

Dinajpur's Macroeconomic Landscape: Navigating Opportunities and Challenges

Mehedi Hasan*
Md. Ahsan Habib**

Abstract

This study analyses Dinajpur's macroeconomic landscape, elucidating the diverse opportunities and challenges that characterise its agriculture, industry, and services sectors. The study finds that the agriculture, industry, and services sectors have significant potential for growth and development but are hindered by various challenges, such as a lack of infrastructure and insufficient investment. Additionally, the paper explores poverty, inequality, and employment issues and argues that addressing these challenges is crucial for sustainable and inclusive economic growth in Dinajpur. The paper concludes with recommendations for policymakers to improve the macroeconomic environment and support the agriculture, industry, and services sectors, which could, in turn, create more jobs and reduce poverty and inequality in the region.

Keywords: *Dinajpur · Agriculture · Industry · Services · Poverty · Inequality · Employment · Economy*

1. Introduction

Dinajpur is a district located in the northern part of Bangladesh. The district has a diverse economy, with agriculture, industry, and services all playing essential roles. This growth has been driven primarily by the agricultural sector, which

* Lecturer, Department of Economics, Mawlana Bhashani Science and Technology University (MBSTU) Science and Technology University; Contact No: 01687214847, E-mail: mehedihasan.econ43@gmail.com

** Lecturer, Department of Economics (ECN), Hajee Mohammad Danesh Science & Technology University, Dinajpur. E-mail: ahsan.ecn@tch.hstu.ac.bd

employs most of the population and contributes significantly to GDP. The industrial and service sectors have also been growing, albeit slower. Our country's development pace is not parallel to the Dinajpur district as it is the second-highest and poorest district. The macroeconomic picture of Bangladesh reveals that the country's economy grew strongly over ten years, surpassing milestones of 7.0 percent in FY 2015–16 and 8.0 percent in FY 2018–19. The COVID-19 pandemic, however, caused the growth rate to drop to 3.45% in FY 2019–20. In FY 2020–21, the economy expanded by 6.94 percent. BBS's preliminary projections show that the GDP grew by 7.25 percent in the fiscal years 2021–22. The contribution of the service and industrial sectors increased the national GDP, where agriculture is the main dominant sector in this district (*Bangladesh-Economic-Review-2022*). No primary agri-based industry or significant service sector is established here. This district's 63.90% of the population's total income comes from agriculture ("Wikipedia," 2023). Even though a few mega projects are going to be completed shortly. However, before taking the development program, we need to have a comprehensive idea about the economy of Dinajpur.

This paper provides an analysis of Dinajpur's macroeconomic scenario, focusing on the opportunities and challenges facing the agriculture, industry, and services sectors. This is followed by an analysis of the macroeconomy, focusing on the factors that impact its growth and development. The research then explores issues relating to employment, inequality, and poverty, examining how these affect Dinajpur's macroeconomic environment.

The paper concludes with a series of targeted policy recommendations to enhance the region's macroeconomic environment and support the growth and development of the agriculture industry and services sector. These recommendations are intended to generate gainful employment, reduce poverty and inequality, and promote sustainable economic growth in Dinajpur.

Overall, this study contributes to the understanding of the macroeconomic landscape in Dinajpur and highlights the need for further research to fully understand the complex economic dynamics at play in the region. This study ends with the hope that it provides a foundation for policymakers to develop effective policies and programs to support economic growth and development in the area.

2. Data and Methodology

This study on the macroeconomic landscape of Dinajpur is based on secondary data sources, particularly newspapers and other relevant publications. A comprehensive review of the available literature was conducted to gather information about the economic landscape in Dinajpur, focusing on the agriculture industry and services sectors. The study employed a descriptive approach to analyse the data, which

involved examining and summarising the available information systematically and structured. But one thing must be mentioned: no previous study has been conducted about the macroeconomic scenario of Dinajpur. Most of the studies about Dinajpur are related to the agriculture sector.

