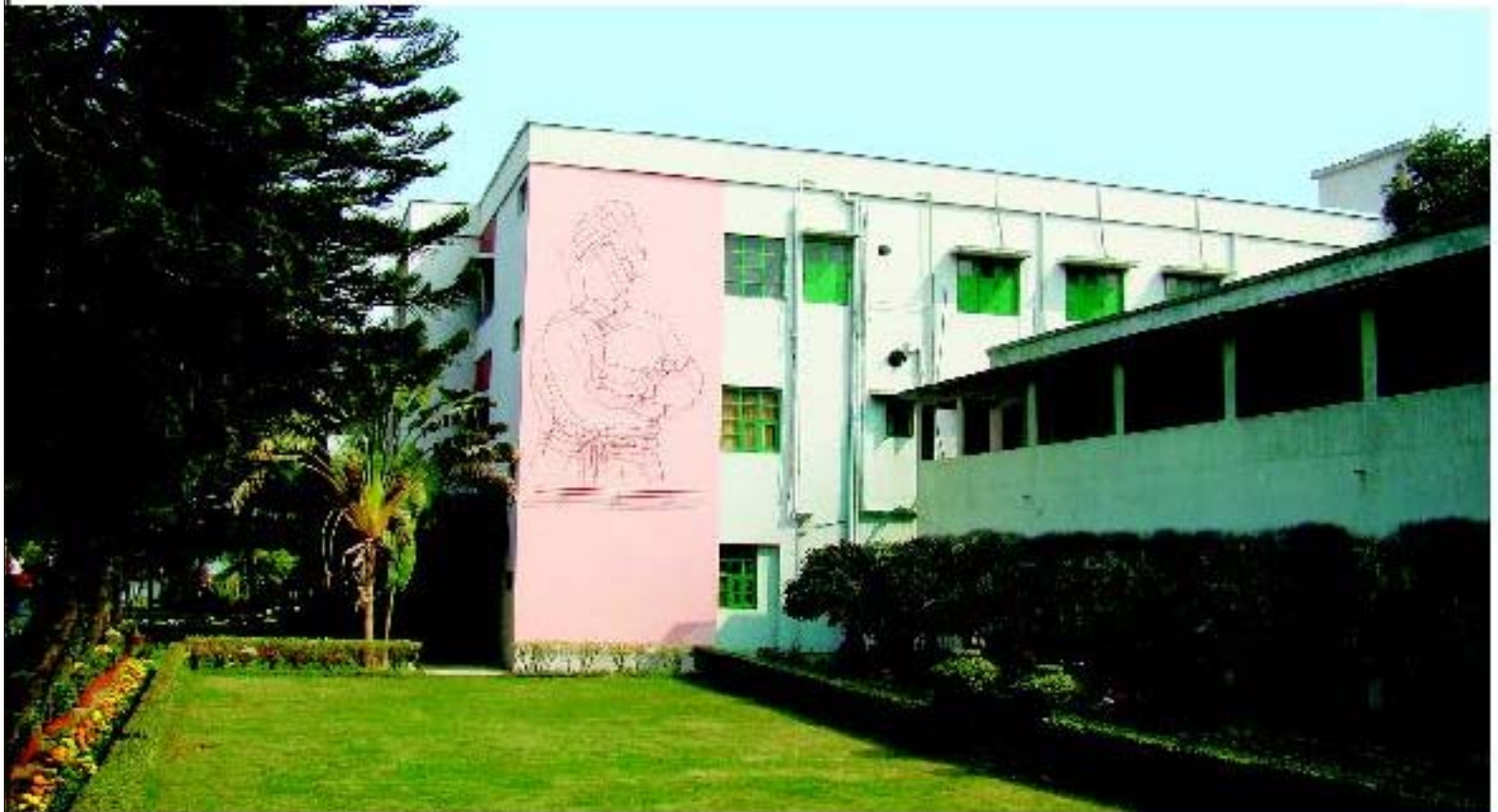


Reflection



**Agricultural Training Centre &
State Agricultural Management &
Extension Training Institute
RAMAKRISHNA MISSION ASHRAMA
NARENDRAPUR, KOLKATA : 700 103**



“It would be better if the people got a little technical education, so that they might find work and earn their bread, instead of dawdling about & crying for service”

-Swami Vivekananda



Foreword



The role of the Agricultural Training Centre of our Ashrama for the development of the agricultural community is well known. In recent past, the responsibility of the Centre has been broadened and intensified for the development of agricultural and allied communities of the whole state through its human resource development excellence. Now, the State Agricultural Management and Extension Training Institute (SAMETI) at our Ashrama is not only known to the agri-stake holders of the state but also to the other parts of our country for its sincere activities and its whole hearted cooperation in human resource development aspects.

The major portion of the population of our country is agriculture-dependent. There is a cry throughout the world on climate change and perhaps it will strike the agriculture and food security to a large extent. Additionally in India, the sustainability of the agricultural system is in a critical junction due to low price return of the agricultural produces to the millions of farm family in the country. In such situations, along with innovations for appropriate technologies, new dimension in extension system and thrust on overall human resource development are highly needed. Our ATC/ SAMETI is continuously working in that direction. The institute is pertaining need-based training for technology dissemination for the farmers and extension workers, and also conducting training and education on extension and management aspects for all the stakeholders. Above all, in the inspiration of swami Vivekananda's philosophy of rural development, the faculty members along with the trained persons and followers are reaching directly to the corners of villages, from where the actual development takes place.

This 'Reflection', the annual report of the ATC/SAMETI reflects the volume of the work done and the degree of sincerity involved in activities of the institute in last one year. I pray to Thakur Sri Ramakrishna, Ma Saradadevi and Swami Vivekananda to bless the ATC / SAMETI for more inspiration for work towards development of the agricultural communities of the state and the country.

Swami Suparnananda

(Swami Suparnananda)

SECRETARY



Preamble



Still now, many people associated with the agricultural and rural developmental work of Ramakrishna Mission Ashrama, Narendrapur for many years, call our centre as 'Garam Sevak Centre'. The Agricultural Training Centre (ATC) under Ramakrishna Mission Ashrama, Narendrapur was initiated as Gram Sevak Training Centre for more than four decades ago. As the Training Centre believes in holistic approach of rural development, besides organizing training for grass root level extension workers in different areas of agriculture, incorporated other components of rural livelihood development. In turn, this valued experience supports to provide excellence in imparting effective training to all levels of agricultural stakeholders. This institutional excellence resulted in recognizing this particular institute under the umbrella of Ramakrishna Mission, as 'State Agricultural Management and Extension Training Institute (SAMETI)' by the Government for human resource development for agriculture and also for allied sectors like animal husbandry, fishery, horticulture, marketing etc.

Now, the agriculture, particularly the agriculture-dependent country like India, is passing through a very crucial stage. It is facing several challenges like more production to feed the burgeoning population with limited and reducing the utilization of natural resources, sustainability of the production for the coming years, standard income capacity of the farm families with better marketing options, mechanism of efficient use of resources through integrated approach, combating the climate change effect etc. Along with the available technologies, knowledge, research findings etc., it is very important to disseminate the information, coping up mechanisms and skills with least time to the large number of beneficiaries. SAMETI as well as ATC is playing that important role for the district, block and panchayat level extension functionaries, private and para-extension workers and obviously for the farmers and rural youths living in the state of West Bengal.

SAMETI as well as has ATC conducted mainly two categories of training courses viz. Technical skill development and Extension and Managerial courses. Different skill development trainings in agriculture, horticulture, fishery, animal husbandry, food processing etc. were conducted for the farmers, farm-women groups, farmers' sons, grassroots level extension workers. Extension and Managerial training courses, workshops, seminars for agriculture and allied sectors' extension workers, mainly district, block and panchayat level, private or NGOs and farmer groups, were conducted regularly on the basis of identified needs. Management course in Agricultural Extension sector for the technical graduate officers of agri-allied departments is also very important. Regular extension works in villages with Ramakrishna Mission's ventures, ISOPOMs scheme and other Research/ Extension projects are being implemented. Situation demanded study is continuing. Exchange of trainees with other states is another important aspect of experience exchange and development of outside linkage. SAMETI provides regular support to ATMA programmes in organizing farmers visit within the state and also from other states. Exposure visits of the faculty members to different national institutes, courses, activities help a lot to update information, knowledge, skill and attitude. Interactions and coordination among the departmental extension functionaries within the state, linkage with different national and international extension and research institutes are being continued through visits, resource person exchange, mailing, programme participation etc.

Within the reporting period i.e. January- December, 2009, the Institute has conducted 135 on-station courses (Extension and Technical), 112 outstation extension courses, out of which 35 were field level technical training programmes and 33 were the farmers visits. Through on-station course the institute facilitated 3766 participants while 3583 trainees participated in outstation course. Totally 745 farmers participated in exposure visits among which 97 farmers were from other states. The detailed activities are portrayed in our Annual Report, 'Reflection'. The SAMETI/ ATC has tried to provide its level best support to the agricultural sector of the state for HRD and also implemented extension activities. SAMETI/ ATC humbly acknowledge the support and cooperation of the Department of Agriculture and other allied departments, Universities within the state, SAMETIs of other States, different Private agencies and NGOs/ CBOs within and outside West Bengal, MANAGE, Hyderabad, Department of Agriculture and Cooperation, Government of India and a large number of well wishers. The support of different units of the Ashrama, particularly the Lokasiksha Parishad, the Integrated Rural Development and Management Faculty Centre of Ramakrishna Mission Vivekananda University and Medicinal Plant Garden unit etc. Above all, the guidance of Ramakrishna Mission and blessings of Sri Ramakrishna, Sri Sri MA and Swamiji always make our tasks easy.

Manas Ghosh
Principal & Director

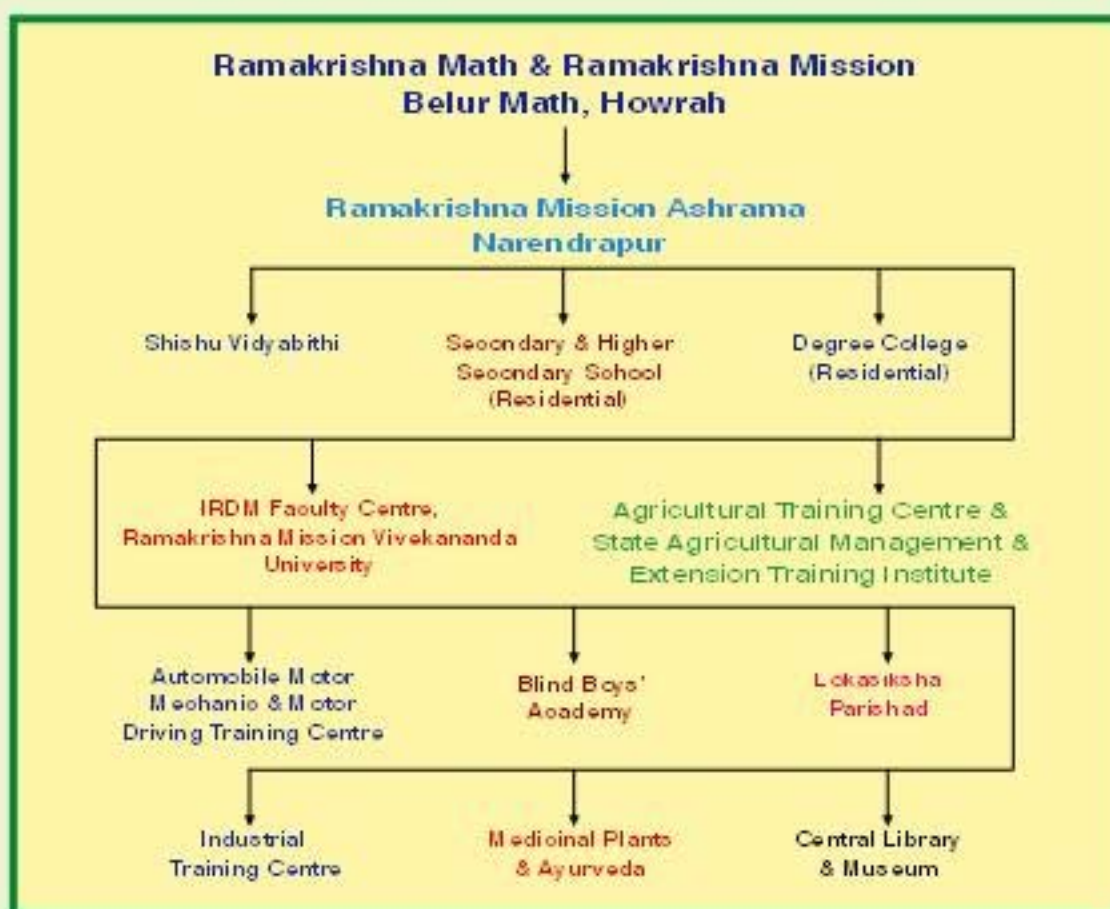
CONTENT

I	Prologue	01
II	Genesis	03
III	Programmes Profile	06
IV	Workshop Wing	24
V	Animal Resource Development	27
VI	Soil Testing Unit	29
VII	Experiment Trial Demonstration	30
VIII	Extension Programmes	32
IX	Annual Celebration	39
X	Evaluation & Studies	41
XI	SAMETI's Intervention in Agricultural Extension	44
XII	Participation of Faculty Members at the National & International level Programme	46
XIII	Faculty Members of the Institute	47
XIV	External Faculty Members	48



Ashrama's rural and urban development initiatives are so incomparably unique that personnel from International organizations and various Govt. departments send their functionaries on a regular interval for orientation as well as exposure visits. Appreciation was evident when National Resource Centre was set up for Ashrama's outstanding and commendable services for the people in need. Three years back, State Govt. also identified Ashrama's Agricultural Training Centre as State Agricultural Management & Extension Training Institute. In the Recent another remarkable achievement is the opening of Integrated Rural

Development & Management Faculty Centre of Ramakrishna Mission Vivekananda University. Existing institutional structure of Narendrapur Ashrama appended below shows the galaxy of its services.





Genesis



Ramakrishna Mission Ashrama, Narendrapur's existing multifaceted activities are nothing but to fulfill Swami Vivekananda's utterance that 'Our mission is for the destitute, the poor, and the illiterate peasantry and labouring classes'. Erstwhile Narendrapur was completely a remote rural area during the phase of its commencement in early 50s. Education apart, Ashrama initiated integrated development programmes for the wellbeing of the peasantry community living in and around Narendrapur. Efforts of this Branch Centre got momentum when Agriculture and Community Development, Government of West Bengal came forward to run one of its Gramsevak Training Centre (GTC) under Narendrapur Ashrama. On 19th January, 1967,

Srimat Swami Vireswaranandaji Maharaj, the then President of the Ramakrishna Math & Mission, Belur Math, consecrated the Gramsevak Training Centre, though it already started functioning in 1965. The prime objective of this centre was to train up the Gramsevaks, the grass-root level development functionaries working under Government of West Bengal. All those Gramsevaks used to attend two-year integrated course which was subsequently transformed into one year 'Upgraded Training Programme. Though improved agricultural technologies got the priority, nonetheless other important related areas viz. Rural based Small Scale Industries, Panchayat, Cooperatives Societies and Public Health were also included in the course curriculum.

