

AGRICULTURAL TECHNOLOGY MANAGEMENT AGENCY (ATMA) NEWSLETTER

ASSAM AGRIBUSINESS AND RURAL TRANSFORMATION PROJECT (APART)

1ST EDITION

March 2019

About APART

The Assam Agribusiness and Rural Transformation Project (APART) is a World Bank financed Project of the Government of Assam.

The Project Development Objective (PDO) of the Project is to *“add value and improve resilience of selected agriculture value chains, focusing on smallholder farmers and agro-entrepreneurs in targeted districts of the State of Assam”*. The Project plans to achieve these by:

- a. enabling investments in agri-enterprises, improving the investment environment and investment promotion, facilitating access to finance for agribusiness enterprises, and, where appropriate, pushing for process, regulatory changes;
- b. facilitating the growth of agri enterprise clusters to increase competitiveness, revenue and employment growth; and supporting development of a modern supply chains; and
- c. fostering the development of climate resilient production clusters, and improving producer access to knowledge, technologies, markets, and infrastructure so that they are able to respond to market opportunities and climate variability.

The four Project components are:

1. **Enabling Agri Enterprise Development**, with sub components being (i) enhancing state capacity to attract private investments, (ii) setting up of an Enterprise Development and Promotion Facility (EDPF) (iii) setting up of an Agribusiness Investment Fund (AIF) (iv) establishing Stewardship Councils.
2. **Facilitating Agro Cluster Development** with sub-components being- (i) support establishment of cluster level Industry Associations (IAs), (ii) supply chain support.
3. **Fostering Market Led Production and Resilience Enhancement** with sub components being (i) promoting climate resilient technologies and their adoption, (ii) Facilitating market linkages through market intelligence and product aggregation, (iii) Facilitating access to and responsible use of financial services.
4. **Project Management, Monitoring & Learning.**

View details on : www.arias.in

Introduction

The Assam Agribusiness and Rural Transformation Project (APART) is presently covering 16 districts (undivided districts as on 1st April 2016) in the state, namely, Nagaon, Sonitpur, Barpeta, Karbi Anglong, Kamrup, Dhubri, Golaghat, Kokrajhar, Lakhimpur, Darrang, Cachar, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari. The Agriculture Technology Management Agency (ATMA) is the main implementing agency at the district level, for all activities, of the **subcomponent C1: Promoting climate resilient technologies and their adoption**; hence they actively coordinate, guide and supervise the Service Provider in all aspects and provide the necessary information & inputs in every step. In the long run, they facilitate the Service Provider in baseline survey, mobilization of farmers to form CIG/FIG/FPO etc. ATMA being the main implementing agency of this subcomponent at block level, so the overall responsibilities of implementation of all activities are laid upon ATMAs. ATMAs not only confine to selection of farmers and site for training and demonstration, but are also responsible for success of the training and demonstration and overall successful implementation of all the activities.

IMPLEMENTATION OF AGRICULTURAL ACTIVITIES BY ATMA UNDER APART

- A. Cluster based approach. Cluster development will broadly focus on two aspects: (i) increasing productivity of the commodity in the identified blocks by technological inputs, and (ii) improved post-harvest management, value addition and marketing of produce by setting up farmer common service centers (CSCs):
 - a. Production Clusters
 - b. Enterprise Cluster
- B. Value Chain Analysis (VCA) and Value Chain Development Plan (VCDP)
- C. International Best Practices and Knowledge Partnerships
- D. Farmer centric bottom up planning

International Rice Research Institute (IRRI) is supporting the Department of Agriculture and Assam Agricultural University mainly in the development and introduction of stress tolerant varieties for flood/submergence, crop management practices, mechanization etc.