The data collection process involved identifying and reviewing relevant newspapers and publications that provided information on the macroeconomic scenario in Dinajpur. Articles, reports, and other relevant materials were reviewed, and relevant information was extracted and compiled. The data was then analysed to identify patterns, trends, and other pertinent information related to agriculture, industry, and services.

The limitations of this study include the potential for bias and incompleteness in the secondary data sources used. Nonetheless, the study provides valuable insights for further research to understand the economic landscape in the region entirely.

3. Macroeconomic Landscape of Dinajpur

I. Agricultural Sector

The agricultural sector is a vital component of the Dinajpur district's economy, as it is the primary source of employment and income for a significant portion of the population. The district's fertile land, moderate climate, and abundant water resources make it ideal for agricultural production. The major crops grown in the Dinajpur district include rice, wheat, maize, potato, onion, garlic, tomato, and other vegetables. The district is also known for producing high-quality mangoes and lychees. Most of the people in this district are involved in the agricultural sector. The total number of Farmers in this district is 329393 (male 320429, female 8964)(*Krishi Batayon*, 2022). More classified data is given below:

| Farmers' category | Number |
|-------------------|--------|
| Uncategorised | 248855 |
| landless | 17555 |
| Marginal | 13656 |
| Small | 35469 |
| Average | 8507 |
| Big | 5351 |

Source: Krishi Batayon, 2022

According to Dinajpur's Department of Agricultural Extension (DAE), the district has around 2.79 lakh hectares of arable land. Local farmers cultivate Boro paddy on 1.74 lakh hectares, Aman on 2.60 lakh hectares, Aush on 11,000 hectares, potato on 43,000 hectares, and wheat on 5,500 hectares. More than 6.24 lakh families in the northern district are involved in agriculture, and they have surplus food grains even after feeding 35 lakh Dinajpur people. (*Department of Agricultural Extension (DAE) of Dinajpur*, 2022). The following table depicts the food production scenario of the Dinajpur district.

| Food-related information | Production |
|--|---------------------|
| The total amount of food production | 1437394 Metric. ton |
| The total food demand | 487015 Metric. ton |
| The total food deficit amounts | 0 Metric. ton |
| The total amount of food surplus | 841865 Metric. ton |
| The total amount of seeds, fodder, and other wastage | 49020 Metric. ton |
| Percentage of grain density | 3084 % |

Source: *Krishi Batayon*, 2022

Dinajpur district is unrivalled in the production of fragrant rice. Different varieties of aromatic rice are grown in this district. Among them, Bridhan-34, Katari, Jira Katari (powdered sugar), Philippine Katari, Challisajira, Badsha Bhog, Black cumin, Jata Katari, Chini Katari, Begun Bichi, and Bridhan-50 are notable. The area under cultivation is about 40765 hectares, and the total rice production is about 85406 million tons. The cultivation of high-yielding, fragrant Biri Dhan-70' has been started to bring back Kataribhog paddy cultivation under the supervision of the DAE. (Dinajpur District, 2022)

Not only rice but also Litchi are prominent agricultural products in this district. According to the Dinajpur Horticulture Center, the district has 4,500 litchi gardens in a total of 5,500 hectares of land. On average, 4000 litchis per tree (in a year), the total yield is 22,000,000. Litchi was cultivated on 5 thousand 610 hectares of land in the Dinajpur district last year (DAE). (*Department of Agricultural Extension of Dinajpur*, 2022)

In addition to rice and litchi, livestock also plays a significant role in the agriculture industry in this district. The information below gives an overview of animals. (*District Livestock Office*, 2020)

1. Dinajpur district has consistently achieved self-sufficiency in meat production (2,35,717 MT 2019-20).

2. Self-sufficient in egg production (42,11,78,215 eggs in 2019-20).
3. Milk production has been 195097 metric tons.
4. 10897 private dairy farms have increased continuously.
5. The number of cattle has increased. Currently, the number of cows in the district is 17, 19,663 out of which 2,99,132 are advanced breed cows. The number of goats and sheep is 11, 20,000.
6. Poultry farms have increased. At present, the number of poultry farms is 2150.
7. The number of small and large private goat farms is 1835.
8. 775 private duck farms.
9. Cultivation of improved varieties of grass has increased at a significant rate. At present, the amount of land under grass cultivation is 750 acres.

