

Present Status of Agriculture in Assam

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Abstract:

Assam is predominantly rural and the economy primarily agrarian in nature with almost 70% of the population directly dependent on agriculture as a source of income and another 15% of the population dependent on allied activities for its living. It is for the reason that any strategy for the development of the state will have to keep agriculture at the centre of its planning process. The fertility of land and abundance of water in the state, the two most important components for agricultural growth, Assam should have been one of the better-developed states in the country. Yet in all the key indicators of agricultural development, be it irrigation, levels of mechanization, cropping intensity, market access or connectivity of the rural areas, the state today lags behind the rest of the country. The present paper attempts to investigate the current status of agriculture in Assam.

Keywords: agriculture growth, irrigation, market.

Introduction:

Assam is predominately rural and the economy purely agrarian in nature with almost 70 per cent of the population directly dependent on Agriculture as a source of income and another 15 per cent of the population dependent on allied activities for its living. It is for this reason that may strategy for the development of the State will have to keep agriculture at the centre of its planning processes. If we look at the development of agriculture in Assam since independence, the scenario in the terms of productivity and production has been mixed. We have achieved self-sufficiency in rice, the staple crop, but we still have a shortfall in overall requirement of oilseed, pulses and wheat. We have a surplus production of fruits and vegetables, but almost 40 per cent of the crop is lost because of past harvest losses. The future of rice production too, is not assured in the State, largely because of the land and the abundance of water in the State, the two most important components for agricultural growth, Assam should have been one of the better-developed States in the country. Yet in all the key indicators of agricultural development, be it irrigation, levels of mechanization, cropping intensity, market access or connectivity of the rural areas, the state today lags behind the rest of the country. Similarly, while at the time of independence Assam was ahead of the country in all the key indicators of agricultural productivity, today it lags behind the rest of the country in the same.

The terms of trade of agriculture in the past decade also have been unfavorable, which has ensured the profit margins of surplus procedures have been steadily squeezed. The farmer is finding it increasingly difficult to ensure increase in productivity, in a scenario where many Tariff barriers in agricultural commodities will fall and a number of products of other countries will start entering the country. In such a scenario, the support of the State in term of policy initiative is extremely necessary to ensure that the farmers of Assam are not driven out of the market. Further, a fresh look at agriculture has to be taken not just in terms of self-sufficiency but also from a view of producing for the market. This means that after taking care of minimal food security and nutritional aspects, a hard look has to be taken to see in which agricultural commodity the State has a comparative advantage and to lay stress in those areas.

Objectives:

- To investigate the current status of agriculture in Assam.

Present status of Agriculture in Assam:

The economy of Assam is largely rural and agrarian. Agriculture is still the principle occupation of majority of the rural population in the State in terms of employment and livelihood. Total geographical area of Assam is 78.44 lakh hectares. About 98.4 per cent of total land mass (Census: 2011) of the State is rural. The net cultivation area of the State is 28.11 lakh hectares (2011-2012) which is about 87.38 per cent of the total land available for agricultural cultivation in the state and out of 20.7 per cent is irrigated, 17.58 per cent chronically flood prone and 3.47 per cent chronically drought prone.

Table: 1.1. Land use data of Assam

1	Geographical Area	78,43,800 Ha
2	Area under Forest	20,12,319 Ha
3	Area under Tea	3,15,000 Ha
4	Net Area Sown	28,08, 526 Ha
5	Area sown more than once	12,50,000 Ha
6	Gross Cropped Area (excluding tea)	4075871 Ha
7	Cropping Intensity	152.00%
8	Cultivable Land Waste	88,200 Ha
9	Chronically Flood Prone Area	4,75,060 Ha
10	Chronically Drought Prone Area	93,817 Ha
11	Area Irrigated	4,17,000 Ha
12	Average Land Holding	1.10Ha

Source: Economic Survey of Assam, 2014-2015, Statistical Handbook of Assam, 2015 & Directorate of Economics and Statistics, Assam.

The gross cropped area is 40.76 lakh hectares (excluding Tea area) and the cropping intensity is 152 per cent. Cultivable wasteland is around 80,000 hectares. There does a preponderance of small and marginal farmers in State comprise 26 per cent and 36 per cent respectively of the total farmer's population. Landless farmers account for 28 percent. The average size of holding in the State is 1.24 hectares and figure is showing a declining trend.

