

Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & REVIEWS

journal homepage: www.ijmrr.online/index.php/home

ECONOMIC CONTRIBUTION OF PADDY CULTIVATION TO RURAL LIVELIHOODS: A CASE STUDY OF GHAGRA VILLAGE, LAKHIMPUR DISTRICT, ASSAM, INDIA

Dr. Anjan Deka¹ & Jyoti Chetia²

¹Assistant Professor, Department of geography, B. Borooah College, Guwahati.

²PG 4th Semester student, PG department of Geography, B. Borooah College, Guwahati.

How to Cite the Article: Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.



<https://doi.org/10.56815/ijmrr.v5i7.2026.167-179>

Keywords	Abstract
<i>Paddy cultivation, Rural livelihood, Agricultural economics, Farm income, Paddy marketing, Lakhimpur District, Assam, Sustainable agriculture.</i>	Paddy cultivation is the principal agricultural activity in rural Assam and serves as a cornerstone of food security, employment generation, and household income. Despite its socio-economic importance, smallholder farmers continue to face challenges related to fragmented landholdings, fluctuating market prices, inadequate irrigation facilities, and limited access to modern agricultural technologies. The present study examines the economic contribution of paddy cultivation to rural livelihoods in Ghagra Village of Lakhimpur District, Assam, with particular emphasis on production practices, farm economics, marketing systems, and socio-economic conditions of farming households. The study is based on primary data collected from 100 randomly selected households through structured questionnaires, field observations, and personal interviews, supplemented by secondary information obtained from government publications, census reports, and relevant literature. Descriptive statistical techniques, including frequency distribution, percentage analysis, tables, and graphical representations, were employed to analyse the collected data. The investigation assessed landholding patterns, paddy varieties cultivated,



The work is licensed under a [Creative Commons Attribution
Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

	production levels, cultivation methods, production costs, net income, marketing channels, and the adoption of modern agricultural practices. The findings indicate that paddy cultivation remains the primary source of livelihood for the majority of farming households in the study area. Nearly 39% of farmers possess 3–6 bighas of cultivated land, while 25% cultivate more than 9 bighas. Among the cultivated varieties, Ranjit occupies the largest cultivated area and contributes the highest share (28.4%) of total paddy production, followed by Chakuwa (13.7%), Aijung (13.4%), and Bora (12.2%). The study further reveals that 88% of farmers have adopted modern cultivation methods, whereas only 12% continue to rely primarily on traditional farming practices. Although modernization has contributed to improved productivity, the majority of farmers earn modest profits, with 46.5% reporting annual net returns between ₹20,000 and ₹40,000 from paddy cultivation. Production costs, dependence on seasonal rainfall, labour shortages, and market-related constraints continue to limit farm profitability. The study concludes that paddy cultivation continues to play a significant role in sustaining rural livelihoods and strengthening the local economy of Ghagra Village. However, improving farmers' income requires enhanced irrigation infrastructure, access to high-yielding and climate-resilient varieties, affordable farm mechanization, efficient marketing systems, storage facilities, institutional credit, and agricultural extension services. Strengthening these interventions would contribute to sustainable agricultural development, increased farm profitability, and improved livelihood security for smallholder farmers in floodplain regions of Assam.
--	---

Introduction –

Agriculture has long been recognized as the backbone of the Indian economy, providing livelihood opportunities for nearly half of the country's population and contributing significantly to national food security (Government of India, 2024; FAO, 2023). Despite rapid industrialization and the expansion of the service sector, agriculture continues to play a vital role in sustaining rural livelihoods, particularly in developing countries where a large proportion of the population depends directly or indirectly on farming (World Bank, 2023). Among the various agricultural crops cultivated in India, rice (*Oryza sativa* L.) occupies a unique position as the principal staple food for more than half of the country's population and serves as an important source of income, employment, and nutritional security (FAO, 2023; IRRI, 2023). India is the world's second-largest producer of rice after China and contributes approximately one-fourth of global rice production (FAOSTAT, 2024). The country's diverse agro-climatic conditions facilitate rice cultivation across irrigated plains, rain-fed uplands, floodplains, and deltaic regions. Besides ensuring domestic food security, rice has become one of India's major agricultural export commodities, contributing substantially to rural employment and foreign exchange earnings (Government of India, 2024). However, the



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. *International Journal of Multidisciplinary Research & Reviews*, 5(7),167-179.

sustainability and profitability of rice cultivation are increasingly threatened by fragmented landholdings, climate variability, declining soil fertility, labour shortages, increasing production costs, water scarcity, and market uncertainties (IPCC, 2023; OECD & FAO, 2024).

