

Kisan Rath App for Assam

Kisan Rath App, customized for Assam to facilitate trade in fruits and vegetables was launched by the Hon'ble Chief Minister of Assam on 6th October 2020 at a function organized by the Assam Rural Infrastructure and Agricultural Services (ARIAS) Society, at Assam Administrative College, Khanapara, Guwahati.

The KisanRath App was earlier launched by the Ministry of Agriculture and Farmers Welfare, Govt. of India in April 2020 in 8 languages to provide logistic support for farmers. The app was customized for Assam by the Assam Agribusiness and Rural Transformation Project (APART) and National Informatics Cell (NIC), Assam. APART has also built the capacity of the district Officials and project team by conducting online training

sessions to all the districts. The pool of master trainers will support in disseminating information and also provide necessary guidance to the farmers, traders, FPOs, and others in downloading and installation of the KisanRath application.

The App is aimed at providing better marketing linkage for Agri Horti produces like fruits, vegetables, spice crops etc. It will benefit the producer farmers, farmer producer organizations (FPOs), traders and service providers associated with Fruits and Vegetable marketing. As the app will directly link the producers with the traders of different markets of the state and outside, it is expected to minimize the involvement of middlemen in the marketing of Fruits and Vegetables and thereby provide better price to the producers. Farmers can offer their products for sale through this app by sharing the details viz., farmers name, place, contact number, product name, available quantity and offer price, etc, so that the traders dealing with those commodities may directly connect for procuring the items. The App is available online and can be downloaded from Google Play Store/App Store.

Till date the registered stakeholders of Kisan Rath App across all the districts in Assam are:

- » Farmers 16320 Nos.
- » FPO 70 Nos.
- » Traders-1251 Nos.
- » Service Provider 446 Nos.



IRRI develops entrepreneurship in the seed sector

In Assam, the soil type, land topography, rainfall and climate, in general, are very conducive for agricultural activities, mainly for the cultivation of paddy. Despite the untiring efforts of all the stakeholders, the productivity of paddy in the state is still lower than the national average due to some biotic and abiotic challenges. To address the abiotic challenges faced by the state farmers, the



district

International Rice Research Institute (IRRI) in collaboration with State Agriculture Universities (SAUs) made the introgression of Sub1 gene in the mega varieties of the states which can tolerate complete submergence up to 2 weeks.

International Rice Research Institute (IRRI) and Assam Agricultural University (AAU) have implanted Sub1 gene in Assam's popular rice varieties Ranjit & Bahadur and converted them into their respective Sub1 versions, which by retaining their original characteristics, have additional benefits of submergence tolerance up to 14 days. These Sub1 varieties along with Swarna-Sub1 and BINA Dhan11 have been widely demonstrated and performed well across varied locations of Assam. For the promotion or scaling up of a variety for broader adoption, it is pre-requisite to assure timely availability of seed at affordable price. Farmers require quality seed of these Sub1 varieties for better productivity and higher production. However, the seed system in Assam is not on a sound footing rather reflects a dilapidated condition. Unavailability and non-accessibility to quality seed is a persisting problem in the region, as most of the public and private sector seed companies/corporations have little or no presence in the stress-prone areas of Assam. Most farmers routinely save their seed from one harvest to the next. Because of the lack of proper training on quality seed production, processing, and storage, the quality of the Farmer Saved Seed (FSS) is often sub-standard, thus affecting crop yield.

One of the targeted interventions of APART is to strengthen the seed system by supplying breeder and foundation seed to the seed producers. With this aim, IRRI has initiated linking of national partners/ allied research institutes to supply the breeder and foundation seed of STRVs, with the public and private stakeholders engaged in formal and informal seed systems of Assam, for further seed multiplication. It ensures not only local seed-supply but also creates business opportunities for rural youth. Since these varieties have good demand in the local market, there is a huge scope for the development of local entrepreneurship in the seed business. IRRI has linked five Assam based companies/cooperatives with national partners/allied research institutes. A total of 1445 kg breeder seed (BS) and 3260 kg foundation seed (FS) of STRVs (Ranjit-Sub1, Bahadur-Sub1, Swarna-Sub1, BINA Dhan 11 and DRR Dhan 44), besides 1580 kg BS of PQR varieties (Keteki Joha and Bokul Joha) was supplied to through linkage with different institutions during Sali season 2020. Besides the linkage for seed, IRRI is providing time to time technical support to these organizations. The performance of these companies will be an example for the local youth to engage themselves in the seed sector.