Besides crops, Dinajpur also has surplus seeds. Dinajpur annually produces more than 42,384 tons of paddy, wheat, and potato seeds worth Tk166.18 crore. The district supplies 2,850 tons of seeds worth Tk12.73 crore to the nearby neighbourhoods. (*Tbsnews*, 2020)

The groundwater level in the northern district of Dinajpur had been going down for decades. This started damaging agriculture. Four rubber dams, one mini rubber dam, and two cisterns are now serving as a source of relief for many farmers. Earlier, irrigating a bigha of land used to cost around Tk 4,000; now, the dams provide enough water. As a result, the irrigation cost has decreased from 2500 to 2000 taka. Along with increased agricultural production, the tourism industry has developed around the dam, positively impacting the district's economy. 11 thousand 665 hectares of agricultural land in the district have come under simple irrigation. Due to the Mohanpur Rubber Dam, there has been an increase in the cultivation of 10%, or 6.6 metric tons. The Punarbhava River Rubber Dam prevented the desertification of 1000 hectares of agriculture. As a result, an additional 6,000 tons of food grains are being produced. The beneficiaries receive financial benefits of about five crore tk annually. (*Jagonews24*, 2023)

The government has taken various initiatives to deal with the future food crisis. As a part of that, the government has undertaken a project to promote sustainable agricultural development in the Dinajpur region. The DAE will implement this project at a cost of Tk 65 crore 31 lacks by June 2027. There is an excellent opportunity to increase the intensity of crops and crop production by adopting agricultural technology that avoids climate risks, including modern farming technology. That, in turn, creates women and young entrepreneurs, commercialisation of agriculture, and introduction of new crops. (*Department of Agricultural Extension (DAE) of Dinajpur*, 2022)

II. Industrial Sector

The industry is an emerging sector in the Dinajpur district, with a few large and medium-sized enterprises operating there. 6.29% and 3.90% of the total income of Dinajpur district come from non-agricultural labour and the industrial sector, respectively (“Wikipedia” 2023). The district has the potential for industrial development due to its strategic location, availability of natural resources, and access to significant markets in Bangladesh and neighbouring countries.

The major industries in Dinajpur district are related to agro-processing, such as rice mills, flour mills, oil mills, and jute mills. In addition, some textile mills, chemical factories, and pharmaceutical companies are operating in the area. Setabganj Sugar Mills Ltd. and Dinajpur Textile Mills Ltd. are two of the major industries and factories in the Dinajpur district. As paddy is the main agricultural product of this district, there are about 2000 rice mills in terms of industry and factories, including about 100 automatic and semi-automatic rice mills. (*Dinajpur District*, 2022) Below is the information on medium and small-scale sectors:

| Name of Mill/Factory | Number |
|--------------------------|--------|
| Automatic rice mill | 61 |
| Semi-automatic rice mill | 35 |
| Chatal rice mill | 1861 |
| Major rice mill | 12 |
| Automatic Flower Mill | 6 |
| Cold storage | 9 |
| Jute mill | 1 |
| Lozenges Factory | 2 |
| Garments | 1 |
| Mixed Fertilizer Factory | 1 |
| Poultry Hatchery | 4 |

Source: (Dinajpur District Website, 2022)

Pulhat BSCIC operational factories are the most prominent part of the industrial sector, where entrepreneurs have invested 22 crores and 20 lakhs in these industrial establishments. Here, 54 industrial establishments were established on 189 plots. Out of these, 41 rice mills, five engineering industries, four chemical industries, one forestry industry, two textiles, and one industrial plot in the Ayurvedic sector have production processes. Besides this, in Dinajpur, there are around 300 Bazar to facilitate the economic activities of these districts. (Rangpur, 2019).