Assam is predominantly an agrarian state where agriculture continues to be the primary occupation of the rural population. The state possesses fertile alluvial soils, abundant monsoon rainfall, and extensive river systems that provide favourable conditions for rice cultivation. Paddy occupies the largest share of the gross cropped area in Assam and remains the principal food crop as well as the major source of livelihood for rural households (Department of Agriculture, Assam, 2023). Three major rice-growing seasons—Ahu, Sali, and Boro—reflect the adaptation of farming systems to the region's climatic and hydrological conditions. Among these, Sali rice accounts for the largest cultivated area and production. Nevertheless, agricultural productivity in Assam remains below the national average because of recurrent floods, riverbank erosion, fragmented holdings, inadequate irrigation, limited mechanization, and poor market access (Sharma & Sharma, 2015; Department of Agriculture, Assam, 2023). Paddy cultivation extends beyond food production and constitutes the economic foundation of rural society in Assam (Ellis, F. 2000). It generates employment throughout the agricultural calendar, including land preparation, nursery raising, transplantation, irrigation, weeding, harvesting, threshing, transportation, processing, and marketing. Income derived from rice cultivation supports household expenditure on education, healthcare, housing, clothing, and other essential needs, thereby contributing significantly to rural welfare and poverty reduction (Singh & Sharma, 2010; FAO, 2023).

Despite its socio-economic significance, paddy cultivation in Assam is confronted with several challenges. Small and fragmented landholdings restrict economies of scale and reduce opportunities for mechanization. Dependence on monsoon rainfall exposes farmers to production risks associated with floods and droughts. Moreover, rising input prices, labour scarcity, inadequate storage infrastructure, fluctuating market prices, and limited institutional support adversely affect farm profitability (Government of India, 2024; OECD & FAO, 2024). Climate change has further intensified these challenges through increased frequency of extreme weather events, thereby threatening sustainable rice production and rural livelihood security (IPCC, 2023). Lakhimpur district, located in northern Assam, is one of the state's important agricultural regions where paddy cultivation forms the backbone of the rural economy. The district is characterized by fertile alluvial soils, favourable climatic conditions, and extensive floodplains suitable for rice cultivation. However, recurrent flooding by the Brahmaputra River and its tributaries frequently affects agricultural productivity. Within the district, Ghagra Village represents a typical agrarian settlement where the majority of households depend primarily on paddy cultivation. Field observations indicate that Sali rice is the dominant crop cultivated during June–July and harvested during November–December. Farmers cultivate several traditional and improved varieties, including Ranjit, Aijung, Bora, Chakuwa, Joha, and Black Rice, reflecting considerable varietal diversity.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

Although numerous studies have examined rice production, irrigation, and marketing in India, relatively few have comprehensively analysed the contribution of paddy cultivation to rural livelihoods at the village level by integrating production practices, farm economics, marketing systems, and socio-economic characteristics. Village-level studies are particularly important because agricultural systems differ considerably according to environmental conditions, resource availability, institutional support, and socio-economic factors. Such localized investigations provide valuable evidence for designing context-specific agricultural development and rural livelihood strategies (Ellis, 2000; Chambers & Conway, 1992).

The present study addresses this research gap by examining the economic contribution of paddy cultivation to rural livelihoods in Ghagra Village of Lakhimpur district, Assam. Using primary household survey data, the study analyses cropping patterns, cultivation practices, production, farm expenditure, net income, marketing systems, and farmers' adoption of modern agricultural technologies. The study also identifies the key challenges affecting paddy cultivation and proposes policy recommendations for improving agricultural productivity, farm income, and sustainable rural development.

Objectives –

1. Assess the contribution of paddy cultivation to the income, employment, and livelihood security of farming households in Ghagra Village.
2. Suggest sustainable policy interventions and development strategies for improving paddy productivity, farm income, and rural livelihoods in the study area.