AAU,IRRI and APART team in the paddy seed production field

Details of institutional linkage for strengthening STRV seed supply to different seed stakeholders in Assam during Sali season is as follows:

Name of the Institution	Variety Name	Category of seed linked (Breeder/ Foundation)	Quantity of seed linked (kg)
Poohar Agro Producer Company Limited, Borchala (Patuakata), Morigaon, Assam, India. PIN: 782106	Davaiit Culai	Breeder	15
	Ranjit-Sub1	Foundation	120
	Bahadur-Sub1	Foundation	400
Sankar Azan Agro Producer Company Limited, M. Azad Road, Bara Bazar, Nagaon, Assam, India. PIN: 782001	BINA Dhan 11	Foundation	520
	DRR Dhan 44	Foundation	60
	Ranjit-Sub1	Foundation	500
	Swarna-Sub1	Foundation	560
Allied Crop Care Pvt. Ltd., Guwahati, Assam, India	Ranjit-Sub1	Breeder	300
	Bahadur-Sub1	Breeder	100
	Swarna-Sub1	Breeder	30
		Foundation	200
	Keteki Joha	Breeder	920
	Bokul Joha	Breeder	660
Asomi Polyseed Pvt. Ltd., GS Road, Near Poddar CarWorld, SamannayPath, Khanapara, Guwahati-781022, Assam, India	Ranjit-Sub1	Breeder	200
	Bahadur-Sub1	Breeder	200
	Swarna-Sub1	Breeder	100
Duarbagori Cooperative Society Ltd.; Village-Kuthari, District-Nagaon, Assam, India	BINA Dhan 11	Foundation	260
	DRR Dhan 44	Foundation	400
	Ranjit-Sub1	Breeder	500
	Swarna-Sub1	Foundation	180
	Samba Mah- suri-Sub1	Foundation	60

Cachar leading in creating Private Service Provider

The introduction of mechanization and development of service economy/ entrepreneurship vital improving to the productivity and profitability of ricebased cropping systems in Assam. In rural Assam. Private Provider Service (PSP) model plays an important role. not only addressing



Harvesting using the user friendly Repear- A step towards farm mechanization

labour scarcity, and production-cost under traditional methods of rice cultivation, but also in building the capacity of smallholders to engage in farming as a business; enabling them to generate income that brings food security at the household and community levels.

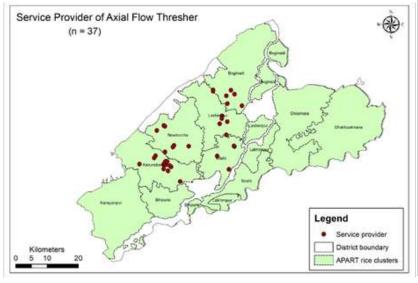
In Assam, most of the farmers harvest their paddy manually using sickles, which is a slow, time-and labour-consuming process. It takes about 28-30 labours to harvest one hectare of paddy field. Thus, there is high drudgery and high cost involved in harvesting paddy fields in a stipulated period. There is even a shortage of labour during the peak harvesting period. Hence, the reaper was introduced to address the challenges, initially in 9 districts of Assam including Cachar, in the first year of implementation of APART activities.

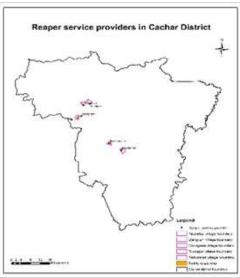
During the training and demonstration program in 2019–20, Krishi Vigyan Kendra (KVK), Cachar demonstrated the operation of the reaper to the farmers from different areas. It was a motivating factor for the farmers. They were impressed with the time-saving and cost-effective technology of paddy harvesting. Eight farmers from Cachar immediately decided to procure a reaper on their own. With the continuous support

from IRRI team, the group of farmers procured reapers of Shrachi Company costing ₹1.75 lakh in November 2019, and that triggered the mechanization in the district.