The key strategy to address the identified constraints include-

- a. Strengthening seed systems for rice
- b. To meet the quality paddy seed

c. Expertise of International Rice Research Institute (IRRI) will be used for modernizing paddy seed system in Assam and promoting modern and climate resilient paddy production and processing practices.

d. Revised and updated Packages of Practices for Kharif Crops, Rabi

e. Demonstrations will be organized covering all aspects from crop production to harvesting by the concerned ATMA.

f. Farmers will be well trained in mechanized harvesting, threshing, cleaning, winnowing, drying, storage, processing and transportation on a co-operative platform.

g. Trainings will be imparted to input suppliers, traders of the crop produce in the present changing scenario of market to update their knowledge of trade efficiency of input and output flow.

h. Farmers shall be trained on commercial production of selected commodities with improved and climate resilient technology.

i. For improving access to institutional credit Kissan Credit Card awareness camps will be organized for farmers in cooperation with the banks

j. Farmers will be educated about the benefits of storing surplus agriculture produce in warehouse to prevent distress sale during market gluts and accessing credit through warehouse receipts

k. Farmers, traders and transporters will be trained on food safety issues.

l. Farmers will be organized in commodity interest groups, FPOs and FPCs; and these will be used as focal points for technology dissemination activities through demonstrations, farmer trainings and exposure visits.

m. Farmer Producers Organizations (FPOs) and Common Service

Centers (CSCs) will be the platform through which technology dissemination, product aggregation, finance linkages, Agro-Business linkage; Agro-Business strategies will be operationalized.

ACHIEVEMENTS IN 2018-19

PHYSICAL PROGRESS OF ACTIVITIES

Sl.No.	Activities	Year Target	
		Target	Achievement
A.	DEMONSTRATION ON CLIMATE RESILIENT AND MARKET LED PRODUCTION TECHNOLOGY (0.25HA)		
	Paddy	1550	1550
	Maize	570	On going
	Black Gram	220	Spill over
	Lentil	142	On going
	Pea	142	On going
	Mustard	570	On going
	Fodder Demo to Support WAMUL	528	Planning going on
	Manual Chaff Cutter	264	Planning going on
	Input Dealer cum farmers Interactive meet	48	0
	Zonal level workshop	16	3
	Streamlining Agri credit including KCC and Insurance	296	35.52
	District level Buyer seller meet	16	0
	Post Harvest Management Demo	54	0
	Training on GAP	80	1 ToT done, rest going on in districts
	Preparation of VCDP Ls	29	5 FGDs are conducted
B.	IRRI SUPPORTED ACTIVITIES		
	Supervision management and monitoring of Minikit based of STRV demos by ATMA	5000	5000
	Integrated crop management Demos ICMD (Area 0,25 ha)		0
	Winter paddy	200	200
	Summer Paddy	200	200
	Premium Quality Rice (PQR)	50	50
	CAPACITY BUILDING TRAINING AND DEVELOPMENT OF OUTREACH MATERIAL		
	One day training for farmers by ATMA	10	5
	Exposure Visit		
	Within District	6	3
	Within Assam	1	0
	Outside Assam	2	2
	TRAINING AND VISITS AT INSTITUTES OF NATIONAL AND INTERNATIONAL IMPORTANCE		
	Within the Country	25	25
	Number of participants for training /visits at national and international institutes.		
	Within the Country	5	5
	TRAINING CAPACITY BUILDING AND DISSEMINATION AND COMMUNICATION MATERIALS FOR AWARENESS CREATION FOR SCALE APPROPRIATE MECHANIZATION		
	Exposure visit of farmers outside state LS	1	1
C.	WORLD VEG SUPPORTED ACTIVITIES		
	Climate resilient Production Demonstration		
	Black Gram	16	
	lentil	10	On going
	Pea	10	On going



IMPLEMENTATION OF HORTICULTURAL ACTIVITIES BY ATMA UNDER APART

APART (Assam Agribusiness & Rural Transformation Project), a third generation project which is coordinated by ARIAS Society and implemented by various departments/directorates/agencies of Govt. of Assam is focusing on value addition and improving resilience in production system of the selected agricultural value chains. Under APART, DoH&FP is also one Operational Project Implementation Unit (OPIU) which is supported by two international agencies viz. International

Potato Centre (CIP) from Lima, Peru and World Vegetable Centre (WorldVeg) from Taiwan. CIP is supporting OPIU, Horticulture in potato value chain and WorldVeg is supporting in five vegetable value chains viz. cabbage, cauliflower, tomato, brinjal and pumpkin. Besides these value chains, OPIU, Horticulture is concentrating on ginger, turmeric (supporting mainly processing part) and banana value chain under APART. All the field level activities such as integrated crop management demonstrations on improved technologies, Training of farmers etc. are implemented by ATMA's.

