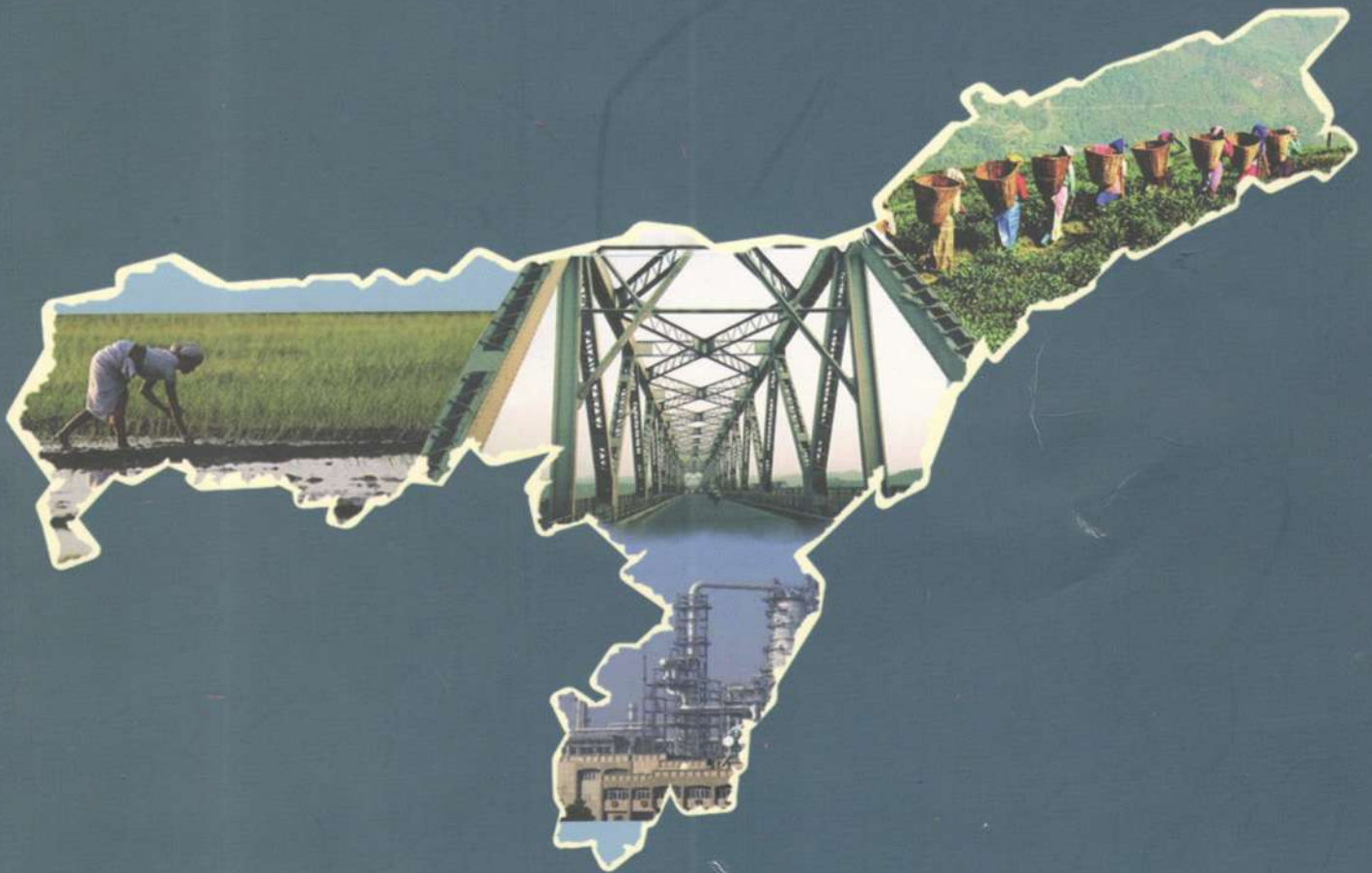




सत्यमेव जयते

ECONOMIC SURVEY

ASSAM: 2020-21



Directorate of Economics and Statistics, Assam, Guwahati - 28
Transformation and Development Department
Government of Assam



ECONOMIC SURVEY ASSAM: 2020-21

**GOVERNMENT OF ASSAM
TRANSFORMATION & DEVELOPMENT DEPARTMENT
DIRECTORATE OF ECONOMICS AND STATISTICS, ASSAM
JAYANAGAR, BELTALA, GUWAHATI-28**

ড° হিমন্ত বিশ্ব শর্মা
Dr. Himanta Biswa Sarma



মুখ্যমন্ত্রী, অসম
Chief Minister, Assam



Dated Dispur, the 25th June, 2021

MESSAGE

I am glad to know that the Directorate of Economics and Statistics, Assam is bringing out its annual publication 'Economic Survey Assam, 2020-21'. I on this occasion compliment the efforts of the Directorate.

Economic survey holds great importance as it gives a fair idea about the state of economic affairs. I hope the Economic Survey Assam, 2020-21 becomes a flagship document and a mirror of the economic development of the state which gives an account of detailed statistical data of the key sectors of the state's economy. I hope the survey report provides an outline of the state's economy for the next financial year.

I convey my best wishes to the department for resounding success in its endeavour.

(Dr. Himanta Biswa Sarma)

Jishnu Barua, IAS
Chief Secretary



GOVERNMENT OF ASSAM

Janata Bhawan, Block-C
Dispur, Guwahati-781006
Phone : 0361-2261120 (O)
0361-2261403 (O)
Fax : 0361-2237200
E-mail : cs-assam@nic.in

MESSAGE

Publication of Economical Survey, Assam 2021 is an important milestone in recording the Socio-Economic progress of the State. These documents not only focus on performance based analysis of the greater economic sphere of the State but also act as resource material for policy maker and research scholars.

I extend my best wishes to all those involved in the process and hope that these efforts shall be continued in future with goals of objectivity and greater good of the citizens of Assam.

Dated the 29th June, 2020


(Jishnu Barua, IAS)

Paban Kumar Borthakur, IAS

Additional Chief Secretary
T&D, Cultural Affairs &
Tourism Department



GOVERNMENT OF ASSAM

'D' Block, Ground Floor

Janata Bhawan

Dispur, Guwahati-781006

Tel.: +91-361-2237032 (O)

email : pabankb@nic.in

Ref No.

Date :



MESSAGE

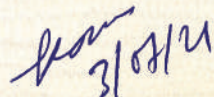
It is a matter of great satisfaction that the Directorate of Economics and Statistics, Assam is bringing out the Annual Publication 'Economic Survey Assam, 2020-21' highlighting latest economic scenario of the State.

The Directorate of Economics and Statistics, Assam has been entrusted with the task of collecting, compiling and analysis of data on different sectors of the economy and incorporating the details in the current issue the 'Economic Survey Assam, 2020-21'.

I hope, the publication will be of use of Policy makers, Planners, Administration and Researchers and other interested parties.

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

July 03, 2021


(P. K. Borthakur)

FOREWORD

The Directorate of Economics and Statistics, Assam has been publishing the "Economic Survey, Assam" annually with a view to maintain the data base on various aspects and focus the objective accounts of the state's economy based on development of the state during the year. Economic Survey, Assam is a annual publication which contains detail analysis of Departmental activities, Schemes and Programmes undertaken by the Government for development of the State.

In the current edition of the Report, "Economic Survey Assam, 2020-21" endeavour has been made to depict and review the latest developments and trends in sectoral performance of the State's economy. However due to currently existing situation of Covid-19 Pandemic, collection of information from various fields relevant for preparation of this report, have been hampered. Therefore some of the sectoral information of the economy could not be updated and depicted in details. Even though special efforts have been made to provide information on achievements of various measures/ programmes undertaken by the State Government for all round socio-economic development through collated data made available by different Government Departments, Organisations, Institutions and Agencies. The Directorate acknowledges with gratitude the co-operation extended by various Government Departments / Organisations in making relevant data/information available for bringing out this publication.

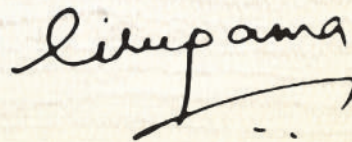
I extend sincere appreciation for the efforts made by the officers and staff associated directly and indirectly in compiling, composing and designing this publication.

The Chapter "Sustainable Development Goals" has been prepared by the SDG Cell, Plan Coordination Division, Transformation and Development Department, Assam, and the Directorate sincerely acknowledges the efforts put in by the SDG Cell of the Department.

I would like to accord my sincere gratitude to Sri Mounash Pathak, Concept Artist, for designing the cover page of this publication.

I expect this publication will definitely be beneficial for the Administrators, Planners, Academicians, Researchers, and many others.

Comments and suggestions for improvement of the future editions of this publication would be highly appreciated.



Nirupama Talukdar
Director of Economics and Statistics

June, 2021

Officials of the Directorate associated with the publication.

Joint Director

Nasim Parveen

Senior Research Officer

Purbajyoti Das

Research Officer

Utpal Medhi

Parimal Chakraborty

Debanan Saikia

Jiten Bhuyan

Mukul Sarma

Jyoti Prasad Hazarika

Manjila Zahan

Statistical Officer

Karmeswar Nath

Mitali Barbara

Ramen Kalita

Inspector of Statistics

Rajesh Mishra

CONTENTS

<u>CHAPTER</u>		<u>PAGE</u>
	Assam at a Glance	i-v
Chapter-I	Assam Economy - An Overview	1-8
Chapter-II	Population	9-33
Chapter-III	State Income	34-61
Chapter-IV	State Finance	62-76
Chapter-V	Agriculture	77-104
Chapter-VI	Irrigation	105-123
Chapter-VII	Flood and Flood Control Measures	124-134
Chapter-VIII	Livestock, Animal Husbandry and Dairy Development	135-158
Chapter-IX	Fisheries	159-173
Chapter-X	Forestry	174-193
Chapter-XI	Industry, Trade and Mining	194-216
Chapter-XII	Power	217-232
Chapter-XIII	Transport and Communication	233-249
Chapter-XIV	Institutional Finance	250-270
Chapter-XV	Co-operation	271-284
Chapter-XVI	Prices and Public Distribution System	285-300
Chapter-XVII	Labour, Employment and Wages	301-315
Chapter-XVIII	Panchayat and Rural Development	316-332
Chapter-XIX	Social Sector	333-361
Chapter-XX	Assam's march to achieving Sustainable Development Goals (SDGs) - A district disaggregated approach	362-386

ASSAM AT A GLANCE

Sl. No.	Item	2017-18	2018-19	2019-20
1	Geographical Area ("000sq. Km.)	-	-	78.44
2	Administrative Setup-(In no.)			
(i)	Revenue Circles	-	-	184
(ii)	District	-	-	33
(iii)	No. of Gaon Panchayat	-	-	2200
(iv)	Inhabited Villages	-	-	25372
(v)	Un -inhabited villages	-	-	1023
(vi)	No. of Towns	-	-	214
3	Population as per Census 2011 (In "000)			
(i)	Total	-	-	31205
(ii)	Male	-	-	15939
(iii)	Female	-	-	15266
(iv)	Rural	-	-	26807
(v)	Urban	-	-	4398
(vi)	Scheduled Cast	-	-	2231
(vii)	Scheduled Tribes	-	-	3884
(viii)	Density of Population (per sq. km.)	-	-	382
(ix)	Literacy rate (percentage)	-	-	73
(x)	Sex ratio (Female per thousand male)	-	-	958
(xi)	Percentage of urban population to total population	-	-	14.1
4	Net State Domestic Product (Rs. in crore)			
(i)	At current Price	227570	280394	313052#
(ii)	At Constant Price	172961	208035	216243#
(a)	Agriculture &, Forestry and Fishing (Rs. in crore)			
(i)	At current Price	44127	51106	49509#
(ii)	At Constant Price	32699	36993	34414#
(b)	Service Sector (Rs. in crore)			
(i)	At current Price	111508	147645	141873#
(ii)	At Constant Price	76202	96813	80244#
5	Rainfall-percent to Normal (in mm)	101.89	75.77	96.36
6	Agriculture-(Area in "000 Ha.)			
(i)	Net area sown	2722	2723	-
(ii)	Gross cropped area	4045	4004	-
7	Area under principal crops (in "000 ha.)			
(i)	Rice	2434	2425	2401*
(ii)	Wheat	18	16	11*
(iii)	Maize	32	32	37*
(iv)	Rape & Mustard	290	286	287*
(v)	All cereals	2488	2479	2454*
(vi)	All pulses	155	150	144*
(vii)	All food grains	2643	2629	2598*
(viii)	Sugarcane area	31	31	30*
(ix)	Cotton	1	1	1*
(x)	Total Fruits & Vegetables	211	207	209*

ASSAM AT A GLANCE

Sl. No.	Item	2017-18	2018-19	2019-20
8	Production of principal crops (in '000 tonnes)			
(i)	Rice	5284	5437	5215*
(ii)	Wheat	25	23	14*
(iii)	Maize	99	105	128*
(iv)	Rape & Mustard	186	184	177*
(v)	All cereals	5410	5569	5360*
(vi)	All pulses	116	113	106*
(vii)	All food grains	5526	5682	5467*
(viii)	Sugarcane (cane)	1143	1093	1218*
(ix)	Total Fruits & Vegetables	2420	2507	2470*
9	Index of agricultural production	137.54	150.86	147.51
10	Agriculture Census as on 2015-16			
(i)	Number of operational landholding (in '000)	-	-	2741\$
(ii)	Area of operational landholding (in '000)	-	-	2976\$
(iii)	Average size of operational landholding (Ha.)	-	-	1.09\$
11	Livestock Census-as on 2019			
(i)	Total livestock (in '000)	-	-	18077
(ii)	Total poultry (in '000)	-	-	NA
12	Forest Area (sq. km.)	13517	13590	13590
13.(i)	Index of Industrial Production of Assam	109.29	111.24	112.00
13.(ii)	Index of Mineral Production of Assam (All Minerals)	86.58	89.55	84.82
14	Electricity-(Million Kwh)			
(i)	Gross Unit Generation (MU)	1490	1594	1546
(ii)	Total Consumption	6813	6968	7257
(iii)	Industrial consumption	888	1127	1586
(iv)	Domestic consumption	3703	3477	3818

- Data for the year 2019-20 (QE)

* - Data for the year 2019-20 (P)

\$ - Data for the year 2015-16

ASSAM AT A GLANCE

Sl. No.	Item	2017-18	2018-19	2019-20
15	Banking -(Scheduled Commercial)			
(i)	Banking offices	2326	2348	2889
(ii)	Banking office for rural population	1062	481	477
16	Education			
(i)	Primary schools (in nos.)	39780	36262	36684
(ii)	Enrolment (in"000)	2495	2650	2617
(iii)	Secondary schools (in nos.)	3380	5142	4313
(iv)	Enrolment (in "000) (Including High & Higher secondary)	810	783	780
17	Health			
(i)	Civil Hospital (including sub-divisional civil Hospital)	39	39	38
(ii)	Dispensaries	278	278	154
(iii)	Beds per lakh population (Estimated population)	58.29	53.35	60
(iv)	Birth rate	21.2 [^]	21.1 [@]	-
(v)	Death rate	6.5 [^]	6.4 [@]	-
(vi)	Infant mortality rate	44 [^]	41 [@]	-
18	Transport			
(i)	Railway route length (in Km.)	2464.89	2518.99	2518.99
(ii)	Total road length (in km.)	52890	57848	58884
(iii)	Motor vehicles on Road (in "000 Nos.)	3310	3725	4167
(iv)	Road Length per lakh of population	169.49	163.41	166.34
(v)	Road Length per "00sq. Km. of Area (in km.)	67.43	73.74	75.07

[^] - Data for the year 2017

[@]- Data for the year 2018

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 (2016-17)	In 000Hac.			
2.1	Net area sown	"	2773	139415	1.98
2.2	Gross cropped area	"	4087	200203	2.04
2.3	Gross irrigated area	"	224	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 for year 2019-20 (P)	In Million Hac.			
(i)	Rice	"	2.4	43.8	5.47
(ii)	Wheat	"	0.01	31.5	0.03
(iii)	Total Pulses	"	0.14	28.3	0.49
(iv)	All food grains (cereals and pulses)	"	2.59	127.6	2.02
(vi)	Sugarcane	"	0.02	4.6	0.43
(vii)	Cotton	"	1	NA	

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)				
5.1	Total generation	Million kwh.	7629	1433400	0.53
5.2	Total consumption	"	6814	N.A.	
5.3	(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)				
6.1	Metro politan	Number	Nil	26961	-
6.2	Semi Urban		665	38481	1.72
6.3	Urban		599	25307	2.36
6.4	Rural	"	1062	49384	2.15
7	State/National Income (2017-18) (QE)				
7.1	Net State domestic Product (At current price)	Rs. in crore	227570	14710563	1.55
7.2	Per capita income at current prices	In Rs.	72289	111782	64.66
7.3	Gross State Domestic Product (GSDP)/Gross Domestic Product (GDP)	Rs. in crore	259997	16438895	1.58

CHAPTER-I 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 lakhs of which 159.39 lakhs were male and 152.66 lakhs 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 in urban areas of the State, while the percentage of rural population of the State was higher than All-India average (69%). 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 compared 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. Compared 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 INCOME

As per quick estimates, the Gross State Domestic Product (GSDP) of the State at current prices is estimated at Rs. 351,317.77 crores during 2019-20 indicating a growth of 11.22% over the preceding year and the GSDP of the State at constant prices is estimated at the level of Rs. 248,796.15 crores indicating a growth of 6.30%. During 2019-20, the percentage contribution of agriculture and allied sector, industry, services, taxes and subsidies to total GSDP of Assam at current prices are 15.64%, 33.62%, 44.03% and 6.71% respectively as against 15.08%, 40.48%, 38.01% and 6.43% at constant prices. The share of agriculture and its allied activities in GSDP at current prices has marginally come down from 19.89% in 2011-12 to 16.21 % in 2018-19(P.E) and 15.64% in 2019-20(Q.E). During the same period, the share of industry sector at current prices has increased gradually from 30.63% in 2011-12 to 33.69% in 2018-19(P.E) and 33.62% in 2019-20(Q.E). The contribution of the Service sector has also increased from 43.97% in 2011-12 to 44.03% in 2019-20 which has reflected a positive trend. The annual growth rate of GSDP in respect of agriculture and its allied sector at current prices for the year 2019-20(Q.E) is estimated to at 7.28% as against 2.35% at constant prices. The annual growth rate of Industry sector is estimated to achieve 10.98% at current prices during 2019-20 over the previous year as against 8.20% at constant prices. During the same period, the annual growth rate of Service sector is estimated to achieve 12.55% at current prices over the previous year as against 4.48% at constant prices. The per capita income of the State in terms of NSDP at constant (2011-12)

prices is estimated at Rs.62,796.00 for the year 2019-20 (Q.E) as against Rs.60,695.00 in 2018-19 (P.E) with an increase of 3.46% and the same was Rs. 41,142.00 in the year 2011-12.

STATE FINANCE

Public finance has undergone major changes during the period 2001-17. Compared to earlier two decades (1980s and 1990s), States in India experienced relatively comfortable fiscal situation during 2001-16. Major reforms were initiated in revenue and expenditure fronts during the period notable among them are introduction of Value Added Tax (VAT) and adoption of Fiscal Responsibility and Budget Management practices. With implementation of GST in 2017, the principle of indirect taxation for many goods and services and raise revenue shifted from origin-based to destination-based. As a result, ability to tax goods and services and raise revenue shifted from origin or producing states to destination or consuming states.

The State Government mobilizes financial resources through direct and indirect taxes, non-tax revenue, share of central taxes and grants-in-aid from Central Government to meet the expenditure on administration and developmental activities.

During the financial year 2020-21(B.E), total revenue receipts of the state is expected to reach the level of Rs. 91930.81 crore as against Rs. 93026.08 crore in F.Y 2019-20(R.E) with a deficit of Rs.8782.82 crore in Revenue Receipt Account. An amount of Rs.30513.52 crore is expected to be earned from the state's own resources with contribution of Rs. 23209.73crore as tax revenue and Rs. 7303.78crore as non-tax revenue. An amount of Rs. 26775.56 crore is expected to be received from Govt. of India as share of central taxes. Revenue expenditure was Rs. 86213.77 crore in 2019-20 and it was decreased to Rs. 82776.98 crore in F.Y 2020-21(BE).

During the F.Y 2020-21, total capital outlay is expected to reach the level of Rs. 13015.14 crore. Net Extension of Debt was Rs. 11621.36 crore in 2019-20 and it comes down to Rs. 10867.31 crore in F.Y. 2020-21(B.E).

The permanent debt has increased from Rs. 29608.50 crore in 2019-20 to Rs. 41551.63 crore in 2020-21 (B.E.) with an increase of 40.34 percent. Loans from Central Govt. has declined from Rs. 1774.95 crore in 2018 to Rs.1415.92 crore in 2020 with a decrease of 10.11 percent . The liabilities of State Govt. which was Rs. 5987.25 crore in 2018 was raised to Rs. 6346.67 crore in 2020 with an increase of 3.0 percent .Per capita loan outstanding has increased from Rs.12043.00 in 2016 to Rs. 20171.00 in 2020 registering annual growth of 16.87 percent.

During the F.Y 2019-20, the Finance (Taxation) Department had collected Rs. 8521.81 crore under GST against Rs.7439.78 crore in the financial year 2018-19 with a growth of 15.31%. The department had received Rs. 201.96 crore and Rs. 973.42 crore as advance/provisional settlement of IGST returns during the F.Y 2019-20and 2018-19 respectively. Also, the state had received Rs. 1284.00 crore and Rs. 455.00 crore as compensation under GST during the F.Y 2019-20 and 2018-19 respectively.

BANKING

According to the Reserve Bank of India, the number of reporting Bank Offices of all Scheduled Commercial Banks in Assam has been increased to 2889 as on March 2020

from 2348 as on March 2019. With the increase in the bank networking, the dependence per bank offices in Assam has been considerably decreased over the years and reduced from 42.14 Sq.km as on March 2014 to 27.15 Sq.km as on March 2020. However, average population covered per bank branch office in Assam was calculated at 12 thousand (based on projected Population as on 1st March, 2020) as on March, 2020 compared to All India average of 9.05 thousand during the same period.

The expansion of banking facilities in the State has augmented not only in respect of volume of deposits but also in respect of disbursement of credit. The aggregate deposit with Scheduled Commercial Banks in Assam, which was Rs.147203 crore in March 2019, has increased to Rs.166270 crore in March 2020. The total volume of credit disbursed by the banks has been increased to Rs. 70658crore in March 2020 from Rs. 65070 crore in March 2019 thereby recorded a growth of 8.59 percent. The per capita deposit at the end of March 2020 was Rs.47961 showing an increase of 11.73 percent over per capita deposit of Rs.42925 on 31st March 2019. The per capita credit as on March 2020 increased to Rs.20381 from Rs.18974 in March 2019 showing a growth of 7.42 percent during 2020 over the previous year.

The Credit-Deposit ratio of Scheduled Commercial Banks in Assam has marginally decreased to 42.49 percent at the end of March, 2020 compared to 44.20 percent during the year 2018-19. The Quarterly Statistics on Deposit and Credit of Scheduled Commercial Banks India, RBI reveals that District-wise Lakhimpur with 73 had the highest CD Ratio as on March, 2020 followed by Udalguri (72), Kamrup (71) as on 31st March 2020 and the four districts with the lowest CD ratio are Kamrup Metro (32), Kokrajhar (32), Karimganj (31) and Dima Hasao (25).

AGRICULTURE

Agriculture is the backbone of the State Economy and plays a key role in the development of the State. The contribution of Agriculture and allied activities towards gross state domestic product (GSDP) in 2019-20 at current prices is 15.64% (Q.E.) and 15.08% (Q.E.) at constant prices, which was 16.21% (P.E.) in current prices and 15.66% (P.E.) in constant prices in the year 2018-19. The contribution of Agriculture and allied sector marginally declined due to various factors such as soil erosion, urbanisation etc. The annual growth rate of GSDP in Agriculture and allied sector 2019-20 (Q.E.) at current prices is 7.28% and at constant prices is 2.35%. The total number of Kishan Credit Card issued was 312618 nos. and credit limit sanctioned was Rs.1502.75 Cr during the year 2019-20.

The average rainfall pattern in Kharif season was normal and deficient during the Rabi season and altogether rainfall during the year 2019 was normal.

Agriculture census 2015-16 has revealed that the total number of operational holdings (includes all sizes) are 2741722 and total area operated is 2976765 hect. (Includes all sizes)

The average size of holdings was 1.09 hectares and the area covered under food grains was 25.98 lakh hectares in 2019-20. Area under Rice (Autumn, Winter and Summer) was 24.00 lakh hectares, Wheat - 0.11 lakh hectares, total pulses - 1.44 lakh hectares and total oil seeds (excluding coconut) covered 3.11 lakh hectares during the

year 2019-20. The total food grain production was 5467 ('000 tonnes) which accounted for total average yield of 2129 Kg/hectare in the year 2019-20.

The total rice production was 5214804 (in tonnes) with average yield of 2199 (kg/hectare) in the year 2019-20 as against production of 5437372 (in tonnes) and average yield of 2271 (kg/hectare) in the year 2018-19. During the year 2019-20, rice production decreased by 4.09 percent and average yield came down to 3.17 percent as compared to the previous year 2018-19

Irrigation

Out of the total geographical area of Assam i.e. 78.44 lakh hectares, the Gross Cropped Area of the state was 40.87 lakh hectares (estimated for 2016-17) and Net Area Sown was 27.74 lakh hectares. The ultimate irrigation potential of the state was estimated at 27 lakh hectares. It was planned to irrigate 17 lakh hectares through Minor irrigation schemes, out of which 10 lakh hectares were to be covered by surface water resources and the rest 7 lakh hectares from ground water resources. The remaining 10 lakh hectares were planned to be covered through Major and Medium Irrigation projects.

In Assam, irrigation potential of 10.24 lakh hectares was created by the Government under the Department of Irrigation till 31st March, 2020 through ongoing Major, Medium and Minor irrigation schemes.

MILK, MEAT AND EGG PRODUCTION

The total Milk production of the State for the year 2019-20 was estimated at 975 million litres as against 946 million litres of the previous year 2018-19 revealing a growth of 3.16% in 2019-20 over the year 2018-19.

The total Meat production in 2019-20 was 52.96 ('000' tonnes) and 50.00 million tonnes in the 2018-19 resulting in the increase of Meat production by 4.99 percent in the year 2019-20 over the previous year 2018-19.

The Egg production during the period 2019-20 for both (Fowl and Duck) was 514 (in million no.) and 501 (in million no.) in the previous year 2018-19 and the increase in Egg production was 2.7 percent in the current year over the previous year.

The total no. of dispensaries in the state was 311, Sub-Centre/FAC/SMC - 804 nos. and key village centres - 19 numbers as on Mar-2020. The number of live stock and poultry vaccinated was 1936886 and 510430 respectively during the year 2019-20.

FISHERY

Fishery sector plays a significant role in the socio economic development of the state providing rural employment, nutritional support and livelihood security thereby reducing poverty and encouraging promotion of health. Fishery sector has been identified as one of the Ratnas among the selected Navaratnas under the 'Chief Minister's Samagra Gramya Unnayan Yojana (CMSGUY)'. Fish Production in the state has reached a level of 3.73 lakh MT during 2019-20 against the corresponding nutritional requirement of 3.87 lakh MT. The per capita consumption of fish is 11.12 Kg per annum which is now included as one of the SDG indicators for the State. Fish is the most important cuisine of the people of Assam and more than 90% of the people of the state prefer fish in their meal leading to ever increasing demand for fish. In rural areas of the state, fish farming has become one of the most common activities. Thus, the Fishery

Sector is considered as an important economic activity in the socio-economic context of the state of Assam, providing scope for employment generation especially in the rural areas through fish production and its related activities. The contribution of Fishery Sector to the State's GSDP (at constant price 2011-12 prices) was Rs 5, 97,648.00 lakhs for the year 2019-20 with a growth rate of 1.49 percent per annum over the previous year.

Forestry

Assam is the second largest state in the North Eastern region of India. The total geographical area of Assam is 78,438 sq Km which is 2.39 percent of the total geographical area of the country. As per India State Forest Report (ISFR) 2019 the total forest cover of Assam is 28,327 sq km which is 36.11 percent of the total geographical area of the state. Assam has shown a marginal increase of 222 sq km area of forest cover compared to the ISFR report, 2017. It is estimated that plantation mostly outside forest area is the main cause for this increase.

In terms of forest canopy density classes, the state has 2795 sq km very dense forest, 10279 sq km moderately dense forest and 15253 sq km of open forest. Besides forest cover, the area under tree cover is 1408 sq km in the state as per ISFR 2019 report. In respect of Bamboo resources of the state it was revealed that the area of bamboo bearing area in the state has significantly increased which is 1570 sq km compared to ISFR, 2017 estimation. Forestry and Logging is one of the main components of the Primary Sector of the state economy. As per quick estimation (QE) the total contribution of Forestry and logging to the state GSDP in 2019-20 (QE) at current prices was Rs 327099 lakhs as against Rs 306278 lakhs (Provisional Estimate) at current price with a growth rate of 6.78 percent.

INDUSTRY AND INDUSTRIAL GROWTH

The Industry sector comprises of mining & quarrying, manufacturing, electricity, gas, water supply & other utility services and construction. As per quick estimates for 2019-20 at constant (2011-12) prices, annual growth rate in Industry Sector is estimated at 8.00%; the growth rate being 10.98% at current prices. At constant prices, the contribution of the sub sectors to the industry sector for 2019-20(A.E.) is estimated at 8.03% for mining and quarrying, 7.39% for manufacturing, 8.11% for electricity, gas, water supply & other utility services and 9.82% for the construction sector. All the sub-sectors of Industry have recorded declining growth at current prices except construction sector; its growth rate increasing over the previous year. The contribution of Industry Sector to the state's Gross Domestic Product (GDP) is 33.62% at current prices during 2019-20(Q.E.) which was 33.69% (P.E.) during the year 2018-19. At constant prices the contribution of Industry sector was 40.48% (Q.E.) in 2019-20 which was 39.77% (P.E.) during the year 2018-19.

During 2018-19, the Index of Industrial Production (Base: 2011-12=100) in respect of registered manufacturing sector is calculated at 125.46 (Prov.) showing a positive growth of 0.75% over the previous year 124.63. Index of industrial Production of Assam during 2018-19 has been worked out at 111.24 (Prov.) registering a growth of 1.8 % over 109.29 in 2017-18.

Minerals

The state is endowed with mineral resources, and the minerals are major contributors to the state's industrial performance. The contribution of Mining and Quarrying sector to the economy has been around 10.86% at Current Prices in 2019-20(Q.E.) and at Constant Prices it was 8.03%. Table 11.3 shows the trend of production of some major minerals in the state in the last five years.

During the year 2019-20, among the major minerals of the State the production of Coal decreased by 23% , Natural Gas decreased by 5% and Crude oil by 3.0% compared to the previous year. Besides, production of Limestone in the state also recorded a down of 6.0% during 2019-20 as compared to the previous year.

POWER

The installed capacity of generating plants hydel and gas plants of the state was 376.155 MW as on March , 2019 compared to 375.355 MW in 2018-19 and 364.7 MW in 2017-18. Source-wise electricity generated in Assam, now also includes renewable energy sources like Solar and Wind Energy to meet the additional requirement of power in the state.

The energy requirements of the State has been worked out at 9413 Million Units (MU) for the year 2019-20 which was 9173 MU in 2018-19 and 8694 MU in 2017-18. The peak demand for electricity in the State has increased from 1745 MW in 2017-18 to 1809 MW in 2018-19 and further to 1956 MW in 2019-20. The Power Department has taken up a number of initiatives for electrification of the rural areas of the state under its programmes of Rajiv Gandhi Gramin Vaidyutikaran Yojana (RGGVY), Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Saubhagya and Gram Swaraj Yojana (GSA-I and GSA-II).

Initiatives have also been taken up for promoting renewable energy sources like Solar and Wind energy to complement the existing sources of power for lighting the remote villages, hill areas and char areas and cater to the additional power requirements of the state.

TRANSPORT

The contribution of the transport and communication sector was calculated at 5.00% of GSDP in 2019-20 at constant prices (at 2011-12 prices) as against the contribution of 5.29% in 2018-19. The road network in Assam comprised of total 58882 km of roads consisting of 3890 km of National Highways, 2530 km of State Highways, 4379 km of Major District Roads, 1739 km of Urban roads, 46344 km of Rural Roads as on March 2019-20. Out of the total 54992 km road length maintained by the PWD, 31493 km is blacktopped; 650 km is cement concrete, 5566 km is inter- locking cement concrete block pavement (ICBP) and 17284 km is metalled and un-metalled roads.

The on road vehicle population in the State was 4167346 as on March 2020. The density of motor vehicles in Assam was 53.1 per sq. km. during the year 2019-20 as against 47.5 vehicles per sq. km. during the year 2018-19. At present Assam has total railway route length 2518.99 km. which is 3.9% of the total Railway Route length of the country.

SOCIAL SECTOR

EDUCATION

During 2019-20, number of Primary schools (class I to VIII) was 41928 with enrolment in the Lower Primary and Upper Primary level at 2617761 and 1518225 numbers respectively. As stated by the District Information System for Education (DISE) 2019-20, the average annual Drop-out Rate at Primary level in the State during 2019-20 was 4.3 percent which was 3.1 percent in 2018-19. At the Upper Primary level the drop-out rate was 3.4 percent in 2019-20 which was 1.9 percent in 2018-19. Among the districts, Dima Hasao registered highest dropout rate of 7.8 percent in Lower Primary level and South Salmara registered highest dropout rate of 10.4 in the upper Primary Level. The Pupil-Teacher Ratio (PTR) in the Primary level of the State during the year 2019-20 was 22 percent. While in the Upper Primary level, the PTR of the state was 20 percent in 2019-20. Further during 2019-20, the number of secondary & higher secondary schools from (class IX to XII) was 4313 and the total enrolment in these classes (class IX to XII) was 877428.

HEALTH

The status of health care performance in the state has gradually improved over the years. At present there are 6 Medical colleges, 24 Civil Hospitals, 14 Sub- Divisional Civil Hospitals, 12 First Referral Units, 841 Primary Health Centres, 192 Community Health Centres, 154 State Dispensaries, 4690 Sub-Centres, 21475 number of bed for patients in the Government Hospitals at the end of 2019. Till 31st March, 2020 there were 5609 Doctors including Ayurvedic and Homeopathic doctor, 2089 Pharmacist, 6395 G.N.M, 12251 A.N.M. 562 Rural Health Practitioner and 1647 number of Laboratory Technicians who are rendering their level best services for better health of common people.

For sustainable health care facilities in the state, Government has concentrated on efforts toward the establishment of an efficient system of health care and family welfare through effective planning. Department of Health and Family Welfare, Assam, along with National Health Mission have been implementing many health care schemes for improving Maternal health and reducing MMR, IMR and under 5 Mortality Rate. 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 downfall is 21% in the MMR from 300 to 237. During 2016-18 the MMR of the state is 215 from while it was 229 during 2015-17 against the all India level; the rate is 113 in 2016-18 and 122 in 2015-17. As per report available, Under 5 Mortality Rate (U5MR) of Assam per 1,000 live births is also higher for the state as compared to the all India figure. It was 47 for Assam in 2019 against 34 at the all India level.

RURAL DEVELOPMENT

The re-structured erstwhile IAY programme PMAY-G is implemented for providing shelter to the shelter-less/homeless people living below the poverty line (BPL). It is funded by the Centre and the State at the ratio of 9:1. A beneficiary gets Rs.1.30 lakhs under PMAY-G scheme from the year 2016-17. The fund is directly transferred to the beneficiary's Bank Account in three instalments. Plans for the implementation of a new

scheme to provide financial assistance to the landless PMAY-G beneficiaries for procurement of a plot of land @ Rs.50000/-is under discussion.

For the financial year 2019-20 against the fund receipt of Rs. 146,109.44 lakhs, utilization was Rs. 204,668.75. Likewise, for the financial year 2020-21, a target of 365,976 houses has been provided by Govt. of India against the estimated cost of Rs. 475,768.78 lakhs.

In Assam, the Deendayal Antodaya Yojana–NRLM (DAY-NRLM) is being implemented through Assam Rural Livelihood Mission, Assam (ARSLM) since 2012, working with a mission to reduce poverty by enabling the poor households to access gainful self employment and skilled wage employment opportunities. This has resulted in appreciable improvement in their livelihood building strong grassroots institutions of the poor. Till 31st March, 2020 Assam State Rural Livelihood Mission has promoted 283,790 Women SHGs across 33 districts covering 30, 29, 864 households.

In order to empower women SHGs financially, the Government of Assam launched Kanaklata Mahila Sabalakaran Asoni on 1st April 2018 for promotion of 1 lakh women SHGs in the state and subsidy linked loan upto Rs.5 lakhs for development of Women SHGs. Till March 2020, a total of 134,000 SHGs @ Rs. 15,000.00 each, have been provided Revolving Fund of Rs.176.59 crores.

CHAPTER – II POPULATION

Important Features:

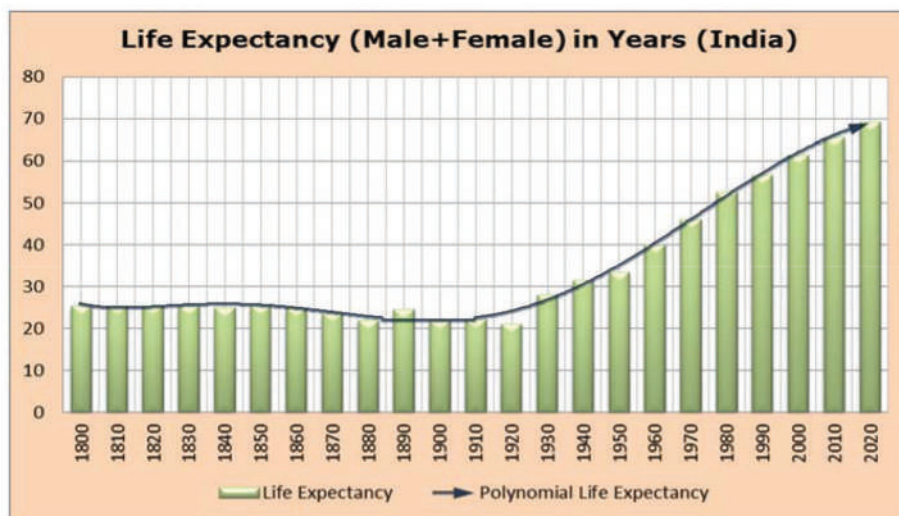
Assam, a state situated between 24008’N-27059’N latitude in the northeast region of India, is the gateway to the region, the premier, largest and the most vibrant of the eight states comprising the Northeast. It borders seven states namely, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal and two countries, namely Bhutan and Bangladesh. Its topographical asymmetry underscored by the Barail 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(30285 sq.mile), 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, 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. According to WHO data, 2018 life expectancy in India is Male 67.4, Female 70.3 and Total 68.8 with world ranking of 125.

Table 2.1: Life Expectancy (at birth) in India from 1800 to 2020

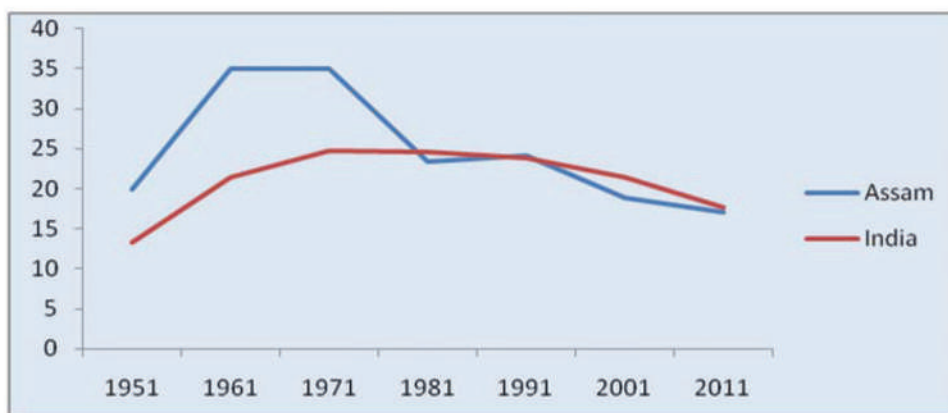
Life Expectancy in Years	Years																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
	25.44	25.44	25.44	25.44	24.91	25.44	24.95	23.66	21.98	24.54	22.01	22.15	21.16	27.98	31.61	33.44	39.93	46.10	52.51	56.69	61.47	65.53	69.3



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 2.2: Density of Population in NE States, Census, 2011

States	Population (Nos)	Density (per sq km)
Arunachal Pradesh	1382611	17
Assam	31205576	398
Manipur	2964007	122
Meghalaya	2964007	132
Mizoram	1091014	52
Sikkim	607688	86
Tripura	3671032	350

Source: Census of India 2011

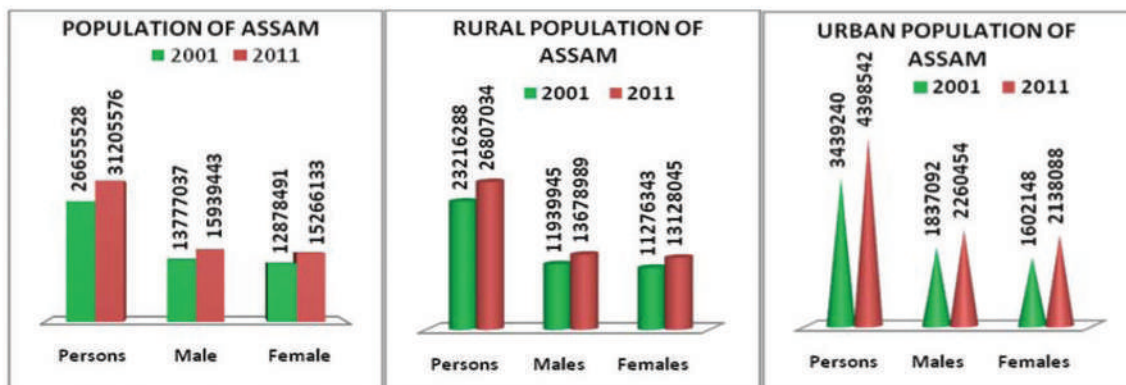
Some important features of population of Assam as per Census 2001 and 2011 are shown in the following Table.

TABLE – 2.3: Population Features at a Glance of Assam

Particulars	Unit	2001 Census	2011 Census
Population	Lakh	267	312
Decadal Growth	Percent	18.92	17.07
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

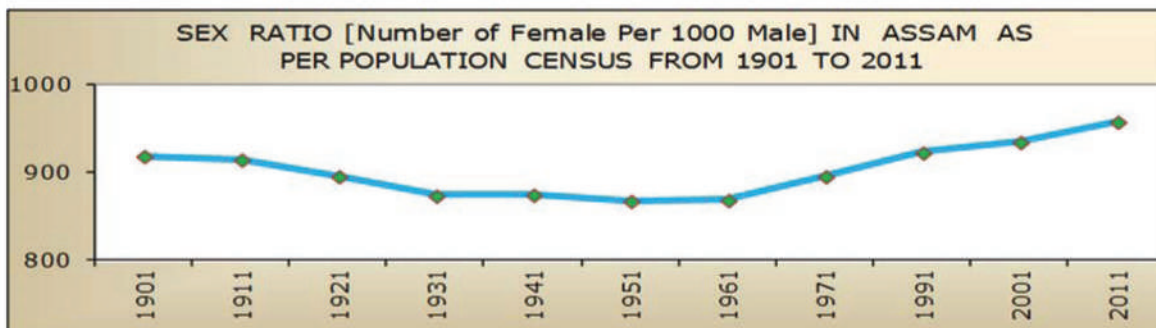
Population : Rural and Urban

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.

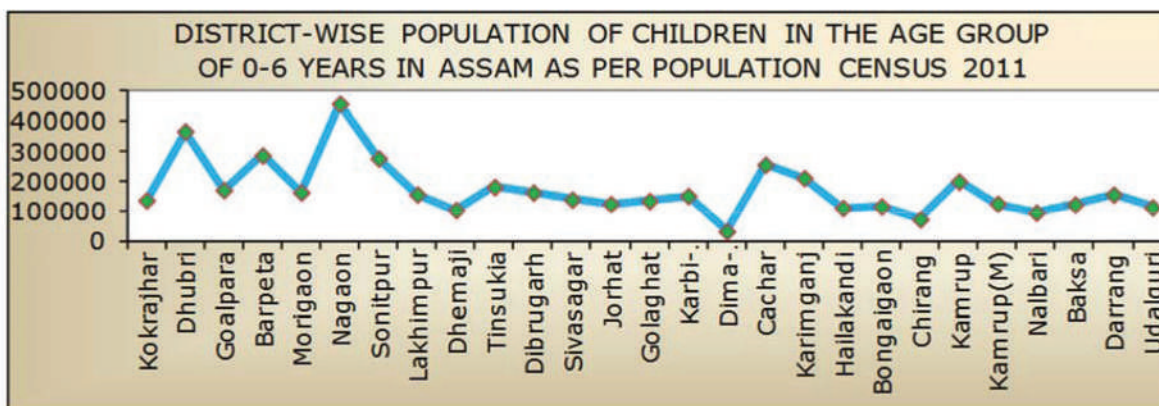


Table: 2.4 Sex Ratios in North East States

State	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
1	2	3	4	5	6	7
Sikkim	883	882	908	913	875	890
Arunachal Pradesh	914	953	819	890	893	938
Nagaland	916	940	828	908	909	931
Manipur	967	969	1009	1026	978	985
Mizoram	923	952	948	998	935	976
Tripura	946	955	959	973	950	960
Meghalaya	969	986	982	1001	975	989
Assam	944	960	872	946	932	958
All-India	946	949	900	929	933	943

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: 2.5 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
Assam	967	964	943	944	935	962
All-India	934	923	906	905	927	918

Literacy Rate

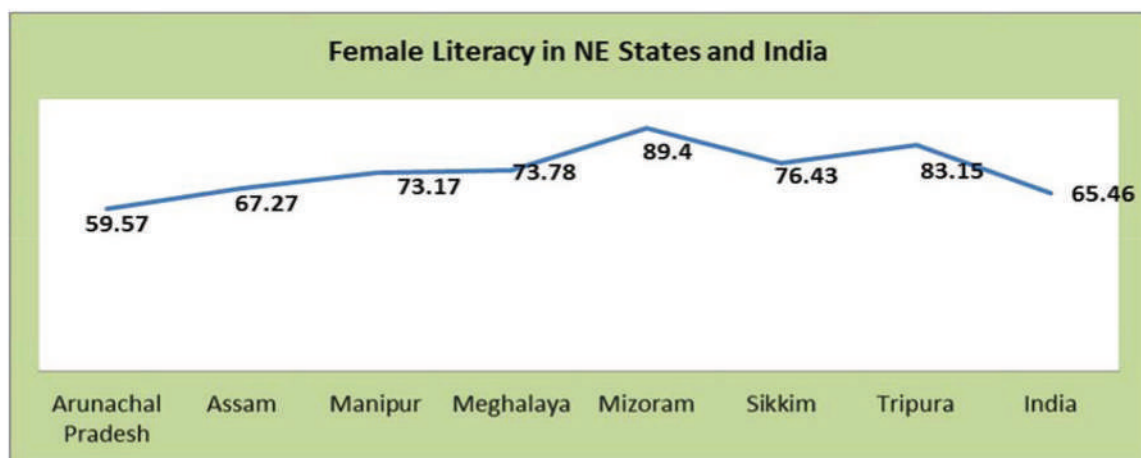
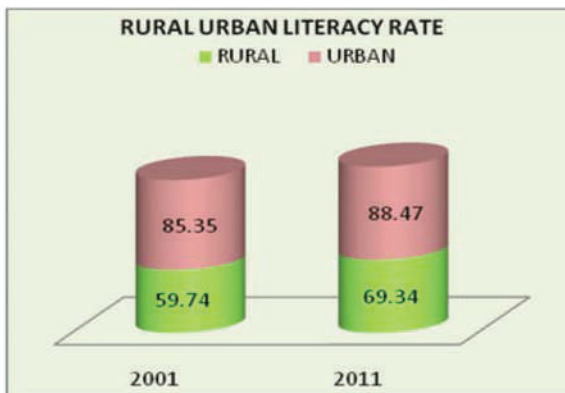
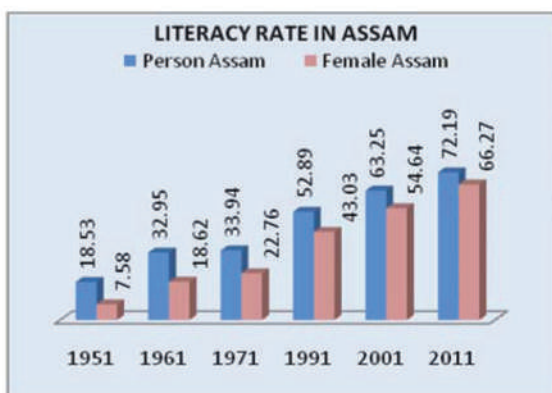
The growth of literacy in Assam has shown an encouraging sign. The literacy rate for Assam as per Census 2011 increased to 72.19 percent with 77.85 percent for males and 66.27 percent for females. The literacy rates for rural and urban areas were calculated at 69.34 percent and 88.47 percent respectively. 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 :2.6 Literacy Rates for Selected states (age group 7 years & above)

(Figure in %)

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
Assam	71.28	54.61	63.25	77.85	66.27	72.19
All-India	75.3	53.7	64.8	80.9	64.6	73.0

Source: Registrar General of India



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

Table 2.7: 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	2058.9
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.

Table: 2.8 Demographic Indicators: 2011-2021, ASSAM

Indicators	2011-15	2021-25
Population Growth Rate	12.2	9.3
Crude Birth Rate (CBR)	20.3	17.1
Crude Death Rate (CDR)	7.5	7.2
Infant Mortality Rate (IMR)	51.4	41.5
Under-5 mortality Rate	73.9	59.6
Total Fertility Rate (TFR)	2.34	2.00
Life expectancy of Males	63.51	67.01
Life expectancy of Females	66.22	69.72

Source: Registrar General 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 (28,23,768)	Dima Hasao (2,14,102)
Total Rural Population	Nagaon (24,54,234)	Dima Hasao (1,51,613)
Total Urban Population	Kamrup Metro (10,37,011)	Baksa (12,242)
Percentage of Population Growth	Total	Dhubri (24.40)
	Rural	Dhubri (27.13)
	Urban	Nalbari (200.34)
Literacy Rate	Total	Kamrup Metro (88.66)
	Rural	Jorhat (81.36)
	Urban	Hailakandi (94.67)
Sex-ratio	Total	Morigaon (974)
	Rural	Morigaon (975)
	Urban	Hailakandi (992)
Density	Kamrup Metro (2,010)	Dima Hasao (44)

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

Appendix-2.1: POPULATION TREND IN ASSAM AND INDIA

Year	Population (in lakh)		Percentage Decadal Variation		Density (Person per sq. km.)	
	ASSAM	INDIA	ASSAM	INDIA	ASSAM	INDIA
1901	33	2384	-	-	42	77
1911	38	2521	17.0	5.8	49	82
1921	46	2513	20.5	0.3	59	81
1931	56	2789	19.9	11.0	71	90
1941	67	3186	20.4	14.2	85	103
1951	80	3611	19.9	13.3	102	117
1961	108	4392	35.0	21.5	138	142
1971	146	5481	35.0	24.8	186	177
1981	*180	6833	*23.4	24.7	*230	230
1991	224	8463	24.2	23.9	286	267
2001	266	10270	18.9	21.5	340	325
2011	312	12106	17.1	17.7	398	368

*Interpolated.

Source: Census of India 2011

APPENDIX-2.2

DISTRICT-WISE DEMOGRAPHIC PROFILE OF ASSAM, 2011 CENSUS

Sl. No.	District	Area in Sq. Km.	Population	Rural Population	Urban Population	Population Density per Sq. Km.
1	Dhubri*	1511	1394144	1190443	203701	923
2	Bongaigaon	1093	738804	628994	109810	676
3	Kokrajhar	3296	887142	832201	54941	269
4	Chirang	1923	482162	446825	35337	251
5	Baksa	2457	950075	937833	12242	387
6	Goalpara	1824	1008183	870121	138062	553
7	Barpeta	2282	1693622	1546269	147353	742
8	Nalbari	1052	771639	688909	82730	733
9	Kamrup (M)	955	1253938	216927	1037011	1313
10	Kamrup (R)	3105	1517542	1375148	142394	489
11	Darrang	1585	928500	873006	55494	586
12	Udalguri	2012	831668	794094	37574	413
13	Sonitpur*	3409	1533660	1403641	130019	385
14	Lakhimpur	2277	1042137	950804	91333	458
15	Dhemaji	3237	686133	637848	48285	212
16	Morigaon	1551	957423	884125	73298	617
17	Nagaon*	2550	1774798	1523016	251782	742
18	Golaghat	3502	1066888	969152	97736	305
19	Jorhat*	1758	924952	704418	220534	526
20	Sivasagar*	1581	664823	582339	82484	728
21	Dibrugarh	3381	1326335	1082605	243730	392
22	Tinsukia	3790	1327929	1063186	264743	350
23	Karbi-Anglong*	7366	643140	547989	95151	130
24	Dima Hasao	4888	214102	151613	62489	44
25	Karimganj	1809	1228686	1118986	109700	679
26	Hailakandi	1327	659296	611156	48140	497
27	Cachar	3786	1736617	1421153	315464	459
28	Biswanath*	1796	390450	346624	43826	341
29	Majuli*	1093	167304	167304	0	153
30	Charaideo*	1087	486227	458615	27612	422
31	West Karbi-Anglong*	3068	313173	295358	17815	96
32	South Salmara*	665	555114	555114	0	835
33	Hojai*	1422	1048970	931218	117752	655
ASSAM		78438	31205576	26807034	4398542	398

Source : Census of India, 2011

APPENDIX – 2.3
DECADAL PERCENTAGE VARIATION IN POPULATION OF ASSAM

District	1901-11	1941-51	1951-61	1961-71	1971-91	1991-2001	2001-2011
Dhubri*	28.73	12.74	43.74	43.26	45.65	22.97	24.44
Bongaigaon*	28.69	12.88	36.27	35.81	38.77	22.09	20.59
Kokrajhar*	28.73	17.11	55.41	54.89	61.96	14.49	5.21
Chirang*	5.02	18.18	40.32	57.37	103.33	(-) 0.08	11.34
Baksa*	18.36	33.68	60.52	66.67	73.65	12.51	10.74
Goalpara	29.97	9.25	37.10	45.88	54.12	23.03	22.64
Barpeta*	18.65	16.62	34.39	33.91	40.97	19.62	21.43
Nalbari*	15.24	35.15	33.56	31.79	75.78	14.21	11.99
Kamrup(M)*	6.59	2.39	13.30	19.99	20.77	45.91	18.34
Kamrup *	10.01	17.01	45.12	44.48	81.53	14.97	15.69
Darrang*	22.72	18.58	40.94	36.05	89.77	22.18	22.19
Udalguri *	45.60	29.13	54.04	37.85	43.03	10.02	9.61
Sonitpur*	23.67	22.02	41.99	33.17	68.08	18.11	15.55
Lakhimpur	26.29	17.94	50.46	43.39	56.29	18.30	17.22
Dhemaji	26.29	17.94	75.21	103.42	107.50	19.45	19.97
Morigaon	15.84	36.63	37.89	37.51	50.90	21.35	23.34
Nagaon	15.84	36.65	35.91	38.99	51.26	22.26	22.00
Golaghat	16.55	19.76	26.04	30.85	58.12	14.27	12.75
Jorhat	16.90	14.87	24.17	17.47	33.10	14.69	9.31
Sivasagar	13.41	15.98	23.36	19.47	38.76	15.83	9.44
Dibrugarh	26.29	17.94	30.64	22.93	37.78	13.68	11.92
Tinsukia	26.29	17.94	35.92	31.02	47.03	19.51	15.47
Karbi Anglong	-	30.96	79.21	68.28	74.72	22.72	17.58
Dima Hasao	(-) 33.12	6.16	36.95	40.00	98.30	24.72	13.84
Karimganj	12.94	29.87	22.96	25.13	42.08	21.87	21.90
Hailakandi	16.09	17.48	27.23	23.61	45.94	20.89	21.45
Cachar	12.33	23.92	22.60	23.96	47.59	18.89	20.19
ASSAM	16.99	19.93	34.98	34.95	53.26	18.92	17.07

*Due to creation of 4 new Districts the rates for 2001 have been affected in 12 Districts.

