

Youth in Agriculture Transformation : A case story from Bangladesh

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THE MAIN OBJECTIVE OF THIS PRESENTATION

"To explore and analyze how youth participation has influenced the transformation of the agricultural sector in Bangladesh, highlighting key challenges, opportunities, and the impact of young innovators in advancing sustainable agricultural practices."

SOME GLOBAL INSIGHTS

- Today, there are **1.2 billion young people** aged 15 to 24 years, accounting for 16% of the global population.
- In 2023, **35% of the world's youth** between 15 and 24 years were employed.
- Agriculture accounts for **32% of total employment globally** and 39% in developing Asia and the Pacific.
- A 2020 report by AgFunder shows that **32% of venture capital investment** in Agri-Tech startups went to companies founded by entrepreneurs under 35, a key indicator of youth involvement in this sector.

CONTRIBUTION OF AGRICULTURE TO BANGLADESH'S ECONOMY

Impact on GDP and Employment

11.3%

Significant Contribution to GDP

45.33%

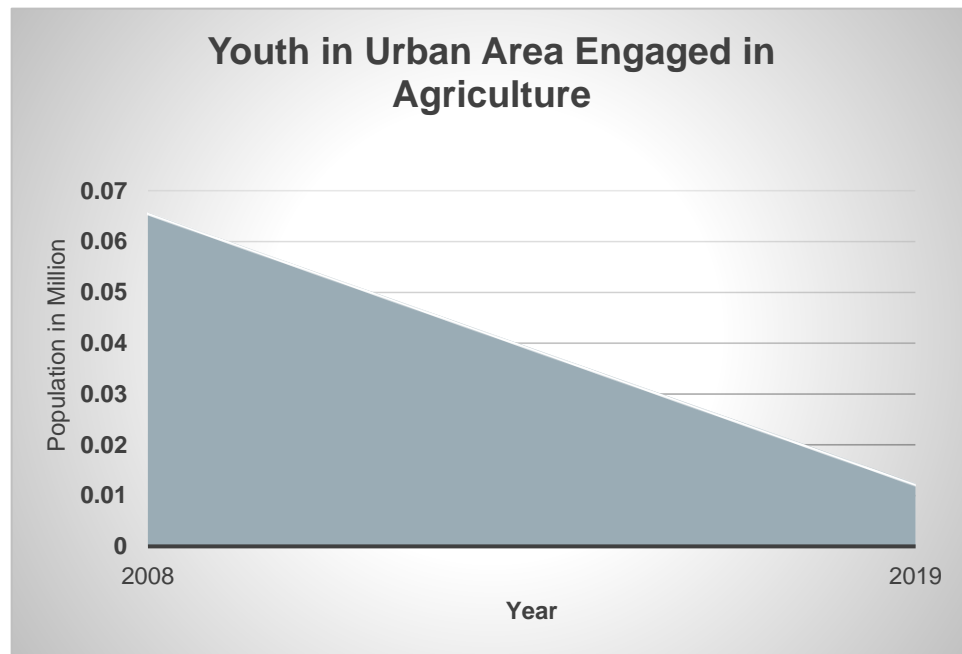
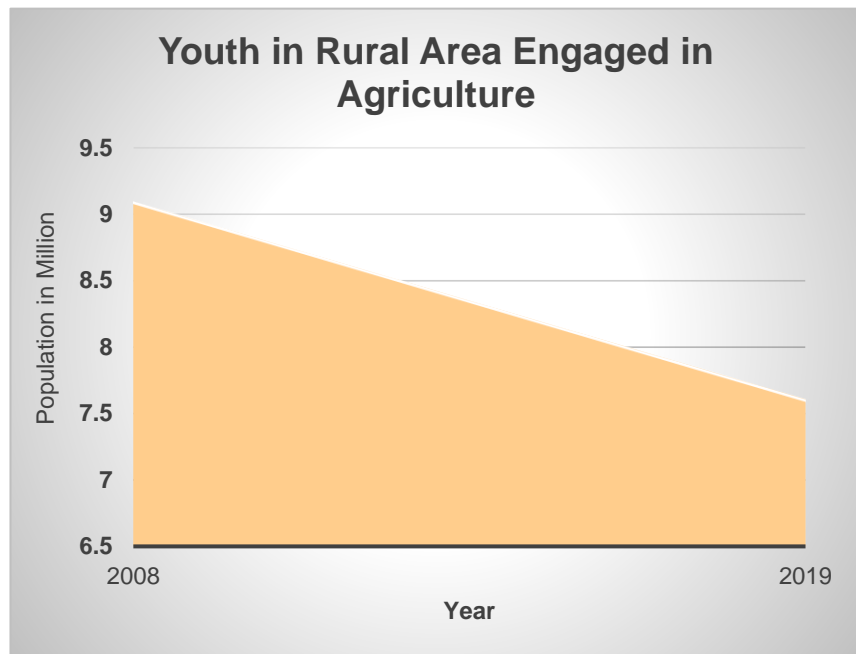
Employment in Agriculture



