



# **ECONOMIC SURVEY ASSAM 2018-19**

**TRANSFORMATION & DEVELOPMENT DEPARTMENT  
GOVERNMENT OF ASSAM**





**Sarbananda Sonowal**



सत्यमेव जयते

**Chief Minister, Assam  
Guwahati**

Dispur  
21.1.2019

**MESSAGE**

I am happy to know that the Directorate of Economics and Statistics, Assam is bringing out “Economic Survey Assam, 2018-19”.

The publication has immense significance in preparing budget and making development plans for the state as it provides detail analysis of sector wise socio-economic parameters. I hope “Economic Survey Assam, 2018-19” would go a long way in enabling the planners and policy makers to prepare the future developmental roadmap for the state which would usher in a period of rapid development in all spheres.

I wish the Directorate of Economics and Statistics, Assam all the very best on this occasion of bringing out the “Economic Survey Assam, 2018-19” and hope that its efforts in collecting, compiling and analysing data would be able to achieve the desired results.

**(SARBANANDA SONOWAL)**

DR. HIMANTA BISWA SARMA, Ph.D. LLB  
Minister, Assam



Finance, Transformation & Development,  
Health & Family Welfare and  
Public Works Department

## Message

It is a matter of great happiness that the Directorate of Economics & Statistics, Assam is bringing out the 2018-19 edition of the well-known publication "Economic Survey Assam, 2018-19" focusing on the trends of the performance based on the development of the State of Assam.

In the current publication an effort has been made to depict the latest statistical updates and analysis of various development schemes and programmes running in the State in a comprehensive manner. The important analysis on primary, secondary and tertiary sectors are put into twenty chapters. State Finance and Income, Industry & Mining, Transport & Communications, Power, Agriculture, Animal Husbandry & Veterinary, Forestry, Fishery, Panchayat and Rural Development, etc. are some of the sectors of interest to the readers. The eminent experts along with Departments concerned of the Government of Assam have also put their effort to make the publication more resourceful. This publication will highly be beneficial for Administrator, Planner, Academician, Researchers and others.

I extend my sincere appreciation for the efforts made by the officers and staff of the Directorate of Economics & Statistics, Assam associated with the publication.

  
(HIMANTA BISWA SARMA)



E-Block, 3rd Floor, Assam Secretariat, Dispur, Guwahati - 781 006, Assam  
Tel. No. : 0361-2237315, Fax : 0361-2237012  
e-mail : himantab@hotmail.com / himantabsarmaoffice@gmail.com

**Alok Kumar, IAS**  
Chief Secretary



**GOVERNMENT OF ASSAM**  
Block-'C', 3rd Floor,  
Janata Bhawan, Dispur,  
Guwahati-781008

**MESSAGE**

I am glad to know that the Directorate of Economics & Statistics, Assam is bringing out the publication the "Economic Survey, Assam, 2018-19". This year, it focuses on the analysis of past, present and future trends on the socio-economic characteristics of various issues of the State of Assam.

This comprehensive and informative document contains information about the achievements of various schemes & programme presently being run by the Government of Assam for socio-economic development as well as employment generation and poverty alleviation in the State. Among twenty chapters of the publication, chapters like Agriculture, Forestry, Fishery, Panchayat & Rural Development, State Finance & Economy, Industry, Power, Transport & Communication & Social sector gives interesting information & analysis.

I appreciate the sincere efforts and hardwork of the Officials and staff of the Directorate of Economics and Statistics, Assam in bringing out this valuable publication in time.

  
(Alok Kumar)

January 21, 2019



**Rajiv Kumar Bora, IAS**  
Additional Chief Secretary



**Government of Assam**  
Department of Finance,  
Department of Transformation &  
Development, Department of Soil  
Conservation and Department of Hill Areas  
Block 'A', 4th Floor,  
Assam Secretariat,  
Dispur, Guwahati-781006  
Tel.: +91-3612237329 (O)  
Fax: +91-361-2237018

## **MESSAGE**

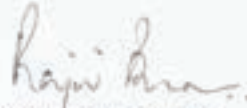
It gives me immense pleasure to see the 2018-19 edition of Economic Survey, Assam published by the Directorate of Economics & Statistics, Assam. The publication contains statistical information and analysis of the latest macro-economic and sectoral performance and trends of the state's economy.

The publication analyzes in detail the primary, secondary and tertiary sectors of the economy of Assam. The publication will be of use in the preparation of the state budget and formulation of plans for economic development of state. There are twenty chapters in the publication and some the important chapters are - State Finance and Income, Industry & Mining, Transport & Communications, Power, Agriculture, Animal Husbandry & Veterinary, Forestry, Fishery, Panchayat and Rural Development, etc.

To make the publication more relevant to the present economic situations, information is being collected from various Government Departments, Organisations, Institutions and Agencies. The Departments concerned, eminent experts and reviewers have made a sincere effort to make this publication more insightful and informative.

I convey my sincere thanks and gratitude to eminent experts and convey my appreciation to the Officials and staff of the Directorate of Economics & Statistics, Assam, for their dedication and hardwork which has enabled the Directorate to collect, collate, analyse the information and publish this volume in time.

Date : 22/01/2019

  
(Rajiv Kr. Bora)

**DR. J. B. EKKA, IAS**



Principal Secretary  
Panchayat & Rural Development,  
Transformation & Development and  
Parliament Affairs Departments  
Government of Assam

**MESSAGE**

Dated 21<sup>st</sup> of January, 2019

It is a matter of great happiness that the Directorate of Economics & Statistics, Assam is bringing out the 2018-19 edition of "Economic Survey Assam", focusing on the trends of the performance based on the development of the State of Assam.

In the current publication an effort has been made to depict the latest statistical updates and analysis of various development schemes and programmes running in the State in a comprehensive manner. The important analysis on primary, secondary and tertiary sectors are put into relevant chapters. There are twenty chapters in the publication and some the chapters of interest are -State Finance and Income, Industry & Mining, Transport & Communications, Power, Agriculture, Animal Husbandry & Veterinary, Forestry, Fishery, Panchayat and Rural Development, etc. The eminent experts along with Departments concerned of the Government of Assam have also put their effort to make the publication more resourceful. This publication will highly be beneficial for Administrators, Planners, Academicians & Researchers and others.

I extend my sincere appreciation to the efforts made by the officers and staff of the Directorate of Economics & Statistics, Assam associated with the publication.

  
( Dr. J. B. Ekka )





## FOREWORD

The Directorate of Economics and Statistics, Assam has been publishing "Economic Survey Assam" regularly with a view to focus the trend and performance of various sectors of the economy of Assam.

In this present issue of the publication i.e. Economic Survey Assam 2018-19 endeavour has made to depict and analyze the latest economic situation and sectoral performance of the Economy of Assam. There are twenty chapters in this publication. Some of the important chapters are Agriculture, Fishery, Forestry, Animal Husbandry & Veterinary, Industry, Service, Transport and Communication, Power, Panchayat & Rural Development, Water Resources, State Income and Finance, etc. In this publication special efforts have been made to provide up-to-date and correct information and analysis on various schemes, programmes, policies, etc. undertaken by the State Government for all round socio-economic development and the achievements thereof. The salient features of the State's Economy is discussed in Part-I of the publication mainly with reference years 2017-18 and 2018-19 and the statistical tables related are given in the appendix in Part-II of this issue. The information was provided by various Government Departments, associated Organisations, Institutions and Agencies.

In this year's publication a significant development has been made in terms of quality. The draft chapters were prepared by the officials of DES Assam on the basis of information collected from Departments concerned and the same was arranged to review by the respective Departments. Thereafter, the chapters were reviewed by eminent sectoral experts and finally the complete publication was reviewed by Dr. Mrinal Kanti Dutta, Professor & Head, Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati.

Firstly, I acknowledge the co-operation extended by various Departments of the Government of Assam and Organisations in making available relevant information and correct the draft chapters to bring out the publication in time.

To enhance the quality and make it more resourceful some critical chapters like Agriculture, Fishery, Forestry, Animal Husbandry & Dairy, Panchayat & Rural Development, Sustainable Developmental Goals, Industry & Mining, Transport & Communication, Water Resources, State Income and State Finance, Social Sector, etc. were being reviewed by eminent experts. The experts who made the publication



more reader friendly enriched with latest sectoral inputs are- Dr. M. P. Bezbaruah, Professor & Head, Dept. of Economics, Gauhati University; Dr. Labananda Choudhury, Professor & Head, Dept. of Statistics and Dean Faculty of Science, Gauhati University; Dr. Chandan Kumar Sharma, Professor & Head, Dept. of Sociology, Dept. of Social Work, Tezpur University; Dr. Joydeep Baruah, Associate Professor, OKD Institute of Social Change and Development, Guwahati; Dr. Kalyan Das, Associate Professor, OKD Institute of Social Change and Development; Dr. S .Chatterjee, Adviser to the Centre for SDGs Assam, Dr. R. M. Dubey, Prof. & Head, Centre for SDG Assam; Dr. J. B. Ekka, IAS, Principal Secretary Panchayat & Rural Development Deptt., Govt. of Assam; Smt. Supriya Khound, Satate Technical Officer (NE Region), UNDP; Dr. M. N. Ray, Professor, Department of Extension Education, CVSc, AAU-Khanapara; Dr. S. K Bhagabati, Head (i/c), Dept. of Aquatic Environment Management, College of Fisheries, AAU, Raha; Also Prof. Mrinal Kranti Dutta has taken the pain to review the whole book. I sincerely thank and convey my regards to those eminent experts, who inspite of their heavy official commitment have agreed to review our chapters in short time.

Economic Survey Assam, 2018-19 is the outcome of the sincere hardwork of the Officers and Staff of the DES Assam associated at different levels. I acknowledge the contribution made by Smt. Nirupama Talukdar, Joint Director and her team to bring out this publication in time with quality.

Last but most importantly, the whole exercise was done in regular and constant supervision and direction of Shri Rajiv Kumar Bora, IAS, Additional Chief Secretary, Transformation & Development Department, Government of Assam and Dr, J. B. Ekka, IAS, Principal Secretary, Transformation & Development Department, Government of Assam. I behalf of the Officials and staff of DES, Assam sincerely thank and convey regards for their for their concern and effort to bring out this publication with quality improvement.

I may forget to mention the name of officials/ persons associated with us, whose role during the process were very crucial to bring out this publication in time. I acknowledge the contribution made by them and sincerely thank them.

I welcome comments and suggestions of the readers for improvement of the future issue of this publication.

Dated, 24<sup>th</sup> January, 2019

(Kamala Kanta Nath, ISS)  
Secretary to the Government of Assam  
Transformation & Development Department and  
Director of Economics & Statistics, Assam  
Dispur, Guwahati-6



# CONTENTS

- I. Messages
- II. Foreword
1. An overview on State Economy /01
2. Population /08
3. State Income /19
4. State Finance /33
5. Agriculture /48
6. Irrigation /70
7. Floods /84
8. Livestock, Animal Husbandry and Diary Development /91
9. Fishery /104
10. Forestry /111
11. Industry and Mining /123
12. Power Final /141
13. Transport and Communication /154
14. Institutional Finance /172
15. Cooperation /187
16. Price and PDS /196
17. Employment and Wages /207
18. Panchayat and Rural Development /217
19. Assam At a Glance for Economic Survey, 2018-19 /227
20. Outcome Budgeting to Achieve Assam Agenda 2030 /323



# ASSAM ECONOMY – AN OVERVIEW

### Area and population

Assam is situated in the North-East region of India – bordering seven States namely Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal and two countries viz. Bangladesh and Bhutan. The geographical area of the State is 78,438 sq. km. of which 98.4 percent area is rural. Assam shares about 2.4% of the country's total geographical area and provides shelter to 2.6% population of the Country as per 2011 census.

Assam is a state of heterogeneous population with socio-cultural and ethnic diversity. According to the Census of India, 2011 the population of Assam was 312.05 lakh of which 159.39 lakh were male and 152.66 lakh were female. The decadal growth of the State's population during 2001-2011 was 17.07% against 17.68% growth for the country as a whole. Out of the total population, 86% population lived in rural areas and 14% population were in urban areas of the State, while the percentage of rural population of the State was higher than all-India average (69%). However, the urban population in the State had increased from 12.9% in 2001 to 14% in 2011. The density of the population of Assam in 2011 was 398 persons per sq. km. as compare to 340 persons in 2001. The sex ratio (number of female per thousand male) of Assam had increased to 958 in 2011 from 935 in 2001. Compare to overall sex ratio of the State, the Child sex ratio (age-group 0-6 years) had gradually declined from 975 in 1991 to 967 in 2001 and further to 962 in 2011. On the other hand, sex ratio at birth in Assam as per 2011 Census was 957.

### State Domestic Product

As per quick estimates, the Gross State Domestic Product (GSDP) of the State at current prices increased to Rs.278710.10 crore during 2017-18 registering a growth of 9.59% over the year 2016-17. At constant prices (at 2011-12 price) the estimated GSDP of the State increased to Rs.211940.28 crore in 2017-18 (QE) with a growth of 5.55% year over the year. At constant prices, all the sub-sectors of Agriculture and allied sector showed the positive trend in 2017-18 over 2016-17. The annual growth of GSDP at base year 2011-12 prices in respect of Crop, Livestock, Forestry & Logging, Fishing sectors are estimated at around 2.42%, 3.95%, 3.47% and 7.21% respectively during 2017-18 (QE) over 2016-17.

During the year 2017-18 (QE) at constant (2011-12) prices, the growth rate of the sub sectors of the Industry sector is estimated at 1.70% in Mining & Quarrying, 4.56% in Manufacturing, 4.92% in Electricity, Gas, Water supply & Other Utility services and 5.62% in Construction respectively. The service sector comprises of Trade, Hotel & Restaurants, Transport, Storage, Communication & Services related to Broadcasting, Financial Services, Real Estate, Ownership of Dwelling and Professional Services, Public Administration and Other services registered a growth of 6.17% in 2017-18 (QE) over the previous year.



The annual average growth rate during the period 2012-2017 of the State is estimated at 7.09% in terms of GSDP at constant prices (at 2011-12 price) indicated a favourable status of the State Economy. During the period 2011-12, Industry sector achieved the highest annual average growth rate of 11.42% in respect of GSDP at constant prices followed by Service sector (6.21%) and Agriculture and Allied sector (4.54%). On the other hand, the annual average growth rate in respect of GSDP at current prices for the period 2012-2017 is estimated at 12.20%.

The per capita income of the State in terms of Net State Domestic Product (NSDP) at constant prices (at 2011-12 price) estimated at Rs.54122.00 for the year 2017-18 (QE) as against Rs.52728.00 in 2016-17 with an increase of 2.64% and the same was Rs.41142.00 in the year 2011-12. The average annual growth rate during the period from 2011-12 to 2017-18 was estimated at 4.74 %.

### State Finance

During the financial year 2018-19, the State Government had expected (Budget Estimate) to earn revenue receipts of Rs.74118.50 crore against expected expenditure of Rs.71329.37 crore, which shows a surplus of Rs.2789.13 crore in Revenue Account. The expected growth of Revenue Receipt during 2018-19(BE) is estimated at 36.92% over 2017-18 (RE).

During 2018-19 an amount of Rs.25643.37 crore was expected (Budget Estimate) from the state's own resources with contribution of Rs.17451.70 crore as tax revenue and Rs.8191.67 crore as non-tax revenue. The total state tax collections during the year 2018-19 (BE) was expected to increase from Rs.13215.52 crore in 2017-18(RE) to Rs.17451.70 crore in the year 2018-19(BE) with a growth of 32% over 2017-18.

The State was anticipated to receipt of Rs.14008.19 crore from Public Debt and Rs.2546.74 crore from recovery of Loans and Advances in 2018-19. As regards the allocation of funds under the three important components of capital expenditure- the Budget for 2018-19 provided Rs.14571.57crore for Capital Outlay, Rs.3830.31crore for Repayment of Public Debt and Rs.538.67crore for Loans and Advances. There was a deficit of Rs.2385.62 crore in the capital Budget in 2018-19.

As per 2018-19(BE) the share of capital receipts in total receipts and capital expenditure in total expenditure was expected to be 18.2% and 5% respectively. The percentage of fiscal surplus to GSDP was 3.3% in 2017-18(RE) and total Debt stock to total revenue receipt was 78% in 2018-19(BE).

### INSTITUTIONAL FINANCE

The total number of Scheduled Commercial Banks in the State was 2326 as on March 2018 as per report of Reserve Bank of India, which is 1.65% of the total Scheduled commercial Banks in the country as a whole. As on 31<sup>st</sup> March 2018, there were 2326 bank offices, under scheduled commercial banks of which 46% bank offices were located in rural, 28% were in semi-urban and 26% were in urban areas. At the end of March 2018, growth of aggregate deposits of the Scheduled Commercial Banks in the State was 10.1% as compare to the previous year. The growth of bank credit on the other hand, was calculated at 17.5% during the year ending March 2018 as compare to 18.8% growth of aggregate credit of the previous year. During the year 2018 as on March, the Credit-Deposit Ratio (CDR) of all Scheduled Commercial Banks



in Assam was 42.6% as compare to 75.6% at the all India level. There was positive growth under priority sector advances to the extent of Rs.5773.00 crores in March 2018 over March 2017 and growth rate was estimated at 17%. The per capita priority sector advances had significantly increased from Rs.10635.00 in 2016-17 to Rs.12486.00 in 2017-18. The number of banks operating in the State disbursed agricultural credit of Rs.4407.86 crore during the year 2016-17 as against the annual commitment of Rs.5710.00 crore. During the year 2015-16, total agricultural credit disbursed in the State was Rs.3901.29 crore against the annual commitment of Rs.3636.00 crore.

**Pradhan Mantri Jan Dhan Yojana (PMJDY):** Under the scheme accounts opened in Assam under PMJDY stands at 1,42,32,903 as on 31 March 2018 against 1,38,93,310 accounts in 31 March 2017 registering an increase of 2.4% in opening of bank account during the period under reference.

**Pradhan Mantri MUDRA Yojana:** This is a flagship programme of Government of India (implemented from 8<sup>th</sup> April 2015) to provide hassle free loans upto Rs.10 lakh to all non-farm micro and small enterprises engaged in income generating activities. Loan under the scheme are categorized as Shishu (upto Rs.50,000), Kishore (Rs.50,000 – Rs.5 lakh) and Tarun (Rs.5 lakh- Rs.10 lakh) according to the development stage/ credit needs of the beneficiary units. The loan disbursement under the Scheme in the State as on 31.3.2018 are- Sishu- 470566 number with Rs.165942.92 lakh; Kishore- 127179 number with Rs.128373.82 lakh; Tarun- 7966 number with Rs.49966.24 lakh; Total- 605711 with Rs.344282.98 lakh.

#### Agriculture and Allied activities

Agricultural Census, 2010-11 revealed that there were 27.2 lakh operational holdings in Assam covering an operated area of 29.99 lakh hectares as against 27.5 lakh operational holdings covering an operated area of 30.49 lakh hectares in 2005-06 and 27.1 lakh operational holdings covering an operated area of 31.1 lakh hectares in 2000-01. Thus, the agricultural operational area declined by 3.69% in 2010-11 over 2000-01 which was attributed to various factors like soil erosion of ever widening Brahmaputra River, urbanisation, industrialisation, expansion of roadways and other infrastructural development activities, conversion of agricultural land for residential and industrial uses etc.

The total estimated food grain production for the state was showed a rising trend during 2011-12 to 2014-15 with the highest production of 54,59,000 MT during the year 2014-15. The estimated food production had declined in 2015-16 and again increased in 2016-17 and 2017-18. The production was at a record high of 55,25,000 MT in 2017-18. In 2017-18 the production of Rice increased to 5283000 MT from 5127000 MT in 2016-17. Wheat and Pulses production also increased to 24000 MT and 116000 MT in 2017-18 from 23000 MT and 5353 MT respectively in 2016-17. The high production was due to good i.e. 99.7% of the normal rainfall during 2017-18.

Index of Agricultural Production for all crops (Base triennium ending 2007-08=100) for the State stands at 142.72 in 2015-16, 144.33 in 2016-17 and 147.78 in 2017-18.

#### Milk, Egg and Meat Production

The total milk production during 2017-18 was estimated at 925 million liters against 904 million liters in 2016-17. The production of egg was estimated at 495 million



numbers in 2017-18 as compare to 477 million numbers in 2016-17. The Meat production during 2017-18 was estimated at 48000 MT. The contribution of Animal Husbandry to GSDP under Agriculture and allied sector was 5.07% in constant prices (at 2011-12 price) and 6.03% in current prices in 2017-18(QE).

#### Fishery

The estimated fish production in the State had increased to 3.27 lakh MT in 2017-18 with 6.5% growth rate during 2016-17 to 2017-18. The contribution of Fishing and Aquaculture to the SGDP was Rs.646294 lakh with 2.31% share in 2017-18(QE) at current prices and registered a growth of 5.8% over previous year.

#### Irrigation

Out of the Gross Cropped Area of 40.87 lakh hectares (estimated for 2016-17) of the State, 9.96 lakh hectares (24.37%) irrigation potential were created by Government up to March, 2018 under ongoing irrigation schemes. Out of 9.96 lakh hectares- 2.73 lakh hectares (27.41%) are covered through both major and medium irrigation projects and the rest 7.23 lakh hectares (72.59%) were covered through minor irrigation schemes. During the last four years, around 2.38 lakh hectares are covered under irrigation potential with an annual increase of 5.97%.

#### Forest

The recorded forest area in Assam was 26,832 sq. km. which is 34% of the total geographical area of Assam and 3.21% of country's total forest area in 2016. Out of total recorded forest area, reserved forest area constituted 17,864 sq. km., which is 66.58 % and Unclassed State forest constitutes 8,968 sq. km., which is 33.42% to the total forest area. As per State of Forest Report (ISFR) 2017, the total forest and tree cover in India had increased over 8,021 square km. (about 80.20 million hector) which is one percent increase as compare to the area of 2015. Assam had also shown marginal increase in forest and tree cover as per assessment made in 2017 over its previous figure of 2015.

The Sal tree forests, found in the state have luxuriant growth due to abundant rainfall and look green all year round. According to the forest profile of the state the reserved forest area was 13,517 sq. km., of which the encroached forest area is 3,730 sq. km. The reserved forest area constitutes about 17% and the total forest area excluding unclassified forest constitutes about 22% of the total geographical area of the state.

### INDUSTRY AND INDUSTRIAL GROWTH

The contribution of Industry sector (incl. Mining & Quarrying, Manufacturing, Electricity, Gas, Water Supply & other Utility Services and Construction) to the SGDP was 30% at current prices during the year 2017-18(QE). The rate of growth of the Industry sector in 2017-18 over previous year was 7.82% at current price. At current prices, the share of growth of the sub sectors of the Industry sector was- Mining and Quarrying (3.42%), Manufacturing (10.19%), Electricity, Gas, Water supply & other utility Services (14.04%) and Construction (8.52%). At constant price (at 2011-12 price) the growth rate of the sub sectors of the Industry sector during the year 2017-18 was estimated at 1.70% in Mining and Quarrying, 6.81% in Manufacturing, 6.85% in Electricity, Gas, Water Supply & Other Utility Services and 5.14 % in Construction.



During 2017-18, the Index of Industrial Production (Base: 2011-12=100) in respect of manufacturing sector was calculated at 124.55 showing a positive growth of 3.5 percent over the previous year. IIP of Assam during 2017-18 had worked out at 109.25 registering a growth of 2.5% over 106.54 in 2016-17. Table-1.1 shows the production of some selected industries during 2015-16 to 2017-18.

Table-1.1: Production of some selected Industries in Assam

Year	Tea (000' tonnes)	Wheat Flour (MT)	Coal (000' tonnes)	Jute Textiles (M.T)	Crude Oil (000' tonnes)	Cement (000' tonnes)	Fertilizer (Urea) (MT)
2015-16	653	110156	397	22296	4513	605814	390197
2016-17	657	103845	600	23244	4202	616649	368364
2017-18	667	94392	782	22785	4345	638504	298592

There were 47048 MSME units in Assam involving average investment (per unit) of Rs.15.61 lakh with total employment of 2.82 lakh persons till March 2018.

#### Plantation Industry-Tea

Tea industry plays a very special role in the State economy. Assam alone produces more than half of India's tea production. According to the Tea Board of India in 2017, there were more than 86,000 registered Small Tea Growers (i.e. with up to 10.12 hectares of land) in Assam. Total number of small tea gardens were 87675, which all together produced about 187320 thousand kg of tea in 82119.98 hectares of land. The number of big Growers' Garden (with holding above 10.12 hectares) in the state were 767 with production of 478010 thousand kg in 232670.80 hectares of land in 2017. The estimated production of tea in Assam was 665.3 thousand tonne in 2017; produced in 314.79 thousand hectares of land against 659.7 thousand tonne produced in 311.03 thousand hectares in 2016.

#### Minerals

The state is richly endowed with mineral resources and they are major contributors to the state's industrial performance. Main minerals found in the state are-coal, crude oil, natural gas, limestone and sulphur. The contribution of Mining sector to the economy was around 10% during 2017-18(QE). During the year 2017-18 mineral production in the state showed a positive growth except Lime stone. The year wise production of coal, crude oil, natural gas, limestone and sulphur during latest available two years is given at Table-1.2 below.



Table-1.2: Production of Major Minerals in Assam

Year	Coal ('000MT)	Crude Oil ('000MT)	Natural Gas Utilised (MCM)	Limestone ('000MT)	Sulphur ('000 MT)
2015-16	397	4513	2903	442	4322
2016-17	600	4202	2907	1597	6571

## ENERGY

The installed capacity of power generating plants in the state was 364.7 MW till 23/10/2017. Power includes Coal, Hydel and Gas plants of the State. The energy requirements in the State were estimated at 9364.54 Million Units (MU) for the year 2017-18 against the availability of energy was 8572.1 MU. The power generation was 1851.107 MU during 2017-18. The peak demand of electricity in the State had increased from 1679 MW in 2016-17 to 1763 MW in the 2017-18, though the shortage of power has come down from 158 MW in 2015-16 to 45.9 MW in 2016-17 and 79.5 MW in 2017-18. The aggregate transmission and commercial losses in percentage was come down to 15.72% in 2017-18 from 24.70% in 2016-17. The sector wise electricity consumption in Assam in 2017-18 were- industrial incl. irrigation-1463 MU, Agriculture-20MU, Domestic-3703MU, Commercial- 979MU, Public services (incl. government office, government institution (school, college etc), public lighting and water supply works)-159MU and others-490MU.

## TRANSPORT

The contribution of the transport and communication sector was calculated at 6.11% of GSDP in 2017-18(QE) at constant prices (at 2011-12 price). The road network in Assam comprised of total 52890 km. of roads consisting of 3900.44 km. National Highways, 2530 km. State Highways, 4379 km. Major District Roads, 1714 km. Urban roads, 40367 km. Rural Roads as on March 2018. At present 48989 km. road network excluding 3900.44 km. National Highways [of which 223.31 km. under construction and 894.79 km. newly declared NH] is maintained by the State PWD. The road length per lakh population [2011 Census] is 169.49 and 67.43 km. per 100 sq.km. of geographical area on March 2018. The on road vehicle population in the State was 3309551 as on March 2018. The density of motor vehicles in Assam was 42.2 per sq. km. during the year 2017-18 as against 36.2 vehicles per sq. km. during the year 2016-17. At present Assam has total railway route length 2434 km. with 3.6% of the total Railway Route length of the country.

As per report from Directorate of Civil Aviation, air traffic movement and passenger traffic (only for LGBI Airport, Guwahati and Mohanbari Airport, Dibrugarh and Silchar Airport published by the DGCA) has gone up by 21.9% and up by 42.9% respectively during 2017-18 as compare to the previous year. Similarly average number of flights handled by these three airports per day has gone up by 23% in 2017-18 from 52% in 2016-17. In respect of handling of freights, the growth was calculated at 42% in 2016-17 over the previous year and 38% in 2017-18 over the previous year. In 2017-18 the average number of flights were-125 per dar, average number of



passenger handled per day were 14717, average cargo handled per day 65 MT in 45554 number of air traffic movement and 5371859 number of passenger handled.

## SOCIAL SECTOR

### Education

During 2017-18- numbers of Primary schools (class I to VIII) was 53374 with enrolment in the Lower Primary and Upper Primary level at 2495167 and 633124 respectively. The average annual Drop-out Rate as per Flash Statistics 2016-17, at Primary level in the State during 2016-17 was 5.60% while it was 15.36% in 2015-16 against the all India drop-out rates of 6.35% and 4.13% respectively. At the Upper Primary level it was 2.51% in 2016-17 and 10.51% in 2015-16. Among the district South Salmara registered highest dropout rate of 20.0% while Jorhat had lowest rate of 2.1% in Lower Primary level. The Pupil-Teacher Ratio in the Primary level of the State during the year 2017-18 was 21%. In Upper Primary, the PTR of the state was 16% in 2017-18. During 2017-18, the number of secondary & higher secondary schools (class IX to XII) was 4032 with enrolment of 239926

### Health

Crude Birth Rate, Crude Death Rate, Infant Mortality Rate, Neo-Natal Mortality Rate, Under Five Mortality Rate had improved in recent years. In 2016 CBR was 21.7%, CDR was 6.7%, IMR was 44%, NNMR was 23% and U5MR was 52%. The Maternal Mortality Ratio of Assam and India in 2014-16 were 237 and 130 respectively which were 300 and 167 respectively in 2011-13.

The data available from Sample Registration Survey (SRS) shows that the Life expectancy at birth during 2010-14 for Kerala had the highest at 74.9 years while Assam has the lowest at 63.9 years among the states in India.

### Rural Development

The re-structured erstwhile Indira Awas Yojana (IAY) programme is now called Prime Ministers' Awas Yojana- Gramin (PMAY-G) and is being implemented for providing shelter to the shelterless/ houseless people living below the poverty line. It is funded by the Central Government and the State at the ratio of 90:10. Under the programme a beneficiary gets Rs.1.30 lakh w.e.f. 2016-17.

About 122772 no. of IAY houses were sanctioned for construction and 106489 houses have been completed against the annual target of 123193 nos. during the financial year 2015-16. Similarly, in financial year 2016-17 and 2017-18, the targeted nos. of houses were 219695 and 40119 nos. respectively, out of which houses sanctioned were 179875 in 2016-17 and 26418 in 2017-18. Accordingly, more than 100853 nos. of PMAY-G houses were completed during financial year 2016-17 and 2017-18 altogether.

In Assam, under NRLM the number of Women Self-Help group formed was 15616 against the target of 22733 during 2016-17. While the achievement was 24004 against the target of 38273 in 2017-18. The number of Women SHGs provided with Revolving Fund (RF) during 2017-18 was 10311 against the target of 17400 while in 2016-17 it was 15445 against 17997 numbers of SHGs. The number of Village Organisation (VO) formed during 2017-18 was 968 against the target of 761 and the number of VOs provided with Community Investment Fund (CIF) is 9125 against the target of 6800; while during 2016-17 the number of VOs formed was 993 against the target of 1534 and the number of VOs provided CIF was 9022 against the target of 5250.



## POPULATION

### Important Features

Assam, a state situated in the northeast region of India, is the gateway to the region, the premier, largest and the most vibrant of the eight states comprising the Northeast. It borders seven states namely, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal and two countries, namely Bhutan and Bangladesh. Its topographical asymmetry underscored by the Brail hill range sandwiched between two valleys – the Brahmaputra and the Barak, named after the two dominant rivers. Assam has a total geographical area of 78,438 sq. km, occupying 2.4% of India's landmass, providing shelter to 2.6% of India's population. For administration and revenue purposes, the State has presently 33 districts, including six newly created districts namely Biswanath, Charaideo, Hojai, South Salmara-Mankachar, West Karbi Anglong and Majuli.

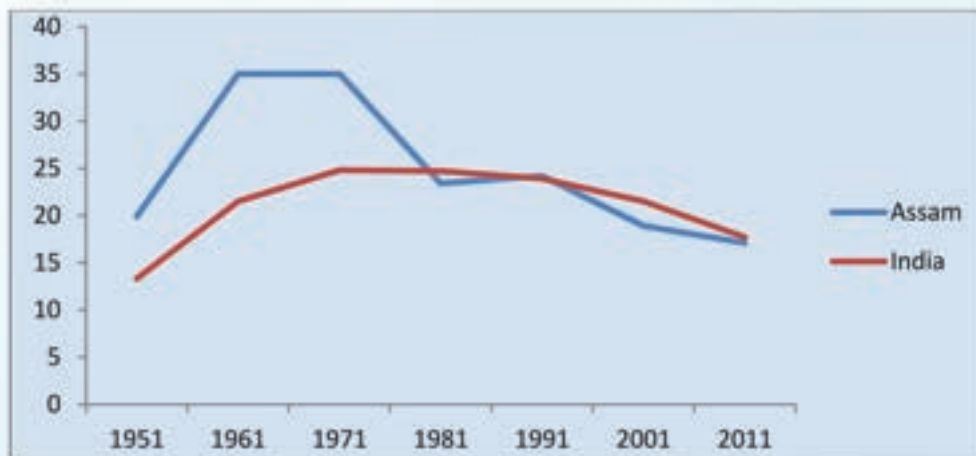
### Life Expectancy at Birth:

The data available from Sample Registration Survey (SRS), 2010-14 that Kerala has the highest life expectancy at birth (Age 74.9) in India while Assam has the lowest (Age 63.9). As a whole life expectancy at birth in India is Age 67.9.

### Decadal growth of population in India and Assam

As per Census of India, 2011 the total population of Assam is 3,12,05,576 of which 1,59,39,443 are males and 1,52,66,133 are females. The decadal growth rate (DGR) of the State's population during 2001-2011 has been worked out as 17.07% against 17.68% for India as a whole.

### Decadal Variation of Population Growth in Assam and India



### Density of Population (Total persons per Sq. Km.) of Assam and India

The density of population in Assam has increased from 340 persons per sq km in 2001 to 398 persons in 2011 census. Thus, on an average 58 more people inhabit every square kilometer in the state compared to a decade ago. The population density of India has gone up to 368 persons in 2011 census per square kilometer from 325 persons in 2001.

**Table 2.1: Density of Population in NE States, Census, 2011**

States	Population (Nos)	Density (per sq km)
Arunachal Pradesh	1382611	17
Assam	31169272	397
Manipur	2964007	122
Meghalaya	2964007	132
Mizoram	1091014	52
Sikkim	607688	86
Tripura	3671032	350

Source: Census of India 2011

Some important features of population of Assam as per Census 2001 and 2011 are shown in the following Table.

**TABLE – 2.2: Population Features at a Glance of Assam**

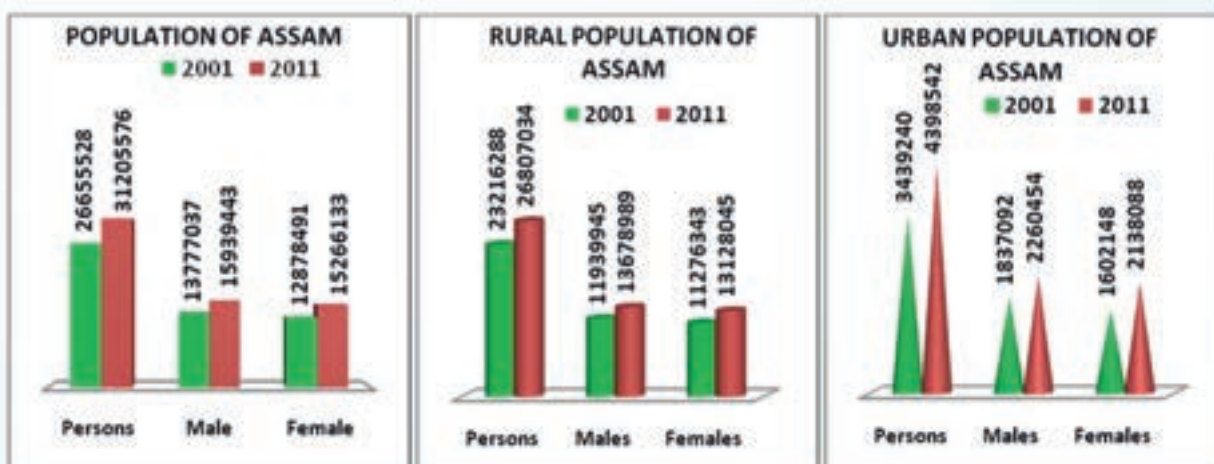
Particulars	Unit	2001 Census	2011 Census
Population	Lakh	267	312
Decadal Growth	Percent	18.92	17.1
Change in percentage of decadal growth	Percent	(-) 5.32	(-)1.8
Density	Per Sq. Km.	340	398
Sex-Ratio	Females per 1000 males	935	958
Literacy	Percent	63.25	72.19



(a) Male	Percent	71.28	77.85
(b) Female	Percent	54.61	66.27
Urban Population	Percent	12.90	14.09
(a) Male	Percent	53.41	51.39
(b) Female	Percent	46.58	48.61
Rural Population	Percent	87.10	85.90
(a) Male	Percent	51.43	51.03
(b) Female	Percent	48.57	48.97
SC Population	Percent	7.40	7.15
ST Population	Percent	12.83	12.45

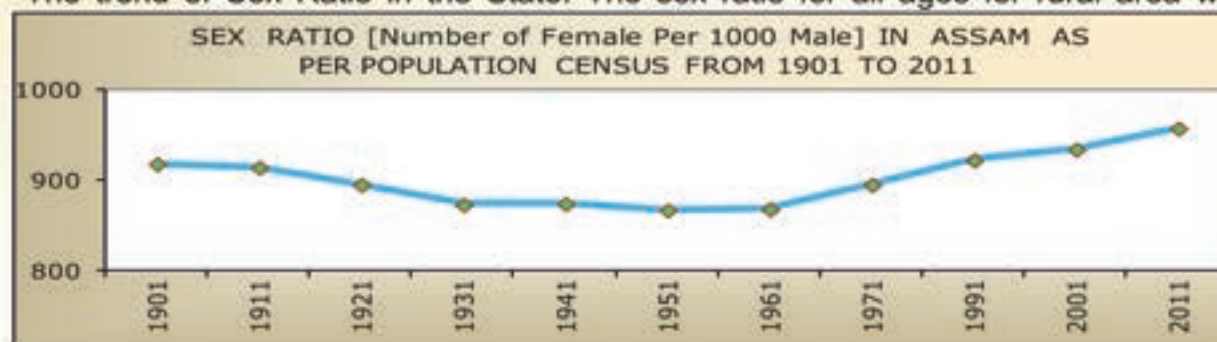
### Population : Rural and Urban

As per Population Census, 2011, the rural population of the State was 86.0 percent of the total population. This percentage was much higher than that for All-India (69.0 percent). The proportion of rural population in the State decreased from 87 percent in 2001 to 86 percent in 2011. Out of the total rural population 51.03 percent were male and 48.97 were female. As per the Population Census, 2011, around 14 percent of the total population of the State was living in urban areas. The proportion of urban population in the State increased from 12.9 percent in 2001 to 14 percent in 2011.

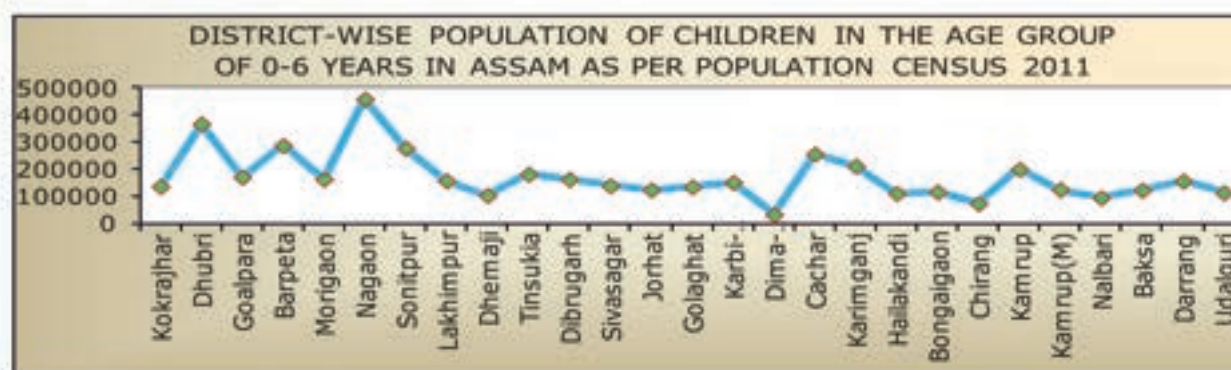


## Sex Ratio

The trend of Sex Ratio in the State. The sex ratio for all ages for rural area was



calculated at 960 and for



urban area were 948. The sex ratio in the age-group 0-6 years is the vital indicator of future sex composition in the population in the State. Child sex ratio in the State was 962 female per 1000 male child as per Census ,2011.

**Table: 2.3 Sex Ratios in Selected States**

State	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
Andhra Pradesh	983	996	965	987	978	993
Gujarat	945	949	880	880	920	919
Karnataka	977	979	942	963	965	973
Kerala	1059	1078	1058	1091	1058	1084
Madhaya Pradesh	927	936	898	918	919	931
Maharashtra	960	952	873	903	922	929
Rajasthan	930	933	890	914	921	928
Uttar Pradesh	904	918	876	894	898	912
<b>Assam</b>	<b>944</b>	<b>960</b>	<b>872</b>	<b>946</b>	<b>935</b>	<b>958</b>
<b>All-India</b>	<b>946</b>	<b>949</b>	<b>900</b>	<b>929</b>	<b>933</b>	<b>943</b>

Source:Registrar General of India



**Sex Ratio and Child Sex Ratios** : As per Population Census 2011, in all districts of the State have witnessed increase of Sex Ratio as compared to the report of Census, 2001. The highest Sex Ratio 974 is observed in Baksa district and lowest Sex Ratio is 932 in Kamrup (Metro).

The corresponding Sex Ratio in the State for the age group 0-6 years is observed highest in Udalguri district and lowest is observed in Kamrup (Metro)

On the other hand, Sex Ratio at birth (0-1 year) in Assam as per 2011 Census was calculated at 957 female per 1000 male. The Sex Ratio at birth for rural area was 958 and for Urban were 948. District wise analysis of Sex Ratio at birth shows that Dima Hasao district recorded highest Sex Ratio of 985 and the lowest is recorded in Dhemaji district with 922. The Sex Ratio of Scheduled Castes and Scheduled Tribes population in Assam were 948 and 985 respectively in 2011. In respect of rural and urban divide, the Sex Ratio for Scheduled Castes population is 945 and 963 respectively and for Scheduled Tribes population the figures are 984 and 996 respectively.

**Table: 2.4 Sex Child Ratios in Selected States**

State	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
1	2	3	4	5	6	7
Andhra Pradesh	963	941	955	935	961	939
Gujarat	906	914	837	852	883	890
Karnataka	949	950	940	946	946	948
Kerala	961	965	958	963	960	964
Madhya Pradesh	939	923	907	901	932	918
Maharashtra	916	890	908	899	913	894
Rajasthan	914	892	887	874	909	888
Uttar Pradesh	921	906	890	885	916	902
<b>Assam</b>	<b>967</b>	<b>964</b>	<b>943</b>	<b>944</b>	<b>935</b>	<b>962</b>
<b>All-India</b>	<b>934</b>	<b>923</b>	<b>906</b>	<b>905</b>	<b>927</b>	<b>918</b>

Source: Registrar General of India

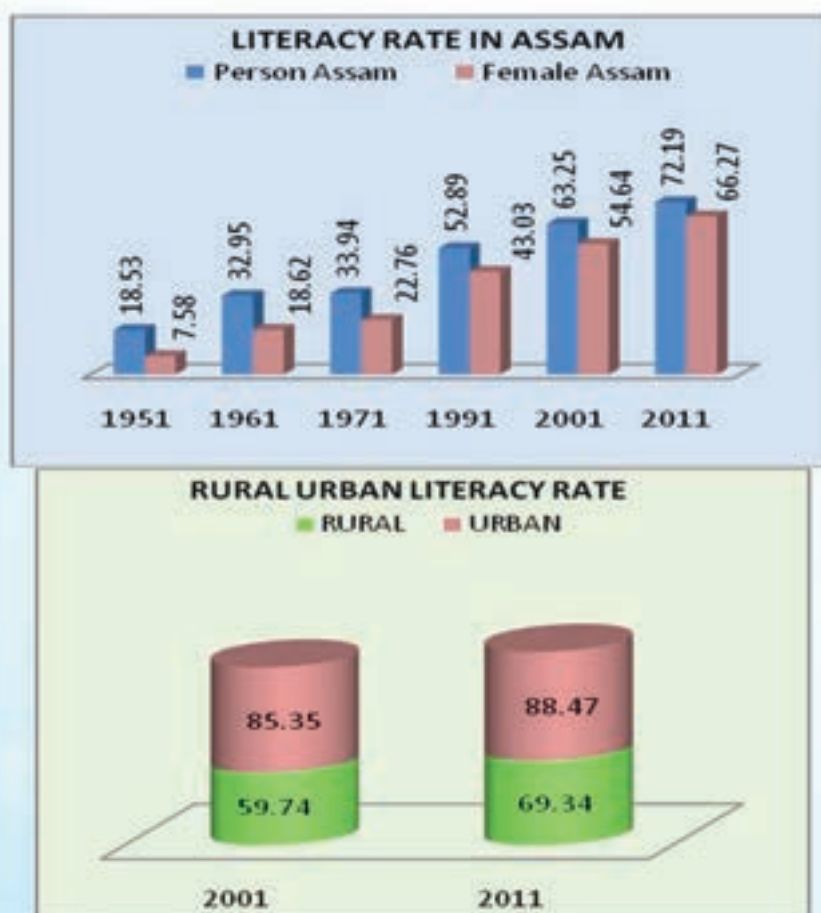
### Literacy Rate

The growth of literacy in Assam has shown an encouraging sign. The literacy rate for Assam as per Census 2011 increased to 72.19 percent with 77.85 percent for males and 66.27 percent for females. The literacy rates for rural and urban areas were calculated at 69.34 percent and 88.47 percent respectively. The literacy rate for country as a whole, on the other hand, increased to 73 percent from 65 percent with male and female differentials of 80.09 percent and 64.64 percent respectively.

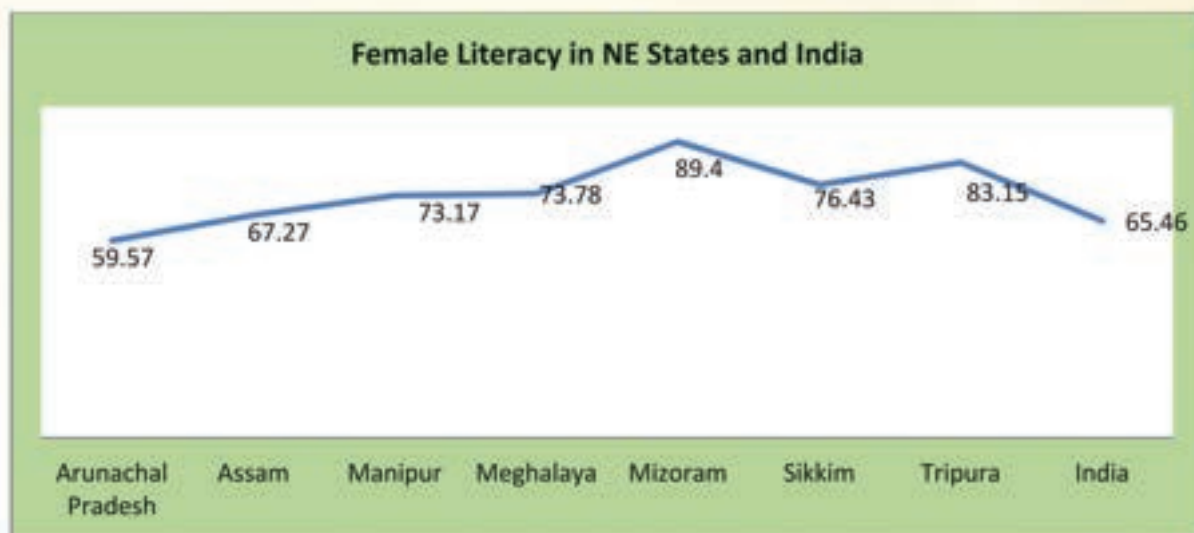
**Table :2.5 Literacy Rates for Selected states ( age group 7 years & above)**

State	2001			2011		
	Male	Female	Persons	Male	Female	Persons
1	2	3	4	5	6	7
Andhra Pradesh	70.3	50.4	60.5	74.9	59.2	67
Gujarat	79.7	57.8	69.1	85.8	69.7	78
Karnataka	76.1	56.9	66.6	82.5	68.1	75.4
Kerala	94.2	87.7	90.9	96.1	92.1	94
Madhaya Pradesh	76.1	50.3	63.7	78.7	59.2	69.3
Maharashtra	86	67	76.9	88.4	75.9	82.3
Rajasthan	75.7	43.9	60.4	79.2	52.1	66.1
Uttar Pradesh	68.8	42.2	56.2	77.3	57.2	67.7
<b>Assam</b>	<b>71.28</b>	<b>54.61</b>	<b>63.25</b>	<b>77.85</b>	<b>66.27</b>	<b>72.19</b>
<b>All-India</b>	<b>75.3</b>	<b>53.7</b>	<b>64.8</b>	<b>80.9</b>	<b>64.6</b>	<b>73.0</b>

(Figure in %) Source: Registrar General of India







Following table shows the distribution of population in Assam by major scheduled language.

**Table 2.6: Language-wise distribution of population of major scheduled languages in Assam, as per Census.**

Mother Tongue Name	Population		% of Growth (2001-2011)
	2001	2011	
Assamese	13010478	15095797	16.03
Bengali	7343338	9024324	22.89
Bodo	1296162	1416125	9.26
Dogri	2234	1561	-30.13
Gujarati	6911	7660	10.84
Hindi	1569662	2101435	33.88
Kannada	2059	2597	26.13
Kashmiri	358	357	-0.28
Konkani	156	413	164.74



Maithili	4346	6034	38.84
Malayalam	8141	5768	-29.15
Manipuri	154059	168133	9.14
Marathi	6303	11641	84.69
Nepali	564790	596210	5.56
Odia	231474	218552	-5.58
Punjabi	30763	23313	-24.22
Sanskrit	51	104	103.92
Santali	242886	213139	-12.25
Sindhi	910	19646	2058.90
Tamil	5672	5229	-7.81
Telugu	27463	26630	-3.03
Urdu	4715	8293	75.89
All Scheduled Languages	24512931	28952961	18.11

*Source: Census of India.*

### **Assam Highlights – 2011 census**

The Census Directorate of Assam highlighted the following observation after completion of the Population Census, 2011.

Growth of population in the state during 1971-2011 is 113.12 percent against the national growth rate of 120.77 percent during this period.

Assam ranks 14th in size of population among the states of India.

Assam ranks 15th in density among the states of India.

Assam ranks 15th in sex-ratio among the states of India.

Assam ranks 26th in literacy among the states of India.

Some State highlights in 2011 census, such as highest and lowest population, percentage of growth, literacy rate, sex ratio and density among the districts of Assam may be seen in the following.

Item		Highest	Lowest
Total Population		Nagaon (826,006)	Dima Hasao (213,529)
Total Rural Population		Nagaon (2,457,906)	Dima Hasao (152,302)
Total Urban Population		Kamrup Metro (1,044,832)	Baksa (12,173)
Percentage of Population Growth	Total	Dhubri (24.40)	Kokrajhar (5.19)
	Rural	Dhubri (27.13)	Kamrup Metro (2.93)
	Urban	Nalbari (200.34)	Sonitpur (-2.65)
Literacy Rate	Total	Kamrup Metro (88.66)	Dhubri (59.36)
	Rural	Jorhat (81.36)	Dhubri (56.49)
	Urban	Hailakandi (94.67)	Darrang (66.86)
Sex-ratio	Total	Morigaon (974)	Kamrup Metro (922)
	Rural	Morigaon (975)	Darrang (923)
	Urban	Hailakandi (992)	Dima Hasao (880)
Density		Kamrup Metro (2,010)	Dima Hasao (44)

Source: Census of India.

**Table 2.7: Percentage of households\* by source of drinking water, and availability of latrine facility in selected States**

State	Availability of Drinking Water		Latrine Facility Available within the Premises	Latrine not available within Premises	
	Within Premises	Near the Premises		Public	Open
	Andhra Pradesh	43.2	37.3	49.6	2.5
Assam	54.8	26.7	64.9	1.9	33.2
Gujarat	64.0	23.5	57.4	2.3	40.4
Karnataka	44.5	37.3	51.2	3.8	45.0
Kerala	77.7	14.1	95.2	1.1	3.8
Madhya Pradesh	23.9	45.6	28.8	1.2	70.0
Maharashtra	59.4	27.6	53.1	12.9	34.0
Rajasthan	35.0	39.0	35.0	0.7	64.3
Uttar Pradesh	51.9	36.0	35.7	1.3	63.0
All India	46.6	35.8	46.9	3.2	49.8

\*Excluding of Institutional households

Source: Office of the Registrar General Of India

Source of Lighting : As per Population Census,2011, Kerosene as the main source of lighting in the State as reported by 61.8 percent households. Electricity was the second main source of lighting with 37.0 percent households. The percentage of households in the State by source of lighting with some selected States is in the table 2.6.



**Table 2.8 Percentage of households\* Source of lighting**

State	Source of Lighting			No Lighting
	Electricity	Kerosene	Other**	
Andhra Pradesh#	92.2	6.9	0.6	0.4
Assam	37.0	61.8	1.2	0.2
Gujarat	90.4	8.1	0.5	1.0
Karnataka	90.6	8.6	0.4	0.4
Kerala	94.4	5.2	0.4	0.0
Madhya Pradesh	67.1	32.1	0.6	0.2
Maharashtra	83.9	14.5	0.7	0.9
Rajasthan	67.0	30.9	1.2	0.8
Uttar Pradesh	36.8	61.9	1.1	0.2
All India	67.3	31.4	0.8	0.5

\*Excluding Institutional households. \*\* Others include solar energy, other oil and any other Fuel # including Telegana Source: Office of the Registrar General Of India

Used for cooking: As per Population Census,2011, Firewood was the main source cooking as reported by household. Liquefied Petroleum Gas(LPG) was used as a cooking media by 19.0 per cent household.

The per centage of households by source of fuel for cooking in selected States is given in the Table.2.7

**Table: 2.9 Percentage of households \* by source of Fuel for Cooking in selected States:**

State	Source of Fuel (per cent)				
	LPG	Firewood	Kerosene	Other	No cooking
Andhra Pradesh#	35.8	56.8	3.9	3.2	0.3
Assam	19.0	72.1	0.6	8.3	00
Gujarat	38.3	44.0	7.6	9.8	0.4
Karnataka	32.5	57.5	5.4	4.3	0.3
Kerala	35.8	61.9	0.4	1.6	0.3
Maharastra	43.4	42.6	6.5	6.8	0.8
Rajasthan	22.8	61.8	0.9	14.3	0.2
Uttar Pradesh	18.9	47.7	0.7	32.5	0.2
All India	28.6	49.0	2.9	19.4	0.3

# including Telegana, Source: Office of the Registrar General Of India

## **SLUM POPULATION**

As per Census, 2011, thirty one (31) towns in Assam were reporting slums against 2613 towns reporting slums in India as a whole. According to the Census of India, 2011, the Slum population stands at 197,266 of which 101,424 are males and

95,842 females. The Slum population accounts for 0.63 percent of the total population of the State. The child population (0-6years) in Slum population is 22,229 out of which 11,378 are males and 10,851 are females. The corresponding child population (0-6 years) in all India level is 8,082,743 of which male & females are 4,204,451 and 3,878,292 respectively. The Slum population to the urban population of the State is 4.5 percent. The all India figure for Slum population as per Census, 2011 is 65,494,604 of which 33,968,203 are males and 31,526,401 are females.

#### **LITERACY RATE OF SLUM POPULATION**

The Literacy rate for Slum population is 72 percent with 76 percent for male and 68 percent for female population, according to Census 2011. The corresponding figure for literacy in all India level is 68 percent with 73 % and 62 % for male and female literacy respectively.



## STATE INCOME

The State Domestic Product (SDP) is the most important economic indicator used to measure the growth and pattern of economic development of a state. The SDP and other related macroeconomic aggregates are useful to meet the financial requirement of the Government apart from planning and policy formulations. The estimates of State Domestic Product reveal the extent and direction of changes in the levels of economic development of the state over a period of time.

The annual average growth rate during the period 2012-2017 of the State of Assam is estimated at 7.09 % in terms of Gross State Domestic Product (GSDP) at basic (2011-12) prices which indicated a favorable status of the State Economy. During the period 2011-12, industry sector achieved the highest annual average growth rate of 11.42% in respect of GSDP at basic prices among the three major sectors, followed by service sector (6.21%) and agriculture and allied sector (4.54%) respectively. On the other hand, the annual average growth rate in regard to GSDP at current prices for the period 2012-2017 is estimated at 12.20%.

The annual average growth rate in respect of Net State Domestic Product (NSDP) for the period 2012-2017 is estimated at 6.53% at basic prices (base 2011-12) as against 11.84% at current prices.

### 3.1 GROSS STATE DOMESTIC PRODUCT (GSDP) AND NET STATE DOMESTIC PRODUCT AT CURRENT PRICES

As per provisional estimates, the Gross State Domestic Product (GSDP) of Assam at current prices is estimated at Rs. 254320.86 crore for 2016-17 reflecting a growth of about 11.56% over the preceding year. As per quick estimates, the Gross State Domestic Product of the State at current prices increased to Rs. 278710.10 crore during 2017-18 registering a growth of 9.59%.

The Net State Domestic Product (NSDP) of Assam at current prices for 2016-17 is estimated at Rs. 225901.49 crore recording a growth of 12.22% over the previous year. The Net State Domestic Product of the State at current prices increased to Rs 246150.79 crore during 2017-18(Quick Estimates) which is at a growth of 8.96 % over the previous year.

### 3.2 GROSS STATE DOMESTIC PRODUCT (GSDP) AND NET STATE DOMESTIC PRODUCT AT BASIC PRICES (BASE YEAR 2011-12)

According to the provisional estimates, the Gross State Domestic Product of Assam at constant prices is estimated at Rs. 200790.00 crore for 2016-17 reflecting a



growth of 5.07 % over the year 2015-16. As per quick estimates, the Gross State Domestic Product of the State at constant prices increased to Rs 211940.28 crore during the year 2017- 18 registering a growth of 5.55%.

The Net State Domestic Product of Assam at constant prices is estimated at Rs 176790.28 crore for 2016-17 recording a growth of 5.47% over the previous year. The Net State Domestic Product of Assam at constant prices increased at Rs. 185667.39 crore during 2017-18 at a growth of 5.02% per cent over the previous year.

The GSDP and NSDP of Assam at both current and constant prices during the period from 2011-12 to 2017-18(Q.E) is presented in **Table-3.1**.

<b>Table:3.1</b>					
<b>Rs. in crore</b>					
Sl. No	Year	GSDP		NSDP	
		At current prices	At basic prices	At current prices	At basic prices
1	2011-12	143174.91	143174.91	129354.12	129354.12
2	2012-13	156864.24	147342.38	142039.46	132517.60
3	2013-14	177745.22	154525.40	160441.53	138724.76
4	2014-15	195723.15	165212.30	172848.89	146425.39
5	2015-16	227958.83	191109.00	201308.81	167628.67
6	2016-17(P.E)	254320.86	200790.00	225901.49	176790.28
7	2017-18(Q.E)	278710.10	211940.28	246150.79	185667.39

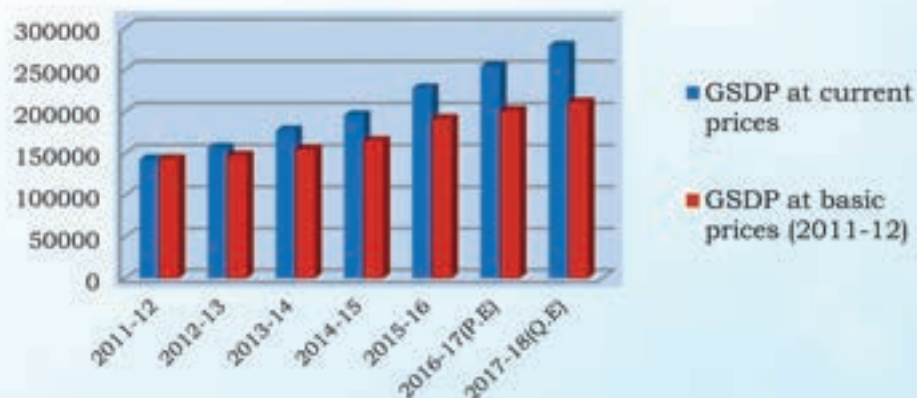
P.E-Provisional Estimates, Q.E-Quick Estimates

Source: Directorate of Economics and Statistics, Assam

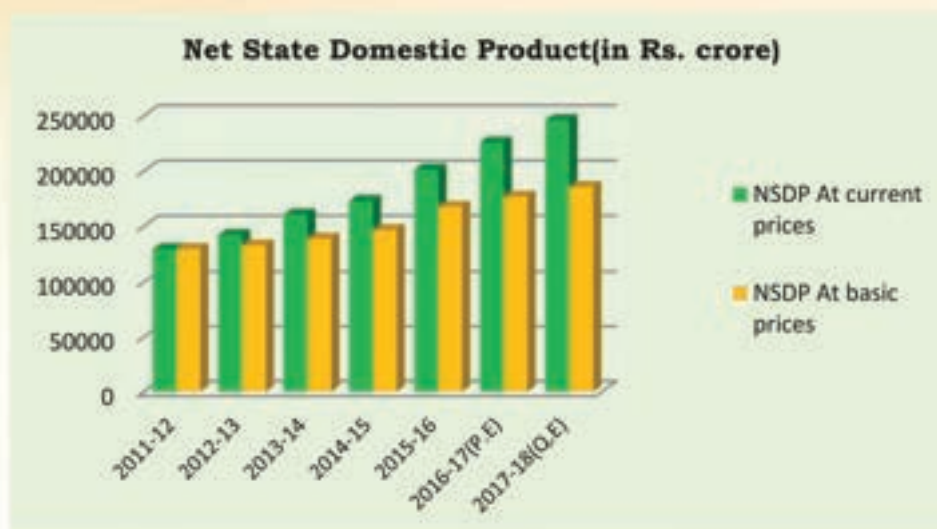
The GSDP and NSDP of Assam at both current and constant prices during the period from 2011-12 to 2016-17 is depicted in Chart-3.1& 3.2 respectively.

**Chart.3.1**

**Gross State Domestic Product (Rs. in Crore)**



**Chart: 3.2**



The average annual growth rate in terms of GSDP and NSDP of Assam during the period from 2012-13 to 2017-18(Q.E) at both current and constant prices is presented in **Table: 3.2**.

From the table, it is observed that GSDP and NSDP at both current and constant prices during the year 2015-16 had rapidly inclined high against the previous year due to sudden increase of Gross Value Added (GVA) in mining and quarrying sector of the state. The main reason of increase of GVA in mining and quarrying sector was some oil fields were covered earlier under the Arunachal Pradesh but actually located under the jurisdiction of Assam.

Table: 3.2

Sl. No	Year	GSDP		NSDP	
		Current	Constant	Current	Constant
1	2012-13	9.56%	2.91%	9.81%	2.45%
2	2013-14	13.31%	4.88%	12.96%	4.68%
3	2014-15	10.11%	6.92%	7.73%	5.55%
4	2015-16	16.47%	15.67%	16.47%	14.48%
5	2016-17(P.E)	11.56%	5.07%	12.22%	5.47%
6	2017-18(Q.E)	9.59%	5.55%	8.96%	5.02%

P.E-Provisional Estimates, Q.E-Quick Estimates

Source: Directorate of Economics and Statistics, Assam

The average annual growth rate in terms of GSDP and NSDP of Assam during the period from 2012-13 to 2017-18(Q.E) at both current and constant prices is presented graphically in **Chart: 3.3**



Chart-3.3



### 3.3 SECTORAL COMPOSITION OF GSDP

The sectoral composition of State Domestic Product (SDP) depicts the contribution of different sectors in percentage in the economy over a period of time which not only indicates the real structural changes taking place in the economy but also facilitates formulation of various plans and programmes for overall economic development of the State.

The sectoral analysis revealed that during 2017-18 (Quick Estimates), the percentage contribution of agriculture and allied Sector to total GSDP of Assam at current prices was 17.27%, industry Sector (30.48%), service sector (45.54%) and taxes and subsidies (6.71%).

The structural composition of the state economy witnessed significant changes during the last seven years.

The share of agriculture and its allied activities in GSDP at current prices had marginally come down from 19.89% in 2011-12 to 17.27 % in 2017-18(Quick Estimates), yet the agriculture sector continues to occupy a significant place in the state economy and any fluctuation in the production of food grains/ vegetables and fruits affect the state economy. During the same period, the share of industry sector at current prices has slightly declined from 30.63% in 2011-12 to 30.47% in 2017-18. During the period 2011-12 to 2016-17, the share of service sector had nominally increased from 43.97% in 2011-12 to 45.54% in 2016-17. During the period, the contribution of taxes and subsidies has increased by 1.2%.

Table:3.3

Sectoral composition of GSDP at current prices		
Industry	2011-12	2017-18(Q.E)
Agriculture and its Allied	19.89%	17.27%
Industry	30.63%	30.48%
Service	43.97%	45.54%
Taxes & Subsidies	5.51%	6.71%



The industry group "Agriculture and allied" sector consists of (i) crop sector, (ii) livestock sector, (iii) forestry and logging sector and (iv) fishing and aquaculture sector. As per quick estimates, the annual growth rate of GSDP in respect of agriculture and allied sector at current prices for the year 2017-18(Q.E) is estimated around 4.22% as against 5.60% in previous year 2016-17(P.E). The annual growth of GSDP in respect of crop, livestock, forestry and logging, fishing sectors are estimated at constant prices for 2017-18 (Q.E) around 2.42%, 3.95%, 3.47% and 7.21% respectively as against 2.37%, 2.48%, 2.14% and 4.37% in 2016-17 (P.E). At constant prices, all the sub-sector of agriculture industry showed the positive trend in 2017-18 over 2016-17.

Industry	Current Prices	Constant Prices
Crop	3.97%	2.42%
Livestock	4.31%	3.95%
Forestry and logging	3.73%	3.47%
Fishing and aquaculture	5.83%	7.21%
Agriculture and allied sector	4.22%	3.24%

The 'Industry' sector which comprises mining & quarrying, manufacturing, electricity, gas, water supply & other utility services and construction sectors is estimated to attain at 7.81% growth at current prices during 2017-18 (Q.E) over the previous year. At current prices, the share of growth of the sub sectors to the industry sector is estimated in mining and quarrying (3.42%), manufacturing (10.19%), electricity, gas, water supply & other utility services (14.04%) and construction (8.52%) respectively. At constant prices, the contribution of the sub sectors to the industry sector during the year 2017-18(Q.E) is estimated at 1.70% in mining and quarrying, 4.56% in manufacturing, 4.92% in electricity, gas, water supply & other utility services and 5.62% in construction respectively.

Industry	Current Prices	Constant Prices
Mining & Quarrying	3.42%	1.70%
Manufacturing	10.19%	4.56%
Electricity, Gas, Water Supply & Other Utility Services	14.04%	4.92%
Construction	8.52%	5.62%
Industry Sector	7.81%	3.91%

The 'Service' sector comprises of trade, repair, hotel & restaurants, transport, storage, communication & services related to broadcasting, financial services, real estate, ownership of dwelling and professional services, public administration and other services. It is estimated to attain the growth of 12.19% for 2017-18(Q.E) over the previous year at current prices. At constant prices, it is estimated to achieve the growth of 6.17% for 2017-18 (Q.E) over the preceding year.

At current prices, the share of growth of the sub sectors to the service sector is

Industry	Current Prices	Constant Prices
Trade, Repair, Hotel & Restaurants	12.04%	6.69%
Transport, Storage, Communication & Services related to Broadcasting	13.41%	6.11%
Financial Services	11.71%	5.17%
Real Estate, Ownership of Dwelling and Professional Services	9.25%	4.17%
Public Administration	12.81%	5.98%
Other Services	13.10%	7.47%
Service Sector	12.19%	6.17%



estimated in trade, repair, hotel & restaurants (12.04%), transport, storage, communication & services related to broadcasting (13.41%), financial Services (11.71%), real estate, ownership of dwelling and professional services (9.25%), public administration (13.10%) and other services (12.19%) respectively.

At constant prices, the contribution of the sub sectors to the service sector is estimated in trade, repair, hotel & restaurants 6.69%), transport, storage, communication & services related to broadcasting (6.11%), financial services (5.17%), real estate, ownership of dwelling and professional services (4.17%), public administration (5.98%) and other services (7.47%) respectively. The sectoral growth rates of GSDP at constant (2011-12) prices during the period from 2011-12 to 2016-17 are shown in **Table: 3.7**.

**Table: 3.7** depicts that the Annual Percentage Growth Rate (APGR) in respect of GSDP at constant prices during the period from 2011-12 to 2017-18(Q.E) was highest in public administration (19.27%) among all the sub-sectors, followed by electricity, gas, water supply & other utility services (16.65%), and manufacturing (15.56%), respectively. On the other hand, the lowest APGR was observed in real estates, ownership of dwelling and professional services (0.52%).

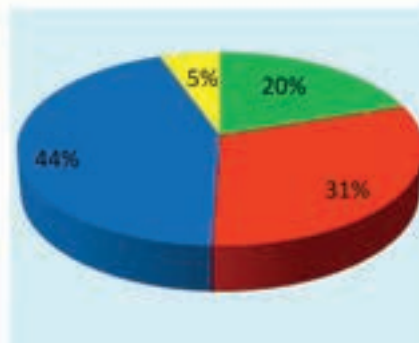
Table: 3.7			
SECTORAL GROWTH RATES OF GSDP AT CONSTANT (2011-12) PRICES DURING LAST SIX YEARS			
(Rs. in Lakh)			
Sector	2011-12 (Base Year)	2017-18 (Q.E)	Average Annual Growth Rate
Agriculture, Forestry & Fishing	2848113	3638567	4.63%
Mining & Quarrying	1464989	2337528	9.93%
Manufacturing	1540255	2977970	15.56%
Electricity, Gas, Water Supply & Other utility Services	191883	383602	16.65%
Construction	1188747	1772043	8.18%
Industry Sector	4385874	7471143	11.72%
Trade, Repair, Hotels & Restaurants	2045676	2312653	2.18%
Transport, Storage, Communication & Services related to Broadcasting	810091	1297106	10.02%
Financial Services	427077	610702	7.17%
Real Estates, Ownership of Dwelling and Professional Services	1112543	1147300	0.52%
Public Administration	821723	1771946	19.27%
Other Services	1077923	1670470	9.16%
Service Sector	6295033	8844729	6.75%
Total Gross State Value Added at Basic Prices	13529020	19919886	7.87%
Gross State Domestic Product (GSDP)	14317491	21194028	8.00%
Taxes on Products -Subsidies on Products	788471	1274142	10.27%
Per capita Gross State Domestic Product (in Rs.)	45538	62510	6.21%

Source: Directorate of Economics & Statistics, Assam.



## SECTORAL CONTRIBUTION TO GROSS STATE DOMESTIC PRODUCT (GSDP) AT CONSTANT PRICES DURING 2011-12

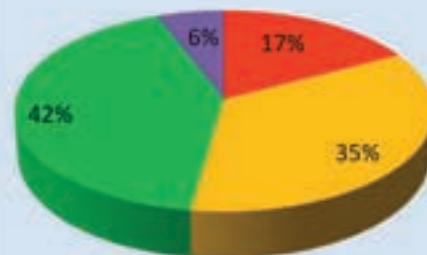
GSDP at constant prices during 2011-12 (Base year)



- Agriculture, Forestry and Fishing Sector
- Industry Sector
- Service Sector
- Taxes on Products - Subsidies on Products

## SECTORAL CONTRIBUTION TO GROSS STATE DOMESTIC PRODUCT (GSDP) AT CONSTANT PRICES DURING 2016-17

GSDP at constant prices during 2017-18



- Agriculture, Forestry and Fishing Sector
- Industry Sector
- Service Sector
- Taxes on Products - Subsidies on Products

### 3.4. PER CAPITA INCOME

Per capita income of the state and the nation is presented in **Table: 3.8.**

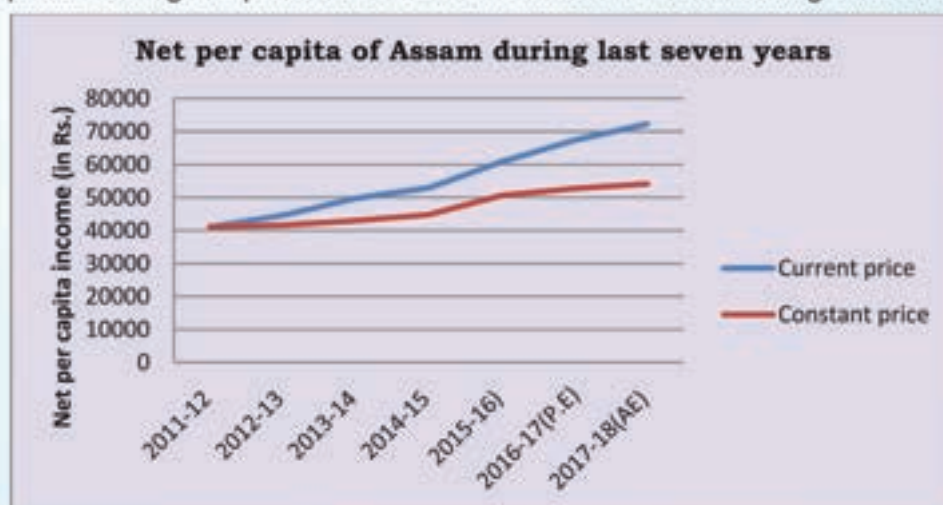
Year	Assam		India	
	At current Prices	At constant Prices	At current Prices	At constant Prices
1960-61*	433	8769	373	8889
1970-71*	743	9351	763	10016
1980-81*	1673	9334	1852	10712
1990-91*	5315	10915	5621	14330
2000-01*	12803	12447	17295	20362
2004-05**	16782	16782	24143	24143
2008-09**	24099	18922	40775	31754
2009-10**	28383	20406	46249	33901
2010-11**	33087	21146	54021	36342
2011-12#	41142	41142	63460	63460
2012-13#	44599	41609	71050	65664
2013-14#	49734	43002	79412	68867
2014-15#	52895	44809	86647	72805
2015-16)#	60817	50642	94731	77826
2016-17(P.E)#	67375	52728	103870	82229
2017-18(Q.E)#	72289	54122	112835	86668

\* From 1960-61 to 2000-01 the base year is 1999-2000, \*\* From 2004-05 to 2010-11 the base year is 2004-05 #From 2011-12 to 2017-18 the base year is 2011-12

Source: Directorate of Economics and Statistics, Assam and Central Statistics Office (MOSPI), Govt. of India

The per capita income of the State in terms of NSDP at constant (2011-12) prices is estimated at Rs. 54122.00 for the year 2017-18 (Quick Estimates) as against Rs.52728.00 in 2016-17 (Provisional Estimates) with an increase of 2.64% and the same was Rs. 41142.00 in the year 2011-12. During the same period, the per capita income of the country at constant prices was 5.39%. The average annual growth during the period from 2011-12 to 2017-18 was 4.74 %. The per capita NSDP at current prices for the year 2017-18(Q.E) is estimated at Rs.72289.00 as against Rs.67375.00 in 2016-17 registering a growth of 7.29%.

The annual growth rate of Net Per Capita of the State at both current and constant prices during the period 2011-2018 is shown in the following Line Diagram.





A comparison of annual growth rate of GSDP (sector wise) between National Account and State Account for the year 2017-18 is shown in Table-3.9.

SI No	Industry	Annual Growth Rate (in %)			
		National Account		State Account	
		Current price	Constant price	Current price	Constant price
1	Agriculture, Forestry and Fishing	4.5	3.4	4.2	3.2
2	Mining & Quarrying	12.5	2.9	3.4	2.0
3	Manufacturing	8.6	5.7	10.2	4.6
4	Electricity, Gas, Water Supply and other utility services	6.7	7.2	14.0	4.9
5	Construction	8.8	5.7	8.5	5.6
6	Trade, Repair, Hotels & Restaurants	11.4	8.0	12.0	6.7
7	Transport, Storage, Communication and services related to broadcasting	11.4	8.0	13.4	6.1
8	Communication & Services related to Broadcasting	11.4	8.0	12.4	5.1
9	Financial Services	10.8	6.6	11.7	5.2
10	Real Estate, Ownership of dwelling & Professional Services	10.8	6.6	9.3	4.2
11	Public Administration	14.4	10.0	12.8	5.9
12	Other Services	14.4	10.0	13.1	7.5
13	Total GSVA at Basic Prices	9.7	6.5	9.6	5.6

Source: Directorate of Economics and Statistics, Assam and Central Statistics Office (MOSPI), Govt. of India

## Appendix-3.1

## ESTIMATION OF GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES

New base (2011-12) series

Rs. in Lakh

SI No	Industry	2011-12	2015-16	2016-17 (P.E)	2017-18 (Q.E)
1	Agriculture, Forestry and Fishing	2848113	4373933	4618893	4813731
1.1	Crops	2061487	3210429	3381282	3515540
1.2	Livestock	159289	271183	278319	290319
1.3	Forestry & Logging	231388	321284	348578	361578
1.4	Fishing and aquaculture	395949	571037	610714	646294
2	Mining & Quarrying	1464989	2746865	2600783	2689794
A	Primary sector	4313102	7120799	7219676	7503525
3	Manufacturing	1540255	2616441	2944582	3244582
4	Electricity, Gas, Water Supply and other utility services	191883	393251	498462	568462
5	Construction	1188747	1615093	1834347	1990638
B	Secondary Sector	2920885	4624785	5277392	5803682
6	Trade, Repair, Hotels & Restaurants	2045676	2841530	3484383	3903916
6.1	Trade and repair services	1961211	2727336	3360324	3762163
6.2	Hotel and restaurants	84465	114194	124059	141753
7	Transport, Storage, Communication and services related to broadcasting	810091	1450602	1491279	1691201
7.1	Railways	158334	312914	270511	319687
7.2	Transport by means other than Railways	436288	680682	747929	839994
7.2.1	Road Transport	356262	556176	610362	689054
7.2.2	Water Transport	43626	27714	31597	33597
7.2.3	Air Transport	0	30620	34187	39560
7.2.4	Services incidental to Transport	36400	66172	71783	77783
7.3	Storage	6594	9501	10448	11664
7.4	Communication & Services related to Broadcasting	208875	447505	462391	519856
8	Financial Services	427077	647536	632074	706108
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1379694	1451800	1586084
10	Public Administration	821723	1712363	2185480	2465480
11	Other Services	1077923	1740134	2068634	2339696
C	Tertiary Sector	6295033	9771859	11313650	12692485
12	Total GSVA at Basic Prices	13529020	21517443	23810718	25999692
13	Taxes on Products	1203476	1773533	2058700	2338650
14	Subsidies on Products	415005	495093	437332	467332
15	Gross State Domestic Product	14317491	22795883	25432086	27871010
16	Population (in '00 )	314410	331010	335290	339050
17	Per Capita (in Rs.)	45538	68868	75851	82203
D	Agriculture	2848113	4373933	4618893	4813731
E	Industry Sector	4385874	7371650	7878175	8493476
F	Service Sector	6295033	9771859	11313650	12692485
G	Taxes on Products -Subsidies on Products	788471	1278440	1621368	1871318
	GSDP at current price	14317491	22795883	25432086	27871010



## Appendix-3.2

## GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES

New base (2011-12) series

Rs. in Lakh

Sl. No	Industry	2011-12	2015-16	2016-17 (P.E)	2017-18 (Q.E)
1	Agriculture, Forestry and Fishing	2848113	3433875	3524435	3638567
1.1	Crops	2061487	2559454	2620133	2683479
1.2	Livestock	159289	173148	177437	184437
1.3	Forestry & Logging	231388	225456	230271	238271
1.4	Fishing and aquaculture	395949	475816	496593	532379
2	Mining & Quarrying	1464989	2477702	2298528	2337528
A	Primary	4313102	5911576	5822963	5976095
3	Manufacturing	1540255	2531956	2847970	2977970
4	Electricity, Gas, Water Supply and other utility services	191883	296011	365602	383602
5	Construction	1188747	1509561	1677798	1772043
B	Secondary	2920885	4337528	4891370	5133615
6	Trade, Repair, Hotels & Restaurants	2045676	2223850	2167705	2312653
6.1	Trade and repair services	1961211	2133298	2089857	2230740
6.2	Hotel and restaurants	84465	90552	77848	81913
7	Transport, Storage, Communication and services related to broadcasting	810091	1224030	1222426	1297106
7.1	Railways	158334	266230	214705	228543
7.2	Transport by means other than Railways	436288	576250	620224	661202
7.2.1	Road Transport	356262	470846	506146	542959
7.2.2	Water Transport	43626	23462	26202	26902
7.2.3	Air Transport	0	25922	28350	29415
7.2.4	Services incidental to Transport	36400	56020	59526	61926
7.3	Storage	6594	8007	8581	9049
7.4	Communication & Services related to Broadcasting	208875	373543	378916	398311
8	Financial Services	427077	600139	580702	610702
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1093453	1101374	1147300
10	Public Administration	821723	1342663	1671946	1771946
11	Other Services	1077923	1334130	1554412	1670470
C	Tertiary	6295033	7818265	8298565	8810177
12	Total GSVA at Basic Prices	13529020	18067370	19012898	19919886
13	Taxes on Products	1203476	1539995	1606114	1870295
14	Subsidies on Products	415005	496465	540012	596153
15	Gross State Domestic Product	14317491	19110900	20079000	21194028
16	Population (in '00 )	314410	331010	335290	339050
17	Per Capita (in Rs.)	45538	57735	59885	62510
D	Agriculture, Forestry and Fishing Sector	2848113	3433875	3524435	3638567
E	Industry Sector	4385874	6815230	7189898	7471143
F	Service Sector	6295033	7818265	8298565	8810177
G	Taxes on Products -Subsidies on Products	788471	1043530	1066102	1274142
	GSDP at constant price	14317491	19110900	20079000	21194028



## Appendix-3.3

## NET STATE DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES

New base (2011-12) series

Rs. in Lakh

SI No	Industry	2011-12	2012-13	2016-17 (P.E)	2017-18 (Q.E)
1	Agriculture, Forestry and Fishing	2620851	4022029	4266968	4412671
1.1	Crops	1888760	2920425	3066180	3160438
1.2	Livestock	153834	263417	245533	250706
1.3	Forestry & Logging	228850	316280	372308	387133
1.4	Fishing and aquaculture	349407	519907	582947	614394
2	Mining & Quarrying	1288077	2298510	2201123	2300488
A	Primary	3908928	6320540	6468092	6713160
3	Manufacturing	1274688	2132801	2437810	2674695
4	Electricity, Gas, Water Supply and other utility services	130994	244168	310946	340656
5	Construction	1131858	1519060	1727465	1877708
B	Secondary	2537540	3896029	4476221	4893060
6	Trade, Repair, Hotels & Restaurants	2002198	2740712	3365100	3767805
6.1	Trade and repair services	1919528	2635151	3250515	3643816
6.2	Hotel and restaurants	82670	105561	114585	123989
7	Transport, Storage, Communication and services related to broadcasting	654962	1113698	1107742	1246529
7.1	Railways	102300	163457	98216	110746
7.2	Transport by means other than Railways	376730	596565	651186	736008
7.2.1	Road Transport	307628	496568	542719	613124
7.2.2	Water Transport	37671	16841	18095	18996
7.2.3	Air Transport	0	25235	27599	30599
7.2.4	Services incidental to Transport	31431	57921	62773	73289
7.3	Storage	5654	7978	8724	9690
7.4	Communication & Services related to Broadcasting	170278	345698	349616	390084
8	Financial Services	420333	634297	617236	677053
9	Real Estate, Ownership of dwelling & Professional Services	942080	1117382	1171554	1235410
10	Public Administration	634052	1371994	1789048	2015867
11	Other Services	1046848	1657789	1973788	2208148
C	Tertiary	5700473	8635872	10024468	11150812
12	Total NSVA at Basic Prices	12146941	18852441	20968781	22757032
13	Taxes on Products	1203476	1773533	2058700	2306455
14	Subsidies on Products	415005	495093	437332	448408
15	Net State Domestic Product	12935412	20130881	22590149	24615079
16	Population (in '00 )	314410	331010	335290	340509
17	Per Capita (in Rs.)	41142	60817	67375	72289
D	Agriculture, Forestry and Fishing Sector	2620851	4022029	4266968	4412671
E	Industry Sector	3825617	6194540	6677345	7193548
F	Service Sector	5700473	8635872	10024468	11150812
G	Taxes on Products -Subsidies on Products	788471	1278440	1621368	1858047
	NSDP at current price	12935412	20130881	22590149	24615079



## Appendix-3.4

## NET STATE DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES

New base (2011-12) series

Rs. in Lakh

SI No	Industry	2011-12	2015-16	2016-17 (P.E)	2017-18 (Q.E)
1	Agriculture, Forestry and Fishing	2620851	3095258	3172244	3269868
1.1	Crops	1888760	2275122	2242941	2306287
1.2	Livestock	153834	166190	168610	178037
1.3	Forestry & Logging	228850	222802	310177	305243
1.4	Fishing and aquaculture	349407	431143	450515	480301
2	Mining & Quarrying	1288077	2102478	1962918	2031909
A	Primary	3908928	5197735	5135162	5301777
3	Manufacturing	1274688	2099360	2393609	2495490
4	Electricity, Gas, Water Supply and other utility services	130994	189516	227717	237989
5	Construction	1131858	1420013	1574535	1640598
B	Secondary	2537540	3708889	4195861	4374077
6	Trade, Repair, Hotels & Restaurants	2002198	2133665	2062735	2197989
6.1	Trade and repair services	1919528	2050826	1993230	2123737
6.2	Hotel and restaurants	82670	82839	69505	74252
7	Transport, Storage, Communication and services related to broadcasting	654962	928374	890114	940341
7.1	Railways	102300	136171	67726	71897
7.2	Transport by means other than Railways	376730	498264	532642	562469
7.2.1	Road Transport	307628	415241	444639	471197
7.2.2	Water Transport	37671	13307	13891	14142
7.2.3	Air Transport	0	20946	22446	23446
7.2.4	Services incidental to Transport	31431	48770	51666	53685
7.3	Storage	5654	6654	7071	7571
7.4	Communication & Services related to Broadcasting	170278	287285	282675	298404
8	Financial Services	420333	588643	567935	600628
9	Real Estate, Ownership of dwelling & Professional Services	942080	867924	866265	880947
10	Public Administration	634052	1032739	1312196	1426037
11	Other Services	1046848	1261367	1471657	1574292
C	Tertiary	5700473	6812712	7170902	7620234
12	Total NSVA at Basic Prices	12146941	15719337	16501926	17296088
13	Taxes on Products	1203476	1539995	1737114	1874436
14	Subsidies on Products	415005	496465	560012	603785
15	Net State Domestic Product	12935412	16762867	17679028	18566739
16	Population (in '00 )	314410	331010	335290	343054
17	Per Capita (in Rs.)	41142	50642	52728	54122
D	Agriculture, Forestry and Fishing Sector	2620851	3095258	3172244	3269868
E	Industry Sector	3825617	5811367	6158779	6405987
F	Service Sector	5700473	6812712	7170902	7620234
G	Taxes on Products -Subsidies on Products	788471	1043530	1177102	1270651
	NSDP at constant price	12935412	16762867	17679028	18566739

**Appendix:3.5**  
**Movement of Gross State Domestic Products(GSDP)of Assam at Current and Constant(2011-12) Prices**

Year	Gross State Domestic Products (Rupees in Lakh)		Per Capita Gross State Domestic Product (in Rupees)	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
2004-05	5339771	5339771	18993	18993
2010-11	11268796	7344442	37053	24149
2011-12	14317491	14317491	45538	45538
2012-13	15686424	14734238	49254	46264
2013-14	17774522	15452540	55098	47900
2014-15	19572315	16521230	59894	53922
2015-16	22795883	19110900	68868	57735
2016-17(P.E)	25432086	20079000	75851	59885
2017-18(Q.E)	27871010	21194028	82203	62510

**Appendix:3.6**  
**Movement of Net State Domestic Products(NSDP)of Assam at Current and Constant(2011-12) Prices**

Year	Net State Domestic Products (Rupees in Lakh)		Per Capita Net State Domestic Product (in Rupees)	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
2004-05	4718074	4718074	16782	16782
2010-11	10062671	6430998	33087	21146
2011-12	12935412	12935412	41142	41142
2012-13	14203946	13251760	44599	41609
2013-14	16044153	13872476	49734	43002
2014-15	17284889	14642539	52895	44809
2015-16	20130881	16762867	60817	50642
2016-17(P.E)	22590149	17679028	67375	52728
2017-18(Q.E)	24615079	18566739	72289	54122



## STATE FINANCE

The Goods and Services Tax (GST) is an indirect tax which was introduced in India on 1<sup>st</sup> July' 2017 and was applicable throughout the country. GST replaced multiple cascading taxes levied by the Central Government and State Governments throughout the country. Along with the rest of the Country, Assam has been implementing the Goods and Service Tax'2017 (GST) with effect from 1<sup>st</sup> July'2017. The introduction of GST is a very noteworthy step in the field of indirect tax reforms in India. By merging a large number of Central and State taxes into a single tax, GST are expected to significantly ease multiple taxation and make taxation overall easy for the industries. For the end customer, the most beneficial will be in terms of reduction in the overall tax burden on goods and services. Introduction of GST is also making Indian products competitive in domestic and international markets.

During 2017-18 the Finance (Taxation) department had collected Rs 12055.87 crore (including GST) against Rs 10293.75 Crore in 2016-17 with a decent growth of 17.12%. During the period from 2011-12 to 2017-18, the collection of taxes under the different taxation acts has increased from Rs.6604.31 crore to Rs.12055.87 with an annual growth of 13.76%.

The Budget estimate of 2018-19 expects a revenue surplus of Rs. 2789.13 crore and is expected to have a fiscal deficit of Rs.9774.37 crore. During the year 2016-17, the State showed that a fiscal deficit of 2.41% of GSP and it is expected that the fiscal deficit to remain at 2.41% of GSDP in 2017-18.

### 4.1 ASSAM BUDGET 2018-19

Annual Budget 2018-19 of Government of Assam reflect the overall picture in terms of receipts, expenditures, deficit / surplus and overall balance of the state for 2016-17(actual), 2017-18(R.E) and 2018-19 (B.E). During the financial year 2018-19(B.E), the State Government expected to earn Rs. 381688.28 crore against Rs. 333726.94 crore during 2017-18. However, the receipt under consolidated fund has increased from Rs.62582.45 crore (R.E) in 2017-18 to Rs.90673.43 crore in 2018-19(B.E.)

In 2018-19 (B.E), the overall expenditure is estimated at Rs.380688.27 crore (B.E) against Rs.310406.98 crore during 2017-18(R.E). It is expected to achieve a surplus amount of Rs.1000.01 crore during 2018-19(B.E) against the surplus amount of Rs.23319.96 crore during 2017-18(R.E). Adjusting against the closing balance, it is estimated at Rs. 24099.05 crore surpluses in 2018-19(B.E) against Rs.23099.04 crore



(R.E) surpluses during 2017-18(R.E). The broad category-wise budget estimates in 2018-19 as compared to revised estimates in 2017-18 is shown at **Table: 4.1**.

<b>TABLE: 4.1</b>			
<b>BUDGET AT A GLANCE</b>			
(Rupees in crore)			
		2017-18 (R.E.)	2018-19 (B.E.)
A.	Receipts		
I.	Consolidated Fund		
	Revenue Account	54130.94	74118.50
	Capital Account	8451.78	16554.93
	Total (I)	62582.72	90673.43
II.	Contingency Fund Accounts	100.00	100.00
III.	Public Accounts	271044.22	290914.85
	Total (II+III)	271144.22	291014.85
	Total Receipts (A)	333726.94	381688.28
B.	Expenditure		
I.	Consolidated Fund		
	Revenue Account	55480.94	71329.37
	Capital Account	9905.51	18940.55
	Total (I)	65386.45	90269.92
II.	Contingency Fund Account	100.00	100.00
III.	Public Accounts	244920.53	290318.35
	Total (II+III)	245020.53	290418.35
	Total Expenditure (B)	310406.98	380688.27
C.	Transactions during the year (A-B)		
	Surplus (+)	(+)23319.96	(+)1000.01
	Deficit (-)		
D.	Opening balance		
	Surplus (+)		(+)23099.04
	Deficit (-)	(-) 220.92	
E.	Closing balance (C+D)		
	Surplus (+)	(+)23099.04	(+)24099.05
	Deficit (-)		

R.E = Revised Estimates. B.E = Budget Estimates.

Source: Assam Budget in Brief 2018-19, Directorate of Economics and Statistics, Assam Department of Finance (Economic Affairs), Govt. of Assam

## 4.2 REVENUE BUDGET 2018-19

### 4.2.1 Revenue Receipt & Expenditure

The revenue receipts can broadly be categorized as share of central taxes, state taxes, non-tax revenue and grants-in-aid from Government of India. The component of revenue receipts and revenue expenditures are shown in the **Table: 4.2**. In 2018-19 budget estimates under revenue receipts of the Government of Assam is estimated at Rs.74118.50 crore against expenditure at Rs.71329.37 crore, which shows a surplus of Rs.2789.13 crore in Revenue Account. The expected growth of revenue receipt during 2018-19(B.E) is estimated at 36.92% over 2017-18 (R.E).

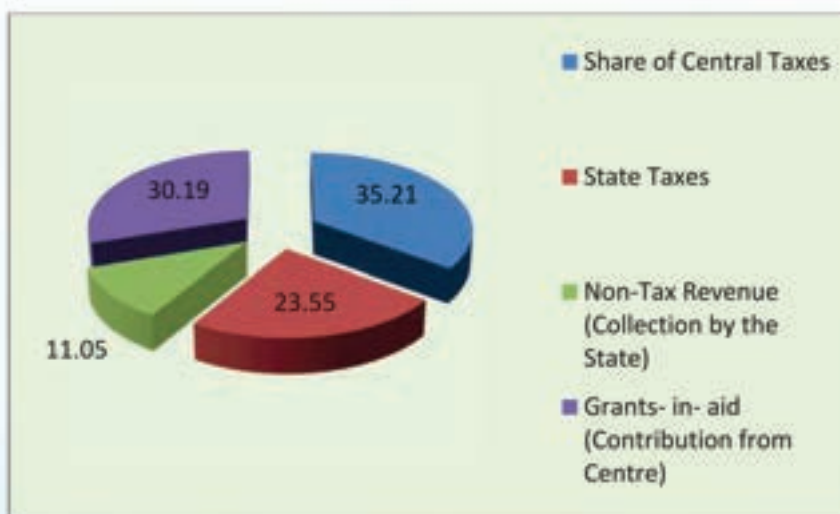


During 2018-19 (B.E), an amount of Rs.25643.37 crore is expected from the state's own resources with contribution of Rs. 17451.70 crore as tax revenue and Rs. 8191.67 crore as non-tax revenue. The total state tax collections during the year 2018-19(B.E) is expected to increase from Rs 9137.85 crore in 2017-18(R.E) to Rs. 17451.70 crore in during the year 2018-19(B.E) with a growth of 91% over 2017-18.

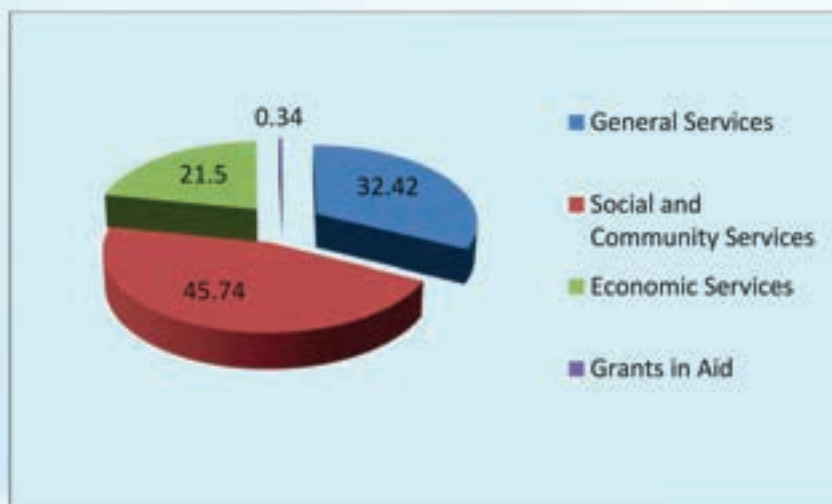
Table:4.2						
Revenue Receipt & Expenditure:2018-19						
(Rupees in crore)						
Sl No	Revenue Receipt			Revenue Expenditure		
	Item	Amount	%shareShare	Item	Amount	%
1	Share of Central Taxes	26095.30	35.21	General Services	23124.58	32.42
2	State Taxes	17451.70	23.55	Social and Community	32628.50	45.74
3	Non-Tax Revenue (Collection	8191.67	11.05		15334.36	21.50
4	Grants- in- aid (Contribution	22379.83	30.19	Grants in Aid	241.92	0.34
	<b>Total Receipts</b>	<b>74118.50</b>	<b>100.00</b>	<b>Total Expenditure</b>	<b>71329.37</b>	<b>100.00</b>

Source: Assam Budget in Brief 2018-19, Directorate of Economics and Statistics, Assam Department of Finance (Economic Affairs), Govt. of Assam

The revenue receipt position during 2018-19 (B.E) is shown in the following pie diagram.



The revenue expenditure position during 2018-19 (B.E) is shown in the following pie diagram.





#### 4.2.2 Year wise Revenue Receipt

The total revenue receipt of the State has been increasing steadily from Rs.27455.40 crore in 2011-12 to Rs.49219.81 crore in 2016-17 (Actual) ,Rs.54130.94 crore in 2017-18 (R.E) and Rs.74118.50 crore in 2018-19(B.E.). The annual growth rate is calculated at 15.9%, 16.2% and 24.3% in 2016-17 (actual), 2017-18(R.E) and 2018-19(B.E) over the year 2011-12 respectively.

The proportion of tax revenue to total revenue in 2011-12 was 61.7% had increased to 66.6% in 2016-17 (Actual),75.6% in 2017-18 (R.E.) and 65.4% in 2018-19 (B.E). The Grants-in-aid from the Centre, which constituted 28.0 % in 2011-12, registered a decreased to 25.6% in 2016-17 (Actual), 26.9% in 2017-18(R.E) and rise to 30.2% in 2018-19 (B.E).The total revenue receipt under different heads is shown in **Table.4.3**.

The revenue receipts during 2011-12 to 2018-19 (B.E) shows a progressive growth in the State Government. However, the State's Own Resources share to total revenue receipts recorded 38.26% in 2011-12 had declined to 33.39% in 2016-17(Actual) and 34.60% in 2018-19(B.E). The revenue receipt of the State Government consists of its own tax and non-tax revenue, central tax transfer and grants-in-aid from Govt. of India. The State's own tax revenue is estimated at Rs.17451.70 crore in 2018-19(B.E) against Rs.7638.24 crore in 2011-12. On the other hand, the State's own non-tax revenue is estimated at Rs.8191.67 crore in 2018-19(B.E) against Rs.2866.76 crore in 2011-12 with a annual growth of 26.5% during the period from 2011-12 to 2018-19 (B.E) .

**Table:4.3**

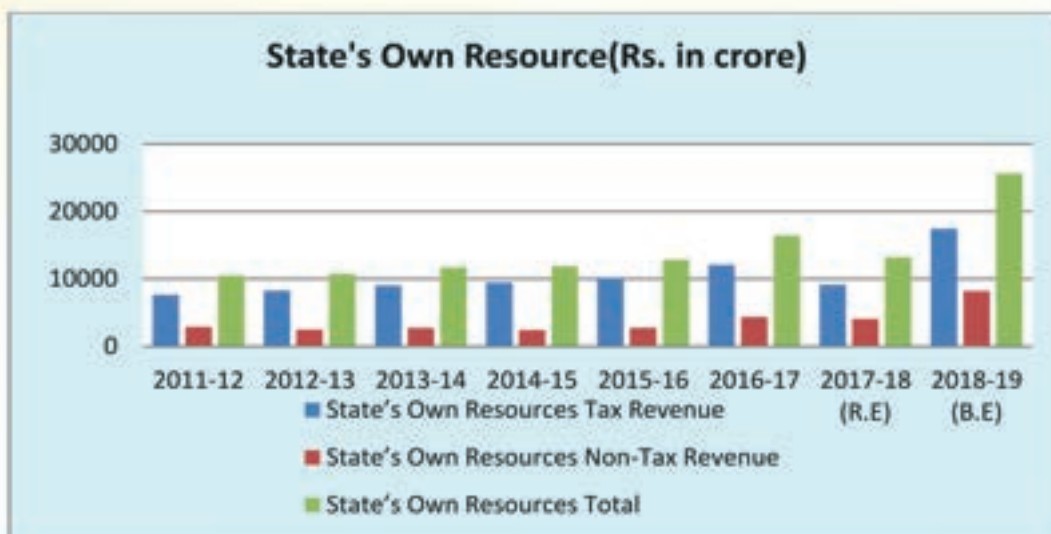
Year wise Revenue Receipt during 2011-12 to 2018-19 (B.E)								
(Rs. in crore)								
Year	State's Own Resources			Transfer from the Centre				Total Revenue Receipt
	Tax Revenue	Non-Tax Revenue	Total	Share in Central Taxes	Plan Grants	Non-Plan Grants	Total	
2011-12	7638.24	2866.76	10505.00	9283.53	6876.55	790.32	16950.40	27455.40
2012-13	8250.21	2473.59	10723.80	10601.26	8017.88	1348.04	19967.18	30690.98
2013-14	8994.92	2705.03	11699.95	11574.52	8257.40	680.92	20512.84	32212.79
2014-15	9449.81	2412.89	11862.70	12283.71	12544.13	1490.95	26318.79	38181.49
2015-16	10106.50	2741.57	12848.07	16784.88	9494.27	3330.48	29609.63	42457.70
2016-17	12079.56	4353.12	16432.68	20188.64	10444.07	2154.41	32787.12	49219.81
2017-18(R.E)	9137.85	4071.97	13209.82	26379.21	Grants 14541.91		40921.12	54130.94
2018-19 (B.E)	17451.70	8191.67	25643.37	26095.30	22379.83		48475.13	74118.50

Source: Department of Finance (Economic Affairs), Govt. of Assam



The receipt of Central tax transfers is estimated at Rs.48475.13Crore in 2018-19(B.E) against Rs.40921.12 crore in 2017-18(R.E)with an increase of 18.46%over the previous year.

The revenue receipt by State's own resources is shown in the following line diagram.



#### 4.2.4.Revenue Expenditure under Different Heads:

The total revenue expenditure from the revenue account is estimated at Rs. 71329.37 crore in 2018-19(B.E) against Rs. 55480.94 crore in 2017-18 (R.E)with an annual increase of 28.57%.Theexpenditure under revenue heads was Rs.26528.55 crore in 2011-12 is expected to rise to Rs.71329.37 crore in 2018-19 with an annual growth of 24.13%.Out of the total revenue outlay for 2018-19, Social and Community Services account for 45.74%, General Services (32.42%), Economic Services (21.5%) and Grants in Aid (0.34%) respectively. The relative shares of expenditures in 2011-12 under the four heads viz. General Service, Social and Community Services, Economic Services and Grants-in-aid were 36.6 %, 38. %, 15.5 % and 9.2 % respectively.

