

During the last one year of implementation of different field activities of APART by different ATMA, it is observed that by and large almost all ATMA are working hard to achieve the project objective of APART. Of course, as a first year of implementation, there were some implementation and operational issues for which project authority is trying to find out amicable solution so that ATMA can implement the field activities smoothly. Considering the Project Objective of APART, ATMA need to give more focus on Climate Resilient, Market Led Production and Post Harvest Management Value Addition etc.

IMPLEMENTATION OF DIFFERENT ACTIVITIES BY DIFFERENT ATMA_s UNDER APART

FIELD DAY ON BRINJAL DEMONSTRATION AT TAKIMARI VILLAGE UNDER BECHIMARI BLOCK (CLUSTER) DARRANG DISTRICT

ATMA, Darrang, organized a field day on brinjal crop on 2nd May, 2019, as a part of the Integrated Crop Management Demonstration (ICMD) at Takimari village under Bechimari Block (cluster) of the district. The field day was attended by demo farmers, nearby farmers and Block Technology Manager (BTM) and Assistant Technology Manager (ATM) of the block. Among the different extension tools used in Agriculture, Field Day is an important tool to compare the results of the demonstrated technology over the normal practice or technology and to show the farmers the benefit of demonstrated technology or practice. Generally, during the field day, all the nearby farmers of a particular demonstration site is invited to show the performance of the demonstration where a plot of 25 sqm. (5sqm.X5sqm.) is selected and crop is harvested and yield is calculated and compared with the normal practice. Similarly, the field day, at Takimari, was organized to show the results of the brinjal demonstration to the farmers, where the farmers were also explained the details of the technologies/practices used in the demonstration.



Field Day on Brinjal demonstration at Takimari village under Bechimari Block (cluster)

CAPACITY BUILDING (TRAINING) PROGRAMME OF BLOCK TECHNOLOGY MANAGERS (BTMS) AND ASSISTANT TECHNOLOGY MANAGERS (ATMS) BY AAU

As a part of the capacity building programme of extension functionaries under APART, a two-day training programme for the Block Technology Managers (BTMs) and Assistant Technology Managers (ATMs) of different ATMAs (districts) was organized by the Directorate of Extension Education (DEE), Assam Agricultural University (AAU), Jorhat on 6th and 7th May, 2019. The two day training programme was inaugurated by Dr. M. Neog, Associate Director of Extension, DEE, AAU and Dr. K. Pathak, Principal Scientist, Directorate of Research (DR) (Agri.), AAU, besides, scientists from DEE and DR imparted the training to the BTMs and ATMs. During the two day training programme, different topics, such as better crop management, disease management, pest management, new technologies introduced in Agriculture etc. were covered by the resource persons. This type of training is very much essential for the extension functionaries to upgrade their knowledge on the new cultivation practices / technologies, which in turn build their capacity regarding a new technology or practices. Now-a-days, due to advancement in the agriculture sector, different technologies and practices have been introduced in each crop by different organizations and without proper training and knowledge of these technologies/practices, it becomes challenging for the extension functionaries to convince the farmers to adopt these new technologies and practices.



Capacity building (training) programme of BTMs and ATMs

TECHNICAL TRAINING ON BINA DHAN-11 AT TULSIBARI UNDER RANGIA BLOCK (CLUSTER) OF KAMRUP DISTRICT

On 6th May, 2019, ATMA Kamrup organized a day-long technical training programme at Tulsibari village under Rangia Block (cluster) of Kamrup district in connection with the Integrated Crop Management Demonstration (ICMD) on Bina Dhan-11. The day-long training programme was attended by more than 30 farmers. The training was imparted by officer from IRRI, Block Technology Manager (BTM) and Assistant Technology Manager and other officers of the District Agricultural office. During the training, farmers were trained on different aspects of demonstration, such as scientific method of nursery raising, transplanting, disease and pest management and post harvest management etc. Before conducting a demonstration on a particular technology or variety, such type of training is crucial as the purpose of the demonstration is to disseminate the new technology or variety among the farmers.