APPENDIX-2.3

DISTRICTWISE POPULATION OF SCHEDULED CASTES AND SCHEDULED TRIBES
IN ASSAM

Sl. No.	District	Scheduled Castes			Scheduled Tribes		
		Total	Male	Female	Total	Male	Female
1	Kokrajhar	29570	15386	14184	278665	139579	139086
2	Dhubri*	62628	32362	30266	2300	1144	1156
3	Goalpara	45094	22999	22095	231570	116013	115557
4	Barpeta	95320	49165	46155	27344	13530	13814
5	Morigaon	117841	60194	57647	136777	68382	68395
6	Nagaon*	156913	79655	77258	86422	43119	43303
7	Sonitpur*	65367	33474	31893	139033	70335	68698
8	Lakhimpur	81840	41689	40151	249426	126716	122710
9	Dhemaji	4225	23006	21219	325560	165449	160111
10	Tinsukia	37688	19443	18245	82066	41769	40297
11	Dibrugarh	58876	30517	28359	102871	51835	51036
12	Sivasagar*	34847	17753	17094	37334	19099	18235
13	Jorhat*	64787	32931	31856	62368	31467	30901
14	Golaghat	62298	31807	30491	111765	56420	55345
15	Karbi Anglong*	33523	17502	16021	345220	174557	170663
16	Dima-Hasao	4337	2340	1997	151843	76520	75323
17	Cachar	264897	136051	128846	17569	8736	8833
18	Karimganj	157890	81384	76506	1940	994	946
19	Hailakandi	70659	36369	34290	691	354	337
20	Bongaigaon	82784	42513	40271	18835	9377	9458
21	Chirang	35135	18105	17030	178688	89273	89415
22	Kamrup	107827	55237	52590	182038	92094	89944
23	Kamrup(M)	101789	52106	49683	75121	37902	37219
24	Nalbari	60216	30654	29562	23364	11692	11672
25	Baksa	73083	37534	35549	331007	165634	165373
26	Darrang	40260	20566	19694	8419	4300	4119
27	Udalguri	37844	19402	18442	267372	133550	133822
28	Biswanath*	43763	22343	21420	93174	47350	45824
29	Majuli*	23878	12263	11615	77603	39328	38275
30	Charaideo*	7500	3815	3685	11705	5890	5815
31	West Karbi-Anglong*	11438	5934	5504	193518	97903	95615
32	South Salmara*	7767	3997	3770	4032	2054	1978
32	Hojai*	109437	56818	52619	28731	14640	14091
	ASSAM	2231321	1145314	1086007	3884371	1957005	1927366

APPENDIX-2.4

POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN ASSAM
(2011 Census)

Sl. No.	District	Male	Female	Rural	Urban	Total
1	Kokrajhar	70085	66839	131397	5527	136924
2	Dhubri*	127251	122314	230424	19141	249565
3	Goalpara	87457	84200	152141	19516	171657
4	Barpeta	146777	141052	273296	14533	287829
5	Morigaon	83746	80073	155116	8703	163819
6	Nagaon*	157143	151066	287622	20587	308209
7	Sonitpur*	96365	93044	175651	13758	189409
8	Lakhimpur	80016	76723	146289	10450	156739
9	Dhemaji	53457	50790	98352	5895	104247
10	Tinsukia	92777	89049	155228	26598	181826
11	Dibrugarh	83168	80042	140283	22927	163210
12	Sivasagar*	40097	38394	70527	7964	78491
13	Jorhat*	52104	50428	81332	21200	102532
14	Golaghat	68662	66131	125120	9673	134793
15	Karbi-Anglong*	50925	48621	88914	10632	99546
16	Dima-Hasao	16480	15934	25067	7347	32414
17	Cachar	131417	125357	222673	34101	256774
18	Karimganj	107638	104322	200334	11626	211960
19	Hailakandi	56936	54342	106617	4661	111278
20	Bongaigaon	59099	57293	105251	11141	116392
21	Chirang	37201	36014	69176	4039	73215
22	Kamrup	101716	98345	186844	13217	200061
23	Kamrup(M)	64444	60942	27333	98053	125386
24	Nalbari	48458	46875	87759	7574	95333
25	Baksa	62498	60374	121332	1540	122872
26	Darrang	79437	76971	150916	5492	156408
27	Udalguri	57410	55864	109653	3621	113274
28	Biswanath*	44988	43465	85313	3140	88453
29	Majuli*	11324	10738	22062	0	22062
30	Charaideo*	31005	29884	57762	3127	60889
31	West Karbi-Anglong*	26503	25632	49493	2642	52135
32	South Salmara*	59841	58856	114855	3842	118697
32	Hojai*	77060	74671	133191	18540	151731
	Assam	2363485	2274645	4187323	450807	4638130

APPENDIX-2.5

COMPARATIVE DISTRIBUTION OF CHILD POPULATION (0-6 YEARS) IN ASSAM

Sl. No.	District	2001	2011	Percentage to total Population		Sex Ratio	
				2001	2011	2001	2011
1	Kokrajhar	151366	136924	17.95	15.43	955	959
2	Dhubri	326754	368262	20.86	18.89	964	953
3	Goalpara	159133	171657	19.36	17.03	974	964
4	Barpeta	265146	287829	19.01	16.99	961	953
5	Morigaon	148758	163819	19.16	17.11	966	967
6	Nagaon	426280	459940	18.42	16.29	975	962
7	Sonitpur	270419	277862	16.24	14.44	974	956
8	Lakhimpur	150312	156739	16.91	15.04	967	968
9	Dhemaji	99545	104247	17.4	15.19	970	953
10	Tinsukia	184845	181826	16.07	13.69	958	952
11	Dibrugarh	172631	163210	14.57	12.31	962	961
12	Sivasagar	149098	139380	14.18	12.11	968	954
13	Jorhat	133888	124594	13.4	11.41	967	962
14	Golaghat	142970	134793	15.11	12.63	963	964
15	Karbi-Anglong	150230	151681	18.47	15.86	974	951
16	Dima-Hasao	30807	32414	16.38	15.14	955	932
17	Cachar	229219	256774	15.86	11.79	961	959
18	Karimganj	177431	211960	17.6	17.25	965	963
19	Hailakandi	100976	111278	18.6	16.88	927	951
20	Bongaigaon	110835	116392	18.09	15.75	972	966
21	Chirang	79037	73215	18.25	15.18	958	969
22	Kamrup	204757	200061	15.61	13.18	963	949
23	Kamrup (M)	125033	125386	11.8	10	943	936
24	Nalbari	97847	95333	14.2	12.35	961	949
25	Baksa	138906	122872	16.19	12.93	961	974
26	Darrang	146808	156408	19.32	16.85	977	954
27	Udalguri	125044	113274	16.48	13.62	975	973
28	ASSAM	4498075	4638130	16.87	14.86	965	958

APPENDIX-2.6

POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN INDIA
(2011 Census)

Sl. No.	State	Total	Male	Rural	Urban	Total
1	Jammu & Kashmir	1084355	2018905	1593008	425897	2018905
2	Himachal Pradesh	407459	777898	712822	65076	777898
3	Punjab	1665994	3076219	1945502	1130717	3076219
4	Chandigarh	63536	119434	4270	115164	119434
5	Uttarakhand	717199	1355814	990776	365038	1355814
6	Haryana	1843109	3380721	2285112	1095609	3380721
7	NCT of Delhi	1075440	2012454	56716	1955738	2012454
8	Rajasthan	5639176	10649504	8414883	2234621	10649504
9	Uttar Pradesh	16185581	30791331	25040583	5750748	30791331
10	Bihar	9887239	19133964	17383701	1750263	19133964
11	Sikkim	32761	64111	49218	14893	64111
12	Arunachal Pradesh	107624	212188	172289	39899	212188
13	Nagaland	149785	291071	217482	73589	291071
14	Manipur	174700	338254	236843	101411	338254
15	Mizoram	85561	168531	93384	75147	168531
16	Tripura	234008	458014	365309	92705	458014
17	Meghalaya	288646	568536	490592	77944	568536
18	Assam	2363485	4638130	4187323	450807	4638130
19	West Bengal	5410396	10581466	7820710	2760756	10581466
20	Jharkhand	2767147	5389495	4367507	1021988	5389495
21	Orissa	2716497	5273194	4525870	747324	5273194
22	Chattisgarh	1859935	3661689	2924941	736748	3661689
23	Madhya Pradesh	5636172	10809395	8325731	2483664	10809395
24	Gujarat	4115384	7777262	4824903	2952359	7777262
25	Daman & Diu	14144	26934	7438	19496	26934
26	Dadra & Nagar Haveli	26431	50895	28504	22391	50895
27	Maharashtra	7035391	13326517	7688954	5637563	13326517
28	Andhra Pradesh	4714950	9142802	6152022	2990780	9142802
29	Karnataka	3675291	7161033	4517645	2643388	7161033
30	Goa	74460	144611	54014	90597	144611
31	Lakshwadeep	3797	7255	1815	5440	7255
32	Kerala	1768244	3472955	1823664	1649291	3472955
33	Tamil Nadu	3820276	7423832	3911302	3512530	7423832
34	Puducherry	67527	132858	44514	88344	132858
35	Andaman & Nicobar Islands	20770	40878	26415	14463	40878
	INDIA	85732470	164478150	121285762	43192388	164478150

APPENDIX – 2.7

STATEWISE POPULATION, SEX RATIO, POPULATION DENSITY,
LITERACY RATE AND PERCENTAGE DECADAL GROWTH IN INDIA

Sl. No.	India, States, Union Territories	Population 2011	Sex Ratio 2011	Population Density per sq. km. 2011	Literacy rate 2011	Percentage decadal growth	
						1991-2001	2001-2011
	India	1210854977	943	368	72.99	21.54	17.68
1	Jammu & Kashmir	12541302	889	56	67.16	29.43	23.64
2	Himachal Pradesh	6864602	972	123	82.8	17.54	12.94
3	Punjab	27743338	895	551	75.84	20.1	13.89
4	Chandigarh	1055450	818	9258	86.05	40.28	17.19
5	Uttarakhand	10086292	963	189	78.82	20.41	18.81
6	Haryana	25351462	879	573	75.55	28.43	19.9
7	Delhi	16787941	868	11320	86.21	47.02	21.21
8	Rajasthan	68548437	928	200	66.11	28.41	21.31
9	Uttar Pradesh	199812341	912	829	67.68	25.85	20.23
10	Bihar	104099452	918	1106	61.8	28.62	25.42
11	Sikkim	610577	890	86	81.42	33.06	12.89
12	Arunachal Pradesh	1383727	938	17	65.38	27	26.03
13	Nagaland	1978502	931	119	79.55	64.53	-0.58
14	Manipur	2855794	992	115	79.21	24.86	12.05
15	Mizoram	1097206	976	52	91.33	28.82	23.48
16	Tripura	3673917	960	350	87.22	16.03	14.84
17	Meghalaya	2966889	989	132	74.43	30.65	27.95
18	Assam	31205576	958	398	72.19	18.92	17.07
19	West Bengal	91276115	950	1028	76.26	17.77	13.84
20	Jharkhand	32988134	948	414	66.41	23.36	22.42
21	Orissa	41974218	979	270	72.87	16.25	14.05
22	Chhatisgarh	25545198	991	189	70.28	18.27	22.61
23	Madhya Pradesh	72626809	931	236	69.32	24.26	20.35
24	Gujarat	60439692	919	308	78.03	22.66	19.28
25	Daman & Diu	243247	618	2191	87.1	55.73	53.76
26	Dadra & Nagar Haveli	343709	774	700	76.24	59.22	55.88
27	Maharashtra	112374333	929	365	82.34	22.73	15.99
28	Andhra Pradesh	84580777	993	308	67.02	14.59	10.98
29	Karnataka	61095297	973	319	75.36	17.51	15.6
30	Goa	1458545	973	394	88.7	15.21	8.23
31	Lakshadweep	64473	946	2149	91.85	17.3	6.3
32	Kerala	33406061	1084	860	94	9.43	4.91
33	Tamil Nadu	72147030	996	555	80.09	11.72	15.61
34	Puducherry	1247953	1037	2547	85.85	20.62	28.08
35	Andaman & Nicobar Islands	380581	876	46	86.63	26.9	6.86

Source : Census of India, 2011.

APPENDIX – 2.8

BIRTH AND DEATH RATES IN ASSAM

YEAR	BIRTH RATE			DEATH RATE		
	Combined	Rural	Urban	Combined	Rural	Urban
1991	30.9	31.7	21.3	11.5	11.8	6.9
1995	29.3	30.2	21.8	9.6	10	6.7
1996	27.6	28.9	20.7	9.6	10.2	5.8
1997	28.2	29	20.7	9.9	10.3	5.9
1998	27.9	28.7	20.2	10	10.5	6
1999	27	28	18.9	9.7	10.1	6.2
2000	26.9	27.9	18.6	9.6	10	6.1
2001	26.8	27.8	15.5	9.5	9.8	6.6
2002	26.6	27.5	18.3	9.2	9.6	6
2003	26.3	27.2	18	9.1	9.5	5.9
2004	25.1	27	14.3	8.8	9.3	5.5
2005	25	26.6	15.3	8.7	9.2	5.6
2006	24.6	26.1	15.4	8.7	9.2	5.8
2007	24.3	25.7	15.5	8.6	9.1	5.7
2008	23.9	25.3	15.7	8.6	9	5.6
2009	23.6	24.9	15.9	8.4	8.8	5.9
2010	23.2	24.4	15.8	8.2	8.6	5.8
2011	22.8	24	15.5	8	8.4	5.6
2012	22.5	23.7	15.6	7.9	8.3	5.6
2013	22.4	23.5	15.4	7.8	8.2	5.6
2014	22.4	23.6	15.5	7.2	7.6	5.3
2015	22	23.2	15.3	7.1	7.4	5.1
2016	21.7	22.8	15	6.7	7.1	4.9
2017	21.2	22.4	14.7	6.5	6.7	5.3
2018	21.1	22.2	14.6	6.4	6.6	5.1

Source : Registrar General of India.

APPENDIX – 2.9

INFANT MORTALITY RATE IN ASSAM AND INDIA

Sl. No.	YEARS	Rural		Urban		Total	
		Assam	India	Assam	India	Assam	India
1	2005	71	64	39	40	68	58
2	2008	66	58	39	36	64	53
3	2009	64	55	37	34	61	50
4	2010	60	51	36	31	58	47
5	2011	58	48	34	29	55	44
6	2012	58	46	33	28	55	42
7	2013	56	44	32	27	54	40
8	2014	52	43	27	26	49	39
9	2015	50	41	25	25	47	37
10	2016	46	38	22	23	44	34
11	2017	46	37	21	23	44	33
12	2018	44	36	20	23	41	32

Source : Registrar General of India.

APPENDIX – 2.10

INFANT MORTALITY RATE BY SEX IN ASSAM AND INDIA

Sl. No.	YEARS	Male		Female		Total	
		Assam	India	Assam	India	Assam	India
1	2005	68	58	69	61	68	58
2	2007	64	55	67	56	66	55
3	2008	62	52	65	55	64	53
4	2009	58	49	64	52	61	50
5	2010	56	46	60	49	58	47
6	2011	55	43	56	46	55	44
7	2012	54	41	57	44	55	42
8	2013	53	39	55	42	54	40
9	2014	49	37	49	40	49	39
10	2015	47	35	47	39	47	37
11	2016	43	33	45	36	44	34
12	2017	41	32	46	34	44	33
13	2018	40	32	44	33	41	32

Source : SRS Bulletin, Registrar General of India.

APPENDIX – 2.11

DISTRICT-WISE NUMBER OF VILLAGES, GAON PANCHAYAT, COMMUNITY DEVELOPMENT BLOCK, ANCHALIC PANCHAYAT AND ZILA PARISHADS IN ASSAM

Sl No.	District	Number of Villages (As per 2011 Census)	Number of Gaon Panchayat (as on 2011)	Number of Community Development Block (as on 2011)	Number of Anchalik Panchayat (as on 2011)	Number of Zila Parishad (as on 2011)
1	2	3	4	5	6	7
1	Dhubri	777	133	11	11	1
2	Kokrajhar	1068	-	5	-	-
3	Bongaigaon	563	65	5	5	1
4	Goalpara	829	81	8	8	1
5	Barpeta	835	129	11	11	1
6	Nalbari	456	65	7	7	1
7	Kamrup	1068	139	16	16	1
8	Darrang	561	75	6	6	1
9	Sonitpur	1044	102	7	7	1
10	Lakhimpur	1184	81	9	9	1
11	Dhemaji	1319	65	5	5	1
12	Morigaon	632	85	5	7	1
13	Nagaon	1012	172	13	13	1
14	Golaghat	1125	102	8	8	1
15	Jorhat	600	91	6	6	1
16	Sivasagar	531	79	4	4	1
17	Dibrugarh	1348	93	7	7	1
18	Tinsukia	1168	85	7	7	1
19	Karbi Anglong	2353	-	7	7	-
20	Dima Hasao	695	-	5	5	-
21	Karimganj	936	96	7	7	1
22	Hailakandi	331	62	5	5	1
23	Cachar	1040	163	15	15	1
24	Chirang *	508	-	2	-	-
25	Baksa *	690	-	7	-	-
26	Kamrup (M)*	216	21	3	3	1
27	Udalguri *	800	-	6	-	-
28	Biswanath*	832	56	7	7	1
29	Majuli*	248	19	2	2	1
30	Charaideo*	344	39	5	5	1
31	West Karbi-Anglong*	568	-	4	4	-
32	South Salmara*	314	35	3	3	1
33	Hojai*	400	67	5	5	1
	Assam	26395	2200	219	189	26

N. B * Indicates newly created Districts.

APPENDIX – 2.12

PROJECTED TOTAL POPULATION BY SEX AS ON 1st MARCH FOR THE YEARS
2011 to 2036 INDIA AND ASSAM ('000 Nos)

Year	INDIA			ASSAM		
	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7
2011	12,10,855	6,23,270	5,87,585	31,206	15,939	15,266
2012	12,26,731	6,31,285	5,95,446	31,598	16,135	15,464
2013	12,42,607	6,39,301	6,03,306	31,991	16,330	15,661
2014	12,58,483	6,47,316	6,11,167	32,383	16,525	15,858
2015	12,74,359	6,55,331	6,19,028	32,776	16,720	16,056
2016	12,90,235	6,63,346	6,26,889	33,168	16,915	16,253
2017	13,04,457	6,70,469	6,33,988	33,543	17,100	16,443
2018	13,18,678	6,77,591	6,41,087	33,918	17,286	16,632
2019	13,32,900	6,84,714	6,48,186	34,293	17,472	16,822
2020	13,47,121	6,91,836	6,55,285	34,668	17,657	17,011
2021	13,61,343	6,98,959	6,62,384	35,043	17,843	17,200
2022	13,73,761	7,05,088	6,68,673	35,378	18,006	17,371
2023	13,86,180	7,11,217	6,74,963	35,713	18,170	17,543
2024	13,98,598	7,17,346	6,81,252	36,047	18,334	17,714
2025	14,11,016	7,23,475	6,87,541	36,382	18,497	17,885
2026	14,23,435	7,29,604	6,93,831	36,717	18,661	18,056
2027	14,33,852	7,34,662	6,99,190	37,012	18,803	18,209
2028	14,44,268	7,39,720	7,04,549	37,308	18,945	18,363
2029	14,54,685	7,44,777	7,09,908	37,604	19,088	18,517
2030	14,65,102	7,49,835	7,15,267	37,900	19,230	18,671
2031	14,75,519	7,54,893	7,20,626	38,196	19,372	18,824
2032	14,84,073	7,59,055	7,25,018	38,437	19,485	18,952
2033	14,92,627	7,63,217	7,29,410	38,677	19,597	19,080
2034	15,01,181	7,67,379	7,33,802	38,918	19,710	19,208
2035	15,09,734	7,71,540	7,38,194	39,158	19,823	19,336
2036	15,18,288	7,75,702	7,42,586	39,399	19,935	19,464

Source: Census of India, 2011

APPENDIX – 2.13

**PROJECTED TOTAL POPULATION BY AGE AND SEX
AS ON 1st MARCH FOR THE YEARS 2011 to 2021: ASSAM ('000 Nos.)**

Age Group	2011			2021		
	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7
0-1	699	355	345	621	323	298
1-4	3,404	1,727	1,676	3,024	1,575	1,449
5-9	3,450	1,760	1,690	3,001	1,570	1,430
10-14	3,401	1,746	1,655	3,323	1,687	1,637
15-19	3,136	1,600	1,536	3,390	1,730	1,660
20-24	2,927	1,456	1,472	3,307	1,701	1,606
25-29	2,719	1,345	1,374	3,040	1,549	1,491
30-34	2,435	1,225	1,211	2,848	1,407	1,440
35-39	2,172	1,112	1,059	2,643	1,299	1,344
40-44	1,881	983	897	2,354	1,176	1,179
45-49	1,554	825	729	2,068	1,049	1,019
50-54	1,210	648	562	1,751	908	842
55-59	921	489	432	1,406	738	668
60-64	728	376	353	1,051	547	504
65-69	542	275	267	744	383	362
70-74	422	214	208	515	256	258
75-79	189	103	86	320	150	170
80+	113	55	57	258	117	141
Total	31,206	15,939	15,266	35,043	17,843	17,200

Source: Census of India, 2011

APPENDIX – 2.14

COMPARATIVE STATEMENT ON PERCENTAGE OF POPULATION
BELOW POVERTY LINE

Sl. No.	State	Using TENDULKAR Methodology (Poverty Headcount Ratio)								
		2004-05			2009-10			2011-12		
		Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	32.3	23.4	29.9	22.8	17.7	21.1	10.96	5.81	9.2
2	Arunachal Pradesh	33.6	23.5	31.1	26.2	24.9	25.9	38.93	20.33	34.67
3	Assam	36.4	21.8	34.4	39.9	26.1	37.9	33.89	20.49	31.98
4	Bihar	55.7	43.7	54.4	55.3	39.4	53.5	34.06	31.23	33.74
5	Chhattisgarh	55.1	28.4	49.4	56.1	23.8	48.7	44.61	24.75	39.93
6	Delhi	15.6	12.9	13.1	7.7	14.4	14.2	12.92	9.84	9.91
7	Goa	28.1	22.2	25	11.5	6.9	8.7	6.81	4.09	5.09
8	Gujarat	39.1	20.1	31.8	26.7	17.9	23	21.54	10.14	16.63
9	Haryana	24.8	22.4	24.1	18.6	23	20.1	11.64	10.28	11.16
10	Himachal Pradesh	25	4.6	22.9	901	12.6	9.5	8.48	4.33	8.06
11	Jammu & Kashmir	14.1	10.4	13.2	8.1	12.8	9.4	11.54	7.2	10.35
12	Jharkhand	51.6	23.8	45.3	41.6	31.1	39.1	40.84	24.83	36.96
13	Karnataka	37.5	25.9	33.4	26.1	19.6	23.6	24.53	15.25	20.91
14	Kerala	20.7	18.4	19.7	12	12.1	12	9.14	4.97	7.05
15	Madhya Pradesh	53.6	35.1	48.6	42	22.9	36.7	35.74	21	31.65
16	Maharashtra	47.9	25.6	38.1	29.5	18.3	24.5	24.22	9.12	17.35
17	Manipur	39.3	34.5	38	47.4	46.4	47.1	38.8	32.59	36.89
18	Meghalaya	14	24.7	16.1	15.3	24.1	17.1	12.53	9.26	11.87
19	Mizoram	23	7.9	15.3	31.1	11.5	21.1	35.43	6.36	20.4
20	Nagaland	10	4.3	9	19.3	25	20.9	19.93	16.48	18.88
21	Odisha	60.8	37.6	57.2	39.2	25.9	37	35.69	17.29	32.59
22	Puducherry	22.9	9.9	14.1	0.2	1.6	1.2	17.06	6.3	9.69
23	Punjab	22.1	18.7	20.9	14.6	18.1	15.9	7.66	9.24	8.26
24	Rajasthan	35.8	29.7	34.4	26.4	19.9	24.8	16.05	10.69	14.71
25	Sikkim	31.8	2.9	31.1	15.5	5	13.1	9.85	3.66	8.19
26	Tamil Nadu	37.5	19.7	28.9	21.2	12.8	17.1	15.83	6.54	11.28
27	Tripura	44.5	22.5	40.6	19.8	10	17.4	16.53	7.42	14.05
28	Uttar Pradesh	42.7	34.1	40.9	39.4	31.7	37.7	30.4	26.06	29.43
29	Uttarakhand	35.1	26.2	32.7	14.9	25.2	18	11.62	10.48	11.26
30	West Bengal	38.2	24.4	34.3	28.8	22	26.7	22.52	14.66	19.98
31	Andaman & Nicobar							1.57	0	1
32	Chandigarh							1.64	22.31	21.81
33	Dadra & Nagar Haveli							62.59	15.38	39.31
34	Daman & Diu							0	12.62	9.86
35	Lakshadweep							0	3.44	2.77
	All India	42	25.5	37.2	33.8	20.9	29.8	25.7	13.7	21.92

Source: Planning Commission, Govt. of India.

APPENDIX-2.15

STATE- WISE INFORMATION ON SLUM POPULATION IN INDIA-CENSUS 2011

Sl. No.	Area Name	Towns reporting Slums	Total No. of House-holds	Slum Population			% of Total Slum Population to Urban Population	Slum Population (0-6yrs)		
				Persons	Male	Female		Persons	Male	Female
1	2	3	4	5	6	7	8	9	10	11
	INDIA	2613	13920191	65494604	33968203	31526401	17.4	8082743	4204451	3878292
1	Andhra Pradesh	125	2431474	10186934	5103377	5083557	36.1	1149779	593145	556634
2	Arunachal Pradesh	5	3479	15562	8029	7533	4.9	2226	1102	1124
3	Assam	31	42533	197266	101424	95842	4.5	22229	11378	10851
4	Bihar	88	216496	1237682	649475	588207	10.5	208383	107994	100389
5	Chhattisgarh	94	413831	1898931	966623	932308	32	254080	130178	123902
6	Delhi	22	367893	1785390	974329	811061	10.9	229029	119508	109521
7	Goa	3	5497	26247	13826	12421	2.9	3240	1691	1549
8	Gujarat	103	345998	1680095	912571	767524	6.5	240589	126331	114258
9	Haryana	75	332697	1662305	887947	774358	18.8	225889	122124	103765
10	Himachal Pradesh	22	14385	61312	32555	28757	8.9	6509	3493	3016
11	Jammu & Kashmir	40	103633	662062	342422	319640	19.3	94204	50649	43555
12	Jharkhand	31	72544	372999	192908	180091	4.7	53465	27703	25762
13	Karnataka	206	707662	3291434	1650724	1640710	13.9	418295	212928	205367
14	Kerala	19	45417	202048	97429	104619	1.3	20327	10271	10056
15	Madhya Pradesh	303	1117764	5688993	2957524	2731469	28.3	771999	403360	368639
16	Maharashtra	189	2499948	11848423	6328217	5520206	23.3	1428850	743603	685247
17	Meghalaya	6	10518	57418	28737	28681	9.6	8241	4162	4079
18	Mizoram	1	15987	78561	38861	39700	13.7	10430	5292	5138
19	Nagaland	11	17152	82324	42651	39673	14.4	11114	5569	5545
20	Odisha	76	350032	1560303	800963	759340	22.3	188962	97551	91411
21	Punjab	73	293928	1460518	776388	684130	14	176257	94781	81476
22	Rajasthan	107	394391	2068000	1078991	989009	12.1	307035	161872	145163
23	Sikkim	7	7203	31378	16216	15162	20.4	3229	1621	1608
24	Tamil Nadu	507	1463689	5798459	2886993	2911466	16.6	614969	314363	300606
25	Tripura	15	34143	139780	70143	69637	14.5	14755	7467	7288
26	Uttar Pradesh	293	1066363	6239965	3298339	2941626	14	863392	457036	406356
27	Uttarakhand	31	93911	487741	257624	230117	16	66176	35131	31045
28	West Bengal	122	1391756	6418594	3321700	3096894	22.1	656780	337441	319339
29	N. Islands	1	3324	14172	7386	6786	9.9	1588	788	800
30	Chandigarh	1	21704	95135	53340	41795	9.3	14720	7697	7023
31	Puducherry	6	34839	144573	70491	74082	17	16002	8222	7780

APPENDIX -2.16
STATE PRIMARY CENSUS ABSTRACT FOR INDIVIDUAL SCHEDULED TRIBES,
ASSAM (As per Census 2011)

ST Name	Total	Number of HHs with at least one ST member	Total Population (including Institutional and houseless population)		
			Population	Male population	Female population
1	2	3	4	5	6
All Schedule Tribes	Total	7,94,768	38,84,371	19,57,005	19,27,366
Chakma	Total	430	2,032	1,043	989
Dimasa, Kachari	Total	28,211	1,22,663	61,570	61,093
Garo	Total	30,544	1,61,392	81,278	80,114
Hajong	Total	7,868	34,689	17,608	17,081
Hmar	Total	2,794	15,745	7,964	7,781
Khasi, Jaintia, Synteng, Pnar, War, Bhoi, Lyngngam	Total	3,426	15,936	7,916	8,020
Any Kuki Tribes, including:**	Total	6,223	33,399	17,220	16,179
Lakher	Total	36	37	20	17
Man (Tai speaking)	Total	324	1,269	644	625
Any Mizo (Lushai) tribes	Total	222	880	419	461
Karbi	Total	78,588	4,30,452	2,17,758	2,12,694
Any Naga tribes	Total	5,390	29,767	14,905	14,862
Pawi	Total	3	3	1	2
Syntheng	Total	5	5	2	3
Lalung	Total	41,298	2,00,915	1,00,468	1,00,447
Barmans in Cachar	Total	2,405	6,716	3,398	3,318
Boro, Borokachari	Total	2,90,517	13,61,735	6,82,931	6,78,804
Deori	Total	8,612	43,750	21,938	21,812
Hojai	Total	134	642	327	315
Kachari, Sonwal	Total	60,002	2,53,344	1,27,692	1,25,652
Mech	Total	2,380	9,883	4,968	4,915
Miri	Total	1,17,825	6,80,424	3,45,786	3,34,638
Rabha	Total	65,611	2,96,189	1,48,887	1,47,302
Singpho	Total	533	2,342	1,175	1,167
Khampti	Total	251	1,106	566	540

Notes:-

(i) ST communities returned with zero population in 2011 Census are not shown.

(ii) All Scheduled Tribes includes figures for Generic Tribes, i.e. those who returned as Anusuchit jan-jati, Girijan, Adivasi, etc.

(iii) any kuki tribes including **

**Biate, Biete, Changsan, Chongloi, Doungel, Gamalhou, Gangte, Guite, Hanneng, Haokip, Haupit, Haolai, Hengna, Hongsungh, Hrangkhwal, Rangkhoh, Jongbe, Khawchung, Khawathlang, Khothalong, Khelma, Kholhou, Kipgen, Kuki, Lengthang, Lhangum, Lhoujem, Lhouvun, Lupheng, Mangjel, Misao, Riang, Sairhem, Selnam, Singson, Sitlhou, Sukte, Thado, Thangngeu, Uibuh, Vaiphei

APPENDIX-2.17

STATE PRIMARY CENSUS ABSTRACT FOR INDIVIDUAL SCHEDULED CASTE,
ASSAM, 2011 CENSUS

SC Name	TOTAL	Number of HHs with at least one SC member	Total Population (including Institutional and houseless Population)		
			Population	Male Population	Female Population
1	2	3	4	5	6
All Schedule Castes	Total	4,95,475	22,31,321	11,45,314	10,86,007
Bansphor	Total	3,343	16,359	8,189	8,170
Bhuinmali, Mali	Total	15,738	69,535	35,621	33,914
Brittial Bania, Bania	Total	11,733	50,598	25,777	24,821
Dhupi, Dhobi	Total	11,910	52,431	27,029	25,402
Dugla, Dholi	Total	2,050	7,991	4,091	3,900
Hira	Total	12,829	55,300	27,860	27,440
Jalkeot	Total	5,598	24,774	12,626	12,148
Jhalo, Malo, Jhalo-Malo	Total	17,385	80,376	41,620	38,756
Kaibartta, Jaliya	Total	1,53,413	6,93,219	3,53,177	3,40,042
Lalbegi	Total	333	790	404	386
Mahara	Total	414	1,822	1,020	802
Mehtar, Bhangi	Total	2,111	8,835	4,489	4,346
Muchi, Rishi	Total	18,651	77,643	39,875	37,768
Namasudra	Total	1,33,858	6,31,542	3,26,753	3,04,789
Patni	Total	41,491	1,81,904	93,599	88,305
Sutradhar	Total	14,764	66,303	34,121	32,182

Notes:-

- (i) SC communities returned with zero population in 2011 Census are not shown.
(ii) All Scheduled Castes includes figures for Generic Castes, i.e. those who returned as Anusuchit jati, Harijan, etc.

CHAPTER-III

STATE INCOME

State Domestic Product (SDP) or State Income is the total value of goods and services produced during any financial year within the geographical boundaries of a state. The SDP is always calculated or estimated in monetary terms and is instrumental in the evaluation of per capita income. It serves as an indicator for measuring the economic prosperity of the state and to study the structural changes taking place in the economy. The SDP and other related macroeconomic aggregates are useful to meet the financial requirement of the Government apart from planning and policy formulations. The estimate of State Domestic Product reveals the extent and direction of changes in the levels of economic development of the state over a period of time. The sectoral composition of Gross State Value Added (GSVA) gives an idea about the relative position of different sectors in the economy over a period of time, which not only indicates the real structural changes taking place in the economy, but also facilitates the formulation of plans for overall economic development.

During the period of last three years i.e. 2017-18 to 2019-20, the State achieved annual average growth rate of 7.18 % in terms of Gross State Domestic Product (GSDP) at constant (2011-12) prices reflected a favourable status of the State Economy. During this period, industry sector attained the highest annual average growth rate of 10.58% in respect of GSDP at constant prices, followed by service sector (6.87%) and agriculture & allied sector (2.35%) respectively. On the other hand, the annual average growth rate in respect to GSDP at current prices during the period 2017-18 to 2019-20 is estimated to achieve at the level of 11.36 %.

The annual average growth rate in respect of Net State Domestic Product (NSDP) during the period 2017-18 to 2019-20 is estimated at 6.45 % at constant prices (2011-12) as against 12.08 % at current prices.

3.1 Gross State Domestic Product (GSDP) for 2019-20 (Quick Estimate)

The Gross State Domestic Product (GSDP) of the state of Assam, during 2019-20 (Quick Estimates) at current prices was Rs. 351317.77 crore which is 11.23 percent higher than that of Rs. 315881.20 crore in 2018-19 which was the composition of substantially high growth of 12.55 percent of Service Sector, 10.98 percent of Industry Sector and 7.28 percent of Agriculture and Allied Sector.

The Gross State Domestic Product of the state during 2019-20 (Quick Estimates) at constant prices (2011-12) was Rs. 248796.15 crore against Rs. 234047.90 crore in 2018-19 showing an increase of 6.30 percent growth over the previous year. As per quick estimates Agriculture and Allied Sector has shown slightly higher growth rate of 2.35 percent compared to the growth of 1.43 percent experienced in 2018-19. The Industry Sector has also experienced a lower growth rate of 8.20 percent against 11.39 percent recorded during 2018-19.

3.2 Net State Domestic Product (NSDP) for 2019-20 (Quick Estimate)

The Net State Domestic Product (NSDP) at current prices is estimated at Rs.313052.62 crore in 2019-20 (quick estimate) which is higher by 10.70 per cent than that of Rs.282781.82 crore in 2018-19. At current prices 'Agriculture & Allied Activities' registered an increase of 5.56 per cent while 'Industry' and 'Service Sector' registered a growth of 6.26 per cent and 15.57 per cent respectively.

The quick estimates of State Income at constant (2011-12) prices is estimated at Rs.216601.80 crore in 2019-20 showing a marginal increase of 4.54 per cent than that Rs.207193.26 crore in 2018-19.

GSDP and NSDP of Assam both at current and constant prices during the period from 2011-12 to 2019-20(Q.E) is presented in **Table-3.1**.

Table-3.1

GSDP and NSDP of Assam at both current and constant (2011-12) prices during the period from 2011-12 to 2019-20(Q.E)

Rs. in crore

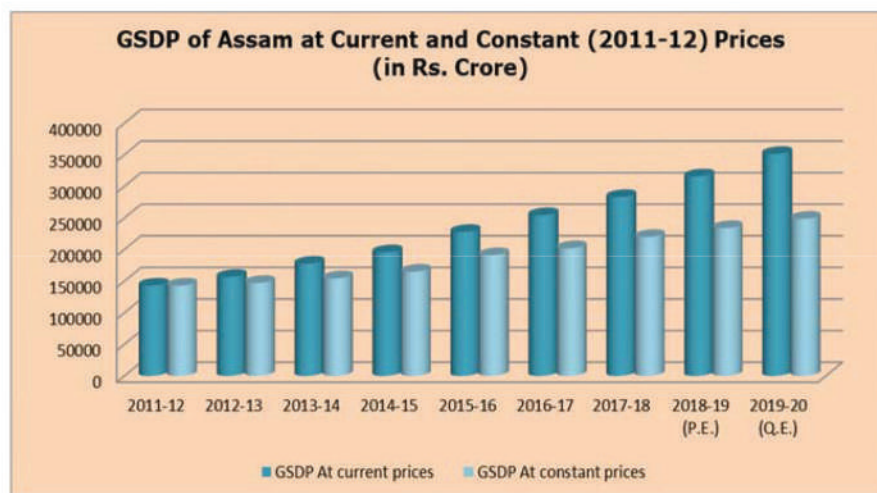
Sl. No	Year	GSDP		NSDP	
		At current prices	At constant prices	At current prices	At constant prices
1	2011-12	143174.91	143174.91	129354.12	129354.12
2	2012-13	156864.24	147342.38	142039.46	132517.60
3	2013-14	177745.22	154525.40	160441.53	138724.76
4	2014-15	195723.15	165212.30	172848.89	146425.39
5	2015-16	227958.83	191109.00	201308.81	167628.67
6	2016-17	254382.36	202080.85	222396.52	179631.90
7	2017-18	283164.91	219919.38	253726.41	195262.28
8	2018-19 (P.E.)	315881.20	234047.90	282781.82	207193.26
9	2019-20 (Q.E.)	351317.77	248796.15	313052.62	216243.12

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

Source: Directorate of Economics and Statistics, Assam.

GSDP of Assam at both current and constant prices during the period from 2011-12 to 2019-20 is depicted in following bar-diagram.

Chart-3.1



The annual growth rate in terms of GSDP and NSDP of Assam during the period from 2012-13 to 2019-20(Q.E.) at both current and constant prices is presented in **Table: 3.2.**

TABLE- 3.2
Annual growth rate of GSDP and NSDP of Assam
Base Year : 2011-12

Sl. No	Year	GSDP		NSDP	
		Current Prices	Constant Prices	Current Prices	Constant Prices
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	11.59%	5.74%	10.48%	7.16%
6	2017-18	11.31%	8.83%	14.09%	8.70%
7	2018-19 (P.E.)	11.55%	6.42%	11.45%	6.11%
8	2019-20 (Q.E.)	11.22%	6.30%	10.70%	4.37%

Source: Directorate of Economics and Statistics, Assam

From the table-3.2, it has been observed that GSDP both at current and constant prices for 2019-20 achieved annual growth rate of 11.22% and 6.30 % over the previous year respectively. On the other hand, NSDP at current prices has achieved annual growth rate of 10.70 % and 4.37 % at constant prices during 2019-20. The GSDP growth rate during 2018-19 both at current and constant prices is estimated at 11.55% and 6.42% respectively which has declined by 0.33% at current prices and by 0.12% at constant prices during 2019-20. The NSDP growth rate during 2018-19 both at current and constant prices is estimated at 11.45% and 6.11% respectively which has declined by 0.75% at current prices and by 0.74% at constant prices during 2019-20.

The annual growth rate in terms of GSDP and NSDP of Assam during the period from 2012-13 to 2019-20 (Q.E) both at current and constant prices is shown in the following line-diagram.



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

Table:-3.3

Sectoral composition of GSDP at current prices			
Sector	2011-12 (Base yr.)	2018-19(P.E)	2019-20(Q.E)
Agriculture and its Allied	19.89%	16.21%	15.64%
Industry	30.63%	33.69%	33.62%
Service	43.97%	43.51%	44.03%
Taxes & Subsidies	5.51%	6.58%	6.71%

Source: Directorate of Economics and Statistics, Assam

As per Quick Estimates for 2019-20, the percentage contribution of agriculture & allied sector, industry, service and taxes & subsidies to total GSDP of Assam at current prices were 15.64%, 33.62%, 44.03% and 6.71% as compared to 15.08%, 40.48%, 38.01% and 6.43% at constant prices respectively. The structural composition of the state economy witnessed significant changes during the last eight years.

Table:-3.4

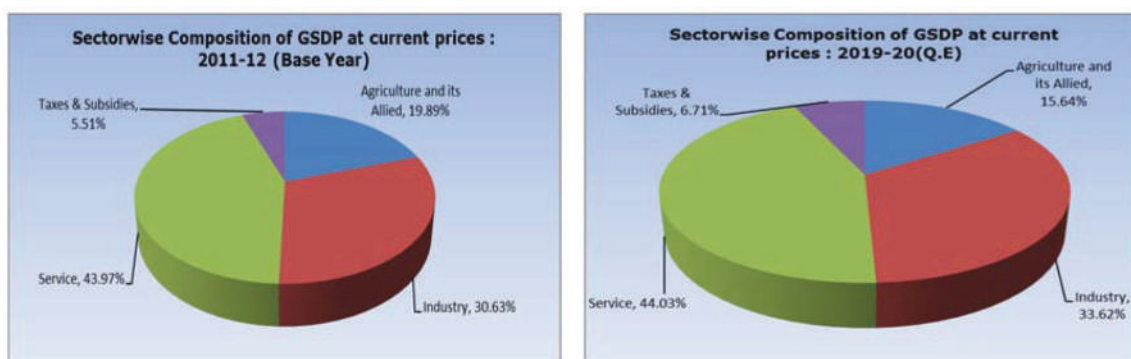
Sectoral composition of GSDP at constant (2011-12) prices			
Sector	2011-12 (Base yr.)	2018-19(P.E)	2019-20(Q.E)
Agriculture and its Allied	19.89%	15.66%	15.08%
Industry	30.63%	39.77%	40.48%
Service	43.97%	38.67%	38.01%
Taxes & Subsidies	5.51%	5.89%	6.43%

Source: Directorate of Economics and Statistics, Assam

As per 2019-20 (Q.E), the service sector has the largest share in GSDP of the state at current prices, followed by industry sector. It is evident that the service sector plays a significant role in the state economy. The share of agriculture and its allied activities in GSDP at current prices had marginally come down from 19.89% in 2011-12 to 16.21 % in 2018-19(P.E) and 15.64% in 2019-20(Q.E). The similar picture has also

been reflected at constant prices. During the period 2019-20, the contribution of agriculture and allied sector to total GSDP at constant prices (2011-12) has slightly declined by 0.58% due to less production of paddy, pulses and some vegetable crops. 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 have positive and negative impact on the state economy. During the same period, the share of industry sector at current prices has inclined from 30.63% in 2011-12 to 33.69% in 2018-19(P.E) but slightly declined by 0.07 % i.e.to 33.62% in 2019-20(Q.E). The share of service sector at current prices is 43.51% in 2018-19 which has increased to 44.03% in 2019-20.

Sector wise composition of GSDP at current prices for 2011-12 and 2019-20 is shown in the following.



3.4. ANNUAL GROWTH RATE OF GSDP IN AGRICULTURE AND ITS ALLIED SECTOR

The industry group "Agriculture and its allied" sector consists of (i) Crop sector, (ii) Livestock sector, (iii) Forestry & Logging sector and (iv) Fishing and Aquaculture sector. As per quick estimates, the annual growth rate of GSDP in respect of Agriculture and its Allied sector at current prices for the year 2019-20 is estimated a growth of 6.55% as against 2.35% at constant prices. During the year 2019-20(Q.E), the annual growth of GSDP in respect of Crop sector, Livestock sector, Forestry & Logging sector and Fishing sector at constant prices is estimated at 1.82%, 0.69%, 0.63% and 6.12% as against 1.35%, 2.63%, 2.39% and 1.05 % in 2018-19 (P.E) respectively.

Sector	Current Prices	Constant Prices
Crop	6.55%	1.82%
Livestock	4.56%	0.69%
Forestry and logging	6.80%	0.63%
Fishing and aquaculture	12.10%	6.12%
Agriculture and allied sector	6.55%	2.35%

Source : Directorate of Economics and Statistics, Assam

3.5. ANNUAL GROWTH RATE OF GSDP IN INDUSTRY SECTOR:

Industry sector comprises of Mining & Quarrying, Manufacturing, Electricity, Gas, Water Supply & Other Utility Services and Construction. As per Quick Estimates for 2019-20 at constant (2011-12) prices, annual growth rate in Industry sector is estimated at 8.00% and 10.98% at current prices over the previous year. At constant prices, the growth of the sub-sectors in Industry sector for 2019-20(Q.E.) is estimated at 8.03% in Mining and Quarrying, 7.39% in Manufacturing, 8.11% in Electricity, Gas, Water Supply & Other Utility Services and 9.82% in Construction respectively. All the sub sectors of Industry sector have posted encouraging growth performance both at current and constant prices over the previous year.

Table-3.6		
Annual Growth Rate of GSDP in Industry Sector during 2019-20 (Q.E)		
Sector	Current Prices	Constant Prices
Mining & Quarrying	10.86%	8.03%
Manufacturing	7.02%	7.39%
Electricity, Gas, Water Supply & Other Utility Services	6.18%	8.11%
Construction	17.79%	9.82%
Industry Sector	10.98%	8.00%

Source: Directorate of Economics & Statistics, Assam

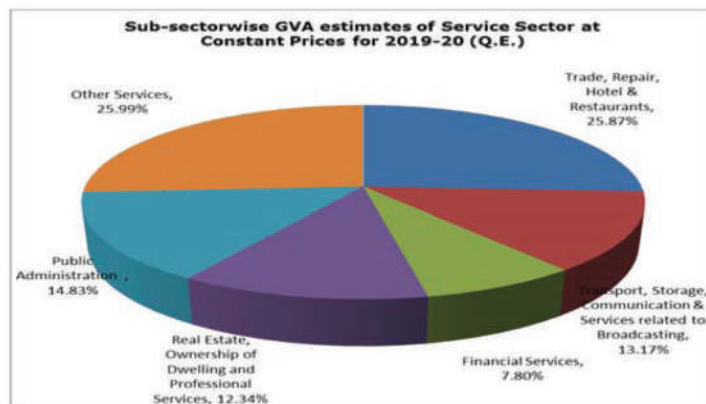
3.6. ANNUAL GROWTH RATE OF GSDP IN SERVICE SECTOR:

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.

Table-3.7		
Annual Growth Rate of GSDP in Service Sector during 2019-20 (Q.E)		
Industry	Current Prices	Constant Prices
Trade, Repair, Hotel & Restaurants	10.67%	2.45%
Transport, Storage, Communication & Services related to Broadcasting	8.57%	0.65%
Financial Services	15.03%	6.29%
Real Estate, Ownership of Dwelling and Professional Services	7.01%	2.18%
Public Administration	23.46%	1.10%
Other Services	12.56%	11.60%
Service Sector	12.55%	4.48%

Source: Directorate of Economics & Statistics, Assam

As per Quick Estimates for 2019-20, the annual average growth rate in Service sector is worked out the achievement at the level of 12.55% at current prices and 4.48% at constant prices over the previous year. During this period, the Public Administration achieved the highest annual growth rate of 23.46 % at current prices as compared to the all other sectors in the Service sector.



Industry	(Rs. in Lakh)		
	2011-12 (Base Yr.)	2019-20 (Q.E)	Average Annual Growth Rate
Agriculture, Forestry & Fishing	2848113	3752512	3.46%
Mining & Quarrying	1464989	3321569	12.75%
Manufacturing	1540255	3856084	11.87%
Electricity, Gas, Water Supply & Other utility Services	191883	537416	12.50%
Construction	1188747	2356993	8.58%
Trade, Repair, Hotels & Restaurants	2045676	2446062	2.57%
Transport, Storage, Communication & Services related to Broadcasting	810091	1245327	6.40%
Financial Services	427077	737134	8.02%
Real Estates, Ownership of Dwelling and Professional Services	1112543	1167342	1.25%
Public Administration	821723	1402407	7.71
Other Services	1077923	2457866	10.65%
Primary Sector	4313102	7074081	6.26%
Industry Sector	2920885	6750493	10.49%
Tertiary Sector	6295033	9456138	5.31%
Total Gross State Value Added at Basic Prices	13529020	23280712	6.77%
Gross State Domestic Product (GSDP)	14317491	24879615	7.55%
Taxes on Products -Subsidies on Products	788471	1598903	10.24%
Per capita Gross State Domestic Product (in Rs.)	45538	72129	6.05%

Source: Directorate of Economics & Statistics, Assam.

The **Table:-3.8** depicts that the annual average growth rate (AAGR) in respect of GDP at constant prices during the period 2011-2020 was highest in Mining and Quarrying (12.75%) among all sectors and more than 10% growth achieved by the sectors Electricity, Gas, Water Supply and Other Utility services (12.50%), Manufacturing (11.87%) and Other Services (10.65%).

SDG Indicator 8.1.1 Annual growth of real GDP per capita

3.7. ECONOMIC GROWTH AND INDIVIDUAL INCOME

The per capita GSDP (at current prices) in Assam is estimated to be Rs. 101851 in 2019-20 (Q.E.) showing a growth rate of 10.07% over 2018-19. This implies an average monthly GSDP of Rs. 8488 in 2019-20. In per capita income terms (i.e. ratio of NSDP and population) estimated per capita income is Rs. 62,796 at constant (2011-12) prices and Rs. 90,758 at current prices during 2019-20(Q.E.).



The per capita income of the State in terms of NSDP at constant (2011-12) prices is estimated at Rs. 62692.00 for the year 2019-20 (Q.E) as compared to Rs.60695.00 in 2018-19 (P.E) registering a growth of 3.29%. The average annual growth during the period 2011-12 to 2019-20 was 8.09 %. The per capita NSDP at current prices for the year 2019-20(Q.E) has achieved a level of Rs.90758.00 as compared to Rs.82837.00 in 2018-19(P.E) indicating a growth of 9.56%. During the period 2011-12 to 2019-20, Per capita income of the state as well as country as a whole has been increasing more than double.

Table:3.9

Per capita income of Assam and All India

In Rs.

Year	Assam		India	
	At current Prices	At constant Prices	At current Prices	At constant Prices
2011-12	41142	41142	63462	63462
2012-13	44599	41609	70983	65538
2013-14	49734	43002	79118	68572
2014-15	52895	44809	86647	72805
2015-16)	60817	50642	94797	77659
2016-17)	66330	53575	103870	83003
2017-18	75151	57835	115293	87828
2018-19(P.E.)	82837	60695	126521	92085
2019-20(Q.E.)	90758	62796	134226	94954

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

Net Per Capita Income of Assam and All India at constant prices is shown in the following bar diagram.

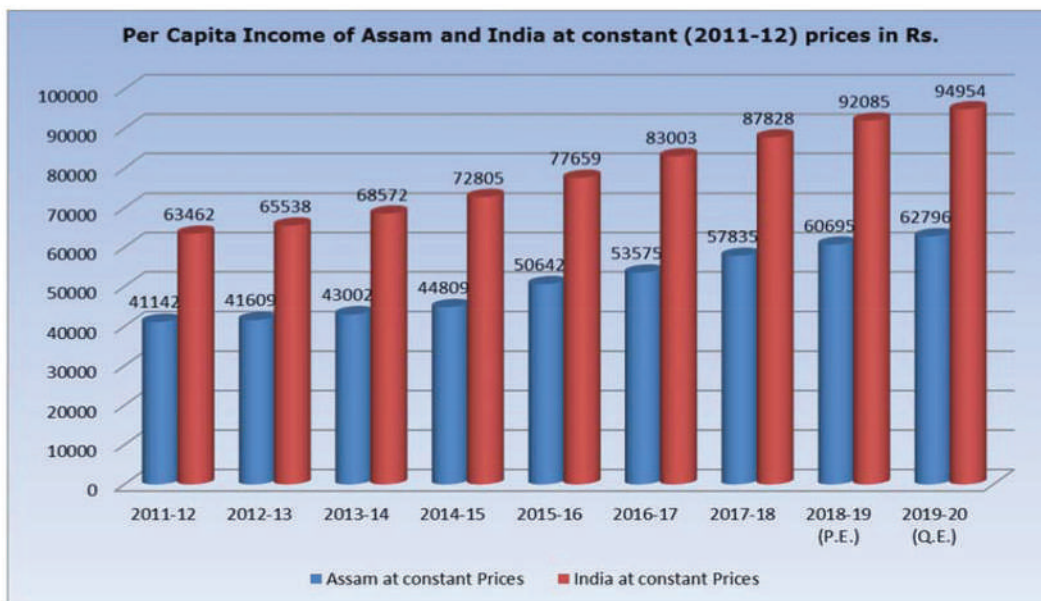


Table-3.10

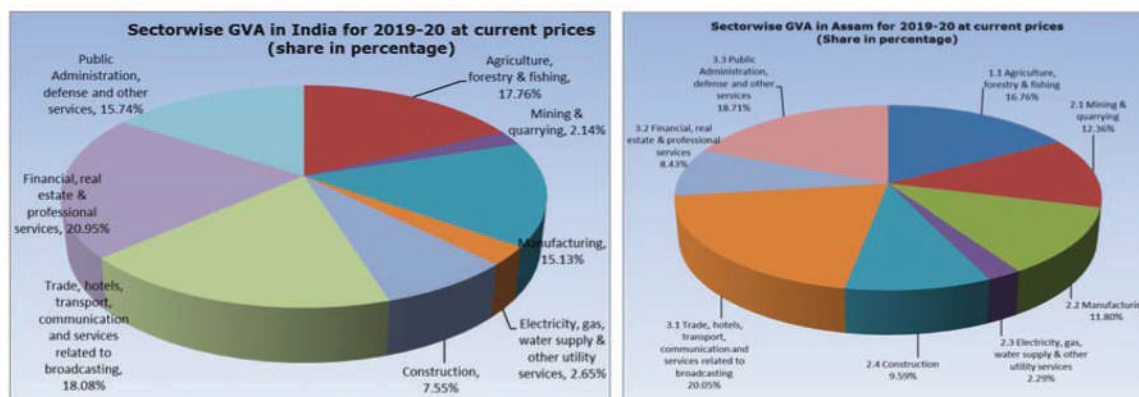
Share of Contribution of GVA of India and Assam at Current and Constant (2011-12) Prices

Sl. No.	Sector	GVA in 2019-20 (Rupees in Crore)			
		All India		Assam	
		Current Prices	share (%)	Current Prices	share (%)
1	Agriculture Sector	32,57,443	17.76%	54,944	16.76%
1.1	Agriculture, forestry & fishing	32,57,443	17.76%	54,944	16.76%
2	Industry Sector	50,40,100	27.48%	1,18,125	36.04%
2.1	Mining & quarrying	3,93,102	2.14%	40,501	12.36%
2.2	Manufacturing	27,75,587	15.13%	38,691	11.80%
2.3	Electricity, gas, water supply & other utility services	4,68,516	2.65%	7,493	2.29%
2.4	Construction	13,84,895	7.55%	31,440	9.59%
3	Service Sector	1,00,45,694	54.77%	1,54,687	47.20%
3.1	Trade, hotels, transport, communication and services related to broadcasting	33,16,653	18.08%	65,726	20.05%
3.2	Financial, real estate & professional services	38,42,524	20.95%	27,623	8.43%
3.3	Public Administration, defense and other services	28,86,517	15.74%	61,338	18.71%
GVA at basic prices		1,83,43,237	100%	3,27,756	100%

Sl. No.	Sector	GVA in 2019-20 (Rupees in Crore)			
		All India		Assam	
		Constant Prices	share (%)	Constant Prices	share (%)
1	Agriculture Sector	19,48,110	14.65%	37,525	16.12%
1.1	Agriculture, forestry & fishing	19,48,110	14.65%	37,525	16.12%
2	Industry Sector	40,15,068	30.19%	1,00,721	43.26%
2.1	Mining & quarrying	3,55,680	2.67%	33,216	14.27%
2.2	Manufacturing	23,17,280	17.42%	38,561	16.56%
2.3	Electricity, gas, water supply & other utility services	3,08,832	2.32%	5,374	2.31%
2.4	Construction	10,33,276	7.77%	23,570	10.12%
3	Service Sector	73,37,941	55.17%	94,561	40.62%
3.1	Trade, hotels, transport, communication and services related to broadcasting	25,77,945	19.38%	36,914	15.86%
3.2	Financial, real estate & professional services	29,15,680	21.92%	19,045	8.18%
3.3	Public Administration, defense and other services	18,44,316	13.87%	38,603	16.58%
GVA at basic prices		1,33,01,120	100%	2,32,807	100%

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

Share of Contribution of GVA of India and Assam at Current and Constant (2011-12) Prices Table-3.11



Source: Directorate of Economics and Statistics, Assam

3.8 District Domestic Product:

District Domestic Products (DDP) is one of the key indicators used in measuring the economic growth of the district. It has great importance in district economy and need for formulating development plans for a district. Significances of DDP are:

- ▶ It measures the relative shares of the different districts in generating SDP,

- ▶ It assesses the performance of the economy of a district, It gives a quantitative measurement of the district economic activity,
- ▶ It provides a basis for the districts as well as state and national policies like employment, inflation, standard of living etc.

The district income is defined as the sum total of the economic value of all goods and services produced within the district, irrespective of the fact whether the income is owned by persons inside the district or outside. The estimates of District Domestic Product (DDP) also termed as District Income is compiled in a similar manner to the one being followed in the case of State Domestic Product (SDP).