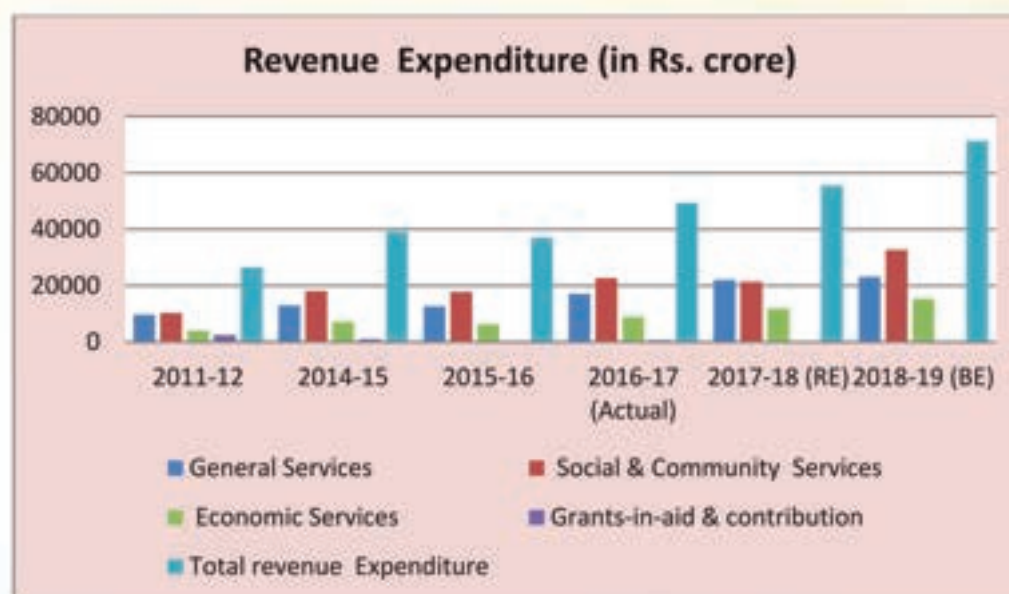
#### REVENUE EXPENDITURE UNDER DIFFERENT HEADS

(Rupees in Crore)

Sources of Revenue	2011-12	2014-15	2015-16	2016-17 (Actual)	2017-18 (RE)	2018-19 (BE)
1. General Services	9707.73	12921.60	12656.04	17123.19	22057.80	23124.58
2. Social & Community Services	10277.17	18087.75	17740.36	22673.14	21373.17	32628.51
3. Economic Services	4098.11	7075.32	6239.87	8914.03	11924.92	15334.36
4. Grants-in-aid & contribution	2445.54	993.50	375.16	652.36	125.05	241.92
Total Expenditure (1+2+3+4)	26528.55	39078.17	37011.43	49362.72	55480.94	71329.37

Source: Department of Finance (Economic Affairs), Govt. of Assam

Year wise revenue expenditure under different sources is presented in the following line diagram.



#### 4.2.4. Plan and Non-plan Expenditure

Revenue expenditure of the State showing Plan, Non-plan and various sectors is presented in **Table: 4.5**.

**Table: 4.5**

**Component wise revenue expenditure**

**(Rs.in crore)**

Year	Plan Expenditure		Non-Plan Expenditure			Total Revenue Expenditure	
	Total	Salary	Total	Interest Payment	Salary		Pension
2011-12	6487.76	668.89	20040.79	2074.40	10978.54	3136.07	26528.55
2012-13	6495.09	818.12	22641.83	2114.91	12452.21	3778.87	29136.92
2013-14	7027.85	773.01	24962.23	2198.45	14841.44	4264.13	31989.88
2014-15	9390.82	877.83	29687.35	2333.74	16702.00	5237.02	39078.17
2015-16	9435.57	1381.55	27575.85	2618.44	17102.92	5985.23	37011.42
2016-17	13433.64	1450.04	35929.08	2963.75	17759.09	6564.64	49362.72
	Interest Payment	Salary	Pension	Other		Total Revenue Expenditure	
2017-18 (R.E)	3205.32	25751.61	8287.34	18236.67		55480.94	
2018-19 (B.E)	4193.35	26502.78	8028.49	32604.75		71329.37	

Source: Department of Finance (Economic Affairs), Govt. of Assam

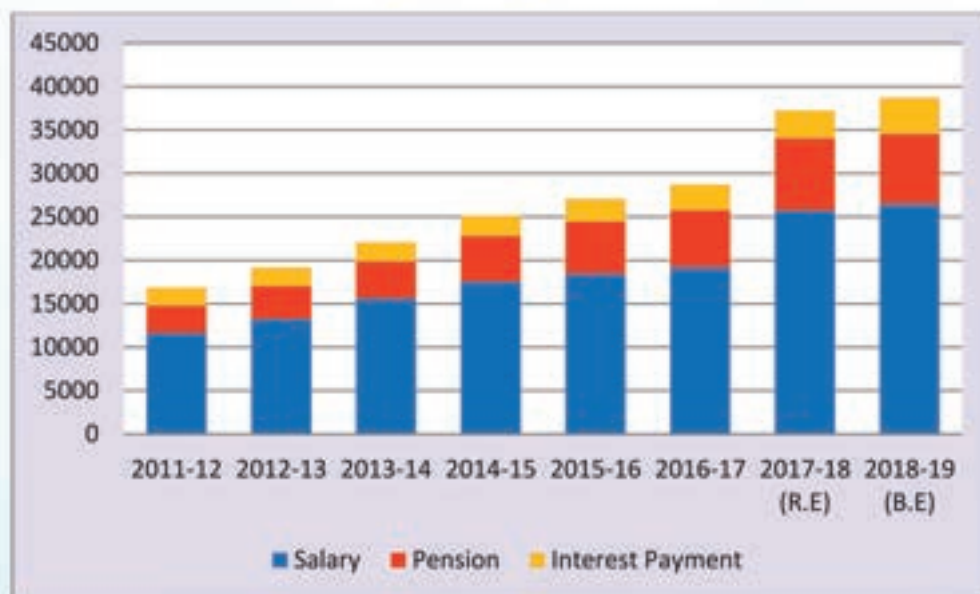
It is revealed from the table: 4.5 that total revenue expenditure was increased by 86% in 2016-17 over the year 2011-12. The volume of plan expenditure to total revenue expenditure was estimated around 27.21% in 2016-17 as against 24.46% in 2011-



12. The salary component under the plan expenditure was 9.71% to total plan expenditure in 2011-12 and it was raised to 10.79% in 2016-17. On the other hand, the share of salary to total non-plan expenditure was 54.78% in 2011-12 and it has slightly come down to 49.43% in 2016-17. The share of salary expenditure to total revenue expenditure for the year 2018-19(B.E) is estimated at 37.16% against 46.42% in 2017-18(R.E).

Another component of non-plan revenue expenditure is interest payment. The share of expenditure on interest payment to the total revenue expenditure has shown the decreasing trend from 7.82% in 2011-12 to 5.88% in 2018-19(B.E). Under non-plan head, the share of expenditure on pension to total non-plan revenue expenditure was about 15.65% and it was increased to 18.27% in 2016-17. The share of pension expenditure to total revenue expenditure for 2017-18 (R.E) and 2018-19(B.E) is estimated at 14.93% and 11.26% respectively.

Year wise revenue expenditure on interest payment, salary, pension and total revenue is shown in the following bar diagram.



#### 4.2.5. Trend of Revenue Expenditure

The break-up of total revenue expenditure is shown in **Table: 4.6**.

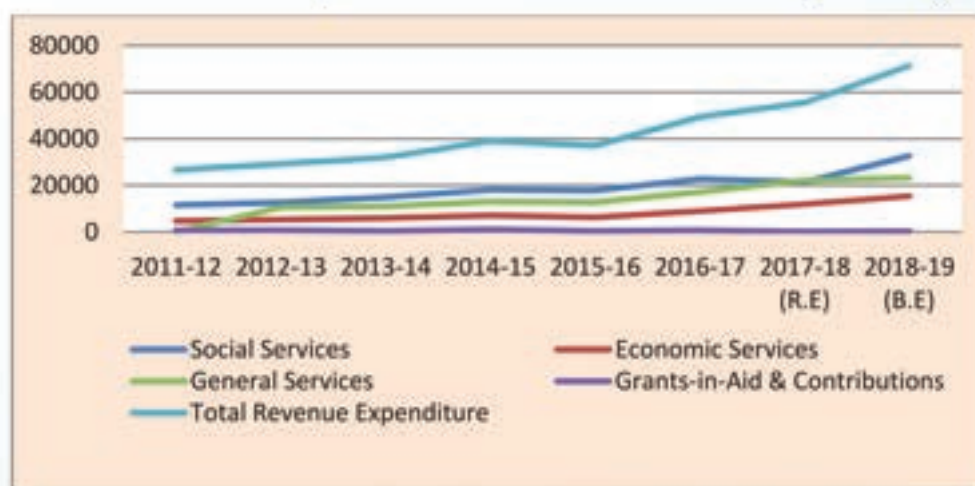
The Table: 4.6 reveals that of the two constituents of development expenditure, the share of expenditure on social services to total revenue expenditure has marginally increased from 43.22% in 2011-12 to 45.74% in 2018-19(B.E) and again slightly come down to 38.52% in 2017-18. On the other hand, the share of expenditure on economic services to total revenue expenditure has increased from 17.58% in 2011-12 to 21.5% in 2018-19(B.E). The table shows that the share of non-development expenditure to total revenue expenditure remains almost same during the last seven years. It also reflects that grant-in-aid and contributions under revenue expenditure is on a decreasing trend since 2011-12.



Year	Development Expenditure			Non-Development Expenditure	Grants-in-Aid & Contributions	Total
	Social Services	Economic Services	Total	General Services		
2011-12	11465.79 (43.22%)	4663.27 (17.58%)	16129.06 (60.80%)	9743.67 (36.73%)	655.83 (2.47%)	26528.56 (100.00%)
2012-13	12617.46 (43.30%)	5209.38 (17.88%)	17826.84 (61.18%)	10570.29 (36.28%)	739.79 (2.54%)	29136.92 (100.00%)
2013-14	14850.09 (46.42%)	5835.53 (18.24%)	20685.62 (64.66%)	10928.50 (34.16%)	375.76 (1.18%)	31989.88 (100.00%)
2014-15	18087.75 (46.29%)	7075.32 (18.11%)	25163.07 (64.39%)	12921.60 (33.07%)	993.50 (2.54%)	39078.17 (100.00%)
2015-16	17740.36 (47.93%)	6239.87 (16.86%)	23980.23 (64.79%)	12656.03 (34.19%)	375.16 (1.01%)	37011.42 (100.00%)
2016-17	22673.14 (45.93%)	8914.03 (18.06%)	31587.17 (63.99%)	17123.19 (34.69%)	652.36 (1.32%)	49362.72 (100.00%)
2017-18 (R.E)	21373.17 (38.52%)	11924.92 (21.49%)	33298.09 (60.02%)	22057.80 (31.76%)	125.05 (0.23%)	55480.94 (100%)
2018-19 (B.E)	32628.51 (45.74%)	15334.36 (21.5%)	47962.87 (67.24%)	23124.58 (32.42%)	241.92 (0.34%)	71329.37 (100%)

Source: Department of Finance (Economic Affairs), Govt. of Assam

The trend of Revenue expenditure is shown in the following line diagram.



### 4.3 THE CAPITAL BUDGET-2018-19

The Budget estimates anticipate the receipt of Rs. 14008.19 crore from Public Debt and Rs. 2546.74 crore from recovery of Loans and Advances by the State Government. As regards the allocation of funds under the three important components of capital expenditure, the Budget for 2018-19 provides Rs. 14571.57 crore for Capital Outlay, Rs. 3830.31 crore for Repayment of Public Debt and Rs. 538.67 crore for Loans and Advances. There is a deficit of Rs. 2385.62 crore in the capital Budget.

Table 4.7 shows the head wise receipt & expenditure of the capital budget 2018-19



Table:4.7

Heads	(Rupees in crore)
<b>A. Receipt</b>	
(i) Public Debt	14008.19
(ii) Loans and Advances by the State Government	2546.74
(iii) Inter-State Settlement	--
<b>Total (A)</b>	<b>16554.93</b>
<b>B. Expenditure</b>	
(i) Capital Outlay	14571.57
(ii) Public Debt	3830.31
(iii) Loans and Advances by the State Government	538.67
(iv) Appropriation to Contingency Fund	--
(v) Inter-State Settlement	--
<b>Total (B)</b>	<b>18940.55</b>
<b>C. Net Result (A-B)</b>	
Surplus (+) / Deficit (-)	(-) 2385.62

Source: Assam Budget in Brief, 2018-19

#### 4.3.1. Non-Debt Capital Expenditure:

Non-debt capital expenditure consists of capital outlay and lending. This excludes loan repayment. The trend of actual capital expenditure during the period from 2011-12 to 2017-18 and budget estimate for 2018-19 is presented in **Table: 4.08**.

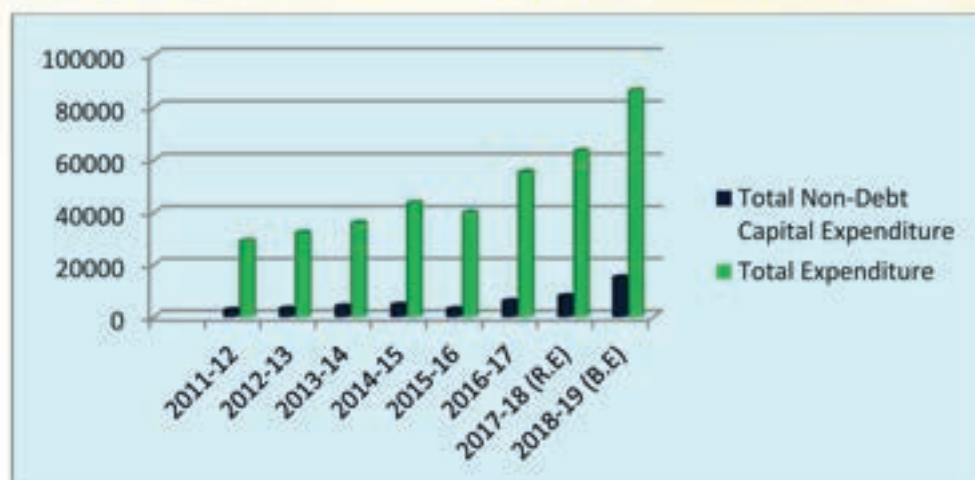
The Table: 4.08 reveals that total capital outlay to total expenditure was about 8.60% in 2011-12 and it is expected to reach around 16.82% in 2018-19. During the period from 2011-12 to 2018-19, the share of lending to total expenditure of the state has slightly increased from 0.30 % to 0.62%. The share of total non-debt capital expenditure to total expenditure was around 12.53% in 2017-18 and it is expected to increase 17.48% for 2018-19.

Table:4.08

Non-Debt Capital Expenditure									
Rs. in crore									
Year	Capital Outlay			Lending			Total Non-Debt Capital Expenditure	Total Revenue Expenditure	Total Expenditure
	Plan	Non-Plan	Total	Plan	Non-Plan	Total			
2011-12	2431.34	74.67	2506.01	81.81	6.47	88.28	2594.29	26528.55	29122.84
2012-13	2544.96	72.32	2617.28	71.34	389.31	460.65	3077.93	29136.92	32214.85
2013-14	3088.59	100.65	3189.24	316.01	506.03	822.04	4011.28	31989.88	36001.16
2014-15	3827.13	85.14	3912.27	306.67	324.04	630.71	4542.98	39078.17	43621.15
2015-16	2704.05	-13.14	2690.91	108.30	151.79	260.09	2951.00	37011.42	39962.42
2016-17	5270.25	231.83	5502.08	227.97	271.41	499.38	6001.46	49362.72	55364.18
2017-18(R.E)			7692.84			254.07	7946.91	55480.94	63427.85
2018-19 (B.E)			14571.57			538.67	15110.24	71329.37	86439.61

Source: Department of Finance (Economic Affairs), Govt. of Assam

The percentage share of revenue and non-debt capital expenditure to total expenditure from 2011-12 to 2018-19(B.E) is shown in the following bar-diagram.



#### 4.3.2. Receipt and Expenditure on Capital Account

The **Table: 4.09** shows total capital receipts and capital expenditure from 2013-14 to 2017-18(R.E) and budget estimate for the year 2018-19.

Table: 4.09						
Receipt and Expenditure on Capital Account						
Rs. in crore						
Year	Receipts		Total	Expenditure		
	Total	Of which Internal Debt		Of which		Repayment of Public Debt
			Capital Outlay	Disbursement of Loans and Advances		
2013-14	1202.14	1147.46	5188.50	3189.24	822.03	1177.23
2014-15	6155.59	6095.80	6170.02	3912.28	630.71	1627.03
2015-16	6008.18	5447.50	4919.90	2690.91	260.09	1968.90
2016-17	3920.31	3844.36	8044.09	5502.08	499.38	2042.63
2017-18(R.E)	8451.78	8377.51	9905.51	7692.84	254.07	1958.60
2018-19(B.E)	16554.93	13893.73	18940.55	14571.57	538.67	3830.31

Source: Department of Finance (Economic Affairs), Govt. of Assam

It is seen from the **Table: 4.09** that capital receipts declined by 34.75% during 2016-17 over the previous year due to decrease in internal debt during the year as compared to the previous year. During the year 2018-19, it is expected to increase by 1.96 times over the previous year and internal debt is expected to contribute by 83.93%.



### 4.3.3. Borrowings and Repayment

The status of Borrowing, Repayment and Net Loans of the State during the period from 2011-12 to 2017-18 and budget estimate for the year 2018-19 is presented in **Table: 4.10**.

Table:4.10			
Borrowings and Repayment			
Rs. in crore			
Year	Borrowings (including, Small, Savings, State Provident Fund etc.)	Repayment of loans (including Small Savings, State Provident Fund etc.)	Net Loans
2011-12	2114.47	1673.26	441.21
2012-13	2757.75	2094.62	663.13
2013-14	2650.77	1794.77	856.00
2014-15	7776.79	3931.43	3845.36
2015-16	7205.80	2816.57	4389.23
2016-17	5649.45	2993.91	2655.54
2017-18(R.E)	10476.20	2960.07	7516.13
2018-19(B.E)	16492.63	5119.51	11373.12

Source: Department of Finance (Economic Affairs), Govt. of Assam

The sources of borrowings of the State Government are loans from the market, loans from financial institutions/banks. NSSF loans, loans from the Centre against EAPs and State Provident Fund and GIS. State Government usually resorts to borrowing to meet the fiscal deficit.

### 4.3.4. Debt Position

Debt Position of Assam is shown in the **Table: 4.11**

Table:4.11			
Debt Position			
Rs. in crore			
Year	Outstanding Debt	GSDP at Current Prices	Debt-GSDP Ratio (%)
2011-12	25936.49	143174.91	18.12
2012-13	26599.61	156864.24	16.96
2013-14	27455.62	177745.22	15.45
2014-15	31300.99	195723.15	15.99
2015-16	35690.22	227958.83	15.65
2016-17	38345.77	254320.86	15.08
2017-18(B.E)	54810.83	278710.10	19.66

Source: Department of Finance (Economic Affairs), Govt. of Assam

The Debt-GSDP Ratio and the Ratio of interest payment to total revenue receipts are the standard criteria for determining the debt sustainability of a State. It appears from the above table that outstanding debt position of the State has improved gradually since few years back. The Debt-GSDP ratio has gradually come down from 18.12% in 2011-12 to 15.08% in 2016-17. The Debt-GSDP ratio of the State is expected to reach 19% above in 2017-18(B.E)

### 4.3.5. Debt Stock and Interest Payment

The total debt stock and interest to total revenue receipts in terms of percentage is shown in **Table: 4.12**.

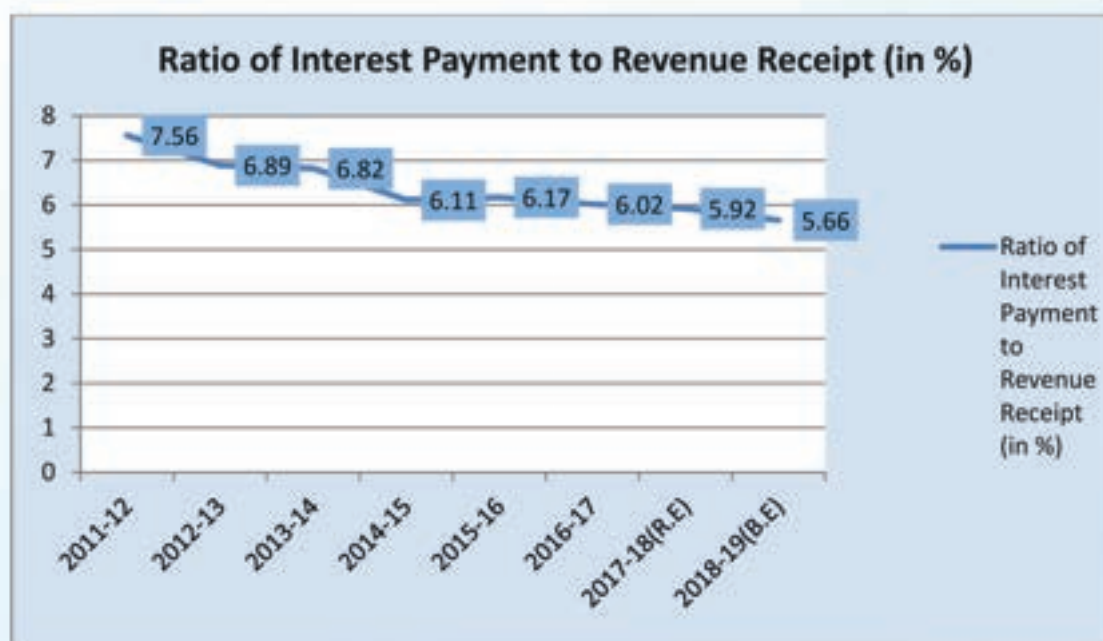
It is seen from the table that the ratio of interest payment to total revenue receipt has been gradually come down from 7.56% in 2011-12 to 5.92% in 2017-18 and it is expected to fall further 5.66% during the current financial year.

Year	Total Revenue Receipt	Debt Stock	Interest Payment	Ratio of Interest Payment to Revenue Receipt (in %)
2011-12	27455.40	25936.49	2074.40	7.56
2012-13	30690.98	26599.61	2114.91	6.89
2013-14	32212.79	27455.62	2198.45	6.82
2014-15	38181.49	31300.99	2333.74	6.11
2015-16	42457.70	35690.22	2618.44	6.17
2016-17	49219.81	38345.77	2963.75	6.02
2017-18(R.E)	54130.94	45861.90	3205.32	5.92
2018-19(B.E)	74118.50	58506.99	4193.35	5.66

Source: Department of Finance (Economic Affairs), Govt. of Assam

The ratio of interest payment to revenue receipt remains well below the benchmark of 15% prescribed by the XII Finance Commission. The ratio of interest payment to revenue receipt has gradually come down from 7.56% in 2011-12 to 5.66% in 2018-19(B.E).

Year wise ratio of interest payment to total revenue receipt is shown in the following Line Diagram.





### 4.3.6. FISCAL SECNARIO OF THE STATE

The **Table: 4.13** show the trend of fiscal parameters of the State from 2011-12 to 2018-19(B.E). The figure of GSP at current prices from 2011-12 is taken as per new series of national accounts.

The fiscal scenario in the State took a positive turn in 2005-06 due to the fiscal reform measures adopted by the State in 2004-05 and continued up to 2008-09. After a heavy downslide in 2009-10, the revenue deficit turned into surplus till 2013-14 followed by revenue deficit of Rs. 896.68 crore in 2014-15.

Table:4.13					
FISCAL PARAMETERS					
(Rs. in crore)					
Year	Revenue Deficit(+)/ Surplus(-)	Fiscal Deficit(+)/ Surplus(-)	Primary Deficit(+)/ Surplus(-)	Fiscal Deficit(+)/ Surplus(-) as % of GSDP	GSDP at Current Price
2011-12	(-)926.85	(+)1646.05	(-)428.44	(+)1.15	143175
2012-13	(-)1554.07	(+)1516.49	(-)598.42	(+)0.97	156864
2013-14	(-)222.91	(+)3782.30	(+)1583.85	(+)2.13	177745
2014-15	(+)896.68	(+)5429.54	(+)3095.80	(+)2.95	195723
2015-16	(-)5446.28	(-)3005.47	(-)5623.91	(-)1.31	227959
2016-17	(-)142.92	(+)6125.78	(+)3162.03	(+)2.41	254321
2017-18(R.E)	(+)1350.01	(+)9292.21	(+)6086.89	(+)3.33	278710
2018-19(B.E)	(-)2789.13	(+)9774.37	(+)5581.03	-	-

During the year 2015-16, the revenue surplus was raised to Rs. 5446.28 crore with a fiscal surplus of Rs. 3005.47 crore. The revenue surplus, fiscal deficit and primary deficit for the year 2016-17 was Rs. 142.92 crore, Rs. 6125.78 crore and of Rs. 3162.03 crore respectively. The Budget estimate of 2018-19 expects a revenue surplus of Rs. 2789.13 crore and is expected to have a fiscal deficit of Rs. 9774.37 crore. During the year 2016-17, the State showed that a fiscal deficit of 2.41% of GSP and it is expected that the fiscal deficit to remain at 2.41% of GSDP in 2017-18.

### 4.4. ACHIVEMENT OF TAXATION DEPARTMENT DURING 2011-12 to 2017-18

The Finance (Taxation) Department is responsible for collection of major share of tax revenue of the State. During 2017-18 the Finance (Taxation) department had collected Rs 12055.87 crore (including GST) against Rs 10293.75 Crore in 2016-17 with a decent growth of 17.12%. During the period from 2011-12 to 2017-18, the collection of taxes under the different taxation acts has increased from Rs. 6604.31 crore to Rs. 12055.87 with an annual growth of 13.76%.

The Taxation Department administered 11 (Eleven) different taxation acts during 2017-18 and collection of revenue under different taxation acts from the years 2011-12 to 2017-18 is presented in **Table: 4.14**.

Along with the rest of the Country, Assam has been implementing the God and Service Tax'2017 (GST) with effect from 1<sup>st</sup> July'2017. The State indirect taxes those were subsumed under GST are:



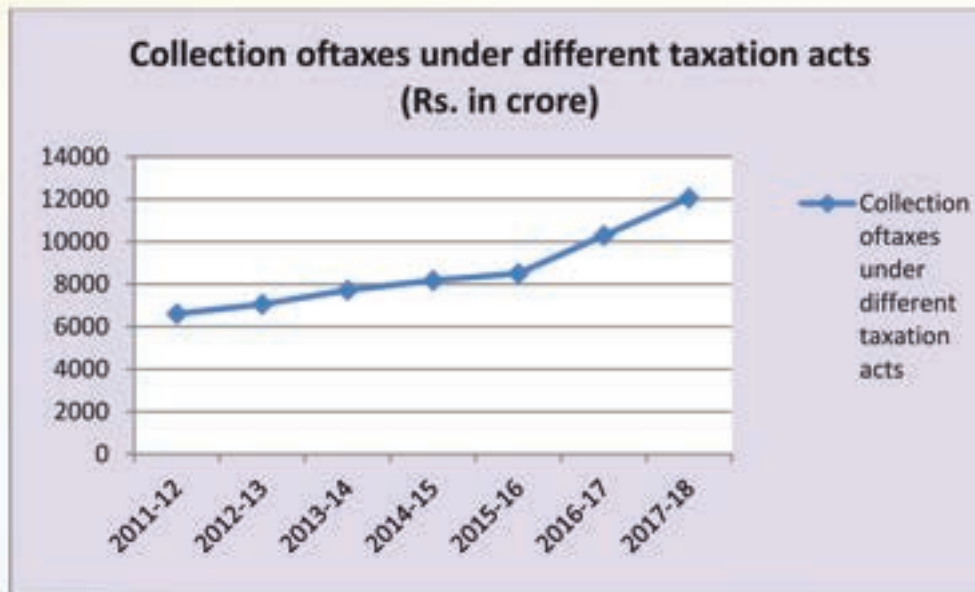
- a) Value Added Tax (VAT) – except 5 Petroleum product (Petrol, Diesel, ATF, Natural Gas, Petroleum Crude) and Liquor for human consumption.
- b) Central Sales Tax (CST) - except 5 Petroleum product (Petrol, Diesel, ATF, Natural Gas, Petroleum Crude) and Liquor for human consumption.
- c) Entertainment Tax including Tax on Lottery, Betting and Gambling.
- d) Entry Tax / Octroi.
- e) Luxury Tax ( Hotel & Lodging )
- f) State cesses and surcharges in supply of goods and services and cess under the Assam Health Infrastructure and Service Development Fund Act'2009.

Taxation Act	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
The Assam Value Added Tax Act, 2003	5181.44	5689.88	6288.54	6859.24	7013.93	8176.31	6027.42
The Central Sales Tax Act, 1956	512.51	533.25	559.47	492.01	474.05	558.26	338.52
Assam Health Infrastructure and Services Development Fund, 2009 (w.e.f 01-07-2015)	-	-	-	-	5.74	17.07	6.93
The Assam Entry Tax Act, 2008	518.75	364.14	404.69	382.88	580.93	1015.49	260.58
The Assam Professions, Trades Calling & Employment Tax Act, 1947	164.27	168.31	186.36	191.38	183.05	184.27	193.38
The Assam Electricity Duty Act, 1964	36.67	41.82	40.54	44.00	48.68	49.44	60.19
The Assam Amusement and Betting Tax Act, 1939	5.87	63.07	38.93	44.37	64.87	153.18	28.61
The Assam Taxation on Luxuries (Hotels & Lodging Houses ) At, 1989	5.89	8.04	8.67	10.55	9.74	14.49	5.83
The Assam Taxation (on Specified Land) Act, 1990	95.64	99.72	102.43	101.66	91.14	102.02	63.84
The Assam Agriculture Income Tax Act, 1939	83.27	82.33	89.99	51.07	32.45	23.22	13.52
Sub Total	6604.31	7050.56	7719.62	8177.16	8504.57	10293.75	6998.82
The Goods and Service Tax, 2017 w.e.f August'2017 ( GST )							
SGST	-	-	-	-	-	-	1837.47
CGST	-	-	-	-	-	-	1181.96
IGST	-	-	-	-	-	-	1977.58
GST Compensation from July'2017 to March'2018	-	-	-	-	-	-	1242.00
Sub Total	-	-	-	-	-	-	5057.50
Total	6604.31	7050.56	7719.62	8177.16	8504.57	10293.75	12055.87
Growth Rate	27.4	6.8	9.5	5.9	4.0	21.0	17.12

Source: Commissionerate of Taxes, Assam



Annual Growth rate in terms of collection of taxes in the State is shown in the following Line Diagram.



## AGRICULTURE

Agriculture is the backbone of the state's economy and holds the key to the overall development of the state of Assam. It contributes about 20 per cent to the state's net domestic product and provides livelihood support to about 70 per cent of the population. The operational holding on an average is 1.10 hectare only and more than 85 % of farmers are either small or marginal with average land holding of hectares, that too scattered in small sizes leading to many inconveniences. Studies have shown that the preponderance of small and fragmented land holdings is one of the main causes of low productivity as it hinders economic and efficient use of modern technology and agricultural machinery etc. Government of Assam very well appreciates the problems associated with agriculture of the state and strives very hard to find workable solutions to the problems to bring in rapid changes to agriculture and serve the farmers' causes. With this in mind, the Government declared 2015-16 as the year of agriculture and constituted a Task Force.

### AGRICULTURE:

#### ROAD TO PROSPERITY:

Farmers' noble contributions to the state's socio-economic uplift are not duly recognised even though they are the ones who are feeding the people. Recognizing the services of farmers, the Government has issued I-Cards to the farmers. These Identity Cards will bring a sense of recognition to their contribution besides being used as a unique identity to develop the database of the farmers.

#### Zero Interest on Crop Loans

Financial inclusion is in the heart of several programmes of the Government. Very low Credit-Deposit Ratio in Assam leaves a great scope for expansion of credit flow to the rural areas, particularly, to the farmers.

The Government is exploring innovative ways to increase the credit flow. To encourage the uptake of credit by our farmers, the Government has introduced "Zero Interest Crop Loans" by giving 100 percent interest subventions on agricultural loans taken by farmers of Assam up to Rs.1.00 lakh.

Perhaps, Assam is the first state in the entire country to take such a transformative intervention to promote agricultural loans. This will encourage the farmers to avail loans for agricultural purposes and help building the rural economy. For this purpose, Rs.25.00 crore had been allocated in the budget of 2018.

**TABLE- 5.1**  
TREND OF GROWTH OF AGRICULTURAL SECTOR [GSDP at Current (2011-12) Prices] Figure in percentage)

Years	Contribution to GSDP (Figure in Rs. Lakh)	Annual Growth Rate over the previous year
2015-16 (F)	2559454	
2016-17 (P)	2620133	
2017-18 (A)	2683479	2.42

Source: Directorate of Economics and Statistics, Assam.

**TABLE- 5.2**  
TREND OF PRODUCTION OF FOODGRAINS IN ASSAM  
(Figure in '000 tonnes)

Year	Total Rice	Wheat	Total Pulses	Total Food grains	Total oilseeds [excl. Coconut]
2013-14	5193	40	104	5418	186
2014-15	5223	29	111	5459	206
2015-16	5125	24	108	5348	216
2016-17(F)	5127	23	108	5353	204
2017-18 (P)	5283	24	116	5525	201

Source: Directorate of Economics and Statistics, Assam.



### **Financial Incentives for Farmers using Kisan Credit Cards (KCC)**

As per bank records, over 9.60 lakh KCC were issued in Assam. However, data show that numbers of active credit cards are just a little over 1.34 lakhs with more than 80 percent cards being inactive. To activate these inactive KCC's, our Government proposed to introduce a one-time cash incentive of Rs.3000.00 per inactive KCC holding farmer if he renews the card. A detailed guideline was issued and Rs. 65 crores was allocated for this purpose in the budget of 2017-18.

### **Agriculture Department: Groundworks for Prosperity Laid:**

A series of measures including zero interest crop loans to farmers, financial incentives for farmers using KCC, interest subsidy to farmers on agricultural machinery and equipments etc. have been initiated. As discussed earlier, Identity Cards have been issued to the farmers of the State in the fiscal year 2017-18. In tune with the dream of the Hon'ble Prime Minister for 'Harkhet Me Pani', the State Government has prepared District Irrigation Plan, Annual Action Plan and State Irrigation Plan to develop irrigation facilities for the State in a holistic manner.

With the mission to increase area under irrigation, a programme was undertaken to install 61,000 Shallow Tube Wells (STW) with funding from NABARD and then 39,000 more STWs were sanctioned in 2017-18 itself as part of the last tranche. The Government has the dream to make the name of Majuli as Assam's trade mark of organic products in the name of "O Majuli" so as to make Majuli known all over the World as a popular organic brand in addition to its current status of World's largest Riverine Island.

Productivity of almost all the crops in the state is very low compared to that in most other states of the country primarily due to unpredictable weather conditions, particularly, erratic rainfall pattern and various other impediments like floods, soil erosion etc. though Assam is endowed with very rich and diverse soil conditions conducive for agriculture.. However, the State Agriculture Department has been successful enough to give great impetus to increase the production of food grains by implementing various programmes to increase productivity and cropping intensity with priority attention to optimal and efficient use of available resources through use of suitable technologies.

The Department has taken steps to formulate State and District specific plans depending on prevailing agro-climatic conditions, growth potentials and specific requirements of districts with due emphasis on use of quality seeds of high yielding crop varieties , adoption of multi-cropping, access to assured irrigation, use of improved farm mechanization, use of bio-fertilizers and bio-pesticides, adoption of organic farming practices, establishing market linkage and ultimately creation of employment opportunities and enhancement of income.

The 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 weaknesses like inadequate transport and communication infrastructure, extensive practice of traditional Jhum cultivation and non-availability of markets etc. To improve the situation there, the State Government's priority focus has been promotion of cash crops, horticultural crops, particularly, fruits like pineapple, citrus etc. and different spices like ginger, turmeric etc. and settled agriculture in terrace lands, wherever feasible.



## Agriculture Scenario (2017-18)

### Weather and Rainfall

The climate of Assam is sub-tropical with warm humid summers and cool dry winters. Due to its unique geographical location and varied physiography Assam has an array of climatic conditions. Assam is situated in the high rainfall zone with annual average rainfall of 2297.4 mm. The state normally receives 2 percent of rainfall in Winter Season (January-February), 25 percent in Summer Season (March-May), 65 percent in Monsoon Season (June-September) and 7 percent in Post-Monsoon Season (October-December). Assam is prone to floods and often experiences drought like situations. Thus, though the State has enough natural potentialities for growing food grains in abundance, it very often faces losses due to erratic and unpredictable weather conditions with adverse impact on the state's possible contribution to the national granary.

It has been observed that climate change has significantly impacted the weather conditions resulting in erratic rainfall and unpredictable monsoon behaviour in the state. This has, in turn, immensely affected the agricultural production and made the farmers increasingly vulnerable to varied biotic and abiotic stresses. Crop season wise rainfall pattern is presented in Table 5.3.

**TABLE 5.3: CROP SEASON WISE AVERAGE RAINFALL IN ASSAM**

(Figure in mm)

Year	Kharif season				Rabi season				All Season			
	Actual	Normal	Deviation from normal (%)	Pattern	Actual	Normal	Deviation from normal (%)	Pattern	Actual	Normal	Deviation from normal (%)	Pattern
2012	1953.2	2001.0	(-)27.0	Normal	198.6	294.8	(-)32.6	Deficient	2151.8	2295.8	(-)6.3	Normal
2013	1529.5	2016.3	(-)24.0	Deficient	177.3	294.8	(-)40.0	Deficient	1706.8	2311.1	(-)26.1	Deficient
2014	1774.6	2001.0	(-)11.0	Normal	79.8	294.8	(-)73.0	Scanty	1854.4	2295.8	(-)62.0	Deficient
2015	1936.5	2001.0	(-)3.2	Normal	196.5	294.8	(-)33.3	Deficient	2133.0	2295.8	(-)7.1	Normal
2016	1789.7	2001.0	(-)11.0	Normal	289.2	294.8	(-)2.0	Normal	2078.9	2295.8	(-)9.4	Normal
2017	1983.5	2000.6	(-)1	Normal	306.4	294.8	(+)2.1	Normal	2289.9	2295.4	(-)0.2	

Source: Directorate of Agriculture, Assam

#### Rainfall during 2017-18

It is evident from the Table 5.3, that the State had received 2289.9 mm rainfall during 2017-18, against normal rainfall of 2295.4 mm. During the kharif crop season, total rainfall was 1983.5 mm against the normal rainfall of 2000.6 mm. Thus, both total and kharif season rainfall were Normal. With 306.4 mm against Normal rainfall of 294.8 mm the State experienced normal rainfall during Rabi Season as well. There was, however, spatial and temporal variation in rainfall pattern as evident from the Table 5.4 and 5.5:

**TABLE- 5.4: MONTHWISE Rainfall in Assam during Kharif and Rabi Season, 2017-18**

Months	Rainfall during Kharif 2016-17			
	Actual (mm)	Normal (mm)	Deviation from Normal	Pattern
April, 2017	286.6	172.9	66	Excess
May, 2017	250.4	304.2	-18	Normal
June, 2017	375.2	427.3	-12	Normal
July, 2017	376.5	454.2	-17	Normal
August, 2017	380.2	356.6	-7	Normal
September, 2017	314.6	285.4	-10	Normal



Total During Kharif, 2017-18	1983.5	2000.6	-1	Normal
<b>Rainfall during Rabi 2017-18</b>				
<b>Months</b>	<b>Actual (mm)</b>	<b>Normal (mm)</b>	<b>Deviation from Normal</b>	<b>Pattern</b>
October, 2017	192.8	131.8	46	Excess
November, 2017	9.3	24.9	-63	Scanty
December, 2017	10	11.8	-15	Normal
January, 2018	6.4	16.2	-60	Scanty
February, 2018	14.3	32	-55	Deficient
March, 2018	73.6	78.1	-6	Normal
Total during Rabi, 2017-18	306.4	294.8	4	Normal

Source: Directorate of Agriculture, Assam.

**TABLE: 5.5- PATTERN OF RAINFALL IN ASSAM DURING KHARIF AND RABI 2017-18**

(in mm)

Month/ Year	Pattern of Rainfall during Kharif 2017-18					
	Normal	Deficient	Scanty	Excess	No Rain	N.A.
April, 2017	4 (Dist)	-	-	22 (Dist)	-	-
May, 2017	12 (Dist)	12 (Dist)	-	2 (Dist)	3 (Dist)	-
June, 2017	08 (Dist)	14 (Dist)	1 (dist.)	3 (Dist)	15(Dist)	-
July, 2017	13(Dist)	9 (Dist)	1(Dist)	3 (dist.)	10(Dist)	-
August, 2017	9 (Dist)	9 (Dist)	-	8 (Dist)	1(Dist)	-
September,2017	12 (Dist)	4 (Dist)	-	4 (Dist)	-	-
Month/ Year	Pattern of Rainfall during Rabi 2017-18					
	Normal	Deficient	Scanty	Excess	No Rain	N.A.
October, 2017	8 (Dist)	1 (Dist)	1 (Dist)	17 (Dist)	-	1 (Dist)
November, 2017	4 (Dist)	6 (Dist)	13 (Dist)	1 (Dist)	8 (Dist)	1 (Dist)
December, 2017	-	2 (Dist)	7 (Dist)	3 (Dist)	5 (Dist)	1 (Dist)
January, 2018	2 (Dist)	6 (Dist)	9 (Dist)	-	14 (Dist)	1 (Dist)
February, 2018	5 (Dist)	10 (Dist)	10 (Dist)	1 (Dist)	-	1 (Dist)
March,2018	7 (Dist)	4 (Dist)	4 (Dist)	10 (Dist)	-	1 (Dist)

Note: Figure refers to number of districts Source: Directorate of Agriculture, Assam.

### Area under Crops

The production of all agricultural crops including food grains is directly related to area coverage of various crops. In Assam, the soil, topography, rainfall and climate are very conducive for agriculture, specially for cultivation of paddy. Therefore, rice occupies the highest acreage and its cultivation receives primacy from both farmers as well as Department of Agriculture. As per the final estimates, the total area under paddy cultivation during the year 2017-18 was 24.34 lakh hectares. Total area under paddy showed a steady decline due mainly to decline in area covered under autumn rice (ahu rice). The area under the other two classes of rice viz., winter rice (sali rice) and summer rice (boro rice) has remained almost stable with the cultivated area being 18.79 lakh hectares and 4.01 lakh ha under former and later class, respectively in 2017-18 (Table 5.7). While area under Wheat recorded steady decline over the years, pulses and oilseeds area registered slight increase (Table 5.6).

**TABLE- 5.7: AREA UNDER CROPS IN ASSAM DURING THE PERIOD 2011-12 to 2017-18**

(In lakh hectares)

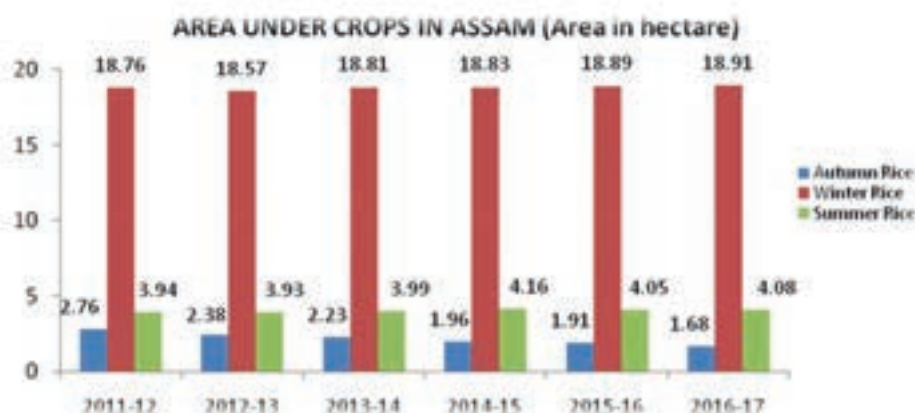
Year	Autumn Rice	Winter Rice	Summer Rice	Total Rice*	Wheat	Total Pulses	Total Food grains	Total Oilseeds (excl. Coconut)
2011-12	2.76	18.76	3.94	25.46	0.40	1.32	27.43	2.76
2012-13	2.38	18.57	3.93	24.88	0.34	1.42	26.92	3.05
2013-14	2.23	18.81	3.99	25.03	0.31	1.50	27.13	3.05
2014-15	1.96	18.83	4.16	24.95	0.24	1.48	27.00	3.07
2015-16	1.91	18.89	4.05	24.85	0.21	1.42	26.83	3.11
2016-17	1.68	18.91	4.08	24.67	0.17	1.46	26.67	3.18
2017-18	1.54	18.79	4.01	24.34	0.18	1.54	26.42	-

\*Total may not be equal due to rounding off. Source: Directorate of Economics and Statistics, Assam



## Production

As per final estimates, total food grain production, in the State, exhibited a rising trend since 2011-12 to 2014-15, the highest being 54,59,000 tonnes during the year 2014-15, a decline in 2015-16 and an increase again in 2016-17 and 2017-18, with the record production of 55,25,000 tonnes in 2017-18 (Table 5.2).



## YIELD

Since 2011-12, winter rice exhibited steady increase in yield over the years and recorded 2023 kg/ha in 2016-17. On the other hand, both autumn and summer rice also exhibited increase in yield but with some fluctuation in between and recorded 1380 kg/ha and 2773 kg/ha, respectively in 2016-17 (Table 5.8). Pulses and oilseeds also exhibited steady growth in yield though both recorded somewhat lower yield of 735 kg/ha and 644 kg/ha, respectively in 2016-17 (Table 5.8).

TABLE- 5.8  
YIELD RATE OF PRINCIPAL AGRICULTURAL CROPS IN ASSAM (Kg/Hect)

Year	Autumn Rice	Winter Rice	Summer Rice	Total Pulses	Total Oilseeds (excl. Coconut)
2011-12	1242	1785	2744	560	563
2012-13	1317	1998	2965	597	610
2013-14	1340	2002	2981	695	611
2014-15	1454	2005	2940	749	670
2015-16	1364	2003	2818	757	664
2016-17	1380	2023	2773	735	644

*Source: Directorate of Economics and Statistics, Assam.*

## Area under High Yielding Varieties (HYV)

Total area under HYV of rice was 19.18 lakh hectares during 2016-17 (Table 5.9) as compared to 18.87 lakh hectares during the year 2015-16. Coverage of rice area by the high yielding varieties to the extent of more than 70 %, as evident from the Table 5.9, is really pretty high considering the fact that rice cultivation, and for that matter agriculture as a whole, is basically rainfed in the state except summer rice (boro rice) which is grown with irrigation. Such an appreciable coverage of HYV has been possible mainly because of the programmes taken by the Department of Agriculture for replacement of old varieties and seeds through free distribution of quality seeds of situation specific new high yielding rice varieties and

TABLE- 5.9  
AREA UNDER HIGH YIELDING VARIETY RICE  
(Area in lakh hectares)

Year	Autumn Rice	Winter Rice	Summer Rice	Total HYV Rice area
2011-12	2.19	12.8	4.02	19.01(74.0)
2012-13	1.60	11.70	3.61	16.91(68.0)
2013-14	1.43	12.22	2.24	15.89(63.5)
2014-15	1.28	12.42	3.95	17.65(70.7)
2015-16	1.26	13.70	3.37	18.87 (75.93)
2016-17	1.07	14.09	3.47	19.18(77.74)

Total figure may not be equal due to rounding off to nearest zero;  
Figure in bracket shows the percentage to Total Rice Area.  
*Source: Directorate of Agriculture, Assam.*



hybrids Moreover, the farmers abandoned the traditional boro rice varieties long back as they started growing boro rice crop with assured irrigation by adopting high yielding varieties like Mala, IR-36, Lachit, Masuri, Jaya, Ranjit, Ratna, China, Biplov, , Krishna etc.

## Hybrid Rice

The State Agriculture Department put special efforts for increasing cultivation of hybrid varieties of rice on experimental basis in the state since 2009-10 considering the high yield potential of such varieties over the conventional high yielding varieties to enhance rice productivity (Table 5.10). The area coverage of hybrid rice was 234.0 thousand hectares amounting to 9.1 percent of the total area under rice in the State during the year 2013-14. Subsequently, however, the hybrid rice area declined to 167.0 thousand hectares in 2014-15 and further declined to 140.3 thousand hectares in the year 2015-16. In the year 2016-17, hybrid rice area increased to 160.5 as per records of Department of Agriculture, Assam.

**TABLE- 5.10**  
**AREA UNDER HYBRID RICE IN ASSAM**  
(Area in '000 hectare)

Year	Kharif Rice (Autumn + Winter)	Rabi Rice (Summer Rice)	Total*
2011-12	2.5	21.7	24.2 (1.0)
2012-13	12.4	84.8	97.2 (3.9)
2013-14	28.0	206.0	234.0(9.1)
2014-15	N.A.	N.A.	167.0
2015-16	N.A.	N.A.	140.3
2016-17	N. A.	N. A.	160.5

*N.A. – Not Available*  
\*Total figure may not be equal due to rounding off to nearest zero.  
Figure in bracket shows the percentage to Total Rice Area.  
Source: Directorate of Agriculture, Assam.

## Index of Agricultural Production

The Index of Agricultural Production for all crops (Base triennium ending 2007-08=100) for the State stands at 142.72 in 2015-16,144.33 in 2016-17 and147.78 in 2017-18.

**TABLE- 5.11: Index of Agricultural production in Assam and India**  
(Base : Triennium ending 2007-08=100)

Year	Assam			India		
	Food	Non-Food	All Commodities	Food	Non-Food	All Commodities
2012-13	152.29	115.11	135.70	119.4	129.1	124.2
2013-14	155.81	123.81	141.56	123.3	136.1	129.6
2014-15	157.43	130.24	145.32	116.4	131.5	123.9
2015-16	154.54	127.98	142.72	115.2	122.0	116.0
2016-17 (P)	154.36	131.82	144.33	129.7	122.4	126.1

Source: Directorate of Economics and Statistics, Assam.

**N. B.:**

- ❖ The Agricultural indices for Assam are constructed on the basis of crops covered by Crop Forecast.
- ❖ Figure rounded to nearest zero.
- ❖ Data for 2015-16 in Assam are based on Provisional Estimates.

## Land Utilization Statistics

As per the Land Utilization Statistics for the year 2014-15(Provisional), the total geographical area of the State was 78.44 lakh hectares. Out of the total reported area, net sown area was 28.27 lakh hectares (36.04 percent of the geographical area), forest area 18.53 lakh hectares (23.62 percent), land not available for cultivation was 24.60 lakh hectares (31.36 percent) and other uncultivable area was 5.29 lakh hectares (6.74 percent of the geographical area) . While fallow land was around 1.75 lakh hectares constituting 2.23 percent of the total reported area , land under still water and water logged area together constituted 2.15 lakh hectares amounting to 2.74 percent. The area under Social Forestry was only 0.11 lakh hectare or 0.14 percent of the total reported area. The Gross Cropped Area in the State was 40.83 lakh hectare in 2014-15 compared to 41.00 lakh hectare in 2013-14.



The area sown more than once decreased from 12.80 lakh hectare in 2013-14 to 12.55 lakh hectare in 2014-15 while net cropped area increased from 28.20 lakh hectare in 2013-14 to 28.27 lakh hectare in 2014-15. Thus, the ratio of area sown more than once to the net area sown was 44 percent during 2014-15 compared to 45 percent during 2013-14. The ratio of net sown area to gross cropped area, on the other hand, was calculated at 69 percent during the year 2014-15 compared to 68 percent during the year 2013-14.

### Agricultural Holding

Agricultural Census, 2010-11 revealed that there were 27.2 lakh operational holdings in Assam covering an operated area of 29.99 lakh hectares as against 27.5 lakh operational holdings covering an operated area of 30.49 lakh hectares in 2005-06 and 27.1 lakh operational holdings covering an operated area of 31.1 lakh hectares in 2000-01. Thus, the agricultural operational area declined by 3.69 percent in 2010-11 over 2000-01 which was attributed to various factors like soil erosion of ever widening Brahmaputra River, urbanization, industrialization, expansion of roadways and other infrastructural development activities, conversion of agricultural land for residential and industrial uses etc. The Table 5.12 depicts the trend of number of holdings and area during the Agricultural Censuses of 2000-01, 2005-06 and 2010-11.

**TABLE- 5.12: AGRICULTURAL CENSUSES 2000-01, 2005-06 AND 2010-11**

Size class (In hectare)	Number of holding			Area operated (in hectare)		
	2000-01	2005-06	2010-11	2000-01	2005-06	2010-11
Marginal (Below 1.0)	1699107	1752989	1831115	662780	760145	774796
Small (1.0-2.0)	561039	591431	496574	730513	718383	687156
Semi-medium (2.0-4.0)	351521	317859	303528	957959	846006	817982
Medium (4.0-10.0)	95500	82933	84869	498797	425403	437372
Large (10.0 & above)	4970	4902	4137	263529	298606	271763
Total	2712137	2750114	2720223	3113578	3048543	2999070

Total figure may not be equal due to rounding off to nearest zero Source: Directorate of Economics and Statistics, Assam.

The disaggregated data also shows that the marginal holdings with less than one hectare of land accounted for 67.3 percent of the total holdings and 25.8 percent of the total operated area of the State in 2010-11 compared to 63.7 percent of the total holdings and 24.9 percent of the total operated area of the State in 2005-06. It is also evident from the Table 5.13 that the small holding with size class between 1-2 hectares, shared 18.25 percent of the total holdings and 22.91 percent of the total operational area and the large holdings (10 hectares and above) constituted only 0.15 percent of the total number of holdings and 9.1 percent of the total operated area in the State in 2010-11. The Table 5.13 shows the trend of agricultural holdings and operated area in the State from 1970-71 to 2010-11.

**TABLE- 5.13: AGRICULTURAL HOLDINGS AND OPERATED AREA IN ASSAM  
(AS PER AGRICULTURAL CENSUSES)**

Agricultural Census Year	Number of Holdings(in'000)	Total operated area (in thousand hect.)	Average size of Holdings (in hect.)
1970-71	1964.38	2882	1.47
1976-77	2254.65	3079	1.37
1980-81	2298.59	3121	1.36
1985-86	2419.16	3161	1.31
1990-91	2523.38	3205	1.27
1995-96	2683.00	3138	1.17
2000-01	2712.14	3114	1.15
2005-06	2750.11	3049	1.11
2010-11	2720.22	2999	1.10

Total may not be equal due to rounding off to nearest zero. Source: Directorate of Economics and Statistics, Assam.



## Horticulture

Assam is endowed with very diverse agro-climatic conditions favouring cultivation of wide range of horticultural crops including fruits, vegetables, flowers, spices, nuts, tubbers, medicinal and aromatic plants etc., and is traditionally very rich in horticultural crop production. The State of Assam is a constituent unit of the Eastern Himalayan Biodiversity Region; one of the two biodiversity "Hot Spots" in the country. The climatic condition and wide variety in physical features witnessed in Assam have resulted in a diversity of ecological habitats such as forests, grasslands, wetlands, which harbour and sustain wide ranging floral and faunal species. The State has tremendous scope to promote horticulture sector that can help ensuring food and nutritional security for both urban and rural masses and enhance employment opportunities and livelihood via cultivation and post-harvest management and value addition.

Horticultural crops occupy about 15 percent of the gross cultivated area of the state with an annual production of more than 67 lakhs metric tonnes of various horticultural produces, thereby significantly contributing towards food and nutritional security of the State. Keeping in view the demand of horticultural produces against projected population growth of Assam by the year 2020 and also priority consideration for commercialization of the sector crop specific strategies are being formulated.

After 2020, Assam will be able to make in-roads towards commercialization of the Horticulture sector for gaining sustainable development of the rural farming community. To make the horticulture sector more viable and sustainable, due emphasis has also been given on raising the productivity of various commercially potential crops through use of better technology, management and provision of planting materials to farmers. Similarly, due importance is also given on various aspects and provision of facilities namely, pre-harvest treatment, proper harvest techniques, setting up of collection centers with grading facilities, transport facilities and marketing facilities etc.

According to the Directorate of Horticulture and Food Processing of Assam, the growth rate of Area, Production and Productivity of Horticulture sector has been assessed at 50.32 percent, 91.0 percent and 20.31 percent, respectively. The Horticulture Directorate has also taken up positive steps towards self-employment opportunities under Horticulture sector by helping 15,000 rural farm women for engaging themselves by the setting up of 350 nos. of small and 4 nos. Medium Fruits Processing Units. The details of the performance of the Horticulture sector, with the increase in Area, Production and productivity of horticultural crops are evident from Table 5.14 below.

**TABLE- 5.14: AREA, PRODUCTION & PRODUCTIVITY OF HORTICULTURAL CROPS**

Year	Fruits			Spices			Vegetables		
	Area (Lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)	Area (Lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)	Area (lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)
2000-01	1.09	12.41	11384	0.81	1.52	1879	1.95	24.71	12672
2005-06	1.13	13.52	12005	0.86	2.12	2475	2.32	18.18	16485
2006-07	1.14	13.72	12139	0.86	2.14	2478	2.38	38.87	16469
2007-08	1.16	14.08	14142	0.88	2.18	2478	2.38	39.18	16462
2008-09	1.34	16.61	12425	0.93	2.80	3023	2.46	44.20	17923
2009-10	1.27	15.65	12370	0.94	2.35	2505	2.51	42.55	16952
2010-11	1.37	16.56	12485	1.01	2.30	2277	2.57	44.33	17231
2011-12	1.38	17.75	12885	1.04	2.56	2464	3.66	52.51	24325
2012-13	1.51	20.74	13760	1.10	3.28	2970	3.86	60.34	27536
2013-14	1.42	20.25	14219	1.04	2.67	2578	3.65	53.30	24797
2014-15	1.44	20.12	13869	1.08	2.97	2749	3.91	134.78	25456
2015-16	1.44	20.56	-	1.09	3.58	-	2.80	516.32	-
2016-17	1.41	20.06	14144	1.11	3.77	3380	2.80	519.23	18485
2017-18	1.62	24.14	14821	1.24	5.57	4485	2.88	542.35	18812

Source: Directorate of Horticulture and Food Processing, Assam, Khanapara, Guwahati-22.



## INTEGRATED NUTRIENT MANAGEMENT (INM)

### Fertilizer and Manure

Fertilizer is a very important input of agriculture, and it plays a dominant role in augmenting the productivity of crops. The State Government has put thrust on promoting "Integrated Nutrient Management" (INM) and also organic farming with a view to diminish the farmers' dependence on external chemical inputs and encourage the farmers to make optimal use of their on-farm resources, economize the production cost through adoption of optimum doses of fertilizer and care for the health of soil and the ecology. The uses of bio-fertilizer, compost and green manures and organic farming practices have been increasing gradually. However, the State Government has also accorded due importance to timely availability of fertilizers at the doorstep of farmers during peak period of cultivation. AIDC, NAFED, GPSS, and organizations like IFFCO, BVFCL, Green Chemicals Ltd, Testa Agro Industries Ltd. have been playing a pivotal role in distribution of fertilizer through their respective branches located at various corners of the State. At present, there are 416 nos. of wholesale points and 6855 nos. of fertilizer sale points in Assam..

#### Consumption of Fertiliser:

The consumption of fertilizer in Assam is low because of low consumption during kharif season. Farmers are reluctant to invest on fertilizer due to fear of loss caused by heavy rainfall and flood. Consumption of fertilizers during summer and rabi seasons is low due to non-availability. According to the State Agriculture Department, the consumption of fertiliser in the State was 68.6 kgs per hectare during the year 2014-15 compared to 65.4 kgs per hectare during 2013-14. In the year 2015-16, the consumption of fertilizers in the state was 62.6 kgs per hectare. The details of consumption of fertilizers in Assam are presented in the Table 5.15:

**TABLE- 5.15.**  
**CONSUMPTION OF (CHEMICAL) FERTILISERS**

(Fig in '000 MT)

Fertilizer	Year								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Nitrogen	114.0	135.6	129.3	155.0	135.3	151.3	155.9	169.2	153.506
Phosphorus	52.5	56.1	47.2	60.0	36.0	41.7	50.2	33.5	37.6140
Potash	59.1	71.9	71.4	75.0	44.8	80.1	80.3	39.9	39.8450
Consumption (kg/Ha)	57.8	63.2	67.1	74.6	58.5	65.4	68.6	62.6	55.03

Total may not be equal due to rounding off to nearest zero.

Source: Draft Annual Plan 2014-15, Planning and Development Department and Directorate of Agriculture.

#### Soil Health Management

The State Agriculture Department has taken up initiatives to restore depletion of soil nutrients and sustain the Crop Production System. The Government has promoted use of Bio-fertilizers, micronutrients, lime, organic manures like green manures and vermi compost, FYM etc. to increase crop productivity and also maintenance of soil health. Lately, the use of Bio-fertilizer has increased significantly due to motivation through extension machinery and initiation of demonstration programmes by the State Agriculture Department. Special thrust has been given for the use of Bio-fertilizer by initiating Programme 'Input support to the agriculturist having KCC' under State Priority Scheme, which has been implemented since 2006-07 with an aim to attract the farming communities to go for credit support in cultivating crops. The season-wise consumption of fertilizers in terms of nutrients for the last three years is shown in Table-5.17 below.



**TABLE-5.17: CONSUMPTION OF FERTILIZERS IN TERMS OF NUTRIENTS**

Nutrient	2014-15		
	Kharif	Rabi	Total
N	68575.03	88200.00	156775.03
P	21601.00	28500.02	50101.02
K	21000.00	24000.00	45000.00
Total	111176.03	140700.02	251876.05

Source : Directorate of Agriculture, Assam.

There are 11 (eleven) State owned Soil Testing Laboratories functioning in the State, of which 7 are Static and 4 are Mobile. One Soil Testing Laboratory is also functioning under Private Sector. All these Soil Testing Laboratories have total annual analyzing capacity of 90,000 soil samples.

**TABLE- 5.18: Soil Sample Analyzed AND SOIL Health Card Issued (Nos)**

Soil Testing Labs	2015-16	2016-17		2017-18	
		Tested	Issued	Tested	Issued
State Owned	14715	118044	118044	801496	801496

Source: Draft Annual Plan, 2014-15, Planning and Development Department and Directorate of Agriculture.

Note: N.A. – Not Available

### Integrated Pest Management (IPM)

For sustainable agricultural production the key component is Integrated Pest Management (IPM). Assam has a diverse eco-system and humid sub-tropical climate favoring insect pests and diseases that cause 20-30 percent yield loss. Excessive and injudicious use of chemical pesticides in the field as well as horticultural crops result in development of pest resistance, pest resurgence, pest replacement and pesticides residue problem. Intensification of agriculture with the introduction of HYV, Hybrid, STW, Mechanization and other advanced inputs also enhance the pest population dynamics and pest status. In order to facilitate the availability of the Bio-Control Agent (BCA) for biopesticide intensive IPM (BIPM) module, the thrust has been given to increase production of already established BCA and the newly introduced BCA in the State Bio-Control Laboratory (SBCL).

The State Agriculture Department is popularizing the use of bio-pesticides and other methods of IPM by organizing training and demonstrations and as a result, the consumption of bio-pesticide is increasing in the State over the years. The trend of consumption of both chemical and bio-pesticides during the last nine years is evident from Table - 5.19.

**TABLE- 5.19: CONSUMPTION OF PESTICIDES**

(Figure in MT)

Pesticide Consumption	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Chemical Pesticide	150.0	143.0	150.0	160.0	183.0	205.0	180.0	185.0	308.55
Bio-Pesticide	18.0	19.0	24.0	87.0	143.0	160.0	135.0	150.0	188.00

Source: Directorate of Agriculture, Assam.

### Seed: Development of Seed Sector

The most vital component for increasing production & productivity of crops is seed. Quality seed is the primary input for crop production. Certified Seed production is a process through which seeds are produced in conformity with the standard variety, by taking specific measure as required for seed production. In Assam, production of certified seed has been taken up in the Field Trial Stations (FTSs), in some of the State Govt. Seed Farms and Assam Seed Corporation's seed farms. But, there is a dearth of quality seeds in the State and so the Seed Replacement Rate (SRR) stands at a low level. Moreover, the State has to depend on outside sources for quality seeds of some crops every year to meet the demand immediately after every natural calamity. To meet the growing demand and increase quality seed production, the Agricultural Department has taken the following steps:



- Expansion of Seed Village Programme;
- Production of certified seeds of Paddy, Pulse & Oilseeds in Seed Village in large scale;
- To focus on capacity building of Registered Seed Growers;
- Strengthen Seed Farms to facilitate production, processing & storage of seeds.
- Seed Replacement Rate (Srr)

Seed is the most important input for any crop productivity. The State Agriculture Department has continuously made efforts towards popularisation of improved varieties and use of quality seeds. The SRR of some of the important crops for last eight years are shown in Table-5.20:

**TABLE- 5.20: SEED REPLACEMENT RATE (SRR) IN ASSAM**

(Figure in %)

Crops	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Paddy	33.0	50.0	46.8	47.9	31.1	32.77	45.26	44.37
Blackgram	64.4	48.0	79.7	25.8	40.5	44.66	32.00	33.00
Greengram	33.0	38.0	100.0	37.5	45.2	76.00	34.91	35.54
Lentil	50.6	34.0	26.2	100.0	54.1	30.11	57.42	57.01
Pea	88.0	37.0	40.5	59.7	46.7	-	-	-
Rape & Mustard	60.0	16.0	26.2	46.8	38.1	45.24	42	43.00
Sesamum	30.7	4.0	0.9	0.0	0.0	-	-	-
Jute	22.5	42.0	51.1	10.2	19.2	63.22	55.83	54.21

Source: Directorate of Agriculture, Assam

## Seed Certification

Assam State Seed Certification Agency (ASSCA) is the Nodal Agency, which has been responsible to certify seeds of different important crops including Paddy, Rape & Mustard and Pulses. For certification of planting materials different important fruit crops like Coconuts, Litchi and Guava etc. are under consideration. Under ASSCA, there are 3 (three) of notified Seed Testing Laboratories located at Guwahati, Jorhat and Silchar. The total annual testing capacity of these three notified laboratories is about 20,000 samples. Seed testing and certification guidelines are to be strictly followed for proper quality control and certification as per set norms. Table 5.21 below shows the performance of seed certification taken up in Assam during the last eight years.

**TABLE- 5.21: STATUS OF SEED CERTIFICATION**

(Figure in Quintal)

Crop(Seeds)	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Paddy	19750	18960	28686	18555	18555	15848	22454	131707
Mustered	3840	3840	7450	9210	11324	8456	7630	28791
Blackgram	1250	1250	2800	700	1840	2098.5	1688	2237
Potato	-	-	3412	11300	23350	9000	-	23600

Source: Draft Annual Plan 2014-15, Planning and Development Department and Directorate of Agriculture.

## System of Rice Intensification (SRI)

The annual growth of production of major crops mainly rice in the State is significantly increasing due to adoption of SRI system of Rice intensification and the use of Hybrid seeds. As compared to normal practices, adoption of SRI system enhances the productivity of Rice significantly and also facilitates use of low volume of seeds, fertilizers, water, low cost of production and also shortens the crop duration by few days which may be of significance for double cropping. The status of Rice Intensification for the last seven years is shown in Table 5.22 below:



**TABLE- 5.22: STATUS OF SYSTEM OF RICE INTENSIFICATION**

Year	Area under SRI (in Ha)	Average Yield under Normal Practice (Ton/Ha)	Average Yield under SRI (Ton/Ha)	Percentage of increase over normal practice
2008-09	882.20	2.65	5.08	219
2009-10	43836.00	5.80	5.85	209
2010-11	50438.00	2.65	5.65	217
2011-12	57900.00	2.88	5.70	205
2012-13	65150.00	2.90	6.14	212
2013-14	-	-	-	-
2014-15	79456.00 (RKVY) 11070.00 (BGREI) 4080.00 Total=94606.00	3.28	6.58	100.00
2015-16	2500	-	-	-
2016-17	12510 (RKVY) 2200 (NFSM) 4400 (BGREI) Total=19110	-	-	-

Source: Directorate of Economics and Statistics, Assam

### Crop Development (Mission Double Cropping)

About 13.49 lakh hectares is under double/multiple cropping in the state which accounts about 48 percent of the net cropped area. To attract farmers to take up double/multiple cropping, the State Government has taken up initiatives to expand Summer Paddy, Rabi Pulses and Oilseeds, as per feasibility/potentiality under Mission Double Cropping with additional coverage of 1.00 lakh hectares, and areas under mono cropping with an allocation of Rs. 6200.00 lakh. Additional area of 3.0 lakhs hectares is proposed to be covered under double cropping to increase cropping intensity to 160.0 percent.

### Farm mechanization and Irrigation

Though the importance of farm mechanization is well appreciated by all concerned the state is far behind the developed states of the country in this count. Several factors, particularly, fragmented and small land holdings, farmers' poor economic conditions, inavailability of situation specific prototypes of farm implements etc. stand as serious hindrance to mechanization of agriculture of the state. However, serious efforts are being made to boost farm mechanization. The State Agriculture Department, has taken up initiatives to procure farm equipment like Tractors, Power Tillers and other farm machineries under various externally aided, centrally sponsored and State Plan Schemes for the benefit of farmers, mainly the small and marginal farmers. According to the State Agriculture Department, the farm power created in the State till the end of 2014-15 is 1.78 HP per hectare which was 1.52 HP per hectare till the end of 2012-13 and 1.02 HP per hectare till the end of 11TH Five Year Plan period in comparison to 2.05 HP per hectare at national level. Various status of farm machineries and equipments during the period 2006-07 to 2014-15 is evident from the Table 5.23.

**TABLE- 5.23: STATUS OF FARM MECHANISATION**

(Figure in Nos.)

Year	Tractors	Power Tillers	Power Pumps	Small Implements	Rotovators	Farm power available [HP per hectare]
2006-07	338	2112	3994	958	-	0.54
2007-08	855	4232	9960	850	-	0.60
2008-09	1719	861	18163	1527	158	0.60
2009-10	511	3782	30634	92492	59	0.69
2010-11	962	3136	85506	0	65	0.90
2011-12	824	5138	12852	-	335	1.02
2012-13	588	3339	24337	N.A.	93	1.52
2013-14	0	73	15000	N.A.	N.A.	N.A.
2014-15	460	1559	60656	N.A.	430	1.78
2015-16	0	1492	-	-	-	1.3
2016-17	0	6557	-	-	14	1.31

N.A. =Not Available, Source: Directorate of Agriculture, Assam.



## Irrigation

For the achievement of agricultural growth in the State by ways of raising crop yield, increasing cropping intensity and diversification farmers' access to irrigation must be significantly improved. Considering the uncertainties faced in the production of Kharif crops due to floods and high rainfall, the State Agriculture Department is giving more emphasis on Rabi crops by assigning top priority to develop assured irrigation facilities through installation of Pump Sets (Shallow Tube Well & Low Lift Pump). Irrigation by way of Shallow Tube Well and Low Lift Pumps is considered to be the efficient method of water utilization for crop growth (Table 5.24).

**TABLE– 5.24: IRRIGATION INFRASTRUCTURE CREATED BY THE AGRICULTURE DEPARTMENT**

Component of irrigation	Nos. installed								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Shallow Tube Wells (Nos)	30080	53208	141452	25704	43938	30000	55590	9274	-
Low Lift Pumps (Nos)	6246	8060	29560	0	4736	0	5066	854	-

Source: Directorate of Agriculture, Assam.

**TABLE- Irrigation Potential created by Agriculture Department & Utilizable irrigation (As on 31st March, 2015)**

Irrigation Potential Created	11.27 lakh hectares (40% of net cropped Area)
Area under utilizable assured irrigation	7.33 lakh hectare (26% of net Cropped Area)

At present, only 11.27 lakh hectares has been covered by Irrigation Potential created by the Agriculture Department i.e.; 40% percent of net cropped area has been covered. The area under utilizable assured irrigation is 7.33 lakh hectares i.e.; 26 percent of net cropped area. The department has proposed to install 1.00 lakh STWs under RIDF Scheme of NABARD to increase the irrigation command of additional assured irrigation area by 2.0 lakh hectares and to restore the area rendered unirrigated due to deplorable condition of STWs installed prior to 2000.

## Crop Insurance

The state of Assam has been experiencing floods almost every year and about 4.75 lakh hectares of area in the State is chronically flood prone and about 0.94 lakh hectares area is drought prone. Therefore, the Crop Insurance is a very important area to look into to help farmers at the time when there is crop loss/crop damage due to recurring natural calamities, severe pest infestations and diseases in notified crops.

The Government of India has launched a Crop Insurance programme under the nomenclature "National Agricultural Insurance Scheme" (NAIS). All farmers who avail loans from financial institutions are covered under the scheme and it is optional for non-loanee farmers. Here 50 percent of the premium amount is contributed as subsidy to small and marginal farmers which will be shared equally by Government of India and State Government. This scheme is expected to be a critical instrument for development in the field of crop production by providing financial support to the farmers in the event of crop failure and help in maintaining flow of agricultural credit. This programme covers 8 (Eight) crops i.e. 3 crops in Kharif Season and 5 crops in Rabi season. The crops are

Kharif Season : Autumn / Ahi Paddy, winter / Sali Paddy and Jute.

Rabi Season : Rape & Mustard, Wheat, Potato, Sugarcane and summer/Boro Paddy.

This scheme, under the Area Approach, not only facilitate insurance coverage to each of the notified crop damage within the defined area for widespread calamities but also on an individual basis for localized calamities such as hailstorm, landslide, cyclone and flood. National Agriculture Insurance Scheme, unfortunately, has not been able to provide the desired solution to the risk in the



agriculture sector in the State. Various reasons such as lack of awareness, low subsidy premiums (10 percent) for small and marginal farmers, delayed claim settlement, slow response of banks in issuance of Kissan Credit Cards etc. are the main impediments to successful implementation of the scheme. Moreover, some important horticulture crops like ginger etc. are not covered under the Scheme.

**TABLE-5.25: AGRICULTURE CREDIT YEARWISE KCC ISSUED & FINANCING**

Year	No. of KCCs issued	Credit limit Sanctioned (Rs. in Crore)
2001-02	8,041	8.98
2002-03	43,977	49.11
2003-04	51,815	40.02
2004-05	88,732	88.02
2005-06	63,853	79.05
2006-07	50,130	60.75
2007-08	44,621	69.19
2008-09	26,881	51.89
2009-10	1,49,822	42.98
2010-11	1,21,584	197.59
2011-12	3,78,101	131.54
2012-13	2,65,797	932.20
2013-14	3,08,306	15.06
2014-15	2,81,889	1331.36
2015-16	2,17,460	1089.09
2016-17	3,96,776	952.55

Source: Directorate of Agriculture

#### NATIONAL AGRICULTURAL INSURANCE SCHEME (NAIS)

National Agricultural Scheme (NAIS) has been implemented in the State since Rabi 1999-2000 Cropped covered: Autumn Rice, Winter Rice, Summer (Boro) Rice, Wheat, Jute, Rape & Mustard, Potato and Sugarcane Calculation of claim under NAIS :

Claim =  $\frac{\text{Shortfall in yield}}{\text{Threshold yield}} \times \text{Sum Insured for the farmers in the concerned notified area}$

- Shortfall in Yield = Threshold yield – Actual yield for the Defined Area: Threshold yield = 3 years of Average yield for paddy and 5 years of Average yield for other crops.
- As per Scheme, the Agriculture Insurance Co. of India Ltd. (AICL) pays 100% amount of premium collected towards claim if any, and the remaining portion of the claim is equally shared by Govt. of India and Govt. of Assam.
- The scheme provides 10% subsidy to small & marginal farmers. Total premium subsidy is also shared equally between Govt. of India and Govt. of Assam.

**TABLE- 5.26: CROP SEASON-WISE PERFORMANCE OF NATIONAL AGRICULTURAL INSURANCE SCHEME (NAIS) IN ASSAM**

Season & Year	Area covered (Ha)	Sum Insured (Rs in Crore)	Premium Received (Rs. in crore)	Total Claims (Rs. in crore)	Farmers covered (No.)	Farmers benefited (No.)
Kharif 2006	8304.30	10.838	0.173	0.919	8800	3882
Rabi 2006-07	4757.90	9.115	0.246	0.077	5818	491
Kharif 2007	7541.80	11.721	0.205	0.067	8938	2181
Rabi 2007-08	5854.91	13.598	0.504	0.045	10780	853
Kharif 2008	7332.90	8.265	0.172	0.054	7458	198
Rabi 2008-09	20126.26	41.715	1.244	0.669	28359	3592
Kharif 2009	24099.81	48.018	0.978	0.687	24619	3727
Rabi 2009-10	19003.26	57.200	1.755	3.292	27288	7512
Kharif 2010	17277.05	4.655	0.987	0.597	21433	2598
Rabi 2010-11	10464.97	31.033	1.293	0.163	14675	533
Kharif 2011	18281.07	62.040	1.551	2.022	23770	5457
Rabi 2011-12	20317.33	73.911	2.734	1.450	32547	15405
Kharif 2013	24195.66	89.454	2.237	0.137	32053	1654
Rabi 2012-13	13925.24	63.917	2.088	0.983	24012	1954
Kharif 2013	21410.64	96.459	2.495	0.361	30678	561
Rabi 2013-14	23537.00	73.630	2.125	0.924	21943	1770
Kharif 2014	2567.67	10.99	2.748	0.281	2895	62
Rabi 2014-15	15379.43	87.68	2.434	2.490	23643	598
Kharif 2015	2227.60	9.811	0.245	-	2312	61
Rabi 2015-16						
Kharif 2016						

The scheme has been withdrawn

Source: Directorate of Agriculture, Assam.



### Modified National Agricultural Insurance Scheme (MNAIS)

The scheme is being implemented on pilot basis in 50 districts in the country. NAIS is withdrawn from those districts in which MNAIS will be implemented.

Unit of insurance for major crops is Village / Village Panchayat. Scheme is compulsory for loanee farmers & voluntary for non-loanee farmers. Uniform seasonality norms will be applicable for both loanee & non-loanee farmers. Sum insured can be opted up to 150% of the value of average yield. Premium subsidy is available up to the value of threshold yield / loan amount only. Entire claim will be borne by the implementing agency. The scheme provides account payment up to 25% of likely claim for immediate relief to the farmers. Minimum indemnity level will be 70% against 60% in case of NAIS. Calculation of threshold yield: Average yield of last 7 years excluding up to 2 years of declared natural calamity. The scheme is implemented in two districts of Assam viz., Kamrup and Dhubri from Rabi, 2010-11. The summary of progress of implementation of MNAIS in the above mentioned districts presented in the Table - 5.27 below:

**TABLE- 5.27: Status of MNAIS (Kamrup & Dhubri district)**

Season & Year	Area covered (hectare)	Sum insured (Rs. in crore)	Premium received (Rs. in crore)	Total Claims (Rs. in crore)	Farmers covered (No.)	Farmers benefited (No.)
Rabi, 2010-11	1564.19	4.98	0.12	0.039	2097	-
Kharif, 2011	3192.02	13.89	0.80	0.193	4641	711
Rabi, 2011-12	2670.87	8.75	0.32	0.060	3942	299
Kharif, 2012	3375.95	9.038	0.326	0.598	2722	388
Rabi, 2012-13	1849.32	12.284	0.298	0.096	2229	216
Kharif, 2013	2628.82	13.443	0.424	Not yet Settled	3604	Not yet settled
Rabi, 2013-14	486.33	2.911	0.126	Not yet Settled	828	Not yet settled
Kharif, 2014	From Kharif 2014, a new scheme (WBCIS) was introduced and continued till Kharif 2016					
Kharif 2015						

Source: Directorate of Agriculture, Assam.

### Weather Based Crop Insurance Scheme (Wbcis)

With the objective to overcome the shortcoming of delayed settlement of claims etc. under NAIS, a Pilot Weather Based Crop Insurance Scheme (WBCIS) was introduced for implementation in 20 States on pilot basis. WBCIS has been implemented in Assam since Rabi, 2013-14.

WBCIS is intended to provide insurance protection to the farmers against adverse weather incidence. Such as deficit and excess rainfall, high or low temperature, humidity etc. which are deemed to impact adversely the crop production. WBCIS is based on actuarial rates of premium but to make the scheme attractive, premium actually charged from farmers have been restricted to at par with NAIS. The difference between actuarial rates and premium actually paid by farmers are borne by the Government (both Centre and State concerned on 50:50 basis). Besides. A cap on premium payable by farmers for annual commercial/horticultural crops has been provided. The scheme is available to all the farmers- loanee and non-loanee-irrespective of their size of holding. As under NAIS, the loanee farmers area covered on compulsory basis in a notified area for notified crops whereas for non-loanee farmers scheme is voluntary. Further, to provide competitive service private insurance companies i.e. ICICI-Lombard. IFFCO-TOKIO. M.S Cholamandalam and HDFC-ERGO General Insurance Companies have been involved for implementation besides Agriculture Insurance Company of India (AIC).



**TABLE-5.28: STATUS OF WEATHER BASED CROP INSURANCE SCHEME (WBCIS)**

Season & Year	Area covered (Ha.)	Sum Insured (Rs. In crore)	Premium Received (Rs. In crore)	Total Claims (Rs. In crore)	Farmers covered (No.)	Farmers benefited (No.)
Rabi 2013-14	924.230	5.825	0.495	Not yet settled	1844	Not yet settled
Kharif 2014	11480.45	69.854	7.023	11.963	21710	19471
Rabi 2014-15	853.350	4.282	0.514	0.291	1593	771
Kharif 2015	17681.425	107.536	10.758	NA	29149	NA
Rabi 2015-16	23538	51.892	5.310	-	13551	-
Kharif 2016	36364					
Rabi, 2016-17	4313					
PMFBY	-					
Kharif 2017	38519584					

Source: Directorate of Agriculture, Assam.

### Procurement of Paddy as a measure of price support

Assam has been able to become marginally surplus in Rice production for remarkable improvements achieved in productivity through better input management practices and adoption of improved technology. But the problem of disposal of produce by the farmers at un-remunerative prices discourages them considerably in the adopting improved measures that can result in more yields. With the consideration of the interest of the farmers the State Government has engaged Assam State Agricultural Marketing Board (ASAMB) for procurement of paddy at Minimum Support Price apart from procurement to be done by FCI. Table-5.29 shows MSP procurement for the last 8 years from 2008-09 to 2015-16.

**TABLE-5.27: MSP & PROCUREMENT OF MINIMUM SUPPORT PRICE OF AGRICULTURAL PRODUCE (Rs. Per quintal)**

Commodity	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Paddy (Common)	1000.00	1080.00	1250.00	1310.00	1360.00	1410.00	1470.00	1550.00
Paddy (Grade-A)	1030.00	1110.00	1280.00	1345.00	1400.00	1450.00	1510.00	1590.00
Wheat	1320.00	1285.00	1350.00	1400.00	1450.00	1525.00	1625.00	1735.00
Maize	880.00	980.00	1175.00	1310.00	1310.00	1325.00	1365.00	1425.00
Arahar	3000.00	3200.00	3580.00	4300.00	4350.00	4425.00#	5050.00	5450.00
Greengram	3170.00	3500.00	4400.00	4500.00	4600.00	4650.00#	5228.00	5575.00
Blackgram	2900.00	3300.00	4300.00	4300.00	4350.00	4425.00#	5000.00	5400.00
Lentil	2250.00	2800.00	2900.00	2950.00	3075.00	3325.00*	3525.00	5250.00
Gram	2100.00	2800.00	3000.00	3100.00	3175.00	3425.00*	3875.00	4400.00
Rape & Mustard	1850.00	2500.00	3000.00	3050.00	3100.00	3350.00	3600.00	4000.00
Sesamum	2900.00	3400.00	4200.00	4500.00	4800.00	4700.00	5000.00	5300.00
Jute (TD-5)	1575.00	1675.00	2200.00	2300.00	2400.00	2700.00	3000.00	3700.00
Sugarcane	145.00	170.00	210.00	220.00	230.00	230.00	250.00	

# - Bonus of Rs. 200.00 per quintal is payable over and above the Minimum Support Price.

\*- Bonus of Rs. 75.00 per quintal is payable over and above the Minimum Support Price.

**TABLE-5.28: STATUS OF PROCUREMENT OF PADDY IN ASSAM AT MINIMUM SUPPORT PRICE**

Procurement Agency	Year-wise procurement of Paddy under CMR (MT)							
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
FCI	23282.00	34073.00	20104.00	45.00	6461.00	529875.8	372443.12	2600.00
ASAMB	Nil	Nil	7895.34	236.00	7577.15	101307.4	159646.9	1488.00
NAFED	Nil	Nil	Nil	Nil	Nil	Nil	33765.38	-
NACOF	Nil	Nil	Nil	Nil	Nil	Nil	37087.00	-
NCCF	Nil	Nil	Nil	Nil	Nil	Nil	22202.44	-
Total	23282.00	34073.00	27999.00	281.00	14038.15	631183.2	625144.84	



**TABLE-5.29: STATUS OF PROCUREMENT OF JUTE IN ASSAM BY JUTE CORPORATION OF INDIA (JCI) AT MINIMUM SUPPORT PRICE**

Region	Districts covered	2015-16		2016-17		2017-18	
		Quantity procured (Qtl.)	Value of produce (In Rs.)	Quantity procured (Qtl.)	Value of produce (In Rs.)	Quantity procured (Qtl.)	Value of produce (In Rs.)
Guwahati	Darrang, Kamrup, Goalpara, Barpeta	998.81	4933768	998.81	4933768	69504.55	214073908.00
Nagaon	Nagaon, Morigaon	5400.56	-	4942.53	-	94200.28	288262437.00
Dhubri	Dhubri, Bongaigaon	Nil	Nil	Nil	Nil	9235.29	28598800.00
Total	8 (eight) districts	5694.62	649374	5941.34	4933768	172940.12	530935145.00

### Agriculture Marketing and Storage

Marketing of agriculture produces in the State is a serious problem for the farming community. Lack of organized marketing facility, lack of storage infrastructure near the field, poverty and need of money after harvest for repayment of agricultural debt forced the farmers to dispose off their hard earned produces at the earliest and that too at low prices. However, there is good potential for development of Agricultural Marketing Infrastructure and Storage facilities with Private Sector Participation. Keeping in view the interest of farmers the State govt. has encouraged procurement of Paddy at Minimum Support Price by engaging the Assam State Agriculture Marketing Board in addition to the procurement done by the FCI.

**Table-5.32 Storage Capacity created by different Organizations in the State**

Organisations	Storage Capacity (in MT)
FCI	296584
Central Warehousing Corporation	73400
State Warehousing Corporation	252622
ASAMB	46610
Total	469216

Source: Directorate of Agriculture, Assam

At present, there are 24 Regulated Market Committees, 20 Primary Market Yards, 143 Trader's Shop, 532 Auction Platform/retailers Shed, 806 Rural Primary Markets, 405 Wholesale Markets, One Organic Market, 18 Packaging Room, 42 Drying Platform and 15 Processing units in the State. The Regulated Markets have been covered under AGMARKNET. As regards to cold storage infrastructure in the State, there are 26 numbers of cold storages (Govt. Sector-3, private sector-23) are available in the State at present.

At present, there are 24 Regulated Market Committees, 20 Primary Market Yards, 143

**Table- 5.33 Market Infrastructure Developed**

Market Infrastructure	Number
Cold Storage	4
Wholesale Market Developed (Out of 405 nos.)	3
Rural Primary Market (Out of 735 nos)	43
Organic Market	1
Sale Counter	11
Seed Storage Godown	-
Drying Platform	33
Three/Four Wheel Auto Van	-

Source: Directorate of Agriculture, Assam

To assist the farmers carrying vegetables to the distant market, the Assam State Agriculture Marketing Board provided transport subsidy to 980 farmers. The State Government proposed to construct three-storied Market at Pamohi (Guwahati), Growers Consumers Market Complex at Ulubari (Guwahati) and establish 11 nos. of Sale Counters for marketing of farm products. For transportation of agricultural produces from field to market as many as 1102 numbers of three/four wheelers are provided during the year 2012-13. During the year 2013-14, the State Agriculture Department has planned to provide 2372 numbers of three/four wheel Auto Vans, 35 numbers of refrigerated vans and develop 15 numbers of Rural Hats to the farmers to facilitate marketing of farm produce. The Department has also taken initiative for establishment of market infrastructure, storage facility and to eradicate the transportation bottlenecks by distributing 224 auto vans, 610 mini trucks and providing transport for carrying the produces from remote areas to different markets. The rural connectivity scheme implemented under PMGSY is a major step towards benefit



of farmers to take out their agricultural products to nearest urban markets. Some of the major steps taken up to boost up marketing support and for post harvest management:

- Farming community has been mobilized to form 25 numbers of Farmer Producer Organizations (FPO) for securing better produce price;
- Rural farm women have been empowered by training and providing mini processing units of Pulses and oil seeds from which they can earn from their homes;
- Tie up has been made for export of Red Bao Paddy to USA and the process has started in 2012-13 on regular basis;
- Export of Pineapple cubes, orange, ginger, dendrobium orchids to other States and Countries have already been started;
- 0.56 lakh SHGs assisted to take up Agri-Horti activities including post harvest management; etc.

#### **National Mission on Oilseeds & Oil Palm**

The State is highly deficient in Oil seed production. To achieve targeted area coverage of 4.65 lakh hectares and 3.44 lakh MT production during 2014-15 to drive the State towards self sufficiency at the end of 12th Five Year Plan an amount of Rs.5000.00 lakh has been earmarked for launching Mini-Mission-I-Development of Cultivation of vegetable oilseeds crop, Mini-Mission-II-Development of Cultivation of Oil Palm and Mini-Mission-III-Development of Cultivation of Tree Borne Oil seeds.

#### **Establishment of Mini Oil Mill with Packaging Unit:**

For employment generation from value added products of oilseeds and to facilitate the farming community to assure supply of pure cooking oil locally with maximum return from oilseeds cultivation. The State Agriculture Department proposed to establish 800 mini oil mills with packaging unit involving an amount of Rs.2000.00 lakh. The Scheme will be envisaged for marketing linkage of oil produced involving ASAMB.

#### **Women Welfare Scheme as a Gender Responsive Budget :**

Rural women are considered as the most productive workforce in all aspects of cultivation/crop production and processing to marketing. Development of farming women has been given special thrust by the State Govt. for which the scheme has been formulated which will cover 500 women. 200 spice and pulses grinding mills, 200 numbers of power weeder and 50 numbers of paddy transplanter will be provided to the women SHGs for their economic upliftment during the year 2014-15 with special reference to Chief Minister's Vision of Women & Children of 2016.

#### **Bring Green Revolution to Eastern India including Assam :**

Central and State Governments have chalked out a strategy to achieve the planned growth in agriculture sector, particularly, with a view to achieving self-sufficiency in food production to provide food security. Several interventions with emphasis such as Bringing Green Revolution to Eastern India (BGREI), double cropping, supply of improved seeds, fertilizer and technology equipment etc. have been taken. Under this new initiative on BGREI, the Government of India covers the states namely Assam, Bihar, Chhatisgarh, Jharkhand, Odisha, Eastern U.P. and West Bengal because of having excellent potential for increasing food grain production and productivity but is mired by low credit availability, poor extension facilities and infrastructure bottlenecks etc. To remove these impediments on a priority basis and transform these states into the performing states steps have been taken with priority emphasis on better Seed Replacement Ratio, adequate and timely availability of critical inputs, improving infrastructure facilities and other required interventions including bank credit etc.



In Assam, the scheme was launched in 2010-11 as a sub-scheme of RKVY to overcome the constraints limiting the productivity of rice based cropping system in the state by adopting short term activities related to Transfer of Technology through Rice demonstration in farmers field along with activities pertaining to assets building like creation of irrigation facilities to maximize agricultural production on sustainable basis. The scheme targets the main food grain crop of the State, i.e. Rice. After 3 years (2010-11 to 2012-13) of implementation of the scheme the productivity and production of Rice has been increased by 21 percent and 19 percent respectively. For successful implementation of the Scheme, [though the scheme is a sub-scheme of RKVY], separate fund has been provided by the Govt. of India. During the period 2010-11 to 30th September 2013, the State has received an amount of Rs.19501.00 lakh from the Govt. of India.

#### **PRADHAN MANTRI FASAL BIMA YOJANA:**

Every single farmer of the country is the root of our economy. We rely heavily on the work done by our farmers. The crops cultivated by farmers are distributed all over the country and in some cases to other countries too. Although farmers do a great deal of work for us, their very own work have no security. Bad weather can lead to damage of their crops. It is a 100% loss case for the farmers who rely only on farming. Many poor farmers across the country borrow money for farming and in the scenario when crops are damaged; they find themselves in middle of nowhere. This leads to acts like Suicide which is unacceptable. We can't let that happen. So, the need of any scheme that could help the farmers was always there. Recently, Pradhan mantri Narendra modi announced the scheme named as "Pradhan Mantri Fasal Bima Yojana". If implemented carefully, this scheme alone can help the farmers to great extent. Our farmer brothers are now no longer alone. If the crop damages due to any reason, the Government will come forward. With the Launch of this crop insurance scheme, there will be some relief for our Farmer brothers.

#### **Highlights of PMFBY :**

There will be a uniform premium of only 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops. In case of annual commercial and horticultural crops, the premium to be paid will be only 5%.

The premium rates to be paid by farmers are very low and balance premium will be paid by the Government to provide full insured amount to the farmers against crop loss in any natural calamities.

There is no upper limit on Government subsidy. Even if balance premium is 90%, it will be borne by the Government.

Earlier, there was a provision of capping the premium rate which is low claims being paid to farmers. Now this is removed and farmers will get claim against full sum insured without any reduction.

The use of technology will be encouraged to a great extent. Smart phones, Remote sensing drone and GPS technologies will be used to capture and upload data of crop cutting to reduce the delays in the claim payment.

The insurance plan will be handled under a single insurance company, [Agriculture Insurance Company of India \(AIC\)](#).

PMFBY is a replacement scheme of [National Agriculture Insurance Scheme \(NAIS\)](#) and [Modified National Agriculture Insurance Scheme \(MNAIS\)](#) and hence exempted from the service tax.



**Objectives of the scheme :**

To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.

To stabilise the income of farmers to ensure their continuous process in farming.

To encourage farmers to adopt innovative and modern agricultural practices.

To ensure flow of credit to the agriculture sector.

**ASSAM SITUATION ABOUT PMFBY :**

The Assam government will roll out the Pradhan Mantri Fasal Bima Yojana in the state from this season with an aim to benefit over 5.5 lakh farmers in 2016-17. "Assam is all set to implement the Pradhan Mantri Fasal Bima Yojana from Rabi season this year. Our target for the season in 2016-17 under PMFBY is 5,53,000 farmers. During the current season, a wide range of crops, including summer paddy, wheat, potato, sugarcane, rapeseed and mustard will be covered. Under the PMFBY scheme, paddy, jute, black gram and green gram will be covered during Kharif next year. To improve yield data quality and timeliness, smart phones will be used." For effective rolling out of the scheme, training of Agriculture Department officials and publicity-cum-awareness programmes among the farmers will be organised in coming days. Contingency fund proposal/supplementary demand proposal has already been submitted to the State Government for implementation of the scheme.

**APPENDIX – 5.1 : AREA, PRODUCTION AND AVERAGE YIELD UNDER FOOD AND NON- FOOD CROPS COVERED BY CROP FORECAST IN ASSAM, 2017-18 (PROVISIONAL)**

Sl. No.	Commodities	Area (In Hect.)	Production (In Tonnes)	Average Yield (In Kg/Hect)
1	Autumn Rice	154511	209349	1377
2	Winter Rice	1878798	3883120	2098
3	Summer Rice	400402	1191244	2975
	<b>Total Rice</b>	<b>2433711</b>	<b>5283713</b>	<b>2171</b>
4	Maize	31537	98783	3132
5	Wheat	17786	24658	1386
6	Other Cereals and Small Millets	5233	3058	584
	<b>Total Cereals</b>	<b>2488267</b>	<b>5410212</b>	<b>2174</b>
7	Gram	2273	1562	687
8	Tur (Arahar)	5609	4672	833
9	Rabi Pulses	146824	109526	746
	<b>Total Pulses</b>	<b>154706</b>	<b>115760</b>	<b>748</b>
	<b>Total Food Grains</b>	<b>2642973</b>	<b>5525972</b>	<b>2091</b>
10	Sesamum	122214	8344	683
11	Rape and Mustard	290285	185564	639
12	Linseed	5004	3065	613
13	Castor	758	357	467
14	Nizer	5968	3368	564
15	*Coconut (2012-13, 2013-14 & 2014-15)	19917	168598	65
	<b>Total Oilseeds</b>	<b>334146</b>	<b>200698</b>	<b>638</b>
16	Cotton (b)	771	4378	83
17	Jute (c)	69926	841150	2165
18	Mesta	3418	20166	1062
	<b>Total Fibres</b>	<b>74115</b>	<b>861694</b>	<b>2538</b>
19	Banana	53082	913272	17205
20	Pineapple	16304	296524	18187
21	Orange	14952	203716	13625
22	Papaya	7212	147395	20438
23	Potato	102868	720968	7009
24	Sweet Potato	5303	29199	5506
25	Tapioca	3117	28868	9260
26	Onion	8338	80374	9639
	<b>Total Fruits and Vegetables</b>	<b>211176</b>	<b>2420316</b>	<b>129</b>
27	Areca nut (2012-13, 2013-14 & 2014-15)	66800	49687	938
28	Chillies	20242	18994	1232
29	Turmeric	16871	20787	37402
30	Sugarcane	30559	1142974	415
31	Tobacco	148	68	501
	<b>Total Misc. Crops</b>	<b>134620</b>	<b>1232510</b>	
	<b>All Crops</b>	<b>3397030</b>		

Note: (a) In terms of million nuts (b) Bales of each 170 Kgs (c) Bales of each 180 Kgs.(d) In terms of dry nuts (e) Nuts per bearing tree (f) \* In total Oil seeds coconut is excluded

Source: Directorate of Economics and Statistics, Assam



**APPENDIX - 5.2 INDEX NUMBERS OF AREA, PRODUCTION AND PRODUCTIVITY FOR FOOD AND NON-FOOD CROPS IN ASSAM, 2016-17 (PROVISIONAL)**

(Base Triennium ending 2007-08=100)

Sl. No.	Commodities	Area Index	Production Index	Productivity Index
1	Autumn Rice	47.45	65.56	138.15
2	Winter Rice	114.81	168.28	146.57
3	Summer Rice	126.40	154.66	122.36
4	Total Rice	110.30	154.50	140.07
5	Maize	170.64	684.98	401.42
6	Wheat	31.13	33.13	106.43
7	Other Cereals and Small Millets	68.40	83.13	121.54
8	Total Cereals	104.81	153.95	146.89
9	Gram	129.82	167.41	128.95
10	Tur	97.08	116.08	119.57
11	Other Rabi Pulses	131.25	180.33	137.39
12	Total Pulses	128.78	175.48	136.26
13	Total Food Grains	105.23	154.36	146.69
14	Linseed	65.12	77.79	119.46
15	Castor	62.36	67.98	109.00
16	Sesamum	93.54	115.92	123.92
17	Rape & Mustard	125.22	153.98	122.97
18	Coconut	109.52	104.37	95.30
19	Nizer	69.26	75.00	108.29
20	Total Oilseeds	114.55	125.13	109.24
21	Jute	125.56	122.22	97.33
22	Cotton	64.90	67.24	103.61
23	Mesta	67.47	79.35	117.62
24	Total Fibres	123.23	120.48	97.77
25	Plantation Crop (TEA)	94.73	125.45	132.43
26	Chillies	127.61	179.66	140.79
27	Turmeric	134.12	194.08	144.70
28	Areca nut	98.29	99.00	100.72
29	Total Condiments & Spices	106.31	120.67	113.50
30	Potato	141.54	149.34	105.51
31	Banana	111.97	140.89	125.83
32	Total Fruits and Vegetables	125.63	144.79	115.26
33	Sugarcane	121.95	123.21	101.03
34	Tobacco	45.31	43.40	95.78
35	Total Misc. Crops	121.45	122.70	101.02
36	Total Non-Food Crops	119.19	131.82	110.59
37	All Commodities	108.16	144.33	133.44

The Agricultural Indices is constructed only on the basis of crops covered by the Crop Forecast.

The Area and Production of Areca nut and Coconut are final estimates for the year 2014-15.

Source: Directorate of Economics and Statistics, Assam

## IRRIGATION

Assam is predominantly rural in nature and its economy is primarily based on rural life with 70% of its population directly dependent on agriculture as source of livelihood. Agriculture plays a vital role in the economy of the state.

Out of the total geographical area of 78.44 lakh hectare the gross cropped area of the State is 40.87 lakh hectare and the net area shown is 27.74 lakh hectares. The ultimate irrigation potential of the state is estimated at 27 lakh hectare. It is planned to irrigate 17 lakh hectares through Minor Irrigation scheme and 10 lakh hectares through Major & Medium projects. Moreover out of the 17 lakh hectare area planned to irrigate through Minor Irrigation Schemes an area of 7 lakh hectares through Minor Irrigation Schemes taken from surface water resources and the rest 10 lakh hectares from ground water sources.

There has been a shortage of food grain production in the State due to formidable increase in population. In order to cope up with the food deficit and ensure food security by boosting up production, modernization of agriculture sector has been felt necessary. For this purpose availability of assured irrigation facility is undoubtedly the most important pre-requisite for sustained development in agriculture sector as water is essential for proper growth of crops.

The two major river systems viz the Brahmaputra and the Barak along with numerous tributaries constitute the rich surface water resources of the State. Moreover the total annual ground water recharge in the State of Assam is 32.11 BCM. The net ground water availability in the State is worked out at 28.90 BCM after deducting natural discharge during non-monsoon season. The existing gross ground water draft for all uses is 4.74 BCM of which 4.06 BCM is the gross ground water draft for irrigation use and 0.68 BCM is the gross ground water draft for domestic and industrial use. The allocation for domestic and industrial use up to the year 2025 is 0.84 BCM whereas the ground water draft for all uses is 4.74 BCM. The net ground water resources for future irrigation uses are 24 BCM. The stage of ground water development is 19% and all districts of Assam are falling under safe category. But in spite of the rich resources of water in the State, irrigation has become highly essential because of adverse and unpredictable weather condition including flood, erosion and drought like situation etc.



Irrigation is the application of controlled amount of water to plants at needed intervals. Irrigation helps to grow agricultural crops, maintain landscape and revegetate disturbed soils in dry areas and during the periods of less than average rainfall. Besides, availability of assured irrigation facility is pre-requisite for a sustained development in the agriculture sector. Thus irrigation development plays a significant role in the efforts towards economic development of the state too.

The irrigation projects are classified into three categories viz. Major, Medium and Minor Projects which have a Cultivable Command Area (CCA) of more than 10,000 hector are termed as Major projects, those which have a CCA of less than 10,000 hector but more than 2,000 hector are termed as Medium projects and those which have a CCA of 2,000 hector or less are known as Minor projects.