Technical Training on Bina Dhan-11

VISIT TO INTEGRATED CROP MANAGEMENT DEMONSTRATION (ICMD) SITE ON BINA DHAN-11 BY DISTRICT AGRICULTURAL OFFICER CUM PROJECT DIRECTOR (PD), ATMA, NALBARI AND IRRI

On 9th May, 2019, Mr. P. Saikia, District Agricultural Officer cum Project Director (PD), ATMA, Nalbari and Dr. K. Singh, Resident Consultant, International Rice Research Institute (IRRI) along with other officers of ATMA, Nalbari and IRRI visited the different Integrated Crop Management Demonstration sites on Boro paddy, variety-Bina Dhan-in Nalbari district. This was as part of the regular inspection and monitoring of APART field level activities implemented by ATMA at Block (cluster) level. The demonstration is technically supported by IRRI. During the visit, the team interacted with farmers, field staff etc. Good crop growth was observed by the team.



Visit to Integrated Crop Management Demonstration (ICMD) by District Agricultural Officer cum Project Director (PD), ATMA, Nalbari and IRRI

REVIEW OF ATMAS ON PROGRESS OF APART ACTIVITIES BY SPD

As part of the state level monitoring and reviewing of the progress of the field activities of APART done by ATMAS, a series of review meeting was held in the month of May 2019. The first review meeting was held on 13th May, 2019, where 5 ATMAS (districts) viz. Nagaon, Darrang, Nalbari, Barpeta and Morigaon participated and on 14th May, 2019, the second review meeting was held where Kamrup ATMA participated and on 28th May, 2019 another 5 ATMAS viz. Golaghat, Goalpara, Dhubri, Cachar and Sonitpur were reviewed. The review meetings were chaired by Mr. Vinod Seshan, IAS, State Project Director (SPD) of ARIAS Society. During the review meetings, it was observed that some districts are yet to utilize maximum amount of fund released to them for implementing the project activities under different departments. Therefore, SPD instructed the concerned district officers to utilize the fund immediately and submit the utilization certificate (UC) at the earliest. During the discussion, it was also observed that some of the districts did not organize field days after the demonstrations due to which fund for field days remained unutilized, hence SPD instructed the districts to complete the field days linked with the completed demonstrations and submit the UCs immediately. He also instructed the team to start the procurement of Sali Paddy seeds, so that farmers can transplant the seedlings as per the timeline given by IRRI.



Review of ATMAS

TRAINING ON GINGER PLANTING AT DONKA BEY GAON UNDER LUMBAJONG BLOCK (CLUSTER) OF KARBI ANGLONG DISTRICT

A day long Technical Training programme on scientific Ginger planting was organized by ATMA, Karbi-Anglong on 16th May, 2019 at Donka Bey Gaon of Lumbajong Block (cluster) of Karbi-Anglong district. The training was organized as per the demonstration programme under APART. More than 20 farmers participated in the training. The training was given by the officers from the District Agricultural Office, Block Technology Manager (BTM) and Assistant Technology Manager (ATM) of the Block. During the training programme, scientific method of ginger planting was shown by the officers and explained the benefits of maintenance of proper spacing between row to row and rhizome to rhizome.



Training on Ginger planting at Donka Bey Gaon under Lumbajong Block (cluster)

TRAINING ON POST HARVEST MANAGEMENT AND MARKETING OF MAIZE BY ATMA, DARRANG

A day long Technical Training programme on Post Harvest Management and Marketing was organized by ATMA, Darrang at Sanowatari village of Sipajhar Block (cluster) of Darrang district on 18th May, 2019. The training was imparted by Mr. Sankar Nath, BTM, Sipajhar Block which was attended by both man and woman farmers along with local traders. During the training programme, farmers were trained on proper method of maize shelling along with proper method of storage etc. Both man and woman farmers showed interest during the training programme.



Training on Post Harvest Management and Marketing of Maize by ATMA, Darrang

FIELD DAY ON MAIZE DEMO AT GARAKHAT UNDER BECHIMARI BLOCK (CLUSTER) DARRANG DISTRICT

As part of the Integrated Crop Management Demonstration (ICMD) on Maize for the 2018-19, ATMA, Darrang organized field day at Garakhata under Bechimari Block (cluster) of the district. The field day was attended by demo farmers, nearby farmers and officers including District Agricultural Officer cum Project Director (PD), ATMA, Darrang, Deputy Project Director (Dy. PD), ATMA, Darrang, Nodal Officer, APART, Darrang, Block Technology