SDP is the aggregation of the DDP estimates of the districts. Conversely segregation of SDP estimates to the districts gives DDP estimates.

The methodology for compilation of DDP estimates is very much depends on availability of basic data at district level. There has been a feeling that the data base at the district level is far from satisfaction for estimation of DDP at the district level. Nevertheless, the data in respect of commodity producing sectors viz., Primary Sector and Manufacturing (Registered) Sector, is fairly sound, but appears to be very scanty in respect of remaining sectors. Therefore the district level data could be utilized to the extent of its availability to compute the DDP estimates adopting the state level methodology.

In the case of non-commodity producing sectors, where the district wise basic data are not available, the State level estimates are allocated to the districts on the basis of suitable district wise indicators. Further, in some of the commodity producing sectors, though the district wise production data are available, the corresponding prices are not available. In such cases, district wise production and State average prices are used in compilation of DDP estimates. Apart from this, wherever certain ratios, norms, yield rates, IIP, WPI etc, are used for the State level estimates those are normally not available at the district level, these are used in compilation of district income estimates.

Sector wise Gross District Domestic Products of Assam both at current and constant prices for 2017-18 (P.E) is shown in Appendix: 3.10 and 3.11 respectively.

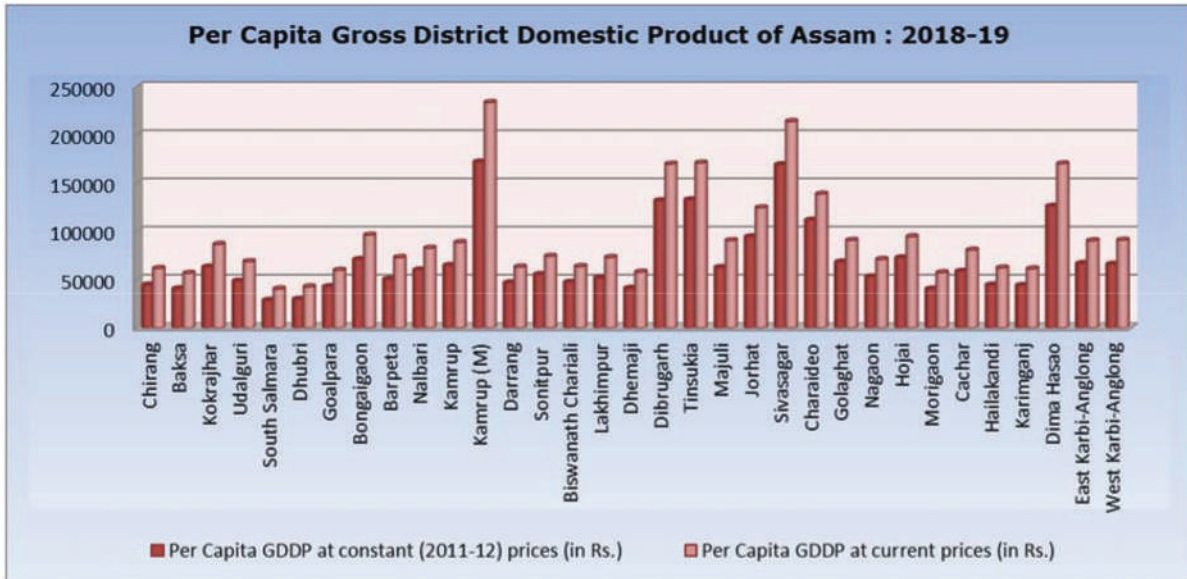
Year wise Gross District Domestic Products of Assam both at current and constant prices is shown in Appendix: 3.12 and 3.13 respectively.

Per capita Net District Domestic Products at constant prices is known as per capita income of the district. Year wise NDDP and GDDP at both constant and current prices is shown at Appendix-3.14, 3.15, 3.16 and 3.17.

Per-Capita income was found higher in districts of Kamrup (Metro), Sivasagar, Tinsukia, Dibrugarh, Jorhat, Dima Hasao, Charaideo, Bongaigaon, Kokrajhar, Kamrup as compared to State average at both constant and current prices from 2011-12 onwards. The per capita income was found lower in the districts of South Salmara, Dhubri, Hailakandi, Morigaon, Goalpara, Baksa, Chirang, Dhemaji, Lakhimpur, Barpeta, Darrang, Sonitpur, Biswanath, Cheriali, Nagaon, Hojai, Cachar, Hailakandi, Karimgange, West Karbi Anglong as compared to State average at both constant and current prices from 2011-12 onwards.

Contribution of Agriculture and allied sector to Gross District Domestic Products at current prices during 2018-19 was found highest in Dhemaji (32.30%), followed by Cirang (31.07) and West Karbi Anglong (33.33%) as against state contribution of 15.66%.

Per Capita Gross District Domestic Products both at constant and current prices during 2018-19 is shown in the following bar-diagram.



Appendix - 3.1					
GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES					
New base (2011-12) series					
(Rs. in Lakhs)					
Sl. No.	Industry Sector	2011-12	2017-18	2018-19 (P.E)	2019-20 (Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2848113	4755643	5121469	5494358
1.1	Crops	2061487	3447408	3655194	3894745
1.2	Livestock	159289	331703	369223	386045
1.3	Forestry & Logging	231388	296298	306278	327099
1.4	Fishing and aquaculture	395949	680234	790773	886469
2	Mining & Quarrying	1464989	3017341	3653222	4050112
A	Primary	4313102	7772984	8774691	9544470
3	Manufacturing	1540255	3365031	3615479	3869127
4	Electricity, Gas, Water Supply and other utility services	191883	664534	705626	749258
5	Construction	1188747	2164602	2669230	3143980
B	Secondary	2920885	6194167	6990334	7762365
6	Trade, Repair, Hotels & Restaurants	2045676	3863733	4297516	4756116
6.1	Trade and repair services	1961211	3725420	4144356	4589081
6.2	Hotel and restaurants	84465	138313	153160	167035
7	Transport, Storage, Communication and services related to broadcasting	810091	1521029	1673082	1816491
8	Financial Services	427077	795261	864894	994856
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1532750	1651710	1767451
10	Public Administration	821723	1944603	1996207	2464595
11	Other Services	1077923	2646052	3259855	3669211
C	Tertiary	6295033	12303428	13743264	15468720
12	Total GSVA at Basic Prices	13529020	26270579	29508289	32775555
13	Taxes on Products	1203476	2355537	2668567	3023196
14	Subsidies on Products	415005	309625	588736	666974
15	Gross State Domestic Product	14317491	28316491	31588120	35131777
16	Population (in '00)	314410	337620	341370	344931
17	Per Capita (in Rs.)	45538	83871	92533	101851
D	Agriculture	2848113	4755643	5121469	5494358
E	Industry Sector	4385874	9211508	10643556	11812477
F	Service Sector	6295033	12303428	13743264	15468720
G	Taxes on Products -Subsidies on Products	788471	2045912	2079831	2356222
GSDP		14317491	28316491	31588120	35131777

Source: Directorate of Economics & Statistics, Assam

Appendix - 3.2					
GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES					
New base (2011-12) series					
(Rs. in Lakhs)					
Sl. No.	Industry Sector	2011-12	2017-18	2018-19 (P.E)	2019-20 (Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2848113	3614528	3666272	3752512
1.1	Crops	2061487	2663201	2699140	2748243
1.2	Livestock	159289	225962	231899	233490
1.3	Forestry & Logging	231388	168032	172053	173131
1.4	Fishing and aquaculture	395949	557334	563180	597648
2	Mining & Quarrying	1464989	2667679	3074647	3321569
A	Primary	4313102	6282207	6740919	7074081
3	Manufacturing	1540255	3343622	3590722	3856084
4	Electricity, Gas, Water Supply and other utility services	191883	495984	497095	537416
5	Construction	1188747	1849704	2146213	2356993
B	Secondary	2920885	5689310	6234031	6750493
6	Trade, Repair, Hotels & Restaurants	2045676	2372154	2387499	2446062
6.1	Trade and repair services	1961211	2286085	2299865	2354135
6.2	Hotel and restaurants	84465	86069	87634	91927
7	Transport, Storage, Communication and services related to broadcasting	810091	1212499	1237346	1245327
8	Financial Services	427077	687214	693487	737134
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1115335	1142460	1167342
10	Public Administration	821723	1428880	1387103	1402407
11	Other Services	1077923	1893074	2202475	2457866
C	Tertiary	6295033	8709157	9050370	9456138
12	Total GSVA at Basic Prices	13529020	20680673	22025320	23280712
13	Taxes on Products	1203476	1561486	1769273	2120253
14	Subsidies on Products	415005	250222	389803	521350
15	Gross State Domestic Product	14317491	21991937	23404790	24879615
16	Population (in '00)	314410	337620	341370	344931
17	Per Capita (in Rs.)	45538	65138	68561	72129
D	Agriculture	2848113	3614528	3666272	3752512
E	Industry Sector	4385874	8356989	9308678	10072062
F	Service Sector	6295033	8709157	9050370	9456138
G	Taxes on Products -Subsidies on Products	788471	1311264	1379470	1598903
GSDP		14317491	21991938	23404790	24879615

Source: Directorate of Economics & Statistics, Assam

Appendix - 3.3					
NET STATE DOMESTIC PRODUCTS(NSDP) OF ASSAM AT CURRENT PRICES					
New base (2011-12) series					
(Rs. in Lakhs)					
Sl. No.	Industry Sector	2011-12	2017-18	2018-19 (P.E)	2019-20 (Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2620851	4359715	4690243	4950923
1.1	Crops	1888760	3112293	3292615	3432489
1.2	Livestock	153834	323360	360156	376926
1.3	Forestry & Logging	228850	293481	303080	306126
1.4	Fishing and aquaculture	349407	630581	734392	835382
2	Mining & Quarrying	1288077	2550486	3093371	3449950
A	Primary	3908928	6910201	7783614	8400873
3	Manufacturing	1274688	2945235	3157330	3220126
4	Electricity, Gas, Water Supply and other utility services	130994	461037	484451	493743
5	Construction	1131858	2042907	2497537	2647031
B	Secondary	2537540	5449179	6139319	6360900
6	Trade, Repair, Hotels & Restaurants	2002198	3750424	4164985	4804143
6.1	Trade and repair services	1919528	3619037	4019482	4637374
6.2	Hotel and restaurants	82670	131387	145503	166769
7	Transport, Storage, Communication and services related to broadcasting	654962	1079911	1154921	1210697
8	Financial Services	420333	778091	845502	939346
9	Real Estate, Ownership of dwelling & Professional Services	942080	1234638	1322154	1402920
10	Public Administration	634052	1594503	1656481	1770973
11	Other Services	1046848	2529782	3131376	4059188
C	Tertiary	5700473	10967349	12275418	14187267
12	Total GSVA at Basic Prices	12146941	23326727	26198351	28949040
13	Taxes on Products	1203476	2355537	2668567	3023196
14	Subsidies on Products	415005	309625	588736	666974
15	Gross State Domestic Product	12935412	25372639	28278182	31305262
16	Population (in '00)	314410	337620	341370	344931
17	Per Capita (in Rs.)	41142	75151	82837	90758
D	Agriculture	2620851	4359715	4690243	4950923
E	Industry Sector	3825617	7999665	9232690	9810850
F	Service Sector	5700473	10967349	12275418	14187267
G	Taxes on Products -Subsidies on Products	788471	2045912	2079831	2356222
NSDP		12935412	25372641	28278182	31305262

Source: Directorate of Economics & Statistics, Assam

Appendix-3.4					
NET STATE DOMESTIC PRODUCTS (NSDP) OF ASSAM AT CONSTANT PRICES					
New base (2011-12) series					
(Rs. in Lakhs)					
Sl. No.	Industry Sector	2011-12	2017-18	2018-19 (P.E)	2019-20 (Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2620851	3314851	3348921	3441434
1.1	Crops	1888760	2416994	2440354	2499431
1.2	Livestock	153834	219081	224875	230823
1.3	Forestry & Logging	228850	165732	169589	173536
1.4	Fishing and aquaculture	349407	513044	514103	537644
2	Mining & Quarrying	1288077	2293036	2639531	2864277
A	Primary	3908928	5607887	5988452	6305711
3	Manufacturing	1274688	2975480	3189715	3252871
4	Electricity, Gas, Water Supply and other utility services	130994	318059	322700	419215
5	Construction	1131858	1734164	1988012	2059089
B	Secondary	2537540	5027703	5500427	5731175
6	Trade, Repair, Hotels & Restaurants	2002198	2276013	2280239	2284488
6.1	Trade and repair services	1919528	2195800	2198760	2201724
6.2	Hotel and restaurants	82670	80214	81479	82764
7	Transport, Storage, Communication and services related to broadcasting	654962	836836	809487	807055
8	Financial Services	420333	672579	677599	711732
9	Real Estate, Ownership of dwelling & Professional Services	942080	877523	893463	909692
10	Public Administration	634052	1119971	1098244	1121464
11	Other Services	1046848	1796452	2091945	2189959
C	Tertiary	5700473	7579373	7850977	8024390
12	Total GSVA at Basic Prices	12146941	18214964	19339857	20061276
13	Taxes on Products	1203476	1561486	1769273	2120253
14	Subsidies on Products	415005	250222	389803	521350
15	Net State Domestic Product	12935412	19526228	20719327	21660180
16	Population (in '00)	314410	337620	341370	344931
17	Per Capita (in Rs.)	41142	57835	60695	62796
D	Agriculture	2620851	3314851	3348921	3441434
E	Industry Sector	3825617	7320739	8139958	8595452
F	Service Sector	5700473	7579374	7850978	8024390
G	Taxes on Products -Subsidies on Products	788471	1311264	1379470	1598903
NSDP		12935412	19526228	20719327	21660180

Source: Directorate of Economics & Statistics, Assam

Appendix-3.5				
Movement of Gross State Domestic Products (GSDP) of Assam both at current and constant (2011-12) prices				
Year	Gross State Domestic Products		Per Capita Gross State Domestic Product	
	(Rupees in Lakh)		(in Rupees)	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
2011-12	14317491	14317491	45538	45538
2012-13	15686424	14734238	49254	46264
2013-14	17774522	15452540	55098	47900
2014-15	19572315	16521230	59894	50558
2015-16	22795882	19110900	68868	57735
2016-17	25438236	20208085	75869	60270
2017-18	28316491	21991938	83871	65138
2018-19 (P.E)	31588120	23404790	92533	68561
2019-20 (Q.E)	35131777	24879615	101851	72129

Source: Directorate of Economics & Statistics, Assam

Appendix-3.6				
Movement of Net State Domestic Products (NSDP) of Assam at Current and Constant (2011-12) Prices				
Year	Net State Domestic Products		Per Capita Net State Domestic Product	
	(Rupees in Lakh)		(in Rupees)	
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
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	20130880	16762867	60817	50642
2016-17	22239652	17963190	66330	53575
2017-18	25372641	19526228	75151	57835
2018-19 (P.E.)	28278182	20719327	82837	60695
2019-20 (Q.E.)	31305262	21624312	90758	62796

Source: Directorate of Economics & Statistics, Assam

Appendix-3.7					
Gross Domestic Product (GDP)					
Rs. in crore					
Sl. No.	Year	All India		Assam	
		At current prices	At basic prices	At current prices	At basic prices
1	2011-12	8736331	8736331	143175	143175
2	2012-13	9944013	9213017	156864	147342
3	2013-14	11233522	9801370	177745	154525
4	2014-15	12467959	10527674	195723	165212
5	2015-16	13771874	11369493	227959	191109
6	2016-17	15391669	12308193	254382	202081
7	2017-18	17098304	13175160	283165	219919
8	2018-19(P.E.)	18971237	13981426	315881	234048
9	2019-20(Q.E.)	20339849	14565951	351318	248796

Source: Directorate of Economics and Statistics, Assam & Ministry of Statistics and Programme Implementation (MOSPI)

Appendix-3.8					
Sector-wise contribution of GVA at constant for 2019-20					
Rs. in Crore					
Sl. No.	Sector	All India		Assam	
		GVA at constant prices	Share (in %)	GVA at constant prices	Share (in %)
1	Primary Sector	2283724	17.39	70741	30.39
1.1	Agriculture, Forestry and Fishing	1907605	14.39	37525	16.12
1.2	Mining & quarrying	376119	3.01	33216	14.27
2	Secondary Sector	3763352	28.45	67505	29
2.1	Manufacturing	2374176	18.32	38561	16.56
2.2	Electricity, gas, water supply & other utility services	301966	2.24	5374	2.31
2.3	Construction	1087210	7.9	23570	10.12
3	Tertiary Sector	7493305	54.15	94561	40.62
3.1	Trade, hotels, transport, communication and services related to broadcasting	2616095	19.27	36913	15.86
3.2	Financial, real estate & professional services	3027407	21.67	19045	8.18
3.3	Public Administration, defence and other services	1849803	13.21	38603	16.58
GVA at basic prices		13540381	100	232807	100

Source: Ministry of Statistics and Programme Implementation and Directorate of Economics & Statistics, Assam

Appendix-3.9					
Sector-wise contribution of GVA at current prices for 2019-20					
<i>Rs. in Crore</i>					
Sl. No.	Sector	All India		Assam	
		GVA at current Prices	Share (in %)	GVA at current Prices	Share (in %)
1	2	3	4	5	6
1	Primary Sector	3450623	18.65	95445	29.12
1.1	Agriculture, Forestry and Fishing	3047187	16.47	54944	16.76
1.2	Mining & quarrying	403436	2.18	40501	12.36
2	Secondary Sector	4825767	26.08	77624	23.68
2.1	Manufacturing	2882958	15.58	38691	11.8
2.2	Electricity, gas, water supply & other utility services	502917	2.72	7493	2.29
2.3	Construction	1439892	7.78	31440	9.59
3	Tertiary Sector	10225803	55.27	154687	47.2
3.1	Trade, hotels, transport, communication and services related to broadcasting	3391278	18.33	65726	20.05
3.2	Financial, real estate & professional services	3944979	21.32	27623	8.43
3.3	Public Administration, defence and other services	2889546	15.62	61338	18.71
GVA at basic prices		18502193	100	327756	100
<i>Source: Ministry of Statistics and Programme Implementation and Directorate of Economics & Statistics, Assam</i>					

Appendix - 3.10								
Gross District Domestic Products of Assam at current prices for 2018-19 (Provisional)								
Base year : 2011-12								
<i>Rs. in Lakh</i>								
SI No.	District	Primary sector	Secondary Sector	Tertiary Sector	Gross District Value Added	Taxes-Subsidies	Gross District Domestic Product (GDDP)	Per capita DDP (in Rs.)
1	Chirang	116787	55182	125311	297280	22896	320176	61572
2	Baksa	191587	91999	256412	539998	36789	576787	56492
3	Kokrajhar	224603	175263	355997	755863	58900	814763	86585
4	Udalguri	210290	103125	257015	570430	42135	612565	68596
5	South Salmara	63211	32618	138121	233950	14574	248524	40345
6	Dhubri	158792	115255	341491	615538	44619	660157	42481
7	Goalpara	177980	100643	341425	620048	47682	667730	59672
8	Bongaigaon	134708	228239	365096	728043	56660	784703	96165
9	Barpeta	263604	212266	811613	1287483	77241	1364724	72941
10	Nalbari	171015	124208	349039	644262	44298	688560	82561
11	Kamrup	298065	387063	662379	1347507	113608	1461115	88499
12	Kamrup (M)	88873	897354	2000403	2986630	222506	3209136	233732
13	Darrang	162025	150786	292894	605705	41886	647591	63057
14	Sonitpur	216814	274269	407996	899079	63086	962165	74184
15	Biswanath Chariali	139720	118196	217104	475020	32428	507448	63590
16	Lakhimpur	252874	120231	409302	782407	49047	831454	72999
17	Dhemaji	157928	58946	193250	410124	26489	436613	57753
18	Dibrugarh	1063226	534587	686812	2284625	145163	2429788	169797
19	Tinsukia	1100632	563285	652392	2316309	157703	2474012	170975
20	Majuli	79472	48637	160166	288275	19226	307501	90441
21	Jorhat	196695	293112	465539	955346	81054	1036400	124567
22	Sivasagar	763166	288717	452615	1504498	98337	1602835	213997
23	Charaideo	241765	172995	212831	627591	45425	673016	138766
24	Golaghat	320656	235796	415137	971589	76385	1047974	90734
25	Nagaon	350651	393786	692906	1437343	90754	1528097	70909
26	Hojai	244643	244437	371705	860785	53781	914566	94480
27	Morigaon	195239	97785	271021	564045	43238	607283	57129
28	Cachar	343703	403175	684895	1431773	108992	1540765	80584
29	Hailakandi	118278	89723	217830	425831	26778	452609	62086
30	Karimganj	132052	154738	493001	779791	53302	833093	61122
31	Dima Hasao	168981	82643	122334	373958	22436	396394	170126
32	East Karbi-Anglong	258704	104854	208721	572279	43585	615864	90303
33	West Karbi-Anglong	167951	36422	110512	314885	18828	333713	90930
ASSAM		8774690	6990335	13743265	29508290	2079831	31588121	92533

Appendix - 3.11								
Gross District Domestic Products of Assam at constant prices for 2018-19 (Provisional)								
Base year : 2011-12								
Rs. in Lakh								
Sl No.	District	Primary sector	Secondary Sector	Tertiary Sector	Gross District Value Added	Taxes-Subsidies	Gross District Domestic Product (GDDP)	Per capita DDP (in Rs.)
1	Chirang	85420	45272	87286	217978	13244	231222	44466
2	Baksa	140749	77534	167545	385828	26208	412036	40356
3	Kokrajhar	163583	146700	234278	544561	48466	593027	63021
4	Udalguri	156303	83498	164290	404091	28236	432327	48413
5	South Salmara	45794	28728	92038	166560	11409	177969	28891
6	Dhubri	116189	99925	225101	441215	24161	465376	29947
7	Goalpara	130525	88540	227519	446584	30446	477030	42630
8	Bongaigaon	99847	199798	241267	540912	36754	577666	70792
9	Barpeta	193404	178856	518899	891159	49880	941039	50296
10	Nalbari	126437	103238	240664	470339	30040	500379	59997
11	Kamrup	221643	342964	416913	981520	86040	1067560	64661
12	Kamrup (M)	66593	826073	1364192	2256858	104484	2361342	171984
13	Darrang	118793	140003	187415	446211	32590	478801	46621
14	Sonitpur	157620	255363	267357	680340	35333	715673	55179
15	Biswanath Chariali	100936	108962	144811	354709	21748	376457	47175
16	Lakhimpur	185337	101614	268706	555657	33012	588669	51683
17	Dhemaji	115013	49812	126966	291791	17040	308831	40851
18	Dibrugarh	868873	480040	430644	1779557	105608	1885165	131738
19	Tinsukia	901658	503344	415275	1820277	101230	1921507	132792
20	Majuli	58207	41540	103210	202957	9789	212746	62572
21	Jorhat	148342	266902	314015	729259	55470	784729	94318
22	Sivasagar	625363	264261	301462	1191086	76057	1267143	169178
23	Charaideo	195671	153963	142291	491925	49273	541198	111587
24	Golaghat	242583	216 454	280936	739973	47811	787784	68206
25	Nagaon	261965	354697	459929	1076591	62609	1139200	52863
26	Hojai	184462	242456	249125	676043	26832	702875	72611
27	Morigaon	142916	85589	177044	405549	21292	426841	40154
28	Cachar	252607	352992	447287	1052886	66802	1119688	58561
29	Hailakandi	85234	75225	140827	301286	22009	323295	44348
30	Karimganj	96067	138796	321499	556362	41488	597850	43863
31	Dima Hasao	127639	66646	77327	271612	22037	293649	126030
32	East Karbi-Anglong	197859	84367	140347	422573	31653	454226	66602
33	West Karbi-Anglong	127287	29878	73905	231070	10419	241489	65801
ASSAM		6740919	6234030	9050370	22025319	1379470	23404789	68561

Appendix - 3.12									
Year wise Gross District Domestic Products of Assam at Current Prices									
Base year : 2011-12									
Rs. in Lakh									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	153909	175253	194553	212931	242791	262430	292315	320176
2	Baksa	265708	291501	327463	360458	417761	460082	522513	576787
3	Kokrajhar	386609	434375	504793	555207	604595	651176	734717	814763
4	Udalguri	290203	334084	365722	394018	460709	496596	553438	612565
5	South Salmara	121764	127104	142093	159271	172997	177981	220343	248524
6	Dhubri	312669	333932	397675	437741	478659	576670	599565	660157
7	Goalpara	343514	352015	416891	461804	486539	595149	608177	667730
8	Bongaigaon	366491	398375	496300	547789	610753	639254	712934	784703
9	Barpeta	632577	637936	713630	793875	845058	1112804	1216343	1364724
10	Nalbari	322183	356144	394735	438274	469760	550913	621478	688560
11	Kamrup	654977	763499	879661	972016	1121097	1157123	1306796	1461115
12	Kamrup (M)	1453153	1593191	1767567	1955849	2168791	2555478	2887647	3209136
13	Darrang	299907	336537	362845	400415	459558	534067	581831	647591
14	Sonitpur	459571	492247	578119	636979	712788	816928	865823	962165
15	Biswanath Chariali	230505	257003	297192	327466	378456	407358	463761	507448
16	Lakhimpur	384742	415998	462876	512258	554034	670504	748592	831454
17	Dhemaji	210611	231757	253908	280705	302628	365920	399579	436613
18	Dibrugarh	1029354	1100823	1246203	1362514	1833778	1910287	2136735	2429788
19	Tinsukia	1054293	1077212	1260377	1362332	1880845	1960481	2174038	2474012
20	Majuli	133621	146461	166070	183150	206585	232505	278198	307501
21	Jorhat	469671	521399	666505	737820	837547	851242	938367	1036400
22	Sivasagar	689126	714449	808047	895303	1194798	1295845	1411590	1602835
23	Charaideo	294007	311946	362911	397398	522868	534650	603085	673016
24	Golaghat	485155	524494	678954	748073	852117	870441	956183	1047974
25	Nagaon	684296	708954	822553	907972	1020353	1241573	1371744	1528097
26	Hojai	419509	434091	494442	542792	623841	746803	827890	914566
27	Morigaon	284860	330307	359459	391275	435290	490554	554611	607283
28	Cachar	680648	727926	934695	1033997	1150195	1201929	1381425	1540765
29	Hailakandi	199747	225696	238950	265312	282302	355783	408293	452609
30	Karimganj	381944	403382	455421	507118	565364	679929	743688	833093
31	Dima Hasao	173355	186157	196559	215615	248353	300901	350721	396394
32	East Karbi-Anglong	299962	328034	360242	393379	439605	509165	548940	615864
33	West Karbi-Anglong	148934	162177	167212	181319	215195	265436	295131	333713
ASSAM		14317491	15686425	17774522	19572315	22795882	25438236	28316491	31588121

Source: Directorate of Economics & Statistics, Assam

Appendix - 3.13									
YEAR WISE GROSS DISTRICT DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES									
Base Year : 2011-12									
Rs. in Lakh									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	153909	160831	176111	187515	197351	222436	221709	231222
2	Baksa	265708	278297	300589	322527	323210	350498	392395	412036
3	Kokrajhar	386609	402262	435036	475105	544181	552281	562343	593027
4	Udalguri	290203	302446	327684	351727	401130	417855	410171	432327
5	South Salmara	121764	129929	136378	144348	142834	151779	169708	177969
6	Dhubri	312669	326728	341498	356254	374682	398424	442197	465376
7	Goalpara	343514	363965	374383	380062	419167	446329	454642	477030
8	Bongaigaon	366491	371404	396405	427661	520804	554867	546677	577666
9	Barpeta	632577	650604	676487	723620	728142	743993	888993	941039
10	Nalbari	322183	333442	351489	383101	411545	419469	475766	500379
11	Kamrup	654977	673351	716581	783489	971393	1014185	1006350	1067560
12	Kamrup (M)	1453153	1473881	1544472	1662244	1904928	2026658	2237089	2361342
13	Darrang	299907	311115	332444	356893	422481	472682	456863	478801
14	Sonitpur	459571	471823	502003	518904	572273	604610	678578	715673
15	Biswanath Chariali	230505	243272	257356	269050	310561	344779	358700	376457
16	Lakhimpur	384742	407814	427057	461189	470988	501932	562694	588669
17	Dhemaji	210611	224220	232694	238575	241656	261835	295295	308831
18	Dibrugarh	1029354	1034845	1062772	1140919	1508746	1624088	1731785	1885165
19	Tinsukia	1054293	1073843	1094523	1167939	1523869	1627401	1757377	1921507
20	Majuli	133621	138768	146885	160344	173951	192794	202881	212746
21	Jorhat	469671	476333	510709	568508	707107	759756	742184	784729
22	Sivasagar	689126	701175	713691	757899	988633	1058220	1161024	1267143
23	Charaideo	294007	300303	309948	336701	440997	474642	504135	541198
24	Golaghat	485155	502523	519605	554944	650347	710572	744058	787784
25	Nagaon	684296	705773	751665	796012	793825	842085	1074106	1139200
26	Hojai	419509	425327	440866	455078	470090	492098	661878	702875
27	Morigaon	284860	298420	311635	334288	397630	421063	407790	426841
28	Cachar	680648	697639	739261	801840	940842	961838	1056254	1119688
29	Hailakandi	199747	214311	228178	241618	267754	277564	307357	323295
30	Karimganj	381944	400903	423866	460047	492229	508386	562364	597850
31	Dima Hasao	173355	176503	182969	193915	226411	235823	271396	293649
32	East Karbi-Anglong	299962	309761	320517	342086	418357	424222	423498	454226
33	West Karbi-Anglong	148934	152513	166875	166925	162905	170470	223682	241489
ASSAM		14317491	14734238	15452540	16521230	19110900	20208085	21991938	23404790

Source: Directorate of Economics & Statistics, Assam

APPENDIX - 3.14									
YEAR WISE PER CAPITA NET DISTRICT DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES									
Base Year : 2011-12									
(in Rs.)									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	32623	33013	35614	35656	39553	40903	46464	48481
2	Baksa	28226	28868	30813	31034	33820	35198	39786	41667
3	Kokrajhar	48881	49081	49876	53717	57343	61662	68449	71518
4	Udalguri	36971	37244	38082	40277	44219	46859	52694	55077
5	South Salmara	19404	20278	21280	21483	24782	25361	29129	30752
6	Dhubri	19043	19738	20975	21079	23193	23588	26685	27916
7	Goalpara	30240	30312	30797	31921	33649	36472	40392	41944
8	Bongaigaon	52626	52838	53188	56438	59126	62715	67056	69701
9	Barpeta	26214	26695	26878	29197	31526	32978	35506	37329
10	Nalbari	37599	37069	37709	41613	44915	47135	54860	57460
11	Kamrup	48095	48328	51279	52813	59493	64124	62285	65323
12	Kamrup (M)	88716	88906	89392	90351	102341	109586	116559	121246
13	Darrang	32079	32327	33635	33728	36512	40972	43655	45403
14	Sonitpur	33083	33877	35163	36916	39273	39759	44381	46360
15	Biswanath Chariali	29832	31034	33288	33855	36455	37282	39737	41354
16	Lakhimpur	30002	30113	31995	32157	35979	38134	46675	48623
17	Dhemaji	23504	24037	24569	24849	28061	29980	38917	40639
18	Dibrugarh	73183	72787	73274	74685	95733	100570	107676	116258
19	Tinsukia	73931	73362	74828	75570	97098	100652	116260	117319
20	Majuli	39014	39654	42372	42812	46852	50891	54599	56838
21	Jorhat	74048	74024	78870	80956	85641	93889	91974	95643
22	Sivasagar	75386	75435	78462	78821	102228	108789	114544	123063
23	Charaideo	59894	59814	65000	64997	78722	88278	81873	87070
24	Golaghat	38237	38786	42679	43315	48020	50541	58021	59870
25	Nagaon	31800	32219	34324	35309	39580	39589	42919	45321
26	Hojai	37400	37959	39423	40383	45604	46874	50556	53424
27	Morigaon	26362	26532	27181	27415	30053	33750	35176	36640
28	Cachar	38853	39040	39576	42506	46778	49738	54595	56720
29	Hailakandi	27620	28070	28146	29654	33259	36734	39189	41114
30	Karimganj	27626	27748	27801	30346	32984	38192	36855	38948
31	Dima Hasao	63029	63872	65270	85056	92779	92988	99895	105248
32	East Karbi-Anglong	38210	38436	39270	47888	52912	59554	55681	58140
33	West Karbi-Anglong	30109	30324	31319	31359	40602	41150	53762	57291
	ASSAM	41145	41609	43002	44809	50642	53575	57835	60695

Source: Directorate of Economics & Statistics, Assam

APPENDIX - 3.15									
YEAR WISE PER CAPITA NET DISTRICT DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES									
Base Year : 2011-12									
(in Rs.)									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	32623	32400	35466	37541	42466	45444	59246	64907
2	Baksa	28226	25010	30505	32456	37247	40185	51222	56194
3	Kokrajhar	48881	42289	50240	53390	57876	64035	86637	95110
4	Udalguri	36971	33537	38565	40155	46457	49757	68186	74768
5	South Salmara	19404	15840	21264	23083	24865	28238	37741	42089
6	Dhubri	19043	19054	24180	25738	28026	31653	36183	39856
7	Goalpara	30240	29113	36530	39116	40994	43885	53521	58621
8	Bongaigaon	52626	46046	58497	62256	68304	74128	86834	94897
9	Barpeta	26214	28561	37604	40461	42994	47289	50167	56508
10	Nalbari	37599	38566	44814	48089	51635	57078	70137	77803
11	Kamrup	48095	41472	51162	54519	62051	68104	78470	86190
12	Kamrup (M)	88716	154695	125710	134512	147057	161666	161457	178287
13	Darrang	32079	30352	34290	36550	41542	44394	54649	59714
14	Sonitpur	33083	36900	42945	45648	50574	55836	57772	63214
15	Biswanath Chariali	29832	28601	35329	37597	42837	46707	52982	57667
16	Lakhimpur	30002	33453	38894	41681	44901	47954	61889	67649
17	Dhemaji	23504	28727	32494	34783	37419	39408	51825	56388
18	Dibrugarh	73183	75757	81477	85984	113349	122471	135662	152848
19	Tinsukia	73931	70515	82424	85864	115855	124264	143704	151174
20	Majuli	39014	33815	44848	47871	53337	58672	72359	79497
21	Jorhat	74048	62237	75845	81020	90595	101689	116081	127137
22	Sivasagar	75386	90252	100008	107278	140135	151175	144189	161348
23	Charaideo	59894	60142	69320	73298	94491	102949	100643	112021
24	Golaghat	38237	41241	56222	59730	67100	73978	76375	82272
25	Nagaon	31800	30113	37157	39559	43988	48034	55179	61021
26	Hojai	37400	39715	49004	51876	58736	64109	67897	75105
27	Morigaon	26362	28451	33097	34817	38408	40689	48050	52659
28	Cachar	38853	37971	48085	51295	56614	62362	71682	78509
29	Hailakandi	27620	28725	31933	34244	36292	38654	51185	56249
30	Karimganj	27626	26093	33230	35743	39614	43525	49761	56118
31	Dima Hasao	63029	76940	81087	85860	98361	103017	123992	136485
32	East Karbi-Anglong	38210	47413	51560	54499	60777	63773	72627	79790
33	West Karbi-Anglong	30109	38815	43271	45433	53871	56588	69438	77190
	ASSAM	41145	44599	49734	52895	60817	66330	75151	82837

Source: Directorate of Economics & Statistics, Assam

APPENDIX - 3.16									
YEAR WISE PER CAPITA GROSS DISTRICT DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES									
Base Year : 2011-12									
(in Rs.)									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	31931	32941	35610	37431	38891	43277	42884	44466
2	Baksa	27969	28920	30838	32665	32316	34598	38698	40356
3	Kokrajhar	43586	44771	47801	51536	58274	58388	60144	63021
4	Udalguri	34922	35930	38431	40724	45850	47152	46243	48413
5	South Salmara	21007	22129	22931	23960	23406	24554	27730	28891
6	Dhubri	21396	22072	22775	23455	24354	25567	28658	29947
7	Goalpara	34079	35646	36198	36277	39499	41521	40922	42630
8	Bongaigaon	49593	49615	52279	55680	66940	70408	67491	70792
9	Barpeta	37342	37916	38920	41100	40828	41184	47847	50296
10	Naibari	41734	42640	44374	47746	50636	50952	57460	59997
11	Kamrup	43147	43791	46007	49659	60783	62650	61400	64661
12	Kamrup (M)	115881	116032	120037	127538	144290	151551	164130	171984
13	Darrang	32283	33061	34877	36963	43196	47712	44790	46621
14	Sonitpur	38588	39111	41081	41921	45642	47605	52685	55179
15	Biswanath Chariali	31445	32762	34217	35314	40241	44105	45233	47175
16	Lakhimpur	36923	38637	39944	42585	42934	45170	49752	51683
17	Dhemaji	30701	32267	33059	33461	33460	35791	39320	40851
18	Dibrugarh	77629	77045	78114	82785	108076	114854	121871	131738
19	Tinsukia	79389	79828	80326	84618	108995	114914	131442	132792
20	Majuli	42194	43260	45205	48716	52175	57089	60024	62572
21	Jorhat	60578	60652	64198	70550	86628	91893	89744	94318
22	Sivasagar	98659	99101	99582	104398	134440	142069	156052	169178
23	Charaideo	64973	65516	66757	71591	92569	98359	104592	111587
24	Golaghat	45469	46495	47461	50041	57894	62448	65963	68206
25	Nagaon	35118	35757	37596	39305	38696	40526	50168	52863
26	Hojai	47920	47964	49081	50015	51005	52711	68802	72611
27	Morigaon	29766	30784	31737	33609	39466	41258	38616	40154
28	Cachar	39185	39650	41479	44415	51448	51925	56304	58561
29	Hailakandi	30311	32105	33746	35276	38593	39496	42453	44348
30	Karimganj	31078	32203	33613	36016	38043	38790	41534	43863
31	Dima Hasao	81007	81424	83329	87184	100494	103335	117998	126030
32	East Karbi-Anglong	48303	49244	50303	53001	63990	64059	62555	66602
33	West Karbi-Anglong	44458	44944	48549	47942	46190	47718	61283	65801
	ASSAM	45538	46264	47900	50558	57735	60270	65138	68561

Source: Directorate of Economics & Statistics, Assam

APPENDIX - 3.17									
YEAR WISE PER CAPITA GROSS DISTRICT DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES									
Base Year : 2011-12									
(in Rs.)									
Sl. No.	District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Chirang	31931	35730	39463	42757	48130	51359	56541	61572
2	Baksa	27969	30153	33690	36894	42213	45896	51530	56492
3	Kokrajhar	43586	48124	56213	61621	66245	70438	78579	86585
4	Udalguri	34922	39507	43128	46084	53195	56607	62394	68596
5	South Salmara	21007	21549	24514	27001	28953	29407	36004	40345
6	Dhubri	21396	22455	27213	29435	31775	37793	38857	42481
7	Goalpara	34079	34318	39704	43119	44848	54159	54741	59672
8	Bongaigaon	49593	52975	64707	70139	77202	79773	88017	96165
9	Barpeta	37342	37007	40409	44326	46581	60556	65465	72941
10	Nalbari	41734	45335	50030	54922	58115	67285	75058	82561
11	Kamrup	43147	49426	56208	61520	70049	71377	79731	88499
12	Kamrup (M)	115881	124851	136176	148847	162943	189545	211860	233732
13	Darrang	32283	35599	37523	40734	46153	52951	57042	63057
14	Sonitpur	38588	40617	47027	51298	56670	64121	67222	74184
15	Biswanath Chariali	31445	34453	39276	42846	48885	51946	58482	63590
16	Lakhimpur	36923	39232	42938	46996	50179	59953	66189	72999
17	Dhemaji	30701	33199	35711	38771	41265	49259	53206	57753
18	Dibrugarh	77629	81582	91633	99454	132142	135898	150368	169797
19	Tinsukia	79389	79712	92268	98363	134066	137958	162606	170975
20	Majuli	42194	45449	51405	56288	62679	69643	82307	90441
21	Jorhat	60578	66086	84267	92619	103794	104145	113466	124567
22	Sivasagar	98659	100515	113418	124815	164439	176069	189730	213997
23	Charaideo	64973	67745	78629	85518	111081	112134	125121	138766
24	Golaghat	45469	48306	62118	67638	76060	76704	84768	90734
25	Nagaon	35118	35754	40506	44010	48825	58653	64070	70909
26	Hojai	47920	48728	54196	58560	66444	78525	86059	94480
27	Morigaon	29766	33918	36018	38436	42213	46965	52520	57129
28	Cachar	39185	41182	51784	56503	62049	64012	73637	80584
29	Hailakandi	30311	33656	34883	38010	39928	49678	56394	62086
30	Karimganj	31078	32254	35469	38860	42769	50779	54925	61122
31	Dima Hasao	81007	85484	89345	97124	110441	132101	152487	170126
32	East Karbi-Anglong	48303	51910	56038	60279	66501	76041	81084	90303
33	West Karbi-Anglong	44458	47573	48306	51599	60457	73620	80858	90930
	ASSAM	45538	49254	55098	59894	68868	75869	83871	92533

Source: Directorate of Economics & Statistics, Assam

Appendix-3.18				
Contribution of Agriculture and allied sector to Gross District Domestic Products at Current prices for 2018-19				
Sl. No.	District	Agriculture and Allied Sector (Rs. in Lakh)	GDDP at Current prices (Rs. in Lakh)	% Contribution
1	2	3	4	5
1	Chirang	100665	320176	31.44
2	Baksa	166589	576787	28.88
3	Kokrajhar	194403	814763	23.86
4	Udalguri	168206	612565	27.46
5	South Salmara	59624	248524	23.99
6	Dhubri	141058	660157	21.37
7	Goalpara	155679	667730	23.31
8	Bongaigaon	111988	784703	14.27
9	Barpeta	244870	1364724	17.94
10	Nalbari	150486	688560	21.86
11	Kamrup	228102	1461115	15.61
12	Kamrup (M)	57615	3209136	1.8
13	Darrang	145468	647591	22.46
14	Sonitpur	193780	962165	20.14
15	Biswanath Chariali	128509	507448	25.32
16	Lakhimpur	230239	831454	27.69
17	Dhemaji	139810	436613	32.02
18	Dibrugarh	209289	2429788	8.61
19	Tinsukia	193901	2474012	7.84
20	Majuli	73147	307501	23.79
21	Jorhat	139774	1036400	13.49
22	Sivasagar	130678	1602835	8.15
23	Charaideo	60964	673016	9.06
24	Golaghat	217697	1047974	20.77
25	Nagaon	276220	1528097	18.08
26	Hojai	175002	914566	19.13
27	Morigaon	173483	607283	28.57
28	Cachar	288718	1540765	18.74
29	Hailakandi	109946	452609	24.29
30	Karimganj	115629	833093	13.88
31	Dima Hasao	88780	396394	22.4
32	East Karbi-Anglong	147416	615864	23.94
33	West Karbi-Anglong	103733	333713	31.08
ASSAM		5121468	31588121	16.21

CHAPTER-IV STATE FINANCE

Public finance has undergone major changes during the period 2001-17. Compared to earlier two decades (1980s and 1990s), States in India experienced relatively comfortable fiscal situation during 2001-16. Major reforms were initiated in revenue and expenditure fronts during the period notable among them are introduction of Value Added Tax (VAT) and adoption of Fiscal Responsibility and Budget Management practices. With implementation of GST in 2017, the principle of indirect taxation for many goods and services and raise revenue shifted from origin-based to destination-based. As a result, ability to tax goods and services and raise revenue shifted from origin or producing states to destination or consuming states. Together with this, changes in the GST rates from the earlier tax rates, added to the uncertainty for states to raise revenue. This was addressed through a constitutional amendment and the GST (compensation to States) Act, 2017 that guarantees states compensation for five years for any loss of revenue arising due to GST implementation. The compensation to states is to be given out of the GST Compensation Fund, which consists of collections of a cess levied specifically to generate funds for this purpose.

The State Government mobilizes financial resources through direct and indirect taxes, non-tax revenue, share of central taxes and grants-in-aid from Central Government to meet the expenditure on administration and developmental activities.

4.1. Revenue Receipts

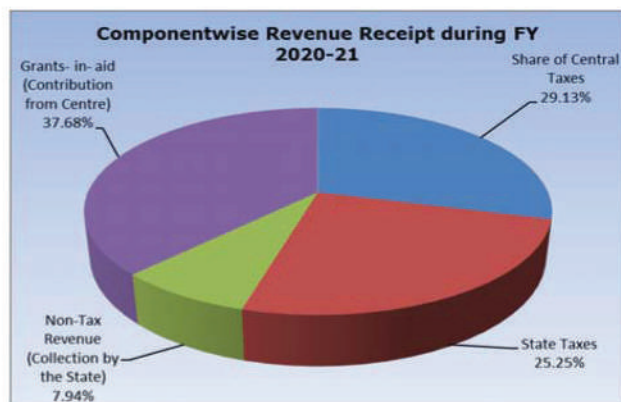
Component	Amount	% share
1	2	3
Share of Central Taxes	2677556	29.13
State Taxes	2320973.53	25.25
Non-Tax Revenue (Collection by the State)	730378.86	7.94
Grants- in- aid (Contribution from Centre)	3464171.65	37.68
Total Receipts	9193080.09	100.00

Component wise revenue receipts are shown in **Table: 4.1**. The revenue receipts consist of central taxes, state taxes, non-tax revenue and grants-in-aid from Government of India. During the financial year 2020-21(B.E), total revenue receipts of the state is expected to achieve at the level of Rs. 91930.81 crore as against Rs. 93026.08 crore in F.Y 2019-20 (R.E) with a deficit of Rs.8782.82 crore in Revenue Receipt Account.

An amount of Rs. 30513.52 crore is expected to earn from the state's own resources with contribution of Rs. 23209.73 crore as tax revenue and Rs. 7303.78 crore

as non-tax revenue. An amount of Rs. 26775.56 crore is expected to receive from Govt. of India as share of central taxes. The share of Central taxes, State taxes, Non-tax revenue and Grant-in-aid to total revenue receipt during the F.Y 2020-21 is expected to achieve at 29.13 percent, 25.25 percent, 7.94 percent and 37.68 percent respectively.

The revenue receipts position of the State for F.Y 2020-21 (B.E) is shown in the following pie diagram.



4.1.1 State's Own Resources

Year wise revenue receipts position of the state is shown in Table-4.2.

Table:- 4.2								
Revenue Receipts								
(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	9283.53	6876.55	790.32	16950.4	27455.4
2015-16	10106.5	2741.57	12848.07	16784.9	9494.27	3330.48	29609.63	42457.7
2016-17	12079.56	4353.12	16432.68	20188.6	10444.07	2154.41	32787.12	49219.81
					Grants			
2017-18	13215.52	4071.97	17287.49	22301.5	14541.91		36843.45	54130.94
2018-19	16480.23	8221.29	24701.52	24660.5	14117.17		38777.64	63479.16
2019-20 (R.E)	21853.1	10208.19	32061.29	34374.2	26590.59		60964.79	93026.08
2020-21 (B.E)	23209.74	7303.79	30513.53	26775.6	34641.72		61417.28	91930.81

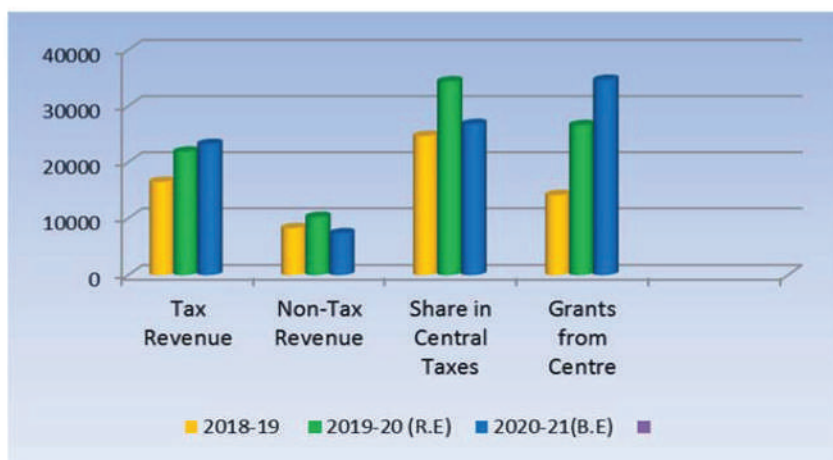
Source: Department of Finance (Economic Affairs), Govt. of Assam and Assam Budget-in-Brief, 2020-21

The total State's own tax revenue was Rs. 10505.00 crore in F.Y 2011-12 and it is expected to grown up to Rs. 30513.53 in F.Y 2020-21 with annual growth rate of 19.05 percent. During the F.Y 2020-21 (B.E), an amount of Rs. 23209.74 crore is expected to earn from the state's own tax revenue and Rs. 7303.79 crore from the non-tax revenue. The share of own tax revenue to total revenue receipts was 38.26 percent in 2011-12 and it is expected to come down to 33.19 percent in F.Y 2020-21(B.E).

4.1.2 Transfer from the Centre

Resource flow from the Centre was Rs. 60964.79 crore in the F.Y 2019-20(R.E) as against Rs. 38777.64 crore in 2018-19 with an annual increase of 57.22 percent. During the F.Y 2020-21(B.E), it is expected to receive Rs. 61417.28 crore from transfer of Central fund with a minimal growth of 0.74 percent. The receipt of Grants from the Centre is estimated to increase from Rs. 26590.59 crore in F.Y 2018-19(R.E) to Rs.34641.72 crore in F.Y 2020-21(B.E) with a optimum growth of 30.28 percent.

Component wise revenue receipts position of the state during last three years is shown in flowing bar diagram.



4.1.3 Revenue receipt under different heads

Revenue receipt under different heads and sub-heads for the F.Y 2018-19(Actual), 2019-20(R.E) and 2020-21(B.E) are shown in Table-4.3.

The share of central tax in total revenue receipt of the state was Rs.34374.20 crore in F.Y 2019-20(RE) and it has come down to Rs. 26775.56 crore in F.Y 2020-21(BE) recorded downward growth of 22.10 percent. On the other hand, the share of state's own tax revenue has increased from 31.90 percent in F.Y 2019-20 to 33.19 percent in F.Y 2020-21(BE). However, the share of state's non tax revenue has decreased from 10.26 percent in F.Y 2019-20(RE) to 7.94 percent in F.Y 2020-21(BE) and the Grants-in-aid from the Centre has raised from 26.76 percent in F.Y 2019-20(RE) to 37.68 percent in F.Y 2020-21 (BE).

**Table - 4.3 Revenue Receipt under Different Heads
for the F.Y 2018-19 to 2020-21 (BE)**

(Rs. in Lakh)

Head		2018-19	2019-20 (R.E)	2020-21 (B.E)
1		2	3	4
1. Share of Central Taxes		2466047	3437420	2677556
1.1	Central Goods and Services Tax (CGST)	622349	896296.2	734919
1.2	Corporation Tax	876887	983440.8	754517
1.3	Taxes on Income Other than Corporation Tax	645789	764838	685925
1.4	Taxes on Wealth	321	0	0
1.5	Customs	178736	448266	183730
1.6	Union Excise Duties	118780	344579	311116
1.7	Service Tax	23185	0	7349
2. State Taxes		1648022.86	2185309.56	2320973.53
2.1	Agricultural Income Tax	784.84	1450	1473.41
2.2	Other Taxes on Income & Expenditure	23201.61	22663	24620.27
2.3	Land Revenue	16321.63	25329.84	27619.17
2.4	Stamps & Registration	24072.36	39937.9	40017.61
2.5	State Excise	139984.02	145000	175000
2.6	Sales Tax	469873.53	487312.22	534072.79
2.7	Taxes on Motor Vehicles	76501.45	89830.75	107796.9
2.8	Taxes on Goods & Passengers	-361.89	95	114
2.9	Taxes & Duties on Electricity	7275.34	14250.79	16622.51
2.10	Other Taxes and Duties on Commodities and Services	1396.08	0	125.74
2.11	State Goods and service Tax	839303.89	1314917.06	1393511.18
2.12	Integrated Goods and Services Tax (IGST)	49670	44523	0
3. State Non-Tax Revenue		822128.9	1020819.42	730378.86
3.1	Interest, Dividend and Profits	74133.81	96195.07	114661.44
3.2	General Services	97296.67	24366.1	134321.19
3.3	Social and Community Services	5211.4	9119.74	6653.13
3.4	Economic Services	645487.02	891138.51	474743.1
4. Grants-in-Aid		1411716.97	2659058.59	3464171.65
Total Receipt (1+2+3+4)		6347915.73	9302607.57	9193080.09

Source: Annual Financial Statement 2020-21

4.2 Revenue Expenditure

4.2.1 Revenue Expenditure under Different Head wise Component

Head wise revenue expenditure for the F.Y 2018-19 (Actual), 2019-20(RE), 2020-21(BE) are shown in Table-4.4.

Table-4.4: Revenue Expenditure under Different Heads

(Rs. in Lakh)

Head wise component	2018-19 (Actual)	2019-20 (RE)	2020-21 (BE)
1	2	3	4
1. General Services	2105864.08	2842771.22	3121557.33
1.1 Organs of State	57463.85	67697.7	79120.11
1.2 Fiscal Services	83200.01	169466.72	115929.48
1.3 Interest Payments and Servicing of Debt.	407342.83	512296.34	616240.63
1.4 Administrative Services	628162.52	1068680.22	1367825.28
1.5 Pension and Miscellaneous Services	929694.87	1024630.24	942441.83
2. Social & Community Services	2533444.27	4068292.35	3649864.16
2.1 Education, Sports, Art and Culture	1560887.38	2089637.24	1887114.01
2.2 Health and Family Welfare.	425175.78	681737.39	574245.04
2.3 Water Supply, Sanitation, Housing and Urban Development	139745.24	580007.6	478051.77
2.4 Information and Broadcasting	6734.43	10220.95	10840.84
2.3 Others	400901.44	706689.17	699612.5
3. Economic Services	1023202.11	1606641.54	1452320.23
3.1 General Economic Services	70852.48	101792.55	88391.2
3.2 Agriculture and allied Services	289545.76	644850.79	458021.75
3.2.1 Rural Development	198298.47	697910.14	379100.45
3.2.2 Special Areas Programmes	10148.31	23986.79	17438.17
3.2.3 Irrigation and Flood Control	85515.88	119449.45	110372.69
3.2.4 Energy	164205.82	293235.17	152160.1
3.3 Industry and Mineral	56587.79	86625.43	58758.71
3.4 Science, Technology and Environment	3005.97	2782.24	3541.12
3.5 Transport and Communication	145041.63	236008.98	184536.03
4. Grants-in-aid & contribution	27389.15	103670.97	53956.13
Total Expenditure (1+2+3+4)	5689899.61	8621376.08	8277697.84

Source: Assam Budget Document, 2021

Expenditure from revenue heads has increased from Rs. 56898.99 crore in F.Y 2018-19 to Rs. 82776.97 crore in F.Y 2020-21(BE) registering an annual growth of 22.74 percent.

Revenue expenditure under General Services was Rs.21058.64 crore in F.Y 2018-19 has increased to Rs.31215.57 crore in F.Y 2020-21(BE) with a annual growth of 24.12 percent. Similarly, revenue expenditure under Social & Community Services has increased from Rs. 25334.44 crore in F.Y 2018-19 to Rs. 36498.64 crore in F.Y 2020-21(BE) with an increase of 22.03 percent annually. Likewise, Revenue expenditure under Economic Services was Rs 10232.02 crore in 2018-19(RE) has increased to Rs. 14523.20 crore in F.Y 2020-21(BE) with an annual increase of 20.97 percent. During 2020-21(BE) there is expectation to increase 1.97 times in Grants-in-aid & Contribution against the F.Y 2018-19.

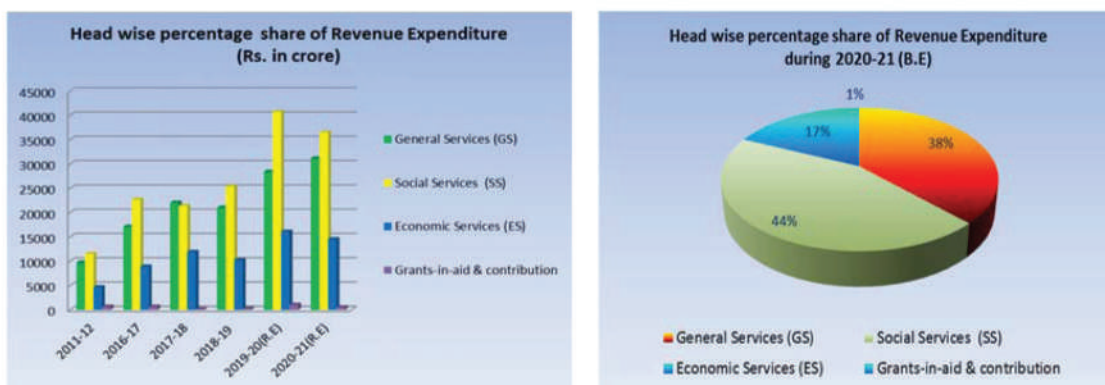
During the F.Y 2020-21 (B.E) , The shares of expenditures to the total expenditure under the General Service, Social and Community Services, Economic Services and Grants-in-aid are to be achieved at 37.71 percent, 44.10 percent, 17.54 percent and 0.65 percent respectively.