From 2016 to 2021, about 15 lakh 48 thousand crore tk was spent on various district development activities in these five financial years. Two mega projects, Dinajpur Economic Zone and Sheikh Kamal IT Training and Incubation Center, are currently under construction. (*Banglatribune*, 2023)

Dinajpur Economic Zone will be established on 308 acres of land in the Sundarban village of Dinajpur Sadar Upazila. About 250 local and foreign industrial establishments will be built there. Since this is an agro-based area, agro-processing factories, light engineering, garment and textiles, and pharmaceutical factories will be established. Another project, named Sheikh Kamal IT Park, has been planned for about 100 crore taka investment. It has been projected that about 2000 youth will emerge as skilled workforce from here every year. (*dailyjanakantha*, 2023)

Three of the five coal mines discovered in Bangladesh are in Dinajpur - Barapukuria, Phulbari, and Dighipara. On average, about 1500 tons of coal are mined daily in Barapukuria. Recently, iron mines were discovered in Hakimpur. The Hakimpur magnetite field has iron ore reserves of 62.5 crore tons. These natural resources also contributed to the industrial sector of Dinajpur. Considering the 25 percent recoverable reserves and the current annual requirement for raw materials (50 lakh tons), the Hakimpur field can supply raw materials for the next 30 years, according to the Geological Survey of Bangladesh. The economic value of this raw material will be Tk 1.6 lakh crore. Since iron has been discovered in Dinajpur, iron and steel factories will also be established here. Bangladesh is proud to have the world's only underground granite mine away from the sea. Madhyapara Hard Rock Quarry of Parvatipur Upazila of Dinajpur is a precious resource of Bangladesh. (*Tbsnews*, 2021)

Dinajpur district is 100% electrified now, increasing production, especially in industries. The government has undertaken a project on rural infrastructure development titled "Rural infrastructure development of Dinajpur district", which has been proposed to the Planning Commission. If the project is implemented, 24.44 percent of Upazila roads, 40.10 percent of union roads, 9.05 percent of village roads will be developed for the development of modern civic facilities in the rural areas of 23 Upazila of Dinajpur, Thakurgaon, and Panchagarh districts of Rangpur division. In the last five years (2016-21), the local government engineering department has done development work worth Tk 84 thousand 88 crores 50 lakhs in Dinajpur district. (*dailyjanakantha*, 2023)

III. Service Sectors

The service sector in Dinajpur district is diverse and includes a range of activities, including transportation, education, healthcare, tourism, and banking and finance. Transportation is an essential service in the Dinajpur district, with a well-

developed road network connecting the district to major cities in Bangladesh and neighbouring countries. Significant investment in the transport sector included 1 thousand 7 hundred 14.61 kilometres of road at 72 thousand 688 crore 81 lakh taka. Out of this, 1 thousand 3 hundred 24.02 kilometres of roads have been completed. 390.48 km of road work is going on. Construction of 1 thousand 866 decimal, 50-meter bridge and culvert has been completed at 4 thousand 931 crores 9 lakh taka. (dailyjanakantha, 2023)

The education sector includes one university, 118 colleges, ten vocational institutes, one textile institute, 617 secondary schools, 1713 primary schools, 11 community schools, 29 non-government schools, ten kindergartens, and 351 madrasas. In the last five years, the Department of Education and Engineering has carried out development activities worth Tk 46 thousand 936 crores in the Dinajpur district. This investment includes 60 private secondary schools, 60 additional secondary schools, 29 private madrassas, 29 educational institutions, and six government primary schools. Besides this, Two technical schools and colleges. 38 private colleges. Development of 9 government postgraduate colleges and nine educational institutions were developed under the Dinajpur Secondary and Higher Secondary Education. (dailyjanakantha, 2023)

The healthcare sector in the Dinajpur district is incorporated with several government and private hospitals, clinics, and pharmacies operating in the area. In recent years, there has been a focus on improving healthcare infrastructure and services in the district, with the construction of new hospitals and the introduction of mobile healthcare units in remote areas. There is a medical college in Dinajpur. The city has a 250-bed general hospital. Apart from this, there are 50-bed hospitals in two Upazila and 30-bed hospitals in the remaining 10 Upazila; besides health centres in many unions, 313 community clinics are functioning in Dinajpur. (dailyjanakantha, 2023).

