

KRISHI RUPANTAR

Assam Agribusiness and
Rural Transformation Project
APART

Monthly
E-Newsletter

Issue 15 | August 2020

Content compiled and published by
APART, ARIAS Society

Message

Of the State Project Director

Respected Readers,

Namaskar,

I am glad to share the 15th edition of Krishi Rupantar, a compilation of success and inspiring stories from across the APART districts.

APART in collaboration with its International Knowledge partners namely, International Rice Research Institute (IRRI), International Potato Centre (CIP), International Livestock Research Institute (ILRI), World Vegetable Centre (WVC) and World Fish have taken up demonstrations on different climate-resilient varieties and technologies besides building the capacity of our beneficiaries at different levels.

In this issue, we have compiled success stories on multi-cropping, conservation agriculture, integrated pest management (IPM), use of technology and farm mechanization, on how these initiatives have helped our beneficiaries.

With an objective to bring about a change in the agriculture ecosystem of the State, we at APART look forward to the support of all our stakeholders.

Thank you.

Laya Madduri, IAS
State Project Director,
ARIAS Society

CULTIVATING PUMPKINS WITH A PURPOSE

A farmer demonstrates some new practices to safely produce a healthy, vigorous crop of pumpkins—and gets some beans as a bonus!

When a farmer has grown vegetables for more than 20 years, it seems there would not be much more to learn or try in pursuit of a better crop.

That wasn't the case with Prodig Hazarika, a 46-year-old farmer who lives with his wife and two children in Bhokotgaon village, Koliapani Development Block, Jhanjimukh, Jorhat, India. By using new methods to produce pumpkin, a favourite crop in the area, Hazarika carved out a special niche for himself in his community.



Hazarika with WorldVeg and ATMA officials

A team from the Assam Agribusiness and Rural Transformation Project (APART), with technical support from the World Vegetable Center (WorldVeg), approached Hazarika in 2019 and invited him to cultivate pumpkin on a climate-resilient demonstration plot. The demonstration aimed to show the differences between agricultural methods promoted by WorldVeg and the traditional practices farmers use in their fields.

Under the supervision of ATMA, Jorhat and technical guidance of World Vegetable Centre (World Veg), Hazarika planted pumpkin on a 0.15-hectare field for the demonstration. He also implemented three improved production practices: seed trays, intercropping, and sticky traps to foster better plant growth, increase returns, and minimize his dependency on synthetic fertilizers.

Seed trays for healthy seedling production

Planting seed in trays with individual cells allowed Hazarika to closely monitor his seed use. Hybrid seed is expensive and farmers want every seed they purchase to result in a robust, healthy seedling. He filled the seed trays with sterile planting medium free from soil-borne diseases. “I used to sow the pumpkin seeds directly into the soil, but the plants often lacked vigour and were plagued with diseases,” said Hazarika. “This year, after receiving the training from APART, I was enlightened about this new seed tray technique and I have seen a difference in the growth and vigour of my plants compared to last year.”

Intercropping for impact

APART and WorldVeg teams introduced Hazarika to intercropping: the practice of growing two or more crops at the same time on the same field. The goal is to produce a higher yield (and income) from a given piece of land through more efficient use of resources and agroecological processes. Intercropping also reduces a farmer’s risk by insuring against crop failure; if one crop fails from pests or diseases, the other may continue to thrive.

“In the training, it was recommended to plant six rows of French bean as an intercrop between the rows of pumpkin,” Hazarika said. “This practice was new to me and has helped me to gain more returns from my field.”

Hazarika harvested 4.8 quintals of French bean from his demonstration plot, which was sold at a price ranging from Rs 20-25/kg. This yield helped him to get some bonus returns in addition to the returns from his main crop, ‘pumpkin’. He was also made aware of the use of yellow and blue sticky traps to manage pests and diseases and control the use of pesticides.



Intercropping: French bean as an intercrop between the rows of pumpkin

Success in the field pays off with a good harvest!

Hazarika harvested 37.35 quintals of pumpkin (3.735 tonnes) from his WorldVeg supported demo plot, which he sold at an average market price of Rs 30–35 per piece. While on the other hand, from his control plot he harvested 26.12 quintals (2.612 tonnes) of produce. Following the interventions suggested by WorldVeg, Hazarika found a difference of 11.23 quintals of pumpkin between both his plots. “I am very happy with the harvest of my pumpkins. Amidst the COVID 19 lockdown, I managed to sell my pumpkins at Rs 30–35 per piece. The hard work which I had put regarding the adoption of these improved production practices finally turned out to be fruitful for me.” said Hazarika.