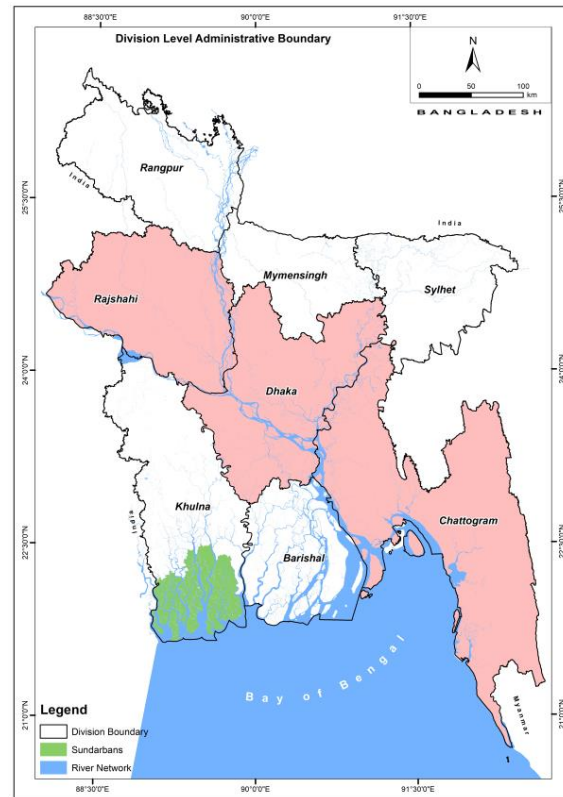
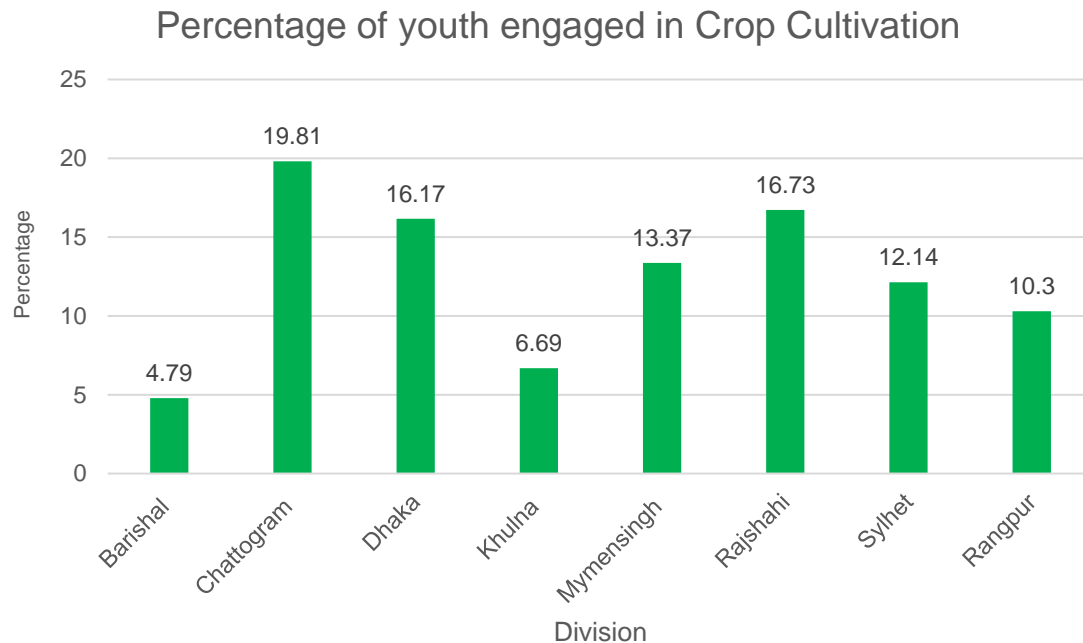
However, specific data detailing the percentage of youth (typically defined as individuals aged 15 to 24) engaged in the agricultural sector is limited.

