

Role of Agricultural in the economy of Bangladesh

Introduction

Agriculture is the methodologies of arts and crafts of cultivating crops, nurturing animals, producing foods. It is one of the main reasons for civilization to come this far. Bangladesh is a delta land with so many rivers which makes the land of this country much more fertile. Since the beginning of this country, agriculture has been a major economic factor and one of the main livelihood of the people. At Least 40% of the employment comes from agriculture(Asian Development Bank, 2023).

Bangladesh's agriculture, primarily rice-based, is gaining diversification with high-value crops like fruits, vegetables, livestock, and fisheries, but still largely dominated by smallholder farmers. Meanwhile handmade tools, use of domestic animals and intense physical labor are still main methods of farming today as most of the farmers belong below the poverty line but recent government subsidies and incentives are being introduced to farmers for modernization, greater productivity and more crop diversification. BRRI and other research institutions are also developing new varieties of crops with sustainable and more productive rates(The Daily Star, 2024).

Impact of agricultural on the economy of Bangladesh

Bangladesh is substantially an agricultural nation, and the sector is essential to boosting economic expansion. According to the Quarterly Labour Force Survey 2015–16, the agricultural sector—which includes agriculture, animal husbandry, forestry, and fishing—contributes 14.74 percent of the nation's GDP and employs roughly 41 percent of the workforce(Bangladesh Bureau of Statistics, n.d.). Bangladesh has become self-sufficient in food production and is now importing varieties of agricultural products to the USA,UK,EU and Middle east. This year, Bangladesh exports were \$637 million in the past eight months according to the export promotion bureau (EPB)(Chakma, 2024).

Bangladesh is the 7th largest mango producer in the world and there is a whole industry created based on it(Rahman, 2021). The north-eastern side of the country especially in Chapai Nawabganj, Rajshahi area is famous for mango production. The Agricultural Extension Department reports that 18,515 hectares of land were used for mango cultivation during the 2021–22 growing season and year by year it is increasing. More money is made by farmers from the cultivation of mangoes than from any other crop. In recent years, exporting mango is growing rapidly. In 2017–18, 310 tons were exported; in 2018–19, 283 tons were exported; in 2020–21, 1,632 tons were exported; and in 2021–22, 1,757 tons were exported(Dhaka Tribune, 2023).

Importance of Sustainable Agriculture

An environmentally beneficial strategy that lessens dependency on finite natural resources is sustainable agriculture. Crop rotation, intercropping, and companion planting are some of its meticulous agricultural techniques that assist in preserving soil health and water quality while removing the need for harmful practices. Bangladesh's agriculture is under attack due to its continued use of hazardous agrochemicals and degradation of land and water resources. The government of Bangladesh is working toward sustainable agricultural practices to improve longevity and environmental safety with ongoing assistance (Project, 2024).

Crop rotation, organic farming, integrated pest management, agroforestry, water-saving irrigation, and hardy crop varieties are examples of sustainable agricultural methods used in Bangladesh. By improving soil health, preserving water, lowering chemical pollution, fostering biodiversity, and assisting farmers in adjusting to climate change, these methods improve the environment and eventually advance sustainable agriculture and a balanced ecosystem.

Agricultural challenges and their solutions

Farmers in Bangladesh deal with a number of issues that affect income stability, sustainability, and productivity. Among the main challenges are -

Climate Vulnerabilities: Drought, flooding, and erratic rainfall etc are the climate-related threats that Bangladesh's agriculture faces which frequently harm crops, lower yields, and interfere with planting seasons.

Limited Access to Modern Technologies: Productivity is hampered by the fact that many Bangladeshi farmers lack access to contemporary farming tools and technologies including a lack of high-yield crop types, insect control techniques, and automated equipment.

Soil Degradation: Degradation of the soil has been caused by intensive farming, excessive use of chemical fertilizers, and inadequate land management.

Water Scarcity and Irrigation Issues: Many areas experience water scarcity as a result of inadequate irrigation infrastructure.

Financial Constraints: Farmers face financial strain due to the high cost of inputs like seeds, fertilizer, and pesticides as well as the lack of readily available, reasonably priced loans.

Solutions to address the above mentioned challenges and long-term support for farmers -

1. Encouraging the use of agricultural varieties that can withstand flooding or drought will help reduce losses.
2. By offering rental services or subsidies, government initiatives or cooperatives can make machinery accessible, lowering the cost of contemporary equipment.
3. Increasing the use of organic and balanced fertilizers by farmers helps preserve soil health and lessen reliance on chemicals.
4. The government can promote widespread adoption of effective irrigation technologies, particularly in regions that are prone to drought, by providing subsidies for them.

Conclusion

In summary, Bangladesh's economy still relies heavily on agriculture to support livelihoods, generate GDP, and ensure food security. Even while modernization and crop diversification have advanced significantly, issues such as soil degradation, limited access to technology, climate vulnerabilities, and financial limitations still exist. Bangladesh can significantly develop its agricultural sector by adopting sustainable methods and assisting farmers with modern technologies, legislation, and subsidies. In addition to increasing resilience and productivity, these initiatives will support the country's long-term environmental sustainability and economic stability.

Reference:

1. Asian Development Bank. (2023). *BANGLADESH'S AGRICULTURE, NATURAL RESOURCES, AND RURAL DEVELOPMENT SECTOR ASSESSMENT AND STRATEGY*.
<https://www.adb.org/sites/default/files/institutional-document/864661/bangladesh-agriculture-sector-assessment-strategy.pdf>
2. The Daily Star. (2024, January 10). BRRI develops two new rice varieties. *The Daily Star*.
<https://www.thedailystar.net/business/news/brri-develops-two-new-rice-varieties-351536>
3. Bangladesh Bureau of Statistics. (n.d.). Bangladesh Economic Review 2017. In *Chapter 7- Agriculture* (pp. 87–88).
[https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/e8bc0eaa_463d4cf9_b3be_26ab70a32a47/Ch-07%20\(English-2017\)_Final.pdf](https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/e8bc0eaa_463d4cf9_b3be_26ab70a32a47/Ch-07%20(English-2017)_Final.pdf)
4. Chakma, J. (2024, March 12). Agri product exports make a turnaround. *The Daily Star*.
<https://www.thedailystar.net/business/economy/news/agri-product-exports-make-turnaround-3564546>
5. Rahman, W. (2021, July 18). Bangladesh 7th largest mango producer in the world. *Dhaka Tribune*.
<https://www.dhakatribune.com/business/economy/252809/bangladesh-7th-largest-mango-producer-in-the-world>
6. Dhaka Tribune. (2023, August 4). Bangladesh exports 2,700 tons of mangoes to 34 countries. *Dhaka Tribune*.
<https://www.dhakatribune.com/bangladesh/321638/bangladesh-exports-2-700-tons-of-mangoes-to-34>

7. Project, B. (2024, June 12). *The growth of sustainable agriculture in Bangladesh*. The Borgen Project. <https://borgenproject.org/sustainable-agriculture-in-bangladesh/>