Percentage share of Revenue expenditure under different heads is presented in **Table-4.5**. Out of the total revenue outlay for F.Y 2020-21(B.E), Social Services accounted for 47.2 percent, General Services (33.0 percent), Economic Services (17.5 percent) and Grants in Aid (0.7 percent) respectively. The relative shares of expenditures in F.Y 2011-12 under the four heads viz. General Service, Social and Community Services, Economic Services and Grants-in-aid were 36.7 percent, 43.2 percent, 17.6 percent and 2.5 percent respectively.

(Rs. in Crore)

Head	2011-12	2016-17	2017-18	2018-19	2019-20(R.E)	2020-21(R.E)
General Services (GS)	9743.67 (-36.7%)	17123.19 (-34.8%)	22057.8 (-39.8%)	21058.6 (-37.0%)	28427.71 (-33.0%)	31215.57 (-37.7%)
Social Services (SS)	11465.79 (-43.2%)	22673.14 (-45.9%)	21373.17 (-38.5%)	25334.4 (-44.5%)	40682.92 (-47.2%)	36498.64 (-44.1%)
Economic Services (ES)	4663.27 (-17.6%)	8914.03 (-18.1%)	11924.92 (-21.5%)	10232 (-18.0%)	16066.42 (-18.6%)	14523.2 (-17.5%)
Compensation & Assignment to Local Bodies & PRIs (Grants-in-aid & contribution)	655.83 (-2.5%)	652.36 (-1.32%)	125.05 (-0.2%)	273.89 (-0.5%)	1036.71 (-1.2%)	539.56 (-0.7%)
Total Expenditure (1+2+3+4)	26528.56	49362.72	55480.94	56899	86213.76	82776.98

Source: Assam Budget Document, 2020-21



Head wise percentage share of revenue expenditure during F.Y 2020-21(B.E) is shown in the following pie diagram.

4.2.2. Trend of Revenue Expenditure

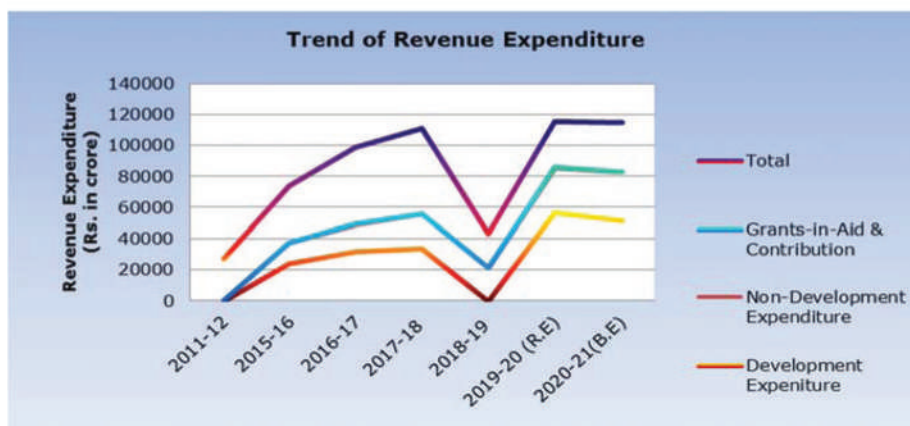
The trend of revenue expenditure is shown in **Table:-4.6**

Year	Rs. in crore					
	Development Expenditure			Non-Development Expenditure	Grants-in-Aid & Contributions	Total
	Social Services	Economic Services	Total	General Services		
2011-12	11465.79 (43.2%)	4663.27 (17.6%)	16129.06 (60.8%)	9743.67 (36.7%)	655.83 (2.5%)	26528.56 (100%)
2015-16	17740.36 (47.9%)	6239.87 (16.9%)	23980.23 (64.8%)	12656.03 (34.2%)	375.16 (1.0%)	37011.42 (100%)
2016-17	22673.14 (45.9%)	8914.03 (18.1%)	31587.17 (64.0%)	17123.19 (34.7%)	652.36 (1.3%)	49362.72 (100%)
2017-18	21373.17 (38.5%)	11924.92 (21.5%)	33298.09 (60.0%)	22057.80 (39.8%)	125.05 (0.2%)	55480.94 (100%)
2018-19	25334.44 (44.5%)	10232.02 (18.0%)	35566.46 (62.5%)	21058.64 (37.0%)	273.89 (0.5%)	21331.53 (100%)
2019-20(R.E)	40682.92 (47.2%)	16066.42 (18.6%)	56749.34 (65.8%)	28427.71 (33.0%)	1036.71 (1.2%)	29464.42 (100%)
2020-21(B.E)	36498.64 (44.1%)	14523.20 (17.5%)	51021.84 (61.6%)	31215.57 (37.7%)	539.56 (0.7%)	31755.13 (100%)

Source: Assam Budget Document, 2020-21

The share of expenditure on social services to total revenue expenditure has marginally increased from 43.2% in F.Y 2011-12 to 44.1% in F.Y 2020-21(B.E). On the other hand, the share of expenditure on economic services to total revenue expenditure has remained almost same during the period from 2011-12 to 2020-21. The table shows that the share of non-development expenditure to total revenue expenditure was 60.80% in F.Y 2011-12 and it slightly increased to 61.6% in F.Y 2020-21. It also reflects that grant-in-aid and contributions under revenue expenditure is on a decreasing trend since F.Y 2011-12.

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



4.3 THE CAPITAL BUDGET: 2020-21

The component of Capital Receipts and Expenditures are shown in Table-4.7

Table-4.7: Capital Receipt and Expenditure, 2020-21 (BE)

(Rs. in Lakh)

Heads	2018-19	2019-20(R.E)	2020-21(B.E)
A. Receipt			
(i) Public Debt	1175465.26	1573093.01	1301514.02
(ii) Loans and Advances by the State Government	292.93	104942.87	30029.44
(iii) Transfer to Contingency Fund	0	0	0
Total (A)	1175758.19	1678035.88	1331543.46
B. Expenditure			
(i) General Services	46427.72	111823.41	122378.1
(ii) Social Services	216407.27	431902.56	401633
(iii) Economic Services	840573.07	1728719.44	1328042.46
(ii) Public Debt	358936.45	410957.34	214783.51
(iii) Loans and Advances by the State Government	32807	46789.43	31627.99
(iv) Transfer to Contingency Fund	0	20000.01	0
Total (B)	1495151.51	2750192.19	2098465.06
C. Net Result (A-B)	(-)319393.32	(-)1072156.31	(-)766921.6
Surplus (+) / Deficit (-)			

4.3.1 Capital Receipts:

The Budget estimates anticipate the receipt of Rs. 13015.14 crore from Public Debt and Rs. 300.29 crore from recovery of Loans and Advances by the State Government during 2020-21(B.E). During the F.Y 2020-21, total Capital Receipts is to be expected to attain a level of Rs. 13315.43 crore.

4.3.2 Capital Expenditure:

During the F.Y 2020-21, total capital outlay is expected to reach at the level of Rs. 13015.14 crore of which Rs.2147.84 crore for Public Debt, Rs. 316.27 crore for Loans and Advances by the State Government, Rs.1223.78 for general services, Rs.4016.33 crore for social services and 13280.42 crore for economic services respectively. There is a deficit of Rs. 7669.22 crore in the capital Budget.

4.3.3 CAPITAL OUTLAY UNDER DIFFERENT HEADS & SUB-HEADS

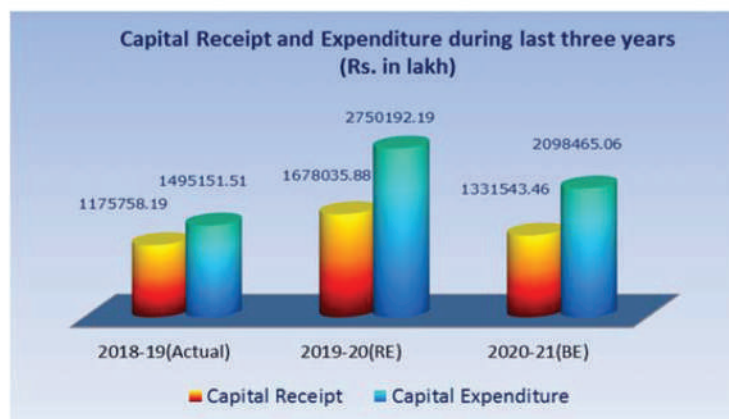
Capital outlay under different heads and sub-heads for 2018-19(Actual), 2019-20(R.E) and 2020-21 (B.E) are shown in Table-4.8.

Table-4.8: Capital Outlay under Different Heads & Sub-Heads

(Rs. in Lakh)

Services	2018-19 (Actual)	2019-20 (RE)	2020-21 (BE)
1. General Services	46427.72	111823.41	122378.1
2. Social & Community Services	216407.27	431902.56	401633
2.1 Education, Sports, Art and Culture	6712.81	54895.49	55073.79
2.2 Health and Family Welfare	39055.38	86911.08	75390.2
2.3 Water Supply, Sanitation , Housing and Urban Development	167015.69	272104.02	259403.43
2.4 Welfare of Schedule Cast, Schedule Tribes and other Backward Class	1028.22	14524.61	8501.11
Social Welfare and Nutrition	450	22	413.26
2.5 Other Social Services	2145.17	3445.36	2851.21
3. Economic Services	840573.07	1728719.44	1328042.46
3.1 General Economic Services	1802.8	17762.74	7275.8
3.2 Agriculture and Allied Services	26672.85	51899.62	49130.06
3.3 Rural Development	0	0	3800
Special Area Programme	47688.74	286399.56	188473.72
Irrigation and Flood Control	159446.55	255373.6	172173.42
3.4 Energy	36968.64	91178.91	70093.06
Industry and Minerals	13303.35	13818.72	10421.51
3.5 Transport	554382.71	1011671.29	823763.14
3.6 Science, Technology & Environment	307.43	615	2911.75
Total Expenditure (1+2+3)	1103408.06	2272445.41	1852053.56

The share of capital expenditure under General Services to total Capital outlay was 4.21 percent in 2018-19 has increased to 6.61 percent in 2020-21(B.E). Simultaneously; the share of capital expenditure under Social & Community Services has increased from 19.61 percent in 2018-19 to 21.69 percent in 2020-21(B.E) and the share of capital expenditure under Economic Services has inclined from 76.18 percent in 2018-19 to 71.71 percent in 2020-21(B.E).



4.4 PUBLIC DEBT

Public Debt is another component of capital expenditure. It consists of Loans from Internal debt of the State Government and loans and advances from the Centre. Public debt for 2018-19(Actual), 2019-20(R.E) and 2020-21(B.E) is shown in the Table4.9. Net Extension of Debt was Rs. 8165.29 crore in 2018-19 has increased to Rs. 10867.31 crore in 2020-21(B.E).

Table-4.9: Public Debt

(Rs. in Lakh)

Debt	2018-19 (Actual)	2019-20 (RE)	2020-21 (BE)
1	2	3	4
A. Internal debt of the State Government			
1. Receipt	1166549.35	1547868.01	1276389.02
2. Expenditure	344809.73	396417.40	199855.14
B. Loans and advances from the Centre			
1. Receipt	8915.91	25225	25125
2. Expenditure	14126.72	14539.94	14928.37
Total			
1. Receipt	1175465.26	1573093.01	1301514.02
2. Expenditure	358936.45	410957.34	214783.51
Net Extension of Debt (1-2)	816528.81	1162135.67	1086730.51

4.5 Loans and Advances

Loans and advances by the State Govt. is also a part of Capital Budget which is shown in Table-07. It is expected that the loan amounting to Rs.316.28 crore will be received in the current financial year 2020-21 (BE).

Table – 4.10: Loans and Advances

(Rs. in Lakh)

Loans and Advances	2018-19 (Actual)	2019-20 (RE)	2020-21 (BE)
Receipt	34832.39	46789.43	31627.99

4.6 Receipt and Expenditure from the Consolidated Fund

Receipt and expenditure under the consolidated fund for the years 2018-19 (Actual), 2019-20(RE) and 2020-2021 (BE) is shown in Table-4.11.

Receipt under the Consolidated Fund has increased from Rs.75236.74 crore in 2018-19 to Rs.109806.43 crore in 2019-20 (RE) and further slightly decline to Rs. 105246.24 crore in 2020-21(BE). Expenditure under consolidated fund has also increased from Rs. 71850.51 crore in 2018-19 to Rs.119715.68 crore in 2019-20 (RE) and to come down to Rs. 103761.63 crore in 2020-21 (BE).

Table-4.11: Receipt and Expenditure from the Consolidated Fund

(Rs. in Lakh)

Heads		2018-19 (Actual)	2019-20 (RE)	2020-21 (BE)
1		2	3	4
1	Revenue Account			
1.1	Receipt	6347915.73	9302607.57	9193080.09
1.2	Expenditure	5689899.61	9221376.08	8277697.84
1.3	Surplus (+) or Deficit (-)	658016.12	81231.49	915382.25
2	Capital Account			
2.1	Receipt	1175758.19	1678035.88	1331543.46
2.2	Expenditure	1495151.51	2750192.19	2098465.06
2.3	Surplus (+) or Deficit (-)	-319393.32	-1072156.31	-766921.6
3	Consolidated Fund			
3.1	Receipt	7523673.92	10980643.45	10524623.55
3.2	Expenditure	7185051.12	11971568.27	10376162.9
3.3	Surplus (+) or Deficit (-)	338622.8	-990924.82	148460.65

4.7 VARIOUS LOANS AND LIABILITIES OUTSTANDING AGAINST THE GOVERNMENT OF ASSAM

The Table-4.12 shows that loans and liabilities against the Government of Assam as on 31st March of the years 2018, 2019, and 2020. The permanent debt has increased from Rs.22471.08 crore in 2018 to Rs.41551.63 crore in 2020 with an increase of 42.46 percent. Loans from Central Govt. has declined from Rs. 1774.95 crore in 2018 to Rs.1415.92 crore in 2020 with a decrease of 10.11 percent . Amount under reserved fund/provident fund was Rs.11316.88 crore in 2018 has inclined to Rs.13244.38 crore in 2020. The liabilities of State Govt. was Rs. 5987.25 crore in 2018 and it raised to Rs. 6346.67 crore in 2020 with an increase of 3.0%

Table:-4.12 LOANS AND LIABILITIES

(Rs. in Lakh)

Particulars	2018 as on 31 st March	2019 as on 31 st March	2020 as on 31 st March
1	2	3	4
I. PUBLIC DEBT			
Permanent Debt	2247108	2960850	4155163
II. FLOATING DEBT			
Ways and Means Advance from the RBI	-	-	-
III. Loans from Central Govt.			
	177495	133364	141592
IV. INTERNAL LOANS			
(a) Loans from National Agricultural and Rural Development Bank	-	-	-
(b) Other Loans	-	-	-
(c) Loans from LIC, GICI	290688	346879	427501
(d) NSSF	866408	795458	719962
* Loans from LIC, Loans from GICI, Loans from NCSC, Loans from NABARD, Loans from HUDCO.			
B. UNFUNDED DEBT			
(a) Unfunded Debt	-	-	-
(b) Reserve Fund/ Provident Funds	1131688	1214983	1324438
(c) Other liabilities	598725	466722	634667
Grand Total	5312112	5918256	7261731

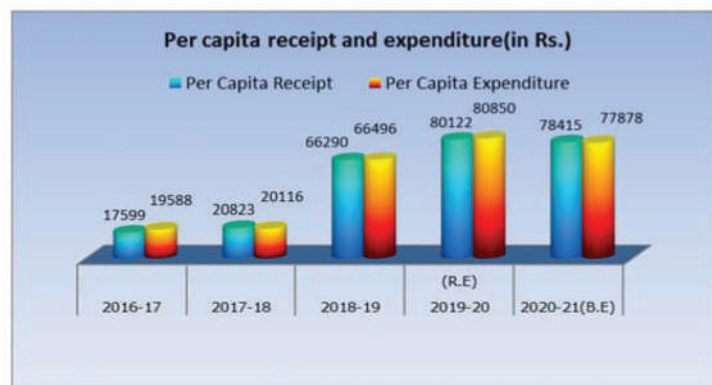
4.8 PER CAPITA ON TOTAL RECEIPT AND EXPENDITURE

Per capita receipt was Rs.17599.00 in 2016-17 and it has increased to Rs.78415.00 in 2020-21(B.E) with an increase of 86.39 percent. During the same period, per capita expenditure has increased from Rs.19588.00 in 2016-17 to Rs.77878.00 in 2020-21 with an increase of 74.40 percent.

Table-4.13 Per Capita Receipt and Expenditure

(in Rs.)

Items	2016-17	2017-18	2018-19	2019-20 (R.E)	2020-21 (B.E)
Per Capita Receipt	17599	20823	66290	80122	78415
Per Capita Expenditure	19588	20116	66496	80850	77878



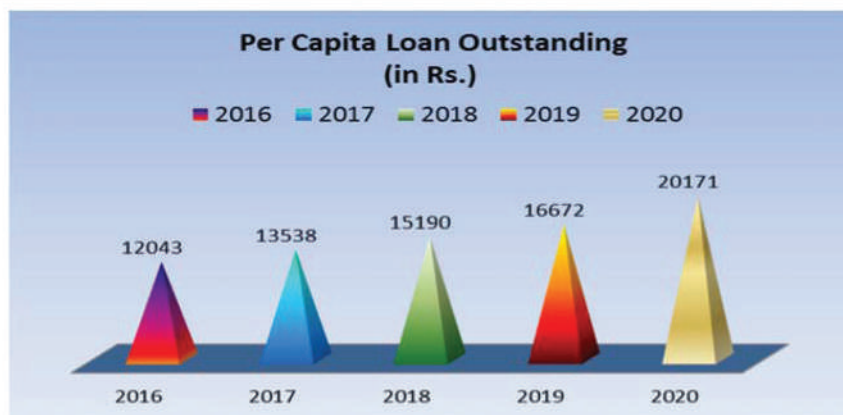
4.9: Per Capita Loan Outstanding

Per capita loan outstanding is shown in Table: 4.14.

Per capita loan outstanding has increased from Rs.12043.00 in 2016 to Rs. 20171.00 in 2020 registering annual growth of 16.87 percent.

Table-4.14: Per capita Loan Outstanding

ITEMS	2016	2017	2018	2019	2020
1	2	3	4	5	6
1.Total loan outstanding (In Lakh)	4037971	4598026	5312112	5918256	7261731
2. Per capita loan outstanding (in Rs.)	12043	13538	15190	16672	20171



4.9: Collection of Tax Revenue

The Finance (Taxation) Department is responsible for the Sales Tax administration in the State. The Commissioner of Taxes is the Head of the Department and responsible for administration of all Taxation measures and general control and supervision over the zonal and unit offices and the staff engaged in collection of taxes and to guard against evasion of taxes.

The following Acts were administered by the Taxation Department during the F.Y 2018-19.

1. Goods and Services Tax, 2017(w.e.f 01/07/2017)
2. The Assam Value Added Tax Act, 2003 (w.e.f 01/05/2005)
3. The Central Sales Tax Act, 1956
4. The Assam Professions, Trade, Callings and Employments Taxation Act, 1947.
5. The Assam Electricity Duty Act,1964
6. The Assam Taxation (on Specified Land) Act,1990
7. The Assam Agricultural Income Tax Act, 1939.

4.9.1 Revenue under GST:

During the F.Y 2019-20, the Finance (Taxation) Department had collected Rs. 8521.81 crore under GST against Rs.7439.78 crore in the financial year 2018-19 with a growth of 15.31%. The department had received Rs. 201.96 crore and Rs. 973.42 crore as advance/provisional settlement of IGST returns during the F.Y 2019-20 and 2018-19

respectively. Also, the state had received Rs. 1284.00 crore and Rs. 455.00 crore as compensation under GST during the F.Y 2019-20 and 2018-19 respectively.

4.9.2 Total Tax Revenue:

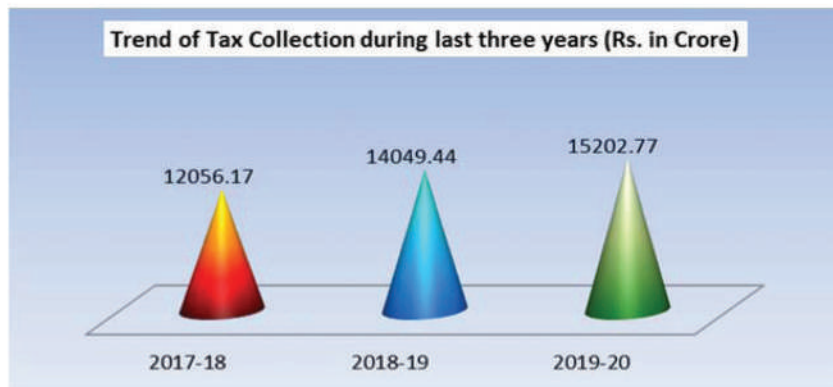
During the period from F.Y 2019-20, the department collected Rs. 15202.77 crore (including advance settlement and compensation under GST) against Rs.14049.44 crore (including advance settlement and compensation under GST) in previous F.Y 2018-19 with a growth of 8.21% .

Collection of taxes under different taxation acts during last three years is given in table-4.15.

	Rs. in crore		
Taxation Act	2017-18	2018-19	2019-20
The Assam Value Added Tax Act, 2003	6027.42	4607.05	4633.81
The Central Sales Tax Act, 1956	338.52	206.44	156.63
Assam Health Infrastructure and Services Development Fund, 2009 (w.e.f 01-07-2015)	6.93	-	-
The Assam Entry Tax Act, 2008	260.58	6.9	46.5
The Assam Professions, Trades Calling & Employment Tax Act, 1947	193.28	232.02	147.19
The Assam Electricity Duty Act, 1964	60.19	72.75	191.78
The Assam Amusement and Betting Tax Act, 1939	28.62	0.04	0
The Assam Taxation on Luxuries (Hotels & Lodging Houses) At, 1989	5.83	0.74	0.72
The Assam Taxation (on Specified Land) Act, 1990	63.84	53.51	10.05
The Assam Agriculture Income Tax Act, 1939	13.52	13.45	8.32
Sub Total	6998.73	5192.9	5195
SGST	1837.47	3560.8	4212.37
Settlement of IGST return	1977.58	3867.32	4309.44
IGST	-	-	-
Provisional /advance settlement of IGST	262	973.42	201.96
Sub Total (SGST & IGST settlement)	4077.05	8401.54	8723.77
Total without GST Compensation	11075.78	13594.44	13918.77
Compensation under GST	980.39	455	1284
Grand Total	12056.17	14049.44	15202.77

Source: Commissionerate of Taxes, Assam

Collection of tax revenue under different taxation acts is shown in the following Bar Diagram.



4.9.3 The Assam Industries (Tax Reimbursement for eligible units) Scheme:

The scheme has been framed in order to provide refund of State GST under the area based Industrial Reimbursement Scheme. Assam is the first State in the North Eastern Region and in fact, one of the first in the entire country to implement the area based industries scheme in order to attract and induce investment in the State. Under the scheme, an amount of Rs. 300.13 crore of State GST has been reimbursed to the 475 no. of eligible industries in the F.Y 2019-20. The reimbursement will usher the growth of further industrialization in the State.

4.9.4 The Assam Taxation (Liquidation of Arrear Dues) Amendment Act,2019

The Government has enacted and implemented "The Assam Taxation (Liquidation of Arrear Dues) Amendment Act,2019" for realization of outstanding dues in respect of amounts assessed for the period upto 30th June, 2017 and levied against him on or before 30th September,2019 . Under this Scheme an amount of Rs. 39.30crore has been collected from 227no.of tax payers up to 31st March'2020. Due to lock down , the Scheme was extended up to 31st July'2020 for the benefit of tax payers.

CHAPTER-V AGRICULTURE

The economy of Assam is largely rural and agrarian in nature. Agriculture is the principal occupation of majority of the rural population in the State in terms of employment and livelihood. At present agriculture in Assam contributes about 20 percent revenue to the Gross State Domestic Product (GSDP) and provides livelihood support to about 70 per cent population of the state. The total number of farmers' family in Assam is 2741722 as per agriculture census 2015-20. The size of operational holdings on an average is 1.10 hectare and more than 85 percent farmers are either small or marginal with average land holding of just about 0.36 hectares. Agriculture Census data 2015-20 reveals that the total land under cultivation was 29.77 lakhs hectares i.e. 37.95 percent of total geographical land area of State. The data thus reveal that preponderance of small and fragmented land holdings along with insecure tenancy are the major reasons for underdevelopment of agriculture sector in the state. Government of Assam recognised the problems associated with agriculture sector of the state and made efforts to bring rapid changes to the sector and serve the cause of farmers. Assam declared 2015-16 as the year of agriculture and constituted a Task Force to achieve the objectives of development.

TABLE-5.1

CONTRIBUTION OF AGRICULTURE AND ALLIED SECTOR TO GSDP AT CURRENT AND CONSTANT PRICES FOR 2017-18, 2018-19 AND 2019-20

Sector	2017-18		2018-19 (P.E)		2019-20 (Q.E)	
	Current Prices	Constant Prices	Current Prices	Constant Prices	Current Prices	Constant Prices
Crops	12.17	12.11	11.57	11.53	11.09	11.05
Livestock	1.17	1.03	1.17	0.99	1.10	0.94
Forestry % & Logging	1.05	0.76	0.97	0.74	0.93	0.70
Fishing & Aquaculture	2.40	2.53	2.50	2.41	2.52	2.40
Agriculture & Allied	16.79	16.44	16.21	15.66	15.64	15.08

The contribution of Agriculture (crop) sector came down since last three years to 11.05% in 2019-20 from 12.11% in 2017-18 at constant prices.

The share of agriculture and its allied activities in GSDP at current prices had marginally come down from 19.89% in 2011-12 to 16.79% in 2017-18 and 16.21% in 2018-19(P.E) and to 15.64% in 2019-20 (Q.E.). The GSDP at constant prices came down from 16.44% in 2017-18 and 15.66% in 2018-19 (P.E.) and 15.08% in 2019-20 (Q.E.).

The contribution of Agriculture sector came down marginally due to various factors such as like Soil, River Bank erosion of ever widening Brahmaputra River, Conversion of Agricultural land because of Urbanisation, Industrialisation, expansion of road ways and other infrastructural development activities etc.

Table 5.2 shows the annual growth rate of GSDP in respect of agriculture and its allied sector at current prices as well as constant prices for the year 2019-20(Q.E).

ANNUAL GROWTH RATE OF GSDP IN AGRICULTURE AND ITS ALLIED SECTOR

TABLE-5.2
Annual Growth Rate of GSDP in Agriculture and Allied Sector
during 2019-20(Q.E)

Industry sector	Current Prices	Constant Prices
Crop	6.55%	1.82%
Livestock	4.56%	0.69%
Forestry and Logging	6.80%	0.63%
Fishing and Aquaculture	12.10%	6.12%
Agriculture and Allied sector	7.28%	2.35%

Source: Directorate of Economics and Statistics, Assam

TABLE-5.3
Gross State Domestic Products of Agriculture & Allied Sector
Base Year (2011-12) Prices

(Rs. in lakh)

Sl No.	Industry sector	2011-12	2017-18	2018-19(P.E)	2019-20(Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2848113	3614528	3666272	3752512
1.1	Crops	2061487	2663201	2699140	2748243
1.2	Livestock	159289	225962	231899	233490
1.3	Forestry & Logging	231388	168032	172053	173131
1.4	Fishing and Aquaculture	395949	557334	563180	597648
	GSDP	14317491	21991938	23404790	24879615

TABLE-5.4

Gross State Domestic Products Agriculture & Allied Sector at Current Prices*(Rs. in Lakhs)*

Sl No.	Industry sector	2011-12	2017-18	2018-19 (P.E)	2019-20 (Q.E)
1	2	3	4	5	6
1	Agriculture, Forestry and Fishing	2848113	4755643	5121469	5494358
1.1	Crops	2061487	3447408	3655194	3894745
1.2	Livestock	159289	331703	369223	386045
1.3	Forestry & Logging	231388	296298	306278	327099
1.4	Fishing and Aquaculture	395949	680234	790773	886469
GSDP		14317491	28316491	31588120	35131777

AGRICULTURE CREDIT:

Recognizing the contribution of farmers, the state government has issued Identity Cards to the farmers. These Identity Cards are being used to develop a database of the farmers.

In view of the necessity to ensure credit flow for investment and development of the agriculture sector government of Assam has introduced "zero interest crop loans" by giving 100 percent interest subventions on agricultural loans taken by farmers of Assam to the limit of Rs.1.00 lakh. It is anticipated that this endeavour will encourage the farmers to avail agriculture loans towards building the rural economy.

Kisan Credit Cards (KCC):

The State Directorate of Agriculture, during the period 2001-02 to 2019-20 has issued 34 lakhs Kisan Credit Cards (KCC) and sanctioned Rs. 13272.37 crores as credit. The figures of KCC issued and sanctioned an amount of credit for the past three years are presented in Table 5.5.

TABLE - 5.5

Agriculture Credit Kissan Credit Cards (KCC) issued & financing

Sl No.	Year	No of KCC issued	Credit limit sanctioned (Rs. in crore)
1	2017-18	349362	1492.06
2	2018-19	298629	1415.58
3	2019-20	312618	1502.75

Source : Directorate of Agriculture, Assam

SUPPORT SCHEMES FOR AGRICULTURE DEVELOPMENT:

In addition to the provisioning of credit, to fulfil the dream of the Honourable 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. Towards the mission to develop the Agriculture sector, Government of Assam have distributed 4598 numbers of power tillers, 4296 numbers of tractors and 50 numbers of Rotovetors in the year 2019-20 against 3125 numbers of power tillers, 6582 numbers of Tractors and 5175 numbers of small implements in the year 2018-19. The state government is also planning to build Majuli Island, the largest riverine island in the world as a hub of organic products with the trade mark in the name of "O Majuli". Productivity of most of the crops in the state is very low compared to the average of the productivity of the country. The reasons of low productivity are primarily due to erratic rainfalls and various other impediments like floods, soil erosion and sand deposition in agriculture fields, though Assam is endowed with very rich and diverse soil conditions conducive for agriculture. Despite all the constraints, the state Agriculture Department has been successful to give an impetus to increase the production of food grains by implementing various programmes. In recent times the state has seen increase in productivity of food grains and cropping intensity. The Department has taken steps to formulate State and District specific plans considering the agro-climatic conditions, growth potentials and specific requirements of the 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 of the people. The agriculture sector in the hill districts of the State, namely East Karbi-Anglong, West Karbi-Anglong and Dima Hasao is constrained because of inadequate transport and communication facilities, infrastructure, extensive practice of traditional Jhum cultivation and non-availability of markets etc. To improve condition of agriculture in the hill districts, the state government has emphasized the promotion of cash on horticultural crops, particularly on pineapple and citrus fruits and on ginger and turmeric. Emphasis is also given to support settled agriculture in terrace lands, wherever it seems feasible in the hill areas.

WEATHER AND RAINFALL:

The climate of Assam is sub-tropical with warm humid summers and cool dry winters. The state is situated in high rainfall zone with annual average rainfall of 2297.4 mm. The state normally receives 2 percent of the total rainfall in the winter season (January-February), 25 percent in the summer season (March-May), 65 percent in the monsoon season (June-September) and 7 percent in post-monsoon season (October-December). Assam is prone to floods and drought like situations. The state though has natural potentialities to drive the agriculture sector, erratic and unpredictable weather conditions and floods have been creating adverse impact making the farmers vulnerable to the situations.

Table 5.6 present crop season wise rainfall pattern for the last five years as follows.

RAINFALL DURING 2018-19:

TABLE - 5.6

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
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	(+) 4	Normal	2289.9	2295.4	(-) 0.2	Normal
2018	2444.1	3309.8	(-) 26	Deficient	166.2	292.7	(-) 43	Deficient	2610.3	3602.5	(-) 28	Deficient
2019	9350.3	9385.6	0	Normal	1215.4	1766.7	(-) 31	Deficient	12673.3	15096.4	(-) 16	Normal

Source: Directorate of Agriculture, Assam

Table - 5.6 shows that the State had received actual rainfall of 9350.3 mm during 2019 against normal rainfall of 9385.6 mm in the Kharif season. This deviation is '0%' (Zero) from the normal. In the Rabi season of 2019 the deviation of rainfall was (-41%), overall deviation of rainfall in the state for the year being (-5%) from the normal.

AREA UNDER CROPS:

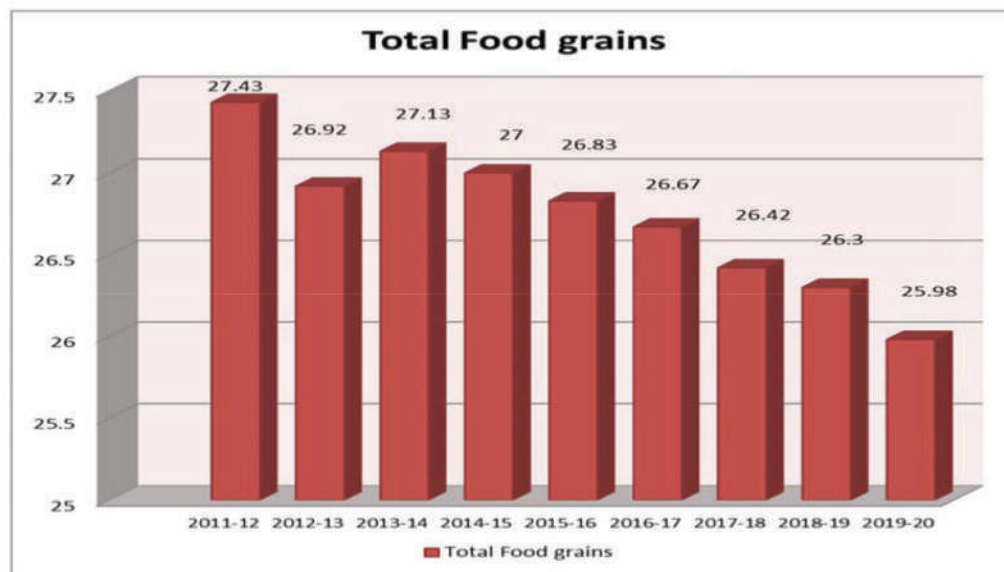
In Assam, the soil, topography, rainfall and climate are very conducive for cultivation of paddy. Rice occupies the highest area under cultivation and this crop receives priority from the farmers as well as from the department of Agriculture. As per the final estimates, the total area under paddy cultivation during the year 2019-20 was 24.00 lakhs hectares. Total area under paddy shows a steady decline mainly due to decline in area under autumn rice (ahu rice). The area under the other two varieties of rice viz., winter rice (sali rice) and summer rice (boro rice) has remained stable with cultivated areas being 18.78 lakh hectares and 3.96 lakh hectare respectively in 2019-20. On the other hand, marginal changes were registered in the area under wheat, pulses, total food grains and total oil seeds. This has been shown in the following Table - 5.7.

TABLE-5.7
AREA UNDER CROPS IN ASSAM DURING THE PERIOD 2011-12 to 2019-20(P)
(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	3.14
2018-19	1.45	18.80	4.01	24.26	0.17	1.50	26.30	3.09
2019-20	1.27	18.78	3.96	24.01	0.11	1.44	25.98	3.11

*Total may not be equal due to rounding off.

Source: Directorate of Economics and Statistics, Assam



PRODUCTION:

Total food grain production in the state is showing a rising trend since 2011-12. The total food grains production was 5683 thousand tonnes in 2018-19. But decreased to 5467 thousand tonnes in 2019-20. The productions decrease was 3.96% in 2019-20 over the previous year 2018-19.

YIELD:

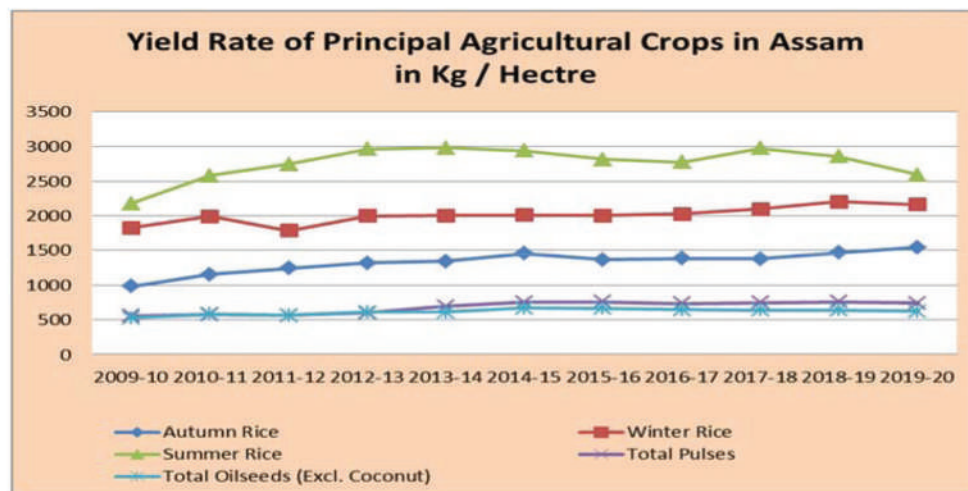
The Yield rate of rice shows oscillations during the years 2011-12 to 2019-20 for autumn and summer rice. The yield rate of winter rice is 2160 Kg/Hect in the year 2019-20 as against 2205 kg/hect previous year 2018-19. The yield rate of autumn rice is decreased by 5.1% in the 2019-20 as against the previous year 2018-19. The yield rate of winter rice 2.08%, summer rice 10.22%, total pulses 2.02% and total oil seeds 3.72% which decreased in the year 2019-20 as against the previous year. Table-5.8 represents the yield rate for last 11 yrs.

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)
2009-10	982	1824	2180	558	529
2010-11	1155	1993	2577	572	580
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
2017-18	1377	2098	2975	748	638
2018-19	1468	2205	2858	755	642
2019-20	1543	2160	2593	740	619

Source : Directorate of Economics and Statistics, Assam



AREA UNDER HIGH YIELDING VARIETIES:

The state agriculture department focuses to raise productivity of the agriculture sector by adopting and distributing High Yielding Variety of seeds among the farmers free of costs. At present the farmers of the state use Mala, IR-36, Lachit, Masuri, Joya, Ranjit, Ratna, China, Biplob, Krishna varieties of HYV seeds for rices. During the period 2010-11 to 2019-20 area under HYV seeds in case of winter rice has increased from 11.34 lakh hectares to 15.18 lakh hectares, but the area under autumn rice has decreased from 2.13 lakh hectares in the year 2010-11 to 1.11 lakh hectares in the year 2019-20. This has been shown in the following table 5.9 for the last 10 years.

TABLE-5.9
AREA UNDER HIGH YIELDING VARIETY OF RICE

Area in Lakh hect.

Year	Autumn Rice	Winter Rice	Summer Rice	Total HYV Rice area
2010-11	2.13	11.34	3.54	17.01(66.2)
2011-12	2.19	12.8	4.02	19.01(74.6)
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(77.76)
2017-18	1.04	14.36	2.90	18.30(75.18)
2018-19	1.19	14.30	3.84	19.33(79.70)
2019-20	1.11	15.18	2.95	19.24(79.32)

Total figure may be not be equal due to rounding off to nearest 0.

Figure in bracket shows the percent of total Rice Area.

Source: Directorate of Agriculture.

HYBRID RICE:

The state Agriculture Department since 2009-10 is putting special efforts to promote cultivation of hybrid varieties of rice on experimental basis considering the high yield potential of such varieties over the conventional high yielding varieties. The area under hybrid rice in the state was 254.20 thousand hectares in 2017-18, which declined to 191.825 thousand hectares in 2018-19 but this area has increased to 290.430 thousand hectares in 2019-20. Total 34% area increased in 2019-20 over the previous year 2018-19. This has been presented in the following table-5.10

TABLE-5.10
Area under hybrid rice in Assam

(Area in '000' hectare)

Year	Kharif Rice (Autumn+Winter)	Rabi Rice (Summer Rice)	Total Hybrid Rice area	% of Hybrid Rice area to total Rice area
2009-10	32.9	14.1	47.0	1.9
2010-11	37.7	25.0	62.7	2.4
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	NA	NA	167.0	6.69
2015-16	NA	NA	146.0	5.87
2016-17	NA	NA	160.5	6.51
2017-18	104.04	150.16	254.20	10.44
2018-19	91.149	100.676	191.825	7.91
2019-20	112.568	177.862	290.430	11.98

N.A.: Not Available

INDEX OF AGRICULTURAL PRODUCTION:

The Index of Agricultural Production for all crops (Base triennium ending 2007-08=100) for the State stands at 147.51 in 2019-20 in all commodities as against 150.86 in 2018-19. Following table- 5.11 presented the index of Agricultural Production for last five years.

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
2015-16	154.54	127.98	142.72	115.2	122.0	116.0
2016-17	154.36	131.82	144.33	129.7	122.4	126.1
2017-18	159.37	134.17	148.15	136.8	142.1	139.4
2018-19	163.88	134.64	150.86	136.3	137.7	136.5
2019-20	157.67	134.85	147.51	139.6	144.1	141.80

N. B.: 1. The Agricultural indices for Assam are constructed on the basis of crops covered by Crop Forecast.

2. Figure rounded to nearest zero.

Source: Directorate of Economics and Statistics, Assam.

LAND UTILIZATION STATISTICS:

As per land utilization statistics for the year 2019-20, the total geographical area of the state is 78.44 lakh hectares. The total cropped/ gross cropped area is 39.75 lakh hectares and net area sown is 26.99 lakh hectares in the year 2019-20. Cropped intensity is the ratio of net area sown to the total cropped area multiplied by hundred. The gross cropped area, net area sown and crop intensity for the last three years are given below.

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

There is a marginal increase in cropped intensity in 2019-20 is 0.80% over the previous year 2018-19. The growth of cropped intensity in 2019-20 is 0.54% over the previous year 2018-19.

AGRICULTURAL HOLDING:

Agricultural Census 2015-16 revealed that there were 27.42 lakhs operational holdings in Assam covering an operated area 29.77 lakhs hectare as against 27.2 lakh operational holdings covering an operated area 29.99 lakhs hectares in 2010-11 census. The trend thus shows that there is a marginal increase of number of holdings (0.80% increases), but marginal decline of operated area which is (0.74%) during 2010-11 to 2015-16. Table 5.13 presents the trend of number of holdings and operated area during Agricultural Census 2000-01, 2005-06, 2010-11 and 2015-16 across the size classes of holding. The data shows increase in number of holdings in marginal size class, but decline in other size classes.

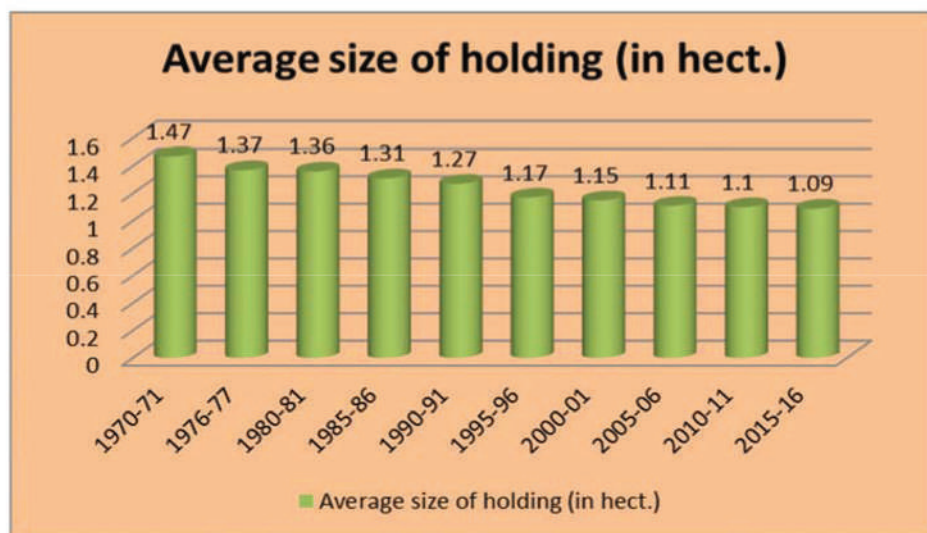
TABLE-5.12
AGRICULTURAL CENSUSES 2000-01, 2005-06, 2010-11 AND 2015-16

Size class (in hectare)	Number of holding			
	2000-01	2005-06	2010-11	2015-16
Marginal (Below 1.0)	1699107	1752989	1831115	1869568
Small (1.0-2.0)	561039	591431	496574	493786
Semi-medium (2.0-4.0)	351521	317859	303528	295282
Medium (4.0-10.0)	95500	82933	84869	79264
Large (10.0 & above)	4970	4902	4137	3822
Total	2712137	2750114	2720223	2741722
Size class (in hectare)	Area operated (in hectare)			
	2000-01	2005-06	2010-11	2015-16
Marginal (Below 1.0)	662780	760145	774796	782024
Small (1.0-2.0)	730513	718383	687156	700452
Semi-medium (2.0-4.0)	957959	846006	817982	805819
Medium (4.0-10.0)	498797	425403	437372	409904
Large (10.0 & above)	263529	298606	271763	278566
Total	3113578	3048543	2989069	2976765

Source: Directorate of Economics and Statistics, Assam.

TABLE-5.13
Agricultural holdings and operated area in Assam
 (As per Agricultural Census)

Agricultural Census Year	Number of holdings (in '000')	Total operated area (in '000' hect.)	Average size of holding (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
2015-16	2741.722	2976	1.09



HORTICULTURE:

Assam produces a wide range of horticultural crops including fruits, vegetables, flowers, spices, nuts, tubers, medicinal and aromatic plants. The climatic condition and diverse landscape of the state have helped to develop diverse ecological habitats such as forests, grasslands, wet lands which harbour and sustain wide ranging floral and faunal species in the state. The state has tremendous scope to promote horticulture sector that can help ensure food and nutritional security, as well as enhance employment opportunities via cultivation and post harvest management and value addition of horticulture produces.

Horticulture crops occupy about 15 percent of gross cultivated area of the State with an annual production of more than 67 lakhs metric tons of various horticultural produces. The state has now emphasized on the commercialization of the sector as a priority basis.

The emphasis of the state is now on raising productivity of various commercially potential crops through use of better technology, management and provision of planting materials to the farmers. Moreover, emphasis is also placed on pre and post harvest treatment, proper harvest techniques, setting up of collection centers with grading facilities, transport facilities and marketing facilities.

The Directorate of Horticulture and Food Processing of Government of Assam has taken up some positive steps towards creation of self employment opportunities in the horticulture sector by helping 15,000 rural women to get themselves engaged by setting up of 350 small and 4 medium fruits processing units. In the year 2019-20, area under horticulture crops was 8.15 lakh hectares, production was 99.08 lakh MT and average yield was 48014 Kg/hectare which is shown in the following table- 5.14.

TABLE-5.14
AREA PRODUCTION AND PRODUCTIVITY OF HORTICULTURAL CROPS FOR THE
LAST TEN YEARS 2010-11 TO 2019-20

Year	Fruits crops			Tuber crops			Spices crops			Vegetable crops			Plantation crops		
	Area	Production	Productivity	Area	Production	Productivity	Area	Production	Productivity	Area	Production	Productivity	Area	Production	Productivity
2010-11	1.37	16.56	12485	-	-	-	1.01	2.3	2277	2.57	4.33	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	-	-	-	1.1	3.28	2970	3.86	60.34	27536	-	-	-
2013-14	1.42	20.25	14219	-	-	-	1.04	2.67	2578	3.65	53.3	24797	-	-	-
2014-15	1.44	20.12	13869	-	-	-	1.08	2.97	2749	3.91	134.8	25455	-	-	-
2015-16	1.44	20.56	-	-	-	-	1.09	3.58	-	2.8	516.3	-	-	-	-
2016-17	1.41	20.06	14144	-	-	-	1.11	3.77	3380	2.8	519.2	18485	-	-	-
2017-18	1.46	21.04	14390	1.11	7.79	7000	1.12	3.89	3458	2.87	54.24	18914	0.9	2.23	1569
2018-19	1.66	24.97	15041	1.25	12.43	9914	1.27	5.92	4652	2.9	54.99	18987	1.11	2.6	1650
2019-20 (estimated)	1.68	25.41	15148	1.19	9.05	7577	1.27	5.92	4652	2.9	55.9	18987	1.11	2.8	1650

Area = In Hectare, Production = Lakh MT, Productivity = Kg/Hectare

INTEGRATED NUTRIENT MANAGEMENT (INM):

FERTILIZER AND MANURE:

Fertilizer 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 reduce farmers' dependence on chemical inputs and encourage optimal use of farmers' on-farm resources, economize 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 gradually increased. In addition to promotion of organic manure, government of Assam however, has accorded due importance to timely availability of fertilizers at the doorstep of farmers during peak season of cultivation. The public institutions such as AIDC, NAFED, GPSS, and other organizations - IFFCO, BVFCL, Green Chemicals Ltd, Testa Agro Industries limited have been playing a pivotal role in distribution of fertilizer throughout the state. At present, there are 416 wholesale points and 6855 fertilizer sale points in Assam.

CONSUMPTION OF FERTILISER:

The consumption of fertilizer in Assam is low. Farmers are reluctant to invest on fertilizer because of the fear of loss caused by heavy rainfall and flood. Consumption of fertilizer during summer and Rabi seasons is low because of non-availability of water. The consumption of fertilizer in the state was 60.01 Kg./hectare in 2017-18, 56.05 Kg./hectare in 2018-19 and 66.84 Kg./Hectare in 2019-20. Table-5.15 present the detail of consumption of fertilizer in Assam.

TABLE-5.15
CONSUMPTION OF (CHEMICAL) FERTILISERS

(Fig in '000 MT)

Fertilizer	YEARS					
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Nitrogen	155.9	169.20	153.506	156.78	148.12	182.05
Phosphorus	50.2	33.50	37.61471	50.10	42.17	44.84
Potash	80.3	39.90	39.8450	45.00	38.81	40.75
Consumption (kg/Ha)	68.6	62.60	55.03	60.01	56.05	66.84

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

Source: Directorate of Agriculture.

TABLE-5.16
SEASON WISE CONSUMPTION OF FERTILIZER IN TERMS OF NUTRIENTS
FOR THE LAST THREE YEARS

Year	Seasonwise crops	Nutrient			
		N	P	K	Total
2017-18	Kharif	68575.03	21601	21000	111176.03
	Rabi	88200	28500.02	24000	140700.02
	Total	156775.03	50101.02	45000	251876.05
2018-19	Kharif	87000	24400	31230	142630
	Rabi	104000	24000	26000	154000
	Total	191000	48400	79630	319030
2019-20	Kharif	84001.59	18430.69	26550.75	128983
	Rabi	98048.78	26412.12	14196.72	138657.6
	Total	182050.4	44842.8	40747.47	267640.67

Source: Directorate of Agriculture, Assam.

SOIL HEALTH MANAGEMENT:

The state Agriculture Department has taken up initiatives to restore depletion of soil nutrients and sustain the crop production system. The state has promoted use of bio-fertilizers, micro nutrients, lime, organic manures like green manures and vermi compost and FYM to increase crop productivity and maintain soil health. Of late, use of bio-fertilizer has assumed significance due to motivational demonstration programmes of the 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. Table 5.17 presents the number of soil sample tested and issued for the years 2017-18, 2018-19 and 2019-20.

TABLE-5.17**SOIL SAMPLE TESTED AND SOIL HEALTH CARD ISSUED (Nos)**

2017-18		2018-19		2019-20	
Soil Sample Tested	Health card Issued	Soil Sample Tested	Health card Issued	Soil Sample Tested	Health card Issued
801496	801496	278618	1295388	58203	63110

Source: Directorate of Agriculture, Assam

INTEGRATED PEST MANAGEMENT (IPM):

For sustainable agricultural production a key component is Integrated Pest Management (IPM). The humid sub-tropical climate and diverse eco-system of the state favour intensification of insect and pest attacks causing yield loss up to 30 percent. Excessive and injudicious use of chemical pesticides however results in many residual problems and negative externalities. To mitigate the externalities and sustain yield of agriculture fields, the department now has started to facilitate the availability of the Bio-Control Agent (BCA) for Bio-pesticide Intensive BPMI 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 Agriculture Department of the state is trying to popularize the use of bio-pesticides and other methods of IPM by organizing training and demonstrations. The initiatives have showed results, rising trend of consumption of bio-pesticide in the state over the years.

TABLE-5.18			
CONSUMPTION OF PESTICIDES			
<i>(Figure in MT)</i>			
Pesticide Consumption	2017-18	2018-19	2019-20
Chemical Pesticide	259.00	439.95	410.39
Bio-Pesticide	220.50	233.50	242.35
<i>Source: Directorate of Agriculture, Assam.</i>			

The trend of consumption of chemical and bio-pesticides during the last three years is presented in Table-5.18.

DEVELOPMENT OF THE SEED SECTOR:

The most vital component for increasing production and productivity of crops is the quality of seeds used. Certified seed production is a process through which seeds are produced in conformity with the standard variety by taking specific measures. In Assam, production of certified seed has been taken up in the Field Trial Stations (FTSs), of some

of the government seed farms and Assam Seed Corporation's seed farms. In spite of the efforts made there is dearth of quality seeds in the state and seed replacement rate (SRR) is at a low level. The State has to depend on outside sources for quality seeds of some crops every year to meet the demand immediately after occurrence of natural calamities. To meet the growing demand and increase quality seed production, the Agricultural Department has taken the following measures:

- Expansion of Seed Village Programme;
- Production of certified seeds of Paddy, Pulse and 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):

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 six years is presented in Table-5.19

TABLE-5.19
SEED REPLACEMENT RATE (SRR) IN ASSAM

(Figure in %)

Crops	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Paddy	31.1	32.77	45.26	44.37	42.7	38.59	39.1
Blackgram	40.5	44.66	32	33	32.43	--	31.8
Greengram	45.2	76	34.91	35.54	42.16	--	38.01
Lentil	54.1	30.11	57.42	57.01	38.1	--	--
Pea	46.7	--	--	--	--	--	--
Rape & Mustard	38.1	45.24	42	43	43.04	45.03	45.09
Sesamum	0	--	--	--	--	--	--
Jute	19.2	63.22	55.83	54.21	65.87	52.43	52.39

Source: Directorate of Agriculture, Assam

SEED CERTIFICATION:

Assam State Seed Certification Agency (ASSCA) is the Nodal Agency, which has been entrusted with the responsibility of seed certification of namely paddy, mustard and seeds of pulses as per feasibility in the state. For planting crops namely coconuts, litchi, guava etc. are under consideration for the purpose of certification. Under ASSCA there are three notified seed testing laboratories located at Guwahati, Jorhat and Silchar. The total annual testing capacity of this three notified laboratories are about 20,000 samples. Seed testing and certification guidelines are to be strictly followed for proper quality control and certification as per the set norms.

SYSTEM OF RICE INTENSIFICATION (SRI):

Adoption of the System of Rice Intensification with the use of hybrid seeds has shown significant result in annual growth of production of rice in the State. As compared

to normal practices, adoption of SRI system enhances productivity with minimum use of seeds, fertilizers and water, thus reducing the cost of production. The SRI also helps to shorten the crop duration, which may have significance to go for another round of cropping during the year.

CROP DEVELOPMENT:

To motivate the farmers to adopt the practice of double/multiple cropping the government of Assam is taking up initiatives to facilitate cultivation of summer paddy, rabi pulses and oil seeds. The mission double cropping envisages additional coverage of 1.00 Lakh hectares presently under mono cropping and allocates Rs. 6,200.00 Lakh. The plan is further to add 3.0 lakh hectares to increase the cropping intensity of the state to 160.0 percent.

FARM MECHANIZATION AND IRRIGATION:

Several factors, particularly, fragmented and small land holdings, farmers' poor economic conditions and non availability of situation specific prototypes of farm implements stand as serious hindrance to mechanization of agriculture of the state. However, has undertaken serious efforts 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 externally aided, centrally sponsored and state plan schemes for the benefit of farmers, particularly the small and marginal farmers. Estimates show farm power available per hectare of land in the state is 1.16 HP in the year 2019-20.

TABLE-5.20
STATUS OF FARM MECHANISATION

(Figure in Nos.)

Year	Tractors	Power Tillers	Power Pumps	Small Implements	Rotovators	Farm power available [HP per hectare]
2016-17	0	6321	0	0	14	1.30
2017-18	0	5207	40	0	160	1.21
2018-19	6582	3125	0	5175	0	1.29
2019-20	4296	4598	0	0	50	1.16

Source: Directorate of Agriculture, Assam.

IRRIGATION:

Towards the goal of increasing cropping intensity and raising crop yield provisioning of irrigation in the agriculture field is the prime necessity. Considering the uncertainties faced in the production of Kharif crops due to floods, the state Agriculture Department has put emphasis on Rabi crops by assigning top priority to develop assured irrigation facilities through installation of pump sets (shallow tube well and low lift pumps).

TABLE-5.21**IRRIGATION INFRASTRUCTURE CREATED BY THE AGRICULTURE DEPARTMENT**

Component of irrigation	Year			
	2016-17	2017-18	2018-19	2019-20
Shallow Tube Wells (Nos)	2705	40	4831	37376
Low Lift Pumps (Nos)	154	0	0	0

Source: Directorate of Agriculture, Assam.