Seeing Hazarika’s success, other fellow farmers in the village has also enquired him about these improved production practices and they are now planning to adopt such good agricultural practices.

*Story by: Angshuman Bezbaruah, Technical Officer, World Vegetable Center
– APART Project, Assam*



Hon'ble CM, Shri Sarbananda Sonowal, releasing the booklet on “Climate Resilient Short duration Fish Culture Technology” under APART and implemented by College of Fisheries, Raha

35TH GOVERNING BODY MEETING OF ARIAS SOCIETY

The 35th Governing Body meeting of the Assam Rural Infrastructure and Agricultural Services (ARIAS) Society was held on 25th August 2020 at the Assam Administrative Staff College, Khanapara. The meeting was chaired by Shri Rajesh Prasad, IAS, Agriculture Production Commissioner (APC), Govt. of Assam, also the Chairman of ARIAS Society.

APART is being implemented in 24

districts and adopts a value chain and cluster approach to achieve the targeted project objectives. APART is being supported by Agriculture & Horticulture, Assam Agriculture University, Industries & Commerce, Animal Husbandry & Veterinary, WAMUL, ASWC, ASAMB, Fisheries, Handloom, Textile & Sericulture, PWRD & P&RD departments of the State Government in implementing the Project activities.



Shri Rajesh Prasad, APC, Govt of Assam and Chairman ARIAS Society presiding the GB meeting



Officials from Implementing Departments attending the Governing Body meeting

Laya Madduri, IAS, State Project Director (SPD), ARIAS Society, presented the status of APART followed by presentations of the respective departments on the implementation status of their field-level activities. SPD also highlighted on the Kshyamata initiative launched by APART for empowering Agri enterprises of Assam. The initiative is designed to encourage, promote and support Agri Enterprises in Assam and a total of 1300 Agri

entrepreneurs will be supported, through capacity building and guidance, in 4 years duration. Successful interventions on paddy-fish and polyculture by the

Department of Fisheries through APART were appreciated. These interventions have helped farmers increase their income. During the meeting, it was also discussed that the area of beel fisheries needs to be expanded as the intervention has helped the farmers get additional income, through multiple harvesting of small indigenous fishes, which also has high nutritional value. Shri Rajesh Prasad, IAS, APC, encouraged the Project to document the good practices of the successful interventions and replicate them so that the farmers get maximum benefits.



VCS members showcasing their potato value added products during GB meeting

The members of Milijuli Value Chain School (VCS) from Bezkuchi village under Bajali block, Barpeta district displayed various potato value-added products, like potato pickle, potato khurma, potato bhujia etc, which were appreciated by the members present in the meeting. The VCS is an initiative of APART, Department of Horticulture and International Potato Centre (CIP) - International knowledge partner of APART.



Participants from the Implementing departments attending the 35th GB meeting of ARIAS Society

The meeting was attended by Shri Rakesh Kumar, IAS, Secretary, Fisheries, Shri Gaurav Bothra, IAS, Commissioner & Secretary, Handloom Textiles & Sericulture, Shri Manoj Kumar, IAS, Director- Agriculture, Shri Oinam Saran Kumar Singh, IAS, Commissioner, Industries & Commerce, Department Heads, Senior Officials and Nodal Officers (APART) of all the implementing departments

besides representatives from International Knowledge Agencies - International Rice Research Institute (IRRI), International Livestock Research Institute (ILRI), International Potato Centre (CIP), World Fish and World Vegetable Centre (WorldVeg) and external Consulting Agencies of APART.

APART TO POPULARISE FRESHWATER PRAWN CULTURE IN ASSAM

Under the World-Bank aided, Assam Agri-Business and Rural Transformation Project (APART), the Department of Fisheries, Assam has started Freshwater prawn polyculture Demonstrations with the technical support of WorldFish, Malaysia to be taken up in 80 Beneficiary ponds covering 21.54 ha in 3 Districts, namely Kamrup (M), Nalbari and Goalpara.