Methodology and database –

The present study was conducted in Ghagra Village, located in Lakhimpur District, Assam, India, where agriculture, particularly paddy cultivation, constitutes the principal source of livelihood for the majority of rural households. The village is characterized by fertile alluvial soils, favourable agro-climatic conditions, and abundant monsoon rainfall, making it highly suitable for rice cultivation. The dominant cropping season is Sali (winter) rice, although farmers also cultivate a variety of traditional and improved rice varieties, including Ranjit, Aijung, Bora, Chakuwa, Joha, Bahadur, Lachit, Masuri, TTB, Joybangla, Chaichampa, and Black Rice. The study adopted a descriptive and analytical research design to examine the economic contribution of paddy cultivation to rural livelihoods. A mixed-method approach incorporating both quantitative and qualitative techniques was employed to obtain a comprehensive understanding of the production system, cultivation practices, household income, and socio-economic conditions of farming households. The investigation was based on both primary and secondary sources of data. Primary data were collected through extensive field surveys using a structured questionnaire, personal interviews, direct field observations, and informal discussions with farmers. A stratified random sampling technique was



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. *International Journal of Multidisciplinary Research & Reviews*, 5(7),167-179.

adopted to select 100 farming households, ensuring adequate representation of different categories of farmers in the village. The questionnaire was designed to collect detailed information on socio-economic characteristics, landholding size, paddy varieties cultivated, cropping patterns, cultivation practices, production levels, production costs, farm income, marketing channels, government assistance, and the major constraints encountered by farmers. Field observations and personal interactions were also undertaken to verify the information obtained during the household survey and to gain deeper insights into local agricultural practices. In addition to primary information, secondary data were collected from books, research articles, government publications, Census reports, Department of Agriculture statistics, journals, and other authenticated sources to provide the necessary background information and to support the interpretation of the findings. After completion of the field survey, the collected data were carefully edited, coded, classified, and tabulated for analysis. Descriptive statistical techniques, including frequency distribution, percentage analysis, averages, tabulation, graphs, and charts, were employed to analyse the data and present the findings in a systematic manner. Microsoft Excel was used for data processing and graphical representation, while Microsoft Word was used for manuscript preparation. Furthermore, ArcGIS software was utilized to prepare the location map of the study area and other thematic maps required for spatial representation and geographical interpretation. The analysed data were interpreted to evaluate the contribution of paddy cultivation to household income, employment generation, and rural livelihoods, while also identifying the major production, marketing, institutional, and environmental constraints affecting the sustainability of paddy cultivation in Ghagra Village.

The Study Area –

The district of Lakhimpur is situated in the northeastern region of the Indian state of Assam. The district is located on the Brahmaputra River's north bank. It is surrounded by Lower Subansiri and Papumpara District of the state of Arunachal Pradesh in the north, Dhemaji District in the east, Majuli, the largest river island district, in the south, and Biswanath District in the west. Its coordinates are 26.48 to 27.53 in the north and 93.42 to 94.20 in the east. The district of Lakhimpur is 2277 square kilometers (879 square meters) in size. Dhakuakhana, Narayanpur-Bihpuria, and North Lakhimpur are the district's three subdivisions. Ghagra village, the study area, is situated in the Lakhimpur region of Assam's North Lakhimpur subdivision. It is located 70 kilometers from the North Lakhimpur subdistrict headquarters and 13 kilometers from Narayanpur. The Ghagra village's Gram Panchayat is called Rangati. The village's total land area is 150.69 hectares. There are about 1641 people living in Ghagra, of which 794 are women and 847 are men.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