Department of Agriculture, Government of West Bengal made up-gradation of this Training Centre in 1971 along with directly Government of West Bengal run three other GTCs located in different parts of the state in 1971. Further advancement took place in the realm of technologies which persuaded State Government to change the nomenclature of the Training Centre for catering to the wide needs of the farming community. So, the GTC became Agricultural Training Centre (ATC) in 1987 as

those of other GTCs. Since the agricultural technologies



were the prime thrust area, a large number of people were appointed as Krishi Prajukti Sahayak (KPS) by the State Government. ATC started to orient these KPSs in induction training programme under 'Pre-service course' of six months duration but the KPSs attend 'In service course' too for the same span of time during the tenure of their service as KPS. Course coverage was restructured and specialised areas like Horticulture, Plant Pathology and Entomology were brought under the course curricula. In-depth theoretical class-room discussions coupled with wide scope for practical application in the instructional farms make the trainees to be confident enough being enlightened with knowledge and equipped with skills.

Currently, ATC has been conducting 'Refresher Training Course' of one week period for the KPSs as there is left no KPS to undergo Pre-service or In-service Training Programme. Hence, KPSs are being acquainted with some innovative proven technologies viz. Power Transplanter of Rice, Zero Tillage Rice, System of Rice Intensification, Direct Wet Seeding by Drum Seeder, Paddy harvesting by Vertical Conveyor Reaper and so on in the one week programme referred above.

Being fully sponsored by the State Government,

ATC, Narendrapur accommodates only Govt development functionaries in the aforesaid courses, but at the same time participation of general trainees in courses like 'Running and Maintenance of Power Tiller, Tractor and Pump Set for farmers Sons' for ninety days duration and 'Farmers Training Programme for one week' is there. Special efforts are taken to include participants from Scheduled Caste, Schedule Tribe in both the courses and especially Women farmers in the latter programme.

Effective training inputs, brotherly relations with the adult trainees, ample scope for practical exposure, ATC, Narendrapur always proves its identity. Department of Agriculture is not alone; other allied departments of the State Government also organize Seminar,



Symposium, Workshop in collaboration with ATC, Narendrapur. As a mark of extreme honour, Government identified this Training Centre as State Nodal Institute for Human Resource Development with the introduction of a centrally sponsored scheme entitled 'Support to State Extension Programmes for Extension Reforms' across the country in 2005. So, on 2nd June, 2005, this institute became State Agricultural Management & Extension Training Institute (SAMETI) with a view to revitalizing agricultural extension in the state.

One of the major considerations behind the initiation of the aforesaid scheme was that the Ministry of Agriculture, Government of India developed a broad policy framework for Agricultural Extension. Major guiding elements of the policy framework are as follows:

- ◆ Reforming Public Sector Extension.
- ◆ Promoting Private Sector to effectively

complement, supplement wherever possible to substitute public extension.

- ◆ Augmenting Media & Information Technology Support for Extension.
- ◆ Mainstreaming Gender Concern in Extension.
- ◆ Capacity Building/skill up gradation of farmers and extension functionaries.

In addition, recommendations of National Agricultural Policy and Tenth Plan Approach Paper also facilitated to

introduce the scheme, 'Support to State Extension Programmes for Extension Reforms' popularly known as ATMA Scheme in 2005. The scheme aims at fulfilling farmers'

special needs and taking appropriate actions for research, technology dissemination and extension services. There will be wide

scope for promotion of decentralised decision making process and participation of all stakeholders will also be ensured under this scheme. In a nutshell, following key reforms are being promoted under this scheme. These are:

- ◆ New Institutional Arrangements
- ◆ Convergence of line departments' programmes
- ◆ Encouraging Multi Agency Extension Strategies
- ◆ Moving towards integrated broad-based extension delivery
- ◆ Group Approach to Extension
- ◆ Addressing Gender Concerns
- ◆ Sustainability of Extension Services

Under the new institutional arrangement, an Inter Departmental Working Group (IDWG) has been formed at the apex level in the State.

SAMETI as has been stated in the Govt. of India's guidelines is an autonomous institute at the state level with greater flexibility in structural and operational aspects.

The Faculty members provide requisite support to all the development functionaries having liaison with the scheme in the following areas.

- ◆ Capacity building support in Extension Management related areas both for public and private sector functionaries.
- ◆ Consultancy in formulation, implementation and impact assessment of projects and programmes.
- ◆ Application of management tools preparation and promotion for enhancing effectiveness of agricultural extension services through better management of resource be it human or material.
- ◆ Organise training programmes catering to the needs of all levels of agricultural extension functionaries.
- ◆ Management communication, participatory methodologies related models development keeping in view of reactions from the training programmes.

There remains a strong centralizing tendency in the existing mechanism of planning & implementation of agriculture and allied development programmes. So, in order to make it decentralised Strategic Research and Extension Plan (SREP) has been proposed to be prepared for each district.

Since SREP happens to be the basis of development of work plans at block and district level, SAMETI provided all possible support right from orienting district ATMA functionaries with the participatory methodologies, physical presence of SAMETI faculty members during the data collection and finally preparation of SREP of all districts in the State. Besides organising different sorts of orientation programmes, workshops, seminars etc. for all levels of Stakeholders, Government functionaries organizing

programmes under ATMA have also been assisted for formulation of Block Action Plan (BAP) and District Action



Plans (DAP) keeping in view of the allotment and SREP as well of the concerned district. To keep track of necessity and pace of progress in each district, ATMA districts have been allocated among the faculty members of the Institute.

As regards lodging arrangement Institute has got a hostel, Srikrishna Bhavan for accomodating farmers and KP Ss. Every year, on the day of Janmastami Celebration, all the ex-trainees are invited along with their family members to take 'prasad'. Another such joint gathering takes places in the 'Re-union Function' of ex-trainees during the Annual Celebration. The Institute commemorates the Training Centre's foundation day during this four day celebration highlighting the activities in the realm of agriculture and allied sectors through exhibition and organizes seminar and symposium on current issues. Eminent academicians and functionaries speak on issues.

As regards infrastructural facilities, the institute has got classrooms, conference hall and seminar hall etc. with modern trainee equipments like LCD projectors, public address systems and so on.

With the patronage of the Institute, an alumni association called Gramseva Praktani has been formed with the representatives of the ex-trainees. It publishes its annual journal on the day of 'Re-union Function' during the Annual Celebration of this ATC. The Institute provides active support to their development programmes and publication.



PROGRAMMES PROFILE

Dependency syndrome is the perennial root of underdevelopment. Both theoretical and practical inputs make the people to be adept in a particular field which in turn provides opportunity for earning by utilisation of the learned skill. This capacity development ultimately leads to self reliance. Since Ramakrishna Mission always thrives for making the people to be self reliant its foremost priority has always been organizing different sorts of training courses especially for resource poor people. Post training follow-up services have also been initiated gradually. Agriculture Training Centre brought about the scope to serve the agrarian community in a very effective manner. Though the Institute primarily started imparting training programmes yet it has initiated other related activities too in order to give a comprehensive shape to its all programmes. Activities of the Institute can be shown thus:

REALM OF INTERVENTIONS



Training, Workshop, Seminar, Visit etc.

Development of human resource has been considered to be prime area of interventions besides other programmes undertaken by the Institute. Training Centre always emphasises upon theoretical inputs but it takes effective measures for the development of skill & development as well as change of attitude towards positive direction also. Organising training programmes apart, workshops, seminars, symposia, farmers' meet, exposure visits have also been organized.

Training Programme for Krishi Prajukti Sahayaks :

The Institute used to conduct 'Two-year Integrated Training Programme' and 'One-year Upgraded Training Programme' for the grass-root level Extension Functionaries working under the Department of Agriculture, Government of West Bengal. In order to meet the growing needs of the farmers

the recruitment of Gramsevaks were withdrawn Krishi Prajukti Sahayak (KPS) as agricultural technologists were appointed to a large scale. Creation and appointment of KPS required to reschedule of the training module. Training programme for the KPS was decided to be conducted in two terms i.e. Pre-service Training Programme and then In-service training programme and each term would be of six month duration. The course module encompassing course duration, contents, methodology and number of theoretical & practical session is applicable to both ATC, Narendrapur and other ATCs directly run by the Govt of West Bengal.

The Institute always takes the trainees to villages in different districts in a small groups and stayed over there during their period of field placements. As this Ashrama has been implementing numerous extension programmes in the different corners of the State in collaboration with grass-root level voluntary organisations, Institute's faculty and trainees get full-fledged support from the community. So far as the collection of information or data is concerned,

both the Survey Method and Participatory Rural Appraisal Method are followed. Application of scale & chain for measurement of land, land & plot location through Mouza Map and conducting Farmers' meeting etc were also done during the span of placement.

Right at this phase, all the KPSs in the State have already been covered under both Pre-service and In-service training programmes. So, a new module of one week duration of

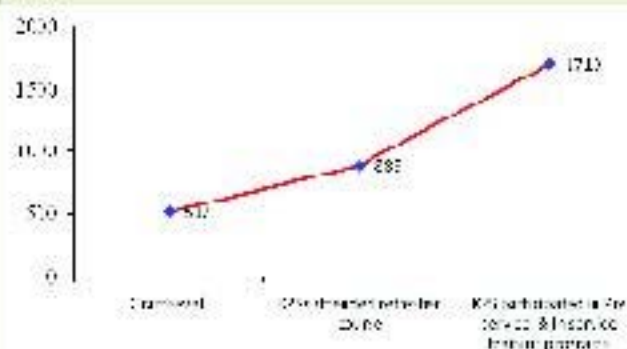
'Refresher Training for KPSs' has been developed. Apart from newly emerged improved technologies, functional aspects of 'Support to State Extension Programmes for Extension Reforms' scheme have made their inclusions.

Now, almost all the KPSs working in the state have been covered under both Pre-service and In-service training programmes; a one week Refresher programme has been designed to update their knowledge with recent developments in the realm of technology and also methodology of implementing extension programmes keeping in view the recently launched 'Support to State Extension Programmes for Assessment of farmers' needs through Participatory Rural Appraisal Method, Promotion of Public-Private Partnership (PPP), Seed Production Technology, Seed Treatment, Trends of Pest incidence on Major crops, Advancement in Plant Protection & Plant Pathology, Trends of use of Bio-fertilizer, Bio-pesticides, Trends of Crop Diversification, Vegetable & fruit, Trends

of Productivity of Major crops and also Wastage of glut sale in the market etc have been covered in that short duration training programme.

ATC, Narendrapur has so far trained five hundred and seventeen Gramsevak's one thousand seven hundred KPSs in its Pre-service & In-service training programmes, seven hundred and seventy five KPSs have attended Refresher training programme for one week and eighty and eighty nine KPSs have attended one week orientation programme under the 'Farm Mechanisation' and Bio-Intensive Farming Programmes for one duration during the last calendar year. The total coverage of the participants covered under the aforesaid three programmes are shown in the following graphs.

COVERAGE OF TOTAL NUMBER OF GRAMSEVAKS AND KRISHI PRAJUKTI SAHAYAKS BY ATC, NARENDRAPUR



Number of Gramsevak's	517
Number of KPSs attended refresher course	889
Number of KPS participated in Pre service & In service training programs	1710

Progress of Programees during 2009

IN-CAMPUS TRAINING PROGRAMMES

Use of Farm Machineries and Equipments :

With a view to promoting farm machineries in agricultural field, this training programmes are organised under 'Rastriya Krishi Vikash Yojana'. Since farm mechanisation have a direct impact over crop productivity and profitability, it possess a good prospect for maximising productivity

which ultimately leads to profitability also. It serves many ways like saving crops from losses during the harvesting & minimising drudgery of labour etc. Besides lecture sessions the participants were given practical exposures on like Power-driven reaper, Fertiliser-cum seed drill, Drum Seeder, Seed drill, Tractor, Power tiller etc. All together eighty three field level functionaries have attended the programmes in five batches during the reporting period. All the courses ware of seven days span.

Market-led Extension :



Agricultural marketing Extension has been supposed to be the crying need in the present era. Farming practices need to be promoted in order to have quality produce coupled with better sorting, grading, packaging and transportation too. If these are properly maintained farmers' earning will obviously improved. So, market led extension requires to be developed and betterment of market linkages also draw attention of both extension functionaries and farmers. Keeping in view above, the Institute has organized two orientation programmes for seven days duration on the above title involving twenty one participants.

Farmers Training on Agriculture for Skill & Knowledge Updating :

During the last few years Govt. of India entrusted ATC, Narendrapur to organize special training courses for the poor farmers especially hailing from scheduled caste and scheduled tribe communities and also women farmers for

one-week duration. A wide range of topics like Policies and programmes for tribal communities, organic farming with reference to INM & IPM, seed production technology, oyster mushroom cultivation, compost making - utility and technique, cash crop production technology, scope & opportunities for animal resource development, medicinal plants-identification & uses, prospects & opportunities in agri-entrepreneurship, integrated disease management have been covered under the course. The participants went to visit the programmes being implemented by two renowned Institutions Vivekananda Institute of Bio-technology of Sri Ram Krishna Ashram, Nimpith & Samaj Sevak Sikshan Mandir, Ramakrishna Mission Ashrama, Belur Math. A sum total of five hundred and seventy participants out of which fifty percent happened to be women have participated in those twenty programmes conducted during the period from January to December, 2009.

Quality seed production technology of food grains and oil seed crops :

Quality seeds appear to be prime consideration for achieving optimum activity. It is well known that farmers face immense difficulty to have quality seeds. Keeping in view this factor the Institute conducted seven courses of two days duration during the reporting period. Different aspects, like package of practices of crops, special care for seed production, actions as per seed laws, processing of seeds and their storing etc. were covered in each course. Two hundred and six farmers from different districts attended these programmes.

Vermicompost Preparation :

With a view to overcoming the problem of availability of the compost matter the farmers are being enlightened with the techniques of preparation of vermicompost. Technology of vermicomposting is becoming very popular among the farmers for converting the field garbage to wealth. It has been proved to have profound impact on soil health as well as crop production. Based on the demand two training programmes for three days duration were organised in the last year involving sixty four participants. Detailed technology, precautions, raw materials needed, cost benefit etc were

thoroughly discussed and practice sessions were also held by the participants themselves during the training programmes.



Bio- Intensive Farming :

Bio-fertilisers, organic manure, panchagavya, Amrit Pani & vermicomposting etc were the topics covered under the above training course. All the participants visited organic farm for practical exposure. Two training programmes were organised in two batches. Thirty KPS attended one programme while the second course was attended by fifty two farmers. So, altogether eighty fifty participants attended those two courses.



Scientific Cultivation of Bamboo :

In collaboration with National Bamboo Mission, the Institute has organised one course of two days duration was

organised under the above title. Selection of species for



different purposes, raising of bamboo nursery, plantation of bamboo, its' intercultural operations, insect and disease management etc. have been discussed by the experts from University, Forest Dept., advanced farmers etc in the course and some practical sessions were also organised. Forty five farmers from Purba Medinipur, South 24 Parganas, Purulia, North 24 Parganas etc. attended the programme.

Protected Cultivation of High-value Crops :

Advantages of cultivation, types of poly House and green House, construction and instruments of poly House, nursery management & vegetative propagation, bed preparation and cultivation procedure of different high value crops and flowers inside poly house and green house, irrigation and fertigation, pest and disease management, nursery management and vegetative propagation etc. have covered under the course. Altogether forty five participants underwent this four -day course. Participants went for practical exposure for one day.