Hon'ble Minister of Fisheries distributing prawn seeds to farmers for fresh water prawn cultivation

The Hon'ble Minister of Fisheries, Government of Assam Shri Parimal Suklabaidya, on 31st August 2020, formally released the prawn seeds and distributed inputs during a function held at Bagibari Village in Dimoria Development Block, Kamrup (M). The Minister explained that the net annual profit from 2.0 Bigha carp polyculture is 1.30 Lakh, where the expected annual profit of Polyculture of Freshwater prawns with Carps is about 1.80 Lakh, where the additional profit of Rs 0.50 lakh by stocking freshwater along with carps. Freshwater prawn farming is an environmental friendly aquaculture farming system and State's agro-climatic condition is suitable for freshwater prawn production. Carp-prawn farming will flourish in a big way and will boost the confidence of the rural youths, mainly the migrated labours due to COVID pandemic for coming forward in freshwater prawn-fish polyculture system, the Minister added.

Traditional farming of freshwater prawn was practised in different parts of the country in a very limited area relying on riverine seed collections and seeds from natural resources. Commercial freshwater prawn seed production in many of the coastal states has now made it possible to expand the freshwater

prawn farming in different parts of the country. Giant freshwater prawn (*Macrobrachium rosenbergii*) is introduced in the APART Project demonstrations along with Catla, Rohu, and Grass Carp in polyculture system.

Carp-prawn polyculture is practised based on the principle that the food materials available in the water body are fully utilized, waste is minimized and profit per unit area is increased. The freshwater prawn has a very high market value, is preferred by consumers in Assam besides having good export potential.



Explaining the technical aspects of this intervention under APART, Sri N. K Debnath, Director of Fisheries informed that this farming of freshwater prawn along with carps will be successful in the state as freshwater prawn has vast market demand and will help to increase the income of the farmers.

Dr Dhruvajyoti Sharma, Nodal Officer, APART explained that by introducing freshwater prawn in fish culture system in existing ponds of the fish farmers, where traditional pisciculture farming is practised, will enable APART to develop a Fishery Model Block on cluster approach.

Shri Sanjib Choudhury, District Fisheries Development Officer, Kamrup (Rural) and Dr Sanjay Sarma, Fisheries Coordinator, ARIAS Society added that the freshwater prawn culture is initiated as per Annual Work Plan of 2020-21 under APART. It is also planned to organise harvest day as well as buyer-seller meeting in the villages where successful demonstration of the Carp-prawn polyculture are taken up so that the nearby farmers can also learn about the production as well as the benefits of prawn farming. The farmers will also be linked to the banks through Kisan Credit Card (KCC) for procuring prawn seeds and feed so that the farmers are encouraged to continue carp-prawn polyculture.

INTERVENTIONS OF INTEGRATED PEST MANAGEMENT (IPM):

TRANSFORMING FARMERS LIFE IN CACHAR

World Vegetable Center (WorldVeg) has been carrying out demonstration trials in vegetable crops within the framework of the “Assam Agribusiness and Rural Transformation (APART) Project” to popularize climate-resilient cropping practices to local farmers in Cachar district. It was found that the farmers completely rely on chemical pesticide solutions to tackle the pest problems, which in turn harm the crops, consumer and environment, altogether. Therefore, in all the demonstrations scheduled for 2019-20, IPM has introduced and various IPM components which have given better solutions and also comparatively reduced application of chemical pesticides. Various IPM components:

- » Pheromone traps
- » Trap crops
- » Yellow and Blue sticky traps
- » Border crop (Maize)
- » *Beaveria bassiana* (a fungus that kills Lepidopteral insects)
- » Neem oil

During 2019-20 demonstrations, taken up with the collaboration with Dept. of Agriculture Cachar, various trainings to the farmers were conducted to understand and use these IPM components, and the same had a positive response from the farmers of Cachar.



Boshir with his pumpkin harvest after the use of pheromone trap technology to control pests



Installation of Blue and yellow sticky traps has reduced chemical spray for sucking pests

Mr Boshir Ahmed Laskar, a progressive farmer from Banskandi block who was growing pumpkins since past two decades used to spray chemical pesticides but never got complete control on fruit flies and had to face yield loss, but this year after placing pheromone trap in his pumpkin plot he got a better result and was very much happy and said this technology has given him a chance to grow pumpkin without making a loss due to fruit flies.