Hasan et al., 2020 have done a survey in the Dinajpur municipality area on the health facilities, and the findings are given below-

Table: Number, types, and distribution of surveyed health facilities in Dinajpur municipality

| Facility Type | PUBLIC | NGO/NOT FOR PROFIT | PRIVATE | TOTAL |
|-------------------|--------|-----------------------|---------|---------|
| | (N=33) | (N=99) | (N=75) | (N=207) |
| Hospital | 2 | 4 | 1 | 7 |
| Clinic | 7 | 15 | 36 | 58 |
| Diagnostic center | 1 | 0 | 36 | 37 |

| Facility Type | PUBLIC | NGO/NOT FOR PROFIT | PRIVATE | TOTAL |
|---|--------|-----------------------|---------|---------|
| | (N=33) | (N=99) | (N=75) | (N=207) |
| The pharmacy attached to doctor's chamber | 1 | 0 | 0 | 1 |
| Doctors Chamber | 0 | 5 | 0 | 5 |
| Drop-in centre | 0 | 4 | 1 | 5 |
| Blood bank | 0 | 3 | 1 | 4 |
| Total | 11 | 31 | 75 | 117 |
| Satellite | | | | |
| Clinic | 2 | 66 | - | 66 |
| EPI center(immunization) | 20 | 2 | - | 22 |
| Total | 22 | 68 | 0 | 90 |

Source: (Hasan et al., 2020)

Tourism is a growing sector in the Dinajpur district, with several attractions such as the Ramsagar, National Park, the Kantajew Temple, and the Dinajpur Rajbari drawing visitors from both domestic and international. This has led to developing several hotels and resorts in the area, providing employment opportunities and boosting the local economy. There are about 20 hotels and resorts, a sign of the expanding tourism industry. Currently, the temple area of Kantiji has been declared a tourist area. This is the first time in the last 150 years that the temple of Kantiji has been extensively renovated. Tourist motels and resorts have been built next to the temple. A bridge has been constructed at around 30 crore taka for travelling to the temple. (Porjotonia, 2023)

Banking and finance are also essential services in the Dinajpur district, with several commercial banks and microfinance institutions operating in the area. This has led to increased access to credit and other financial services for local businesses and individuals, supporting the growth of the local economy. The district is served by 23 banks, 70 non-governmental organisations, and 13 insurance companies. (Dinajpur District, 2022)

IV. Poverty Scenario

A sizable proportion of the people in the Dinajpur district live below the poverty line, making poverty a severe problem. According to the latest data from the Bangladesh Bureau of Statistics, Dinajpur is one of the ten poorest districts in Bangladesh. As per a report published in 2010, 37 percent of residents in Dinajpur were living below the poverty line. Now, the number is above 64 percent, the

second-highest and poorest district in the country. At the same time, the rate is higher than in 2010. (Prothom Alo, 2022) Nonetheless, according to BIDS research, Dinajpur has a 42 percent overall poverty rate and a 26.3 percent extreme poverty rate. BIDS also found that, on average, 44.3 percent of people in Dinajpur are vulnerable non-poor. (Nuruzzaman, 2019)

Even if no current data on poverty is available, we can rationally assume that the effects of COVID-19 and recently increased inflation contribute to the poverty rate. The Department of Agricultural Marketing's district office records also indicate that the cost of necessities has increased over the previous two years. (Islam, 2022)

| Items | Average Price (2020) Per Kg | Average Price (2023) Per Kg | % Change |
|-------------------|-----------------------------|-----------------------------|----------|
| Boro (fine) | 45 | 61 | 36% |
| Boro (regular) | 36 | 53 | 47% |
| Loose flour | 29 | 33 | 16% |
| Loose wheat flour | 37 | 46 | 24% |
| Lentils | 58 | 97 | 68% |
| Loose soybean oil | 93 | 144 | 55% |
| Four eggs | 26 | 35 | 35% |

Source: Department of Agricultural Marketing's district office

V. Inequality Scenario

Inequality is a significant issue in the Dinajpur district, with disparities in income, wealth, and access to basic services. The income inequality in the district is higher than the national average, with the top-income households accounting for a significantly higher share of income than the bottom-income households. This statement is based on the fact that the rate of inequality is higher in the periphery than in the centre. The main drivers of inequality in the Dinajpur district include a lack of access to education and training opportunities, limited access to credit and financial services, a lack of job opportunities, and gender and ethnic discrimination. In addition, rural areas tend to have higher levels of inequality than urban areas.