BANGLADESH: AGRICULTURE CENSUS 2008 & 2019 INSIGHTS

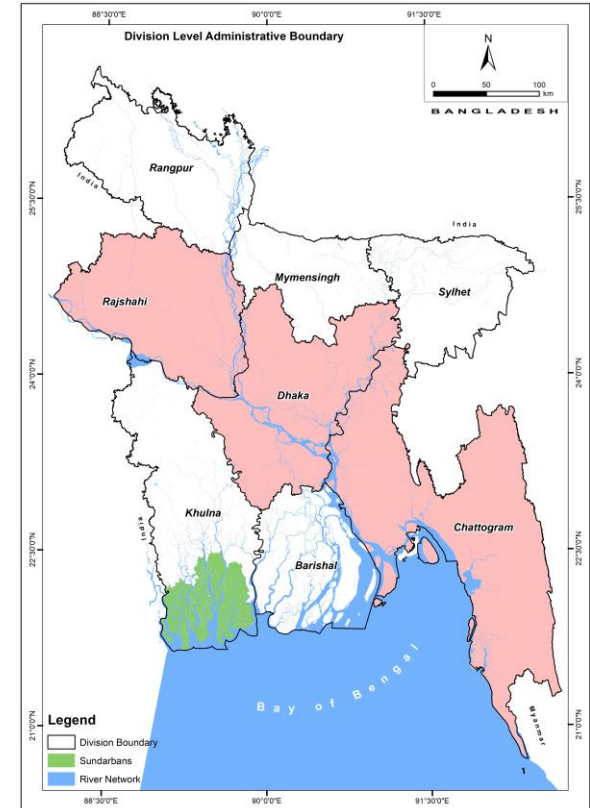
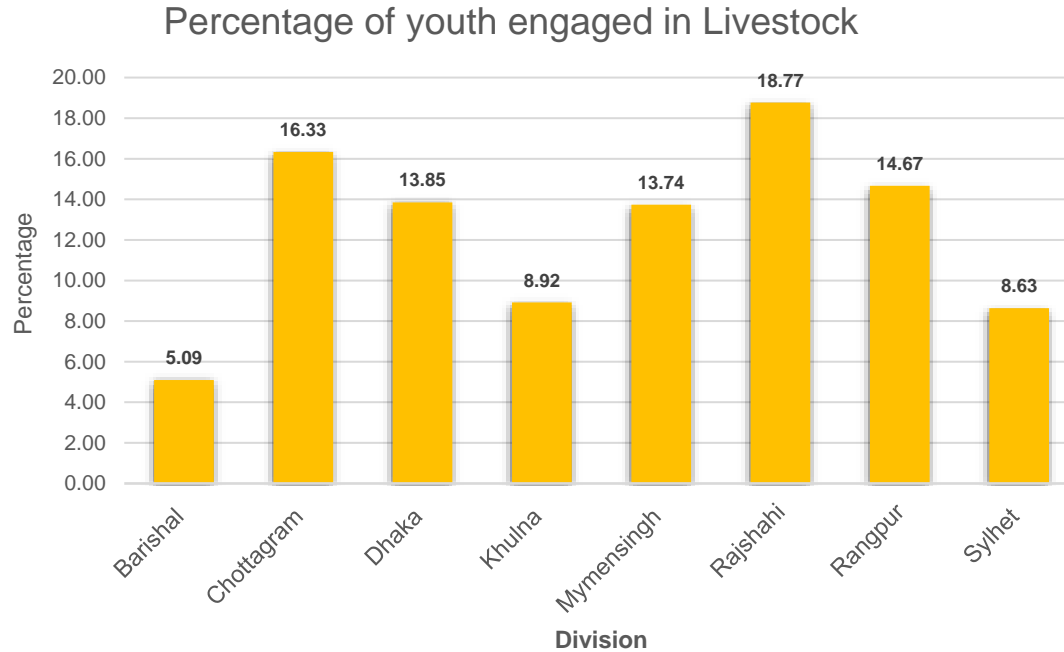
Age(17-35) and Participation Comparison