Ornamental Fish Culture & Entrepreneurship Development:

With a view to promoting entrepreneurship a few new courses have been initiated by the Institute. One course of four days duration under above title was organised in preceding year. Various species of ornamental fish, their culture procedure, breeding, feeding, sanitation, diseases and their control and even aquarium preparation etc were

discussed in the course with practical classes. The participants went to a big ornamental fishery farm at barrackpur for practical exposure. Thirty entrepreneurs having involvement in such activities or intension in this arena came from the districts of South 24 Parganas, Howrah, Burdwan, Hooghly, Paschim Medinipur and Nadia to attend the training course.

Cultivation of Mushroom and Processing :

As mushroom posses a potential source of earning and supposed to be the good's substitute for animal protein, it is gradually becoming popularised among the common people. Source of raw materials, procedure of inoculation, maintenance as well as practical demonstration etc. were covered in the said programme. All steps of cultivations were practiced by the trainees along with spawn production (seed of mushroom) technology and the processing like drying and preservation of mushroom was also taken care of in the course. Fourteen entrepreneurs from South 24 Parganas district have participated in four-days course.

Master Trainers Training for Horticulture Extension Functionaries:

A two-day programme on Commercial Floriculture was organized for the SHGs of Howrah district during 2009. Twenty women members from SHG groups have participated in the training. Selection of flower on the basis of market, agronomic situation etc., cultivation practices, process of drying of flowers, designing etc. were covered and practical sessions were also organised.



Promotion and up-gradation of agri-clinic-agribusiness in West Bengal :

For promotion of agricultural business by enthusing the agricultural graduates, Govt. has taken some initiatives to support those agripreneurs. It also facilitates agricultural extension at the grassroots level. In this context the Institute has organized discussion cum follow-up programme in previous year. The personnel from Srachi Bengal Tools company dealing with agricultural tools and machineries interacted with the participants regarding different options. Fifteen agri-preneurs from different areas participated in that programme.

Scientific Cultivation of Bamboo:

One training programme was held in 2009 in collaboration with National Bamboo Mission. Starting from selection of species for different purposes, raising of bamboo nursery, plantation of bamboo, its intercultural operations, insect and disease management etc. were discussed and some practical sessions were also there in the programme. Resource persons were invited from the University, Forest Dept., and some advanced farmers also shared their experience in the sessions. Forty five farmers from Purba Medinipur, South 24 Parganas, Purulia, North 24 Parganas etc. participated in the training programme.

Operation and Maintenance of Agricultural Implements and Machineries:

Two courses for ninety days duration of each were conducted for the farmer's sons in the year 2009 and altogether sixteen farmer's sons from South 24 Parganas, North 24 Parganas and Purba Medinipur attended these two programmes. Theoretical sessions incorporated topics like different sorts of engines, gears, power supply, usefulness of different types of machineries etc. and practice sessions on Pump sets, Power tiller, Tractor, Drum seeder, Sprayer, Seed drill etc. were there in the said training course. As study tour the trainees also visited Dakshineswar, Deurmah etc.

Krishak Mitra

In collaboration with the Indian Farmers Fertiliser Corporation (IFFCO), SAMETI organised previously three training programmes for one week duration involving 'Krishak Mitras'. Subjects covered are agriculture, animal husbandry, horticulture, fisheries etc in relation to climate, cropping season, market and so on. Last year sixteen participants from the district of Hooghly, Howrah, Bankura, Burdwan, Malda, North 24 Parganas and Purba Medinipur participated in two programmes of four days each under the above referred title. Subjects like vegetable nursery raising for winter vegetables, improved package of practices of mustard and safflower, intercultural and manuring practices for fruit crop during post monsoon etc were covered in the programme. An assessment was also done regarding further training needs.

Public Private Partnership

In the context of ATMA programmes, PPP is regarded as the most important subject. In collaboration with MANAGE, Hyderabad SAMETI, West Bengal organised one such programme in the previous year. Concept of PPP, Agriculture & Agri. Business and contract farmers case study on PPP etc. have been covered under the five day course. Besides Dr. V K Singh, MANAGE, University Professor, Officials from the Private Agencies



and faculty members of SAMETI took different sessions. All the eleven participants were taken to one factory for practical orientation.

SRI Technology:

Culture of system of rice intensification has become an established phenomenon in so far as the scarcity of water source is concerned. Concept of 'more water more rice' will obviously be disappeared with the practice of SRI technology. During the two days training, specially recommended technologies viz, special seed bed, marking, transplanting, allowing the field with fine cracks before irrigation etc were covered in theoretical sessions, audio-visual presentation and demonstration etc. Total number of participants was twenty five in that training course.

Animal Resource Development :

Ashrama's Animal Resource Development Unit has altogether organised twenty five training programmes throughout the preceding year with the active support of the faculty members of this Training Institute. The title of the courses were Animal Husbandry , Artificial Insemination & Poultry, Artificial Insemination & Veterinary First Aid, Live-stock health care, Poultry keeping, Refresher Course for Field Artificial Insemination workers (Pranibondhu), Live-stock, Orientation on Dairy, Live-stock health. Duration of the programmes ranged from five days to fifty days depending upon the nature as well duration of the courses. A total of seven hundred and thirty three trainees participated in all these twenty five courses. Majority of the programmes are sponsored. As regards contents, the techniques of Artificial Insemination, different aspects of cattle rearing, their feed, daily maintenance, disease prevention and management, fodder cultivation tools & techniques of controlling pest and diseases of livestock, proper care for nutrition of the animals, health and hygiene of cattle rearing and first hand treatments etc were covered.

Refreshers Course for Extension Workers of Horticulture :

With a view to meet the emerging demands the extension workers need to development themselves. A course under the above referred title was organised for the grass-root level extension functionaries. Topics covered in the



programme were betel vine cultivation, cultivation of field flower, spices, cashew nuts, post harvest management of horticultural crops, high-tech horticulture etc. Director, Horticulture, experts from Universities and faculty, SAMETI took different sessions. Eighteen participants from five districts namely Bankura, Nadia, Malda, Purba Medinipur, & Hooghly etc. attended the course.

Promotion of Commodity Interest Groups (CIGs) & Federation under Extension Reforms



Farmers' Organisations happen to be very useful mechanism for mobilizing farmer's collective self-help action aimed at improving their own economic and social situation and that of their own communities. Hence, there is a need for empowering the members of farmers groups for overall management of financial resources and also agriculture and allied sector development in a sustainable manner apart from providing credit to the groups. Commodity based, market oriented farmers organizations specialized in a single commodity can also opt for value added products. In rural areas where producers are dispersed and scattered and communication are not optimal, the importance of these organizations is even greater. These groups in agriculture, horticulture, livestock etc. at village level, commodity associations and federation of farmers groups at different levels can provide a sustainable foundation. So, SAMETI organized one course for twenty one ATMA extension functionaries in the reporting year.

Integrated Farming & Farming System :

Integrated Farming has become highly important in the context of sustainable agriculture. The Institute, therefore conducted one three day training course on this topic for both the agricultural extension workers and the personnel of voluntary organizations involved in implementing agricultural development programmes. Thirty two persons from different districts turned up in that programme.

Training Methods for Trainers :

Empowerment of stakeholders under new institutional arrangement is highly important. So, a core group of Master Trainers who are to be groomed properly to empower others so as to make them competent to act accordingly

otherwise participation of all the stakeholders in the development process will never be facilitated. With a view to accelerating the human resource towards proper direction a programme on the above referred title was held at the SAMETI in the previous year in collaboration with MANAGE, Hyderabad. Contents, duration, methodology, techniques etc. were covered thoroughly and at the same each participant took active part in different exercises which in turn will be replicated to make the trainees much involved in the content of the session. Thirty three Trainers of the different state and district level training institutes attached to Agriculture, Animal Resource Development, Fisheries, Krishi Vigyan Kendras from Orissa, Jharkhand and West Bengal and SAMETI Faculty members also underwent this course of five days duration. As regards resource persons, Dr. V.K. Reddy, Director, National Institute of Agricultural Extension Management (MANAGE), Hyderabad was the coordinator of the course and took majority of the sessions, Dr. D. Sen, former Director of Extension Education, BCKV as well as former Faculty of NIRD and some SAMETI faculty members took some sessions.

Managerial Tools & Techniques in Project Management

Project Management brings together and optimises the resources necessary to successfully complete the project. It is the application of knowledge, skills, tools and



techniques to project activities in order to meet or exceeding stakeholders' needs and expectations invariably involves balancing competing demands among resources. Component of project management includes integration, scope, time, cost, quality, human resources, communications and also risks management. SAMETI, Narendrapur in collaboration with MANAGE, Hyderabad organised one training programme on the above title at the Institute in the previous year.



There were twenty four participants in the said programme. Besides MANAGE Faculty other Resource persons were invited from BCKV, Private Companies and SAMETIs. Faculty Members also took some sessions

PROGRESS OF IN-CAMPUS TRAINING PROGRAMMES	
Programmes organised	81
Participants attended	2085

OFF-CAMPUS TRAINING PROGRAMMES

Agricultural Marketing Information Network.

In the existing scenario, besides Agricultural Functionaries farmers are also required to be enlightened and competent for making assessment of agricultural marketing information on the Internet including AGMARKNET, interpretation of prices of agricultural commodities, projection of future trend of prices and quantities. 'Agricultural Marketing Information Network' scheme being implemented by the Directorate of Marketing and Inspection (DMI) aims at

establishing a nation wide market information network for speedy collection and dissemination of market information for its efficient and timely utilization by the farmers and other stakeholders involved in agricultural marketing. In order to spread the benefit of agmarketnet portal at the grass-root level, DMI has been conducting aggressive promotion campaign and training programmes for the farmers.

Keeping in view above SAMETI, Narendrapur has already conducted a Master Trainers Training Programme and organized further courses of three days duration on the same issue for farmers in collaboration with four community based organizations. Altogether hundred farmers attended these courses in four batches.

Delivery of Gender Sensitization Module to the Cutting-edge Level Extension Functionaries

The National Gender Resource Centre in Agriculture (NGRCA) has been set up in the Department of Agriculture & Cooperation for convergence and coordination of gender related issues. With a view to creating adequate sensitivity among the



programmes implementers right from senior level, middle level and also cutting-edge level so as to facilitate them to perceive and implement agricultural schemes and programmes with greater gender focus, MANAGE, Hyderabad has developed Gender Sensitization Module for three levels.

Being entrusted by the Directorate of Extension, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India SAMETI, Narendrapur has conducted two programmes for the Cutting-edge Level Extension Functionaries for three days duration. Different issues related to Gender mainstreaming, gender analysis frame work livelihood analysis, application of PRA for gender analysis, gender budgeting, Govt. programmes on gender, farm women, women and land rights etc. have been covered under the programme Altogether fifty one functionaries hailed from Agriculture, Animal Resource Development, Fisheries and Community based organizations. One programme was organized at the Head Quarter of Milk Development Block, Darjeeling and the second one was conducted at Krishi Vigyan Kendra, Sri

Ramakrishna Ashrama, Nimpith, South 24 Parganas. Institute's faculty being trained at MANAGE, Hyderabad on this issue has coordinated these two programmes.

Farmers Training :

One day programme on Group Approach and Modern Agriculture, Farm implements: use and Importance, Skill & Knowledge Updating, Scope of Human Resource Development in Animal Resource Development and Seed Village and one training on Rural Godown for two days duration organized on different days in different districts in the state by this Training Centre. A sum total of two hundred and sixteen farmers attended these six types of training programmes.

Training on Farm School :

Farm School has been planned to be a special programme in so far as the ATMA programmes are concerned. 'National Commission on Farmers' has given very much emphasis on organizing Farm Schools on agriculture and allied sectors too in all the development blocks. Apart from specially designed Farm School Programmes being

conducted by the ATMA functionaries at the block level ATC, Narendrapur took initiative to organize one day programme on this issue in two districts. Altogether five such programmes were organized with participation of one hundred and fifteen farmers.

HIGHLIGHT : OFF-CAMPUS TRAINING PROGRAMMES

Number of Programmes	16
Number of Participants	522

TRAINING COURSES ORGANISED UNDER ISOPOM SCHEME :

Quality seeds are scarce but productivity largely dependent upon good quality of seeds. ATC, Narendrapur conducted a couple of one day training programmes under centrally sponsored Integrated Scheme on Oilseeds, Pulses, Oil

palm & Maize (ISOPOM) both at the Institute level and village level on different locations where Ashrama having good rapport with the functionaries of community based development organizations. These organizations support the farmers to a great extent to keep contact with the Faculty of the Institute for their queries and advice. The training programmes were organized under the titles of improved pulse & oilseed, rabi oilseeds,

improved sesame, drumseeder technology, sesame treatment & sesame cultivation etc. Altogether four hundred sixty one farmers farmers attended in twelve off-campus programme where as nineteen participants attended one programme at the Institute itself.

FIELD TRAINING PROGRAMMES FOR TECHNOLOGY DISSEMINATION :

The Institute organised ample 'Field Training Programmes for Technology Dissemination programmes for one to days duration at the villages across the State on different issues. The title of the programmes were Pest Management in green gram crop, Pulse & Oilseed, Integrated Pest Management demonstration, Farmers' Consultation on Seed Sampling for Quality Seed Production, Farmers Meeting on yield analysis of Boro Paddy, Direct Seeding Rice Culture, Rice Cultivation, Bio-intensive Farming, Seed Village Farmers Meet, Boro Rice Cultivation & Drum-seeder, Demonstration of Drumseeder rice cultivation, quality rice seed production,



Training and demonstration of Seeding of Drum Seeder Technology, Drum Seeding Demonstration and Farmers Meet, Awareness and Training Programme on 'Rural Godown under 'Gramin Bhandar Yjona', Training cum Demonstration on Intercultural Operation of Drum Seeding Technology and Seed Production, Soil Testing and Modern



Agriculture: Field Soil Testing, Training on Intercultural Operation for Quality Seed Production, Farmers Group Meeting on Follow up of Drum Seeder Rice Cultivation, Intercultural Operation in Direct Seeded Rice, Participatory Rural Appraisal of Women Group.

In the realm of animal resource development, one day to two days programme on Deworming of Poultry Bird, Additional Income Generation-ARD Programme, Scientific Dairy Maintenance, Poultry rearing, Backyard and Small Scale Poultry Rearing, Income Generation through Dairy Development, Awareness on Scientific Poultry Rearing were held in the different parts of the state. Altogether one thousand five hundred & eighty three farmers both male and female were present in those thirty five programmes.



PROGRESS OF FIELD TRAINING PROGRAMMES FOR TECHNOLOGY DISSEMINATION

Training Programmes held	35
Farmers Present	1583

IN-CAMPUS WORK SHOP

Horticultural Extension Management :

A substantial part of total earnings of farmers come from horticulture. Therefore, Govt. of India has initiated the National Horticultural Mission for promotion of the activities under horticulture. With a view to making the district level Horticultural Officers a five-day workshop on Horticultural Extension Management was organised at SAMETI, Narendrapur in the last year. MANAGE, Hyderabad was the collaborating partner of this programme. Besides Dr. T.N. Reddy, Consultant, MANAGE, Hederabad other



resource persons of the programme were Dr. Pijush Pramanik, Director of Food Processing Industries and Horticulture, Govt. of West Bengal, Dr. Arun Kumar, Executive Director of State Horticultural Mission, Andhra Pradesh, Prof. Ranajit Kumar Samanta, Vice Chancellor, BCKV University, Management Institutes, Private Agencies and SAMETI Faculty. Twenty nine officers of the State Govt. attended the said workshop.