The installation of Blue and Yellow sticky traps has reduced the chemical spray for various sucking pests such as whiteflies and thrips, application of Neem oil and Beauveria on need base has given complete protection from other insect pests to maximum extent. Farmers of Cachar now have a better option to avoid the use of chemical pesticides to protect their crops and also a great opportunity to produce safer vegetables for the consumer.

Submitted by: Souradeep Acharjee, Technical Officer, World Vegetable Center

TRAINING WORKSHOP FOR MENTORING GOVT. PIG BREEDING FARMS

To improve the piggery sub-sector in the State, the Govt. Pig Breeding Farms need to spearhead the initiative by supplying quality germplasm to large commercial as well as smallholder pig farmers. This would happen only if the Govt. Pig Breeding Farms keep good quality breeding stock, follow scientific breeding methods, keep necessary records, follow good feeding, healthcare and management practices and create and maintain the infrastructure that satisfies the need of efficient farm operation. Keeping this in view, capacity building of Farm Managers of Govt. pig breeding farms are envisaged under the APART in Assam.



Participants of the training

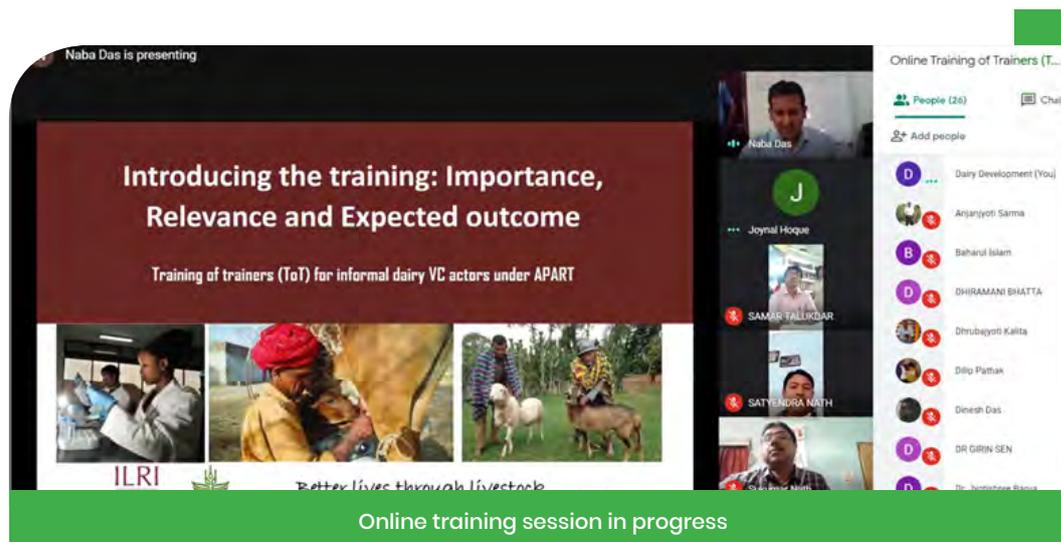
As a part of this, International Livestock Research Institute (ILRI) delivered training to the Farm Managers, Govt. pig breeding farms and some officers associated with APART organized by the A.H. & Veterinary Department at the Regional Institute of Livestock Entrepreneurship Management (RILEM), Rani, Kamrup (M), Assam. The training was inaugurated by Mr N.N Mahanta, Director of RILEM, Rani. The main resource persons for delivering the training were Dr Ram Pratim Deka, Scientist and Research Programme Coordinator of ILRI, Dr Madan Tamuli, retired Principal Scientist of NRCP and Dr Naba Kumar Das, Consultant of ILRI.

TRAINING OF TRAINERS (TOT) PROGRAMME FOR INFORMAL DAIRY VALUE CHAIN

Under APART, ILRI delivered the first and second phase of training of trainers (ToT) of informal dairy value chain actors, namely milk producers, milk traders, milk sweet makers and milk cottage processors. The ToT was kick-started on 23rd July 2020 with the inaugural address by Shri Shyam Jagannathan, IAS, Commissioner and Secretary to the Govt. of Assam, AHVD and welcome address by Director of AHVD Shree Ashok Kr. Barman, ACS and Director in-charge of DDD, Shree Utpal Kumar Sarma.