During the financial year 2019–20, IRRI, with its continuous endeavour was able to create 8 PSPs for reaper and 6 PSPs for axial flow thresher in the district. Initially, the first PSP charged ₹ 400 for each bigha harvesting. But as the driver was engaged on a daily wage basis, he used to harvest only 2–3 bigha of paddy in a day.

The farmer group thought of a business model to increase the efficiency of the machine. They renewed the contract with the operator and fixed rate based on harvesting done (₹100 per bigha). This idea worked, and the operator started harvesting 10-12 bighas of paddy in a day. Consequently, the income curve went up exponentially. At the same time, the group revised the harvesting charges to ₹500 per bigha. Mr Abu, PSP member said "In my area harvesting starts in December and continues till February, due to shortage of labour that bears a huge loss. But now, with the introduction of the reaper, harvesting is completed in December itself. Reaper saved my time. Besides harvesting my field on time, now I could go to nearby villages for providing service to other needy farmers that gave me a good income. In this season my net income was₹30,000. I got motivated as I attended a postharvest training under APART. I extend my thanks to IRRI and KVK Cachar"





SPD's visit to the GIS facility at AAU

The State Project Director, Vinod Seshan, IAS, along with a team from ARIAS Society visited the GIS lab at Assam Agricultural University (AAU), Jorhat on 31st October 2020. He was apprised of the work currently being done at the GIS facility and shown a few of the output maps and other products developed by the GIS team of APART.

Earlier on August 5, 2020, the GIS facility was inaugurated at AAU, Jorhat by Dr Mirinal Saikia, Associate Director, Directorate of Research, AAU. The facility is established under the objective-IV of APART's IRRI supported activities with AAU. The facility is equipped with high-performance computing hardware for processing of heavy satellite data as well as associated proprietary software including Erdas Imagine and ArcGIS, besides open source software such as QGIS and R. The facility is functional with 2 Project Scientists, 2 Assistant Project Scientists and 2 Research Technicians who are involved in processing satellite data for creating maps related to developing extrapolation domain of cropping





SPD ARIAS visit to the GIS lab, AAU, Jorhat

systems for efficient targeting of technologies in low-productive rice-fallows and stress-prone areas. Two training courses on the use of ArcGIS software was organized with the help of ESRI, Kolkata through online sessions in Sep and Oct 2020.

It is to be mentioned that Geospatial technologies have been used to create cropping intensity and cropping system maps using time-series satellite data for the characterization of existing cropping systems of Assam, Rice area maps for Kharif season were prepared for 2017, 2018 and 2019. Rice-fallow maps were generated for rabi season so that these areas can be targeted for increasing cropping intensity and substantially improve the food supply and enhance livelihoods in the state of Assam. Targeting of water-efficient crops (e.g., pulses) in rice-fallow areas not only helps intensify the cropping system and enhance crop diversification but also contributes to soil fertility.

To achieve this objective, soil moisture maps for rice-fallow areas in 2018 and 2019 were prepared to precisely target and utilize the short residual soil moisture window. Presently this exercise is carried out for 2020 along with field verification of maps to assess the accuracy of the outputs.



Inauguration of GIS lab at AAU by Dr. Mrinal Saikia
Associate Directorate of Research, AAU

Since Assam is one of the most flood-prone states, a detailed

characterization of flood-inundated areas is required for identifying the suitable areas to target submergence-tolerant rice varieties so that loss in rice production due to flood submergence can be minimized. Remote sensing technology using microwave (SAR) data with cloud-penetration capabilities was used to map flood inundation areas over Assam during 2017 - 2020. Besides, the duration of submergence in the frequent flood-prone area was also extracted. A Satellite-based Remote Sensing study was also carried out to develop an integrated drought stress index based on historical satellite measured climatic and bio-physical variable to identify the drought-prone areas of Assam. Subsequently, the agricultural areas with crop stress were identified with a range of severe, moderate, normal and healthy indicators.

A joint action on technology "Puffed Rice Machine" procurement

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 in Assam for the development agro-based industry in the State.