Agro-Climatic Zones:

There are six agro climatic zones in the State, namely (1) North Bank Plains Zone, (2) Upper Brahmaputra Valley, (3) Central Brahmaputra Valley, (4) Lower Brahmaputra Valley, (5) Barak Valley and (6) Hill Zone. The coverage of the district is

Table: 1.2. Agro-Climatic Zones

North Bank Plains Zone	Lakhimpur, Dhemaji, Sonitpur, and Darrang.
Upper Brahmaputra Valley	Sibsagar, Jorhat, Golaghat, Dibrugarh, and Tinsukia.
Central Brahmaputra Valley	Nagaon and Morigaon.
Lower Brahmaputra Valley	Kamrup, Borpeta, Bongaigaon, Nalbari, Gaolpara, Dhubri and Kokrajhar.
Barak Valley	Cachar, Karimganj and Hailakandi
Hill Zone	Karbi Anglong and North Chahar hills.

Source: Directorate of Economics and Statistics, Assam.

Trend of Growth of Agriculture Sector:

Agriculture significantly contributes to the state's economy, provides as a main source of occupation and livelihood to a large proportion of its rural population. As per (Census 2011), out of the total land mass, 98.4 percent is rural, where agriculture and allied activities is the major occupation of its people. The net cultivable area of the state is 28.11 hectares, which is about 87.38 percent of the total land mass available for agricultural cultivation in the state. The operational holding on an average is 1.10 hectares only and more than 85 percent of farmer families are either small or marginal farmers, with average land holding of only 0.63 hectare, but in a small size and scattered manner. However, agriculture as a sector still continues to support more than 75 percent of its population, either directly or indirectly, providing employment and support to more than 50 percent of its total workforce. Government of Assam has declared 2015 16, as the "Year of Agriculture". A "Task Force on Agricultural Development" was constituted by the State Government. The base year for GDP estimation has changed from 2004-05 to 2011-12. With it, the macro picture of the Indian economy, along with the State has acquired a new look, with the introduction of substantive, changes. Now, for the valuation of commodities and services, factor cost is replaced by 'Basic Prices', entailing wider scope and coverage of

sectoral components. Besides, some other methodological improvements have also been introduced. Assam, followed the changed approach in GDP estimation in preparing GSDP estimation of the State from 2011-12 onwards. The contribution of Agriculture Sector towards the State Economy has registered a gradual rise [GSDP at constant (2011-12) prices] for the years 2014-15 (Provisional estimates) and 2015-16 (Quick estimates). Though the annual growth rate has come down from - 4.97 as per 2013-14 to 0.02 as per 2014-15 (Provisional estimates). The growth rate is expected some recovery to 4.26 as per 2015-16 (Quick estimates).

Table: 1.3. Trend of growth of Agriculture sector

(GSDP at Constant 2011-12 prices)		
(Figure in percentage)		
Year	Contribution to GSDP (Figure in Rs. Lakh)	Annual growth over the previous year
2011-2012	2061487	
2012-2013	2496905	21.12
2013-2014	2372688	-4.97
2014-2015 (P)	2373106	0.02
2015-2016 (Q)	2474086	4.26

Source: Economic Survey Report of Assam, 2016-2017.

Trend of Production of Food grains in Assam:

Assam has a rich and diverse soil conditions, very conducive for agriculture and agricultural productivity. But, due to unpredictable weather conditions, along with erratic rainfall and the presence of various impediments like floods, soil erosion etc., agricultural productivity has been suffering at times. Yet, the State Agriculture Department, has been able to give thrust to increase the production of food grains by the implementation of double cropping patterns for the provision of food security and nutrition to its ever growing population, by the adoption of strategies for the increase and enhancement of food productivity and cropping intensity. The State Agriculture Department, has also prioritized the optimum and efficient use of available resources for increasing production and productivity of agricultural and horticultural crops, through use of best technologies as available and wherever feasible.

The State Agriculture Department has given more thrust to increase production of food grains by implementing double cropping schemes to provide food security and nutrition to the growing population and prioritized exploitation of enhance the production, productivity of the crops and income of the farming community by harnessing the best technologies. The Department has formulate State as well as District specific plans depending on Agro-climatic condition, growth potential and specific requirement of District and giving thrust on multi cropping, improved farm mechanization & assured irrigation, using quality of certified HYV/ Hybrid Seeds, popularizing integrated Nutrient and Pest Management Schemes with the special use of

bio-fertilizer and bio-pesticides and organic farming, development of Marketing infrastructure etc with available State Governments own resources and the resources supplemented by many centrally sponsored and central sector schemes with a view to encourage the farming community and to create minimum potential for income and employment generation.