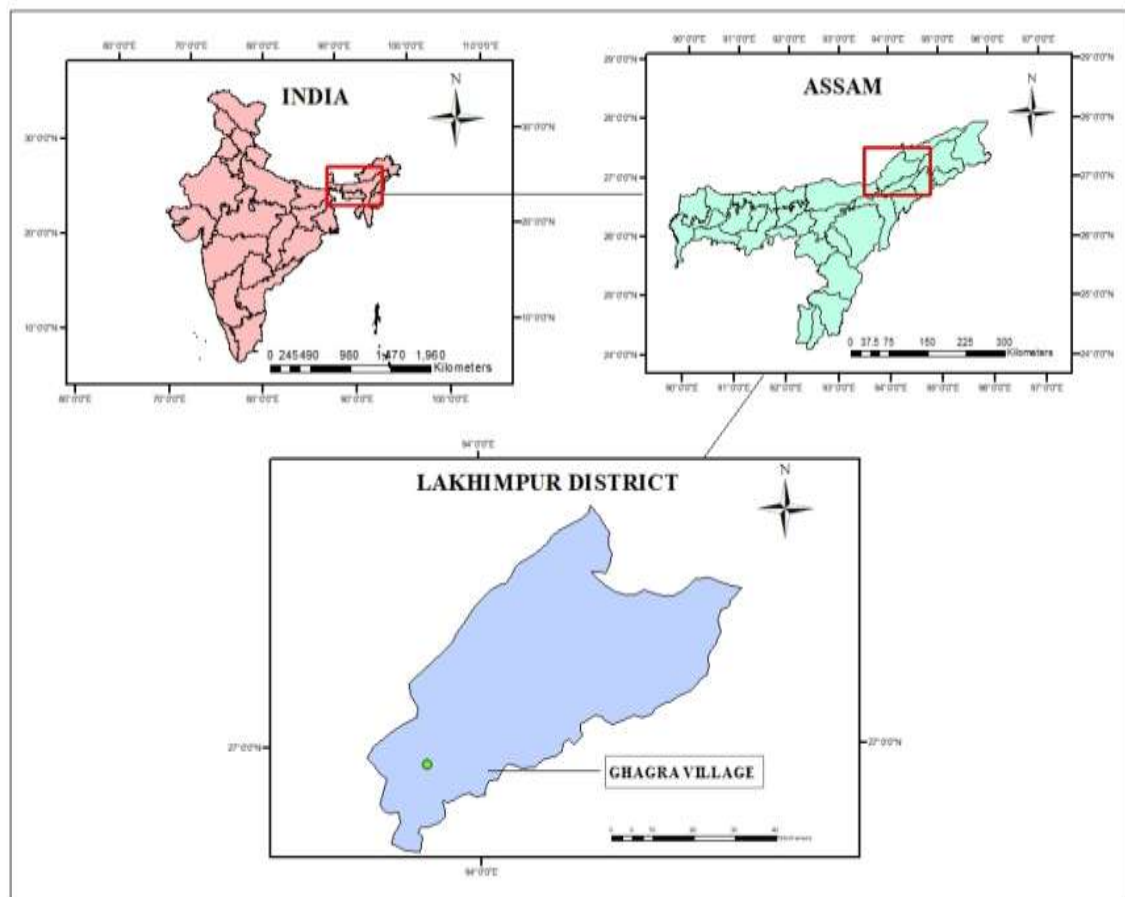


Fig 1: The study Area

Results and Discussion –

Landholding Pattern and Paddy Production -

The distribution of cultivated land among the surveyed households indicates that paddy cultivation in Ghagra Village is predominantly undertaken by small and medium-scale farmers. Of the surveyed households, 39% cultivated between 3 and 6 bighas of land, followed by 25% cultivating more than 9 bighas, 19% cultivating between 6 and 9 bighas, and 17% cultivating only 1–3 bighas. These findings demonstrate that although a considerable proportion of farmers possess medium-sized holdings, fragmentation of agricultural land remains a characteristic feature of the study area.

The predominance of medium and small landholdings has important implications for agricultural productivity and household income. Small holdings often limit the adoption of large-scale mechanization, increase production costs per unit area, and reduce economies of scale. Nevertheless, farmers have adapted to these constraints through intensive cultivation and the adoption of improved



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

production practices. Similar observations have been reported in rural Assam, where fragmented landholdings continue to influence farm profitability and technological adoption.

Analysis of paddy production revealed substantial variation among cultivated varieties. Ranjit emerged as the dominant variety, occupying approximately 182 bighas and contributing 28.4% of total production. Chakuwa (13.7%), Aijung (13.4%), Bora (12.2%), and Joha (6.5%) were also widely cultivated, whereas Black Rice occupied only 7 bighas and contributed 1.3% of total production.

The dominance of Ranjit indicates farmers' preference for high-yielding and comparatively stable varieties that ensure higher productivity and better economic returns. In contrast, specialty varieties such as Joha and Black Rice occupy smaller areas owing to limited production, although they may command premium market prices.