As the Cluster Development Technical Agency (CDTA), the major objectives for Grant Thornton India LLP are :

- » To develop and establish 17 Cluster-Based Industry Associations (IAs) in 16 (undivided as on 1st April 2016) Project districts of Assam
- » Assist the IAs in the development and implementation of Agro-Industrial Development Plans (AIDPs)
- » facilitate the sustainable growth of agro MSMEs in these clusters through better infrastructure, marketing, financing and human resources
- » Enhance access of cluster agro MSMEs to needed technical and BusinessDevelopmentServices(BDSs),includingEntrepreneurship Development Training Programmes (EDPs)
- » Assist in supply chain support.

Another objective of the formation of an Industry Association is to bring in industry enterprises together and to give them a formal platform for interaction and to discuss the issues related to the growth of the enterprises. To bring enterprises together requires 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.

Value addition for Rice-based products: Gaps and solutions

Dhubri district has a high demand for puffed rice but there was no local manufacturer of this product in the district. All the puffed rice consumed by locals in the district were procured from either other districts of Assam, West Bengal and other parts of the country.

During the baseline survey, the following major gaps from the ground were identified:

- » Lack of proper knowledge of Value-added product
- » Lack of Modern technology
- » Lack of Marketing linkage
- » Lack of Raw material information
- » Lack of Skill manpower/training
- » Lack of knowledge of financial scheme etc.
- » Willingness to work together

For addressing these gaps, the CDTA discussed ways of mitigating these issues through joint activities and encouraged the entrepreneurs on the scope of procuring new technology at a competitive price, increasing knowledge on financial schemes, increasing knowledge of value-added products. During an awareness camp organized for rice millers in the Mahamaya block of the district, 15 rice millers were briefed about the benefits of joint action. As an outcome of this programme 3 millers came forward to invest jointly in procuring and producing puffed rice in the district to mitigate the existing gap of local supply. GT team helped this group of millers in reaching out to various vendors within Assam and other states. The activities of the group and the encouragement from the members further motivated three more millers to be part of the group in the procurement of the puffed rice making machine. For marketing of the product four major Districts are targeted: Kokrajhar, Dhubri, Bongaigaon and Goalpara where there is a huge demand of "Puffed Rice".

For the procurement of the "Puffed Rice Machine", the following Machinery Suppliers were contacted:

- » "Shiva Durga Enterprise", Tarakeswar, West Bengal
- » "Kuber Techno Craft", H.B.Road, Fancy Bazar, Assam
- » "New Omkar Machinery Store", Kokrajhar, Assam

After verifying their T&C, Rate & Capacity, "Shiva Durga Enterprise" was selected to procure the Machines.

Details of the Machine which was procured from Shiva Durga Enterprise:

The Capacity of production of the machine for manufacturing of Puffed Rice is 180 kg/hr and the power used to run the machine is LPG gas and Electricity (Single phase). The weight of the machine is 410 kg and the price is Rs. 1,45,000/- including GST (18%).

Expected Profit Margin per Quintal is Sale Price - Cost of Production Rs. 4000/ - Rs. 3400/ = Rs 600/Quintal.





The newly procured puff-rice making machine

First exclusive "sales outlet" in Morigaon: a success story

Agriculture and Allied Processors Industrial Association of Morigaon (AAPIAM) formed on 5th Aug 2019, intends to resolve the common issues about the various value chains and to have collective bargaining power.

The most common issues often discussed among the various meetings of AAPIAM Executive Committee were:

- » Scarcity and lack of awareness on food-grade packaging materials.
- » Quality of packaging materials was substandard, while the rates of the products were very high.

- » The designs of the products were lesser and there were no suppliers of goods and rates were in a monopolistic market.
- The purchase of the products was made in lower quantity and higher rates.
- The products are being dumped in the market by the entrepreneurs and thus do not have better bargaining power for their products.
- » Absence of a forward linkage for the products manufactured by the various enterprises

The CDTA discussed ways of mitigating these issues through joint activities and encouraged the entrepreneurs on the scope of procuring better quality packaging materials at competitive prices in bulk and newer packaging style for its introduction and introduction and acceptability in the market and also to place the products differently.