BANGLADESH: YOUTH PARTICIPATION IN CROP CULTIVATION BY DIVISION

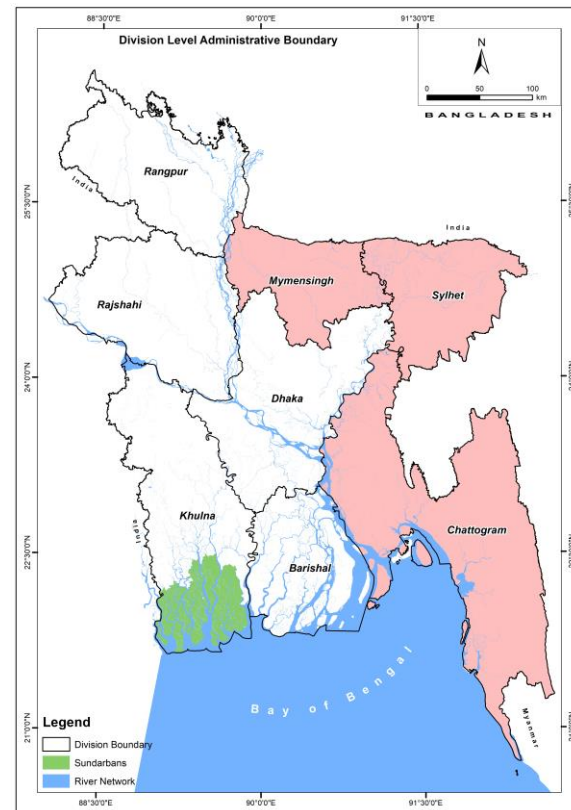
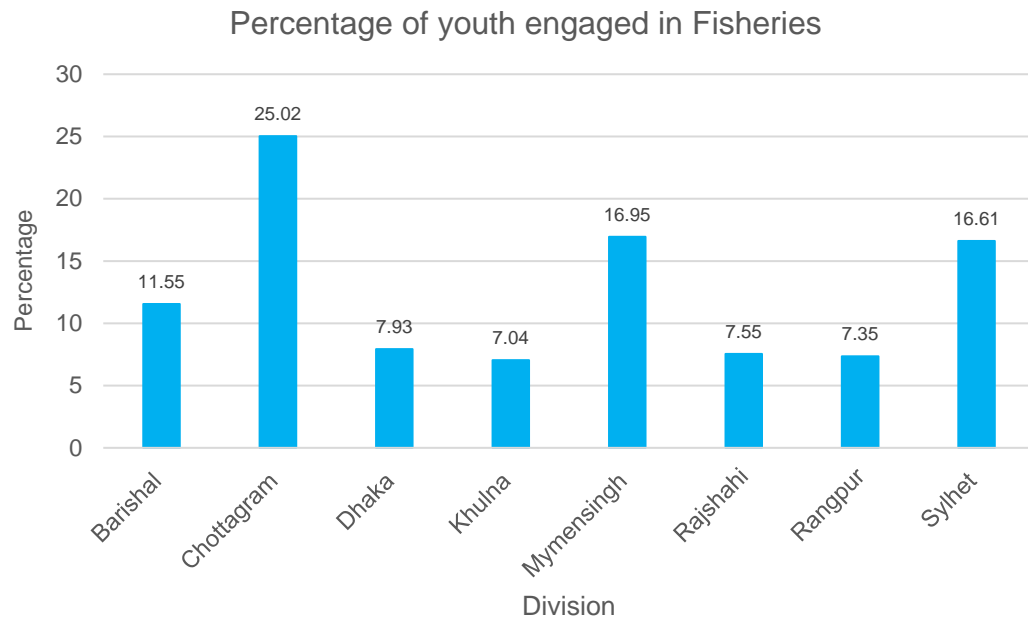