Preparation of State Training Calendar :

With a view to proper utilisation of available human resources in an effective manner a well knit plan for each sector is highly solicited especially in the context of Support to State Extension Programmes for Extension Reforms scheme is concerned. Hence, an in-depth discussion was held among the seventeen officials of Department of Agriculture and other line Departments for preparing a State Calendar on trainings to be organised in the dates to come.



Preparation of Annual Programme of SAMETI :

A workshop for three days was organised at the Institute itself for preparing the programmes in detail to be covered by the SAMETI through the year. Apart from the issues or topics, duration, venue, nature of participants as well as resource persons etc were elaborately discussed by all the faculty members present in the programme. All the twenty five participants from the Institute were faculty as well as support staff also.

Training Materials Preparation :

Training materials appear to very foremost concern for all the trainers as mere dissemination of information is not enough. Nowadays, every training institute take requisite efforts to make the presentation effective so as to enhance the participation of the trainees in the discussion. Considering this aspect, SAMETI faculty members and other support staff s at together for consecutively three days to prepare a detailed plan on materials to be developed for their numerous categories of trainees to come to attend training programmes on different issues. Sri Ganesh Barman, the then , State Nodal Officer met the participants in a session.

State Level Training cum Workshop on Jute & Allied Fibres:

Jute development related issues viz. modern package of practices of jute cultivation, varietal improvement, modern seed production technology, pest and disease

management, value addition of Jute and its diversified use etc. were elaborately discussed among twenty seven District level officers of different districts under the Directorate of Agriculture, Govt of West Bengal who were the participants of this three days programmes organised under 'Mini Mission II of Jute Technology Mission'. Experts from, Central Research Institute on Jute and allied fibers, Barrackpur, Govt. of India; National institute for research on jute and allied fibers, Jute corporation of India, Bidhan Chandra Krishi Vidyalyaya & Govt of West Bengal etc. were invited as resource persons in this programme.

KVK Extension Works:

Convergence of extension programmes being implemented by different departments and Institutes has been highly emphasized upon in the Support to State



Extension programmes for Extension Reforms scheme. So, in order to initiate concerted efforts, coordination of the programmes undertaken by the various departments and Institutions have been considered to be very much vital. So, a workshop for two days duration was organised involving thirty five state level officers of Agriculture Department, other line Departments and functionaries of Krishi Vigyan Kendras (KVKs). 'Scope and prospects of coordination', 'Programme highlights of different Depts and KVKs', 'Group discussion and presentation on areas and modalities of coordination' etc. were the topics of discussion in the workshop.

Review and Planning Workshops of ATCs :

To make a review of the programmes implemented and plan of proposed activities to be undertaken by all the Agricultural Training Centres in the State elaborately discussed in this workshop. The administrators of the Training Wing of Directorate of Agriculture, Govt of West Bengal and faculty members of all ATCs participated in the workshop for three days duration. Keeping in consideration of existing needs and available resources future plan of action was prepared. Total number persons attended the workshop was forty three.



Review of ATMA Activities :

An assessment of the programmes implemented under ATMA Scheme in different districts during the last two years was felt to be necessary, therefore a workshop was held on this score. Altogether twenty two district level officers across the State participated in the workshop held at this Institute in 2009. Additional Director, Agriculture (Special) happened to be present in the said programme.

Market-led Extension :

Market linkage is supposed the foremost consideration for getting needed profit. Other related areas like farming practice, better sorting, grading, packaging and transportation etc. also require the attention of extension

TOTAL IN CAMPUS WORKSHOPS HELD

Number of Workshop organised	09
Participants attended	249

OFF-CAMPUS WORK SHOP

Sub-divisional Workshop on Operationalisation of FIAC :

Promotion of decentralised planning or decision making process is one the major reforms conceived in the 'Support to State Extension Programmes for Extension Reforms'. So, under this new institutional arrangement Farm Information and Advisory Centre (FIAC) is the bottom level institution and its both the bodies i.e. Block Technology

Team (BTT) and Farmers' Advisory Committee (FAC) are supposed to be involved in preparation of Block Action Plans and execution of the block level programmes. Therefore, all the stakeholders at this level required to be equipped in so far as the smooth functioning of the ATMA scheme is concerned. In view of the above, twenty two subdivisions of sixteen districts have been covered under sixteen Workshops held on different district head quarters. The total number of participants was eight hundred and forty five out of which seven hundred and forty eight candidates were male while females were ninety seven in number.



Review Workshop of Conveners of FIAC :

Forty one Conveners and some BTT members of FIACs in Bankura attended this one-day workshop to review the programmes being implemented by all those bottom level institutions. Though Bankura is one of the old six districts where ATMA scheme came into being in 2005 nevertheless because of the transfer many new Agricultural Development officers assumed the charge of Convener. So, this workshop enlightened those new conveners and at the same time all the conveners were aware of the present status of programmes being implemented under the purview of ATMA scheme and understood the gaps and measures to be taken to bridge those gaps.

Workshop on ATMA :

A similar type of workshop was conducted at the Tamluk Sub-division in Purba Medinipu District. Thirty eight ATMA functionaries attended this workshop for one day. ATMA scheme was also introduced in this district in 2005.

SREP Preparation :

Strategic Research & Extension Plan (SREP) has been considered to be foundation of all the development programmes to be undertaken by all the ATMA Districts. It is a voluminous document and takes long time to take final shape. Right now SREP of all the twelve district are on the way to completion. ATMA functionaries Howrah, Uttar Dinajpur & Dakshin Dinajpur came to SAMETI in three phases to finalise the SREP of their concerned districts. Altogether thirty eight district officials attached to SREP preparation attended these three programmes.

HIGHLIGHTS OF TOTAL OFF-CAMPUS WORKSHOPS

Workshops conducted	21
Persons attended	962

SEMINAR

Prospect of Organic Farming in West Bengal :

Soil productivity has gradually been on the wane due to abrupt use chemical fertilisers, agrochemicals. All these have detrimental effect both on soil and human beings as well. Organic farming happens to be most effective alternative to combat this problem. Since a bulk of farmers has already



initiated this, it has got enormous potentiality in the State. Taking into consideration this aspect a seminar on the above caption was held at the Institute in the yester year. Director of Agriculture, Director of Food Processing Industry and Horticulture, Govt of West Bengal, Professor from Bidhan Chandra Krishi Viswa Vidyalaya, Mohanpur presented their views in the workshop while a few farmers and the representatives of community based organisation associated in promotion of organic farming shared their experiences too. There was seventy participants in that seminar.

Role and Importance of Information Technology in Agriculture at village :

Now-a-days, it is quiet unjust to ignore the role information technology in enhancing the delivery of extension services as it plays a pivotal role to keep liaison between knowledge base in Research Institutions with functionaries working at the field. So, with a view to making improvement of the delivery of agricultural information, programmes have been organized at the Institute highlighting on Information & Communication Technology (ICT). Considering this aspect, this seminar was held at the Institute itself. It was collaborative programme with the rural and urban development wing, Lokasiksha Parishad of this Ashrama. An overwhelming number of farming community i.e. two hundred and five were present in the seminar. SREI-Sahaj Tathya Mitra Kendra, IFFCO-Airtel Kisan Sanchar Ltd. and SAMETI faculty highlighted on the issue and there was in-depth interaction between the speakers and the participant farmers.



Post Harvest Management ;

A substantial portion of produce has become lost owing to poor harvest management practice at the phases of sorting, grading, storing etc. In order to induce better post harvest management a seminar on this aspect was organised at the Institute in collaboration with National



Horticultural Mission, Directorate of Horticulture, Govt. of West Bengal for the extension functionaries in the state. A huge number of Govt. officials i.e. one hundred and thirty participated in that workshop. Prof. Dr. R.K. Pal, Head of the Dept. of Post Harvest Technology, Indian Agricultural Research Institute (IARI), New Delhi spoke in the seminar as main speaker while Dr. Sanjeev Chopra, IAS, the then Secretary, Dept. of Food Processing Industries and Horticulture, Dr. Pijush. Pramank, Director of Horticulture, Dr. Pasupati Barik, Director of Food processing Industry also contributed in the seminar as speakers.

CUMULATIVE PROGRESS OF SEMINAR

Seminar conducted	03
Persons participated	405

OTHER PROGRAMMES :

Exposure Visit at the Institute :

With the introduction of 'Support to Extension Programmes for Extension Reforms' frequency of Farmers' visit at the Institute has been increased to a great extent. District officials in the State and other State also send the farmers group under 'exposure visit' programmes. A few groups from Colleges and Universities pay visit Institute's farms and other activities. During the last calendar year seven hundred and forty five farmers and students came to visit this Institute in thirty one batches. Farmers from other States went to visit the Institute field activities as well.

Post Graduate diploma in Agricultural Extension Management (PGDAEM):

Upgradation of technical and extension skill of extension functionary have been felt to be highly solicited to address the emerged demands of the public extension system for dissemination of latest technologies. At present, Commercial agriculture is gradually replacing subsistence agriculture which requires the extension functionaries to be more equipped with methodology & capacity for effective delivery of extension services. In view of above, Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India has launched Post Graduate diploma in Agricultural Extension Management course for the

extension functionaries directly involved with the implementation of 'Support to State Extension Programmes for Extension Reforms' at the district level. The course is for one year duration spread over two semeste. MANAGE, Hyderabad has developed the course materials and conducting contact classes, writing assignments and Semester examinations.

SAMETI, Narendrapur being the collaborating Institute

phase all the faculty members were present in almost all the GB & AMC meetings especially for clarification of ATMA activities. In the preceding year only ten such meetings were attended by the SAMETI faculty members.

MEETINGS AT THE INSTITUTE :

Two meetings were held at the Institute with the the functionaries of community based organizations and the

committee members of Praktani, alumni organization of former K P S trainees of the ATC, Narendrapur regarding some extension activities to be initiated in the 'Aila' affected areas under Sunderban. Decision was taken that healthy and salinity resistant rice



at the State level conducts the 'contact classes' as well as Examinations for the student undergoing this diploma course. Last year, two hundred and thirty nine students attended the nine 'contact classes'. Mostly University Professors, Readers, Lecturers and the Faculty members of SAMETI also take session under 'contact classes' programmes.

ATMA GB & AMC MEETING :

SAMETI faculty members are the invitee in the GB & AMC meetings held at the district level. During the initiation

seedlings will be raised in non-flooded areas of Sundarban and will be distributed among the farmers residing in saline flood affected areas. Twenty four person attended these two meetings.

EMINENT PERSONALITIES VISITED SAMETI

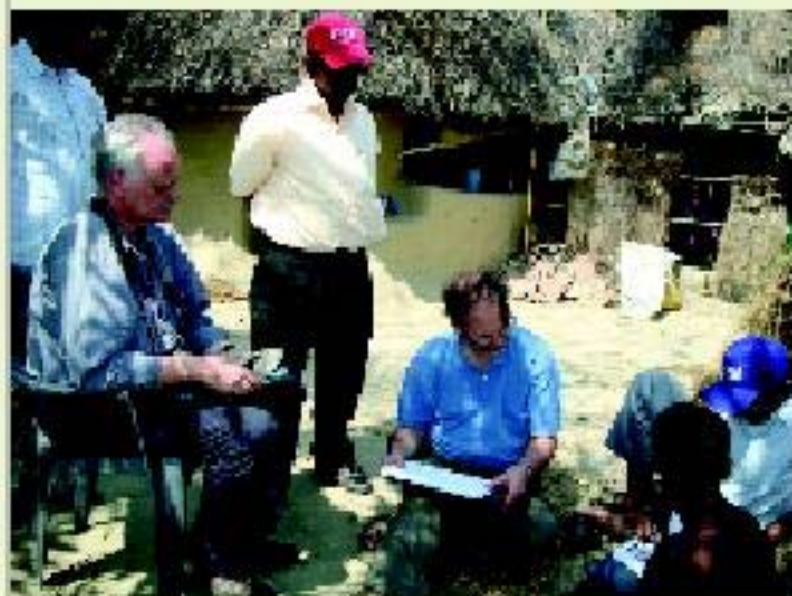
Dr. S.P.S. Brar, Director, Punjab Agricultural Management & Extension Training Institute, Ludiana visited SAMETI, Narendrapur in 2009. Dr. Brar went for observing some ATMA programmes being implemented by ATMA, Howrah and talked to the beneficiary-farmers at field area.

During the programme on 'Horticultural Extension Management' Dr. Arun Kumar, IAS, Executive Director, State Horticultural Mission, Andhra Pradesh stayed over at this Institute and interacted with the faculty members of SAMET & ATC with regard to its multifarious extension programmes. Representatives of Collaborating Partners of the programme on 'Poverty Alleviation through Rice Innovation System', Dr. David Jonsen of International Rice Research Institute (IRRI), Manila, Philippines; Dr. Mortimer, Institute for Sustainable Water Integrated Management and Ecosystem Research (SWIMER) and Dr. Orr of University of Liverpool, UK of Natural Resource Institute (NRI), University of Greenwich, UK came to the Institute to visit the operational areas of the said programme.



of planting materials, marketing and other related issues. During the interaction, the faculty members in turn shared

their own experience and recommended some practical measures successfully followed under trial of straw berry cultivation here at ATC farm. A few staff members of the Animal Resource Development Unit visited Haringhata and Kalyani Livestock Research Farm and the Mother dairy Unit at Dankuni, Hooghly in the preceding year. They visited there the modern Dairy farm, Piggery Farm, Frozen Semen Production Unit, State sheep and Goat Farm, Processing plant of Milk etc. They gained sound knowledge in quality control of milk production during their visit. The staff members also made some suggestions out of their own experience in respect of demonstration on sheep, goat, rabbit units and value addition of the milk produced in the dairy farm.



EXPOSURE VISIT BY SAMETI FACULTY MEMBERS

Two Faculty Members of SAMETI, Narendrapur Dr. Ashutosh Das and Shri Dilip Maity went to Pune, Maharashtra in 2009 to have practical experience of Straw Berry cultivation in Pune and they visited Mahabaleswar of Satara district also. There they had have discussion especially with the farmers, extension workers of the state Agricultural Dept, Pvt. Agencies etc. regarding technicality of straw berry cultivation, farmers organisations, supply

Shri Debabrata Giri, Faculty, SAMETI coupled with Shri Prasanta Naskar attended the 2nd. International Horticultural Expo, 2009 held at Pragati Maidan, New Delhi. They were enlightened with high tech. horticulture, organic farming, post harvest technologies related to horticulture being practised by the farmers and technologists in other States of the Country.