VI. Employment Scenario

With the high unemployment rate and scarcity of formal employment options in the Dinajpur area, employment is a significant concern. Most of the population in Dinajpur district is engaged in agriculture, with a small number of people employed in the industrial and service sectors. Besides that, women's employment

is growing gradually in various SMEs and industries.

Approximately 12 thousand women workers are directly involved in “Papor” production in Dinajpur city. (Sangbad, 2023) Dinajpur’s jute mills have opened new employment doors for women workers. 60 to 70 percent of the workers in these factories are women. Rupali Bangla Jute Mills has given employment to 1500 people. (*Ajkerpatrika*, 2023) Lakhs of women from 80 villages of Dinajpur’s Nawabganj, Ghoraghat, Birampur, Chirirbandar, and Khansama Upazila untangled hair and made caps. Twenty-one wig manufacturing factories have been established in Dinajpur. At least two thousand women workers work in factories built with the cooperation of Chinese companies. In 2023, at least 10 thousand women will be employed in these factories. (Deshkal, 2023)

VII. Environmental pollution

Unplanned auto-rice mills in Dinajpur mainly destroy the environment. There are about two thousand rice mills. Besides the rice mills, there are more than three thousand boilers and huts for various processes, including boiling and drying of paddy. Toxic smoke, waste, dust, and ash from these auto-rice mills and huts are spreading in the residential areas. They are causing environmental catastrophes. Roads are blown away by smoke and ashes, and houses have become dark. Trees, ponds, and drains are being polluted. The area’s people have been affected by various diseases, including eye diseases, shortness of breath, and asthma. (*Bangladeshpost*, 2020)

The environmental impacts of coal mines and thermal power plants on the surroundings of Barapukuria are substantial. The coal-based power plants burn a tremendous amount of coal in a year and emit a considerable amount of carbon dioxide (CO₂), sulphur oxide (SO_x), nitrogen oxide (NO_x), suspended particulate matter (SPM), ashes, volatile organic, ultrafine/nanoparticles and various other organic matters through the chimneys. This resulted in a variety of environmental and health risks. Besides, the increased transportation activities of coal to the operation of the power plants have led to an increase in noise levels in the adjacent localities. (*Barapukuria | The Daily Star*, 2018)

In Barapukuria, subsidence causes waterlogging on the surface. The ecosystem is switched from terrestrial type to aquatic type. Vegetation in waterlogged areas disappears. Instead, alkaline-resistant vegetation appears in the mining area. The underground water level decreased slightly. As a result, the ecosystem is threatened with destruction. The Barapukuria coal mine area experienced significant land subsidence in its southern part as a big bang accompanied by a considerable jolt scared local people. (*Barapukuria | The Daily Star*, 2018). Other sources of pollution include-

The district is home to numerous small and medium-sized industries that release toxic effluent and waste into nearby waterways, contaminating water resources. Additionally, these industries' burning of fossil fuels and the use of outdated machinery have contributed to air pollution, posing significant health risks to the area's residents. Agricultural practices also contribute to environmental pollution in Dinajpur. Using excessive pesticides, herbicides, and fertilisers in farming has led to soil degradation and water pollution. The consequences of environmental pollution in Dinajpur have been severe. The pollution has led to health problems for the area's residents, including respiratory diseases, skin allergies, and stomach disorders.