Manager (BTM) and Assistant Technology Manager (ATM) of the Block. Among the different Extension Tools used in Agriculture, Field Day is one important tool to compare the results of the demonstrated technology over the normal practice or technology and to show the farmers the benefit of demonstrated technology or practice. Generally, during the field day, all the nearby farmers of a particular demonstration site is invited to show the performance of the demonstration where a plot of 25 sqm. (5sqm.X5sqm.) is selected and crop is harvested and yield is calculated and compared with the normal practice. Similarly, at Garakhat also, the field day was organized to show the results of the demonstration; mainly the performance of the one maize variety, i.e. NMH-731 to the farmers and later on details of the technologies/practices used in the demonstration was explained to the farmers of the area.



Field Day on Maize demo at Garakhat under Bechimari Block (cluster)

TECHNICAL TRAINING ON BANANA DEMO AT CHAYGAON BLOCK (CLUSTER) OF KAMRUP DISTRICT

A day long Technical Training programme on scientific Banana cultivation was organized by ATMA, Kamrup on 24th May, 2019 at Chaygaon Block (cluster) of Kamrup district. The training was organized as per the demonstration programme under APART. More than 20 farmers participated in the training. The training was given by the officers from the District Agricultural Office, Block Technology Manager (BTM) and Assistant Technology Manager (ATM) of the Block. During the training programme, details cultivation method including banana sucker selection, sucker treatment, pit digging, planting method, pest and disease management etc. were explained by the officers.



Technical Training on Banana demo at Chaygaon

DLCC MEETING OF KAMRUP (RURAL) ON 30TH MAY, 2019

On 30th May, 2019, monthly meeting of District Level Coordination Committee (DLCC) under APART was held at the Office of the Deputy Commissioner (DC), Kamrup (R) which was chaired by Mr. Kamal Baishya, DC, Kamrup(R). The meeting was also attended by District Officers of the different implementing departments under APART. Deputy Commissioner first welcomed all the officers and reviewed the ongoing progress of different activities of APART implemented by different departments at the district level. He urged all the officers to implement the activities on time to achieve the targets as per the plan. He also requested all the officers to do for the betterment of farming community.



DLCC meeting of Kamrup (Rural)

TRAINING ON GOOD AGRICULTURAL PRACTICES (GAP) BY ATMA JORHAT



Training on Good Agricultural Practices (GAP) by ATMA Jorhat

As a part of the capacity building programme of farmers and extension functionaries under APART, a daylong training programme was organized by ATMA, Jorhat on 8th May, 2019 where farmers from Central Jorhat Development (Cipahikhola) Block (cluster) and Koilapani Development Block (cluster) participated. The focus of the training was to train the farmers as well as extension functionaries regarding better management and crop husbandry practices to get good production from their crops. The training covered the Good Agricultural Practices (GAP) to be followed for both kharif and rabi crops. Such good practices have been introduced, with an aim to reduce the different constraints in agriculture and allied sector faced by farmers. These trainings are aimed at boosting the confidence of the farmers in Agriculture and allied sectors.

STREAMLINING AGRICULTURAL CREDIT AND INSURANCE TRAINING CUM AWARENESS CAMPS BY DIFFERENT ATMAS

To enhance awareness among farmers for availing Agricultural credit and other financial products, such as crop insurance etc., the ATMAs from different districts organized training cum awareness camps during the month of May 2019. During these camps, officials from different banks, financial institutions, district Agriculture office, and ATMA attended the camps as resource persons. During these awareness camps, emphasis was given to link the farmers with banks and financial intuitions to avail the credit facilities and at the same time importance was also been given to make the farmers aware to responsible use of financial services.



Training on Good Agricultural Practices (GAP) by ATMA Jorhat

SUCCESS STORIES FROM THE FIELD

POTATO FARMING: AN INCOME BOOST FOR RURAL WOMEN

Submitted by ATMA- Kokrajhar

Two enthusiastic ladies Basanti Pandit and Kalpana Debnath, members of a Self Help Group of Bandarchara Village, Kokrajhar took up potato farming through the scheme provided by APART and implemented by ATMA, Kokrajhar. They took up potato farming after being trained by ATMA, prior to which they had never cultivated potato in their agricultural plots. The agricultural plots of Basanti Pandit (5 bighas), Kalpana Debnath (19 bighas), is equipped with shallow tube well for irrigation and they also had different modern equipments like sprayer, electric pump set and straw cutter which could be used for the cultivation. The ATMA team trained these women farmers on cultivating potato by adopting new technologies and techniques and organic manure.