Table: 1.4. Trend of Production of Food grains in Assam (Figure in 000 tonnes)

Year	Total Rice	Wheat	Total Pulse	Total Food Grains	Total Oilseeds (excl. Coconut)
2001-02	3854	85	66	4023	156
2002-03	3738	78	60	3894	149
2003-04	3880	73	63	4034	157
2004-05	3470	68	61	3617	146
2005-06	3552	54	56	3680	114
2006-07	2916	67	59	3060	134
2007-08	3319	71	61	3468	139
2008-09	4009	55	62	4142	141
2009-10	4409	65	66	4557	147
2010-11	5033	56	72	5178	159
2011-12	4716	49	73	4857	156
2012-13	5128	44	84	5279	187
2013-14	5193	40	104	5418	186
2014-15	5223	29	111	5459	206
2015-16 (p)	5125	34	108	5359	215

Source: Economic Survey of Assam, 2014-2015

Requirement of Food Grains During the 12th Five year plan period:

The food grain requirement during the 12th Five year plan period in the State has been estimated on the basis of growth of population (projection) of 2001 Census and presented in the Table below. To fulfill the needs of food requirement, the State Agriculture Department has given thrust in the areas like making available of quality seeds and inputs to farmers, enhance farm power, emphasis on SLR, increase coverage of areas under HYV/ Hybrid paddy, increase areas under pluses and oilseeds, provide institutional support of credit and crop insurance to farmers, bring marketing reforms by establishing markets on Public- Private Partnership (PPP) model, Procurement of paddy at Gaon Panchayat (GP) level etc.

Table: 1.5. Requirement of Food Grains During the 12th Five year plan period

Year	Projected population	Adult population (in lakh)	Food requirement (in lakh MT)				Total Food grains (in lakh MT)
			Rice	Wheat	Pulses	Oilseeds	
2012-13	316.97	253.58	41.65	5.55	2.78	3.70	50.91
2013-14	322.34	257.87	42.35	5.56	2.82	3.76	51.77
2014-15	327.79	262.23	43.07	5.74	2.87	3.83	52.64
2015-16	333.34	266.67	43.80	5.84	2.92	3.89	53.53
2016-17	338.40	270.72	46.46	5.92	2.96	3.95	54.35

Source: Draft Annual Plan 2014-15, Planning and development of Assam & Economic Survey of Assam 2014-2015.

Findings:

- The net cultivable area of the state is 28.11 hectares, which is about 87.38 percent of the total land mass available for agricultural cultivation in the state. The operational holding on an average is 1.10 hectares only and more than 85 percent of farmer families are either small or marginal farmers, with average land holding of only 0.63 hectare, but in a small size and scattered manner.
- The annual growth rate has come down from - 4.97 as per 2013-14 to 0.02 as per 2014-15 (Provisional estimates). The growth rate is expected some recovery to 4.26 as per 2015-16 (Quick estimates).
- Total food grains production was up and down in every year and highest production was 5459 tonnes in the year 2014-15.
- It has been found that the total food grains requirement was increasing from and the total food grains requirement is 54.35 lakh MT in the year 2016-17.

Conclusion:

The Assam has diverse soil and climate condition with vagarious of nature especially unseasonal floods and dry spells, wreaking havoc on crop land. In addition insufficient irrigation support, occurrence of chronic flood and river bank erosion affected upon loss of agricultural land and further to crop loss and hampers crop production in the State. The development of agriculture sector in hill districts of the State, namely East Karbi-Anglong, West Karbi-Anglong and Dima Hasao, are suffering due to presence of various weakness, and prevalent conditions, namely low infrastructural facilities, low productivity due to practice of extensive Jhum cultivation and non-availability of markets etc. The need is of changing the pattern of cultivation in these hilly districts, which is posing as a great challenge before the State Government. It is a priority for the future to see the development of Agriculture, in these districts by introduction of new schemes for the production of cash crops, horticultural crops and practice of settled agriculture in terrace lands. Development of Agriculture in

these hilly areas needs attention for infrastructural development and access to markets. Areas of concern to be looked into for the exploitation of horticultural potentialities, introduction of cultivation suitable for fruits like citrus, spices, their value addition, which will bring in substantial contribution to the economy of these hill districts of the state.

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