BANGLADESH: YOUTH PARTICIPATION IN LIVESTOCK BY DIVISION



Source: BBS Sample Census (Livestock 2020)

BANGLADESH: YOUTH PARTICIPATION IN FISHERIES BY DIVISION



Source: BBS Sample Census (Fisheries 2020)

WHY AGRICULTURE IS LESS PRIORITY SECTOR FOR YOUTH IN BANGLADESH

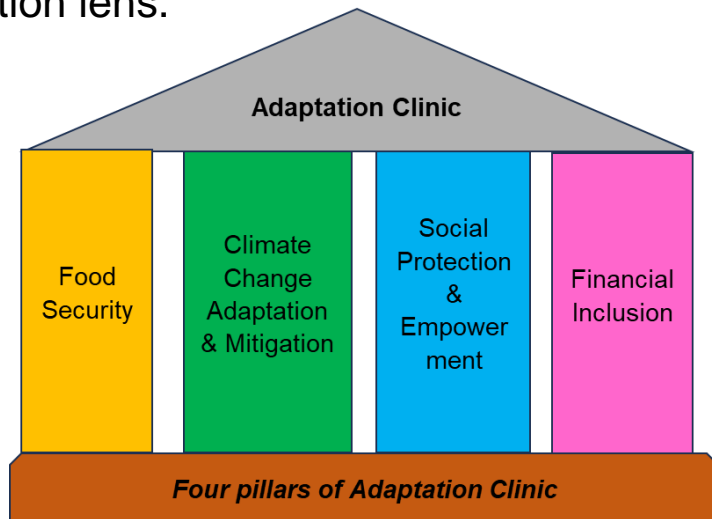
- Phyco-Social Issue: Farming Appears To Be **Socially Non-Prestigious**.
- **Unstable Market Condition**: Return over investment is very risky in Agriculture.
- Climatic Hazard: **Climate change** is making agriculture increasingly vulnerable, deterring youth from investing in the sector.
- Expansion of Service & Industrial Sector: In Bangladesh, Commercial Services and **Industrial sector creates more job** opportunities for youth in comparison to Agricultural Sector.
- Access to Information & Knowledge: **Lack of Knowledge in agriculture** is hindering the development of entrepreneurial ventures and farm productivity.
- Limited **Access to Financial System**: Financial service providers are reluctant to provide their services including Credit, Savings and Insurance to rural youth due to lack of existing policy and procedures.
- Choice of Generation: nowadays, youth are primarily interested in the **Digital Environment** rather than the Natural.

The youth have demonstrated a distinct narrative of agricultural transformation.



BRAC'S ADAPTATION CLINIC

A one-stop service center for the climate vulnerable farming communities that provides holistic services including climate adaptive technologies and advisory support, Agri-inputs support (quality and tolerant seed, organic fertilizer, machineries etc.), weather and climate-based information, market linkages and capacity building with a Climate Change Adaptation lens.



24 Adaptation Clinic operated
19,290 Farmers Reached
28,457 bighas land are under Climate
Adaptive Agricultural Practices
221% Average Cropping intensity

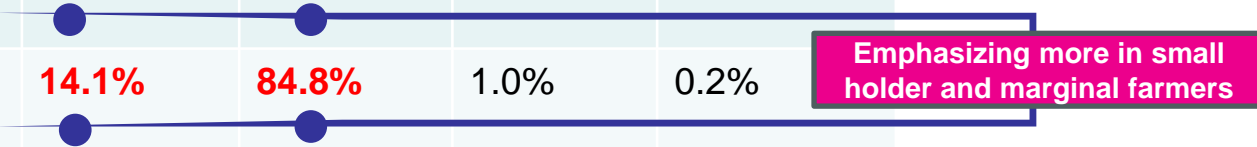
8921 farmers received **Advisory Services** through the
Mobile Adaptation Clinic

ADAPTATION CLINIC PARTICIPANTS

- ❑ Small Holder Farmers - up to 2.4 acres
- ❑ Medium farmer - 2.5 to 7.4 acres
- ❑ Large farmer - 7.5 acres or more