The total investment for each of them was around Rs 24800/- (approx) and the total potato production was 472 and 353 quintal/ha for Basanti and Kalpana, respectively. The monetary return they got was around Rs 100/- per unit (B: C = 5:1). The harvested potatoes were sorted, graded and packaged for selling and the excess were kept for domestic use. In the local Basaugaon market, the potatoes were sold in between Rs 7- Rs 13, and in the wholesale market in between Rs 5/- Rs 10/-, depending on the size and quality of the potatoes.

Through this initiative of potato cultivation, though a new crop for the farmers has been well accepted and it is encouraging to see that many women farmers are taking up potato farming and getting good returns from the same.



Potato farms of Basanti Deb and Kalpana Nath

MAIZE- WAYS TO IMPROVED LIVELIHOOD

Submitted by ATMA , Darrang

The Village Garakhat is situated at a distance of 5 km away from Dalgaon town under Bechimari Development Block, Darrang district. Farming is the main source of income of the villagers. The farmers cultivate Rice, Vegetables, Jute etc. After the cultivation of vegetables, farmers either grow Jute or Boro Paddy in that area.

In 2011, when CSS ATMA was established at Bechimari Dev. Block, Ruhul Amin and other fellow farmers were attending training, exposure visit and different activities conducted by ATMA. They learned scientific cultivation of maize. Gradually, they shifted to maize cultivation from Jute and Boro Paddy in that area. Last Year, the area was half filled with maize and this year, the area is fully covered with maize.

During the exposure visit and training, the farmers from Dalgaon were briefed on the scientific cultivation of maize. And since 2018, they started cultivating JKH and other hybrid variety of maize and this year, they have cultivated NMH-731, under APART, and DKC (Own) in that area. By adopting the new innovative technology, they have produced Maize with an average yield of 10-12 qt/ bigha.

The success of Ruhul Amin and other farmers have encouraged the unemployed youth of the village which has led to the acceptance of the technology by many farmers.



Maize farmers of Dalgaon, Bechimari, Darrang

THE MUSTARD SEED CHARM

Submitted by ATMA, Jorhat

Srimati Sewali Bor Koch of Kumar Gaon, Teok ADO Circle, Kaliapani Dev. Block, Teok in Jorhat district earns her livelihood by selling mustard pods and oil. She has been a member of Joymoti Self Help Group since seven years and has experience of cultivating crops of Mustard, Paddy Cultivation, Handloom and Rabi Cultivation.

During the period of 2018-19, Sewali Bor Koch was chosen as a beneficiary for Mustard Cultivation under APART scheme, under the, Kaliapani Development Block, Jorhat. High yielding varieties of Mustard seeds were given for 0.75 ha of land. Other than that, better supervision during yielding and use of good agricultural practise were also provided. After the intervention from Department of Agriculture, Jorhat under APART and use of TORIA (TS 36) mustard seed variety, She earned almost 8.9 qt/ha, also thanks to the implementation of improved production technologies as compared to 6 qt/ha to previously practised traditional system. The cost of production also increased to 14793 per ha from 12000(Approx). Moreover, the net profit per ha also amplified to 28498 from 15600 per ha.

The farmer following the use of new marketing strategy, like – Access to market (through Private, Cooperative,

Contract farming etc.) has sold Rs 3200 per Quintal in the local market. The farmer earlier used to grow local mustard varieties which gave smaller pods which in turn yielded low oil. Moreover, buyers were not offering good prices for the mustard seeds in the market. Also, these local varieties were susceptible to lodging. However, TS 36 yielded 10% more oil compared to the traditional Mustard varieties and the seeds fetched better price in the market due its bigger size. Now, the farmer is also open to new technologies and is keen to value add to her harvest. Oil extraction mills might be an answer to this.