There are three types of Irrigation Schemes executed in Assam. These are:-

1. **Surface Flow Irrigation Scheme:** This type of Irrigation Schemes is done by constructing diversion weir across the river to convey water through canal system by surface gravity flow. This type of Schemes consists of Major, Medium and Minor Irrigation Schemes.
2. **Surface Lift Irrigation Scheme:** This type of Irrigation Schemes is also taken up on surface water sources by lifting of water by pump from river, lake or pond etc. and water is conveyed through canal system.
3. **Ground Water Lift Irrigation Schemes:** This type of Irrigation Schemes is done on lifting ground water by installing Deep Tube wells or Shallow Tube wells and drawing water to the crop field through canal or through over ground flow or underground network of pipe.

The State Government created the Irrigation Department under the Flood Control & Irrigation Ministry and all works pertaining to water resources were executed by F C & I Department. The importance of Irrigation Department was felt by the Government of Assam during seventies and separate Irrigation Department was created in the year 1974 by bifurcating it from the erstwhile F C & I Department. Accordingly, independent Department initiated its functioning in the year 1974. The Department is playing vital role in the development of irrigation potential of Assam by harnessing the rich surface water and ground water resources of the State. The main service of the Department is to supply water to the crop field as per demand of the cultivators and as per requirement of crops with a view to delivering the service to the citizen cultivators.

The development programmes for improvement of irrigation facility in Assam is taken up under two broad heads, viz. Minor Irrigation and Major & Medium Irrigation. While the Irrigation Schemes are classified as Major, Medium and Minor, they are categorized as Surface Flow, Surface Lift (for major/ Medium and Minor) and Ground Water Lift (for Minor only). Three Departments, viz. Irrigation, Agriculture and Panchayat



and Rural Development are associated with development of irrigation facilities in the State. The State Irrigation Department, being the Nodal Department for development of irrigation in the state, executes and maintains Major, Medium and Minor Irrigation Schemes, the irrigation works of the other two departments are confined to Minor Irrigation schemes like Shallow Tube Wells, Low Lift Points and Temporary Minor Irrigation Schemes only. The State Agriculture Department and the Panchayat and Rural Development Department execute the Minor Irrigation schemes (Shallow Tube Wells, Low Lift Points and Temporary small diversions) the Irrigation Department alone executes and maintains Major, Medium and Minor Irrigation Schemes both on surface water and ground water sources.

#### CREATION OF IRRIGATED AREA AND UTILISATION OF POTENTIAL

Irrigation potential created up-to March'2018 is shown in **Table-6.1**. Out of the Gross Cropped Area of 40.87 lakh hectares (2016-17) of the State, 9.96 lakh hectares (24.37%) are created irrigation potential by Irrigation Department up to March, 2018 under ongoing irrigation schemes. Out of 9.96 lakh hectares, 2.73 lakh hectares (27.41%) are covered through both Major and Medium Irrigation Projects and the rest 7.23 lakh hectares (72.59%) through Minor Irrigation Schemes. During the last four years, around 2.38 lakh hectares are covered under irrigation potential with an annual increase of 5.97%.

While Irrigation Department executes Major, Medium and Minor Irrigation Projects, the State Agriculture Department has also created a huge irrigation potential through the private Shallow Tube wells (STWs) and Low Lift Points (LLPs). The minor irrigation activities taken up by Panchayat & Rural Development Department and Soil Conservation Department are of temporary nature and / or seasonal.

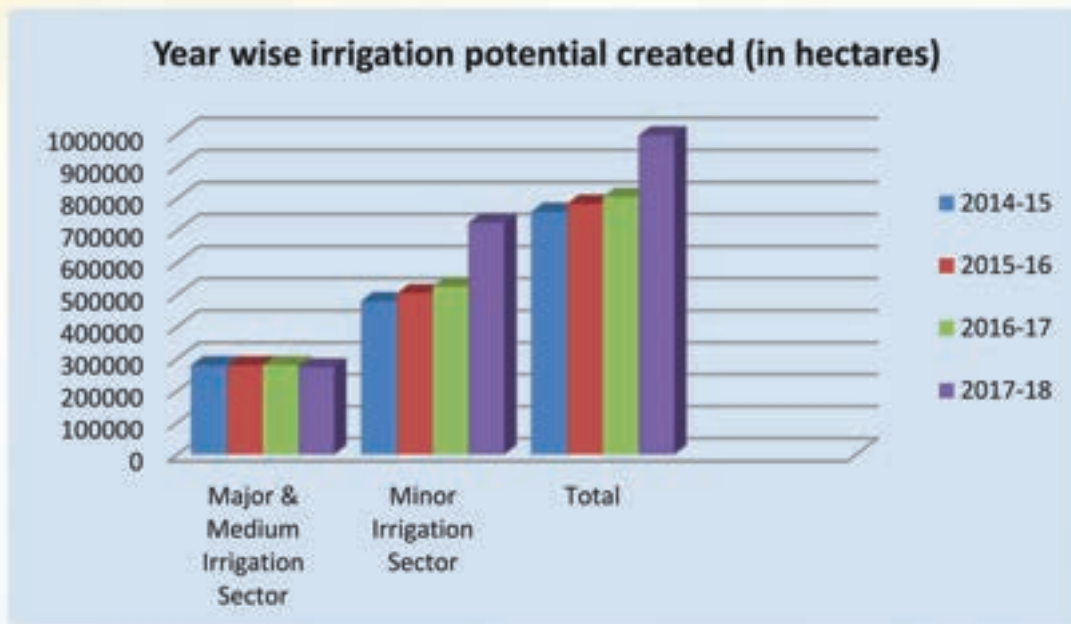
**TABLE-6.1**

IRRIGATION POTENTIAL CREATED UPTO MARCH, 2018			
<i>(In hectares)</i>			
Year	Major & Medium Irrigation Sector	Minor Irrigation Sector	Total
2014-15	278783	478927	757710
2015-16	278783	503862	782645
2016-17	279423	524912	804335
2017-18	272518	723513	996031

Source: Chief Engineer, Irrigation Department, Assam



The year wise irrigation potential created under major & medium and minor is depicted in the following bar diagram.



#### CREATION OF IRRIGATED AREA AND UTILISATION OF POTENTIAL

It is pertinent to mention that since 1996-97 Central assistance was taken from Accelerated Irrigation Benefit Programme (AIBP) in Major/ Medium Irrigation Sector only with the allocation pattern 90:10 (Central Assistance: State Share). Subsequently Since 2000-01 the central assistance under AIBP received in respect of Minor Irrigation Sector also with the same allocation pattern. Assistance from Non-Lapsable Central Pool of Resources (NLCPR), Assam Rural Infrastructure for Agricultural Services Programme (ARIASP) funded by World Bank and subsequently under RIDF from National Bank for Agriculture and Rural Development (NABARD), Command Area Development & Water Management (CADWM), North Eastern Council (NEC) apart from State Plan allocation like TSP, SCSP etc. was also taken.

##### a) Major and Medium Irrigation Sector:

At present there are 3(three) AIBP funded ongoing major/medium irrigation projects (Dhansiri I/P, Borolia I/P and Buridehing I/P) and all are in different stages of progress. Under Assam Bikash Yojana, revival/ improvement work of integrated Irrigation Project on Kolong Basin (Medium) was taken up with the estimated amount of Rs. 5.00 Crore to restore lost potential of 150 hectares.



The State Irrigation Department has planned to complete all the ongoing projects within the 12th Five Year Plan period. In addition, one Major Irrigation Project viz., Puthimari Irrigation Project at an estimated potential of 12280 hectare and 3 medium Irrigation Projects–Burisuti Medium Irrigation Project, Dikhow Medium Irrigation project and Buroi Medium Irrigation Project having potential of 6500 hectares, 6000 hectares and 5000 hectares respectively have been proposed in the 12<sup>th</sup> Five Year Plan with estimate costs of Rs. 1225.09 crore for creating additional potential of 29780 hectares (net Irrigation area) and survey & investigation work will be completed.

#### **b) Minor Irrigation Sector:**

During the year 2016-17, the Irrigation Department under AIBP, received a sanction of 267 nos. of minor irrigation schemes at an estimated cost of Rs.75842.27 lakh to achieve a target of 57772 hectares & for the year out of 267 schemes, 264 schemes have been completed & cleared their liabilities. Under the Non Lapsable Central Pool of Resources (NLCPR) fund, 7nos. of schemes have been taken up during 2016-17 & 2 nos. of schemes have been included during the year 2018-19.

During 2017-18, 2 (two) out of 7(seven) NEC funded Minor Irrigation Schemes have been completed with achieving a potential of 635 hectares. During 2018-19, works of another three new minor irrigation schemes with estimated amount of Rs.282.53 lakh are implemented in the state with a target to achieve irrigation potential of 2157 hectares. Under Scheduled Caste Sub-Plan (SCSP), the Department has taken up works of 255 nos. of minor schemes out of which 213 nos.( 83.5%) have been completed during the year 2017-18 and out of remaining 42 nos. of schemes, 22 nos. have been taken up for completion for the year 2018-19 and accordingly 15 nos. of schemes completed. Remaining 27 nos. of scheme has been planed for achieved to complete during this year. Under the Tribal Sub-Plan (TSP) Schemes the Irrigation Department has taken up works of 108 minor irrigation schemes out of which till March 2018, 93 nos.(86.1%) schemes have been completed.

#### **(c) COMMAND AREA DEVELOPMENT AND WATER MANAGEMENT (CADWM):**

During the year 2017-18, 4 (four) nos. of schemes namely Bordikrai , Pahumara, Maloibari LIS and Dhansiri I/P are running as ongoing schemes under CADWM programme with a target to create a potential of 31124 hectares against the physical target of 48297 hectares which achieved one third of the physical target.



#### (d) IRRIGATION SCHEMES POWERED BY SOLAR ENERGY:

During the year 2018-19 to create irrigation potential generation by the solar power the department have proposed four nos. of schemes taken up and their names of the schemes are GW-Solar DTW scheme at Biswanath district, Balipara Solar Powered DTWS , Construction of Pakhamara DTWS and DTWS with solar system at beheli areas.

In the year 2017-18, the irrigation department introduces a new scheme to combat the erratic power supply situation a pilot Deep Tube Well scheme powered by Solar Energy at Borlah near Hajo has been taken up with a target of 30 Hectares of Irrigation potential. Proposal has been formulated to take up some irrigation schemes powered by solar energy for hassle free operation.

#### (e) PARTICIPATORY IRRIGATION MANAGEMENT (PIM):

Emphasis has been laid on Participatory Irrigation Management and as many as 1581 Water Users' Associations have been formed within the command areas of Irrigation Schemes. It is pertinent to mention that under the Scheme - Pradhan Mantri Krishi Sinchai Yojana (PMKSY) the District Irrigation Plans (DIP) for all the 27 districts of Assam have already been approved and the State Irrigation Plan (SIP) Assam, has also been finalized. It is expected that during the five years from 2016-17 to 2020-21 agriculture in the State will march forward and the irrigation in Assam will gain a new era if the required fund is made available by Govt. of India under PMKSY. A statement showing the district wise activities proposed by Irrigation Department under PMKSY for the five years as per approved District Irrigation Plans is given below in Table 6.2.

Table 6.2

#### DISTRICT WISE ACTIVITIES PROPOSED BY IRRIGATION DEPARTMENT FOR THE FIVE YEARS (FROM 2016-17 TO 2020-21) UNDER PMKSY (As per approved District Irrigation Plan)

Sl. No.	Name of district	No. of Irrigation schemes proposed							Area proposed in Hectare	Proposed cost Rupees in Crores
		FIS	DTW	LIS	STW	RRR	LLP	Total		
1	Chirang	237	40		55			332	21540	2283.50
2	Dima Hasao	38				57		95	9672	194.65
3	Bongaigon	18	230					248	7525	161.36
4	Dhubri	37	1031	277		15		1360	57662	1386.64
5	Karbi Anglong	304	42	99	304	4		753	30442	4606.704
6	Goalpara	69	273	32				374	19029	316.514
7	Cachar	61		43				104	30448	300.274
8	Barpeta	13	143	50				206	45346	437.434
9	Golaghat	16	1884	68	1164			3132	30452	2990.774
10	Kokrajhar	679	32	72				783	37425	1225.024
11	Darrang	95	1195	42				1332	37594	184.43

12	Dhemaji	15	3694	725				4434	27759	2015.29
13	Lakhimpur	27	2625	1920				4572	45260	2065.73
14	Udalguri	245	509			146		900	24920	2876.93
15	Dibrugarh	1	193	75	7(260 pts)			276	31364	583.4900
16	Nagaon	202	1644	976				2822	53807	19.52
17	Sonitpur (Biswanath Block)	88	804	126		85		1103	34590	1668.78
18	Tinsukia	72	1143	243		27		1485	32658	231.02
19	Baksa	1250	63	11				1324	52104	2566.91
20	Kamrup (R )	205	653			102	1524	2484	48249	799.60
21	Morigaon	77	2504	58				2639	31250	550.06
22	Hailakandi	35	277	257		25		594	23250	179.98
23	Kamrup (M)	177	15	253				445	9978	254.78
24	Nalbari	124	497	253				874	27069	643.24
25	Karimganj	65	98	39		13		215	25403	579.67
26	Sivsagar	9	1229	749		27		2014	39409	683.43
27	Jorhat	42	2483	342	872 (3752 pts)			3739	54250	1329.20
Total		4201	23301	6710	2402	501	1524	38639	888455	31134.91



**TABLE- 6.3**  
**FINANCIAL ACHIEVEMENTS OF SOME OF THE CENTRAL SECTOR**  
**AND CENTRALLY SPONSORED SCHEME**

(Rs. In lakh)

Year	Schemes											
	AIBP		AIBP		CADWM		NLCPR		NEC		RMIS	
	Major/Medium		Minor		Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement								
2014-15	10452.50	4043.76	47949.00	18901.45	3960.00	179.23	1345.47	-	1037.77	263.11	176.30	15.40
2015-16	9513.40	5485	64578.54	5211.15	8150.00		1175.00	-	831.52	-	315.00	12.79
2016-17	10478.80	420.38	78216.53	11861.71	7709.41	626.72	1287.32	897.44	529.47	257.47	314.50	41.92
2017-18	89.00	-	18357.75	1408	2326.75	262.91	1148.06	11.39	473.39	229.15	262.40	56.13

Source: Chief Engineer, Irrigation Department, Assam

**TABLE- 6.4**  
**PHYSICAL ACHIEVEMENTS OF SOME OF THE CENTRAL SECTOR**  
**AND CENTRALLY SPONSORED SCHEME**

(Area in Hect.)

Year	Schemes									
	AIBP		AIBP		CADWM		NLCPR		NEC	
	Major/Medium		Minor		Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement						
2014-15	32915	15220	44084	11266	8500	405	250	-	635	333
2015-16	30911	-	91204	11521	23010	0	250	-	635	635
2016-17	30108	-	57772	6910	63514	750	6775	-	-	-
2017-18	30108	-	74263	7455	31224	12142	3270	360	-	-

Source: Chief Engineer, Irrigation Department, Assam

**UTILISATION OF IRRIGATION POTENTIAL:**

Department of Irrigation collects & maintains the data on utilization of irrigation potential by the Govt. Irrigation schemes and there are no provision to collect those in respect of private irrigation executed by Agriculture Department and others agencies.

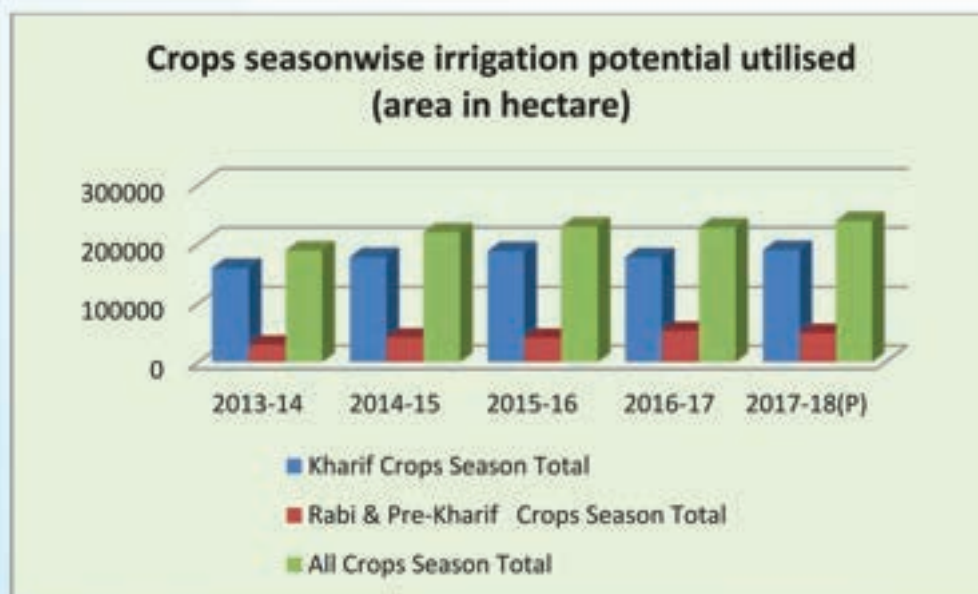
Out of the cumulative Irrigation Potential Created / made available through Government Irrigation Schemes under Irrigation Department the position of utilization of the same during the last few years is shown in the Table- 6.5 .

**TABLE- 6.5**  
**CROP SEASON WISE IRRIGATION POTENTIAL UTILISED**

(FIGURES IN HECTARES)

Year	Crop Season								
	Kharif crops season			Rabi & Pre-Kharif crops season			Total		
	Minor	Major/ Medium	Total	Minor	Major/ Medium	Total	Minor	Major/ Medium	Total
2013-14	99199	60058	159257	25301	4057	29358	124500	64115	188615
2014-15	129734	48142	177876	37549	4153	41702	167283	52295	219578
2015-16	119147	68772	187919	32447	8923	41370	151594	77695	229289
2016-17	60509	116912	177421	17781	35008	52789	147458	80364	227822
2017-18(P)	67450	122294	189744	43569	5658	49227	165863	73108	238971

Source: Chief Engineer, Irrigation Department, Assam





It is clear from the above that the utilisation of Irrigation Potential is not up to the expectation and there is a vast gap between Irrigation Potential Created and Irrigation Potential Utilised. There are many reasons for less utilisation and accordingly the identified drawbacks are-

- i) General wear and tear of the Irrigation Schemes and on the other hand non-availability of fund in proper head of account in the State Budget for their repair in due time leading the created potential to remain un-utilised.
- ii) Natural calamities like flood, storm etc. damaging the created potential as well as the Irrigation Schemes.
- iii) Erratic power supply in respect of the electrically operated Irrigation Schemes (Surface Lift and Ground Water Lift).
- iv) Damage of transformer, H T line and mechanical components at peak hours of requirement of water.
- v) Change of river course in respect of Surface Flow and Surface Lift Irrigation Schemes.
- vi) Damage of canal system.
- vii) Lack of demand from the cultivators for irrigation water.
- viii) Dependence of the cultivators on rain water as they adopt the traditional system of single cropping.
- ix) Stealing of motors/ pumps and other accessories in some areas leading to non-functioning of the Irrigation Schemes.
- x) Imposition of Irrigation Service Charges by Government for realization from the beneficiary cultivators. As the cultivators are economically poor, they are reluctant to pay Irrigation Service Charges and want to get water from Govt. Irrigation Schemes free of cost.
- xi) Reluctance of the cultivators to adopt multiple cropping systems in their crop field where assured irrigation is essential.

#### **AREA IRRIGATED:-**

The table no 6.6 shows the crop season-wise area irrigated during the year 2016-17 and 2017-18 (Provisional) in different districts of Assam from Government source of irrigation.

**TABLE- 6.6**

Name of District	Kharif (in hec.)		Rabi & Pre-kharif (in hec.)		Total (in hec.)	
	2016-17	2017-18(P)	2016-17	2017-18(P)	2016-17	2017-18(P)
Kokrajhar	13069	13890	98	98	13167	13988
Dhubri	45	100	197	286	242	386
Goalpara	1142	1309	460	365	1602	1674
Barpeta	4957	4352	428	271	5385	4623
Morigaon	185	78	620	571	805	649
Nagaon	22689	28423	1457	2296	24146	30719
Sonitpur	13444	7459	116	123	13560	7582
Lakhimpur	375	81	244	34	619	115
Dhemaji	10	59	97	19	107	78
Tinsukia	308	431	51	12	359	443
Dibrugarh	265	760	10	162	275	992
Sivasagar	1289	1362	16	9	1305	1371
Jorhat	139	549	227	376	366	925
Golaghat	499	709	481	967	980	1676
KarbiAnglong	15181	16863	22140	31337	37321	48200
DimaHasao	4115	4853	-	-	4115	4853
Cachar	367	2022	391	1333	758	3355
Karimganj	22	22	113	85	135	107
Hailakandi	172	537	145	130	317	667
Bongaigaon	727	263	731	731	1458	994
Chirang	12054	10058	2821	2821	14875	12879
Kamrup	2664	5957	641	651	3305	6608
Kamrup (M)	913	622	2473	1487	3386	2109
Nalbari	168	320	80	74	248	394
Baksa	9871	15122	1229	661	11100	15783
Darrang	5382	6872	682	2240	6064	9112
Udalguri	61903	66671	16874	4343	78777	71014
<b>Assam</b>	<b>172425</b>	<b>189744</b>	<b>55397</b>	<b>49227</b>	<b>227822</b>	<b>238971</b>

P= Provisional Source : Chief Engineer, Irrigation Department, Assam

From the table-6.6, it is observed that the highest irrigated area was covered in Karbi-Anglong district which was about one-fifth out of total irrigated area of the state during the year 2017-18, followed by Nagaon district (12.85%) and lowest irrigated area was covered 78 hectare in Dhemaji district. During the year 2017-18, total irrigated area in all season was increased by 4.89% over the year 2016-17.



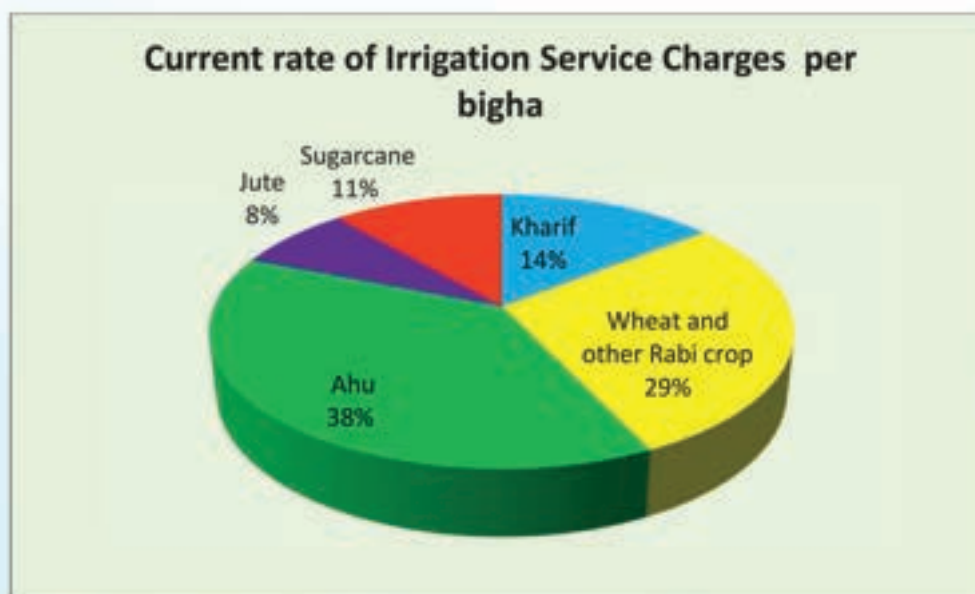
## IMPOSITION OF IRRIGATION SERVICE CHARGES:

Sufficient fund is required for operation and maintenance of Irrigation Schemes and on the other hand adequate fund is not available for the said work. Viewing that the whole operation and maintenance cost of the Irrigation Schemes and at least one percent of the capital cost may be accrued from the beneficiaries the "Irrigation Service Charges" was introduced on adhoc basis in 1993 under the premises of the Assam Irrigation Act, 1983. The rates were subsequently revised in 2000. The current rates of Irrigation Service Charges are shown below in the Table no 6.7.

**Table:6.7**

Crops	Rate per bigha (in Rs)	Rate per hect. (in Rs)
1. Kharif	37.50	281.24
2. Wheat and other Rabi crop	75.00	562.50
4. Ahu	100.00	751.00
5. Jute	20.00	150.00
6. Sugarcane	29.60	222.00

The current rates of Irrigation Service Charges are presented in the following pie chart.



The charges collected from the beneficiaries are deposited fully to the public exchequer. But the position of realization of Irrigation Service Charges is not at all satisfactory as the beneficiaries want to get water from government Irrigation Schemes free of cost.

The key statistics of realization of Irrigation Service Charges during the last four years are shown in Table-6.8 as follows:-

**Table-6.8**

Year	Irrigation Service Charges realized (in Rupees)
2014-2015	7,21,493
2015-2016	7,67,388
2016-2017	10,93,967
2017-2018	11,83,819

The position of realization of Irrigation Service Charges is not at all satisfactory in spite of Endeavour of the field officers/ staff of Irrigation Department. In order to improve the scenario the following steps have been taken.

- ❖ The Assam Irrigation Act, 1983 and the Assam Irrigation Rules, 1997 were enacted making provision for imposition/ collection of the water tax.
- ❖ The Assam Irrigation Water Users' Act, 2004 has been enacted.
- ❖ District-wise Farmers' Motivation Trainings are conducted from time to time to encourage them to go for more multiple cropping with the help of irrigation water so that they become more sound economically and do not feel the pinch to pay the Irrigation Service Charges.
- ❖ A total of 1407 Water Users' Associations (WUAs) have been formed up to 2015-16 out of which 794 WUAs have already been registered with the Director of Registration of Firms & Societies, Assam, under the Society Registration Act, 1860.
- ❖ District-wise farmers' trainings were conducted to adopt scientific agriculture in the Irrigation Command.
- ❖ Out of State exposure visit to Tamil Nadu, Andhra Pradesh and Jharkhand have been organized for officers of Irrigation Department, NGOs and WUA farmers.

It is worth mentioning that there is a huge gap between Irrigation Potential Created (IPC) and Irrigation Potential Utilized (IPU). The Department has been endeavoring to reduce the gap so that the very purpose of creation of irrigation potential is fulfilled.

In order to minimize the gap between irrigation potential created and irrigation potential utilised in the State as well as to encourage utilisation of irrigation facilities created by the state government departments, the following steps have been initiated:



- 1) Emphasis has been given on Participatory Irrigation Management (PIM) where the farmers can take part in the system and process of irrigation as well as its maintenance. Keeping this in view, the Department encouraged the farmers to form Water Users' Associations within the Command Areas of Irrigation schemes. A total of 1375 Water Users' Associations (WUA) have been formed up to 2014-15 out of which 769 WUAs have already been registered under the Society Registration Act, 1860.
- 2) State Level Co-ordination Committee as well as District Level Co-ordination Committees has been formed with the officials of Irrigation Department, Agriculture Department and other concerned Departments/ organizations to motivate farmers for optimum use of water.
- 3) Out of State exposure visit in Tamil Nadu, Andhra Pradesh and Jharkhand have been organized for some Irrigation officials, NGOs and WUA farmers.
- 4) Farmers' Motivation Trainings are conducted in every district to encourage them to go for more and more multiple cropping using assured irrigation provided by Govt. Irrigation Schemes.
- 5) The Assam Irrigation Act, 1983 and The Assam Irrigation Rules, 1997 have been enacted providing safeguard to the Irrigation Schemes and the cultivators as well.
- 6) The Assam Irrigation Water Users' Act, 2012 has been enacted with a view to safeguarding the right of the beneficiary cultivators of the Govt. Irrigation Schemes wherein provision for active participation of the cultivators has been made. Preparation of necessary Rules under the Act are under process.

\*\*\*\*\*



## FLOOD AND FLOOD CONTROL MEASURES

### FLOODS AND THE DAMAGES

The State of Assam comprises of two River valleys, namely the Brahmaputra and the Barak. Total geographical area of Assam is 78,438 sq. km of which area of districts located in Brahmaputra valley is 56,194 sq. km and Barak valley districts comprise of 6922 sq km. The area of two hill districts of the state is 15,322 sq. km. The narrow and elongated valley of Brahmaputra River (80-100 km wide and about 725 km long) is surrounded by the Himalayas on the North and East, receives water flow of a huge catchment area. The catchment area of the Brahmaputra River in Tibet is 2, 93,000 sq. km, in India and Bhutan is 2,40,000 sq. km and in Bangladesh is 47,000 sq. km. Average discharge of Brahmaputra River is very high at 20,000 m<sup>3</sup>/sec. The maximum discharge of Brahmaputra at Pandu near Guwahati was recorded as 72,779 m<sup>3</sup>/sec on 23.08.62 and minimum discharge was recorded as 1757 m<sup>3</sup>/sec on 22.02.63. The catchment area of Barak River is 41,157 sq. km and surrounded by the geographical areas of Manipur, Mizoram, Meghalaya, Nagaland, Assam and Tripura states. The rain fed tributaries of Barak River, namely Katakhal, Jiri, Chiri, Modhura, Longai, Sonai, Ruksni and Singla cause severe floods.

The National Flood Commission of Ministry of Water Resources, Government of India had estimated area vulnerable to floods in Assam at 31.60 lakh hectares against 335.16 lakh hectares for entire India<sup>1</sup>. Assam thus accounts for 9.4 per cent of total flood prone area of the country, and about 40% area of the state is flood prone. To the Flood Hazard Atlas of Assam, ISRO, 2011, 40% to 50% areas of the districts of Dhemaji, Jorhat, Nalbari and Nagaon and Sivasagar; 50% to 60% of Lakhimpur; 60% to 70% of Barpeta and 70% to 80% areas of Darrang and Marigaon districts are flood prone. In addition to floods, the state has lost approximately 4.27 lakh hectares of its land area (7.4 percent of the entire land area of the state) because of river bank erosion of the Brahmaputra and its tributaries, and channel migration since 1950. The average annual rate of erosion is thus 8000 ha (information as revealed by the Water Resource Department, Assam). River erosion has wiped out more than 2500 villages affecting nearly 500,000 people<sup>2</sup>. To the assessment of Revenue Department, Government of Assam, during 2001 to 2006 altogether 119,203 households in 2839 villages have lost 4827 ha of land because of river bank erosion.

There are possibilities and ways out to adapt to the conditions of recurrent floods, but with river bank erosion people loss their land resources forever. It has put challenge on the State for resettlement of the displaced people. An estimated 3.67 lakh people have been displaced due to floods and erosions in Assam<sup>3</sup>. The challenge to resettle the number is now evident in the state which is now critically land constrained.

The Water Resources Department, Government of Assam, India has identified twenty five vulnerable and severe river bank erosion sites. The major erosion affected areas are Rohmorla in Dibrugarh district (eroded areas 8435 hectare), Palasbari in Kamrup district (16,037 hectare) and Matmora in Lakhimpur district (3640 hectare)<sup>4</sup>. The other significant river bank erosion affected areas of the state of recent times are Mukalmua, Majuli island, South Salmara, Kareng Chapori, Matmora, Moirabari, Lahorighat, Bhuragaon, Bohori and Baghbor.

Flood in the year 2012 had breached embankments in 53 places of the state. In the year 2017 there were cases of 26 breaches of embankment in the state. The recurrence of flood and erosion continued to be the major obstacle towards development of the largely agrarian economy of the state. Flood also takes away the nutrient rich top soil, even after the flood waters recede and it leaves behind many problems relating to health hazards and reconstruction activities to put the livelihood systems back.

Weibe (2006)<sup>5</sup> had estimated flood damage in the state annually at Rs. 6,521/ per hectare during the period 1999-2005. Government of Assam (2009)<sup>6</sup> estimated the annual flood damage at



Rs. 14,590/ per hectare in the Dhemaji district, one of the most flood prone districts in the state. It is also evident that annual growth rate of production of autumn paddy, rapeseed and mustard, sugarcane, jute, winter paddy and potato had declined significantly in the state, though the summer paddy showed a high growth rate at 9.25 percent<sup>7</sup>, largely because of adaptation process of the farmers. The state faces three to five waves of flood during the year and the peaks return with massive destructions from year to year. In the post-independence period floods of the years 1954, 1962, 1972, 1977, 1984, 1988, 1998, 2002, 2004, 2008, 2012 and 2014 have been the most destructive<sup>8</sup>.

Central Water Commission has estimated average annual damage costs of floods in the state during the period 1953 to 2016 at Rs.123.4 crores taking into account of damage to crops, houses and public utilities. The damage estimate for the year 2012 was highest at Rs. 3200/ crores. In addition to the damages done to the agriculture field and houses, the loss in terms of death of people (yearly average is 47 and 497 being the highest number of deaths in 2004 floods) and livestock are immense. Moreover, several hundreds of crores of Rupees have to be put into reconstruction activities for the damages caused to roads, bridges, schools, communication systems and many other public and private infrastructure and property. All put serious pressure on the state exchequer and adverse effects on the development of the state.

### **POLICIES AND MEASURES FOR MANAGEMENT OF FLOODS**

Following the unprecedented floods of 1954, the Union Minister for Planning, Irrigation and Power, placed before Parliament, on 3 September 1954, two statements namely, 'Floods in India - Problems and Remedies' and 'The Floods in the country'. The objective, set unequivocally in the policy statements, was to rid the country of the menace of floods by containing and managing floods.

Flood protection and flood management measures undertaken by the State Bodies falls in three categories – structural or engineering measures, non-structural measures and catchment area treatments<sup>9</sup>. The structural measures have several components – artificially created reservoirs across river, improvement and regulation of a natural depression, diversion of peak flow to other rivers or basins, embankments and channel and drainage improvement works etc. All approaches however are not suitable in all geo-environmental settings. Non-structural measures to mitigate the flood damages are primarily based on - facilitating timely evacuation of the people and shifting the movable properties to safe places. Timely intervention in such contexts largely depends on an appropriate warning system and anticipation on flood havoc and inundations. Considering the common perception that the rising intensity of flood and river erosion in Assam is direct repercussion of deforestation and construction of dams to tap the immense hydroelectric potential of the rivers in the sub-Himalayan belt of Arunachal Pradesh and Bhutan, the issue of catchment area treatment would take centre stage in flood disaster mitigation.

The High Level Committee on Floods, 1957 and Policy Statement of 1958 had recommended that absolute or permanent immunity from flood damage is not physically attainable by known methods of flood control. Flood plain zoning, flood forecasting and warning, and like measures should, therefore, be given due importance, particularly as these do not require large capital investment. There is also need to consider effects of embankments on the river regimes before approving proposals on embankments. In general, embankments are considered as satisfactory means of flood protection when properly designed, executed and maintained, but a suitable combination of this approach with other approaches such as storage dams, detention basins, etc. is usually more efficient and should be adopted as resources permit. The National Water Policy 2002, on the other hand put emphasis on non-structural measures to mitigate floods induced disasters.

The state of Assam though primarily has been focusing on structural measures to mitigate floods disasters, in recent times the approach is also being complemented by non-structural measures. The Assam Embankment and Drainage Act, 1953 (Assam Act No 1 of 1954) was enacted to provide better provision for construction, removal and upkeep of embankments for the drainage and improvement of land. Flood control activities in Assam started after the announcement of National Flood Policy in 1954. Subsequently, "Outlined plan for flood control in Assam" along with various plans were prepared and the priority areas, which need immediate and urgent attention were identified. In 1954



the length of embankment in the state was 211 km. By 1969 the length of embankments in the state raised to 3161 km; the length further rose to 4176 km in 1980.

Till date, the Water Resources Department, Assam has taken up holistic approach for protection and development of the rural sector as well as for the protection of major townships in both the Brahmaputra and Barak Valleys. Schemes have also been taken up to relieve drainage congestion in the urban areas. The activities of the WRD are -

- Construction of Embankments and Flood walls
- River training and bank protection works
- Anti erosion and town protection works
- River channelization with pro siltation device
- Drainage improvement/ Sluices
- Raised Platform
- Flood forecasting and warning
- Flood plain zoning

### PROGRESS OF FLOOD MANAGEMENT SCHEMES

Till the end of XI plan flood management programme in Assam has restored 3.86 lakh hectares of land and protected 1.0 lakh hectares of new area (largely through embankments). These have benefitted altogether 97.8 lakh populations<sup>10</sup>. During the XI plan altogether Rs. 996 crores was sanctioned for 100 flood management programmes in the state. Till the XII plan the physical achievement of flood management work in Assam comprised of construction of 4474.4 km of embankments, 882 km of drainage channel and protection of 958 villages and towns protection work. Till date, the Water Resource Department, Assam, flood protected area of the state is 16.49 lakh ha out of the 31.5 lakh ha of flood prone area of the state.

Assam at present has a total of 449 embankments covering about 4,486.5 km of river stretch. While the Water Resource Department has identified 950 km of embankments as extremely vulnerable, about 2,390 km stretch of the total length of embankments have been identified as vulnerable.

Table 7.1 presents physical achievement of the Water Resources Department, Assam on various flood management schemes from the beginning of 2<sup>nd</sup> Five Year Plan.

**Table 7.1: Physical achievement of the water resources department upto 12<sup>th</sup> Plan (upto March'18) since 11<sup>th</sup> Plan**

Nature of Work	11 <sup>th</sup> Plan (2007-2012)		12 <sup>th</sup> Plan (2012-2017)		Period since March 2017	
	Achievement during the plan	Total	Achievement during the plan	Total	Achievement upto 31.03.08	Total
Construction of Embankments (Km)	7.97	4473.82	0.6	4474.42	12.02	4486.44
Town Protection & Anti Erosion Works (Nos.)	138	884	74	958	25	983
Construction of Major Sluice (Nos.)	8	94	4	98	2	100
Construction of Minor Sluice (Nos.)	6	545	-	545	-	545
Drainage Channel (Km)	20.77	874.97	7	881.97	-	881.97
Raising & Strengthening of Embankment (Km)	527.76	527.76	280.14	807.89	67.75	875.64

Source: Irrigation Department, Govt. of Assam



At present the Water Resources Department had taken up the following flood management schemes

***Inter Ministerial Committee on Flood Management Programme (IMC-FMP) for the XII Plan***

The meeting of the Inter Ministerial Committee on Flood Management Programme (IMC-FMP) held on 19<sup>th</sup> December, 2013 had recommended 41 schemes for the XII Plan. Estimated costs of the 41 schemes were Rs. 1387 crore planned to benefits 307,231 ha of land and a population of 40.72 lakh. Out of these schemes seven schemes have been completed and rests are in progress.

***Schemes under Rural Infrastructure Development Fund (RIDF) of NABARD***

The NABARD sanctioned 44 schemes under its RIDF with a budget of Rs.282.50 crores during 2015-16 for flood control measures in the state. Till October, 2018, altogether 37 schemes have been completed, and the rests are targeted to be completed by March, 2019. During the year 2017-18, NABARD had sanctioned 48 flood control schemes under RIDF for the state with financial provision of Rs 199.18 crores. Till October 2018, it saw completion of 8 schemes.

***Schemes under North East Council (NEC)***

The NEC had sanctioned 3 Schemes with an amount of Rs. 9.45 crores. In Kokrajhar district two anti-erosion schemes to protect Raimona Village and its adjoining area from river Janali and Ranipur and its adjoining areas from the erosion by river Pekua were taken up with an estimated expenditure of Rs.7.17 crores. These two schemes are to benefit 1500 hectares of agriculture land. In addition an anti erosion scheme at different reaches of both the banks of river Pomra in Baksa District has been completed with a cost of 2.28 crores.

***National Hydrology Project (NHP):***

The National Hydrology Project (NHP) is being implemented under the Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India with a total outlay of Rs.3679.77 Crore for the entire country. This project was approved on 3<sup>rd</sup> June, 2016. NHP is expected to improve and expand hydrology data and information systems, strengthen water resources operation and planning systems and enhance institutional capacity for water resources management. The project will thus strengthen the information base and institutional capacity for evidence-based decision making in water resources planning and operational management at the basin scale across India using the latest technology and tools. NHP will contribute to the GOI Digital India initiative by integrating water resources information across state and central agencies. NHP for the state of Assam is being implemented by the Water Resources Department, Assam. The total budget provisioned for the state for the entire project period of eight years is Rs.47.00 crores. This amount is provisioned across four components of (i) water resources data acquisition system – Rs. 28.2 crores ii) water resource information system –Rs. 2.35 crores, (iii) water resources operation and planning – Rs. 7.05 crores and (iv) institutional capacity building – Rs. 9.40 crores. The work has already started to construct State Data Centre at Baisistha and to establish Real Time Data Acquisition System (RTDAS) for Assam.

***Schemes under the aegis of Asian Development Bank***

Government of Assam has taken up a project on floods and river bank management with the help of Asian Development Bank, which is being implemented in two phases. Two sub-projects under Tranche I has already been completed at Dibrugarh and Palasbari-Gumi area with a total cost of Rs. 319.50 crores. Under Tranche-II, 3 sub-projects at Dibrugarh, Kaziranga and Palasbari-Gumi are initiated with provisioning of Rs.356.09 crores.

The Dibrugarh sub-project area would protect 7128 ha of cropland, excluding the tea estates, from regular flood inundation and damages. The Palashbari and Gumi sub projects shall protect 3200



ha and 26980 ha of croplands respectively. The Kaziranga sub project area would protect 10600 ha of area of all types – cropland, forest, wetland etc<sup>11</sup>.

#### **Scheme under State Plan/ States Own Priority Development Programme (SOPD)**

During the year 2015-16, 2016-17 & 2017-18, the Water Resource Department undertook 80 schemes at a cost of Rs.145.49 crores. Out of these schemes 30 schemes have been completed and the rest are targeted to be completed within March, 2019.

- 1 Scheme for the FY 2015-16 under the State Plan costing Rs. 8.00 Cr.
- 27 Schemes for the FY 2016-17 under the State Plan costing Rs.35.37 Cr.
- 46 Schemes for the FY 2017-18 under SOPD costing Rs. 96.12 Cr.
- 6 Schemes for the FY 2015-16 under SOPD in Majuli costing Rs.20.00 Crs.

#### **Schemes under Chief Minister's Package**

- 8 Schemes under CM Package are taken up in Barak Valley costing Rs. 42 crore. These schemes are to benefit 7900 ha of land and a population of 127,500.
- As part of CM's special packages for Barak Valley, 18 schemes for a costs of Rs.65.79 crores were taken up during the year 2013-14 and 2014-15. 16 schemes have been completed and the rests are in progress and nearing completion.
- Altogether 6 Schemes under CM Package are taken up in Lakhimpur and Dhemaji districts with a budget of Rs. 30.09 crores. These schemes shall benefit 12500 ha of land.
- Three schemes for protection with RCC porcupine in different reaches of river Subansiri and one scheme for protection at Charikoria River for a total cost of Rs.22.96 Crores were taken up in Lakhimpur District of Assam during the year 2014-15. All the schemes have been physically completed.

#### **Brahmaputra Express Highway including Dredging of River Brahmaputra**

The honorable Chief Minister of the state has stressed for an ambitious project of construction of two express highways along the north and south banks of the River Brahmaputra from Sadia to Dhubri. It is expected that the proposed Highways shall contribute to speedier economic development of the state besides protecting the valley from recurring floods. The honorable Union Minister for Water Resources, Government of India has assured full co-operation for this ambitious project. The Water Resources Department, of government of Assam has taken up a preliminary survey on land and morphology of the river. The land survey is to determine the alignment of the proposed highways. The morphological survey consists of reading of 120 of river cross-sections along the course of the River. A consultancy firm, Water and Power Consultancy (WAPCOS) India Ltd. has been entrusted the task to prepare detailed project report regarding this.

#### **Rejuvenation of Kollong River**

The Kollong is an off shoot channel of the Brahmaputra, once was a life line of central Assam contributing to the economic and socio-cultural prosperity of the region. Government of Assam now has taken initiative to rejuvenate the dead river channel and a provision of Rs.10 crores was made in the budget of 2017-18. During 2017-18, eight schemes were taken up for this purpose. For the year 2018-19 the state budget has allocated Rs.15 crores for rejuvenation of the river and altogether 11 schemes are adopted with provisioning of Rs.14.50 crores.



## NON-STRUCTURAL MEASURES OF FLOOD DISASTER MITIGATION

Non-structural measures to mitigate the damages caused by floods are primarily based on - facilitating timely evacuation of the people and shifting the movable properties to safe places. Timely intervention in such contexts largely depends on an appropriate warning system and anticipation on flood havoc and inundations. The goal of such approach is to organise and enhance the existing capacities and coping mechanism of the local communities (Annual Report of Assam State Disaster Management Authority, 2012). The second approach of non-structural measures is flood plain zoning and appropriate land use plan for settlements, agriculture and other economic activities.

The recommendations for the XII plan made by the working group on flood management and region specific issues indicate several forms (including improvement of the existing) of non-structural measures to supplement the existing measures of flood management programmes. One of the recommendations indicates concrete plan for extension of Central Water Commission's (CWC) flood forecasting network. At present the country has 226 flood forecasting stations consisting of 166 level furcating stations for villages and towns and 60 inflow forecasting stations for 60 reservoirs/barrages in the country. In Assam at present there are 29 level furcating stations. The working group recommended extension of inflow forecast services to more dams to cover 80 to 90 percent of the live storage capacity and accordingly identified additional 160 reservoirs. This list of additional reservoir includes Subansiri reservoir (capacity 442 MCM at Full Reservoir Level). To the recommendations of the working group of the XII plan the existing network of CWC was not sufficient to cover adequately the entire country. The working group felt the need based on appropriate contour maps and satellite imagery data for assessment and classification of flood prone areas as severe, moderate, low and occasionally affected. The working group also mentioned the need of flood hazard information and zonation as one of the re-requisite for non-structural flood management<sup>12</sup>. The National Remote Sensing Centre has already prepared floods hazard maps for Assam based on information derived from the satellite data on flood havocs occurred during 1998-2007. The data also has helped to prepare a hazard index and classify the hazard prone districts of the state.

Government of Assam runs a project on flood early warning with the support from the North East Space Application Centre of Department of Space, Government of India since 2009. Information on Flood Early Warning System (FLEWS) of the tributaries contributing to flooding supplement the information of CWC which cover early working only for the major rivers of the state. As the FLEWS projects are location specific and thus help to identify or predict which villages or cluster of villages are likely to be inundated<sup>13</sup>. The FLEWS project initially covered Lakhimpur district of Assam and subsequently extended to 14 districts in the state. As claimed by NESAC the percentage of successful flood alerts has improved from 25 percent in 2009 to 65 percent in 2012. The average lead time of forecast has also improved from 7 hours in 2009 to 14 hours in 2011. The entire system mainly consists of four elements - risks knowledge, monitoring and warning services, disseminations and communications and response capacity. The response capacity can be evaluated on two fronts - the administrations of the state and the people in affected areas of flood.

The floods early warning system adopted in the state is an integrated approach of the stakeholders of Indian Meteorological Department, CWC, North Eastern Electric Power Corporation, NESAC and Brahmaputra Board. The year 2011 show improvement of forecast accuracy went up to 60 percent<sup>14</sup>.



## WAY AHEAD

In floodplains across the world, farmers have been welcoming floods as traditional mechanism to upgrade soil quality because they enable silt deposition and the state of Assam was no exception. Siltation drives the desire of farmers to allow floods into their agriculture fields. Floods, however, are now often perceived as a disaster. The Assam Human Development Report (2014) reveals critical evidences on life expectancy, expected years of schooling and per capita annual income in the flood affected areas (captured and presented by development blocks) of the state. The flood affected areas of the state are laggard in these vital indicators of development.

Impact of floods is now considered as a major impediment of development and persistent poverty in Assam. Floods induced poverty is a widely discussed concern at all levels. Concern is how the adverse effects of floods in the state can be minimized at least considering availability of limited resources with the state. Recurrent floods and devastations now leave little scope to make rooms for new provisioning and restoration of the damages already done.

---

### Notes

<sup>1</sup> Government of India (2011) Report of the Working Group on Flood Management and Region Specific Issues for XII Plan, Planning Commission, New Delhi

<sup>2</sup> Phukan A et al (2012) River Bank Erosion and Restoration in the Brahmaputra River in India, *The Clarion*, 1 (1) 1, 1-7

<sup>3</sup> Global Estimates of People Displaced by Disaster (2015), Internal Displacement Monitoring Centre, Geneva

<sup>4</sup> Water Resource Department (2008) "North Eastern Integrated Flood and River Bank Erosion Management Project: Feasibility Study (PPTA, Phase II)" Unpublished report of Water Resources Department, November

<sup>5</sup> Weibe, H. (2006) 'River Flooding and Erosion in North East India: Exploratory Consideration of Key Issues', *mimeo*, North West Hydraulic Consultants, Alberta, Canada

<sup>6</sup> Government of Assam (2009) Report on damage of flood released by the Dhemaji district administration for the year 2007-08, [dhemaji.nic.in](http://dhemaji.nic.in)- extracted on 25/6/2009

<sup>7</sup> Mandal R (2010) 'Cropping Pattern and Risks Management in the Flood Plain of Assam', *Economic and Political Weekly*, 45 (33): 78-81

<sup>8</sup> Newspaper reportages and State Disaster Management Plans, Assam, ASDMA, Government of Assam

<sup>9</sup> Government of India (2011) Report of the Working Group on Flood Management and Region Specific Issues for XII Plan, Planning Commission, New Delhi

<sup>10</sup> Government of India (2011) Report of the Working Group on Flood Management and Region Specific Issues for XII Plan, Planning Commission, New Delhi

<sup>11</sup> Detailed Projects Report of ADB funded Assam Integrated Flood and Riverbank Erosion Risk Management Investment Programme, Tranche I

<sup>12</sup> Inputs received from the representatives of National Remote Sensing Centre at the working group meeting on Flood Management and Region Specific Issues for the XII plan.

<sup>13</sup> Report on Best Practices- Flood Early Warning System, ASDMA, Government of Assam, 2014

<sup>14</sup> *ibid*



## LIVESTOCK, ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

Animal Husbandry is one of the most potentially important sectors for rapid socio-economic development of the State. Livestock is basically a component of agro-based production system with a marked contribution to its sustainability. Fast growth in this sector is essential not only to achieve higher productivity levels in livestock products but also for income generation of rural households. Livestock in the State is thus highly livelihood oriented and generally owned by small and marginal farmers and landless agricultural labourers.

Assam economy continues to be agrarian as more than 85 percent of the population is living in the rural areas and about 52 percent of the total labour force being engaged in agriculture and allied activities. Animal Husbandry sector has significant impact on employment generation in the State and plays a vital role in income generation of both the rural and semi-urban economy. The Animal Husbandry and Veterinary Department of the State has been implementing various developmental programmes to create gainful employment/income opportunities in the rural areas with the objectives to boost up the socio-economic condition of the rural household and to enhance the volume of livestock and poultry products in the State so as to reduce the gap between demand and supply of these products.

### LIVESTOCK POPULATION AS PER 19<sup>TH</sup> LIVESTOCK CENSUS

According to the 19th Livestock Census 2012, the cattle population constitutes the largest group with more than ten million of which 99 lakh are indigenous/non-descript and only 3.9 lakh are crossbred. The population of buffalo, sheep, goat and pig are shown at Table-1.

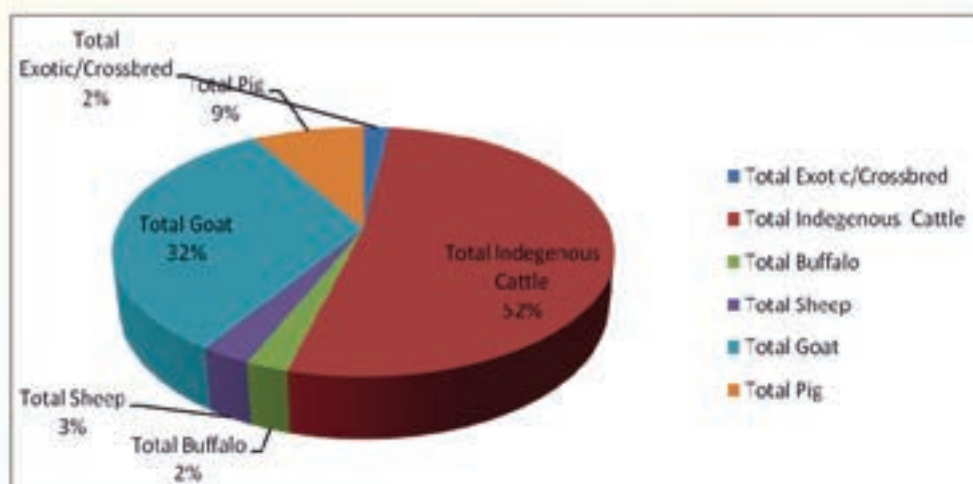
**TABLE 1: LIVESTOCK AND POULTRY POPULATION IN ASSAM AS PER LIVESTOCK CENSUS, 2012**

<i>Sl No.</i>	<i>Livestock species</i>	<i>Number</i>
1	Total cattle	10307604
	a.Crossbreed cattle	395902
	b.Indigenous Cattle	9911702
2	Buffaloes	435265
3	Sheep	518067
4	Goat	6169193
5	Horses & Ponies	14153
6	Pigs	1636022
7	Dogs	527521
8	Elephant	445
9	Rabbit	6170
10	Fowls	18718209
11	Ducks	7300402

Source: Directorate of AH & Veterinary Department, Assam

Figure-1 shows the share of cattle, buffalo, sheep, goat and pig in total livestock population in Assam in 2012.

Figure-1. SHARE OF DIFFERENT SPECIES TO LIVESTOCK POPULATION IN ASSAM



Source: Directorate of AH & Veterinary Department, Assam

Figure-1 above shows that among the total livestock, Cattle (both crossbred & indigenous) contributes highest with 54.02% followed by Goat 32.33%, Pigs 8.57%, Sheep 2.71% and Buffalo 2.28% besides a marginal contribution from other livestock species such as Mules, Donkeys, Horses and Ponies. The variation in number of animals for different species of livestock in comparison to the previous census is very marginal. The Cattle population is observed to have remained the same with 2007 census sharing 54% to the total Livestock population.

Table-2 shows the milk, meat and egg production in the state during 2009-10 to 2017-18 in the state.

**TABLE 2. GROWTH TREND OF LIVE STOCK PRODUCTS IN ASSAM**

Item	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18(P)
<b>Milk</b> (million litres)	830	832	838	845	857	873	888	904	925
<b>Egg</b> (million nos)	468	470	471	471	472	473	474	477	495
<b>Meat</b> (‘000 tonnes)	32.0	34.0	34.19	36.63	38.34	42.0	45	47	48.43

Source: Directorate of AH & Veterinary Department, Assam.



## **SOME IMPORTANT ACTIVITIES**

### **A. BREED UP-GRADATION THROUGH ARTIFICIAL INSEMINATION PROGRAMME**

Despite having sizeable number of cattle, milk production in the State is not upto the satisfactory level as the major percentage of the cattle population in the State is of none-descript type. Implementation of World Bank funded scheme as well as the Scheme under National Project on Cattle-Buffalo Breeding [NPCBB] although augmented milk production to a considerable extent, achievements in case of production of cross breed animal was not very satisfactory. At present, breed up-gradation programme is being carried out under AACP, RKVY and NPCBB Schemes.

The Animal Husbandry & Veterinary Department has proposed to develop the diary sector to enhance milk production.

### **B. PIG DEVELOPMENT SCHEMES UNDERTAKEN BY THE A. H. & VETERINARY DEPARTMENT, ASSAM:**

Assam is characterized by a high proportion of tribal people for whom pig keeping is an integral part in their traditional way of life. The present population scenario of pig in Assam comprises of doom breed, recognized varieties like HD-K75, Rani and Asha, non-descript local varieties and genetically graded pigs. However, the large majority of the pig population in the state belongs to the non-descript type. The schemes in operation under pig development are as follows:

- National Livestock Mission (NLM)
- Rashtriya Krishi Vikash Yojana (RKVY)
- Assam Agri-Business and Rural Transformation Project (APART)
- Different pig development schemes under state plan, TSP, SCCP etc.

### **C. GOVT. PIG FARMS:**

At present, the A. H. & Veterinary Department, Assam has the 19 numbers of Govt. Pig Farms at-Base Pig Breeding Farm, Khanapara, Guwahati; Pig Breeding Farm cum Demonstration Farm, Sonapur; Nucleus Pig Breeding Centre, Morigaon; Base Pig Breeding Farm, Titabor; Pig Breeding Farm at -Khanikar, Dibrugarh; Kokrajhar; Diphu; Dongkamokam; Sontila; Umrangsu; Sonaigaon; Halowating, Sivasagar; Gargaon, Sivasagar; Khelowa, Sivasagar; Gogamukh, Dhemaji;Kuchdhowa, Goalpara; Nucleus Pig Breeding Centre, Nagaon; Pig Farm, Deyangmukh, Dima Hasao.

### **D. PIG DEVELOPMENT SCHEME FOR FARMERS:**

Like other livestock husbandry, piggery serves as a means of generating additional income to rural families (principally the tribal communities) and requires little capital. The Animal Husbandry and Veterinary Department, Assam has been emphasizing on scientific pig rearing among the traditional rearers through introduction of exotic Boar, improved housing and management and health care which will require transfer of farmer-centric technologies and anthro-po-centric approach to the farmers.

During last few years, the A. H. & Veterinary Department, Assam has taken some farmer-centric approach for economic upliftment and social safeguard of rural poor particularly the women folk of the society. For coming years too, more farmer-centric approach has been proposed under NLM, RKVY, APART, State Plan, IPDPNE, NEC, Chief Minister Samagra Gramya Unnayan Yojana (CMSGUY), RIDF etc. where besides giving emphasis on production and productivity, measures would be taken for marketing the produce by properly organizing the pig rearers into organized and registered body.



### E. Assam Agribusiness & Rural Transformation Project (APART):

Cluster approach will be initiated for pig development in the state under APART to include a total of 59390 families covering them in 56 clusters, which will be grouped under 30 FPOs.

### F. FODDER DEVELOPMENT

As feed and fodder are the most important contributing factors for the growth of livestock sector, proper steps need to be taken in this direction. It is estimated that 60-70 percent of the total cost of livestock production is incurred on feed and fodder. Due to heavy rainfall in the region and for availability of wild grass during monsoon; farmers are not habituated with fodder cultivation. The Department has planned to popularize fodder cultivation at institutional waste land, strengthen and revamp the Regional Feed Testing Laboratory, located at Khanapara and establish Silage making unit in each Government Livestock Farm for demonstration purpose.

**TABLE 3. ACTIVITIES ON FODDER PRODUCTION IN ASSAM**

Year	Name of Central Schemes under fodder	Name of State Schemes under fodder	Units (Nos.)	Whether Beneficiary oriented	Amount involved (Rs.)	Central Scheme	State Share	Remarks
2017-18	Fodder seed distribution Scheme under RKVY		12,000		12 Lakhs	50%	50%	Fund not received. No AA was received
2017-18	Fodder seed distribution to individual farmers under National Livestock Mission		825	Yes	33 (L)	30 (L)	3 (L)	Fund not Received. No AA was received
2018-19	Fodder seed distribution under RKVY		17,000	Yes	206 Lakhs	50%	50%	
2018-19		Fodder seed distribution under SOPD	2900	yes	5 Lakhs		100%	



**SOURCE : DIRECTORATE OF A.H. & VETY.,ASSAMG. COORDINATED CATTLE BREEDING PROJECT (S.E)**

**G. COORDINATED CATTLE BREEDING PROJECT (S.E)**

The non-descript cattle and buffalo which constitute a major proportion of bovine genetic resources naturally deserved priority for their genetic improvement. C.C.B.P (S.E) phase-I was launched under NPCBB with the objective to produce milk cattle in large numbers for enhancement of milk production to be achieved through infusion of exotic inheritance. Besides milk production efforts will be made to conserve their indigenous germ plasm to retain disease resistance and draught ability to meet local requirement.

**TABLE 4. SHOWING THE ACTIVITIES UNDER CCBP, 2017-18**

Physical Target	Physical Achievement	Financial Achievement (Phase-1)			
		Year	Fund released (In lakh)	Expenditure (In lakh)	Balance ( In Lakh)
Collection of Semen	Started	2007-08 2008-09	10.00		
Distribution of Semen in FPR Area	Started	2009-10 2010-11	Nil	7,82,350.00 From 2007 to 2012	2,17,650.00 This amount was deposited in the ALDA accounts
No. of A.I. done	1,750 Nos. 750 Nos.	2011-12 2012-13			
No. of Calf born	65 Nos. 42 Nos.	2013-14 2014-15 2015-16 2016-17 2017-18 2018-19			

Source : Directorate of A.H. & Vety., Assam

The Operation of current bank account has been closed as per Govt. instruction. Hence the expenditure cannot be incurred during the financial year 2018-19.

**H. Physical and financial achievements of NERDDL & Animal Health Centre for the year 2017-18, Plan of action for 2018-19**

The NERDDL had provided referral and consultancy services to the state diagnostic laboratories of the region for economically important livestock and poultry diseases, as and when needed. Visit to state laboratories of Meghalaya, Manipur, Arunachal Pradesh and Mizoram had been undertaken and necessary interactions made for their improvement of working condition.

**TABLE 5. LABORATORY TESTS PERFORMED BY NERDDL DURING 2017-18**

Name of the section	No. of samples processed	Diseases diagnosed
Parasitology	593	Faciola, Ascariasis, Amphistomiasis, Strongyloidiasis, Bunostomiasis, Theileria spp., Trypanosoma spp., Babesia spp., Ehrlichia spp., Coccidia spp, Balantidium coli
Bacteriology	380	Haemorrhagic Septicaemia, Anthrax, E.coli, strpto & Staphylococcosis (excluding 12343 Brucella sera surveillance samples)
Virology	4069	PPR, FMD, New Castle disease Samples of HPAI
Biochemistry & Toxicology	18	Aflatoxicosis, OP poisoning and supporting tests for other diseases
Pathology	126	BSE negative status, Rabies, Lipoma, Liver degeneration, Bronchopneumonia and supporting diagnostic aids for other diseases

Source : Directorate of A.H. & Vety. Department, Assam

### **I. Modernization of laboratories**

Modernization works of NERDDL laboratories had been completed and upgradation of Bacteriology and Virology labs upto BSL-II standards were also made. One PCR based lab has been established at NERDDL and commissioned.

### **J. Preparedness for control and containment of Avian Influenza**

1. NERDDL is presently testing the bird flu swab samples by applying RTPCR technology and serum samples with ELISA technique
2. Training of veterinary workforce in the field of collection, preservation and dispatch of samples is being conducted.
3. Constant and continued surveillance of bird flu is going on with active collection of representative samples.
4. States are requested to prepare and update new surveillance plan for their states.

### **K. ESTIMATION OF MILK, MEAT AND EGG PRODUCTION**

The total milk production of the state for the year 2017-18 was estimated at 925.77 Million Ltrs against 904.23 Million liters of the previous year. It reveals that the growth of



milk production has increased by 2.4% over the previous year. Further during the year Indigenous/ Non descript cattle milk is observed to have constituted 54% of the total milk production of the State while the contribution of Crossbreed cattle milk is around 31.34% and thus the cattle milk together contributes 85% to the total milk. Buffalo and Goat milk contributes 13% and 2% respectively to the total milk production.

**TABLE 6. ESTIMATED MILK PRODUCTION OF ASSAM** (in million ltrs)

Period	Cattle		Overall	Buffalo	Goat	Grand Total
	Crossbreed Cattle	Indigenous Cattle				
Annual 2017-18	290.90	494.73	785.62	121.86	18.29	925.77(P)
Annual 2016-17	276.84	488.03	764.87	120.56	18.80	904.23
% Change over 2016-17	5%	1.4%	2.72%	1%	(-)3%	2.4%

Source : The report on Integrated Sample Survey for Estimation of milk, egg and meat, 2016-17 and 2017-18

The per capita availability of milk for the year 2016-17 is estimated on the basis of total milk production and total population of the state during the period. As such the per capita availability is estimated to be 77 ml per day during the year 2017-18.

**TABLE 7. ESTIMATED EGG PRODUCTION OF ASSAM**

Period	Fowl ( in lakh nos. )	Duck ( in lakh nos. )	Total Egg ( in lakh no)
Annual 2017-18	3742.08 (P)	1208.69(P)	4950.75(p)
Annual 2016-17	3588.69	1182.04	4740.73
% Change over 2015-	4%	2.2%	

Source : The report on Integrated Sample Survey for Estimation of milk, egg and meat, 2016-17 and 2017-18

The total number of egg in the State for the year 2017-18 was estimated at 4950.75 lakh numbers against 4770.73 lakh numbers in 2016-17 showing a growth of about 3.77% over the year 2016-17.

**TABLE 8. MEAT PRODUCTION ( 000 TONNES)**

ITEM	2016-17	2017-18 (P)
Cattle	3.20	3.32
Buffalo	0.11	0.14
Goat	14.60	14.55
Sheep	1.53	1.65
Pig	18.73	19.38
Poultry	8.69	9.39
Total Meat	46.86	48.43

Source : The report on Integrated Sample Survey for Estimation of milk, egg and meat, 2016-17 and 2017-18

The total meat production during 2017-18 is estimated at 48.43 thousand tones against 46.86 thousand tones of the previous year of 2016-17 . It reveals that meat production in the state is estimated to have increased by 3.35 percent over the previous production of 2016-17.

#### L. INSTITUTE OF VETERINARY BIOLOGICALS [ IVB ]

INSTITUTE OF VETERINARY BIOLOGICALS (IVB) IS A VACCINE PRODUCTION CENTRE OF A.H. & VETY.DEPTT. GOVT.OF ASSAM. IVB Plays major role in Livestock Health coverage for growth and development of A.H & Veterinary sector.The institution associates with mainly medicinal preparation made from living organisms and their products widely used in the field of immunization and disease diagnosis of animals and birds. These immunizing agents may be classified as vaccine, immunoglobulin, antiserum, antitoxin or antigen, which play a vital role in immune-prophylaxis and diagnosis of diseases.

**TABLE 9. SHOWING VACCINE PRODUCTION (Target and achievement)**

PHYSICAL	Target 2015-16	Achievem ent 2015-16	Target 2016- 17	Achievem ent 206-17	Target 2017-18	Achievem ent 2017-18
I) No. of vaccination (disease-wise in lakhs)						
i) PPR	02.00	00.15	02.00	0.00	1.80	0.14
ii) FMD	20.00	05.85	50.00	0.01	0.45	0.38
iii) HS	20.00	11.59	15.00	01.58	10.00	0.83
iv) BQ	3.00	00.27	05.00	01.29	5.00	0.90
v) Anthrax	3.00	00.47	03.00	0.71	3.00	0.38
vi) SF	5.00	00.21	03.00	0.00	3.00	0.93
vii) DP	10.00	00.66	05.00	0.58	5.00	0.68
viii) R <sub>2</sub> B	20.00	00.65	05.00	0.71	5.00	0.76
ix) F <sub>1</sub>	10.00	00.29	05.00	0.20	5.00	0.28



x) H.S.-B.Q combine	05.00	02.07	05.00	0.35	5.00	0.32
xi) ETV	02.00	00.00	02.00	0.00	2.00	0.20
xii) GP				2.00		0.10
TOTAL	100.00	22.21	100.00	5.43		
II) No. of Biological - production units upgraded / Strengthened (a) Addition / Alternation – Position / Progress made so far, Purchase of freeze dryer stage of purchase, Fermenter technology – stage of purchase / installation.	1	Machineri es & Equipmen ts etc not completed	1	Machineri es & Equipmen ts etc not completed	1	Machineri es & Equipmen ts etc not completed
III) No. of Disease Diagnostic Labs upgraded / strengthened	3	-	3	-	3	-
IV)No. of training organized for veterinarians Exposure visit	200	-	200	-	200	-
V) Nos of training for Para- Veterinarians	200	-	200	-	200	-
VI)No. of Workshops / Seminars organized	2	-	2	-	2	-
VII)No. of awareness camps organized at Block / Village level	438	-	438	-	438	-
VII)No. of awareness camps organized at District / state level	26	-	26	-	26	-

#### M. ASSAM PROJECT ON AGRI-BUSINESS AND RURAL TRANSFORMATION(APART), (A WORLD BANK FUNDED PROJECT)

**Project Development Objective (PDO) :** "To add value and improve resilience of selected agriculture value chains, focusing on smallholder farmers and agro-entrepreneurs in targeted districts of Assam". The project would achieve the PDO by:

- Promoting investments in agri-enterprises, reducing the business and transaction costs, facilitating access to finance for agribusiness entrepreneurs, and, where appropriate, push for process, regulatory and/or policy change;



- Supporting the development of a modern supply chain; improved information communication technologies (ICT) based farm information and intelligence services, and alternative marketing channels; and Improving producer's access to knowledge, technologies and infrastructure so that they are able to respond to market opportunities and climate variability.
- **Project Beneficiaries** : Farmers, farmer producer organizations, and entrepreneurs especially in the MSME segment in the targeted districts.
- Key Performance Indicators (KPIs):
  - ❖ Number of beneficiaries with improved resilience
  - ❖ Number of new agri-enterprises established
  - ❖ Number of jobs created by targeted agri-enterprises, including for women (percent)
  - ❖ Increase in value of marketed output at the farmer level
  - ❖ Direct project beneficiaries (number) with the percentage of female.
- **APART Districts:** 1. Kokrajhar, 2. Goalpara, 3. Dhubri, 4. Barpeta, 5. Nalbari, 6. Kamrup, 7. Nagaon, 8. Morigaon, 9. Karbi Anglong, 10. Cachar, 11. Darrang, 12. Sonitpur, 13. Lakhimpur, 14. Golaghat, 15. Jorhat, 16. Sivsagar.

The project broadly focuses on two components:

1. **PORK VALUE CHAIN (PVC)** :To be implemented by AHVD
2. **MILK VALUE CHAIN (MVC)** Interventions by AHVD in the Cross Cutting areas under Formal Dairy Sector(by West Assam Milk Union Limited (WAMUL) and Informal Dairy Sector by Dairy Development Department (DDD)

**Financial outlay of the Project:**Pork Value Chain : Project Cost = Rs.6893.72 lakh , No. of Districts : 13 Investments under this sub-component will cover: Production, aggregation, processing, Value Addition & Marketing, Food Safety & Public Health Issues in piggery sector covering 56 Blocks/Clusters under 13 Districts of the State.

#### **N. RashtriyaKrishiVikasYojana (RKVY)**

The majority of the land in Assam is owned by small and marginal farmers, who generally practice subsistence agriculture. Assam's economy is fundamentally based on agriculture. Over 70 percent of the State's population relies on agriculture as farmers, agricultural laborers, or both for their livelihood. A majority of State population, almost 85 per cent lives in rural areas where the mainstay of livelihoods is agriculture. The farmers are often constrained by low level of capital formation coupled with very low accessibility and availability of credit facilities. The level of farm mechanization, fertilizer usage and irrigation in the State is also very low, which prevents the farmers from increasing their agricultural productivity as well as improving their cropping intensity. Although, the State has managed to become self-sufficient in rice production, there is still a significant



shortfall in the production of other cash crops like sugarcane, wheat, pulses, oilseeds etc. Keeping in mind the above constraints of agriculture and allied sectors growth in Assam as well as in other States of India, the National Development Council has launched the flagship agricultural development plan "Rashtriya Krishi VikasYojana in the year 2007-08 affirming its commitment to achieve 4% annual growth in the agriculture and allied sectors. However, the plan was introduced in the State of Assam during the year 2008-09. The annual growth rate for Assam had been fixed at minimum of 2% during 11<sup>th</sup> Five year Plan. Since inception of the programme in the State, various development projects have been implemented in each district of the State to raise the level of productivity in agriculture and allied sectors.

The primary target area for Agricultural sector development through RKVY had been identified as Agriculture, Horticulture, Animal Husbandry, Research, Fishery and Dairy. Apart from these, other related sectors were also considered from time to time for RKVY Programme on the basis of C-DAP (Comprehensive District Agriculture Plan) and SAP (State Agriculture Plan). To achieve the projected target growth, State has given complete flexibility and choice in selecting interventions. RKVY was initiated in 2007 as an umbrella scheme for ensuring holistic development of agriculture and allied sectors with a funding pattern of 90:10 between Centre and States of N.E. India.

One of the important components under this project was implemented by Animal Husbandry Dept. during FY 2008- 2019. It was found that there has been an unprecedented contribution of RKVY in the development of animal husbandry sector of the economy. The growth of this sector has increased steadily in spite of various constraints faced by the farmers during the implementation period.

**TABLE 10. PHYSICAL AND FINANCIAL PROGRESS OF RKVY 2016-17**

#	Components	Physical		Financial		Remarks
		Target	Achievement	Target	Achievement	
1	Construction of new Sub-Centre	16 Unit	Completed	238.40	238.40	
2	Foot and Mouth Disease - Control Programme (FMD - CP)	1 Unit	Completed	531.11	531.11	
3	Administrative Cost	L/S	Completed	1.90	1.90	
<b>Total</b>				<b>769.51</b>	<b>769.51</b>	

Rs. in Lakh



## O. DAIRY DEVELOPMENT

The Government of Assam created a separate Directorate of Dairy Development bifurcating it from the Animal Husbandry and Veterinary Department with the basic objective to develop dairy industry in Assam.

The primary focus areas of Dairy Development, Assam are:

- Procurement, processing and distribution of milk aiming at economic upliftment of rural milk producers and help urban consumers to get quality milk at a reasonable price.
- Developing adequate infrastructure to ensure procurement and processing of milk produced in the State.
- Organizing milk producers for efficient procurement, processing and marketing
- Awareness among milk producers, traders and consumers regarding clean milk production and consumption.
- To modernize the supply of inputs like A.I., Feed, Fodder, Animal Health coverage and Training etc. to the Dairy farmers in the milk shed areas linked with Milk Supply Schemes and Milk Plants.
- To help the villagers in marketing their produce by setting up of suitable transport and marketing organization.

**TABLE 11-TRENDS OF MILK PRODUCTION IN ASSAM AND INDIA**

*(In'000 Tonne)*

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Assam	796	800	815	829	843	858
All India	127904	132431	13766	146314	155500	165400

**Source-** Directorate of Animal Husbandry and Veterinary, Assam and Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, GOI

## SCHEMES IMPLEMENTED BY DAIRY DEVELOPMENT DEPARTMENT

### Rashtriya Krishi Vikash Yojana

RKVY is a flagship scheme under CSS was implemented by Dairy Department, Assam since 2013-14.. Under the State Plan schemes, 20 Dairy Cooperative Societies (DCS) in four Districts were organised and 13 nos. of SHG units of Commercial Dairy Farm at Dhemaji District under CM's Special package were established during 2016-17. Dairy Development Assam is implementing only World Bank aided project, APART which has commenced its operation from the financial year 2018-19. The Dairy Development



Department, Assam has also implemented Milk Village scheme under SCSP for 2017-18 and for 2018-19 the scheme is proposed and the same is under progress. k

**Some Key Achievements of the Department are as follows-**

- Operationalise 13 nos. of commercial Dairy Farms in Dhemaji District under CM's Special Package.
- Organisation of 40 nos. of Dairy Cooperative Societies in 4 Districts of Assam.
- Training to Dairy Officers and NGOs for "Assam Cooperative Act, 2007".
- A "Comprehensive study of the Dairy sector of Assam" was conducted by International Livestock Research Institute (ILRI), Nairobi, Kenya.
- Establishment of Milk Processing plant at Jorhat and Bongaigaon.
- Initiative to improve the hygiene and quality of milk produced and marketed by informal Milk Vendors in Guwahati city.
- Establishment of cluster Milk village with women folk for women empowerment.
- Integrated support services for creation of Milk Surplus district Barpeta.
- 800 nos. of beneficiaries are covered by organising Dairy Cooperative Societies in the state and providing support inputs to progressive Dairy Cooperative Societies for enhancement of Milk production as per demand supply matrix.
- Powers of Registrar Cooperative Societies to Director of Dairy Development Department.

## FISHERY

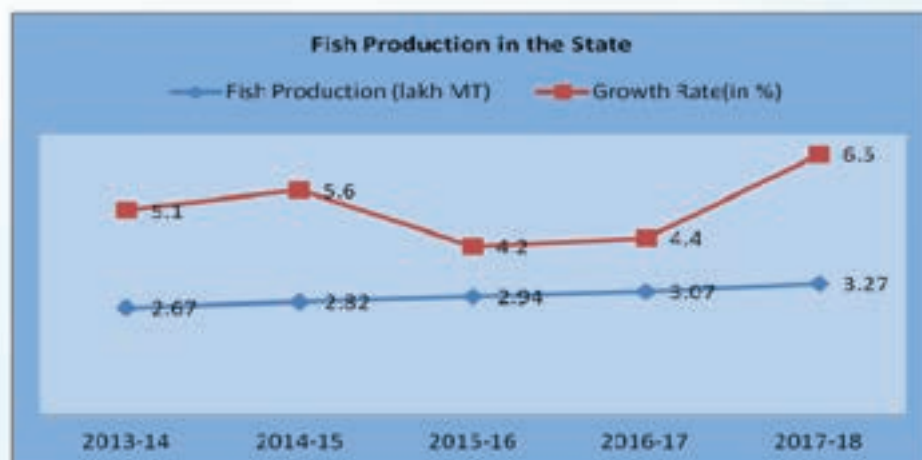
Fishery is an important sector of state economy contributing significantly towards rural employment throughout the State. The income generation through fish production and related activities are directly aiding socio economic development of the State. Assam is endowed with vast natural aquatic resources. The State possesses 4,33,727.1 hectares of suitable area for inland water fish production.

More than 90% of total population of the state consumes fish. The state is also very rich in ichthyofaunal diversity with 216 fish species. Of these fish species 131 are having high value as food fish while 180 are considered to be as ornamental. Among the ornamental fish species 50 are having overseas ornamental values.

For development of the sector, thrust has been given by both Central as well as State Government and accordingly State Fisheries Department has been implementing a number of development schemes and programs for sustainable development of the sector. Fish Production in the state has reached a level of 3.27 lakh MT during 2017-18. However the estimated nutritional requirement is 3.48 lakh MT for the State leaving a gap of 0.21 lakh MT.

The Department has imported 11357 M.T. of Fish to meet requirement of demand for consumption. The per capita availability of fish is estimated at 0.52 kg per annum in 2017-18 as against 0.72 kg estimated during 2016-17.

Due to different development initiatives taken by the Government the Fish production have been achieving a momentum in production since last few years.



The fish production in the State increased to 3.27 lakh MT in 2017-18 the registered growth rate during 2016-17 to 2017-18 is also substantiate at 6.51 per cent.



## Relevance of the Fishery Sector in the State Economy

Considering its role in employment, nutrition and livelihood security of the State the fishery sector has been identified as one of the Ratnas among the selected Navaratnas under the 'Chief Minister's Samagra Gramya Unnayan Yojana (CMSGUY)'.

Due to constant effort of the State as well as Central Government the growing interest of the farming community during the last few years, the fishery sector in the state has reached to a significant position in the state economy. Recently, fish farming has been adopted by many rural youth and entrepreneurs as a commercial activity.

The contribution of fisheries and aquaculture to the State's Gross Domestic Product (GDP) is Rs. 610714 lakh (2.40%) in 2016-17 (Quick Estimates) at current prices registering a growth of 6.9 percent over previous year.

For overall growth of the sector and for achieving the success of the State Fishery Department's slogan of "Grow More Fish" the Department is working with the following objectives:

- ✓ to increase fish and quality fish seed production in the state with optimum utilization of resources
- ✓ implementation of Fishery related schemes of the Government of Assam and Government of India,
- ✓ to identify and promote research and studies on fisheries and fishery related areas so that benefit can be disseminated to the grass root level users,
- ✓ to collect, compile, analyze and make available adequate/ relevant statistical and other information for proper planning to promote fish farming and related industries /activities,
- ✓ to prepare/ support in preparation of project reports and proposals related to fisheries and fishery related industries,
- ✓ to provide extension services to fish farmers/ fishermen and fishery entrepreneurs.

## Present Status of Development and Management of Resources

Although the resource potential for fish production is high, scientific fish farming and management is being practiced on a small scale. Culture based capture fisheries' enhancement programme has been undertaken in some of the beels and low-lying areas which has resulted in increasing the productivity to a considerable extent.

Riverine fisheries are being exploited with little conservation effort and no specific intervention. The revenue fisheries, i.e. rivers and beels are at present are under Assam Fisheries Development Corporation Ltd; Fisheries Administrative Departments, Government of Assam; Deputy Commissioners and Sub-Divisional Officers (Civil) and Panchayats through leasing out to individual/ Co-operative societies.

**Table: 9.1 Fishery Resources, 2017-18**

<b>Sl.</b>	<b>Resources</b>	<b>Number</b>	<b>Water Spread Area (km/ ha)</b>
1	<i>River Fisheries</i>	<i>Main River: 2 Tributaries: 53</i>	<i>4820 (km)(167094.54ha)</i>
2	<i>Beels /Ox-bow lakes</i>	<i>Registered: 430 Unregistered: 767</i>	<i>60215 (ha) 40600 (ha)</i>
3	<i>Forest Fisheries</i>	<i>239</i>	<i>4835.10 (ha)</i>



4	<i>Derelict water bodies/swamps/low-lying</i>	5524	86204(ha)
5	<i>Reservoir fisheries</i>	1	1713 (ha)
6	<i>Ponds and Tank</i>	416240	73065.08(ha)

Source : Department of Fisheries, Assam

#### Major Infrastructure of Fishery Sector:

##### Eco-Hatcheries & other Infrastructures:

- (a) Departmental : 21 nos.  
 (b) Private : 500 nos.  
 (c) Mini bandh : 9 nos. (Departmental)

##### Departmental Farm

- (a) Handed over to FFDA : 68 nos.  
 (b) Retained with the Department : 33 nos.

**Total Farm : 101 nos.**

- Fish Feed Mill (Pvt.) : 13 nos.  
 Fisheries Training Centre : 9 nos.

**Table: 9.2 Fish & Fish Seed Production for last five years**

Year	Fish Production (lakh MT)	Fish Seed Production (Million nos. – fry/ fingerling)
2013-14	2.67	4546 (fry)
2014-15	2.82	4584 (fry)
2015-16	2.94	5678 (fry)
2016-17	3.07	6758 (fry)
2017-18	3.27	8000 (fry), 3921 (fingerling)

Source : Department of Fisheries, Assam

During 2017-18, Nagaon was the highest fish producing district of the State with 40647 M.T. fish contributing 12.4% to the total fish produced in the State and production of fish seed was highest in Barpeta district that is around 53% of the total fish seed produced in the State as reported by the Department.

During 2017-18 Government financial assistance of Rs. 601.96 Lakh was provided to 1013 nos. of Private Fisheries. In the previous year, assistance amount was Rs. 1279.71 lakh and nos. of benefitted Private Fisheries was 2131.

One of the significant developments has been witnessed in the production and export of ornamental fish under initiation of Private Sector in the State since last few years back. The numbers of ornamental fish exported in 2017-18 was around 3.0 lakh.

During the last three years the allocation and expenditures for development of fishery sector, component wise, is given in the table below.



**Table: 9.3 Financial Allocation and Expenditure During the last three years  
(2015-16 to 2017-18)**

*Rs in Lakh*

Sl. No	Category	Allocation			Expenditure		
		2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
1	General Areas (including State Share of CSS & RIDF)	4921.39	1860.44	1260.69	1302.47	741.60	766.48
2	SCSP	583.00	200.00	100	-	146.40	88.00
3	TSP	110.00	0.00	-	-	0.00	-
4	Central Share for CS & CSS	77.16	1702.61	9341.74	-	1702.61	1182.84
<b>Total</b>		<b>5691.55</b>	<b>3763.05</b>	<b>10702.43</b>	<b>1302.47</b>	<b>2590.61</b>	<b>2037.33</b>

Source : Department of Fisheries, Assam.

**Brief description of the development schemes / programmes implemented by the fishery department in the last three years are :**

### **1. Fish & Fish Seed Farming:**

This is one of the major schemes implemented by the Department for enhancement of fish and fish seed production along with other related activities and infrastructure development. Various programmes have been taken up under this scheme for fish and fish seed production. The following beneficiary oriented programme has been implemented under the scheme 'Fish and Fish Seed Farming'.

#### **a) Construction of New Pond – General and SCSP**

Under this programme selected beneficiaries are assisted for construction of new ponds for undertaking scientific fish culture where management is vested with concerned Community/ SHG/ Group.

#### **b) Construction of New Pond through Women SHG: Assistance To Women SHGs For Production of Value Added Fish Products**

##### **Objective:**

- Develop Entrepreneurship in fisheries post harvest activities
- Women empowerment
- Promotion of value added fish products

### **2. Construction of Hygienic Fish Markets:**

For proper marketing of fish, Department of Fisheries, Assam has taken up construction of Hygienic Fish Markets.



### **3. Rural Infrastructure Development Fund (RIDF):**

Department of Fisheries, Assam has been implementing different fishery related infrastructure development programmes under NABARD instituted Rural Infrastructure Development Fund (RIDF), contributing towards agriculture growth, rural connectivity and other social sector development. Under this programme beel fisheries development and upgradation of Departmental Fish Farm has been initiated.

Under RIDF, Fishery Projects for construction of New Individual Ponds of unit area 0.14 ha covering 10,000 numbers of ponds have been initiated.

#### **Centrally Sponsored Schemes**

##### **1. Blue Revolution:**

Under the Blue Revolution project preparation, monitoring and evaluation etc are done for the following activities:

- a. Construction of new pond (Govt. and private).
- b. Renovation of existing pond.
- c. Establishment of hatchery and fish feed mill.
- d. Supply of inputs.

Under Blue Revolution & Integrated Development & Management of Fisheries, component like construction of Hatcheries (15 nos.), Fish Feed Mill (1 no.), Wetland Development (40 ha) for fingerling production etc. are covered.

#### **II . National Welfare Fund for Fishermen Insurance**

Under this component, fisher folk licensed, identified or registered with the State Government could be insured for Rs. 1.00 lakh against death or permanent disability and Rs. 0.50 lakh for partial disability. The insurance coverage will be for a period of 12 months and a policy would be taken out by FISHCOPFED in respect of all the States. Numbers of fisherman insured in 2017-18 was 157325.

#### **III. Rastriya Krishi Vikash Yojana (RKVY):**

RKVY, a flagship programme of Government of India introduced in the State during 2008-09 was also implemented during last three years of the 12<sup>th</sup> five year plan period. It provides 50% subsidy support to the fish farmers against the schematic cost. Zila Parishads recommend the list of beneficiaries under RKVY. The major schemes implementing under RKVY are development of existing pond, low-lying areas converted to community tank, construction of new ponds and creation of nursery & rearing tanks.

#### **IV. Schemes under National Fisheries Development Board (NFDB):**

The activities related to NFDB are to work towards achieving blue revolution by utilizing the untapped potential of the State fisheries sector. These includes the development of capture fisheries, culture fisheries, processing & marketing of fish and overall growth of fisheries sector with the application of modern tools including biotechnology.

##### **Components of Assistance under NFDB:**

- (i) Construction of new Ponds and Tanks.
- (ii) Renovation of existing Ponds and Tanks.
- (iii) One time First-year inputs for fish/prawn culture.
- (iv) Establishment of freshwater fish seed hatcheries.



- (v) Construction of fish seed rearing farms.
- (vi) Renovation/ up-gradation of existing fish seed hatcheries/ farms.

### **Schemes /Programmes proposed for the year 2017-18:**

Besides continuing the schemes of the earlier years of the 12<sup>th</sup> five year plan like Aquaculture Development FFDA, Fishery Extension Service, Schemes under RIDF etc. under state plan, National Welfare Fund for Fishermen, Strengthening Database and GIS under Centrally Sponsored Scheme and Central Sector Schemes respectively, new schemes in the name of "Matsya Jagaran" under "Fish and Fish Seed Farming-" (General area) and "Blue Revolution-Integrated Development and Management of Fishes" under centrally sponsored scheme have been introduced in the last year of the 12<sup>th</sup> Five year Plan. Under Matsya Jagaran there was provision of engagement of fishery extension worker as "Matsya Mitra" in the Village level. Overall, more than 228 ha of new pond have been created under this Matsya Jagaran for General area and Blue Revolution.

During the year 2017-18, major schemes/ programmes proposed under State Own Priority Development (SOPD):

- 1) Proposal for Construction of 63 ha. (453 nos.) of New Individual Ponds under the scheme "Fish & Fish Seed Farming" in the name of "Matsya Jagaran".
- 2) Honorarium to 75 Matsya Mitras as support extension worker and Capacity Building of Women Entrepreneurs for production of value added fish products under the scheme "Fishery Extension Service".
- 3) During current year, process for construction of 1811.33 ha of new ponds in the form of individual ponds and village community tanks (as a part of Matsya Jagaran- Ghare Ghare Pukhuri Ghare Ghare Maach') has already been initiated under RIDF scheme of NABARD.

### **Some other Developmental Schemes initiated for Fishery Sectors are as follows:**

- During current year, process for construction of 1811.33 ha of new ponds in the form of individual ponds and village community tanks (as a part of Matsya Jagaran- Ghare Ghare Pukhuri Ghare Ghare Maach') has already been initiated under RIDF scheme of NABARD.
- Around 8000 beneficiaries have already been selected.
- Similarly, process has already been initiated for selection of beneficiaries under different schemes of Central Sector Scheme-the Blue Revolution for the year 2017-18.
- The schemes include creation of 90 ha of fish fingerling production areas, construction of 22 fish seed hatcheries, introduction of 4 Recirculatory Aquaculture Systems, construction of 50 fishermen houses.
- During 2018-19, fish farmers are being supported with input and material supply for enhancing fish production covering more than 150 ha.
- Additionally, more than 20 ha of new area shall be developed for fish production.
- Establishment of 'Gene Bank for Indigenous Fish (GBIF)' a 5-year project is under process for scientific conservation of Indigenous Fishes to be implemented through College of Fisheries, Raha.



- Process has also been initiated for construction of few fish retail outlets and development of Gopinath Bordoloi Tank in the Guwahati City as an aqua-tourism spot.
- Under Chief Minister Samagra Gramya Unnayan Yojana (CMSGUY) for development of individual and community fisheries during 2018-19 targeted 10,000 beneficiaries selected to impart training under RIDF-XXIII Scheme "Ghare Pukhuri Ghare Ghare Maach"

It is expected that successful implementation of the aforesaid development schemes would lead to achieving self-sufficiency in fish production in the state and will bring a desirable change in uplifting the socio-economic status of the fish farmer and stake holders of the State.

### **JICA's assistance towards fisheries development in Assam**

Fishery Department had submitted one externally aided project entitled "Assam Fisheries Development and Livelihood Project" in the month of Nov, 2017 to the Ministry of DoNER, Government of India. The project is proposed to be financed by the Japan International Cooperation Agency (JICA) for three years (From the year 2017 to 2020) with total allocation of Rs. 3391.50 Cr. The basic goal of the project is to make the State self sufficient in table fish production by 2021-22 and thereby increase fish intake by the people of the State, to ensure supply of cheapest source of protein to them as well as create more additional employment in rural areas through fisheries.

### **Project Outputs from the point of view of production**

- Enhanced fish production from 1200kg/ha/year to 3000kg/ha/year.
- Creation of 2,00,000 ponds with average size of 0.14 ha backyard ponds covering total pond area of 28000 ha.
- Creation of 10000 village community tanks @ 1.0 ha to be managed by local community/ SHGs consisting of 15-25 Local youths.
- Creation of additional pond areas of 38000 ha.
- Production of additional 114 thousand tons fish @ 3 ton/ha.
- At current trend fish requirement 360 thousand tons fish will be required in 2019-20. However, at current trend of fish production 347 thousand tons fish will be produced in 2019-20. So there will be a deficit of  $360-347=13$  thousand tons fish in 2019-20 at current rate of fish requirement and production. But after completion of the JICA project there will be a surplus production of fish i.e.  $114-13=101$  thousand tons.
- Considering the price of fish @ Rs. 150/kg for surplus 101 thousand tons fish there will be a profit of Rs. 1515 crores.

### **Project Outputs from the point of view of employment generation**

- From the village community ponds (10,000 nos.) total employment generation =  $10,000 \times 20 = 2,00,000$  (taking 20 unemployed youth per SHG/local community group).
- From farmers individual ponds ( $100 \times 2000 = 2,00,000$  nos.), employment generation is =  $2,00,000 \times 2 = 4,00,000$  (taking 2 employable persons per family).
- Total employment generation from the project will be at least 6 lakhs.



## FORESTRY

Assam is worldwide known for its flora and fauna diversity. Forestry, in Assam is a major and significant sector of the state economy. As per the constitutional provision the forestry has come in the concurrent list and the Forest Department of Assam has its authority to maintain the forest, its produce along with the all-round development of wild life. The issue of environment protection, conservation of natural resources, flora and fauna especially herbs and shrubs of medicinal importance have gain tremendous significance from commercial as well as conservation view point because of their extensive use as natural products. The contribution of medicinal plants to state economy has tremendous potential. The State Forest Department has initiated many programs to promote commercial exploitation and conservation of bio resources. The Government of India enacted Schedule Tribe and other forest dwellers (Recognition of forest rights) act 2005, for recognition of rights of schedule tribes and other forest dwellers living in forest areas from centuries against whom social justice was not made. The Government of Assam also started recognition of forest rights of such communities since adoption of rules made under this act.

Forests of Assam have rich bio-diversity-floral and faunal. It has a wide range of forests viz Evergreen, Semi-evergreen, Mixed deciduous, Moistsal forest, Dry sal forest, Riverine forest, Moist savannah, Dry Savannah and Miscellaneous type of forests. As per the policy adopted by Government of India, for proper environmental and ecological security, the country should have 33% offorest cover in tropical zone, 60% of forest cover in Himalayan & peninsular region and 20% of forest cover in the Great Plains.

### **RECORDED FOREST AREA:**

The recorded forest area in Assam is 26,832 square km. which is 34% of the total geographical area of Assam and 3.21% of country's total forest area. Out of total recorded forest area, reserved forest area constitutes 17,864 square km. which is 66.58 % and Unclassed State forest constitutes 8,968 square km. which is 33.42 % to the total forest area. As per State of Forest Report (ISFR) 2017, the total forest and tree cover in India has increased over 8,021 square km. (about 80.20 million hector) which is one percent increase as compared to the area 2015. Assam has also shown increase in forest and tree cover as per assessment made in 2017 over its previous figure of 2015 marginally.



## FOREST COVER:

The total forest and tree cover in the country spreads across 80, 2088 square km. which is 24.39 % of the geographical area of the country. According to State of Forest report 2017 by forest survey of India (FSI) Dehradun, the forest cover of Assam has increased by 567 square km. compared to the forest cover as assessed in 2015. Some more details about forest and tree cover statistics about the state of Assam as per 2007 State of Forest report are furnished below:

### Statistics of forest and tree cover in Assam

- Total Forest cover area: 27,673 square km.
- Area of tree cover: 1,564 sq.km.
- Forest Cover to total geographical area: 35.28%.
- Assam share of country's total forest cover: 3.2%
- Reserve Forest area to geographical area: 22.77%.
- Per capita Forest and tree cover: 0.094 hector.
- Extent of water bodies within Forest cover: 354 square km.
- Area under Very Dense Forest Cover: 1444 sq.km.
- Area under Moderately Dense Forest Cover: 11404 sq.km.
- Area under Open Forest: 14825 sq.km.
- Total Forest Cover: 27673 square km.
- Forest cover to Geographical area of state: 35.28%

The State has witnessed significant change in composition of its forest cover during last few assessments made on biennial basis. For the sake of comparison the area under different forest cover type assessed during 2013, 2015 and 2017 are presented in the following table.

**TABLE -10.1: TRENDS IN THE FOREST COVER IN ASSAM**

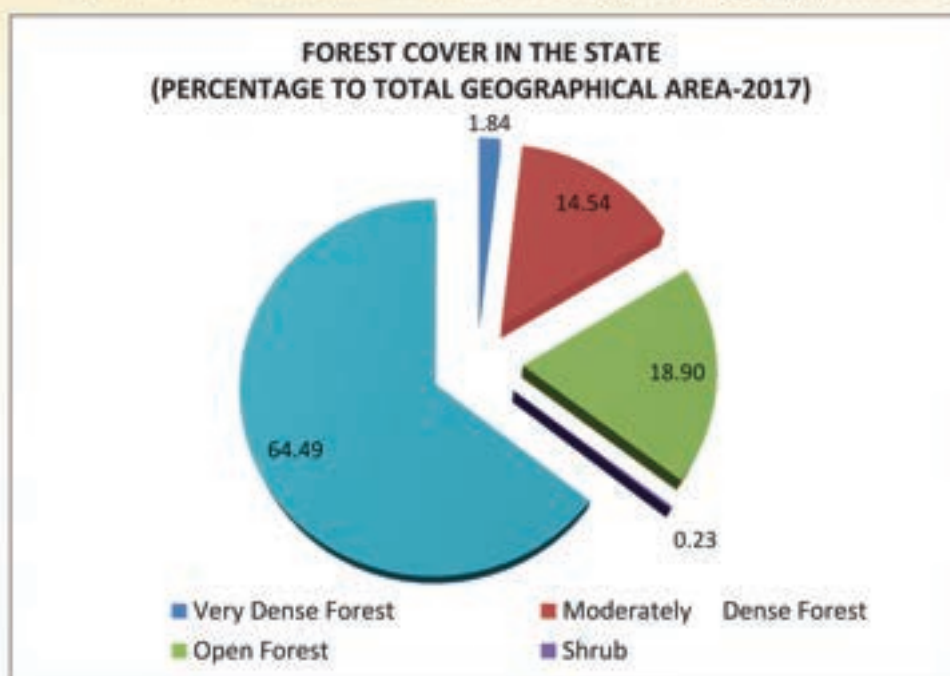
(Area in square km.)

Item	Very Dense Forest	Moderately Dense Forest	Open Forest	Shrub	Non Forest	Geographical Area
As per Assessment in 2013	1,444 (1.84)	11,345 (14.46)	14,882 (18.97)	182 (0.23)	50,585 (64.50)	78,438 (100.00)
As per Assessment in 2015	1,441 (1.84)	11,268 (14.37)	14,914 (19.01)	384 (0.49)	50,431 (64.29)	78,438 (100.00)
As per Assessment in 2017	1,444 (1.84)	11,404 (14.54)	14,825 (18.90)	182 (0.23)	50,593 (64.49)	78,438 (100.00)

*Note: Figures in brackets indicate percentages to the total geographical area.  
Source: India State of Forest Reports, 2013, 2015 and 2017*



Figure 10.1: Forest cover in Assam (Percentage to total geographical area)



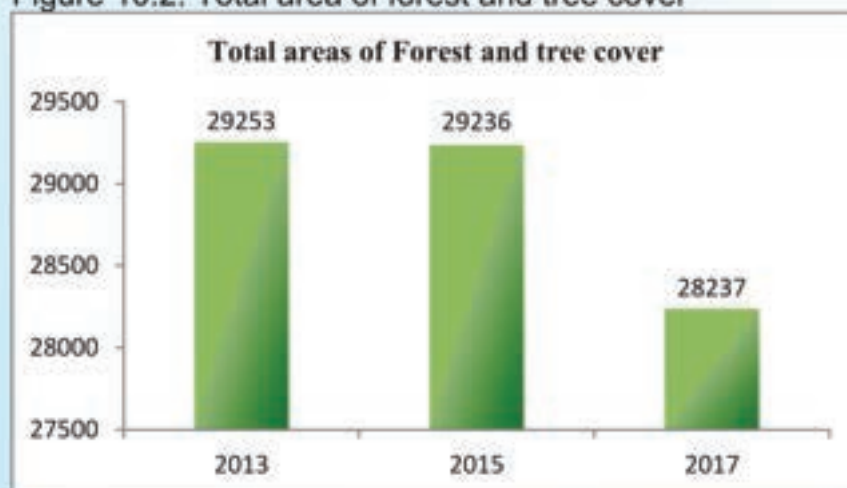
The state has also witnessed significant changes in tree cover outside the forest areas. The following table 10.2 gives the forest cover and tree cover as assessed during last three assessments made by forest survey of India.

**TABLE-10.2: FOREST AND TREE COVER IN ASSAM**

Items	Units	2013	2015	2017
Area of Forest Cover	Sq. km.	27671	27623	27673
Area of Tree cover	Sq. km.	1582	1613	1564
Total area of Forest and tree cover	Sq. km.	29253	29236	28237
Forest and tree cover to the Total Geographical area of the state	%	37.29	37.27	36.67

Source: India State Forest Report 2013, 2015, and 2017.

Figure 10.2: Total area of forest and tree cover





## BAMBOO RESOURCES IN THE FOREST:

Assam is rich in bamboo resources and most of its forest are richly stocked with bamboo and cane of various species. Bamboo is a raw materials of great versatility and forms an integral part of the lifestyle and economy of Assam. The North east region of India has the highest concentration of bamboo, accounting for 60% of the total bamboo resources of the country, as a whole. The sectoral allocation for the year 2018-19 for promotion of bamboo sector in the state has been Rs. 500 lakh.

## STATE FOREST PROFILE:

The Sal tree forests, found in the state have luxuriant growth due to abundant rainfall and look green all year round. According to the forest profile of the state as reported by state forest department, the reserved forest area is 13,517 sq.km of which the encroached forest area is 3,730 sqkm. The reserved forest area constitutes about 17% and the total forest area excluding unclassed forest constitutes about 22% of the total geographical area of the state. However the scenario within the notified area in the state, depicts a gloomy picture in terms of degradation as noticed during the last 20 years, due to presence of various biotic factors encroachment of forest lands and the practice of shifting cultivation. As a result, considerable rich biodiversity has been lost.

The state forest department has identified the thrust areas and initiated actions as following:

1. Preservation of the existing bio diversities.
2. Arresting the trend of existing degradation and reverting to the process of reforestation and extension of the forestry with multiple stake holders.
3. Preservation and development of the existing protected area network and their expansion in suitable areas.
4. Development activities and research in forestry and wildlife.
5. Bridging the gaps in infrastructural and logistical fronts.