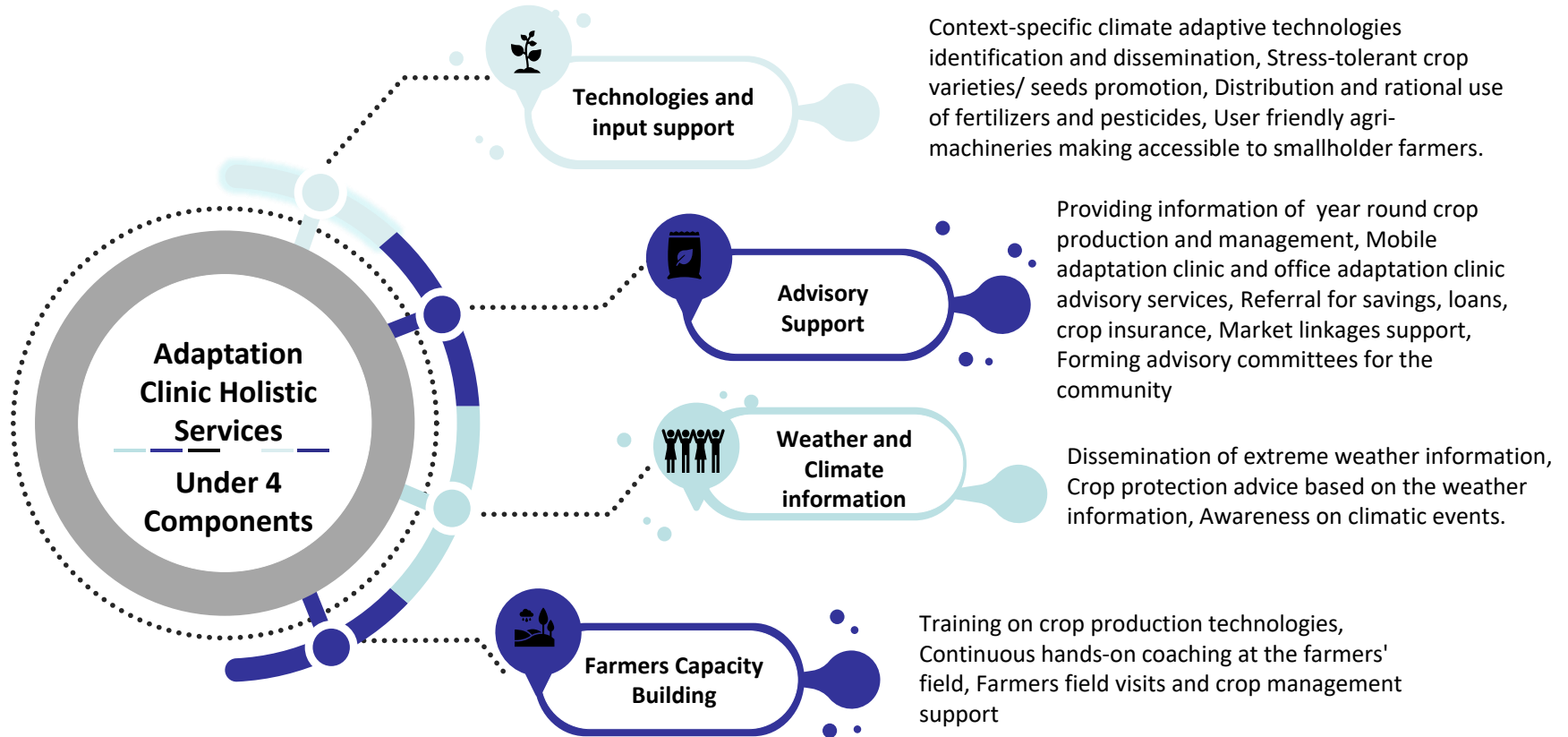
(BBS, 2023)

Year	Total surveyed	Landless farmer	Small Holder farmer	Medium farmer	Large farmer
2023	12540	5.7%	93.2%	1.1%	0.0%
2024	31681	14.1%	84.8%	1.0%	0.2%



