



Research Paper

Agricultural Scenario in Assam in the 21st Century: Issues and Challenges

¹Dr. Phanindra Kalita, Assistant Professor, Department of Political Science, Chhaygaon College, Chhaygaon, Assam: India.

²Mrs. Mousumi Das, Assistant Professor, Department of Economics, Chhaygaon College, Chhaygaon, Assam: India.

Corresponding Author: Dr. Phanindra Kalita

ABSTRACT: Agriculture is vital as it is a mainstay in every human life. Without agriculture living will be difficult because agriculture is responsible for providing the most basic need in human life which is food. In rural India agriculture is the main foundation of the Indian economy. But, unfortunately, there have been many factors hindering the success of agriculture in the country. Agriculture is said to be the main source of income for the farmers or people living in the rural India. Being an agrarian based economy, the large number of rural people in India in general and Assam in particular are mostly dependent on agriculture. It is the chief role of earning income in the economy of Assam. Agricultural sector support more than 75 percent of the state directly or indirectly providing employment of more than 53 percent of the total workforce. Over a course of time, agricultural sector has been facing several issues and challenges. Against this background, the present paper examine the various challenges in agricultural sector in the rural economy of Assam. Among the various issues and challenges lack information on finance and marketing tactics to get the best prices for their output, poor infrastructure, low use of technologies and best farming techniques, decrease of soil fertility due to over fertilization and sustained pesticides used are some leading contributors to low agricultural development in Assam. Again, ineffective minimum support prices (MSP) system, adverse terms of trade, rural indebtedness, and inefficient value in agriculture are also among those challenges in the agricultural sector of Assam. Therefore, this paper is an effort to highlight some of the acute agricultural problems facing in the rural Assam and will try to make some suggestions for its solution.

KEY WORDS: Agriculture, Agricultural issues, Rural Assam, Unemployment

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I. INTRODUCTION

Agriculture is vital as it is a mainstay in every human life. Without agriculture, living will be difficult because agriculture is responsible for providing the most basic need in human life which is food¹. In rural India agriculture is the main foundation of the Indian economy. But, unfortunately, there have been many factors hindering the success of agriculture in the country. Agriculture is said to be the main source of income for the farmers or people living in the rural India. Agriculture is the key to solve rural poverty as because the development of agriculture can play direct role in rural poverty alleviation. Since, the majority of rural poor depend on agricultural activity for providing the main source of their income and employment. Rural development allows the improvement of rural communities' quality of life and prevents the population of regions affected by rural exodus. The economic stability achieved by agriculture may be fundamental for the growth of a nation

Being an agrarian based economy, the large number of rural people in India in general and Assam in particular are mostly dependent on agriculture. It is the chief role of earning income in the economy of Assam. Agricultural sector support more than 75 percent of the state directly or indirectly providing employment of more than 53 percent of the total workforce. Over a course of time, agricultural sector has been facing several issues and challenges. Against this background, the present paper examine the various challenges in agricultural sector in the rural economy of Assam. Among the various issues and challenges lack information on finance and marketing tactics to get the best prices for their output, poor infrastructure, low use of technologies and best

farming techniques, decrease of soil fertility due to over fertilization and sustained pesticides used are some leading contributors to low agricultural development in Assam. Again, ineffective minimum support prices (MSP) system, adverse terms of trade, rural indebtedness, and inefficient value in agriculture are also among those challenges in the agricultural sector of Assam. Therefore, this paper is an effort to highlight some of the acute agricultural problems facing in the rural Assam and will try to make some suggestions for its solution.

II. OBJECTIVES

Main objectives of this study are as follows:

- a) To study the current agricultural scenario of rural Assam.
- b) To search out main problems and challenges of agriculture in Assam.

III. METHODOLOGY

The methods of the study are descriptive and analytical in nature. Besides, data for this study are primarily collected from the reliable secondary sources viz., web sources, Government reports, periodicals, published books, articles, journals, newspapers and so on.

IV. RURAL SCENARIO OF AGRICULTURE IN ASSAM

Agriculture plays a vital role in the economy of Assam. The main food crops produced in Assam are rice, maize, pulses, potato, wheat etc. Besides, other important crops are tea, jute, oilseeds, sugarcane, cotton, oranges, pineapples, coconut, betel, black pepper, mustard, Bananas etc.² (Gadgil et.al., 2000) . Total annual production of rice in the state is about 2.02 million tons. Assam excels as number one tea producing state in the country, contributing to over half (215, 157, 000 kg) of the total annual production of the country and the state earns about 11 percent of its revenue from tea production. The National Bureau of Plant Genetic Resources (NBPGR) has highlighted the North-East region as being rich in wild relatives of crop plants. Assam is also very rich in medicinal plants and many other rare and endangered taxa and is characterized by high levels of endemism³. Assam's richness of flowering plants is estimated at 3010 and about 293 species of orchids have been reported. In this regard Assam is representing 44.39 percentage of North-East species and 24.42 percent of species occurring in India (Das & Chanu, 2014). The state also holds much bamboo of variety of species.