## FOREST ROADS:

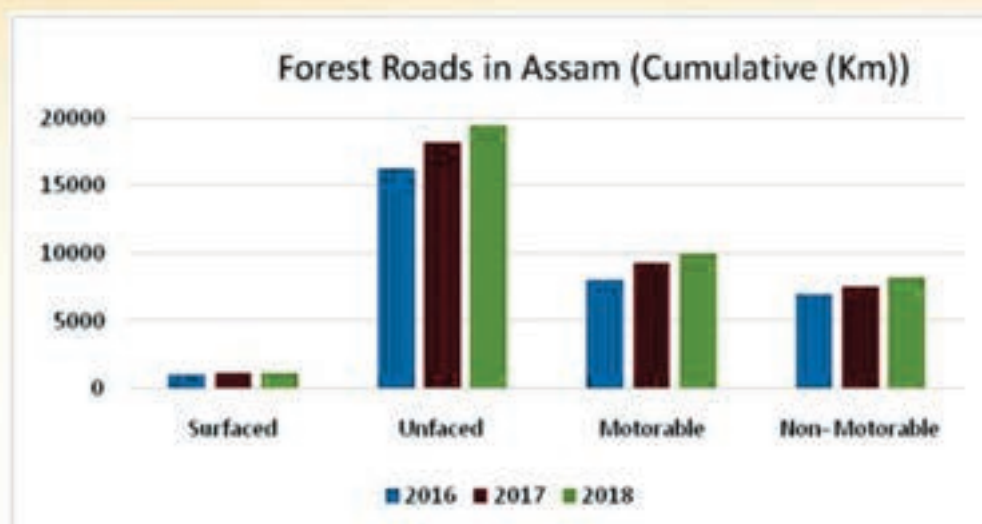
Forest is a vital sector of the state. The state forest department has been entrusted the maintenance and management of forest, forest product and wildlife in the state. For the purpose of patrolling inside the forest area of Assam, to harvest the forest produces, for both improvement, development and creation of infrastructure the existence of proper roads are very essential. Accordingly, the state forest department has given special thrust to development of forest roads. The government of Assam recently proposed to build elevated road with viaducts on stretches of NH 37. The NH 37 acts as a boundary to the Kaziranga Tiger Reserve, also famous for one horned Indian rhino. The forest department of Assam has given special emphasis on this matter, and proposed to improve 92.25 km forest roads with 8 nos. of culverts during the year 2017-18. Statistics of forest roads in Assam can be shown below:

**TABLE-10.3: FOREST ROADS IN ASSAM (CUMULATIVE):**

Category of Roads	Surfaced	Unfaced	Motorable	Non-Motorable
2013	640.635	10672.647	6235.357	4437.29
2014	723.435	12729.627	7628.177	5101.45
2015	-	-	-	-
2016	1077.953	16229.357	7972.050	6938.570
2017	1122.403	18187.632	9310.375	7558.52
2018	1180.218	19459.197	9946.08	8194.38

Source: Office of the Principal Chief Conservator of Forest Force, Assam





### OUT TURN OF FOREST PRODUCE & REVENUE:

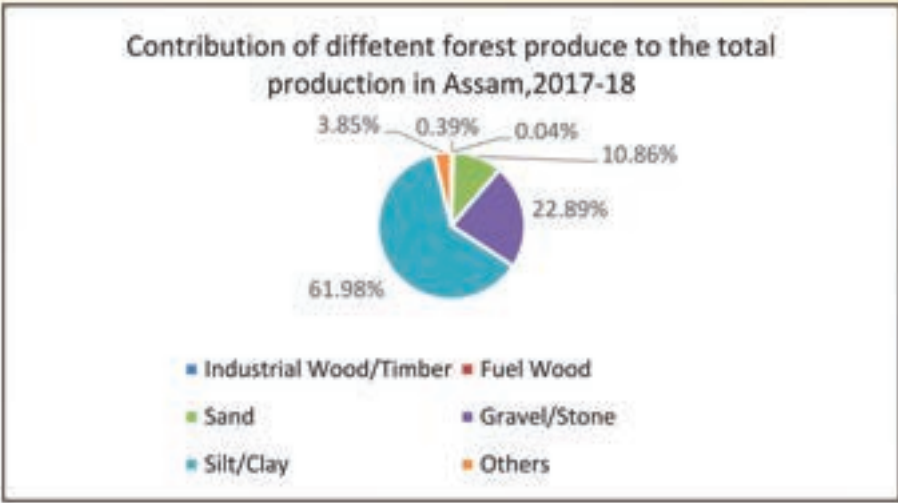
Forest provide numerous natural resources for the industries but they are not seen as the source of revenue because of the conservation strategy of the state. The forest are treated as the source of livelihood of the common populace. The forest in the state are being harvested observing the principle of sustainability and following the prescription as laid down in working plan. The major forest produce in the state includes industrial wood or timber namely Teak, Shisam, Sal, Chir, Kait, Hollong, Makai etc. and other products like pulp, match wood, round wood and fuel wood, minor forest products including bamboo. But these days the major source of forest revenue is sand, gravel, stone, silt, clay, thatch etc.. The production of various forest produce and out-turn in the state is given in the table 10.4:

**TABLE: 10.4: PRODUCTION AND OUT-TURN OF FOREST PRODUCTS IN ASSAM DURING 2017-18**

Forest Produces	Units	2014-15	2015-16	2016-17	2017-18
Industrial Wood/Timber	Cubic metres	78629	14074.53	24546.48	14274.97
Fuel Wood	Stack Cubic metre	3469	15151.47	10410.41	1381.37
Sand	Cubic metre	4775406	338604.69	527010.69	397608.26
Gravel/Stone	Cubic metre	8587090	806423.47	1542003.04	838361.33
Silt/Clay	Cubic metre	1186372	1986018.72	3734861.05	2270042.29
Others	Cubic metre	128988	22604.30	201120.86	140962.08
<b>TOTAL</b>		<b>2651610</b>	<b>3182877.18</b>	<b>6039952.53</b>	<b>3662630.29</b>

Source: Office of the Principal Chief Conservator of Forest, Assam

Figure 10.4: Contribution of different forest produce to total production from forest for 2017-18

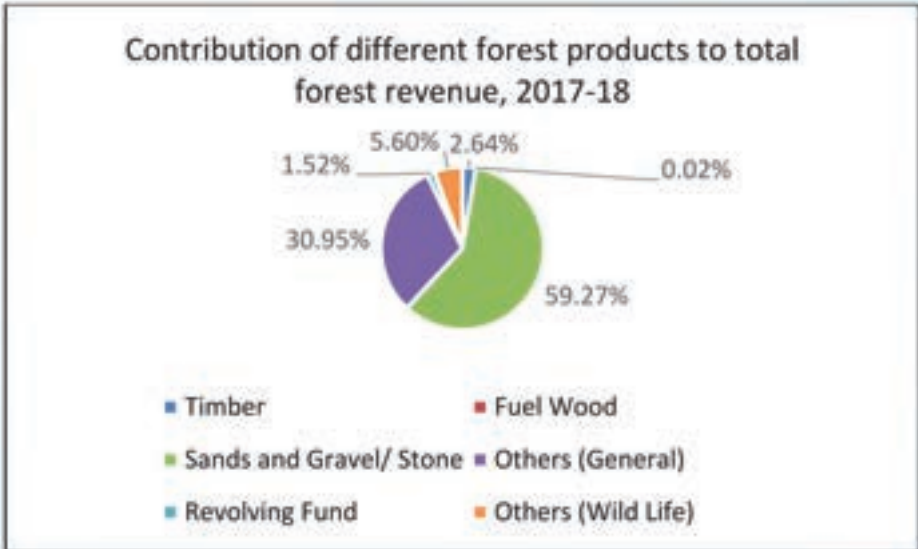


The economy of Assam is largely agriculture based with 69% of the population engaged in it. The State Govt. earns a good amount of revenue from various forest produces. The revenue earned from various forest products during the last three years are shown below:

**TABLE 10.5: REVENUE EARNED FROM VARIOUS FOREST PRODUCTS IN THE STATE**

Items	Revenue Earned (Rs. in Lakh)		
	2015-16	2016-17	2017-18
Timber	164.99	385.07	422.00
Fuel Wood	6.90	-	3.00
Sands and Gravel/ Stone	4601.60	9728.77	9491.00
Silt/ Clay	19.86	-	-
Others (General)	704.00	2736.92	4956.00
Revolving Fund	-	400.61	244.00
Others (Wild Life)	-	754.88	896.00
<b>Total</b>	<b>5497.35</b>	<b>14006.26</b>	<b>16012.00</b>

Figure 10.5: Contribution of different forest products to total forest revenue, 2017-18





## PROTECTED AREA WILDLIFE, NATIONAL PARK AND SANCTUARIES:

The Protected Area Network (PAN) of Assam includes 5 National parks and 18 wildlife sanctuaries covering an area of 0.40 million hector constituting 4.98 of the geographical area. The state has four Tiger Reserves. The wildlife sanctuaries in Assam are a heterogeneous mixture of a variety of landscapes, plants, birds and animals. The suitable climatic conditions, geographical location and vast forest reserves have made Assam a favorable destination for birds, animals and natural vegetation. Assam is home to several wildlife sanctuaries and national parks that are the breeding ground for some of the rarest global species. The many wildlife sanctuaries of Assam provided shelter to large number of wildlife right from the golden languor to the one horned rhinoceros. Out of 5 national park two of which are designated as world heritage sites by UNESCO in 1985. The Wildlife Act, provides for setting up national park and sanctuaries for wildlife. In the state of Assam, the total wildlife protected areas at present is 3817.9sq. km. The category wise wildlife protected areas is shown below:

**TABLE: 10.6: AREA OF THE NATIONAL PARKS, in Assam, 2017-18**

Name of the National Park	Location (District)	Area in sqkm	Encroached Area in sqkm.
Kaziranga National Park	Golaghat, Nagaon & Sonitpur	858.98	Nil
Manas National Park	Chirang and Baksa	500.00	31.00
Orang National Park	Udalguri and Sonitpur	78.81	Nil
Nameri National Park	Sonitpur	200.00	5.00
Dibru-Saikhowa National Park	Dibrugarh and Tinsukia	340.00	5.37

**Table 10.7: Area under Wildlife Sanctuaries (WLS)**

Name of the Wildlife Sanctuaries	Location (District)	Area in sqkm	Encroached Area in sqkm
Bhejan-Borajan-Padumoni WLS	Tinsukia	7.22	0.05
Panidehing WLS	Sivasagar	33.93	Nil
Gibbon WLS	Jorhat	20.98	Nil
Nambor-Doigurung WLS	Golaghat	97.15	Nil
Garampani WLS	Karbi Anglong	6.05	Nil
Nambor WLS	Karbi Anglong	37.00	Nil
East Karbi Anlong-WLS	Karbi Anglong	221.81	Nil
Marat Longri WLS	Karbi Anglong	451.00	Nil
Burhachapori WLS	Sonitpur	44.06	4.23
Laokhowa WLS	Nagaon	70.13	1.35
Pabitora WLS	Morigaon	38.80	Nil
Sonai-Rupai WLS	Sonitpur	220.00	85.00
Barnadi WLS	Udalguri	26.22	4.00
Chakrasila WLS	Kokrajhar	45.56	0.0053
Dihing-Patkai WLS	Dibrugarh and Tinsukia	111.19	Nil
Barail WLS	Cachar, Karimganj	326.25	9.64
Amchang WLS	Kamrup (Metro)	78.64	5.00
Deepor Beel Wildlife Sanctuary	Kamrup (Metro)	4.14	Nil



**Table 10.8 Area under proposed Wildlife Sanctuaries**

Name of the Proposed Wildlife Sanctuaries	Location (District)	Area in km <sup>2</sup>
North Karbi Anglong WLS	Karbi Anglong	96.00
Bardoibam Beelmukh WLS	Lakhimpur	11.25

Source: Chief Conservator of Forest (WL), Assam

Out of a total of 1351669 hectares of Reserved Forest Area, 372992 hectares are under Encroached Area as reported by the Office of the Principal Chief Conservator of Forests and Head of Forest Force.

### **WILDLIFE PRESERVES:**

A sanctuary is a protected area which is reserved for the conservation of only animal and human activities like harvesting of timber, collecting minor forest products and private ownership rights are allowed as long as they do not interfere with well-being of animals. Boundaries of sanctuaries are not well defined and controlled biotic interference is permitted. The state has more than 70% of the world population of one horned rhinos in the wildlife sanctuaries of Assam. The other wildlife sanctuaries in Assam are a heterogeneous mixture of a variety of Landscapes, plants, birdhs and animals. The suitable climatic conditions, Geographical location and vast forest reserves have made Assam a favorable destination for Birdhs, animals and natural vegetation.

#### **Kaziranga National Park:**

Kaziranga National Park is a Protected area in the north east Indian state of Assam. Spread across the floodplains of the Brahmaputra River, its forests, wetlands, and grassland, are home to tiger, elephants and the world's largest population of India one horned rhinoceros. It also has the world's largest population of Asiatic Wild Buffalo and nearly 500 species of birds. It is a UNESCO World Heritage site. The park covered area consists of 430 sqkm. During the year 2017-18, the number of foreign tourists to Kaziranga National Park was 8467 and 475 061 domestic tourists.

#### **Manas National Park:**

Manas is a National Park, declared as world heritage site by UNESCO in 1985. It is also declared as project tiger reserve, and elephant reserve and a biosphere reserve in Assam. The Park is located in the Himalayan foothills and is contiguous with the Royal Manas National Park in Bhutan. The Park is known for its rare and endangered endemic wild life such as the Assam roofed turtle, hispid hare, golden langur and pygmy hog. During 2017-18, the number of foreign tourists and Domestic tourists to the Manas National park were 1565 and 261201 respectively.

#### **Orang Rajiv Gandhi National Park:**

The Orang National Park also known as Rajiv Gandhi Orang National Park is located on the north bank of the river Brahmaputra in the Darrang and Sonitpur districts of Assam. It covers an area of 78.81 sqkm. It is the smallest of Assam's five National Parks. Its landscape, flora and fauna, are similar to Kaziranga National Park. It was established as a sanctuary in 1985 and declared a National Park in 13 April 1999. The Park has a rich of flora fauna, including the great Indian one horned rhinoceros, Pygmy



hog, elephants, wild buffalos, and tiger. It is only stronghold of rhinoceros on the north bank of the Brahmaputra river. The no. of foreign tourists were 911 and 114399 Domestic tourists visited the park in 2017-18.

### **Nameri National Park:**

Nameri National Park is in the foot hills of the eastern Himalayas in the Sonitpur district of Assam about 35 km from Tezpur. It covers 200 sq. km and established in 1978. The Park is the second tiger reserve of Assam and is also important for the commutation of elephants. Apart from 30 species of mammals recorded in this area, the rich wildlife includes Tiger, black bear, elephant, leopard, clouded leopard, Indian prison, panguline, Indian wild dog, deer, cinet cat, capped langur, jackals etc. various species of birds such as endangered white winged, wood duck, four species of hornbill, butterflies and reptiles are also found in the Park. During 2017-18, the number of foreign tourists to the park were 1263 and 196491 Domestic tourists.

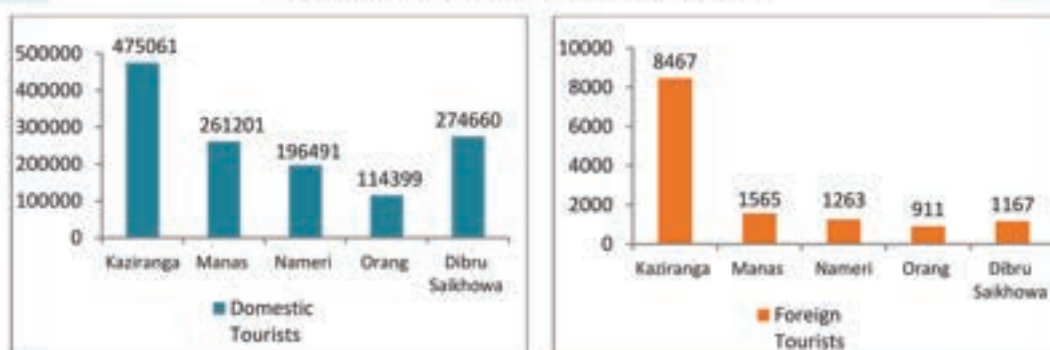
### **Dibru-Saikhowa National Park:**

Dibru-Saikhowa National Park is located in Dibrugarh and Tinsukia districts. It was designated a Biosphere reserve in July 1997 with an area of 340 sqkm. The park mainly consists of moist semi evergreen forest, canebrakes and grass lands. It is the longest swamp forest in north eastern India, with a tropical monsoon climate with a hot and wet summer and cool usually dry winter. It is heaven for many endangered species and rich in fish diversity. Animal life to be viewed in their natural habitat includes Royal Bengal Tiger, hoolock gibbons and Leopard. It is also home to some restricted range of Bird species. The number of foreign tourists were 1167 and 274660 Domestic tourists in 2017-18.

**TABLE- 10.9 NUMBER OF TOURISTS VISITING NATIONAL PARKS IN ASSAM IN 2017-18**

Name of the Park	Domestic Tourists	Foreign Tourists
Kaziranga National Park	475061	8467
Manas National Park	261201	1565
Nameri National Park	196491	1263
Orang National Park	114399	911
Dibru Saikhowa National Park	274660	1167

**TOURIST VISITED NATIONAL PARKS, 2017-18**



*Figure 10.6: Number of tourists visiting national Parks, 2017-18*



### **Project Tiger:**

Assam now has four tiger reserves namely Orang, Kaziranga, Manas and Nameri. The first country wide tiger census conducted in 1972 estimated the population to comprise a little more than 1,800 individuals, a reduction in tiger population. Project tiger is a tiger conservation programme lunched in 1<sup>st</sup> April 1973 by the Govt. of India. The project aims at ensuring a viable population of Bengal tigers in their natural habitats, protecting them from extinction and preserving area of biological importance as a natural heritage forever represented as close as possible the diversity of ecosystems across the tiger distribution in the country. The Government has set up a tiger protection force with intensive protection of tiger areas and stopping the poaching. Wild tigers are found in 18 of our states viz Andhra Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram, Odisha, Rajasthan, Tamilnadu, Telangana, Uttarakhand and West Bengal. Project tiger is being implemented in all these states in collaboration with respective state Governments. The total area under project tiger is 70,244.10 sqkm. of the country.

**TABLE-10.10: Population of Rhinos, Elephants, Tiger as per Census Report**

Category	Year of Census	Numbers
Tiger	2014	167
Elephant	2017	5719
Rhino	2018	2650

*Source:O/o the Principal Chief Conservator of Forest (Wild Life)*

### **ASSAM PROJECT ON FOREST AND BIODIVERSITY CONSERVATION:-**

Assam Project on Forest and Biodiversity conservation Society (APFBCS), was created by state Government of Assam as special purpose vehicle (SPV) registered under the Societies Registration Act 1860. The Society has the mandate for planning implementation, monitoring, coordination and management of all the activities proposed under project. The implementing activities of the project are rehabilitation of Forest Department's infrastructure and equip it for income generation and livelihood security of forest dependent communities. The society came into existence on 28<sup>th</sup> June 2012. The project is funded by the French Development Agency under Indo-French Development co-operation. With Assam being one of the bio diversity hot spots in the country, a coordinated approach for conserving the biological heritage with the involvement of research institutions, academicians and civil Society was necessary. The new project will a long way in fulfilling the conservation needs of the state.

As the state has a huge forest cover, a number of schemes have been taken up for increasing tree coverage in the state for reducing man/animal conflict that has taken a toll on wildlife. The Government in an effort to reduce the conflict has proposed to erect solar powered fencing in and around the reserve forest areas. More than 50% of notified forest area in the state fall under the category "Open Forests";restoration of such areas,



enhancing of human and infrastructural capacity of the state Forest Department along with the need to provide livelihood opportunities and alternatives to forest dependent communities, requires infusion of various funds, at a very large scale and forms.

The project has four technical components:

1. Institutional strengthening of the Forest Department
2. Multi-level strategic planning
3. Sustainable Forest management
4. Add value and openings of market opportunities for forest and bio-diversity goods and services and project management of non-technical components

Project vision: - To enable sustainable forest management in Assam through multiscale integrative planning involving participation of local population

Project specific objective: - In collaboration with the forest dependent communities to restore forest ecosystems to enhance the forest dependent community's livelihoods and ensure conservation and sustainable use of bio-diversity.

#### **PARTICIPATION OF NGO'S AND PEOPLE WITH THIS SCHEMES/ PROJECT ETC:**

There are large number of NGO's in India and other countries that are exclusively working for environmental, protection, conservation and awareness. The Government is viewing NGO'S not only as agencies that will help them to implement their programs but also as agencies who will bring transformation in conservation strategies of the Government.

NGOs are now playing an important role in framing the environmental policy, mobilizing public support for environmental conservation and protecting be endangered species of forest and animals. Some of the NGOs have played an active role in the conservation and preservation of wild life. Wild life protection society of India collaborate with State Government to monitor illegal wild life trade. Wild life conservation is the practice of protecting wild plant and animal's species and their habitat. Wild life plays an important role in balancing the eco system and provides stability to different process of nature. Wild life conservation has become an increasingly important practice due to be negative effects of human activity on wild life.

#### **PROJECT ELEPHANT**

Project elephant was launched in 1992 by the Government of India to provide financial and technical support of wildlife management efforts by states for their free ranging population of wild Asian elephants. The project aims to ensure long term survival of viable conservation resilient population of elephant in their natural habitats and migration corridors. Other goals of Project Elephant are supporting research of the ecology and management of elephant, creating consecration awareness among local people, providing improved veterinary care for captive elephants.

During the year 2017-18 total allocation for project elephant is Rs. 8.42,99800 and sanction amount Rs. 305,290800. The physical target during the year 2107-18 are



formation of anti-depredation squad, Running charge of vehicle, Population estimation of wild elephant, veterinary support, reward to informer, publicity and awareness and purchase of drugs for tranquilizing gun. An amount of Rs. 1 Cr. was sanctioned as ex-gratia to fulfill the target and achieve the target as proposed.

### **INTEGRATED DEVELOPMENT OF WILDLIFE HABITAT AREA:**

Integrated Development of Wildlife Habitats (IDWH) is an ongoing centrally sponsored scheme which has been made operational by adding more components and activities. The Sectoral allocation for 2018-19 for the scheme is Rs. 330 lakh. The scheme includes preparation of management plans surveys, demarcation of boundaries for protection of wild life habitats areas and prevent anti-poaching activities etc.

#### **Components of the Scheme**

1. Centrally sponsored scheme of project tiger.
2. Development of wild life habitats
3. Project elephant

The result of the scheme is resource generation through tourist visit, thereby fostering in securing tiger source areas and other areas important for wild life conservation, friends being helpful in sustaining life support systems as well as ensuring the food, water and livelihood security.

\*\*\*\*\*



## INDUSTRY AND MINING

Assam is well-known for its natural and precious mineral resources. Although, because of its rich and diverse natural and mineral resources, during the colonial period the state experienced an early industrialisation, Assam today is considered as one of the industrially backward states of the country. The current industrial scenario of the state is largely confined to the growth of employment oriented SSI Sector. Notwithstanding, the state is making significant attempts at accelerating the pace of industrialisation focusing on the state's potential resources, augmenting investment, and improving necessary infrastructure including power. In this regard while on one hand the transport and communication has seen considerable facelift in the state, on the other hand, a series of benefits and incentives have been offered to entrepreneurs willing to take up industrial activities in the state. Besides, many innovative business models have been promoted depending on the advantages the state can offer. As a result, despite several constraints, during the recent past a favourable industrial climate has gradually been created in the state for rapid industrialisation and development.

With the objective of showcasing the unique advantages and benefits of the state, and attracting increased investment from outside, a Global Investors' Summit titled as *Advantage Assam* was held in Guwahati during February 3-4, 2018. This was the largest event organised ever by the government of Assam in the state for investment promotion and facilitation. Within the broad ambit of the Look (Act) East Policy, the Summit particularly highlighted the state's geostrategic advantages in promoting industrial activities related to export oriented manufacturing and services to tap the potential and growing economies of the ASEAN and BBN countries. The Summit, accordingly, emphasized on potential sectors like Pharmaceuticals & Medical Devices, Plastic & Petrochemicals, IT & ITES, Tourism, Hospitality & Wellness, Power Agriculture & Food Processing, Inland Water Transport, Civil Aviation, Petroleum and Natural Gas, Handloom, Textiles and Handicrafts and Bamboo crafts. It is envisaged that the Summit will go a long way in ushering in a new era of industrialisation in the state in the long run and contribute immensely to the process of development in the state.

### Contribution of Industrial Sector to state Economy

The contribution of Industry sector to the state's Gross Domestic Product (GDP) has been 30 per cent at current prices during the year 2017-18(Q). The rate of growth of the Industry sector which comprises Mining & Quarrying, Manufacturing, Electricity, Gas, Water Supply & other Utility Services and Construction sectors over previous year is estimated to be 7.82% at current prices during 2017-18(Q). At current prices, the share of growth of the sub sectors to the Industry sector is estimated in Mining and Quarrying (3.42%), Manufacturing (10.19%), Electricity, Gas, Water supply & other utility Services



(14.04%) and Construction (8.52%) respectively. At constant (2011-12) prices, the growth rate of the sub sectors to the Industry sector during the year 2017-18 is estimated at 1.70% in Mining and Quarrying, 6.81% in Manufacturing, 6.85% in Electricity, Gas, Water Supply & Other Utility Services and 5.14 % in Construction respectively.

**Table-11.1 Annual Growth Rate of GSDP in Industry Sector during 2017-18 (Q)**

Sector	Current Price (%)	Constant (2011-12) Prices (%)
Industry	7.81	3.91
Mining & Quarrying	3.42	1.70
Manufacturing	10.19	6.81
Electricity, Gas, Water Supply & Other Utility Services	14.04	6.85
Construction	8.52	5.14

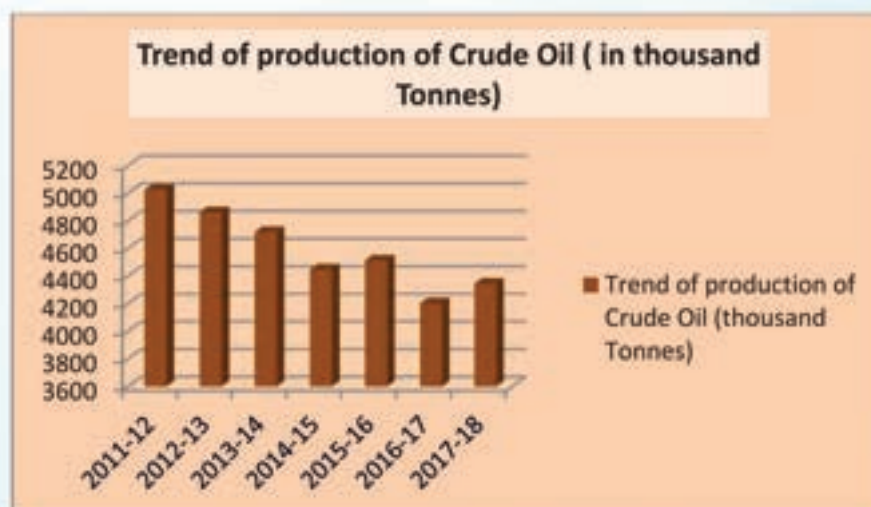
Source: Directorate of Economics and Statistics, Assam

During 2017-18, the Index of Industrial Production (Base: 2011-12=100) in respect of manufacturing sector was calculated at 124.55 showing a positive growth of 3.5 percent over the previous year. IIP of Assam during 2017-18 has been worked out at 109.25 registering a growth of 2.5 percent over 106.54 in 2016-17.

**Table 11.2: Production of some selected Industries in Assam**

Year	Tea (000' tonnes)	Wheat Flour (MT)	Coal (000' tonnes)	Jute Textiles (M.T)	Crude Oil (000' tonnes)	Cement (000'tonnes)	Fertilizer (Urea) (MT)
2015-16	653	110156	397	22296	4513	605814	390197
2016-17	657	103845	600	23244	4202	616649	368364
2017-18	667	94392	782	22785	4345	638504	298592

Source: Tea: Tea Board of India; Minerals: Indian Bureau of Mines, Nagpur.





## Mining sector:

The state is richly endowed with mineral resources, and the minerals are major contributors to the state's industrial performance. The contribution of Mining sector to the economy has been around 10 per cent during 2017-18(Q). During the year 2017-18, mineral production in the state showed a positive growth except in the production of Lime stone. The Table 11.3 shows the trend of some major minerals exploited in the state during the last three years.

**Table 11.3: Mineral Production in Assam**

Year	Coal ('000MT)	Crude Oil ('000MT)	Natural Gas Utilised (MCM)	Limestone ('000MT)	Sulphur ('000 MT)
2015-16	397	4513	2903	442	4322
2016-17	600	4202	2907	1597	6571
2017-18	782	4345	3034	1432	8339*

Source: Indian Bureau of Mines. \* Up to February 2018

declined by around 10 over the previous year.

During the year 2017-18, productions of Coal and Sulphur have increased substantially by 30 percent and 27 percent respectively while production of Crude oil and Natural Gas has increased by 3.4 percent and 4.4 percent respectively over the previous year. The production of Lime stone, however, has

### **Industrial Infrastructure Facilities in Assam:**

The mandate of Industries and Commerce Department, Assam is to create a conducive environment for industrialisation in the state. As Industrial Infrastructure is a pre-requisite for industrial development, the department has been creating industrial infrastructural facility as well as upgrading the existing ones located in different parts of the state. Infrastructural facilities in the form of Export Processing Industrial Park (EPIP), Integrated Infrastructure Development Centre (IIDC), Industrial Growth Centres (IGC), North East Mega Food Park, Food Processing Park, Bamboo Park, Industrial Estates, Industrial Areas, Commercial Estates, etc. have been established throughout the state.

The department has established one Export Processing Industrial Park (EPIP) at Amingaon in Kamrup district, 3 Industrial Growth Centres at Balipara, Matia & Chaygaon-Patgaon-Jambari, 11 Industrial Infrastructure Development Centres (IIDCs), one Food Park at Chaygaon and one North East Mega Food Park at Nalbari district. Besides, there are 24 Industrial Estates, 8 Mini Industrial Estates, 20 Industrial Areas, 25 Growth Centres under the department. At present about 850 Nos. of industrial units are functioning in these industrial infrastructures.



## **Industrial Estate and Industrial Growth Centre:**

### **1. Export Promotion Industrial Park (EPIP):**

The Export Promotion Industrial Park was established at Amingaon in Kamrup district at a total project cost of Rs.1462.0 lakh. Total 57 numbers of industrial units are functioning in the park.

### **2. Industrial Growth Centre (IGC):**

The department has taken 3 numbers of centrally sponsored projects known as Industrial Growth Centre (IGC) at Balipara (Chariduar), Matia and Chaygaon –Patgaon-Jambari.

#### **(i) Industrial Growth Centre, Balipara (Chariduar):**

Industrial Growth Centre, Balipara (Chariduar) is located in the district of Sonitpur. The total cost of the project was Rs.1600.00 lakh. The sharing of this cost between central government and state government was Rs.1500.00 lakh and Rs.100.00 lakh respectively. Government of India has released Rs.1216.00 lakh out of the central share while the state government has released Rs.22.20 lakh up to the year 2017-18. The first phase of the project like construction of boundary wall, internal road, water facilities, construction of power works etc have been completed. Already 20 bigha of land have been allotted for setting up a pharmaceutical unit. Assam Industrial Development Corporation (AIDC) is the implementing agency.

#### **ii) Industrial Growth Centre, Matia:**

Industrial Growth Centre, Matia in Goalpara district is being implemented by the AIDC Ltd. The total cost of the project is Rs.2200 lakh. The cost sharing between the central and state governments is Rs.1500 lakh and Rs.700 lakh respectively. Till the end of 2017-18, the government of India has released Rs.1500.00 lakh while state government has released Rs. 367.14 lakh as their share. The first phase like construction boundary wall, internal road, electrical sub-station etc. is completed. The total expenditure incurred Rs. 1867.14 lakh up to the year 2017-18. Plots have been allotted to various industrial units in this IGC and construction activities of M/S Kohinoor Paper & Pulp industry is going on.

#### **(iii) Industrial Growth Centre, Chaygaon-Patgaon-Jambari:**

The Industrial Growth Centre (IGC) located at split locations at Chaygaon-Patgaon & Jambari in Kamrup district is being implemented by Assam Industrial Infrastructure Development Corporation (AIIDC). The total cost of the project is Rs.1615.24 lakh, out of which, Rs.1500.00 lakh was released by Govt. of India and Rs.115.24 lakh was released by the state government. The IGC project at Chaygaon, Chatabari & Patgaon locations had been completed in 2007. The extension of IGC, Chaygaon project at Jambari location had been completed in 2012. The areas of IGC Chaygaon-Chatabari, Patgaon & Jambari have been allotted to the interested industrial units including some mega projects within the two years of time from its opening. Altogether 31 nos. of units



at Chatabari location, 25 nos. units at Jambari location and 6 units at Patgaon location have got the allotment of land for their proposed ventures. Out of these, 30 units at Chaygaon Chatabari location, 25 units at Jambari location and 6 units at Patgaon have already started their commercial production. The Bamboo Technology Park is also located in the IGC, Chaygaon project.

### **3. Border Trade Centres:**

Assam shares borders with 7 states and 2 countries viz. Bhutan and Bangladesh with 2276.3 km inter-state and 529 km international borders. India's Look (Act) East Policy visualizes Assam as one of the strategically important and key players in opening up India's economic future by engaging in trades with the neighbouring countries. For facilitating the Border trade with the neighbouring Countries like Bangladesh, Bhutan & even Myanmar, government of Assam and government of India have taken initiatives to create infrastructure facilities for cross border trades in the form of Border Trade Centres at 5 (Five) locations: Sutarkandi in Karimganj district, Mankachar and Golokganj in Dhuburi district, Darranga in Baksa District and Jagun in Tinsukia District.

#### **(i) Border Trade Centre, Sutarkandi:**

The Border Trade Centre, Sutarkandi in Karimganj district was approved by government of India in the year 2000 under Critical Infrastructure Balance (CIB) and ASIDE scheme. The total project cost (both 1<sup>st</sup> and 2<sup>nd</sup> phase) was Rs. 2563.00 lakh, shared by the central and state governments with Rs.2400.00 lakh and Rs.163.00 lakh respectively. Till 2017-18, the government of India has released Rs.2400.00 lakh and the state government has released Rs.163.00 lakh against their share. Both the phases of the project have been completed. The project has been implemented through AIDC and normal trade is going on.

#### **(ii) Border Trade Centre, Mankachar:**

The government of Assam has approved setting up of a Border Trade Centre at Mankachar in present South Salmara district under ASIDE scheme. The approved cost of the project is Rs.466.00 lakh. The central share is Rs.380.83 lakh and the state government's share is 85.00 lakh. Both the government of India and the state government have released their shares in full. The project was implemented by AIIDC and has already normal trade is going on.

#### **(iii) Trade Facilitation Centre, Jagun, Tinsukia ( Along Stilwell Road – to Myanmar)**

A Trade Facilitation Centre (TFC) has been created at Jagun which is about 3 Km to Jairampur (Assam - Arunachal Pradesh border point) and 20 Km from Panchu Pass (Indo- Myanmar Border on the Stilwell Road). The Trade Centre has been constructed by AIIDC in a plot of land measuring 12 acres with a project cost of Rs. 5.98 Cr and the project has already been completed. Facilities like Warehouse, Parking Yard, loading & unloading platform, etc. have been created in this centre. The Govt. of India has released 530.98 lakhs for this project up to 31-03-2018.



**(iv) Border Trade Centre, Golokganj (Sonahat, Gate No-24)**

This Border Trade Centre is located near Gate No: 24 of Sonahat, Dhubri district and implemented by AIDC Ltd. with a project cost of Rs.1938.00 Lakh. This centre has a competitive advantage and may be a Hub in coming years. On 28<sup>th</sup> April, 2014, the first consignment of Coal crossed this Border point to Bangladesh and it was inaugurated on December 12, 2015. The central government has released Rs. 1839.00 lakh towards the project.

**4. Food Processing Industrial Park:**

The Ministry of Food Processing Industries, government of India has approved for setting up of a Food Processing Industrial Park at Chaygaon in Kamrup district with a project cost (revised) of Rs.496.0 lakh. The central government share is Rs.350.0 lakh and state government share is Rs.146.0 lakh. The government of India has released Rs.262.50 lakh while the government of Assam has released Rs.146.00 lakh against their share up to the year 2017-18. The project is completed by ASIDC and plots allotted to 16 Nos. of interested units, out of which 8 No. of units are currently functioning, 2 nos. of units yet to start and 4 nos. newly allotted industry are in the process of establishment.

**5. Integrated Infrastructure Development Centres (IIDC):**

The Ministry of MSME, government of India has approved setting up 11 (eleven) numbers of Integrated Infrastructure Development Centres (IIDCs) at different locations of Assam. These are located at Naltali-Bhomoraguri in Nagaon district, Tihu (Nathkuchi) in Nalbari district, Rangia in Kamrup district, Bandardewa in Lakhimpur district, Titabar in Jorhat district, Dalgaon in Darrang district, Malinibeel in Cachar district, Silapathar in Dhemaji district Demow in Sivasagar district, Serfanguri in Kokrajhar district and Parbatipur in Tinsukia District. government of India has released Rs.2411.66 lakh and the government of Assam has released Rs.665.88 lakh for the Centres. All the projects have been completed. At present a total of 97 units are functioning in different IID centres as indicated below:

1. IID Centre , Nalbari:	7 Nos.
2. IID Centre , Malinibeel:	28 Nos.
3. IID Centre , Titabar:	3 Nos.
4. IID Centre , Dalgaon:	10 Nos.
5. IID Centre , Demow:	9 Nos.
6. IID Centre , Bhomoraguri:	13 Nos.
7. IID Centre , Rangia:	20 Nos.
8. IID Centre ,Bandardewa:	4 Nos.
9. IID Centre , Parbotipur:	2 Nos.
10. IID Centre Serfanguri:	--
11. IID Centre Silapathar:	1 Nos.

**6. North East Mega Food Park, Nathkuch, Nalbari:**

With the objective of providing adequate infrastructure for the food processing industries of the region along with value chain from farm to market, a Mega Food Park is under construction at Nathkuchi (Tihu) in Nalbari district. The park is being developed in PPP



model with assistance from the Ministry of Food Processing Industries, government of India in an area of 50 acres. The total project cost is Rs. 8085.37 lakhs where central share is Rs.5000.00 lakhs, while the state share is Rs. 3085.37 lakhs including promoters' contribution & term loan. The central government has released Rs 4500 lakhs and the state government has released Rs 2824.16 lakh against their shares up to 2017-18. The park is located on NH-31 at a distance of 90 KM from Guwahati and will accommodate 27 food processing units. The Mega Food Park was inaugurated on May 28, 2015 and one unit is functioning.

### **Ongoing Infrastructure projects:**

#### **1. Border Trade Centre Darranga, Baksa (Indo-Bhutan Border)**

In view of growing Indo-Bhutan trade, it is proposed to set up a Border Trade Centre at Darranga, Baksa district of Assam in a plot of land measuring 48 bigha (16 acres). The estimated cost of the project is Rs.1433.88 lakh and the construction is under progress. It is proposed to provide infrastructure like Cold Storage, parking yard, warehouse, quarters for custom officials, Weigh Bridge, Loading & Unloading platform etc. to encourage formal trade with Bhutan. The project is being completed by AIIDC Ltd. The central has released Rs 1402.71 lakhs towards the project.

#### **2. Plastic Park:**

To facilitate the growth of downstream industries based on the Assam Gas Cracker Project (Brahmaputra Cracker & Polymer Ltd), government of Assam has proposed to set up a Plastic Park at Gelapukhuri in Tinsukia district. The primary aim of the proposed park is to facilitate polymer based downstream industries. The project site is located 3-4 km. from the Tinsukia town and about 60 km from the Assam Gas Cracker project site. It is proposed to provide following facilities, viz.

- Developed plots.
- Internal roads.
- Water supply system.
- Captive power plant.
- Internal drainage system.
- Boundary wall.
- Street lighting.
- Medical/ recreation/ canteen
- Tool Room
- Recycling plant, etc.

The approved project cost of the Plastic Park covering a physical area of 500 acres is Rs. 9365.00 lakhs, out of which the central share is Rs. 4000.00 lakh and the state share is Rs. 5365.00 lakh. AIDC Limited has been designated as the nodal agency for implementation of the project and about 25% the work of the project has so far been completed. The central government has released Rs 2200.00 lakh and the state government has released Rs 4765 lakh.



### 3. Bamboo Park

A Bamboo Park at Chaygaon in Kamrup district is under construction which is about 60 km from Guwahati. The proposed park is being developed in PPP model with the assistance from Ministry of Commerce & Industry, government of India, state government and private promoters. Cost of the project is Rs. 6228 lakh out of which the central government's contribution is Rs. 5263 lakh and the state government's contribution is Rs 390.00 lakh along with the term loan of Rs 575.00 lakh. The government of India released Rs 5105.21 lakh & the state govt released Rs 101.40 (equity) plus Rs 50.00 lakh (grant) i.e. a total of Rs 151.40 lakh. The objective of the park is to create integrated infrastructure for promotion of bamboo based industries in the state. The project is already commissioned.

### Major Schemes being implemented by Department of Industries and Commerce, Assam

#### 1) Prime Minister Rojgar Yojana (PMRY)/Prime Minister Employment Generation Programme (PMEGP):

The Prime Minister Rojgar Yojana (PMRY) was a Centrally Sponsored Scheme, which has been launched on October 2, 1993 with the objectives of providing employment to the educated unemployed youth. The scheme facilitates self-employment through setting up of manufacturing or service enterprises and business ventures. For these purposes a limited amount of bank loan with an amount of subsidy are provided to the interested and qualified educated youth on the recommendation of Task Force Committees constituted for the purpose. The programme was effective up to March 31, 2008 and thereafter a new scheme namely Prime Minister Employment Generation Program (PMEGP) has been introduced by merging the PMRY and REGP with the same aims and objectives. The KVIC is implementing the PMEGP scheme as the nodal agency at the national level and at the state level the scheme is implemented by the state KVIC Directorate, state KVIB and the District Industries and Commerce Centres and Banks. The government subsidy under the scheme is being routed by the KVIC through the identified Banks.

**Table 11.4: Target and Achievement of PMEGP**

Year	Physical target (in nos.)	Total Cases sanctioned (in Nos.)	Physical achievement (in no.)	Financial achievement (Rs. In lakh.)	P.C. of Physical achievement	P.C. of financial achievement to sanction	Remakes
2013-14	4558	8049	8049	7219.90	176.59	89.7	Information represents only the DIC part.
2014-15	5101	5584	5584	5042.41	109.47	90	
2015-16	1913	3382	3382	2793.39	176.79	82	



2016-17	3776	3773	3773	3499.4	99.92	92.7
2017-18	6386	3267	2166	2269.6	33.92	69

Note: Physical and financial targets are subject to revision from time to time.

## 2. Promotion of Micro, Small and Medium Enterprise (MSME)

The MSME sector has a vital contribution towards the process of industrialisation of the state. The enterprises categorized into Micro, Small and Medium enterprises based on their investment in plant and machineries (for manufacturing sector) or in equipment (in case of service enterprises) as under

### A) Manufacturing Enterprises:

- Micro:** Fixed investment in plant and machinery up to Rs.25 lakh.
- Small:** Fixed investment in plant and machinery above Rs.25.0 lakh and up to Rs.5 Cr.
- Medium:** Fixed investment in plant and Machinery above Rs.5 Cr up to Rs.10 Cr.

### B) Service Enterprises:

- Micro:** Fixed investment in equipment up to Rs.10 lakh.
- Small:** Fixed investment in equipment above Rs.10 lakh and up to Rs.2 Cr.
- Medium:** Fixed investment in equipment above Rs.2 Cr and up to Rs.5 Cr.

There are 47048 numbers of SSI/MSME units in Assam providing employment to 282942 of persons till the end of 2017-18. The Table 11.5 provides some statistics on SSI/MSME units up to the year 2017-18.

**Table 11.5: Some Statistics on SSI/MSME of Assam**

YEAR	No. of SSI/MSME	Employment	Average no. of Employment per MSME	Investment in Plant & Machinery (Rs. in lakh)	Average Investment Per Unit (Rs. in Lakh)
Up to 31-03-2001	14453	64623	5	22009.00	1.5
2013-14	1860	12971	7	31099.08	16.71
2014-15	2629	20496	8	26923.29	10.24
2015-16	1898	13848	7	25597.96	13.48
2016-17	2177	19355	9	60687.45	27.88
2017-18	1539	14442	9	47452.20	30.83
<b>Cumulative Total</b>	<b>47048</b>	<b>282942</b>	<b>6</b>	<b>434524.02</b>	<b>9.23</b>

Source: Commissionerate of Industries and Commerce, Government of Assam



### **(3) Biponi:**

It is an innovative marketing scheme for Micro and small entrepreneurs of Assam. The basic objective of the scheme is to provide support to participate in different trade fairs and events within the state, in the country and abroad for marketing of their products. All registered Micro and Small entrepreneurs are eligible for this scheme. In this scheme an exhibition (mela) for marketing promotion in 4 districts has been fixed as the limit and under the scheme altogether 515 entrepreneurs have been sponsored during the year 2017-18. The quantum of assistance under the scheme is given under:

- (a) Within the state: Maximum ceiling of Rs. 5,000.00 per entrepreneur towards stall rent & extra Rs. 500.00 per day for the entrepreneur participating from another district to meet travelling, food & lodging expenditure.
- (b) Outside the state: Selected participants will be reimbursed 50% of the stall rent subject to a ceiling of Rs. 10,000.00 only and actual sleeper class to & fro Railway fare for 2 (two) persons per unit along with Rs. 300.00 per person per day for the actual fair period towards food & lodging expenses.
- (c) Outside the country: Selected participants will be provided free stall space on sharing basis and actual Economy Class Air fare for 1 (one) person per unit along with Rs. 1000.00 per person per day for the actual fair period towards food & lodging expenses.

### **(4) Sarothi: The Start-Up Assam**

The entrepreneurs of the state, more particularly the first generation entrepreneurs are facing problems to convert their ideas into reality due to lack of adequate resources in the form of equity, loan etc. Getting loan or financial assistance from Bank/Financial Institutions for any new venture is a major problem in the state as Banks/Financial Institutions are very reluctant to provide loan for new ventures considering the various risks involved. To remove this hurdle the state government proposed to launch a new scheme called Chief Minister's Start-up Fund named **Sarothi** with an initial amount of Rs. 10 Cr. during 2016-17. The fund is placed under the control and management of the Industries and Commerce Department as per its operational guidelines. The scheme is proposed for a period of five years starting with 2016-17. The underlying idea is to provide financial assistance in the form of loan with interest subvention through a designated Bank covering whole of Assam. The loan so availed by the beneficiaries will be supported by the state government through an annual interest subvention of 5%. The physical target for the year 2017-18 was 1298 and the total number of projects sponsored was 253 with the fund for the year 2016-17.

### **(5) Svayem**

Swami Vivekananda Assam Youth Empowerment Yojana (SVAYEM) announced in the state Budget in 2017 is a flagship programme to provide financial support to youths of Assam to take up income generating activities in the manufacturing, trading and service sector. The target is to provide suitable credit support for taking up income generating enterprises to about one lakh youths of the state. The main objective of the scheme is to



generate employment opportunities in rural as well urban areas through setting up of new ventures as well as expanding and/or scaling-up of the existing ventures. This scheme particularly aims at providing financial assistance to micro and small business entities engaged in the manufacturing, trading and service sectors as well as traditional artisans for enhancement of their income level by ensuring sustainable growth.

### **Inspector of Factories:**

Total numbers of registration of new factories with the office of the Inspector of Factories during the year 2017-18 have been 571. With that the number of Registered Factories in the state reached 6729 at end of 2017 against 6158 in the previous year with a recorded growth of 9.3 per cent. The number of daily workers engaged in the factories has been recorded as 269276 in 2017 with average number of daily worker per factory as 40.

**Table 11.6: Registered Factories in Assam**

Year	Number of Factories	Number of daily workers	Average no. of daily workers per Factory
2001	2512	98862	39
2015	5799	219903	38
2016	6158	243821	39
2017	6729	269276	40

Source: Office of the Chief Inspector of Factories, Assam

From the available district-wise data on Registered Factories it is obtained that the undivided Kamrup district i.e. Kamrup Rural and Kamrup Metro districts taken together has the highest number of Factories with 18888 registered units engaging 69522 numbers of daily workers in 2017, while Dhemaji district have the lowest 11 number of registered factories with 180 numbers of daily workers during the same year.

### **Some Major Industries in Assam**

#### **Tea Industry:**

The Tea industry occupies an important place in Assam and plays a very special role in the state's economy. Tea in Assam has a long history. The first Indian tea produced in Assam was sent to United Kingdom for public sale in the year 1838. Although the tea cultivation was extended to other parts of the country between 50's and 60's of the last century, as of today, Assam Tea has maintained its international reputation and commands significant share in the World Tea Market. The total area under tea cultivation in Assam accounts for more than half of the country's total area under tea. In addition to existing big & large tea gardens owned by both reputed Indian and multinational Companies, the profession of tea plantation in the state has been taken up by common people as business venture at present, especially by unemployed youths. The tea industry in Assam provides average daily employment to more than 6.86 lakh persons in the state, which is more than 50 percent of the total average daily number of



labour employed (i.e. on an average 11.1 lakh labour employed per day) in the country as a whole under tea industry.

Assam has witnessed a spurt in the growth of small tea holdings during the last three decades and there is more than 1.0 lakh small holdings accounting for about 200 hundred million kg of made tea. Most of the Small Tea Growers (STGs) are first generation young and educated entrepreneurs who have started contributing immensely towards transformation of socio-economic life of rural Assam. According to the Tea Board of India, in 2017, there are about more than 86 thousand registered Small Tea Growers (i.e. up to 10.12 hectares of land) in Assam. Total number of small tea gardens is 87675 which together produce about 187320 thousand kg of tea in 82119.98 hectares of land.

Currently Assam alone produces more than half of India's total tea production. The number of big Growers' Garden (i.e. with holding above 10.12 hectares) in the state is 767 in 2017 producing 478010 thousand kg in total 232670.80 hectares of land. The estimated production of tea in Assam was 665.3 thousand tonne in 2017; produced in 314.79 thousand hectares of land against 659.7 thousand tonne produced in 311.03 thousand hectares in 2016.

**Table 11.7: Tea Statistics of Assam**

Year	No of Tea Gardens	Area under Tea ('000 hectares)	Total Tea Production ('000 kg)	Average yield
2013	69220	322	629050	1953
2014	77710	304	610970	2010
2015	83566	316	526185	1665
2016	85344	311	659740	2121
2017	88442	314	665330	2119

Note: Area, Production and Average yield have been estimated and subject to revision.  
Source: Tea Board of India.

The Guwahati Tea Auction Centre is actively taking part in trading of the Tea produced mainly in the North-eastern states since its establishment. Statistics of quantity and average price of tea sold in the Guwahati Tea Auction Centre is shown in the Table 11.8.

**Table 11.8: Quantity and Average Price of Tea sold in Guwahati tea Auction Centre**

Year	Leaf				Dust	
	CTC		Orthodox		CTC	
	Quantity (million kg)	Average Price (Rs. per kg)	Quantity (million kg)	Average Price (Rs. per kg)	Quantity (million kg)	Average Price (Rs. per Kg)



2015	86.7	140.93	1.40	186.40	41.20	146.80
2016	38.12	137.71	0.32	186.03	17.78	143.65
2017	116.43	136.01	1.47	186.36	47.76	151.02
2018 (up to August, 2018)	61.79	137.54	0.91	173.78	27.16	156.95

Source: Guwahati Tea Auction Centre

### Rubber Industry:

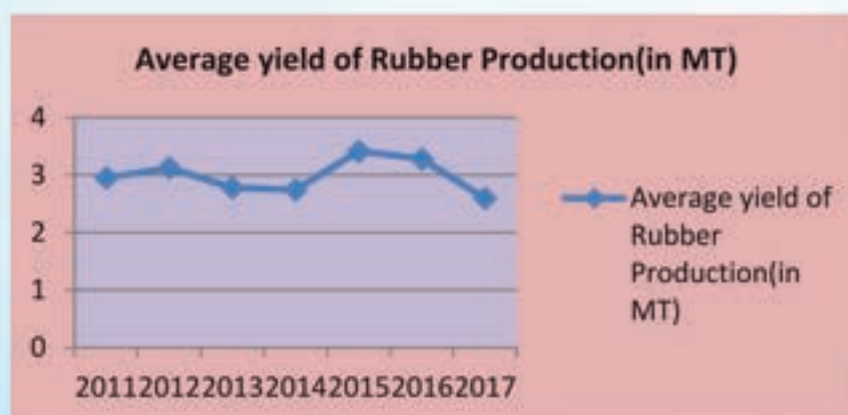
The rubber cultivation has gained popularity in Assam due to congenial agro-climatic condition as well as eco-friendly environment in the state. The Rubber Board has identified Assam as a "Potential state" from the "productivity" point of view as the state has ample scope of rubber plantation. Accordingly, the Rubber Board planned to enhance rubber plantation area to 2 lakh hectares at the end of Twelfth Five Year Plan (i.e. 2017) from the 28102 hectare at present to cope with the growing demand of rubber in the country which is expected to touch 1.78 lakh MT at the end of 2025.

The area under rubber cultivation has grown from 16.5 thousand hectares in 2006-07 to 57.94 thousand hectares in 2017-18. The tapping area as well as production of rubber has also been increased considerably during the same period. During 2017-18 the production of Rubber increased by 27 percent as compared to previous year. The growth of coverage of the rubber plantation area as well as production in the state is presented in the Table 11.9. Considering the growth of plantation areas and rubber production trends, there is vast potential for setting up of rubber industries in the state.

**Table 11.9: Area and Production of Rubber in Assam**

Year	Area (in hectare)	Production (in MT)	Tapping Area (in hectare)	Employment Generation (Man-days)
2015-16	55990	16400	12308	174763
2016-17	57646	17574	15139	179856
2017-18	57945	22324	16099	189790

Source: The Rubber Board, Zonal Office, Guwahati.





**Coffee Industry:**

Coffee is grown in Assam and the rest of North Eastern state, but not in abundance. Coffee is planted in Assam only in Karbi Anglong and Dima Hasao districts. Meghalaya, Nagaland and Mizoram are the largest coffee producers in the North East.

**Table 11.10: Area Production and Employment Generation in Coffee Board, Assam**

Year	Area (in hectares)	Production (in MT)	Price* (Rs./Kg) Arabica	Price (Rs./Kg) Robusta	Employment Generation (Nos.)
2015-16	1119.00	41.50	180	116.00	1228
2016-17	1158.24	42.90	152.00	102.00	1318
2017-18	1248.82	39.50	118.66	110.53	1543

\*Price /Kg is quoted as per average price realized on ICTA

**Khadi and Village Industry (KVI):**

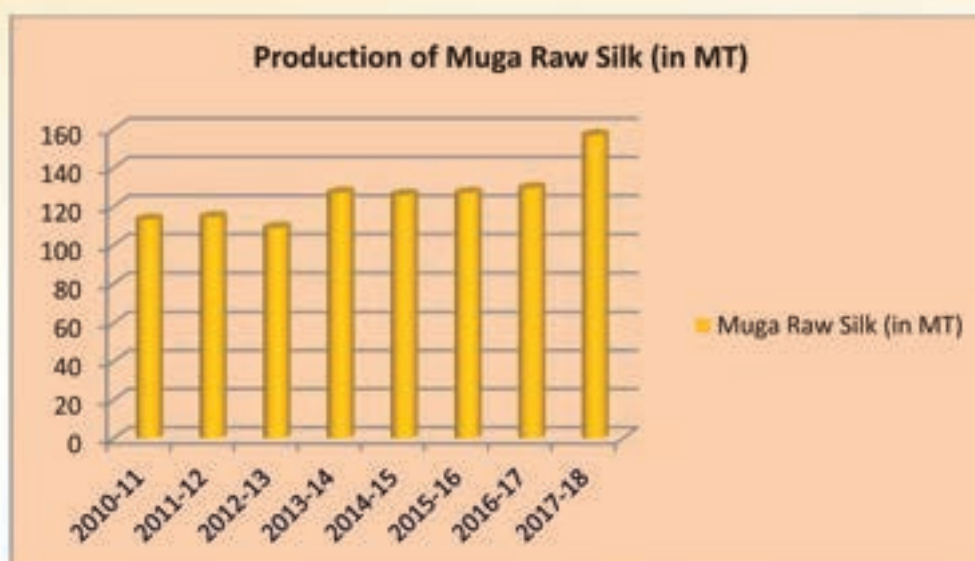
With a view to generate rural employment and uplift the rural economy, various Khadi and Village Industries are being promoted in the state by the Khadi and Village Industries Commission and Assam Khadi and Village Industries Board since their establishment. The value of production of the commodities produced under KVI was Rs. 26.76 crore in 2017-18 against Rs.22.35 crore in 2016-17. Total employment generated by KVI was 66844 in 2017-18 as compared to 74960 in 2016-17.

**Sericulture:**

Traditionally, sericulture is a major cottage industry in the state. Sericulture has been practiced in Assam from time immemorial and continues to be an important labour-intensive and agro based cottage industry providing gainful occupation to more than 3 lakh families in rural and semi-urban areas of Assam. Moreover, sericulture is a sustainable farm-based economic enterprise positively favouring the rural poor in the un-organized sector because of its relatively low requirement of fixed capital and higher returns on investment.

The state of Assam is proud of its traditional Muga, Eri and Mulberry and lastly the Oak tassar in the hills districts. The state accounts for the highest production of non-mulberry silk, muga and eri in the country. Assam has the monopoly in the world in the production of Muga, the "Golden Silk", the pride of Assam, as more than 97 percent of Muga Silk is produced in Assam. Muga Silk is geographically tagged to Assam. During 2017-18, the state government has started the project "Muga Mission" for enhancement of Muga Silk production with a project cost of Rs.465.00 crore. The state is also a Major producer of Eri Silk (about 65 percent).





The sericulture industry has undergone a number of changes with respect to loom, fabric, design, technology etc. Non-mulberry silk in general and Muga silk in particular has been closely associated with the rituals and traditions of Assam and thus, silk production and its usage has been an important household activity in the state over the years. Muga Silk and Eri Silk have good demand in the national and international market. Rearing of Eri, Muga and Mulberry silkworm are playing an important role in the economic development of a large section of rural population of the state. The engagement of villages and families in sericulture activities have marginally come down to 8729 and 3.1 lakh during 2017-18 as compared to the previous year. The production of silk in the state was 4866.46 MT in 2017-18 which is 33 percent higher than the previous year. The performance of Sericulture is presented in Table 11.11.

**Table 11.11: Sericulture Activities in Assam**

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1. Sericulture Villages (Nos.)	10740	10746	11411	11281	11281	9935	8726
2. No. of Families Engaged	254516	291592	282073	652406	496901	319405	310582
3. Area under Silk Worm food Plants (In Hect.)	24268	26827	33790	15417	11434	15983	11585
3.1 Eri	8044	9172.5	15796	6601	5510	7176	5936
3.2 Muga	9400	10230	10371	5995	4383	5931.58	4369
3.3 Mulberry	6824	7424	7623	2821	1541	2875	1280



4.	Yield of Cocoons							
4.1	Eri-cut Cocoons (in MT)	1622.51	2514.16	3182	3050	3317	4350.58	6300
4.2	Muga Cocoons (in lakh Nos.)	5812	5450	6361	6528	6864	6480.00	7865
4.3	Mulberry Reeling Cocoons (in MT)	129.28	225.0	340.5	268	328	439.05	576
5.	Production of Silk Yarn (in MT)	1187.42	2068.0	2700.04	2497.40	2712.80	3647.49	4866.46
5.1	Eri Raw Silk	1061.61	1934.0	2545.6	2345.0	2555.00	3468.25	4650
5.2	Muga Raw Silk	114.56	109.0	127.2	126.0	127	129.60	156.96
5.3	Mulberry Raw Silk	11.25	25.0	27.24	26.4	31.02	49.64	59.50

Source: Directorate of Sericulture, Assam.

### Handloom:

Handloom is a precious part of generational legacy and has been kept alive by the skilled weavers engaged in the age old tradition of weaving since antiquity in Assam. In Assam, handloom weaving is inexorably linked with Assamese culture and heritage. The industry provides maximum number of employment after agriculture in the state and is known for its rich glorious tradition. Contrary to use of modern technology and tools in the textile sector in present days, the handloom sector continued to play very important role in terms of employment generation and the socio-economic development of Assam. Handloom sector in Assam has gradually grown to the expected level for commercial production. During 2017-18, there were 19.48 lakh weavers in the state. Number of handloom demonstration circle were 221 and 14273 numbers of villages were covered under the activity. During the year 9 Yarn Bank has been established by the Directorate under state sponsored scheme and 13783 numbers of schemes are functioning under Centrally Sponsored Scheme.

### Tourism:

Tourism is a fastest growing industry in the world. Tourism in Assam is based on wildlife, natural beauty, unique flora & fauna, holy shrines, lush green tea gardens, turbulent rivers, vibrant and colourful cultural festivals. Eco-tourism is one of the fastest growing tourism segments and therefore the government of Assam has given



tremendous thrust with relevant to natural beauty and bounty. In Assam usual tourism period is November to April. To make Assam as 365 days tourist destination and to boost the Tourism sector in the state, government has made endeavours to promote 'Monsoon Tourism'. A good campaign has been undertaken both in national and international forum to market the tourism destinations in the state. In the year 2017-18 a sublime growth of domestic as well as foreign tourist is witnessed as per report of Assam Tourism Development Corporation (ATDC).

The state Tourism Department has witnessed a considerable success and all round development in respect of infrastructure development as well as in creation of other facilities over the years with the financial assistance from the central government, state government and the NEC. For the growth of tourism sector, special emphasis has been given on Tourism Circuit Development, Destination Development, Wayside Amenities etc., through public and private partnership to tap the unexplored potential opportunities. Under the scheme Swadesh Darshan the state government through ATDC has undertaken a project costing Rs. 9835.54 lakh for development of Tezpur-Majuli-Sivasagar as Assam Heritage Circuit. Some small projects like *Amar Alohi* (Home-stays), livelihood linked tourism schemes at Majuli and Chandubi, *Punya Dham Yatra* etc are implemented to benefit to different sections of the population and tap all sources of tourism potential. The state government has made all basic arrangements for construction of a chain of 5[Five] Star Hotels in collaboration with private investors and Indian Hotel Company Ltd. Eco-tourism aims at the appreciation of both natural world and traditional cultures existent in natural areas and to protect natural and cultural assets. Assam has several ethnic groups residing in harmony in spite of the differences in rites and rituals, festivals and attires. One may discover the fascinating legacy of art and crafts in Assam, the proud producer of three unique varieties of Silk, the Golden Muga, the White Pat and Warm Eri. In Assam, one can hear the rhythms of the shuttles of looms in the craft village, which get momentum with the advent of spring. Special priority for development of Religious Tourism & Cultural festivals like "Ambubachi Mela" in Maa Kamakhya Temple, Dol Utsav in Barpeta has also given to attract both Indian and foreign tourists. One can opt for short cruises or can avail longer sailing to Kaziranga National Park or to the ethno-religious island of Majuli or to the remnants of the Great Ahom Kingdom in Sivasagar. The Brahmaputra Beach Festival, Kite festival, Kaziranga Golf Competition etc., are organised in collaboration with the Tourism Department is another important step to attract Indian and Foreign tourists to Assam. The Table 11.12 shows the volume of tourist traffic in last three years.

**Table 11.12: Number of Indian and Foreign Tourist to Assam**

Year	Domestic Tourist	Foreign Tourist
2015-16	5642950	26320
2016-17	5413156	28419
2017-18	5934394	31739

Source: Directorate of Tourism, Assam

**Table 11.13. Status of Revenue earned from the Tourists Lodge (Rs. in lakh)**

Lodge/Year	2015-16	2016-2017	2017-18
Kaziranga	1554390	900601	1021570



Sivasagar	735175	762694	802957
Bhalukpong	177000	85600	51600
Chandubi	107400	214800	178040
Barpeta Road	163100	262400	376100
Total	2737065	2226095	2430267

Source: Directorate of Tourism, Assam

During 2017-18, out of the five National Parks in the state, number of visits by foreign tourists increased in Orang, Dibru-Saikhowa and Nameri National Park. Maximum increase of 201 percent was noticed in Orang National Park compared to 2015-16 followed by Dibru-Saikhowa (115 percent) National Park. The Table 11.14 shows the trend of number of tourists to the National Parks in Assam during the last three years.

**Table 11.14: Number of Tourist visited National Parks in Assam**

Name of The National Park	Domestic Tourist			Foreign Tourist		
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
Kaziranga N. Park	464945	462741	475061	6679	7891	8467
Nameri N. Park	184763	195305	196491	1165	1206	1263
Orrang N. Park	111667	112037	114399	897	907	911
Manash N Park	214230	217464	261201	897	904	1565
Dibru Saikhowa N. Park	207655	261303	274660	1005	1112	1167

Source: Directorate of Tourism, Assam

Undoubtedly, Assam has immense potential in Tourism sector. The government of Assam, therefore, launched a new Tourism policy 'Tourism Policy of Assam 2018' with the aim of at least doubling the tourist inflow to the state within the next five years.

**Key Highlights of 'Tourism Policy of Assam 2018'**

- It aims at creating a policy framework to move tourism into a major economic sector of Assam, increasing the inflow of tourists' by at least two to three folds in the next five years.
- Its main focus is to make Assam a film making destination by offering a range of incentives to movie producers to come and shoot in the state.
- It will also encourage the private sector to pro-actively participate and invest in tourist places in order to promote the tourism sector.
- A special incentive will be offered as additional 10 per cent capital grant up to Rs 25 lakh for investment in remote/potential tourist destinations of Assam.
- It also offers a range of financial benefits for constructing approach roads and installing renewable energy sources at tourist places/units.

\*\*\*\*\*



# POWER

Along with the rise in the pace of rapid urbanisation, followed by infrastructure development and industrial growth, there is a considerable resulting upsurge of electricity demand in the country, as a whole. In the total electricity consumption, a sizeable part is from domestic and commercial categories. Therefore, electricity as a very vital input, its consumption and growth trends reflects and helps in knowing the priorities set thereby. Today, in the modern world, electricity or power is of paramount importance. This can be best known by the fact that the Power Department has the capacity in propelling all-round growth. In the present times, the development of a country is no longer determined by its gross capita income, rather it is dependent and decided by the energy availability and per capita consumption of energy. As per the Central Electricity Authority Statistics, Northeast part of India, has a hydro power potential of 63, 257 MW, which is about 43 percent of the total assessed hydro power of the Country as a whole Assam, among the North-Eastern states has a capacity to produce 680 MW of hydro power.

Pursuing the Indian Electricity Act 2003, and as a part of the programme of Assam Power Sector Development, Government of Assam has unbundled the Assam State Electricity Board (ASEB) in the year 2004, into three Government companies namely:

1. The Assam Power Generation Corporation Limited (APGCL),
2. The Assam Electricity Grid Corporation Limited (AEGCL), and
3. The Assam Power Distribution Company Limited (APDCL)

These initiatives were taken up by the electricity sector in the state, in the interest of its stakeholders, namely consumers, shareholders, suppliers, creditors, infrastructure builders and the Government of Assam. However, schemes like externally aided projects, rural electrification, accelerated power development and reform programmes (APDRP) are still executed under ASEB. The Assam Power Generation Corporation Ltd. (APGCL) are constituted to see to the power generation in the State Sector. Its final Transfer Scheme was implemented, since August, 2005. This company is mainly responsible for development of both Thermal and Hydro Power Projects, to generate electricity to meet the energy demands in the State, as far as possible and feasible.

Assam Power Distribution Company limited has a vision to be the "to be the catalyst for holistic growth of the state of Assam by powering Agriculture and Industry: lighting homes – rural & urban, and generating internal resources for



continually improving Technology and Delivery System to induce Customer Delight". Its mission is to make Assam Power Distribution Company Limited (APDCL) the pride of Assam with its 15 Key Strategies to be undertaken to achieve its mission. They are as follows:

- Advance planning for procurement of electricity to cater to the consumers according to demand.
- Enhancing the capacity of electrical sub-divisions and distribution networks by investing in infrastructure.
- Expanding the distribution network to supply power to all the villages.
- Increasing awareness among the consumers about economic use of electricity.
- Replacing of Electro-Mechanical meters with Electronic Meters.
- To give emphasis on 100% revenue collection, energy audit and error free billing.
- Engagement of franchisee to improve the services to the consumers.
- To setup vigilance cell to detect unauthorized use of electricity.
- Training the employees for consumer-friendly behaviour.
- To setup state-of-art customer care center and carry out consumer indexing.
- Strong resolve for financial discipline.
- Take proper steps to increase faith among consumers.
- Proper planning to an effective HT/LT ratio.
- To reduce AT&C losses by augmenting I-Ph lines wherever required.
- Installation of underground cable in lieu of overhead lines.

The present installed capacity of APGCL is 364.7 MW till 23/10/17 & 329.7 from 24/10/17, of which

*All units in MW	23/10/17	24/10/17
Namrup Thermal Power Station (NTPS)	97.0	77.0
Lakwa Thermal Power Station (LTPS)	105.0	90.0
Karbi Langpi Hydro Electric Project (KLHEP)	100.0	100.0
Myntriang Hydro Electric Project St-II (M. SHEP St-II)	3.0	3.0

As per the 18<sup>th</sup> Electric Power Survey of India, undertaken by Central Electricity Authority (CEA) for forecasting Electric Energy Requirements, Electric Load and Power Station Bus Bars (Utilities only) for all States and Union Territories of India. As per the survey report, the projected energy requirements for Assam will be 8947 MW and peak Electric Load 1817 MW. To meet this projected peak demand, ASEB has given emphasis on development of power projects based on coal and natural gas, along with steps taken up on the following.

- 1) Development of new Projects on hydro energy.
- 2) A distributed growth of small hydro projects.
- 3) Repair and Maintenance of Old Power Stations



- 4) Upgradation of Infrastructure related to distribution, for reduction of transmission and distribution losses thereby, which will lead to an added capacity of 1452 MUA.
- 5) Introduction of Sub-Station Automation and reliable communication system with OPGW, to reduce the system downtime which in turn will help in predictive maintenance.
- 6) Identification and Construction of new Transmission and Transformation Network.
- 7) Transmission capacity expansion for evacuation of power from central sector generating stations for distribution network. Transmission line capacity addition of length 614 CKm and MVA addition of 1310 MVA is expected.
- 8) To become less dependent on power purchased from outside the State.

**TABLE-12.1: Long Term Forecast of Electrical Energy Requirements At Power Stations Bus Bar MW (Utilities only)**

State	2011-12	2016-17	2021-22
Assam	1257	1817	2534
India	124995	199540	283470

Source: 18<sup>th</sup> Electric Power Survey Report.

#### **I. INSTALLED CAPACITY AND GENERATION OF POWER:**

The noticeable feature of installed generation capacity should be higher growth rates, and the inclusion of renewable energy sources in comparison to use of fossil fuels. At present, the installed capacity of generating plants in the state is 364.7 MW till 23/10/17 & 329.7 from 24/10/17, which includes Coal, Hydel and Gas plants of the State. Regarding the status of power generation in the state, is not at all satisfactory, from the point of view of power requirements in general and also in terms of consumer demand, in particular. There has always been a shortage of power supply in the state due to generation of less amount of power in comparison to its demand. However, the ASEB, has been trying to meet the power shortage by importing power from the Central Government and private foreign sources. It is observed that gross power generation in the State during the year 2015-16 was 1851.107 MU, during the year 2016-17 was 1650.607 MU and during the year 2017-18 was 1498.848 MU.



The installed capacity of various generating plants and the generation of power in the State during the last three years is shown in the Table 12.2 below-

**TABLE – 12.2: INSTALLED CAPACITY AND GENERATION OF ELECTRICITY IN ASSAM**

Installed Capacity of Generating Plant (MW)		2015-16	2016-17	2017-18
Hydel	KLHEP	100	100	100
	M. SHEP St-II	3	3	3
Gas	LTPS	120	120.0 till 11/1/2017 and 105.0 from 12/1/2017	105.0 till 23/10/2017 and 90.0 from 24/10/2017
	NTPS	97	97.0	97.0 till 23/10/2017 and 77.0 from 24/10/2017
Waste Heat Recovery Unit	LTPS WHRU	37.2	37.2	37.2
	NTPS WHRU	22.5	22.5	22.5
Total	APGCL	379.7	379.7 till 11/1/2017 and 364.7 from 12/1/2017	364.7 till 23/10/2017 and 329.7 from 24/10/2017
<b>Gross Unit Generation (MU)</b>				
Hydel	KLHEP	396.375	397.130	490.057
	M. SHEP St-II	0.383	5.725	10.739
Gas	LTPS	946.797	891.400	663.401
	NTPS	507.552	356.352	325.652
Total	APGCL	1851.482	1650.607	1489.848
<b>AUX Consumption(MU)</b>				
Hydel	KLHEP	1.982	1.986	2.450
	M. SHEP St-II	0.008	0.057	0.107
Gas	LTPS	76.562	68.136	53.490
	NTPS	27.734	23.168	19.252
Total	APGCL	106.286	93.347	75.300
<b>Net Unit Generation (MU)</b>				
Hydel	KLHEP	394.393	395.144	487.607
	M. SHEP St-II	0.375	5.667	10.631
Gas	LTPS	870.235	823.265	609.911
	NTPS	479.818	333.184	306.400
Total	APGCL	1744.82	1557.260	1414.548

Source: Assam Power Generation Corporation Ltd (APGCL).



### **POWER SUPPLY POSITION:**

The energy requirements in the State has been worked out at 9364.54 Million Units (MU) for the year 2017-18, as against 9200.37 MU during the year 2016-17 and 8279.31 Million Units (MU) during the year 2015-16. But availability of energy during the periods was 8572.1 MU, 8239.77 MU and 7857.25 MU respectively. However, the power generation was 1489.848 MU, 1650.607 MU during 1851.107 MU respectively during the period. The peak demand of electricity in the State has increased from 1496 MW in 2015-16 to 1679 MW during 2016-17 and further increased to 1763 MW in the 2017-18, though the shortage of power has come down from 158 MW in 2015-16 to 45.9 MW in 2016-17 and 79.5 MW in 2017-18, the shortage in percentage being 11 %, 3% and 5% respectively during the period. The requirement and shortage of electricity in Assam is shown in table 12.3 below:

**TABLE – 12.3: PER CAPITA AVAILABILITY STATUS**

<b>Item</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Energy requirement (MU)	8279.31	9200.37	9364.54
Energy input (availability)	7857.25	8239.77	8572.10
<b>Shortage (MU)</b>	<b>422.06</b>	<b>960.60</b>	<b>792.44</b>
Peak demand (MW)	1496	1679	1763
Peak demand net (MW)	1338	1633	1684
<b>Shortage (MU)</b>	<b>158</b>	<b>46</b>	<b>79</b>
<b>Shortage in %</b>	<b>11%</b>	<b>3%</b>	<b>5%</b>

### **TRANSMISSION, DISTRIBUTION & COMMERCIAL LOSSES:**

Power, which and when supplied to various categories of consumers, it passes through various stages from transformation of higher voltage level to final distribution in the premises of the various customers. This process involves energy losses, known as Transmission, distribution and commercial losses in the State. The aggregate transmission and commercial losses in percentage 21.74% in 2015-16, 24.70% in 2016-17 and 15.72% in 2017-18. Though the situation is gradually improving, however power loss through transmission is an important issue and area of concern, especially for power deficit states like Assam. In order to bring down the T and D losses following measures has been taken up and they are as follows:

1. Energy Accounting an electricity live ring fencing under capital R-APDRP.



2. Repair and Maintenance and re-conducting of 33KV, 11KV and LT lines.
3. Changing and replacing of electromechanical meters to electronic meters.
4. Establishment of police station in different circles for theft detection.
5. Energy bill payments through net banking.

In Assam the transmission distribution and commercial losses is shown in table 12.4 below:

**TABLE – 12.4: TRANSMISSION & DISTRIBUTION (T&D) LOSSES AND  
Item TRANSMISSION & COMMERCIAL (AT&C) LOSSES**

Item	2015-16	2016-17	2017-18
Energy Input (MU) (at APDCL end Available)	7571.24	7948.08	8272.93
Energy Billed (MU)	6199.32	6525.91	6813.81
T&D Losses (MU)	-	-	-
T&D Losses (%)	-	-	-
Amount Billed (Rupees in crore)	3810	4327	4759
Amount Realized (Rupees in crore)	3368	3968	4870
Collection Efficiency (%)	95.58	91.71	102.32
Overall Efficiency (%)	78.26	75.30	84.28
AT&C Losses (%)	21.74	24.70	15.72

*T & D losses: Transmission and Distribution losses;*

*AT&C losses: Aggregate Transmission and Commercial Losses;*

*Source: Assam Power Distribution Company Ltd.*

### NUMBER OF ELECTRICITY CONSUMERS:

The domestic categories of consumers include Jeevan dhara, capital LT (DomA, DomB) and HT (Dom) categories, while commercial category includes LT(Com) & HT(Com) categories.

The total number(s) of consumer(s) in Assam, Domestic and Commercial in shown in tables 12.5 below:

**TABLE – 12.5: Total number of consumers in Assam**

Year	Domestic	Commercial	Total
2015-16	2994105	214567	
2016-17	3605099	241652	
2017-18	3930759	256004	

*Source: Assam Power Distribution Company Ltd.(Commercial Wing)*



Sectorwise electricity consumption in Assam is shown in the below table

**Table 12.6: Sectorwise electricity consumption in Assam, All figures in MU, except stated otherwise**

Sector	Period			% change in 2017-18 over 2016-17
	2015-16	2016-17	2017-18	
Industrial (including irrigation)	1505	1377	1463	6%
Agriculture	12	15	20	33%
Domestic	3115	3423	3703	8%
Commercial	908	1013	979	-3%
Public services*	161	190	159	-16%
Others	498	508	490	-4%

Note: \*government office, government institution (school, college etc), public lighting and water supply works.

The electricity generated in Assam in Million Units (MU) from central and state sector can be known from table 12.7

**Table 12.7: Sectorwise electricity generated in Assam, All figures in MU, except stated otherwise**

Source	Electricity generated			% change in 2017-18 over 2016-17
	2015-16	2016-17	2017-18	
In the state (excluding central sector)				
Thermal	-	-	-	-
Natural gas	1377	1166	978	-16%
Hydro	394	395	488	23%
Renewable	10	19	25	33%
From central sector				
CSGS	4890	6124	6138	0.23%

In order to meet the shortage of electricity generated from its own sources and also to meet the growing demand of consumers in the State, the power distribution company has been purchasing electricity from different sources and agencies from time to time. Electricity purchase in Assam is shown in Table-12.8 below.



**Table 12.8: Electricity purchased, Assam**

Name of the organizations	Year 2015-16		Year 2016-17		Year 2017-18	
	Units (MU)	Total cost (Rs. In Cr.)	Units (MU)	Total cost (Rs. In Cr.)	Units (MU)	Total cost (Rs. In Cr.)
APGCL	1744.82	68	1557.26	596.62	1492.32	414.93
Kopili	358.72	28.6	514.29	106.05	539.61	57.71
Kopili2	49.10	8.4	52.93	8.58	56.32	7.7
Khangdong	95.14	16.14	106.39	19.70	139.47	22.6
Ranganandi	566.47	149.06	534.95	128.17	600.51	174.43
Doyang	67.08	31.80	107.65	54.13	113.64	54.72
AGBP	924.78	353.26	812.50	280.70	824.96	280.64
AGTPP	267.54	112.18	371.36	109.10	267.53	98.62
AGTPP-2	66.89	4.99	-	-	-	-
NHPC	152.00	54.50	210.40	58.21	238.31	63.94
Farakha	236.05	75.04	277.26	94.18	228.75	82.51
Kahel gaon-1	132.23	42.30	130.99	44.35	118.80	42.28
Kahel gaon-2	537.76	179.68	524.56	179.57	555.03	194.92
Talcher	142.65	29.63	136.50	38.16	145.92	39.01
Farakha-3	160.16	77.11	-	-	-	-
BTPS	-	-	1020.85	542.93	1007.75	645.45
MeEcl	16.74	5.84	17.72	10.78	0.55	0.40
IOCL(AOD)	10.56	3.87	9.27	4.39	-	-
NWNN(solar power)	8.61	11.37	7.88	9.56	7.19	9.83
SEIPL	-	-	4.4	4.27	6.15	5.45
SECI	19.17	6.14	38.05	24.93	35.72	24.41
NNBNL(coal power)	10.79	3.08	36.40	11.07	36.12	11.48
IEX	250.67	62.98	239.31	58.74	772.45	317
OTPC	507.38	4.62	1287.24	464.95	1269.32	384.08
HHPCL	9.81	4.03	8.97	3.69	8.55	3.51
OTHERS	1944.19	2102.02	1193.23	875.14	1041.07	1559.10

#### **Rural Electrification:**

The Power Department has taken up a number of initiatives for electrifying the rural areas of the State under the flagship programme of Rajiv Gandhi Gramin Vaidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

#### **Rajiv Gandhi Gramin Vaidyutikaran Yojana (RGGVY):**

The Rajiv Gandhi Gramin Vaidyutikaran Yojana (RGGVY) is a scheme for attaching the goal of providing access to electricity to 8406 nos. of Un-Electrified (EU) villages and provide BPL connection to around 10 lakh consumers in 13081 nos of Already Electrified (AE) villages in the State. In Assam, RGGVY was



implemented from April 2007. Under this programme, 90% grant is provided by Government of India and 10% as loan by Rural Electrification Corporation (REC) as nodal agency for the programme. Under RGGVY, electrification works of 8348 nos. of un-electrified villages has been completed, 12841 nos. of partially electrified villages has been completed and electricity connections to 1214398 nos. of BPL households were released at free of cost.

**Deendayal Upadhyaya Gram Jyoti Yojana-DDUGJY (DDUGJY):**

This scheme was announced since budget 2014-15, envisages feeder separation, strengthening sub transmission and distribution network, metering at all levels, including input points, feeders and distribution transformers, minor grid and off grid distribution network and rural electrification to complete already sanctioned projects. This scheme will help in power supply to rural households and adequate power supply to agricultural consumers.

Under the Deen Dayal Upadhyaya Gramjyoti Yojana, a total of 928 nos. of un-electrified villages have been electrified till date in 2016-17. Power has been supplied to the remaining 1022 nos. of un-electrified villages till May, 2017. Moreover, a total of 5,41, 953 nos. of BPL beneficiaries has been provided electricity connections free of cost

**Status of electrification of un-electrified villages under DDUGJY:**

Total villages in Assam as per census 2011	Balance UEV as on 31.03.2015	Achievement under XII plan/DDUGJY as on 31.12.2017	Villages which could not be electrified due to un-inhabited/PGR/VGR	Total villages electrified in Assam
26,395	2,892	2,732	160*	26,235

Note: un-inhabited (138) nos – PGR/VGR (22) nos = 160 nos

**(a) Status of Award:**

No. of Projects sanctioned	No. of packages	No. of pkgs. Awarded	Remarks
27	219	219	Works under progress

**(b) Coverage and achievement as on 30.11.2018**

No. of projects sanctioned	UEV (No.)		IEV (No.)		SAGY (No.)		BPL HHS (No.)	
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
27	2892	2732*	10970	7846	117	21	735054	563931

Note: \*un-inhabited + villages which cannot be electrified (PGR/VGR) = 160 nos.



- All un-electrified villages as per GARV have been electrified.
- As reported in various print/visual media sources many villages are yet to get electricity, mainly due to:
  - Many habitations of census villages got de-electrified due to damage of infrastructure due to flood/cycles etc.
  - Habitations of many census villages are yet to be electrified and programme is going on to complete the partially electrified census villages.

### SAUBHAGYA PROGRESS

SAUBHAGYA	Household connections as per SUBHAGYA Dashboard (In Lacs)		Balance HH (In Lacs)
	Coverage	Achievement (as on 30.11.2018)	
	19.04	9.47	9.57

N.B:

HH connections released against SAUBHAGYA only w.e.f 11th Oct 2017 to 30th Nov 2018	5.62 Lacs
HH connections released against XII plan/DDUGJY w.e.f 11th Oct 2017 to 30th Nov 2018	3.85 Lacs
Total HH connections released w.e.f 11th Oct 2017 to 30th Nov 2018	9.47 Lacs

### (c) Financial progress under DDUGJY: (as on 30.11.2018):

Plan	Sactioned Cost (Rs. In Cr.)	Amount Released (Rs. In Cr.)	Utilization (Rs. In Cr.)	Balance (Rs. In Cr.)
XII plan, DDUGJY	1621.07	946.30	977.74	-31.44
DDUGJY (Ph-I)	1267.74	337.36	353.65	-16.29
DDUGJY (Ph-II)				
DDG	288.00	160.94	143.28	17.66
SAUBHAGYA	2271.24	248.08	159.84	88.24
<b>TOTAL</b>	<b>5448.05</b>	<b>1692.68</b>	<b>1634.51</b>	<b>58.17</b>

### Status of DDG(DDUGJY Scheme), NRE, APDCL:

- DPRs for remote villages for electrification through Solar Standalone System and Solar Micro grid etc. have already been sanctioned by the Govt. of India amounting to Rs. 288.00 Cr.
- The total households to be covered under Standalone system & Micro grid now stands at 41,822 nos. and compared 20,602 nos. of households.
- Electrification works in un-electrified remote villages are completed.



### **SAUBHAGYA & GRAM SWARAJ ABHIYAN (GSA):**

- Pradhan Mantri Sahaj Bijli Har Ghar Yojana – 'Saubhagya' a new scheme was launched by the Hon'ble Prime Minister on 25<sup>th</sup> September 2017. Under Saubhagya free electricity connections to all households (both APL and poor families) in rural areas and poor families in urban areas will be provided.
- Saubhagya scheme was ceremonially launched by hon'ble Chief Minister of Assam on 23<sup>rd</sup> January 2018 in the state of Assam.
- Awareness campaign at field level had been started from 16<sup>th</sup> March 2018.
- DPR for Saubhagya submitted on 23-03-2018 for an amount of Rs. 5098.17 Cr.
- REC Ltd. Has released Rs. 248.08 Cr. As ad-hoc advance under Saubhagya scheme till date.

<b>Detailed Project Report (DPR)</b>				<b>Revised provisional sanction (Rs. In Cr.)</b>
<b>Particulars</b>	<b>Cost ( Rs. In Cr.)</b>	<b>No. of Revenue village (no.)</b>	<b>No. of Household (no.)</b>	
Rural on grid	4932.59	25015	18,62,823	2235.39
Rural off grid	74.58	365	6376	31.88
Urban (economically poor household)	91.00	96	8,817	3.97
<b>Total</b>	<b>5098.17</b>	<b>25476</b>	<b>18,78,016</b>	<b>2271.24</b>

### **GRAM SWARAJ ABHIYAN (GSA-I):**

<b>Target</b>		<b>Achievement as on 30.11.2018</b>	
<b>Village</b>	<b>Household</b>	<b>Village</b>	<b>Household</b>
3042	282625	1687 (55%)	194385 (69%)

### **GRAM SWARAJ ABHIYAN (GSA-II):**

<b>Target</b>		<b>Achievement as on 30.11.2018</b>	
<b>Village</b>	<b>Household</b>	<b>Village</b>	<b>Household</b>
2728	425984	1065 (39%)	239114 (56%)

Under the Deen Dayal Upadhyaya Gramjyoti Yojana, a total of 928 nos. of unelectrified villages have been electrified in 2016-17. Power has been supplied to the remaining 1022 nos. of unelectrified villages till 31<sup>st</sup> May, 2017. Moreover, a total of 5,41,953 nos. of BPL beneficiaries has been provided electricity connection free of cost.



### **INITIATIVES ON SOLAR POWER GENERATION IN ASSAM:**

Solar power has become a key strategic choice for high growth economies. Renewable energy is no longer considered an "alternate energy" source, but has increasingly become a key part, of the solution to meet a nation's growing energy needs. The demand for electricity in Assam, is constantly on the rise, with the increase in the population and the growth of infrastructure. It is also seen that, there is a steady rise in the numbers of commercial, industrial, educational, institutional, and residential establishments, triggered by rising population and diversified economic activities. In Assam, the demand for electricity exceeds the supply of the same, resulting in power unavailability and crisis arising thereby.

### **INITIATIVES TAKEN UP BY APGCL FOR PROMOTION OF RENEWABLE ENERGY:**

Special attention is been given to the development of the State, through a separate budget allocation granted by GOA, under various renewable energy programmes, over and above receipt of CFA from the Ministry of New and Renewable Energy. The Government of Assam, has allocated budgetary support for the deployment of community based rural electrification model through mini and micro solar plants for providing basic lighting facilities to the inhabitants of un-electrified villages and un-electrified hamlets of electrified villages. In many North-Eastern States, remote villages have widely dispersed households, small population and are situated at large distances from motorable roads.

In addition to these conditions, many villages in Assam are located in Char Areas, of the Brahmaputra River, which has to be shifted, due to inundation and occurrence of floods. Under such circumstances, good lighting facilities can not only provide basic comforts to the households but also provide safety from wild animals etc. Solar photovoltaic based home lighting systems have been providing, a welcome relief, to people living in such remote villages. Hybrid Solar and Wind lighting prototypes is another promising application related to renewable energy based favourable combination of two or more energy sources within the same system, such as wind and solar ones. The hilly slopes of territories in Assam, are ideal for putting up wind generated power stations.

Grid interactive solar photovoltaic power plan on the roof top terrace of buildings is a viable option of solar energy application. It has been proposed to set up grid connected solar photovoltaic power plants on roof terrace of buildings or ground based projects with provisions of net-metering. The Scheme targets large area roofs or vacant land of Government/ Semi Government offices, hospitals, educational institutions. Implementation of the Projects would meet partial load of buildings during working days and contribute the surplus power available to the Grid during weekends and holidays.



APGCL has also been taking initiatives to make use of solar energy and energy efficiency measures for public street lighting as a part of smart street lighting solutions. The Government has announced its priority for the provision of sufficient and reliable power to everyone in the State. However, with the given resource position and infrastructural constraints, it would take some time to put the system in place for supply of quality and uninterrupted power supply. However, as a beginning, it is proposed to take steps in this direction to cover a few important places of tourist attraction which needs a good infrastructure including uninterrupted power supply to these places. As a part of this 24 × 7 dedicated feeder to Kamakhya, Kaziranga, Majuli, Tezpur, Sualkuchi, Manas, and Pabitora. Accordingly, Rs.3000.00 lakhs is proposed to be provided in the budget. Various new Projects have been taken up in the State power sector recently, such as infrastructure development, providing uninterrupted power supply to all etc. In 2017-18, six new power projects with an installed capacity of 247 MW have been proposed in the Budget. Moreover, Ministry of New and Renewable Energy (MNRE), Govt. of India has proposed 688 MW of Generating capacity from the renewable energy sources in Assam till 2021-22, out of which 663 MW will be from Solar and 25 MW will be from hydro electric power projects.

Under Restructured Accelerated Power Development and Reform Programme (R-APDRP), advanced IT implementation has been successfully completed in 67 towns across Assam, including Guwahati. Initiatives have been taken to reduce AT & C losses in these towns considerably. Implementation of SCADA (Supervisory Control and Data Acquisition) system alongwith Smart Grid Pilot Project. These two projects are expected to help in maintaining round the Clock power supply in Guwahati City.

For the Financial year 2017-18, Government will launch the 'Flagship' Programms of setting up of 2 nos. of solar power plants having capacities of 69 MW at Amguri in Sivasagar District and of 20 MW at Chandrapur in Kamrup District of Assam, for providing 24 ×7 power supply to 5 (five) nos. of towns in Assam, namely Guwahati, Dibrugarh, Sualkuchi, Rangapara and Jorhat. Many states in the country has segregated HT (Industry) and LT (Non-industry) feeders and this has resulted in reduction of AT & C losses of DISCOMs. Our Government will support such proposals for dedicated HT feeders for the HT Consumers. For preparatory works on the same, Rs.1000.00 lakhs will be allocated in the current year. It is proposed to revise Assam, Electricity Duty, under the relevant Act in due course of time. Further, the Government is keen that the pension fund available be managed professionally in such a way that it will be invested to get the maximum return.

\*\*\*



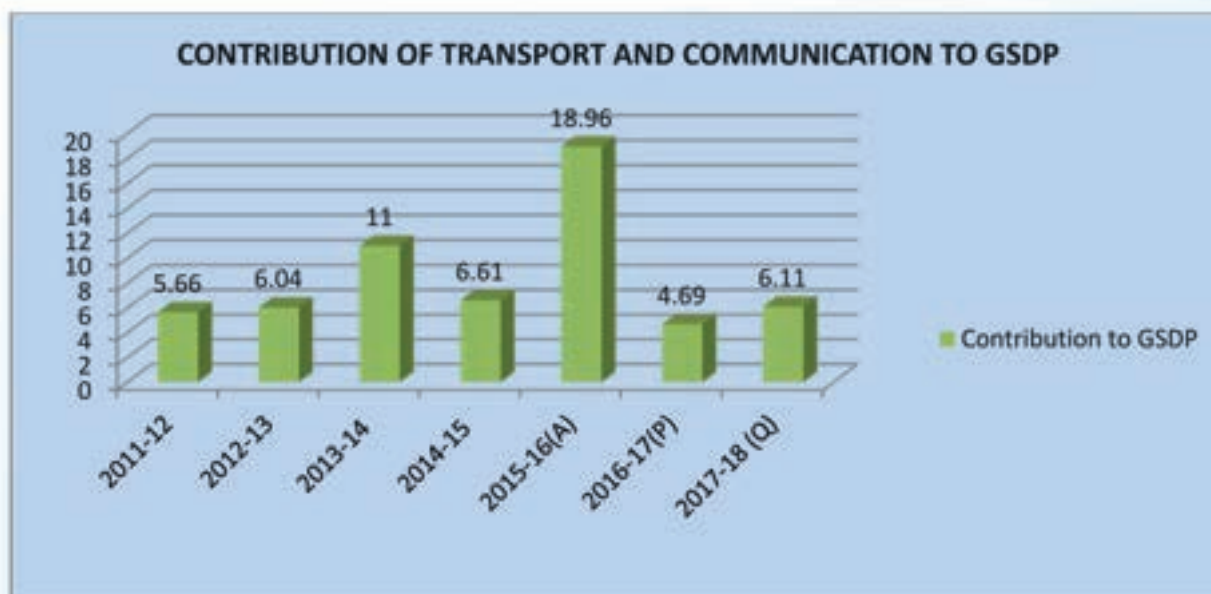
## TRANSPORT AND COMMUNICATION

Transport and Communication is the basic infrastructure for development of a modern economy. An efficient transport system integrates remote, backward and urban areas and plays a vital role in increasing productivity and improving quality of life. Moreover, development of this sector generated large employment opportunities.

**TABLE: 13.1**

Contribution of Transport & Communication sector to State Economy [GSDP at Constant 2011-12 Prices]	
Year	Contribution to GSDP
2011-12	5.66
2012-13	6.04
2013-14	11.00
2014-15	6.61
2015-16	18.96
2016-17(P)	4.69
2017-18 (Q)	6.11
P: Provisional	Q:Quick

Source: Directorate of Economics & Statistics, Assam



Assam being the gateway of the North East India, the need for development of transport and communication sector in the State is paramount for speedy economic development of the region. Due to its geographical isolation, transport has been a major bottleneck in the process of economic progress of the State. The State although served by all the modern



means of transport viz., roads, railways, waterways and airways, there is enough scope for further improvement of the facilities. The contribution of the transport and communication sector is calculated at 6.11 percent of State Gross Domestic Product in 2017-18(Q) at constant (2011-12) prices (New base). The graph shows the trend of the contribution of the transport and communication sector to the GSDP of Assam.

The position of the State with regard to the existing means of transport and communications is described briefly in the following paragraph.

#### **ROADS:**

The road network in Assam comprises of total 52890 Km. of roads consisting of 3900.44 Km. National Highways, 2530 Km. State Highways, 4379 Km. Major District Roads, 1714 Km. Urban roads, 40367 Km. Rural Roads.

At present 48989 Km. road network excluding 3900.44 Km. National Highways [of which 223.31 Km. under construction and 894.79 Km. newly declared NH Way] is maintained by the State PWD. Out of the total 48989 Km. road length maintained by the PWD, 28480 Km. is blacktopped, 200 km is cement concrete, 1393 km is Inter- locking Cement Concrete Block Pavement (ICBP) and 18917 km is metalled and un-metalled roads. Most of the State Highways and Major District Roads are Single lane roads and hardly 16 percent of the Secondary Roads are double lane and 20 percent are still unpaved. According to the India road Congress Vision, 2021, the State Highways should be 100 percent double lane and 40 percent of the Major District roads should be doubled lane. Also the weak pavements and bridges should be strengthened to cope with heavy traffic.

The effort of the State PWD helps to bring down the number of semi-permanent timber bridges from 5450 in 2001 to 1000 as on March 2018. The total number of RCC Bridges under PWD is 631-major bridges 74 and minor bridges 557 and the total bridge length is 23,735.55 m while the total numbers of RCC Bridges under NHA is 161, out of which major bridges is 37 and minor bridges is 124 and the total bridge length is 6128.21 m as per DRSC Report 2017-18. The table 13.2 shows the road length network maintained by the State PWD.

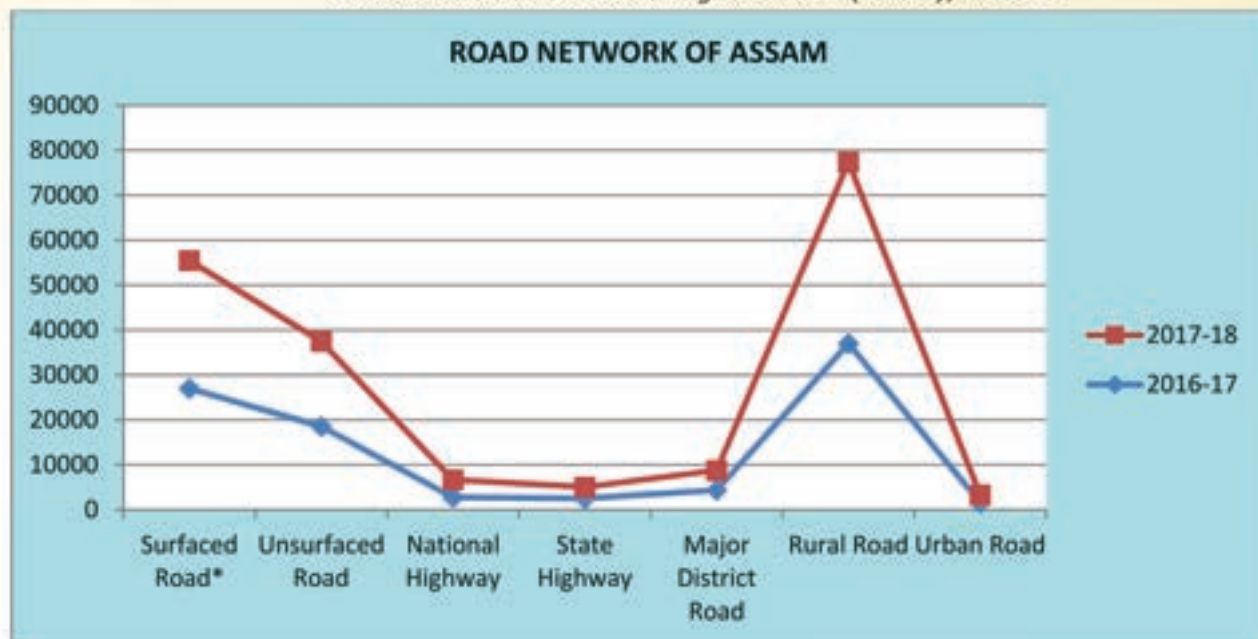
**TABLE - 13.2**  
**ROAD NETWORK IN ASSAM**

Item	(in Km.)					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Surfaced Road*	22700	23747	23948	25546	27003	28480
Unsurfaced Road	22800	21753	20914	19316	18551	18917
National Highway	3069	3069	3834.68	3862.53	2782.34	3900.44
State Highway	3134	3134	2530	2530	2530	2530
Major District Road	4413	4413	4379	4379	4379	4379
Rural Road	36544	36544	36544	36544	37030	40367
Urban Road	1409	1409	1409	1409	1615	1714

\*Excluding National Highways



Source: Office of the Chief Engineer PWD (Roads), Assam.



The graph above shows that the road network in Assam has made a remarkable progress in the length of National Highways from 2782.34 km in 2016-17 to 3900.44 km in 2017-18. Similarly, in the rural areas, the length of Rural Road has increased from 37030 km in 2016-17 to 40367 km in 2017-18.

The total road length availability [including NH] is 52890 km, out of which the road length per lakh population [2011 Census] is 169.49 and 67.43 km per 100 Sq.Km. of geographical area, on March 2018. Whereas the road length was lower in 2016-17 in respect of per lakh of population 146.0 km and 58.08 per sq. Km of geographical area respectively.

#### **NATIONAL HIGHWAY DEVELOPMENT PROJECT:**

The National Highways are very important as even though these comprise about 7.0% of the road network but are carrying about 40% of the total road traffic. The Ministry of Road Transport & Highways is responsible for the development and maintenance of National Highways.

Out of the total 111,111 Km. length of NH in the country, Assam shares only 3900.44km. This includes 15 numbers of newly declared NHs for a length of 1032.127 km. In addition to this 847.00 km of road stretches have already been approved "in principle" as new NHs and another 1253 km of state roads have been identified to be upgraded to NH.

The Government of India has also proposed to construct/improve roads connecting Doboka (Assam) to Dimapur (Nagaland Border), Baihata-Chariali to Banardewa, Banardewa (Assam) to Arunachal Border, Assam/Meghalaya Border to Assam Tripura Border and Silchar (Assam) to Mizoram Border under NHDP Phase-II.



The Government of India has approved implementation of 4 laning of NH-37 on Nagaon-Jorhat-Dibrugarh stretch from Numaligarh to Dibrugarh (201 Km.) along with construction of 4-lane Bridge over river Brahmaputra connecting Numaligarh and Gohpur.

In addition, the Dhola-Sadiya 2-lane Bridge (bridge length 9.15 Km.) connecting Dhola & Sadiya Ghats upto Islampur (NH 37 extension) at the cost of Rs. 950 crore was inaugurated on 26<sup>th</sup> May, 2017. This longest river beam bridge in India is named after Dr. Bhupen Hazarika. This project has not only saved about 4 hours travel time between Assam and Arunachal Pradesh, but also promotes socio-economic activity around the area.

Government of India has approved implementation of Arunachal Pradesh Package of Roads & Highways covering 2319 Km of roads at an estimated cost of Rs.11703 crore. Out of 2319 Km., 139 Km. falls in Assam.

The Govt. of India has also approved the following three major long-pending road infrastructure projects for Assam worth over Rs. 1,933 crore (excluding land acquisition and other pre-construction activities) with a view to expedite the improvement of infrastructure in Assam and reduce travel time and cost of travel for traffic, particularly heavy traffic, plying between Guwahati and Dibrugarh and beyond. These projects would also increase the employment potential for local labourers for project activities. The project covered the districts of Golaghat, Jorhat, Sivasagar, Dibrugarh and passes through the towns of Numaligarh, Dergaon, Jorhat, Jhanji, Gaurisagar, Sivasagar, Demow, Sepon, Moran and Dibrugarh.

- Four-laning of the Demow-Bogibil junction section of National Highway-37 under the Special Accelerated Road Development Programme in North Eastern Region (SARDP-NE) on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The length of the road will be approximately 46 Km.
- The second project is four laning of the 'Jorhat-Demow' section of National Highway-37 under SARDP-NE Phase 'A' on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The length of the road will be approximately 80 Km.
- The third project is of four-laning of the 'Numaligarh-Jorhat' section of National Highway-37 also under SARDP-NE Phase 'A' on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The length of road will be approximately 51 Km.

The physical achievement (in km) of SARDP-NE is 76.76 kms out of the 130.00 kms in 2017-18. Whereas the financial achievement is 171.01 crores out of the targeted 1438 crores for the NER States in the year 2017-18.



## **IMPLEMENTATION OF FLAGSHIP PROGRAMME FOR DEVELOPMENT OF ROAD INFRASTRUCTURE:**

The PMGSY has been implemented with the objective of connecting rural habitations with all-weather roads in order of priority. Till end of March 2018, 14416 villages have been covered under rural connectivity programme. Out of the total 14415 villages, 5910 villages having 1000 or more habitations, 4439 villages with 500 or more habitations and 2875 villages having habitations from less than 250 habitations to below 500 habitations.

### **ROAD TRANSPORT:**

Road transport is considered to be vital to economic development and social integration of the country. Road transport is also one of the most cost effective and preferred mode of transport, both for freight and passengers, keeping in view its level of penetration into populated areas. Easy availability, adaptability to individual needs and the cost savings are some of the factors which go in favour of road transport. Road transport also acts as a feeder service to railway, shipping and air traffic.