Economic Contribution of Paddy Cultivation -

The survey findings demonstrate that paddy cultivation constitutes the principal source of livelihood in Ghagra Village. Approximately 71% of household income is generated directly or indirectly from paddy cultivation, highlighting its central role in sustaining rural livelihoods and ensuring household food security. Besides fulfilling subsistence requirements, surplus paddy is marketed locally, providing an important source of cash income for farming households.

The distribution of annual net income from paddy cultivation further illustrates its economic importance. Nearly 46.5% of households earned between ₹20,000 and ₹40,000 annually, while 28.1% earned less than ₹20,000, 21.1% earned between ₹40,000 and ₹60,000, and only 4.2% earned more than ₹60,000 from paddy sales (Assam Economic Survey. 2024).

These findings suggest that although paddy cultivation remains economically viable for most households, income levels remain modest. The predominance of farmers in the middle-income category reflects the influence of limited landholdings, production constraints, and fluctuating market prices on farm profitability. The relatively small proportion of high-income households indicates that only a few farmers possess sufficient land or production capacity to generate substantial agricultural returns.

Cost of Cultivation -

Household expenditure on paddy cultivation exhibited moderate variation across the study area. Approximately 47% of households spent between ₹5,000 and ₹10,000 on agricultural inputs, while 45% invested more than ₹10,000, and only 8% reported expenditures below ₹5,000 (Assam Economic Survey. 2024).

The relatively higher expenditure observed among many households reflects increasing investment in improved seeds, machinery hiring, labour, and other production inputs. Although higher



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

expenditure often contributes to improved productivity, it simultaneously increases financial risks for resource-poor farmers, particularly during years affected by floods or market instability.

Transition from Traditional to Modern Farming Practices -

One of the most significant findings of the study is the rapid transformation in cultivation practices. Only 12% of farming households continue to follow traditional methods, whereas 88% have adopted modern agricultural practices.

The transition has been driven primarily by the availability of agricultural machinery, labour shortages caused by rural outmigration, and the perceived advantages of improved production technologies. Farmers increasingly utilize power tillers, tractors, mechanical threshers, and transplanters, enabling them to complete agricultural operations more efficiently than traditional methods.

Traditional cultivation, based largely on indigenous knowledge, bullock ploughing, organic manure, and manual labour, remains environmentally sustainable but requires substantial labour inputs and longer cultivation periods. Modern methods, in contrast, have enhanced operational efficiency and production potential. The observed shift indicates a gradual modernization of agriculture in Ghagra Village while highlighting the need to integrate traditional ecological knowledge with appropriate modern technologies.

Constraints Affecting Paddy Cultivation -

The survey identified several constraints limiting agricultural productivity and farm income. Among these, improper irrigation emerged as the most serious problem, affecting 95 households, followed by natural calamities (70 households), lack of finance (65 households), and poor-quality seeds (50 households).

The overwhelming importance of irrigation reflects the dependence of paddy cultivation on monsoon rainfall. Despite abundant seasonal precipitation, the absence of reliable irrigation infrastructure exposes farmers to production risks during dry spells and irregular rainfall events. Seasonal flooding further compounds these challenges by damaging standing crops and reducing productivity. Financial constraints limit farmers' ability to invest in improved technologies and quality inputs, while poor access to certified seeds affects crop performance.

The study also found that government support remains limited, with PM-KISAN being the principal scheme accessed by farmers. Limited institutional assistance, inadequate extension services, poor market access, and insufficient storage facilities continue to constrain agricultural development in the study area.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

Table 1.1: Types of Crop (Paddy) practice and production in the study area

Sl. No.	Crops (paddy)	Total Area (in Bigha)	Total Production (in Quintal)	Total Production (in percentage)
1	Aijung	80	408	13.4%
2	Ranjit	182	864	28.4%
3	Bora	75	370	12.2%
4	Chakuwa	83	415	13.7%
5	Lachit	25	130	4.3%
6	TTB	29	141	4.6%
7	Chaichampa	34	162	5.3%
8	Joha	43	197	6.5%
9	Masuri	22	110	3.6%
10	Bahadur	25	129	4.2%
11	Joybangla	14	72	2.4%
12	Black Rice	7	40	1.3%

Source: Field survey (2024-2025)

Discussion –

The findings clearly demonstrate that paddy cultivation continues to form the economic backbone of Ghagra Village by supporting household income, employment, and food security. The predominance of medium-sized landholdings and widespread cultivation of high-yielding varieties such as Ranjit indicate that farmers have attempted to improve productivity despite structural limitations (Deka, N., & Das, B. 2021). However, relatively modest household incomes suggest that higher production does not necessarily translate into greater profitability because of rising input costs, fragmented landholdings, and marketing constraints.