SPECIAL EVENTS :

- ◆ Dr. Ashutosh Das, Senior Lecturer, SAMETI has recently completed his Ph.D research programme on Role of Farm Input Retailers in Agricultural Development in South 24 Parganas of West Bengal from the Yashwantrao Chavan Maharashtra Open University, Nashik and awarded Doctorate degree.
- ◆ Dr. Musiar Ali, Faculty member, SAMETI, being the national expert went to Shilong, Meghalaya for finalisation of Strategic Research and Extension Plan (SREP) of the

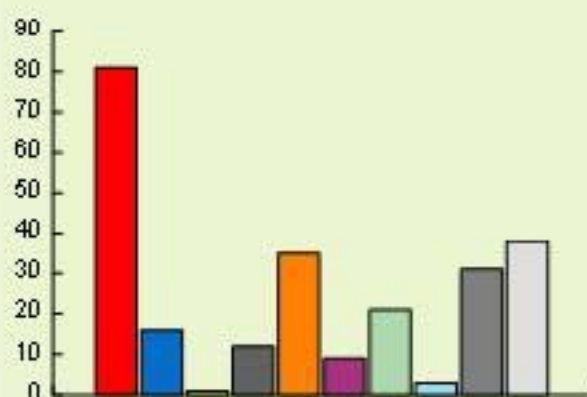
districts in the State. He had detailed discussion with the ATMA functionaries of agricultural and allied department who were assigned to the preparation of SREPs of their concerned districts. He also took sessions on 'Operationalisation of ATMA Programme' in their Orientation Programme held during his stay over there.

HIGHLIGHT OF OTHER PROGRAMMES

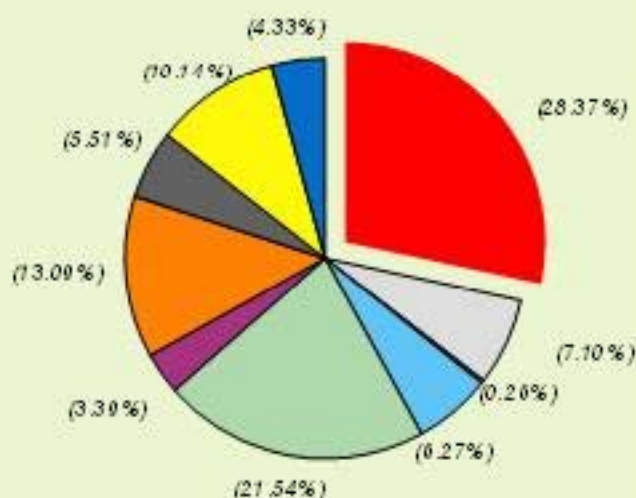
Contact classes held	61
Students attended	1032

CUMMULATIVE PROGRESS OF 2009

Types of programmes compared to their coverage



Participants vis-a-vis Programmes



- In campus training
- Off Campus training
- In campus ISOPOM
- Off campus ISOPOM
- F.T.T.D

- In Campus workshop
- Off campus workshop
- Seminar
- Exposure visit at SAMETI
- Other programme

WORKSHOP WING

Primary task of this wing is to organise training courses on 'Operation & maintenance of Agri equipments and Machines' especially for the young generation farmers. Within the period of ninety days, the farmers get enlightened with theoretical knowledge and practical application on

operation, maintenance and repairing of sprayer, pump set, tractor, power tiller etc. and recently transplanter and drum seeders like newly emerged agricultural machineries have also made their inclusions in the course coverage. This training provides opportunity to the farmers to get acquainted with the latest technologies and those trainees subsequently enthuse other farmers to use those technologies. Altogether sixteen farmers from five Districts have attended the aforesaid training programme during the reporting year. Institute's faculty members having wide exposure and qualification in agricultural & mechanical engineering look after this wing.

On the other hand, marginalised stratum of farming

community of Narendrapur and its adjacent areas are also being benefitted from this wing as tractors and power tillers are provided to them free of cost. These services have made a good impacts since the productivity as well as application of the farmer friendly modern technologies has been increased to a great extent. A couple of demonstrations have also been done in the farmers' fields on different locations



in the state. The performances in the sphere of training as well services are as follows:-

ACHIEVEMENT

Training

Frequency of Programmes	02
Number of Participants	16

Service

Sl No.	Service provided	Hours of Service	Area covered (Acre)
01	Power tiller	583	146
02	Tractor	224	18
03	Trolley carrying by Tractor	305	-

INSTRUCTIONAL FARMS

Instructional farm appears to be one of the major prerequisites for practical application of knowledge besides the discussions in theoretical sessions. The Training Centre has got four plots of land encompassing a little over forty acres in two locations- viz. Ashrama Campus itself while the second one is 'demonstration plot situated



in Arapanch village which is 10 kms away from the Institute. The said village falls under the Sonarpur Development Block of South 24 Parganas district. During the training programmes held at the Institute, plots are allotted to each trainee. Under the supervision of faculty and support staff of the Institute, the trainees become gradually proficient in using of technologies in the different field crops, vegetables, fruits and also flowers. Apart from conducting trials, demonstration, experiments, the training Centre also thrives for production of quality seeds. Programmes and performance of the instructional farms are portrayed

herein below:-

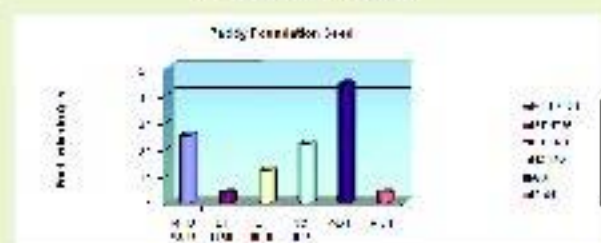
Foundation & Certified Seeds Production:

The Institute has undertaken this collaborative venture in association with West Bengal Seed Certification Agency, Directorate of Agriculture, Government of West Bengal. Quality seeds of paddy, pulse and oil are produced in the plots of instructional farms and also in some farmer's plots

of adopted villages of the Training Centre. This program has made a remarkable impact over the farmers in such a manner that a few farmer-entrepreneurs have already started producing foundation seeds in their own farms and also in some plots taken under lease. One of the major reasons behind the great demand of these seeds among local farmers happens to be the reliability as entrepreneurs have

close liaison with Ashrama run Training Centre. The seeds produced under Ashrama plots are distributed free of cost to the resource-poor farmers. Performance of the scheme is depicted below:-

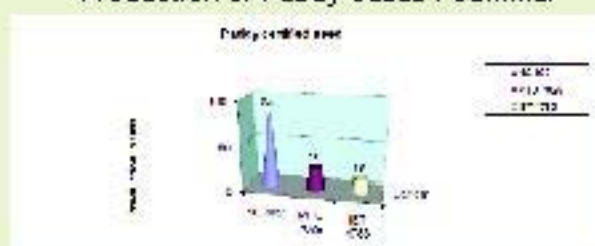
Foundation Seeds



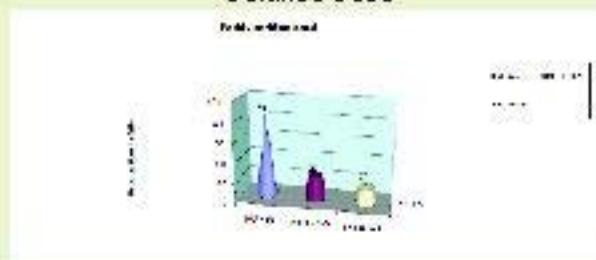


Production of Seeds : Kharif Paddy

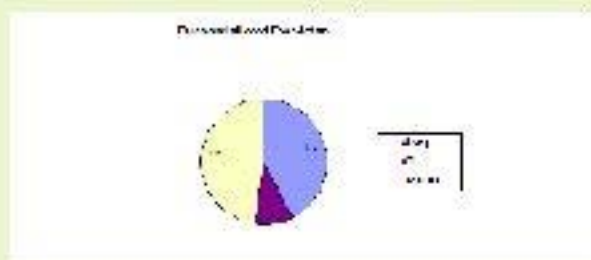
Production of Paddy Seeds : Summer



Certified Seed



Pulse and Oilseed Crops (Winter & Summer)



Animal Resource Development

Agriculture may be the prime source of earning to the rural community but agriculture apart; there are some other predominant subsidiary sources which support farmers to sustain. Amongst those sources, animal rearing is supposed to be the most remunerative avenue. So, enthusing people living within the periphery of the Ashrama to be well equipped in this arena got foremost priority. Ashrama maintains dairy & poultry units dairy farm is around 520kg of 13-24kg. Under the guidance of qualified veterinary doctors of this Training Centre, Ashrama has been organising ample courses in relation to animal rearing for maximising farmers' earning. Programmes include training on Dairy, Poultry, and Artificial Insemination in the Ashrama's campus and also in the villages for ensuring their full-fledged participation in the said courses. At the initial stage, courses were organised for the people residing within the radius of ten to fifteen kms of the Ashrama but currently farmers from distant districts also are benefited from these programmes.

The trainees being guided by the trained veterinary doctors practise regular disease diagnosis test in the dairy farm. The routine tests are tuberculosis, IBR, protozoa stool & urine. On the bases given against BQ, HS, Routine deworming are also done.

In addition to training, the Training Centre also provides technical guidance for fodder cultivation, conducts follow-up services and runs veterinary clinic both at the campus and in Arapanch group of villages where ATC, Narendrapur has got one Demonstration Farm. With a view to enhancing



the production as well as productivity of both green fodder and milk, maintaining breeding cycle of the bred able cows, minimising the cost of milk production, finding out the agro climatic zone specific sustainable green fodder and disseminating technologies to the animal growers, green fodder is cultivated covering six acres of land in the Ashrama farm situated adjacent to the Dairy Farm. Lucern & Barseem varieties in winter, Maize & Gai-mung during summer and Hybrid Napier, Dhaincha, Sorghom and Paragrass during rainy season have been cultivated during the preceding year.

In the context of the extension programmes being implemented under this wing for the wellbeing of the farmers are thus; distribution of chicks to rural poor women, cross bred cows to the unemployed youth, fodder cutting distribution among resource-poor farmers, artificial insemination and service for treatment as well as vaccination are done through in-campus & off-campus clinics. Statistical information regarding progress of this wing is presented herein below:

Ashrama Farm's Livestock Population

Breeds	Number
Gir X Holstein Friesian	60
GIR X Jersey	25
Sahiwal X HF	43
Sahiwal X Jersey	22

Biosecurity

Measures taken	Frequency
Use of disinfectants in the Cattle shed	Twice in a month
Use of bio-waste materials	4 biogas plant
Green fodder cultivation	6 acres of land

Cultivation of Green fodder

Crop	Area in acre
Hybrid Napier	03
Para Grass	01
Seasonal (Cowpea, maize, barseem, oats)	02

Sl No.	Course Title	Duration days	Venue	No. of trainees	No. of trainees	Target group
1.	Animal Husbandry , Artificial Insemination & Poultry	50	ATC	02	50	Mik Co-op. A.I. worker
2.	Artificial Insemination & Veterinary First Aid	40	ATC	02	56	Mik Co-op. A.I. worker
3.	Live-stock health care	30	ATC	06	180	Unemployed rural youth
4.	Poultry keeping	15	ATC & Field	07	225	Rural women
5.	Refresher of Field Artificial Insemination workers Pranibondhu)	05	ATC	03	85	Govt. A.I. Workers.
6.	Live-stock	15	ATC	01	24	Tribal youth
7.	Orientation on Dairy	04	ATC	03	88	Mik Cooperative farmers
8.	Live-stock health	20	ATC	01	25	Mik Cooperative farmers



Extension Programmes

<i>Program mes</i>	<i>Frequency</i>
Frequency of Fodder cuttings distributed to the Farmers	9000
Animals Treated	2850
FIRD Vaccination	18000
FDRD Vaccination	6800
FMD Vaccination	600
BQ Vaccination	400
HS Vaccination	650
Anthrax Vaccination	300
DP Vaccination	200
Fowl Pox	6000
Artificial Inseminationv (door to door service)	2615

SOIL TESTING UNIT

Soil testing results in getting better yields and optimum productivity. So, testing of soils of the farmers gets top priority among the different activities of the Agricultural Training Centre. It has been rendering regular services to the farming community through this wing in order to enhance the knowledge of the farmers with regard to fertility level and also available plant nutrient elements of their agricultural farms, orchard and flower garden. Since Ramakrishna Mission Ashrama has a wide network with village level development organisations for implementing its multifaceted development programmes across the state, the soil testing unit gets ample soil samples through those organisations from different agro climatic zones for tests. Farmers receive their soil testing report containing soil reaction (pH), electrical conductivity, organic carbon, available phosphate and potassium coupled with specific recommendations like proper doses of organic manure, fertilizers and soil amendments. Institute also utilises those soils for different experiments and trials. Soil Scientist of the Training Centre looks after this wing.

Besides soil testing, it arranges practical classes for grass-root level agricultural functionaries and the students of Ramakrishna Mission Vivekananda University. Furthermore, this Centre organises training programmes



especially on soil health Management and Vermicomposting and Vermiculture. During the reporting period forty five persons have attended such training programme.

Department of Science and Technology, Government of India has launched a programme on 'GIS Mapping on Status of Degraded Soil in Different Districts of West Bengal' where ATC has been extending its full-fledged



support being entrusted by the said department.

During the last calendar year ATC has tested altogether 504 soils samples brought from Howrah, Hooghly, Purba Medinipur, Birbhum, Nadia, North 24 Parganas and the home District- South 24 Parganas. It transpired from the observation that barring a very few samples which were found to be neutral, majority of the soil samples contained acidity, pH ranged from 5 to 6.5. In the soils of the coastal area, Electrical Conductivity (EC) were observed to be above 1mmohs/cm and the range varies from 1 to 4.5 mmohs/cm. The level of organic carbon or nitrogen was found to maintain low to medium. Available phosphate level resembled the findings of organic carbon or nitrogen. Farmers were given the report containing observations and recommendations. Follow-up programme proved the exactness of the recommendation as was found from the farmers' acknowledgement.

'Seeing is believing' is the dictum which the Training Centre always follows since experiences have shown that mere discussion and even audio-visual presentations cannot make the persons fully convinced. Hence, experiment on current technologies for different crops in the Instructional Farms of the Ashrama is a very common phenomenon. These experiments, trials, and demonstrations serve dual purposes i.e. facilitates the scope for assessing feasibility of those technologies in

EXPERIMENT TRIAL & DEMONSTRATION

the Institute's own farm and demonstration for the farmers and other visitors to replicate those in their own fields on the other. So, the farmers are benefited and simultaneously promotion of the proven technologies also takes place. Some of the initiatives undertaken by the ATC in this realm are presented herein brief:-



Direct Wet Seeding by Drum Seeder :

This collaborative effort was initiated in the state by this Training Centre along with the International Rice Research Institute (IRRI), Philippines and Rice Research Station, Chinsura, Government of West Bengal. Both in-campus and off-campus demonstrations on direct Wet Seeding by Drum Seeder has been conducted. In the Ashram's instructional farms, seven bighas of land covered under this technology. With the support of Ashrama affiliated development organisations a few demonstration plots have been chosen from the farmers' plots in two districts namely South 24 Parganas and Purba Medinipur. Govt. of West Bengal has taken special initiative to promote this technology among the farmers. The most positive outcome of this programme is that one Private Manufacturer has been manufacturing drum seeders with the requisite assistance from this ATC.