### **MOTOR VEHICLES:**

The rapid increase of the number of motor vehicles on road in Assam has been observed over the past few years. The on road vehicle population in the State has reached 3309551 as on March 2018 compared to 2837829 as on March 2017. An additional of 471722 or 16.62 percent on road motor vehicles was added during the year 2017-18 over 2016-17. Out of the total 3309551 motor vehicles during 2017-18 on road about 63.7 percent vehicles were two wheelers.

According to the Motor vehicle registering authority of the State as many as 416726 new motor vehicles were registered during the year 2017-18 in the State which is 51.1 percent more than that of the previous year. Out of the total registered motor vehicle more than 73.4 percent were two wheelers.

The total number of Motor vehicles on road in the State was recorded about 16.62 percent growth as on March 2018 compared to 6.42 percent growth as on March 2017(2837829) which shows increasing trend.

The density of motor vehicles in Assam was 42.2 per Sq. Km. during the year 2017-18 as against 36.2 vehicles per Sq. Km. during the year 2016-17. Whereas during the year 2000-01, density of motor vehicles in Assam was only 6.8 per Sq. Km.

The increase in the number of Motor vehicles registered as well as Motor vehicles on road in the State over the years is evident from the Table -13.3.

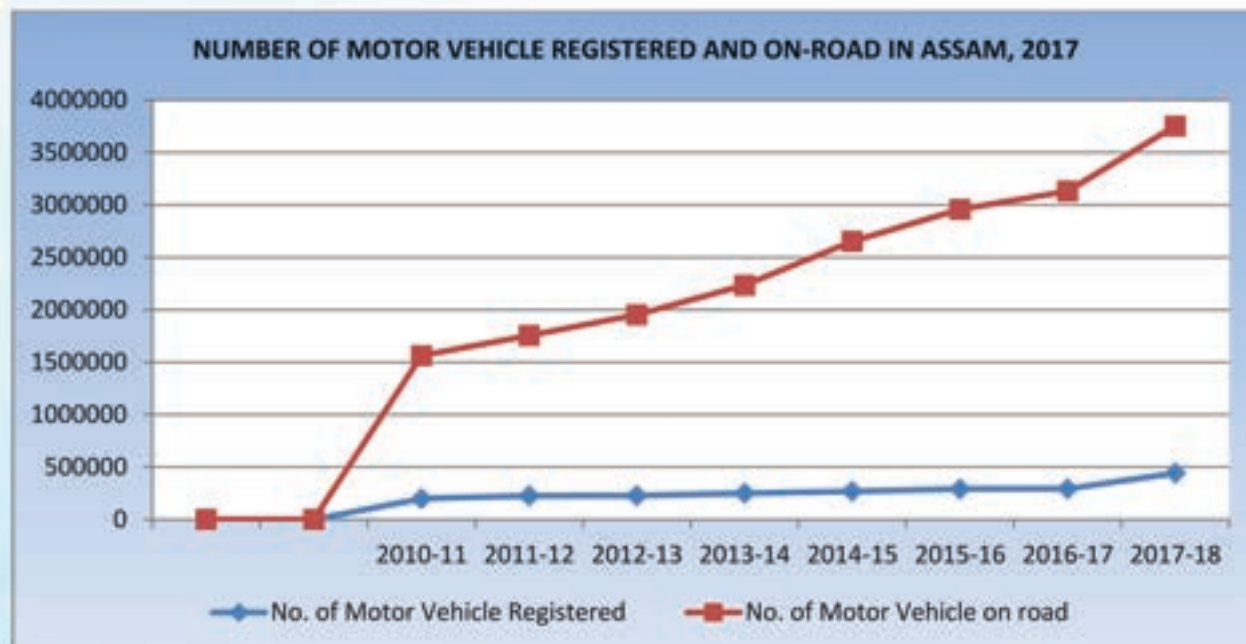


**TABLE - 13.3**  
**NUMBER OF MOTOR VEHICLE REGISTERED AND**  
**MOTOR VEHICLE ON-ROAD IN ASSAM**

Year	No. of Motor Vehicle Registered	No. of Registered Motor Vehicle per		No. of Motor Vehicle on road	No. of Motor Vehicle on road per	
		100 Sq.Km.	Lakh of Population		100 Sq. Km.	Lakh of Population
2000-01	52518	67	198	534885	682	2017
2010-11	199076	253	655	1363625	1738	4484
2011-12	226010	288	725	1528269	1948	4903
2012-13	227367	290	729	1725222	2199	5528
2013-14	249564	318	799	1984880	2530	6360
2014-15	267900	341	858	2384576	3040	7641
2015-16	290874	370	932	2666589	3400	8545
2016-17	292980	374	939	2837829	3618	9094
2017-18	416726	530	1335	3309551	4219	10606

Source: Office of the Commissioner of Transport, Assam and Directorate of Economics and Statistics, Assam.

The graph below depicts the increase in the number of motor vehicles registered and the numbers of vehicles on- road which shows a quite remarkable increase over the years.



With the increasing growth of motor vehicles the number of road accidents in the State is also increasing. During the year 2017-18, the number of road accidents reported in the State was 7170 which was calculated 3.56 percent less over the previous year. During the year 2016-17, number of road accidents reported 7435. The number of persons killed



and injured as a result of road accidents during 2017-18 were 2783 and 6163 respectively compared to 2572 and 6127 number of persons killed and injured respectively during 2016-17. The number of persons killed and injured in 2017-18 recorded 8.2 percent more and 0.59 percent more compared to the number of persons killed and injured reported during the year 2016-17. However, the number of persons killed per 100 accidents recorded 38.8 during 2017-18 compared to 34.6 during 2016-17 showing an increasing trend.

The Road accidents severity in Assam may be evident from the Table-13.4 below.

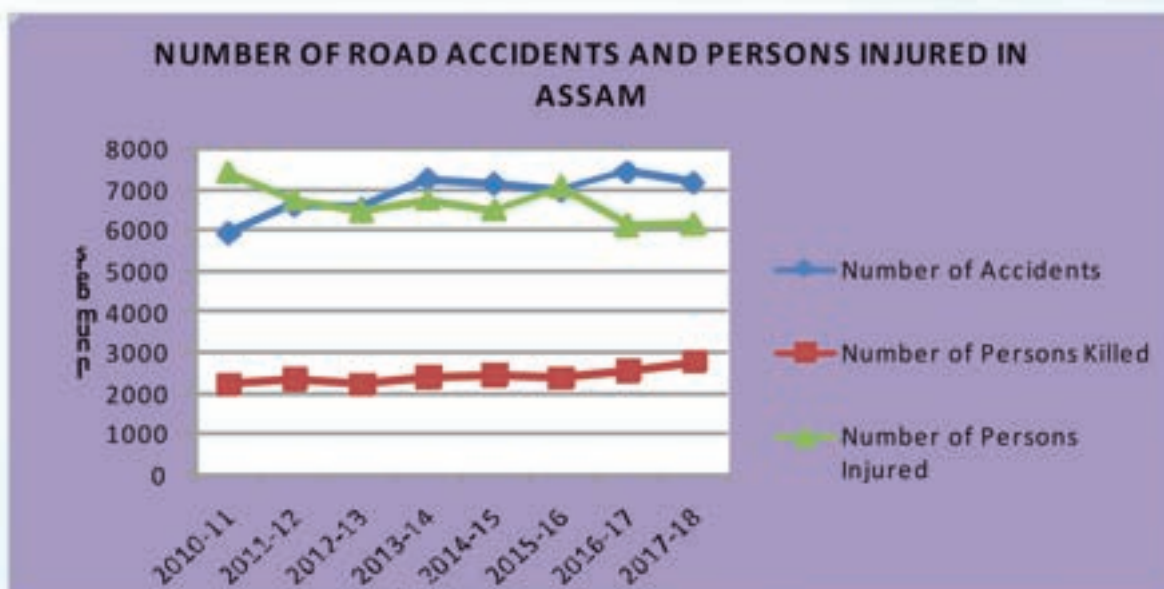
**TABLE - 13.4**  
**NUMBER OF ROAD ACCIDENTS AND PERSONS INVOLVED IN ASSAM**

Year	Number of Accidents	Number of Persons		Accident Severity*
		Killed	Injured	
2000-01	2516	1021	3744	40.6
2010-11	5929	2250	7404	38.0
2011-12	6617	2375	6741	35.9
2012-13	6562	2252	6472	34.3
2013-14	7251	2407	6734	33.2
2014-15	7143	2465	6499	34.5
2015-16	6959	2397	7066	34.4
2016-17	7435	2572	6127	34.6
2017-18	7170	2783	6163	38.8

Accident Severity: \* Number of persons killed per 100 Accidents.

Source: Office of the Additional Director General of Police, Criminal Investigation Department, Assam.

The Graph below shows the number of road accidents and persons killed and injured. It is evident from the graph that road accidents have increased in 2017-18 compared to 2016-17 and also the numbers of persons killed.





The Commissionerate of Transport apart from providing fast and comfortable services to the commuters as well as to create self-employment avenues among the unemployed youths, Trekkers services, post-paid City Taxi services have been introduced in the State, which became not only very popular in the greater Guwahati and in adjoining areas but also in various parts of the State.

The collection of transport revenue by the Department of Transport during the year 2017-18 was Rs. 676.32 crore as against Rs. 546.65 crore in 2016-17. The collection of transport revenue during the year 2017-18 was 23 percent more than that of 2016-17.

### **ASSAM STATE TRANSPORT CORPORATION:**

The public Road Transport is the most important means of communication for the movement of goods as well as passengers traffic in the State. In the road transport system of the State, both public and private sector operators are playing equally important role. Earlier, the Assam State Transport Corporation (ASTC), a State Government undertaking and one of the premier public enterprises of the State with its headquarter in Guwahati, is mainly concerned with the movement of passenger traffic on the nationalized routes of the State, while the private sector road transport operators are involved in the Intra-State movement of both goods and passenger traffic throughout the State. With the changing scenario, both the ASTC and private operators are providing transport services equally in the interest of passenger traffic. The ASTC has been providing efficient, safe, reliable, economic and dedicated services to the people especially in the rural and other backward areas since its inception and have earned the appreciation of the people of the State.

As a step towards improvement of passenger amenities the State Government has already constructed two Inter-State Bus Terminus (ISBT) one at Guwahati and the other at Silchar to facilitate Inter-State transportation of passengers. At present, both the Inter-State Bus Terminuses are fully functional. Inter-State Bus Terminuses have also been constructed at Jorhat, Dibrugarh and Sivasagar by the ASTC with all modern facilities for passengers and bus operators. For providing better passenger amenities, the ASTC has taken initiative to construct new Bus Terminuses at Guwahati City (City Service), Bongaigaon, Halflong, North Lakhimpur and Nalbari. The ASTC has also proposed to construct a modern Inter-State Bus Terminus at Adabari to cater to the demands of the increased number of buses and passengers and to reconstruct/improve the present status of 100 numbers of Station buildings, both major & minor, spread all over the State. The ASTC has also set up a multistoried car parking building at Guwahati City to ease out shortage of car parking space within the market locality at Paltan bazaar.

Under ASTC the Govt. of Assam has introduced two new schemes in 2017, namely Gramin Parivahan Yojana 2017 and Swachh Kamakhya-Clean & Green Technology-

**Chief Minister Gramin Parivahan Yojana:** ASTC is inducting modern digital technology in its operation like E-Ticketing, Automatic Break-Down Management System, GPS Bus Tracking System and Integrated Public Transport Management System etc. It is also in the process of inducting a highly skilled and technically qualified workforce to manage its affairs in the new working environment. In the light of it, it is proposed to implement the most optimistic programme of "Chief Minister Gramin Parivahan Yojana" by ASTC. The routes are planned to provide connectivity to remote villages to connect them to major road networks



which will lead to Sub-divisional or District Head Quarters. It is proposed to cover 3, 02,422 kms per day, which will generate 1, 20, 96,880 kms daily. This scheme will benefit the rural population by generating direct employment like drivers, conductors' mechanics etc and also indirect employment. With the proper implementation of this scheme the whole socio-economic status of the state will achieve a new height.

**Swachh Kamakhya-Clean & Green Technology:** Kamakhya Temple is the pilgrimage destination of the Hindus. People from different parts of India visit this temple throughout the year. But the four day long Ambubachi Mela, occupies a significant importance in the month of June and many tourists (20 lakh in 2017 compared to 15 lakh in 2016) from different parts of India throng to this temple during this period which create a major transport problem and also health and hygiene problem. Hence the Govt. has introduced a new scheme called "Swachh Kamakhya -Clean & Green Technology"2017.The ASTC is currently operating a fleet of 8 buses from morning to evening during that days. Under the scheme the govt. has proposed to introduce 100 E-buses which will be purchased at the interval of 2 years upto 2027.The routes to be covered is Kamakhya from LGBI Airport, ISBT-Betkuchi, Khanapara-Mini ISBT, Narengi, Jalukbari and Kamakhya Railway Station etc.

The performance of ASTC during the period 2010-11 to 2017-18 is evident from the Table-13.5.

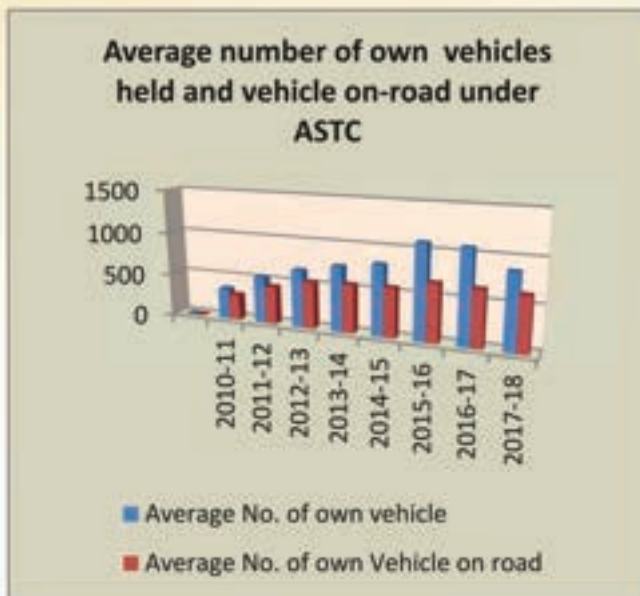
**TABLE - 13.5**

**PERFORMANCE OF ASSAM STATE TRANSPORT CORPORATION (ASTC)**

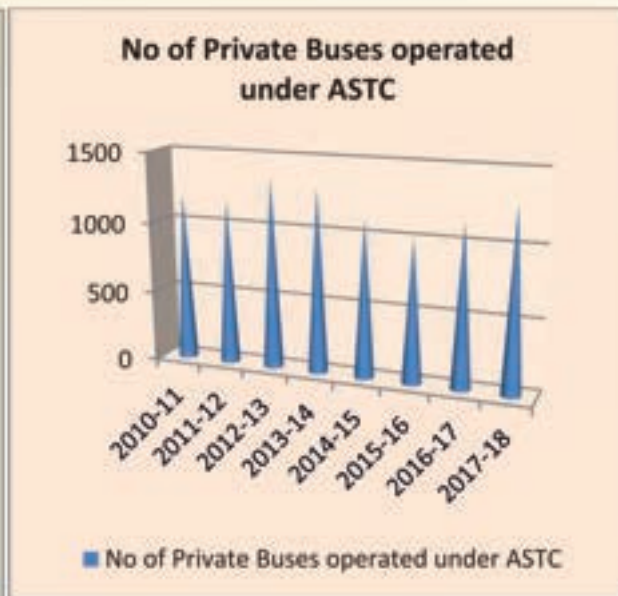
Year	Average No. of own vehicle held	Average No. of own Vehicle on road	Fleet utilisation (%)	Total km operated during the year (in lakh)	Monthly Av. Net income from own buses (Rs. In lakh)	Staff-Bus ratio	No of Private Buses operated under ASTC	Monthly Average Income from Privately operated buses (Rs. In lakh)
2010-11	357	299	84	159.45	85.30	6:01	1189	95.12
2011-12	538	441	82	222.36	123.61	5:01	1170	92.25
2012-13	665	540	81	248.48	136.64	4:01	1344	76.31
2013-14	751	559	74	279.30	138.32	4:01	1300	72.52
2014-15	815	570	69.88	284.45	148.40	6:01	1112	61.31
2015-16	1090	668	61.28	300.69	244.69	6:01	1009	56.82
2016-17	1074	650	60.52	266.89	167.90	6.01	1139	55.04
2017-18	865	634	73.29	291.41	187.31	5.04	1272	66.40

Source: Assam State Transport Corporation.

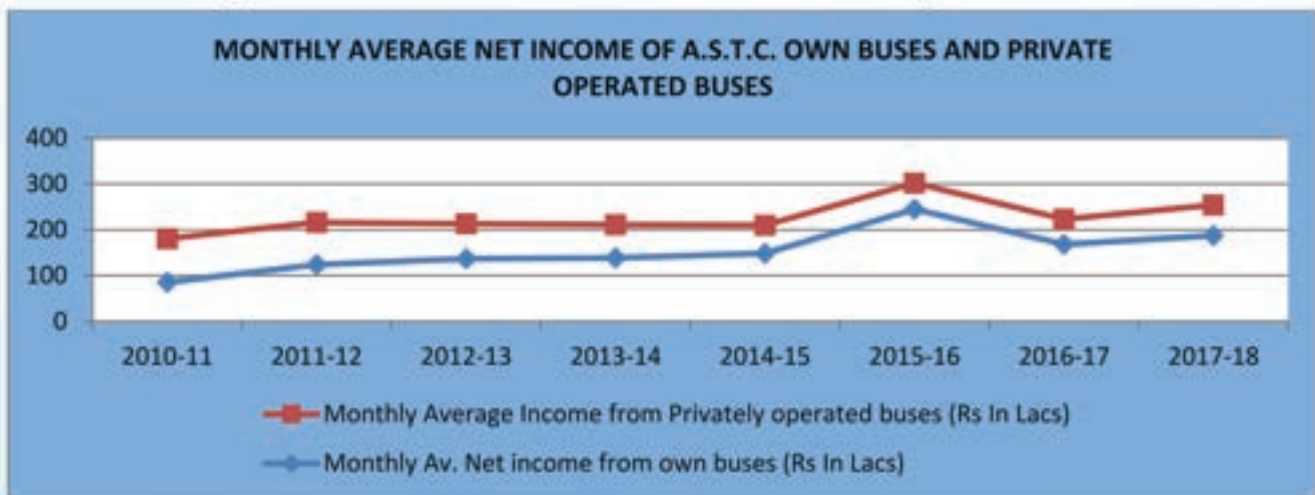




**Fig. I**



**Fig. II**



**Fig. III**

The average number of own vehicles on road is 634 in 2017-18 compared to 650 in 2016-17 which shows a decline of 2.46 percent over 2016-17. The graph Fig. I above shows the average number of own vehicles held is more than vehicle on road under ASTC. The number of private buses operated under ASTC is 1272 in 2017-18 whereas the same in 2016-17 was 1139 which shows an increase of 11.68 over 2016-17 as shown in Fig. III.

The ASTC is implementing Dharmajyoti Scheme under which 50 percent bus fare is charged from the pilgrims visiting religious places within and outside the State of Assam. The Scheme has become very popular and more than 2(two) lakh pilgrims have availed the facility.



## **RAILWAYS:**

As per information available from the N.F.Railway, Headquarters, Maligaon, Guwahati, Assam has total railway route length 2434.00Km. at present. This 2434.00 km is broad gauge railway length with no meter gauge and narrow gauge railway. As per Indian Railway Statistical Publication 2016-17, the total Railway Route length of India as on 31<sup>st</sup> March, 2017 is 67368 Km. Out of which Electrified Route length is 25367 Km. Assam shares 3.6 percent of the total Railway Route length of the country. The total number of passengers carried by N.F. Railway is 113.74 million numbers and the total Cargo carried is 30.65 million tonnes during 2016-17. The revenue generated from this goods carried is Rs. 1875.31 Crores and the revenue generated from the passengers carried is 1018.99 crores during 2016-17 as compared to 1025.54 crores in 2015-16 which shows a decline in the earnings of railway.

The Bogibeel rail-cum-road bridge, India's longest bridge over the mighty Brahmaputra and the fifth bridge across the Brahmaputra River is the lifeline for the North-East. The bridge is an attempt by India to shore up the requirements of Indian border. The project of 4.94 Km. rail cum road bridge is implemented by the North East Frontier Railway was inaugurated by Prime Minister of India on 25<sup>th</sup> Dec, 2018 with an estimated cost of Rs 5900 crore. It will connect the two existing railway networks running at north bank and south bank of the river and will provide connectivity and livelihood to around five million people residing in upper Assam and Arunachal Pradesh. It starts from Chaulkhowa station and Moranhat Station at south bank and joins between Sisibargaon and Siripanistation of Rangia – Murkongselek section in north bank.

The North East Frontier Railways has also undertaken various development activities in the Railway Sector-

1) The initiatives taken for improvement in passenger amenities has resulted into the growth of 7.28% in numbers of passengers and 13.77% growth in passengers earnings during the current year.

2) As many as 10 trains including the prestigious Rajdhani, Shatabdis and the iconic trains of the NE India like NE Express, Kamrup Express and Avadh Express are now being monitored regularly as punctuality drive. In around 19 stations of the zone like Guwahati, Kamakhya, Dibrugarh, Mariani etc the trains are monitored through sensors called Data Loggers i.e. the timing of movement of trains is being feed to a central system without any human interference.

3) The N.F Railway has introduced a regular weekly express train between Dibrugarh and Silchar from 8<sup>th</sup> April 2018. The train will further strengthen the rail connectivity between Barak and Brahmaputra valley.

4) N.F Railway has planted 5,33,300 plant saplings along railway tracks, around office buildings, in stations, residential colonies, schools, workshops and various parks maintained by railways during 2017-18 as part of its continuous commitment towards a greener, safer and more sustainable environment

5) Each of the stations in N.F Railway has been provided with 100% LED lighting. In a remarkable achievement, Guwahati station has been made the first railway station in



North East to be fully powered with grid connected Solar Power with commissioning of a 700 KWP solar plant.

6) For conservation of the environment, a total of 6210 environmental friendly, zero-discharge bio-toilets have been fitted in 1730 coaches. Already the 81 kms Chaparmukh-Silghat Town section has been converted into a discharge free Green Corridor in August, 2017.

7) Stoppage time of 33 trains in Guwahati station reduced for better punctuality. This reduction in duration of stoppage time varies from 5 minutes to as much as 25 minutes with effect from 18<sup>th</sup> June, 2018.

8) Digitization has already resulted in shifting of 50.32 % reservation workload to E-ticketing platform as on October, 2018. Universal Payment Interface (UPI) has already been introduced in all Passenger Reservation System (PRS) & Unreserved Ticketing System (UTS) counters. E-ticketing has been introduced in all trains. Mobile ticketing (UTS on Mobile) introduced for cashless transaction of unreserved tickets.

9) Mechanised cleaning has been introduced in 371 stations to provide passenger better cleanliness and hygienic environment at station.

10) In NFR there are number of ongoing infra structural works like doubling tracks, signal up gradation work and works to elimination of level crossing which are being priority to ensure timely completion of connectivity projects.

## **AIR TRANSPORT:**

Assam is well connected with the rest of the country through Air Transport. The State has the highest numbers of operational civil airports in the North-East and these are located at Guwahati, Tezpur, Jorhat, Dibrugarh, North Lakhimpur and Silchar. In addition, one more civil airport located at Dhubri (Rupshi) district of Assam is lying closed and non-functional for long time. The State Govt. has demanded to reopen the airport for passenger traffic for the benefit of the State which will further benefit the people of Meghalaya. All major airlines including private commercial airlines viz., Indian Airlines, Spice jet, Indigo, Go-air, Air Asia, Vistara etc. are operating their flights to and from Guwahati and intra-state air services regularly. In addition to these civil airports, small private airstrips in the interior areas are present in large numbers. Some small and remote airstrips are being operated under private operators like tea gardens and PSUs.

In the Guwahati sector movement of air traffic as well as passenger traffic [both domestic and international] has been increasing rapidly since 2004-05. However, as per available records, air traffic movement and passenger traffic (only for LGBI Airport, Guwahati and Mohanbari Airport, Dibrugarh and Silchar Airport published by the DGCA) has gone up by 21.9 percent and up by 42.9 percent respectively during 2017-18 compared to the previous year. Similarly average number of flights handled by these two airports per day has gone up by 23 percent in 2017-18 from 52 percent in 2016-17. In respect of handling of freights, the growth was calculated at 42 percent in 2016-17 over the previous year and 38 percent in 2017-18 over the previous year.



**TABLE - 13.6****AIR TRANSPORT STATISTICS OF ASSAM**

Year	Air Traffic Movement (No.)	Passenger Handled (No.)	Freight loaded /Unloaded (Tonne)	Mail loaded/unloaded (Tonne)	Average number of flight per day	Average number of passenger handled per day	Average Cargo Handled per day (Tonne)
2004-05	20334	828640	5199	1320	57	2270	18
2011-12*	35022	2685871	8601	N.A.	96	7359	24
2012-13*	33535	2526434	6668	N.A.	92	6922	18
2013-14*	29426	2442613	8124	N.A.	81	6692	22
2014-15*	30363	2552861	10796	N.A.	83	6994	30
2015-16*	24392	3103961	11976	N.A.	67	8504	33
2016-17*	37383	3759494	17283	N.A.	102	10299	47
2017-18*	45554	5371859	23582	N.A.	125	14717	65

\* Figures excluding Lakhimpur, Tezpur and Jorhat Airport.

Source: Directorate General of Civil Aviation Statistical Division, New Delhi.

The Lokapriya Gopinath Bordoloi International Airport, Guwahati is the only International Airport in the North-East India.

The number of aircraft movement, passengers as well as freight handled in the LGB International airport during the period from 2007-08 to 2017-18 is detailed in the Table-13.7.

**TABLE - 13.7****AIR TRANSPORT STATISTICS OF L.G.B. INTERNATIONAL AIRPORT, GUWAHATI**

Year	Aircraft Movement	Passenger handle (No)		Freight loaded/unloaded (Tonne)
		Embark/Disembark	Transit	
2010-11	226	14523	NA	0
2011-12	452	26864	NA	0
2012-13	416	21810	NA	94
2013-14	494	24633	NA	36
2014-15	474	27564	NA	15
2015-16	512	28913	NA	11
2016-17	490	37383	NA	03
2017-18	455	46680	NA	22

Source: Directorate General of Civil Aviation Statistical Division, New Delhi and Airport Authority.





The graph above shows the aircraft of the L.G.B Airport. It also depicts, the passengers handled by the L.G.B. International Airport Guwahati which has considerably increased over the years.

#### **INLAND WATER TRANSPORT:**

Inland water transport is generally accepted as the most efficient mode of transportation from the point of energy consumption. It is also considered as the cheapest mode of transportation as well as labour intensive and environment friendly in nature. Assam is a riverine State. As much as 32 percent of the water resource of the country flow down through the river Brahmaputra, Barak and their myriad tributaries weave a vast network of waterways in the State. The Brahmaputra has 891 Km. navigable length of waterways from Sadiya to Dhubri as National Waterway No.2 while the Barak has 121 Km. length of navigable waterways between Lakhimpur and Bhanga as National Waterways No.6. for unified development of the waterways for shipping and navigation and transportation of cargo to the North Eastern Region particularly in the states of Assam, Nagaland, Mizoram, Manipur, Tripura and Arunachal Pradesh.

For effective exploitation of the waterways, being the cheapest mode of transport and in order to cater to the growing need for goods and passenger movement, two Government owned organisations of Assam viz, Central Inland Waterways Corporation and Directorate of Inland Water Transport (IWT), are operating the water transport services on the river Brahmaputra and Barak on commercial basis and have been trying to improve the water transport system in the region. The Brahmaputra has several small river ports. In addition, there are more than thirty pairs of ferry Ghats on the Brahmaputra transporting both passengers and cargo. But due to scarcity of serviceable vessels under the department most of the ferry services often suffer problems in their smooth operation. However, there



is need to augment the IWT fleet by suitable type of vessels to ensure adequate cargo support.

At present the Directorate of Inland Water Transport is operating 104 ferry services under 3(three) IWT Divisions on the river Barak, Brahmaputra and its tributaries for the purpose of public utility. The Directorate of Inland Water Transport during the last two years has undertaken the work for 15 vessels and 3 wooden vessels. As per the present status, 4 steel and 3 wooden vessels in Majuli have already been deployed and the remaining 10 vessels will be completed shortly. It may be mentioned that 3 new vessels will be introduced between Guwahati- North Guwahati shortly. The total number of passengers carried is 9044431 and the total amount of goods carried is 431271 quintals. In 2017-18. The revenue earned by the IWT during the same period is Rs. 9.8 crore. At present the Directorate of Inland Water Transport has possessed 186 vessels of different capacity upto May 2017 and proposed to add a good number of vessels during the current FY. Besides these Government owned organisations, large number of private owners conducted ferry services [including commonly known *Bhoot-bhooty* services] to transport goods and passengers to the remotest hinterlands under un-organised sector. The Assam Legislative Assembly has passed a bill to create a regulatory authority that will streamline the Inland Water Transport in the state. It will aim to improve water transport and safety in the state by bringing all mechanically- propelled vessels under a standardised set of operating norms.

#### **OTHER ACTIVITIES:**

The Directorate of Inland Water Transport has introduced Air-conditioned long distance river cruise service for the development for river tourism. The Directorate has leased out a vessel M. K. Charaidew to private entrepreneur on hire basis. The Directorate of Inland Water Transport has also introduced two luxurious A/C cruise vessels on the river Brahmaputra and they are being operated by the Directorate itself at Guwahati.

The Directorate of Inland Water Transport has also constructed a RCC jetty on the 11 nos. of floating restaurants (A/C & Non A/C) on board of IWT vessels and three river cruise services on the river Brahmaputra. The Directorate has also constructed 7 nos. of 25m long single Decker floating terminal at north bank and 2 nos. of 28m long double Decker floating terminal at the south bank of the Brahmaputra at Guwahati under centrally Sponsored scheme.

#### **COMMUNICATION:**

##### **POSTAL COMMUNICATION:**

The Assam Postal Circle has a network of 4011 Post Offices and 12427 nos. of Letter Boxes [as on 31<sup>st</sup> March 2018] out of which 3736 post offices are located in rural areas. On an average, each Post Office serves a population of 22523 persons and covers 20.72 Sq. in rural areas while 4.39 sq km in urban areas. There are 3 Night Post Offices also functioning in the State located at Guwahati GPO, Dibrugarh HO and Silchar HO for convenience of the



people. In addition, there are 624 modernised post offices and 624 computerised post offices in the State. Apart from the above, there are 4 National Speed Post Centre and 16 Speed Post Centre in the State and Postal Mail Conveyance covers 4428 railway kilo metre.

The Assam Postal Circle has taken initiative to start Core Banking Solution (CBS) in 12 selected post offices of Assam under Pilot Project to bring the postal customers under postal banking coverage so that the customers can access their savings bank accounts from any of the above selected post office. Assam is among the six states across India selected for the Pilot. After successful implementation of CBS in these pilot offices, other post offices will be brought under coverage of CBS in a phased manner. In addition; Assam State has also been selected for the Rural-ICT project for computerisation and networking of rural post offices (also called Branch Post Offices). A total of 375 Branch Post Offices of Sivasagar Postal Division comprising of three districts –Sivasagar, Jorhat and Golaghat are the pilot offices covered under Rural-ICT project for Assam Circle.

The Circle is utilising services of Indian Airlines & Jet Airways for transmitting outward airmails from all the Air Centres of the region. From Guwahati, outward airmails are transmitted in direct flight for Kolkata by Indian Airlines and for Delhi Sector by Jet Airways. For mail transmission in the North East Region freighter air craft service has been used which is running in the Kolkata- Guwahati-Imphal- Agartala Sector. The service of ASTC and Private Night Super Buses are also utilised for transmission of local mails to all District Headquarters except Morigaon and Dhemaji.

## **TELECOMMUNICATION:**

Assam Telecom Circle of Bharat Sanchar Nigam Limited (BSNL) is the largest telecom operator in Assam which was formed in 1987, providing comprehensive range of telecom services in the State. BSNL is reaching the nook and corner of Assam with focused development thrust. At present 563 telephone exchanges with 7 Telecom Districts are functioning in the State (as on March 2018).

It is evident from the status of telecom facilities in Assam shown in the Table 13.8 that the overall tele-density (Telephone per 100 of population) of the State as on March 2017 was 68.41 as against the national average 91.64. While the urban tele-density of Assam stood at 154.12 as on March 2017 compared to 148.86 as on March 2016, the rural tele-density was only 51.49 as on March 2017 and seems to be higher over the previous year (46.63). However, in respect of overall tele-density as well as urban tele density the position of Assam stood far below the national average [overall 91.64 and Urban 167.50 as on March 2017. In respect of rural segments also tele-density of Assam was considerably below the national average. (Rural-56.58) during the same period.



**TABLE - 13.8**

**TELECOM FACILITIES IN ASSAM**

Item	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
1	2	3	4	5	6	7	8	9	
Direct Exchange Lines Fixed	1739591	1492608	1430077	1463773	1427318	1503449	1667066	2124457	
Rural Telephone Connections	594291	491881	445399	459014	449347	482397	547081	743833	
Village Public Telephones (VPTs)	24196	24415	24688	24692	24692	24663	5297	4876	
Total Phones	Wire Line Phones (Fixed DELS)	257683	229854	194395	183984	178191	167434	130810	134850
	Wireless Phones (GSM+CDMA)	11670711	14208075	14387664	15278208	16433438	17150891	20536756	1989877
	Total	11928394	14437929	14582059	15462192	16611629	17318325	20694170	2124727
Tele-density (%) (Telephones per 100 population)	Urban	124.45	148.54	130.92	126.27	129.05	132.26	148.86	154.12
	Rural	23.93	28.35	31.13	34.36	37.41	39.18	46.63	51.49
	Total	38.98	46.61	46.51	48.74	51.9	53.95	63.25	68.41
Public Call Offices (Local+STD+Highway)	27380	19307	11929	11207	10350	8909	6321	5379	

*Source: Annual Reports- 2017-18 of Department of Telecommunication, Govt. of India. BSNL Assam circle.*

The subscriber base basic services provided by the BSNL in the State were 2124457 as on March 2017 which shows a growth of 27.4 percent over the previous year. The total number of telephone connections as on March 2017 was 27.5 percent more than that of March 2016. There is an increase of 3.1 percent in wire-line phones in 2017 in Assam.

In respect of wireless phone [mobile segment] connections, there were 1.98 crore mobile subscribers in Assam as on March 2017. BSNL provides only around 9.3percent of the total mobile connections in the State till March 2017. The private mobile service operators, on the other hand, provided about 1.90 crore mobile connections as on March 2017. Bharati Televentures (Airtel), Disnet Wireless (Aircel), Idea and Vodafone are the main private mobile service provider companies operating in Assam. BSNL also provided Village Public Telephones (VPTs) to 4876 inhabited villages of Assam till March 2017.

The table 13.9 shows the nearly total decrease in the Reliance Wireless Network from 1383658 in 2016-17 to only 38 in 2017-18, which is due to the closure of the network in Assam. On the other hand, there is a remarkable increase in the Bharti-Airtel network customers from 3239681 in 2016-17 to 7803873 in 2017-18, as most of the customers have ported to Airtel network due to unavailability of the Reliance Network. There is also increase

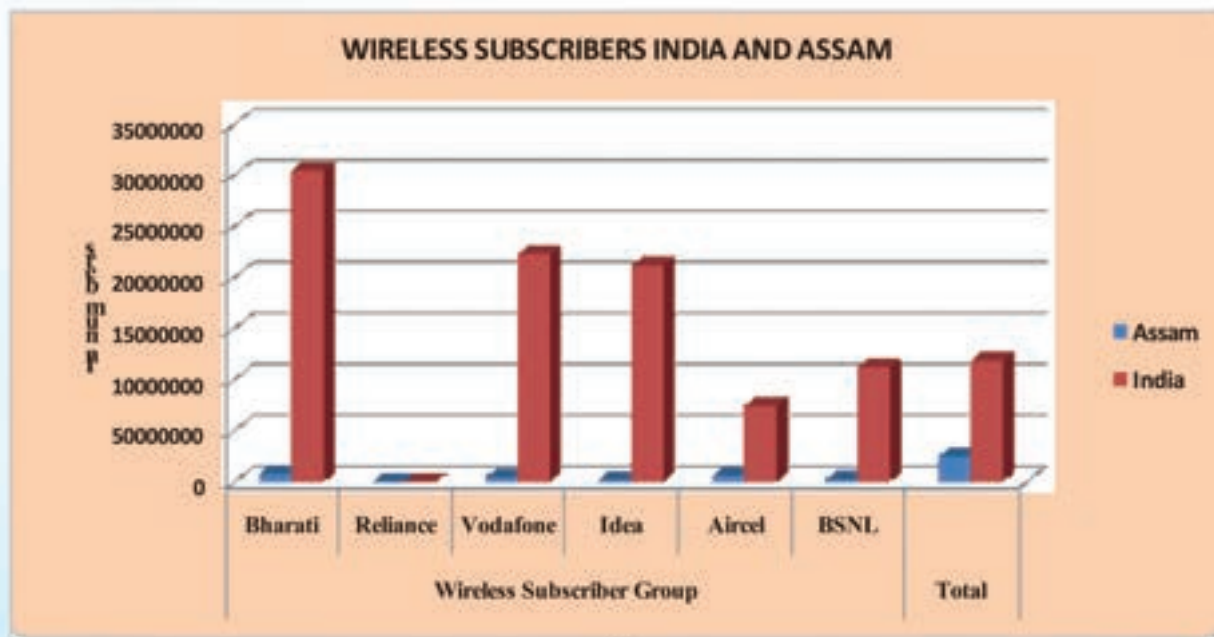


in the number of customers of Vodafone from 3898309 in 2016-17 to 4220244 in 2017-18, as per the Annual Report 2016-17 and 2017-18 of Telecommunications, Govt. of India.

**TABLE - 13.9  
MAJOR GROUP-WISE WIRELESS SUBSCRIBER IN ASSAM  
(As on MARCH, 2018)**

Circle	Wireless Subscriber Group						Total
	Bharati	Reliance	Vodafone	Idea	Aircel	BSNL	
Assam	7803873	38	4220244	1396473	5723781	1964401	21108810
India	304191806	185968	222697757	211209603	74152299	111679483	118340861

Source: Annual Report 2017-18, Department of Telecommunications, GOI.



The graph above shows the wireless subscribers in Assam and All India, where Airtel network is the highest provider of the network both in Assam and India.

\*\*\*\*\*



## INSTITUTIONAL FINANCE

The financial system of a country is of immense use and plays a vital role in shaping the economic development for a nation. A well structured and efficient network of financial institutions gives rise to economic growth. Financial system helps in mobilization and collection of scattered savings from different sections of the society. It also increases the overall savings and investment and most efficiently caters to most desirable and productive investment in accordance with the priorities and thereby leading to overall economic development. With the objective to bring as many as people within the bank coverage, the bank network has been increased by opening new branches in the State. The total number of Scheduled Commercial Banks in the State is 2326 as on March, 2018, as per report of Reserve Bank of India, which is 1.65% of the total Scheduled commercial Banks in the country as a whole. With the increase in the bank networking, the dependence per bank offices in Assam has been considerably decreased over the years and reduced from 54.70 Sq.km as on March, 2010 to 33.72 Sq.km as on March 2018. In all India level the networking of banking increased from March, 39.1 sq km in 2010 to 23.4 sq km in March, 2018. However, average population covered per bank branch office in Assam was calculated at 13.41 thousand (based on Population Census 2011) as on March, 2018 compared to All India average of 8.6 thousand during the same period.

### Banking Financial Institution:

Banking sector comprises of Scheduled and non-scheduled banks. Scheduled banks are of two types viz. Scheduled Commercial Banks and Scheduled Cooperative Banks. Scheduled Commercial banks are classified into five types – State bank of India & its associates, Nationalized Banks, Private sector Banks, Regional Rural Banks and Others (Foreign Banks).

**Table – 14.1: Growth of Scheduled Commercial Banks in Assam and India, as on March, 2018**

Year	Number of Offices*		Deposits (Rs. in Crore)		Credit (Rs. in Crore)	
	Assam	India	Assam	India	Assam	India
2010	1434	83997	49545	4601926	18311	3345619
2015	2047	125863	97378	8922111	35911	6878472
2016	2177	132587	103794	9659968	42671	7520929
2017	2276	137770	122307	107514386	48776	79270028
2018	2326	140133	134643	114792883	57307	86825727

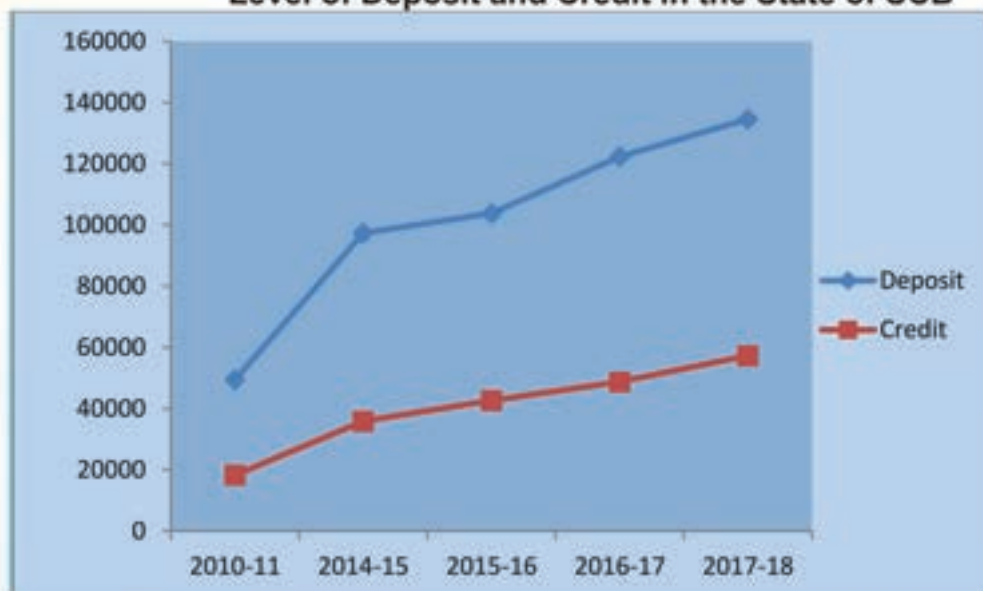
\*Reporting Offices only

Source: Reserve Bank Of India.



As on 31<sup>st</sup> March, 2018, there were 2326 bank offices, under scheduled commercial banks of which, 46 percent bank offices were located in rural, 28 percent were in semi-urban and 26 percent were in urban areas. At the end of March 2018, growth of aggregate deposits of the Scheduled Commercial Banks in the State was 10.1 percent . Growth of bank credit, on the other hand, was calculated at 17.5 percent during the year ending March 2018 compared to 18.8 percent growth of aggregate credit in the previous year. The table 14.1 shows the number of Scheduled Commercial Bank Offices in Assam as well as in India and the trend of deposits and credit over the period of past few years.

**Level of Deposit and Credit in the State of SCB**



#### **Credit – Deposit Ratio:**

The Credit-Deposit ratio of all Scheduled Commercial Banks in Assam has increased from 39.9 percent in 2017( March, 2017) to 42.56 percent in March,2018. The Credit –Deposit Ratio of all Scheduled Commercial Banks in Assam, however, remained far below when compared with the All India ratio. During the year 2018 as on March, the Credit-Deposit Ratio of all Scheduled Commercial Banks in Assam was 42.6 percent compared to 75.6 percent at the all India level. Table 14.3 shows the Credit - Deposit ratio of all scheduled commercial banks in Assam and India from 2008 to 2017 and the status of Credit-Deposit ratio in the districts of Assam at 14.1

**Table – 14.2:Growth of Credit Deposit Ratio of all Scheduled Commercial Banks in Assam and India**

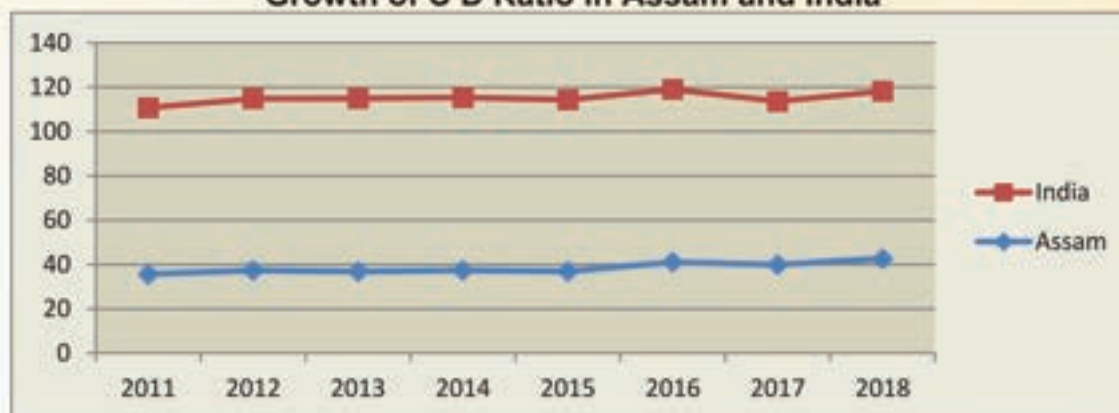
(as on March2018)

Year	2011	2012	2013	2014	2015	2016	2017	2018
Assa m	35.6	37.3	36.8	37.3	36.9	41.1	39.9	42.6
India	75.1	77.5	78.1	78.0	77.4	77.9	73.7	75.6

Source: Reserve Bank Of India



**Growth of C D Ratio in Assam and India**



**Table: 14.3 Deposit of Scheduled Commercial Bank in the State by type of Account, 2018, March**

(Rs.crore)

Type of Account	Rural	Semi Urban	Urban	Total
Current	13,55.50	2779.30	7430.20	11565.00
Savings	16714.50	20613.40	28588.90	65916.90
Term Deposit	8708.20	12952.30	35501.10	57161.50
<b>Total</b>	<b>26778.20</b>	<b>36345.00</b>	<b>71520.30</b>	<b>134643.50</b>

Source: Reserve Bank of India.

State Level Bankers' Committee(SLBC) Report reveals that In Assam there are 34 numbers of Commercial Banks and 2355 bank branches. As on March 2018 the total credit in the Commercial Banking sector was Rs 67,938.00 crores and Credit-Deposit Ratio(CD Ratio) was 50%. The Priority Sector Advance Constitutes Rs.38,955.00 crores and more than 57% of the total Advances which is well above the bench mark of 40%. The overall achievement under Annual Credit Plan was Rs 22,464.00crores against the total outlay of Rs.19,440.71 which is 116% of the target. This achievement is well diversified into all three broad sectors, Agriculture, SME( Industry ) and Services. In the SME segment where the employment promotion of certain schemes like Pradhan Mantri MUDRA Yojana (PMMY), Pradhan Mantri Jeevan Jyoti Bima Yojana(PMJBY), Pradhan Mantri Surakhsha Bima Yojana (PMSBY), Atal Pension Yojana (APP), etc for all inclusive financial growth of the State.

**Table -14.4: Deposit and Credit of all commercial Banks in Assam as on March,2018**

Banking Profile	Public Banks	Private Banks	RRBs	Co-op Banks	NEDFI	Total
Branch Net work	1485	330	474	66	0	2355
Aggregate Deposit	10533695.98	1667393.46	927876.37	340862.20	0.00	13469828.01



Aggregate Advances	4468858.17	1503399.29	434579.09	88505.55	298442.18	6793784.28
CD Ratio(in %)	42.42	90.16	46.84	25.97		50.44

Source : State Level Bankers' Committee Report

**TABLE -14.5: Banking Branch Network in Assam as on March,2018**

Bank	Rural (R)	Semi Urban (SU)	Urban (U)	Total(R+SU+U)	ATM No Rural	ATM No Semi Urban	ATM No Urban	Total
Public	645	461	379	1485	1107	1186	1032	3325
Private	65	128	137	330	54	170	238	462
RRB	363	91	20	474	1	1	0	2
ACAB*	17	21	28	66	3	12	16	31
<b>Total</b>	<b>1090</b>	<b>701</b>	<b>564</b>	<b>2355</b>	<b>1165</b>	<b>1369</b>	<b>1286</b>	<b>3820</b>

\* Assam Cooperative Apex Bank. Source : State Level Bankers' Committee Report

#### Priority Sector Advances:

There was positive growth under Priority sector advances to the extent of Rs. 5773.00crores in March,2018 over March,2017 and growth rate estimated at 17%(Seventeen percent).

The priority-sector advances showed a growth of more than 17% percent at the end of March 2018 over the end of March 2017 according to the State Level Bankers' Committee reports. The advances to priority sectors is estimated at 57.34% to aggregate advances disbursed by banking group in the State. Out of the total advances Rs.38955.17crore to priority sectors the agriculture sector was disbursed Rs.14702.52 crore in 2017-18 of which Scheduled Commercial Banks shared 48.56 percent, Regional Rural Banks 13.3 percent and Co-operative Banks 0.47 percent and remaining 37.67 percent was disbursed under various schemes of NEDFi, NABARD (RIDF), MIDC and SIDBI. Out of the total priority sector advances, the disbursement of advances to agriculture sectors has increased from Rs.12938.49 crore in 2016-17 to 14702.52crore in 2017-18 and registered a growth of more than 13% in advances to Agriculture sector. The per capita priority sector advances has been significantly increased from Rs. 10635.00 in 2016-17 to Rs. 12486.00 in 2017-18 (17 percent increase)

**Table- 14.6: Advances under Priority Sector**

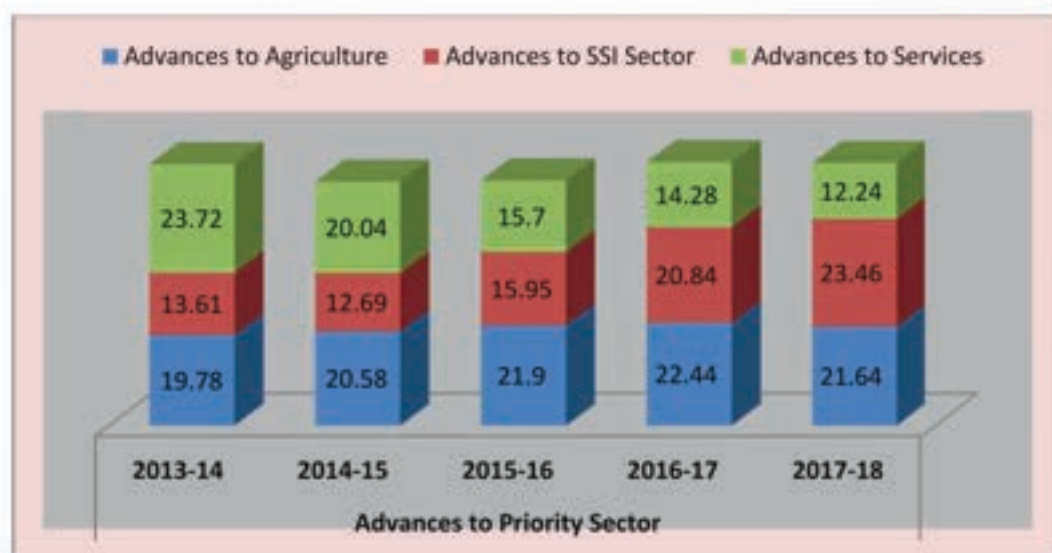
(Rs. in Crore)

Sectors	2013-14	2014-15	2015-16	2016-17	2017-18
Aggregate Advances	37902.92	43142.92	54371.52	57645.58	67937.84
Total Priority Sector Advance % of Advances	21645.83 [57.11]	22987.58 [53.28]	29120.39 [53.56]	33182.65 [57.56]	38955.17 [57.34]



Advances to Agriculture % to Total Advances	7497.58 19.78	8878.37 20.58	11910.33 21.90	12938.49 22.44	14702.52 21.64
Advances to SSI Sector(Industries) % to Total Advances	5158.53 13.61	5465.16 12.67	8673.42 15.95	12013.83 20.84	15935.88 23.46
Advances to Service Sector % to Total Advances	89897.21 23.72	86440.53 20.04	85366.37 15.7	82303.21 14.28	8316.76 12.24

Source: Reports of State Level Bankers Committee, Assam.



### Regional Rural Banks:

Regional Rural Banks [RRBs] were established under the Regional Rural Banks Act, 1976 with an objective to give a boost to rural economy by providing rural credit to farmers, agricultural labourers, artisans and small entrepreneurs etc. At present, there are two RRBs in the State - Assam Gramin Vikash Bank [AGVB] and Langpi Dehangi Rural Bank [LDRB]. While the Assam Gramin Vikash Bank is operating both in the Brahmaputra Valley and Barak Valley covering all the districts with 414 branches, the service area of the Langpi Dehangi Rural Bank is confined within the hill districts of Assam with 60 bank branches as on March 2018

Out of the total branch network of the Assam Gramin Vikash Bank, 311 branches located in rural areas, 83 branches in semi-urban areas and 29 branches in urban areas. In respect of Langpi Dehangi Rural Bank, 52 branches located in rural areas and 8 branches located in semi-urban areas. The aggregate deposits of RRBs was Rs.9278.76 crore at the end of March 2018 compared to Rs.8542.93 crore at the end of March 2017. The growth of aggregate deposits of RRBs was calculated at 8.6 percent at the end of March 2018 over March ending 2017. There is slightly decrease in aggregate volume of credit disbursed by these banks in 2017-18 compared to 2016-17,



which was Rs.4345.79 crore as on March 2018 compared to Rs 4520.96 crore as on March 2017. Credit-Deposit ratio of these banks has slide down to 46.8 percent at the end of March, 2018 compared to 52.92 percent as on March 2017. The share of achievement in Annual Plan have been declining since last few years. The performance of Regional Rural Banks is presented in the Table- 14.7.

**Table – 14.7: Achievements of Regional Rural Banks in Assam (Priority sector)**  
(Rupees in lakh)

Period (as on)	Achievements under Annual Credit Plan			Credit - Deposit Ratio (%)	
	Annual Target for All Banks	Achievement of All Banks	Achievement of RRBs(in %)	All Banks*	RRBs
31.3.2011	354847.18	289468.82	70261.61 (24.27)	39.71	47.94
31.3.2012	449985.62	458541.64	76721.43 (16.73)	44.64	53.75
31.3.2013	642041.89	463765.9	61755.56 (13.32)	43.56	56.28
31.3.2014	1067096.67	647419.05	78707.27(12.16)	43.48	55.88
31.3.2015	1001174.85	612794.07	86143.45(14.05)	43.08	52.79
31.3.2016	779300.00	894483.19	71248.25 (7.96)	44.48	57.62
31.3.2017	1110500.00	1124367.00	77733.00 (6.91)	43.99	52.92
31.3.2018	1944071.92	2246434.7	102276(5.26)	47.01	46.84

Figure in bracket shows the percentage share of achievements of RRBs to All Banks.

\*Lending by NEDFi and under RIDF by NABARD has been incorporated as priority sector advances.

Source: State Level Bankers Committee reports of various years.

#### **Assam State Cooperative Apex Bank Limited:**

The Assam Cooperative Apex Bank is a pioneer cooperative institution in channelizing credit for agricultural operation to boost up the development process of rural economy as well as financing other urban business and industrial activities through cooperative channel in the State. The Bank is registered in the year 1948 and at present 66 branches in the State of which 17 in rural areas, 21 in Semi Urban areas and 28 in Urban area. At the end of March,2018 the growth of deposit and credit of ACAB was Rs.3408.62 crore and Rs.885.05 crore respectively and credit deposit ratio was 25.97 percent.

The cooperative bank lend agricultural loans to farmers through primary agricultural credit societies(PACS) . At the end of March,2018 the membership of bank increased to 94,000. As per guidelines of RBI all the branches of ACAB have been computerized and it has been implementing core banking solution.

#### **Annual Credit Plan :**

Annual Credit Plan mainly seeks to indicate the scope for the development of various economic activities with an emphasis on increasing opportunities for weaker sections. It thus , ensures adequate & timely flow of credit to priority and neglected sectors. Accordingly , annual credit plan of the State is prepared and monitored by



convener bank of State Level Bankers' Committee. In Assam, State Bank of India is designated as the convener bank for the State. The target size for priority sector of the State for 2017-18 was Rs. 19.4 thousand crore out of which share for Agriculture & Allied Activities and MSME sector were 66 per cent and around 20 percent respectively.

Credit disbursement to priority sector in the State under Annual Credit Plan is given in Table 14.7 and districtwise Annual Credit Plan is at Annexure 14.2

**Table 14.8: Credit disbursement to Priority sector in the State under Annual Credit Plan.**

(Rs. in crore)

Priority sector	Target		Achievement		Percentage of achievement to target	
	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
Agriculture & Allied Activities	5710.00	12846.51	4407.89	7592.13	77	59
MSME	2789.00	3818.43	4931.91	10562.15	177	276
Other Priority sector	2606.00	2775.78	1903.91	4310.10	73	155
Total	11105.00	19440.72	11243.65	22464.35	101	116

#### Agricultural Credit:

Credit is an essential requirement for revitalizing agriculture sector. According to the State Level Bankers' Committee Report, banks operating in the State disbursed agricultural credit of Rs. 4407.86 crore during the year 2016-17 as against the annual commitment of Rs. 5710.00 crore. During the year 2015-16, total agricultural credit disbursed in the State was Rs. 3901.29 crore against the annual commitment of Rs.3636.00 crore.

**Table- 14.9: Credit plan trend of credit flow to Agriculture under Annual Credit Plan**

Year	Advance to Agriculture (Rs. in crore)	Crop Loans (Rs. crore) in	% Share of crop Loan to Total Agricultural Advances	Crop Loan per farmer family# (Rupees)
2013-14	2756.66	1460.02	53	5368
2014-15	2492.60	1599.75	64	5881
2015-16	3901.29	1014.26	26	3729
2016-17	4407.86	1253.20	28	4607
2017-18	7592.13	1460.88	19	5371
(%) Growth in 2017-18 over 2016-17	72	16.57	-	16.6

#Total Farmer Family = 27.20 lakh as per Agriculture Census 2010-11

Source: Reports of State Level Bankers Committee, Assam.



### Progress of Financial Inclusion :

Effective financial inclusion is not only access but use of financial services. The launch of *Pradhan Mantri Jan Dhan Yojana* (PMJDY) is an ambitious agenda of financial inclusion of all group of population in mission mode. The scheme has been started with a target to provide 'universal access to banking facilities' starting with "Basic Banking Accounts" with overdraft facility of Rs. 5000.00 after six months and RuPay Debit card with inbuilt accident insurance cover of Rs.1.00 lakh and RuPay Kisan Card. Under the scheme accounts opened in Assam under PMJDY stands at 1,42,32,903 as on 31st March, 2018 against 1,38,93,310 in 31<sup>st</sup> March, 2017 registered an increase of 2.4% in opening of bank account under PMJDY SLBC report for quarter ending March, 2018. Under the scheme 1,00,66,552 nos. of RuPay Card issued as on 31.3.2018

### Kishan Credit Card Scheme:

Like other states of the Country, the banks operating in Assam have been extending timely, cost effective and hassle free credit support to the farmers of the State through Kishan Credit Card [KCC] Scheme which was introduced in 1998-99. Kishan Credit Card scheme has facilitated in augmenting credit flow for agricultural activities. The scope of the KCC has been broad-based to include term credit and consumption needs. During the year 2016-17, 2.82 lakh KCC were issued to the farmers of the State and sanctioned Rs.1259.88 crore compared to 2.17 lakh KCC issued and sanctioned Rs.1084.10 crore in 2015-16. Cumulatively about 17.87 lakh KCCs have been issued in the State up to March 2017 since introduction of the scheme. The Scheme, thus, covered around 65.70 percent of the total farmer family (there are 27.20 lakh farmer families as per Agriculture Census 2010-11) of the State at the end of March 2017.

**TABLE – 14.10: Advances Under Kishan Credit Card (KCC) Scheme**

(Rupees in lakh)

Year	Annual Achievement		Cumulative Achievement	
	Card Issued (No.)	Amount	Card Issued (No.)	Amount
2011-12	371474	130329.35	967220	307834.01
2012-13	265797	93219.58	1329203	393538.41
2013-14	308306	150567.42	1586687	1551091.21
2014-15	281889	133136.24	1809898	629941.72
2015-16	217460	108409.61	1706822	691273.68
2016-17	281773	125988.00	1786652	757335.00
2017-18	349362	149206.00	1950214	821222.00

Source: Reports of State Level Bankers Committee, Assam.

*Pradhan Mantri MUDRA Yojana* is a flagship programme of Gol (implemented from 8<sup>th</sup> April, 2015) provide hassle free loans upto Rs.10 lakh to all non-farm micro and small enterprises engaged in income generating activities. Loan under the scheme are categorized as 'Shishu' (upto Rs.50,000), 'Kishore' (Rs. 50,000 – Rs 5 lakh) and 'Tarun' (Rs.5 lakh- Rs.10 lakh) according to the development stage/ credit needs of the beneficiary units. The Scheme Progress of the Scheme in the State in Table 14.8 as on 31.3.2018



**Table 14.11: Progress of Pradhan Mantri MUDRA Yojana**

Category	As on 31.3.2018	
	No	Amount(Rs. inLakh)
Sishu	470566	165942.92
Kishore	127179	128373.82
Tarun	7966	49966.24
Total	605711	344282.98

Source: Reports of State Level Bankers Committee, Assam.

**Social Security Scheme** :Total enrolment under three Social security schemes PMJJBY, PMSBY and APY was 32,00,748 as on March,2018 compared to 25,66,054 as on March,2017

**Coverage of Tea Garden by Banking Institution:** During 2017-18 no of Tea garden covered by bank was 280 and no of account in Tea Garden opened were 73948 in Assam. Progress of net work of banking in Tea Garden area is given in Table 14.9

**Table 14.12: Opening of Accounts in Tea Garden Labourers of Assam in 2017-18**

No of Tea Gardens covered by Bank	280
Total Nos of Labourers in these Gardens covered by Bank	75162
No of Account opened	73948
No of Rupay / ATM Cards issued against the Account Nos	62386

Source: State Level Bankers' Committee

### Micro-Finance:

The Micro Finance Scheme is an effective instrument for financial inclusion which was launched to meet the financial demands of small entrepreneurs and regarded as an effective programme for poverty alleviation and also empowerment of the poor. The micro-finance programme of NABARD, which began in 1992 with formation of 500 Self Help Groups (SHGs), has emerged as the largest micro-finance programme in the world. The Self-Help Group – Bank linkage programme, the main micro-finance model and institutional finance mechanism to provide financial credit support to the micro-entrepreneurs (including farmers) in the country as a whole, has been proved to be the most cost effective credit delivery system in India. The programme has also helped in providing banking services to the uncovered rural poor.

The Self Help Groups movement started picking up in Assam in the recent years. The programme has gathered momentum from the year 2001-02 onwards. Till the end of March 2018 out of the all total 772271 SHGs have been bank linked in the State out of which 403765 SHGs were credit linked. Current year and Cumulative position of bank linked SHGs presented in the Table-14.9 –14.9.



**Table 14.13 : Financing of SHG by Banks (Rs. Lakh)**

	During 2017-18	Cumulative As on 2017-18
Deposit No	19499	365536
Deposit Amount	1756.75	11900.05
Credit Linkage under NRLM Nos	5516	132711
Credit Linkage under NRLM Amount	5390.75	96265.22
Credit Linkage to Direct SHG Nos	15595	274024
Credit Linkage To Direct SHG Amount	16817.19	159100.48
Credit Linkage to Total Nos	28313	406735
Credit Linkage To Total Amount	29071.25	255365.70

Source: State Level Bankers' Committee

#### Rural Infrastructure Development Fund (RIDF):

The GoI has set up Rural Infrastructure Development Fund (RIDF) for financing ongoing rural infrastructure projects at low cost to the State Governments. The fund is managed by NABARD. In Assam the State Government to meet the major infrastructure gaps has taken initiative for development of infrastructure in rural areas with the financial assistance from NABARD under RIDF. As on 31st March, 2018, NABARD has sanctioned 3284 projects involving RIDF loan of Rs.6230.51 crore. Out of the total loan sanctioned Rs.6230.51 crore, Rs. 3914.55 crore has been disbursed to the State Government as on 31st March, 2018. As against 3284 projects sanctioned 1454 projects have been completed as on 31.12.2016 and remaining projects are under various stages of implementation. The activity wise number of projects and amount sanctioned including amount released under RIDF are shown in Table-14.12.

**TABLE – 14.14: Activity Wise Project Wise Infrastructure Development Loans Sanctioned and Disbursed by NABARD Under RIDF (as on 31-03-2018)**

(Rs. in crore)

Activity	No. of	Loan	Loan disbursed
Rural Bridges	1436	1749.57	1434.49
Rural Roads	654	1207.91	873.53
Irrigation	159	238.11	208.67
Flood Control	192	887.24	709.32
Animal Husbandry & Vety. Projects	283	197.24	115.45
Small Hydel Project	2	46.14	46.14
Marketing Infrastructure	6	33.99	30.95
Beel Fisheries Projects	136	147.53	49.62



Pay & use toilets	21	8.3	2.49
Meat Processing	1	3.92	3.91
Revitalization of sericulture Farms	40	23.04	16.95
Rural Godowns	246	100.91	61.36
Cattle Feed Plant	1	4.73	0.00
Soil Conservation	33	51.33	38.31
Secondary School Infrastructure	32	480.01	12.43
Elementary School Infrastructure	2	136.29	0.00
Agriculture Department (STW/Soil)	40	914.25	310.90
Total	3284	6230.51	3914.55

Source: NABARD Regional Office, Guwahati.

### Loan sanctioned, and Disbursed for Projects By NABARD



### North Eastern Development Finance Corporation Ltd [NEDFi]:

NEDFi, since its inception has been playing a crucial role in catalyzing the development of economy of the Northeast India. NEDFi has been instrumental for identifying, financing and nurturing eco-friendly and commercially viable industries, infrastructure and agro-horticultural projects in the region. NEDFi is also giving special emphasis to cover small enterprises and micro finance to the needy at the grassroots in the region. During the year 2017-18, the Corporation sanctioned Rs.15087.53 lakh and disbursed Rs.15671.70 lakh in the Assam out of the total sanctioned and disbursement amount of 28915.80 lakh and 25141.43 lakh respectively in the NE Region and registered 52.2% in sanctioned and 62.3% in disbursed amount for 1,610 Nos. of projects in the State. The sanction and disbursement in the State of Assam during 2016-17 was Rs.210.91 crore and Rs.185.27 crore respectively for financing of 98 Nos. of projects.

### Micro Finance Scheme:

NEDFi's Micro Finance Scheme has proved to be an effective instrument for financial inclusion where credit is routed to SHGs/JLGs and individuals through



established and good Non-Government Organizations (NGO)/Micro Finance Institutions (MFIs) to meet the needs of smaller entrepreneurs (preferably Self-Help Group or individual) of the region for taking up productive activities in the field of agriculture, micro industries and service sectors including transportation, etc.

Till the end of March 2018, the Corporation mobilized a capital formation of Rs. 14,314.00 crore by extending assistance to 5,460 with cumulative sanctions & disbursement of Rs.4688.00 crore and Rs.3616.00 crore, through which NEDFi has been able to reach out to more than 6.00 lakhs beneficiaries in the NE Region.

**TABLE – 14.15: Amount Sanctioned , Amount Disbursed and No of Projects Under Micro finance in Assam by NEDFi (as on March,2018)**

(Rs. in Lakh)

Item	2013-14	2014-15	2015-	2016-17	2017-18	Cumulativ
Amount Sanctioned	5520	5275	5635	6150	15087.53	284,981.6
Amount Disbursed	5570	5848	5885	4450	15671.70	218,852.3
No of Projects	109	69	66	77	98	1,610

Source: Annual Reports of NEDFi.

**NEDFi's Performance in Assam and North Eastern Region(NER):**

During the year 2017-18, loans sanctioned by NEDFi for the entire NE region was decreased by around 27% percent and as well as loan sanctioned for Assam also decreased by 28 percent compared to the previous year. Accordingly disbursement of loan also have an impact and loan disbursed by NEDFi for the entire NE region was decreased by 28 percent and that for Assam was by 15 percent during 2017-18 compared to the previous year. Loan sanctioned and disbursed by the NEDFi to the North-Eastern States including Assam may be evident from the Table-14.15.

**Table – 14.16: Loan sanctions and Disbursements by NEDFi for last five years(Cumulative)**

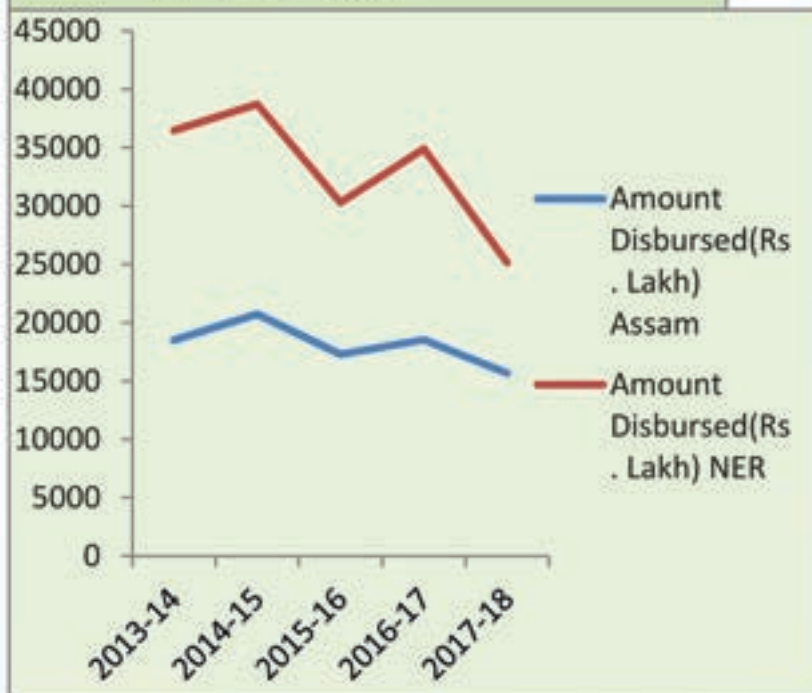
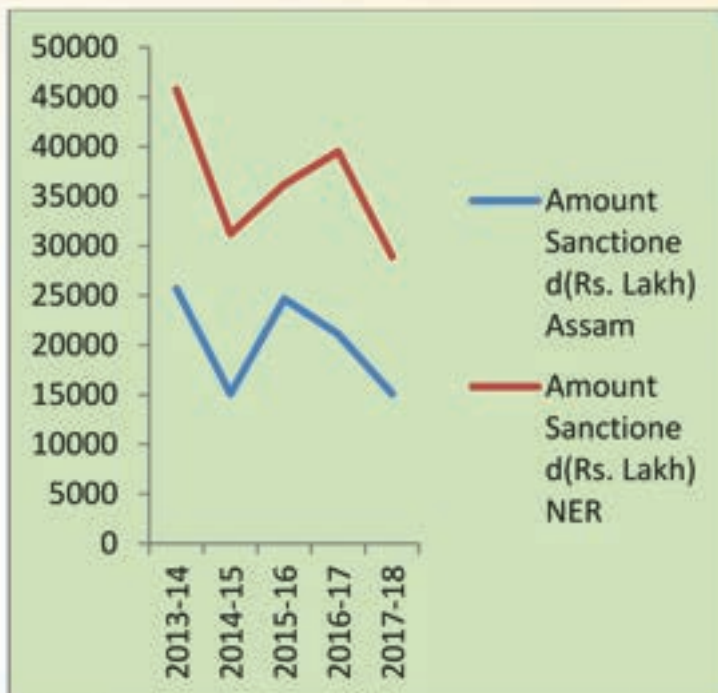
(Rs. in lakh)

Year	No of Projects		Amount Sanctioned		Amount Disbursed	
	Assam	NER	Assam	NER	Assam	NER
2013-14	109	543	25684.12	45750.56	18488.41	36469.12
2014-15	69	428	15069.69	31203	20726.39	38720.22
2015-16	66	422	24654.63	36186.18	17278.44	30298.70
2016-17	77	472	21091.03	39488.22	18527.08	34908.97
2017-18	98	553	15087.53	28915.80	15671.70	25141.43

Source: Annual Reports of NEDFi.

Amount of Sanctioned and Amount of Disbursed in Assam & NER





#### **Assam Financial Corporation:**

The Assam Financial Corporation has significant contribution towards the industrial development of the region. The Corporation has been persistently working to improve its performance. On the sanction and disbursement front, in spite of various constraints, the Corporation is continuing its lending operations. At present the Corporation has 2 numbers of DGM level branches, 3 numbers of Senior Manager level branches, 6 numbers of Branch Manager level branches, 2 numbers Field Offices and one Satellite Office to provide need based customer service.



**Table 14.17: Net effective sanction , disbursement and outstanding of loans and advances:**

Rs. in lakh

Amount Sanctioned (effective)				Amount Disbursed		Loan Outstanding	
Small Scale		others		Small Scale	Others	Small Scale	Others
No	Amount	No	Amount	Amount	Amount	Amount	Amount
6001	14576.66	751	8955.91	13450.13	7915.57	3045.06	2379.39

Source : Annual Report- Assam Financial Corporation (AFC)

Assam Financial Corporation (AFC) has so far provided financial assistance to total 7282 projects both in service and manufacturing sector under its various schemes since inception involving total loan amount of Rs. 28111.21 lakh sanctioned as on March,2018. AFC has provided direct & indirect employment opportunities to more than 1,50,000 unemployment youths of the State as on March ,2018. During the year 2017-18 the total loan amounted to Rs. 2287.75 lakh and total disbursement amounted to Rs.2095.90 lakh from Rs. 1740.00 lakh & Rs.1606.70 lakh in the previous year registering a growth of 36.18% and 35.45% respectively.Total recovery of loan in 2017-18 increased to Rs.2532.49 lakh from Rs. 2149.40 lakh in the previous year recorded a growth of 17.82% .

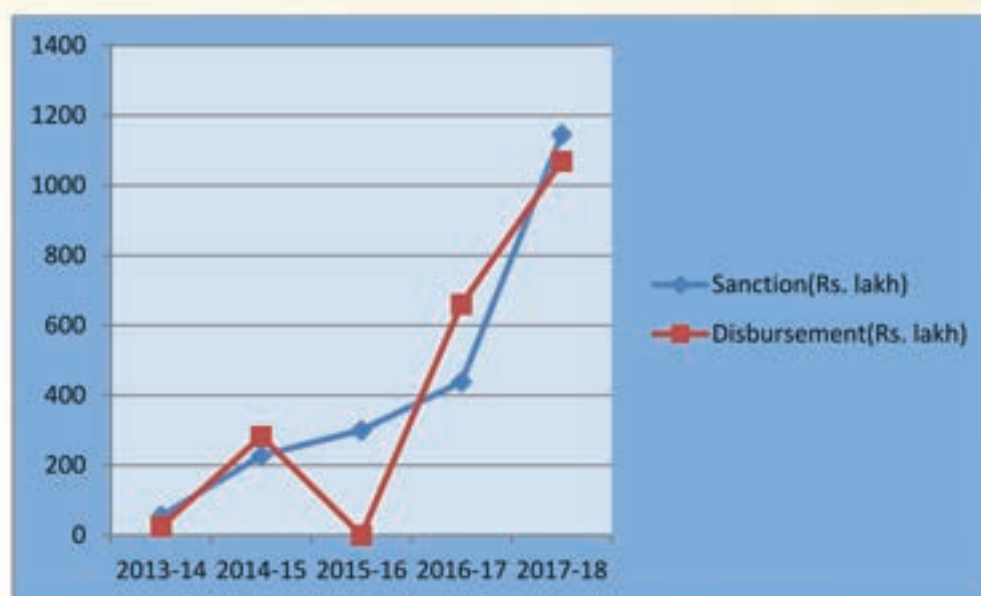
**Table 14.18: Assistance for women Entrepreneurs**

Name of the Scheme	Current year 20017-18		Cumulative as on 31.3.20018	
	No	Amount	No	Amount
Chief Minister's Micro Finance Scheme	NIL	NIL	24	2083.76
Kanaklata Micro Finance Scheme	10	1145.00		1928.50
<b>Total</b>	<b>10</b>	<b>1145.00</b>		<b>4012.26</b>

Source: Annual Report- Assam Financial Corporation



## Trend of Sanction and Disbursement of Loan for Micro Finance by AFC



**Table 14.19: Micro Finance Beneficiaries assisted since inception**

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
No of SHG	20	10	0	280	22	93	NIL	217	10	652
No. of JLG	880	1384	290	0	0	1117	NIL	648	2117	6436
No. of SHG Beneficiaries	300	100	0	3360	200	733	NIL	1221	100	6014
No of JLG Beneficiaries	4400	7020	1450	0	0	5589	NIL	3363	10585	32307
Total Beneficiaries assisted	4700	7120	1450	3360	200	6322	NIL	4584	10685	38321

Source: Annual Report- Assam Financial Corporation

In Micro Finance Sector after successful implementation of "Chief Minister's Micro Finance Scheme" another new scheme namely "Kanaklata Micro Finance Scheme" has been implemented to encourage the women entrepreneurs in the Rural as well as Semi Urban and Urban areas of the State to set up their own enterprises for livelihood support and to contribution towards the socio-economic development of the State. The micro finance loan sanctioned amounted to Rs.1145.00 lakh as against the disbursement of Rs.1068.50 lakh during the year 2017-18. The Micro finance operation which was started from FY 2009-10 the AFC has sanctioned and disbursed total amount of Rs.4012.26 lakh and Rs, 3192.26 lakh respectively till March,2018 under the "Chief Minister's Micro Finance Scheme " and "Kanaklata Micro Finance Scheme" and provided financial inclusion and livelihood support to more than 30,000 women beneficiaries of the State.



# CO-OPERATION

The Cooperative movement in Assam made its first appearance in an organised manner with the patronage of the Government and through the enactment of the Cooperative credit Societies Act, 1904. It has spread geographically almost all villages in the state covering functionally all economic activities.

Since the economy of Assam is predominantly rural in character, an extensive network of sound and viable cooperatives can play a vital role in giving right shape to the socio-economic structure of rural Assam in particular and boosting the much needed economic growth and social transformation in the State.

The Cooperative Act, 1904 has the provision to make the Cooperative Societies member driven, member owned, self reliant and democratic autonomous enterprises paving the way for spontaneous growth and development of the cooperative movement in the country. The act further strengthens by an amendment as well as by an insertion of a separate chapter for "Cooperative Credit Structure Society (CCSS)" as per the MOU signed by the State Government with the Central Government and NABARD in 2012. This helped to revive Short Term Cooperative Credit Structure (STCCS).

The main objectives of the Cooperative department are registration, supervision, assistance, counselling, to provide education and all round development of the cooperative movement. It also looks after the implementation of various schemes of cooperative societies in different economic sectors like agriculture, fisheries, farming, diary, industry, processing, marketing, business etc. which are mainly focussed on economic development and employment generation.

All the cooperative societies of the state are registered under the Assam Cooperative Societies Act, 2007 and remain under the administrative control of the Cooperative Department. At present there are 11,731 Nos. of different types of Cooperative Societies in Assam. These include Primary Agriculture Cooperative Societies i.e. PACS (GPSS and LAMPS), one state level open Cooperative Bank, one State Agriculture and Rural Development Bank (ASCARD), 8 nos. of Urban Cooperative Bank, Thrift and Credit Cooperative Societies, Diary Cooperatives, Farming Cooperatives, Fishery and Pisi-culture Cooperatives, Consumer Cooperatives, Tourism Cooperatives, Transport Cooperatives, Marketing Cooperatives, Housing Cooperatives etc. Most of these cooperatives have attained a noticeable and impressive growth over the past couple of years and contribute significantly towards the socio-economic development of the State.

### **Scheme Implemented by the Cooperation Department :**

The Cooperation Department has emphasized for publication of the Cooperative



Movement for up-liftment among the rural people through information and publicity by the way of SammanitaSamabaySajagataAchni and an amount of Rs.3.29 lakhs has been provided for this purpose. The Govt has also provided an amount of Rs.7.50 lakhs to popularise the movement among rural people by the way of entertainment through documentary feature film etc.

#### **Revamping of PACS :**

The multipurpose cooperative society like Primary Agriculture Cooperative Societies (PACS) organised in the year 1973 are the back bone of cooperative movement in the State. The main objectives of the PACS are the Production, Procurement and Distribution. The Gaon Panchayat Samabai Samity (GPSS) / Large Area Multipurpose Cooperative Societies (LAMPS) are the grass root level of two tier short term cooperative credit structure and Assam Cooperative Apex Bank is on the top. Due to heavy overdue, almost all GPSS / LAMPS become ineligible to get fresh finance. The credit flow from NABARD has also stopped to Apex Bank affecting the agriculture production in the State. The GPSS are compelled to devote entire time in dealing with PDS business as handling agent of public distribution system of Government of India.

There are a total of 2202 numbers of GPSS in the State that deals in production, procurement and distribution of essential commodities. Many of these societies are performing very well. The GPSS need to be re-oriented for dealing fertiliser, pesticides, farm mechanism, agriculture credit through KCC, supply of quality seeds and to provide forward backward linkage for micro finance. It will act as a tree primary agricultural bank by providing banking service and inculcate habit of thrift among farmers besides agricultural lendings.

The GPSS will maintain data bank of agriculture for respective Gaon Panchayat in the context of production and productivity, cropping pattern, irrigation, consumption of fertiliser, pesticides etc.

#### **Women Cooperative Societies :**

With a view to improving the socio-economic status of women almost 2014 numbers of Gaon Panchayat level multipurpose women cooperative societies are formed in the year 1992 in Assam. But due to lack of training, motivation and required financial support only a few women cooperative societies are functioning well and doing traditional works like handloom, knitting, embroidery, pickle making etc. for economic benefit. Most of them doing PDS business as an agent of GPSS. The Government has provided financial assistance of Rs.21.00 lakhs through SamannitaMahilaSamabaiSabalakaran Scheme to women cooperative societies during the year 2017-18. Another amount of Rs.20.00 lakh is proposed to be provided to such cooperative in the year 2018-19.

#### **Administrative Reforms :**

Cooperative Societies should be free from the Government control or in other words, to be given more democracy by making law in the light of Vaidanathan Committee's recommendation. Participation of women in the management is ensured. Provision is made for inclusion of professionals in the management of the cooperatives.



### **Processing Cooperatives :**

A large number of Processing Units have been setup in the state under co-operative sector comprising of rice and oil mill, Spinning Mill, Mustard Oil Mill, Jute Mill, etc. The Eastern Agro processing and Tea Warehousing Cooperative Society Ltd. The Assam Polyster Cooperative Society Ltd. (APOL) are the prestigious organisations under the cooperative sector in the state. Due to financial Constraints APOL remained non-functional for few years. The Eastern Agro Processing and Tea Warehousing Cooperative Society (EAPT WCS) is functioning without any financial assistance from the Government and is performing well and earning continuous profit. This Society has earned a net profit of Rs.265.25 Lakhs during the year 2017-18.

### **Credit Co-operatives:**

There are three (3) types of Co-operative Bank in the State, viz., (1) ASCARD Bank, (2) Assam Co-operative Apex Bank Ltd. and (3) Urban Co-operative Bank with their branches spread all over the State. These societies are providing credit to local entrepreneurs for undertaking various types of business activities and thus providing employment to unemployed youth at minimum rate of interest. The State Government has already taken several steps to implement the scheme of revival package of short term Co-operative Credit Structure (STCCS) through Apex Bank and Long Term Co-operative Credit Structure (LTCCS) through ASCARD Bank.

### **Housing Co-operatives:**

There are more than 200 numbers of primary housing cooperatives with one apex level Society, HOUSEFED, Assam, is rendering service to its members. This Federation has provided housing facilities to the Central and State Government employees and loan for dwelling houses to the low and middle income group of people in the urban / rural areas.

### **Consumer Co-operative:**

There are 38 types of urban consumer store with more than 250 affiliated primary consumer stores in the state. These Co-operative Societies extends yeoman service to the urban people and in maintaining the price line. The Wholesale Consumer Co-operative Societies (WCCS) are involved in procuring and selling of essential commodities and other products at subsidised rates. These procured essential item required scientific storage for proper preservation for long periods. Karimganj Wholesale Consumer Co-operative Society Ltd. (KWCCS), Mahabhairav Consumer Co-operative Store Ltd. of Golaghat District bagged the "Best Performing Consumer Cooperative Societies Award" during the year 2016-17.

### **Revival of Dairy Co-operatives :**

Primary milk cooperatives are village level cooperatives. There are 562 numbers of primary dairy cooperatives societies and three number of regional level milk union namely 1) West Assam Milk producers Union Ltd.(WAMUL), 2) East Assam Milk producers Cooperative Union Ltd. (EAMUL), 3) Cachar and Karimganj District Milk producer Cooperative Union Ltd. (CAMUL). Though there is vast potential in the dairy sector, the growths of the dairy cooperative societies are not satisfactory. A number of



primary cooperative societies viz., Sitajakhala Dugdha Utpadak Samabai Samiti Ltd. (SJDUSS), Kamdhenu Dairy Cooperative Society Ltd., Sundapukhuri Dairy Cooperative Society Ltd. etc. are performing well. Government has provided financial assistance during the year 2017-18 for an amount of Rs.15.86 lakhs to Sundarphkhuri Milk Cooperative Societies and Rs.14.14 lakhs to Tezpur Grazier Dugdha Samabai Samity. Government has taken steps for upliftment of the dairy societies viz., WAMUL, EAMUL and CAMUL which were handed over to the National Dairy Development Board (NDDB), New Delhi, in the line of AMUL model. Government has been providing financial assistance to these cooperatives in a phase manner.

#### **Fishery sector:**

Fishery sector has a higher growth rate than other agricultural and allied sectors and could play a pivotal role in the socio-economic development and employment generation in the state. These societies are rendering various services to the economically poor and backward schedule castes people in the state. At present there are 516 number of primary fishery co-operatives in the state. It is necessary for creation of infrastructure and application of modern technologies in the fishery sector for boosting this sector. To popularise the Blue Revolution through fishery cooperative Societies, awareness camps and skill development programmes to fishermen are necessary.

For development of Fishery Cooperatives, the State government has provided an amount of Rs.15.00 lakhs to Tarajan Fishery Cooperative Society and Gamiri Koibarta Fishery Cooperative Society during the year 2017-18. The Apex body, FISHFED is a federation of primary fishery cooperative societies. Presently there are 247 nos. of member cooperatives. FISHFED is running business of fresh fish marketing in a hygienic manner. For this purpose, FISHFED has acquired four vehicles with the financial assistance from NFDB. FISHFED has also air conditioned fish marketing retail outlet at Rupnagar, Guwahati. FISHFED has already constructed two cold rooms of 5000 cft. and 6000 cft. capacity. It is in the process of implementing an online application for sale of fish and fish products. During the year 2016-17, its authorised share capital is Rs.400.00 lakhs and paid share capital is Rs.343.07 lakhs. Government has sanctioned an amount of Rs.15.00 lakhs to FISHFED as financial assistance to take up the business smoothly during the year 2017-18. It is to be noted that in the pursuance of the decision taken in the State Cabinet held on 17.10.2018, the administrative control of FISHFED has been handed over to the Fishery Department to the Government of Assam subject to some terms and conditions.

#### **Other Co-operatives :**

In addition to the above mentioned Co-operative Societies, there is a large number of cooperatives like, poultry, piggery, duckery, goater, pisciculture, cane & bamboo, brick manufacturing, transport & communication, rickshaw puller, bee keeping, blacksmith, bell metal utensils manufacturing, tourism etc. in the State. The financial assistance to these societies will go along way in enabling economically weaker section of the society to achieve their economic upliftment.

#### **Performance of state level cooperative societies :**

The performance of some of the state level credit and non-credit Co-operative institutions is elaborated below :



### **Assam State Cooperative Apex Bank Limited:**

The Assam State Co-operative Apex bank Ltd which is registered in the year 1948 is a pioneer institution in channelizing credit for agricultural operation to boost up the development process of the rural economy as well as financing other urban business and industrial activities through cooperative channel in the state. The Assam State Cooperative Bank Ltd. is rendering services mainly in Agricultural credit. It is the sole bank for rural agricultural credit. Gaon panchayat Samabay Samity (GPSS) are also adopted by this bank. Presently the bank is implementing the package of Short Term Cooperative Credit Structure (STCCS) on receiving revival assistance from Govt. of India and State Govt. The bank has played a very important role in the socio-economic development of Assam by advancing credit to agricultural allied sector, tea sector etc. The bank is managed by elected Board of Directors and a professional Chief Executive. The bank has net profit of Rs.1817.33 lakhs during the year 2016-17. The Apex Bank has 68 branches including the Head Office. All the branches are now computerized and implementing core banking solution like other Nationalised and Commercial Banks. The Apex Bank has also operated RTGS/NEFT. The Capital to risk weighted assets ratio of the bank has achieved 10.65% which can be taken as a good condition of assets to be compared with other state cooperative Banks in the country. The bank provides A.T.M. facility to its customers like other commercial banks for smooth running the banking business.

As per available information, the membership of the bank has increased from 91000 in 2012-13 to 94000 in 2017-18. The share capital has increased to Rs.14.86 crore in 2017-18 from Rs.9.13 crore in 2012-13. The working capital has also increased to Rs.3136.59 crore in 2017-18 from Rs.1687.60 crore in 2012-13.

The performance of the Assam State Cooperative Apex Bank during the last six years may be evident from the table below:

Particulars	Unit	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Bank Branches	No	67	68	67	68	68	68
Members	*000*No	91	93	94	92	94	94
Paid of share Capital	Rs in Crore	9.13	9.74	10.84	11.75	13.44	14.86
Reserved	-- Do --	33.69	30.08	43.03	51.76	65.03	84.10
Deposits	-- Do --	1500.63	1950.92	1888.50	2039.81	2870.66	3426.54
Working Capital	-- Do --	1687.60	2032.21	2079.81	1921.94	2379.61	3136.59
Borrowing Outstanding	-- Do --	6.45	7.37	4.87	7.46	25.49	28.89
Investment	-- Do --	987.10	1268.28	1028.60	1079.15	1394.78	1557.36
Loan Advance	-- Do --	125.29	358.77	287.95	278.57	394.25	154.48
Loan Outstanding	-- Do --	483.71	686.36	787.33	879.27	850.65	884.29
Loan Overdue	-- Do --	98.38	135.31	88.06	95.83	91.16	71.90



### **ASSAM STATE COOPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANK LTD. (ASCARD) :**

The Assam State cooperative Agriculture Rural Development Bank Ltd. (ASCARD) was registered during the year 1955-56. It is a land mortgage Bank. This Bank is not a Bank under the Banking Regulation Act but the Bank is regulated under the Assam Cooperative Land Mortgage Bank Act, 1960 and the Assam Cooperative Land Mortgage Bank Rules, 1961. The ASCARD bank was providing medium and long term agricultural credit. The ASCARD bank has 28 Nos. of Branches throughout the state with more than 48 thousand members. Formerly, the primary Land Mortgage Bank (PLMB) in the District level and later on the PLMB's were reformed as primary Agriculture Co-operative Bank which were finally merged with ASCARD Bank Ltd. At present these primary Agriculture Co-operative Banks are functioning as Branches of the ASCARD Bank Ltd. Present financial position of the ASCARD Bank is precarious. Performance of the Bank is almost deplorable due to mismanagement. The Government has yet to take proper steps for revival of Long Term Cooperative Credit Structure (LTCCS) as recommended by Vaidyanathan Committee Report – II (VCR-II). As per available information, a slight increase was seen in share capital from Rs.6.33 crore in 2012-13 to Rs. 6.58crore in 2017-18. Working capital has increased to 14.79 crore in 2017-18 from Rs.13.22 crores in 2012-13. Deposits have increased to Rs.2.62 crore in 2017-18 from Rs.0.18 crore in 2012-13.

The loans and advances issued by bank have shown a good improvement in the year 2017-18 compared to previous years. The loan outstanding has also increased to Rs.9.94 crores in 2017-18 from Rs.8.42 crores in 2012-13.

The data containing important indicators of bank performance are presented in the table below:

Particulars	Unit	2012-13	2013-14	2014-15	2015-16	2016-17 (Prov.)	2017-18
Bank Branches	No	28	28	28	28	28	28
Membership	No	44332	45886	46771	47610	54076	48208
Paid up Share Capital	Rs. in Crores	6.33	6.36	6.36	6.37	6.48	6.58
Working Capital	Do	13.22	13.07	12.41	13.31	13.96	14.79
Deposits	Do	0.18	0.73	0.95	1.05	1.50	2.62
Loans and Advances	Do	0.18	0.82	0.36	0.43	1.42	9.94
Loan Outstanding	Do	8.42	8.65	8.46	8.42	9.02	9.94



### **URBAN COOPERATIVE BANK**

The state at present has 8 numbers of functioning urban co-operative banks (UCBS) with 25 branches. Till recent past, multiplicity of command, absence of clear – cut demarcation between the functions of the state Government and RBI, led to operational difficulties in implementing regulatory and supervisory measures pertaining to UCBS. To sort out the difficulty, a Memorandum of Understanding (MOU) between RBI and Government of Assam was signed in connection with regulatory control of RBI over UCBS during the year 2008 so that functioning of such banks can be improved and confidence of depositors can be restored.

As per available report total membership of the functioning UCBS are 42 thousand in 2017-18 against 29 thousand in 2012-13. Similarly paid up share capital has also increased to Rs.17.74 crore in 2017-18 from Rs.6.53 crore in 2012-13. Slight increase was also observed in working capital as Rs.600.27 crore. Loan advances has increased to Rs.264 crore in 2017-18 from Rs.199.59 crore in 2012-13. Loan outstanding has increased to Rs.272.07 crore in 2017-18 from Rs. 239.45 crores in 2012-13.

### **STATISTICS RELATED TO PERFORMANCE OF URBAN COOPERATIVE BANKS**

Particulars	Unit	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Bank Branches	NO	23	24	25	25	25	25
Membership	'000'NO	29	31	30	32	40	42
Paid up Capital	Rs in Crores	6.53	6.89	7.36	13.18	15.93	17.74
Working Capital	DO	595.15	616.00	687.97	723.69	773.10	600.27
Deposits	DO	522.49	602.92	604.89	479.48	690.29	724.22
Loans Advances	DO	199.59	233.04	217.71	259.87	207.85	264.00
Loan Outstanding	DO	239.45	239.10	236.24	257.24	194.82	272.07
Loan overdue	DO	13.89	18.07	21.00	26.76	23.06	30.65

### **STATE LEVEL NON-CREDIT COOPERATIVE SOCIETIES**

There are a few state level Non-credit cooperative societies functioning in the state. The performances of these societies are presented in the Table below:



**Statistics Related to state level Non-Credit Cooperative societies in Assam.**

Name of Societies	Year	No. of Societies	No. of Members	Rupees in Lakh		
				Paid up share Capital	Paid up working Capital	Value of sales
Assam Cooperative Jute Mill Ltd.	2013-14	1	1825	325.79	1237.92	3811.42
	2014-15	1	659	323.93	929.34	4510.55
	2015-16	1	659	323.93	942.38	4244.15
	2016-17	1	659	323.93	926.65	5244.66
	2017-18	1	659	323.93	957.82	4438.40
FISHFED	2013-14	1	239	343.00	407.00	18.87
	2014-15	1	246	343.04	411.95	74.49
	2015-16	1	285	343.10	115.66	57.50
	2016-17	1	285	343.10	115.66	57.50
	2017-18	1	277	343.18	115.60	45.47
HOUSEFED	2013-14	1	418 Members Societies	1663.55	15294.24	
	2014-15	1	418	1653.21	15050.69	
	2015-16		418	1642.51		
	2016-17	1	412	1636.60	15744.76	N.A
	2017-18	1	412	1626.34	14023.12	N.A.
Eastern Agro Processing & Tea Warehousing Cooperative Society Ltd.	2013-14	1	493	97.98	1889.00	1655.00
	2014-15	1	504	98.08	1850.00	1611.00
	2015-16	1	503	98.13	2107.00	1384.00
	2016-17	1	504	98.15	2459.65	1314.03
	2017-18	1	503	97.90	1972.55	1321.21
Assam Polyester Cooperative Society Ltd.	2013-14	26 Societies	4618	1628.00	84.80	1885.24
	2014-15	37	4589	1648.05	(-) 175.78	1135.34
	2015-16	37	4579	1648.12	(-) 395.63	1655.26
	2016-17	37	4590	1648.12		
	2017-18	37	4590			

**Assam State Cooperative Union (ASCU) :**

The Assam State Cooperative Union (ASCU) is an apex level cooperative organization for promotion of cooperative education, training, publicity and propaganda activities in the State of Assam. It was registered on 12<sup>th</sup> September 1955.

**The aims and objectives of ASCU :**

- a) To promote and develop cooperative movement in Assam.
- b) To educate, train and guide people and to assist them in their efforts to build and expand the Cooperative sector
- c) To serve as an exponent of cooperative union.
- d) To propagate and publicize the cooperative principles and ideas in order to create public opinion in favour of the movement by holding seminars, conferences etc.
- e) To arrange for inter-state study visit in other cooperatively developed States of India.



#### **Assam Polyester Cooperative Society Lt. (APOL) :**

The Assam Polyester Cooperative Society Ltd. is the only surviving cooperative spinning mill in Assam. It was registered on 14<sup>th</sup> September 1981 under the Assam Cooperative Societies Act 1949. Initially, the Mill was set up as a spinning unit with 19,200 Spindles by purchasing 86 bigha of land at Tulshibari, Rangia, with financial involvement of Rs.12 crore in June, 1988. The main objective of the society is to promote the economic interest of the members by under-taking spinning, dying, weaving and manufacturing of textile (polyester) materials of all kinds and supply of yarn of all types to weavers and others. Due to lack of working capital, the mill stopped its production in December, 2003 and after persistent efforts the mill re-started its production from the year 2006 and now, it is running smoothly. More than 600 employees are engaged in production of yarn in different counts and these are supplied to the local markets as well as markets of Kolkata. The Govt. of Assam has taken steps to revive the mill through up-gradation and replacement of the obsolete machineries under the sponsorship from North Eastern Council (NEC). The NEC has sanctioned a project of Rs 457.34 lakhs for Up-gradation / Replacement of Machineries. As per the NEC scheme 90% of the total cost of Rs 457.34 lakhs was to be borne by the NEC amounting to Rs 411.60 lakhs and balance 10% amounting to Rs 45.74 lakhs being State Share was to be borne by the Govt. of Assam. Its authorized share capital is Rs. 2000.00 lakhs, paid up share capital is Rs.1648.05 lakhs and upto 2015-16 its accumulated loss is Rs.2804.35 lakhs. The government has provided an amount Rs.100.00 lakhs as revival assistance to APOL during the year 2017-18. It may also be mentioned that the Government of Assam has already been sanctioned an amount of Rs.1243.55 lakhs for giving Voluntary Retirement to 380 numbers of its employees.

#### **Infrastructure support under Rural Infrastructure Development Fund (RIDF):**

The State Cooperative Department has initiated the boosting of rural storage infrastructure by construction of rural Godowns in various Gaon Panchayat Samabay Samity (GPSS), Large Area Multipurpose Cooperative Societies (LAMPS) and other cooperative societies with the help of the National Bank for Agriculture and Rural Development (NABARD) sponsored RIDF-XVIII scheme. The Government has released mobilization advance for an amount of Rs.24.08 lakhs for construction of 105 numbers of rural Godowns under RIDF in the year 2017-18. NABARD has sanctioned a sum of Rs.2343.08 lakhs and released an amount of Rs.1954.64 lakhs to the Government during the year 2017-18. Moreover, the Government has released an amount of Rs.122.87 lakhs as state share for construction of 244 numbers. of rural Godowns during the year 2017-18. As on 1<sup>st</sup> December 2018, out of 244 Godowns, construction of 222 Godowns has been completed and the remaining are in progress.



## PRICES AND PUBLIC DISTRIBUTION SYSTEM

The economic activities as well as the purchasing power of the people of a country are greatly influenced by the changes in commodity prices. Rising prices leads to increase in income inequality and also affects the income groups of a country. It is crucial to have a continuous watch on the price behavior to regulate economic policies. Price Index is a Statistical device to measure the relative change in price level with reference to time/geographical location and other characteristics. A barometer of economic activities. The State of Assam in particular and the country as a whole is experiencing price rise in varying degree in the last few years. Consequently the country is going through high inflation. In short more money is required to buy a given amount of goods and services.

### PRICE SITUATION IN ASSAM:

The increase or decrease of retail prices affects the purchasing power of people that in turn affects the living condition of the people. Retail Price is defined as the price paid by the consumer which includes all taxes and excluded discount. With a view to study the ups and downs of price level, the Directorate of Economics and Statistics, Assam collects retail prices of 28 essential commodities from 27 urban and 26 rural centres of Assam on a weekly basis.

### PRICE INDICES:

Inflation is measured by taking into account of the wholesale Price Index (WPI) based on the prices in the Wholesale markets and the Consumer Price Index (CPI) based on the Prices of the Consumer purchases from the retail trade market.

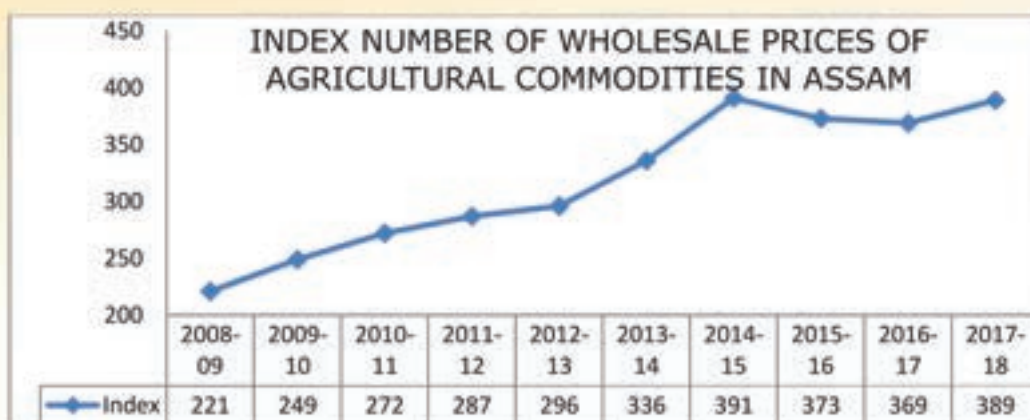
### WPI OF AGRICULTURAL COMMODITIES WITH BASE 1993-94 IN ASSAM:

The Directorate of Economics and Statistics compiles the WPI of agricultural commodities with base 1993-94=100. The table below depicts WPI of Agricultural commodities in Assam for last ten years. Index Number of Wholesale Prices of Agricultural Commodities for last ten years.