Emphasizing more in small holder and marginal farmers

HOLISTIC SERVICES OF ADAPTATION CLINIC



YOUTH PARTICIPATION IN DIFFERENT BRAC'S ADAPTATION CLINICS

Year	Division	Total Number of Farmer	%of youth Participant	Receive Machinery Support	High-Value Crops Seed Support	Fisheries Support	Receive Training on Agriculture Technology
2022	Barishal	5368	40%	98	5211	157	5368
	Khulna	2471	34%	63	2369	102	2471
2023	Barishal	7081	47%	110	6875	206	7081
	Khulna	2505	43%	75	2362	143	2505
	Rajshahi	528	38%	42	505	23	528
	Mymensingh	1337	48%	65	1178	159	1337

HOW DOES THE ADAPTATION CLINIC ATTRACT YOUTH TO AGRICULTURE?

- **Disseminate Information on Technology-based production** and receive high return on investment.
- **Provides support to marketing of produced agricultural products** So that farmers get fair prices and make favorable profit.
- **Frequent Hands-on Coaching** on Precision Agriculture
- **Received resilient inputs** through Adaptation Clinic.
- Got orientation on **different relevant websites and apps on agriculture**.
- The **Advancement of Entrepreneurship and Financial Inclusion**, with Emphasis on Credit and Crop Insurance.
- Receiving **one-stop services** regarding any agricultural issues.

YOUTH AS A CHANGE AGENT IN BANGLADESH AGRICULTURE

Key Contributors



Golam Nabi

Started dragon fruit cultivation in Natore. He's gaining worldwide recognition and sharing his knowledge in places like Vietnam.



Sabina Yeasmin

Founded Alif Goat and Dairy farm in Faridpur. which has provided her with much-needed self-sufficiency.



Kamrunnesa Mira

Launched the 'Chashibon' project in Natore which removes middlemen and introduces AI and robotics in agriculture, promoting sustainable practices and fair prices for farmers.

AGRICULTURAL APPLICATIONS AND INNOVATIONS

Empowering Farmers with Technology

iFarmer

A young entrepreneur, Fahad Ifaz founded iFarmer to address financial challenges in agriculture and reduce exploitation by middlemen. It connects farmers and buyers, creating a fairer supply chain for agricultural products.

Krisaker Janala

Krisoker Janala (Farmers Window) is a newly developed app that is used by the agricultural extension agent of Bangladesh to spread information to the farmers. It offers farmers information on 120 crops, assisting them in diagnosing plant diseases and issues without the need for internet access.



HYDROPONICS AND AQUAPONICS INNOVATIONS

Sustainable Urban Farming



Tanvir Hossain Siddiqui

Tanvir, a graduate from Ahsanullah University, embraced aquaponics, a system that combines raising fish (aquaculture) with hydroponic farming. He is growing vegetables like spinach and lettuce using nutrient-rich water from fish tanks. This innovation allows for water conservation and pesticide-free farming, ideal for urban environments. Tanvir's clients include high-end grocery stores like Meena Bazaar, and he continues to revolutionize urban agriculture in Bangladesh.

STRAWBERRY FARMING SUCCESS

Innovative Agricultural Practices



Sadat Rahman

Sadat Rahman has successfully introduced strawberry farming in northern Bangladesh. Despite strawberries being a rare crop in the region, Sadat capitalized on the increasing demand for the fruit, cultivating it organically and marketing it across the country. His efforts have made strawberries more accessible and popular in local markets, proving that non-traditional crops can thrive in Bangladesh with proper care.

SALMA AKTER ADURI: A STORY OF AGRICULTURAL TRANSFORMATION

Empowering Communities through Innovation



Salma

Potato Farmer

A potato farmer from Rangpur, Salma expanded her access to finance, markets, and technology through the Birahim Cooperative. She is successfully exporting potatoes and launching a vegetable seed business. Her leadership and innovations have led to financial stability and community empowerment.



CASE STUDY: RAJOB ALI, AQUACULTURE ENTREPRENEUR

Rajob Ali, a young fish farmer in Bangladesh, has become a successful aquaculture businessman. He started as a farm manager at his father's small-scale rice farm and now owns a 2,400 decimals fish farm in Fulpur upazila, Rajshahi.

Thank You!