Observing the success of wet Drum Seeder in different parts of West Bengal and implement christened as Dry Drum Seeder (DDS) has been manufactured by the staff of the workshop wing. DDS suitable for sowing dry paddy seeds in dry land the implement is supposed to be cost effective and wheel facilitated to increase productivity. The implement is found to be useful in Purulia, Bankura, Birbhum and Paschim Medinipur. It is under trial now and 1.32 acres of land has been shown under this

trial in Kharif season. Power Transplanter of Rice :

Under this process, special seed bed is raised in 'mat form' and transplanter is placed keeping height about 2-3 inches. A couple of benefits like perfect lining, reduction of drudgery of labour, excessively lesser time for transplantation which has been estimated to be around one fifth of the traditional manual system as has been observed and the most interesting observation is that yield quantity remains same in both traditional system of transplantation and transplantation through

power driven transplanter. In order to have effective result, proper raising of seedling mat, adjustment in terms of depth of transplanting thorough practice of driving transplanter should be taken care of. The application of transplanter has been in practice in the Ashram's farms for the last three years.

System of Rice Intensification (SRI):

Introduction of System of Rice Intensification culture has given a very effective alternative towards maintaining ecological balance as the application of this technology leads to drastic reduction of water requirement for production of rice. Water requirement being observed during the cultivation at the Institute's instructional farms has been found to be almost half of the total requirement in the traditional system of production. Four bighas of land in the Instructional farms were covered under this technology

during the Boro Cultivation while twelve bighas of farmer's plots were brought under the application of this technology during both Boro and Kharif in the yester year. Some special techniques like raising special seed bed, marking, transplanting, allowing the field with fine cracks before irrigation etc were followed religiously as per the recommendation.

'No Tillage' Rice:

'No tillage' system appeared before the farmers to be highly effective alternative against the traditional system of puddle rice culture as the soil health has been proved to be enriched with more micro- organism population and porosity too. In so far as the Zero tillage is concerned, individual seeds are placed in grooves made by zero tillage machine and weeds are controlled with the application of herbicides etc. On the other hand, masses get in the No tillage system and weeds are killed with the application of herbicides before the culture starts functioning. Seedlings are uprooted with slight mud around the root- mass are just dropped maintaining space on soil or killed weed mass with little standing water. One bigha of land under each system has been covered under demonstration.

Paddy Harvesting by Vertical Conveyor Reaper :

It is a highly time as well as cost effective implement. Around Rs. 500 has been estimated to be the cost of operation against the produce of eight to ten bighas of land. A farmer can easily harvest ten to fifteen bighas in a day where as in the traditional process harvesting of 1 bigha of land's produces requires at least four labours. This Vertical Conveyor Reaper is carried out by a self-propelled, walk- behind type vertical conveyer reaper. It is a petrol-start kerosene-run, 1 cylinder, 4 stroke having 3.8 HP engine with fuel consumption of 1.5 litres per hour. Reaper takes 1.2 to 1.8 hours for cutting crop covering one acre of land. The reaping attachment consists of cutter bar, two crop conveyer belts, crop row dividers and star wheels. The cutter bar and conveyer belts are driven by engine through belt pulley and safety clutch. A demonstration was held during harvesting season of kharif rice and about forty farmers of Baruiipur and Sonarpur Development Blocks were present in that programme.

Cultivation of Vegetables :

Different types of traditional and exotic vegetables are grown in the Ashrama's Instructional farms under trial programme. Priority is given on new crops or new varieties. Trainees, farmers and visitors under Exposure visit programme find the opportunity to have practical experience of these trials. This programme has been continuing in collaboration with Crystal Siemens Private Limited company. Agronomist of this Institute over sees this venture. More than 300 farmers visited the plots during the preceding years Progress on this score is shown below:



PROGRESS

<i>Crops</i>	<i>Frequency of entries/ varieties</i>
Broccoli	04
Beans	02
Cabbage	61
Chinese Cabbage	02
Chilli	04
Carrot	02
Celery	02
Coriander	03
Cauliflower	67
Lettuce	02
Tomato	32

EXTENSION PROGRAMMES

This Training Centre is fortunate enough to function under Ramakrishna Mission which provides enormous scope to be actively associated with different sorts of extension programmes for the agrarian community in the state. In addition to own programmes, its faculty members are



also deeply involved in the formulation, execution, monitoring and appraisal of the Ashrama's own development programmes being implemented in the villages across the state in association with grass-root level community based organisations. The extension programmes are being implemented by the Institute right at this moment are depicted below in brief:-

Poverty alleviation through Rice Innovation Systems (PARIS)

Research into Use (RIU)/ Department for International Development (DFID), United Kingdom has been providing financial assistance to this multi-institutional project. Other international partners collaborating this initiative are International Rice Research Institute, Manila, Phillipines, National Resources Institute (NRI) University of Greenwich, United Kingdom and the Institute of Sustainable Water, Integrated Management and Ecosystem Research (SWIMMER), University of Liverpool, United Kingdom while national level partners in India are Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, Uttarakhand, Narendra Dev University of Agriculture & Technology,

Faizabad, Uttar Pradesh, Nand Educational Foundation for Rural Development, Uttar Pradesh, Ramakrishna Mission Ashrama, Narendrapur, Kolkata and the Professional Assistance for Development Action, Purulia. Ashrama with the active support of the ATC has been implementing this project since August 2008

Project Objectives :

- i) Promotion of rice-based potential technology which are in rudimentary stage, like Drum-Seed technology
- ii) Maintaining bio-diversity of indigenous scented rice having market potentiality.
- iii) Human Resource Development.

The focal intervention area of this project has been considered to be demonstration & practical application of potential research results of Universities and Research Institutes for the people dependent upon agriculture. Finding out and use of innovations related to rice culture throughout and along the river Ganges from foot hills to mouth to the Bay of Bengal

have also been considered. Direct seeded rice mainly wet direct seeded cultivation, land modelling, traditional varieties having market potentials, use of advanced information system have been identified in the sphere of gradual escalated cultivation cost.

Altogether eleven villages in four Development Blocks namely, Kakdwip (Shibkalinagar & Lakshipur), Patharpratima (Dakshinshib Ganj, Dakshin Gobindapur & Banashyamnagar), Baruipur (Ghola & Jelerhat) and Sonarpur (Sitla & Metiary) of South 24 Parganas district and Thekua under Nandakumar Development Block in



Purba Medinipur district have been brought under the purview of the project area. The most astonishing part of this programme was to extend support from this Institute to the farmers of non-project areas too as the farmers of those areas have already undertaken same programme being enthused in the training and farmer's visit

programmes organised by the Narendrapur ATC. As a result frequent interactions with the farmers scope for improvement of drum seeder machine has been worked out & the process is being continued under participatory process. Achievement in project areas and non project areas shown in the following tables

ACHIEVEMENT

Awareness Generation & Information Dissemination Activities

I. Project Area

<i>Telecast of the Programmes by E TV Bangla</i>	<i>Organisation of Training Programmes</i>	<i>Participation of Farmers in Training & Demonstration</i>	<i>Organisation of Exchange Programme</i>	<i>Presence of Farmers in Field Exchange Programme</i>
02	24	1260	12	850

II. Non-Project Area

<i>Telecast of the Programmes by E TV Bangla</i>	<i>Organisation of Training Programmes</i>	<i>Participation of Farmers in Training & Demonstration</i>	<i>Organisation of Exchange Programme</i>	<i>Presence of Farmers in Field Exchange Programme</i>
02	24	365	06	364

Progress during Boro Season

I. Project area

Sr. No.	Farm Location	District	Variety	Frequency of Plots Under Technologies		Covered Area Bigha (33 decimal)
				Direct Rice	System of Intensification	
01	KB (Ashrama)	South 24 Parganas	IET WGE20471	02	02	02
02	Ashrama	do	IET 4786	-	01	02
03	Parthaprati Gobindarampore	do	IET IR 64, I	60	04	94
04	Shibkalinagar	do	IET WGL IR-64	36	02	46
05	Ghola	do	IET WGL 20471	15	01	25
06	Sitala, Metiary	do	IET 4786	07	--	18
07	Thekua, Nandakumar	Purba Medinipur	IR-64	13	--	14
	TOTAL	02	-	131	10	200



II. Non-Project area

Sr. No.	Farm Location	District	Variety	Frequency of Plots Under Technologies		Covered Area Bigha (33 decimal)
				Direct Rice	System of Intensification	
01	Thekua	Purba Medinipur	Sankar 4094 64	16	02	18
02	Keshpur	do	Sankar IET IET 4094	18	-	20
03	Bamanagar	South 24 Parganas	IET 4786	12	-	15
04	Joynagar	do	IET 4786	12	-	15
05	Kulpi	do	Sankar IET 4786	08	-	13
	TOTAL	02	-	62	02	74

Integrated Scheme on Oilseeds, Pulses, Oil-palm & Maize (ISOPOM): Govt. of India launched this scheme in 01.04.2004 with 75 percent support from the Central Govt. and 25 percent from the State Govt. in order to promote the production of oilseeds, pulses, and maize crops since the quantum of production did not correspond to the total requirement. The deficit has been estimated to be 45 to 50 percent in oil seeds and 80 to 88 percent in pulses in the State.



Agricultural Training Centre, Narendrapur has been organising this scheme from the very beginning. Now, eight districts of South Bengal have been brought under the purview of the scheme Directorate of Agriculture, Government of West Bengal has been extending its full-fledged assistance in proper implementation of this scheme. Quality seeds, coupled with fertilizers, plant protection equipments, farm implements, soil amendments, bio-fertilizers, bio-pesticides etc. have been given as critical inputs to the farmers of the different parts of the state in order to fulfil the total requirement of the state. Farmers have been oriented to the seed multiplication techniques through both in-campus and off-campus training programmes and field demonstrations also organised in the instructional farms at Ashrama as well as in the farmers' plots. Owing to have wide network with the village level development organisations, this Training Centre has been successfully implementing, monitoring and getting feed-back too of the programme very meticulously with its faculty members. Following data can speak for the progress of the scheme.

Proven result of field crop demonstration:

The yields and economic advantages of demonstration were reflected in the crop cutting results taken during field days. The yield of demonstration plots was compared with the yield of control plots. During the field days programme, the farmers covered under the programmes have made comparative analysis with regard to the packages followed in demonstration, the yield harvested from the demonstration plot compared to non-demonstration plot. Package of practices followed in demonstration plot was necessarily different from control plots. Crop cutting results of demonstration plots were compared with control plots. The quality as well as quantum of yields have proved the efficacy of practices followed in Demonstration plots.

Crop Demonstration:			
Crop	Quality Seed distributed (Kg)	Area covered (Hectare)	Farmers benefited
Moong	3196	106	1198
Groundnut	3780	50	563
Maize	450	20	225
Total	7426	176	1986



Average yield under demonstration and control plots

Crop	Yield (Kg/ha)		Yield advantage
	Demonstration	Control	
Mustard (Yellow)	1350	1125	225
Sesamum	1050	750	300
Groundnut	2250	1900	350
Sunflower	1500	1200	300
Moong	900	600	300
Khesari (Paira)	900	750	250
Maize	2625	2080	545

Comparative status of yield under demonstration and control plot

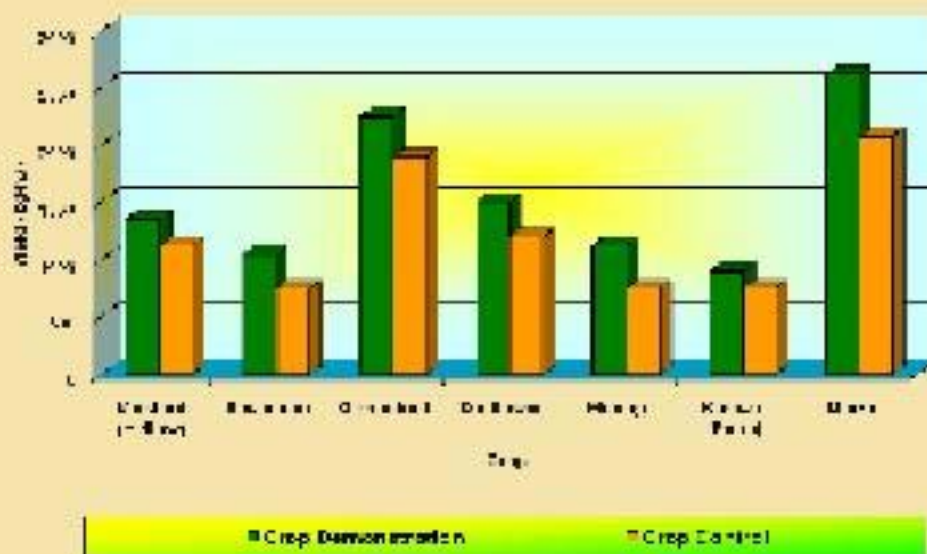


Figure : Bar chart showing comparative yield of demonstration and control plots

Training Highlights

Frequency of of Farmers'	Frequency of the Participants
15	750



Information Services:

Technical literature in Bengali vernacular on 'Moong cultivation' entitled 'Moong Chashey Unnoto Prajukt' has already been published in the form of leaflet for accelerating demonstrations and training programmes. Besides this, two CDs have also been developed on 'Sunflower' and 'Moong' cultivation so as to broaden the information base of the farmers.



Community based Seed Production for Livelihood Improvement of the Farmers in Rice based Cropping System :

This programme aims at promoting quality seeds production at the community level for fulfilling the ever increasing seed requirement of the cultivators. This programme has been implemented by ATC, Naredrapur in eleven villages covering two districts which fall under mainly saline & coastal agro-climatic zone.

Programme Objectives:

i) To make the farmers self-reliant in producing quality seeds to meet local requirement.

ii) To improve livelihood through production of quality seeds.

iii) To orient the local youth to be self employed from the practice of seed production.

iv) To acquaint the farmers with application of direct wet Seeding by Drum Seeder & System of Rice Intensification (SRI) method of sowing. Following factors have been taken into consideration to make the programme effective:-

- a) Intending farmers will be brought under group consisting of 20 farmers having lands almost adjacent to one another.
- b) Group members will be oriented and be opted for training and other technicalities related to production technology.
- c) For the sake of sustainability of the groups, concerted efforts will be directed to develop effective liaison with Agricultural Development officer at the block level, local Seed Company, Farmers Co-operatives, Research Organisation and also notable Non-Government Organisations working in this arena.

STATUS OF THE PROGRESS

Sr.	Villages covered	Name of Seed Produced Farmer's Group	Farmer Member Trained	Area covered (ha)	Variety	Quality produced
01	Parthapartima Ramaganga-pathar 24 Parganas	parthapratima-I	150	21	Sabita Ranjit	640
02	Ghola, Baruipur, South 24 parganas	Ghola-I	65	07	Sabita IET 5656	246
03	Katwa, Burdwan	Seed Group Pro	11	05	IR	242

Diagnostic Field-visit Programme:

General farmers and beneficiary-farmers covered under Ashram's development programmes solicit Institute's advice and recommendations regarding diagnosing diseases and pest for different crops. Many a time Institute's faculty visit farmers' plots if the situation appears to be grave and advise accordingly. Farmers always keep in touch with the faculty physically or over phone and sometimes through the local voluntary organisations having frequent contact with the Ashrama for implementation of different development programmes.