**TABLE-16.1: INDEX NUMBER OF WHOLESALE PRICES OF AGRICULTURAL COMMODITIES IN ASSAM FOR LAST TEN YEARS**

S	Index	Percentage Variation
2008-09	221	8.33
2009-10	249	12.67
2010-11	272	9.24
2011-12	287	5.51
2012-13	296	3.14
2013-14	336	13.51
2014-15	391	16.37
2015-16	373	(-) 4.60
2016-17	369	(-) 1.07
2017-18	389	5.42

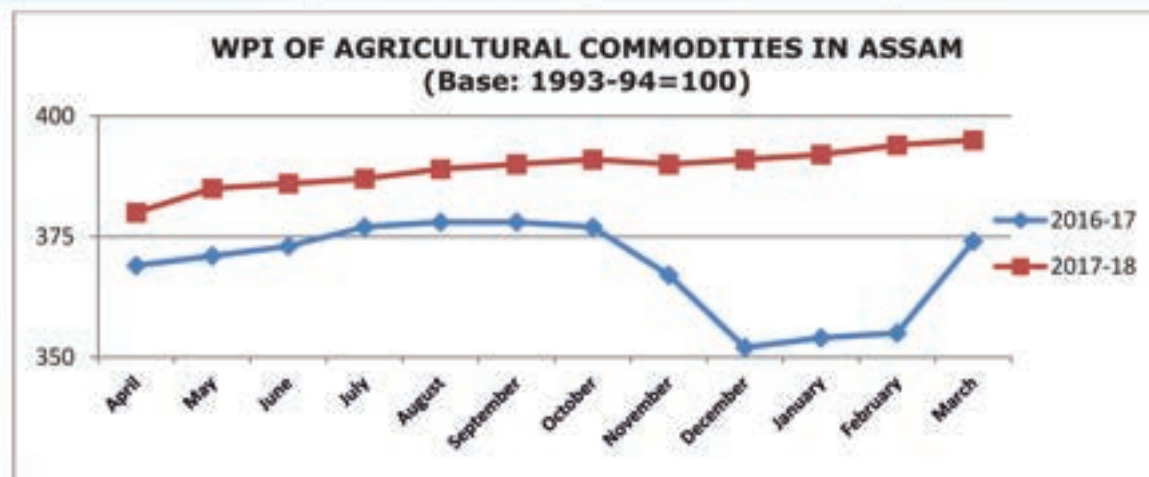




In the last ten years highest increase was 16.37% in 2014-15 as 391 over 336 in 2013-14. During, 2015-16, remarkable decrease was observed in the index point by 4.6% as 373 over 391 in 2014-15. Ultimately it was increased by 5.42 percent in 2017-18 as 389 over 369 in 2016-17. The month to month trend of WPI of agricultural commodities in Assam is depicted through the graph given below:

**TABLE NO -16.2**  
**MONTH TO MONTH TREND OF WPI OF AGRICULTURAL COMMODITIES**  
**IN ASSAM**

Year 2016-17, Base 1993-94=100		Year 2017-18, Base 1993-94=100	
Month	Index	Month	Index
April' 2016	369	April' 2017	380
May' 2016	371	May' 2017	385
June' 2016	373	June' 2017	386
July' 2016	377	July' 2017	387
Aug.' 2016	378	Aug.' 2017	389
Sept.' 2016	378	Sept.' 2017	390
Oct.' 2016	377	Oct.' 2017	391
Nov.' 2016	367	Nov.' 2017	390
Dec.' 2016	352	Dec.' 2017	391
Jan.' 2017	354	Jan.' 2018	372
Feb.' 2017	355	Feb.' 2018	394
March' 2017	374	March' 2018	395





## CONSUMER PRICE INDEX NUMBERS:

The Consumer Price Index numbers are intended to represent the average changes over time in the prices paid by the ultimate consumer for a fixed basket of goods and services. The analysis of different types of Consumer Price Indices are presented in the paragraph given below:

### CONSUMER PRICE INDEX NUMBER (GENERAL) FOR RURAL, URBAN & COMBINED:

The Central Statistics Office (C.S.O.), Ministry of Statistics and Programme Implementation, G.O.I. has introduced a new series of Price Indices with base year 2012 for all India and States/UTs separately for Rural, Urban and combined. The annual average consumer price Index Number (with base 2012=100) in Assam for Rural, Urban and Combined for the year 2017 is calculated as 131.0, 129.2 and 131.1 against the All India annual average indices 135.8, 131.5 and 134.1 respectively. The increase in general Indices for Rural, Urban and Combined in Assam during 2017 over 2016 are 3.16%, 3.40% and 3.72% respectively. The table below shows the month wise Consumer Price Index (General) for Rural, Urban and Combined in Assam and All India for the year 2017 and 2018 with base 2012=100.

**TABLE NO - 16.3: CONSUMER PRICE INDEX NUMBER (GENERAL) FOR RURAL, URBAN AND COMBINED FOR 2017 AND 2018, (Base 2012=100)**

Month	ASSAM			ALL INDIA		
	Rural	Urban	Combined	Rural	Urban	Combined
January'17	127.1	126.5	127.0	132.4	127.8	130.3
February'17	126.4	124.9	126.1	138.5	134.0	136.4
March'17	126.6	125.5	126.4	132.8	128.7	130.9
April'17	127.1	128.4	127.4	132.9	129.1	131.1
May'17	128.0	128.9	128.2	133.3	129.3	131.4
June'17	129.1	128.1	128.9	133.9	129.9	132.0
July'17	130.1	129.2	129.9	136.2	131.8	134.2
August'17	132.3	130.7	132.0	137.9	132.7	135.5
September'17	133.6	131.9	133.2	135.2	132.4	135.2
October'17	134.9	132.0	134.3	136.1	133.5	136.1
November'17	137.9	132.4	136.8	140.0	134.8	137.6
December'17	138.4	131.6	137.0	139.8	134.1	137.2
Annual average'17	131.0	129.2	131.1	135.8	131.5	134.1
January'18	137.8	130.7	136.3	139.3	134.1	136.9
February'18	136.8	131.0	135.6	138.5	134.0	136.4
March'18	137.1	131.2	135.9	138.7	134.0	136.5
April'18	137.9	132.3	136.7	139.1	134.8	137.1
May'18	138.6	132.8	137.4	139.8	135.4	137.8
June'18	139.6	131.9	138.0	141.8	136.2	138.5
July'18	140.9	132.8	139.2	141.8	137.5	139.8



## CONSUMER PRICE INDEX NUMBER FOR INDUSTRIAL WORKERS (CPI-IW):

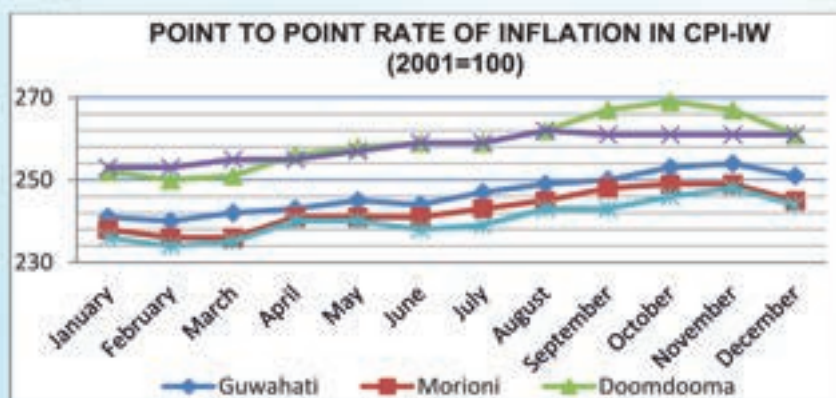
This Index is the oldest among the CPI indices as its dissemination started as early as 1946. Consumer Price Index Number for Industrial workers measure a change over time in prices of a fixed basket of goods and services consumed by industrial workers. CPI-IW is mainly used for the determination of Dearness Allowance (DA) and Variable Dearness Allowance (VDA) being paid to millions of public sector employees besides fixation and revision of minimum wages in scheduled private sector employees respectively. It is also used for measuring inflammatory trend for policy formulation in the country. Since its inception in 1946, labour Bureau, Ministry of Labour, Govt. of India has been compiling and maintaining CPI for Industrial Workers. The 2001 index is a more representative in collecting prices for approximately 392 consumption items from 289 market of 78 centres of the country. In Assam, the CPI for Industrial workers with new base 2001=100 and in old base 1982=100 are constructed and compiled by taking weighted average of the indices for the five centres namely, Guwahati, Doomdooma (Tinsukia), Labac (Silchar), Morioni (Jorhat) and Rangapara (Tezpur).

**TABLE-16.4: CONSUMER PRICE INDEX NUMBER FOR INDUSTRIAL WORKERS IN FIVE CENTRES OF ASSAM (Base 2001 = 100)**

Sl. No.	Period	Guwahati	Morioni (Jorhat)	Doomdooma (Tinsukia)	Labac (Silchar)	Rangapara (Tezpur)
1	January '2017	241	238	252	253	236
2	February 2017	240	236	250	253	234
3	March '2017	242	236	251	255	235
4	April '2017	243	241	256	255	240
5	May '2017	245	241	258	257	240
6	June '2017	244	241	259	259	238
7	July '2017	247	243	259	259	239
8	August '2017	249	245	262	262	243
9	September '2017	250	248	267	261	243
10	October '2017	253	249	269	261	246
11	November '2017	254	249	267	261	248
12	December '2017	251	245	261	261	244
	Average	247	243	259	258	241

Source: Directorate of Economics and Statistics, Assam.

The point to point rate of inflation in the five centres of Assam during the year 2017 depicted in the following graph-





## ANNUAL AVERAGE TREND IN CPI-IW:

The annual average CPI of five centres of Assam and All India are depicted in the following table:

**TABLE NO – 16.5: CONSUMER PRICE INDEX NUMBER FOR INDUSTRIAL WORKERS (GENERAL) CPI-IW (General), Base 2001=100.**

Sl. No.	Period	Base 2001 = 100						
		Guwahati	Morioni	Doom-Dooma	Labac	Ranga-para	Assam	All India
1.	2011	168	171	170	186	163	174	192
2.	2012	184	185	182	197	171	184	209
3.	2013	198	195	196	216	186	198	232
4.	2014	214	217	213	243	213	220	247
5.	2015	239	238	241	253	231	244	268
6.	2016	243	241	246	257	237	245	274
7.	2017	247	243	259	258	241	249	281
7.	2018*	252	246	263	260	245	253	292

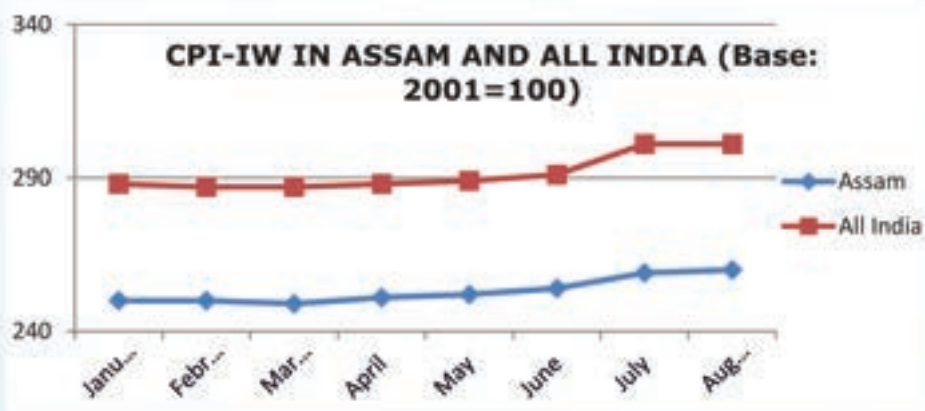
\*(Average of eight months from Jan'2018 to Aug'2018)

During the year 2017, the CPI (IW) in Assam increased to 249 from 245 in 2016 i.e. an increase of 1.63 percent against 2.55 percent increase in all India CPI to 281.

The rate of increase of the index point in different centres in 2017 over the previous year was recorded highest in Doomdooma by 5.28 percent whereas CPI for Labac was remained almost constant with an increase of 0.39%.

**TABLE NO – 16.6: CPI-IW in Assam and All India.**

Months	Assam	All India
January '2018	250	288
February '2018	250	287
March '2018	249	287
April '2018	251	288
May '2018	252	289
June '2018	254	291
July '2018	259	301
Aug '2018	260	301





It is seen that during February' 18, CPI-IW for Assam remains constant against 1 point decrease in the All India Index. During March' 18 CPI-IW for Assam decrease by 0.40 percent whereas All India Index was remained constant in March' 18 over Feb' 18. Then it is seen gradually increased and increased upto 260 in Aug' 18 against All India Index point increased up to 301 in Aug'18.

**CONSUMER PRICE INDEX NUMBER FOR WORKING CLASS POPULATION IN ASSAM WITH BASE 2001=100 AND IN OLD BASE 1982=100 :**

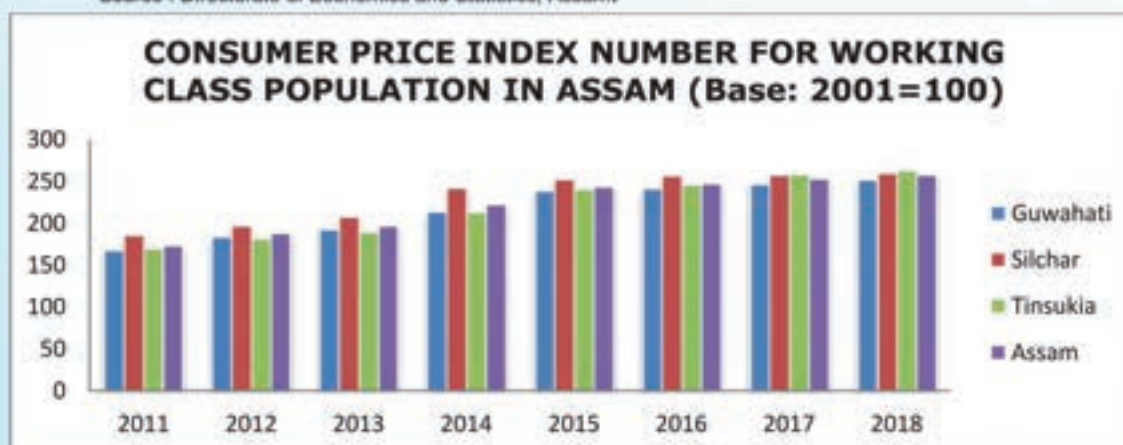
The CPI for Working Class Population for the State is compiled by Directorate of Economics and Statistics, Assam taking into account the weighted average of the indices of the three centres viz. Guwahati, Silchar and Tinsukia.

The index no. on old base 1982=100 is obtained by multiplying the index no. on new base 2001=100 by the linking factors provided by the Labour Bureau. Most of the private agencies use these indices for calculation of Variable Dearness Allowance (VDA) while computing the minimum rate of wages. The following table depicts the CPI for working class `population with base 2001=100 from 2010 to 2017.

**TABLE NO – 16.7: CONSUMER PRICE INDEX NUMBER FOR WORKING CLASS POPULATION IN ASSAM (Base 2001 = 100)**

Sl. No.	Period	Guwahati	Silchar	Tinsukia	Assam
1	2011	168 (7.69)	186 (4.49)	170 (6.25)	174 (6.10)
2	2012	184 (9.52)	197 (5.91)	182 (7.06)	188 (8.05)
3	2013	193 (4.89)	208 (5.58)	190 (4.40)	197 (4.79)
4	2014	214 (10.88)	243 (16.83)	213 (12.11)	223 (13.20)
5	2015	239 (11.68)	253 (4.12)	241(13.15)	244 (9.42)
6	2016	242 (1.26)	257 (1.58)	246 (2.07)	248 (1.64)
7	2017	247 (2.07)	258 (0.39)	259 (5.28)	254 (2.42)
8	2018 (Average of 8 months from Jan'2018 to Aug.'2018)	252 (2.02)	260 (0.77)	263 (1.54)	258 (1.57)

Source : Directorate of Economics and Statistics, Assam.





The annual average consumer Price Index Number for Working Class population with base 2001=100 in Assam was increased by 8.05% to 188 in 2012 from 174 in 2011. In the last eight years highest increase was 13.20% in 2014 as 223 over 197 in 2013. Ultimately the CPI rose 1.57 percent in 2018 to 258 over 254 in 2017.

Among 3 centres of working class population Guwahati centre recorded highest increase by 5 points i. e. an increase of 2.02 percent in the year 2018 over 2017.

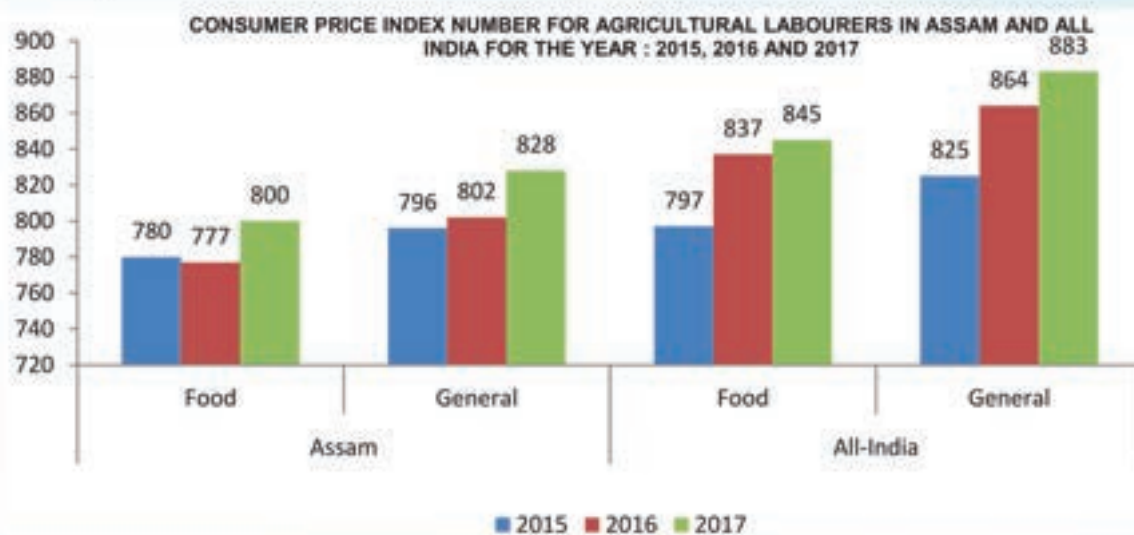
#### CONSUMER PRICE INDEX NUMBER FOR AGRICULTURAL LABOURERS (CPI-AL):

The Labour Bureau, Shimla has been compiling CPI numbers for Agricultural Labourers for 20 states including Assam with the base year 1986-87. CPI-AL is being utilized for fixation and revision of wages engaged in agricultural occupation under Minimum Wages Act, 1948. At all India level from 20 states 600 villages have been selected for the purpose of collecting the retail prices and this data is being utilized for the computation of index numbers. The collection of retail prices in the selected villages have been entrusted to Field Operations Division (FOD) of NSSO, Govt. of India.

The CPI Numbers for Agricultural Labourers for the State of Assam and All India with Food and General Index for the years 2013 to 2017 are presented in Table given below-

**TABLE NO-16.8: CONSUMER PRICE INDEX NUMBERS FOR AGRICULTURAL LABOURERS IN ASSAM AND ALL INDIA FOR THE YEAR 2013 TO 2017**

Sl. No	Year	Assam		All-India	
		Food	General	Food	General
1	2013	706 (10.65)	708 (8.58)	724 (13.48)	735 (12.73)
2	2014	770 (9.06)	776 (9.60)	769 (6.22)	788 (7.21)
3	2015	780 (1.29)	796 (2.57)	797 (3.64)	825 (4.69)
4	2016	777 (-0.38)	802 (0.75)	837 (5.01)	864 (4.73)
5	2017	800 (2.96)	828 (3.24)	845 (0.96)	883 (2.20)





It can be observed from the above table that during the five years period highest increase in Food Index for the State was observed in 2013 by 10.65 over 2012. Highest increase in Food Index is also observed in All India level during that period. Highest increase in General Index in Assam has been observed in 2014 by 9.06% over 2013 and at all India level during 2013 by 12.73% over 2012.

**Public Distribution System:**

Public Distribution System is a major instrument of the Government's economic policy for ensuring availability of food grains at affordable prices as well as to provide food security to the poor. It is an important component for poverty eradication and is intended to serve the poor who are nutritionally at risk. Public Distribution System in India is perhaps the largest distribution system of its type in the world. Public Distribution System is operated under the joint responsibility of the Central and the State governments. The Central Government has taken the responsibility for procurement, storage, transportation and bulk allocation of food grains etc. The responsibility of distribution food articles to the consumers through the network of fair price shop rests with the State governments. In Assam, the Food and Civil Supplies Department looks after the allocation and distribution of food grains, identification of families below poverty line, issue of ration cards and supervision and monitoring of stock position and distribution of food articles etc. by the fair price shops. The department is also entrusted with the responsibility of procurement of paddy and rice under 'Minimum Support Price' scheme under the 'The Food Management Policy' of the Ministry of Food and Public Distribution of Govt. of India to ensure remunerative price to the producers for their agricultural produce and to provide the procured food grains to the consumers fairly at reasonable and affordable price.

**Scheme wise Targets and Achievements (Both financial and physical) under Central Sector and Centrally Sponsored Schemes for the last three years.**

**National Food Security Act 2013 (NFSA'13):**

The National Food Security Act, 2013 was launched in the month of December, 2015 throughout the State of Assam. Total targeted population under NFSA in the State is 2,52,18,001. Total Antodaya Anna Yojana (AAY) families to be covered 7,04,000 nos. The target was fixed by the Government @84.17% in respect of Rural Areas and 60.35% in respect of urban areas on the Census population of 2011 census report. A total of 5087962 numbers of PH families covering 22020803 numbers of population and a total of 692595 numbers of AAY families covering 2857349 numbers of population have been selected till date (Grand total of PH and AAY families are 5780557 numbers and population are 24878152 numbers as per ERCMS as on 16/11/2018. The sub allocation of NFSA Rice is made online. The despatch of fund in respect of transportation and commissioned cost of Rice under NFSA Rice from December, 2015 are as follows (both Central and State Share).

YEAR	TRANSPORTATION COST	COMMISSION
2015-16	18,79,00,000	10,00,00,000
2016-17	183,83,67,273	196,80,72,250
2017-18	182,97,53,520	183,92,55,657
2018-19 (upto June, 2018)	111,71,44,772	153,16,59,479



**Pradhan Mantrir Ujjwala Yojana Scheme** : Under the Scheme free LPG connections has been provided to the BPL households on the basis of the Socio Economic Caste Census (SECC data base exercise initiated in the year of 2011. Oil Marketing Companies are the Nodal Agencies for implementation of the Scheme through the State of Assam. The Government of Assam implemented the Scheme of Pradhan Mantri Ujjwala Yojana in the month of May, 2017. The women under below poverty line were the beneficiaries of the said scheme.

Financial Year	Target	Target achieved	Fund released to OMCs
2017-18	10,65,603	11,28,137	100,59,46,920/-
2018-19	13,00,000	11,34,927 (upto Nov, 2018)	63,80,90,640/-

As per Government's letter vide No.FSA.80/2016/Pt-II/3 dated 16/06/2017, the Government of Assam has paid to the Oil Marketing Companies against their bills @Rs.990.00 per beneficiary. The beneficiaries for the scheme have been selected on the basis of Socio Economic Caste Census, 2011.

Further, the Government of India and the Government of Assam have given subsidy as under :

1. Government of India :

i)	Security Deposit for per cylinder	: Rs. 1250.00
ii)	Security of PR (Pressure Regulator)	: Rs. 150.00
iii)	Suraksha Hose 1.2 M	: Rs. 100.00
iv)	DGCC	: Rs. 25.00
v)	Inspection/Installation/Demonstration	: Rs. 75.00
	<b>Total</b>	<b>: Rs. 1600.00</b>

2. Government of Assam :

i)	Per beneficiary	: Rs. 990.00
----	-----------------	--------------

**Scheme wise Targets and Achievements (both Financial and Physical) under State Sector for the last 3 (three) years.**

**Aamar Dukan:**

To prevent the price hike and to give partial relief from the burden to the poor consumers on the Essential Commodities, the Government of Assam has taken an innovative scheme, namely "Aamar Dukan". The Fair Price shop Holder (Licensee) are eligible for the scheme of "Aamar Dukan". The Deputy Commissioner / Council Head are the authorities to select the Fair Price Shop (Licensee) holder for the above scheme. A total of 5623 numbers of Fair Price Shop Holder(Licensee) are functioning in the State of Assam. The Members of the "Aamar Dukan" Scheme are dealing 23 numbers of selected Essential Commodities. Out of Which, 22 nos. are non-PDS Commodities and 1 (One) is PDS Iodised Salt. The Consumers can purchase their required items from the "Aamar Dukan" at a price lesser than that of open market.

Financial Year	Target	Target achieved	Fund released
2017-18	588	588	3,89,40,300/-
2018-19	830	767	63,80,90,640/-



### **The items distributed through AAMAR DUKAN :**

Rice, (ii) Branded / premium rice, (iii) Sugar, (iv) Gur, (v) Pulses (Masur Dal) (vi) Pulses (Moong Dal), (vii) Packaged iodised Salt (Tata, Nirma, Captain Cook etc.), (viii) Biscuit and Confectionary, (ix) Packaged Atta, (x) Packaged Maida, (xi) Packaged Suji, (xii) Tooth Paste, (xiii) Soaps (bathing and washing), (xiv) Packaged tea (Tata, Golaghat, Nameri etc.), (xv) Spices (MDH, Sona, etc. age marked / FPO Products) (xvi) Packaged Ghee, (xvii) Packaged Butter, (xviii) Chana (Gota), (xix) Moong (Gota), (xx) Potato, (xxi) Onion, (xxii) Edible Oils (Mustered, Soya, Dalda, Vegetable, Refined etc.), (xxiii) PDS iodised Salt.

### **AAMAR DUKAN ON WHEELS :**

For employment of educated un-employed youth and as well as to prevent the price hike on the Essential Commodities, the Government of Assam has taken up another innovative scheme namely "Aamar Dukan on Wheels" in the year of 2017-18. The Government of Assam has fixed a Target of 200 numbers of "Aamar Dukan on Wheels" in the Financial Year of 2017-18. The Government of Assam has also proposed for dealing 23 numbers of Essential Commodities, Out of which, 22 Nos. are non PDS Commodities and 1 (one) PDS Iodized salt by the "Aamar Dukan on Wheels" and the Government has proposed to increase the items upto 36 numbers.

Financial Year	Target	Target achieved	Fund released
2017-18	200	145	72,50,000/-
2018-19	220	192	Fund yet to be released

### **CONSUMER COURTS:**

Under the provisions of Consumer Protection Act 1986, the Food and Civil Supplies Department being the State Nodal Centre has one State level Consumer Redressal Forum at Guwahati and 23 District level Consumer Redressal Forums. To create consumer awareness among the masses, the department has undertaken various activities such as advertisements through the print and electronic media, distribution of pamphlets, leaflets, organizing painting and essay competition among children and observance of National Consumers Day on 24<sup>th</sup> December and World Consumer Day on 15<sup>th</sup> March. Under Confonet scheme, internet connectivity to the 23 District Consumer Forum and State Level Consumer Forum has been provided for easy access of case tests, judgments and to know the status of the cases.

### **TPDS COMPUTERIZATION:**

Data of all the selected beneficiaries and GPSS/ Fair Price Shop have been digitized as a part of end to end computerization of supply chain management under NFSA, 2013. Internet connectivity is being provided up to GPSS level as part of Component-1 of the end to end computerization of TPDS. The State Transparency Portal [www.fcs.assam.gov.in](http://www.fcs.assam.gov.in) has been developed for the purpose.



**ONLINE GRIEVANCE REDRESSAL SYSTEM:**

For redressing the grievances of common consumers, online Grievance Redressal System headed by an Additional Deputy Commissioner in each district of the State is being set up for speedy redressal of the grievances of the public.

**MEASURES TAKEN UP TO CHECK PRICE RISE OF ESSENTIAL COMMODITIES:**

The State Administration along with District and Sub-Division holds regular meetings with trading community and also holds monthly coordination meetings with the FCI, Railways, IOC, trade and public bodies to have information on availability of stock and price. The price of essential commodities is monitored on daily basis by reviewing the daily price bulletins. Steps are also taken to ensure home delivery of LPG cylinders and to reduce the margin of Wholesale and the retail prices of commodities by monitoring the prices of essential commodities collected from the major Indian Cities. To check price rise Vigilance and Monitoring Committees has been constituted at the District, Sub-Divisions and District Council level.

\*\*\*\*\*



## EMPLOYMENT AND WAGES

The objective of economic policy planning in India is to achieve high rates of growth of economy and sustained improvement in the standards of living of people. To achieve the objective, it is essential to absorb the growing labour force to generate productive and gainful employment, on a sufficient scale.

The State Government besides implementing various national employment programmes has initiated various programmes to lessen the burden of unemployment by creating and utilizing the potential employment avenues available in the state. The population censuses, different quinquennial rounds of National Sample Survey on employment data and Economic Census provides data on employment structure and workforce as well as involvement of human resources in economic activity, employment etc. On the other hand, the data available from the Employment Exchanges does not give a clear picture on unemployment as a large number of unemployed people either did not register their names with Employment Exchanges or those who secure employment through other channels do not delete their names from the records of Employment Exchanges.

### EMPLOYMENT SCENARIO

The Census of India defines all persons engaged in 'work' as participation in any economically productive activity with or without compensation, wages or profits are workers. The year preceding the date of enumeration is taken as the reference period for determining a person as worker or non-worker. The Census of India collects information on economic activity of an individual and classifies workers into two groups namely, Main workers who had worked for the major part of the reference period i.e. 6 months or more and Marginal workers who had worked less than six months. The table below shows the trend of Main workers, Marginal workers and Non-workers in Assam as per the last three censuses.

**TABLE 17.1: DISTRIBUTION OF TOTAL WORKERS, MAIN WORKERS, MARGINAL WORKERS AND NON-WORKERS IN ASSAM**

Year	Population	Total Workers	Main Workers					Marginal Workers	Non-Workers
			Total	Cultivators	Agricultural Labours	Household Industry Workers	Other Workers		
1991	22414322	8088935	6992056	3559117	844964	61455	2526520	1096879	14325387
2001	26655528	9538591	7114097	2680092	636351	178082	3619572	2424494	17116937
2011	31205576	11969690	8687123	3138554	903294	242071	4403204	3282567	19235886

The Figure I below shows that proportion of main workers to total population in Assam has decreased from 31 percent in 1991 to 28 percent in 2011 although the figures in absolute number has increased by 24 percent between the period 1991 to 2011. On the other hand, the proportion of marginal workers shows an increasing trend both in percentage share and absolute number during the period. The



proportion of non-workers to total population although remained more or less at the same level (about 64 percent) in 1991 and 2000 it showed a slight decline in 2011.

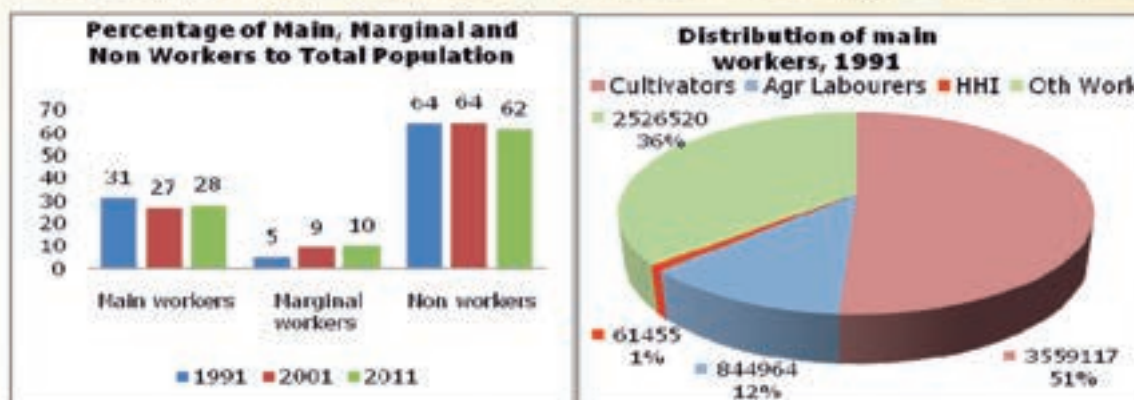


Fig. I

Fig. II

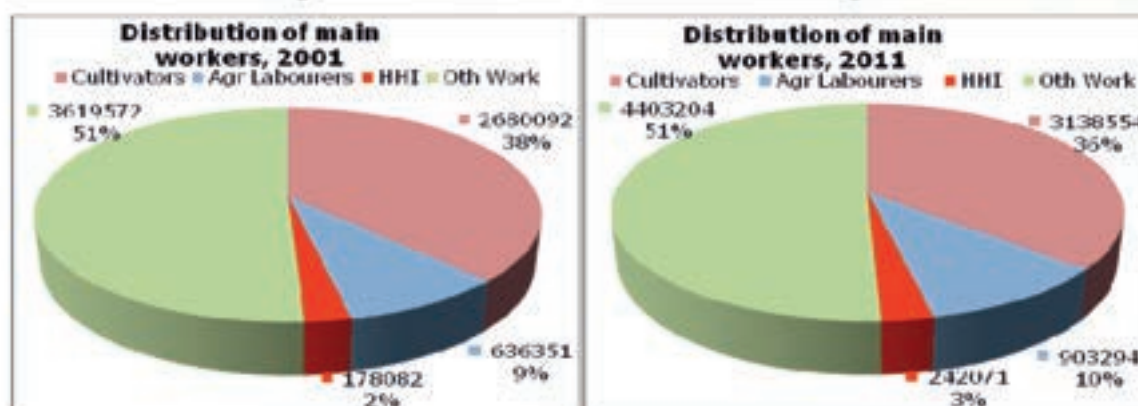


Fig.III

Fig. IV

The Fig.II, Fig.III and Fig.IV, shows that there is a shift in the composition of total main workers from agricultural sector to non-agricultural sector. During 2001 and 2011, of the total main workers, proportion of workers in agricultural sector was 46 percent as against 62 percent in 1991. On the other hand, the proportion of other workers to total main workers depicts an increasing trend from 36 percent in 1991 to 51 percent in 2011 and proportion of workforce engaged in household industry increased from 1 percent in 1991 to 3 percent in 2011. The sex-wise distribution of main workers, marginal workers and non-workers is depicted in the figure V given below:

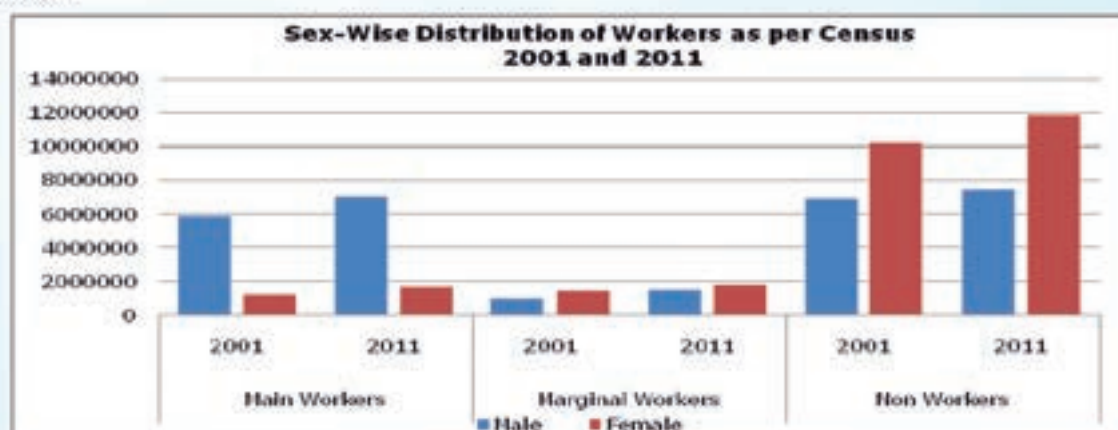


FIGURE V



The percentage share of male and female main workers is 44 percent and 11 percent respectively as per Census 2011 shows a slight increase over the composition of male (42%) and female (10%) main workers as per Census 2001.

### EMPLOYMENT IN SHOPS AND COMMERCIAL ESTABLISHMENTS

The Labour Bureau, Ministry of Labour and Employment, Govt. of India publishes report on employment in shops and commercial establishments covered by the various Central and State Acts on the basis of returns or reports submitted by the States and Union Territories. The report on Shops and establishment in Assam is prepared on the areas covered under the Assam Shops and Establishment Act, 1971. The report published by the Labour Bureau shows that the total number of establishments in Assam covered under the Act and persons employed therein during 2014 were 91 thousand and 1.35 lakh respectively. Out of these 91 thousand establishment, 70 thousand (77 percent) were shops, 15 thousand (16 percent) were commercial establishments and 6 thousand (7 percent) were Cinemas, theatres, Hotels and Restaurants that employed 65 thousand (48 percent), 50 thousand (37 percent) and 20 thousand (15 percent) persons respectively. A comparison of number of shops and establishment in Assam during 2008, 2009, 2010, 2011, 2012 2013 and 2014 is shown in Table 17.2.

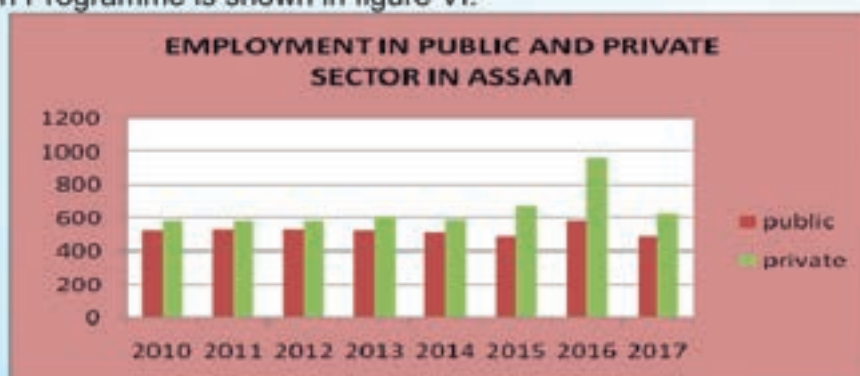
**TABLE – 17.2 EMPLOYMENT IN SHOPS AND COMMERCIAL ESTABLISHMENTS IN ASSAM**  
(‘000 number)

Year	Shops		Commercial Establishment		Restaurants, Theatres etc.		All Establishment	
	Number	Workers	Number	Workers	Number	Workers	Number	Workers
2008	61	55	10	29	5	14	76	98
2009	57	53	10	30	4	13	71	96
2010	61	57	10	32	4	14	75	102
2011	56	57	11	33	4	14	71	104
2012	70	65	13	39	5	17	88	120
2013	68	56	12	43	4	16	84	116
2014	70	65	15	50	6	20	91	135

Source: Statistical Year Book, 2018, MOSPI, Govt. of India

### EMPLOYMENT MARKET INFORMATION (EMI) PROGRAMME

EMI programme gives information about the level of employment in the organised sector of the economy, which covers all establishments in the public sector and non-agricultural establishments employing 10 or more persons in the private sector. Collection of data under the EMI programme is reported through an 'Establishment Reporting System'. The trend of employment in public and private sector from 2007 to 2017 as per data collected through Employment Market Information Programme is shown in figure VI.





The total employment in the public and private sector establishments under EMI programme in 2017 was 11.15 lakh (in public sector 4.90 lakh and in private sector 6.25 lakh) compared to 15.49 lakh (in public sector 5.83 lakh and in private sector 9.66 lakh) in 2016 and thus increased by 33 percent in 2017 over 2016. During 2017, female employment was 37 percent of the total employment against 26 percent in 2016. Out of the total 4.90 lakh employment in public sector, share of local bodies was 1.65 percent and share of State Quasi Government was 10.60 percent during the year. The figure VII shows the composition of public and private sector employment in Assam during 2017.

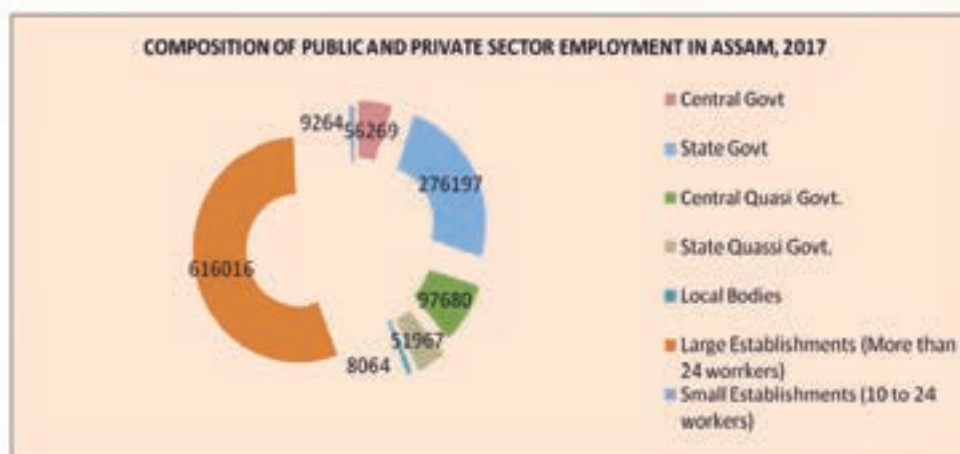


FIGURE VII

### WOMEN EMPLOYMENT IN ORGANIZED SECTOR

The employment of women in organized sector of the State was 411 thousand during 2017 which is 36.9 percent of the total employment. During the same year, percentage share of women employees in public sector and private sector to the total employment was 8.2 percent and 28.7 percent respectively as seen in the table 17.3.

**TABLE – 17.3: EMPLOYMENT OF WOMEN IN ORGANIZED SECTOR**

(In thousand nos.)

Year	Public Sector		Private Sector		Public and Private Sector		Percentage Share of Women in Organised sector
	Women	Total	Women	Total	Women	Total	
2004	77.3	525.1	255.6	572.0	332.9	1097.2	30.0
2005	81.5	524.5	268.4	605.2	350.0	1140.0	30.7
2006	81.8	519.7	299.0	599.7	380.7	1119.4	34.0
2007	84.9	527.0	310.8	640.5	395.7	1167.5	33.9
2008	85.6	527.3	266.5	554.6	352.1	1081.9	32.5
2009	87.3	531.7	273.0	571.7	360.3	1103.4	32.7
2010	87.0	531.1	279.7	583.0	366.7	1114.1	32.9
2011	89.0	537.0	279.9	583.5	369.0	1120.6	32.9
2012	90.1	535.7	280.5	584.8	371.0	1120.5	33.1
2013	90.5	529.3	294.9	609.5	385.4	1138.8	33.8
2014	94.4	515.2	288.8	590.8	383.2	1106.0	34.6
2015	89.7	492.4	304.1	673.7	393.8	1166.2	33.8
2016	91.0	583.0	319.0	966.4	410.0	1549.4	26.5
2017	91.1	490.1	320.2	625.3	411.4	1115.5	36.9

Source: Directorate of Employment and Craftsmen Training, Assam



The Figure VIII shows an increasing trend of women employment in both private and public sector-



Figure viii

### UN-EMPLOYMENT SCENARIO IN THE STATE

The State has 53 employment exchanges comprising of 49 general, 1(one) special and 3 Employment Information and Guidance Bureau. Moreover, there are 28 Employment Information and Assistance Bureau to guide the unemployed youths for employment. Two Districts of BTAD, Baksa and Chirang have no Employment exchange. The table below shows that the number of unemployed as per Live Register decreased by 2.35 percent in 2017 over 2016. During 2017, total placement was 42.7 percent against the number of notified vacancies through Employment Exchanges.

TABLE – 17.4: EMPLOYMENT THROUGH EMPLOYMENT EXCHANGES

YEAR	No. in Live Register	Percentage increase in Live register	No. of Vacancies Notified	No. of Placement Against Vacancies
2010	1911431	(-)0.08	2606	455
2011	1729029	(-)9.54	1401	436
2012	1622729	(-)6.15	2632	394
2013	1677192	3.36	4204	745
2014	1746520	4.13	2829	1099
2015	1915886	9.70	2672	1028
2016	2010603	4.94	2147	582
2017	1963376	(-) 2.35	2395	1023

Source: Directorate of Employment and Craftsmen training, Assam

The size of the educated job seekers is considerably high, which is a challenge before the growing economy of the State. From the records of the live register of Employment Exchanges, the registered educated job seekers stood at 1665866 during 2017 against 1642718 during 2016 thereby showing an increase of 1.41 percent during 2017. The percentage of educated job seekers constitutes about 85 percent of the total job-seekers.. A noticeable development has been observed in registration at all levels of education during 2017. Unlike in the previous year's, number of educated job seekers has increased at all level of education in 2017 over 2016. The year 2017 shows an increase in registration of Engineering Graduates, Medical Graduates, Agriculture Graduates, Veterinary Graduates, ITI passed, Post Graduates, Diploma holders and Others respectively. The detail distributions of the educated job seekers are shown in the table below.



**TABLE – 17.5: DISTRIBUTION OF EDUCATED JOB-SEEKERS**

Level of Education	Registration		Placement		Numbers in live register	
	2016	2017	2016	2017	2016	2017
Engineering Graduate	1081	1589	28	49	8181	7804
Medical Graduate	62	91	9	16	454	942
Agriculture Graduate	19	28	0	1	286	832
Veterinary Graduate	28	41	1	2	250	327
Passed out Trainees (ITI)	11190	16450	29	51	28744	16121
Post Graduates	1948	2864	72	127	29544	16576
Graduates	21212	31183	109	192	262172	317824
H.S.S.L.C.	53105	78068	93	163	660296	682796
H.S.L.C.	39121	57511	153	269	612943	567340
Diploma Holders(Eng.)	2885	4241	16	28	12073	9167
Others	3870	5690	72	125	27775	46137
<b>Total</b>	<b>134521</b>	<b>197756</b>	<b>582</b>	<b>1023</b>	<b>1642718</b>	<b>1665866</b>

Source: Directorate of Employment and Craftsmen Training, Assam

The overall registration of educated job seekers as per record of Employment Exchanges has increased by 12 percent in 2017 over the previous year. The figure IX shows the increase in the registration of educated job seekers in 2017.

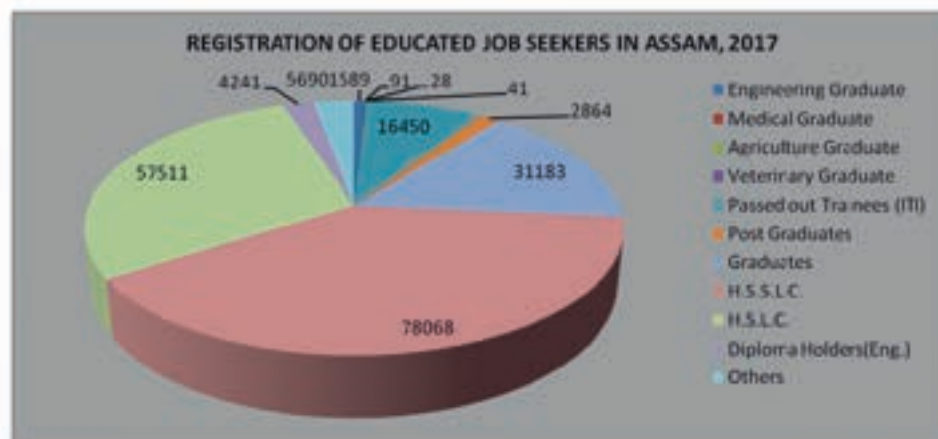


Figure ix

### AVERAGE DAILY WAGE RATE IN RURAL AREAS

As per data collected by the Directorate of Economics and Statistics, Assam, the Average Daily Wage Rate of skilled, unskilled and other agricultural labours shows a more or less steady upward trend. The wage rate in rural areas shows that under un-skilled labour, wage rate of male ploughman increased by 2 percent and male Reaper and Harvester increased by 9 percent. During 2017-18, the female wage rate for Reaper and Harvester increased by 12 percent over the previous year. The wage rate (other agricultural labour) for male and female increased by 14 percent and 14 percent respectively during 2017-18 over the previous year 2016-17.

**TABLE – 17.6 AVERAGE DAILY WAGE RATE IN RURAL AREAS IN ASSAM (in Rs.)**

Year	Skilled Labour Wage		Un-skilled Labour Wage				Other Agricultural Labour	
	Carpenter	Blacksmith	Ploughman	Herdsmen	Reaper and Harvester		Man	Women
	Man	Man	Man	Man	Man	Women	Man	Women
2010-11	150	131	120	117	112	87	137	92
2011-12	155	133	125	120	119	93	137	98
2012-13	196	189	18	164	164	135	169	126
2013-14	220	217	220	172	204	173	206	174
2014-15	305	249	244	196	225	189	234	188
2015-16	325	283	260	203	241	198	239	196
2016-17	349	289	278	220	261	214	256	210
2017-18	369	313	284	267	285	239	293	239

Source: Directorate of Economics and Statistics, Assam.



## **EMPLOYMENT GENERATION PROGRAMME**

Our economy is developing at a fast pace but still a major part of the population who are poverty ridden, illiterate and lack of skill needs support to earn. Keeping this in mind the Central Government and the State Government has initiated and implemented many programmes for self and wage employment generation as well as for creation of production of assets through various organisations like, the Panchayat and Rural Development Department, Directorate of Industries and Commerce, Agriculture Department, etc. The achievements of some of these programmes are briefly discussed as follows:

### **SAROTHI-THE START-UP ASSAM**

The entrepreneurs of the State, more particularly the 1<sup>st</sup> generation entrepreneurs had to step back before converting their ideas into reality due to lack of adequate resources such as equity, loan, etc. Moreover, Banks in the State deter to provide assistance considering it to be risk for them. To remove this hurdle of equity/fund crunch, the State Government has come up with an innovative scheme Chief Minister's Start-up Fund-"Sarothi" with an initial amount of Rs.10 crore during 2016-17. The fund will be managed by the Industries and Commerce Department and will be for a period of five years.

The basic objective of the scheme is to provide financial assistance in the form of loan with interest subvention through a designated Bank covering whole Assam. The loan so availed by the beneficiaries will be supported by the State Govt. through Interest Subvention at the rate of 5 percent per annum. The Physical target for the year 2017-18 is 1298 and the total sponsored is 253 (fund for the year 2016-17).

### **BIPONI**

"Biponi" is an innovative marketing scheme for Micro and small entrepreneurs of Assam. The basic objective of the scheme is to provide support to participate in different trade fairs and events within the state, in the country and abroad for marketing of their products. All registered Micro and small entrepreneurs are eligible for this scheme.

(a) Within the State: Maximum ceiling of Rs 5,000/ per entrepreneur towards stall rent and extra Rs 500.00 per day for the entrepreneur participating from another district to meet travelling, food and lodging expenditure.

(b) Outside the State: Selected participants will be reimbursed 50 % of the stall rent subject to a ceiling of Rs 10,000/ only and actual sleeper class to and fro railway fare for two (2) persons per unit along with Rs 300/ per person per day for the actual fair period towards food and lodging expenses.

(c) Outside the Country: Selected participants will be provided free stall on sharing basis and actual Economy Class airfare for one (1) person per unit along with Rs 1000/ per person per day for the actual fair period towards food and lodging expenses.



In this scheme an exhibition (Mela) for marketing promotion in four (4) numbers of districts was fixed and for this 515 number of units is sponsored for the year 2017-18.

#### **SVAYEM:**

Swami Vivekananda Assam Youth Empowerment (SVAYEM) yojana announced on February 2017 is a flagship programme to provide financial support to the youths of Assam to take up income generating activities in the manufacturing ,trading and service sectors.About 1(one) lakh youths of Assam will be provided suitable credit support for taking up income generating enterprises. The main objectives of this scheme is to generate employment opportunities in rural as well as urban areas through setting up of a new venture as well as developing existing ones.This scheme will provide financial assistance to micro and small business entities engaged in the manufacturing, trading and service sectors and to provide financial assistance for enhancement of income level of traditional artisans ensuing sustainable growth.

#### **NATIONAL RURAL LIVELIHOOD MISSION**

In Assam, the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) is being implemented through Assam State Rural Livelihoods Mission. Assam State Rural Livelihoods Mission (ASRLM), is working with a mission to reduce poverty by enabling the poor households to access gainful self-employment and skilled wage employment opportunities, resulting in appreciable improvement in their livelihood building strong grassroot institutions of poor till October 2018, Assam State Rural Livelihood Mission promoted more than 2, 28,406 Women SHGs across 33 districts covering 24, 58,227 women. It has also promoted higher level of federations of SHG like Village Organization (VOs) and Cluster Level federations.

In order to strengthen these Community Based Organizations financially, Government Grants in the form of Revolving Fund of Rs.15000 per SHG, Community Investment Fund of Rs. 50,000 per SHG is also provided in order to facilitate them to initiate a sustainable livelihood practice. ASRLM also facilitate Credits linkage and Facilities of repeat linkages are also established.

In order to empower women SHGs financially, the Government of Assam launched Kanaklata Mahila Sabalikiran Asoni on 1<sup>st</sup> April 2018 for promotion of 1 lakh women SHG in the state and subsidy linked loan upto Rs.5 lakhs for development of Women SHGs. Govt. of Assam has already released Rs. 250 Crs under Kanaklata Mahila Sabalikiran Asoni for disbursement of Revolving Fund (RF) of Rs.25000/- to newly formed SHGs under NRLM and additional Rs. 10000/-to NRLM SHGs which have already received Rs.15000/- previously.

ASRLM is on its way forward with various innovative initiatives which includes extending handholding, capacity building and technical support to SHG members in various livelihood practices like Water Hyacinth Craft, other Handloom and Handicraft products. Product diversification and Value Chain developments are the areas in which ASRLM is concentrating to facilitate the SHG members. Value Chain Development projects in Hill broom and Maize Cultivation, Handloom, Mushroom



Cultivation are some of such areas where ASRLM has intervened. Development of Integrated farming model for Homestead Gardens, development of Composite nursery, scientific management of paddy cultivation under the 'Mahila Kisan Sashaktikaran Pariyojana' (MKSP) are some other areas in which the SHG members are engaged. Some other livelihood activities initiated for SHGs under ASRLM are Solar Urja Lamp, where SHG members are trained to assemble solar lamps and distribute amongst the school going children, Sanitary Napkin Manufacturing and marketing unit, Bee Keeping, Development of Organic Clusters etc.. More than 5 lakh SHG Members have been enlisted in the Livelihood Tracking System where it has been reflected that they are engaged in multiple Livelihood activities under broad heads with an average income of more than Rs.40000 per member per year.

During 2017-18, number of women SHG formed was 38273 against the target of 22733 SHGs and 23119 SHGs received Revolving Fund (RF) during the year against the target of 10311. On the other hand, Women Self-Help group formed is 14307 against the target of 16997 during 2016-17 which indicates that the achievement of the current year is much satisfactory.. The number of Village Organisation (VO) formed during 2017-18 was 965 against the target of 384 and the number of VOs provided with Community Investment Fund (CIF) is 9639 against the target of 5742 while during 2016-17 the number of VOs formed was 655 against the target of 420 and the number of VOs provided CIF was 5039 against the target of 2750. Thus, it has been observed that the performance of VOs provided with CIF is quite remarkable compared to the previous year.

#### **MAHATMA GANDHI NATIONAL EMPLOYMENT GUARANTEE ACT (MGNREGA)**

The Mahatma Gandhi National Employment Guarantee Programme was introduced during the 11<sup>th</sup> five year Plan for giving wage employment opportunities to the rural poor during the lean agricultural season when they require wage employment for boosting their purchasing power to supplement their income requirement for livelihood. The other objective of the Act is to create durable community assets for development of rural infrastructure for upliftment of quality of the rural people.

During the year 2017-18, a total of 481.26 lakh mandays were generated against 408.00 lakh mandays in 2016-17 and 466.09 lakh mandays in 2015-16. Since inception up to March 2017, more than 43.64 lakh numbers of rural households have been provided with job card as compared to the cumulative total of 46.74 lakh during 2016-17. Out of the total, 38.51 percent of jobs were provided to women during 2017-18 against 36.45 percent in 2016-17 and 36 percent in 2015-16.

#### **PRIME MINISTER EMPLOYMENT GENERATION PROGRAMME (PMEGP)**

The Prime Minister Employment Generation Program (PMEGP) has been introduced by merging the PMRY and REGP with the objective of providing employment to the educated unemployed youth. The scheme facilitates self-employment through setting up of industries/service and business ventures with a limited amount of Bank loan with subsidy on the recommendation of Task Force Committees constituted for the purpose. The KVIC is the nodal agency for implementing the PMEGP scheme at the national level and at the State level the scheme is implemented by the state KVIC Directorate, State KVIB and the District Industries and Commerce Centers and Banks. The Government subsidy under the scheme is being routed through the KVIC to the identified Banks. The target and achievement under PMEGP from 2009-10 to 2017-18 is reflected in the table below.



**TABLE – 17.7: TARGET AND ACHIEVEMENT OF PMEGP DURING THE YEAR 2008-09 TO 2017-18**

Year	Physical target (In nos.)	Financial Target (margin Money) (Rs. in Lakh)	Total Cases sanctioned (In nos.)	Physical achievement (In no.)	Financial achievement (In Rs Lacs)
2009-10	1292	1550.00	2440	2440	1899.71
2010-11	3193	4469.66	4756	4756	4801.10
2011-12	5047	7065.80	5280	5280	5544.99
2012-13	4644	6500.20	7336	7336	5801.15
2013-14	4588	6210.97	8049	8049	7219.90
2014-15	5101	7238.82	5584	5584	5042.41
2015-16	1913	-	3382	3382	2793.39
2016-17	3776	7552.08	3773	3773	3499.4
2017-18	6386	12772	3267	2166	2269.60

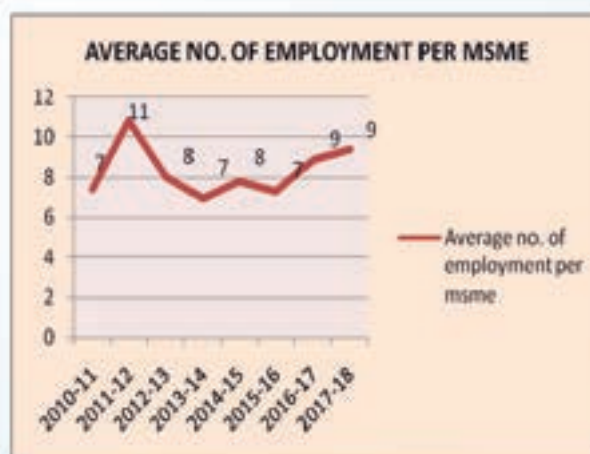
Source: Directorate of Industries and Commerce, Assam

### SMALL SCALE INDUSTRIES/MICRO, SMALL AND MEDIUM ENTERPRISE (MSME)

The small scale industries sectors have a major contribution towards creating employment in the State. Presently the small-scale industries have been sub-divided into Micro, Small and Medium Enterprise under the Micro, Small and Medium Enterprises Development (MSMED) Act 2006. There are 47048 numbers of SSI/MSME units in Assam providing employment to 282942 numbers of persons till the end of 2017-18 compared to 45509 units giving employment to 268500 persons in 2016-17. The graph below (Figure X) shows the average number of employment per SSI/MSME unit.

**TABLE-17.8**

NO. OF SSI & MSME UNIT AND EMPLOYMENT		
Year	No. of SSI/MSME Unit	Employment
2009-10	1678	12787
2010-11	1214	9002
2011-12	1287	13886
2012-13	1451	11671
2013-14	1860	12971
2014-15	2629	20496
2015-16	1898	13848
2016-17	2177	19355
2017-18	1539	14442



SOURCE: DIRECTORATE OF INDUSTRIES AND COMMERCE, ASSAM

FIGURE X

### FACTORY EMPLOYMENT

During 2017, there was 6729 number of factories employing 269276 numbers of persons compared to 6158 number of factories registered employing 243821 numbers of persons in the State showing an increase of 9 percent in the number of factories employing 10 percent more than that of 2016. The maximum number of workers were engaged in manufacturing of other non-metallic mineral products (35%) followed by manufacturing of food products (31%), manufacturing of chemical and chemical products (5%) and the rest distributed amongst of factories as per NIC-2008.

\*\*\*\*\*



## PANCHAYAT AND RURAL DEVELOPMENT

The responsibility of the *Panchayat* and Rural Development Department includes alleviation of rural poverty, enhancement of rural livelihoods by providing self-employment to the people living below poverty line as defined by the Planning Commission from time to time through implementing variety of programmes and to strengthen the *PanchayatiRaj* Institutions (PRI). The Department is concerned to empower PRIs to enable them to increase the capability of poor through self-employment programmes and by developing critical infrastructures in the rural areas. At present, there are 21 *ZilaParisads*, 189 *Anchalik Panchayats* and 2200 *Gram Panchayats* in the State under three tier PRI system in 21 plain districts excluding the 6<sup>th</sup> Scheduled districts viz., 3 Hill districts - East Karbi-Anglong, West, Karbi-Anglong and Dima-Hasao and 4 BTAD districts under BTC where PRI system is not in existence. Moreover, there are District Rural Development Agencies one in each district and 219 Community Development Blocks to look after the implementation of programmes/schemes of the Department.

With the mandate of eradicating poverty and to create infrastructure that accelerates socio economic growth in rural Assam, the Panchayat & Rural Development has been implementing various schemes for development of rural infrastructure and upliftment of quality of life of rural people. The schemes implemented by the Department are broadly classified into three categories:

- i) Self Employment
- ii) Wage Employment
- iii) Welfare schemes for the Disabled, Widows & other down trodden people living below poverty line.

### SCHEMES IMPLEMENTED BY THE PANCHAYAT AND RURAL DEVELOPMENT DEPARTMENT ARE AS FOLLOWS:

#### 1) Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS):

Under this scheme, the willing unskilled labourers of rural area are given Job Cards with guarantee to provide 100 days employment to a family in a fiscal year. The Govt bears 100% burden of wage expenditure for the Job Card holders. For the expenditure of materials, the Govt pays 75% and the 25% is borne by the State Govt. The wage material ratio is 60:40. The approved labour budget for the financial year 2015-16 was 432.74 lakh mandays and generated 466.09 lakh mandays. Similarly, it was 408.00 lakh mandays during financial year 2016-17, but the state surpassed the approved labour budget and generated 466.09 lakh mandays. Similarly, for the financial year 2017-18, Govt. of India had approved 500.00 lakh mandays for the state, out of which 481.26 lakh mandays have been generated. The approved labour budget for the current year i.e. financial year 2018-19 is 500.00 lakh for the state out



of which till Oct., 2018, the corresponding achievement is 231.22 lakh mandays under this programme.

Further, during the financial year 2015-16, 2016-17 and 2017-18 total no. of households provided employment under this flagship programme was 15.70 lakh, 16.85 lakh and 9.93 lakh respectively, while households that completed 100 days work during the years under reference was of the order of 42233, 11411, and 10938 respectively. Under MGNREGA, 33% of the job must be provided to the women workers, as such 36.48% jobs generated had gone to women in financial year 2016-17 as against 33.59% during 2015-16 and it became 38.51% in financial year 2017-18. Moreover, in the financial year 2015-16, 14369 no. of schemes had been completed while in the financial year 2016-17 and in financial year 2017-18 it was 21670 and 54825 respectively.

As far as financial achievement is concerned, an amount of Rs.620.65 crores was utilized against Rs.103393.12 lakh released fund in 2015-16. During financial year 2016-17, the position of its utilization was Rs.1501.08 crores against the received fund of Rs.1689.31 crores. Similarly, fund receipt position was 1551.86 crores and out of this an amount of Rs.1530.58 crores has been utilized. During the current year 2018-19 (till Oct. /2018), an amount of Rs.761.36 crores has been utilized out of the total receipt fund of Rs.908.13 crores.

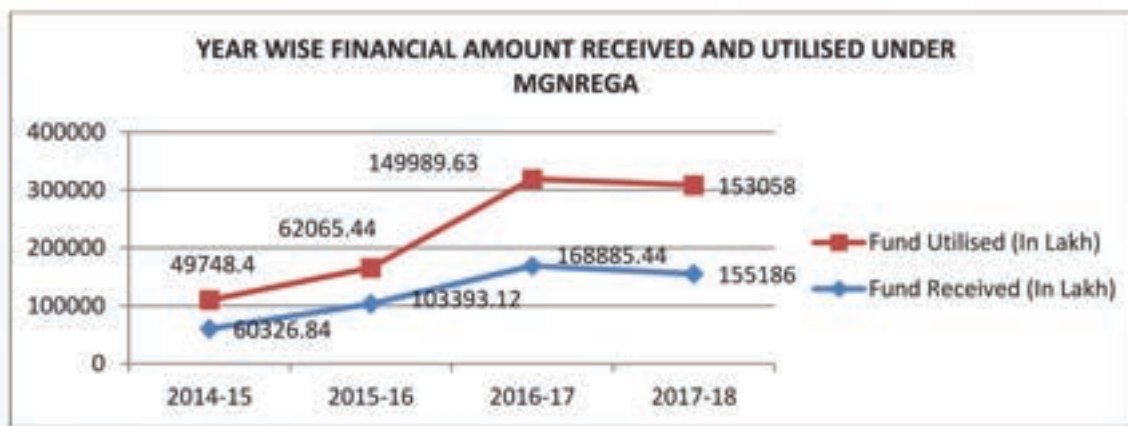
As per direction of the Ministry of Rural Development, Govt. of India, all the assets created under MGNREGS are now being geo-tagged with the help of Indian Space Research Organisation (ISRO). Till date, 189642 assets have been geo-tagged against 228420 assets created (83.02%).The year-wise physical target and achievement and financial position under MGNREGA is depicted in the table below.

TABLE- 18.1Year-Wise Physical And Financial Achievement Of Mgnrega Are Reflected Below.

Programme	Year	Unit Persons days (in lakh)	Physical		Financial (Rs. in lakh)	
			Target	Achiev ement	Fund Received	Utilised
MGNREGA	2014-15	-do-	401.01	314.24	60326.84	49748.4
	2015-16	-do-	432.74	486.33	103393.12	62065.44
	2016-17	-do-	408.00	467.52	168885.44	149989.63
	2017-18	-do-	500.00	481.26	155186.00	153058.00

The graph below shows the year-wise physical side of MGNREGA which shows an increasing trend of the target and achievement in the year 2017-18 over 2016-17. While from the financial aspect, it is seen that the fund received in 2017-18 is less compared to 2016-17 as also seen in the graph below.





**Pradhan Mantri Awas Yojana – Gramin (PMAY – G) :**

The re-structured erstwhile IAY programme is now called as PMAY-G and is implemented for providing shelter to the shelterless/houseless people living below the poverty line. It is funded by the Central and the State at the ratio of 90:10. A beneficiary gets Rs.1.30 lakh from 2016-17.

About 122772 no. of IAY houses were sanctioned for construction and 106489 houses have been completed against the annual target of 123193 nos. during the financial year 2015-16. Similarly, in financial year 2016-17 and 2017-18, the targeted nos. of houses were 219695 and 40119 nos. respectively, out of which houses sanctioned in 2016-17 were 179875 and 26418 in 2017-18. Accordingly, more than 100853 nos. of PMAY-G houses were completed during financial year 2016-17 and 2017-18 altogether.

As far as financial achievement is concerned, utilization position was of the tune of Rs.823.74 crores against the total fund received of Rs.949.08 crores during 2015-16. Similarly, an amount of Rs.113.84 crores was utilized against received fund of Rs.1298.83 crores during 2016-17 and Rs.1458.51 crores was utilised against receipt fund of Rs.1582.56 crores in financial year 2017-18.

Department has already taken steps for imparting training to more than 16000 masons under rural mason training programme for engagement in the construction of PMAY-G houses across the state to gear up early completion in the current year.



### **National Social Assistance Programme (NSAP) :**

NSAP is a Central Sector (Earmarked Fund) programme and the fund is borne by the Govt. on 100% basis. However, the State Govt. is to pay the Minimum Mandatory Provision (MMP) under IGNOAPS @Rs.50/- P.M. against the Govt.'s share of Rs.200/- P.M. In respect of other sub-schemes there is no provision of MMP. Govt. has taken decision for providing Rs.500/- P.M. under IGNOAPS for the persons who had attained the age of 80 yrs. and above.

**Indira Gandhi National Old Age Pension Scheme (IGNOAPS)** - The objective of this scheme is to provide financial support to the rural people living below poverty line who have attained the age of 60 – 79 yrs. and 80 and 80 yrs. above. During the financial year, 2015-16, 778480 nos. of beneficiaries of both the categories have been assisted under this scheme while in financial year 2016-17, 771052 no. of beneficiaries were assisted. Similarly, 676784 such categories of beneficiaries have been assisted during financial year 2017-18. The monthly pension norms (for 60 – 79 yrs.) is @Rs.250/- (including @Rs.50/- as Minimum Mandatory Provision) while for the 80 yrs. and above, it is @Rs.550/- (including @Rs.50/- as Minimum Mandatory Provision).

**Indira Gandhi National Widow Pension Scheme (IGNWPS)** - It aims to provide monthly financial assistance @Rs.300/- P.M. to all the identified pensioners who are widows at the age of 40 – 79 yrs. of age and @Rs.500/- P.M. to those who are age of 80 yrs. and above. During financial year 2016-17, 111477 beneficiaries are benefitted like equal no. of beneficiaries of the previous year under reference. Similarly, 101583 no. of beneficiaries were assisted during financial year 2017-18.

**Indira Gandhi National Disabled Pension Scheme (IGNDPS)** – It is implemented to provide financial support @Rs.300/- P.M. in the age group of 18 – 79 yrs. and @Rs.500/- P.M. to the beneficiaries who are at the age group of 80 yrs. and above. During the financial year 2015-16, 42577 nos. of beneficiaries were assisted while equal no. were assisted in the financial year 2016-17. Similarly, total assisted such beneficiaries during 2017-18 was 32988 nos.

**National Family Benefit Scheme (NFBS)** – It is implemented with the objective of providing one time financial benefit @Rs.20,000/- at the death of the bread earner of the BPL family. During 2015-16 and financial year 2016-17, no. of such families assisted was 5156 and 3726, while it was 4041 nos. during financial year 2017-18.

Department has launched a new pension scheme during Oct.,2018 viz. Swahid Kushal KonwarSarbjananinBridha Pension Achari for ensuring Universal Coverage of all the deserving Old Age Beneficiaries under this state sponsored scheme during the current year, 2.00 lakh beneficiaries has been covered for this purpose.

As far as financial achievement is concerned, an amount of Rs.19781.44 lakh has been utilized against equal no. of fund received from the Govt. during financial year 2015-16. The total utilized amount was of the tune of Rs.32422.27 lakhs against Rs.32422.27 lakhs received in financial year 2016-17. Similarly, in financial year 2017-18, an amount of Rs.21482.47 lakhs was received out of which an amount of Rs.21482.47 lakhs was utilized under the NSAP as a whole.

### **14<sup>th</sup> Finance Commission Grant:**

The period covered by this programme is from 2015-16 to 2019-20. Generally, fund under this programme is received against two components viz. Basic Grant and Performance Grant. In case of Gram Panchayats, 90% of the Grant will be Basic Grant and 10% will be the Performance Grant. Under this grant, funds are utilized for



core base services delivery like primary health care, primary education, safe drinking water, street lights, rural sanitation, drainage and sanitary maintenance of burial/cremation grounds and creation of community assets like market shed, community hall etc. in rural areas. Under this programme, an amount of Rs.989.68 crore as Basic Grant and an amount of Rs.106.20 crore as Performance Grant was made available to districts. For the year 2015-16 and 2016-17 a total of 72786 schemes are taken up which are being utilized for delivery of core basic services by the Gaon Panchayats.

#### **5<sup>th</sup> Assam State Finance Commission:**

The scheme period is from 2015-16 to 2019-20. During financial year 2016-17, an amount of Rs.5971.00 lakh was received from the Govt. and out of this amount a part has been utilized against the remuneration of PRI members for 5 months and the remaining part is handed over to CEOs, ZP for various assets creation.

#### **Assam State Rural Livelihoods Mission - Promoting Rural Livelihoods**

In Assam, the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) is being implemented through Assam State Rural Livelihood Mission. Assam State Rural Livelihoods Mission (ASRLM), since 2012 is working with a mission to reduce poverty by enabling the poor households to access gainful self-employment and skilled wage employment opportunities. This is resulting in appreciable improvement in their livelihood building strong grassroot institutions of poor. Till October 2018, Assam State Rural Livelihood Mission promoted more than 2, 28,406 Women SHGs across 33 districts covering 24,58,227 women. It has also promoted higher level of federations of SHG like Village Organizations and Cluster Level federations. Although the SHGs are engaged in various livelihood and social development programmes, there is vast opportunity for strengthening them through better support and technical guidance from agriculture and allied departments to explore sustainable nutrition linked livelihoods.

Ever since the formation of the SHGs and their partnering federations undergo a series of capacity building programmes on SHG Management, SHG Book Keeping, VO Management, Financial Literacy, Basic Livelihood, Food Nutrition, Health, Sanitation, Women and Gender Sensitivity etc. The training programmes are conducted at various levels with the aid of modules and video shows in the mode of participatory learning and role plays.

In order to strengthen these Community Based Organizations financially, Government Grants in the form of Revolving Fund of Rs.15000 per SHG, Community Investment Fund of Rs. 50,000 per SHG is also provided in order to facilitate them to initiate a sustainable livelihood practice. ASRLM also facilitate credits linkage and facilities of repeat linkages are also established.

In order to empower women SHGs financially, the Government of Assam launched KanaklataMahilaSabalakaranAsoni on 1<sup>st</sup> April 2018 for promotion of 1 lakh women SHG in the state and subsidy linked loan upto Rs.5 lakhs for development of Women SHGs. Govt. of Assam has already released Rs. 250 Crores under KanaklataMahilaSabalakaranAsoni for disbursement of Revolving Fund (RF) of



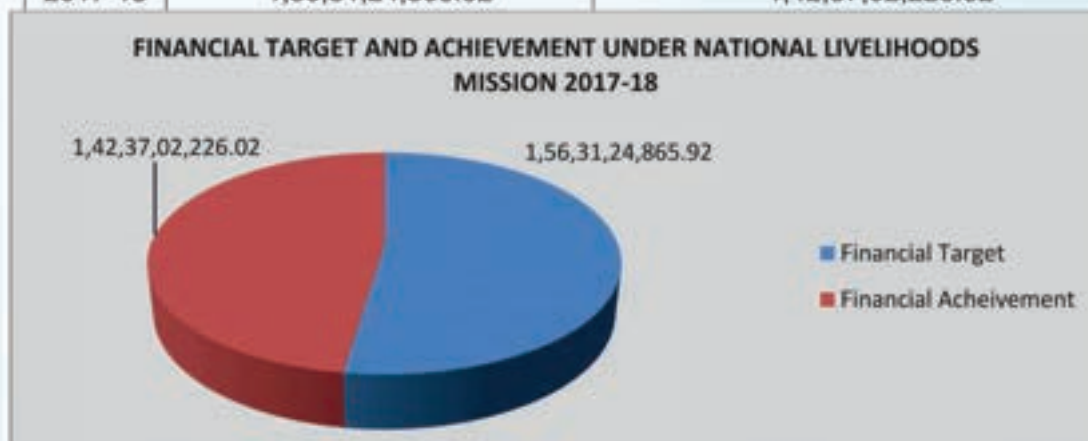
Rs.25000/- to newly formed SHGs under NRLM and additional Rs. 10000/-to NRLM SHGs which have already received Rs.15000/- previously.

ASRLM is on its way forward with various innovative initiatives which include extending handholding, capacity building and technical support to SHG members in various livelihood practices like Water Hyacinth Craft, Handloom and Handicraft products etc. Product diversification and value chain developments are the areas in which ASRLM is concentrating to facilitate the SHG members. Value Chain Development projects in Hill broom and Maize Cultivation, Handloom, Mushroom Cultivation are some of such areas where ASRLM has intervened. Development of Integrated farming model for homestead gardens, development of composite nursery, scientific management of paddy cultivation under the 'MahilaKisanSashaktikaranPariyojana' (MKSP) are some other areas in which the SHG members are engaged. Some other livelihood activities initiated for SHGs under ASRLM are solar urjalamp, where SHG members are trained to assemble solar lamps and distribute amongst the school going children, sanitary napkin manufacturing and marketing unit, bee keeping, development of organic clusters etc. More than 5 lakh SHG members have been enlisted in the Livelihood Tracking System where it has been reflected that they are engaged in multiple livelihood activities under broad heads with an average income of more than Rs.40000 per member per year.

ASRLM also bagged the National Award as Best Performing State for 'Institution Building and Capacity Building' for the FY 2017-18. Under DDU-GKY also ASRLM has bagged 1<sup>st</sup> prize in Category (North East States and Hilly Region States) at National Level. ASRLM takes pride in mentioning that in the last two years Ministry of Rural Development, Govt. of India has conferred National Award to three Self Help Groups (SHGs) under Assam State Rural Livelihoods Mission (ASRLM). Each SHG received a prize money of Rs.1,00,000/-.The table 18.2 and graph below shows the year-wise target and achievement under NRLM and the table 18.3 with the pie graph depicts the target and achievement under NRLP, a World Bank aided project which ended in 30<sup>th</sup> October 2018.

**Table No.-18.2: National Rural Livelihoods Mission (NRLM)**

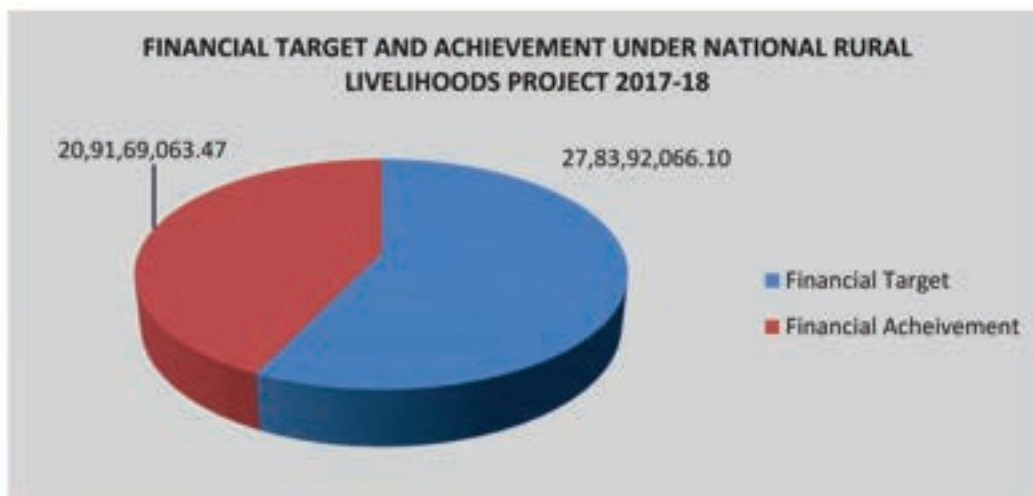
Year	Financial	
	Target (Rs)	Achievement (Rs)
2015-16	1,23,42,75,692.00	81,39,60,716.00
2016-17	88,88,78,093.00	76,77,10,078.00
2017-18	1,56,31,24,865.92	1,42,37,02,226.02





**Table No.-18.3: National Rural Livelihoods Project (NRLP)**

Year	Financial	
	Target (Rs)	Achievement (Rs)
2015-16	28,19,70,499.00	26,98,95,140.00
2016-17	49,98,63,335.00	43,83,73,716.00
2017-18	27,83,92,066.10	20,91,69,063.47



#### **Rural Self Employment Training Institutes (RSETIs):**

In order to ensure institutional arrangement for skill development for self employment and wage employment, dedicated training institute for rural BPL youth i.e Rural Self Employment Training Institutes(RSETIs) are being set up with the aim of having at least one in district.RSETIs have operated in Assam since 2009. Presently there are 26 RSETIs in Assam including one RUDSETI that are sponsored by various banks like UBI, UCO, AGVB, SBI, Canara Bank, Central Bank of India and from FY 2009 till October 2018, they have trained 82997 candidates and out of these trained, 50507 candidates got settled. For FY 2017-18, 14262 candidates have been trained, and 8864 were settled as per the Ministry of Rural Development, MIS portal as on 30<sup>th</sup> November 2018. Total target for FY 2017-18 was 13920. The target for FY 2018-19 is 12880. Out of these, 70% NRLM target group candidates i.e 9016 is the target submitted for AAP 2018-19. In Assam, under NRLM the number of Women Self-Help group formed is 15616 against the target of 22733 during 2017-18. While the achievement was 24004 against the target of 38273 in 2017-18. The number of Women SHGs provided with Revolving Fund (RF) during 2017-18 was 10311 against the target of 17400 while in 2016-17 it was 15445 against 17997 number of SHGs. The number of Village Organisation (VO) formed during 2017-18 was 968 against the target of 761 and the number of VOs provided with Community Investment Fund (CIF) is 9125 against the target of 6800; while during 2016-17 the number of VOs formed was 993 against the target of 1534 and the number of VOs provided CIF was 9022 against the target of 5250. Therefore, more effort is needed to fulfil the target of SHGs and VOs.

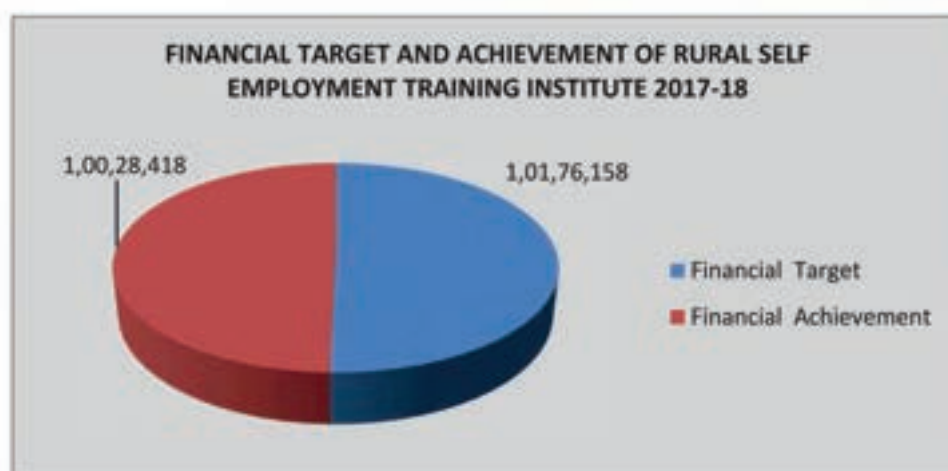
Under NRLP, a World Bank aided project the number of Self-Help groups formed is 3418 against the target of 3787 during 2017-18. While the achievement was 4255 against the target of 4127 in 2017-18. The number of SHGs provided with Revolving Fund (RF) during 2017-18 was 4514 against the target of 5700



while in 2016-17 it was 5193 against 7017 numbers of SHGs. The number of Village Organisations (VO) formed during 2017-18 was 329 against the target of 516 and the number of VOs provided with Community Investment Fund (CIF) is 4740 against the target of 5200 whereas during 2016-17 the number of VOs formed was 968 against the target of 360 and the number of VOs provided CIF was 3248 against the target of 2500.

**Table No.-18.4: Rural Self Employment Training Institute (RSETI)**

Year	Financial	
	Target (Rs)	Achievement (Rs)
2015-16	84,14,117.00	68,31,041.00
2016-17	2,09,43,076.00	2,04,05,842.00
2017-18	1,01,76,158.00	1,00,28,418.00



#### **DeenDayalUpadhaya Grameen Kaushalaya Yojana (DDU-GKY)**

DeenDayalUpadhaya Grameen Kaushalaya Yojana (DDU-GKY), a Placement Linked Skill Development of Ministry of Rural Development, Govt. is being implemented by the Assam State Rural Livelihoods Mission (ASRLM). Under the scheme, skill development trainings are provided to the rural youth of age group 15-35 years. Ministry of Rural Development (MoRD), Govt. of India has approved a target of 78,508 nos of rural youths in the state of Assam under this scheme. At least 70% of these youths will be given assured job placement in organized sectors like automobile, hospitality, health care, information and communication technology etc. after skill training for 3-12 months. Till date, 31,919 nos of rural youths have been trained and 23,568 nos of rural youths have been offered jobs in organised sector. Total 57 nos of Project Implementing Agencies have been sanctioned (Till Oct'18) to implement the project in PPP mode in the State of Assam. Total 108 nos of training centers have been set up under DDU – GKY, wherein 14392 candidates can be trained simultaneously. DDU-GKY does not have a yearly target. Instead, it has a total cumulative target of 78,508 youths who need to be trained and 70% of whom need to be placed during the period of FY 2016-2019.

#### **Features of DDU-GKY:**

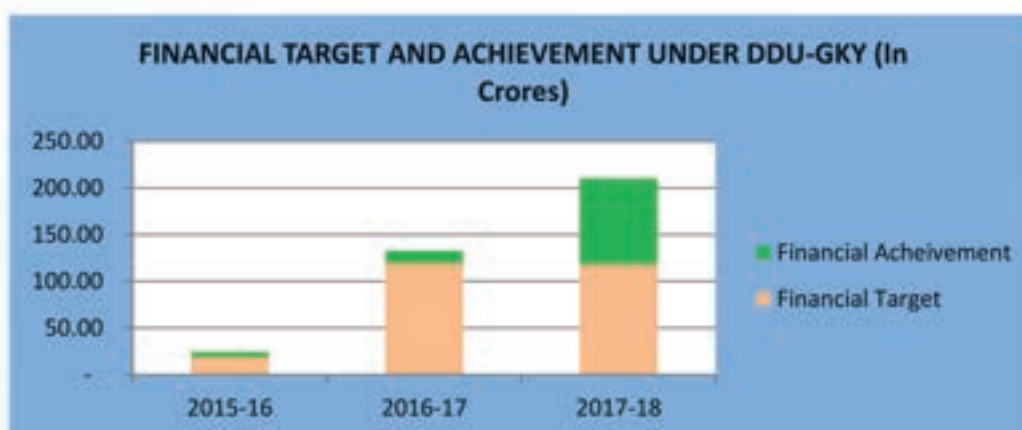
- 1) **Enable the poor and marginalized to access benefits:** DDU-GKY aims to skill rural youth who are poor and in the age Group of 15-35 Years and provide them with jobs with regular monthly wages at or above the minimum wages.



- 2) **Outcome Led Design:** Assured Placement for at least 70% trained candidates and moving towards minimum mandatory certification.
- 3) **Standards-led delivery:** Standard Operating Procedures provide essential quality assurance framework for training infrastructure and service delivery.
- 4) **Inclusive Program Design:** Mandatory coverage of socially disadvantaged groups (SC/ST 50%, Minority 15%, Women 33%)
- 5) **Shift in emphasis from training to career progression:** Incentives for jobretention, career progression and foreign placements.

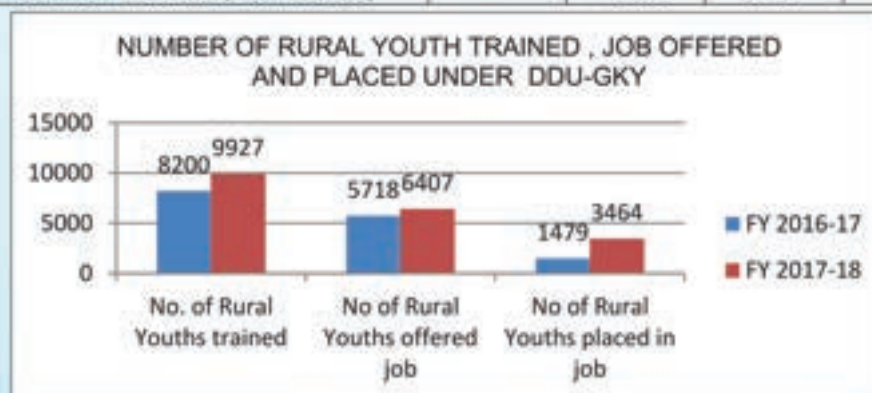
**Table No.-18.5: DeenDayalUpadhaya Grameen Kaushalaya Yojana (DDU-GKY)**

Year	Financial	
	Target	Acheivement
2015-16	18,82,29,111.00	5,95,63,180.00
2016-17	1,19,02,17,716.00	13,63,13,431.00
2017-18	1,17,78,95,871.75	92,37,19,592.79



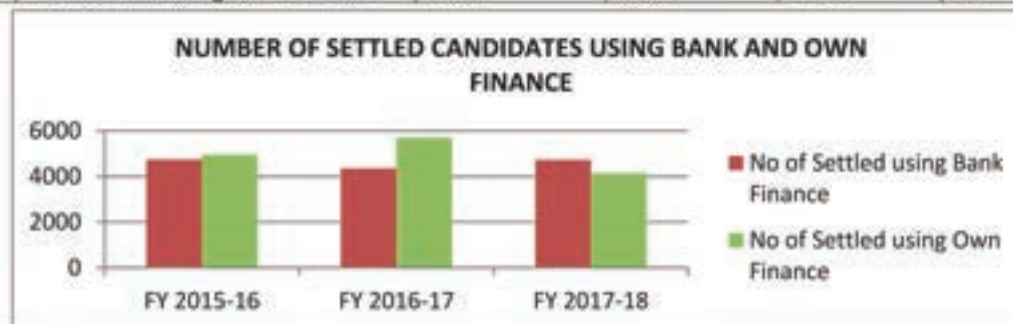
**Year wise Progress of ASRLM under DDU-GKY**

Sl No	Particulars	Till FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19 (Till Oct'18)
1	No. of Rural Youths trained	4258	8200	9927	9534
2	No of Rural Youths offered job	3022	5718	6407	8421
3	No of Rural Youths placed in job	1265	1479	3464	3639
4	Total Fund available (Rs. in Crore)	-	119.02	118.16	121.95
5	Total Fund utilised (Rs. in Crore)	-	13.63	92.37	28.15





Sl. No	Year	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19 (till October, 2018)
1	Total BPL Trained Target	17250	13604	13920	12880
2	Achievement of BPL Trained	14556	15057	14262	7346
3	Achievement of Settled	9693	10051	8864	2271
3.1	No of Settled using Bank Finance	4743	4352	4724	1334
3.2	No of Settled using Own Finance	4950	5699	4140	937



#### **SKILL DEVELOPMENT TRAINING/STRENGTHENING OF EXTENSION TRAINING CENTRES PROGRAMME UNDER SIRD:**

The State Institute of Rural Development (SIRD), Assam has been organising skill development training programmes on different activities for providing self employment avenues for unemployed youths, farmers, weavers, artisans, entrepreneurs etc., as well as given thrust for upgrading the skill of traditional activities for income generation and livelihood promotion. The Government of India has been providing 100 percent grant for strengthening the infrastructure of SIRD and the State Government also borne its share of 10 percent of total recurring grant. Moreover, the Government of Assam has set up the Resource Centre in IT and Skill Development at Kahikuchi with a view to transfer the benefit of technology development directly to the communities at the grass root level to uplift life and livelihood of rural poor. Since 2001-2013, the Extension Centre has provided managerial and skill development training to 1.6 lakh persons comprising youths, women, farmers, weavers, artisans etc., for livelihood. During 2015-16 about 4700 persons have to be assisted skill development training on various activities. The total number of training programme conducted by the State Institute of Panchayat and Rural Development, Assam for the year 2016-17 were 3000 which showed a decline to 2210 during 2017-18. During the same period the numbers of participant also decreased to 140500 in 2017-18 from 150000 in 2016-17. The number of training programmes conducted for Elected Representatives of PRIs by the State Institute of Panchayat and Rural Development (SIPRD), Assam for the year 2017-18 were 685 and 837 during 2016-17 which showed a decline and the number of participants for the corresponding years were 27400 and 32090 respectively which also showed a decline of 14.61 percent over the previous year. The State Institute of Rural Development, Assam (SIRD) had implemented a few employment generation schemes also.



## Assam at a Glance

Sl. No.	Item	2015-16	2016-17	2017-18
1	Geographical Area("000sq. Km.)	78.44		
2	Administrative Setup-(in no.)			
	Revenue Circles	184		
	District	27	33	33
	No.of Gaon Panchayat	2202	2200	2200
	Inhabited Villages	25372		
	Un -inhabited villages	1023		
	No.of Towns	214		
3	Population as per Census 2011 (in "000)			
	Total	31205		
	Male	15939		
	Female	15266		
	Rural	26807		
	Urban			
	Scheduled Cast	2231		
	Scheduled Tribes	3884		
	Density of Population(per sq. km.)	382		
	Literacy rate (percentage)	73		
	Sex ratio(Female per thousand male)	958		
	Percentage of urban population	14.1		
4	Net State Domestic Product (Rs. In crore)			
	i)At current Price	188524	209688	227570
	ii) At Constant Price	157193	165019	172961
	Agriculture & ,Forestry and Fishing (Rs. In crore)			
	i)At current Price	40220	42670	44127
	ii) At Constant Price	30951	31722	32699
	Service Sector (Rs. In crore)			
	i)At current Price	86359	100245	111508
	ii) At Constant Price	68127	71709	76202
5	Rainfall-percent to Normal(in mm)	90.50	88.95	101.89
6	Agriculture-(Area in "000 Ha.)			
	Net area sown	2801	2774	-
	Gross cropped area	4060	4087	-
	Gross irrigated area to gross cropped area	5.64	55	-
7	Area under principal crops(in "000 ha.)			
	Rice	2485	2467	2434
	Wheat	21	17	18
	Maize	28	31	32
	Rape & Mustard	286	294	290
	All cereals	2541	2521	2488
	All pulses	142	146	155
	All foodgrains	2683	2667	2643



### Assam at a Glance

Sl. No.	Item	2015-16	2016-17	2017-18
	Sugarcane area	29	31	31
	Cotton	1	1	1
	Total Fruits & Vegetables	211	211	211
8	Production of principal crops (in '000 tonnes)			
	Rice	5125	5127	5284
	Wheat	24	23	25
	Maize	87	91	99
	Rape & Mustard	200	189	186
	All cereals	5241	5245	5410
	All pulses	108	108	116
	All foodgrains	5349	5353	5526
	Sugarcane (cane)	1038	1207	1143
	Cotton	1	1	1
	Total Fruits & Vegetables	2356	2387	2420
9	Index number of agricultural production	144.33	133.44	137.54
10	Agriculture Census (as on 2010-11)			
	Number of operational landholding(in '000)	2720	2720	2720
	Area of operational landholding(in '000)	2999	2999	2999
	Average size of operational landholding (ha.)	1.1	1.1	1.1
11	Livestock Census-as on 2012			
	Total livestock (in '000)	19080	19080	19080
	Total poultry (In '000)	26019	26019	26019
12	Forest Area(sk.km.)	13973	13517	13517
13	Industrial Investment-			
	No. of projects approved	1898	2177	-
	Proposed Investment(Rs. In crore)	260	607	-
14	Electricity-(Million Kwh)			
	Total Generation (MU)	6671	7704	7629
	Total Consumption	6199	6526	6138
	Industrial consumption	1483	1356	1448
	Domestic consumption	3115	3423	3703



### Assam at a Glance

Sl. No.	Item	2015-16	2016-17	2017-18
15	Banking -(Scheduled Commercial)			
	Banking offices	2177	2276	2326
	Banking office for rural population	465	477	1062
16	Education-			
	Primary schools(in nos.)	40480	40465	39780
	Enrolment (in"000)	2925	2914	2495
	Secondary schools(in nos.)	6987	4314	3380
	Enrolment (in "000) (Including High & Higher scndary )	1151	818	810
17	Health-			
	Civil Hospital (including sub-divisional civil Hospital)	38	39	39
	Dispensaries	272	272	278
	Beds per lakh population (Estimated population)	57.61	58.97	58.29
	Birth rate@ (2016)	22.0	21.7	-
	Death rate@ ( " )	7.1	6.7	-
	Infant mortality rate@ ( " )	47	44	-
18	Transport-			
	Railway route length (in Km.)	2400.85	2440.39	2464.89
	Total road length (in km.)	48724.54	49454.44	52890.00
	Motor vehicles on Road (in "000 Nos.)	2667	2938	3310
	Road Length per lakh of population	156.14	146	169.49
	Road Length per "00sq. Km. of Area (in km.)	62.12	66.35	67.43
19	Co-operation-			
	Total no. of co-operative societies	10252	11277	-
	Total membership (in lakh)	42.91	43.03	-
	Total working capital of co-operative(in crore)	3125.64	3644.46	-



### ASSAM'S COMPARISON WITH INDIA

Sl. No.	Unit	Unit	Assam	India	Comparison with India (%)
1	2	3	4	5	6
1	Population (2011, as per census)	In '000'			
1.1	Total population	"	31205	1210855	2.57
	(a) Male	"	15939	623270	2.55
	(b) Female	"	15266	587585	2.59
1.2	(a) Rural population	In '000'	26807	833749	3.21
	(b) Proportion of rural population to total population	Per cent	85.9	68.9	-
1.3	(a) Urban population	In '000'	4398	377106	1.16
	(b) Proportion of urban population to total population	Per cent	14.1	31.1	
1.4	Sex Ratio	Females per thousand males	958	943	-
1.5	Decadal growth rate of population (2001-2011)	Per cent	17.1	17.7	-
1.6	Literacy rate	"	72.19	72.99	-
1.7	Population of scheduled cast and scheduled tribes	In '000'	6115	305924	1.99
1.8	Total workers	"	11969	481889	2.48
1.9	Geographical area	In '000'sq.km.	78.44	3290	2.38
2	Agriculture (2011-17)	In Hac.			
	2.1 Net area sown	"	2773855	N.A.	
	2.2 Gross cropped area	"	4087449	N.A.	
	2.3 Gross irrigated area	"	224777	N.A.	
	2.4 Percentage of gross irrigated area to gross cropped area	Per cent	5.49	N.A.	
	2.5 Area under principal crops (Average for years 2014-15 to 2016-17)	In '000 Hac.			
	(i) Rice	"	2482	130800	1.89
	(ii) Wheat	"	21	92500	0.02
	(iii) All cereals	"	2538	297600	0.85
	(iv) All foodgrains (cereals and pulses)	"	2684	375500	0.71
	(v) Sugarcane area	"	31	14400	0.21
	(vi) Cotton	"	1	35900	



### ASSAM'S COMPARISON WITH INDIA

Sl. No.	Unit	Unit	Assam	India	Comparison with India (%)
1	2	3	4	5	6
3	Livestock Census (2012)				
	3.1 Total livestock	In '000 No.	19080	512057	3.72
4	Forests				
	4.1 Total forest area(Reserved) (2017-18)	Sq. km.	13517	767419	1.76
5	Electricity (2017-18)				
	6.1 Total generation	Million kwh.	7629	1433400	0.53
	6.2 Total consumption	"	6814	N.A.	
	6.3(a) Industrial consumption	"	1448	N.A.	
	(b) Percentage of Industrial consumption to total consumption	Per cent	21.25	N.A.	
6	Banking(Scheduled commercial) (March 2018)				
	7.1 Metro politan	Number	Nil	26961	-
	7.2 Semi Urban		665	38481	1.72
	7.3 Urban		599	25307	2.36
	7.4 Rural	"	1062	49384	2.15
7	State/National Income(2017-18)(QE)				
	(8.1)Net State omestic Product (At current price)	Rs. In crore	227570	14710563	1.55
	(8.2) Per capita income at current prices	In Rs.	72289	111782	64.66
	(8.3) Gross State Domestic Product(GSDP)/Gross Domestic Product(GDP)	Rs. In crore	259997	16438895	1.58



### **Outcome Budgeting to Achieve Assam Agenda 2030: Genesis of Sustainable Development Goals based Outcome Budgets in Assam and their Operationalization**

#### **1. Introduction: concept of outcome budgeting**

Traditionally, budgets in India and other countries have generally been based on departmental outlays that focused on production of physical outputs such as roads or buildings, or expenditure on services such as on salaries of various categories of staff who provide public services. However, there has been a growing realization in recent years that focusing attention on such physical “outputs” or in procurement of “inputs” diverts attention from the main goal of public expenditures which is to secure desired “outcomes” and “results” rather than merely ingredients that such as outputs and inputs that help produce the outcomes. As a result, increased focus on producing outcome budgets is being stressed.<sup>1</sup>

To take an example, the real goal of public expenditures in education is to achieve well-educated children and adults. Expenditures that focus only on spending to build schools and pay teachers’ salaries will consider them well spent if the targeted number of schools have been built and teachers have been paid. But this alone will not ensure that children have acquired a good quality education. India, for example, is facing a major problem of poor quality of education partly as a result of such focus on “outputs” and “inputs” in education and not on the real results or “outcomes” of education.

Achieving good education will require attempting to ensure that school students actually have achieved learning levels appropriate for their class. This will involve tracking learning outcomes, ensuring adequate nutrition of students, overcoming prejudices concerning girls’ attending school, improving curricula on a regular basis, motivating teachers and so on. This requires attention on outcomes that can be provided through a broader inter-departmental strategy rather than only on outputs and inputs in the education department alone as outcomes usually span areas of responsibility involving several departments. Outcome focused budgets therefore encourage coordination of effort by several departments supporting a single Goal and abandoning the departmental “silos.”

The Sustainable Development Goals (SDGs) which are the result of years of deliberations by a wide body of experts drawn from all relevant stakeholders from all over the world, focus on outcomes, an approach focusing on the real results or goals of development. They comprise a set of 17 broad Goals traversing economic, social and environmental areas. The SDGs have been adopted globally as the framework for all development efforts internationally till 2030. The Government of India too has adopted the SDGs and NITI Aayog has focused on them as the guiding strategy for India’s future development.

Assam was the first state in India to adopt the SDGs and also the first state to adopt budgeting focusing on the SDG outcomes as outlined in Assam Agenda 2030. This chapter

<sup>1</sup> See Government of Assam Budget Manual (updated 2012) Section 12.9 on Outcome Budget. The Budget Manual is available at <https://finance.assam.gov.in/sites/default/files/Budget%20Manual.pdf>



presents some of the experiences in implementing an SDG focused outcome budget in Assam and a summary of the results and lessons of this exercise.

## **2. Steps taken to set up outcome budgeting in Assam.**

The Government of Assam's Finance Department supported by the SDG Centre first introduced the Outcome Budget based on the SDGs from the budget of 2016-17. Detailed guidelines were issued to staff on the manner of mapping items of expenditure to the 17 Goals and Targets. The initial guidelines to conduct the mapping consisted of the mapping expenditures to Goals and Targets but considering the unfamiliarity of staff with the details of the SDGs, the exercise has been focused so far on assigning expenditure items to the 17 Goals of the SDGs only - while mapping expenditures to detailed targets under the Goals has been deferred till this preliminary exercise can be worked out satisfactorily. The initial guidelines issued to Departments to conduct the mapping were:

- Individual budget expenditure items will be associated with outcomes supporting Assam Vision 2030, developed in line with the Sustainable Development Goals (SDGs). Expenditure items directly related to one (or in some cases more than one) of the 17 SDGs and Targets listed under them will accordingly be tagged to the appropriate SDG and Target.
- Expenditure items, schemes or projects should be tagged only to those Goals and Targets to which it contributes directly. If such expenditure only indirectly contributes to a Goal/Target it should not be associated with such indirectly linked Goal/Target. For example, construction or upgradation of roads indirectly promotes literacy, income generating activities etc., but it is mainly an infrastructure development activity, so it shall not be included in SDGs/Targets concerning health, poverty eradication, education etc. Instead it should be tagged against SDG 9 and Target 9.1 (develop quality, reliable, sustainable and resilient infrastructure); or Target 9.4 (upgrade infrastructure ...to make them sustainable) only.
- Items which are apparently non-developmental in nature should not be excluded if they support SDG outcomes and should be tagged to the appropriate Goal/Target. For example, several police activities contribute to Goal 16 such as initiatives to reduce violence (16.1); end abuse, trafficking and violence against children (16.2); promote rule of law (16.3); and reduce arms flows, strengthen recovery and return of stolen assets, and combating of organized crime (16.4) and should therefore be tagged appropriately.
- Expenditure items in a Department's budget that cannot be directly related to any Goal/Targets should, however, be omitted. A brief footnote justifying the cause of exclusion should be provided against these items in the Outcome Budget format.
- In case a particular expenditure item or scheme directly addresses more than one Goal and Target, the expenditure of the item or scheme should be apportioned equally among all the SDGs/Targets it addresses. For example, if a scheme addresses two targets, each target should be apportioned 50% of the expenditure.
- Salary and other administrative expenses incorporated in a scheme shall also form part of SDG/Target.