As per the population Census 2001, more than 85 percent of population living in rural area and out of that 52 percent of the total labour force are found to be engaged in agriculture and allied activities. Out of total gross cultivated area only 5.4 % is irrigated and the average cropping intensity of the state is 145.9%. (Dhar, 1994). Agriculture is backbone of Assam Economy, which plays a very important role for economic development of the state. The total food grain production in the state is rising since from the year 2011-12 and it was 5683 thousand tons in 2018-19 but then decreased to 5467 thousand tons in 2019-20. There is a fluctuation in the yield rate of rice from 2011-12 to 2019-20. In order to raise the productivity in agriculture, the state agricultural department are distributing High Yielding Variety (HYV) seeds among the farmers at a free of cost. Since, economy of Assam is based largely on rural agriculture which is the principal occupation of the majority of rural population. It generates larger share of employment and livelihood of the state. Presently, agriculture contributes about 20 percent revenue to the Gross State Domestic Product (GSDP) in the province of Assam. As per the agriculture census, 2015-20, the total number of farmer's family in Assam is 2741722 and it provides livelihood support to about 70 percent of population. The agriculture census data, 2015-20, reveals that the size of operational holdings on an average is 1.10 hectare and more than 85 percent farmers with average land holdings of just about 0.36 hectares. Apart from that total land under cultivation was 29.77 lakh hectares i.e. 37.95 percent of total geographical land area of the state of Assam up to 2020 (Economic Survey of Assam, 2020-21).

The following table shows the land utilization statistics of Assam, from the year 2017-18 to 2019-20. The intensity of crop is calculated as the ratio of net area to the total crop area multiplied by hundred. There is a marginal increase in the cropped intensity of 2019-20 is 0.80 percent over the previous year 2018-19.

Table: 1

Year	Gross cropped area in lakh hectare	Net area in lakh hectare	Intensity of crop %
2017-18	40.45	27.23	148.54
2018-19	40.04	27.23	147.04
2019-20	40.05	27.09	147.84

Source: *Economic survey of Assam, 2020-21*

According to various reports and study regarding the agricultural scenario of Assam, the performance and contribution to the GDP is very poor in comparison to that of the other states of the country. In this regard, both the Central and State government have adopted various schemes for the upliftment of agricultural scenario

including farmers in the region viz., Sub-Mission on agricultural mechanization (SMAM), Rashtriya Krishi Vikash Yojana (RKVY), Pradhan Mantri Kisan Samman Nidhi Yojana (PMKSNY), Pradhan Mantri Krishi Bikash Yojana (PKVY) and so on. Therefore, an attempt has been made in this study to analyse the issues and challenges in Agriculture of rural Assam.

V. ISSUES AND CHALLENGES IN AGRICULTURE OF RURAL ASSAM

Agriculture places a very important role in the economy of Assam. But the slow growth of agricultural sector is the cause of slow growth of the economy of Assam. However, India lacks behind many other countries as far as agricultural productivity is concern. The reasons are many. Most farmers in India in general and Assam in particular don't have excess to technology driven irrigation tools and practices. Farmers also lack information on finance and marketing tactics to get the best prices for their output⁴. Apart from that average farm size, poor infrastructure, limited usages of technologies and best farming techniques, decrease of soil fertility due to over fertilization and sustained pesticides used are leading contributors to low agricultural development in Assam. Again, population explosion, ineffective Minimum Support Prices (MSP) system, adverse terms of trade, rural indebtedness and inefficient value in agriculture are among those challenges in the agricultural sector⁵. Therefore, this paper is an effort to highlight some of the following acute problems of agriculture facing in the rural Assam and will try to make some suggestions for its betterment.

Natural Calamities: Floods and drought are major challenges in Assam which are considered as the principal natural disasters faced by Assamese farmers every year. The Brahmaputra and its tributaries are the principal sources of flood. The loss of crops, livestock, and houses, cultivable land due to landslide and of course loss of human lives are common during yearly flood which estimated losses of millions of rupees every year. The flood prone area of the state by Rastriya Barh Ayog (RBA) is 31.05 lakh hectares against the total area of the state i.e. 78.523 lakh hectares. The average annual area affected by flood is 9.31 lakh hectares. The flood prone area of the state is four times than the national mark of the flood prone area of the country⁶.