In the year 2016-17 the area covered by irrigation potential was 8.10% of net cropped area and it came down to 7.88% in 2017-18, 7.40% in 2018-19 and 7.29% in the year 2019-20. Following table-5.22 shows the irrigation potential created by the Agriculture Department.

TABLE-5.22**IRRIGATION POTENTIAL CREATED BY AGRICULTURE DEPARTMENT & UTILIZABLE IRRIGATION**

Year	Irrigation potential created during that year (Hectare)	Cumulative Irrigation Potential Created (lakh Hectare) (Considering 10 year running life of Pump set ie. From 2010-11 to 2019-20)
2016-17	5718	8.10 (28.92% of Net Cropped Area)
2017-18	84	7.88 (28.13% of Net Cropped Area)
2018-19	9662	7.40 (26.65% of Net Cropped Area)
2019-20	85624.8	7.29 (26.76% of Net Cropped Area)

Source : Directorate of Agriculture

CROP INSURANCE:

In Assam about 4.75 lakh hectares of land is chronically flood prone and about 0.94 lakh hectares of land is drought prone. To mitigate the distress of the farmers caused by crops loss/crop damage Crop Insurance is the vital policy adopted by the government. In addition to the floods and draught the farmers of the state also faced attack of pests in the agriculture fields. The Government of India had 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. Under this scheme 50 percent of the premium amount is contributed as subsidy to small and marginal farmers which is 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 - 3 crops in Kharif Season and 5 crops in Rabi season. The crops are-

Kharif Season	:	Autumn/Ahu 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 facilitates 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 though is being implemented in the state since 2009-10, has not been able to provide the desired solution to the risk involved in the agriculture sector due to reasons like 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 have emerged as the main impediments in the successful implementation of the scheme.

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 and 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 the 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 the Rabi season of 2010-11.

WEATHER BASED CROP INSURANCE SCHEME (WBCIS):

With the objective to overcome the shortcoming of delayed settlement of claims 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 the Rabi season of 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

PROCUREMENT OF PADDY AS A MEASURE OF PRICE SUPPORT:

At present Assam has surplus in Rice production. The improvement in production and productivity is result of better input management practices and adoption of improved technology. Despite the progress made, un-remunerative price received by the farmers for not having institutionalised markets is acting as a disincentive to drive the initiatives of the farmers. To ensure interest of the farmers the state government has

engaged Assam State Agricultural Marketing Board (ASAMB) for procurement of paddy at Minimum Support Price, in addition to procurement to be done by the Food Corporation of India.

AGRICULTURE MARKETING AND STORAGE:

Marketing of agriculture produce 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 and other contingencies force the farmers to dispose off their hard earned produce at the earliest and at throwaway prices. Keeping in view, the interest of farmers, the government of Assam in addition to engaging the Assam State Agriculture Marketing Board and FCI for procurement of products have developed storage capacity (Table 5.23).

TABLE - 5.23

STORAGE CAPACITY CREATED BY DIFFERENT ORGANIZATIONS IN THE STATE

Organisations	Storage Capacity (in MT)		
	2016-17	2017-18	2018-19
Food Corporation of India (FCI)	389976	385913	379969
Central Warehousing Corporation	72150	72983	73717
State Warehousing Corporation	250838	242910	221407
Assam State Agricultural Marketing Board (ASAMB)	46775.00	46775.00	46775.00
Total	759739.00	748581.00	721868.00

Source: Directorate of Agriculture, Assam

At present, the state has 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. The Regulated Markets have been covered under AGMARKNET. As regards to cold storage infrastructure in the state, there are 26 cold storages of which 23 are in private sector and 3 in state sector.

To assist the farmers carrying vegetables to the distant market, the Assam State Agriculture Marketing Board provides transport subsidy to farmers. Government of Assam has taken steps to construct a three-storied market at Pamohi (Guwahati), a growers-consumers market complex at Ulubari (Guwahati), and establish 11 sale counters for marketing of farm products have been undertaken by the Government. The Department has also taken initiative for establishment of market infrastructure, storage facility and to eradicate the transportation bottlenecks. The rural connectivity scheme implemented under PMGSY is a major step towards benefit of farmers to take out their agricultural products to nearest 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;
- Some Self Help Groups are assisted to take up Agri-Horti activities including post harvest management.

NATIONAL MISSION ON OILSEEDS & OIL PALM:

The State is highly deficient in oil seed production. To achieve targeted area the Agriculture Department has been 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:

The state Agriculture Department has proposed to establish mini oil mills with packaging units. The scheme has envisaged support of the Assam State Agricultural Marketing Board to market the products. It is also envisaged that value addition of oilseeds will not only drive the oilseed cultivation, it will also help to generate employment in production and processing sectors.

WOMEN WELFARE SCHEME:

Considering the role played by rural women in all components of agriculture and farm sector to manufacturing and marketing, the government of Assam through the Chief Minister's Vision on Women and Children, 2016 has given special thrust on woman's self help groups to facilitate their engagement and for economic upliftment.

BRING GREEN REVOLUTION TO EASTERN INDIA INCLUDING ASSAM:

The Central and the State Governments have chalked out a strategy to achieve the planned growth in agriculture sector of the country. Several interventions such as Bringing Green Revolution to Eastern India (BGREI), double cropping, supply of improved seeds, fertilizer and technology equipment now have been undertaken. Under the initiative on BGREI, the government of India considers the states namely Assam, Bihar, Chhatisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh and West Bengal as potential areas for increasing food grain production and productivity. The states are however mired by low credit availability, poor extension facilities and infrastructure bottlenecks. To remove the impediments on a priority basis steps have been taken emphasising on better seed replacement ratio, adequate and timely availability of critical inputs, improving infrastructure facilities and other required interventions including bank credit. 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 creation of irrigation facilities to maximize agricultural production in sustainable way.

PRADHAN MANTRI FASAL BIMA YOJANA: THE HIGHLIGHTS

The Pradhan Mantri Fasal Bima Yojana was introduced in February 2016 to provide insurance service to the farmers for their yield. It was formulated in line with one nation–one scheme theme by replacing earlier two schemes National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS) by incorporating their best features and removing their inherent drawbacks.

STATUS OF PMFBY IN ASSAM:

The Assam Government rolled out the Pradhan Mantri Fasal Bima Yojana from the Rabi season of 2016-17 with an aim to benefit about 5.5 lakh farmers. In the year 2020, the scheme covered Kharif area of 589729.6 hectores and 848309 farmers. For effective rolling out of the scheme, the state plans to impart training to the officials of agriculture department and organise publicity-cum-awareness programmes among the farmers. Table- 5.24 show the status of implementation of the scheme in Assam.

TABLE-5.24
PRIME MINISTER FASAL BIMA YOJANA (PMFBY)

Season	Area covered (Ha)	Farmers covered (Number)	Sum Insured (Rs. in lakh)	Premium collected (Rs. in lakh)	Claims paid (Rs. in lakh)	Farmers benefited (Number)
Kharif 2016	4312.95	51749	NA	691.42	501.68	23398
Rabi 2016-17	36692.00	8516	3011.99	173.22	33.60	282
Kharif 2017	38519.50	42723	23308.32	1033.94	50.97	1440
Rabi 2017-18	4328.08	5595	3469.40	163.82	56.97	478
Kharif 2018	13263.51	25076	NA	324.33	9.23	428
Rabi 2018-19	42661.38	50488	21176.45	NA	NA	NA
Kharif 2019	247804.30	392965	146637.98	NA	NA	NA
Rabi 2019-20	344391.85	650599	277909.66	NA	NA	NA
Kharif 2020	589729.58	848309	334662.26	NA	NA	NA

Source : Directorate of Agriculture.

SCHEME FOR MARKETING OF FRUITS AND VEGETABLES:

TRANSPORT SUBSIDY SCHEME 2018-19:

Affordable transport facility is one of the prime requisites to enable the farmers to place their produce at remunerative markets. Provisioning of transport facilities also help to reduce number of intermediaries involved in market chain and thus ensure fair return to the farmers and procurement at reasonable price for the consumers. The state

has formed Agricultural Production Management Group (APMG) for better crop planning and marketing.

The scheme proposes to provide subsidy @ Rs.2.0/Quintal per km to each selected APMG/growers Group etc. for maximum 2 tons per group per trip for maximum distance of 100 Km.

The scheme had placed supplementary demand of Rs. 250 lakh under the budget head of other agriculture programmes (2435) on subsidy for transportation support for marketing of fruits and vegetables for the year 2017-18. The physical target for transportation was approximately 20,500 MT.

OBJECTIVE OF THE SCHEME:

- The objective of the scheme is to facilitate marketing of surplus agricultural products particularly the perishable fruits and vegetables from areas where surplus production takes place. The goal is to ensure remunerative price for the farmers.
- It is also expected that the approach will encourage the growers to take up production on commercial point. .
- To facilitate the urban population to get products at reasonable price.
- To check fall of market price in the surplus growing areas beyond the cost of production. Subsidised transport facilities are thus required to be provided to the growers to safeguard the growers from financial losses in the harvest season.

PROCEDURE FOR SALE:

1. Sale price is to be fixed by the District Agricultural Officer in consultation with farmers and on the basis of prevailing market rate. The price list is to be displayed everyday at the sale points.
2. In case the farmers of the APMGs are not getting remunerative price the Agricultural Development Officer (ADO) will inform the District Agricultural Officer (DAO). In such case the DAO is to take measure to facilitate sale of the products at identified points.

SCHEME FOR DEVELOPMENT OF JUTE GRADING AND BALING -

AIM AND OBJECTIVE:

The aim and objective of the Jute grading and baling scheme is to extend facilities and modern know how of the grading jute to the growers of the state. It is expected that grading of jute would help the growers to involve themselves in the marketing of jute to get remuneration prices of graded jute.

During 2018-19 under the scheme it was proposed to impart training to 90 unemployed educated youth selected from the families of jute growers in three batches in the jute grading training centre located at Howly of Barpeta District. The training centre was established in 2000, but the infrastructure of the centre got damaged in 2001 due to natural calamities. Since then the centre is not operational and the staff associated with the centre were attached to the district agriculture office, Barpeta. Now a financial proposal of Rs. 350 lakh is made to revive the training centre. The duration of the training is planned for one month with provision of a stipend of Rs.1000/-for each of the trainees. In addition, there is provision for food and accommodation.

MARKET INTELLIGENCE SCHEME (PLAN): OBJECTIVES

The scheme of market intelligence is in operation in Assam since November 1957. The scheme originally covered seven markets, now it covers 72 important markets and representative markets and 40 commodities to collect requisite information for formulation of economic policies. The scheme has importance for formulating price policy by the state and it provides necessary support to address problems of marketing. The activities under the market intelligence scheme is to collect and dissemination of daily and weekly wholesale and retail prices of market arrival of important agricultural commodities and live stock products from the selected markets and furnish the market information to the Economic and Statistical adviser of government of India, state government, public and private institutions and Army Head Quarter through various reports, bulletin and review. The All India Radio, Guwahati broadcasts the daily price bulletin of wholesale prices of selected agricultural commodities of important markets of Assam in the evening programme of "KRISHI JAGAT" for the best interest of growers, consumers and traders. This scheme has an annual operational budget of 150 lakh.

SCHEME FOR QUALITY CONTROL AND AGMARK GRADING (PLAN):

This scheme was introduced in the state during the year 1966-67. Agmark is a symbol of purity guaranteed by the Government. It is voluntary for the packers and millers. Under the scheme Agmark laboratories have been established in Guwahati, Tezpur, Nagaon, Jorhat, Dibrugarh and Silchar. The principal objective of the scheme is to promote grading of commodities like mustard oil, spices, honey ghee, wheat etc. under Agmark grading. To encourage the packers and millers to produce quality product, at present there are six District Agmark Laboratories established in different parts of Assam.

ANNEXURE-I

AREA, PRODUCTION AND AVERAGE YIELD OF SOME MAJOR HORTICULTURAL CROPS OF ASSAM FOR THE YEAR 2018-19 (FINAL) AND 2019-20 (ESTIMATED)

Sl. No.	Name of Crops	Year 2018-19 (Final)			Year 2019-20 (Estimated)		
		Area in hectare	Production in M.T.	Average yield in Kg/Hectare	Area in hectare	Production in M.T.	Average yield in Kg/Hectare
A. FRUIT CROPS							
1	Banana	51113	917792	17956	57182	1028418	17985
2	Pine Apple	16905	308769	18265	19549	358724	18350
3	Orange	14971	213809	14281	18129	253352	13975
4	Papaya	7359	149866	20365	10053	205734	20465
5	Assam lemon	13802	119318	8645	15712	155077	9870
6	Guava	4450	97254	21855	5767	126729	21975
7	Litchi	5617	51283	9129	6035	58913	9762
8	Jack fruit	22202	202482	9119	24705	243838	9870
9	Mango	4695	49133	10465	5780	62337	10785
10	Other fruits	4625	36838	9880	4806	47531	9890
TOTAL FRUIT CROPS		146205	145739	2146544	167718	2540653	15148
B. TUBER CROPS							
1	Potato	103205	773481	7495	110183	839843	7522
2	Sweet potato	5020	26342	5247	5566	30014	5393
3	Tapioca	3364	31751	9438	3655	34907	9550
TOTAL TUBER CROPS		111589	831574	7452	119404	904764	7577
C. SPICES CROPS							
1	Chillies	19847	18984	956	22359	21867	978
2	Turmeric	15896	19395	1220	17629	22829	1295
3	Onion	8211	84835	10332	17054	247965	14540
4	Ginger	17865	166272	9307	19351	183157	9465
5	Garlic	10450	62334	5965	10659	67418	6325
6	Coriander	29799	30122	1011	30548	32839	1075
7	Black Pepper	3388	7476	2207	4067	8785	2160
8	Other Spices	5186	6145	1185	5597	7136	1275
TOTAL SPICES CROPS		110642	395563	3575	127264	591996	4652
D. VEGETABLES CROPS							
1	Kharif	87740	16000932	18246	88240	1648764	18685
2	Rabi vegetables	200380	3765609	18792	201380	3850385	19120
TOTAL VEGETABLES		288120	5366541	18626	289620	5499149	18987
E. PLANTATION CROPS							
1	Coconut	20612	183185	66	25137	194896	69
2	Areca nut	67059	52876	128	82433	79465	206
3	Cashew nut	3658	5029	1375	3759	5168	1375
TOTAL PLANTATION		91329	241090	1569	111329	279529	1650

Production of coconut is in "000" nuts, average yield of Areca nut and coconut is in numbers. per bearing tree and the data of coconut and areca nut is for the year 2018-19

Source : Directorate of Economics & Statistics, Assam

ANNEXURE-II**PROCUREMENT OF MINIMUM SUPPORT PRICE OF AGRICULTURAL PRODUCE***(Rs. Per quintal)*

Commodity	2015-16	2016-17	2016-17	2017-18	2018-19	2019-20	2020-21
Paddy (Common)	1410.00	1470.00	1470.00	1550.00	1750.00	1815.00	1868.00
Paddy (Grade-A)	1450.00	1510.00	1510.00	1590.00	1770.00	1835.00	1888.00
Wheat	1525.00	1625.00	1625.00	1735.00	1840.00	1925.00	--
Maize	1325.00	1365.00	1365.00	1425.00	1700.00	1760.00	1850.00
Arahar	4425.00#	5050.00	5050.00	5450.00#	5675.00	5800.00	6000.00
Greengram	4650.00#	5228.00	5228.00	5575.00#	6975.00	7050.00	7196.00
Blackgram	4425.00#	5000.00	5000.00	5400.00#	5600.00	5700.00	6000.00
Lentil	3325.00*	3525.00	3525.00	4250.00*	4475.00	4800.00	--
Gram	3425.00*	3675.00	3675.00	4400.00	4620.00	4875.00	--
Rape & Mustard	3350.00	3600.00	3600.00	4000.00*	4200.00	4425.00	--
Sesamum	4700.00	5000.00	5000.00	5300.00*	6249.00	6485.00	6855.00
Jute (TD-5)	2700.00	3000.00	3000.00	3700.00	3700.00	3950.00	--
Sugarcane	230.00	250.00	250.00	255.00	275.00	275.00	--

- 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.

ANNEXURE-III**STATUS OF PROCUREMENT OF PADDY IN ASSAM AT MINIMUM SUPPORT PRICE**

Procurement Agency	Procurement					
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
FCI	45.00	6461.00	53087.00	43181.00	39122.00	81862.00
ASAMB	251.06	10553.83	10130.70	16632.806	5261.68	6665.92
NAFED	Nil	Nil	Nil	3377.00	3712.40	18407.46
NACOF	Nil	Nil	Nil	4328.00	419.52	NA
NCCF	Nil	Nil	Nil	2220.244	4194.40	12363.70

ANNEXURE-IV

STATUS OF PROCUREMENT OF JUTE IN ASSAM BY JUTE CORPORATION OF INDIA (JCI) AT MINIMUM SUPPORT PRICE

Region	Districts covered	2013-14		2014-15		2015-16	
		Quantity procured (Qtl.)	Value of produce (In Rs.)	Quantity procured (Qtl.)	Value of produced (In Rs.)	Quantity procured (Qtl.)	Value of produce (In Rs.)
Guwahati	Darrang, Kamrup, Goalpara, Barpeta	40263.92	87438626	290.06	649374	998.81	4933768
Nagaon	Nagaon, Morigaon	73343.41	158159084	5400.56	-	4942.52	-
Dhubri	Dhubri, Bongaigaon	5074.07	10957844	Nil	Nil	Nil	Nil
Total	8 (eight) districts	118681.4	256555554	5690.62	649374	5941.33	4933768

Region	Districts covered	2016-17		2017-18		2018-19	
		Quantity procured (Qtl.)	Value of produce (In Rs.)	Quantity procured (Qtl.)	Value of produced (In Rs.)	Quantity procured (Qtl.)	Value of produce (In Rs.)
Guwahati	Darrang, Kamrup, Goalpara, Barpeta	69088.48	236396465	69504.55	214073908	257.81	834781
Nagaon	Nagaon, Morigaon	65143.04	221302669	94200.28	288262437	4754.88	14923952
Dhubri	Dhubri, Bongaigaon	14404.78	48605057	9235.29	28598800	15	55500
Total	8 (eight) districts	148636.3	506304191	172940.12	530935145	5027.69	15814233

ANNEXURE-V

AREA, PRODUCTION AND AVERAGE YIELD UNDER FOOD AND NON- FOOD CROPS COVERED BY CROP FORECAST IN ASSAM 2019-20

Sl No	Name of Crop	Area (in Hect)	Production (In Tonnes)	Average Yield (Kg/Hect)
1	Autumn Rice	127223	193215	1543
2	Winter Rice	1878208	3996018	2160
3	Summer Rice	395518	1025571	2593
	TOTAL RICE	2400949	5214804	2199
4	Maize	36636	128036	3495
5	Wheat	11336	14430	1273
6	Other Cereals and Small Millets	5212	3226	619
	TOTAL CEREALS	2454133	5360496	2211
7	Gram	2176	1523	698
8	Tur (Arhar)	5830	5040	864
9	Rabi Pulses	135956	99902	735
	TOTAL PULSES	143962	106465	740
	TOTAL FOOD GRAINS	2598095	5466961	2129
10	Sesamum	12027	8534	709
11	Rape & Mustard	287447	177226	617
12	Linseed	4885	3039	622
13	Castor	748	345	452
14	Nizer	5715	3195	558
15	Coconut (2018-19)	20752	160256	63
	TOTAL OIL SEEDS	310822	192339	619
16	Cotton (b)	789	417	89
17	Jute (c)	64247	791512	2218
18	Mesta (c)	3221	20010	1118
	TOTAL FIBRES	68257	811939	2141
19	Banana	49445	906683	18337
20	Pineapple	16606	307519	18518
21	Orange	14633	203799	13927
22	Papaya	7339	149513	20372
23	Potato	104750	756222	7219
24	Sweet Potato	4926	25640	5206
25	Topeoca	3289	31794	9667
26	Onion	8155	88892	10900
	TOTAL FRUITS & VEGETABLES	209143	2470062	
27	Areca nut (2018-19)	67210	47324	128
28	Chillies	19835	19413	979
29	Turmeric	16359	20885	1277
30	Sugercane	29703	1218118	41010
31	Tobacco	114	62	523
	TOTAL MISCELLANEOUS CROPS	133221	1305802	

Source: Directorate of Economics & Statistics, Assam

CHAPTER-VI IRRIGATION

The State of Assam is endowed with abundant water resources. The two major river systems - the Brahmaputra and the Barak along with numerous tributaries constitute the rich surface water resources of the State. The ground water availability in the State 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.

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.

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 sown is 27.74 lakh hectare. The ultimate irrigation potential of the State is estimated at 27 lakh hectare. It is planned to irrigate 17 lakh hectare through Minor Irrigation Schemes and **10** lakh hectare through Major & Medium Irrigation Projects. Moreover, out of the 17 lakh **hectare** area planned to irrigate through Minor Irrigation Schemes an area of 10 lakh hectare through Minor Irrigation Schemes taken from surface water resources and the rest 7 lakh hectare from ground water sources.

There are three types of Irrigation Schemes executed by Irrigation Department, Assam. Those are --Major Irrigation Scheme - (Culturable Command Area is more than **10,000 hectare**), Medium Irrigation Scheme - (Culturable Command Area is between **2000 and 10,000 hectare**) and Minor Irrigation Scheme (Culturable Command Area is **up to 2000 hectare**). These Irrigation Schemes may be of three types. 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 Departments responsible for development of irrigation in the state of Assam are Irrigation Department, Agriculture Department, Panchayat and Rural Development and Soil conservation department. While Irrigation Department executes Major, Medium and Minor Irrigation Projects, the Agriculture Department constructs shallow tube wells and low lift points for handing over to the individual beneficiaries. The minor irrigation

activities taken up by Panchayat and Rural Development Department and Soil Conservation Department are of temporary nature and seasonal.

Irrigation Department has alone created an irrigation potential of **10.24 lakh hectare** up to **31/03/2020**.

IRRIGATION INFRASTRUCTURE:

The category wise and status wise number of Government Irrigation Schemes executed by Irrigation Department up to 2019-20 is as follows:

Status of Irrigation Schemes	Category	Number of Government Irrigation Schemes up to 2018-19 (P)		
		Major & Medium	Minor	Total
Completed	Surface Flow	13	1513	1526
	Surface Lift	3	470	473
	G W Lift		744	744
Total		16	2727	2743
On going	Surface Flow	3	433	486
	Surface Lift	1	148	170
	G W Lift		421	430
Total		4	1002	1086
Grand Total Assam		20	3729	3749

CREATION OF IRRIGATED AREA AND UTILISATION OF POTENTIAL:

Irrigation potential created by the state during 2019-20 is shown in **Table-6.1**. Out of the **Gross Cropped Area** of 40.87 lakh hectares (2016-17) of the State, 10.07 lakh hectares (24.64%) are covered as irrigation potential by the irrigation department till 2020 under the ongoing irrigation schemes. Out of 10.07 lakh hectares of irrigation potential created, 2.85lakh hectares (%) are covered through both Major and Medium Irrigation Projects and the rest 7.38lakh hectares (%) through Minor Irrigation Schemes. During the last five years, about 2.35 lakh hectares are covered under irrigation potential.

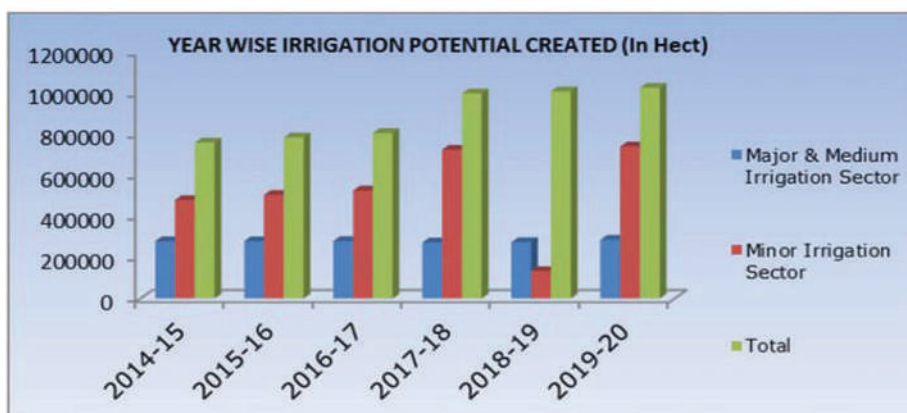
In addition to the Major, Medium and Minor Irrigation Projects, the State Agriculture Department has also created a huge irrigation potential through ASMIDC Ltd and provisioned private Shallow Tube wells (STWs) and Low Lift Points (LLPs). The minor irrigation activities taken up by Panchayat & Rural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

TABLE-6.1

Irrigation Potential Created upto the year, 2019-20			
(In hectares)			
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
2018-19	273378	733813	1007191
2019-20	285703	738539	1024242

Source: Chief Engineer, Irrigation Department, Assam

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



UTILISATION OF IRRIGATION POTENTIAL:

Irrigation Department collects and maintains the data on utilization of Irrigation potential by the Government Irrigation Schemes only. But there is no machinery to collect those in respect of private irrigation executed by Agriculture Department and other Departments/ agencies.

Out of the cumulative Irrigation Potential Created/made available through Government Irrigation Schemes under Irrigation Department the cultivators availed the facility of utilizing the same during the last three years are as follows –

TABLE-6.2

Year	Irrigation potential utilized during the year (out of the cumulative created potential through Government Irrigation Schemes)								
	Kharif crops season			Rabi & Pre-Kharif crops season			Total		
	Major & Medium	Minor	Total	Major & Medium	Minor	Total	Major & Medium	Minor	Total
2017-18	73108	122294	189744	5658	43569	49227	73108	165863	238971
2018-19	64878	130233	195111	3683	42002	45685	68561	172235	240796
2019-20	73557	181170	254727	4725	38110	42835	78282	219280	297562

The data shows huge gap of irrigation potential created (IPC) and irrigation potential utilized (IPU). The reason of low utilisation are-

- 1) General wear and tear of the irrigation scheme, and non-availability of fund in proper head of account in the state budget for their repair in due time leading unutilisation of the created potential.
- 2) Natural calamities like flood, storm etc. damaging the created potential.
- 3) Erratic power supply in respect of the electrically operated irrigation schemes (surface lift and ground water lift systems)
- 4) Damage of transformer, H.T. line and mechanical components at peak hours of requirement of water.
- 5) Change of river course in respect of surface flow and surface lift irrigation schemes.
- 6) Damage of canal system.

- 7) Lack of demand from the cultivators for irrigation water.
- 8) Reluctance of the cultivators to adopt multiple cropping in their crop field where assured irrigation is necessary.
- 9) Dependence of the cultivators on rain water as they adopt the traditional system of single cropping.
- 10) Stealing of motors/pumps and other accessories in some areas leading to non-functioning of the irrigation schemes.
- 11) Imposition of irrigation service charges by the government for realization from the beneficiary cultivators. As the cultivators are poor, they are either incapable or reluctant to pay irrigation service charges.

For better and efficient co-ordination among the Departments of Irrigation, Agriculture and other allied sectors, a state level co-ordination committee was constituted under the Chairmanship of the Additional Chief Secretary and Agriculture Production Commissioner, Assam and with the members from the concerned departments. In addition, a District Level Co-ordination Committee under Irrigation Department was constituted with the Additional Chief Engineer/Superintending Engineer as the Chairman and eight other members from various departments and organisations. Moreover, emphasis is placed on participatory irrigation management and as many as 1643 water user's association 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), District Irrigation Plans (DIP) for all the 33 districts (including newly created 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 year period from 2016-17 to 2020-21, the agriculture sector of the state will mark significant progress. The concern however remains on timely release of the approved fund. Table 6.3 shows district wise activities proposed by Irrigation Department under PMKSY for the five years and as approved by the District Irrigation Plans.

TABLE-6.3

Sl. No.	District	Number of Irrigation Scheme proposed							Area proposed in hectare	Proposed cost (Rs. in crore)
		FIS	DTW	LIS	STW	RRR	LLP	Total		
1	Chirang	237	40		55			332	21540	2283.5
2	Dima Hasao	38				57		95	9672	194.65
3	Bongaigaon	18	230					248	7525	161.36
4	Dhubri	37	1031	277		15		1360	57662	1386.635
5	Karbi-Anglong	304	42	99	304	4		753	30442	4606.7
6	Goalpara	69	273	32				374	19029	316.51
7	Cachar	61		43				104	30448	300.2743
8	Barpeta	13	143	50				206	45346	437.43
9	Golaghat	16	1884	68	1164			3132	30452	2990.77
10	Kokrajhar	679	32	72				783	37425	1225.02
11	Darrang	95	1195	42				1332	37594	184.4286
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	583.49
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	205	653			102	1524	2484	48249	799.6
21	Morigaon	77	2504	58				2639	31250	550.055
22	Hailakandi	35	277	257		25		594	23250	179.98
23	Kamrup Metro	177	15	253				445	9978	254.78
24	Nalbari	124	497	253				874	27069	643.2437
25	Karimganj	65	98	39		13		215	25403	579.668
26	Sivasagar	9	1229	749		27		2014	39409	683.43
27	Jorhat	42	2483	342	872 (3752 pts)			3739	54250	1329.2017
Total		4201	23301	6710	2402	501	1524	38639	888455	31134.9063

However main component of PMKSY- HKKPhas not taken up till date due to non receipt of CA from Ministry of Jal Shakti. But under PMKSY- HKKP- Access to ground water , which is a part component of PMKSY, has received as CA Rs. 22146.00 Lakh out of total 24606.96 lakh to complete 4779 Nos. of Tube-Well points (2344 Solar and 2435 Electrical) during the year 2019-20 to create potential of 19116 hectare in 18 Districts .The allocation for Irrigation Sector is not sufficient to meet up the targeted goal of 2022 (i.e. doubling the farmers income) and 2030 (i.e. to achieve ultimate irrigation potential of 27.00 Lakh hectare.

Moreover in Phase-II PMKSY-HKGP-GW, 4920 tubewells points have been sanctioned by Govt. of India where 1247 numbers are solar operated and 3673 numbers are electrically operated in 10 districts of Assam.

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.

Table-6.4 presents a statement on scheme wise target and achievement (both financial and physical under central sector and centrally sponsored schemes for the last three years.

TABLE:-6.4

Name of Scheme	Physical Achievement (In Hectare)						Financial Achievement (Rs. in Lakh)					
	2017-18		2018-19		2019-20		2017-18		2018-19		2019-20	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1) AIBP												
(i) Major & Medium	30108	0	21972	0	0	0	89	0	0	0	0	0
(ii) Minor	74263	7455	0	0	61916	5079	16457.8	1408	27000	4061.6	36842.1	8683.62
2) CADWM	31124	2000	36729	14990.68	40171	8754.46	3990.65	273.33	8055	1025.54	2050	746.06
3) NLCPR	570	0	1470	900	570	0	1148.06	11.39	882.04	721.498	732.58	0
4) NEC	2157	0	0	0	0	0	473.39	229.15	228.97	0	0	0
5) RMIS	-	-	-	-	-	-	262.4	56.13	243	45.72	708.5	95.04
6) PMKSY-HKCP	-	-	31716	0	19116	0	19116	0	52000	4200	22146.3	2132.71

TABLE:-6.5

Name of Scheme	Physical Achievement (In Hectare)						Financial Achievement (Rs. in Lakh)					
	2017-18		2018-19		2019-20		2017-18		2018-19		2019-20	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
A) 4701 CO. M & M Irrigation												
i) One time ACA (recast of Bordikrai I/P)	1050	0	0	0	0	0	72.07	0	0	0	0	0
ii) State Plan	-	-	-	-	-	-	-	-	-	-	560	82.37
B) 4702 co. Minor Irrigation												
State Plan	1530	0	1530	0	1530	150	2475	617.21	3475.02	633.31	7852.67	3863.83
SOPD	0	0	2010	30	450	500	-	-	-	-	-	-
C) 4705 CO. on CAD												
CADWM UNDER SOPD	-	-	4230	80	-	-	-	-	-	-	1497.17	1124.2

TABLE:-6.6
SCHEMES UNDERTAKEN WITH ASSISTANCE FROM THE WORLD
BANK/ASIAN DEVELOPMENT BANK OR OTHER FOREIGN
INVESTMENTS/ASSISTANCE

Name of Scheme	PHYSICAL (Area in Hectare)						FINANCIAL (Rs. in Lakh)					
	2017-18		2018-19		2019-20		2017-18		2018-19		2019-20	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
A) 4701 CO. M & M Irrigation												
i) Normal work	5668	0	0	0			501.1	128.65	562.1	293.89	400	82.38
ii) LTIF under NABARD Dhansiri IP	0	0	21972	0	22072	11072	0	0	9000	0	3000	0
B) 4702 CO. Minor Irrigation												
i) Normal work	2003	100	0	0	0	0	0	0	0	0	0	0
ii) TSP	1524	1760	568	285	687	349	430.2	241.93	430	421.83	494	456.077
iii) SCSP	1977	1428	663	613	2742	775	1000	263.96	1000	364.57	1050	479.906
iv) NABARD												
a) RIDF - XVIII Loan and State Share	2076	667	1400	120	1280	1220	6000	2707.38	6000	943.67	3370	1995.05
b) RIDF -XIX)	4379	0	1950	0	1950	0						
v) CM's special package for Dhemaji	400	400	400	0	0	0	7.1	0	0	0	0	0
vi) CM's special package for Barak Valley	132	0	132	132	0	0	50	34.91	0	0	0	0
vii) Assam Bikash Yojona	413	0	413	0	0	0	0	0	0	0	0	0
viii) AIBP short fall of AIBP 2007-08, 208-09, 2009-10 and			66808	4892	32072	4996	10026.2	1970.36	6606.3	622.82	1308.91	729.246
ix) Projected State Share of CSS (AIBP)											4391.8	1075.5
x) NLCPR State Share											173.24	82.96
xi) NEC State Share											5.67	5.67
xii) PMKSY- HKKP State Share											2460.69	68.933
xiii) CMSGUY					142	142					132	44

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.

TABLE -6.7

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

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 position of realization of the charges for the last three years is as follows.

Year	Irrigation Service Charges realised (in Rupees)
2017-2018	1195244
2018-2019	785490
2019-2020	784999

Despite all the constraints the state has set physical and financial targets for development of the irrigation sector. The provisioning as reflected in the budget of the financial year 2019-20 to accomplish the targets, are presented in Table 6.6. Table 6.7 shows crop season-wise area irrigated during the last three years in the districts of Assam.

TABLE – 6.8
BUDGETARY PROVISION, PHYSICAL AND FINANCIAL TARGETS AND ESTIMATES OF
THE SCHEMES ARE PROPOSED FOR THE FINANCIAL YEAR 2020-21

Sl. No.	Componenet / Works	Budget Provision (Rs. in Lakh)			Physical Targets for the FY 2020-21 (in Hect.)
		SS	CA	Total	
1		2	3	4	5
A	4701 C.O. Major & Minor				
1	Jamuna Irrigation Projects Modernisation	47.5	0	47.5	700
2	Intergrated Irrigation Project On Kolong Basin	47.5	0	47.5	126.3
3	Rupahi Irrigation Project	95	0	95	2000
4	New Schemes-Puthimari Irrigation Project	9.5	0	9.5	
5	New Schemes-Burisuti Irrigation Project	9.5	0	9.5	
6	New Schemes-Buroi Irrigation Project	9.5	0	9.5	
7	New Schemes-ERM Of Kaldia Irrigation Project-Major Works-Others	9.5	0	9.5	
8	New Schemes-Rukni Irrigation Project	47.5	0	47.5	
9	New Schemes-Sonai Irrigation Project	47.5	0	47.5	
10	New Schemes-Raising & Strengthening Of CC Lining, Construction Of Double Barrel Box Culvert Of Pahumara I.P Under Bhawanipur LAC	0.95	0	0.95	500
11	New Schemes-Renovation & Construction Of CC Lining Of Canal D3 Of Jamuna IP Under Hojai LAC	0.95	0	0.95	
12	Long Term Irrigation Fund (LTIF) Under NABARD-Dhansiri Irrigation Project	0	11602	11602	11000
	Sub Total under 4701	324.9	11602	11926.9	14326.3
B	4702 C.O. Minor Irrigation				
13	Bandarpara FIS Under Kokrajhar LAC	0.95	0	0.95	
14	Ketengahora FIS Under Kokrajhar LAC	0.95	0	0.95	
15	KaporgaonMeshtabari FIS Under Kokrajhar	0.95	0	0.95	
16	Construction Of KhaipoLangso FIS Under Bokajan LAC	0.95	0	0.95	
17	Construction Of TengkeraLangso FIS Under Bokajan LAC	0.95	0	0.95	
18	Construction Of Tier Langso FIS Under Bokajan LAC	0.95	0	0.95	
19	Construction Of Tokvang FIS Under Bokajan LAC	0.95	0	0.95	
20	Re-Construction Of Deihori FIS Under Bokajan LAC	0.95	0	0.95	
21	Renovation & Repairing Of MnajekNalla FIS Under Jonai LAC	0.95	0	0.95	
22	Renovation & Repairing Of Borbila FIS Under Dhemaji LAC	0.95	0	0.95	

Contd Table-6.8

	1	2	3	4	5
23	Deepalina FIS At Garugaon Under Mazbat LAC	0.95	0	0.95	
24	KathalbariBhutiadong FIS At Panichali Under Paneri LAC	0.95	0	0.95	
25	MantikiriMarabhola Bund At Bengbari FIS Near Bengbari Church Under Udalguri LAC	0.95	0	0.95	
26	Reconstruction Of Dewaguri FIS At Dewaguri Under Kaligaon LAC	0.95	0	0.95	
27	Sigiri FIS In Goalpara Under Golpara West LAC	0.95	0	0.95	
28	Kakira FIS In Goalpara Under Goalpara East LAC	0.95	0	0.95	
29	Superiguri FIS (PH-1) Extension Under Bongaigaon LAC	0.95	0	0.95	
30	Bholatal FIS (PH-1) Extension Under Bijni LAC	0.95	0	0.95	
31	Panbari Boulajhar FIS (PH-1) Under Bijni LAC	0.95	0	0.95	
32	Nigamghola FIS Under Bongaigaon LAC	0.95	0	0.95	
33	Makra FIS Under Bongaigaon-Major Works-Normal	0.95	0	0.95	
34	Relining Of Brick Canal System Of Dhosalcherra FIS Under Hailakandi LAC	0.95	0	0.95	
35	Construction Of Steel Gate & CC Canals In Appin FIS Under Hailakandi LAC	0.95	0	0.95	
36	KhakragolCherra FIS In Karimganj Under Ratanbari LAC	0.95	0	0.95	
37	Kanta Nala Cherra FIS Karimganj Under Ratanbari LAC	0.95	0	0.95	
38	Mandir tillla Cherra FIS In Karimganj Under Ratanbari LAC	0.95	0	0.95	
39	KhekragoolCherra FIS In Karimganj Under Ratanbari LAC	0.95	0	0.95	
40	Reparing And Renovation Of Main Branch & Field Channels (Water Source) Of Kaldia FIS Under Sorbhog LAC	0.95	0	0.95	
41	Renovation Of Diring FIS Under Biswanath Chariali LAC	0.95	0	0.95	
42	Renovation Of Singra FIS Under Boko LAC	0.95	0	0.95	
43	Renovation Of Singuwa FIS Under Boko LAC	0.95	0	0.95	
44	Renovation Of Kapili FIS Under Guwahati West LAC	0.95	0	0.95	
45	Renovation Of Kalmoni FIS Under Guwahati West LAC	0.95	0	0.95	
46	Renovation Of Ubhoti FIS Under Palasbari LAC	0.95	0	0.95	

Contd Table-6.8

	1	2	3	4	5
47	Botiyamari FIS Under Udalguri LAC	0.95	0	0.95	
48	FIS From River Deodubi In Tukolimora Area Under Sonari LAC	0.95	0	0.95	
49	Flow Irrigation-NULL-Major Works-Others	9.5	0	9.5	
50	Flow Irrigation-LA Payment-Major Works-Cost Of Land Acquisition	95	0	95	
51	Dimoria FIS At Tegheria, Upper Tepesia, Fullung And Khamar	190	0	190	670
52	Repairing, Renovation And Extension Of Canal Structure Of Gelasuba, FIS-	47.5	0	47.5	193
53	Kalajhar Bund FIS At Udalguri, Tangla Div.	47.5	0	47.5	
54	Nonoi FIS (Darrang District), Mangaldoi Div	0.01	0	0.01	500
55	Renovation & Remodelling Of Canal System Of Borlesakona FIS, Guwahati Div	14.25	0	14.25	340
56	Construction Of Dalbari Kaniha FIS, Guwahati Div	95	0	95	250
57	Improvement Of Afflux Bund, Guide Bund, Canal And Canal Structure Of Singrimari FIS, Tangla Div	57	0	57	788
58	Improvement Of Canal And Canal Structure Of Gorgella Merbangchuba FIS, Tangla Div	38	0	38	530
59	Improvement And Renovation Of Deosila FIS, Dudhnoi Div	38	0	38	974
60	Reconstruction Of Sapoi Baligaon FIS, Tezpur Div	83.60143	0	83.6	700
61	Improvement Of Sonajuli FIS At Paneri, Mangaldoi Div	19	0	19	800
62	Remodelling Of Huduma FIS At Mangaldoi Div	38	0	38	500
63	Panbari FIS	142.5	0	142.5	1004
64	Reconstruction Of Porbotia FIS	31.91	0	31.91	480
65	BhoralTola ELIS Under Borkhetri LAC	0.95	0	0.95	
66	Lift Irrigation-Relining Of Brick Canal Of Uttar Joshnabad Point - 2 L/B Of River Katakhal Under Hailakandi LAC	0.95	0	0.95	
67	Relining Of Canal In Katilcherra LIS Under Hailakandi LAC	0.95	0	0.95	
68	Relining Of Canal In Mohammadpur ELIS Under Hailakandi LAC	0.95	0	0.95	
69	Kalabari LIS Under Bilashipara West LAC	0.95	0	0.95	
70	Renovation Of Dumardaha LIS Shabganj Point Under Gauripur LAC	0.95	0	0.95	

Contd Table-6.8

	1	2	3	4	5
71	Renovation Of Dumardaha LIS Rupsi Point Under Gauripur LAC	0.95	0	0.95	
72	Renovation Of Gadadhar LIS Under Gauripur LAC	0.95	0	0.95	
73	Renovation Of KLIS Under Kaliabor LAC	0.95	0	0.95	
74	Borsila ELIS Under Batadraba LAC	0.95	0	0.95	
75	Renovation Of Buriganga LIS Under Jamunamukh LAC	0.95	0	0.95	
76	Kalitapara LIS Under Sipajhar LAC	0.95	0	0.95	
77	Improvement & Remodelling Of Bokajan LIS Under Bokajan LAC	0.95	0	0.95	
78	Irrigation Scheme In Abhayapuri South LAC	28.5	0	28.5	1260
79	Extension Of Canal From Kakodonga FIS To Tarani Area	0.1	0	0.1	
80	Improvement Of LIS From River Buridehing Tripling Fakial Mouza In Joypur Dev Block	50	0	50	150
81	Remodelling Of LIS Singahuti Beel Under Kheremia & Sassoni Mouza	50	0	50	80
82	ELIS At Sonapur (5 Points Namely At Dhipuji ELIS, Goronga ELIS, Tuper Pathar ELIS, Dumdang ELIS, Ghoramara Janpump ELIS), Guwahati Div	118.75	0	118.75	390
83	Renovation And Remodelling Of Malancha Kalubari ELIS, Guwahati West Div	14.25	0	14.25	
84	Improvement Of Kuruwa LIS, Mangaldoi Div	71.25	0	71.25	
85	Lift Irrigation-Restoration Of Different Irrigation Scheme Of Sonai LAC	0.1	0	0.1	
86	Pagla Cherra ELIS With Solar Backup Under Ratabari(SC) LAC	0.95	0	0.95	
87	Lift Irrigation-Hirajan FIS	0.1	0	0.1	
88	Lift Irrigation-Chamta FIS	0.1	0	0.1	
89	Renovation, Remodeling & Extension Of Maloibari ELIS	202.35	0	202.35	1950
90	Nonai DTWS 20 Points In Darrang Under Sipajhar LAC	47.5	0	47.5	
91	Construction Of Pakhamara DTW PH-II (10 Points) Under Barama LAC	0.95	0	0.95	
92	DTW I/S - 18 Points (Kalag-6 Points; Borbukia-6 Points; Mukalmua-6 Points) Under Barhketri LAC	0.95	0	0.95	
93	DTW I/S-16 Points (Allya-10 Points; Moriyadonga-5 Points;Balikaria-1 Point) Under Nalbari LAC	0.95	0	0.95	
94	MDTW I/S 8 Points(BakulMajgaon 5 Points; DangarPathar 3 Points) Under Lahowal LAC	0.95	0	0.95	

Contd Table-6.8

	1	2	3	4	5
95	Sonalibari DTW I/S 2 Points Under Gohpur LAC	0.95	0	0.95	
96	Garebond DTW I/S 3 Points Under Ratabari LAC	0.95	0	0.95	
97	SopaiBaligaon DTWS In Sonitpur Under Dekhijuli LAC	0.95	0	0.95	
98	Guthuri DTWS Under Barpeta LAC	0.95	0	0.95	
99	Gajia DTWS Under Jania LAC	0.95	0	0.95	
100	Tube Well-Renovation Of CharaikholaBisondoi Under Golokganj LAC	0.95	0	0.95	
101	Tube Well-Renovation Of MTA Bundh In Gauripur Under Gauripur LAC	0.95	0	0.95	
102	Solar Powered MDTW 4 Points In Majuli Under Majuli LAC	0.95	0	0.95	
103	Solar Powered MDTW 6 Points In UjaniMajuli Under Majuli LAC	0.95	0	0.95	
104	Solar Powered MDTW North West Development Block In Dergaon 5 Points Under Dergaon LAC	0.95	0	0.95	
105	Solar Powered MDTW North West Development Block 2 Points Under Dergaon LAC	0.95	0	0.95	
106	Solar Powered MDTW Kalaipani Development Block Under Teok LAC	0.95	0	0.95	
107	Solar Powered MDTW Central Development Block Under Teok LAC	0.95	0	0.95	
108	Solar Powered MDTW East Development Block 2 Points Under Mariani LAC	0.95	0	0.95	
109	Solar Powered DTW Under Dhakuakhana LAC	0.95	0	0.95	
110	Solar Powered DTW 2 Points (Kumbang; Medok) Under Dhakuakhana LAC	0.95	0	0.95	
111	Solar Powered DTW 2 Points (Kosuwa; Koliamari) In Lakhimpur LAC	0.95	0	0.95	
112	Electrical DTW 6 Points (Jubanagar; LalukRenovation; Jubanagar PH-I; AhmedpurKutubpur 3 Points) In Lakhimpur LAC	0.95	0	0.95	
113	Dofolajan DTWS New 2 Points In Lakhimpur LAC	0.95	0	0.95	
114	Solar Powered Bodhakora MDTWS (Renovation Of Point No.1,2 & 3) In Lakhimpur LAC	0.95	0	0.95	
115	PH-II DTWS 10 Points (Deulknchi 2 Points; Kumarpata; Jamtola; Botahkuchi; Udiana; Chirakhundi 2 Points; Chouramari; Gurmara Chandmari) Under Rangia LAC	0.95	0	0.95	

Contd Table-6.8

	1	2	3	4	5
116	DTWS 10 Points Under Kamalpur LAC	0.95	0	0.95	
117	DTW In Mahammadpur Village Under Jania LAC	0.95	0	0.95	
118	13 Nos DTW Schemes (Naharbari Kuligaon; Bormukali KuliGaon; Baghgaon; Naharani Borjan; Jelem; Dimou Kauripathar; Sundarpur; Tongani, Arnepathar, Phulbari Pathar; Simenpathar; Belong Chahakichuk; Mesaki Tongani) Under Jonai LAC	0.95	0	0.95	
119	Tube Well-Hybrid Schemes In Different Districts	95	0	95	
120	Bhelamari DTWS (3 Points) Under Nalbari LAC	0.95	0	0.95	
121	CLA (AIBP) Minor Irrigation	0	16200	16200	98585
122	Projected State Share Pf CSS(AIBP)	85.5	0	85.5	
123	Shortfall Of AIBP	274.69	0	274.69	
124	Balipara Solar Powered DTWS	28.5	0	28.5	
125	Construction Of Pakhamara DTWS (3 Points)	23.75	0	23.75	
126	DTWS At Rangia (10 Points), Rangia Div	47.5	0	47.5	
127	DTWS At Jalukbari LAC Area (10 Points), Guwahati Div	95	0	95	
128	DTWS At Dharmapur At LAC Area (10 Points), Nalbari Div	38	0	38	
129	DTWS At Tingkhang LAC Area (5 Points), Dibrugarh Div	0.1	0	0.1	
130	Tamulikhat DTWS (3 Pts.) In Tengakhat GP	0.05	0	0.05	
131	Goridhoria Gaon DTWS (3 Pts.)	0.05	0	0.05	
132	DTWS At Kheremia GP Under Duliajan LAC (3 Pts.)	0.05	0	0.05	
133	Dinjoy Gaon DTWS (3 Pts.) - 13-01- SOPD-G-GA-V	0.05	0	0.05	
134	Tube Well-Khrudra Kotlaborkushi (1 Points) Under Nalbari LAC	0.95	0	0.95	
135	Tube Well-Electrical (CSS)	0	45000	45000	
136	Tube Well-Electrical (SS)	6412.5	0	6412.5	
137	Tube Well-Solar (CSS)	0	13500	13500	
138	Tube Well-Solar (SS)	2137.5	0	2137.5	
139	Solar DTWS At Biswanath District	38	0	38	
140	DTW Scheme With Solar System	110.58809	0	110.59	
141	Capital Outlay On Minor Irrigation-NULL-Scheduled Caste Component Plan-NULL-NULL-Major Works-Others	945.25	0	945.25	
142	Capital Outlay On Minor Irrigation-NULL-Tribal Area Sub-Plan-NULL-NULL-Major Works-Others	403.75	0	403.75	

Contd Table-6.8

	1	2	3	4	5
143	Construction Of IB At Dimu, Rangia (Guwahati Div), Mukalmua (Nalbari Div.), Kaziranga (Jorhat Div.), Goreswar (Sukla Div.), Chamata (Nalbari, Guwahati)	0.1	0	0.1	
144	Development Of Irrigation Colony Near Betkuchi, Lohra (Guwahati Division)	190	0	190	
145	Construction Of Central Laboratory, Auditorium And Guest House At Koinadhora With Boundary Wall	95	0	95	
146	Loan Assistance From NABARD Under RIDF (LS)	0	6028.61	6028.61	
147	Loan Assistance From NABARD Under RIDF (SS)	317.3	0	317.3	
148	Census Of Minor Irrigation-Central Share-Other Charges	0	180	180	
149	Rationalisation Of Minor Irrigation Statistics-NULL-Office Expenses	0	2	2	
150	Rationalisation Of Minor Irrigation Statistics-Central Share-Salaries-Pay	0	2	2	
Sub Total under 4702		12944	80912.61	93856.61	110144
151	CAD To Malobari LIS Project (SS)	8.55	0	8.55	400
152	CAD To Malobari LIS Project (CSS)	0	45	45	
153	CAD For Bordikarai Irrigation Schemes (SS)	8.55	0	8.55	1381
154	CAD For Bordikarai Irrigation Schemes (CSS)	0	270	270	
155	CAD For Pahumara Irrigation Project (CSS)	0	135.34	135.34	848.38
156	CAD For Pahumara Irrigation Project (SS)	8.55	0	8.55	
157	New CAD For Dhansiri (CSS)	0	487.63	487.63	21217
158	New CAD For Dhansiri (SS)	101.81657	0	101.82	
Sub Total under 4705		127.47	937.97	1065.44	23846.38
Grand Total (Grant No. 49)		13396.37	93452.58	106849	148316.68

Annexure-6.01

Area irrigated seasons wise in the districts of Assam

Sl. No.	Name of District	Kharif (in hec.)		Rabi & Pre-kharif (in hec.)		Total (in hec.)	
		2018-19	2019-20	2018-19	2019-20	2018-19	2019-20
1	2	3	4	5	6	7	8
1	Kokrajhar	16021	15051	65	62	16086	15113
2	Dhubri	29	36	183	190	212	226
3	Goalpara	1427	1078	493	593	1920	1671
4	Barpeta	2469	3688	218	957	2687	4645
5	Morigaon	254	179	430	713	684	892
6	Nagaon	1096	295	1131	653	2227	948
7	Sonitpur	5733	5001	90	94	5823	5095
8	Lakhimpur	57	57	31	35	88	92
9	Dhemaji	56	25	0	42	56	67
10	Tinsukia	793	543	8	3	802	546
11	Dibrugarh	515	391	36	1	551	392
12	Sivasagar	887	600	65	261	952	861
13	Jorhat	545	150	68	29	613	179
14	Golaghat	1320	3861	1349	2388	2669	6249
15	Karbi Anglong	15954	72305	32598	28894	48552	101199
16	Dima Hasao	4780	5224	0	0	4780	5224
17	Cachar	1925	630	1333	1700	3258	2330
18	Karimganj	22	23	85	0	107	23
19	Hailakandi	537	20	165	11	702	31
20	Bongaigaon	385	254	431	371	816	625
21	Chirang	15705	13305	867	1137	16572	14442
22	Kamrup	5525	2373	720	406	6245	2779
23	Kamrup (M)	877	673	1171	451	2048	1124
24	Nalbari	670	888	60	3	730	891
25	Baksa	22751	21479	685	867	23436	22346
26	Darrang	6883	6761	200	499	7083	7260
27	Udalguri	47758	59935	1171	1295	48929	61230
28	Biswanath	12652	12652	61	61	12713	12753
29	Charaideo	390	368	4	40	394	408
30	Hojai	26989	26767	1820	952	28809	27719
31	Majuli	31	0	99	8	130	8
32	South Salmara	75	75	48	119	123	194
33	West Karbi Anglong	0	0	0	0	0	0
Assam		195111	254727	45685	42835	240796	297562

Source : Chief Engineer, Irrigation Department, Assam

ANNEXURE-6.02
DISTRICT WISE & CATEGORY WISE IRRIGATION POTENTIAL
CREATED THROUGH GOVT. IRRIGATION SCHEMES IN ASSAM

(Area in Hect.)

Sl. No.	District	Minor 2019-20				Total
		Surface flow	Surface lift	Deep Tube well	Shallow Tube well	
1	2	3	4	5	6	7
1	Kokrajhar	30072	4954	1108	100	36234
2	Dhubri	1198	6806	1396	606	10006
3	Goalpara	8497	4432	3950	188	17067
4	Barpeta	2660	12544	1676	229	17109
5	Morigaon	2510	12821	1062	573	16966
6	Nagaon	6172	11040	2536	488	20236
7	Sonitpur	7059	4658	2490	0	14207
8	Lakhimpur	1953	3132	6286	6944	18315
9	Dhemaji	1500	4095	1127	2600	9322
10	Tinsuka	806	2660	3482	557	7505
11	Dibrugarh	0	10639	3792	2700	17131
12	Sivasagar	792	13640	4072	406	18910
13	Jorhat	4086	2294	5090	70	11540
14	Golaghat	2865	6297	6714	472	16348
15	Karbi anglong	169083	8371	971	697	179122
16	Dima Hasao	6334	2029	0	0	8363
17	Cachar	11599	6357	290	30	18276
18	Karimganj	7009	1674	304	0	8987
19	Hailakandi	2103	3572	102	0	5777
20	Bongaigaon	4915	2454	1355	572	9296
21	Chirang	29803	518	880	0	31201
22	Kamrup	21404	9753	3287	61	34505
23	Kamrup (M)	1993	3732	0	0	5725
24	Nalbari	0	3785	3206	985	7976
25	Baksa	43471	3850	650	0	47971
26	Darrang	11120	3916	2858	50	17944
27	Udalguri	87893	150	951	506	89500
28	Biswanath	11682	5020	1599	1226	19527
29	Charaideo	0	0	60	0	60
30	Hojai	2700	6014	1130	0	9844
31	Majuli	1104	811	507	5480	7902
32	S. Salmara	91	3984	1368	224	5667
33	W. Karbi Anglong	0	0	0	0	0
Assam		482474	166002	64299	25764	738539

Source: Chief Engineer, Irrigation Department, Assam

ANNEXURE- 6.03
DISTRICTWISE IRRIGATION UTILISED, FUNCTIONING AND
NON FUNCTIONING IN ASSAM

(in Nos)

Sl. No.	District	Functioning Irrigation scheme during 2019 - 20	Non Functioning Irrigation scheme during 2019 - 20	Total Irrigation Scheme during 2019 - 20
1	2	3	4	5
1	Kokrajhar	92	89	181
2	Dhubri	17	45	62
3	Goalpara	45	81	126
4	Barpeta	39	69	108
5	Morigaon	18	53	71
6	Nagaon	36	100	136
7	Sonitpur	24	26	50
8	Lakhimpur	25	85	110
9	Dhemaji	22	41	63
10	Tinsuka	27	27	54
11	Dibrugarh	29	42	71
12	Sivasagar	32	62	94
13	Jorhat	54	32	86
14	Golaghat	49	46	95
15	Karbi anglong	597	116	713
16	Dima Hasao	161	26	187
17	Cachar	32	107	139
18	Karimganj	31	52	83
19	Hailakandi	14	40	54
20	Bongaigaon	22	38	60
21	Chirang	63	35	98
22	Kamrup	76	82	158
23	Kamrup (M)	19	9	28
24	Nalbari	19	48	67
25	Baksa	105	101	206
26	Darrang	33	31	64
27	Udalguri	272	75	347
28	Biswanath	33	40	73
29	Charaideo	1	1	2
30	Hojai	22	38	60
31	Majuli	37	17	54
32	S. Salmara	13	36	49
33	W. Karbi Anglong	0	0	0
Assam		2059	1690	3749

Source: Chief Engineer, Irrigation Department, Assam

ANNEXURE- 6.04
SECTOR WISE IRRIGATION POTENTIAL
CREATED IN ASSAM 2019-20 (CUMMULATIVE)

(Area in Hect.)

