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DIVERSIFIED FARMING FOR HIGH RETURNS: THE INSPIRING JOURNEY OF A FARMER FROM BARPETA

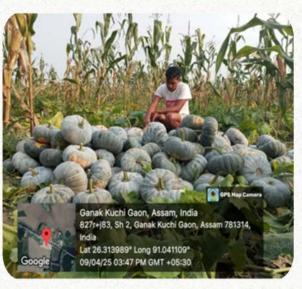
- Minsura Begum, DHC- Barpeta, APART

Iman Ali, a 44- year-old graduate and member of the Barpeta Luitporiya FPC from Bheraldi village, has been involved in farming since 2006. With a steady inclination toward innovation in Agriculture; he has adopted modern practices to enhance productivity and income.

In 2023-24, Iman Ali was selected as a beneficiary under the Potato Area Expansion Program, where he was provided with Chipsona3 (Generation 3) potato variety, suited for chips making under the Assam Agribusiness and Rural Transformation Project (APART). He underwent training on Best Management Practices (BMP) and received regular monitoring and guidance. He cultivated potatoes in a cluster approach with fellow Farmer Producer Company (FPC) members and got a good harvest. He realized a favorable price by selling directly to processing industries (*Graintech Foods India Pvt Ltd*) at a farmgate price of Rs 12.5/kg. Following advice, quality of seeds & market demand, he stored the potato tubers at the Sorbhog Cold Storage to use in the next season (2024-25).

In 2024-25, using the stored seed tubers, he adopted and cultivated 0.5 hectares of Potato (Chipsona 3 variety) following BMP. He also practiced intercropping by cultivating Arjuna variety pumpkin with potato in an area of 2.75 bighas and grew maize as a border crop. Furthermore, he leased 18 bighas of land in addition to his own 10 bighas, significantly scaling up his farming operations.





From the 0.5 ha potato plot, he harvested 13.05 MT of potato tubers, earning a gross income of Rs.1,56,000 with an investment of Rs 56,250 resulting in a net profit of Rs 1,00,350. The pumpkin intercrop yielded 13.2 MT from 2.75 bighas, with minimal input cost (only seed cost), earning him a net income of Rs 66,000. Additionally, he earned Rs 8,000 from the sale of Radish and Knolkhol cultivated on 1 bigha. Besides horticultural crops, he also cultivated and harvested mustard on 12 bighas and maize on 10.5 bighas.



Iman is extremely satisfied with the outcomes, especially the additional benefits gained from intercropping pumpkin with potatoes. He intends to continue adopting and promoting improved agricultural practices.



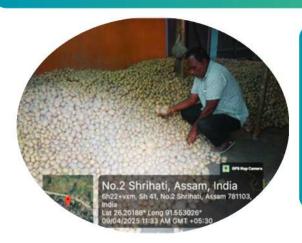
Iman's journey stands as a shining example of how effective training, intercropping, border crop, varietal selection and practicing BMPs can lead to higher returns and efficient resource utilization.



He also adds that with the income from the farming, he has been able to support his family including educating his two sons.

POTATO FARMING: FARMER'S DOUBLING INCOME OPTION

- Mitali Bordoloi, DHC-Kamrup- APART



A notable success story is that of Bhupen Kalita, from Bongshor Village, Suwalkuchi, Kamrup (Rural), Assam. He successfully doubled his income by cultivating climateresilient varieties of potatoes twice a year after receiving guidance from the World Bank-funded Assam Agribusiness and Rural Transformation Project (APART).

His achievements in potato farming, which are wellsuited to the agro-climatic conditions of the state, have sent a positive message to other farmers. His success boosts the confidence of rural youth, particularly educated young farmers, who are eager to engage in potato farming using advanced technology to create earning opportunities.



Intervention:

Bhupen Kalita is a 48-year-old farmer who has been cultivating potatoes using traditional methods for a decade. In the year 2020-21, he was selected as a beneficiary for potato cultivation under the World Bank-funded Assam Agribusiness and Rural Transformation Project (APART). Through this scheme, Bhupen received various inputs, including potato tubers, fertilizers, pesticides, and technical support for potato cultivation, which resulted in a profitable demonstration for him. Additionally, he gained access to a good marketplace thanks to the APART project's intervention.

Bhupen adopted both new potato varieties and improved technology for cultivation. He grew different table and processing varieties like Lady Rosetta, Chipsona-3, Kufri Surya, and Kufri Jyoti, Surya jyoti etc, following the Best Management Practices (BMPs) across an area of 16 bighas. Since 2022-23, he has been able to cultivate potatoes twice a year, planting in October and January. In the year 2024-25, the total potato production from his two crop cycles reached 82.5 metric tons. He sold 70% of his potatoes at a good price of ₹14-16 per kg and stored around 30 metric tons at the Sorbhog cold storage, which he plans to use as seed in the next season.