The programme was organized by the Dairy Development Department, Assam in an online mode via Google-meet. The first phase of ToT started with the Informal milk producers module on 23rd July and ended with cottage processors module on 12th August 2020, similarly second phase of ToT started on 19th August 2020 and ended on 4th September 2020. The first phase of training created a group of 26 resource persons (15 nos. of Veterinary officers & 11 nos. Dairy officers, Male=19, Female=7) and the second phase created a group of 23 resource persons (18 nos. of V.O. & 5 nos. of D.O. (Male=20 & Female=3) who will later conduct the field training for the informal value chain actors in 11 APART districts namely Kamrup, Golaghat, Nagaon, Karbi Anglong, Cachar, Barpeta, Darrang, Dhubri, Goalpara, Kokrajhar & Nalbari. The topics covered for imparting training of the selected resource persons from Directorate of Dairy Development, Assam and Animal Husbandry and Veterinary Department were the elaborated key aspects of the four customized training manuals (training manuals for smallholder dairy farmers, milk traders, sweet makers, and

cottage processors) along with teachings on the adult learning techniques and training protocol for rolling out the field training. Learning from training protocol and adult learning technique was to uniformly impart field training by these resource persons across sites. The key resource persons from ILRI were Dr Ram Pratim Deka, Scientist cum Research Programme Coordinator, Dr Naba Kumar Das, Consultant and Dr Baban Bayan, Scientific Officer. Just before conducting the training sessions and immediately after finishing the last session of dairy farmers' training manual participants were asked to evaluate the outcome of the training in terms of knowledge gained and overall quality of the training delivery using a prescribed format. The training evaluation suggests that training was highly successful. Participants mentioned the training as highly useful by rating an average score of 9 on a 10 point score. The relevance of the topics discussed is rated as 9.16 and appreciated the delivery quality of the resource persons rating the score of 9.15 out of 10. Participants acknowledged the overall quality in arrangements of the training in online mode by scoring an average point of 8.89.



Online training session in progress



Distribution of certificate to participants of Online ToT

MINI TRACK-TYPE COMBINE HARVESTER: A NEW HOPE FOR ASSAM FARMERS

In Assam, during the harvesting period of Boro and Ahu rice, farmers have to face the incessant pre-monsoon rains. In the Sali season too due to heavy rainfall, harvesting gets delayed leading to over-maturity of crops, causing heavy shattering losses that eventually decreases the quality and quantity of the yield. The shortage of labour for harvesting also comes as an additional challenge for the farmers.



Mini combine harvester in the field

To address this problem, mini track-type combine harvesters have been introduced in Assam under the Assam Agri-business and Rural Transformation Project (APART) in Kamrup and Jorhat districts by Assam Agricultural University (AAU) with technical support from the International Rice Research Institute (IRRI). The major advantages of the Mini combine harvester are:

- » The machine has a provision of a track-type wheel system, to facilitate easy operation in a wet field condition, where a full feed combine harvester is unable to operate.
- » By using this type of combine harvester, farmers get a full-length straw, like in the manual harvesting, which gives additional monetary support to farmers.
- » The half feed threshing system in this harvester has two additional benefits:
 - Less impact force on the grains results in <1% broken grains in threshed paddy (In full feed combine harvesters, it generally varies between 10-12% of broken grains).
 - The straw is smooth and easy for chewing for the cattle.
- » The machine has provision for harvesting, threshing, and cleaning paddy, wheat and barley.

A demonstration of the mini combine harvester was organized at village Nizhardia, Hajo, Kamrup involving 30 farmers, where Dr Kanwar Singh and Mr Jyoti Bikash Nath of IRRRI explained the features and benefits of the newly introduced combine harvester to the farmers. Unlike the big combine harvester, the mini combine harvester can harvest crops on small plots (less than 1 ha), as it can take turn easily in small fields. During the demonstration, the paddy field had 2 feet of standing water where generally the farmers use boats to haul their paddy stalk. Farmers got motivated when the machine harvested the paddy in the standing water. During the demonstration, it took around 45 to 60 minutes to harvest 1 acre of land (Average 15 minutes per bigha). Fortunately, a big combine harvester was also operating near the demonstration site, which helped the farmers compare the features of both the harvesters. The farmers noticed that the mini size combine harvester is best suited for their fields, as it can be moved easily in small fields too.

Dr D. N Kalita, Head, KVK Kamrup expressed his satisfaction and explained to the farmers that the trackwheel and small size of this combine harvester suited the requirement of small/ marginal farmers of Assam.