4. Findings

- Despite its importance to the local economy, the agricultural sector in Dinajpur district faces several challenges. These include inadequate access to credit and other financial services, limited irrigation facilities, and a lack of modern farming techniques and technology. Climate change also affects agricultural production, with increased flooding and droughts leading to crop losses and reduced yields.
- The industrial sector faces several challenges, including a lack of infrastructure, inadequate power supply, and limited access to finance. Additionally, the district lacks skilled labour and modern technology, which hinders the sector's growth.
- The service sector creates employment opportunities and supports the growth of other sectors. With the right policies and investments, the service sector in Dinajpur district can grow and become an even more significant contributor to the district's economic development.
- The leading causes of poverty in Dinajpur district include limited access to education and healthcare, limited access to credit and financial services, and a lack of job opportunities. Poverty is particularly acute among marginalised communities such as women, ethnic minorities, and landless farmers.
- The government has implemented social safety net programs to support the poorest households in reducing inequality.
- There is a mismatch between the skills of the workforce and the needs of the labour market. In addition, women and marginalised communities such as ethnic minorities and people with disabilities face particular challenges in accessing employment opportunities.
- Toxic smoke, waste, dust, and ash from the rice mill are significant sources of environmental pollution in Dinajpur.

The economic landscape in Dinajpur is characterised by several challenges, including underinvestment, inadequate infrastructure, limited access to technology, poverty, inequality, and unemployment. Restricted access to credit and a lack of market linkages are significant obstacles to the growth and development of the agriculture industry and services sector. Poverty, inequality, and unemployment substantially hinder Dinajpur's overall macroeconomic growth and development. The use of secondary sources, such as newspapers, limits the depth and rigour of the study.

5. Recommendations

- In the agricultural sector, the government must take the initiative to improve irrigation, increase credit access, and provide farmers with training and support. Digital marketing of farm products and adaptation of modern technology should be the focal points. The agricultural storage infrastructure must be developed. Water flow in the river must be ensured with a proper river dredging system.
- To promote industrial development in the Dinajpur district, the government must improve the infrastructure and transportation system, provide incentives for investment and tax weaving, and create skilled manpower through training and support for local entrepreneurs.
- To improve the service sector, the educational institution should focus more on market demand and digital agriculture.
- To reduce poverty, we need to direct the benefits of the poverty elimination program to those who need them the most and soonest. Government policymakers, development partners, and implementing organisations (NGOs) must devise appropriate plans based on rigorous research for income generation and develop and improve their capacity to cope with this vulnerability.
- When taking the program, we have to keep in mind that the poor are a highly heterogeneous group rather than a homogeneous one. As a result, for sustainable poverty reduction, a one-size-fits-all strategy will not work, at least not in the long run. To achieve Goal 1 of the Sustainable Development Goals to eliminate poverty by 2030, we must devise a need-based holistic program and ensure focused targeting.
- To create a more just and equitable society, we must find the root causes of inequality, such as limited access to education and training and a lack of job opportunities, and promote policies that support inclusive economic growth and reduce income and wealth disparities.

- There is a prerequisite for continued investment in education and training, infrastructure development, and job creation to support the growth of the formal job sector.
- Strong regulatory measures are needed to control industrial effluent discharge, encourage the use of cleaner technology, and promote environmentally sustainable practices in the agricultural sector. Furthermore, a focus should be placed on developing waste management systems to reduce the amount of waste produced and promote recycling and proper disposal practices by fostering renewable energy utilisation.

Investment in physical infrastructure, technology, and human capital is necessary to support the growth and development of the agriculture industry and services sector. Establishing agri-processing facilities can help add value to agri-products and generate employment. Access to credit should be improved through the establishment of microfinance institutions and other credit facilities. Improving market linkages through establishing market information systems and contract farming can help farmers and agri-businesses access new markets and generate higher incomes. Addressing poverty, inequality, and employment issues is critical to supporting sustainable economic growth in Dinajpur.

More rigorous research is necessary to fully understand the complex economic dynamics at play in Dinajpur, including primary data collection and analysis.

6. Conclusions

This paper analyses Dinajpur's macroeconomic scenario, focusing on the agricultural, industrial, and service sectors, including a comprehensive picture of poverty, inequality, environmental pollution, and government development initiatives to overcome the obstacles to development and growth. The main strength of this district is agriculture, which is not only for subsistence but also for the surplus production of food grain at home and abroad. Though it is lagging in industrialisation and modernisation through government and private initiatives, the scenario has begun to change. There are many prospects, such as tourism, export, agropreneurship, and women empowerment, which policymakers must nourish to develop effective policies, projects, and programs to support economic growth and development in this district. Ultimately, the successful implementation of these projects can contribute to reducing poverty and inequality and support sustainable economic growth in Dinajpur.