Sl. No.	District	Irrigation potential created upto 2020		
		Minor Irrigation	Major/Medium Irrigation	Total
1	2	3	4	5
1	Kokrajhar	36234	4960	41194
2	Dhubri	10006	0	10006
3	Goalpara	17067	0	17067
4	Barpeta	17109	25650	42759
5	Morigaon	16966	0	16966
6	Nagaon	20236	42063	62299
7	Sonitpur	14207	32131	46338
8	Lakhimpur	18315	0	18315
9	Dhemaji	9322	0	9322
10	Tinsuka	7505	0	7505
11	Dibrugarh	5667	4158	9825
12	Sivasagar	18910	0	18910
13	Jorhat	11540	0	11540
14	Golaghat	16348	0	16348
15	Karbi anglong	179122	9637	188759
16	Dima Hasao	8363	0	8363
17	Cachar	18276	0	18276
18	Karimganj	8987	0	8987
19	Hailakandi	5777	0	5777
20	Bongaigaon	9296	0	9296
21	chirang	31201	23504	54705
22	Kamrup	34505	0	34505
23	Kamrup (M)	5725	0	5725
24	Nalbari	7976	0	7976
25	Baksa	47971	33356	81327
26	Darrang	17944	0	17944
27	Udalguri	89500	69230	158730
28	Biswanath	19527	0	19527
29	Charaideo	60	0	60
30	Hojai	9844	41014	50858
31	Majuli	7902	0	7902
32	S. Salmara	17131	0	17131
33	W. Karbi Anglong	0	0	0
	Assam	738539	285703	1024242

Source: Chief Engineer, Irrigation Department, Assam

CHAPTER-VII

FLOOD AND FLOOD CONTROL MEASURES

FLOODS AND THE DAMAGES

The State of Assam comprises of two valleys namely the Brahmaputra and Barak Valley and it is situated in between 90° to 96° North Latitude and 24° to 28° East Longitude. The geographical area of Assam is 78,438.00 Sq. Km out of which 56,194.00 Sq. Km and 22,244.00 Sq. Km fall under the Brahmaputra and Barak Valley including 3 (Three) hill districts respectively.

The Brahmaputra Valley has an average width of about 80 Km. The main river of the valley, Brahmaputra is one of the largest rivers in the world and rank fifth with respect to its average discharge. The river originates from the Kailash ranges of Himalayas at an elevation of 5300 M. After flowing through Tibet it enters India through Arunachal Pradesh and flows through Assam and Bangladesh before it joins Bay of Bengal.

The catchments area of Brahmaputra 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. The Brahmaputra basin extends over an area of 5,80,000 Sq. Km up to its confluence within Bangladesh.

The average width of Brahmaputra is 5.46 Km. The maximum discharge of Brahmaputra at Pandu near Guwahati was recorded as 72,779 cumec on 23.08.62 and minimum discharge was recorded as 1757 cumec on 22.02.63. The average annual discharge is about 20,000 cumec and average dry season discharge is 4,420 cumec.

The Barak valley has a geographical area of 6922.00 Sq. Km excluding 3(three) hill districts. The local rainfall run off of the valley along with that of adjacent hilly areas flows through river Barak and its various tributaries and is drained out to Bangladesh. The Katakhal, Jiri, Chiri, Modhura, Longai, Sonai, Rukni and Singla are the main tributaries of the valley. The tributaries are mainly rain fed and cause flood problems when precipitation occurs.

Flood and Erosion are two main natural disasters being faced by the state. The flood prone area of the state is 31,500.00 Sq Km as assessed by the RastriyaBarhAyog which is about 39.58 % of the total land area of Assam. This is about 9.40% of total flood prone area of the whole country. The flood prone area of the country as a whole stands at about 10.2 % of the total area of the country, but flood prone area of Assam is 39.58 % of the area of the state. It signifies that the flood prone area of Assam is four times the national mark of the flood prone area of the country. Records show that average annual area affected by flood is 9.31 Lakh Hectares. The flood protected area of the state is 16500.00 Sq. Km till date.

The severity of flood problem of the state has been further aggravated by the acuteness of erosion on both banks of river Brahmaputra and its tributaries. Study reveals that an area of 4.27 Lakh Hectare of the state has been eroded by the rivers since 1950, which is 7.40 % of area of the state. The average annual rate of erosion is 8000.00 Ha.

FLOOD AND EROSION PROBLEM OF THE STATE

The Brahmaputra and Barak rivers with their 48 nos. of major tributaries and innumerable sub-tributaries have crises-crossed the plains of both valleys. Floods, bank erosion and drainage congestion are major problems faced by the state during the monsoon season. The flood of this region is a recurring phenomenon, every year several waves of flood cause damage to huge areas in the state. The loss to people in terms of houses, crops and cattle is immense. The figures of loss run into hundreds of crores every year apart from huge damages to roads, bridges, schools, communication systems and other such facilities. This diminishes the wealth of the nation and has adverse effects on the development of the state.

During post-independence period, Assam faced major floods in 1954, 1962, 1972, 1977, 1984, 1988, 1998, 2002, 2004, 2008, 2014. Almost every year three to four waves of flood ravage the flood prone areas of Assam. Average annual loss due to flood in Assam is to the tune of Rs. 200.00 Crores and particularly in 1998, the loss suffered was about Rs. 500.00 Crores and during the year 2004 it was about Rs. 771.00 Crores.

After the unprecedented floods in the country in 1954, the Govt. of India announced a National Policy on Floods comprising three phases viz.-

- The immediate,
- The short term and
- The long term measures.

The flood control activities in Assam started mainly after the announcement of National Water Policy. Subsequently, "Outlined plan for flood control in Assam" along with various comprehensive plans were prepared and the priority areas, which need immediate and urgent attention were identified.

Till date, the Water Resources Department has taken up works primarily for the general development of the rural sector and for the protection of major townships in both the Brahmaputra and Barak valley. Schemes have also been taken up to relieve the drainage congestion in the cities and other important areas.

- 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 zoning

The Water Resources Department, Assam has been implementing various flood management schemes from the beginning of 2nd Five Year Plan and is continuing till now.

**Physical achievement of the Water Resources Department, Assam
upto March'2020**

Nature of Work	Total upto 2018-19	DURING 2019-20		Total upto 2019-20
		Target	Achievement	
1	2	3	4	5
Construction of Embankments (km)	4486.44	-	-	4486.44
Anti-Erosion and Town Protection Works (nos)	1063	44	44	1107
Construction of Major Sluice (nos)	101	3	3	104
Construction of Minor Sluice (nos)	545	-	-	545
Drainage Channel (km)	892.216	-	-	892.216
Raising & Strengthening of Embankment (km)	897.614	11.878	11.878	909.492

Source: Office of the Chief Engineer, Water Resource Department, Assam

Flood management schemes taken up by W. R. Department during 2019-20:

Following flood and erosion management schemes had been sanctioned for Water Resources Department during the financial year 2019-20 –

- 53 nos. of scheme under NABARD (RIDF-XXV) for Rs. 100.00 Cr.
- 62 Nos. of Schemes under State Plan costing Rs. 141.42 Cr
- 15 Nos. of Scheme under CM Package in Barak Valley costing Rs. 36.49 Cr.

Ongoing projects

Various ongoing projects of Water Resources Department during the year 2020-21 are – 15 schemes under CM Special Package, 51 schemes under SOPD, 80 schemes under NABARD (RIDF-XXIII, RIDF-XXIV & RIDF-XXV), 2 schemes under Ministry of DoNER (NESIDS) and 4 schemes under Signature Project (UTTARON).

Comprehensive plan for raising & strengthening of Brahmaputra river embankment:

Considering the vulnerability and the present status, the embankment system of Assam is required to be raised and strengthened in phased manner so that the same can provide flood protection to the state for sustainable socio-economic development. Accordingly, steps in this regard have been taken for fortification of embankments of Brahmaputra River at a probable cost of Rs.4454.09 Cr.

Schemes proposed under the aegis of Asian Development Bank (ADB):

The Govt. of Assam has taken up projects under funding of the Asian Development Bank. Under Tranche-I project, two sub-projects at Dibrugarh and Palasbari-Gumi area at a total cost of 68 Million USD have been implemented.

Under Tranche-II, 3 sub-projects at Dibrugarh, Kaziranga and Palasbari-Gumi have been taken up for a total cost of 82 Million USD.

Now the Department is contemplating to prepare a proposal for next phase of the project under ADB funding at an estimated cost of 500 Million USD for Tranche-III.

Schemes proposed under the aegis of World Bank (WB):

The Water Resources Department has embarked upon a project under the nomenclature "**Assam Integrated River Basin Management Project**" at a tentative cost of 625 million USD. The objectives of the program would be (i) to fill in the gaps in existing knowledge base of the Brahmaputra-Barak Basin, showcase the global best practices by the Water Resources Department in planning, design and implementation of projects; and (ii) to implement selected priority physical infrastructure investments within the framework of an integrated flood, erosion and sediment management system for the Brahmaputra-Barak Basin in the State of Assam.

Rejuvenation of Kollongriver

The river Kollong, an offshoot channel of river Brahmaputra, was a life line of middle Assam for ages contributing to the economic, social and cultural prosperity of the region. Under the initiative of the present Government, it was proposed to rejuvenate the Kollongriver in Nagaon district. Accordingly, the Department has received sanction to 4 schemes at a cost of Rs. 14.51 Crore during the year 2019-20 under SOPD-ODS and the works will be started soon.

Breach/cuts of 2019 & Restoration works under SDRF for 2019-20

During floods of 2019, 38 breaches and cuts occurred at different embankments of Brahmaputra and Barak River. For closing these gaps as well as for raising and strengthening of the entire dyke system of the breached embankments, 18 (eighteen) nos. of schemes under SOPD-FDR for Rs 350.26 Crores has been sanctioned. In 2nd Phase, 30 (thirty) nos. of schemes under SOPD-FDR for Rs 257.71 Crores has been approved. Again, for restoration of damaged embankments, 103 (one hundred three) nos. of schemes under SDRF for Rs 172.04 Crores has been recommended in the 40th SEC meeting. Additional 60 nos. of schemes under SDRF were recommended in the 41st SEC meeting for Rs. 89.63 Crores.

National Hydrology Project (NHP):

The National Hydrology Project (NHP) is being implemented under the Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India with an total outlay of Rs. 3679.7674 crore for the entire country. NHP will 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 has been implemented by the Water Resources Department, Assam. The total outlay for the state for the entire project period of eight (8) years is Rs. 47.00 crore.

Table-1
DISTRICT WISE DAMAGE OF FLOOD MANAGEMENT STRUCTURES
(EMBANKMENTS AND OTHERS) IN ASSAM, DURING THE FLOOD OF 2019

Sl. No.	Name of District	Type of embankment (Dyke)	Name of embankment breached	No of embankment breached	No of breaches in the embankment	Length of breach (in meter)
1	Kokrajhar	--	--	--	--	--
2	Dhubri	--	--	--	--	--
3	Goalpara	--	--	--	--	--
4	Barpeta	Tributary dyke	Morachoulkhowa R/B	1	1	50
		Tributary dyke	Pahumara L/B	1	7	376
		Tributary dyke	Bhelengi R/B	1	3	105
		Tributary dyke	Rupahi R/B	1	5	70
5	Morigaon	--	--	--	--	--
6	Nagaon	Brahmaputra dyke	Borghuli bund	1	1	50
7	Sonitpur	--	--	--	--	--
8	Lakhimpur	--	--	--	--	--
9	Dhemaji	--	--	--	--	--
10	Tinsukia	--	--	--	--	--
11	Dibrugarh	--	--	--	--	--
12	Sivasagar	--	--	--	--	--
13	Jorhat	Tributary dyke	Bhogdoi bund L/B	1	1	125
			J. B. Road to Chengeliati.			
		Tributary dyke	Charaipani Marginal Bund L/B	1	1	30
		Tributary dyke	Kakodonga bund R/B	1	1	25
14	Golaghat	Tributary dyke	Kakodonga bund L/B	1	1	10
15	KarbiAnglong	--	--	--	--	--
16	Dima Hasao	--	--	--	--	--
17	Cachar	--	--	--	--	--
18	Karimganj	Tributary dyke	B/B of river Longai from Patharkandi to NilambazarPh - I (L/B)	1	1	30
		Tributary dyke	Singla R/B from Phanairbond to Dullavpur	1	2	35
19	Hailakandi	--	--	--	--	--
20	Bongaigaon	--	--	--	--	--
21	Chirang	--	--	--	--	--
22	Kamrup	Tributary dyke	L/B embankment of Puthimari	1	2	110
		Tributary dyke	R/B embankment of Puthimari	1	1	180
		Tributary dyke	Bornadi R/B embkt.	1	1	15
23	Kamrup (M)	Brahmaputra dyke	B/dyke from Khanamukh to Majirgaon	1	1	30
24	Nalbari	Tributary dyke	L/B of Mora Pagladia embankment	1	2	325
		Tributary dyke	Nadia L/B	1	2	100
25	Baksa	Tributary dyke	Puthimari R/B	1	1	250
26	Darrang	Brahmaputra dyke	Kuraa Ring Bund	1	1	60
		Tributary dyke	Nonoi R/B Embkt	1	1	50
		Tributary dyke	Nonoi L/B Embkt	1	1	45
27	Udalguri	--	--	--	--	--
28	Biswanath	Tributary dyke	L/B of Brahmanjan	1	1	50
29	Charaideo	--	--	--	--	--
30	Hojai	--	--	--	--	--
31	Majuli	--	--	--	--	--
32	South Salmara	--	--	--	--	--
33	West Karbi Anglong	--	--	--	--	--
Total				22	38	2121

Source : Office of the Chief Engineer, Water Resource Department, Assam

Table-2

ACHIEVEMENT OF WATER RESOURCE DEPARTMENT IN ASSAM

Nature of Work	Total upto 2018-19	DURING 2019-20		Total upto 2019-20
		Target	Achievement	
1	2	3	4	5
Construction of Embankments (Km.)	4486.44	-	-	4486.44
Anti-Erosion and Town Protection Works (Nos.)	1063	44	44	1107
Construction of Major Sluice (Nos.)	101	3	3	104
Construction of Minor Sluice (Nos.)	545	-	-	545
Drainage Channel (km)	892.216	-	-	892.216
Raising & Strengthening of Embankment (Km.)	897.614	11.878	11.878	909.492

Table - 3

REGIONWISE LOSS OF HUMAN LIVE, LIVESTOCK, AGRICULTURE AND PROPERTY (HOUSE DAMAGED IN FLOOD) DUE TO DISASTER IN ASSAM DURING 2019

Regionwise Division of the State	Human Live Lost (In Nos.)					Livestock Lost in Nos		Livestock Lost (in Rs. Lakh)	Agriculture (In Rs. lakh)	Property lost (House damaged in Flood) (In Rs. lakh)
	Flood	Thunder-strom	Lightening	Land Slide	Others	Cattle	Poultry			
Lower Assam (Covering 13 Nos. of districts)	46	2	22	1	0	80	1000	7.49	7340.2	7185.12
Upper Assam (covering 11 Nos. of districts)	22	7	9	0	0	124	556	28.99	3626.58	683.36
Middle Assam (covering 3 Nos. of districts)	29	0	8	0	0	39	0	5.74	4299.08	737.06
Hill Districts (Covering 3 Nos. of districts)	2	0	0	0	0	0	0	0	0	2077.82
Barak Valley Districts (Covering 3 Nos. of districts)	3	2	6	0	0	7	0	2.05	488.74	60.94
Assam	102	11	45	1	0	250	1556	44.27	15754.6	10744.3

Table - 4

RIVER BANK PLAIN AND HILL REGIONWISE LOSS OF HUMAN LIVE, LIVESTOCK, AGRICULTURE AND PROPERTY (HOUSE DAMAGED IN FLOOD) DUE TO DISASTER IN ASSAM DURING 2019

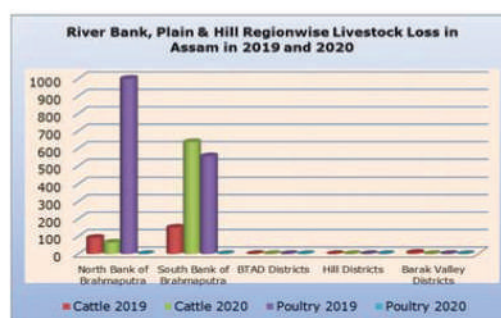
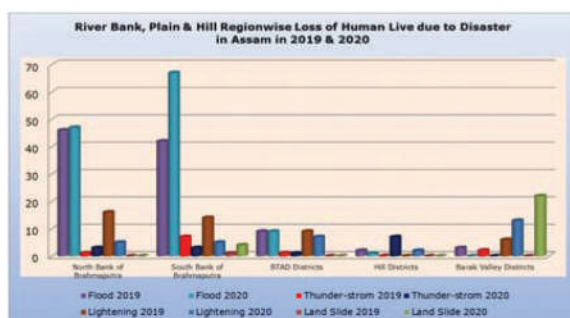
Regionwise Area	Human Live Lost (in Nos.)					Livestock Lost (in Nos)		Livestock Lost (in Rs. Lakh)	Agriculture (in Rs. lakh)	Property lost (House damaged in Flood) (in Rs. lakh)
	Flood	Thunder-strom	Lightening	Land Slide	Others	Cattle	Poultry			
North Bank of Brahmaputra	46	1	16	0	0	92	1000	10.48	8426.47	5936.62
South Bank of Brahmaputra	42	7	14	1	0	151	556	31.74	5174.75	2246.74
BTAD Districts	9	1	9	0	0	0	0	0	1664.64	422.18
Hill Districts	2	0	0	0	0	0	0	0	0	2077.82
Barak Valley Districts	3	2	6	0	0	7	0	2.05	488.74	60.94
Assam	102	11	45	1	0	250	1556	44.27	15754.6	10744.3

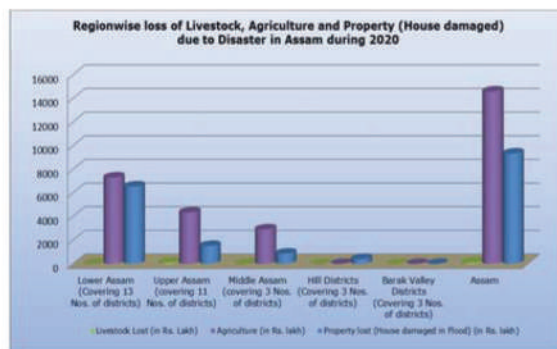
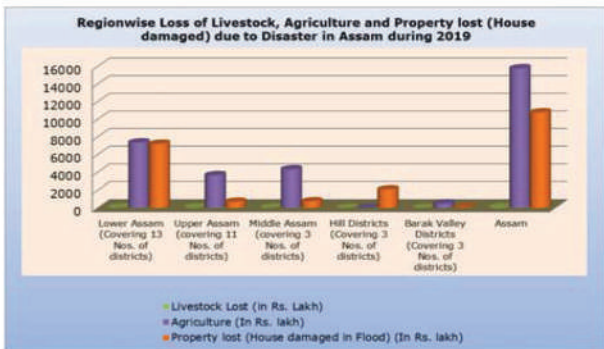
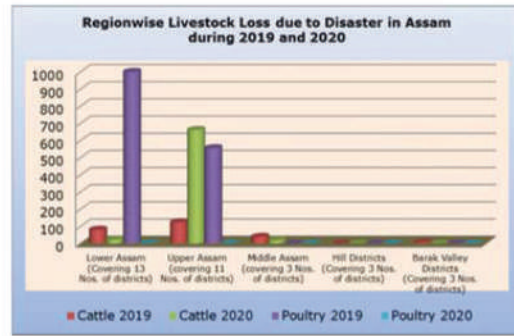
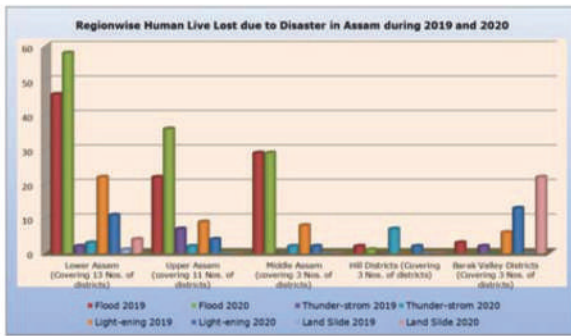
Table – 5
REGIONWISE LOSS OF HUMAN LIVE, LIVESTOCK, AGRICULTURE AND PROPERTY
(HOUSE DAMAGED IN FLOOD) DUE TO DISASTER IN ASSAM DURING 2020

Regionwise Division of the State	Human Live Lost (in Nos.)					Livestock Lost in Nos		Livestock Lost (in Rs. Lakh)	Agriculture (in Rs. lakh)	Property lost (House damaged in Flood) (in Rs. lakh)
	Flood	Thunder-strom	Lighten- ing	Land Slide	Others	Cattle	Poultry			
Lower Assam (Covering 13 Nos. of districts)	58	3	11	4	0	22	0	3.75	7307.31	6547.9
Upper Assam (covering 11 Nos. of districts)	36	2	4	0	0	662	0	96.72	4356.22	1515.34
Middle Assam (covering 3 Nos. of districts)	29	2	2	0	0	18	0	1.56	2923	871.56
Hill Districts (Covering 3 Nos. of districts)	1	7	2	0	0	0	0	0	0	401.26
Barak Valley Districts (Covering 3 Nos. of districts)	0	0	13	22	0	0	0	0	0	0
Assam	124	14	32	26	0	702	0	102.03	14586.53	9336.06

Table – 6
RIVER BANK PLAIN AND HILL REGIONWISE LOSS OF HUMAN LIVE, LIVESTOCK, AGRICULTURE AND PROPERTY (HOUSE DAMAGED IN FLOOD) DUE TO DISASTER IN ASSAM DURING 2020

Regionwise Area	Human Live Lost (in Nos.)					Livestock Lost (in Nos)		Livestock Lost (in Rs. Lakh)	Agriculture (in Rs. lakh)	Property lost (House damaged in Flood) (in Rs. lakh)
	Flood	Thunder- strom	Lighten- ing	Land Slide	Others	Cattle	Poultry			
North Bank of Brahmaputra	47	3	5	0	0	65	0	13.5	6774.82	4937.36
South Bank of Brahmaputra	67	3	5	4	0	637	0	88.53	6481.22	3514.83
BTAD Districts	9	1	7	0	0	0	0	0	1330.49	482.61
Hill Districts	1	7	2	0	0	0	0	0	0	401.26
Barak Valley Districts	0	0	13	22	0	0	0	0	0	0
Assam	124	14	32	26	0	702	0	102.03	14586.53	9336.06





Annexure-I
LOSS DUE TO DISASTER IN ASSAM DURING 2019

Sl. No.	District	Human Live Lost (In Nos.)					Livestock lost in Flood (Nos)		Livestock Lost in Flood	Agriculture in Flood	Property lost (House damaged in Flood)
		Flood	Thunde-rstrom	Lighten-ing	Land Slide	Others	Cattle	Poultry	(Rs. Lakh)	(In Rs. lakh)	(Rs. In Lakh)
1	2	3	4	5	6	7	8	9	10	11	12
1	Kokrajhar	1	0	6	0	0	0	0	0	222.45	30.12
2	Dhubri	12	0	6	0	0	0	0	0	1042.61	1232.88
3	Goalpara	3	0	0	0	0	0	0	0	1189.33	291.9
4	Barpeta	16	1	3	0	0	0	0	0	1976.24	3874.46
5	Morigaon	26	0	3	0	0	31	0	3.58	1854.7	42.76
6	Nagaon	3	0	5	0	0	0	0	0	510.16	630.4
7	Sonitpur	3	0	0	0	0	0	0	0	463.56	89.6
8	Lakhimpur	0	0	4	0	0	4	0	0.83	606.61	4.23
9	Dhemaji	7	0	1	0	0	0	0	0	769.54	18.83
10	Tinsukia	0	2	0	0	0	0	0	0	77.04	0
11	Dibrugarh	0	4	0	0	0	6	0	1.51	297.84	125.61
12	Sivasagar	0	0	1	0	0	0	0	0	62.06	1.75
13	Jorhat	2	0	1	0	0	0	0	0	307.54	55.71
14	Golaghat	5	1	0	0	0	114	556	26.65	395.72	344.23
15	Karbi- Anglong	1	0	0	0	0	0	0	0	0	0.29
16	Dima Hasao	1	0	0	0	0	0	0	0	0	2077.27
17	Cachar	2	1	5	0	0	0	0	0	3.06	9.02
18	Karimganj	0	1	1	0	0	7	0	2.05	406.46	5.74
19	Hailakandi	1	0	0	0	0	0	0	0	79.22	46.18
20	Bongaigaon	1	0	0	0	0	35	1000	5.33	396.91	361.2
21	Chirang	0	1	1	0	0	0	0	0	415.21	341.78
22	Kamrup	1	0	4	0	0	0	0	0	350.16	410.66
23	Kamrup (M)	2	0	0	1	0	0	0	0	39.61	5.66
24	Nalbari	2	0	0	0	0	45	0	2.16	640.17	258.46
25	Baksa	5	0	0	0	0	0	0	0	799.62	27.57
26	Darrang	0	0	0	0	0	8	0	2.16	1934.22	63.9
27	Udalguri	3	0	2	0	0	0	0	0	227.36	22.71
28	Biswanath	5	0	2	0	0	0	0	0	317.97	14.33
29	Charaideo	0	0	0	0	0	0	0	0	40.53	0
30	Hojai	0	0	0	0	0	0	0	0	90.59	10.34
31	Majuli	0	0	0	0	0	0	0	0	238.11	18.73
32	South Salmara	0	0	0	0	0	0	0	0	0	327.72
33	West Karbi-Anglong	0	0	0	0	0	0	0	0	0	0.26
	Assam	102	11	45	1	0	250	1556	44.27	15754.6	10744.3

Source: Assam State Disaster Management Authority (ASDMA)

Annexure-II

LOSS DUE TO DISASTER IN ASSAM DURING 2020 (TILL November, 2020)

Sl. No.	District	Human Live Lost (In Nos.)					Livestock lost in Flood (Nos)		Livestock Lost in Flood	Agriculture in Flood	Property lost (House damaged in Flood)
		Flood	Thunde-rstrom	Lighten-ing	Land Slide	Others	Cattle	Poultry	(Rs. Lakh)	(In Rs. lakh)	(Rs. In Lakh)
1	2	3	4	5	6	7	8	9	10	11	12
1	Kokrajhar	7	0	4	0	0	0	0	0	37.39	20.71
2	Dhubri	5	1	2	0	0	0	0	0	923.58	240.83
3	Goalpara	12	1	0	0	0	0	0	0	1220.28	1200.6
4	Barpeta	21	0	1	0	0	20	0	3.42	1902.02	3353.84
5	Morigaon	15	0	0	0	0	13	0	0.39	1255.14	148.07
6	Nagaon	13	0	2	0	0	0	0	0	948.35	512.62
7	Sonitpur	1	0	1	0	0	0	0	0	292.69	20.71
8	Lakhimpur	6	0	0	0	0	1	0	0.03	353.76	50.79
9	Dhemaji	4	0	0	0	0	2	0	0.55	1133.14	427.18
10	Tinsukia	3	0	0	0	0	0	0	0	35.37	6.78
11	Dibrugarh	7	1	0	0	0	294	0	72.94	426.02	840.69
12	Sivasagar	5	0	0	0	0	0	0	0	295.15	13.5
13	Jorhat	0	0	2	0	0	0	0	0	401.33	6.21
14	Golaghat	6	1	1	0	0	330	0	15.2	208.32	77.91
15	Karbi-Anglong	0	0	2	0	0	0	0	0	0	0
16	Dima Hasao	0	0	0	0	0	0	0	0	0	102.99
17	Cachar	0	0	6	8	0	0	0	0	0	0
18	Karimganj	0	0	7	6	0	0	0	0	0	0
19	Hailakandi	0	0	0	8	0	0	0	0	0	0
20	Bongaigaon	4	0	1	0	0	0	0	0	629.18	579.14
21	Chirang	0	0	2	0	0	0	0	0	417.47	357.84
22	Kamrup	3	0	0	0	0	0	0	0	789.76	35.49
23	Kamrup (M)	1	0	0	4	0	0	0	0	130.62	0.45
24	Nalbari	2	0	0	0	0	2	0	0.33	227.39	46.33
25	Baksa	1	0	1	0	0	0	0	0	839.64	89.56
26	Darrang	1	2	0	0	0	5	0	1.17	719.51	210.87
27	Udalguri	1	1	0	0	0	0	0	0	35.99	14.5
28	Biswanath	3	0	0	0	0	6	0	1.24	250.77	1.6
29	Charaideo	0	0	0	0	0	0	0	0	12.5	0.98
30	Hojai	1	0	0	0	0	0	0	0	629.39	64.88
31	Majuli	0	0	0	0	0	29	0	6.76	330.28	5.09
32	South Salmara	1	0	0	0	0	0	0	0	141.49	607.63
33	West Karbi-Anglong	1	7	0	0	0	0	0	0	0	298.27
	Assam	124	14	32	26	0	702	0	102.03	14586.53	9336.06

Source : Assam State Disaster Management Authority (ASDMA)

**BUDGET DOCUMENT FOR THE YEAR 2019-20 AND 2020-21
OF WATER RESOURCE (FLOOD CONTROL) DEPARTMENT, ASSAM**

The Water Resource Department enables optimum management of floods, works proactively to prevent and control river bank erosion as well as being entrusted with the responsibility of minimizing the impact of floods on life and property of the citizens of our state. The Water Resource Department aims at optimal sustainable protection of the state of Assam against flood and river bank erosion including providing relief to the drainage congested areas of the state.

In 2019, 38 breaches and cuts occurred at different embankments of Brahmaputra, Barak and their tributaries during the devastation caused by annual flood water. An amount of Rs. 350 Crores has been sanctioned for taking long-term steps to repair all the breaches and mitigating the breaches during flood incidents in 2019. It is also mentioned that under the signature project of Kollong Rejuvenation a DPR amounting to Rs. 135.40 Crores has been prepared by WAPCOS and a total amount of Rs. 948 Crores has been allocated for Water Resource Department for the year 2020-21.

CHAPTER –VIII

LIVESTOCK, ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

ANIMAL HUSBANDRY:

Animal Husbandry is potentially one of the most important sectors for rapid socio economic development of the State. Livestock is basically a component of production system and is contributing to sustainable agricultural system. 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. Various steps have already been undertaken by the Government to achieve the objectives of enhancing productivity of the sector and create gainful employment opportunities. The initiatives in this sector are expected to contribute more towards the stock of domestic product of the state.

LIVESTOCK POPULATION AS PER 19TH LIVESTOCK CENSUS:

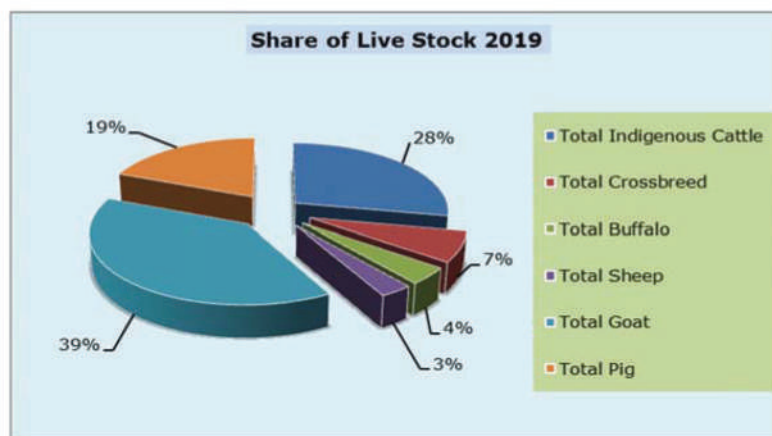
According to the 20th Livestock Census 2019 the cattle population constitute the largest group with more than ten million. Out of the total cattle indigenous/non-descript cattle comprises 1.01 crore while cross breed cattle population comprises 7.6 lakhs. Buffaloes comprise 4.2 lakhs while sheep was counted to become 3.3 lakhs numbers. Goat and Pig comprises about 43 lakhs and 20 lakhs numbers respectively during 2019 livestock census.

TABLE – 8.1

LIVESTOCK AND POULTRY POPULATION IN ASSAM
AS PER 20TH CENSUS (in lakh)

Sl. No.	Livestock species	2019 (in lakh)
1	Total cattle	109.09
	a. Crossbreed cattle	7.69
	b. Indigenous cattle	101.4
2	Buffaloes	4.22
3	Sheep	3.32
4	Goat	43.15
5	Pigs	20.99
6	Duck	120.19
7	Poultry	331.06

Source: Directorate of Animal Husbandry & Veterinary, Assam.



The above figure shows that the total live stock cattle (both crossbreed & indigenous) constitutes 35% and Goat constitutes highest share 39%, Pig shows 19%, Cross Breed shows 7%. Again buffalo and Sheep constitute 4% and 3% shares respectively.

TABLE – 8.2
PRODUCTION TREND OF LIVE STOCK PRODUCTS IN ASSAM

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20(P)
Milk (million litres)	838	845	857	873	888	904	925	945	975
Egg (million nos)	471	471	472	473	474	477	495	501	514
Meat (⁰⁰⁰ tonnes)	34.19	36.63	38.34	42	45	47	48.43	50.42	52.94

Source: Directorate of Animal Husbandry & Veterinary Department, Assam.

The annual average growth of milk is 0.3%, egg is 0.2% and meat is 0.4% respectively in the year 2019-20 (P) over the previous year 2018-19.

SOME IMPORTANT ACTIVITIES

A. BREED UP-GRADATION THROUGH ARTIFICIAL INSEMINATION PROGRAMME:

The state despite having sizeable number of cattle population, milk production in the state is not up to the level of expectation. The reason being a significant proportion of cattle population in the state are of non-descript type. Implementation of World Bank funded scheme as well as the Scheme under National Project on Cattle-Buffalo Breeding [NPCBB] although have assisted to increase milk production in the State, achievements in case of production of cross breed animal is not satisfactory. At present, breed up-gradation programme is carried out under AACP, RKVY and NPCBB Schemes.

The State Animal Husbandry & Veterinary Department has proposed to incorporate the following activities to enhance milk production:

- A modern frozen semen production centre has been set up in Barpeta to enhance semen production of quality breed;
- Out sourcing of A.I. Services to boost artificial insemination activities;

- Improvement of Animal Health Services through holding of training and awareness campaign, organizing Health Camps;
- Induction of High Yielding indigenous breed of cattle like Sahiwal, Red Sindhi, etc in addition to routine A.I. activities;
- Stall feeding practices and quality animal rearing to be promoted on cluster basis to ease milk collection as well as to improve the network of A.I. activities.

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

A significant proportion of population in Assam for whom pig rearing is an integral part of their life. The present population scenario of pig in Assam comprises of largely non-descript local variety and a small proportion is of exotic hybrids and genetically graded pigs. The schemes in operation under pig development are:

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

C. GOVT PIG FARMS:

At present, the A. H. & Veterinary Department of the state has the following Pig Farms:

1. Base Pig Breeding Farm, Khanapara, Guwahati-22, Kamrup (Nucleus Pig Breeding Centre) (Rani Wing)
2. Base Pig Breeding Farm, Khanapara, Guwahati-22, Kamrup (Khanapara Wing)
3. Govt. Pig Breeding Farm cum Demonstration Farm, Sonapur, Kamrup
4. Nucleus Pig Breeding Centre, Morigaon
5. Base Pig Breeding Farm, Bajalbari, Titabor, Jorhat
6. Govt. Pig Breeding Farm, Khanikar, Dibrugarh
7. Govt. Pig Breeding Farm, Kokrajhar
8. Govt. Pig Breeding Farm, Diphu, Karbi Anglong
9. Govt. Pig Breeding Farm, Dongkamokam, Karbi Anglong
10. Govt. Pig Breeding Farm, Sontila, Dima Hasao
11. Govt. Pig Breeding Farm, Umrangsu, Dima Hasao
12. Govt. Pig Breeding Farm, Sonaigaon, Udalguri
13. Nucleus Pig Breeding Centre, Kathiatoli, Nagaon
14. Govt. Pig Breeding Farm, Kopahtoli, Halowating, Sivasagar
15. Govt. Pig Breeding Farm, Gargaon, Sivasagar
16. Govt. Pig Breeding Farm, Khelowa, Sivasagar
17. Govt. Pig Breeding Farm, Dirpai, Gogamukh, Dhemaji
18. Govt. Pig Breeding Farm, Kuchdhowa, Goalpara

19. Govt. Pig Farm, Deyangmukh, Dima Hasao

At present 16 of the above mentioned farms are operational. The department is taking every possible step to make all the farms functional to its full strength. To achieve this goal the state is receiving funds under the schemes of NLM, RKVY, APART, SOPD-G, IPDPNE, NEC, RIDF etc.

D. PIG DEVELOPMENT SCHEME FOR FARMERS:

Pig rearing helps to bring additional income to rural families (primarily the tribal communities) and supplement household expenses. This initiative requires little capital. The A. H. & 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 anthropo-centric approach to the farmers.

During past 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 woman folk. In coming years too, more farmer-centric approach has been proposed under NLM, RKVY, APART, SOPD-G, IPDPNE, NEC, Assam Milk, Meat and Egg Mission (AMMEMS) under CMSGUY, RIDF etc. where besides giving emphasis on production and productivity, emphasis would be placed on marketing of produce by organizing the pig rearers into organized and registered entity.

SCHEMES PROPOSED UNDER DIFFERENT SCHEMES:

THE FOLLOWING FARMS ARE PROPOSED UNDER NATIONAL LIVESTOCK MISSION (NLM):

1. Nucleus Pig Breeding Farm for Indigenous Stock (Doom) at Agomoni, Dhubri for 100 pigs (20:80)
2. Multiplier Pig Breeding Farm, Bongaigaon
3. Multiplier Pig Breeding Farm, Golaghat
4. Multiplier Pig Breeding Farm, Lakhimpur
5. Base Pig Breeding Farm, Khanapara, Guwahati, Kamrup under IPDPNE
6. Pig Breeding Farm, Khanikar, Dibrugarh under IPDPNE
7. Pig Breeding Farm, Kuchdhowa, Goalpara under IPDPNE

The following farms are proposed under NEC:

1. Nucleus Pig Breeding Farm, Sonitpur for Exotic Breed
2. Multiplier Pig Breeding Farm, Darrang
3. Multiplier Pig Breeding Farm, Biswanath
4. Multiplier Pig Breeding Farm, Lakhimpur

RKVY: (RASHTRIYA KRISHI VIKASH YOJANA)

The following works have been proposed under RKVY during 2019-20:

1. Rearing of Pig through Pig Rearers Group (PRG) in different districts of the state. A total of 2000 units of 10 members each will be supported and all the members will be covered in 20 Nos. of Farmer Producer Organization (FPO)/ Farmer Producer

Company (FPC). The districts proposed for the activity will be Golaghat, Goalpara, Jorhat, Sonitpur, Dibrugarh, Tinsukia, Cachar, Morigaon, Bongaigaon, Dhemaji, Lakhimpur and Sivasagar.

Assam Milk, Meat and Egg Mission under CMSGUY:

(CHIEF MINISTERS SAMAGRA GRAMYA UNNAYAN YOJANA):

1. Intensive Pig Development Project in different districts of the state has been proposed covering the rural poor.
2. Farmer Producer Organization (FPO)/Farmer Producer Company (FPC) for Piggery Development in Assam under which 30 FPOs has been proposed covering 23 districts of the state.

APART: (ASSAM AGRIBUSINESS & RURAL TRANSFORMATION PROJECT)

1. Cluster approach will be adopted for pig development in the state under APART. A total of 59390 families will be covered under the project. All the families will be covered in 56 clusters. The clusters will be covered by 30 FPOs.

State Own Priority Development- G :

The following works have been proposed under RKVY during 2019-20:

1. (FPO)/ Farmer Producer Company (FPC). The districts proposed for the activity are Nagaon, Dibrugarh, Morigaon and Dhemaji. Rearing of Pig will be through Pig Rearers Group (PRG) in different districts of the state. A total of 2000 units of 10 members each are to be supported and all the members are to be covered in 20 Nos. of Farmer Producer Organization.

E. FODDER DEVELOPMENT

Feed and fodder are prime contributing factors for the growth of livestock sector. It is estimated that feed and fodder account for 60-70 percent of the total cost of livestock production. As high rainfall ensures availability of grass and vegetation in the state, the farmers are not habituated with fodder cultivation. However, with massive land use conversion in the state, the farmers have started to face the crisis of not having ample grazing land. To meet the demand, the Department has planned to initiate fodder cultivation using institutional waste land and strengthen and revamp the Regional Feed Testing Laboratory, located at Khanapara. The plan is also to establish Silage making unit in each state owned livestock farm for demonstration purpose.

The Animal Husbandry and Veterinary department, Assam has also proposed establishment of 6(six) feed mill and fodder block making units in PPP mode.

F. COORDINATED CATTLE BREEDING PROJECT (S.E)

Productivity is though low, the non- descriptive Indigenous cattle & Buffaloes are the main source of milk production in the state. The priority of the hour is genetic improvement to enhance milk production.

C.C.B.P (S.E) Phase-I was launched under NPCBB with the objective to produce milch cattle economically in large numbers for enhancement of milk production to be achieved through infusion of exotic inheritance. The project is also to combine productivity and adaptability to disease resistance including reasonable draught ability and adjust to the local environment.

TABLE – 8.3
CATTLE BREEDING ACTIVITIES
UNDER CO-ORDINATED PROJECT 2018-19

Year	Physical Target	Physical Achievement
2007-08, 2008-09	Collection of Semen	Started
2009-10, 2010-11	Distribution of Semen in FPR Area	Started
2011-12, 2012-13	No. of A.I. done	1,750 Nos. 750 Nos.
2013-14 to 2019-20	No. of Calf born	65 Nos. 42 Nos.

G. PHYSICAL AND FINANCIAL ACHIEVEMENTS OF NERDDL & ANIMAL HEALTH CENTRE FOR 2019-2020 and Action Plan for 2020-21

PHYSICAL PROGRESS:

The NERDDL (North Eastern Regional Disease Diagnostic Laboratory) provides referral and consultancy services to the state diagnostic laboratories of the region for economically important livestock and poultry diseases, as and when needed. The NERDDL official visits the state laboratories in Meghalaya, Manipur, Arunachal Pradesh and Mizoram and provides necessary guidance. Besides these NERDDL tests the following specimen as part of its routine work.

ASSAM LIVESTOCK DEVELOPMENT AGENCY (ALDA)

ALDA is a Central Government as well as State Government funded Semi-autonomous State Level registered society as "State Implementing Agency" (SIA) created in 2004-05 under Society Registration Act, 1860 to implement the Centrally sponsored scheme namely NPCBB initially. ALDA has its own rules and regulations, Governing Body (GB) Members, Executive Committee and Technical Committees. The ALDA has a separate office; however, officers and staff are placed from the A.H. & Veterinary Deptt. itself on deputation/ placement. It charges for the goods and services (exclusively A.I Service) from the farmers to remain commercially viable. The goods and services provided by ALDA conform to the breeding policy and requirements of the State.

OBJECTIVE OF ALDA

1. Production of clean & quality Frozen semen
2. Expansion of the state cattle breeding network
3. Establishment of Liquid Nitrogen(LN) grid in the state - Strengthen & streamline the Frozen semen & Liquid nitrogen distribution network
4. Capacity building of AI service delivery network.
5. Creation of awareness among farmers
6. To conserve & improve locally available Swamp buffaloes.
7. Self employment generation synergistically with increased AI coverage.

Semen Distribution Network

1. ALDA presently has 17 regional Frozen Semen Banks (FSB) with 6000/3000 lit bulk LN silos to maintain buffer stock of LN & FS.
2. A new FSB has been established at Akajan to cover 20 AI centres of Dhemaji district.
3. 32 no of LN vans were deployed for carrying semen from the regional FSB to all rural and interior AI centres of the state to facilitate AI at farmer's doorstep and 10 vehicles were distributed in the current financial year for more coverage.
4. A new FSB has been established at Akajan to cover 20 AI centers of Dhemaji district.
5. 10 Semen & LN distribution vans were distributed to Tinsukia, Jorhat, Nagaon, Khanapara, Silchar, Howly, Tezpur, North Lakhimpur and Akajan during December, 2019.

FROZEN SEMEN DISTRIBUTION

(Last Five Financial Years)

Year	2015-16	2016-17	2017-18	2018-19	2019-20
Frozen Semen distribution	229815	433938	438907	445377	443173

Capacity Building

1. 71 Vety officers (VO) were trained on Field AI management, Infertility, AI data management, semen production, Quality control, Breeding bull management and fodder production.
2. 3450 para-vets were provided with refreshers training on AI service delivery, Cold chain of the Frozen semen, economic handling of LN etc. In 2019-20 another 900 Veterinary Field Assistant (VFA) were trained.
3. 20 SSB para-vets trained in 2 batches on AI service delivery, economic handling of LN and production of semen at ALDA HQ to carry forward the AI service in to the farmers of Assam Boarder areas.
4. 5 officers were trained on implementation of Information Network on Animal Productivity & Health (INAPH) at NDDDB , Anand as TOT to train up other officers and para-vets of the state. Another 66 District Nodal Officers were trained 2019-20
5. 33 Nos of Vterinary Cattle Sector officers were trained on Herd Registration under DADF in 2019-20.
6. As per Govt of India Guideline ALDA is creating Self Employment Generation by induction of MAITRIs (Maharashtra Industry, Trade and Investment facilitation Cell) in the field. Last year 482 nos. were trained and engaged in their respective fields. In the current year another 1500 is targeted to be trained.

TABLE – 8.4
ARTIFICIAL INSEMINATION PROGRESS OF THE STATE SINCE INCEPTION OF ALDA
(Last Five Financial Years)

Financial Years	A.I. Done	Calf Borne
2015-16	217247	110702
2016-17	301099	87201
2017-18	352389	137861
2018-19	370457	146682
2019-20	419281	165829

Government of India established the Institute of Veterinary Biological (IVB) at Chenikuthi, Guwahati in the year 1950-51 with a license to produce goat tissue vaccine (wet type) against a contagious viral disease of cattle and buffaloes called Rinderpest (RP) or Cattle plague under the Rinderpest Eradication Programme. In the year 1957-58 the liquid goat tissue RP vaccine was replaced by Freeze Dried (FD) RP vaccine as per recommendation of National Project on Rinderpest Eradication (NPRE) and accordingly Assam started to procure the F.D.R.P. vaccines from Bengal Veterinary College, Calcutta and Indian Veterinary Research Institute (IVRI), Izatnagar, Uttar Pradesh. Realizing various problems and difficulties of procuring vaccines from other states and institutions, in 1966-67 the IVB was shifted to Khanapara under a scheme titled as "Expansion of Biological Production Section" for large scale vaccine production. The scheme started working in the year 1970 with the production of F.D.R.P. and other viral and bacterial vaccines. Later on it was raised to the regional status through financial assistance from North Eastern Council (NEC) during the 5th and 6th five year plan and till date this is the only vaccine producing centre in the entire NE region. Today, the Institute supplies the vaccines not only to the NE states but also to the other states like Uttar Pradesh, West Bengal, Jammu & Kashmir, Andaman Nicobar island and several defense organizations. The neighbouring country of Bhutan has also received support from this institute.

Aim and Objective:

1. To produce quality vaccines against the livestock and poultry diseases commonly prevalent in the North Eastern Region.
2. To ensure maximum possible protection to the livestock and birds having crossbred exotic germ plasm.
3. To provide sufficient confidence to the breeder of the region to adapt Animal husbandry as an industry for their economic upliftment with appropriate health coverage.
4. To provide necessary protection of health of the livestock and birds during natural calamities.
5. To provide necessary health coverage to the human population against zoonotic diseases by vaccinating the livestock and birds.

6. To keep co-ordination with various research laboratories and organization for recent development in vaccine production technology.
7. To introduce new vaccines in the Veterinary field from laboratory.

Facilities available:

1. Bacterial vaccine section.
2. Viral vaccine section.
3. Antirabic section.
4. Quality and Standardization section.
5. Small animal laboratory farm.
6. Storage and issue section.

PRESENT STATUS:

a) PRODUCTION :

The IVB has been producing vaccine since its inception in 1950. The quantity of production, procurement & distribution w.e.f. 2017-18, 2018-19 and 2019-20 has been represented as follows:-

i) Total production of Vaccine	:	11,51,670 doses
ii) Total procurement of vaccine	:	1,22,29,900 doses
iii) Total distribution of vaccine	:	1,34,33,360 doses

b) The IVB has well developed infrastructure for production of various bacterial and viral Vaccines. The need however, is to cope with the modern vaccine production technology of contemporary times.

c) MANPOWER :

At present, the institute has altogether 103 post (technical 49 & non-technical 54) in various disciplines. Altogether 10 technical personnel of the institute received training in specific discipline at IVRI (Indian Veterinary Research Institute), Izatnagar, UP. The technical personnel are responsible for producing vaccines as per norms.

ASSISTANCE TO STATES FOR CONTROL OF ANIMAL DISEASES (ASCAD) 2020-21

The Animal Husbandry & Veterinary Department, Assam launched the central aided project ASCAD since the year 2003-2004 to control / eradicates the diseases in livestock & poultry through mass vaccination, treatment, proper monitoring and surveillance, human resource development and conducting public awareness programs. To achieve these objective oriented goals the following strategies have continually been envisaged:-

1. Modernization of IVB for production of quality vaccine as per international standard to meet the increased demand of vaccines.
2. Establishment / Renovation of District Disease Diagnostic Laboratories for disease diagnosis, monitoring & surveillance of disease status.
3. Disease surveillance and mapping.

TABLE 8.5
Disease Status of Assam
During the year 2015-16 to 2019-20 (Outbreak)

Sl. No.	Disease Name	2015-16	2016-17	2017-18	2018-19	2019-20
1	F.M.D.	74	45	53	52	7
2	Anthrax	2	2	2	5	1
4	PPR	3	3	10	16	8
5	Brucellosis	8	4	11	8	3
6	H.S.	9	13	12	20	14
7	B.Q.	24	21	11	14	10
9	Enterotoxaemia	24	9	13	20	15
10	Goat Pox	3	3	1	0	1
11	Duck plague	17	6	7	11	8
12	Ranikhet Disease	72	109	105	31	45
13	Classical Swine Fever	20	18	23	21	19

INFECTIOUS DISEASES DURING 2019-20:

The geo-climatic condition of Assam is most favourable for growth and development of livestock sector, but simultaneously it is also a paradise of various microbes and parasites, many of which create problems for developmental activities of livestock sector causing serious economic losses. The major infectious diseases that occur in Assam are Hemorrhagic Septicemia, Black Quarter, Anthrax, Ranikhet disease, Duck Cholera, Duck Plague, Enterotoxaemia, Goat pox, Rabies, Parasitic infestation etc.

- (i) One identified disease – Hemorrhagic Septicemia (HS)
- (ii) Other identified diseases– B.Q, Anthrax, Goat pox, Enterotoxaemia, Ranikhet and Duck plague.

DISEASE STATUS

At present, HS and FMD are the two most pre-dominating animal diseases of the state in relation to the economy of the people. Out of four FMD serotypes prevailing in this state, the maximum number of outbreaks is found to be due to Type-'O'. Among the economically important diseases, Hemorrhagic Septicemia is considered to be one of the major diseases occurring mostly in the riverine areas of the state and causing substantial economic losses to the farmers in general. The disease occurs just at the beginning of the monsoon and during and after the flood. It occurs throughout the state but are more prevalent in the 23 flood affected districts out of 33 districts of the state and simultaneously the diseases like B.Q and Anthrax are also appears sporadically parallel to HS posing severe threat to the bovine population. Other major diseases that occur in Assam are Ranikhet disease, duck plague, enterotoxaemia, sheep and goat pox, fowl plague etc and many parasitic infestations.

Among all the livestock species pigs share a popular status in the region, due to its unique feed conversion efficiency, short generation interval and prolific breeding capacity. The North Eastern states of India constitute about one third of total pig population of India. But on the contrary this industry often experience severe economic setback owing to the prevalence of many bacterial and viral diseases of which Classical Swine fever is the major killer disease. Although the disease occurs in enzootic form it has become the main threat to the pig husbandry particularly in the areas of dense pig population.

The prevalence of parasitic infestations in livestock in Assam is very high and causes major economic loss to the livestock industry. The agro-climatic condition prevailing in Assam presents a very conducive environment for the growth and development of different species of helminthes as well as various vectors responsible for propagation of the parasites. Besides nematodes, various trematodes and cestodes like Fasciola, Amphistomes etc. are commonly prevalent parasitic diseases which pose a problem in the development of livestock industry in the state. The incidence rates of such infestations are found to be about 30% of total livestock population.

Besides these, various protozoan diseases are also recorded in sporadic manner. The diseases encountered are Coccidiosis, Piroplasmosis, Theileriasis, Babesiasis, Tripanosomiasis and Anaplasmosis. Protozoan diseases were also reported from wild animals procured by the Zoo Authority of the state. Since 2001, IBR is also detected in the imported Jersey herd as an emerging disease to this region. Recently PPR is detected in the goat and sheep. These diseases were not recorded earlier in the state and the present status of this disease needs to be ascertained. For this purpose specific kits will be procured to study the present status of IBR, PPR, PRRS etc in selected areas and there is need to establish animal quarantine facilities in international as well as in interstate borders.

AREAS/DISTRICT TO BE COVERED DURING 2020-21

All together 219 blocks and 26395 villages of 33 districts of the state have been brought under the umbrella of ASCAD programme.

a. Infrastructure facilities available and requirement in terms of delivery of vaccine:

The existing vaccine storage facility of Institute of Veterinary Biologicals can fulfill the need of the state. To maintain the cold chain up to the vaccine delivery stage refrigerator, bottle coolers, gel pack, cold box etc are also being provided to different district and sub-divisional Head Quarters, dispensaries, sub centers etc in phased manner.

INFORMATION ON BIOLOGICAL PRODUCTION UNITS/DISEASE DIAGNOSTIC LABORATORIES

Biological Production Unit:

The Institute of Veterinary Biologicals (IVB), Khanapara, Guwahati-22 was established in 1950. During the fourth and fifth five-year plan with the assistance of NEC it was brought into the existing status and producing different types of bacterial and viral vaccines. Since 2003-04 this unit has been supplying different vaccines to the state and

NE Region. With present infrastructure facilities this unit can produce around 50 lakh doses of different types of vaccines annually.

Disease Diagnostic Laboratories:

Animal Health Centre Khanapara Guwahati-22 was established in 1960 and commissioned in 1971. It is the core of disease diagnostic and monitoring unit of the state and is supported by 19 District Disease Diagnostic Labs viz-Dhubri, Goalpara, Kamrup (M), Morigaon, Mangaldoi, Nagaon, Jorhat, Tezpur, Lakhimpur, Dibrugarh, Sivasagar, Silchar, Karimganj, Golaghat, Nalbari, Barpeta, Diphu, Kokrajhar and Udalguri.

Control of emergent and exotic diseases (100%):

Assam lies in biological hot spot. Diseases like Bird Flu, IBR, PPR, PRRS etc are being detected from time to time and are effectively addressed. Presently an exotic disease viz. African Swine Fever (ASF) emerged during first part of 2020-21 in the state of Assam. It was recorded in the country for the first time. At present 7 epi-centres among 5 districts of Assam is affected. For addressing such event many a time there is need of providing compensation to the farmers. There is need of constant and continued vigilance including sero-monitoring. Moreover, there is need of a readily available contingent fund.

ESTIMATION OF MILK, MEAT AND EGG PRODUCTION (in million ltrs)

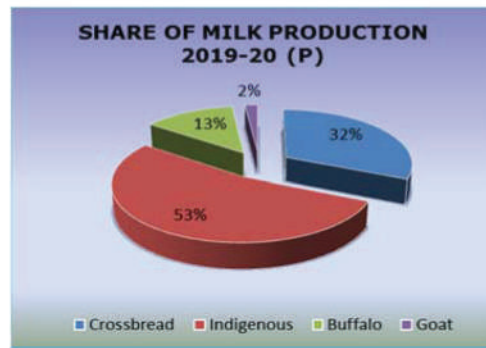
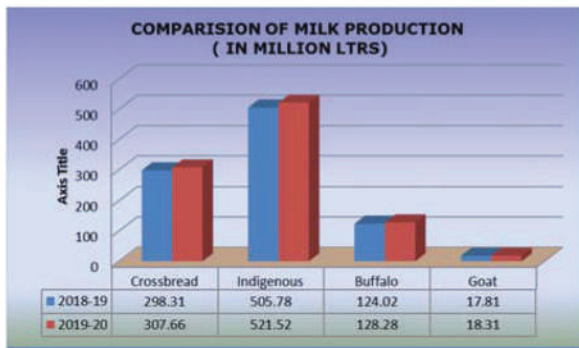
The total milk production of the state for the year 2019-20 was estimated at 975.79 Million Ltrs against 945.92 Million liters of the previous year. It reveals that the growth of milk production has increased by 3.16% over the previous year. Further during the year *Indigenous / Non descript* cattle milk is observed to have constituted 53% of the total milk production of the State while the contribution of *Crossbreed* cattle milk is around 31.53% and thus the cattle milk together contributes 84% to the total milk. *Buffalo* and *Goat* milk contributes 13% and 2% respectively to the total milk production.