The value added products of the farmers and small –medium entrepreneurs on display

The urgency of having a dedicated sales outlet, to display and sale the products prepared by the members of AAPIAM ranging from Spice, Mustard, Dairy, F&V and Rice was felt and the executive committee and the members decided to have a sales outlet. The members of Association approached Grant Thornton India LLP Morigaon Team, who facilitated the members of AAPIAM with space for Sales Counter at Morigaon Town and also assisted the members with the preparation of agreement and others terms and conditions for sharing the common outlet space. The sales counter will exclusively display, promote and sale the products supplied by the members of AAPIAM.





Value-added Agri-horti products

The 1st exclusive Sales Outlet was successfully inaugurated on 4th Sep 2020 in Padum Pukhuri, Near Morigaon Town. The Stall displayed products for sale prepared in the following Value Chain:

- Spices: Various Products.
- » Mustard: Mustard oil
- » Fruits and Vegetable Processing: Various Pickles, Jams & Jellies.
- » Rice: Joha Rice and Black Rice.
- » Traditional Food Items prepared with a shelf life of 10 days

The table below highlights the Profit calculation after the introduction of new packaging material:

PROFIT CALCULATION AFTER INTRODUCTION OF NEW PACKAGING MATERIAL							
Heading	Pack size	Old Rate	New Rate	Difference in Cost	% Deduction in Cost		
Transparent Pouch	50gm	3.5	0.82	2.68	76.57		
	100gm	4.5	1.13	3.37	74.89		
	100gm	5.5	1.44	4.06	73.82		
	500gm	6.5	2.11	4.39	67.54		

The products displayed in the Sales Counter are all packaged in newly procured food-grade pouches procured through the Joint Procurement Consortia for Packaging Materials. Products of Spice powder and Mustard Oil are packed in new design packages viz., Brown Kraft Paper with Rectangle Window for display and Spout Pouches for Mustard Oil Packaging replacing the traditional PET bottles.

Inaugurating the Sales counter, Shri Sanjib Sarma, ADC Morigaon expressed his highest satisfaction with the opening of Sale Counter for the members of AAPIAM and also appreciated the efforts made by the team of Grant Thornton India LLP. He further added that such initiative gives motivation to the MSME entrepreneurs of the district and allow them to scale up their business and also set an example for others to become self-sustainable.

Biosecurity improvement in 5 govt. Pig breeding farms, namely- Rani, Khanapara, Sonapur, Diphu and ALPco

Almost all the Govt. Pig breeding farms under the Animal Husbandry and Veterinary Department are devoid of proper biosecurity provision for which the farms become vulnerable to various infectious and transmissible diseases, specifically to ASF which has no treatment and no vaccine.

The diseases like - ASF, CSF, FMD, PRRS, etc. in the farms can be prevented only by following bio-security measures, ensuring minimization of the occurrence and spread. With these objectives, field visits were conducted by ILRI along with the Executive Engineer from the Animal Husbandry & Veterinary Department (AHVD) to different Govt. Pig breeding farms, namely-Rani, Khanapara, Sonapur, Diphu and ALPCo to work on improving the bio-security infrastructure in these farms.



Inspection of biosecurity provisions at Govt. Pig Breeding far, Sonapur

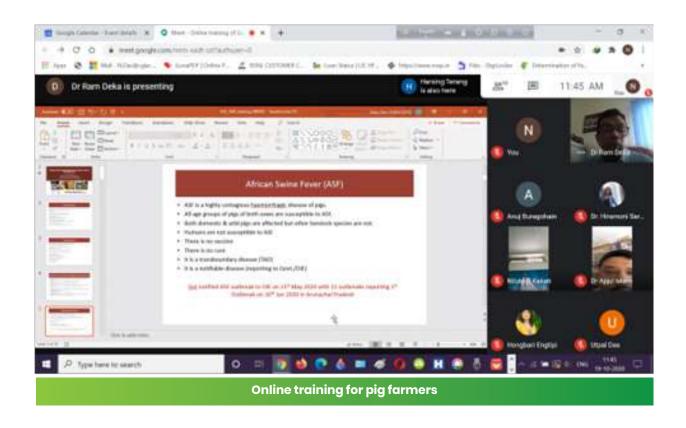


Foundation laying of biosecurity provision Govt.