Production/Income of the farmer in the year 2024-25:

Particulars	1st Harvest	2nd Harvest
Crop Cycle	Oct 2024 - Jan 2025	Jan 2024 - March 2025
Potato Varieties	Kufri Jyoti, Chipsona-3	Kufri Jyoti, Chipsona -3, Kufri Surya
Total Area (Bigha)	10	16
Production (MT)	32.5	52
Income (Rs)	5,20,000/-	7,20000/

Support and Encouragement :

"The World Bank-funded APART project has been a turning point in my potato cultivation journey. With continuous support, encouragement, and guidance from the officials of the Horticultural Department and APART, I have successfully cultivated and produced both table and processing varieties that are in demand in the market, using climate-resilient technology that reduces cultivation costs. As a result, my income has doubled. I am confident that introducing these new varieties and technologies into traditional farming practices will significantly increase farmers' incomes and produce quality seed for the state. I plan to continue using this new technology," says Bhupen Kalita.

FLORICULTURE FOR PROSPERITY: THE INSPIRING JOURNEY OF JAYANTA DAS TOWARDS SUSTAINABLE LIVELIHOOD AND BETTER INCOME

- Mitali Bordoloi, DHC Kamrup - APART



Introduction:

Jayanta Das, 43, is a nursery entrepreneur from Bagta Village, Hajo Revenue Circle, Kamrup (Rural) district. Born into a farming family, he nurtured a passion for making his nursery successful and was eager to learn about advanced nursery management techniques. In a short period, Jayanta became an inspiration for educated rural youth seeking self-employment. Due to his dedication, hard work, sincerity, and courage, he has emerged as a leading supplier of Anthurium cut flowers (in different colors), potted plants, and others towards the wholesale flower market in Guwahati and other states in the Northeast.

The Journey

Jayanta began his nursery business in 2020 with limited knowledge and resources. Initially, he was growing only seasonal flowers and vegetables, which was not sufficient to support his family of four. He had a dream of transforming his small nursery into a high-tech operation.

In 2023, he was selected as a beneficiary of the "Cultivation of Anthurium (under Protected Structure)" scheme, initiated by the Department of Horticulture and Food Processing as part of the State Floriculture Mission AWP 2023-24. This initiative is supported by the World Bank-funded Assam Agribusiness and Rural Transformation Project (APART).

Through APART, Jayanta received support to construct a poly house and quality planting materials for Anthurium cultivation. He also had the opportunity to attend technical training on Anthurium cultivation under protective structures, guided by the Department in collaboration with the Krishi Vigyan Kendra (KVK), Kamrup. Further, he got assistance from APART in accessing markets in Guwahati, and also to other states in the Northeast.

Through constant effort and hard work, Jayanta has successfully led his nursery to become a motivational model for educated unemployed youth in the area. His livelihood has significantly improved due to Anthurium cultivation, and he now sells a minimum of 2,000 cut flowers at least twice a month. Since September 2024, he has sold around 11,000 cut flowers.

In addition to his flourishing nursery, Jayanta has started a training center and sales counter for planting materials, including Anthurium, orchids, and other flowers. He has also provided employment for three individuals in his nursery business. Over the past six months, his income has doubled from ₹1.5 lakhs to ₹3 lakhs. The breakdown of his income for the last six months is as follows:

Total Income from Cut Flowers : ₹1,80,000
 Training Center and Sales Counter for Planting Materials : ₹70,000
 Income from Orchids and Other Flowers : ₹50,000

In the early days of his nursery, Jayanta lacked knowledge of advanced nursery management techniques and the flower market. He was only growing seasonal flowers and vegetables, selling them in the local market, which resulted in poor returns for his produce. Additionally, he could not afford a proper greenhouse structure for his plants, leading to a high mortality rate among them.





Message for the Youth

According to Jayanta, the key to running a successful nursery business is to safeguard both human and business resources. He is conducting short-duration training programs for women of self-help groups (SHGs) and rural youth focusing on nursery development. This initiative aims to increase the production of Anthurium and other high-value flowers to meet the demand for cut flowers, potted plants, and quality saplings in our state.

With the profits earned from the nursery, Jayanta supports his family and sustains his livelihood.