The widespread adoption of modern cultivation practices represents a significant structural transformation in the local agricultural economy. Mechanization has reduced labour requirements and improved operational efficiency, particularly in response to rural labour shortages caused by migration. Nevertheless, modernization has not fully eliminated production risks because irrigation



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. *International Journal of Multidisciplinary Research & Reviews*, 5(7),167-179.

deficiencies, flooding, financial constraints, and inadequate institutional support continue to affect agricultural sustainability.

Overall, the study indicates that enhancing the economic contribution of paddy cultivation requires investments in irrigation infrastructure, improved market access, affordable agricultural credit, quality seed distribution, farmer training, and climate-resilient production strategies. Strengthening these components would not only increase farm productivity but also improve rural livelihood security and contribute to sustainable agricultural development in flood-prone regions of Assam.

Challenges Faced by Paddy Farmers, Government Initiatives, and Policy Recommendations -

The findings of the study reveal that paddy cultivation in Ghagra Village is constrained by a combination of economic, environmental, infrastructural, and institutional factors that collectively reduce farm productivity and household income. Among the surveyed households, 95% identified inadequate irrigation facilities as the most serious challenge, followed by natural calamities (70%), lack of finance (65%), and poor-quality seeds (50%) (Deka, N., & Das, B. 2021). These findings indicate that both climatic risks and limited institutional support continue to undermine the sustainability of paddy cultivation in the study area.

Economic Challenges

Poor market access and unstable prices remain major concerns for paddy farmers in Ghagra Village. After harvesting, many farmers are compelled to sell their produce immediately to local traders or middlemen because of the absence of adequate storage facilities. Consequently, farmers often receive prices below the Minimum Support Price (MSP), reducing their net returns. Limited access to certified seeds, fertilizers, and other quality agricultural inputs further affects productivity. The study also found that agricultural extension services are inadequate, resulting in low awareness of improved cultivation practices and government support programmes. Furthermore, many small and marginal farmers cannot afford modern agricultural machinery, making cultivation labour-intensive and increasing production costs.

Social Challenges

The study highlights several social constraints that adversely affect agricultural development. Low educational attainment and limited awareness among farmers restrict the adoption of improved technologies and government programmes. Rural-to-urban migration has resulted in labour shortages during critical agricultural operations such as transplanting and harvesting, increasing dependence on mechanization where available. In addition, fragmented landholdings reduce operational efficiency, limit economies of scale, and discourage investment in modern irrigation systems and farm machinery.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. International Journal of Multidisciplinary Research & Reviews, 5(7),167-179.

Environmental and Infrastructural Challenges

Environmental risks are among the most significant threats to paddy cultivation in the study area. Seasonal floods, prolonged dry spells, irregular rainfall, and increasing climatic variability frequently damage standing crops and reduce yields. Most farmers depend almost entirely on rainfall because irrigation infrastructure is either absent or inadequate. The lack of canal irrigation, tube wells, and reliable water management systems limits opportunities for multiple cropping and the cultivation of high-yielding rice varieties. These environmental and infrastructural deficiencies significantly reduce agricultural productivity and increase production risk.

Government Initiatives

The study found that PM-KISAN (Pradhan Mantri Kisan Samman Nidhi) is the principal government scheme accessed by farmers in Ghagra Village. Although this programme provides direct financial assistance to eligible farming households, respondents reported limited access to other government interventions, particularly irrigation development, farm mechanization support, and agricultural extension services. The study further indicates that subsidy programmes for seeds and fertilizers are often constrained by limited awareness, delayed implementation, or inadequate institutional outreach. Farmers also reported the absence of government-supported irrigation infrastructure despite the critical importance of reliable water supply for paddy cultivation.