Pig Breeding farm, Diphu

Online training of Govt. Pig farm managers on ASF

African swine fever (ASF) is a deadly and fatal emerging disease of pigs which has recently swept over the pig population of Assam, mainly in the districts of upper Assam. A one-day training program on African swine fever (ASF) was organised by ILRI for the Govt. Pig Farm Managers under the Animal Husbandry & Veterinary Deptt on 19th October 2020 in the conference hall of SIPC through web conferencing. Knowledge on the epidemiological pattern of ASF, transmission and symptoms, measures for containment, preventive measures, biosecurity, etc. was disseminated during the training.



Training of trainers (ToT) programme

The Dairy Development Department (DDD) along with the International Livestock Research Institute (ILRI), organized the Training of Trainers (ToT) program for Sweet makers and Cottage Processors through video conferencing. The training content was based on the customized training manual developed by ILRI for Sweet Makers under APART.

The objective of the ToT was to develop resource persons (Master trainers) from within the Department so that they can, in turn, train up the other value chain actors, i.e. the sweet makers, cottage processors and milk producers on different aspects such as-basic knowledge on infrastructure and equipment, milk and sweets quality, foodborne disease, basic tests to determine the milk quality, good and hygienic processing practices, product preparation, value addition, product handling, packaging and dispatching, record keeping, networking, personal behaviour and business development plan, understanding the prevailing rules and regulations applicable for cottage processors and sweet making units, reproductive health management clean and hygiene practices for milk production etc, besides efforts to improve environmental protection, welfare for animals and care for the environment.

A total of 49 (Sweet making and cottage producers) and 67 (Milk producers) officers from the Animal Husbandry and Veterinary Department and Dairy Development attended the training programmes and were developed as Master Trainers for the Department. They were also awarded certificates on successful completion of the ToT.





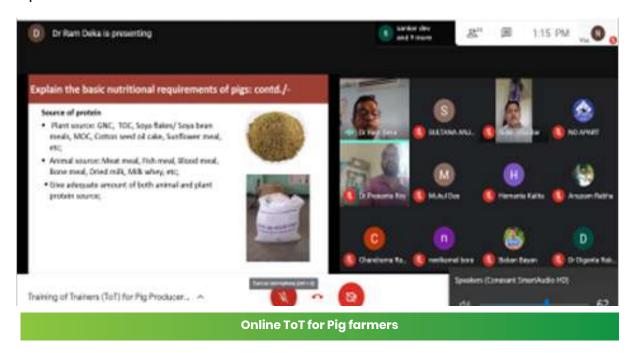
Online Training and award of certificates to the Master trainers

Training of trainers (ToT) for pig farmers

The Animal husbandry & Veterinary Department (AHVD) organized the Training of Trainers (ToT) program for the pig farmers under 13 APART districts and the training was delivered through video conferencing by the International Livestock Research Institute (ILRI), the knowledge partner of World-Bank aided Assam Agribusiness & Rural Transformation Project (APART) and based on the customized training manual developed by ILRI for Smallholder Pig Farmers under APART.

The objective of this kind of training is to develop resource persons (Master trainers) from within the department so that they can, in turn, train up all the value chain actors, i.e. the pig producers in this case, on different aspects such as-housing of pigs, breeds and breeding of pigs, care and management of different categories of pigs, better nutrition for improved productivity, most prevalent diseases of pigs and their control options, human health risk posed by pigs/ pork and risk-reducing measures, restraining/handling and transportation of live pigs, the welfare of animals and care for the environment etc.

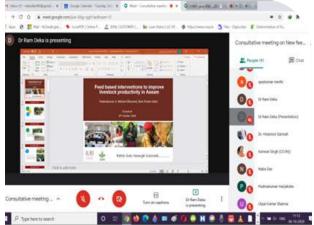
A total of 100 officers from Animal Husbandry and Veterinary attended the training programme and were developed as Master Trainers for the Department.



Consultative meeting on new feed technology

A consultative meeting on new feed and fodder technologies was conducted by ILRI on 6th Oct 2020 at the conference hall of Strategic International Partnership Centre (SIPC). The meeting was attended by the representatives from Animal Husbandry & and Veterinary Department, Dairy Development Department, Agriculture Department, Fishery Department, AAU Jorhat, AAU Khanapara Campus, IRRI and ARIAS Society. The participants took part both physically and through web conferencing. Dr V. Padmakumar, Scientist, ILRI, Hyderabad joined through web conferencing and presented on the new feed technologies. The discussions mainly emphasized on an analysis of quality of paddy straw, use of NIRS platform for testing of feed samples, low-cost feeding, commercial TMR feed and silage making, and promotion of new fodder varieties.