The total meat production during 2019-20 is estimated at 52.94 thousand tones against 50.42 thousand tones of the previous year of 2018-19. It reveals that meat production in the state is estimated to have increased by 4.99 percent over the previous production of 2018-19.

The total number of eggs in the State for the year 2019-20 was estimated at 5148.74 lakh numbers against 5014.61 lakh numbers in 2018-19 showing a growth of about 2.7% over the year 2018-19.

Table 8.6
ESTIMATED MILK PRODUCTION OF ASSAM

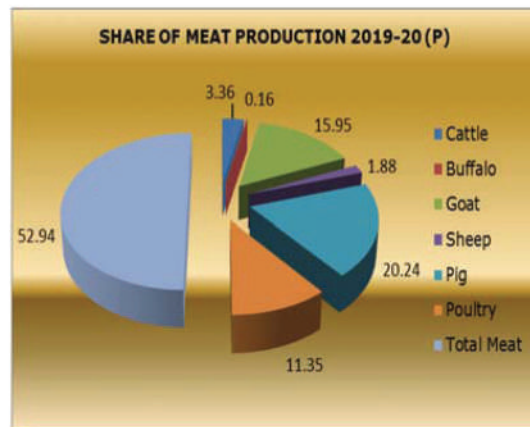
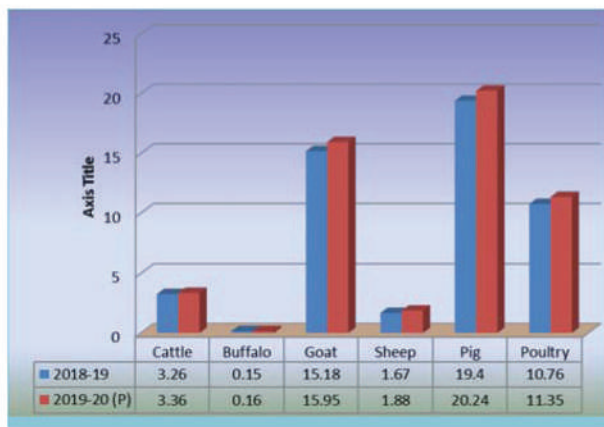
Period	Cattle		Overall	Buffalo	Goat	Grand Total
	Crossbreed Cattle	Idigenous Cattle				
2019-20 (P)	307.66	521.52	829.18	128.28	18.31	975.79
2018-19	298.31	505.78	804.09	124.02	17.81	945.92
% Change over 2018-19	3%	3.10%	3.10%	3.40%	2.80%	3.20%



MEAT PRODUCTION (000 TONNES)

ITEM	2018-19	2019-20 (P)
Cattle	3.26	3.36
Buffalo	0.15	0.16
Goat	15.18	15.95
Sheep	1.67	1.88
Pig	19.4	20.24
Poultry	10.76	11.35
Total Meat	50.42	52.94

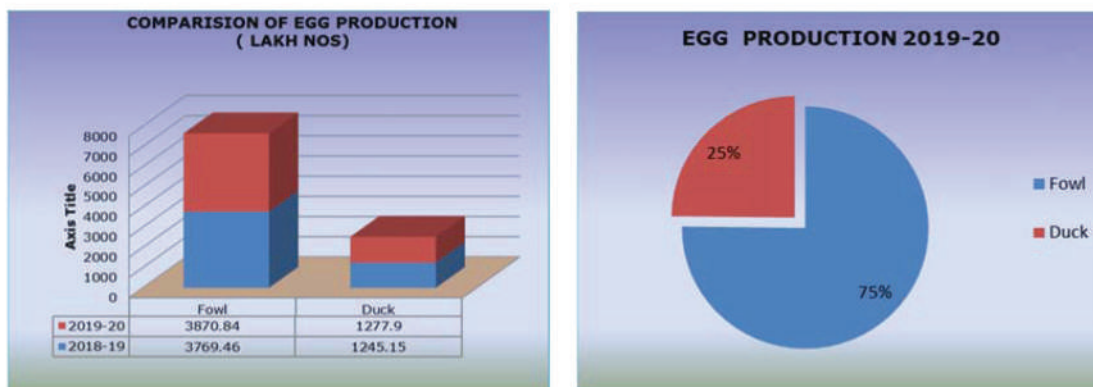
COMPARISION OF MEAT PRODUCTION (IN 000 Tonnes)



ESTIMATED EGG PRODUCTION OF ASSAM

Period	Fowl (in lakh nos.)	Duck (in lakh nos.)	Total Egg (in lakh nos.)
2019-20	3870.84	1277.90	5148.74
2018-19	3769.46	1245.15	5014.61
% Change over 2018-19	2.70%	2.60%	2.70%

SHARE OF EGG PRODUCTION DURING 2019-20



Source: Directorate of Dairy Development of Assam

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

ANIMAL HUSBANDRY AND VETERINARY COMPONENT

The Government of Assam through Government of India has applied for a credit of US\$200 million from the International Development Association (IDA) (a wing of the World Bank group), for implementation of the Assam Project on Agribusiness and Rural Transformation (APART), which is currently under preparatory stage.

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), of which female (percentage).

- **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 (Animal Husbandry and veterinary Department) 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)

APART Strategy- Pig Sector Intervention

- **Increased production through genetic improvement** of indigenous pigs through selective and crossbreeding – Induction of heterogeneous germplasm on cluster approach.
- **Address the issues related to feed shortage** and improvement of nutrient utilization for enhancing pig production-Ration balancing of locally available feed materials and production area specific low cost concentrate feed and production quality improvement to meet the market requirement.
- **Development of integrated pig health management Programme-** Pulse immunization of the pig herd against CSF & other diseases & regular deworming practices.
- **Post harvest management and value addition** of pork-Introduction of low cost slaughter houses, linkages of production clusters with modern processing houses, modern pork vending outlets, and transformation of the vendors.
- **Promote environment friendly and climate resilient pig farming-** Demonstration and adoption of climate resilient pig housing technology with improve manure management practices.
- **Promoting entrepreneurial development** in forward and backward front of pig production- Incentivizing the entrepreneurs to take up sectoral enterprises like feed production, meat processing & marketing, commercial pig breeding & fattening.
- Address the much needed issue of **Food safety** as per FSSAI norms from production, processing and value addition, cold chain maintenance upto retailing. Assessment of contaminants and residues in pork and formulate a standard SOP for reduction in pork for human consumption.
- **Knowledge, attitude & practice gap analysis** of the all the value chain actors, customized designing of training content for capacity building and massive awareness programme on good production practices & food safety along the value chain.
- Formation of **Farmer Producer Organization (FPO)** in production clusters to undertake the various activities in group basis and organized way which is difficult to perform by an individual farmer

1. PORK VALUE CHAIN (PVC) : Activities proposed :

1. Food safety: Consumer awareness
2. Traceability: To bring about transparency along the entire chain of pork production

3. Training need assessment & Capacity Building of market actors
4. Transformation of vendors: Handholding in obtaining of license to Pork handlers, butchers, retailers/vendors and Structured meat shop
5. Waste Disposal
6. Market Development: Identification of Livestock market
7. Hassle free transportation
8. Identification of Cluster of minimum 100 families with 2- 3 pigs within 3 KM radius
9. Market led Extension services
10. Judicial use of Feed staff: Estimation of nutritive value of the local and conventional feed resource & ration balancing
11. Rationalization of Breeding: Breeding activities at cluster level by community boar management and introduction of AI with heterogeneous germplasm
12. Operationalization of the newly constructed Pig breeding Farms of the AHVD as Nucleus farm for seed development with exotic germplasm
13. Strengthening of existing infrastructure of the AHVD centrally for large scale feed production
14. Formulation of policy for bulk procurement of Maize and other available raw materials at production site
15. Feed testing facilities: Activation of the existing laboratory under AHVD at Khanapara
16. Vaccine production & distribution
17. Contract for bulk procurement of CSF vaccine in place
18. Credit & Insurance
19. Financial services - Awareness of community on opening of bank accounts, book keeping, Credit linkage, KCC etc., Convergence of various schemes i.e. NLM

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.

**2. MILK VALUE CHAIN (MVC) : APART Strategy- Dairy Sector Intervention :
FORMAL SECTOR**

The focus is productivity enhancement by organizing farmers into Milk Producers' Institutions (MPIs) that eventually will get registered as Dairy Cooperative Societies (DCS) and genetic upgradation of non-descript cows using AI, improved feeding through fodder production demonstrations, bulk supplements provision through DCS and by developing linkages with crop producers (e.g. maize, mustard, legumes for crop residue).

Activities proposed under APART- Formal Milk Sector

- 1) Doorstep AI Delivery Services: To provide quality AI services, at farmers' door step using semen doses from high genetic merit bulls available in the country aimed at producing superior calves with higher productivity.
- 2) Animal Health: The project proposes to cover animal health care services through animal health/ fertility camps, vaccinations and disease control activities.
- 3) Animal Nutrition-Feed & Fodder : To focus on balanced intake of locally available animal feed and fodder as well as intake of processed feed and other feed supplements for the crossbred milch animals to enable them to achieve their full genetic potential of milk yield.
- 4) Village Based Milk Procurement Systems: Collection of milk through MPIs (Milk Producers Institutions).
- 5) Processing and Marketing of liquid milk and milk products: Value addition of milk through processing.
- 6) Capacity Building: By imparting training programmes for milk producers, village level functionaries, BMC and plant operators, marketing supervisors and executives / managers engaged in various project activities.

INFORMAL SECTOR

Transformation of the informal dairy sector into the formal one through improvement in resilience in production, quality, safety and standards of milk adding value to the produce with particular focus on informal market actors and dairy-entrepreneurs in targeted districts.

Activities proposed under APART- Informal Milk Sector

To provide training to the farmers under informal sector with the help of competent departmental experts in order to enhance the farmer's capability to adopt new practices of animal health care and management, feeding etc.

1. To provide information to the farmers about the better feeding practices in time for better production and productivity and thereby reducing the cost of milk production.
2. Creation of gainful employment in the organized dairy sector

Cross cutting areas of Formal and Informal Milk Sectors:

Project Cost= Rs.4049.48 lakh, No. of Districts: 16

Investments under this sub-component will cover :- about 1,25,500 dairy animals covering 56 Blocks/Clusters under 13 Districts of the State under Health Coverage, Skill Development & Mineral Mixture support (the later two only in Informal Milk sector)

TOTAL PROJECT COST = Rs. 10943.20 lakh

BUDGET DETAILS

AWP (Budget)	Pork Value Chain	Cross cutting areas (MVC)
Budget for 2018-19	976.10 Lakh	578.80 Lakh
Budget for 2019-20	1966.25 Lakh	1239.58 Lakh

“Rashtriya Krishi Vikas Yojana” (RKVY) at a glance:

Animal Husbandry & Veterinary Department, Assam

The majority of the land in Assam is owned by small and marginal farmers, practicing 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 90 percent lives in rural areas where the mainstay of livelihoods is agriculture. The farmers are often hampered by low level of capital formation coupled with very low availability of credit facilities. The level of farm mechanization, fertilizer usage and irrigation in the State is also very low, which is preventing 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 Vikas Yojana 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 11th 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 target growth projection, State has given complete flexibility and choice in selecting interventions. The main aim of the scheme is a 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 is the Animal Husbandry Dept. implemented 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.

RKVY was initiated in 2007 as an umbrella scheme for an umbrella scheme for ensuring holistic development of agriculture and allied sectors by allowing states to choose their own agriculture and allied activities as per the District/State Agriculture plan with a funding pattern of 90:10 between Centre and States of N.E. India.

Table - 8.7

**STATUS OF RECEIPT AND UTILIZATION OF FUND UNDER CSS & CS SCHEMES
FROM 2018-19 TO 2020-21**

Sl. No.	Name of the scheme (as per guidelines)	Funding Pattern	Amount Received (Rs. in Lakh)					
			2018-19		2019-20		2020-21	
1	RKVY RAFTAAR	90:10	CS	SS	CS	SS	CS	SS
			1459.31	162.13	450.00	50.00	0.00	0.00

POULTRY DEVELOPMENT

The Animal Husbandry & Veterinary Department, Assam is encouraging backyard poultry rearing in the state for enhancing meat and egg production. As this sector generates employment and enhance rural income, a large number of people are directly engaged in poultry sector in the state.

Table - 8.8

**REPORT ON THE PHYSICAL ACHIEVEMENTS
FOR THE PERIOD FROM 2017-18 TO 2019-20.**

Sl. No.	Name of the Scheme	Physical		
		17-18	18-19	19-20
		Achievement	Achievement	Achievement
1	100% Assistance to State poultry farm under CSS	Egg Production: 4,52,38,741 Nos.	Egg Production: 2,20,403 Nos.	Egg Production: 3,84,312 Nos.
		DOC: 73,696 Nos.	DOC: 55453 Nos.	DOC: 67,619 Nos.
		Farmers Benefited: 8,221 Nos.	Farmers Benefited: 1,323 Nos.	Farmers Benefited: 3,252 Nos.
2	Broiler Raising Programme	12,44,514 Kg	11,94,915 Kg	10,53,515 Kg
3	Broiler Chick Distribution Programme	Nil	Meat Production: 1.80 L Kgs	1.85 L Kgs
			Farmers Benefited: 1000 Nos.	

NATIONAL PROJECT ON RINDERPEST ERADICATION (NPRE):

The NPRP scheme activities like Village Search, stock route search, Institutional search etc. For Rinderpest like disease are going on throughout the State. The officers of head quarter (Rinderpest) Guwahati are Visiting to the field in all District in time to time Team of doctors from Rinderpest headquarter have visited the various dispensaries/ hospitals/ sub centres and enquired about the occurrence of Rinderpest or Rinderpest like diseases. The Veterinary Doctors and Veterinary Field Assistant placed in different districts under Rinderpest Eradication Scheme are also engaged in various NPRE Scheme activities to search and enquire about occurrence of Rinderpest or Rinderpest like disease in the districts at the village level. It is to be stated the occurrence of Rinderpest or Rinderpest like disease were not reported/ found during the search operation from the entire state.

The collection and screening of the serum sample at State Elisa Laboratory under the Sero-Surveillance work has been completed.

DAIRY DEVELOPMENT:

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

The primary objectives of Dairy Development in 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.
- To implement the Central Sector and other Dairy Scheme linking the Town Milk Supply Scheme causing inflow of financial benefit to the milk producers in the remote areas by providing a steady market throughout the year.
- To coordinate between the allied departments and Nationalized Bank and to provide financial resources to rural farmers for enhancement of milk production and economic status of the villagers especially marginal farmers, small farmers and landless farmers.

To achieve the goals of dairy development and to improve overall performance in the state the Directorate of Dairy Development has worked out the following strategies-

- To organize the presently dispersed dairy farmers in to integrated network of viable commercial unit.
- To create critical infrastructure to enhance the milk procurement, processing and marketing through organized sector, especially of those areas where the process of enhancement of milk yield has been taken up through genetic improvement of cattle through Artificial Insemination under ARIASP Phase-I. (WB Project for agricultural infrastructure creation).
- To upgrade the skill producers for clean milk production in order to maintain the norms of national standard.
- To encourage and facilitate private participation and investment from both inside and outside the state in the dairy sector.
- Dairy farming will be developed on cluster basis in the potential districts of Assam.
- The small dairy farmers will be organized into Dairy Co-operative Society (DCS). The primary Dairy Co-operative Society will form the district level milk union. All the Co-operative Institutions will run democratically with technical support from the Dairy Development in Assam.

ANNEXURE – I
FMD-CP STATUS REPORT (PH-I) FOR THE YEAR 2019-20

District	Block	Total village	Vaccine issued in PH-1	Vaccine utilized	Vacc. (%)	Village covered on	Village coverage (%)	Pre Serum sample	Post Serum sample	Balance vaccine dose
Baska	5	692	218350	191694	87.79	673	97.25	200	200	161275
Barpeta	12	844	246350	47052	19.1	462	54.74	200	0	205269
Bongaigaon	6	568	126400	107262	84.86	391	68.84	200	200	19138
Cachar	15	1061	232100	111050	47.85	619	58.34	200	0	121050
Chirang	1	510	141350	80682	57.08	494	96.86	200	200	60668
Darrang	5	564	213350	112418	52.69	333	59.04	200	200	102922
Dhemaji	5	1323	280750	115524	41.15	641	48.45	191	0	165226
Dhubri	14	1100	312850	88974	28.44	336	30.55	155	200	223876
Dibrugarh	7	1359	276250	73252	26.52	377	27.74	200	200	202998
Dima Hasao	5	699	30750	30274	98.45	378	54.08	200	0	476
Goalpara	8	840	177450	175018	98.63	718	85.48	120	0	2432
Golaghat	8	1132	256800	121939	47.48	964	85.16	200	0	134861
Hailakandi	5	334	113700	67574	59.43	180	53.89	200	0	46126
Jorhat	8	871	310750	210986	67.9	527	60.51	200	30	99764
Kamrup	17	1313	454200	113814	25.06	608	46.31	194	0	340386
Karbi-Anglong	11	2928	226950	195101	85.97	1690	57.72	200	0	31849
Kamrangj	7	943	182850	34916	19.1	233	24.71	200	0	147934
Kokrajhar	5	1072	203350	140870	69.27	774	72.2	200	200	62480
Lakhimpur	9	1188	372900	225244	60.4	773	65.07	200	0	148080
Morigaon	5	638	193200	181675	94.03	589	92.32	200	146	11525
Nagaon	18	1431	462200	259716	56.19	858	59.96	200	0	202484
Nalbari	7	467	158800	158800	100	447	95.72	200	0	0
Sonitpur	14	1889	587050	302898	51.6	899	47.59	200	0	284152
Sivsagar	9	882	261300	168269	64.4	673	76.3	200	20	93031
Tinsukia	7	1186	255450	116431	45.58	553	46.63	200	0	139019
Udalguri	6	803	204550	53922	26.36	199	24.78	200	200	150628
Total	219	26637	6500000	3485355	53.62	15389	57.77	5060	1796	3157649

Source : Directorate of Animal Husbandry & Veterinary, Assam

ANNEXURE – II

SCHEME WISE TARGETS AND ACHIEVEMENTS (BOTH FINANCIAL AND PHYSICAL)
UNDER STATE SECTOR DURING 2018-19

SI No.	Name of the scheme	Physical		Financial (Rs. in Lakh)	
		Target	Achievements	Target	Achievements
1	Establishment of Milk Processing Plant at Dhemaji under C. M.s special package	1 Unit	NIL	0.01	0.00
2	Establishment of 13 units of Commercial Dairy Farm at Dhemaji under C.M.'s Special Package (Continuous scheme)	13 Units	13 Units	9.20	9.20
3	Organization of DCSs in 4 District – 2016-17. (Continuous)	40 DCSs	40 DCSs	25.05	19.54
4	Construction of Grade-III residential staff Qtr 4 storied 16 units at Dairy Campus Khanapara. (Continuous scheme)	16 Units	16 Units	176.22	176.22
5	Balance payment for work station to Directorate office staff.	1 No	1 No	7.78	7.78
6	Operationalise the Dudhnoi Chilling Plant –(Electrical Transformer and power line) (continuous scheme)	1 Job	NIL	7.67	0.00
7	Establishment of District Dairy Development Office with farmers training center at Golaghat and Majuli. (New Scheme)	2 Nos	NIL	50.00	0.00
8	Organization of 200 DCSs in 21 districts of the state. (Finance Minister's Budget Speech.	200 DCSs	200 DCSs	127.59	24.56
9	Preparation of Road Map cum Vision documents of Dairy Development, Assam	1 Job	1 Job	20.47	20.47
10	Establishment of Fodder Block Manufacturing Unit at Bokakhat. (New Scheme)	1 Job	1 Job	42.00	0.00
11	SOPD-SCSP-Implementation of Milk Village Scheme under SCSP. (Ongoing scheme)	10 Units	0	100.00	0.00
12	SOPD-TSP-Implementation of Milk Village Scheme under TSP (Ongoing scheme)	3 Units	0	30.00	0.00
Grand Total:				595.99	257.77
Under World Bank Aided Project (APART)					
1	Mapping of market actors (District) and other activities by IIRI	16	16	135.96	0.00
2	Strengthening existing lab infrastructure (at State level)	1	0	30.00	7.09
3	Strengthening existing lab infrastructure (at District level)	16	0	160.00	0.00
4	Renovation of existing OPIU Building including furniture.	1	1	25.00	0.00
5	Contractual Manpower	4	1	16.80	3.49
6	Seminar on "SDG of Dairy Dev. and its role in doubling income of Dairy Farmers in Assam".	1	1	1.00	0.61
7	Recurring Cost (HQ and 16 Districts) like official equipment Hiring vehicle etc.	l.s		274.20	47.81
TOTAL				642.96	59.00
UNDER RASTRIYA KRISHI VIKASH YOJANA (RKVY)					
1	Installation of milk processing unit at Bongaigaon Milk Plant	1 no	1	140.00	90%
2	Installation of Rapid Milk Cooler	8 nos	8	102.00	100%
3	Setting up of Mini ETP in Milk Processing plant.	3 nos	3	54.75	95%
4	Utensil for DCS (Aluminium Milk Can & Milk Pail)	1525 nos	1525	39.50	100%
5	Cottage Dairy unit for value addition for DCS	40 nos	40	53.60	100%
6	Capacity building of dairy farmers (training on value adding on milk)	200 nos	30	2.70	10%
7	Establishment of knowledge centre & farmers training hall at Khanapara	1 nos	1	180.00	70%
8	Administrative charges @ 2%			14.75	
TOTAL				587.30	

ANNEXURE- III
PRIORITY LIST OF SCHEME (PROPOSED) UNDER SOPD 2019-20

Sl. No.	Name of the Work/Scheme	Amount (Rs. in Lakh)
1	Establishment of Milk Processing Plant at Dhemaji (ongoing)	59.54
2	Construction of Grade-III residential staff qtr at Dairy Campus, Khanapara (ongoing)	35
3	Establishment of District Dairy Development office at Golaghat and Majuli (Ongoing)	20.01
4	Organization of 200 DCSs in 21 district (Ongoing)	90.45
5	Establishment of 13 Commercial dairy farms at Dhemaji	0.01
6	Integrated Support Services for creation of milk surplus district – Sadiya Sub-division (Ongoing).	9.99
7	Establishment of Fodder Block Manufacturing Unit at Bokakhat	40
8	Creation of soft ware for monitoring the activities of DCSs linking with TMSS (New)	10
9	Strengthening of TMSS (New)	10
10	Balance work for completion of Chilling Plant building Karimganj	4.73
11	Site Development and approach road to Chilling Plant Karimganj	6.35
12	Construction of Milk Parlour Building at Bokakhat	30
13	Release of payment against Machinery supplied by M/S Chadha Sales Pvt. Ltd.	3.31
14	Renovation of Chilling Plant building Hailakandi	20
15	Implementation of Milk Village Scheme under SOPD-SCSP	105
16	Implementation of Milk Village Scheme under SOPD-TSP	30
Grand Total:		474.39

ANNEXURE- IV

**Scheme Wise Targets and Achievements (Both Financial and Physical)
Under State Sector during 2019-20**

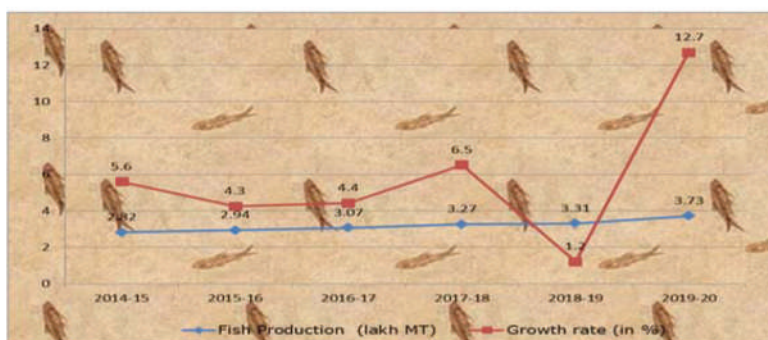
Sl. No.	Name of the Work/Scheme	Physical		Financial (Rs. in Lakh)	
		Target	Achievement	Target	Achievement
1	Establishment of Milk Processing Plant at Dhemaji (ongoing)	1 Unit	Nil	59.54	0.00
2	Construction of Grade-III residential staff qtr at Dairy Campus, Khanapara (ongoing)	1 Units	1	35.00	35.00
3	Establishment of District Dairy Development office at Golaghat and Majuli (Ongoing)	2 Nos	20.00%	20.01	7.14
4	Organization of 200 DCSs in 21 district (Ongoing)	200DCSs	83.00%	268.22	222.93
5	Intregated Support Services for creaton of Milk surplus district-Sadiya Sub-division (Ongoing)	10 DCSs	Nil	9.99	0.00
6	Establishment of Fodder Block Manufacturing Unit at Bokakhat	1 No	Nil	40.00	0.00
7	Creation of soft ware for monitoring the activities of DCSs linking with TMSS (New)	1 Job	Nil	10.00	0.00
8	Strengthening of TMSS (New)	2 Nos	Nil	10.00	0.00
9	Construction of Milk Processing Plant at Jorhat	1 unit	100,00 %	28.44	28.44
10	Construction Chilling Plant Building at Karimganj	1 Job	100.00%	4.76	4.75
11	Construction of Milk Parlour Building at Bokakhat	1 Job	Nil	6.42	0.00
12	Implementation of Milk Village Scheme under SOPD-SCSP	10 Units	90.00%	105.00	94.50
13	Implementation of Milk Village Scheme under SOPD-TSP	3 units	100.00%	30.00	30.00
	Grand Total			627.38	422.76
Under World Bank Aided Project (APART)					
1	Training of Trainers	12	12	23.86	0
2	Skill Development on cooperative management of ICM	16	16	2.40	0.97
3	Project implementation cost			94.88	9.65
	Grand Total			121.11	10.62

Chapter - IX FISHERIES

Assam is gifted with vast fishery resources in the form of rivers, ponds, derelict water bodies and beels/ wetlands covering total water spread area of over 2.42 lakh hectare besides 4820 KM riverine fisheries. The state is also rich in diverse fish-fauna with 216 fresh water species and more than 150 fish species having ornamental importance and 50 species with overseas ornamental value.

Fishery sector is playing very significant roles in socio economic development of the state providing rural employment, nutritional support and livelihood security thereby reducing poverty and improving overall of health. Fishery sector has been identified as one of the Ratnas among the selected Navaratnas under the 'Chief Minister's Samagra Gramya Unnayan Yojana (CMSGUY)'. Fish Production in the state has reached a level of 3.73 lakh MT during 2019-20 against the corresponding nutritional requirement of 3.87 lakh MT. The per capita consumption of fish is 11.12 Kg per annum which is now one of the SDG's indicators for the State.

The following chart shows growth rate of Fish production in Assam.



RELEVANCE OF THE SECTOR IN THE STATE ECONOMY

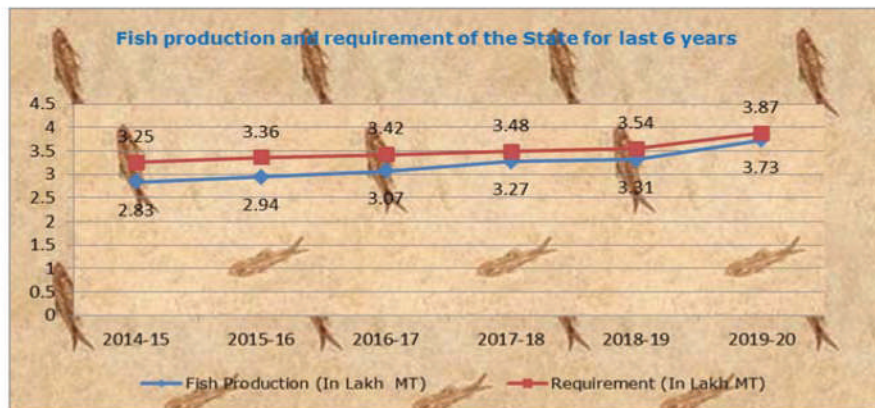
Fish occupies an important place in the lives of the people of the state and fish farming has been one of the common activities in the rural areas. More than 90% of the people of the state prefer fish in their meal leading to ever increasing demand for fish. Thus, the Fishery Sector is considered as an important economic activity in the socio-economic context in the state of Assam, providing scope for employment generation especially in the rural areas through fish production and its related activities.

The GSDP and NSDP of fishery sector at constant (2011-12 prices) and current price are as shown below:-

Gross State Domestic Product (GSDP) of Fishery Sector			
Constant Price (2011-12 prices)		Current Price	
2018-19 (Provisional Estimation)	2019-20 (Quick Estimation)	2018-19 (Provisional Estimation)	2019-20 (Quick Estimation)
563180	597648	790773	886469
Net State Domestic Product (NSDP) of Fishery Sector			
Constant Price (2011-12 prices)		Current Price	
2018-19 (Provisional Estimation)	2019-20 (Quick Estimation)	2018-19 (Provisional Estimation)	2019-20 (Quick Estimation)
514103	537644	734392	835382

The contribution of Fishery Sector to the State's GDP (at constant price 2011-12 prices) was Rs. 5,63,180 lakh as per provisional estimates for the year 2018-19 with a growth rate of 1.26 percent over previous year and Rs. 5,97,648.00 lakh as per quick estimates of the year 2019-20 with a growth rate of 1.49 percent per annum over previous year.

The following graph shows the production and requirement of fish in Assam for last 6 years.



A sizable section of the people is engaged in the Fishery Sector, either in the culture or in the capture. Since, initial investment in setting up of a fish pond or a farm involves a comparatively huge amount, thus pisciculture is yet to get a major role as a turning economic activity in the state. Due to lack of awareness, knowledge and skill on scientific fish culture practices and management, fish production in the state is yet to reach to its potential. Department of Fisheries is taking initiative in bridging these gaps and contribute to wards technical backstopping. Due to constant effort of the State as well as Central Government, the growing interest of the farming community during the last few years, Fishery Sector in the state has reached to a distinctive level in the state economy. Recently fish farming has been taken by many rural youth and entrepreneurs as a commercial activity.

For overall development of the sector Department's have been taking steps as follows:

- 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 / 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 resources potential for fish production is high, scientific fish farming and management is being practiced considerably in a lesser extent. 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.

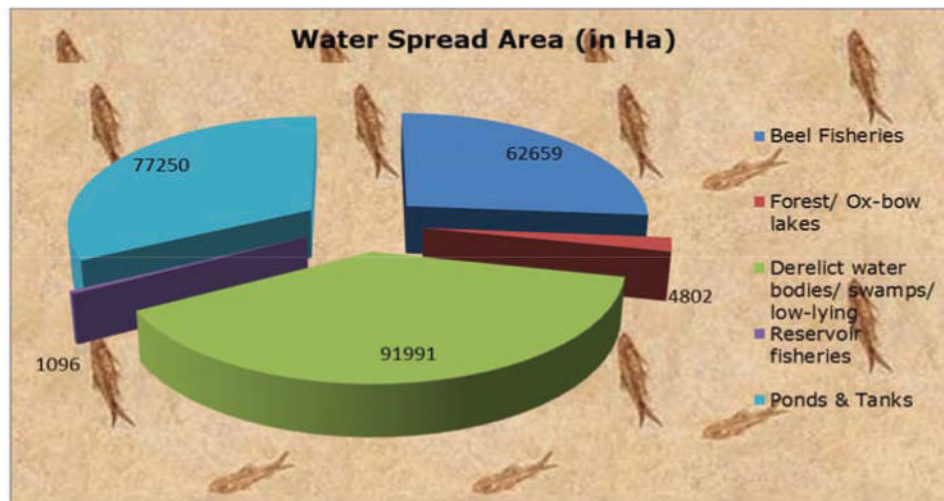
Riverine fisheries are being exploited with little conservation effort and no specific intervention. The revenue fisheries, i.e. rivers and beels are at present are under the control of Assam Fisheries Development Corporation Ltd; Fisheries Administrative Departments, Government of Assam; Deputy Commissioners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

FISHERY RESOURCES:

Table:- 9.1

Sl. No.	Resources	Number	Water Spread Area
1	River Fisheries	Main River - 2, Tributaries - 53	4820 (Km.)
2	Beel Fisheries	1909	62659 (Ha)
3	Forest/ Ox-bow lakes	453	4802 (Ha.)
4	Derelict water bodies/swamps/low-lying	11158	91991 (Ha.)
5	Reservoir fisheries	2	1096 (Ha.)
6	Ponds & Tanks	461706	77250 (Ha)

Source: Department of Fisheries, Assam



In the above the water spread area is shown excluding the river fisheries as the unit of it is different from the rest.

MAJOR INFRASTRUCTURE OF FISHERY SECTOR

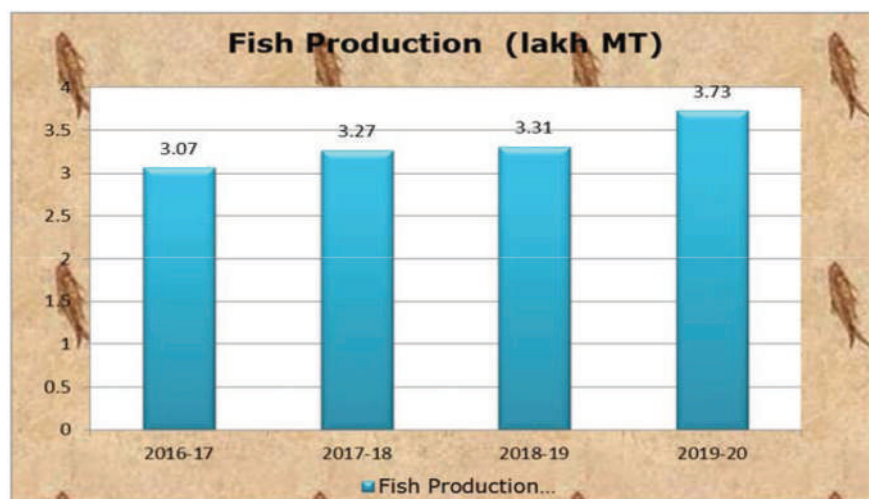
Eco-Hatcheries & Other Infrastructures:	
(a) Departmental	21 nos.
(b) Private	500 nos.
Departmental Farm	
Total Farm	124
Functional	113
Non Functional	11
Leased Farm	73
Departmental farm	45
Handed over to to Dev. Block / Municipal Board.	6
Fisheries Training Centre	9 nos.
Fish Feed Mill	13 nos.

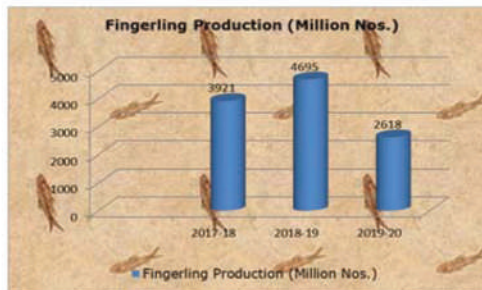
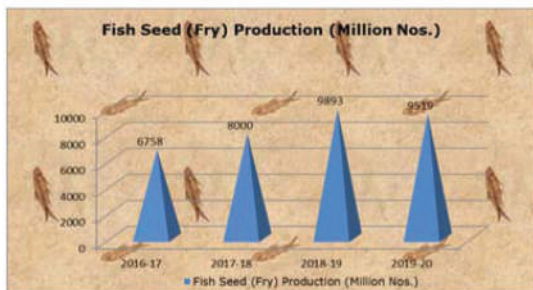
TABLE: 9.2

FISH & FISH SEED PRODUCTION FOR LAST THREE YEARS

Year	Fish Production	Fish Seed (Fry) Production	Fingerling Production
	(lakh MT)	(Million Nos.)	(Million Nos.)
2017-18	3.27	8000	3921
2018-19	3.31	9893	4695
2019-20	3.73	9519	2618

Source: Department of Fisheries, Assam





ACTS AND RULES OF THE DEPARTMENT

- The Assam Fishery Rules, 1953 (Amended in 2005)
- The Assam Fish Seed Act, 2005
- The Assam Fish Seed Rules 2010. This is the first such kind of Act in the country.

Table: 9.3

FINANCIAL ALLOCATION AND EXPENDITURE DURING THE LAST THREE YEARS (2017-18 to 2019-20)

Sl. No	Category	2017-18		2018-19		2019-20	
		Allo.	Exp.	Allo.	Exp.	Allo.	Exp.
1	SOPD-(G & ODS)	1091.50	707.45	1289.49	950.30	1917.00	753.58
2	SOPD-SCSP	100.00	88.20	100.00	0.00	105.00	61.60
3	CSS- (Blue Revolution)						
	Central Share	2691.74	799.66	1500.00	283.12	800.00	241.02
	State share	19.19	19.19	166.66	157.60	88.89	29.43
4	RIDF						
	Loan Share	6650.00	383.19	7600.00	5809.73	2850.00	1909.55
	State Share	350.00	41.84	400.00	0	150.00	150.00
	Total	10902.43	2039.53	11056.15	7200.75	5910.89	3145.18

Source: Department of Fisheries, Assam

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

A. SCHEMES UNDER STATE OWN PRIORITY DEVELOPMENT (SOPD)

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 Individual and Community New Pond – General and scheduled Castes Sub-Plan (SCSP)

b) Input and Material Supply in Pond and Departmental Farm for increasing fish productivity

c) Gene Bank for Scientific Conservation of Indigenous fishes, breeding and seed production of Chital and mass production technology of L. Calbasu, domestication of fish species.

2. Construction of Hygienic Fish Markets:

Proper marketing of fish is one of the important aspects for consumer's safety as well as to encourage more and more people to take up fisheries as livelihood. The state is in need of new hygienic fish markets and hence it is proposed to construct as well as to remodel existing markets with all required modern amenities for maintaining the minimum hygiene. With this back ground, Department of Fisheries, Assam has been taken up construction of Hygienic Fish Market in different parts of the state.

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 agricultural growth, rural connectivity and other social sector development. Under this programme beel fisheries development and up-gradation of Departmental Fish Farm has been initiated alongwith construction of marketing infrastructure and fish landing centers. Under RIDF-XXIII the Department has been implementing "Ghare Ghare Pukhuri Ghare Ghare Maach" under which more than 1300 Ha individual ponds and about 500 Ha village community tanks under process of excavation covering more than 9500 beneficiaries.

B. CENTRALLY SPONSORED SCHEMES

I. Blue Revolution/ Pradhan Mantri Matsya Sampada Yojana (PMMSY):

Activities under this scheme are as follows:

- a. Construction of new pond (Govt. and private)
- b. Renovation of existing pond
- c. Establishment of fish seed hatchery, fish feed mill
- d. Supply of inputs
- e. Fishery related infrastructure development.

II . NATIONAL WELFARE FUND FOR FISHERMEN

Fishermen Insurance

Under this component, fisher folk licensed, identified or registered with the State Government could be insured for Rs. 2.00 lakh against death or permanent disability, Rs.1.00 lakh for partial disability. The insurance cover will be for a period of 12 months and a policy would be taken out by FISHCOPFED in respect of all the States.

C. FISHERY MISSION SOCIETY UNDER CHIEF MINISTERS SAMAGRA GRAMMYA UNNAYAN YOJANA (CMSGUY)

The Fishery Mission Society for Chief Ministers Samagra Grammya Unnayan Yojana (FMS-CMSGUY), an autonomous Society under the administrative control of Mega Mission Society for Chief Minister Samagra Gramya Unnayan Yojana (MMS-CMSGUY) and Fisheries Department, Government of Assam. It is formed with an objective to contribute and achieve the goal of doubling the farm income of fish farmers in Assam by 2021-22 in

terms of fish and fish seed production by developing existing water resources through effective resource utilization scientifically and creation of additional water bodies for large scale fish production in scientific way. The Fishery Mission Society also aims at Quality fish seed production and distribution at farmer's door step and making the State self-sufficient in advanced fingerling production by 2022 and Conservation of native, endangered and indigenous fish species by diffusing useful knowledge and extends doorstep technical support.

Ongoing Projects under FMS-CMSGUY

1. Supply of inputs to RIDF-XXIII Project Beneficiaries for two years (Convergence Programme)
2. Capacity building of farmers under "Ghare Ghare Pukhuri Ghare Ghare Maach".
3. Cage Culture in Selected Beels of Assam (phase-II, 2020-21)

1. SUPPLY OF INPUTS

- Total area Targeted-1811.33 ha.
- Total beneficiaries (under RIDF-XXIII) to be covered (Individual & Community tank)-10,000 Nos.(approx.)
- Total Project cost- Rs. 5434.00 lakh
- CMSGUY Share-(50%)-Rs. 2717.00 lakh
- Beneficiaries Share(50%)-Rs.2717.00 lakh
- Sanction received from MMS-CMSGUY till date- Rs.2717.00 lakh.
- Fund received-700.00 lakh.

2. Capacity Building (5 days residential training to farmers)

❖ No of beneficiaries to be covered	-	10,000
❖ Total project cost (in Rs.)	-	500.00 lakh
❖ CMSGUY Share	-	100%
❖ Sanction received (in Rs.)	-	500.00 lakh
❖ Fund received (in Rs.)	-	100.00 lakh.

5 days residential training will be provided to RIDF-XXIII Project beneficiaries.

3. Cage Culture in Selected Beels of Assam

A. Project at a glance:

- Total no. of beels covered-15 Nos
- Total estimated project cost (Rs. in lakh) for 150 Cages in 15 beels including training - Rs. 333.18 lakh
- CMSGUY share (70% on civil works & inputs and 100 % on Training to farmers - Rs. 234.39 lakh.
- Beneficiary share (30%) - Rs. 98.78 lakh.

D. ASSAM AGRIBUSINESS AND RURAL TRANSFORMATION PROJECT (APART)

Sub-Component: Fisheries Value Chain

Fisheries Value Chain: Over view: The fish value chain is to be implemented by the Department of Fisheries and the district Agriculture Technology Management Agency

(ATMA), in collaboration with World Fish Centre (WFC) and private sector partners. This sub-component will focus on: (i) improving the quality of the inputs such as fish seed and feed for aquaculture, (ii) increasing the fish productivity and production from the pond/tank aquaculture systems, (iii) increasing fish production through culture-cum-capture fisheries activities in the beels, (iv) promoting diversification of fish species – particularly genetically improved strains - in combination with Indian major carps in the culture systems, (v) improved post-harvest management, value addition and marketing of produce by setting up fish farmer common service centres (CSCs.).

E. RASTRIYA KRISHI VIKASH YOJANA (RKVY):

RKVY, a flagship programme of Government of India introduced in the State during 2008-09. It is supported by 50% subsidy to the fish farmers against the schematic cost. Zila Parishads recommend the list of beneficiaries under RKVY. The major schemes implemented under RKVY are Development of existing pond, Low-lying areas converted to community tank, construction of new ponds and creation of nursery & rearing tanks.

Achievements under the Schemes / Programmes implemented during 2019-20.

To develop the fisheries sector a new activity by the National Welfare Fund for Fishermen, under Centrally Sponsored Scheme in the name of “Pradhan Mantri Matsya Sampada Yojana (PMMSY) has been introduced. The scheme is to bring about Blue Revolution through sustainable and responsible development of fisheries sector. It should be mentioned that the earlier Plan and schemes like Aquaculture Development FFDA, Fishery Extension Service, Schemes under RIDF etc. under state plan are continuing along with the said new activity in the state.

Among the important developmental activities during 2019-20 include the Construction of 313.85 ha of new pond and 115.10 ha of community pond covering 2308 individual beneficiaries and 94 community/groups respectively under SOPD and RIDF schemes. Under SOPD scheme “Fish and Fish Seed Farming” necessary input and material has been supplied to 348 beneficiaries for 51.96 ha water area to enhance fish production and the same has been supplied in 12 departmental farms also. Gopinath Bordoloi Tank, Guwahati has been developed as Fishery Eco-tourism Spot. Construction of two fish retail outlet, 1 whole sale fish market and 3 hygienic fish market have been completed under Marketing and Transport.

Under RKVY 15 ha low lying area converted to community tank, 18 ha area of existing ponds and tanks is renovated for fish culture, development and up-gradation of 2 Departmental fish and fish seed farm has been completed and setting up of 5 mobile fish outlet (KIOSK) is completed. Besides this 35 ha of beel fisheries have been developed, 210 water testing kit has been distributed to field staff, 3 numbers of 4 wheeler refrigerated vehicle have been purchased for transportation of Fish and Fish Seed. Additionally, construction work of 2 magur hatchery in Departmental Farm and 1 Fish feed Mill are in progress.

Under World Bank funded APART Poly-culture Demonstration and Beel Fisheries demonstration have been performed in 484 and 304 ha respectively. 100 ha area developed for paddy cum fish farming, up-gradation of 3 Departmental Hatchery has been completed in addition to 3 Multiplication Center for quality fish seed production.

Under CMSGUY inputs have been supplied to 2934 beneficiaries for 533.01 ha water area of 25 Districts for 1st year 1st installment amounting to Rs. 285.276 lakh disbursed through DBT out of fund received Rs. 700.00 lakh. Fishery Mission Society has already released an amount of Rs. 100.00 lakh to College of Fisheries Science, Assam Agriculture University (AAU), Raha for imparting training to 2000 farmers. College of Fisheries Science, Raha with the help of 15 nos. of KVK under AAU had completed training of 29 batches of farmers covering different Districts of the state. Moreover, installation of cages are successfully going on various beels of 9 different Districts viz. 3 beels in each Districts of Bongaigaon and Nagaon, 2 beels in each Dhemaji and Sonitpur, 1 beel in each Baksa, Barpeta, Darrang, Cachar and Nalbari.

Schemes /Activities proposed during 2020-21 :

Major activities proposed under various schemes are as follows:

Under State owned priority Development (SOPD)

Fish and Fish Seed Farming: Input and material will be supplied in 15 departmental farms for enhanced fish productivity, ongoing project of Fishery Ecotourism Development of GNB Tank, Guwahati, ongoing project of Gene Bank- Scientific Conservation Programme for Indigenous Fishes (SCoPIF). Under SCSP component development of water bodies under co-operative societies/ community/group/individual will be taken up covering 16ha water area.

Fishery Extension Service: Observation of Fish farmers day/World Fish Day and continuation of the programme honorarium to 75 Matsya Mitra and support extension workers.

Marketing & Transport: Establishment of 2 Fish Retail Outlet, 3 Wholesale Fish Market and 2 nos. of hygienic fish market will be continued.

Rural Infrastructure Development Fund (RIDF): New Individual Pond and Community pond will be constructed like the previous year for which the target is yet to be fixed.

Centrally sponsored Scheme (CSS) component of the 'Pradhan Mantri Matsya Sampada Yojana (PMMSY): Administrative Approval of Rs. 11021.9 L has already been accorded by Govt. of India for the proposals of various activities submitted by the Govt. of Assam to be implemented during the current financial year 2020-21. Out of which Rs. 2716.90 lakh as central share and Rs. 300.68 lakh as state share has been allocated in the current financial budget. The various activities to be taken up during the year are as follows:

Construction of new pond including rearing, input for fish farming, installation of RAS, cage culture, pen culture, purchase of motor cycle and cycle with ice-box, e-rickshaw, 3 wheelers with ice-box, purchase of boat and net for fishers along-with provision of livelihood of fishers.

Rastriya Krishi Vikash Yojan (RKVY): under RKVY-RAFTAAR proposal submitted for the creation of new pond/ community tanks and pig-cum-fish integrated fish farming during 2020-21.

Rural Infrastructure Development Fund (RIDF): Based on the budget allocation of Finance Department 3 project proposals viz. (I) Construction of 52 fishery projects, (II) Commissioning of fish feed mills and (III) Procurement of 4 wheeler refrigerated fish

transportation vehicles have been submitted under RIDF-XXVI, the approval of the same are awaited from the NABARD.

ANNEXURE-9.1

DISTRICTWISE NUMBER AND AREA UNDER FISHERIES IN ASSAM, 2019-20

(Area in Hactare)

District	Beel Fisheries		Ponds and Tanks		Derelict Water Bodies / Swamps	
	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)
1	2	3	4	5	6	7
Kokrajhar	76	2066.50	8377	1871.81	96	572.00
Dhubri	162	4141.01	15983	3568.37	7134	4177.50
Goalpara	50	2118.00	9208	2021.14	70	463.00
Barpeta	77	1826.90	24225	4818.95	58	1337.00
Morigaon	106	2330.08	17328	3130.11	668	424.10
Nagaon	134	8000.00	55997	7606.00	143	26078.00
Sonitpur	70	1380.00	16050	1637.00	305	679.00
Lakhimpur	41	1559.50	16577	4392.48	68	4273.00
Dhemaji	46	425.00	5412	1122.50	145	706.00
Tinsukia	18	1500.00	12098	3895.00	70	541.00
Dibrugarh	84	1020.00	14059	1028.25	80	206.38
Sivasagar	172	3955.94	11920	1471.15	112	7194.95
Jorhat	43	2252.96	11018	1801.16	83	14032.50
Majuli	82	1381.00	3331	649.00	395	2688.00
Golaghat	120	1565.80	7555	1133.25		529.50
Karbi-Anglong	15	49.00	11290	2983.00	106	332.00
Dima-Hasao			1368	121.00	648	37.00
Cachar	198	7945.00	36632	9588.00	284	5738.00
Karimganj	39	3459.00	26797	3746.30		11480.00
Hailakandi	42	4377.50	35383	6720.58	25	1628.00
Bongaigaon	41	2619.00	16489	2309.00	193	3332.40
Chirang	16	145.00	3195	465.00	77	120.00
Kamrup	209	3817.90	22994	4586.20	222	643.36
Naibari	31	792.00	26788	3362.00	515	3645.00
Baksa	12	142.00	25257	2438.00	126	441.00
Darrang	19	2894.00	30053	3021.00	71	610.00
Udaiguri	1903	61763.09	465384	79486.25	11694	91908.69
Assam	3806	123526.20	930768	158972.50	23388	183817.38

Source: Department of Fisheries, Assam

ANNEXURE-9.1

DISTRICTWISE NUMBER AND AREA UNDER FISHERIES IN ASSAM, 2019-20

(Area in Hactare)

District	Reservoir Fisheries		Forest Fisheries		River Fisheries		Others (Paddy field/canals etc.)	
	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)
1	8	9	10	11	12	13	14	15
Kokrajhar			17	208	10	2457	7889	395
Dhubri					9	21216.85		40645
Goalpara					8	8356.24		33983
Barpeta					9	2209.6		5955
Morigaon			3	955	5	355.55	9489	8198.89
Nagaon			8	800		2825		30000
Sonitpur					8	20640		104910
Lakhimpur			2	16.7	16	2474.12	51	1851.8
Dhemaji					21	874 km		15000
Tinsukia					5	7440		8004
Dibrugarh			4	277.7	4	245.09 km		15762.35
Sivasagar			14	120	35	7677.12		98879.8
Jorhat					12	20500		16091
Majuli					4	18704		3949
Golaghat				1720	25	12777.57		1112.57
Karbi-Anglong			4	30	5	4200		
Dima-Hasao	1	1713	5	0.9	4	450	1550	1062
Cachar			325	435	45	5868	550	2380
Karimganj					5	5500	4005	450.09
Hailakandi					4	1588		38
Bongaigaon					8	562		2105
Chirang	1	100	10	70	2	480		
Kamrup			42	27.5	74 part	453 km	558	2766.2
Nalbari					7	2100		5040
Baksa			19	121	14	5700		18680
Darrang					17	10400.6		1100
Udalguri	2	1813	453	4781.8	282	164481.7	24092	418358.7
Assam	4	3626	906	9563.6	564	328963.3	48184	836717.4

Source: Department of Fisheries, Assam

ANNEXURE-9.2
DISTRICT -WISE NUMBER OF HATCHERIES AND FISH SEED
PRODUCTION IN ASSAM, 2019-20

District	No. of Hatcheries		Production of Fish Seed (Fry in Million nos)	
	Govt.	Private	Govt.	Private
1	2	3	4	5
Kokrajhar	1	6	0	500
Dhubri	1	12	0	319.4
Goalpara	0	10	0	560
Barpeta	0	79	0	39791.96
Morigaon	1	41	0	547
Nagaon	0	177	2.39	15285.43
Sonitpur	1	15	0	1890
Lakhimpur	2	11	0	210
Dhemaji	0	7	0	96
Tinsukia	0	7	0	500
Dibrugarh	1	4	0	53.76
Sivasagar	2	5	0.76	515.5
Jorhat	1	9	4.5	250
Golaghat	0	14	0	707.67
Karbi-Anglong	2	2	42	12
Dima-Hasao	0	0	8.1	0
Cachar	1	5	0	123
Karimganj	0	31	0	20977.4
Hailakandi	0	4	0	177
Bongaigaon	1	3	0	246
Chirang	0	1	0	60
Kamrup	3	23	0	406.62
Nalbari	0	6	0	10952
Baska	1	13	0	635
Darrang	2	13	17.5	100
Udalguri	1	2	0	197
Assam	21	500	75.25	95112.74

Source: Department of Fisheries, Assam

ANNEXURE-9.3
SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS
UNDER STATE SECTOR (SOPD) FOR THE LAST THREE YEARS
(2017-18 TO 2019-20)

Sl. No.	Item	Unit	2017-18		2018-19		2019-20	
			Target	Achv.	Target	Achv.	Target	Achv.
1	2	3	4	5	6	7	8	9
	General							
1	Fish production	lakh ton	3.19	3.27	3.47	3.31	3.5	3.73
2	Seed production	million nos	6800	8000	9000	9893	9826	9519
3	Fish & Fish Seed farming							
	Construction of Fish Seed Rearing Pond (including Majuli)	Ha	44	39.94	-	-	-	-
	Beneficiaries	Nos.	-	415	-	-	-	-
	Input and material support for fish production (including SCSP)	Ha	83.28	79.26	132	74	52.4	51.96
	Beneficiaries	Nos	-	597	-	447	-	348
	Production of Fish Fingerling in rearing tank	Ha.	-	-	5	5	-	-
	Beneficiaries	Nos	-	-	-	53	-	-
	Renovation of existing pond for Integrated Fish-Pig Farming	Ha	13	12.7	-	-	-	-
	Beneficiaries	Nos.	-	72	-	-	-	-
	Input and material support for pig-fish culture	Ha	-	-	12	12.5	-	-
	Beneficiaries	Nos	-	-	-	64	-	-
	Input and Material for fish and fish seed production in departmental farm	Nos of farms	14	14	11	11	10	12
	Construction of New pond - Matsya Jagaran (including SCSP)	Ha	63	61	-	-	-	-
	Beneficiaries (including SCSP)	Nos.	-	547	-	-	-	-
	Construction of New Pond -Barak valley Development Programme	Ha.	-	-	7.35	7.21	-	-
	Beneficiaries	Nos	-	-	-	50	-	-
	Development of water bodies under co-operative societies (SCSP)	Ha	-	-	-	-	16.96	11
		SHGs/Societies	-	-	-	-	-	11
	Fishery Eco-tourism Development (GNB tank, Guwahati)	Unit	-	-	-	-	1	1

ANNEXURE-9.3

SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS UNDER STATE SECTOR (SOPD) FOR THE LAST THREE YEARS (2017-18 TO 2019-20)

Sl. No.	Item	Unit	2017-18		2018-19		2019-20	
			Target	Achv.	Target	Achv.	Target	Achv.
1	2	3	4	5	6	7	8	9
4	Fishery Extension Service							
i	Women SHG supported through material supply for value added fish product	No.	15	15				
	Training of beneficiaries	Nos of training	-	100	-	54	-	-
ii	Trainee	Nos	-	1000	-	1400	-	-
iii	Celebration of fish farmers day	Events	20	20	-	1	1	1
iv	Procurement of departmental vehicles	Nos	-	-	32	32	-	-
v	Honorarium of Matsya Mitra as support extension workers	Nos of matsya Mitra	75	75	75	75	75	75
vi	Awards to fishermen/ fish farmers	Nos	-	-	-	-	-	7
5	Marketing & Transport							
i	Establishment of Fish Retail Outlet	Nos	-	-	-	-	2	2
ii	Wholesale Fish Market (NFDB State Share) -ongoing	Nos	-	-	-	-	4	1
iii	Hygenic fish market (State Plan) - ongoing	Nos	-	-	-	-	5	3
6	Rural Infrastructure Devt. Fund (RIDF)							
i	Fish Landing centre-RIDF-XXI (Total target- 22 Nos.)	Nos.	-	6	-	4	-	3
ii	Marketing infrastructure (RIDF-XXI (Total target- 11 Nos.)	Nos	-	7	-	1	-	1
iii	Development of Departmental Farm, RIDF-XXI (Total Target-5)	Nos	-	-	-	-	-	2
iv	Construction of new individual ponds- (General and ST/SC): RIDF-XXIII	Ha	-	-	-	-	-	313.85
v	Beneficiary	Nos	-	-	-	-	-	2308
vi	Community tank construction	Ha	-	-	-	-	-	115.1
vii	Beneficiary	community	-	-	-	-	-	94

Source: Department of Fisheries, Assam

ANNEXURE-9.4

STATEMENT SHOWING FUND SANCTIONED, RELEASED & FINANCIAL PROGRESS UNDER MEGA MISSION SOCIETY

Sl. No.	Name of the Scheme	Sanctioned Amount (in Rs.)	Released Amount (in Rs.)	Date of Releasing Fund	Financial Progress in % as per Sanction & Release (amount released/ amount sanctioned * 100)	UC submitted by the Sub-Mission	Financial Progress in % as per UC (UC submitted/ amount released * 100)
1	Training to the Project Farmers beneficiary of Pond under "Ghare Ghare Pukhuri Ghare Ghare Maach"	50000000	10000000	26.10.2018	20	994252	9.94
2	Inaugural Ceremony of the scheme "Ghare Ghare Pukhuri Ghare Ghare Maach"	500000	350000	16.11.2018	96.42	350000	72.6
			132110	24.12.2019			
3	Inputs for pond constructed under RIDF for "Ghare Ghare Pukhuri Ghare Ghare Maach"	271700000	70000000	19.03.2020	25.76		
4	Cage culture in selected bills of Assam under FMS_CMSGUY.	23500000	5000000	02.01.2019	100	2830800	12.05
			7500000	10.02.2020			
			11000000	06.08.2020			
5	Cage culture in selected bills of Assam under FMS_CMSGUY. Phase -II	36204000	14400000	30.07.2020	39.77		
6	Exposure visit of Fishery Technical officers	700000	700000	06.08.2019	100	700000	100
7	Establishment of fish seed, hatchery and related infrastructure at 126 LAC of Assam under CMSGUY.	259560000					
Total		642164000	119082110		18.54	4875052	4.09

Source: Mega Mission Society- Chief Minister Samagra Gramya Unnayan Yojana.