Faculty Participation in Training and other Programmes :

Both Ashrama and Training Centre organise ample field level trainings, workshops, demonstrations, Farmers' meetings and other programmes where Faculty take sessions. Institute's faculty also act as resource persons in different programmes being conducted by some development Institutes like Nehru Yuva Kendra Sangathan, Non-Government Organisations and various Government Departments.



ANNUAL CELEBRATION

Celebration of the foundation day always paves the personnel of the Institute to proceed to the future with more strength and energy. On this occasion, present generation functionaries also get opportunity to identify themselves with the glorious heritage of their own organisation. 19th January, the foundation day of the Agricultural Training Centre is commemorated during this Annual Celebration for four days duration together with Ramakrishna Mission Lokasksha Parishad, the rural and urban development wing of the Narendrapur Ashrama. ATC and other Units working under the purview of Lokasksha Parishad observe the celebration every year highlighting their own activities which encompass training,

extension programmes, education, health, employment generation, arts and crafts through exhibition, symposium, seminar, prize distribution, small entrepreneurs' mela and so on and so forth. Agricultural Exhibition always draws attention of the thousands of visitors as it allows them to experience

ample varieties of agricultural crops, vegetables and fruits brought by the growers from different Development Blocks of South 24 Parganas. Both quality and size of those exhibits are really praiseworthy. Cultural programmes encompassing folk songs, folk dance, patriotic songs, Yatra and staff drama etc in the evenings are the added attraction of the Celebration. Last year, it was 42nd Annual Celebration held from 16th to 19th January, 2009. Every year, this annual event focuses on a special issue bearing international and national importance, so 'Energy crisis: Role of Non-Conventional Energy' and organic farming were chosen as the main theme in 2009 since it

appeared to be the major concern in the context present millennium. Shri Mrinal Bannerjee, Hon'ble Minister-in-charge, Department of Power & Non-Conventional Energy Sources, Govt. of West Bengal inaugurated the Celebration and happened to be the Chairperson in the seminar spoke on the main theme. Srimat Swami Asaktanandaji Maharaj, the then Secretary, Ramakrishna Mission Ashrama, Narendrapur gave welcome address in the inaugural session.

Dr. Sanjeev Chopra, IAS, Secretary, Department of Agriculture, Govt. of West Bengal inaugurated the agricultural arena including Exhibition on 'Organic Farming' and was the guest speaker in the seminar. Other dignitaries present in the seminar as guest speakers were Prof. Sujoy Basu, Former Director, School of Energy Studies, Jadavpur

University, Kolkata and Shri S.P. Gan Chowdhury, Managing Director, West Bengal Green Energy Development Corporation.

'Prospect of Organic Farming in West Bengal' was the topic for seminar organised on 17th January, 2009. Dr. Subhendu Deb Chatterjee Ex-Director, of Agriculture, Government of West Bengal was

the Chairman of the seminar and spoke on 'Policy Issues for Organic Farming in West Bengal' while Dr. Pigush Pramanik, Director, Food processing Industries & Horticulture, Govt of West Bengal being the Chief Guest of the seminar discussed on 'Horticulture: a major prospect for Organic Farming'. Dr. Mahadeb Pramanik, Professor, Bidhan Chandra Krishi Viswavidyalaya and Ashis Hui, Deputy Director of Agriculture (Bio-Control Lab), Directorate of Agriculture, Govt. of West Bengal spoke on 'Prospect of Organic Farming in West Bengal' and 'Organic Farming Towards Sustainable Agriculture: Practical Experience' successively.



On the third day, 'Reunion Function of Ex-students of Agriculture Training Centre, Narendrapur' was held where Shri Bishnupada Mandal, Former Director, Directorate of Agriculture, Govt. of West Bengal became the President and Shri Ganesh Barman, the then Additional Director of Agriculture (Special), Directorate of Agriculture, Govt. of West Bengal chaired as Chief Guest whereas the Special Guest was Shri Sunil Kanti Das, the then Deputy Director of Agriculture (Training), Directorate of Agriculture, Govt. of West Bengal. Ex-trainees & their family members are the permanent invitees to this Reunion Ceremony and they take lunch together at the Sri Krishna Bhaban. 'Prize Distribution Ceremony' took place in the post lunch programme on the same day.

Chairperson of the ceremony was Dr. Kamala Kanta Saha, Director, Directorate of Animal Resource Development, Govt. of West Bengal, Sri Udayan Chakraborty, Jt. Director, Directorate of FPI & Horticulture, Govt. of West Bengal as Special Guests and Dr. Madhumita Mukherjee, Jt. Director, Directorate of Fisheries, Govt. of West Bengal and Dr. P.K. Ojha were present in the function. Successful growers took part in the Agricultural Exhibition and Staff members of ATC as well as Lokasiksha Parishad



on Sri Sri Ma Sarada, Mother of the order of Ramakrishna Mission. During the whole day, discourses apart, Dhyan, Maatri Sangeet and Naam Samkirtan & Bhaktigeeti were performed. Renowned Monks from different Branch Centres of Ramakrishna Math & Mission, namely, Swami Vedaswarupananda, Golpark, Swami Sarvantarananda & Swami Pabitrachittananan of Narendrapur, Swami Balabhadrananda, Secretary, Asansol and Swami Tyagarupananda, Principal, Ramakrishna Mission Vidyamandir and Saradapith, Belur Math spoke in the discourses. Dr. Bandita Bhattacharya, Ex-Professor, Lady Brabourne College and Dr. Purba Sengupta, Research Fellow, Ramakrishna Mission Institute of Culture, Golpark were also the speakers in the programme.

occurrence to the dwellers of Narendrapur to have an exposure of a comprehensive package of healthy entertainment with rural flavour which have been almost withered away from the society in the present era. It has been estimated that altogether a little over thirty five thousand people visited the Exhibition during the span of celebration, attended Seminars, and relished Cultural programmes. Besides local people, Agricultural Scientists, Development Activists,

Farmers from different districts also attend the celebration.



participated in the different events in sports & games received Prizes and Certificates in the said function. As those of yesteryears, a day long programme was there

EVALUATION & STUDIES

Evaluation plays a pivotal role for the implementing organisation as it focuses on the efficacy of the programmes and at the same time it highlights weaknesses of the programmes too which in turn provides scope to the organisation for incorporation of necessary measures for refinement and making the programme much more effective.

SAMETI & ATC conducts huge number of training courses based on the assessed demands. Evaluation of the training courses maintains and improves the standard, judge the effectiveness, rectification of lacunae, assess future needs and so on. The impact of the training can properly be understood generally after a long gap. Evaluation of the training courses at SAMETI/ATC is done in many ways, these are thus:

At the end of each session, the resource person takes the feedback from the participants. This is also done through informal discussion with the trainees during the tea break or after the concluding session of the day by the members of evaluation team or Course Coordinator or Principal & Director etc. and actions are taken accordingly. Sometimes additional information, handouts are given and follow up sessions, if possible are also arranged.

At the end of each training course a formal evaluation is done with a structured questionnaire. It generally solicits the participants assessment on the content of all topics, relevance of the sessions, methodology followed, board and lodging arrangement etc. This process assists in getting the overall standard of the training.

Open and direct feed back of the trainees are also taken in the valedictory session. During that session they are asked to air their views on the effectiveness of the course suggestion for improvement, future needs etc. The trainees are also requested to send their feedbacks after 3-4 months through stamped postcard on how far they have been able to adopt suggested practices etc.

In some courses especially the courses of farmers, stamped self-addressed postcards are given to the trainees for sending comments after some stipulated time.

Trainees also contact the faculty members of the Institute over phone regarding their problems. It also provides opportunity to make an assessment of the programme.

On the other hand, the trainees are also contacted by the faculty members of the Institute as follow-up measures.

The SAMETI & ATC faculty members extensively visit across the state in relation to organise training, meeting, extension programmes etc. It brings additional advantage to have interaction with the trainees. This way impact of the training is also judged.

Following observations are given below on the basis of overall feed-back taken during the last year.

- a. More than 90 percent sessions have secured 8 or more out of the total score 10.
- b. As regards overall performance/standard of the individual courses, almost cent percent courses happened to secure 8 to 9.
- c. Regarding methodology followed during the training, in most of the cases suggestions were to include more practical orientations, exposure visits etc. otherwise methodology was found to be satisfactory.
- d. In order to have farmer-participants' responses self addressed stamped post cards were sent to them. Majority of them send back their feed back. Aroud 90 percent of them highly praised the course inputs as those effectively supported the improvement of their cultivation practices.
- e. In case of grass root level extension worker, they expressed to extend the course duration. Almost all of them found the course to be satisfactory and suggested to include internet information based courses and renovation of the existing KPS/ farmers' hostel of the Training Centre .
- f. With regard to the courses for higher level extension functionaries, more than 95 percent marked the overall performance 8 and above. Suggestions have been given by many participants to upgrade the accommodation facilities. In the sphere of extension and managerial training

courses, as they have expressed are very effective in improving their efficiency and especially practical exposure on certain areas helped a lot to develop clear perception. Owing to some practical reasons the Institute has not been able to make assessment in a structured way. Now the Institute has taken initiative to bring out a comprehensive assessment of its activities in a structured form.

METEOROLOGICAL STUDY

Weather and climate have immense impact on agriculture. Keeping record of meteorological parameters is very important for any Institution conducting trial, demonstration, experiment and extension work etc. The ATC & SAMETI, Narendrapur maintains one modest Meteorology Unit, where simple but standard instruments are installed for recording maximum temperature, minimum temperature, relative humidity (RH) of the air and daily rainfall. These are recorded with sincerity on regularly basis. Some of the important findings of the year are discussed. A brief profile of recorded findings of the last year are given below:

The Hottest Week of the year at Narendrapur was 17th week of the last year. The average temperature of the week was 33.5 degree Celsius. The average weekly temperature of the preceding and succeeding weeks were 32.14 and 30.5 degree Celsius respectively. The weekly average maximum temperature and average minimum temperature were 39.57 and 27.42 degree Celsius respectively. During this week the average relative humidity was 61.4 with maximum and minimum relative humidity 91.14 and 31.71 respectively. There was no rainfall during that week or preceding three weeks consecutively.

The Coldest Week of the preceding year at Narendrapur was found to be the last week of the year. The average temperature of the week was 17.06 degree Celsius. The weekly average maximum temperature and average minimum temperature were 24.42 and 9.28 degree Celsius respectively. The average relative humidity during this week was 69.07 with maximum and minimum relative humidity 92 and 46.28 respectively. There was no rainfall during that week or preceding five weeks successively.

The Most Humid week appeared at Narendrapur was the 29th. week of the year, i.e between 16th and 22nd. July, 2009. The weekly average RH of the week was 87. The

average weekly RH of the preceding and succeeding weeks were 85.07 and 84.71 respectively. During the week the average temperature was 28.64 with average maximum and minimum temperature 31.71 and 25.57 respectively. The rainfall was estimated to be 24.88 mm during the week.

It transpired from the record that the least Humid week at Narendrapur was the 7th. week of the previous year, i.e on and from 12th to 18th. February, 2009. The weekly average RH of the week was 58.42. The average weekly RH of the preceding and succeeding weeks were 64.28 and 64.85 respectively. During the week the average temperature was 23.71 with average maximum and minimum temperature 29.71 and 17.71 respectively. The rainfall was 24.88 mm during the week. There was no rainfall during that week or preceding consecutive 6 weeks.

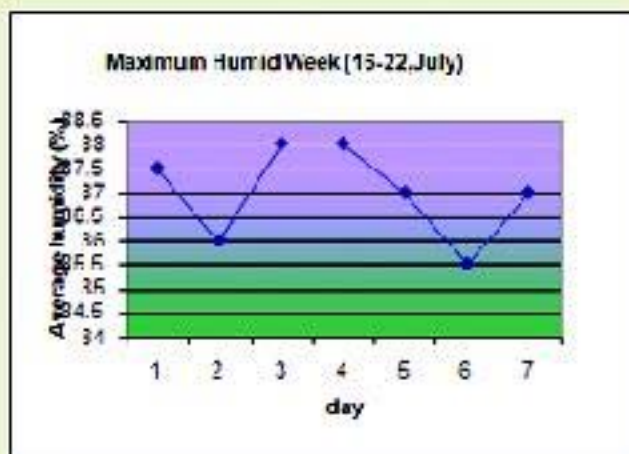
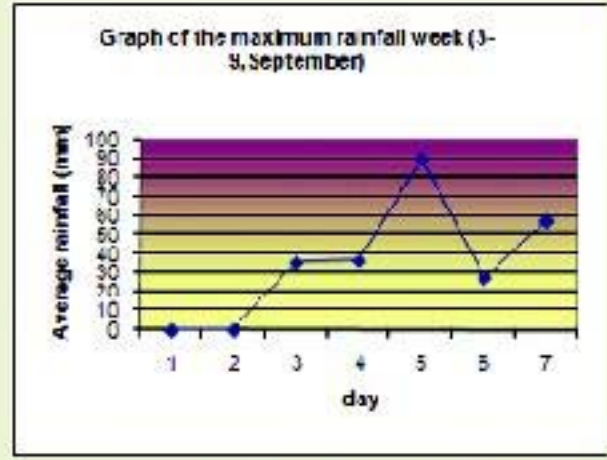
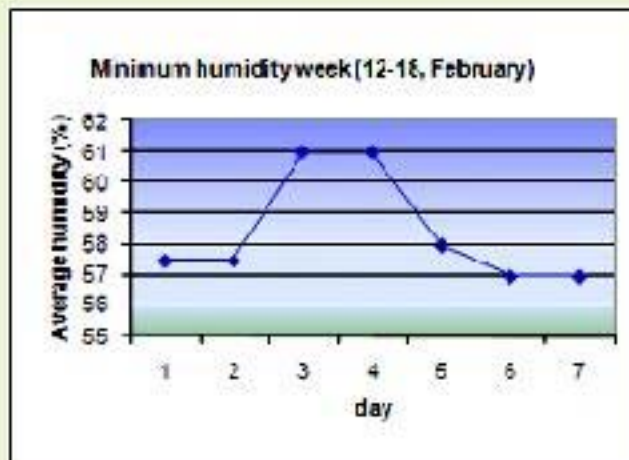
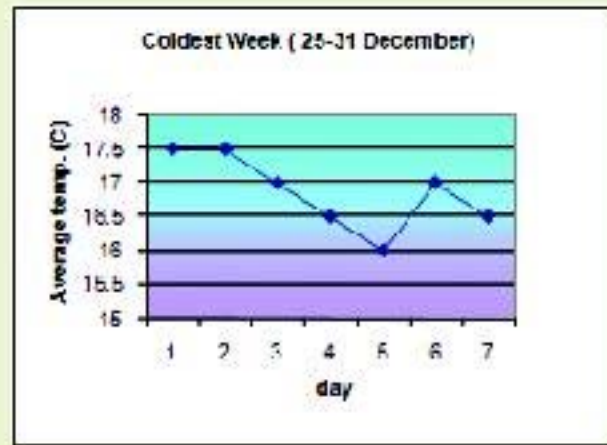
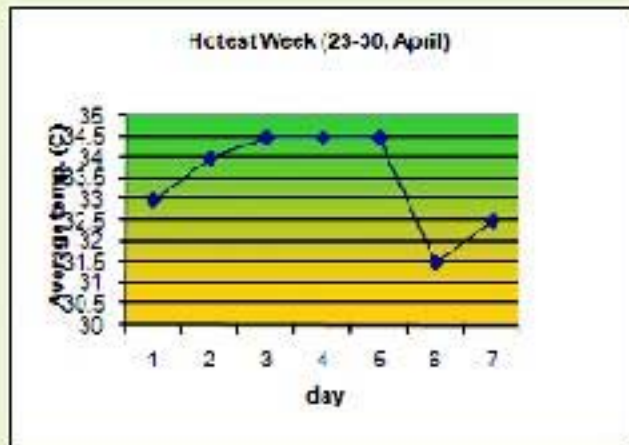
It is also evident that the Most Rainy week of Narendrapur was 36th. week of the last year, i.e. from 3rd. - 9th. September, 2009. The weekly average rainfall was 35.57 mm. The average weekly rainfall of the preceding and succeeding weeks were 17.85mm and 9.85 mm respectively. During the week the average temperature and RH was 28.5 degree Celsius and 85.92 respectively. The weekly average maximum and minimum temperature were 31.42 and 25.57 respectively. The weekly maximum and minimum relative humidity were 97.42 and 74.42 respectively.