Mr Gautam Deka, a farmer from Nizhardia, Hajo said, “During Boro season we have to harvest paddy by rowing a boat. Every year, we used to hire a big size combine harvester is brought to our village from West Bengal to harvest the paddy. But the challenge is that the harvester can’t provide us full-length paddy straw which is required for our cattle. This season, I harvested 3.5 bighas of paddy using the mini combine harvester. We could get the paddy straw in the desired size and also experienced that it harvested one bigha of paddy in 15 minutes. We are happy to see that the mini combine harvester performs all the operations i.e. harvesting, threshing and cleaning at one go, and we expect such a machine to operate in our field every season!!”



Demonstration program on Combine harvester by KV Kamrup

CLIMATE RESILIENT TECHNOLOGY UNDER APART-CIP POTATO VALUE CHAIN: SUCCESS STORY OF A WOMAN FARMER

Women play a critical role in potato cultivation and the rural economy as farmers and entrepreneurs. They add to the family income through their participation in the potato cultivation and small-scale value addition. Conservation Agriculture (CA) based potato cultivation is based on three principles: minimum soil disturbance, no-tillage or zero-tillage, residue retention of previous crop and crop intensification



Rijumoni in her Potato demonstration plot



Comparison of potato growth CA-based technology vs conventional (January 18, 2020)

Smt. Rijumoni Deka, a women beneficiary under APART received training from APART and ATMA officials for zero-tillage potato cultivation. The team visited her field, on a regular basis and guided her during the entire process of potato cultivation using a new technology. This was her first experience of growing any crop without tilling the soil. She was surprised by the yield of 23.35 Tonnes/Ha from zero tillage demonstration plots and is very happy about the new knowledge she gained and appreciated the technology introduced by APART to improve their livelihood.

Before the introduction of this technology, the Paddy fields in Bezkuchi village usually remained fallow. However, after the successful introduction of this technology, farmers of the village could think of growing potatoes after Kharif Paddy instead of keeping rice field fallow during Rabi season. This technology is also a good method of straw management and sustainable use of resources.



Imparting technical training on Conservation Agriculture based Zero-tillage potato planting



Potato harvest of the demonstration of Conservation Agriculture based Zero-tillage

The farmers of Bezkuchi village were highly impressed and motivated by the CA-based Zero-tillage potato planting due to its huge cost saving in land preparing and harvesting, absence of weeds and no requirement of earthing-up, low incidence of pests, delayed late blight incidence, less labour requirement and increased cropping intensity with efficient utilization of natural resources. Srimati Rijumoni Deka has set an

example and also motivated her fellow farmers to try Zero-tillage in the kitchen garden as well as in the fields.

Submitted by: Dr Minsura Begum District Horticulture Coordinator, APART, Barpeta

PROFITS FOR POTATO FARMERS OF GINGIA

A study of the benefits of potato cold storage

Potato prices have surged more than 70 per cent since April 2020 as production fell in key potato-growing states like ; Uttar Pradesh, West Bengal, Gujrat, Bihar, Madhya Pradesh & Punjab and demand has soared amid the Covid-19 pandemic. Potato production in Assam is ranked 9th in the country. However, potato consumption is increasing in Assam, as well. Traders and cold storage owners in Uttar Pradesh, the largest potato producer in the country, said prices will remain firm at least till January 2021. The demand for potato in the Indian kitchens other vegetables and can be blended with any vegetables.

In a recent meeting on Seed awareness organised by the International Potato Centre (CIP), technical knowledge partner of the Assam Agri Business and Rural Transformation Project (APART) with the potato farmers of Gingia, who are members of the CIP initiative 'small farms' large field' as well as APART demonstration beneficiaries, the key points that emerged were that the farmers have earned a very good profit by storing potatoes this season. Gingia block has a cold storage and farmers had stored around 45000 bags (50 kg in each bag) of ware potatoes in the cold store. Before storage, the average potato price in March was Rs 11 per kg. Potato prices have risen throughout India and by August-September 2020, the farmers could sell around 20000 bags of potato in the market for ware consumption. The traders have purchased the potatoes directly from the farmers at the rate of Rs 24 to 28 per kg. Another 5000 bags were sold at the rate of Rs 29 per kg.

The Potato farmers of Gingia block are very happy to get good returns after many years. The upcoming season for potato plantation starts from October, the farmers are looking forward for good price atleast around Rs 50/kg for the potato seed. Keeping in mind the high seed price in view, farmers have decided to use the remaining stored potato (about 20000 bags) as seed for the upcoming season.