ZERO TILLAGE TECHNOLOGY (WITH RICE STRAW MULCHING) ON POTATO IMPLEMENTED BY 7 ATMAS (DISTRICTS)

From 2018-19 onwards, under APART, 7 ATMA's (Districts) have demonstrated **Zero Tillage Technology with Rice Straw Mulching** in farmers' field with the help of **International Potato Centre (CIP)**. This is a new technology where no land preparation is required (*i.e. ploughing not required*), after harvesting of paddy, the potato tubers are planted

in the field and nutrients (inorganic fertilizers and organic manures) are applied and then the crop is covered with paddy straw (*which is used as mulch materials*). Later on nutrients are applied as foliar spray. This technology has got good response from the farmers and farmers are interested to adopt this technology in coming years. In this technology, cost of production is also less, since, farmers need not to prepare the land, fertilizer and water requirement is also less as residual moisture and nutrients are available in the field.

Variety used: - *Kufri Pokhraj* and *Kufri Jyoti*

Nos. of Demonstrations conducted by 7 ATMA's on Zero Tillage Technology and Rice Straw Mulching with technical support from CIP	
District	Nos. of Demo. organized
Barpeta	5
Darrang	3
Nagaon	10
Morigaon	5
Golaghat	10
Jorhat	10
Sonitpur	5
Total	48



Zero Tillage potato cultivation in Darrang district



Harvested potato of Zero Tillage Technology

PARTIAL ROOT ZONE DRYING TECHNOLOGY ON POTATO IMPLEMENTED BY 7 ATMAS (DISTRICTS)

From 2018-19 onwards, with the help of **International Potato Centre (CIP)**, 7 ATMAS (districts) have demonstrated the *Partial Root Zone Drying (PRD)* technology on potato in farmers' field. In this technology, water is applied to the potato crop in alternate furrows, thereby water loss is reduced and only optimum water is applied to the crop for the growth of the potato tuber. This technology is very much beneficial to the areas where water scarcity is common for potato cultivation.

NOS. OF DEMONSTRATIONS CONDUCTED BY 7 ATMAS (DISTRICTS) ON PARTIAL ROOT ZONE DRYING (PRD) TECHNOLOGY WITH TECHNICAL SUPPORT FROM CIP

District	Nos. of Demo. organized
Barpeta	10
Darrang	10
Nagaon	10
Morigaon	10
Golaghat	10
Jorhat	10
Sonitpur	10
Total	70

DEMONSTRATIONS ON EARLY MATURING POTATO VARIETIES (KUFRI POKHRAJ AND KUFRI JYOTI) CONDUCTED BY 7 ATMAS (DISTRICTS) WITH TECHNICAL SUPPORT FROM CIP

From 2018-19 onwards, ATMAS have started demonstrated on *early maturing potato varieties mainly Kufri Pokhraj and Kufri Jyoti* in farmers' field with the help of International Potato Centre (CIP). In 7 ATMAS (districts), CIP has directly supported the ATMAS in conducting the demonstrations and in other 7 ATMAS (districts), CIP has trained the master trainers (BTMS/ATMs) and also facilitated for procurement of good quality potato seeds of those varieties. The purpose of this demonstration is to use the vast rice fallow land to fit the rice cropping system of Assam so that the land can be efficiently utilized and farmers get income from short

duration potato varieties.

Nos. of Demonstrations conducted by 7 ATMAS (Districts) on early maturing potato varieties

District	Nos. of Demo. organized
Barpeta	36
Darrang	38
Nagaon	31
Morigaon	36
Golaghat	31
Jorhat	31
Sonitpur	36
Cachar	21
Kamrup	21
Karbi-Anglong	21
Kokrajhar	21
Lakhimpur	21
Nalbari	21
Sivasagar	21
Total	386

MECHANIZED DEMONSTRATIONS (USE OF POTATO PLANTER AND HARVESTER) ON POTATO BY 7 ATMAS (DISTRICTS)

7 ATMAS (Districts) have started mechanized demonstrations i.e. use of potato planter for planting of potato and use of potato harvester for harvesting of potato in farmers' field. These machines will reduce the labour requirement for potato planting and harvesting and also cover the large area within very short period of time. This will definitely give benefit to potato farmers in coming days.