Sewali in her mustard farm



Sewali Koch with the technical experts

A snapshot of the Annual income before and after the intervention is given below:

Details of result obtained due to the adoption of technologies (Season-wise Crops grown, techniques adopted, results achieved etc.		Improved/ Present Production Technologies 2019	Traditional/ Pest Production Practices 2018
i	Mustard Production (q/ha)	8.9 qt/ha	6 Qt/ha
ii	Cost of production per hectare(Rs.)	14793	12000(Approx)
iii	Net profit per hectare (Rs.)	28498	15600
vii	Product, Quality Improvement	Better Quality, Higher Yield	Quality, Lesse Yield.
	Marketing Strategy – Access to market (through Private, Cooperative, Contract farming etc.)	Sold @ Rs 3200 per Quintal in the local market.	

SEEDING HIS WAY TO A MADHU (r) CULTIVATION Submitted by ATMA, Jorhat

Sri Mithilal Pegu, S/o Thikaram Pegu of Bhushkhati village under 40 G.P in Jorhat District earns his living by selling vegetables. He lives with his wife and two children.

In 2018-19, Mithilal Pegu was selected as a beneficiary for pumpkin cultivation under APART Scheme , under Dhekorgora Development Block,Jorhat. Pumpkin seeds were given for 0.25 ha of land. Fertilisers and pesticides were also provided to the beneficiary for the demo.

He earned almost 7600 kg from 0.25 ha of land in average yield of 28,500 kg per ha of land. Initially, he cultivated local variety of Pumpkin and his production was not satisfactory. But, this year, with the intervention from Department of Agriculture, Jorhat, under APART, he cultivated Madhu variety of Pumpkin and got an average income of Rs. 3,70,500 per ha.

The farmer had never got this kind of harvest before, as till date he was growing only locally sourced Pumpkin seeds, which had poor germination and low yield.

A snapshot of the Annual income before and after the intervention is given below:

Year	Production Before intervention(kg per ha)	Production After intervention(kg per ha)	Income (Rs 13 per kg)
2019	-	28,500	Rs 3,70,500
2018	20,475	-	Rs 2,66,175
2017	20,362.5	-	Rs 2,64,712.50
2016	19,350	-	Rs 2,51,155



Pumpkin cultivation of Mithilal Pegu

INNOVATIVE WOMAN FARMER TEACHING LESSONS ON SMART MARKETING IN TEZPUR



Sulema in her potato farm

Sulema Khatun, wife of Nurul Islam is a progressive woman farmer from Jorgarh village. This village is situated under Gabhoru Development Block of District Agricultural office in Sonitpur. Although professionally a teacher of a private school, agriculture has been her hobby since her childhood. Now, at 32 years of age, she is helping her husband in the cultivation practices of their own. She has two children, for whom they are dreaming for higher education in the near future, with the income reaped only from their agriculture practice. Sadly, although their production is ample, but due to unavailability of local markets, they are not able to acquire a visible profit.

Thanks to her innovative nature, Sulema has now adopted to *zero tillage potato cultivation variety of Kufrijyoti and Kufri Pokhraj* under APART demonstration 2018-19. Initially, she was trained by Agricultural Technology and Management Agency(ATMA) , Sonitpur and International Potato Center (CIP) scientists for this demonstration. Zero tillage potato cultivation is a completely new concept for this locality. After acquiring knowledge, skill and attitude, she has performed a successful demonstration, which was profitability in terms of returns.

The ambitious farmer has been able to harvest a total production of **23.96 qntl.** of potatoes from zero tillage plot of **0.1 hac** and **6.97 qntl** from conventional tillage of **0.05 hac area**. As APART is related to Climate resilience and market led production , therefore ATMA ‘Gabhoru’ has tried to give a market linkage of their produce with the market available at Tezpur Town, where they could get a price of **Rs 14/kg** of potatoes, as compared to **Rs 8-10/kg** of potatoes at their nearby market . And therefore, they are now able to procure a total income of **Rs 43,302** and net profit of **Rs 29,090/-**from their total potato production. This demonstration has been successful not only in terms of income maximization, but also in the context of ‘diffusion of innovation’ to the nearby farmers, who are now willing to adopt this practice at next crop season.



Field day at Sulema’s farm

Convener, Block Technology Manager- ATMA, and CIP Scientist has made frequent visits to the demonstration site to make the demonstration a successful one. District Agricultural officer and Nodal officer APART Sonitpur along with CIP Scientist from Germany visited the plot to encourage her.



Visit by CIP scientist to the farm

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