The hottest day as per the recorded data was 20th April, 2009 with maximum temperature of 41 degree Celsius. The coldest day in terms of minimum temperature were three consecutive days i.e. 28th, 29th and 31st December, 2009 with the minimum temperature of 8 degree Celsius. But if the maximum temperature is considered, the coldest day was 29th December, 2009 (maximum temp. for 28th., 29th. and 30th December, 2009 were recorded as 25, 24, 25 degree Celsius : respectively). The Maximum rainfall day was 1st. July, 2009 with day-total rainfall of 132.6 mm.

Cyclone 'Aila' had an effect over Climate/ Weather. During 25th. and 26th. May the rainfall recorded was 48.4 mm and 102.5 mm respectively. The maximum and minimum temperature during those two days were 28 and 25 degree Celsius respectively. The weekly average condition of different weather parameters before the break out of 'Aila' given in the following table.

Date	Weekly average (Temp in degree Celsius , RH in % and Rainfall in mm)				
	Max. Temp	Min. Temp	Max. RH	Min. RH	Rainfall
18th.- 24th. April, 2009	34.71	26.42	92.85	59.42	0.51

Major Meteriological Observations



SAMETI's Intervention in Agricultural Extension

Vermicomposting

After completion of my graduation, I applied to many offices and even I personally contacted many of them. Lastly I joined as salesman with one small agri-input company. Primarily I was offered Rs. 1500 per month as my salary. In the month of April, 2009, the Krishi Prajukti Sahayak (KPS) of our area advised me to go for a training on vermicomposting at Ramakrishna Mission, Narendrapur. At that time it was quite difficult for me to continue cultivation as I used to remain outside in most of the days. Another difficulty I was facing trouble to borne my family expenses with that meagre amount of salary. Being a farmer's son, I had interest in acquainting with emerging agricultural technologies. Besides that I intended to undergo training under the Ramakrishna Mission, so, I attended a four day training on vermicomposting organised by SAMETI, Ramkrishna Mission Ashrama, Narendrapur in June, 2009. Apart from preparation of vermicompost, development of entrepreneurship was also covered for generating income from it. There was a one day follow up meeting after 20-25 days after the completion of the training. Right now, I am totally engaged in preparation of vermicomposting and running business. Now the farmers of my own village Deulpur and the farmers of adjoining villages also know me very well and my enterprise, 'Joyguru Green Agro Vermicompost'.

With the help of Ramakrishna Mission, on completion of the training I came in contact with the Horticulture Department, Govt of West Bengal where I got support of Rs. 5,000/-. In addition I also invested some money from my own savings and prepared four 4' X 10' size pits. I am preparing composting in heap method also. At present, monthly productivity is around 1000- 1,500 kgs of vermicompost and deployed one labour @ Rs. 70/- per day. Major raw materials are being supplied from our own house along while some waterhyacinth are collected from the village ponds. Currently my earning is about Rs. 3,000.00 in a month. I expect to enhance income at least Rs. 5,000 per month. At the beginning phase I convinced my village-farmers about the benefits of vermicompost and also distributed vermicomposts among a few almost free of cost. Now the farmers are come to me and taking it from my own house. I am trying to develop contact some big purchaser and getting support from Ramakrishna Mission in this context.

I have planned is to maximise the production up to 10 tons per month. I have a plan for expansion of my dairy unit for having more cow-dung.

Sri Mrinal Koley
Vill + P.O.: Deulpur
Police station: Panchla
Dist.: Howrah

Ornamental Fish Culture

Keeping ornamental fish is my hobby. While purchasing these costly fishes on regular basis for my aquarium, I thought to breed the same on my own. Suddenly I got the information regarding the training on ornamental fish being organised by Agricultural Training Centre, Ramakrishna Mission Ashrama, Narendrapur. Afterwards, I completed the four days training in the month of July, 2009. During the training period we equipped with both theoretical and practical knowledge in breeding of ornamental fish, their disease & method of treatment, their feed, making aquarium etc. There one-day exposure visit to the ornamental fish growing village and fish research station at Pailan which made me more and enthusiastic and confident. During the follow up programme I became interested in developing business on ornamental fish.

So, I started with a small unit with the financial support of my father. At present I am breeding molli, gappi, swordtail, goldfish etc. in seven small tanks and also maintain forty aquariums. Besides the local customer, the wholesalers also contact me for a bulk supply. Though amount of net earning comes from this source is around Rs. 1,500/- which is certainly very small amount but expect to earn more in the days to come. Moreover, I can maintain usual household work at present. I have already made up my mind to stick to this profession.

Sri Soumen Ghosal
Vill.: Hariharpur, P.O.: Mallikpur
Dist.: South 24 Parganas
Market Information Hub

I am the Secretary of a village welfare organization, Kamarhat Rural Welfare Centre. We are trying to improve the livelihood of the farm families. It is well known to every body now that the farmers are not getting remunerable price of their produce. After getting information from one staff member of Nimpith KVK, I joined a 3-day training on 'Market Information' organized by SAMETI, Narendrapur.

I learnt a lot about the present agricultural marketing system, rules, difficulties along with the role and procedure of market information. The training made me very much

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enthusiastic and shed my despair

In So far our organization is concerned about the agricultural production of the farmers, but now we are trying to motivate our farmers to consider the local market in selecting their crops. The methodologies described in the training are not possible to apply being in the villages but the concept of getting information from various sources, use of ICT in getting update information or its dissemination etc. are becoming very useful in long term planning, effective implementation etc. We have already taken drive to form farmers' group and are trying to find source for receiving day to day market information of nearby market. We are also in touch with NABARD for construction of rural godown. We are now feeling the necessity of a computer with internet line in our village.

Sri Subhranshu Kamar,
Secretary,

Kamarhat Rural Welfare Centre,
Block: Kakdwip
Dist.: South 24 Parganas

Seed Production

Tapas Baidya S/O Late Sadhan Ch. Baidya is a progressive resource poor farmer of Village Laxmipur, Block Kakdwip of South 24 Parganas district. He has only 4 bighas of low land. He could grow only one winter or Aman crop and after harvesting the crop almost all the land remained fallow. He used to grow khesari in only 10 kathas of land as Paira crop. In 2007 he came to know that the village club, Ramprasad Smriti Sangha and Pathagar being motivated by teaching faculty of Agricultural Training Centre, R K Mission Ashrama, Narendrapur implementing ISOPOM Programme. In one of the farmers' meeting, Sri Tapas Baidya attended and enlightened with the modern technology regarding sunflower cultivation. He was inspired and the club allotted sunflower demonstration in his field. He was given hybrid sunflower seeds along with chemical fertilizer. He cultivated sunflower and approached the club then managed to apply life saving irrigation to his crop at flowering time. He sprayed 2 % boron to apply at 45 days after sowing. He attended the other agricultural meetings organized by the club and followed all the techniques learnt there from technical personnel. He obtained 300 kg sunflower seed from which more than 100 kgs of sunflower oil was extracted. He, then believed that such technique increased the cropping intensity enhancing the employment opportunity considerably. Observing the good result of his crop and

good yield in mono-cropped low land, the other neighbours were motivated and now many farmers of this area started sunflower cultivation in their low lying rain fed areas after harvesting Aman Paddy for better profit. Sri Tapas Baidya has now become a very progressive farmer amongst the farming community in his area and acting as a mini extension worker to reach the improved technologies to the farmers in order to increase the production and productivity of oil and pulse crops.

Moong Cultivation

Sri Sukumar Jana S/O Late Rakhai Chandra Jana is known as an innovative and progressive farmers of Madhabnagar village, under Patharpratima Block of South 24 Parganas district. Earlier he used to cultivate local moong in his land after harvesting Winter or Aman paddy. He was living with his family in a house very closed to Dakshin Shibgong Patharpratima Lokasksha And Rural Development Society which is involved in implementing different development programmes in a few villages. One day he attended a farmers meeting in the premises of the said organization along with other farmers. In the training programme he heard the improved technologies about moong cultivation from the faculty member personnel of Agricultural Training Centre, Ramakrishna Mission Ashrama, Narendrapur. Later on he approached the organization and he was given improved moong var. K-851 along with Rhizobium culture. He was imparted all the modern techniques of moong cultivation. He cultivated moong in 1 bigha and obtained 280 kgs moong. He used to pluck 2-3 times in harvesting local moong where as only one plucking was enough to harvest this variety. He sprayed 2 % DAP at 45 days and managed to have good yield. He is now taking interest and attending each and every farmers' training organized under ISOPOM Programme. Sri Jana also cultivated Summer or Boro rice after Aman paddy purchasing water from the neighbouring farmers having ponds. He obtained net profit of Rs. 1500/- from paddy, whereas now he is getting Rs. 3000/- as net profit from 1 bigha moong cultivation. Now, he is very much enthusiastic and confident to continue moong cultivation and seeing his successful endeavour other few neighbouring farmers switched over to grow moong cultivation from Boro cultivation.

Faculty Members of the Institute

Sr. No.	Name	Designation	Qualification	Field of Specialization
01.	Dr. Manas Ghosh	Principal, Agricultural Training Centre & Director, SAMETI	Ph.D. in Agricultural Entomology	Plant Protection Rural Development
02.	Dr. Gour Gopal Banik	Senior Lecturer	Ph.D. in Soil Science	Soil Science Vermi Composting
03.	Dr. Ashutosh Das	Senior Lecturer	M. Sc. in Plant Genetics	Agricultural Development Management
04.	Shri Prashanta Dasgupta	Senior Lecturer	M. Sc. in Botany Horticulture,	Horticulture Pomology
05.	Shri Pankajaksha Maity	Senior Lecturer	M. Sc. in Agriculture	Horticulture Olericulture Floriculture
06.	Dr. Satinath Das	Senior Lecturer	B. V. Sc in Veterinary Science	Dairy Management
07.	Shri Amiyakumar Raj	Lecturer	M. Sc. in Agricultural Extension	Agricultural Extension
08.	Dr. Kamalakanta Hazra	Lecturer	Ph.D. in Plant Pathology	Plant Protection
09.	Shri Dilip Maity	Lecturer	M. Sc. in Agronomy	Farm Management Seed Technology

Faculty Members of the Institute

Sr. No.	Name	Designation	Qualification	Field of Specialization
10.	Dr. Sk. Musiar Ali	Lecturer	Ph.D. in Agricultural Extension	Extension Management
11.	Shri Asit Kumar Basu	Faculty Member	M. Sc. in Anthropology Entrepreneurship Development	Social Science, Entrepreneurship Development
12.	Shri Subhrasil Basu	Faculty Member	M. A. in Sociology LL.B, SWA	Social Science, Development & Welfare Administration
13.	Dr. Moyeed Hussain	Faculty Member	M.B.B.S.	Health & Hygiene
14.	Shri Soumyesh Mondal	Faculty Member	M. Tech in Agricultural Engineering	Soil & Water Engineering
15.	Dr. Sourendra Nath Das	Senior Lecturer	Ph.D. in Agricultural Entomology	Botanical Pesticides Development
16.	Shri Debabrata Giri	Faculty Member	M. Sc. in Economics	Rural Development
17.	Shri Ranjan Kanti Chatterjee	Faculty Member	Dip. in Mechanical Engineering	Rural Engineering
18.	Dr. Sarbaswarup Ghosh	Faculty Member	M. V. Sc. in Veterinary Science	Veterinary Bio-Chemistry
19.	Shri Panchkari Das	Faculty Member	Diploma in Mechanical Engineering	Rural Engineering

External Faculty Members

	Name	Designation	Field of Specialisation
1	Dr. Debabrata Dasgupta	Ex- Vice Chancellor, Bidhan Chandra Krishi Viswa Vidyalaya (BCKV), West Bengal	Agricultural Extension, Extension Management, Rural development, Human Resource Management
2	Dr. Dibyendu Sen	Ex-Director of Extension Education, BCKV, West Bengal and Former Faculty of NIRD, Hyderabad	Agricultural Extension, Participatory Development, Monitoring and Evaluation, Human Resource Management, Project Management
3	Dr. Rurpak Goswami	Lecturer, Integrated Rural Development & Management Faculty Centre under RKMV University	Agricultural Extension, Extension Management, Rural Development Management
4	Dr. Nasim Ali	Lecturer, Integrated Rural Development & Management Faculty Centre under RKMV University	Plant Genetics and Plant Breeding, Agricultural Bio-technology, Organic Farming
5	Dr. Debabrata Basu	Professor in Agricultural Extension, College of Agriculture, Visva Bharati University	Agricultural Extension, Participatory Development Agronomy, Weed Science
6	Dr. Rambilash Malik	Lecturer, Faculty of Agriculture, Oulcutta University	
7	Dr. Shankar Acharya	Professor of Agricultural Extension, BCKV West Bengal	Agricultural Extension, Communication, Participatory Development

External Faculty Members

	Name	Designation	Field of Specialisation
8	Dr. A.K. Roy	Ex-senior Executive of NABARD and Ex- principal of Training College of NABARD, Project consultant	Entrepreneurship Development, Agri-business Management
9	Sri Madhusudan Kundu	Ex-Director of SAMETI- West Bengal and Ex-Principal of Agricultural Training Centre, West Bengal	Agronomy, Rice cultivation technology, Watershed Management, Participatory Development
10	Dr. Hirak Banerjee	Lecturer, Dept. of Agronomy, BCKV West Bengal	Agronomy, Agroforestry, Organic Farming, Weed Management
11	Sri Ashish Hui	Deputy Director- Agriculture (Bio-control), Govt. of West Bengal	Organic Farming, Bio-logical control
12	Dr. A.K. Pani	Professor, Faculty of Marketing, Army Institute of Management, Kolkata; MBA Ex- Deputy General Manager and Head of Eastern Region, Agricultural Finance Corporation Govt. of India	Agriculture and Rural Marketing, Entrepreneurship Development, Strategy and Business policy
13	Sri Kalyan Maity	Agri-entrepreneur, Kontai, Purba Medidinipur	Agri-business and Agri-entrepreneur experience
14	Sri Prasanna Ash	Programme Co-ordinator (Education), SAHAY, MSc, MBA	Business Management, Project Management





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