Finally, this year the potato farmers of Assam are getting higher benefits from the king of vegetables i.e "Potato".

Table: Additional benefits in the selling of cold-stored potatoes by the farmers

Particular	2019		2020	
	Mar-19	Sep-19	Mar-20	Sep-20
Price at harvest (Rs/kg)	4.5	-	11	-
Stored in cold storage (ton)	5200	-	2340	-
Sale price of cold store potatoes (Rs/kg)	-	7	-	26
Additional Benefits from stored potatoes (Rs)	-	1,30,00,000	-	3,51,00,000



Potato price (Rs 32/ kg) at Nayantara supermarket, Six-mile Guwahati



Meeting with Potato farmers of Gingia with the CIP team

Case reference: Meeting with Gingia farmers & reported By Dr Brijesh Kumar, Agronomist & Post-Harvest Specialist, International Potato Center)

VIRTUAL MISSION OF APART CONDUCTED BY WORLD BANK

The virtual review mission of APART (Component wise) is being conducted through Webex by the World Bank from 24th July onwards and is scheduled to be continued till September 2020. The meetings were conducted with the State Project Director, PCU officials, implementing departments, International agencies of APART, and Consultancies.

The progress of each activity was presented and also different challenges faced by the implementing departments were discussed with the Consultants from the World Bank.

The virtual mission was conducted due to the present pandemic conditions across the globe.



JOINT ACTIVITIES FOR TRUST BUILDING

Grant Thornton India LLP has been working as the Cluster Development Technical Agency under the ambit of Assam Agribusiness & Rural Transformation Project (APART) to form 17 cluster-based Industry Associations (IAs) in Assam for the development agro-based industry in the State.

The prime objective of the formation of an Industry Association is to bring in industry enterprises together and to give them a formal platform for interaction to discuss different issues related to the growth of the enterprises. To bring enterprises together, it requires a lot of trust and social capital among them. To enhance the trust and social capital among the enterprises' joint initiatives, such as joint procurement of raw materials, consumables for processed products, joint marketing, engaging the BDS provider, policy advocacy, collaboration with other institutions which can contribute to the growth of enterprises are considered essential.

Awareness about the concept of ‘Joint Actions’ has been generated through seminars/workshops, seminars with the service provider along with successful groups who have done similar initiatives are undertaken and a small group of enterprises (initially 5-10) is evolved to undertake the joint action. To carry out these joint actions, the groups shall be constituted as a legal entity in the form of Partnership firm, LLP, etc. as per the requirement of the group. These groups can procure raw material, packaging materials, consumables, engage BDS provider for various services related to compliance etc, and also engage in joint marketing, procure technology for value addition which can contribute to the growth of their businesses.

Sonitpur Procurement Consortia: A Success Story

The enterprises in the fruits and vegetable value chain used to procure packaging materials individually and had faced the following issues:

- » Small quantities not exceeding 500 pouches per order
- » Bulk purchase was not done as the procurement was done as and when necessary
- » High Price
- » Not readily available in the local market
- » Time consumption, transportation cost as it had to be procured from Guwahati
- » No scope for negotiation

The GT team at Sonitpur discussed ways of mitigating these issues through joint activities and encouraged the entrepreneurs in the Fruits & Vegetable Value chain on the scope of procuring better quality packaging materials at competitive prices, in bulk. The team identified and reached out to various vendors within Assam and outside, collected samples, held pocket meetings with the entrepreneurs to discuss the quality and quantity of the requirement, accordingly prices were evaluated. A group of 12 entrepreneurs agreed to procure packaging materials jointly and a procurement consortium was formed. These 12 entrepreneurs entered into a partnership deed, legalized their consortium, a current account was opened for the financial transactions. The packaging materials were procured from M/s. Yashvi Enterprises in Mumbai after careful evaluation of bids received from several suppliers. The members of the consortia will in the future work as a BDS provider for other entrepreneurs who would want to procure similar packaging materials.

Cost-Benefit Analysis

SN	Particulars	% incurred	Margin before joint procurement
1	Raw materials	30	35%
2	Labour cost	15	
3	Packaging materials	15	
4	Marketing cost	5	
Cost of production		65%	

By bulk procurement of packaging materials, the entrepreneurs were able to save at least 25 % on packaging materials. This savings led to an increase in the profit margin to 38.75 % from 35%.

