, ducks, small fruit trees etc.

C. Horticulture Extension Programme in South 24 Parganas:

Introduction: Horticultural crops are an important intervention for livelihood development in South 24 Parganas. It was felt need of the farming community and our affiliated organizations provided technological support for horticulture development. Input related technological intervention in the farmers field was accepted as major component for the easy acceptance.



To extend the technological support with the input, a collaborative programme has been taken up with the Dept. of FPI & Horticulture, South 24 Parganas for availability of different horticultural inputs for the farmers of South 24 Parganas.

The essence of the programme is the inputs which will be provided by the Department of FPI & Horticulture and technical support, selection of beneficiaries, supervision, monitoring, etc. will be done by ATC.

The programme was inaugurated by the Hon'ble Minister in-charge, FPI & Horticulture, Govt. of West Bengal at Sarada Hall, ATC on 7th August, 2012 in presence of 315 farmers

from different parts of South 24 Parganas District.

Before launching of the programme, its necessity, modalities of implements, identification of locality, assessment of community readiness, types of inputs requirement etc. were formulated through a workshop at ATC with 15 affiliated village organizations.

"I tell you one thing- if you want peace of mind, do not fault with others"

— Swami Vivekananda

Objectives:

1. Widening the intervention of our activities keeping parity with farmers demand in the sector of horticulture.
2. Activate the rural organizations and empower the local leaders to act as techno-managerial sound person in the field of horticulture.
3. Augmenting the production and productivity of horticultural crops and finally improve the livelihood.

Component:

1. Distribution of fruit plants like mango, guava, banana, litchi etc.
2. Distribution of inputs like neem cake, neem oil, vermin compost, natural enzyme
3. Distribution of implements like hand sprayer & foot sprayer
4. Distribution of vegetable seeds minikits like cabbage, cauliflower, radish, chilli, palak etc.

Quantity of different inputs provided to the farmers:

Sl. No.	Inputs	Quantity
1	Mango plants	35685
2	Guava plants	23791
3	Banana plants	600
4	Litchi plants	524
5	Neem oil	162 lit.
6	Natural enzyme	690 kg.
7	Vermicompost	600 kg
8	Sprayer	461
9	Soade & Watercan	2430
10	Vegetable seed minikits	815

Area of operation:

10 selected organizations in 6 blocks covering 12 villages with 2485 farmers were covered under this programme.

**Impacts:**

This programme has created a wide enthusiasm among the farmers, organization, local panchayat, local public representative. In many organizations centrally orientation programme was organized in presence of farmers, ATC representative, local MLA etc. Farmers were attended the orientation programme and collected the inputs with proper care.

Local organization provided the technical support with the help of us on regular basis.

have been created enthusiasm among the nearby farmers for technical upgradation. Regular monitoring, support, visit etc. are going on.



Orientation on Horticultural Technologies and Distribution of Inputs at Gholia, Inaugurated by Sri Nirman Mondal, Hon'ble MLA.

"Trade increases the wealth and glory of a country, but its real strength and stamina are to be looked for among the cultivators of the land"

— 1st Earl of Chatham, William Pitt

"Be the change that you wish to see in the world"

— Mahatma Gandhi

VII PUBLICATIONS

Publications of the institute is one of the main components, like a spokesmen which self-describes the activities of that institute. Similarly the website of the institute is the only document of the institute which can be browsed by any one through the world. The Institute has a regularly updated website: www.sametivb.org of about 20 pages, displaying the programmes and activities of the institute along with other related information. Updated information, programme images, activity schedules are uploaded in the website on regular basis. Yearly tentative training programmes workshop-seminar, programme performed in the last year, important coming programmes etc. are displayed in the website. Important announcement and information like schedule of PGDAEM semester examinations

etc. are displayed in the website notice board in home page. Since 2006-07 annual progress report of the institute is available in the website in pdf form. The provision for on-line farm till up for the Agri-clinic and Agri-Business Centre (AC-ABC) has been developed in the home page of the website. Various notices of the institute, Govt. Departments related to agricultural reforms are being displayed in the website for interest of the people. Regular feed backs, information, suggestions are coming through website contact address. About 5000 people have clicked the website for various information.

The "News Letter" of the institute is published regularly on quarterly basis. It is of four pages colour publication. The newsletter contains the news covering the major programmes performed by the institute, news pegs, coming programmes, about SAMETI West Bengal etc. The soft copy of the news letter is also displayed in the institute website in pdf form. The design of the newsletter has been changed five times since inception. Since January, 2010 to March, 2013 the newsletter has published in 3 volumes & thirteen numbers.

Other publications like, folders, leaflets, CDs those are produced in the year 2012-13, are given in the tabular form below:

Sl. No.	Type of publication	Name of the Publication	About the publication
1.	Folder	"Hybrid be Sankar Bhutta Chase Unnata Prajukti"	Hybrid maize cultivation by using developed technology (Beng.)
2.	Folder	"Drum Seederer Sahajye Boro Dhaner Chas"	Using drum seeder in summer or boro paddy through direct seeding (Beng.)
3.	Folder	"Direct Seeding of Summer or Boro Paddy Using Drum Seeder"	Using drum seeder in summer or boro paddy through direct seeding (Eng.)
4.	Folder	"Dry Seederer Sahajye Aman Dhaner Chas"	Using of dry seeder in aman paddy (Beng.)
5.	Folder	"Direct Seeding of Aman or Winter Paddy Using Dry Seeder"	Using dry seeder in aman or winter paddy through direct seeding (Eng.)
6.	Video CD	"Dry Seederer Sahajye Aman Dhaner Chas"	Using of dry seeder in aman paddy (Beng.)
7.	Annual Report	Reflection	Annual Report of the institute for the pence Apr 2011 - March 2012 (Eng.)