Way Forward

Jayanta is honest, confident, courageous, and maintains a positive attitude towards his work. These qualities have enabled him to move forward in his nursery business. The support from the Assam Agricultural Production Enhancement Project (APART) served as a crucial stepping stone for him to scale up and grow.

The story of Jayanta Das and the transformation in the attitudes of the youth in the area demonstrate that hard work and determination can lead to success in any field.

EXPORT PROMOTION OF DEHYDRATED GINGER SLICES FROM ASSAM

A Cross Border Trade Business Case Analysis

- APART Cross Border Trade (CBT) team

The Cross Border Trade (CBT) operation was launched as a pilot initiative under the Assam Agribusiness and Rural Transformation (APART) in 2022 and has been evolving since. The CBT operations focus primarily on high-value agricultural commodities such as Ginger, Turmeric, and Chilli, while capitalizing on the key factors that gives Assam a competitive advantage over spices producing states in India.

The primary objectives of CBT are to assess commercial viability, enhance unique selling propositions (USPs), ensure sustainability, and improve procedures to meet compliance standards. Over the past two years (2023-24), the APART CBT Team has made significant progress in the high value spices value chain of Assam by facilitating market linkages, channelizing surplus agrohorticultural commodities to reach consumers across different markets and geographies.

By 2025, the CBT operations have successfully acquired customers from international markets specifically for value added products of high-value spices from Assam.

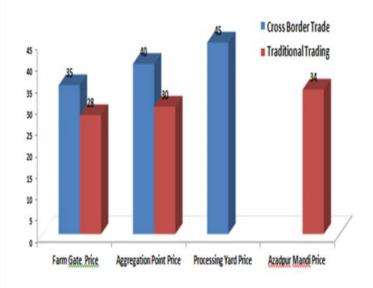
Table-1: Export Consignment goods & cost details under APART CBT

Consignment Details	Unit Price (Rs/Kg)	Volume (MT)	Value (Cr)
Fresh Ginger sourced directly from Ginger Farming Clusters	45	300	1.35
Dehydrated Ginger Slices	350	50	1.75
Comparative current price for imported Nigerian Ginger into India	285	(**)	**

Table-2: Price impact on stakeholders across the supply chain compared to conventional trading

Fresh Ginger	Costing under Cross Border Trade	Costing under Traditional Trading
Farm Gate Price (Rs/Kg)	35	28
Aggregation Point Price (Rs/Kg)	40	30
Processing Yard Price (Rs/Kg)	45	
Azadpur Mandi, Delhi Price (Rs/Kg)		34

The key difference established under the APART CBT, compared to conventional trading, is the requirement of securing a confirmed Purchase Order (PO) from a quality-conscious customer who deals in value-added commodities and is primarily an exporter. This process involves multiple laboratory samples, spot quality checks, and product and process improvements, which lead to full payments being made before dispatching stock from Karbi Anglong, Assam. This approach has instilled confidence in the processing units in Karbi Anglong, encouraging them to invest in upgrading their processing facilities, technologies, and infrastructure to achieve greater volume and value in the coming years.



These operations have also contributed to the GST regime, making transactions more secured, ethical & transparent.

Table-3: GST Index under APART supported CBT operations

Applicable GST Indexes	Export Oriented Spices Processing Units delivering value added materials	Conventional Trading of fresh ginger
Fresh Green Ginger	NA	NA
Dehydrated Ginger Slices	5% GST	NA
Processing & Packaging Machineries	18% GST	NA
Power & Electrical Installations	18% GST	NA
Civil Construction & Material	18% GST	NA
Packing Material	18% GST	NA
FSSAI Certification	18% GST	NA
FSSC Certification	18% GST	NA
Pollution Certification	18% GST	NA
APEDA Certification	18% GST	NA
Spices Board Certification	18% GST	NA

The APART cross-border trade operations have significantly contributed to the commercially viable utilization of local agricultural labor, particularly among female workers. As a result, these female daily wage earners have had the opportunity to receive training in ginger processing and value-added operations. They are earning better wages than in traditional trading jobs and are working in improved conditions, supported by the entrepreneurs at processing units in Karbi Anglong.

Table-4: Employment & Daily Wage Impact under APART CBT

Employment & Daily Wage Impact	Export Oriented Spices Processing Unit (Rs/Day)	Conventional Trading (Rs/Day)
Unskilled Daily Wage Labour	350	300
Semi Skilled Labour	450	NA
Skilled Labour	750	NA
Machinery Operators	900	NA

The APART CBT aims to enhance its operations in the upcoming crop seasons. The team is also working on diversifying its offerings by exploring value-added products made from Chilli, Turmeric, Black Pepper, Bay Leaves, etc.