- The entire allocation of the Department, whether Revenue/Capital/Grant-in-Aid/Externally Aided Projects/Centrally Sponsored Scheme/Central Sector Scheme/others shall form part of Outcome Budget and tagged to appropriate Goal/Target.

These guidelines were issued early in 2016, when the budgetary process was being finalized and so Departments did not have adequate time to accurately map the expenditure items to the SDGs. Similarly, for the 2017-18 exercise also, the exercise was not carried out accurately by all Departments and their interpretations also were not uniform. It was therefore decided that a review would be conducted by the SDG Centre of the process and an improvement of the mapping exercise conducted for the previous three years so that a truer presentation of the Outcome Budget results in future.

An immediate problem confronting the process of manually checking the expenditure mapping was that there were far too many expenditure heads of account for the Centre to handle – in the 2017-18 budget for example there were over 20,000 such heads of account. To reduce the manual classification by the SDG Centre to manageable levels it was decided to confine the mapping to expenditure heads to only those above Rs 10.0 crores as these together constituted over 82-83 percent of the total expenditures and reduced the number of expenditure heads required to be mapped to a manageable number of 1055 only. The same guidelines reproduced above were used to map these items and the exercise was confined to mapping to Goals only. In future SDG Targets too (represented in Assam Agenda 2030 by interventions under each Goal) would also be mapped.

### 3. Results

A summary of the expenditure allocations to the SDGs in the budgets of 2016-17 (actuals); 2017-18 (revised) and 2018-19 (proposed) is presented in Figures 1A & 1B; 2A & 2B and 3A & 3B below. The expenditure budgets for these three years totaled Rs 4166.35; Rs 9945.30; and Rs 9026.99 thousand crores respectively. The actual expenditures for 2016-17 are much smaller (less than 50%) than the budgeted expenditures for 2017-18 and 2018-19 as realized expenditures are smaller due to both shortfalls in revenue as well as insufficient spending from the amounts allocated.

In each of these budgets, the residual non-mapped expenditures consisting of expenditure items less than Rs. 10 crores each consisted of 17-18 percent or less of the overall expenditure budget. Hence the allocation to the mapped expenditures can be construed to reflect fairly well the inter-se allocations between the SDGs.

Although most the budgeted expenditures have been allocated to the SDGs, significant proportions of the expenditure heads of account mapped (14 percent, 20 percent and 14 percent) were allocated to other items not falling strictly within the domain of the 17 SDGs. However, it can still be stated that Assam's overall expenditure budget has been used overwhelmingly to support the SDG outcomes and this is a cause for satisfaction.



The pattern of expenditure allocations given by the shares allocated to the different Goals has remained fairly stable over these three years with only small variations in the allocations between the 17 Goals.

Thus in all the three years, allocations towards **reducing poverty and eliminating hunger** (Goals 1 and 2) amounted to about a quarter (around 25 percent) of expenditures.

Similar priority has been accorded in the state's expenditures to **education** (Goal 4) with allocations of 32 percent, 17 percent and 22 percent respectively in these three years. This demonstrates the importance Assam places on education.

Spending on **reducing inequality** i.e. on Goal 10 has also been consistently prioritized in Assam in the three years obtaining roughly 5-6 percent share in the three years. Given the large inequalities among communities with deprived populations (such as scheduled tribes, scheduled castes, tea garden labourers etc.) and also spatial inequality such as underdeveloped hills districts and remote areas, reducing inequality has been a priority in the state. Priority has also been accorded to **reducing gender inequality** and gender empowerment (SDG 5) with about 3 percent allocated on average to this Goal. The inequality group (i.e. SDGs 5 and 10 taken together) has thus received 8-9 percent of allocations and ranks high in the overall expenditure allocations in the state.

Next in priority but rather less in allocations is accorded to **advancing health** which includes SDG 3 (good health and well-being) together with SDG 6 (clean water and sanitation) which together account for about 7-8 percent in these three years.

Spending on **infrastructure and industry** which includes clean energy (SDG 7) and industry, roads and other infrastructure (SDG 9) has been the next in the state's priority with around 7 percent allocated on average to this area.

Assam has also prioritized **building a peaceful society, strengthening governance and institutions** (Goal 16) with around 6 percent on average allocated to this Goal.

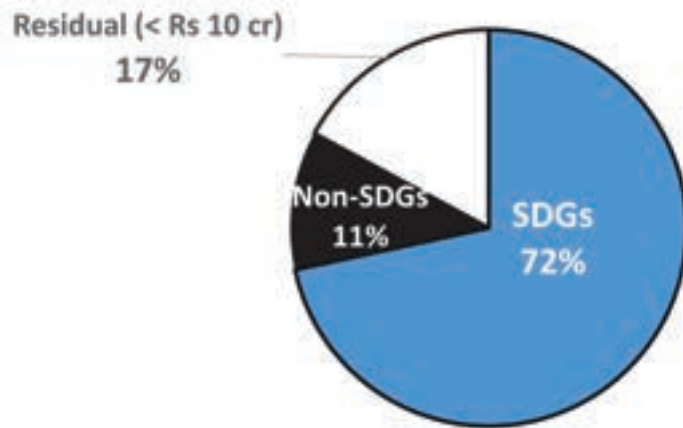
The next in priority (receiving about 3-4 percent of allocations) is **urban development** (Goal 11). The somewhat lower priority can be explained by the lack of urbanization still in Assam. In future years the share allocated to urban development should grow, however.

The spending on the **environment and climate change group** (Goals 12, 13, 14 and 15) constituted only about 1-3 percent of the expenditures in these three years. Given the high emphasis that the SDGs place on environment and climate change, and also the importance of forests and the extensive and fragile water resources and ecosystem of the state, this SDG group is also be expected to increase in importance in the future.

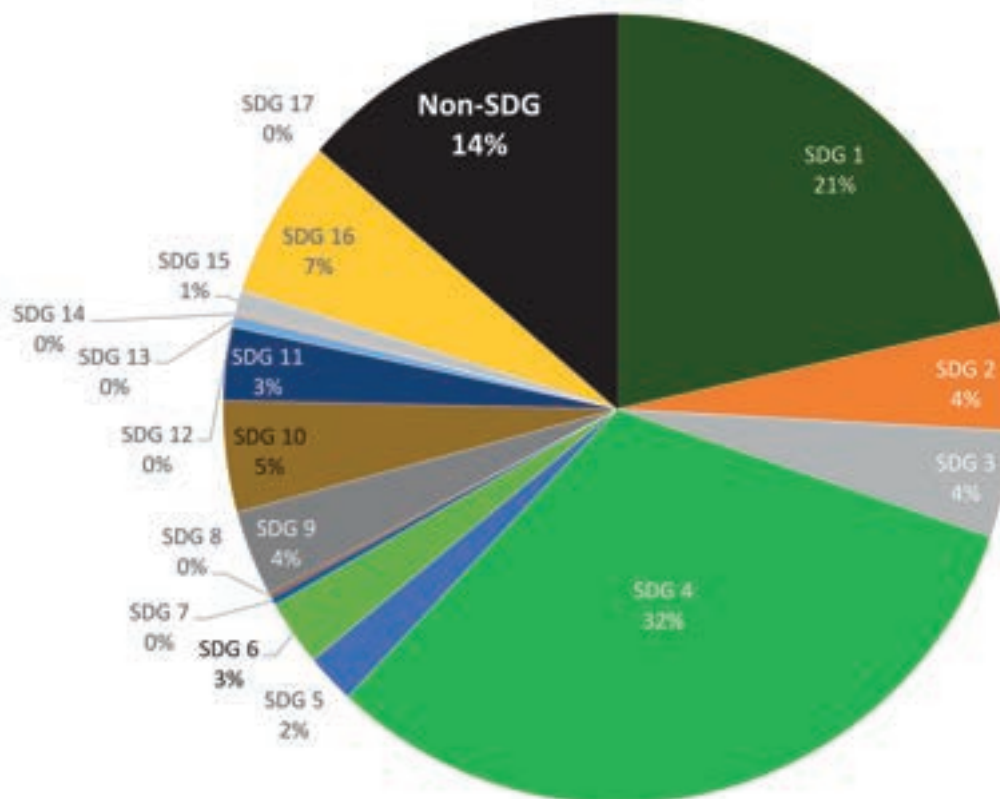
Spending on the **means of implementation** (Goal 17) has so far been negligible so far i.e. less than 1 percent. As in the case of environment, areas such as capacity building, introduction of innovations and technology requires more emphasis and may see increased allocations in future.



**Figure 1A. Allocation of Expenditure Budget  
(2016-17 Actuals totaling Rs 4166.35 thousand crores)**

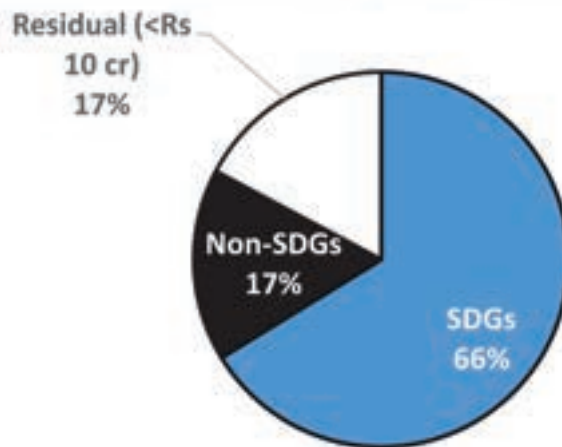


**Figure 1B. Allocation of mapped expenditures to the Sustainable Development Goals (2016-17 Actuals)**





**Figure 2A. Allocation of Expenditure Budget  
(2017-18 Revised totaling Rs 9945.31 thousand crores)**



**Figure 2B. Allocation of mapped expenditures to the Sustainable Development Goals (2017-18 Revised)**

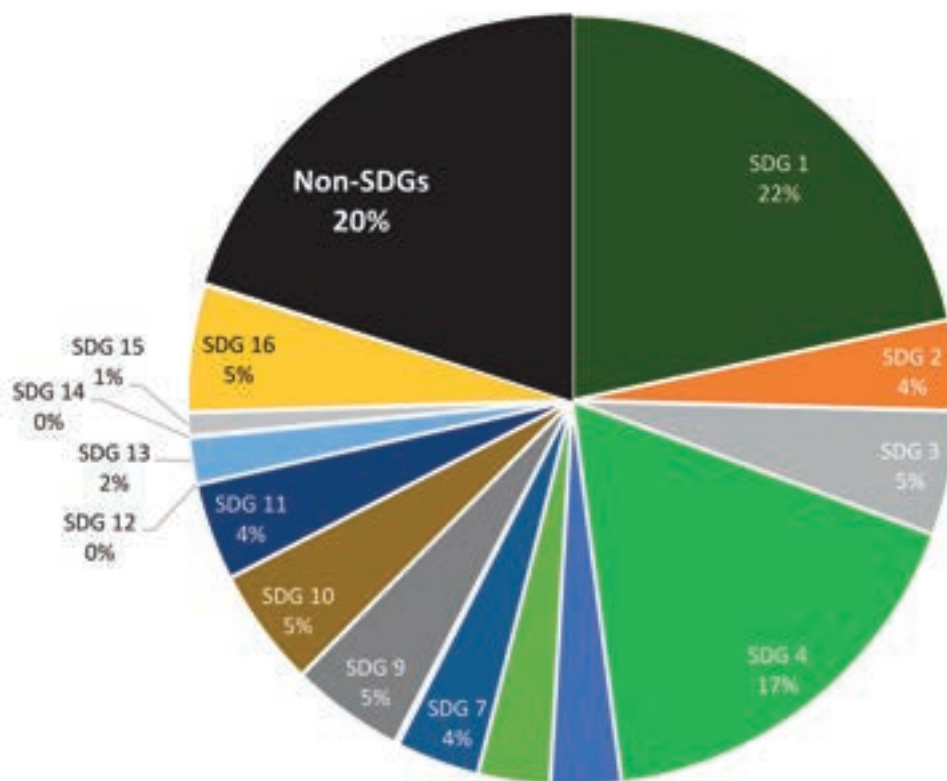




Figure 3A. Allocation of Expenditure Budget (2018-19 totaling Rs 9026.99 thousand crores)

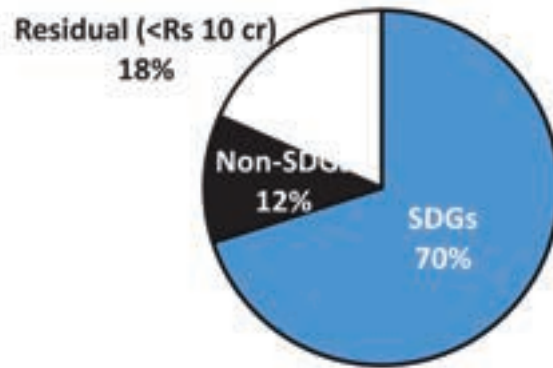
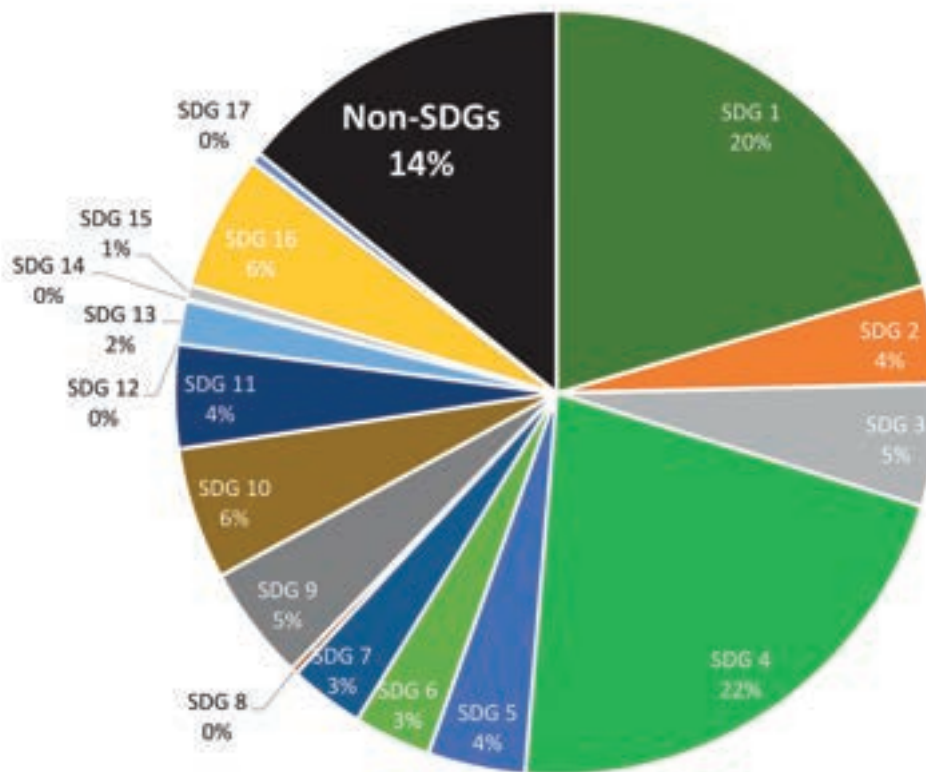


Figure 2B. Allocation of mapped expenditures to the Sustainable Development Goals (2018-19)





#### 4. Future steps

In order to better achieve outcomes, the outcome budgeting process needs to be operationalized to attain the results intended in Assam Agenda 2030. This will require that better monitoring of the schemes and programmes on which expenditures are made is carried out to ensure that they are effectively implemented. This will ensure that timely feedback is received on the results of expenditures made by the Government and corrective action taken.

In order to do this systematically, a monitoring framework consisting of (i) broad outcome monitoring; and (ii) a more detailed project and scheme monitoring is being established.

The outcome monitoring under (i) would track progress on broad indicators such as poverty headcount ratio under SDG1; child malnutrition measured by extent of underweight children as a measure of hunger under SDG2; maternal mortality ratio as an indicator on health under SDG3 and so on. Assam has identified 58 such key outcome indicators relevant for the state. A list of these indicators is in Appendix I. Data on these outcome indicators are however available mainly through surveys and the Government has decided to conduct a comprehensive state-wide survey in 2019 and produce a Report – called the Human and Sustainable Development Report. This survey is planned to be carried out every three years so that regular feedback is received by the Government on progress on these outcome indicators.

In addition to monitoring of overall outcomes under (i), the Government is working to set up a system that assesses progress on the major projects and schemes on which expenditures are made and which are the main instruments through which the final outcomes of the SDGs and Assam Agenda 2030 will be achieved. This is the basic task of the monitoring exercise (ii). For operationalizing (ii) it is planned to establish a flagship projects monitoring system which would track the most important and critical projects – Centrally supported as well as State schemes - being implemented in the state. A list of such projects and schemes is presented Goal-wise under Appendix II.

Under this exercise, each project would be tracked in terms of financial outlays provided and actually spent over the year, and key physical output parameters. For example, road schemes would be tracked on actual amounts spent over their funds released being the financial part; and kilometers of roads and number of bridges constructed representing key physical output parameters.

A dashboard reporting progress on the outcome indices under (i) and financial and physical output progress parameters under (ii) is being set up so that such monitoring can be reviewed and evaluated by senior authorities of the Government.



## Appendix I

Initial indicator set with baselines and 2030 targets				
Proposed Indicator	Year	Unit	Figure	Target 2030
1.1 Poverty Head Count Ratio	2015	percent	27.34	0
2.1 Proportion of children within the age 5 who are underweight	2015-16	percent	29.80	0
2.2 Proportion of women within age 15-49 who are anaemic	2015-16	percent	46.00	0
2.3 Average Yield of Rice Per Hectare of land cultivated	2014-15	kg/ha	2119	4238
3.1 Maternal Mortality Ratio	2011-13	per 100,000 live births	300	70 (Global)
3.2 Under 5 Mortality Rate	2014	per 1000 live births	66	25
3.3 Infant Mortality Rate	2014	per 1000 live births	49	18
3.4 Doctors (Govt and NHM) per 1 lakh population	2014	per 100000 population	15.2	100
3.5 Proportion of Births attended by Trained Personnel	2015-16	percent	74.3	100
3.6 Death Rate due to Road Traffic injuries	2013	deaths per 10,000 km of roads	84.7	42.0 (by 2020)
4.1 Net Enrolment Ratio at upper primary level	2014-15	percent	80.22	100
4.2 Net Enrolment Ratio at secondary level	2014-15	percent	54.31	100
4.3 Net Enrolment Ratio at 10+2 level	2014-15	percent	24.25	100
4.4 Net enrolment rate at pre-primary (ECD) level				100
4.5 Drop out rates at primary level	2014-15	percent	7.44	0
4.6 Drop out rate at secondary level	2014-15	percent	30.43	0
4.7. Ratio of vocational enrolment to total secondary enrolment	2016	percent	2	25
5.1 Ratio of female to male literacy (15-24 years)	2011	ratio	0.91	1
5.2 Ratio of female to male work participation rate	2011	ratio	0.42	1
5.3 Ratio of female to male life expectancy	2006-10	ratio	1.04	
5.4 Proportion of seats in the state assembly occupied by women	2016	percent	6.35	33.3
5.5 Rate of crime (all forms combined) against women in the state	2015	per 100000 women	148.2	halt & reverse
5.6 Proportion of women within 20-24 years getting married before the age of 18	2015-16	percent	32.6	0



5.7 Proportion of women within 15-19 years who are mothers or pregnant	2015-16	percent	13.6	halt & reverse
6.1 Proportion of HH with access to safe drinking water	2011	percent	61.7	100
6.2 Proportion of HH without sanitary latrine	2011	percent	38.9	0
7.1 Proportion of HH having electricity as the primary source of lighting	2011	percent	37	100
7.2 Proportion of renewable energy to the total energy production by installed capacity	2015	percent	2.5	15
7.3 Proportion of transmission and distribution loss to total energy produced	2014-15	percent	21	5
8.1 Annual Rate of Growth of SGDP (constant prices)	2014-15	percent	7.88	at least 10% by 2025
8.2 Total Unemployment Rate usual status (ps)	2011-12	per 1000 (age 15-59)	53	reduce by 2/3rd
9.1 Total length of surfaced road (NH, SH and PWD) per sq. km area	2015	km per 100 sq km	35.42	attain benchmark
9.2 Proportion of NH SH & PWD roads per 100,000 population	2015	km per 100,000 population	89.03	increase
9.3 Total (wireless+wireline)Tele-density connections per 100 population)	2015	number	52.15	100
9.4 Share of manufacturing sector in SGDP (at 2011-12 constant prices)	2014-15	percent (Quick Estimate)	21.9	triple
9.5 Share of manufacturing sector employment in total secondary employment	2014-15	percent	11.0	Triple
10.1 Ratio of average size of land holdings by marginal and small farmers to semi medium, medium and large farmers	2010-11	percent	16.1	increase
10.2 Gini co-efficient of inter-district per capita DGDP	2014	ratio	0.16	reduce
11.1 Proportion of total urban population living in slums and squatters	2011	percent	4.48	0
11.2 Proportion of municipal solid waste treated to the total municipal solid waste generated in the state	2015	percent	15.38	100
11.3 Ambient Air Quality Index of Guwahati SPM (PM <sub>10</sub> ), range and average of 5 locations	2014	Micrograms per cubic meter of air	Range 67-411; Mean 153.43	By 2020 reduce to prescribed levels
13.1 Proportion of cropped area affected by flood to the total cropped area (annual average)	2014-15	percent	8.1	Halt and reduce
13.2 Proportion of people affected by flood (annual average)	2014-15	percent	11.7	0



14.1 Mean of range of total coliform levels of Dhansiri at Golaghat	2013	MPN/100ml	7500	Halt and reduce
14.2 Mean of range of total coliform levels of Bharalu at Guwahati	2013	MPN/100ml	121000	Halt and reduce
14.3 Mean of range of total coliform levels of Disang at Dillighat	2013	MPN/100 ml	10680	Halt and reduce
14.4 Mean of range of total coliform levels of Kharsang before confluence with Buridihing	2013	MPN/100 ml	120000	Halt and reduce
14.5 Mean of range of total coliform levels of Barak at D/S of Silchar	2013	MPN/100 ml	11250	Halt and reduce
15.1 Proportion of area under forest	2015	percent	35.22	increase
15.2 Proportion of area under reserved forest	2015	percent	17.81	increase
15.3 Proportion of area degraded and wasteland	2010	percent	5.83	Halt and reduce
15.4 Growing stock in MCuM	2015	MCuM	143.00	320.00
16.1 Violence related deaths per thousand population (annual)	2015	state total	1343	halt & reverse
16.2 Number of violent crimes (all forms) per lakh population	2015	per 100000 population	47.1	halt & reverse
16.3 Number of victims of human trafficking per lakh population	2015	per 100000 population	4.6	halt & reverse
16.4 Crimes against children (all forms combined) per lakh children	2015	per 100000 children	23.8	halt & reverse
17.1 Share of SDG goals 1-17 in total expenditure budget	2016-19 3-year average	percent	84.0	adjust priority
17.2. Number of technological innovations supporting SDGs in year	n.a	number	n.a	increase
<i>Source: Centre for Sustainable Development Goals, Assam</i>				



## Appendix II

### Initial List of Flagship Projects Identified by Departments

Goal No	Implementing Department	Schemes Sponsored by State/Central Govt.	Programmes Contributing to the Goal
1	Panchayat and Rural Development	Centrally Sponsored Scheme	a. National Rural Livelihood Mission
1	Panchayat and Rural Development	Centrally Sponsored Scheme	3. National Social Assistance Programme .
1	Panchayat and Rural Development	Centrally Sponsored Scheme	4. Pradhan Mantri Awas Yojana (PMAY)
1	Panchayat and Rural Development	State Sponsored Scheme	3. Universalisation of the Old age Pension scheme.
2	Panchayat and Rural Development	Centrally Sponsored Scheme	2. Mahatma Gandhi National Rural Employment Guarantee Scheme.
2	Agriculture	Centrally Sponsored Scheme	1. National Food Security Mission.
2	Agriculture(Horticulture)	Centrally Sponsored Scheme	b) Per Drop More Crop
2	Agriculture	Centrally Sponsored Scheme	3. Green Revolution (Krishi Unnati Schemes and Rashtriya krishi Vikash Yojana :BGREI
2	Agriculture	Centrally Sponsored Scheme	RKVY
2	Agriculture	State Sponsored Scheme	5. Assam Agribusiness & Rural Transformation Project (Externally Aided Project)
2	Agriculture	State Sponsored Scheme	9. Financial incentives for farmers using Kishan Credit Cards
2	Agriculture	State Sponsored Scheme	Agriculture research and Education
2	Agriculture	State Sponsored Scheme	Distribution of Power tiller, tractor (NFSM,RKVY,BGREI,Agril engg)
2	Agriculture(Horticulture)	State Sponsored Scheme	11. Construction of Cold Storage
2	Agriculture	State Sponsored Scheme	17. Distribution of LLP and STW Diesel Pump Sets (NABARD-RIDF)
2	Animal Husbandary & Vety	State Sponsored Scheme	11. Establishment of Veterinary Hospitals and Veterinary Sub-Centres
2	Fishery	State Sponsored Scheme	1. Special programme called "Matshya Jagaran-Ghore Ghore Pukhuri Ghore Ghore maach" in a campaign mode



2	Irrigation Dept.	Centrally Sponsored Scheme	Pradhan Mantri Krishi Sinchai Yojna - a) Har khet ko pani
2	Irrigation Dept.	Centrally Sponsored Scheme	Accelerated Irrigation Benefit Program (AIBP) under PMKSY
2	Irrigation Dept.	State Sponsored Scheme	1. Irrigation schemes through Deep Tubewells powered by Solar Energy
2	Irrigation Dept.	Centrally Sponsored Scheme	3. Completion of major and medium Irrigation projects.
2	Food,Civil Supplies and Consumer Affairs	Centrally Sponsored Scheme	2. Transportation cost and Margin Money to the GPSS and other agents in advance
2	Food,Civil Supplies and Consumer Affairs	Centrally Sponsored Scheme	4.State support for Ujjwala Scheme
2	Food,Civil Supplies and Consumer Affairs	State Sponsored Scheme	1. Strengthening of Aamar Dukans at GPSS-opening of additional Amar Dukan shops
2	Food,Civil Supplies and Consumer Affairs	State Sponsored Scheme	6. Price Stabilization Fund to step in and correct market failure lead in prices of essential commodities.
2	Panchayat and Rural Development	State Sponsored Scheme	Kanaklata Mahila Sabalikaran Yojana
2	Cooperation Deptt(cold chain and food waste prevention)	State Sponsored Scheme	1. Revival of Assam Polyster Cooperatives Society LTD(APOL)
2	Cooperation Deptt(cold chain and food waste prevention)	State Sponsored Scheme	4. Construction of rural godowns of Cooperatives
2	Cooperation Deptt(cold chain and food waste prevention)	State Sponsored Scheme	7. Construction of new warehouses
2	Food,Civil Supplies and Consumer Affairs	Centrally Sponsored Scheme	1.National Food Security Mission
3	Health & Family Welfare	Centrally Sponsored Scheme	NHM
3	Social Welfare Dept.	Centrally Sponsored Scheme	ICDS
3	Health & Family Welfare	Centrally Sponsored Scheme	2. National Miasion on Ayush including Mission on Medicinal.
3	Health & Family Welfare	Centrally Sponsored Scheme	3. National Aids and STD Control Programme
3	Health & Family Welfare	Centrally Sponsored Scheme	4. Rastriya Swasthya Suraksha Yojana.
3	Health & Family Welfare	State Sponsored Scheme	1. Inclusive Cancer Control Programme : A Partnership With Tata Trust



3	Health & Family Welfare	State Sponsored Scheme	2. Atal Amrit Abhiyan - an ambitious critical care health insurance for the citizens of the state.
4	Education Department	Centrally Sponsored Scheme	a. Sarva Shiksha Abhiyan (SSA)
4	Education Department	Centrally Sponsored Scheme	2. Mid Day Meal Programme,
4	Elementary Education	State Sponsored Scheme	1. Guna Utsav programme
4	Elementary Education	State Sponsored Scheme	2. Provision of Additional Classrooms, Partition Walls and Electricity in Elementary Schools.
4	Elementary Education	State Sponsored Scheme	11. Distribution of Free Text Book.
4	Cultural Affairs	State Sponsored Scheme	1. Financial assistance for development of Sattras
4	Cultural Affairs	State Sponsored Scheme	11. Organization of the first International Children Film Festivals and the first International Documentary Film Festivals in addition to the 2nd Guwahati International Film Festival under the ambit of Jyoti Chitran.
5	Social Welfare Dept.	Centrally Sponsored Scheme	
6	Public Health Engineering (PHE)	Centrally Sponsored Scheme	1. National Rural Drinking Water Mission
6	Public Health Engineering (PHE)	Centrally Sponsored Scheme	2. Swachh Bharat Mission (SBM- gram)
6	Public Health Engineering (PHE)	Centrally Sponsored Scheme	1. Construction of Community Water Purification Plants for mitigation of fluoride and arsenic contamination of drinking water.
6	Public Health Engineering (PHE)	Externally Aided Project under World Bank Assisted RWSSP-LIS	Neer Nirmla Yojana
6	Public Health Engineering (PHE)	State Sponsored Scheme	SOPD
7	Power	Centrally Sponsored Scheme	Deen Dayal Upadhaya Gram Jyoti Yojana.
7	Border Protection & Development Dept.	Centrally Sponsored Scheme	BADP
7	Border Protection & Development Dept.	State Sponsored Scheme	BADP
7	Power	State Sponsored Scheme	1. Distribution of LED bulbs of 9 watts to 52 lakh households across the state under Mukhya Mantri Adarsha Deep Yojana (MMADY)



7	Power	State Sponsored Scheme	3. Installation and Commissioning of Myntriyang Small Hydro Electric Project.
7	Power	State Sponsored Scheme	4. Commissioning of Smart Grid project on pilot basis at Guwahati
7	Power	State Sponsored Scheme	5. Construction of Lower Kapili Hydro Electric project which will be funded by ADB, GOI and GOA
7	Power	State Sponsored Scheme	6. Installation of average 10 MW rooftop solar power generating equipment on rooftop of personal homes, institutions, social sectors
7	Power	State Sponsored Scheme	7. Stand Alone Solar Photo Voltaic (SPV) based system where grid extension is not feasible.
7	Power	State Sponsored Scheme	8. Implementation of the scheme namely Saubhgya to achieve universal household electrification in Assam by providing last mile connectivity.
7	Power	State Sponsored Scheme	9. 80 MW Solar Park at Amguri
7	Power	State Sponsored Scheme	10. Implementation of SCADA (Supervisory Control and Data Acquisition) System at Guwahati
7	Power	State Sponsored Scheme	11. Assam Power Sector Investment Programm (Externally Aided Pro
7	Transport Deptt	State Sponsored Scheme	Construction of Utility Vessel
7	Power	State Sponsored Scheme	12. Assam Power Sector Enhancement Investment Programm (Externally Aided Project)
7	Power	State Sponsored Scheme	13. North Eastern Region Power System Improvement Project (Extern Project)
8	Skill, Employment and Entrepreneurship Department	Centrally Sponsored Scheme	3. Pradhan Mantri Kaushal Yojana
9	Public Works Deptt	Centrally Sponsored Scheme	2. Pradhan Mantri Gram Sadak Yojana. (PMGSY)
9	Public Works Deptt	State Sponsored Scheme	1. Road Improvement Projects in Sansad Adarsha Gram Yojana (SAGY) villages
9	Public Works Deptt	State Sponsored Scheme	2. Chief Minister Path Nirman Yojana - Construction of new roads to unconnected habitations and maintenance of existing roads
9	Public Works Deptt	State Sponsored Scheme	1. Conversion of Timber Bridges into RCC bridges
9	Public Works Deptt	State Sponsored Scheme	1. Reconstruction and maintenance of roads and rehabilitation of RCC bridges under Axom Mala - program for State Highway & Major Improvement & Reconstruction
9	Public Works Deptt	State Sponsored Scheme	3. Development of online computerized business process



9	Public Works Deptt	State Sponsored Scheme	5. Assam State Roads Project (Externally Aided Project)
9	Public Works Deptt	State Sponsored Scheme	6. North Eastern States Road Improvement Project (Externally Aided Project)
9	Public Works Deptt	State Sponsored Scheme	1.RIDF (NABARD)
9	Transport Deptt	State Sponsored Scheme	4. Assam Inland Water Transport Development Project (Externally aided Project)
10	Transformation & Development Deptt	Centrally Sponsored Scheme	1. Conducting of crop estimation surveys
10	Transformation & Development Deptt	Centrally Sponsored Scheme	2b. Conducting of Integrated Crop Statistics
10	Transformation & Development Deptt	Centrally Sponsored Scheme	3a. Agriculture Census
10	Transformation & Development Deptt	Centrally Sponsored Scheme	3b.Economic Census
11	Urban Development/Guwahat Development Deptt	State Sponsored Scheme	1. Urban water supply schemes under Assam Urban Water Supply Board for supply drinking water in towns.
11	Urban Development/Guwahat Development Deptt	State Sponsored Scheme	2. Sewerages Project in the city under Guwahati Jal Board
11	Urban Development/Guwahat Development Deptt	State Sponsored Scheme	3. Development and maintenance of existing water retention basins perennial problems of artificial flooding in Guwahati
11	Urban Development/Guwahat Development Deptt	State Sponsored Scheme	4. Cleaning and De-siltation of water bodies
11	Urban Development	Centrally Sponsored Scheme	1. Shyama Prasad Mukherjee Rurban Mission
11	Urban Development	Centrally Sponsored Scheme	2. Padhran Mantri Awas Yojana (PMAY-Urban)
11	Urban Development	Centrally Sponsored Scheme	3. Urban Rejuvenation Mission(AMRUT and Smart Cities Mission)
13	Environment & Forest	Centrally Sponsored Scheme	1. National Mission for a Green India
13	Environment & Forest	Centrally Sponsored Scheme	2. Integrated Development of Wild Life Habitats
13	Environment & Forest	Centrally Sponsored Scheme	3. Conservation of Natural resources and Ecosystems



14	Environment & Forest	Centrally Sponsored Scheme	4. National River Conservation Programme.
14	Water resources	Centrally Sponsored Scheme	Fortification of Embankment system
15	Environment & Forest	Centrally Sponsored Scheme	5. Project Tiger
16	Home & Political	Centrally Sponsored Scheme	1. Modernization of police Forces(including Security Related Expenditure)
16	Home & Political	State Sponsored Scheme	1. Mission for Overall Improvement of Thana for Responsive Image (MOITRI) with an aim to develop the police station as a people friendly service provider for citizens programme
17	Transformation & Development Deptt	Centrally Sponsored Scheme	2a. Conducting of Timely Reporting of Scheme



## **SOCIAL SECTOR,**

In the past few decades the focus of development has shifted from economic growth to human development. Worldwide development of social sector plays a crucial role for improving human development indicators and attainment of Sustainable Development Goals (SDG). In Assam, social sector development bears the essence of overall economic development and human development in the State. This sector includes the State education, health and family welfare, safe drinking water, sanitation, welfare programmes for women, children, SC & ST sub sectors, development of marginalized groups and backward regions etc. Development in these sectors has build up strong edifice of a stimulating economy in terms of rising income and employment opportunities, productivity, technology advancement and finally has enhanced the quality of life in the State. The State Government has been according high priority to these social sectors over the successive plans with positive outcomes thereby.

### **EDUCATION:**

Education is the mirror which reflects the social and economic status of a State. It strengthens the fabric of all round development, economic, social, technical, environmental and scientific areas in the State. It is a distinctive investment that will ensure better access to a progressive future generation. It will help in creating an environment for improvement of the quality of life.

Education is the key development input, a fundamental requirement for human resource development, not only for an individual in particular, but for the society, nation as a whole. Education not only removes ignorance, it helps in boosting the moral values of individuals by enhancing their skills, efficiency, productivity and overall quality of life. It provides individual skills to become more self-reliant, ability to be better informed, be more responsible, have better ability to exercise wide choices in activities of day to day lives, thereby being more productive and also having better standards of living. Education is very important and has been accepted as one of the most crucial inputs required for nation building. Keeping in view the goal of nation building, India has and is committed for the provision of free and compulsory elementary education to all children. Towards achievement of this end, Indian Parliament has enacted a legislation making education free and compulsory for every child in the age group 6 to 14 years of age, which has come in force since 1<sup>st</sup> April 2010. Rashtriya Madhyamik Siksha Abhiyan has been launched, as a step to



universalise secondary education. Simultaneously, efforts are also being made for the creation of a strong and vast system of higher and technical education.

#### **LITERACY RATE IN ASSAM:**

Literacy has both economic and social motives of an individual wellbeing. It improves self esteem, enhances social status, decision making and thereby uplift the confidence level of an individual in the society. It impacts human development outcomes, both as an input and output creating lasting benefits.

Thus literacy rates are the most important indicator that has the ability to reveal the overall human resource quality of a nation. Census data reveals that the literacy rates in Assam has grown encouragingly as per Table-19.1 shown below.

**TABLE-1**  
**LITERACY RATES, ASSAM AND INDIA**

State	1991			2001			2011		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Assam	52.89	61.87	43.03	63.25	71.28	54.61	72.19	77.85	66.27
India	52.21	64.13	39.28	64.83	75.26	53.67	72.99	80.89	64.64

Source: Registrar General of India

As per Census 2011, the literacy rate of Assam is 72.19 with male literacy rate of 77.85 which is behind the national rate of 72.99 and male literacy rate of 80.89 respectively. The female literacy rate with 66.27, stood above the national rate of 64.64. The literacy rates for rural and urban areas were calculated at 69.34 percent and 88.47 percent respectively. For the achievement of the goal of Universal Elementary Education, educational programmes of Sarva Siksha Abhijan (SSA) have been implemented along with various innovative schemes by the State Government. The State Government also equally gives emphasis in providing qualitative technical education to build technical skills to cater to the needs of the economy. In view of the importance of education and its impact on socio-economic development, the State Government has also been implementing various educational programmes from time to time

#### **ELEMENTARY EDUCATION:**

Universalisation of primary education addresses two major groups, the out of school children during the primary school going age and the children who were forced to drop out even before completion of primary grade classes due to social and economic impediments. As per the provision of free and compulsory education to all children up to the age of 14 years, the state Government is implementing the 'Right to Education Act 2009' as "Assam Right of

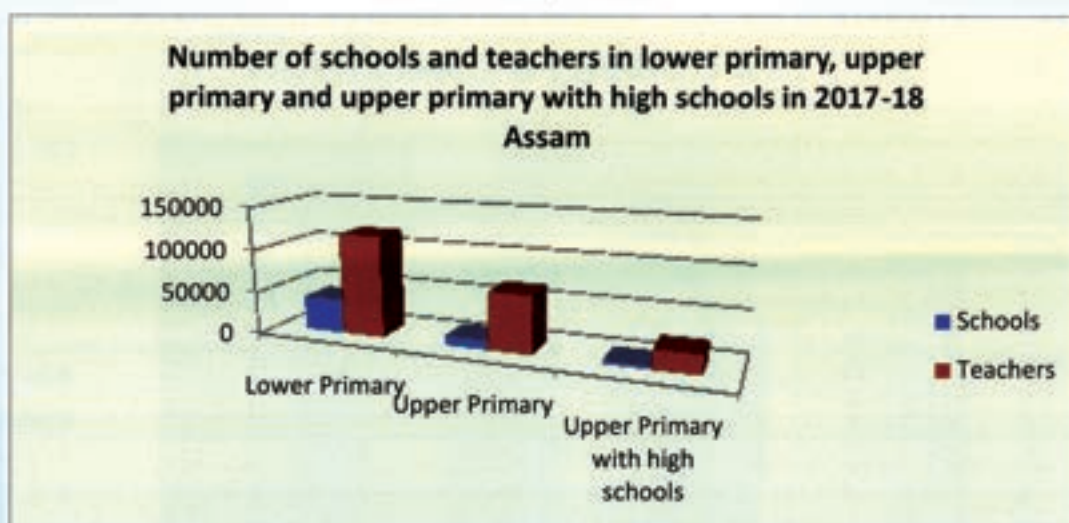


Children to Free and Compulsory Education Rules, 2011” . The Directorate of Elementary Education (DEE), Assam is functioning under the Act to achieve the goal of universalisation of Elementary Education in the State to provide useful and relevant elementary education to all children in the age group of 6-14 years of age. It aims in bridging all gender and social category gaps at primary stage with focus on elementary education of satisfactory quality. All schemes for elementary education are implemented through SSA. The table-2 below shows the numbers of Government/ provisionalised, Tea garden / Local Body schools and teachers in the Lower Primary, Upper Primary and Upper primary with High Schools functioning under DEE while the enrolment in the Lower Primary and Upper Primary is 2495167 and 633124 respectively in 2017-18.

**Table – 2**

Items	Lower Primary	Upper Primary	Upper Primary with high schools
Schools	39780	10387	3207
Teachers	118861	66943	22269
Enrolment	2495167	633124	.....

Source: DISE, 2017-18



In order to provide and promote quality education, to attract children of all social groups, Government has been implementing various schemes and programmes. The Directorate of Elementary Education (DEE) provides the following incentives-

- Mid-day Meal for students of primary and upper primary schools.
- Teaching Learning materials (TLM) to Government and Provisional Schools.
- Provision of free text books up to Class VIII to all categories of schools including institutions not receiving financial assistance.



- Provisions of scholarship to SC, ST, disabled children and meritorious students.
- Provision of uniform to students up to Class VIII level

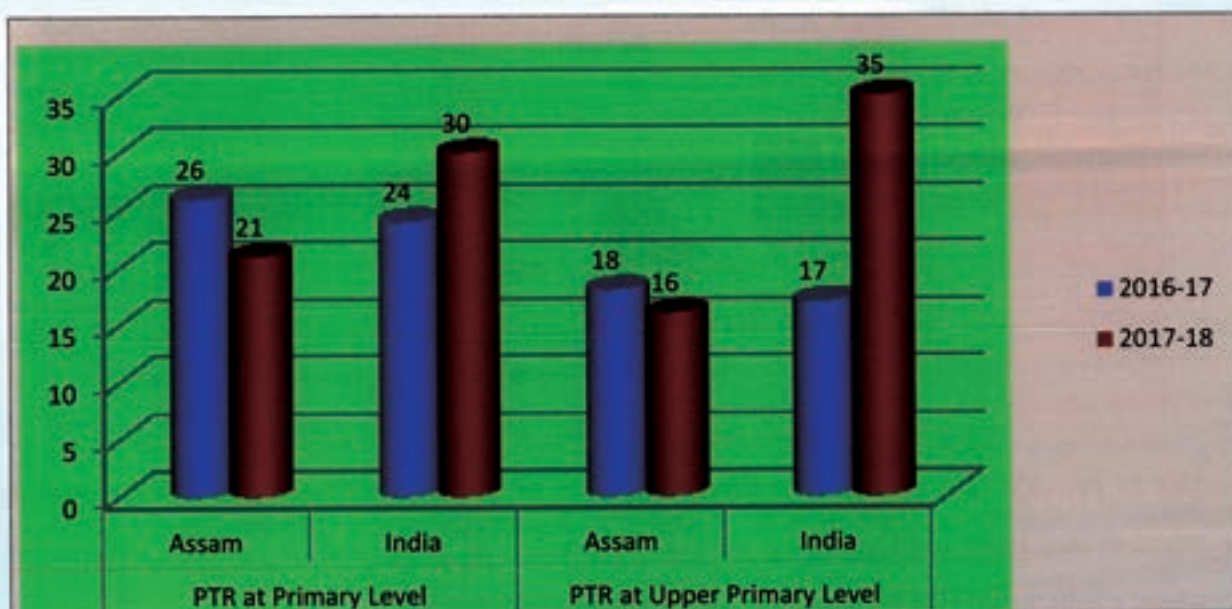
### DROP-OUT RATES:

The Average Annual Drop-out Rate as per Flash Statistics 2016-17; at Primary level in the State during 2016-17 was 5.60 while it was 15.36 in 2015-16 against the all India drop-out rates of 6.35 and 4.13 respectively. At the Upper Primary level it was 2.51 in 2016-17 and 10.51 in 2015-16 against the all India rate of 5.67 and 4.03 respectively. Among the districts South Salmara registered highest dropout rate of 20.0 while Jorhat has lowest of 2.1 in Lower Primary level.

### PUPIL-TEACHER RATIO (PTR):

The Pupil-Teacher Ratio (PTR) or Student- Teacher Ratio is the number of students who attend a school or university divided by the number of teachers in the institutions. The Pupil-Teacher Ratio in the Primary level of the State during the year 2017-18 is 21 which was 26 in 2016-17 against all India level of 30 and 24 respectively. While in Upper Primary, during 2016-17 and 2017-18, the PTR of the state was 18 and 16 as against 17 and 35 at all India level. The graph below is the PTR of Primary and Upper Primary in the State and at All State level during 2016-17 and 2017-18 as per Flash Statistics.

**PTR of Primary & Upper Primary**



### GROSS ENROLLMENT RATIO (GER):



Gross Enrollment Ratio or Gross Enrollment Index is the statistical measure used in the educational sector and by the UN in its Education Index to determine the number of students enrolled in school at several grade levels (like elementary, middle school and high school), and use it to show the ratio. The Gross Enrolment Ratio at Primary Level during 2014-15 and 2015-16 in Assam is 114.96 and 106.11 against 100.08 and 99.21 respectively for all States. The GER at Upper Primary Level during 2014-15 and 2015-16 in Assam was 95.86 and 93.05 compared to 91.24 and 92.81 for all States respectively as per u-DISE-2015-16.

### **SECONDARY AND HIGHER SECONDARY EDUCATION:**

The secondary education is a crucial stage after passing out the stage of elementary education to prepare the student with higher level of knowledge and skills for higher education. In Assam, Secondary Education covers Class IX to Class X for the age group of 14 years to 16 years and Higher Secondary stage covers Class XI to Class XII for the age group 17 years to 18 years. However, amalgamated Secondary Schools are imparting education from Class VI onwards. During 2017-18, there were 3380 numbers of Secondary Schools and 687 numbers of Higher Secondary Schools and 65 numbers are Junior Colleges, 15 Model schools with a total of 4032 high and Higher secondary school (both Government and provincialized), 95 Sanskrit Tols and 138 Senior Madrassas as per report received from Assam Higher Secondary Education Council.

The amenities available in both Government/provincialized high and higher secondary schools in Assam during 2017-18 and as per the UDISE Report, out of 4315 nos. of High and Higher secondary schools, 4183 have drinking water facility, 2372 have boundary walls, 3714 have functional girls toilet, 3134 have computer facility, 1737 have ramp facility, 2849 have playgrounds, 3271 have libraries and 4161 numbers have electricity connection.

The table given below is the number of class and category-wise overall enrolment from class IX to class XII of colleges in Assam as per report received from UDISE-2017-18.



TABLE: 3

**CLASS AND CATEGORY-WISE OVERALL ENROLMENT IN ASSAM 2017-18.**  
IN NOS.

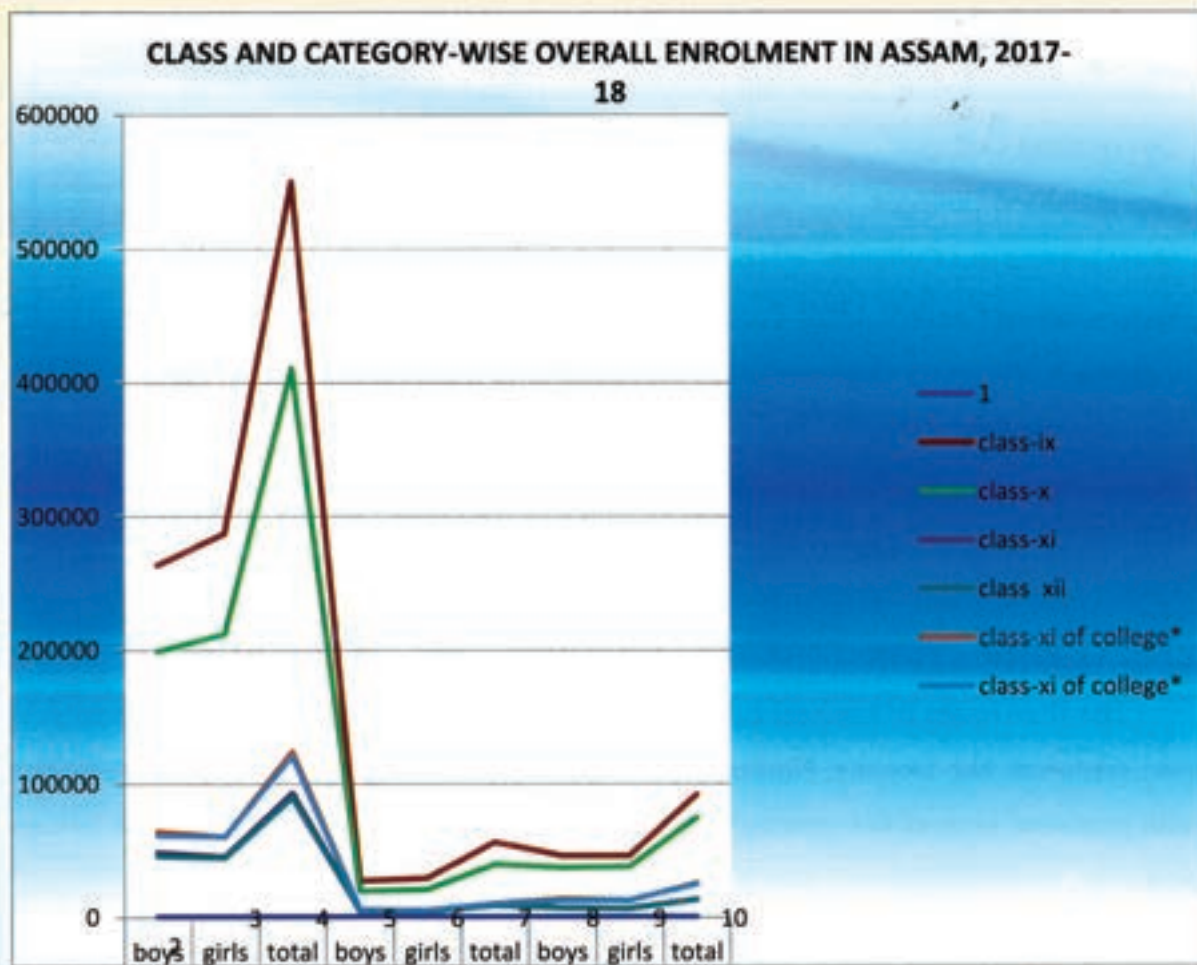
CLASSES	TOTAL ENROLMENT			SCHEDULED CASTES			SCHEDULED TRIBES		
	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL
1	2	3	4	5	6	7	8	9	10
CLASS-IX	262928	286697	549625	26862	28833	55695	45668	45635	91303
CLASS-X	198393	211630	410023	19022	20149	39171	36760	37414	74174
CLASS-XI	47774	44637	92411	4363	4033	8396	6592	6061	12655
CLASS XII	45196	43984	89180	4316	4094	8413	6385	6215	12600
CLASS-XI OF COLLEGE*	63601	59649	123250	5058	4535	9593	12950	11915	24865
CLASS-XI OF COLLEGE*	60604	59882	120466	4956	4696	9652	12145	12184	24329

\*INCLUDED JR COLLEGE AND DEGREE COLLEGE

SOURCE: U-DISE 2017-18.

The above table reveals that the total number of enrolment in class IX is 549625 against which 262928 are boys and 286697 are girls. The number of girl's enrolment in Class IX is higher than boys. Among the Scheduled castes the enrolment in the same class boys are 26862 and girls are 28833 out of 55695 and among Scheduled tribes boys are 45668 and girls 45635 out of 91303 number of enrolment. Likewise Class XII of Junior and degree colleges the total enrolment is 120466 while in case of Scheduled caste it is 9652 and Scheduled Tribes is 24329. The graph below shows the percentage-wise distribution of enrolment from class IX to class XII of Junior and Degree colleges in Assam 2017-18.





### HIGHER EDUCATION:

The Directorate of Higher Education and Directorate of Secondary Education is established to give primary focus on expansion and promotion of Higher Education by granting financial assistance to the needy educational institutions besides implementing various programmes for development of general education and assisting for infrastructure development in general with special focus to rural and backward areas.

The numbers of Higher Educational institutions in Assam is given in Table-19.7 below:



**TABLE- 4****NUMBER OF HIGHER EDUCATIONAL INSTITUTIONS IN ASSAM AS ON 2018-19**

Institutions	Numbers
Universities(including private and Deemed University)	14
Government Colleges	5
Provincialised Colleges	300
Non-Government Colleges	43
Provincialised Sanskrit &Pali Tools	95
Literary & Voluntary Organization	19
Government Law College	1
Non-Government Law Colleges	19

*Source : Higher Education, Assam, Kahilipara, Guwahati-19*

**MEDICAL EDUCATION:**

The Directorate of Medical Education, Assam is entrusted with the task of generating human resources like Doctors, Nurses, Technicians, Physiotherapists, Pharmacists and other Health personnel to meet the growing needs of not only the State but the entire North Eastern region.

The Directorate has a host of institutes under its control that is Assam Medical College(AMC) & Hospital, Gauhati Medical College(GMC) & Hospital, Silchar Medical College (SMC) & Hospital, Jorhat Medical College, Regional Dental College, Guwahati; Regional Nursing College, Guwahati; Government Ayurvedic College, Guwahati; S.J.N. Homeopathic Medical College, Guwahati; Dr. J.K. Saikia Homeopathic Medical College, Jorhat; Assam Homeopathic Medical College, Nagaon, three pharmacist institutes associated with AMC, GMC and SMC, Medical Institute at Jorhat and three Institute of Paramedical Sciences at Guwahati, Dibrugarh and Silchar. The Srimanta Sankaradeva University of Health Services, Assam and Jorhat Medical College & Hospital have started functioning from 2009-10.

Besides the above institutes, the State has added three more medical college's viz. Fakaruddin Ali Ahmed Medical College, Barpeta; Tezpur Medical College Tezpur; Assam Hills Medical College and Research Institute, Diphu. Steps have also been taken to establish three more medical colleges at Lakhimpur, Kokrajhar and Dhubri. The work on establishing AIIMS in Guwahati,Changsari is going too.



## **SOME ACHIEVEMENTS ON EDUCATION SECTOR :**

1. Implementation of GUNA UTSAV programme, the biggest quality enhancement programme of the State Government that has been undertaken so far has completed two phase. Government has allocated a sum of Rs.30 crores for implementing the programme.
2. Government earmarked an amount of Rs.8519 crores for the Elementary Education department in the budget.
3. Government has introduced a scheme called "Introduction of Tele – Education through Virtual Classrooms for the educationally backward areas to inculcate concept based learning by way of virtual interaction covering the core subjects like English ,Science and Mathematics from class IV to X.
4. An amount of Rs.509 crores was allocated for the Secondary Education Department during 2018-19.
5. Government waived off admission fees/tuition fees etc.for those students taking admission in both Higher secondary and colleges for the first time since 2017-18.
6. Free distribution of text-Books at secondary level (Class IX to ClassXII) for the first time and a total of 1.08 crore free textbooks have already been distributed among 766100 numbers of students of class IX & X during the academic session of 2017.
7. In order to facilitate the completion of school education and to reduce the dropout rates, Government has decided to establish 100 new schools in the educationally backward areas by upgrading existing LP and UP schools to High schools upto class-X in a PPP mode. Further, RMSA, Assam has initiated the process for running the operations and management of secondary schools under PPP mode in Tea Garden Areas of Assam.
8. Under Rastriya Ucchatar Siksha Abhiyan (RUSA), five Pandit Deendayal Upadhyaya Model degree Colleges have already started at Behali (Biswanath), Amjonga (Goalpara), Tulungia (Bongaigaon), Eraligool (Karimganj), and Dalgaon (Darrang). In addition, academic programme of 2 more degree colleges at Deithor (Karbi Anglong) and Borkhola (Cachar) is coming up very shortly.
9. A total budgetary allocation of Rs.2545 crore in 2018-19 was earmarked for Higher and technical education.
10. Necessary allocation was made for schemes like Anandaram Barooah Award, Free Cycle distribution etc.



## **HEALTH AND FAMILY WELFARE:**

Health care performance in Assam exhibits sustained improvements over the years. These improvements are the outcomes of concentrated and continued efforts of the Government towards establishing an efficient system of health care and family welfare through effective planning, financing, human and resources management, and infrastructure and supply chain management. The State Government has taken consistent initiatives to reduce prevailing regional disparities and gaps in the access to safe drinking water, sanitation facilities, public and private health care infrastructure, rural infrastructure, access to preventive and medical care, public hygiene, information system on health care and nutrition and skilled manpower.

## **GENERAL HEALTH:**

Quality and adequate health care services has led to better learning ability, nutritional retention, capability enhancement and standard of living of people. It has also helped in limiting family size, improving basic amenities and reducing poverty significantly.

The State health services has always aimed at providing reliable, affordable, accountable and effective primary health care to the people of Assam, with special care provisions for women and children. For the achievement of this goal, the State has been implementing various Central Government schemes, along with its own schemes and programmes by continuously increasing allocation of funds to the Health sector in successive State Plans.

Essentially three categories of health indicators like Infant Mortality Rate (IMR), process (institutional delivery) and input (infrastructure), and public expenditure, National Health Mission (NHM) etc. describe the progress of the health sector in the State. Along with these, important indicators are Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Crude Birth Rate (CBR) and Crude Death Rate (CDR) .



### Status of Health Infrastructure in the State.

The status of Health infrastructure in the State is improving over the years.

- At present there are 6 Medical colleges and Hospitals, 25 Civil Hospitals, 14 Sub-Divisional Civil Hospitals, 946 PHCs, 15 FRUs, 172 CHCs, 278 State Dispensaries and 4644 Sub Centers, 130 Mobile Medical Unit, 15 Boat Clinic with 18886 numbers of total beds in the State at the end of 2018.
- The number of Medical and Paramedical staff in the state is 6011 including Ayurvedic and Homeopathic doctors in 2018.

### HEALTH INDICATORS IN ASSAM, 2018:

The health indicators released by Registrar General of India (RGI) shows that the Under Five Mortality rate in Assam is very high than the all India rate. The neo natal mortality has decreased during the last few years compared to the all India rate and this is due to the initiatives taken by the State Health Service for maternal and child health. The table below shows a comparison of some health indicators of Assam and India.

**Table – 5**

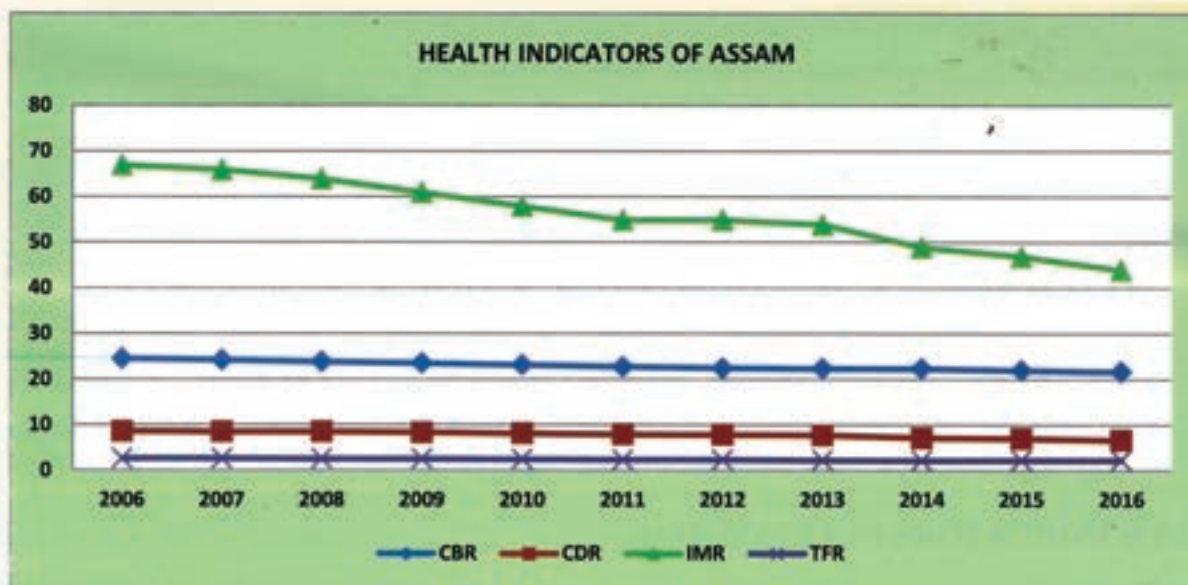
#### TRENDS IN SELECTED HEALTH INDICATORS: 2018

Activity	Total		Rural		Urban	
	Assam	India	Assam	India	Assam	India
Crude Birth Rate (CBR)	21.7	20.4	22.8	22.1	15.0	17.3
Crude Death Rate (CDR)	6.7	6.5	7.1	7.1	4.9	5.4
Infant Mortality Rate. (IMR)	44	34	46	38	22	23
Neo-Natal mortality rate	23	24	21	29	11	15
Under 5 (Five) mortality rate	52	43	56	48	23	28

*Source: SRS Bulletin, 2017 and NITI AAYOG*

The graph below shows the trend of Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) in Assam since 2006 to 2016. The CBR, CDR, IMR and TFR which was 24.6, 8.7, 67 and 2.7 in 2006 has declined to 21.7, 6.7, 44 and 2.3 in 2016.





### LIFE EXPECTANCY:

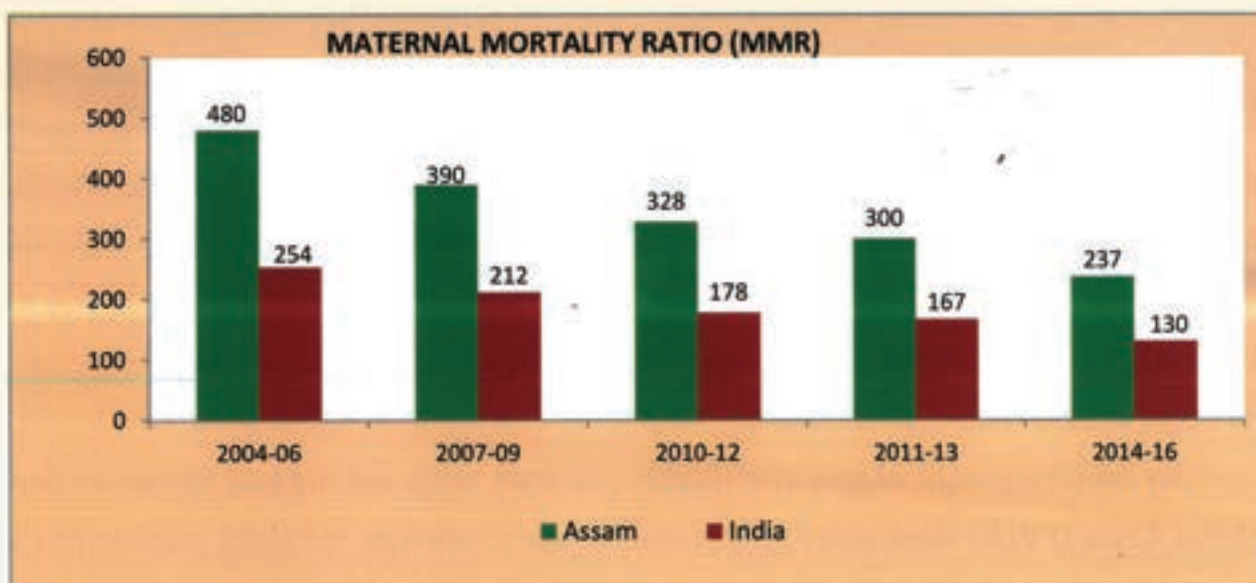
The World Health Organisation (WHO) defined life expectancy as the average number of years that a person expects to live in full health. Life expectancy varies by geographical area and by era. Life Expectancy of a person or population group depends on several variables such as their life style, access to health care, diet, economical status and the relevant mortality and morbidity data. However, as life expectancy is calculated based on averages, a person may live for many years more or less than expected.

The data available from Sample Registration Survey (SRS), 2010-14 that Kerala has the highest life expectancy at birth (74.9) in India while Assam has the lowest (63.9). As a whole life expectancy at birth in India are 67.9. Among the countries in the world, the highest life expectancy is Monaco ranked first with 89.42 years followed by Japan with 85.26 years.(Source: WHO Report)

### MATERNAL MORTALITY RATIO (MMR):

Maternal Mortality Ratio (MMR) is the Annual number of Female death per 100,000 live birth from any cause related to or aggravated by pregnancy or its management. The Maternal Mortality Ratio of Assam and India from 2004-06 to 2014-16 is presented through the graph given below.





*Source: SRS Bulletin, Registrar General of India & NITI Aayog.*

The above graph depicts that there is an overall decline of the Maternal Mortality Rate (MMR) during the period from 2004 to 2016. However, the rate is still very high in Assam in comparison to the All India rate due to some major factors like infections and anaemia during childbirth, especially among rural women. There is a downfall of MMR to 22% at the All India level from 167 in 2011-13 to 130 in 2014-16. Likewise, at the state level, the downfall is 21% in the MMR from 300 to 237. Factors responsible for the downfall in MMR include an increase in institutional deliveries, involving private doctors to provide free health checkups to pregnant women at government hospitals, a decline in child marriage, reduction in teenage pregnancies, etc. Moreover, a facility in public hospitals and health centres, free drugs and diagnostics among other incentives to pregnant women has led to the increase in admission for delivery in Government hospitals. Among the Indian states, Kerala has the lowest MMR of 46, followed by Maharashtra with 61.

#### **NATIONAL HEALTH MISSION:**

The Government of India launched the National Health Mission (NHM) to carry out necessary architectural corrections in the basic health care, delivery system. The Mission's approach is relating health to determinants of good health, viz. segments of nutrition, sanitation, hygiene, and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. Various measures taken by the National Health Mission (NHM) for child and mothers' health.

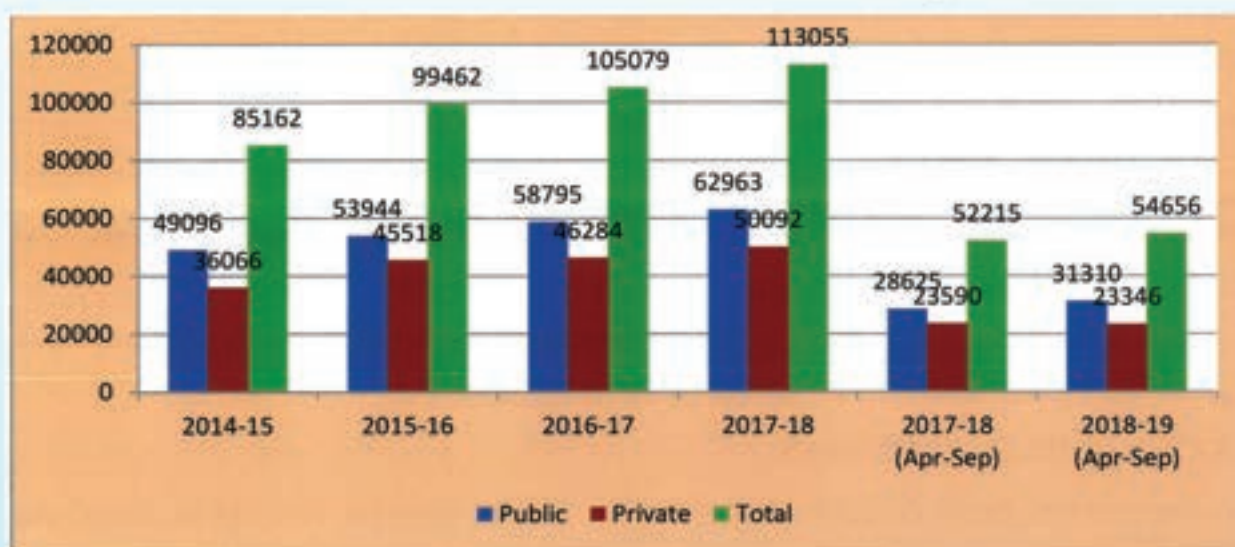


## INSTITUTIONAL DELIVERY:

The Govt. under NHM has taken various initiatives to increase institutional delivery in Assam. Institutional delivery in Assam till 2006-07 was not so encouraging. During 2007-08 number of institutional delivery in Assam increased by 68 percent and is on an increasing trend resulting in decline of MMR due to various interventions like Janani Suraksha Yojana (JSY), Janani Sishu Suraksha Karyakram (JSSY), Pradhan Mantri Surakshit Abhiyan (PMSMA) etc. Institutional Delivery in the state has increased from 22.7% in 2005-06 to 70% in 2015-16. Similarly, number of reported Institutional delivery has also increased from 1.49 lakhs in 2005-06 to 5.26 lakhs in 2017-18.

By deploying required specialist doctors and other staffs and required equipment first Referral Units (FRUs) were made operational. It has resulted in increased number of C-section deliveries in Public health facilities in the year from 53,944 in 2015-16 to 58,795 in 2016-17 providing services to DHs and FRUs. Similarly, total 62,963 C-Section deliveries conducted in 2017-18 to 58,795 in 2016-17. The graph below shows the trend of Institutional delivery in the State since 2014-15 to 2018-19.

### Trend of C-Section Delivery



Source: NHM Report, 2018

### 1) JANANI SURAKSHA YOJANA:

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. The Yojana, launched on 12th April, 2005, by the Hon'ble Prime Minister, is being



implemented in all states and Union Territories with special focus on low performing states. JSY is a 100% centrally sponsored scheme and it integrates cash assistance with delivery and post delivery care. The success of the scheme would be determined by the increase in institutional delivery among the poor families.

The Yojana has identified ASHA, the accredited social health activist as an effective link between the Government and the poor pregnant women in 10 low performing states, namely the 8 EAG states and Assam and J & K and the remaining NE States. In other eligible states and Uts, wherever, AWW and TBAs or ASHA like activist has been engaged in this purpose, she can be associated with this Yojana for providing the services. Under the scheme 46.48 lakh women have got benefitted in the State till March 2018.

1) Benefit to mother for delivery in Government and Accredited Hospitals

- Rs. 1400/- is for women from Rural Area
- Rs. 1000/- is for women from Urban Area

2) Rs. 500/- for Home Delivery for BPL Women (Benefit to mother)

3) Benefit to ASHA

- Rs. 600/- for delivery in Government and Accredited Hospitals.

## .2) SNEHASPASH :

SnehaSparsha, literally meaning the 'touch of love', is the recent unique Health Care Initiative for Children below 12 years of age launched by the Department of Health & Family Welfare, Government of Assam. The scheme, being implemented by NHM, Assam, was flagged off on 15 th April 2013, the first day of Assamese New Year, with an allotted fund of Rs 5 Crore for the Fiscal Year 2012-13.

SnehaSparsha is a striving public health initiative that aims at bearing expenditure of very high-end specialized treatment such as Thalassemia requiring Bone Marrow Transplant, Liver and Kidney transplant, and Cochlear Implant.

Eligibility: Families with annual income less than Rs. 2.50 Lakh shall be eligible for availing benefits under the scheme, while priority shall be given to BPL families. The beneficiary or guardians shall have to submit an Income Certificate issued by competent authority such as the Deputy Commissioner, Sub-Divisional Circle Officer, Circle Officer, Block Development Officer or any other authority notified by the Govt from time to time to be eligible for financial assistance. Total 379 patients benefitted under the scheme till August 2018.



### 3) Rashtriya Bal Swasthya Karyakram (RBSK) :

From “Survival to Healthy Survival”, the National Health Mission has made significant progress in Child Mortality rate. Whereas there is an advance in reducing child mortality there is a dire need to improving survival outcome.

Rashtriya Bal Swasthya Karyakram (RBSK) is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 ‘D’s viz. 4

#### 4) Defects at birth, Deficiencies, Diseases, Development delays including disability.

This aim to improve survival outcomes by decreasing morbidity and improving the quality of life of our children. This programme will reach infants born at public health facilities and at home, covering a significant proportion of the annual birth cohort. In addition, children enrolled under Anganwadi centers and Government schools & Government aided schools are being reached systematically through Mobile Health Teams under RBSK. Thus, early identification of various health condition under RBSK, assured linkage to care, support and early treatment introduces equitable child health care approach which will, in the long run, reduce out of pocket expenditures, reduce the burden of disease, improve awareness and promote health & development among children. Till date screening of children are done at school and AWCs through 360 Mobile Teams posted at Block PHC level. The table given below shows the year wise achievement to bring down child mortality rate in the state.

**Table – 6**

Indicators	2014-15(Jun-14 to Mar-15)	2015-16	2016-17	2017-18	2018-19(Apr-Aug)	Total
Total No. of Children Screened in AWC and School	31,24,689	48,68,879	63,35,738	1,16,93,842	29,64,406	2,60,23,148
Total No of Children Referred	1,52,560	1,11,232	1,44,637	1,08,437	48,143	5,65,009
Total No of beneficiary treated	17,449	37,959	75,417	95,574	20,626	2,47,025

Source: NHM Report, 2018.



### **5) ATAL AMRIT ABHIYAN:**

In order to improve the quality of health service government has implemented the Health Assurance scheme named “Atal Amrit Abhiyan” which covers select, high cost, critical care procedures in six disease groups :cardiac, kidney, cancer, neurological conditions, neonatal disease and burn covering individuals in BPL and APL families upto an annual income of Rs.5 lakhs. This would be a completely cashless programme covering upto 90% of population. An amount of Rs.100 crores has been allocated in the budget for this project in Assam.

### **6) Healthcare initiative for Tea Garden workers:**

Out of 758 surveyed Tea gardens in the state, 428 (57%) only have functional Hospital in their premises and 247 (38%) Tea gardens do not even have Medical Officers. Considering the pathetic situation of health services delivery and health outcomes in garden areas, the Department of Health and Family Welfare will start 80 Mobile Medical Units (MMU) only for garden areas. These MMUs shall have doctors, GNM's, Pharmacists, Lab Technician. Moreover, the number of reserve seats for medical profession from Tea garden is proposed to 18 from the current FY.

### **7) UP-GRADATION Sub Divisional Civil Hospital (SDCH):**

The upgradation work have started for 5 (five) Sub Divisional Civil Hospital to District Hospital at Biswanath Chariali, Sonari, Hatisingimari, Hamren, Garumur (Majuli) and one new District Hospital at Hojai has been approved. Further, a total of 116 Model Hospitals have been approved to be set up across the state; out of these, construction of 79 has been completed. Besides, altogether 62 Model Hospitals have been made functional with OPD, Delivery and Laboratory facilities. To make the medicines available at affordable costs “AMRIT” a pharmacy at GMCH, Guwahati is opened. Such AMRIT pharmacies will start functioning in all medical colleges and the district hospitals of the state.

### **8) Providing Comprehensive primary healthcare to tea garden population through dedicated Mobile Medical Units (MMUs):**

Government of has taken various initiatives for improving healthcare services delivery in garden Areas of the state. In order to provide comprehensive primary healthcare services along with diagnostics facilities Health Department has already launched Mobile Medical Unit services in the state on 20<sup>th</sup> June, 2017. Government of India has sanctioned 130 MMUs in the state of which 80 MMUs are exclusively for Tea garden areas. It is expected that,



healthcare scenario of tea garden laborers will improve drastically which will also contribute to the reduction of Maternal and Infant Mortality in the state.

**Table – 7**

**Performance of MMUs from 20<sup>th</sup> June, 2017 to 30<sup>th</sup> September, 2018**

	No. of MMUs	No. of Camp held	No. of patient treated	No. of tea garden covered
No. of tea Garden	50	11,514	6,62,296	....
Tea Garden	80	24,084	8,30,512	414
<b>TOTAL</b>	<b>130</b>	<b>35,599</b>	<b>14,92,808</b>	<b>414</b>

**Source: NHM Report 2018**

#### **9) Chief Minister's Free Diagnostic Services:**

Quality diagnosis is vital for medical practitioners to make effective decisions about treatment. Access and availability of quality radiology services have been a key challenge for the health system. One of the major component of the out of pocket expenditure of the patient have been the diagnostic tests which is increasing and form the second major segment of such expenditure after medicine The objectives envisaged under free diagnostics scheme are to--- i) Ensure the availability of a minimum set of diagnosis appropriate to he level of care. ii) Reduce out of pocket expenditure of patient on diagnostics. iii) Improve overall quality of health care and patients experience as result of availability of comprehensive healthcare in public health facilities.

To achieve the above objectives, Chief Minister's Free Diagnostics services is launched by Hon'ble CM on 11<sup>th</sup> May 2017, to ensure availability of minimum set of diagnostic service at health institutions up to PHC level.

. Under Chief Minister's Free Diagnostics services CT SCAN, X-RAY and laboratory service are being provided free of cost to all irrespective of APL/BPL status under public private partnership (PPP) arrangement. An online dashboard kept in public domain, exits for monitoring of the performance of PPP service provider.

#### **10) Free Drugs Services:**

The Government of Assam has taken various initiatives for procurement of quality drugs. The essential drug are procured in Genric form and provided free of cost to all OPD and IPD patients. Both the Central and State Government provide budgetary support for this initiative of



providing essential drugs free of cost to patients visiting Government hospitals. State has notified the modified Essential Drugs List [EDL] where number of fee drugs has been significantly increased from 205 to 441 to treat communicable and noncommunicable diseases along with super-speciality diseases like Cancer, Nephro, Hemophilia, Thalassemia etc. "Assam Medical Service Corporation Limited" (AMSCL) is incorporated on 2016, as the central procurement agency of the state.

#### **11) Accredited social health activist (ASHA):**

ASHAs form the backbone of NHM programme. Approximately 30619 ASHA volunteers from rural area and 1336 ASHAs from urban area have been providing laudable service in creating awareness about the availability of various Government sponsored programs. ASHAs are volunteers and they received incentive based on performance. "ASHA Payment and performance monitoring system" has been implemented throughout the state to ensure direct bank transfer (DBT) for payment of incentives to ASHAs using PFMS Portal.

#### **12) Boat Clinic:**

The islets and sandbars of the river Brahmaputra popularly known as Chars and Chaporis are among the most backward area of the state. The main threats to these areas is from frequent floods which play a role of devastation of the communities residing in these islands, thus causing a major concern to the health status of the communities. To meet these challenges, Government of Assam initiated boat clinic service in the year 2008 for these communities. Government is providing health services in these areas of river island of the River Brahmaputra in 13 districts of the state with 15 Boat Clinic Units. As per report available, 20.73 lakhs patients were treated in 27,959 of camps organised by Boat Clinic since 2008-09 till September 2018.

#### **13) Susrusha:**

A total 386 patients who have undergone kidney transplantation have received the financial benefit under this scheme during August 2010 to September 2018. Under Susrusha, an amount of Rs.1.00 lakh is granted as financial assistance to people who have undergone kidney transplantation after 1<sup>st</sup> April 2010.

#### **14) Sanjeevani:**

This scheme covers Village Health Outreach Programmes (VHOP) for early screening, diagnosis and follow up for non-communicable and lifestyle diseases. This scheme covers 62 lakh populations every month. A total of 69, 32,831 patients visited Sanjeevani during 1<sup>st</sup> March 2011 to 31<sup>st</sup> March 2018.

#### **15) Sarathi 104 Health Information Helpline:**

Sarathi 104, a 24x7 health information help line has been established for Medical advice and counselling services. Total 1, 37, 09,173 calls received by Sarathi 104 since



7<sup>th</sup> November 2010 to 15<sup>th</sup> September 2018. It is also working as Grievances Redressal System.

### **Major Infrastructure Development under NHM:**

- Construction of 14 numbers of MCH Wings taken up out of which construction of MCH Wings completed.
- Construction of 116 model hospital (CHC) has been taken up, out of which construction of 94 already completed.
- Construction of 50 number of Riverine/ char PHCs taken up, out of which construction of 49 already completed.

### **PUBLIC HEALTH (SANITATION & DRINKING WATER):**

The Ministry of Drinking Water and Sanitation, Government of India, is the Nodal Ministry for the overall policy, planning, funding and coordination of two flagship programmes of the Government of India, namely, the National Rural Drinking Water Programme (NRDWP) for rural drinking water supply and the Swachh Bharat Mission (Gramin) [SBM (G)] for sanitation in the country.

### **Swachh Bharat Mission**

To accelerate the efforts to achieve universal sanitation coverage and to put focus on safe sanitation, the Prime Minister of India launched the Swachh Bharat Mission on 2nd October, 2014. The Mission aims to achieve a Swachh Bharat by 2nd October, 2019, as a fitting tribute to Mahatma Gandhi on his 150<sup>th</sup> birth anniversary. Swachh Bharat, in rural areas shall mean improving the levels of cleanliness through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised.

In Assam, **SWACHH BHARAT MISSION (G)** has aimed at to provide Individual House Hold Latrin (IHHL) facility to every household in Assam. During 2017-18, the total target of IHHL for both APL and BPL of the state was 1549627 numbers while the achievement till 1<sup>st</sup> April 2018 was 2020264 numbers for APL and 437906 numbers for BPL. Likewise the fund available both for central and state was Rs 25, 692.40 lakh (Rs 19754.68 lakh was central share and Rs 5,937.72 lakh was state share). The amount of expenditure from central share was Rs 1395.88 lakh and Rs 28.86 lakh of state share. On the other hand,



under SBM (U) during 2017-18, the achievement of Household toilet was 10967 unit against the target of 21,000 unit. In respect of community toilet the achievement was 66 seats against the target of 200.

### National Rural Drinking Water Programme (NRDWP)

The National Rural Drinking Water Programme (NRDWP) is a Centrally Sponsored Scheme aimed at providing every person in rural India with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis. Safe water is to be readily and conveniently accessible at all times and in all situations and therefore, the scheme focuses on the creation of the infrastructure.

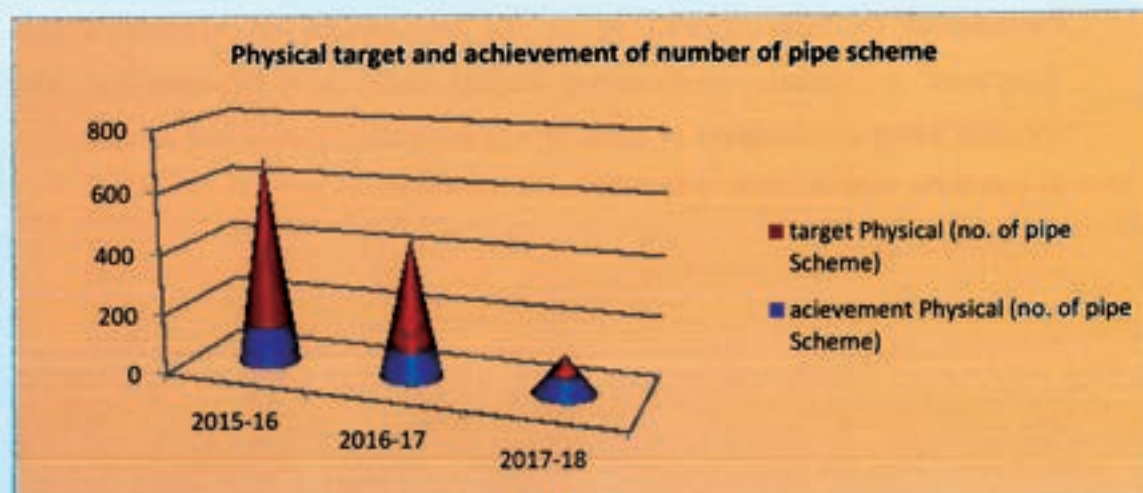
In Assam, the habitations covered with functioning drinking water supply facilities as on 1/4/2018 was 83028 numbers. While schools covered under NRDWP is 170.

The water supply schemes implemented through central sector during the last three years are shown in the table.

**Table – 8**

Year	Target		Achievement	
	Physical (no. of pipe Scheme)	Financial(in lakh)	Physical (no. of pipe Scheme)	Financial(in lakh)
2015-16	550	19424.91	133	16474.57
2016-17	355	10272.00	103	10043.21
2017-18	64	18114.91	62	16712.73

Source: Chief Engineer PHE.





Likewise, scheme wise target and achievement under state sector for the last three years are given at below

**Table – 9**

Year	Target		Achievement	
	Physical (no. of pipe Scheme)	Financial(in lakh)	Physical (no. of pipe Scheme)	Financial(in lakh)
2015-16	94	1789.44	35	3057.735
2016-17	208	7968.00	35	3220.00
2017-18	187	12958.00	55	1694.33

Source: Chief Engineer PHE

During last three years are- 3(three) nos. of Mega pipe water supply were sanctioned during 2015-16 under World Bank Assistance Programme for an amount of Rs. 750.00Crore and so far the expenditure made is Rs.382.43 crore with 45%physical progress. Some other schemes with a target of 96nos. of Community Water purification plan for mitigation of Arsenic affected habitation under NITI Aayog is in progress and so far 64 nos. of plant has been installed. Moreover, 119 nos. of new pipe water supply scheme is proposed to be taken up under National Water Quality Sub-Mission (NWQSM) during this FY 2018-19.

### **SOCIAL WELFARE:**

**Prologue:** The Social Welfare Department, Government of Assam conducts various welfare activities for the development of women and children as well as for generation of social awareness about the problems faced by the children, Women, physically challenged persons, welfare of Transgender community and elderly persons. The Department has been implementing various schemes launched by the Government of India as well as by the Government of Assam. Similarly, the department is regularly implementing various State Level Schemes too, aiming specially better improvement of status of women, elderly person and adolescent girls to serve the ever increasing population of the state.



**UNDER THE MINISTRY OF WOMEN & CHILD DEVELOPMENT, GOVERNMENT OF INDIA:**

**1) Child Development Schemes:**

**Integrated Child Development Services (ICDS):**

The Integrated Child Development Services (ICDS) Scheme is one of the flagship programmes of the Government of India and represents one of the world's largest and unique programmes for early childhood care and development. The beneficiaries under the Scheme are children in the age group of 0-6 years, pregnant women and lactating mothers.

**Step taken by State Government for ICDS scheme:-**

- After Completion of Head Count of beneficiaries in 230 no of ICDS Project the present status stands as below:-
- Total No of ICDS Project-230 nos.
- Children 6months -3years-14, 50,009 nos.
- Children 3years- 6years- 1,56,9,370 nos
- Severely Malnourished Children 6month- 6 years-11298 nos.
- Pregnant Women – 2, 77,950 nos.
- Lactating Mother- 3, 16,346 nos.

**Table – 10**

Rs. In Lakhs

Sl. No	Period	Scheme	Physical Achievement		Financial Achievement		Remarks
			Target	Achievement	Budget Provision	Expenditure	
1	2016-17	ICDS(Central Share)	230 Projects	230 Projects	53778.48	43731.06	
		ICDS (State Share)			5842.05	4385.31	
2	2017-18	ICDS(Central Share)	230 Projects	230 Projects	63750.86	39315.182	
		ICDS (State Share)			7350.00	2645.15	
3	2018-19	ICDS(Central Share)	230 Projects	230 Projects	60659.07	00	
		ICDS (State Share)			7150.00	00	
4	2016-17	SNP(Central Share)	5188703	5188703	16598.76	16598.76	
		SNP (State Share)	5188703	5188703	948.53	948.53	



5	2017-18	SNP(Central Share)	3162017	3162017	20348.62	20348.62	
		SNP (State Share)	1889336	1889336	1514.69	1514.69	
6	2018-19	SNP (Central Share)	3455969	3455969	33608.78	20677.86	
		SNP (State Share)	169004	169004	4056.10	1446.67	

- A state wide “ECCE” curriculum already been prepared and execution will be made very shortly for the 3year-6year children.
- Supplementary Nutrition Programme is being implemented in all the ICDS Project.
- Step has been taken for supply of Take Home Ration (THR) among the children of 6m- 3yrs, Pregnant Women & Lactating mother for 50 days. Similarly Hot cook Meal (HCM) among the children of 3yrs-6yrs age group for the year 2018-19 for 107 days through Anganwadi Centre Managing Committee (AWCMC).A good numbers of 39138 Anganwadi building constructed by the Department till date. The sanitary provision as “Baby Friendly Toilet” @Rs.12000/- per toilet for 4,716 nos of Anganwadi Centres and drinking water facilities will be providing to 1,358 nos of Anganwadi Centre @ Rs.10000/- per unit during the 2018-19.
- An amount of Rs.24, 00, 00,000 (Rupees Twenty four crore) has been budgeted during 2018-19 for repairing of Anganwadi Centre Building.
- The Construction of 1500 Anganwadi Centre building under MGNREGA is also under progress.
- The “VEDENTA” Corporate group has taken up to construct 300 Anganwadi Centre building in 12 high burden District.

## 2) PM’s Overarching Scheme for Holistic Nourishment (POSHAN) Abhiyaan:

POSHAN Abhiyaan is a government of India Initiative to achieve improvement in Nutritional Status of Children from 0-6 years, Adolescent Girls, Pregnant women and Lactating mother in a time bound manner during the next three years beginning 2017-18. India and Assam has been battling issues of malnutrition for decades, but the problem is still rampant. More than half of the young female population in Assam suffers from anaemia. Child Stunting in Assam has declined from 46.5% in 2006 to 36.4% in 2016 – a fall of about



22% but with 1.4 million children under five stunted, Assam contributes to 3% of the stunted children in the country. The POSHAN Abhiyan (National Nutrition Mission) is not the only one of its kind that the Indian government has launched to address this issue.

Under the chairmanship of Honourable Prime Minister Shri Narendra Modi, the Union Cabinet has approved the setting up of National Nutrition Mission (NNM) with a budget of Rs 9046.17 crore, and starts from 2017-18. Honourable Prime Minister formally launched the POSHAN Abhiyaan from Jhunjhunu, Rajasthan on 8<sup>th</sup> March 2018.

The goal is to reduce

- Stunting by 2%,
- Under-nutrition by 2%,
- Anaemia by 3%, and
- Low birth weight by 2% per year.

For stunting the 2% mark is a minimum, as the aim is to reduce the rates of stunting from 38.4% to 25% by the year 2022.

An amount of Rs.11342.03 Crore has been released by the Government of India for implementing the POSHAN Abhiyaan till date. The Department is planning to purchase Smart Phone (CAS) and Devices for the Weighing of Children and Mothers. In the Second Phase another 19 districts have been included in the POSHAN Abhiyaan in Assam during 2018-19. Two (2) Committees - State Level Inter Departmental Task Force on Nutrition and State Level Advisory Committee have also been constituted to roll over the POSHAN Abhiyaan and monitor the same.

3) Scheme for Adolescent Girls (SAG):

The objective of this scheme was to improve the nutrition and health status of girls in the age-group of 11 to 14 years (Out of School), to equip them to improve their home-based and vocational skills, and to promote their overall development. A good number of 54,352 nos School dropout Adolescent girls in age group of 11 to 14 years in 23 nos Districts of Assam has been assessed under Nutrition component @ Rs.9.5/- per day per beneficiaries which is under process.



**Table – 11**

(Rs in Lakhs)

Sl. No	Period	Scheme	Physical Achievement		Financial Achievement		Remarks
			Target	Achievement	Budget Provision	Expenditure	
1	2016-17	Scheme for Adolescent Girls (Central Share)	469521	469521	1356.94	118.96	
		Scheme for Adolescent Girls (State Share)			Nil	Nil	
2	2017-18	Scheme for Adolescent Girls (Central Share)	469521	Nil	341.92	Nil	
		Scheme for Adolescent Girls (State Share)			Nil	Nil	
3	2018-19	Scheme for Adolescent Girls (Central Share)	54352	Nil	Nil	Nil	
		Scheme for Adolescent Girls (State Share)			33.33	Nil	

**4) Integrated Child Protection Scheme (ICPS):**

ICPS is aimed at building a protective environment for children in difficult circumstances & other vulnerable children, through government-civil society partnership. ICPS brings together multiple existing child protection schemes under one umbrella & integrates additional interventions for protecting children & preventing harm.

\* Child Welfare Committees (CWCs) are functional in all 27 District of Assam. Recommendations from Deputy Commissioner of the new of District have been received for selection of Members of CWC and JJB.

- Juvenile Justice Board (JJBs) are Constituted in all 27 District of Assam & functional in all 27 District.
- State Adoption Resource Agency is operational from 2011.
- There are 19 Special Adoption Agencies at present operational in Assam.



- State Child Protection Society has organized a series of training programme for overall staffs of JJ institution on the following issues. Prescribed rules for institutions under JJ.Principal of JJ Act

- Child Right issues
- Psychological support
- How to deal children in conflict with law from the psychological point of view.

\* At present there are 91 nos registered Home in Assam. 23 more Child Care Institution (CCIs) is under process of registration under JJ Act.

### **5. National Crèche Scheme for the Children of Working Mother:**

Under the Scheme, children in the age group 0-6 years from families with monthly income below Rs. 12,000/- are eligible to avail the benefits of this scheme. In addition to being a safe space for the children, the crèches provide services such as supplementary nutrition, pre-school education and emergency health care, etc. The Scheme provides support to voluntary organizations for setting up crèche for children of working and ailing mothers. Under the scheme a Voluntary Organization can run a crèche for 25 children below six years of age.

In 1st January, 2017 National Creche Scheme starts operation across undivided 27 districts across Assam. There are 641 Nos. Creche Centre in Assam. The Break-up of Creche centre are as follows-

1. Social Welfare Board (SWB) = 229
2. Indian Council of Child Welfare (ICCW) = 364
3. BAJSS = 48

The total is 641 Nos. Fund released to Crèche Centre in the year 2016-17 is Rs.2, 17, 96,290.00 and in the year 2017-18 is Rs. 2, 04, 43,260.00.

### **Target for Last three years**

**Table – 12**

Target	Physical	Financial
2016-17	641 Nos.	Rs.2,17,96,290.00
2017-18	641 Nos.	Rs. 2,04,43,260.00
2018-19	641 Nos.	Nil
<b>Achievement of the last three years</b>		
Achievement	Physical	Financial
2016-17	641 Nos.	Rs.2,17,96,290.00
2017-18	641 Nos.	Rs. 2,04,43,260.00
2018-19(Upto October,2018)	641 Nos.	Nil



## WOMEN SECTOR

### **PRADHAN MANTRI MATRU VANDANA YOJANA (PMMVY):**

Pradhan Mantri Matru Vandana Yojana (PMMVY), is a maternity benefit program run by the Government of India. It is implemented by the Ministry of Women and Child Development. It is a conditional cash transfer scheme for Pregnant Women and Lactating Mother (PW&LM) for first live birth only. It provides partial wage compensation to women for wage-loss during childbirth and childcare and provides conditions for safe delivery and good nutrition and feeding practices.

**Benefits under PMMVY:** PW&LM shall receive a cash benefit of Rs. 5000/- in three installments at the following stages as specified.

**Conditionality and Installments:** First Installment at early registration of pregnancy @ Rs. 1,000/-, Second installment received at least one ANC (can be claimed after 6 months of pregnancy) @ Rs. 2,000/- and third Installment after i) Child Birth is registered ii) Child has received first cycle of BCG, OPV, DPT and Hepatitis-B or its equivalent/substitute Rs. 2,000/-

### **Target for Last three years**

**Table- 13**

Target	Physical	Financial
2016-17	2,66,476 Nos.	Rs. 8,06,95,150.00
2017-18		Rs. 1,14,39,82,494.37
2018-19		Rs. 10,07,00,000.00

### **Achievement of the last three years**

**Table- 14**

Achievement	Physical	Financial
2016-17	17,181 Nos.	Rs. 5,15,43,000.00
2017-18	26,892 Nos.	Rs. 4,53,92,206.00
2018-19(Upto October,2018)	70,266 Nos.	Rs. 13,98,38,063.00



## 1) BETI BACHAO BETI PADHAO:

Beti Bachao, Beti Padhao (BBBP) is a social campaign of the Government of India that aims to generate awareness and improve the efficiency of welfare services intended for girls. Since coordinated, convergent efforts are needed to ensure survival, protection and empowerment of the girl child, the Government has announced Beti Bachao Beti Padhao initiative. The BBBP was launched on 24th January, 2015 in Guwahati, Kamrup(Metro) of Assam on pilot basis.

The objectives of this initiative are - prevention of gender biased sex selective elimination, ensuring survival and protection of the girl child and ensuring education and participation of the girl child. From August-September 2018 onwards, another 26 districts have been selected by Government. of India for implementing BBBP scheme under media advocacy and outreach. Action Plan for state wide launch under preparation.

### Target for Last three years

Table – 15

Target	Physical	Financial
2016-17	Covered only in Kamrup district on pilot basis	Rs.44,79,750.00 (Rs.32,50,500.00+Rs.12,29,250.00)
2017-18	Covered all 33 districts of Assam	N/A
2018-19	Covered all 33 districts of Assam	N/A

### Achievement of the last three years

Table – 16

Achievement	Physical	Financial
2016-17	Implemented by DSWO, Kamrup	Rs.32,50,500.00 transferred to DC, Kamrup
2017-18	Process Started all districts.	N/A
2018-19(Upto October,2018)	Process Started all districts.	Rs.12,29,250.00 returned to MWCD

## 1) SWADHAR GREH:

Scheme for Women in Difficult Circumstances was launched by the Department of Women and Child Development in 2001-02. To prevent women from exploitation and to support their survival and rehabilitation, the scheme of Short Stay Home for women and



girls was introduced as a social defense mechanism. The scheme is meant to provide temporary accommodation, maintenance and rehabilitative services to women and girls rendered homeless due to family discord, crime, violence, mental stress, social ostracism or are being forced into prostitution and are in moral danger.

The Scheme envisions a supportive institutional framework for women victims of difficult circumstances so that they could lead their life with dignity and conviction. It envisages that shelter, food, clothing and health as well as economic and social security are assured for such women. It also envisions that the special needs of these women are properly taken care of and under no circumstances they should be left unattended or abandoned which could lead to their exploitation and desolation. For shelter care and eventual social reintegration/ rehabilitation of women in distress and difficult circumstance, 17 nos. of Swadhar Homes are functioning across the State. State Government is required to register on NGO Portal [ngomwd.nic.in](http://ngomwd.nic.in) a State user and directed to all the NGOs implementing Swadhar Greh Scheme to be registered as NGO users portal. The registration process is going on.

#### Target for Last three years

**Table – 17**

Target	Physical	Financial
2016-17	15 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Rs. 1,74,48,200.00
2017-18	17 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Rs. 2,04,33,541.00
2018-19	18 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Not yet received.

#### Achievement of the last years

**Table – 18**

Achievement	Physical	Financial
2016-17	15 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Rs. 1,74,48,200.00
2017-18	17 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Rs. 2,04,33,541.00
2018-19(Upto October,2018)	18 Nos. Swadhar Grehs (30 no. beneficiaries in each)	Not yet received.



## **1) ASSISTANCE TO VOLUNTARY ORGANIZATION:**

Government of Assam in the Social Welfare Department has been providing financial assistance in terms of grants-in-aid to the Voluntary Organizations/ NGOs for the welfare of weaker sections of the society, since several years. The Government has decided to provide similar grants to the voluntary Organizations/ NGOs during the current financial years 2018-19 also.

**CURRENT STATUS** – With a view to select the Voluntary Organizations/ NGOs applications from renowned, leading and reputed organizations working on the following areas are invited: (a) Women Welfare; (b) Child Welfare; (c) Welfare of Disable & Mentally Retarded; (d) Welfare of Old and Infirm Persons & (e) Drug Abuse. Applications received from the Districts.

## **GOVERNMENT RUN HOMES:**

It is a Government Home for Women who do not have any shelter. Vocational training is provided to them for rehabilitation. This Home was first established in the year 1957-58. Alongwith these home, there is a Training cum production centre where several skill development training are given to the boarders in fields like embroidery, doll making, knitting, fancy bag making & weaving etc. Re-integration with the family or marriage or employment of the boarders is also initiated there. There are total 7 (Seven) numbers of Home for Destitute Women in Assam.

## **ONE STOP CENTRE (OSC):**

**Aims & Objectives:** One Stop Centres (OSC) is intended to support women affected by violence, in private and public spaces, within the family or community and at the workplace. Women facing physical, sexual, emotional, psychological and economic abuse, irrespective of age, class, caste, education status, marital status, race and culture will be facilitated with support and redressed by providing specialized services. Government of India provided 100 % fund for this scheme.



**Target for last three years:**

**Table – 19**

Target	Physical	Financial
2016-17	5	11449920.00
2017-18		
2018-19	33	

**Achievement of the last three years:**

**Table – 20**

Achievement	Physical	Financial
2016-17	5	
2017-18		6457716.00
2018-19 ( Upto October,2018 )		

**WOMEN HELPLINE- 181:**

**Aims & Objectives** : The Scheme of Universalisation of Women Helpline is intended to provide 24 hours immediate and emergency response to women affected by violence through referral (linking with appropriate authority such as police, One Stop Centre, hospital) and information about women related government schemes programs across the country through a single uniform number. Government of India provided 100 % fund for this scheme.

**Target for last three years:**

**Table – 21**

Target	Physical	Financial
2016-17	1	3454000.00
2017-18		
2018-19		

**Achievement of the last three years:**



**Table – 22**

Achievement	Physical	Financial
2016-17	1	
2017-18	1	16,58,058.00
2018-19 ( Upto October,2018 )	1	17,95,542.00

**UJJAWALA GREHA:**

**Aims & Objectives:** The problem of trafficking of women and children for commercial exploitation is especially challenging due to its myriad complexities and variation. Poverty, low status of women, lack of a protective environment etc. Are some of the causes for trafficking.

Keeping the above issues and gaps in mind, the Union Ministry of Women and Child Development formulated central scheme "Ujjawala"- which is a comprehensive scheme for rehabilitation and reintegration of trafficking victims.

Funding pattern of this scheme is 80:10:10 where 80% provided by Government of India , 10% provided by State and 10% has to be born by the implementing agency

**Target** for last three years:

**Table – 23**

Target	Physical	Financial
2016-17	23	25953600.00
2017-18	23	19535055.00
2018-19	23	Nil

**Achievement** of the last three years:**Central Share**

**Table – 24**

Achievement	Physical	Financial
2016-17	23	25953600.00
2017-18	23	19535055.00
2018-19 (Upto October,2018)	23	Nil



**Achievement of the last three years: State Share:****Table – 25**

Achievement	Physical	Financial
2016-17	23	29123044.00
2017-18	23	21959438.00
2018-19 (Upto October,2018)	23	Nil

**MAHILA SHAKTI KENDRA SCHEME:**

It will provide an interface for rural women to approach the government for availing their entitlements also empowering them through training and capacity building.

**Aims & Objectives :** Government of India has approved a new scheme namely, Mahila Shakti Kendra which is meant to provide "one stop convergent support services for empowering rural women with opportunities for skill development, employment, digital literacy, health and nutrition". Funding pattern of this scheme is 90:10 where 90% provided by GOI , 10% provided by State.