Consultative meeting on New Feed Technology

Development of dairy handbook (in Assamese)

The Dairy Development (DDD), Department technical collaboration of the International Livestock Institute (ILRI) Research and with the support from the Animal husbandry & Department Veterinary (AHVD) is going to organize "Reproductive Health Mastitis Management Programme" on a pilot basis in two peri-urban areas, namely- Nortap and Maloibari under Kamrup(M). For this, a total of 100 nos. of dairy farmers are identified and these two areas will become a learning hub for the Veterinary Officers of the state. In context to this, a handbook for the dairy farmers has been developed by ILRI containing the information about the frequently encountered reproductive diseases of dairy cattle and mastitis and their preventive measures in a very simple language

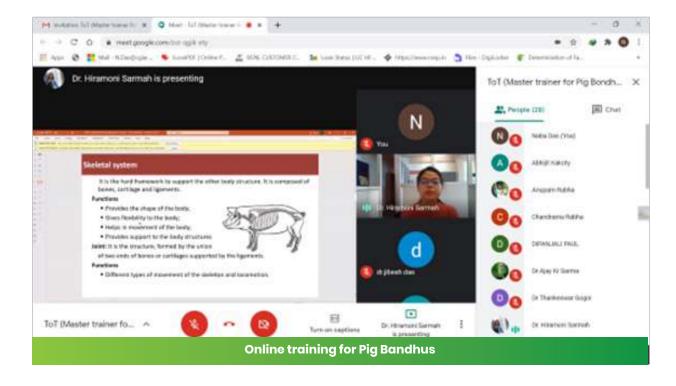


which is expected to help the dairy farmers of the State in a bigger way.

Training of trainers (ToT) for Pig Bandhus

The Animal husbandry & Veterinary Department (AHVD) has organized the Training of Trainers (ToT) program for the Pig Bandhus under 13 project districts and the training was delivered through video conferencing by the International Livestock Research Institute (ILRI), the knowledge partner of World-Bank aided Project Assam Agribusiness & Rural Transformation Project (APART) and based on the customized training manual developed by ILRI for Pig Bandhus under APART. The objective of this kind of training is to develop resource persons (Master trainers) from within the department so that they can, in turn, train up all the Pig Bandhus on different aspects such as-handling and transportation of pigs, internal and external body parts of a pig, different types of germs that cause diseases in pigs, important diseases of pigs, the preventive measures for diseases: vaccination, deworming, feeding of minerals and vitamins, familiarization with commonly used medicines, minor veterinary practices that may need to be attended in the field, etc.

A total of 100 officers from Animal Husbandry and Veterinary attended the training programme and were developed as Master Trainers for the Deptt.



Farm mechanization training for FPOs

three-day trainina programme for Farmer Organisations/ Producer Companies (FPOs/FPCs) on the topic 'Promoting Farm Mechanization through Custom Hiring Center (CHC) FPO/FPC Management", is organised by the Assam Aaribusiness and Rural Transformation Project (APART) in association with



FPO_FPC farm mechanization training

Krishi Vigyan Kendra (KVK) Kamrup, KVK Barpeta and International Rice Research Institute (IRRI) at 'Kaniha', Rangia from 16th to 18th October and at Sorbhog from 20th – 22nd October 2020.

These trainings were organized to popularize farm mechanization and bring technology closer to the farmers. The three-days training included field demonstration of various farm machinery, like thresher, mini combine harvester, portable rice mill, reaper, power weeder cum paddy harvester, super bag, grain quality kit, dry grinding machine, etc besides technical sessions by experts. APART organized these trainings, with the objective of better knowledge dissemination and reach out on farm mechanization and its benefits.