Marketing Problem: One of the main challenges for farmers in Assam is the issue of market. Farmers sell their products to the nearest dealer, in most cases immediately after harvesting when the price is at the lowest instead of trying to find the best markets for their products. It happens basically due to geographical isolation of the remote rural areas where the transportation and communication system is very poor. So far as the role of the government in this regard are more focused on collecting revenues (in the form of tax on daily basis from weekly markets or through check-gates) than facilitating proper marketing system for agricultural products in rural Assam (Bhuyan, 1990).

Water Supply: Uncertainty, water supply is one of the main problems facing in rural agriculture. After about more than 70 years of the Indian independence, there is lack of infrastructure in irrigation system in the rural Assam which reflects the worse picture of the agricultural development. The Government schemes in regard to irrigation system is found inadequate in most cases due to corruption and low standard of infrastructure. Again, these are found inoperative in most of the times. Therefore, Agriculture in India is largely depends on monsoon and Assam too. As a result production of food grains fluctuates year after year.

Non-Economic factors: Illiteracy, lack of knowledge on the challenging economic conditions, traditional mindset, and prejudiced cultural values are some of the principal non-economic factors that hinder agricultural development in rural Assam. These factors are mostly socio-cultural, which may take time to bring changes to the society and these factors may adversely affect the agricultural sector in the region.

Small, and fragmented land holdings: Fragmented of the holdings is another main cause of our low agricultural productivity and backwardness. A lot of time and labour are wasted in moving seeds, manure and cattle from one place to another. In this regard, irrigation also becomes difficult and lot of fertile agricultural land is wasted in providing boundaries where the farmers get difficulty to concentrate on improvement of the agricultural production.

Lack of Infrastructure: Infrastructure plays a very vital role in every single step right from supply of input to post-harvest management. Investment in infrastructure increases the productivity in agriculture and reduced the losses, which in turn increases the income generation. It includes basic infrastructure such as roads, electricity, pure drinking water, irrigation facilities, hospitals and schools etc. which are lacking in the rural areas. Agriculture and rural development can address the root causes of migration including rural poverty, food insecurity, inequality, unemployment, lack of social protection as well as natural resource depletion due to environmental degradation and climate change⁷.

Population Explosion: As we all know that, land is limited and has reached almost the level where more expansion in cultivated area is not possible. The growth in population creates immense pressure on our cultivable land which affects adversely on rural agrarian society. The farm size in India is declining due to population growth especially due to illegal immigration and illegal encroachments in some parts of Assam and competition for land⁸.

Agricultural backwardness- More than half of the total populations in Assam depend on agriculture for their livelihood. But the contribution of agricultural sector to Gross State Domestic Product (GSDP) has been declined from 32.24% in 1999-2000 to 19.22% in 2010-11. Again, the contribution of agricultural sector to total GSDP of Assam increases from 20.56% in 2019-20 to 22.32% in 2020-21. After that, its contribution was decreases to 22.07% in the year 2021-22. As per the 2001 census, 74.58% population was engaged in agricultural activities while in 2011 census, 72.58% population was engaged in agricultural sector (Nath et.al, 2022). Poor technology and lack of skills are responsible for inadequate agricultural production in rural Assam.

Apart from the above issues and challenges there are again more challenges in agriculture of rural Assam like, capital deficiency, lack of quality seeds, lack of research and development (R & D), lack of adequate storage and processing facilities and so on. Moreover, agricultural crop productivity has been greatly affected by various pests; the excessive use of chemical has led to a multitude of effects including increased residues in plants, insect resistance and contamination of soil, water and air⁹.

VI. SUGGESTIONS AND CONCLUSION

The problems of agriculture in rural Assam can never be overemphasized. There is a saying that a problem known is half solved. It's time that the government and the top policy makers woke up with possible solutions with some positive outlooks to correct these menace. To reduce farm distress in rural India in general and Assam in particular, we can follow some ways: like increase incomes through agricultural transformation, reducing risks in agriculture, development of Agro - infrastructure and improvement of quality of rural life, generating employment opportunities to reduce mobility of labour to the urban areas, improve on transport and communication network, make land reforms, promote agro-based industries etc. It becomes very important to modernize the agricultural sector in Assam, to make the agriculture economically viable. It is an urgent need that farmers must adopt the new farm technology for raising agricultural productivity in rural Assam. Moreover, agricultural production and productivity are important to promote and sustain rural development of the state. In order to increase agricultural production, farmers should try to modernize the agricultural sector by adopting modern implements such as – high yielding variety of seeds, applying adequate quantity of fertilizers etc. Adequate organizational steps must be taken for the development of the agricultural sector of the state and the agricultural trade relation should be widened as well. Being an agrarian economy, the state can earn a good amount of revenue out of economic liberalization through diversification of its agricultural exports. Finally, development and expansion of agricultural industries can lead to a boost in rural development of Assam.

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End Notes & Web Sources:

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