Mahila Shakti Kendra scheme is implemented in 8 (eight) districts in Assam namely- 1) Hailakandi, 2) Udalguri, 3) Darang, 4) Dhubri, 5) Goalpara, 6) Barpeta, 7)Baksa, 8) Kamrup (M)

**Target** for last three years:

**Table – 26**

Target	Physical	Financial
2016-17		
2017-18	8	104087925.00
2018-19		

**Achievement of the last three years: Central Share**

**Table – 27**

Achievement	Physical	Financial
2016-17	Nil	Nil
2017-18	8	104087925.00
2018-19 (Upto October,2018)	Nil	Nil

**State Share**

**Table – 28**

Achievement	Physical	Financial
2016-17	Nil	Nil
2017-18	8	104087925.00
2018-19 (Upto October,2018)	Nil	Nil



### **PENSION TO SOCIAL WORKER:**

The right to life, which includes the right to live with dignity is guaranteed to every person under the constitution of India. The Government of Assam has decided to implement the scheme "Pension to Social Worker" in the year 1995-96 through the Department of Social Welfare. This pension scheme is for all the citizens of the state of Assam. The employees of the Central, State Government Public Sector and Private Companies shall not be entitled to the benefit of pension through this scheme. The Main objective of the scheme is to provide monthly pension to distinguished and dedicated social workers after attaining 60 years of her/his age and to provide financial support i.e. Rs 20,000/- (Rupees Twenty thousand) only per month to the selected social worker(s) to provide for more effective protection of the rights of women guaranteed under the Constitution who are victims of violence of any kind occurring within the family and for matters connected therewith or incidental thereto. This Act is called the Protection of Women from Domestic Violence Act, 2005.

#### **CURRENT STATUS –**

1. The District Social Welfare Officer in each of the 27 (old) districts are designated as the Nodal Officers in the District. The District Women's Cell contributes together on the matter. Proposal received from the Districts for registration of NGOs as Service providers for the year 2018-19. Number of total Service providers received from Districts (with approval of DLSC) Registration certificates have been provided to the selected service providers i.e. 45 nos on 21<sup>st</sup> Nov 2018.
2. A State level orientation workshop has been organized on 2<sup>nd</sup> and 3<sup>rd</sup> Aug, 2018 at Directorate of Social Welfare in association with North east Network.

### **KASTURBA GANDHI NATIONAL MEMORIAL TRUST:**

Kasturba Gandhi National Memorial Trust, Assam Branch is a branch of All India Kasturba Gandhi National Memorial Trust, Kasturbagram Indore, M.P. The main aims and objectives of the trust are- 1) To impart social service through various welfare programmes to the poor and needy mothers and children. 2) Welfare Centre for Children and Women.

**Budgeted amount** Rs. 10.15 lakhs (Rupees ten lakhs fifteen thousand) only for the year 2018-19.

### **NARI SHAKTI PURASKAR:**

Ministry of Women and Child Development celebrates International Women's Day every year on 8<sup>th</sup> March. Nari Shakti Puraskars are conferred to eminent women and institutions in recognition of their service towards the cause of women empowerment. Nari Shakti Puraskars showcase the government's commitment towards women with the aim of strengthening their legitimate place in the society. It will also provide an opportunity to the



current generation to understand the contribution of women in building of society and the nation.

**Budgeted Amount-** Rs.12 lakhs (Rupees twelve lakhs) only for the year 2018-19

**CURRENT STATUS** – 5 nos of nominations both individual and institution for National Award under Narishaktipuaskar have been sent to the Government of India

#### **STATE COMMISSION FOR WOMEN:**

Assam State Commission for women is a statutory body under the "Assam State Commission for women Act,1994". It consists of the Chairperson, Vice Chairperson, 7 (seven) members and Member Secretary appointed by the State Government. The Functions of the Commission include -A) to investigate and examine all matters relating to women. B) Look into complaints and take up suo motu notices relating to issues of women.

Budgeted Amount for the current financial year (2018-19) for salary is Rs 45 lakhs (Rupees Forty Five Lakhs) only. Budgeted Amount for the current financial year (2018-19) for repairing and renovation of Office Building of State Women Commission is Rs 14.20 lakhs (Rupees Fourteen Lakhs Twenty Thousand) only.

#### **FINANCIAL ASSISTANCE AND SUPPORT SERVICES TO VICTIMS OF RAPE:**

The right to life, which includes the right to live with dignity, is guaranteed to every person under the Constitution of India. The inherent dignity of the human being and the right of protection from any form of violence against women also forms part of India's International obligations under instruments such as the Universal Declaration of Human Rights (UDHR) and the Convention on Elimination of All Forms of Discrimination against Women (CEDAW). Further, the UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, 1985 recognizes the need to respect the dignity of the victim and their entitlement to prompt redress for the harm suffered through access to the criminal justice system, reparation and support services to assist their recovery. Rape is one of the most violent forms of crimes against women, which not only impacts her bodily integrity but in the long-run, impairs her capacity to develop meaningful personal and social relationships, and affects her life and livelihood. **Objectives of the Scheme:** In furtherance of the goal of ensuring restorative justice to affected women, the Scheme aims to provide: a) Financial assistance to victims of rape; b) Support services such as shelter, counselling, medical aid, legal assistance, education and vocational training depending upon the needs of the victim.



**Target Group/ Beneficiaries:** The scheme shall cover women/ minor girls who are victims of rape, hereinafter referred to as “affected women”.

**Table – 29**

Name of the Scheme	Year	Physical Target	Physical Achievement	Financial Target (Rs. in lakh)	Financial Achievement
Financial Assistance to Victim of Rape	2016-17	28 districts	Nil	5.00	Nil
	2017-18	33 districts	Nil	5.00	Nil
	2018-19	33 districts	Nil	5.00	Nil

**WORKING WOMEN HOSTEL:**

The scheme aims at providing available, safe and conveniently located accommodation for working women, especially, with day care facility for their children, Preparing State guideline proper implementation of the Scheme in urban, semi urban, and rural areas and it is proposed to establish 43 Nos. of Working Women Hostel in 33 districts of Assam based upon the necessity, with Kamrup(M), Kamrup(R), Nagoan, Jorhat, Dibrugrah and Tinsukia districts proposed to have more than one working women hostel.

**CURRENT STATUS** – A Scheme for Financial Assistance to Women victims of rape and molestations being prepared and submitted to Government for approval.

**Table – 30**

Name of the Scheme	Year	Physical Target	Physical Achievement	Financial Target (Rs. in lakh)	Financial Achievement
Working Women Hostel (State Budget)	2016-17	Nil	Nil	500.00	Nil
	2017-18	33 districts	Nil	300.00	Nil
	2018-19	33 districts	Nil	200.00	Nil



## **THE SEXUAL HARASSMENT OF WOMEN AT WORKPLACE(PREVENTION, PROHIBITION AND REDRESSAL) ACT, 2013:**

The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 was enacted to ensure safe working spaces for women and to build enabling work environments that respect women's right to equality of status and opportunity. An effective implementation of the Act will contribute to the realization of their right to gender equality, life and liberty, equality in working conditions everywhere. The sense of security at the workplace will improve women's participation in work, resulting in their economic empowerment and inclusive growth. The Act recognizes the right of every woman to a safe and secure workplace environment irrespective of her age or employment/work status. Hence, the right of all women working or visiting any workplace whether in the capacity of regular, temporary, adhoc, or daily wages basis is protected under the Act. It includes all women whether engaged directly or through an agent including a contractor, with or without the knowledge of the principal employer. They may be working for remuneration, on a voluntary basis or otherwise. Their terms of employment can be express or implied. Further, she could be a co-worker, a contract worker, probationer, trainee, apprentice, or called by any other such name. The Act also covers a woman, who is working in a dwelling place or house.

**CURRENT STATUS – 1.**The Directorate of Social Welfare has taken up with various State Government agencies for the establishment of Local Committees in respective offices headed by the senior most Woman Officer – to hear complaints on Sexual Harassment at workplace.

2. A State level orientation workshop has been organized on 2<sup>nd</sup> and 3<sup>rd</sup> August, 2018 at Directorate, Social Welfare in association with North East Network.

3. Communication has been done with all Deputy Commissioners to constitute internal committee in all public and private sector under their jurisdiction as per Act.

## **Schemes implemented by Social Welfare Department, Assam for Persons with Disabilities(PwDs), Elderly Persons and Ttransgenders**

### **Introduction :-**

According to 2011 Census, there are 4.80 lakh of Persons with Disabilities (PwDs) in Assam. A standard operating procedure has been formulated to organise screening camps in all blocks of the districts for identification of Persons with Disabilities along with issuance of Disability Certificates so that every eligible person with disability gets the opportunity in getting beneficial schemes implemented by the Social Welfare and other Departments.

**(1) Issuance of Disability Certificates to Persons with Disabilities and the Rights:-**The Central Government notified the Rights of Persons with Disabilities Act,2016 on 28.12.2016. Subsequently the Act has been brought into force w.e.f.19.04.2017. A Standard Operating Procedure has already been formulated in issuing of Disability Certificates to the PwDs. Screening camps have also been organised in different Blocks of the districts to find out the



persons eligible for obtaining Disability Certificates. As per data- base prepared, the No. of eligible beneficiaries is **1, 30,411**. It needs to be mentioned that an amount of Rs.1,00,000 (Rupees one lakh) only has been allotted (i.e.,Rs.10,000 per camp for 10 camps) to each of the Districts including newly created Districts, namely, Biswanath, Majuli, Charaideo, Hojai, South Salmara, and West KarbiAnlong for organizing screening camps for identification and issuance of Disability Certificates to PwDs.

**(2) Rehabilitation Grants to Persons with Disabilities (PwDs)** : Rehabilitation grants are provided @ Rs.10,000 to each of the persons with disabilities for their self-employment and rehabilitation. But from the year of 2018-19, the grant amount and number of beneficiaries may be enhanced considering availability of budget provision earmarked for 2018-19. For the purpose, a guideline has also been prepared and placed before the Government for approval.

**(3) “DeenDayalDivyangjanSahajyaAchoni”** :- The Government of Assam launched the scheme on 3<sup>rd</sup> Dec,2017 in conformity with the “International Day for Persons with Disabilities” under which one-time grant of Rs.5,000 is provided to each of the persons with disabilities having Disability Certificates. But **there will be no such scheme for 2018-19**. The new scheme called “*DeenDayalDivyangjan Pension Achoni*” has been introduced in place of it.

**(4) Unemployment allowances to the Persons with Disabilities & Allowances to families with differently-abled children**:- Unemployment allowances are given to those Persons with Disabilities who have registered their names in the special Employment Exchanges. An amount of Rs. 500/-p.m (i.e., 6000/-yearly) is provided to each of the unemployed youth with disabilities and for the families having children with mental retardation. But **there will be no such scheme for 2018-19**. The new scheme called “*DeenDayalDivyangjan Pension Achoni*” has been introduced in place of it.

**(5) Scholarships to Students with Disabilities** :- Scholarships are provided to the students with disabilities @Rs.200/- pm (i.e.,2400/-yearly) to each who are studying in schools and colleges. Apart from this, scholarships are also provided to the students with disabilities Rs.3,000/- p.m. to each (i.e., 36,000/-yearly) in pursuing their medical & technical education courses.

**(6) Project Reach-Out and Respond (Sahari) under Community Education** :- With a joint initiative of Assam State Legal Service Authority in partnership with Social Welfare Department and Health & Family Welfare Department, Assam, the “*Sahari*” was organised at Guwahati and Dibrugarh comprising districts of **Kamrup(M), Kamrup, Darrang, Nagaon, Morigaon, Goalpara, Dibrugarh, Tinsukia, & Sivsagar** where Aids & Appliances and prosthetic limbs were distributed free of cost to 3,966 nos. of beneficiaries by *BhagawanMahaveerVikalangSahayataSamiti* (BMVSS) and Artificial Limb Manufacturing Corporation of India(ALIMCO). **Details are as follows.**



**(7) Higher Education to the Students with Mental Retardation:-** 6 Nos. of project proposals have been received from different NGOs, i.e., (i)*ShishuSarothi*, (ii)*Destination*, (iii)*Mon Vikash Kendra*, (iv)*Ashadeep* and (v)*PreronaPratibandhiShishubikash Kendra* and (vi) *NEVARD* seeking grants-in-aid in connection with renovation of the existing premises as well as for creation of necessary infrastructures along with house rent, activities for capacity building /skill development etc. which are required for the students with mental retardation. A budget provision for the year 2018-19 amounting to Rs.2.00 crore only has been earmarked against the scheme.

**(8) Government Schools for students with disabilities:** - The following Government schools are functioning for the students with disabilities, such as, deaf and dumb, hearing and visually impaired.

**(9) Old Age Homes :-**

It is seen that the older persons in many cases are facing lot of constraints and troubles for their survival in old age period. Incidences of in-humanitarian acts towards the senior citizens are taking place which are frequently noticed. Some of them are abandoned or neglected by their families, children or relatives making them completely homeless and helpless. So, the Social Welfare Department is providing grants-in-aid to some organizations who are actively working for safety of the older persons.

**(10)Night shelter Homes :-** There are now 30 Nos. of Night Shelter Homes for shelter-less persons which are being run by 22 Nos. of NGOs in 18 districts with the grants-in-aid provided by the Social Welfare Department, Assam.

**(11) Prevention of Alcoholism and substance (Drugs) abuse :-** For implementation of the scheme of prevention and substances (Drugs)abuse, Government of Assam has already submitted proposal to the Ministry of Social Justice & Empowerment ,New Delhi for an amount of Rs.2.43 crore vide letter No.DSW(SJ)20/2017/4, dated, Guwahati, the 3<sup>rd</sup> April, 2017. The scheme is to be implemented through identified and recommended NGOs to whom the funds are provided by the GOI. The project proposals have also been received from different NGOs/Voluntary organizations during 2017-18 against the scheme. These have already been sent to Government of Assam maintaining the procedure as framed by the NITI Ayog for onward submission to GOI.

**(12) Welfare of Transgender community :-**This is a new scheme which is introduced in 2018-19. Transgenders are a section of people in our society. They have also constitutional rights to enjoy all the facilities and privileges equally along with other people in our society as envisaged in the Constitution. But due to some biological disorder or some social taboo, they are lagging behind from the rest of the community. This new scheme proposes to include preparation of data-base on transgender community, skill development training, entrepreneurships etc. so as to bring about a transformative change in their lifestyle and livelihood activities with proper rehabilitation.

\*\*\*\*\*



**ANNEXURE- 1.01  
DISTRICT-WISE POPULATION IN ASSAM**

District	Population				Population Density, 2011
	2001	2011	Decadal Growth Rate 2001-11	% share*	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Kokrajhar	843243	887142	5.21	2.84	269
Dhubri	1566396	1949258	24.44	6.25	896
Goalpara	822035	1008183	22.64	3.23	553
Barpeta	1394755	1693622	21.43	5.43	742
Morigaon	776256	957423	23.34	3.07	617
Nagaon	2314629	2823768	22.00	9.05	711
Sonitpur	1665125	1924110	15.55	6.17	370
Lakhimpur	889010	1042137	17.22	3.34	458
Dhemaji	571944	686133	19.97	2.20	212
Tinsukia	1150062	1327929	15.47	4.26	350
Dibrugarh	1185072	1326335	11.92	4.25	392
Sivasagar	1051736	1151050	9.44	3.69	431
Jorhat	999221	1092256	9.31	3.50	383
Golaghat	946279	1066888	12.75	3.42	305
Karbi Anglong	813311	956313	17.58	3.06	92
Dima Hasao	188079	214102	13.84	0.69	44
Cachar	1444921	1736617	20.19	5.56	459
Karimganj	1007976	1228686	21.90	3.94	679
Hailakandi	542872	659296	21.45	2.11	497
Bongaigaon	612665	738804	20.59	2.37	676
Chirang	433061	482162	11.34	1.54	251
Kamrup	1311698	1517542	15.69	4.86	489
Kamrup Metro	1059578	1253938	18.34	4.02	1313
Nalbari	689053	771639	11.99	2.47	733
Baksa	857947	950075	10.74	3.04	387
Darrang	759858	928500	22.19	2.98	586
Udalguri	758746	831668	9.61	2.66	413
<b>Assam</b>	<b>26655528</b>	<b>31205576</b>	<b>17.07</b>	<b>100</b>	<b>398</b>

Contd...

\* % share of district population to state population.



**ANNEXURE- 1.01  
DISTRICT-WISE POPULATION IN ASSAM**

District	Population				Population Density, 2011
	2001	2011	Decadal Growth Rate 2001-11	% share*	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Kokrajhar	843243	887142	5.21	2.84	269
Dhubri	1566396	1949258	24.44	6.25	896
Goalpara	822035	1008183	22.64	3.23	553
Barpeta	1394755	1693622	21.43	5.43	742
Morigaon	776256	957423	23.34	3.07	617
Nagaon	2314629	2823768	22.00	9.05	711
Sonitpur	1665125	1924110	15.55	6.17	370
Lakhimpur	889010	1042137	17.22	3.34	458
Dhemaji	571944	686133	19.97	2.20	212
Tinsukia	1150062	1327929	15.47	4.26	350
Dibrugarh	1185072	1326335	11.92	4.25	392
Sivasagar	1051736	1151050	9.44	3.69	431
Jorhat	999221	1092256	9.31	3.50	383
Golaghat	946279	1066888	12.75	3.42	305
Karbi Anglong	813311	956313	17.58	3.06	92
Dima Hasao	188079	214102	13.84	0.69	44
Cachar	1444921	1736617	20.19	5.56	459
Karimganj	1007976	1228686	21.90	3.94	679
Hailakandi	542872	659296	21.45	2.11	497
Bongaigaon	612665	738804	20.59	2.37	676
Chirang	433061	482162	11.34	1.54	251
Kamrup	1311698	1517542	15.69	4.86	489
Kamrup Metro	1059578	1253938	18.34	4.02	1313
Nalbari	689053	771639	11.99	2.47	733
Baksa	857947	950075	10.74	3.04	387
Darrang	759858	928500	22.19	2.98	586
Udalguri	758746	831668	9.61	2.66	413
<b>Assam</b>	<b>26655528</b>	<b>31205576</b>	<b>17.07</b>	<b>100</b>	<b>398</b>

Contd...

\* % share of district population to state population.



## ANNEXURE - 1.03

District	% of Rural Population		% of Urban Population		% of Child (0-6) Population		Child Sex Ratio, 2011
	2011	DGR 2001-11	2011	DGR 2001-11	2001	2011	
<i>1</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>21</i>
Kokrajhar	93.81	5.11	6.19	6.68	17.95	15.43	954
Dhubri	89.55	27.05	10.45	5.85	20.86	18.89	968
Goalpara	86.31	15.23	13.69	106.36	19.36	17.03	963
Barpeta	91.30	21.96	8.70	16.15	19.01	16.99	961
Morigaon	92.34	19.76	7.66	92.95	19.16	17.11	956
Nagaon	86.91	20.52	13.09	32.79	18.42	16.29	964
Sonitpur	90.96	17.52	9.04	-1.11	16.24	14.44	966
Lakhimpur	91.24	15.41	8.76	40.18	16.91	15.04	959
Dhemaji	92.96	19.65	7.04	24.34	17.40	15.19	950
Tinsukia	80.06	14.80	19.94	18.21	16.07	13.69	960
Dibrugarh	81.62	13.17	18.38	6.69	14.57	12.31	962
Sivasagar	90.44	9.05	9.56	13.29	14.18	12.11	960
Jorhat	79.81	5.29	20.19	28.73	13.40	11.41	964
Golaghat	90.84	12.02	9.16	20.46	15.11	12.63	963
Karbi Anglong	88.19	16.91	11.81	22.88	18.47	15.86	959
Dima Hasao	70.81	17.85	29.19	5.14	16.38	15.14	967
Cachar	81.83	14.28	18.17	56.65	15.86	14.79	954
Karimganj	91.07	19.79	8.93	48.54	17.60	17.25	969
Hailakandi	92.70	22.53	7.30	9.20	18.60	16.88	954
Bongaigaon	85.14	22.03	14.86	12.96	18.09	15.75	969
Chirang	92.67	9.50	7.33	41.30	18.25	15.18	968
Kamrup	90.62	9.69	9.38	145.16	15.61	13.18	967
Kamrup Metro	17.30	3.57	82.70	21.98	11.80	10.00	946
Nalbari	89.28	4.13	10.72	200.99	14.20	12.35	967
Baksa	98.71	9.31	1.29	--	16.19	12.93	966
Darrang	94.02	21.56	5.98	33.07	19.32	16.85	969
Udalguri	95.48	9.44	4.52	13.43	16.48	13.62	973
<b>Assam</b>	85.90	15.47	14.10	27.89	16.87	14.86	962



## ANNEXURE - 1.04

## DISTRICT-WISE AREA, SUB-DIVISIONS, TOWNS, VILLAGES, BLOCKS AND GAON PANCHAYATS IN ASSAM, 2011

District	Area in Sq. Km.		*Sub-Division	Towns (Statutory+Census)	No. of Villages		CD Blocks	**Gaon Panchayat	Revenue Circle
	Total (in Sq.Km.)	Rural (in %)			Total	Inhabited			
1	2	3	4	5	6	7	8	9	10
Kokrajhar	3296	99.5	4	4	1068	1053	5	-	9
Dhubri	2176	98.5	3	9	1091	1052	14	168	9
Goalpara	1824	96.5	2	11	829	779	8	81	5
Barpeta	2282	98.4	4	9	835	825	12	129	9
Morigaon	1551	98.4	1	6	632	598	5	85	5
Nagaon	3973	98.0	3	17	1412	1361	18	239	10
Sonitpur	5204	98.9	4	8	1876	1798	14	158	7
Lakhimpur	2277	98.4	3	4	1184	1146	9	81	7
Dhemaji	3237	99.5	2	4	1319	1264	5	65	6
Tinsukia	3790	98.4	3	13	1168	1136	7	85	4
Dibrugarh	3381	98.7	3	9	1348	1318	7	93	7
Sivasagar	2668	98.4	3	7	875	862	9	118	6
Jorhat	2851	96.8	3	11	848	763	8	110	6
Golaghat	3502	99.0	4	7	1125	1032	8	102	6
Karbi Anglong	10434	99.6	4	7	2921	2712	11	-	4
Dima Hasao	4888	99.6	3	4	695	676	5	-	4
Cachar	3786	98.3	4	19	1040	998	15	163	5
Karimganj	1809	98.9	3	7	936	915	7	96	5
Hailakandi	1327	99.2	1	3	331	330	5	62	4
Bongaigaon	1093	97.1	2	5	563	535	5	65	5
Chirang	1923	99.4	2	3	508	501	2	-	6
Kamrup	3105	97.6	3	16	1068	1037	14	139	12
Kamrup Metro	955	72.5	6	12	216	204	3	21	6
Nalbari	1052	94.7	4	11	456	455	7	65	9
Baksa	2457	99.8	3	2	690	679	5	-	13
Darrang	1585	99.2	1	3	561	552	5	75	6
Udalguri	2012	99.5	2	3	800	791	6	-	9
<b>Assam</b>	<b>78438</b>	<b>98.4</b>	<b>80</b>	<b>214</b>	<b>26395</b>	<b>25372</b>	<b>219</b>	<b>2200</b>	<b>184</b>

\* Source: Gazette Notification on 25th January, 2016

\*\* Source: Panchayat &amp; Rural Development.

Area, Towns and Villages as per Census 2011.



**ANNEXURE- 1.05**  
**DISTRIBUTION OF SCHEDULE CASTES AND SCHEDULE TRIBES POPULATION**  
**IN ASSAM, CENSUS 2011**

District	Schedule Castes		Schedule Tribes	
	Population	Sex Ratio	Population	Sex Ratio
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Kokrajhar	29570	922	278665	996
Dhubri	70395	936	6332	980
Goalpara	45094	961	231570	996
Barpeta	95320	939	27344	1021
Morigaon	117841	958	136777	1000
Nagaon	266350	952	115153	994
Sonitpur	109130	955	232207	973
Lakhimpur	81840	963	249426	968
Dhemaji	44225	922	325560	968
Tinsukia	37688	938	82066	965
Dibrugarh	58876	929	102871	985
Sivasagar	42347	963	49039	962
Jorhat	88665	962	139971	977
Golaghat	62298	959	111765	981
Karbi Anglong	44961	918	538738	977
Dima Hasao	4337	853	151843	984
Cachar	264897	947	17569	1011
Karimganj	157890	940	1940	952
Hailakandi	70659	943	691	952
Bongaigaon	82784	947	18835	1009
Chirang	35135	941	178688	1002
Kamrup	107827	952	182038	977
Kamrup Metro	101789	953	75121	982
Nalbari	60216	964	23364	998
Baksa	73083	947	331007	998
Darrang	40260	958	8419	958
Udalguri	37844	951	267372	1002
<b>Assam</b>	<b>2231321</b>	<b>948</b>	<b>3884371</b>	<b>985</b>



**ANNEXURE - 1.06**  
**DISTRICT-WISE LITERACY RATE BY SEX IN ASSAM, CENSUS 2011**

District	Total	Male	Female	Rural	Urban	Male-Female Literacy Gap		
						Total	Rural	Urban
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
Kokrajhar	65.22	71.89	58.27	63.63	87.86	13.62	13.92	8.53
Dhubri	58.34	63.10	53.33	55.25	82.28	9.77	9.81	9.77
Goalpara	67.37	71.46	63.13	65.93	76.08	8.33	8.33	8.44
Barpeta	63.81	69.29	58.06	61.47	86.28	11.23	11.53	8.50
Morigaon	68.03	71.90	64.04	66.60	84.17	7.86	7.83	7.98
Nagaon	72.37	76.51	68.07	69.96	86.34	8.44	8.70	6.82
Sonitpur	67.34	73.65	60.73	64.98	81.65	12.92	13.66	5.93
Lakhimpur	77.20	83.52	70.67	76.22	86.93	12.85	13.36	7.47
Dhemaji	72.70	79.84	65.21	71.81	84.02	14.63	15.04	9.11
Tinsukia	69.66	77.19	61.73	65.05	82.08	15.46	17.20	7.72
Dibrugarh	76.05	82.82	68.99	72.75	88.00	13.83	15.55	5.95
Sivasagar	80.41	85.84	74.71	79.27	90.92	11.13	11.82	4.10
Jorhat	82.15	87.63	76.45	80.01	72.50	11.18	12.66	5.17
Golaghat	77.43	83.56	71.09	75.94	91.74	12.47	13.22	5.14
Karbi Anglong	69.25	76.14	62.00	66.69	87.37	14.14	14.90	8.64
Dima Hasao	77.54	83.29	71.33	71.13	92.24	11.96	13.84	6.67
Cachar	79.34	84.78	73.68	77.08	87.39	11.10	12.37	5.96
Karimganj	78.22	84.12	72.09	76.66	92.82	12.03	12.84	4.95
Hailakandi	74.33	80.74	67.60	72.73	92.93	13.14	13.94	4.77
Bongaigaon	69.74	74.87	64.43	66.42	87.37	10.44	10.83	8.25
Chirang	63.55	70.24	56.65	62.08	81.28	13.59	13.83	10.73
Kamrup	75.55	81.30	69.47	74.21	87.89	11.83	12.14	9.36
Kamrup Metro	88.71	92.13	85.07	76.45	90.77	7.06	12.14	5.99
Nalbari	78.63	84.36	72.57	77.22	89.89	11.79	12.29	7.84
Baksa	69.25	77.03	61.27	69.18	74.54	15.76	15.80	12.15
Darrang	63.08	67.87	58.04	61.50	85.92	9.83	9.89	8.33
Udalguri	65.41	72.58	58.05	64.43	85.14	14.53	14.83	8.05
<b>Assam</b>	72.19	77.85	66.27	69.34	88.47	11.58	12.37	6.87



**ANNEXURE - 1.07**  
**DISTRICT WISE PERCENTAGE OF RELIGIOUS POPULATION IN ASSAM,**  
**CENSUS 2011**

District	Population	Hindu	Muslim	Christian	Sikh	Buddhist	Jain	Other*	Religion not stated
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
Kokrajhar	887142	59.64	28.44	11.40	0.01	0.19	0.04	0.01	0.27
Dhubri	1949258	19.92	79.67	0.21	0.01	0.01	0.09	0.00	0.08
Goalpara	1008183	34.51	57.52	7.72	0.08	0.02	0.05	0.01	0.10
Barpeta	1693622	29.11	70.74	0.06	0.01	0.00	0.02	0.00	0.06
Morigaon	957423	47.20	52.56	0.09	0.01	0.01	0.03	0.00	0.11
Nagaon	2823768	43.39	55.36	0.95	0.11	0.04	0.04	0.00	0.11
Sonitpur	1924110	73.95	18.22	7.18	0.07	0.26	0.05	0.01	0.26
Lakhimpur	1042137	76.49	18.57	4.43	0.04	0.10	0.02	0.23	0.11
Dhemaji	686133	95.47	1.96	1.27	0.04	0.13	0.02	0.92	0.18
Tinsukia	1327929	88.96	3.64	5.79	0.15	1.22	0.06	0.03	0.14
Dibrugarh	1326335	90.35	4.86	3.99	0.17	0.35	0.08	0.00	0.18
Sivasagar	1151050	87.51	8.30	2.88	0.08	0.34	0.02	0.74	0.12
Jorhat	1092256	92.31	5.01	1.93	0.14	0.22	0.07	0.05	0.28
Golaghat	1066888	85.99	8.46	4.74	0.11	0.36	0.05	0.13	0.16
Karbi Anglong	956313	80.10	2.12	16.50	0.04	0.65	0.04	0.37	0.17
Dima Hasao	214102	67.07	2.04	29.57	0.10	0.32	0.03	0.55	0.33
Cachar	1736617	59.83	37.71	2.17	0.02	0.02	0.10	0.01	0.16
Karimganj	1228686	42.48	56.36	0.98	0.01	0.04	0.04	0.01	0.09
Hailakandi	659296	38.10	60.31	1.29	0.01	0.07	0.04	0.10	0.08
Bongaigaon	738804	48.61	50.22	0.80	0.05	0.03	0.12	0.00	0.16
Chirang	482162	66.50	22.66	10.32	0.02	0.08	0.03	0.10	0.29
Kamrup	1517542	57.82	39.66	2.19	0.02	0.01	0.09	0.00	0.20
Kamrup Metro	1253938	84.89	12.05	1.50	0.29	0.13	0.74	0.01	0.39
Nalbari	771639	63.71	35.96	0.06	0.01	0.00	0.13	0.00	0.13
Baksa	950075	82.40	14.29	2.85	0.02	0.13	0.03	0.04	0.25
Darrang	928500	35.25	64.34	0.18	0.05	0.01	0.08	0.00	0.09
Udalguri	831668	73.64	12.66	13.25	0.03	0.20	0.01	0.03	0.18
<b>Assam</b>	<b>31205576</b>	<b>61.47</b>	<b>34.22</b>	<b>3.74</b>	<b>0.07</b>	<b>0.18</b>	<b>0.08</b>	<b>0.09</b>	<b>0.16</b>

\* Other Religious and Persuasions (including Unclassified Sectors)



**ANNEXURE-1.08**  
**DISTRICT WISE BIRTH & DEATH REGISTERED DURING 2018**

Sl No	District	Current year		Delayed Registration		Total	
		Birth	Death	Birth	Death	Birth	Death
1	2	3	4	5	6	5	6
1	Kokrajhar	14879	3081	3985	663	18864	3744
2	Dhubri	45672	5881	5892	515	51564	6396
3	Goalpara	13673	3462	3163	126	16836	3588
4	South Salmara						
5	Barpeta	46742	6202	5266	314	52008	6516
6	Morigaon	20583	2562	2133	162	22716	2724
7	Nagaon	69562	9727	4394	1433	73956	11160
8	Hojai			0	0		
9	Sonitpur	40117	9367	3191	101	43308	9468
10	Biswanath						
11	Lakhimpur	16553	3804	3343	96	19896	3900
12	Dhemaji	13610	2381	2146	103	15756	2484
13	Tinsukia	20252	6011	3964	109	24216	6120
14	Dibrugarh	25019	8204	1621	352	26640	8556
15	Sivasagar	14112	5303	1236	229	15348	5532
16	Charaideo			0	0		
17	Jorhat	16005	5039	1107	193	17112	5232
18	Golaghat	22672	4206	1592	510	24264	4716
19	East Karbi	19656	2521	4956	119	24612	2640
20	West Karbi Anglong						
21	Majuli						
22	Dima Hasa	4035	1052	3045	124	7080	1176
23	Cachar	41326	9406	4418	350	45744	9756
24	Karimganj	30355	4346	7013	598	37368	4944
25	Hailakandi	10672	2582	1064	310	11736	2892
26	Bongaigaon	16655	3773	1753	199	18408	3972
27	Chirang	5419	1713	1949	99	7368	1812
28	Kamrup	22581	6581	5151	403	27732	6984
29	Kamrup M	31687	10582	6917	3134	38604	13716
30	Nalbari	14573	3011	1507	121	16080	3132
31	Baksa	14533	4120	2723	800	17256	4920
32	Darrang	15302	2395	2650	101	17952	2496
33	Udalguri	13555	2344	2765	92	16320	2436
	<b>Total</b>	<b>619800</b>	<b>129656</b>	<b>88944</b>	<b>11356</b>	<b>708744</b>	<b>141012</b>



**ANNEXURE -1.09**  
**ESTIMATED BIRTH RATE, DEATH RATE & INFANT MORTALITY RATE IN ASSAM**

Year	Birth Rate			Death Rate			Infant Mortality Rate		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	2	3	4	5	6	7	8	9	10
2001	27.9	18.6	27	9.9	6.6	9.6	77	34	74
2003	27.2	18	26.3	9.5	5.9	9.1	70	35	67
2004	27	14.3	25.1	9.3	5.5	8.8	69	38	66
2005	26.6	15	25	9.2	5.6	8.7	71	39	68
2006	30.7	23	24.6	9.2	5.8	8.7	70	42	67
2007	25.7	15.5	24.3	9.1	5.7	8.6	68	41	66
2008	25.3	15.7	23.9	9	5.6	8.6	66	39	64
2009	24.9	15.9	23.6	8.8	5.9	8.4	64	37	61
2010	24.4	15.8	23.2	8.6	5.8	8.2	60	36	58
2011	24	15.5	22.8	8.4	5.6	8	58	34	55
2012	23.7	15.6	22.5	8.3	5.6	7.9	58	33	55
2013	23.5	15.4	22.4	8.2	5.6	7.8	56	32	54
2014	23.6	15.5	22.4	7.6	5.3	7.2	52	27	49
2015	23.2	15.3	22	7.4	5.1	7.1	50	25	47
2016	22.8	15	21.7	7.1	4.9	6.7	46	22	44



**ANNEXURE-1.10  
SLUM POPULATION IN**

Sl. No.	Area Name	Number of Households	Population	
			Total	Sex Ratio
1	2	3	4	5
1	Gauripur (TC)	1515	7794	958
2	Dhubri (MB)	3733	18501	967
3	Sapatgram (TC)	1086	4944	943
4	Bilasipara (TC)	1641	7571	941
5	Chapar (TC)	815	3904	923
6	Sarthebari (TC)	70	308	974
7	Nagaon (MB+OG)	3855	18110	946
8	Hojai (MB)	38	168	1024
9	Lanka (MB)	148	809	908
10	Rangapara (TC)	603	2645	908
11	Tezpur (MB+OG)	787	3692	898
12	North Lakhimpur (MB)	198	842	972
13	Tinsukia (MB+OG)	172	748	752
14	Margherita (TC)	612	2694	942
15	Dibrugarh (MB+OG) (Pt.)	5830	27089	916
16	Sibsagar (MB)	206	881	863
17	Nazira (MB)	531	2352	1002
18	Moranhat (TC)	373	2109	762
19	Jorhat (MB+OG) (Pt.)	2430	9665	913
20	Bokakhat (TC)	66	327	869
21	Golaghat (MB)	1002	3979	994
22	Silchar (MB+OG)	4746	22749	992
23	Lakhipur (MB)	712	3630	1007
24	Karimganj (MB)	841	4157	933
25	Lala (TC)	234	1125	981
26	Bongaigaon (MB)	1271	6140	980
27	Bijni (TC)	1213	5728	995
28	Guwahati (M Corp.) (Pt.)	5883	25739	927
29	Nalbari (MB)	1175	5360	973
30	Kharupatia (TC)	641	3022	926
31	Udalguri (TC)	106	484	898
	<b>Assam</b>	<b>42533</b>	<b>197266</b>	<b>945</b>



**ASSAM, CENSUS 2011**

% of Slum Population			Literacy Rate	% of Worker	Sl. No.
Child (0-6)	Schedule Caste	Schedule Tribe			
<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>1</i>
12.3	16.8	0.2	77.8	34.4	1
12.0	30.7	0.1	77.1	34.8	2
9.6	38.2	0.2	82.6	40.2	3
11.3	42.7	0.4	74.6	34.5	4
12.0	54.7	0.0	66.3	34.1	5
6.5	0.0	0.0	90.3	40.9	6
10.4	4.2	0.3	85.4	37.8	7
11.3	51.8	5.4	65.8	37.5	8
9.9	5.2	0.0	88.3	29.7	9
11.6	10.1	4.7	76.5	35.6	10
11.5	26.8	1.4	82.3	37.3	11
10.5	0.4	72.3	71.1	35.5	12
9.6	0.0	0.0	85.1	39.7	13
10.3	3.4	3.5	88.3	35.0	14
10.7	8.7	1.0	86.8	36.9	15
15.1	4.3	0.3	63.2	46.5	16
10.9	53.4	2.5	87.0	33.6	17
8.1	1.6	0.4	93.9	40.9	18
10.3	12.0	0.6	87.9	39.4	19
10.4	35.2	34.3	69.6	31.2	20
8.9	8.0	1.0	93.1	36.1	21
13.6	45.4	0.6	71.0	33.5	22
10.8	5.4	0.1	93.1	32.8	23
10.0	14.9	0.9	90.5	36.4	24
15.6	29.4	0.0	80.6	30.7	25
13.4	18.7	2.3	72.6	34.9	26
9.1	15.3	8.1	85.1	34.1	27
11.2	16.6	4.8	83.0	39.8	28
10.6	38.3	1.2	86.0	33.5	29
10.7	25.6	0.1	81.3	35.6	30
12.0	5.0	7.0	77.5	32.9	31
11.3	21.5	1.9	81.6	36.3	



**ANNEXURE - 2.01**  
**GROSS STATE DOMESTIC PRODUCT AT MARKET PRICE, ASSAM (AT 2011-12 PRICE)**  
**[NEW BASE]**

(Rs. in Lakhs)

Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
<b>A</b>	<b>Primary Sector</b>							
1	Agriculture, Forestry and Fishing	2848113	4373933	4618893	4813731	3433875	3524435	3638567
			[10.47]	[5.60]	[4.22]	[4.21]	[2.64]	[3.24]
1.1	Crops	2061487	3210429	3381282	3515540	2559454	2620133	2683479
			[9.12]	[5.32]	[3.97]	[4.78]	[2.37]	[2.42]
1.2	Livestock	159289	271183	278319	290319	173148	177437	184437
			[56.21]	[2.63]	[4.31]	[2.73]	[2.48]	[3.95]
1.3	Forestry & Logging	231388	321284	348578	361578	225456	230271	238271
			[4.65]	[8.50]	[3.73]	[1.83]	[2.14]	[3.47]
1.4	Fishing and Aquaculture	395949	571037	610714	646294	475816	496593	532379
			[6.37]	[6.95]	[5.83]	[2.87]	[4.37]	[7.21]
2	Mining & Quarrying	1464989	2746865	2600783	2689794	2477702	2298528	2337528
			[85.47]	[-5.32]	[3.42]	[94.10]	[-7.23]	[1.70]
	<b>Sub-Total - I</b>	<b>4313102</b>	<b>7120799</b>	<b>7219676</b>	<b>7503525</b>	<b>5911576</b>	<b>5822963</b>	<b>5976095</b>
			[30.88]	[1.39]	[3.93]	[29.31]	[-1.50]	[2.63]
<b>B</b>	<b>Secondary Sector</b>							
3	Manufacturing	1540255	2616441	2944582	3244582	2531956	2847970	2977970
			[25.05]	[12.54]	[10.19]	[40.44]	[12.48]	[4.56]
4	Electricity, Gas, Water Supply and other Utility Services	191883	393251	498462	568462	296011	365602	383602
			[14.22]	[26.75]	[14.04]	[8.98]	[23.51]	[4.92]
5	Construction	1188747	1615093	1834347	1990638	1509561	1677798	1772043
			[-3.79]	[13.58]	[8.52]	[4.36]	[11.14]	[5.62]
	<b>Sub-Total - II</b>	<b>2920885</b>	<b>4624785</b>	<b>5277392</b>	<b>5803682</b>	<b>4337528</b>	<b>4891370</b>	<b>5133615</b>
			[12.38]	[14.11]	[9.97]	[23.19]	[12.77]	[4.95]

Contd...



Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
<b>C</b>	<b>Tertiary Sector</b>							
6	Trade, Repair, Hotels & Restaurants	2045676	2841530	3484383	3903916	2223850	2167705	2312653
			[-3.38]	[22.62]	[12.04]	[-12.24]	[-2.52]	[6.69]
6.1	Trade and repair services	1961211	2727336	3360324	3762163	2133298	2089857	2230740
			[-3.70]	[23.21]	[11.96]	[-12.58]	[-2.04]	[6.74]
6.2	Hotel and restaurants	84465	114194	124059	141753	90552	77848	81913
			[4.97]	[8.64]	[14.26]	[-3.40]	[-14.03]	[5.22]
7	Transport, Storage, Communication and services related to broadcasting	810091	1450602	1491279	1691201	1224030	1222426	1297106
			[27.13]	[2.80]	[13.41]	[18.96]	[-0.13]	[6.11]
7.1	Railways	158334	312914	270511	319687	266230	214705	228543
			[23.92]	[-13.55]	[18.18]	[23.45]	[-19.35]	[6.45]
7.2	Transport by means other than Railways	436288	680682	747929	839994	576250	620224	661202
			[18.00]	[9.88]	[12.31]	[16.94]	[7.63]	[6.61]
7.3	Road Transport	356262	556176	610362	689054	470846	506146	542959
			[7.11]	[9.74]	[12.89]	[6.15]	[7.50]	[7.27]
7.4	Water Transport	43626	27714	31597	33597	23462	26202	26902
			[530.58]	[14.01]	[6.33]	[524.99]	[11.68]	[2.67]
7.5	Air Transport	0	30620	34187	39560	25922	28350	29415
			[80.66]	[11.65]	[15.72]	[79.03]	[9.37]	[3.76]
7.6	Services incidental to Transport	36400	66172	71783	77783	56020	59526	61926
			[82.52]	[8.48]	[8.36]	[80.88]	[6.26]	[4.03]
7.7	Storage	6594	9501	10448	11664	8007	8581	9049
			[7.07]	[9.97]	[11.64]	[4.38]	[7.17]	[5.45]
7.8	Communication & Services related to Broadcasting	208875	447505	462391	519856	373543	378916	398311
			[47.79]	[3.33]	[12.43]	[19.42]	[1.44]	[5.12]

Contd...



Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
8	Financial Services	427077	647536 [19.11]	632074 [-2.39]	706108 [11.71]	600139 [25.26]	580702 [-3.24]	610702 [5.17]
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1379694 [-1.14]	1451800 [5.23]	1586084 [9.25]	1093453 [-4.43]	1101374 [0.72]	1147300 [4.17]
10	Public Administration	821723	1712363 [45.48]	2185480 [27.63]	2465480 [12.81]	1342663 [39.99]	1671946 [24.52]	1771946 [5.98]
11	Other Services	1077923	1740134 [3.87]	2068634 [18.88]	2339696 [13.10]	1334130 [0.93]	1554412 [16.51]	1670470 [7.47]
	<b>Sub-Total - III</b>	<b>6295033</b>	<b>9771859</b> [10.12]	<b>11313650</b> [15.78]	<b>12692485</b> [12.19]	<b>7818265</b> [4.70]	<b>8298565</b> [6.14]	<b>8810177</b> [6.17]
12	Total GSVA at Basic Prices	13529020	21517443 [16.76]	23810718 [10.66]	25999692 [9.19]	18067370 [16.11]	19012898 [5.23]	19919886 [4.77]
13	Taxes on Products	1203476	1773533 [2.80]	2058700 [16.08]	2338650 [13.60]	1539995 [6.12]	1606114 [4.29]	1870295 [16.45]
14	Subsidies on Products	415005	495093 [-14.99]	437332 [-11.67]	467332 [6.86]	496465 [1.35]	540012 [8.77]	596153 [10.40]
15	Gross State Domestic Product	14317491	22795883 [16.47]	25432086 [11.56]	27871010 [9.59]	19110900 [15.67]	20079000 [5.07]	21194028 [5.55]
16	Population (in '00)	314410	331010 [1.29]	335290 [1.29]	339050 [1.12]	331010 [1.29]	335290 [1.29]	339050 [1.12]
17	Per Capita GSDP (in Rs.)	45538	68868 [14.98]	75851 [10.14]	82203 [8.37]	57735 [14.20]	59885 [3.72]	62510 [4.38]
Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
D	Agriculture, Forestry and Fishing Sector	2848113	4373933 [10.47]	4618893 [5.60]	4813731 [4.22]	3433875 [4.21]	3524435 [2.64]	3638567 [3.24]
E	Industry Sector	4385874	7371650 [31.72]	7878175 [6.87]	8493476 [7.81]	6815230 [42.06]	7189898 [5.50]	7471143 [3.91]
F	Service Sector	6295033	9771859 [10.12]	11313650 [15.78]	12692485 [12.19]	7818265 [4.70]	8298565 [6.14]	8810177 [6.17]
G	Taxes on Products - Subsidies on Products	788471	1278440 [11.86]	1621368 [26.82]	1871318 [15.42]	1043530 [8.55]	1066102 [2.16]	1274142 [19.51]
	<b>GSDP</b>	<b>14317491</b>	<b>22795883</b> [16.47]	<b>25432086</b> [11.56]	<b>27871010</b> [9.59]	<b>19110900</b> [15.67]	<b>20079000</b> [5.07]	<b>21194028</b> [5.55]

Note: Figures in brackets shown the growth rate over previous year.



**ANNEXURE - 2.02**  
**NET STATE DOMESTIC PRODUCT AT MARKET PRICE, ASSAM (AT 2011-12 PRICE)**  
**[NEW BASE]**

(Rs. in Lakhs)

Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
<b>A</b>	<b>Primary Sector</b>							
1	Agriculture, Forestry and Fishing	2620851	4022029	4266968	4412671	3095258	3172244	3269868
			[12.47]	[6.09]	[3.41]	[6.58]	[2.49]	[3.08]
1.1	Crops	1888760	2920425	3066180	3160438	2275122	2242941	2306287
			[11.25]	[4.99]	[3.07]	[7.96]	[-1.41]	[2.82]
1.2	Livestock	153834	263417	245533	250706	166190	168610	178037
			[58.47]	[-6.79]	[2.11]	[2.49]	[1.46]	[5.59]
1.3	Forestry & Logging	228850	318280	372308	387133	222802	310177	305243
			[4.93]	[16.97]	[3.98]	[1.98]	[39.22]	[-1.59]
1.4	Fishing and Aquaculture	349407	519907	582947	614394	431143	450515	480301
			[7.98]	[12.13]	[5.39]	[3.60]	[4.49]	[6.61]
2	Mining & Quarrying	1288077	2298510	2201123	2300488	2102478	1962918	2031909
			[85.26]	[-4.24]	[4.51]	[95.94]	[-6.64]	[3.51]
	<b>Sub-Total - I</b>	<b>3908928</b>	<b>6320540</b>	<b>6468092</b>	<b>6713160</b>	<b>5197735</b>	<b>5135162</b>	<b>5301777</b>
			[31.21]	[2.33]	[3.79]	[30.69]	[-1.20]	[3.24]
<b>B</b>	<b>Secondary Sector</b>							
3	Manufacturing	1274688	2132801	2437810	2674695	2099360	2393609	2495490
			[22.56]	[14.3]	[9.72]	[33.45]	[14.02]	[4.26]
4	Electricity, Gas, Water Supply and other Utility Services	130994	244168	310946	340656	189516	227717	237989
			[20.35]	[27.35]	[9.55]	[14.19]	[20.16]	[4.51]
5	Construction	1131858	1519060	1727465	1877708	1420013	1574535	1640598
			[0.53]	[13.72]	[8.70]	[5.20]	[10.88]	[4.20]
	<b>Sub-Total - II</b>	<b>2537540</b>	<b>3896029</b>	<b>4476221</b>	<b>4893060</b>	<b>3708889</b>	<b>4195861</b>	<b>4374077</b>
			[12.79]	[14.89]	[9.31]	[20.07]	[13.13]	[4.25]

Contd...



Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
<b>C</b>	<b>Tertiary Sector</b>							
6	Trade, Repair, Hotels & Restaurants	2002198	2740712	3365100	3767805	2133665	2062735	2197989
			[-1.65]	[22.78]	[11.97]	[-13.36]	[-3.32]	[6.56]
6.1	Trade and repair services	1919528	2635151	3250515	3643816	2050826	1993230	2123737
			[-1.94]	[23.35]	[12.10]	[-13.6]	[-2.81]	[6.55]
6.2	Hotel and restaurants	82670	105561	114585	123989	82839	69505	74252
			[6.23]	[8.55]	[8.21]	[-7.11]	[-16.10]	[6.83]
7	Transport, Storage, Communication and services related to broadcasting	654962	1113698	1107742	1246529	928374	890114	940341
7.1	Railways	102300	163457	98216	110746	136171	67726	71897
			[7.83]	[-39.91]	[12.76]	[8.55]	[-50.26]	[6.16]
7.2	Transport by means other than Railways	376730	596565	651186	736008	498264	532642	562469
			[18.23]	[9.16]	[13.03]	[14.73]	[6.90]	[5.60]
7.3	Road Transport	307628	496568	542719	613124	415241	444639	471197
			[8.19]	[9.29]	[12.97]	[5.04]	[7.08]	[5.97]
7.4	Water Transport	37671	16841	18095	18996	13307	13891	14142
			[527.93]	[7.45]	[4.98]	[493.53]	[4.39]	[1.81]
7.5	Air Transport	0	25235	27599	30599	20946	22446	23446
			[119.89]	[9.37]	[10.87]	[116.27]	[7.16]	[4.46]
7.6	Services incidental to Transport	31431	57921	62773	73289	48770	51666	53685
			[84.23]	[8.38]	[16.75]	[80.43]	[5.94]	[3.91]
7.7	Storage	5654	7978	8724	9690	6654	7071	7571
			[6.80]	[9.35]	[11.07]	[3.23]	[6.27]	[7.07]
7.8	Communication & Services related to Broadcasting	170278	345698	349616	390084	287285	282675	298404
			[35.50]	[1.13]	[11.57]	[38.81]	[-1.60]	[5.56]

Contd...



Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
8	Financial Services	420333	634297 [18.84]	617236 [-2.69]	677053 [9.69]	588643 [25.26]	567935 [-3.52]	600628 [5.76]
9	Real Estate, Ownership of dwelling & Professional Services	942080	1117382 [-1.13]	1171554 [4.85]	1235410 [5.45]	867924 [-6.03]	866265 [-0.19]	880947 [1.69]
10	Public Administration	634052	1371994 [52.19]	1789048 [30.40]	2015867 [12.68]	1032739 [45.20]	1312196 [27.06]	1426037 [8.68]
11	Other Services	1046848	1657789 [3.61]	1973788 [19.06]	2208148 [11.87]	1261367 [-1.01]	1471657 [16.67]	1574292 [6.97]
	<b>Sub-Total - III</b>	<b>5700473</b>	<b>8635872</b> [9.72]	<b>10024468</b> [16.08]	<b>11150812</b> [11.24]	<b>6812712</b> [2.99]	<b>7170902</b> [5.26]	<b>7620234</b> [6.27]
12	Total NSVA at Basic Prices	12146941	18852441 [16.79]	20968781 [11.23]	22757032 [8.53]	15719337 [14.90]	16501926 [4.98]	17296088 [4.81]
13	Taxes on Products	1203476	1773533 [2.80]	2058700 [16.08]	2306455 [12.03]	1539995 [6.12]	1737114 [12.80]	1874436 [7.91]
14	Subsidies on Products	415005	495093 [-14.99]	437332 [-11.67]	448408 [2.53]	496465 [1.35]	560012 [12.80]	603785 [7.82]
15	Net State Domestic Product	12935412	20130881 [16.47]	22590149 [12.22]	24615079 [8.96]	16762867 [14.48]	17679028 [5.47]	18566739 [5.02]
16	Population (in '00)	314410	331010 [1.29]	335290 [1.29]	340509 [1.56]	331010 [1.29]	335290 [1.29]	343054 [2.32]
17	Per Capita NSDP (in Rs.)	41142	60817 [14.98]	67375 [10.78]	72289 [7.29]	50642 [13.02]	52728 [4.12]	54122 [2.64]

Contd...



Sl. No.	Industry	2011-12 [Base Year]	At Current Price			At Constant Price		
			2015-16	2016-17(P)	2017-18(Q)	2015-16	2016-17(P)	2017-18(Q)
D	Agriculture, Forestry and Fishing Sector	2620851	4022029 [12.47]	4266968 [6.09]	4412671 [3.41]	3095258 [6.58]	3172244 [2.49]	3269868 [3.08]
E	Industry Sector	3825617	6194540 [31.94]	6677345 [7.79]	7193548 [7.73]	5811367 [39.63]	6158779 [5.98]	6405987 [4.01]
F	Service Sector	5700473	8635872 [9.72]	10024468 [16.08]	11150812 [11.24]	6812712 [2.99]	7170902 [5.26]	7620234 [6.27]
G	Taxes on Products - Subsidies on Products	788471	1278440 [11.86]	1621368 [26.82]	1858047 [14.60]	1043530 [8.55]	1177102 [12.80]	1270651 [7.95]
	<b>NSDP</b>	<b>12935412</b>	<b>20130881</b> [16.47]	<b>22590149</b> [12.22]	<b>24615079</b> [8.96]	<b>16762867</b> [14.48]	<b>17679028</b> [5.47]	<b>18566739</b> [5.02]

Note: Figures in brackets shown the growth rate over previous year.

**ANNEXURE-2.03**  
**MOVEMENT OF STATE DOMESTIC PRODUCT, ASSAM AT (2011-12) PRICE**

GSDP/NSDP		2011-12	2015-16	2016-17(P)	2017-18(Q)
A.	Gross State Domestic Product GSDP (Rs. in Crore)				
	(i) At Current Price	143175	227959	254321	278710
	(ii) At Constant Price	143175	191109	200790	211940
B.	Net State Domestic Product NSDP (Rs. in Crore)				
	(i) At Current Price	129354	201309	225901	246151
	(ii) At Constant Price	129354	167629	176790	185667
C.	Per Capita GSDP (Rs.)				
	(i) At Current Price	45538	68868	75851	82203
	(ii) At Constant Price	45538	57735	59885	62510
D.	Per Capita NSDP (Rs.)				
	(i) At Current Price	41142	60817	67375	72289
	(ii) At Constant Price	41142	50642	52728	54122

Source: (Table 2.01 to 2.03) Directorate of Economics and Statistics, Assam.



## ANNEXURE-3.01

SECTOR WISE IRRIGATION POTENTIAL CREATED IN ASSAM 2017-18(CUMULATIVE)  
(Area in Hect.)

District	Irrigation potential created upto 31st March ,2018			Through ASMIDC (STW/LLP)	Grand Total
	Minor Irrigation	Major /MEDIUM Irrigation	Total		
1	2	3	4	5	6
Kokrajhar	35296	28194	63490	The Shallow Tubewells and low lift Points installed through Assam State Irrigation Development Corporation Ltd. are very old and the irrigation potential of 1,49,205 hectares created by the corporation has been treated as lost Potential.	63490
Dhubri	9741	0	9741		9741
Goalpara	20599	0	20599		20599
Barpeta	16465	25650	42115		42115
Morigaon	17130	0	17130		17130
Nagaon	18685	81769	100454		100454
Sonitpur	16627	32131	48758		48758
Lakhimpur	19081	0	19081		19081
Dhemaji	9918	0	9918		9918
Tinsuka	7100	0	7100		7100
Dibrugarh	22222	5054	27276		27276
Sivasagar	19432	0	19432		19432
Jorhat	11836	0	11836		11836
Golaghat	13272	0	13272		13272
Karbi anglong	178351	9637	187988		187988
Dima Hasao	7639	0	7639		7639
Cachar	21204	0	21204		21204
Karimganj	8952	0	8952		8952
Hailakandi	5689	0	5689		5689
Bongaigaon	8967	0	8967		8967
chirang	28281	0	28281		28281
Kamrup	30012	0	30012		30012
Kamrup (M)	6290	0	6290		6290
Nalbari	6930	0	6930		6930
Baksa	39018	31825	70843		70843
Darrang	18522	0	18522		18522
Udalguri	85062	58258	143320		143320
Biswanath Chariali	17847	0	17847		17847
Charaideo	60	0	60		60
Hojai	10764	0	10764		10764
Majuli	6800	0	6800		6800
S. Salmara	5721	0	5721		5721
W. Karbi Anglong	0	0	0		0
Total Assam	723513	272518	996031	996031	



ANNEXURE-3.02  
DISTRICTWISE NET AREA IRRIGATED IN ASSAM

(Area in Hect.)

District	2016-17	2017-18 (p)
1	2	3
Kokrajhar	13069	13890
Dhubri	197	182
Goalpara	1142	1309
Barpeta	4957	4352
Morigaon	620	571
Nagaon	22689	1315
Sonitpur	13444	6511
Lakhimpur	375	81
Dhemaji	98	59
Tinsuka	308	431
Dibrugarh	265	760
Sivasagar	1289	1362
Jorhat	227	474
Golaghat	499	967
Karbi anglong	22771	31337
Dima Hasao	4115	4853
Cachar	391	2022
Karimganj	113	85
Hailakandi	172	537
Bongaigaon	731	263
chirang	12054	10058
Kamrup	2664	5957
Kamrup (M)	2473	1487
Nalbari	168	320
Baksa	9871	15122
Darrang	5382	6872
Udalguri	61903	66671
Biswanath Chariali		948
Charaideo		
Hojai		27108
Majuli		285
S. Salmara		104
W. Karbi Anglong		
Total Assam	181987	206293



## ANNEXURE- 4.01

## DISTRICTWISE NUMBER AND AREA UNDER FISHERIES IN ASSAM, 2017-18

District	Beel Fisheries		Ponds and Tanks		Derelict Water Bodies/ Swamps		Reservoir Fisheries		Forest Fisheries		River Fisheries		Others (Paddy field/cannals etc.)	
	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Kokrajhar	14	955	8312	1841	96	572	-	-	17	208	10	2457	7889	395
Dhubri	156	7000	21819	2823	1443	6034	-	-	-	-	42	24700	-	60196
Goalpara	57	6820	9208	2021	70	463	-	-	-	20	8	8356	-	33610
Barpeta	23	6298	22800	4265	87	1394	-	-	-	-	9	2210	-	3270
Morigaon	84	8300	15986	3030	132	204	-	-	3	955	10	327	8027	17843
Nagaon	134	9919	41534	5787	143	22854	-	-	8	800	-	2825	-	30870
Somitpur	60	7032	16050	1637	305	679	-	-	-	-	8	20640	-	104910
Lakhimpur	20	6499	16577	4392	68	4273	-	-	2	17	16	2474	51	1852
Dhemaji	16	4575	4950	1029	145	706	-	-	-	-	21	874	2170	15000
Tinsukia	36	2957	12286	3895	-	540	-	-	5	240	8	7440	-	8004
Dibrugarh	38	5289	11060	973	185	257	-	-	-	30	3	19500	-	22500
Sivasagar	66	3878	11226	1046	112	7195	-	-	14	120	325	7677	-	118880
Jorhat	124	6298	11089	1288	244	9313	-	-	-	-	12	20500	-	19892
Golaghat	15	2600	7025	898	-	530	-	-	-	1720	25	12778	-	63707
Karbi-Anglong	19	60	10125	2700	106	332	-	-	4	30	5	4200 (210 Km)	-	-
Dima-Hasao	1	3	1242	98	648	37	1	1713	5	1	4	450	-	-
Cachar	75	3359	36558	10500	437	12300	-	-	129	194	45	3956	545	2217
Karimganj	37	3459	26797	3390	-	7516	-	-	-	-	5	5500	-	4005
Hailakandi	35	1241	35307	6703	150	2000	-	-	-	-	4	1589	-	380
Bongaigaon	47	4347	6906	978	193	3332	-	-	-	-	8	562	666	2105
Chirang	16	145	3125	560	77	150	-	-	20	70	2	480	-	-
Kamrup	59	1418	19649	3585	306	1074	-	-	-	-	14	3420 (380Km)	105	411
Nalbari	19	2248	26578	3325	515	3645	-	-	-	-	7	2100	-	5040
Baksa	18	151	2432	2279	-	441	-	-	19	121	14	5700	-	18680
Darrang	27	5959	28549	2735	62	364	-	-	13	310	17	6380	86	530
Udalguri	1	5	9050	1286	-	-	-	-	-	-	-	-	-	-
<b>Assam</b>	<b>1197</b>	<b>100815</b>	<b>416240</b>	<b>73065</b>	<b>5524</b>	<b>86204</b>	<b>1</b>	<b>1713</b>	<b>239</b>	<b>4835</b>	<b>622</b>	<b>167095</b>	<b>19539</b>	<b>534297</b>



## ANNEXURE -4.02

FISH PRODUCTION, FISH IMPORTED, REGISTERED FISH MARKETS IN ASSAM,  
2017-18

District	Fish Production (in tonne)	Fish imported from other States (in tonne)	Nos. of Registered Fish Markets	
			Raw Fish	Dry Fish
1	2	3	4	5
Kokrajhar	6438	80	8	-
Dhubri	19104	260	16	-
Goalpara	8485	454	15	-
Barpeta	19762	95	16	-
Morigaon	21472	428	5	1
Nagaon	40647	149	31	-
Sonitpur	11813	547	13	-
Lakhimpur	12789	125	10	-
Dhemaji	5088	90	5	-
Tinsukia	13818	221	9	-
Dibrugarh	11125	265	10	-
Sivasagar	16479	391	8	-
Jorhat	12626	794	5	-
Golaghat	8074	320	9	-
Karbi-Anglong	491	305	5	-
Dima-Hasao	142	52	5	-
Cachar	31030	956	5	-
Karimganj	13895	607	5	-
Hailakandi	11364	112	6	-
Bongaigaon	7899	168	7	-
Chirang	1383	95	-	-
Kamrup	20922	3845	36	1
Nalbari	13206	183	14	-
Baksa	6766	110	-	-
Darrang	10344	580	20	-
Udalguri	2100	125	-	-
Assam	327262	11357	263	2



## ANNEXURE - 4.03

DISTRICT -WISE NUMBER OF HATCHERIES AND FISH SEED  
PRODUCTION IN ASSAM, 2017-18

District	No. of Hatcheries			Production of Fish Seed (Fry in Million nos)	
	Govt.	Private	Co-op	Govt.	Private
1	2	3	4	5	6
Kokrajhar	1	6	-	0.00	0.00
Dhubri	1	12	-	0.00	6.80
Goalpara	0	10	-	0.00	98.00
Barpeta	0	79	-	0.30	4222.70
Morigaon	1	41	-	0.00	765.60
Nagaon	0	177	-	0.40	1119.60
Sonitpur	1	15	-	0.00	45.00
Lakhimpur	2	11	-	1.83	7.00
Dhemaji	0	7	-	0.00	10.15
Tinsukia	0	7	-	0.00	12.00
Dibrugarh	1	4	-	0.00	5.12
Sivasagar	2	5	-	0.13	15.64
Jorhat	1	9	-	0.00	2.22
Golaghat	0	14	-	0.00	8.00
Karbi-Anglong	2	2	-	0.00	0.00
Dima-Hasao	0		-	0.00	0.00
Cachar	1	5	-	0.00	80.00
Karimganj	0	31	-	0.00	1472.00
Hailakandi	0	4	-	0.00	20.00
Bongaigaon	1	3	-	0.00	5.00
Chirang	0	1	-	0.00	7.00
Kamrup	3	23	-	0.02	24.12
Nalbari	0	6	-	0.00	15.50
Baksa	1	13	-	0.00	25.00
Darrang	2	13	-	0.00	29.00
Udalguri	1	2	-	0.00	2.00
	21	500	-	2.68	7997.45



## ANNEXURE - 5.01

## FOREST DIVISION-WISE AREA UNDER RESERVED FORESTS AND ENCROACHMENT IN ASSAM, 2017-

(Area in Hect.)

Sl. No.	Forest Division	Reserved Forest Area	Encroached Forest Area	Nos. of Encroachers In Forest Areas(Household)
1	2	3	4	5
1	Goalpara	25199.09	5893.35	3805
2	Kamrup	35328.75	6738.90	14529
3	Kamrup West	68124.91	21940.38	1810
4	North Kamrup	4518.61	112.60	882
5	Dibrugarh	21794.64	1259.00	0
6	Digboi	50045.16	1908.30	650
7	Doom Dooma	30904.35	9344.80	1902
8	Golaghat	94078.87	87213.46	30267
9	Jorhat	25037.15	18651.29	1765
10	Sivasagar	21947.29	8288.00	1186
11	Hamren	10268.00	6282.32	1248
12	Karbi-Anglong East	48033.95	4635.51	2035
13	Karbi-Anglong West	89371.66	1273.00	0
14	Dima-Hasao	66046.80	1624.00	999
15	Baksa	12633.40	6301.20	4710
16	Lakhimpur	31096.55	6857.87	2673
17	Dhemaji	49553.45	31001.50	13072
18	Nagaon	33638.68	3657.00	945
19	Nagaon South	49049.00	12119.00	9674
20	Sonitpur East	47428.00	37595.00	25000
21	Sonitpur West	44977.77	32200.00	38919
22	Silchar (Cachar)	78897.64	5492.20	4030
23	Hailakandi	53835.74	11616.00	7185
24	Karimganj	48056.81	12188.70	3485
25	Aie-Valley	6073.00	502.99	237
26	Dhubri	1344.97	72.86	321
27	Haltugaon	64867.12	18798.43	12362
28	Kachugaon	82199.80	2819.26	2864
29	Dhansiri	17270.94	3862.20	4094
30	Parbatjhora	31960.10	3020.02	1870
31	Chirang	57398.81	7823.01	1816
32	Nagaon WL	2155.00	0.00	0
33	Manah National Park	48533.00	1900.00	0
Assam Total		1351669.01	372992.15	194335

Source: PCCF &amp; Head, Forest Force, Assam, Panjabari, Guwahati-37



## ANNEXURE - 5.02

## DIVISION/DISTRICTWISE REGD.NOS. OF BALI MAHAL &amp; STONE QUARRIES UNDER FORESTS

Name of Divisions/ Districts	Bali Mahal		Stone Quarries	
	2016-17	2017-18	2016-17	2017-18
1	2	3	4	5
Dibrugarh	17	17	6	7
Doomdooma	10	10	-	-
Digboi	4	4	-	-
Sivasagar	17	17	18	18
Jorhat	8	8	-	-
Golaghat	13	13	1	1
Nagaon	30	30	8	10
Nagaon South	10	10	4	4
Sonitpur (East)	3	3	-	-
Kamrup (East)	9	9	1	5
Kamrup (West)	18	20	2	3
North Kamrup	2	2	6	6
Goalpara	11	11	-	2
Cachar	11	11	5	5
Karimganj	15	15	9	9
Hailakandi	8	8	-	-
Aie-Velly	-	-	6	13
Dhubri	2	2	3	5
Assam	188	190	69	88

Source: PCCF &amp; Head of Forest Force, Assam, Guwahati-37



## ANNEXURE - 6.01

## NUMBER OF REGISTERED MSME UNITS, INVESTMENT IN PLANT AND MACHINERY AND WORKERS UNDER THE COMMISSIONER ATE OF INDUSTRIES AND COMMERCE, ASSAM.

District	Unit Registered during the year				Investment in Plant and Machinery (Rs. in Lakh)	No. of Workers
	2017-18					
	Micro	Small	Medium	Total	2017-18	2017-18
1	2	3	4	5	6	7
Kokrajhar	15	5	1	21	1045.47	238
Dhubri	52	2	0	54	371.49	298
Goalpara	51	1	0	52	379.01	241
Barpeta	82	8	0	90	643.01	515
Morigaon	44	1	0	45	628.54	787
Nagaon	128	5	0	133	774.40	666
Sonitpur	65	19	0	84	3375.40	1184
Lakhimpur	22	5	0	27	525.63	177
Dhemaji	25	1	1	27	1379.27	153
Tinsukia	71	19	0	90	3558.84	1844
Dibrugarh	90	45	1	136	4021.56	1141
Sivasagar	51	49	0	100	4036.36	1303
Jorhat	55	22	2	79	2152.05	450
Golaghat	43	36	0	79	3012.03	637
Karbi Anglong	11	3	0	14	603.93	127
Dima Hasao	2	0	0	2	3.56	11
Cachar	17	7	0	24	452.79	159
Karimganj	16	2	0	18	113.64	88
Hailakandi	14	0	0	14	44.87	50
Bongaigaon	63	25	0	69	1316.47	479
Chirang	23	21	1	44	799.60	365
Kamrup	89	56	0	150	16383.81	2221
Kamrup Metro	33	3	5	36	361.00	301
Nalbari	56	1	0	57	544.41	243
Baksa	20	1	0	21	172.99	122
Darrang	47	2	0	49	332.37	311
Udalguri	23	1	0	24	419.71	331
<b>Assam</b>	<b>1208</b>	<b>340</b>	<b>11</b>	<b>1539</b>	<b>47452.21</b>	<b>14442</b>



## ANNEXURE-6.02

## INDUSTRIAL ESTATES AND OTHER INFRASTRUCTURE IN ASSAM, 2017-18

## (A) Industrial Estate:

District	Name of Industrial Estate	Total Area (in Sq. Mtr.)	Total No. of Sheds Constructed	No. of Sheds Allotted	Open Area Allotted (in Sq.Mtr.)	No. of Units function
1	2	3	4	5	6	7
Nagaon	Senchowa	28052.82	24	24	9908.15	23
Nalbari	Nalbari	48776.30	25	24	23975.01	10
Bongaigaon	New Bongaigaon	38810.41	35	35	27786.33	44
Lakhimpur	Rajabari, Bihpuria	46821.60	6	2	0	2
Karimganj	Badarpurghat	29448.38	29	29	0	14
Morigaon	Dolbari	13377.60	0	0	11536.11	1
Karbi-Anglong	Bokajan	80266.00	6	6	28800	4
Karbi-Anglong	Hamren	20066.00	4	0	0	0
Baksa	Bennibari	129707.52	6	6	109044.18	12
Tinsukia	Tinsukia (Borguri)	149566.00	50	50	62267.39	43
Tinsukia	Ulup pathar, Margherita	169735.00	0	0	0	0
Sonitpur	Dhekiajuli	40133.00	30	24	6599.00	6
Jorhat	Cinamora	35049.81	29	29	17519.39	19
Dibrugarh	Lahowal	21939.00	12	12	12818.00	8
Kamrup	Bamunimaidam	76121.00	63	63	20446.09	73
Sivasagar	Sivasagar(Darikapar)	40148.70	26	26	10461.71	26
Chirang	Bengtolgate	93680.30	0	0	35788.09	0
Chirang	Amguri	121449.81	0	0	0	0
Barpeta	Tikagaria	6691.45	0	0	0	0
Barpeta	Bichankuchi	3305.66	3	0	0	0
Dima Hasao	Umrangsu	2680.96	8	6	0	5
Dhubri	Gauripur	13592.00	7	1	652.00	0
Golaghat	Numaligarh	12754.00	0	0	12757.00	1
Baksa	Dhepargaon	48640.32	1	1	3242.69	1
	<b>Total</b>	1270813.64	315	290	393601.14	259



**(B) Industrial Area:**

District	Name of Industrial Area	Total Area (in Sq. Mtr.)	Total No. of Sheds Constructed	No. of Sheds Allotted	Open Area Allotted (in Sq.Mtr.)	No. of Units functioning
1	2	3	4	5	6	7
Golaghat	Jonaki Nagar	72820.00	7	0	21730.00	17
Tinsukia	Buraburi, Sadiya	266667.00	0	0	0	0
Tinsukia	Doomdooma	75160.00	1	1	0	1
Tinsukia	Lakhimpuria Nepali gaon	404144.00	0	0	0	0
Sonitpur	Dolabari	64237.92	4	4	33628.24	16
Sonitpur	Dhekiajuli	30768.00	0	0	0	0
Sonitpur	Kundarbari	48159.00	4	4	15755.00	2
Sonitpur	Gotlong	9364.00	0	0	8713.00	4
	Sadharu	17123.00	5	5	8289.00	1
	Biswanath Chariali					
Darrang	Mangaldoi	63342.94	20	19	45174.02	14
Darrang	Dalgaon	39323.70	0	0	27985.94	0
Dibrugarh	Beheating	33444.00	12	12	17375.34	14
Kamrup	Kalapahar	14052.04	13	13	7914.02	29
Kamrup	Rani	82974.00	40	29	21691.50	29
Dima Hasao	Umrangsu	1072384.00	0	0	0	0
Cachar	Malinibeel	92304.00	3	3	39044.00	14
Kamrup	Bamunimaidam	160595.00	31	31	25789.00	52
Kamrup	Bonda	32120.00	20	28	7198.00	36
Lakhimpur	Bechagaon	12039.84	0	0	0	0
Goalpara	Kothakuthi Ranjuli	7224.00	0	0	0	0
<b>Total</b>		2598246.44	160	149	280287.06	229



## ANNEXURE - 7.01

## STATISTICS ON MOTOR VEHICLES IN ASSAM DURING THE YEAR 2017-18

Sl. No.	Types of Vehicle	No. of Vehicles Registered as on 31-3-2018	No. of Vehicles Registered during 2017-18	No. of Vehicles on Road during 2017-18
1	2	3	4	5
1	Multi Axle Vehicle	1258	141	1145
2	Articulated Vehicle	3044	911	2583
3	Medium	20971	2423	28129
4	Heavy	121315	4875	109861
5	Four Wheelers	110067	14886	100202
6	Three Wheeler	41524	3393	40577
7	Stage Carriage	2125	74	1292
8	Contract Carriage	15793	901	14411
9	Omni Buses	1532	15	1184
10	Mini Buses	2468	46	2265
11	School Buses	1509	80	1433
12	AATT	12429	165	11236
13	Motor Cabs	12447	3003	11674
14	Maxi Cabs	5707	678	6254
15	Others Taxi	37341	1492	34462
16	Auto Rickshaw	114538	8620	102859
17	Two Wheeler	2265700	298899	2106900
18	Car	637597	63936	623178
19	Tractor	51674	6304	45796
20	Trailer	19764	1026	20289
21	Crane	1572	37	1393
22	Govt. Vehicle	23097	105	23356
23	Fire Brigade	83	40	73
24	Ambulance	2322	259	2230
25	Others	17759	484	13122
26	E-Rickow	3745	3933	3647
Total		3527381	416726	3309551



**ANNEXURE - 7.02**

**/ENUE COLLECTION UNDER COMMISSIONERATE OF TRANSPORT, ASS**

(Rs. in Crores)

District Authority	2016-17	2017-18	2017-18
	(Achievement)	Target	Achievement
1	2	3	4
Kamrup (R&L)	149.94	202.54	178.44
Kamrup (RTA)	1.67	2.16	1.94
Kamrup (Enforecement)	4.48	5.78	5.35
Kamrup	18.14	23.42	29.23
Barpeta	12.66	16.34	17.52
Nalbari	8.71	11.24	12.29
Goalpara	8.77	11.32	11.91
Dhubri	11.49	14.83	13.94
Sonitpur	24.47	31.59	31.64
Darrang	8.59	11.09	13.06
Lakhimpur	16.16	20.86	20.47
Dibrugarh	31.53	40.70	37.49
Tinsukia	26.48	35.68	31.00
Dhemaji	4.97	6.69	7.08
Sivasagar	30.18	38.96	33.03
Jorhat	28.45	36.72	33.41
Golaghat	14.28	18.43	18.70
Nagaon	28.49	36.77	36.84
Morigaon	6.68	8.62	8.82
Dima Hasao	1.03	1.38	1.74
Karbi-Anglong	6.34	8.41	8.44
Karimganj	5.31	6.89	5.71
Hailakandi	4.31	5.81	5.99
Cachar	22.06	29.54	30.11
Boxirhat, M.V. Checkgate	4.62	5.96	1.45
Srirampur, M.V. Checkgate	3.11	4.19	1.14
Kokrajhar	8.08	10.93	10.85
Bongaigaon	13.91	17.96	17.78
State Transport Authority	28.36	37.61	31.99
Digarkhal, M.V. Checkgate	1.34	1.81	0.82
Udalguri	3.61	4.89	4.82
Chirang	5.09	6.57	8.32
Baksa	3.34	4.31	5.01
<b>Total</b>	<b>546.65</b>	<b>720.00</b>	<b>676.32</b>

R&L= Registrared & Licence, RTA= Regional Transport Authority.



## ANNEXURE -8.0:

DISTRICT WISE DISTRIBUTION OF AGGREGATE DEPOSIT & GROSS BANK CREI  
(Rs. in Crore)

As on March, 2017

District	No. of Reporting Offices	Deposit
1	6	7
Kokrajhar	37	1889
Dhubri	68	2213
Goalpara	50	1497
Barpeta	85	2755
Morigaon	48	1194
Nagaon	143	5950
Sonitpur	133	4785
Lakhimpur	68	1775
Dhemaji	30	914
Tinsukia	128	5510
Dibrugarh	150	7968
Sivasagar	97	4392
Jorhat	111	5390
Golaghat	85	2644
Karbi Anglong	73	1739
Dima Hasao	23	680
Cachar	126	6670
Karimganj	63	2899
Hailakandi	33	1147
Bongaigaon	47	1908
Chirang	23	1280
Kamrup	103	2837
Kamrup Metro	370	49478
Nalbari	60	1725
Baksa	41	848
Darrang	49	1368
Udalguri	32	851
<b>Assam</b>	<b>2276</b>	<b>122306</b>



**1**  
**POSIT OF ALL SCHEDULED COMMERCIAL BANKS IN ASSAM**

Credit	Credit Deposit Ratio(%)
8	9
483	25.6
1065	48.1
589	39.3
1597	58.0
847	70.9
2820	47.4
2404	50.2
1216	68.5
473	51.8
2053	37.3
2994	37.6
1811	41.2
2488	46.2
1440	54.5
713	41.0
156	22.9
2370	35.5
861	29.7
396	34.5
841	44.1
419	32.7
1821	64.2
16326	33.0
847	49.1
405	47.8
807	59.0
534	62.7
48776	39.9



## ANNEXURE - 8.

**DISTRICT WISE DISTRIBUTION OF AGGREGATE DEPOSIT & GROSS BANK CREDIT**  
(Rs. in Crore)

As on March, 2016

District	No. of Reporting Offices	Deposit	Credit
1	2	3	4
Kokrajhar	11	253	106
Dhubri	14	251	155
Goalpara	12	235	148
Barpeta	20	378	255
Morigaon	12	159	148
Nagaon	39	601	271
Sonitpur	33	457	272
Lakhimpur	20	205	169
Dhemaji	8	148	115
Tinsukia	12	120	70
Dibrugarh	17	213	119
Sivasagar	23	364	196
Jorhat	17	258	156
Golaghat	26	395	172
Karbi Anglong	40	443	262
Dima Hasao	8	97	34
Cachar	21	397	174
Karimganj	17	269	96
Hailakandi	9	168	64
Bongaigaon	9	168	94
Chirang	7	127	79
Kamrup	18	350	261
Kamrup Metro	16	987	342
Nalbari	17	310	226
Baksa	12	204	162
Darrang	15	219	178
Udalguri	12	155	122
<b>Assam</b>	<b>465</b>	<b>7932</b>	<b>4446</b>

Source: (Table 20.01 to 20.03) Quarterly Statistics on Deposits and Credit of Scheduled Com



## OF REGIONAL RURAL BANKS IN ASSAM

As on March, 2017

Credit Deposit Ratio(%)	No. of Reporting Offices	Deposit	Credit	Credit Deposit Ratio(%)
5	6	7	8	9
41.8	11	246	109	44.4
61.8	14	278	150	54.0
63.0	12	244	147	60.3
67.6	19	402	256	63.7
92.6	12	167	143	85.8
45.1	39	620	279	45.0
59.4	33	515	270	52.5
82.2	20	248	178	71.8
77.7	9	176	110	62.5
58.3	14	129	74	57.1
55.9	17	236	119	50.5
53.9	23	409	200	49.0
60.5	17	281	161	57.3
43.4	26	403	179	44.4
59.1	47	499	307	61.5
35.1	8	101	45	44.7
43.7	23	461	164	35.5
35.6	17	305	92	30.1
37.9	9	171	64	37.4
56.0	9	173	100	57.7
62.1	7	151	77	51.2
74.7	19	393	285	72.3
34.7	16	973	285	29.3
73.0	16	342	228	66.7
79.8	13	220	178	80.7
81.3	15	231	187	81.0
78.7	12	163	130	79.8
56.0	477	8537	4517	52.9

mercial Banks, RBI.



annexure- 9.01  
**MONTHLY ALLOCATION OF PDS ITEMS IN ASSAM**  
(DURING THE PERIOD January 2018 onwards to latest Month available)

Month	NFSA Rice (in MT)		Wheat (in MT)	SK Oil (in KL)
	AAY Rice	PH Rice		
1	2	3	4	5
January/2018	24188.75	109235.86	5781.61	20460
February/2018	24203.76	109322.70	5781.61	20484
March/2018	24217.13	109445.19	5781.61	20520
April/2018	24216.18	109738.59	5781.61	20424
May/2018	24211.46	109851.56	5781.61	20520
June/2018	24236.66	109976.75	5781.61	20520
July/2018	24240.02	109200.51	5781.61	20388
August/2018	24242.19	110035.24	5781.61	20532
September/2018	24246.53	110035.26	5781.61	20544
October/2018	24252.23	110043.26	5781.61	20436
November/2018	24241.76	109990.52	5781.61	20508
December/2018	24240.68	110101.83	5781.61	20520

AAY= Antrodoya Anna Yojona; PH= Priority House; NFSA= National Food Security Act.



**annexure- 9.01**  
**MONTHLY ALLOCATION OF PDS ITEMS IN ASSAM**  
**(DURING THE PERIOD January 2018 onwards to latest Month available)**

Month	NFSA Rice (in MT)		Wheat	SK Oil
	AAY Rice	PH Rice	(in MT)	(in KL)
1	2	3	4	5
January/2018	24188.75	109235.86	5781.61	20460
February/2018	24203.76	109322.70	5781.61	20484
March/2018	24217.13	109445.19	5781.61	20520
April/2018	24216.18	109738.59	5781.61	20424
May/2018	24211.46	109851.56	5781.61	20520
June/2018	24236.66	109976.75	5781.61	20520
July/2018	24240.02	109200.51	5781.61	20388
August/2018	24242.19	110035.24	5781.61	20532
September/2018	24246.53	110035.26	5781.61	20544
October/2018	24252.23	110043.26	5781.61	20436
November/2018	24241.76	109990.52	5781.61	20508
December/2018	24240.68	110101.83	5781.61	20520

AAY= Antrodoya Anna Yojona; PH= Priority House; NFSA= National Food Security Act.



## ANNEXURE-9.02

## DISTRICT WISE FAIR PRICE SHOP HOLDER OF "AAMAR DUKAN" IN ASSAM, 2017-18

District	Nos. of "Aamar Dukan"
1	2
Kokrajhar	64
Dhubri	254
Goalpara	137
Barpeta	195
Morigaon	120
Nagaon (including Hojai)	303
Sonitpur (including Biswanath)	370
Lakhimpur	432
Dhemaji	171
Tinsukia	244
Dibrugarh	401
Sivasagar	442
Jorhat	295
Golaghat	383
Karbi Anglong	100
Dima Hasao	20
Cachar	253
Karimganj	61
Hailakandi	130
Bongaigaon	272
Chirang	72
Kamrup	136
Kamrup Metro	284
Nalbari	198
Baksa	85
Darrang	70
Udalguri	66
South Salmara	65
<b>Assam</b>	<b>5623</b>



**ANNEXURE-9.03**  
**DISTRICT WISE AAY,PHH AND TOTAL NUMBER OF RATION CARD AND MEMBERS DETAILS**  
**AS PER ERCMS AS ON 3-12-2018**

District	AAY Rice	PHH Rice	Total Cards	AAY Members	PHH Members	Total Members
1	2	3	4	5	6	7
Kokrajhar	22986	162866	185852	95176	690618	785794
Dhubri	37797	307472	345269	169014	1385793	1554807
Goalpara	19593	159460	179053	87287	717729	805016
Barpeta	37679	269780	307459	157365	1207225	1364590
Morigaon	20512	166781	187293	81954	712718	794672
Nagaon	57871	381988	439859	268506	1997143	2265649
Sonitpur	40573	343868	384441	162271	1403600	1565871
Lakhimpur	24448	173245	197693	105604	744850	850454
Dhemaji	17181	118600	135781	69224	497202	566426
Tinsukia	31853	222291	254144	114983	937191	1052174
Dibrugarh	30405	226972	257377	115103	987237	1102340
Sivasagar	31252	204864	236116	119855	821985	941840
Jorhat	30824	198849	229673	122686	759623	882309
Golaghat	29370	191325	220695	111739	758289	870028
Karbi Anglong	13560	130545	144105	59872	647028	706900
Dima Hasao	5870	28512	34382	30423	145339	175762
Cachar	37078	283629	320707	155526	1229128	1384654
Karimganj	22156	212042	234198	90786	913066	1003852
Hailakandi	15006	113826	128832	59033	510741	569774
Bongaigaon	16268	119341	135609	73211	517595	590806
Chirang	14030	81478	95508	55673	333393	389066
Kamrup	41168	253617	294785	171347	1045503	1216850
Kamrup (M)	7963	153998	161961	33788	642220	676008
Nalbari	22149	127881	150030	94356	523846	618202
Baksa	22923	171758	194671	88100	639955	728055
Darrang	17938	141862	159800	74033	662774	736807
Udalguri	24006	143075	167081	89696	594995	684691
<b>Assam</b>	<b>692459</b>	<b>5089925</b>	<b>5782374</b>	<b>2856611</b>	<b>22026786</b>	<b>24883397</b>



## ANNEXURE -9.04

DISTRICT WISE NUMBER OF FAIR PRICE SHOPS ( FPS) AS PER SIMS AS  
ON 16-11-2018

District	No. of Fair price Shop
1	2
Kokrajhar	1241
Dhubri	1983
Goalpara	1028
Barpeta	2110
Morigaon	1171
Nagaon	3058
Sonitpur	2077
Lakhimpur	1893
Dhemaji	1567
Tinsukia	1682
Dibrugarh	1716
Sivasagar	1970
Jorhat	1617
Golaghat	2043
Karbi Anglong	822
Dima Hasao	276
Cachar	2048
Karimganj	1155
Hailakandi	918
Bongaigaon	710
Chirang	569
Kamrup	1755
Kamrup (M)	785
Nalbari	785
Baksa	871
Darrang	1073
Udalguri	1220
<b>Assam</b>	<b>38143</b>

## ANNEXURE - 9.05

## ALLOTMENT, OFF-TAKE AND DISTRIBUTION OF FOODGRAINS TO FPS UNDER NFSA

Year	RICE ( in MT)			WHEAT ( in MT)		
	Allotment by GoI	Off-take by GOA	Distribution to FPS	GOA	Off-take by GOA	Distribution to FPS
1	2	3	4	5	6	7
2016	1604767.44	1609803.94	1537192.91	69379.32	69379.32	46392.89
2017	1625751.96	1600147.007	1561633.22	69379.32	69379.32	67138.38

Source: (Table-29.04 to 29.08 ) Directorate of Food and Civil Supplies and Consumer Affairs, Assam

## ANNEXURE -10.01

## DISTRICT WISE PHYSICAL ACHIEVEMENT UNDER MGNREGA IN ASSAM, 2017-

18

District	Employment Generated (Mandays) (in Nos.)				
	SCs	STs	Others	Total	Women
1	2	3	4	5	6
Kokrajhar	19965	686806	1488511	2195282	914990
Dhubri	21822	2256	3616374	3640452	1445020
Goalpara	14707	124812	552391	691910	270489
Barpeta	109082	45672	4010524	4165278	1759288
Morigaon	173307	118210	1401969	1693486	649661
Nagaon	122117	79014	2421824	2622955	900315
Sonitpur	42689	97288	1088224	1228201	490637
Lakhimpur	87581	509531	1307731	1904843	877174
Dhemaji	60107	763233	883518	1706858	807593
Tinsukia	19643	101720	1292579	1413942	546169
Dibrugarh	48858	167042	1221266	1437166	626278
Sivasagar	17308	57874	574055	649237	245042
Jorhat	58825	101866	856933	1017624	439061
Golaghat	82201	281691	1490029	1853921	681642
Dima Hasao	4872	516182	25303	546357	210811
Cachar	147685	18043	1865774	2031502	432289
Karimganj	128705	8882	1246370	1383957	402441
Hailakandi	63353	14109	1645620	1723082	429004
Bongaigaon	70466	11137	1002169	1083772	422649
Chirang	60121	387727	580523	1028371	483089
Kamrup	148230	127454	1785018	2060702	674833
Kamrup Metro	29396	28686	43423	101505	47512
Nalbari	51141	25707	1554447	1631295	470142
Baksa	95024	589235	704257	1388516	667725
Darrang	51687	7733	1389674	1449094	563702
Udalguri	121687	1156665	1450093	2728445	1195714
Karbi Anglong	24007	853863	161698	1039568	443080
Majuli	54824	237603	227596	520023	185963
Mankachar	4574	204	364752	369530	149958
Biswanath	79191	186452	858848	1124491	448983
Charaideo	9192	17197	615077	641466	260144
Hojai	152779	36713	856962	1046454	387995
<b>Assam</b>	<b>2175146</b>	<b>7360607</b>	<b>38583532</b>	<b>48119285</b>	<b>18529393</b>



## ANNEXURE- 10.02

## DISTRICT WISE JOB CARDS ISSUED AND EMPLOYMENT PROVIDED IN ASSAM, 2017-

18

(in Nos.)

District	Job card Issued	Household Demanded Employment	Household Provided Employment	Household Provided 100 days Employment	Disabled Persons Provided Employment
1	2	3	4	5	6
Kokrajhar	165868	61404	56280	1067	611
Dhubri	174511	78243	71662	2286	262
Goalpara	134840	42906	37032	60	122
Barpeta	278095	116693	101415	1744	4087
Morigaon	158453	69925	64576	191	66
Nagaon	200116	108617	94741	54	62
Sonitpur	148824	63206	54498	9	46
Lakhimpur	178160	71031	65170	858	272
Dhemaji	106804	61529	54429	335	189
Tinsukia	145154	56083	51457	454	65
Dibrugarh	165386	71578	65164	368	140
Sivasagar	96088	34238	30907	199	100
Jorhat	129710	51430	43814	102	85
Golaghat	155473	84069	77307	258	105
Karbi Anglong	126896	67700	64143	22	36
Dima Hasao	29090	18935	18004	123	14
Cachar	210980	88406	70345	230	51
Karimganj	173065	72212	60314	27	45
Hailakandi	116949	61477	53652	88	51
Bongaigaon	108550	41221	36380	475	81
Chirang	104831	39771	36117	138	23
Kamrup	242585	81629	71036	210	114
Kamrup Metro	43062	6037	5354	1	2
Nalbari	118392	55550	49425	541	29
Baksa	194065	80291	68843	49	117
Darrang	150615	56958	47911	482	98
Udalguri	155874	100609	90253	72	48
Majuli	36269	22064	19599	100	24
South Salmara	38033	10803	9761	12	6
Biswanath	127992	57084	51748	34	634
Charaideo	59441	29174	27119	301	67
Hojai	89749	40505	36829	48	192
<b>Assam</b>	<b>4363920</b>	<b>1901378</b>	<b>1685285</b>	<b>10938</b>	<b>7844</b>

## ANNEXURE - 10.03

## DISTRICT WISE TARGET AND PHYSICAL ACHIEVEMENT UNDER PMAY-G IN ASSAM, 2017-18

District	Annual Target (No. of houses)	House Completed against Target	Under Construction (Sanctioned before 2017-18)	% of achievement against target
1	2	3	4	5
Kokrajhar	1699	302	3577	17.78
Dhubri	1791	600	4618	33.50
Goalpara	1739	677	3439	38.93
Barpeta	2436	1359	3961	55.79
Morigaon	1966	985	2742	50.10
Nagaon	1647	308	4267	18.70
Sonitpur	757	37	1389	4.89
Lakhimpur	2694	389	5943	14.44
Dhemaji	3230	1387	4947	42.94
Tinsukia	955	249	1430	26.07
Dibrugarh	682	235	863	34.46
Sivasagar	135	71	198	52.59
Jorhat	110	34	425	30.91
Golaghat	868	110	2094	12.67
Karbi Anglong	3100	14	6161	0.45
Dima Hasao	1416	0	3045	0.00
Cachar	1447	0	8599	0.00
Karimganj	2120	192	5846	9.06
Hailakandi	515	13	2449	2.52
Bongaigaon	508	51	990	10.04
Chirang	859	103	1772	11.99
Kamrup	1632	886	1390	54.29
Kamrup Metro	220	40	730	18.18
Nalbari	534	274	1025	51.31
Baksa	2595	34	5971	1.31
Darrang	992	336	1443	33.83
Udalguri	869	118	2188	13.58
Majuli	159	2	967	1.26
South Salmara	757	41	2955	5.42
Biswanath	469	15	1710	3.2
Charaideo	163	64	391	39.26
Hojai	1055	39	1761	3.7
<b>Assam</b>	<b>40119</b>	<b>8965</b>	<b>89286</b>	<b>22.35</b>

cont...



## ANNEXURE- 10.04

DISTRICT WISE TARGET AND PHYSICAL ACHIEVEMENT UNDER  
NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2017-18

District	Indira Gandhi National Old Age Pension Scheme		Indira Gandhi National Widow Pension Scheme	
	Target	Achievement	Target	Achievement
1	2	3	4	5
Kokrajhar	28072	26949	4122	3976
Dhubri	34607	25904	7298	3689
Goalpara	23442	21944	3844	4662
Barpeta	21511	17061	5716	4567
Morigaon	28577	28418	4086	4331
Nagaon	86709	74102	10577	8071
Sonitpur	55923	52174	6857	6290
Lakhimpur	27649	26127	4035	3917
Dhemaji	18119	16918	2821	2280
Tinsukia	25505	23579	4402	4406
Dibrugarh	23836	22074	3716	3240
Sivasagar	32690	30056	5324	6118
Jorhat	43391	39534	3617	2671
Golaghat	23396	22151	3472	3392
Karbi Anglong	25559	8900	2559	2253
Dima Hasao	9776	4389	686	281
Cachar	31726	28447	6389	5975
Karimganj	22809	19671	4374	5186
Hailakandi	20965	17588	2620	2217
Bongaigaon	15176	13924	2742	2602
Chirang	8303	8125	2083	1998
Kamrup	62407	54475	4770	4491
Kamrup Metro	16798	7929	834	737
Nalbari	35097	32461	3489	3211
Baksa	27695	21800	4091	3560
Darrang	19830	17191	3477	2932
Udalguri	16268	14893	3476	4530
<b>Assam</b>	<b>785836</b>	<b>676784</b>	111477	101583

Cont....

## ANNEXURE -10.04 A

District	National Family Benefit Scheme		Indira Gandhi National Disability Pension Scheme	
	Target	Achievement	Target	Achievement
1	6	7	8	9
Kokrajhar	267	0	1574	1498
Dhubri	423	0	2787	2118
Goalpara	335	80	1468	1357
Barpeta	310	28	2183	814
Morigaon	289	0	1560	1516
Nagaon	616	275	4040	2943
Sonitpur	469	0	2619	2487
Lakhimpur	267	0	1541	1447
Dhemaji	232	0	1078	837
Tinsukia	289	0	1681	1656
Dibrugarh	342	0	1419	236
Sivasagar	402	131	2033	1937
Jorhat	437	0	1381	951
Golaghat	312	0	1326	1298
Karbi Anglong	168	211	977	632
Dima Hasao	69	0	264	107
Cachar	388	170	2440	2233
Karimganj	250	42	1671	1729
Hailakandi	255	26	1001	537
Bongaigaon	299	493	1047	711
Chirang	175	123	796	628
Kamrup	503	0	1822	862
Kamrup Metro	182	1590	319	104
Nalbari	312	585	1332	714
Baksa	308	287	1562	1211
Darrang	335	0	1328	1069
Udalguri	289	0	1328	1356
<b>Assam</b>	<b>8523</b>	<b>4041</b>	<b>42577</b>	<b>32988</b>



**ANNEXURE - 11.01**  
**HEALTH SERVICES FACILITIES UNDER GOVT. SECTOR IN ASSAM FOR THE YEAR 2017 - 18**

(In Nos.)

Sl. No.	Districts	Health Services Facility under Govt. Sector									
		Civil Hospital	SDCH	FRU	Sub Centres	Primary Health Centres		State Dispensaries		Community Health Centres	
						Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11	12
1	Kokrajhar	1	1	0	161	43	Nil	16	0	4	Nil
2	Dhubri	1	2	0	245	41	Nil	14	0	8	Nil
3	Goalpara	1	0	1	154	37	Nil	13	0	6	Nil
4	South Salmara	-	-	-	-	-	-	-	-	-	-
5	Barpeta	1	1	0	264	48	Nil	8	1	9	Nil
6	Morigaon	1	0	1	123	33	Nil	13	0	6	Nil
7	Nagaon	1	0	5	351	75	Nil	25	0	17	Nil
8	Hojai	-	-	-	-	-	Nil	-	-	-	Nil
9	Sonitpur	1	2	0	279	53	Nil	15	0	9	Nil
10	Biswanath	-	-	-	-	-	Nil	-	-	-	Nil
11	Lakhimpur	1	1	0	156	25	Nil	7	0	8	Nil
12	Dhemaji	1	0	0	98	20	Nil	2	0	4	Nil
13	Tinsukia	1	0	0	164	20	Nil	5	0	7	Nil
14	Dibrugarh	0	0	0	234	30	Nil	7	1	8	Nil
15	Sivsagar	1	2	0	220	43	Nil	4	0	4	Nil
16	Charaideo	1	-	-	-	-	Nil	-	-	-	Nil
17	Jorhat	0	2	1	144	40	Nil	9	0	6	Nil
18	Golaghat	1	1	0	144	40	Nil	5	0	4	Nil
19	East Karbi Anglong	1	1	0	145	42	Nil	9	0	6	Nil
20	West Karbi Anglong						Nil				
21	Majuli	-	-	-	-	-	-	-	-	-	-
22	Dima Hasao	1	0	0	72	11	Nil	2	0	2	Nil
23	Cachar	1	0	1	270	30	Nil	5	0	4	Nil
24	Karimganj	1	0	0	222	29	Nil	7	0	7	Nil
25	Hailakandi	1	0	0	107	13	Nil	3	0	3	Nil
26	Bongaigaon	1	0	0	94	28	Nil	3	0	4	Nil
27	Chirang	1	0	0	87	23	Nil	10	0	3	Nil
28	Kamrup	1	1	3	279	66	Nil	28	0	11	Nil
29	Kamrup Metro	0	0	2	48	25	Nil	0	14	3	Nil
30	Nalbari	1	0	1	121	42	Nil	17	0	11	Nil
31	Baksa	1	0	0	157	36	Nil	14	0	6	Nil
32	Darrang	1	0	0	159	32	Nil	13	0	7	Nil
33	Udalguri	1	0	0	146	21	Nil	8	0	5	Nil
Assam		25	14	15	4644	946	Nil	262	16	172	Nil

N.B.: SDCH = Sub Divisional Civil Hospital; PHC = Primary Health Centre;  
FRU = First Referral Units; CHC = Community Health Centres.

## ANNEXURE -11.02

## NUMBER OF BEDS IN DIFFERENT TYPE OF GOVT. HEALTH INSTITUTIONS IN ASSAM, 2017

Sl. No.	Districts	No. of Beds						Total
		CH	BPHC	MPHC	CHC	SDCH	MCH	
1	2	3	4	5	6	7	8	9
1	Kokrajhar	150	24	164	60	75	0	473
2	Dhubri	200	42	148	180	240	0	810
3	Goalpara	150	30	144	150	0	0	474
4	South Salmara	-	-	-	-	-	-	-
5	Barpeta	100	54	168	240	30	380	972
6	Morigaon	100	18	132	150	0	0	400
7	Nagaon	190	66	276	510	0	0	1042
8	Hojai	-	-	-	-	-	-	-
9	Sonitpur	190	48	200	240	120	0	798
10	Biswanath	-	-	-	-	-	-	-
11	Lakhimpur	100	36	68	240	50	0	494
12	Dhemaji	100	30	72	120	0	0	322
13	Tinsukia	100	24	104	210	0	0	438
14	Dibrugarh	0	36	96	240	100	1385	1857
15	Sivsagar	150	48	148	120	100	0	566
16	Charaideu	-	-	-	-	-	-	-
17	Jorhat	200	42	148	150	50	410	1000
18	Golaghat	100	30	140	120	50	0	440
19	East Karbi Anglong	100	48	152	150	0	0	450
20	West Karbi Anglong							
21	Majuli	-	-	-	-	-	-	-
22	Dima Hasao	100	18	32	60	0	0	210
23	Cachar	50	48	100	120	0	929	1247
24	Karimganj	100	30	96	240	0	0	466
25	Hailakandi	100	24	36	90	0	0	250
26	Bongaigaon	150	36	96	120	0	0	402
27	Chirang	150	0	100	90	0	0	340
28	Kamrup	200	78	232	330	100	0	940
29	Kamrup Metro	350	6	96	90	0	2017	2559
30	Nalbari	100	42	160	330	0	0	632
31	Baksa	150	0	164	150	0	0	464
32	Darrang	100	42	92	210	0	0	444
33	Udalguri	150	0	96	150	0	0	396
Assam		<b>3630</b>	<b>900</b>	<b>3460</b>	<b>4860</b>	<b>915</b>	<b>5121</b>	<b>18886</b>

N.B.: CH = Civil Hospital; BPHC = Block Primary Health Centre;  
 MPHC = Mini Primary Health Centre; CHC = Community Health Centre;  
 SDCH = Sub Divisional Civil Hospital; MCH = Medical College Hospital



### **List of Experts, who have contributes for Quality Improvement of the Publication**

1. Dr. Mrinal Kanti Dutta, Professor & Head, Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati
2. Dr. M. P. Bezbaruah, Professor & Head, Department of Economics, Gauhati University, Guwahati
3. Dr. Labananda Choudhury, Professor & Head, Department of Statistics and Dean Faculty of Science, Gauhati University, Guwahati
4. Dr. Chandan Kumar Sharma, Professor & Head, Department of Sociology, Dept. of Social Work, Tezpur University, Assam
5. Dr. Joydeep Baruah, Associate Professor, OKD Institute of Social Change and Development, Guwahati
6. Dr. Kalyan Das, Associate Professor, OKD Institute of Social Change and Development, Guwahati
7. Dr. M. N. Ray, Professor, Department of Extension Education, CVSc, Assam Agriculture University, Khanapara
8. Dr. S. K Bhagabati, Head (i/c), Dept. of Aquatic Environment Management, College of Fisheries, Assam Agriculture University, Raha
9. Dr. S .Chatterjee, Adviser to the Centre for Sustainable Development Goals (SDG) Assam
10. Dr. R. M. Dubey, Prof. & Head, Centre for Sustainable Development Goals (SDG) Assam
11. Smt. Supriya Khound, State Technical Officer (NE Region), United Nations Development Programme (UNDP)