Policy Recommendations

The findings suggest that improving the sustainability and profitability of paddy cultivation in Ghagra Village requires an integrated policy approach. Priority should be given to developing reliable irrigation infrastructure, including minor irrigation projects, community tube wells, and water-harvesting systems, to reduce dependence on monsoon rainfall. Agricultural extension services should be strengthened to provide regular training on scientific crop management, climate-resilient farming, integrated pest management, and sustainable soil management. Improved access to institutional credit, crop insurance, and timely input subsidies would enable small and marginal farmers to invest in modern technologies and quality seeds. The establishment of village-level storage facilities, efficient procurement systems, and better market linkages would reduce farmers' dependence on middlemen and improve price realization. Furthermore, promoting sustainable farming practices, including crop diversification, organic nutrient management, conservation of indigenous rice varieties, and community seed banks, would enhance long-term resilience while protecting biodiversity. These interventions would strengthen agricultural productivity, improve household incomes, and contribute to the sustainable development of rural livelihoods in the flood-prone regions of Assam.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. *International Journal of Multidisciplinary Research & Reviews*, 5(7),167-179.

AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will take care by all authors. Journal and editors are not liable for aforesaid matters.

SOURCES OF FUNDING

The authors received no financial aid to support for the research.

REFERENCES

- Altieri, M. A. (2018). *Agroecology: The science of sustainable agriculture* (3rd ed.). CRC Press.
- Assam Economic Survey. (2024). *Economic survey of Assam 2023–24*. Government of Assam.
- Bhattacharyya, R. (2018). Agricultural development and rural livelihood in Assam. *Indian Journal of Agricultural Economics*, 73(2), 223–236.
- Borah, D., & Deka, P. (2019). Agricultural development in Assam: Problems and prospects. *International Journal of Research in Geography*, 5(3), 18–27.
- Conway, G. (2019). *The doubly green revolution*. Cornell University Press.
- Deka, N., & Das, B. (2021). Agricultural productivity and rural livelihood in flood-prone areas of Assam. *Journal of Rural Development*, 40(2), 173–194.
- Department of Agriculture, Assam. (2023). *Agricultural statistics at a glance*. Government of Assam.
- Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford University Press.
- Food and Agriculture Organization of the United Nations. (2023). *The state of food and agriculture 2023*. FAO. <https://www.fao.org>
- Food and Agriculture Organization of the United Nations. (2024). *FAOSTAT statistical database*. <https://www.fao.org/faostat>
- Government of Assam. (2023). *Statistical handbook of Assam*. Directorate of Economics and Statistics.



Anjan Deka & Jyoti Chetia (2026). Economic Contribution of Paddy Cultivation to Rural Livelihoods: A Case Study of Ghagra Village, Lakhimpur District, Assam, India. *International Journal of Multidisciplinary Research & Reviews*, 5(7),167-179.

Government of India. (2024). *Agricultural statistics at a glance 2024*. Ministry of Agriculture and Farmers Welfare.

Hazell, P., & Wood, S. (2008). Drivers of change in global agriculture. *Philosophical Transactions of the Royal Society B*, 363(1491), 495–515.

Intergovernmental Panel on Climate Change. (2023). *Climate change 2023: Synthesis report*. IPCC.

International Rice Research Institute. (2023). *Rice facts and figures*. <https://www.irri.org>

IPCC. (2023). *Climate change 2023: Synthesis report*. IPCC.

Lobell, D. B., Schlenker, W., & Costa-Roberts, J. (2011). Climate trends and global crop production since 1980. *Science*, 333(6042), 616–620.

Ministry of Agriculture and Farmers Welfare. (2024). *Annual report 2023–24*. Government of India.

National Bank for Agriculture and Rural Development. (2023). *Status of Indian agriculture*. NABARD.

OECD & Food and Agriculture Organization of the United Nations. (2024). *OECD–FAO agricultural outlook 2024–2033*. OECD Publishing.

Pretty, J. (2008). Agricultural sustainability: Concepts, principles and evidence. *Philosophical Transactions of the Royal Society B*, 363(1491), 447–465.

Pretty, J., Toulmin, C., & Williams, S. (2011). Sustainable intensification in African agriculture. *International Journal of Agricultural Sustainability*, 9(1), 5–24.

Sharma, B. K., & Sharma, H. K. (2015). Agricultural productivity and cropping pattern in Assam. *Journal of Agricultural Science*, 10(2), 45–58.

World Bank. (2023). *World development indicators*. World Bank. <https://data.worldbank.org>