Methodology to Scale up to other enterprises:

Once the entrepreneurs procured the packaging materials jointly and were able to earn more profit, they spread the news about the same and reached out to others to take similar benefits through the consortia. In the recent future, the GT team is targeting to bring in all the enterprises in the fruits and vegetable value chain to be benefitted through these joint initiatives.

Similar groups have been evolved in Districts like Morigaon, Nagaon, Karbi Anglong, Nalbari, Kamrup etc. where enterprises are jointly procuring consumables like packaging material, raw material etc. CDTA has successfully evolved groups of enterprises in project Districts for joint procurement of consumables, micro public mills for joint marketing, enterprises have jointly engaged a CA for filing of income tax return, filing applications under AFCSCSCL scheme etc. More than 120 numbers of enterprises across various Districts have been benefitted through joint actions as on 31st August 2020.

The consortia that are formed in the APART districts so far are on procurement, compliances and marketing. In the procurement consortium, the entrepreneurs will concentrate on procurement of raw materials, packaging materials, consumables etc. In the compliances consortium, the entrepreneurs will concentrate on getting BDS services such as tax returns, GST registration, filing of GST, assistance in availing PMEGP loans, preparation of Detailed Project Report etc. jointly through discounted service charges. However, in the marketing consortia, entrepreneurs will concentrate on jointly marketing their products; identify new markets, creating marketing linkages for their products etc.

Recently, many activities were carried out in various districts under joint actions such as procurement of packaging materials in the Districts of Sonitpur, Morigaon & Nalbari; procurement of raw materials such as mustard oil by fruits and vegetable entrepreneurs in the Kamrup District; joint marketing initiatives by 12 entrepreneurs in Lakhimpur wherein rice was sent to Arunachal Pradesh.

Joint procurement done in few districts:

Name of the District	Inputs	Quantity	Previous rate	Bulk quantity	Bulk rate	Margin
Sonitpur	Standee Transparent Pouch Packet for Pickles 3/5 laminated packets	2500	INR 2.80 (including GST, transportation)	30000	INR 1.60 (including GST, transportation)	33-35%
Morigaon	Standee Pouch	500	INR 5.5	17200	INR 1.70	31%
Nalbari	Pet bottles	300	INR 9	3000	INR 5.80	26%
Kamrup	Mustard Oil	20	INR 130 per litre	200 litres	100 per litre	20%



Joint procurement of packaging materials carried out by the farmers

KSHYAMATA FACILITATES TRAINING ON FOOD BUSINESS MANAGEMENT

A 3-day online certificate training course on Food Business Management under the Indian Institute of Food Processing and Technology, (IIFPT), Thanjavur, Tamil Nadu held from 25th – 27th August 2020, was facilitated for the entrepreneurs enrolled with Kshyamata. APART in coordination with the Department of Industries and Commerce and DICC offices in the districts namely, Kamrup (Rural) Kamrup (Metro), Sonitpur, Nalbari, Goalpara, Golaghat, Cachar, and Jorhat arranged the broadcast of the virtual training sessions. A total of 30 (thirty) prospective entrepreneurs attended and took an active part in the online training sessions in their respective DICC offices and at the DIC office, Udyog Bhawan, Guwahati.



Participants attending the online training session at Udyog Bhawan, Guwahati

The training was facilitated specifically for the entrepreneurs engaged with the food business and enrolled under the Kshyamata initiative, to build their capacity on food business management and update their knowledge on the recent trends. The following topics were covered in the training session: Trends in R & D innovation in food processing, Global food business environment & policy, Food Safety and Quality Management, Global Food Market – forecasting, positioning and promotion, IPR & management, Certification & accreditation essentials, Food traceability solutions & blockchain management, IoT (Internet of things) in food trade and retail management, Investments & working capital management.

A certificate of participation was also issued by the Department of –Industries and Commerce to encourage and motivate the aspiring entrepreneurs.

ARIAS SOCIETY

(An Autonomous Body of the Govt of Assam)

Agriculture Complex, Khanapara, G.S Road, Guwahati –781022 (Assam, India)

Tel: +91 361-2332125 | Email: spd@arias.in | Web site: www.arias.in

Grievance Redressal : grievances@arias.in | Toll Free : 1800-102-0338

(10 a.m – 5 p.m- excluding holidays)