References

- Ajkerpatrika.(2023,March).<https://www.ajkerpatrika.com/107063/%E0%A6%8F%E0%A6%95->
- Bangladesh-Economic-Review-2022—Finance Division, Ministry of Finance-Government of the People's Republic of Bangladesh. (n.d.). Retrieved March 7, 2023, from <https://mof.portal.gov.bd/site/page/28ba57f5-59ff-4426-970a-bf014242179e/Bangladesh-Economic-Review-2022>
- Bangladeshpost. (2020, January 1). <https://bangladeshpost.net/posts/unplanned-auto-rice-mills-in-dinajpur-destroying-environment-41888>
- Banglatribune. (2023, February 28). Bangla Tribune. <https://en.banglatribune.com/country/news/59117/First-economic-zone-in-Rangpur-division-in>
- Barapukuria | The Daily Star. (2018). <https://www.thedailystar.net/star-weekend/environment/barapukuria-1587976>
- Dailyjanakantha. (2023, March 1). Dailyjanakantha. Daily Janakantha. <https://www.dailyjanakantha.com/national/news/603349>
- Department of Agricultural Extension (DAE) of Dinajpur. (2022, January 1). <http://dae.dinajpur.gov.bd/>
- Deshkal, S. (2023, March 1). Shampratikdeshkal. Shampratik Deshkal. <https://shampratikdeshkal.com/print/210749156>
- Dinajpur District. (2022, January 1). <http://www.dinajpur.gov.bd/site/page/7bcd9587-18fd-11e7-9461-286ed488c766/http%3A%2F%2Fwww.dinajpur.gov.bd%2Fsite%2Fpage%2F7bcd9587-18fd-11e7-9461->
- Dinajpur District, Bangladesh. (2023). In Wikipedia. https://en.wikipedia.org/w/index.php?title=Dinajpur_District,_Bangladesh&oldid=1140529394#Economy
- District Livestock Office. (2020, January 1). <http://dls.dinajpur.gov.bd/site/page/89ee9c31-22a5-481a-aac2-7208c6c3cc55/http%3A%2F%2Fdls.dinajpur.gov.bd%2Fsite%2Fpage%2F89ee9c31-22a5-481a-aac2->
- Hasan, S. M., Borces, K. G., Bhattacharyya, D. S., Ahmed, S., Ali, A., & Adams, A. (2020). Healthcare Systems Strengthening in Smaller Cities in Bangladesh: Geospatial Insights from the Municipality of Dinajpur. *Health Services Insights*, 13, 1178632920951586. <https://doi.org/10.1177/1178632920951586>
- Islam, R. (2022, March 28). Prothomalo. Prothomalo. <https://en.prothomalo.com/bangladesh/low-income-people-in-dinajpur-trying-to-curb-expenses>
- Jagonews24. (2023, March 4). Banginews. Jagonews24. <http://www.banginews.com/web-news?id=84ff0dd1c1517ff121d1c64751221e9fbd8e2ad3>
- Krishi Batayon. (2022, January 1). <http://krishi.gov.bd/regional-page/Dinajpur>
- Porjotonia. (2023, March 1). <https://www.porjotonia.com/2020/09/%E0%A6%AA%E0%A6%B0%E0%A7%8D%E0%A6%A>
- Sangbad, P. (2023, February 28). Protidinersangbad. Protidiner Sangbad. <https://www.protidinersangbad.com/todays-newspaper/editor-choice/336189/>

Tbsnews. (2020, January 1). <https://www.tbsnews.net/economy/agriculture/besides-crops-dinajpur-has-surplus-seeds-too-125686=>

Wikipedia.(2023).<https://bn.wikipedia.org/w/index.php?title=%E0%A6%A6%E0%A6%BF%E0%A6%A8%E0%>