Interacting with the participants on the first day of the training programme at Kaniha, Shri Vinod Seshan, IAS, State Project Director, ARIAS Society emphasized on the benefits of mechanization and encouraged the farmers to understand the functionality of FPO/FPC/Custom Hiring Centre (CHC). He also urged the farmers to have a basic understanding of the farm machinery so that they can skilfully operate them. He added that APART will select some skilled persons from the CHCs and train them on the technicalities of these machines so that in case of urgent repairs, immediate assistance is available.

The farmers and FPO/FPC members in both the districts were motivated and came forward to take part in the trainings and live demonstrations.

FPG level focus group discussion on better management practices for carp polyculture and carp-mola-SIS farming

To create awareness among the farmers for adoption of Better Management Practices of Carp Polyculture and Carp-Mola-SIS farming under APART, a series of Focus Group Discussions (FGD) at Farmer Producer Group (FPG) level were taken up by WorldFish in collaboration with Department of Fisheries, Government of Assam. Four FGDs were conducted in Biakorua Gaon & Merapani Gaon in Golaghat District and Gendhali & Horu Sorai Gaon in Jorhat District during October, 2020. A total of 107 participants attended the 4 FDGs conducted, including both beneficiaries and non-beneficiaries of APART from the selected clusters. During the FDGs, Technical Experts from WorldFish introduced the BMP guidelines for carp Polyculture followed by participants interaction, the





Participants during the Focus Group Discussions on better management practices for Carp
Polyculture and Carp-Mola-SIS farming

importance of Mola-SIS farming along with carps and its nutritional value, the need for gender integration in aquaculture and also the importance of the role of women in fisheries and aquaculture. After the completion of the Focus Group Discussion, the Technical Experts also visited the beneficiaries' ponds to provide technical advice and explained to them about the importance of pond record keeping.

Virtual training on Bio-security and Fish Disease Management

A virtual meeting on Bio-security and Fish Disease Management was organized by WorldFish on 13th October, 2020. Dr. C. V. Mohan, Principal Scientist and Country Lead, WorldFish Malaysia, served as the resource person. A total of 37 participants attended the virtual meeting. The participants include WorldFish Odisha team, Dr.Suresh, Project Co-Ordinator WorldFish APART, Dr. Sanjay Sarma, Fisheries Co-ordinator, ARIAS Society, Dr. Dhrubya Jyoti Sharma, Nodal Officer, APART, DoF officials, College of Fisheries team, ECF and TEF under APART.



Dr. C. V. Mohan, Principal Scientist and Country Lead, WorldFish Malaysia, spoke on the "Bio-security and Fish Disease Management" and also detailed on the importance of biosecurity and disease management in the Fisheries sector. He discussed about the important role the field people to document and records every clinical sign they observe, sample collection, collecting the information and informing to CoF or Department of Fisheries etc. and advice the farmers accordingly.

Prof. Dr. Binod Kumar Kalita, College of Fisheries, discussed on the management of fish diseases and also discussed about the common fish disease that occurs in Assam.

Consultative workshop on beel fisheries in Goalpara district under APART

A Consultative workshop on 'Beel Fisheries' under 'World Bank funded Assam Agribusiness and Rural Transformation Project' (APART) was held on 31st October, 2020 at Goalpara for the newly selected beels (2020-21).

TheworkshopwasgracedbySmt.VarnaliDeka,IAS,DeputyCommissioner, Goalpara, who encouraged all the stakeholders and participants on their initiative to take the beel fishery programme ahead through APART.

Dr. Anupam Sarma, DFDO, Goalpara and Dr. Dhurbajyoti Sharma, Nodal Officer, OPIU, APART elaborated on the development of beel fisheries under APART and detailed on the social, technical and environment aspects. They also explained on the BDMC membership for better management of the beel fisheries. Pond records books were also distributed amongst the participants and also discussion was held on the best management practices (BMPs) on beel fisheries and mola culture along with carp in polyculture system was done. A brief on the importance and concept of social and gender and concept of women participation in every sector and other social norms was shared by Dr Arpana Barman, Social Sector Management Specialist, APART.

The meeting was attended by officials from the Fishery Department, APART officials, technical team of APART –Fishery sector besides progressive fish farmers and fishermen of beel community of Goalpara district.





Consultative workshop on beel fisheries in Goalpara district under World Bank funded Assam
Agribusiness and Rural Transformation Project (APART)



Kreishi Bulpantar

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