"The brain and muscles must develop simultaneously. Iron nerves with an intelligent brain – and the whole world is at your feet."
– Vladimir Lenin

"Anyone who has never made a mistake has never tried anything new"
– Albert Einstein

VIII FACULTY MEMBERS OF THE INSTITUTE

The faculty members, the human resources, are the most important assets of the institute. Along with national and international exposures and education, all the members have continuous deep rooted relation and intervention with the rural life and its development.

A. Faculty members of the Institute:

Sl. No	Name	Designation	Educational Qualification	Field of Specialisation
1	Dr. Manas Ghosh	Principal, AIC & Director, SAMEH	Ph. D. in Agricultural Entomology, PGDAEM	Plant Protection, IPM, Rural Development
2	Dr. Asutosh Das	Senior Lecturer	Ph.D., M.Sc(Ag.), PGDAEM	Medicinal Plant Management, ISOPOM
3	Sri Prasanta Dasgupta	Senior Lecturer	M.Sc. in Botany-Horticulture	Horticulture, Pomology, Organic Farming
4	Dr. Satinath Das	Senior Lecturer	B.V. Sc, PGDAFM	Dairy Management
5	Sri Amiyakumar Raj	Senior Lecturer	M. Sc (Ag.) in Agricultural Extension	Leadership, Motivation,
6	Sri Dilip Maity	Senior Lecturer	M.Sc. in Agronomy	Farm Management, Seed Technology
7	Dr. SK. Musiar Ali	Senior Lecturer	Ph. D., M. Sc (Ag.) in Agricultural Extension	Extension Management, ICT in Agriculture
8	Dr. Kamalakanta Hazra	Senior Lecturer	Ph. D. in Plant Pathology	Plant Protection, IPM, Mushroom Cultivation
9	Dr. Sourendranath Das	Senior Lecturer	Ph.D. in Agricultural Entomology, PGDAEM	IPM, Bio - Pesticides, Bio - Control
10	Sri Soumyesh Mandal	Chief Instructor	M.Tech. Agricultural Engineering, PGDAFM	Farm Mechanisation & Water Engineering
11	Sri Subhrasi Basu	Faculty	M. Sc. in Sociology	Social Welfare, Mainstreaming Gender
12	Sri Asit Basu	Faculty	M. Sc. in Anthropology	Entrepreneurship Dev. Agricultural Marketing
13	Sri Ranjan Kanti Chatterjee	Faculty	Diploma in Engineering (Mech.)	Rural Engineering
14	Dr. Moh L Hossain	Faculty	MBBS	Health & Hygiene
15	Sri Debabrata Giri	Faculty	M.Sc. in Economics with Rural Dev., PGDAEM, B.Ed.	Rural Development, Project Management

"Finish the few duties you have at hand, and then you will have peace"

- Sri Ramakrishna

B. Guest Faculty

Sl No	Name	Status	Qualification etc.
1	Dr. Dibyendu Sen	Former Director of Extension & Education, BCKV, the State Agricultural University	Ph.D in Agril. Extension
2	Dr. Debabrata Dasgupta	Former Vice Chancellor, BCKV, the State Agricultural University	Ph.D in Agril. Extension
3	Dr. Debabrata Basu	Professor, Agricultural extension, BCKV	Ph.D in Agril. Extension
4	Dr. Shankar Acharya	Professor, Agricultural extension, BCKV	Ph.D in Agril. Extension
5	Dr. Rupak Goswami	Assistant Professor, Integrated Rural Development & Management Faculty Centre	Ph.D. in Agricultural extension
6	Dr. Nasim Ali	Assistant Professor, Integrated Rural Development & Management Faculty Centre	Ph.D. in Genetics and Plant Breeding
7	Sri Armitava Dutta	Assistant Professor, Integrated Rural Development & Management Faculty Centre	M. A
8	Dr. A. K. Roy	Former Principal of Staff Training College, NABARD	Ph.D
9	Dr. R.B. Mallick	Head of the Dept. Agronomy, Balygunj Science College, Calcutta University	Ph.D
10	Sri Tuhin Roy	Private Entrepreneur (AC - ABC)	M. Sc
11	Dr. A. K. Pani	Professor, Army Management Institute, Kolkata	Ph. D in Agricultural Marketing
12	Dr. Swadesh Mishra	Ex. Agricultural Meteorologist, Govt. of West Bengal	Ph. D.
13	Mr. Arindam Saha	Vice Principal, MCX and Stock Exchange, Kolkata	
14	Mr. Sudipita Mukhopadhyay	Divisional Manager, Marketing, Spencer India Ltd.	
15	Dr. Vivek Roychowdhury	Professor of Indian Institute of Foreign Trade	Ph.D
16	Mr. Kalyan Maity	Pvt. Entrepreneur, Agro India Agri-Clinic	Agri-preneur

Men are more valuable than all the wealth of the world.

- Shivajirao