Nos. of Mechanized Demonstrations (use of potato planter and harvester) conducted by 7 ATMAS (Districts) on potato with technical support from CIP

District	Nos. of Demo. organized
Barpeta	5
Darrang	5
Nagaon	5
Morigaon	5
Golaghat	5
Jorhat	5
Sonitpur	5
Total	35

DEMONSTRATIONS (MAINLY MARKET DEMAND VARIETY) ON OTHER VEGETABLE CROPS (CABBAGE, CAULIFLOWER, TOMATO, BRINJAL, PUMPKIN ETC.)

Besides different demonstrations on potato, ATMAS have conducted integrated crop management demonstrations mainly on market demand variety or farmers preferred variety on *cabbage, cauliflower, tomato, brinjal and pumpkin*. Some of these demonstrations have been technically supported by World Vegetable Centre (WorldVeg).

Nos. of Demonstrations conducted by ATMAs (Districts) (mainly market demand variety) on other vegetable crops (*cabbage, cauliflower, tomato, brinjal, pumpkin etc.*)

Name of the ATMAs (districts)	Demonstration on Cabbage	Demonstration on Cauliflower	Demonstration on Tomato	Demonstration on Brinjal	Demonstration on Pumpkin	Total
Barpeta	0	18	21		29	68
Cachar	17	13	20	16	32	98
Darrang	18	16	19	18	0	71
Goalpara	16	13	0	16	0	45
Golaghat	0	0	19	0	32	51
Jorhat	16	13	0	16	29	74
Kamrup	17	13	21	17	0	68
Karbi-Anglong	0	0	0	0	0	0
Kokrajhar	0	15	10	0	0	25
Lakhimpur	16	17	0	16	0	49
Morigaon	0	0	0	17	0	17
Nagaon	17	17	0	18	28	80
Nalbari	0	0	11	16	0	27
Sivasagar	16	0	10	0	0	26
Sonitpur	17	15	19	0	0	51
Total	150	150	150	150	150	750



Use of potato planter for potato planting



Use of Potato harvester to harvest potato by ATMA Jorhat



Demonstrations on Cauliflower at Bechimari Block of Darrang



Field day on Cauliflower demonstration at Dalgaon -Sialmari Block of Darrang



Use of Yellow Sticky Trap to control Insects Pests on potato crop at Dhekorgora Block of Jorhat



SPD's visit to Tomato Demonstration at Pachim Mangaldoi Block of Darrang



Tomato Demonstration at Kalain Block of Cachar

IMPLEMENTATION OF FISHERIES ACTIVITIES UNDER APART

WorldFish, also known as the International Center for Living Aquatic Resources Management (ICLARM) is providing technical support to the Directorate of Fisheries, Govt of Assam in the implementation of the fisheries sub-component of World Bank-financed Assam Agribusiness and Rural Transformation Project (APART) for a period of five years.

In the inception workshop held at the National Institute of Rural Development (NIRD), Khanapara, Dr. C.V. Mohan, Team Leader, WorldFish explained the technical contribution of WorldFish to the Project, to secure and enhance the contribution of small-scale fisheries to food security in Assam.

He also stressed on increasing the availability, accessibility, and consumption of nutrient-rich safe fish especially for women of reproductive age, infants and young children.

The Package of Practices on Fisheries and Aquaculture (PoP) in Assam, developed based on the changes in Science and Technology, eco-system and necessity for climate resilient technologies by Assam Agricultural University was published by Directorate of Fisheries, Govt of Assam in collaboration with ARIAS Society under World Bank Financed Assam

Agribusiness and Rural Transformation Project (APART). The PoP was released by Shri Parimal Suklabaidya, Hon'ble Minister of Fisheries, Assam at Dispur on 18-09-2018. The Minister, in his speech, said that the new Fisheries PoP suitable for the agro-climatic condition in Assam would be a highly useful document for all the stakeholders and especially for the fish and fish seed farming communities of the State for years to come.

Keeping in line with the implementation modalities of



the Project, Directorate of Fisheries has so far conducted 728 polyculture demonstrations in 13 districts covering 43 clusters, 110 paddy cum fish demonstrations are ongoing in 7 project districts. ATMA is the monitoring agency of fisheries activities of APART at the district level. The department has conducted 90 awareness programmes

in selected 46 fishery clusters in 15 districts. A total of 10,672 fish farmers, including 31% women had attended these awareness programmes in the Project districts. So far, a total of 838 beneficiaries have been covered in this component.





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26.379523°	92.461637°	HEADING
26°22'46" N	92°27'41" E	346°



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