CHAPTER-X

FORESTRY

Forestry is a vital sector of the state. The State Forest Department has been entrusted the maintenance and management of Forest. The state of Assam covers an area of 78,438 sq. km. and its four distinct physiographic units, viz. the Brahmaputra valley of Assam proper, the Barak valley, the Karbi Anglong Plateau and the North Cachar Hills have rich flora and fauna diversity. Forestry, in Assam is a significant sector of the state economy. As per the constitutional provision forestry has come in the concurrent list and the Forest Department of Assam has the authority to maintain the forest, its produce along with the all-round development of the wild life. The issue of environment protection, conservation of natural resources, flora and fauna especially herbs and shrubs with medicinal importance have gained tremendous significance from commercial as well as conservation points of view because of their extensive use as natural products. Conservation of forest was given importance since the times of earliest rulers. Historical data revealed that during the Ahom dynasty, a specific administrative branch was established to look after the management of timber depots and exploitation of timber resources. The surnames of officials engaged during the times of Ahom rulers carry the evidence of this to the present times. The Ahom kings engaged officials for example, *Hatibaruah*, to look after the elephants; *Kath Bharali*, to look after the timber depots etc. The state of Assam is one of the most well-known sites in the world for unique wildlife. The conservation of various species of endangered wildlife is always a challenging task. Assam is harboring the big mammals – like Rhino, Tiger, Genetic Dolphin, Asiatic Buffalo etc. The state of Assam is enriched with extensive forest area and wealth like valuable forest product and also rich with different species and strains of flora and faunas. People of Assam from immemorial time have also depended upon the forest to meet their daily needs. The medicinal plants of the state have tremendous potential to contribute to the state economy. 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 fringe villages from centuries on their rights to use forest resources. Assam has a wide range of forests viz. evergreen, semi-evergreen, mixed deciduous, moist forest, dry sal forest, riverine forest, moist Savannah, dry Savannah and Miscellaneous type of forests. According to the National Forest policy the minimum desired area which is considered, for proper environmental and ecological security, the country should have 33% of forest cover in tropical zone, 60% of forest cover in Himalayan & peninsular region and 20 % of forest cover in the Great Plains. Biodiversity estimate of Assam reveals that there are large numbers of species of different plant and animals found in the forest of Assam. The following table depicts significantly the rich biodiversity of the state.

PLANTS AND ANIMALS AND THEIR SPECIES IN ASSAM

Sl. No.	Name plant and Animals	No. of Species
1	Flowering Plant	3017
2	Wild Orchids	193+
3	Bamboo	42
4	Canes	14
5	Mammals	164+
6	Primates	10
7	Birds	800 (280 migrants)
8	Amphibious	60+
9	Butterfly	1500 (approx)
10	Reptiles	116 (approx)

Source: Assam Forest at a glance (2011-12)

RECORDED FOREST AREA:

The total recorded forest area in Assam is 26,832 square km. which is 34.21% of the total geographical area of Assam and 3.21% of country's total forest area as per India State of Forest Report (ISFR) 2019. Out of total recorded forest area, total reserved forest area constitutes 17,864 square km. which is 66.58 % and Unclassified State forest constitutes 8,968 square km. which is 33.42 % to the total recorded forest area. As per India State of Forest Report (ISFR) 2019, the total forest and tree cover in India has increased over 3976 square km. (about 39.76 million hectore) which is 0.56 percent increase as compared to the area 2017 ISFR. Assam has also shown increase in forest and tree cover as per assessment made in 2019 over its previous figure of 2017 marginally.

FOREST AND TREE COVER:

The total forest and tree cover in the country spreads across 807276 sq. km. which is 24.56% of the geographical areas of the country. According to State of Forest Report 2019 of Forest Survey of India (FSI) Dehradun, the forest cover of Assam has increased by 222 sq. km. compared to the forest cover as assessed in 2017, which is about 0.79% of geographical area. The main reason for this increase was detected due to plantation outside the forest area. Some more details about forest and tree cover statistics of the state of Assam as per 2019 ISFR are furnished below.

Statistics of forest and tree cover in Assam

- Total Forest covers area : 28,327 sq. km.
- Area of tree cover : 1,408 sq. km.
- Forest Cover to total geographical area : 36.11%.
- Assam share of country's total forest cover : 3.21%
- Reserve Forest area : 1359026.70 hect.

- Per capita Forest and tree cover : 0.09 hector.
- Extent of total wetland within recorded Forest area : 67,857 Hac.
- Percentage of wetland within recorded forest Forest area : 2.46%
- Area under Very Dense Forest Cover : 2,794.86sq.km.
- Area under Moderately Dense Forest Cover : 10,279sq.km.
- Area under Open Forest : 15,252.74 sq. km.

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, 2017 and 2019.

TABLE -10.1
TRENDS IN THE FOREST COVER IN ASSAM

(Area in square km.)

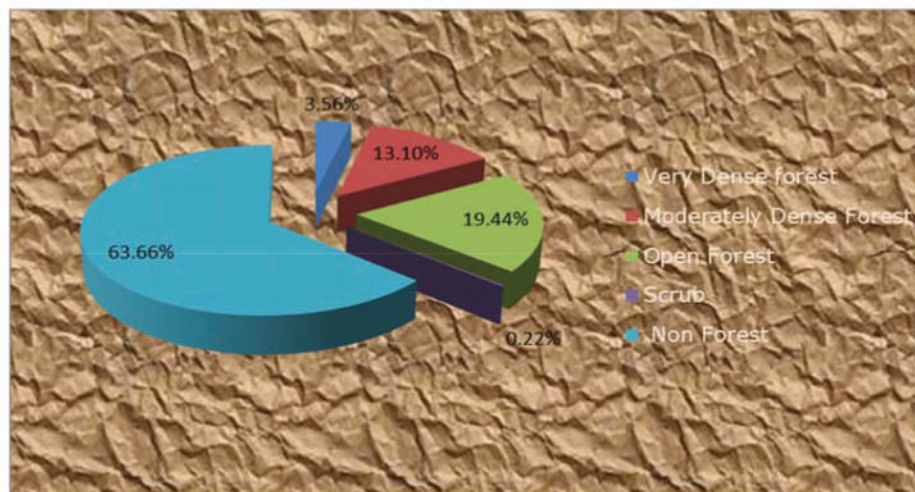
Item	Very Dense Forest	Moderately Dense Forest	Open Forest	Scrub	Non Forest	Geographical Area
As per Assessment in 2013 ISFR	1,444 (1.84)	11,345 (14.46)	14,882 (18.97)	182 (0.23)	50,585 (64.5)	78,438 (100)
As per Assessment in 2015 ISFR	1,441 (1.84)	11,268 (14.37)	14,914 (19.01)	384 (0.49)	50,431 (64.29)	78,438 (100)
As per Assessment in 2017 ISFR	2797 (3.57)	10192 (12.99)	15116 (19.27)	217 (0.28)	50116 (63.89)	78,438 (100)
As per Assessment in 2019 ISFR	2795 (3.56)	10279 (13.1)	15253 (19.44)	173 (0.22)	49,938 (63.66)	78,438 (100)

Note: Figures in brackets indicate percentages to the total geographical area.

Source: India State of Forest Reports, 2013, 2015, 2017 and 2019

Figure-10.1

Forest cover in Assam as per ISFR 2019
(Percentage to total geographical area)



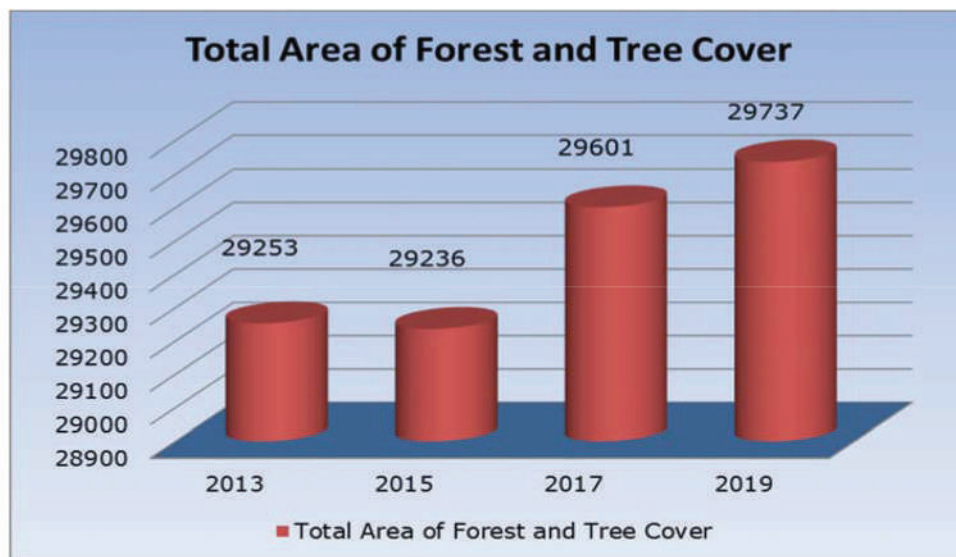
State has also witnessed significant changes in tree cover outside the forest areas. Table 10.2 shows forest cover and tree cover as assessed during last three assessments made by Forest Survey of India.

TABLE-10.2
FOREST AND TREE COVER IN ASSAM

Items	Units	2013	2015	2017	2019
Area of Forest cover	Sq. km.	27671	27623	28105	28329
Area of Tree cover	Sq. km.	1582	1613	1496	1408
Total area of Forest and tree cover	Sq. km.	29253	29236	29601	29737
Forest and tree cover to the Total Geographical area of the state	%	37.29	37.27	37.74	37.91

Source: India State Forest Report 2013, 2015, 2017, and 2019.

Figure-10.2
FOREST AND TREE COVER IN ASSAM (in Sq. km.)



BAMBOO RESOURCES IN THE FOREST:

Bamboos are one of the fastest growing perennial plants in the world. They belong to the family of Poaceae (Graminae) and are found in the tropical, sub-tropical and mild temperate region of the world. In India bamboo grows naturally almost throughout the country except in Jammu and Kashmir. Assam is rich in bamboo resources and most of its forest are richly stocked with bamboo and cane of various species. Assam bearing is only 6.58 % of total country bearing area. The total bamboo bearing tree area in the country is 1,60,037 sq.km.(ISFR 2019) against the area 1,56,808 sq.

km. (As per 2017 ISFR report which is significantly increase 3229 sq. Km). As reported there is 10,525 Sq. Km. Bamboo bearing area within the forest area in the state of Assam as per ISFR 2019 against 8,955 sq. Km. as ISFR 2017 changes of 1,570 sq. K.M. with reference to 2017. Bamboo is versatile group of plant, which is capable of providing ecological, economic and livelihood security to the people. It is an integral part of the lifestyle and economy of Assam. There are 42 numbers of Bamboo species found in the Assam forest area as reported by forest department. If we see the bamboo bearing area under different classes in Recorded Forest Area in Assam we find that there are 204 sq. km. of Pure Bamboo bearing area, 2,350 sq. km. Dense and 7,664 sq. km. Scattered bearing area in Assam as per ISFR 2019. The North East region of India has the highest concentration of bamboo, accounting for more than 60% of the total bamboo resources of the country as a whole. For promotion of bamboo sector in the state the government of Assam has taken initiative to develop its potentiality. Government of Assam has already set up a Bamboo Technology Park with an investment of Rs. 62.28 Crore at the Industrial Growth Centre, Chaygaon of Kamrup district with innovative facilities from where hundred of MSMEs that produce incense stick and handicraft products are getting benefit directly. Now, Assam has become the first state in the country of the art of Bamboo Technology Park to boost cultivation in the state and the region.

To develop the forest sector, the state government has allocated Rs. 200 lakh during 2019-20 to set up 400 medicinal plant nurseries at the cost of Rs 50,000/- for each of the nurseries under the scheme of Raising People's Nurseries/Plantation of Medicinal and Aromatic plant. In respect of this, govt achievement 369 nos. physical target for creation of people nurseries with a financial achievement of Rs 184.5 lakhs . The state government is also implementing the Tribal Sub Plan and Schedule Caste Component Plan under which the government has procured large numbers of *Agar* and *Chandan* seedling to encourage the common people to plant the Agar and Chandan trees for their economic benefit.

STATE FOREST PROFILE:

As per Forest profile of the State the total reserved forest area of Assam, according to the forest department estimation in 2019-20 is 13,59,026.70 hectares., in where 3,64,142.20 hectares presently encroached by 2,05,209 households. The reserved forest area constitutes about 17.32 percent area, and the total forest area excluding un-classed forest constitutes about 22 percent of the total geographical area of the state. The state however depicts a gloomy picture in terms of degradation of forest areas. India's greenest region, the North East States have been consistently losing tree cover over last 20 years, due to various biotic factors and encroachment of forest lands, the practice of shifting cultivation has also induced degradation of forest land as well as loss of rich biodiversity of the state which needs to be rebuilt again.

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

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:

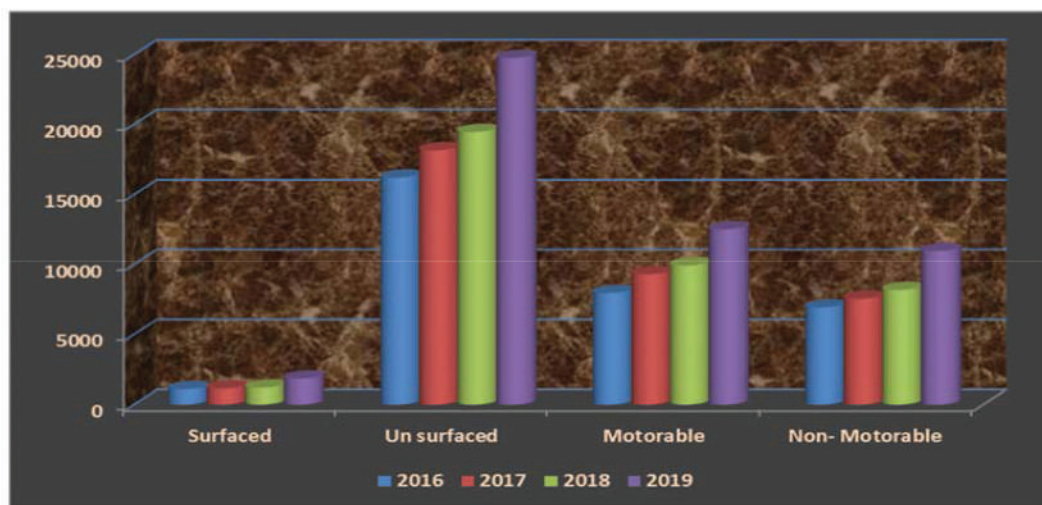
The state forest department is entrusted the task of maintenance and management of forest, forest product and wildlife in the state. For the purpose of patrolling inside the forest area of Assam, to harvest the forest produces, for both improvement, development and creation of infrastructure the existence of proper roads in the forests are very essential. Accordingly, the state forest department has given special thrust to development of forest roads. The government of Assam has recently improved 92.25 km roads and constructed 8 culverts and proposed to improve 72.5 km of forest road with culvert and drainage system under the component of **Development of Forest Village**. The National Highway 37 acts as a boundary to the Kaziranga Tiger Reserve, also for one Horned Rhino. The Forest department of Assam has given special emphasis on this matter, and proposed to improve the road connectivity for better protection and conservation of forest biodiversity and wildlife. Table 10.3 presents data on forest roads in Assam.

TABLE-10.3
FOREST ROADS IN ASSAM (CUMMULATIVE)

Category of Roads →	Surfaced	Un-surfaced	Motorable	Non-Motorable
2016	1077.953	16229.357	7972.05	6938.57
2017	1122.403	18187.632	9310.375	7558.52
2018	1180.218	19459.197	9946.08	8194.38
2019	1825.187	24779.121	12513.273	10947.111

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

Figure-10.3
Forest Roads in Assam (K.M.) (cummulative)



OUT TURN OF FOREST PRODUCE & REVENUE:

Forests are sources of natural resources to be used for various manufacturing activities. In the context of conservation, forests are however not seen as a source of revenue generation. The forests are, however, source of livelihood of people living in forest fringe villages. The forests in the state are being harvested following the laid out principles of working plan of forest to ensure sustainability. The major forest produces 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. At present, however, the major sources of forest revenue are sand, gravel, stone, silt, clay, thatch etc. The production of various forests produces and out-turns in the state are presented in table 10.4. and Table 10.5 presents revenue generated from forest in the state.

TABLE: 10.4

PRODUCTION AND OUT-TURN OF FOREST PRODUCTS IN ASSAM

Forest Produces	Units	2014-15	2015-16	2016-17	2017-18	2018-19
Industrial Wood/Timber	Cubic metre	78629	14074.53	24546.48	14274.97	29199.3
Fuel Wood	Cubic metre	3469	15151.47	10410.4	1381.37	5566.31
Sand	Cubic metre	4775406	338604.69	527010.7	397608.26	2423495.22
Gravel/Stone	Cubic metre	8587090	806423.47	1542003.1	838361.33	2013390.43
Silt/Clay	Cubic metre	1186372	1986018.72	3734861.1	2270042.29	3568832.71
Others	Cubic metre	128988	22604.3	201120.9	140962.1	661661.1
TOTAL		2651610	3182877.2	6039952.5	3662630.9	8702145.07

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

Figure-10.4
CONTRIBUTION OF DIFFERENT FOREST PRODUCT
TO THE TOTAL FOREST PRODUCT IN 2018-19 (IN %)

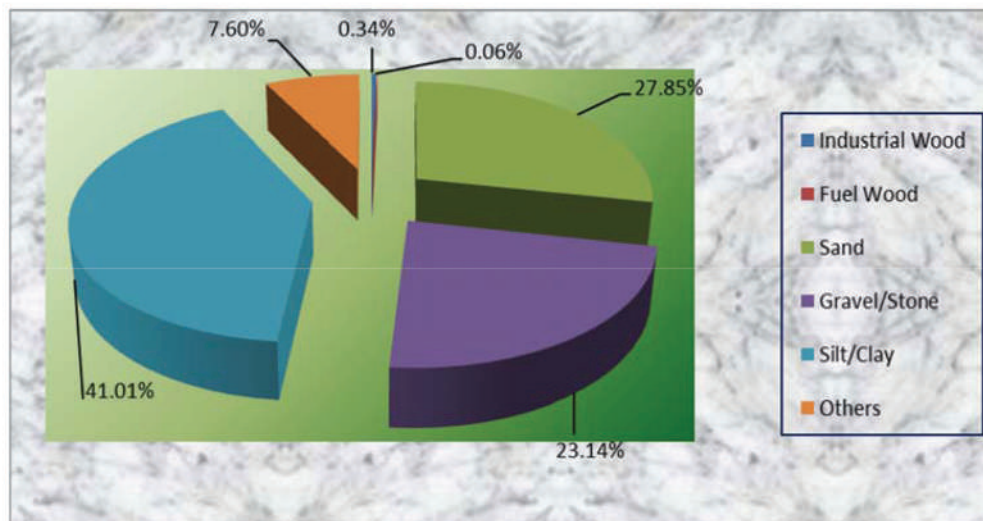
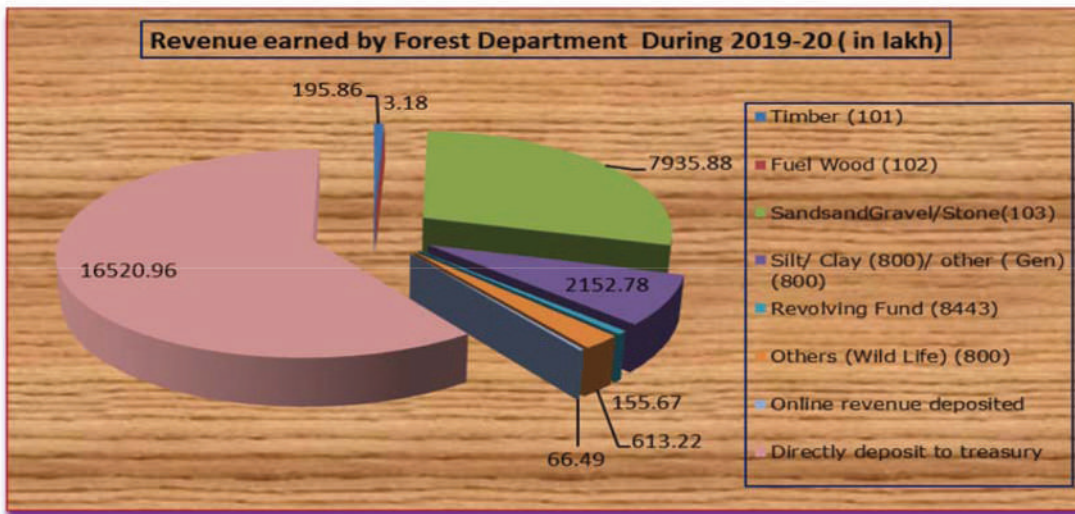


TABLE- 10.5
REVENUE EARNED BY FOREST DEPTT. FROM DIFFERENT SOURCES
(Rs. in lakh)

ITEM	2017-18	2018-19	2019-20
Timber (101)	422	270.19	195.86
Fuel Wood (102)	3	7.22	3.18
Sands and Gravel / Stone (103)	9491	10720.58	7935.88
Silt/ Clay (800) Others (General) (800)	4956	4483.03	2152.78
Revolving Fund (8443)	244	115.73	155.67
Others (Wild Life) (800)	896	940.73	613.22
Online revenue deposited	Nil	Nil	66.49
Directly deposit to treasury	Nil	Nil	16520.96
Total	16012	16537.48	27644.03

Figure-10.5



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

Table-10.6

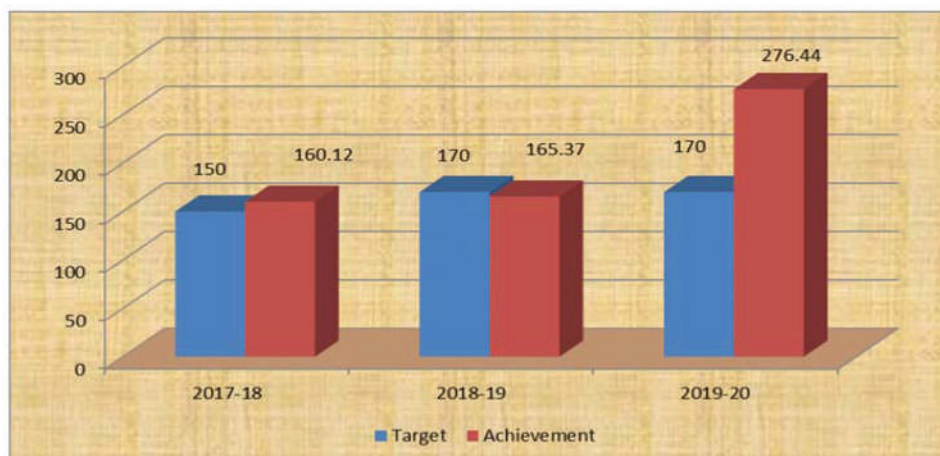
Target of Revenue Collection and Achievement for last 3 years of Forest Department, Assam. (Rs. in Crore)

Sl No.	Year	Target	Achievement
1	2017-18	150	160.12
2	2018-19	170	165.37
3	2019-20	170	276.44

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

Figure-10.6

Target of Revenue collection and Achievement for last 3 years of Forest Department



FOREST COVER AND ECONOMIC DEPENDENCY OF FOREST FRINGE VILLAGES:

In India, the rural population is about more than 60% of the countries total population and significant part of it is dependent on the forest for meeting the needs of fodder, small timber, bamboo etc. Forest cover plays an important role in the socio-cultural and economic life of the Hills and Tribal peoples in the region. It is therefore important to monitor and analyse the forest cover situation in these districts. As per 2019 ISFR, there are 3 nos. of Hill district with an area of 18295 sq.km. and 19 nos. of Tribal districts in Assam with a total geographical area of 49489 sq.km. Moreover, as per ISFR 2019 it is also estimated that there are 64,69,538 nos. of population in the Forest Fringe Villages in the state where their average per capita removal of Fuel wood is 0.218 tonnes, Fodder 3.751 tonnes, Small Timber 0.005 Cum and Bamboo 0.007 tonnes for their daily livelihood. Scope of women empowerment and forest is an inter-related subject. The schemes implemented by forest department for overall development of forest and wild life are mostly labour oriented and these labour are engaged from the forest dwellers. The nurseries plantation, maintenance of plantation by weeding, cutting of forest climbers etc. works are done by women of nearest forest dwellers. Therefore, these women folk from forest fringe villages get the opportunity for their employment and livelihood.

FOREST AND INDUSTRY:

Forest not only provides invaluable ecological services for the environment security to the nation, in addition to this forest also contributes significantly to the economy specially that of rural and marginalised strata of the society. Forest and trees outside forests are rich sources of timber, small timber, firewood, bamboos, at the same time they provide the opportunity to establish forest base industry like Sawmills, Plywood and Veneer industrial units, small scale industries like Building materials unit, Furniture houses in commercial units where large numbers of youth are directly and indirectly involved in their economic activities. In addition to these, forest tourism like tourist spots of different National Parks and Wildlife Sanctuaries also create opportunity of employment to unemployed youth as a Safari provider to local and foreign tourists. After all, forest sector plays a vital role in the state economy, but instead of large potentiality of this sector the initiative taken by the govt. is not satisfactory at all.

PROTECTED AREA - 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 hectares constituting 4.98 percent of the total geographical area of the state. The state has four Tiger reserves. The wildlife sanctuaries in Assam are a heterogeneous mixture of a variety of landscapes, plants, birds and animals. Suitable climatic conditions, geographical location and vast forest reserves have made Assam a favorable habitat for birds, animals and natural vegetation. The wildlife sanctuaries and national parks of the state are the breeding ground for some of the rarest global species. Many wildlife sanctuaries of Assam are home to large number of precious wildlife species from the golden langur to the one horned rhinoceros. Two national parks of the state are designated as world heritage sites

by the UNESCO in 1985. The total wildlife protected areas of the state at present is 3817.38 sq km.

Category wise wildlife protected areas of the state is presented in Table 10.7.

TABLE-10.7**AREA OF THE NATIONAL PARKS, in Assam, 2018-19**

Name of the National Park	Location (District)	Area in sq. km.
Kaziranga National Park	Golaghat, Nagaon, Sonitpur and Biswanath.	858.98
Manas National Park	Chirang and Baksa	500.00
Orang National Park	Udalguri and Sonitpur	78.81
Nameri National Park	Sonitpur	200.00
Dibru-Saikhowa National Park	Dibrugarh and Tinsukia	340.00

TABLE-10.8**AREA UNDER WILDLIFE SANCTUARIES (WLS)**

Name of the Wildlife Sanctuaries	Location (District)	Area in sq. km
Bhejan-Borajan-Padumoni WLS	Tinsukia	7.22
Panidehing WLS	Sivasagar	33.93
Gibbon WLS	Jorhat	20.98
Nambor-Doigurung WLS	Golaghat	97.15
Garampani WLS	Karbi Anglong	6.05
Nambor WLS	Karbi Anglong	37.00
East Karbi Anlong-WLS	Karbi Anglong	221.81
Marat Longri WLS	Karbi Anglong	451.00
Burhachapori WLS	Sonitpur	44.06
Laokhowa WLS	Nagaon	70.13
Pabitora WLS	Morigaon	38.31
Sonai-Rupai WLS	Sonitpur	220.00
Barnadi WLS	Udalguri	26.22
Chakrasila WLS	Kokrajhar	45.56
Dihing-Patkai WLS	Dibrugarh and Tinsukia	111.19
Barail WLS	Cachar, Karimganj	326.25
Amchang WLS	Kamrup (Metro)	78.64
Deepor Beel Wildlife Sanctuary	Kamrup (Metro)	4.14

TABLE-10.9
AREA UNDER PROPOSED WILDLIFE SANCTUARIES

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

Source: Chief Conservator of Forest (WL), Assam

CONSERVATION of WILDLIFE: THE FIVE NATIONAL PARKS OF ASSAM

The state has five national parks and two national parks of the state are recognised by the UNESCO as world heritage sites.

1. Kaziranga National Park:

The Kaziranga National Park spread across the floodplains of the Brahmaputra River. Its forests, wetlands and grasslands are home to deer, tiger, elephant and 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 has an area of 858.98 sq km. During the year 2019-20 altogether 1,74,013 tourists visited the Kaziranga National Park including of 11595 tourists from other countries.

2. Manas National Park:

Manas National Park was declared as world heritage site by UNESCO in 1985. MNP is also declared as project tiger reserve, elephant reserve and a biosphere reserve. The Park is located in the Himalayan foothills and is contiguous with the Royal Manas National Park in Bhutan, covering an area of about 500 sq km. 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 2019-20, altogether 45143 tourists visited to the Manas National park including of 754 foreign tourists.

3. Orang Rajiv Gandhi National Park:

The Orang National Park is also known as Rajiv Gandhi National Park. The 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 sq km. It is the smallest of Assam's five National Parks. The landscape, flora and fauna of Orang National Park are similar to the Kaziranga National Park. It was established as a sanctuary in 1985 and declared a National Park on 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. A total of 3487 no. of tourists visited this park during 2019-20 where 53 nos. were Foreigners.

4. Nameri National Park:

Declared as a National Park in 1978, Nameri National Park is in the foot hills of the eastern Himalayas in the Sonitpur district of Assam, and about 35 km from Tezpur town. The Park covers an area of 200 sq km. 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, pangoline, Indian wild dog, deer, civet 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. A large numbers of tourist visit this park in every year. During the year 2019-20, the total nos. of tourist visited this park were 9891 nos. where 754 were Foreigners.

5. 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 sq. km. 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.

TABLE- 10.10
NUMBER OF TOURISTS VISITED TO DIFFERENT NATIONAL PARKS
DURING 2019-20

Natinal Park	Domestic Tourists	Foreign Tourists	Total (in nos.)
Kaziranga National Park	162418	11595	174013
Manas National Park	44422	721	45143
Orang (Rajib Gandhi) National Park	3434	53	3487
Dibru Choikhowa National Park	923	15	938
Nameri National Park	9137	754	9891

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

Figure-10.10
Number of Tourist Visited to Different National Parks
During 2019-20

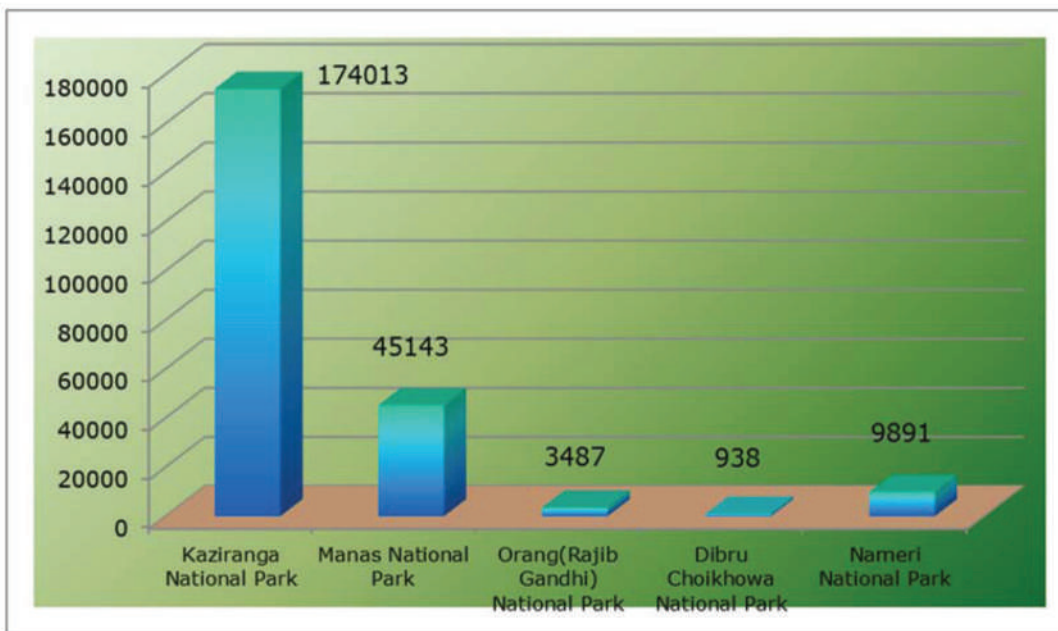


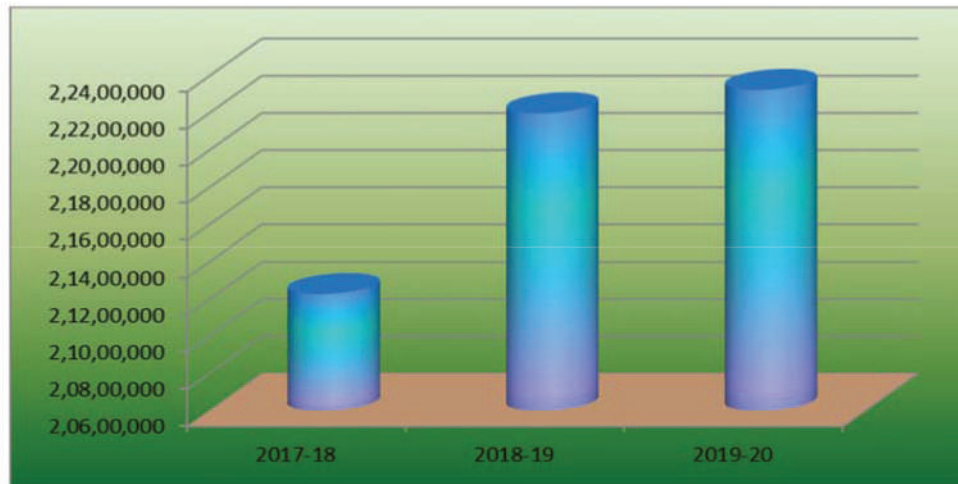
TABLE -10.11
VISITORS AND REVENUE COLLECTION
FROM ASSAM STATE ZOO-CUM BOTANICAL GARDEN

Year	No. of Visitors			Revenue collection (in Rs)
	Indian	Foreigner	Total	
2017-18	279945	89	280034	2,12,26,923.00
2018-19	751065	306	751371	2,21,97,791.00
2019-20	719998	294	720292	2,23,23,327.00

Source: PCCF & Head Forest Force, Assam.

Figure-10.11

REVENUE COLLECTION FROM ASSAM STATE ZOO-CUM BOTANICAL GARDEN



PROJECTS ON CONSERVATION OF FORESTS AND WILDLIFE:

Project Tiger:

Assam has four tiger reserves namely Orang, Kaziranga, Manas and Nameri. The first country wide tiger census conducted in 1972 estimated about 1800 tiger population. The tiger conservation programme, Project Tiger was launched in 1st April 1973 by the government 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 distributions in the country. The Government has set up a tiger protection force with intensive protection of tiger areas and stopping poaching. Royal Bengal Tigers are found in 18 states of India including of the state of Assam. Project tiger is being implemented in all the 18 states in collaboration with respective state governments. During 2018-19 Govt. had allocated Rs. 1980.00 lakh for all round development of infrastructure and security for tiger. Again during the year 2019-20 for implementation of Tiger Project for protection of Tiger Rs 278.13 lakh has utilised for Orng Tiger Reserve, Rs 595.70 lakh for Manas Tiger Reserve , Rs. 123.88 lakh for Nameri Tiger Reserve and Rs. 879.17 lakh is utilised for protection , infrastructural development and for all round protection and Habited management for tiger .

TABLE-10.12
Population of Rhinos, Elephants, Tiger and Swamp Deer
as per Census Report

Category	Year of Census	Numbers
Tiger	2014	167
Elephant	2017	5719
Rhino	2018	2650
Swamp Deer	2018	1007

Source: Principal Chief Conservator of Forest (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 were Rs. 842.99 lakh and utilisation was Rs. 3,05.29 lakh. The physical target during the year 2107-18 were formation of anti-depredation squad, running charge of vehicles, population estimation of wild elephant, veterinary support, reward to informer, publicity and awareness and purchase of drugs for tranquilizing gun. In 2018-19 total allocation for Project Elephant was Rs.222.97 lakh and sanctioned amount was 202.70 lakh. However of the sanction amount only Rs. 95.61 lakh was utilised. The amount during 2018-19 was spent for establishment of of anti poaching camp, immunization of livestock, logistic support quick action to scare way elephant form human habitation and crop fields. During 2019-20 for project elephant Govt. has sanctioned Rs.330.00 lakh under CSS where 167.87 Lakh was utilised for protection of Elephant.

Assam Project on Forest and Biodiversity Conservation (APFBC):

Assam Project on Forest and Biodiversity Conservation Society (APFBCS) was constituted by government of Assam and registered under the Societies Registration Act 1860. The Society has the mandate for planning and implementation, monitoring, coordination and management of all the activities proposed in conservation contexts under the project. The activities of the project put special emphasis on creating sustainable livelihood opportunities for forest dependent communities with a view to promote sustainable forest management and restore forest ecosystems. The society came into existence on 28th June 2012. The project is funded by the French Development Agency under Indo-French Development co-operation. To achieve the goals APFBC adopts participatory micro planning by forming Joint Forest Management Committee

(JFMC) and Eco Development Committee (EDC) among the forest dependent communities. The budget provision for this Project in total was 366 crore and subsequently it was revised to 251.50 crore. The total year wise financial progress of APFBC phase-I was as follows.

Year	Achievement (Rs in crore)
2017-18	89.01
2018-19	48.86
2019-20	18.28

The project has four technical components:

1. Institutional strengthening of the forest department
2. Multi-layer strategic planning
3. Sustainable forest management
4. Value addition and openings of market opportunities for the goods and services generated by communities through sustainable use of forest and non forest resources.

Participation of NGOs and People in APFBC

The state views NGO's as not only as agencies that will help them to implement the 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 collaborates with state government to monitor illegal wild life trade. The APFBC has able to ensure participation of villagers by forming Joint Forest Management Committees (JFMCs) Eco Development Committees (EDCs) to become part of the conservation drive. At present there are 159 Joint Management Committees 57 EDC actively working for conservation and sustainable development of forest Bio-diversity. Under project component for livelihood improvement the department has conducted some skill development programme to empower the women in different economic activities , like Tailoring, ,livestock, weaving, Bee keeping , computer training and Electrician etc. where more than 4500 women were benefited. Under Sustainable Forest Management, department has achieved 21,655 Ha. Area of plantation created Special Nurseries of indigenous fruit bearing trees and developed High Tech Nursery at Rani Area which is positive sign of forest protection.

OTHER INITIATIVES IN CONSERVATION CONTEXT:

The state has created a task force – Special Rhino Protection Force, for protection of one horned Rhino. To mitigate man-animal conflicts, the state has allocated Rs. 1045 Lakh under SOPD budget during 2019-20 and was proposed to install 100 km elephant proof solar powered fencing and around the reserve forest areas of the state. The state

also plans to dig 100 km length of elephant trenches in different areas and provide some logistical support to the villagers to deal with depredation caused by the herds of elephants in the villages by formation of Anti-depredation squads of local villagers and providing logistic support including hire charge of vehicle. Restoration of open forest 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 form. During the 2019-20 there were 150 lakh budget provision to carry on the Forest Research programme to conservation of forest resources by scientific methods. In this matter Govt has sanctioned an amount of Rs.136,18,006 for different research purposes where Rs 106,53,682 is utilised.

Integrated Development of Wildlife Habitat Areas:

Integrated Development of Wildlife Habitats (IDWH) is an ongoing centrally sponsored scheme which has been made operational by adding more components and activities. During 2019-20 total allocation for the scheme (IDWH) was Rs. 342 lakh. The department has received FOC an amount of Rs. 174.37 against the sanctioned amount for construction of anti poaching camps at Dibru Saikhowa WLS, water retention structure for wild animal at Chakrasilla WLS, provisioning of piglets to Fringe Villagers under eco development activity at Nambar WLS. The scheme includes preparation of management plans, surveys and demarcation of boundaries for protection of wildlife habitats areas and prevents anti-poaching activities. During 2018-19 government of Assam had sanctioned Rs.1965.66 lakh under SOPD to meet the physical targets for overall development of forest conservation under different programme. During 2019-20 under External Aided Project (EAP) schemes for capacity building for Management and Training of Personnel and for APFBC the total allocation was Rs. 5053.00 lakh. For National Afforestation Programme, Forest Fire prevention Management, National River conservation, for Project Elephant and Tiger during 2019-20 Govt has sanctioned Rs. 31604.71 Lakh under CSS where Total Rs. 2133.80 was utilised.

STATE CAMPA and its achievement during 2019-20 to 2020-21:

(as on 10-11-2020)

State Compensatory Afforestation and Fund Management and Planning Authority (State CAMPA) is intended as an instrument to accelerate activities for preservation of natural forest, management of wildlife, infrastructure development in the sector and allied works. On the basis of Compensatory Afforestation Fund Act, 2016 and Compensatory Afforestation Fund Rule, 2018 The government of Assam has constituted State Compensatory Afforestation Fund (SCAF), Assam on 11th Feb, 2019 and carries various activities under State CAMPA. During 2019-20 to 2020-21 under State CAMPA the state has planted 905.666 ha. of plants, including of 20 ha of *Apurugia Brikhya* plantations, 48 Nos. of Nurseries with area of 1.5 Ha. and 22 Nos. of Nurseries with area of 3.0 Ha. More over during this period the State CAMPA has undertaken a good effort for development of Medicinal & Aromatic plant and implemented various activities under different components. The following Table presents physical and financial achievements of STATE CAMPA during 2019-20 to 2020-21. (as on 10.11.2020)

TABLE-10.13
Physical and Financial Achievements of STATE CAMPA
during 2019-20 to 2020-21. (as on 10.11.2020)

Activities	Target	Physical Achievement	Financial Achievement (Creation & Management) (In Rs. Lakh)
Site Specific Plantation	885.666 Ha.	902.998 Ha.	1078.72
Aided Natural Regeneration	1230 Ha.	500 Ha.	384.52
Afforestation	3145 Ha.	1000 Ha.	1576.37
Sal Coppice Management	335 Ha.	100 Ha.	146.38
Apurugiya Brikhya Plantation	20 Ha. (4 units)	20 Ha.	139.16
Building Construction	11 Nos.	10 Nos.	170.69
Nurseries (1.5 Ha.)	48 Nos.	48 Nos.	299.2
Nurseries (3.0 Ha.)	22 Nos.	22 Nos.	328.84

Source: PCCF & Head Forest Force, Assam.

Contribution of Forestry Sector to State Economy:

Agriculture and allied sector (Primary Sector) is one of the major sector in the state economy, Forestry and Logging is also one of the main component of this sector. If we see the sector wise contribution to GSDP and NSDP with at current and constant price the contribution of Forestry and Logging to State's GSDP at current price for the year 2019-20 was Rs. 306278 lakh as per Provisional Estimate (PE) with a growth rate 6.78 % with reference to the previous year 2018-19. The following Table shows the contribution of Forestry and Logging Sector to the State economy.

TABLE: 10.14
Contribution of Forestry and Logging to State GSDP 2018-19 and 2019-20
(Rs. in Lakh)

Gross State Domestic Product (GSDP)			
At Constant Price (2011-12)		At Current Price	
2018-19 (QE)	2019-20 (QE)	2018-19 (PE)	2019-20 (QE)
172053	173131	306278	327099

Source : Directorate of Economics and Statistics, Assam.

ANNEXURE-10.14

FOREST DIVISION WISE AREA UNDER RESERVED FORESTS AND ENCROACHMENT IN ASSAM, 2019-20

Sl. No.	Forest Division	Reserved Forest Area (in hecets.)	Encroached Forest Area (in hecets.)	No. of Encroachers in forest Areas (Household)
1	2	3	4	5
1	Goalpara	25249.66	5798.25	3668
2	Kamrup	35329.55	6384.9	15546
3	Kamrup West	68133.89	21069	2450
4	Kamrup North	4518.61	132.3	882
5	Dibrugarh	21794.65	1445.97	0
6	Digboi	55714.65	2272.1	665
7	Doomdooma	30904.35	9344.8	2306
8	Golaghat	94078.87	87213.46	39243
9	Jorhat	25037.15	18651.29	1765
10	Sivasagar	24085.99	9788	3319
11	Hamren	10268	6282.32	0
12	Karbi Anglong East	48033.95	4635.51	2035
13	Karbi Anglong West	89371.66	1273	0
14	Dima Hasao	132633.6	810.16	2674
15	Baksa	13323.33	6686	4142
16	Lakhimpur	31096.55	6856.87	2683
17	Dhemaji	49553.45	31001.5	13072
18	Nagaon	33640.78	3668.5	486
19	Nagaon South	49049	12070	9658
20	Sonitpur East	47428	37574	39415
21	Sonitpur West	44067.77	32200	25000
22	Cachar (Silchar)	78897.64	5592.2	4030
23	Hailakandi	53834.97	11616	6786
24	Karimganj	48056.81	14018	4357
25	Aie Valley	6086.8	483.32	237
26	Dhubri	1344.97	72.86	321
27	Haltugaon	47876.12	16865.83	10944
28	Kachugaon	82199	2719.26	2796
29	Dhansiri	17270.94	3862.2	4094
30	Parbatjhora	32023.18	3020.02	1870
31	Chirang	55967.81	737.4	765
32	Nagaon WL	2155	-	-
33	Manah National Park	-	-	-
	Assam	1359026.7	364145.02	205209

Source : PCCF & Head of Forest Force, Assam.

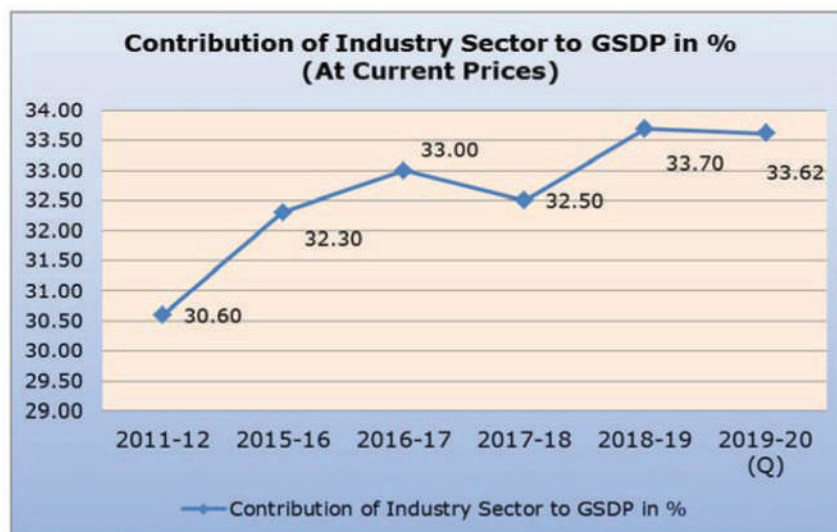
CHAPTER – XI

INDUSTRY, TRADE AND MINING

Assam though has rich and diverse natural and mineral resources, and during the colonial period the state experienced an early industrialisation, Assam today is considered as one of the industrially backward states of the country. Notwithstanding, the state is making attempts to accelerate the pace of industrialisation focusing on the state's existing resources, augmenting investment and improving necessary infrastructure including power. Towards this the state on one hand focuses on development of the transport and communication sector and on the other hand, a series of benefits and incentives have been offered to the 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. The state, despite several constraints, now has able to create a favourable environment for industrial development.

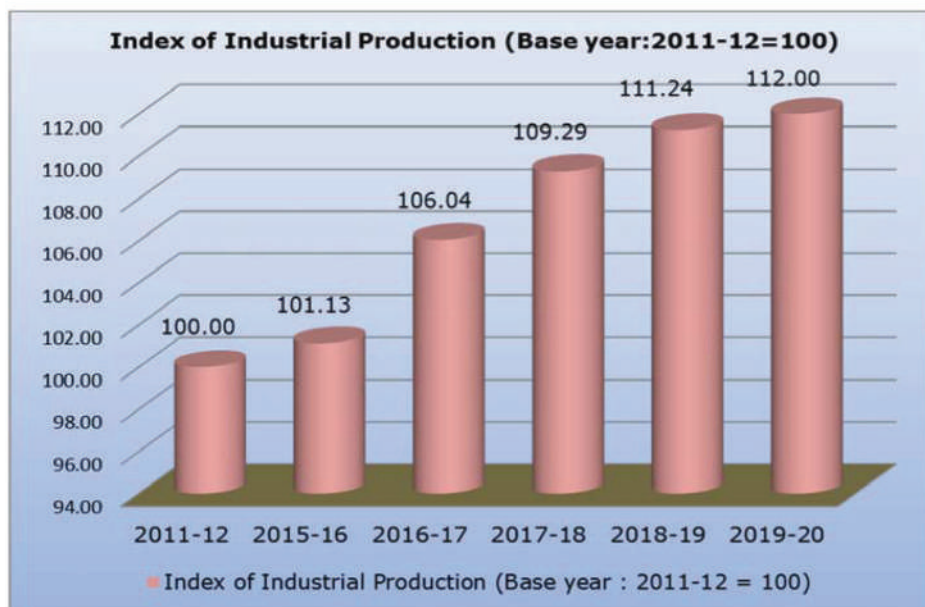
CONTRIBUTION OF INDUSTRIAL SECTOR TO STATE ECONOMY:

Industry sector comprises of mining & quarrying, manufacturing, electricity, gas, water supply & other utility services and construction. As per quick estimates for 2019-20 at constant (2011-12) prices, annual growth rate in industry sector is estimated at 8.00%; the growth rate being 10.98% at current prices. At constant prices, the contribution of the sub sectors to the industry sector for 2019-20 (A.E.) is estimated at 8.03% for mining and quarrying, 7.39% for manufacturing, 8.11% for electricity, gas, water supply & other utility services and 9.82% for the construction sector. All the sub-sectors of Industry have recorded declining growth both at current except construction sector its growth rate is increasing over the previous year. The contribution of Industry Sector to the state's Gross Domestic Product (GDP) is 33.62% at current prices during 2019-20 (Q.E.) which was 33.69% (P.E.) during the year 2018-19. At constant prices the contribution of Industry sector was 40.48% (Q.E.) in 2019-20 which was 39.77% (P.E.) during the year 2018-19.



INDEX OF INDUSTRIAL PRODUCTION (Base: 2011-12=100):

During 2019-20, the Index of Industrial Production (Base:2011-12=100) in respect of manufacturing sector is calculated at 112.00 as against 111.24 in 2018-19 showing a marginal positive growth of 0.68 percent over the previous year.

**TABLE-11.1****PRODUCTION OF SOME SELECTED INDUSTRIES IN ASSAM**

Year	Tea (000' tonnes)	Wheat Flour (000' tonnes)	Coal (000' tonnes)	Jute Textiles (000' tonnes)	Crude Oil (000' tonnes)	Cement (000'tonnes)	Fertilizer (Urea) (000' tonnes)
2015-16	653	110	397	22	4513	609	390
2016-17	657	104	600	23	4202	617	368
2017-18	667	94	782	23	4345	639	299
2018-19	702	98	783	32	4222	640	277
2019-20	412	95	596	54	4093	643	274

Source: Tea: Tea Board of India; Minerals: Indian Bureau of Mines, Nagpur.

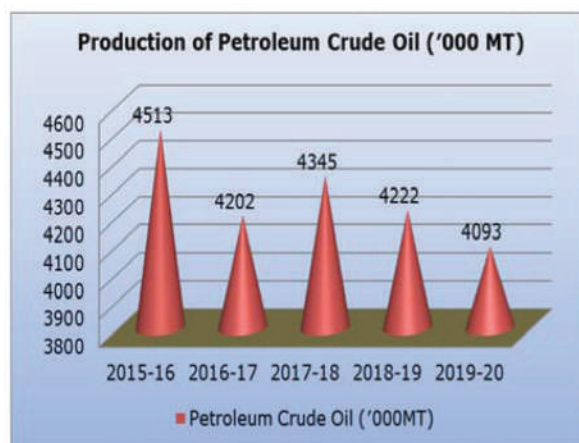
MINING SECTOR:

The state is endowed with mineral resources, and the minerals are major contributors to the state's industrial performance. The contribution of Mining and Quarrying sector to the economy has been around 11 to 12% at Current Price in 2018-19. During the year 2018-19, production of coal increased marginally but the production of crude oil declined by 2.8% compared to the previous year. The Index of Mineral Production is calculated at 84.82 in 2019-20 as against 89.55 during 2018-19 compared to 90.15 during 2017-18.

The Table-11.2 shows the trend of production of some major minerals in the state during the last three years.

Year	Coal ('000MT)	Petroleum Crude Oil ('000MT)	Natural Gas Utilised (MCM)	Limestone ('000MT)
2015-16	397	4513	2903	442
2016-17	600	4202	2907	1597
2017-18	782	4345	3034	1432
2018-19	783	4222	3083	1651
2019-20	596	4093	2931	1552

Source: Indian Bureau of Mines.



The trend shows that during the year 2018-19, production of Coal and Natural Gas (1.6%) increased marginally compared to the previous year. On the other hand, production of Sulphur declined by 16.60% and Crude Oil by 2.83%. Production of Limestone in the state during 2018-19, however, has increased by 15% compared to the previous year. But during 2019-20 production of Coal, Crude Oil, Natural Gas, Limestone and Sulphur has slid down and registering a downward growth of 23.88%, 3.05%, 4.93%, 6.38% and 14.39% respectively.

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 facilities as well as upgrading the existing ones located in different parts of the state. Infrastructural infrastructure and facilitation centres 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. are now established in the state.

The department has established one Export Processing Industrial Park (EPIP) at Amingaon in Kamrup district, 3 Industrial Growth Centres at Balipara, Matia & Chhaygaon – Patgaon - Jambari, 11 Industrial Infrastructure Development Centres (IIDCs), one Food Processing Park at Chhaygaon and one North East Mega Food Park at Nalbari district. Besides, there are 24 Industrial Estates, 7 Mini Industrial Estates, 20 Industrial Areas, 28 Growth Centres under the department and 5 Border Trade Centres. At present about 850 industrial units are functioning in these industrial estates and 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. Up to 31st March'2020 total Rs. 539.64 lakhs

fund was released for the EPIP and 58% work has been completed. At present total seven (7) industrial units are functioning in the park.

2. Industrial Growth Centre (IGC):

The Industries and Commerce Department of the state has initiated three (3) centrally sponsored projects on Industrial Growth Centre (IGC) at Balipara (Chariduar), Matia and Chhaygaon – 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 share of the central government being Rs. 1500.00 lakh and the rest Rs. 100.00 lakh is shared by the state government. Till the year 2017-18 the Government of India had released Rs. 1216.00 lakh from its total share, while the state government had released Rs.22.20 lakh. The first phase of the project covering construction of boundary wall, internal road, water facilities, construction of power works etc have been completed. In this centre 20 bigha of land have been allotted for a pharmaceutical unit. In the year 2018-19 altogether 14 units were functioning at the Centre implemented by the Assam Industrial Development Corporation (AIDC).

ii. Industrial Growth Centre, Matia:

The total project cost of the 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 central government shares Rs. 1500 lakh, and the share of the state government is Rs. 700 lakh. Till 31st March'2020, the government of India had its entire share of allocation while the state government had released Rs. 367.14 lakh. The first phase of the project covering construction boundary wall, internal road, electrical sub-station etc. is completed. An amount of Rs. 1867.14 lakh was spent for the project till the year 2017-18. Up to 31st March'2020 status of completion of the IGC is 85%.

iii. Industrial Growth Centre, Chhaygaon – Patgaon - Jambari:

The Industrial Growth Centre initiated at split locations at Chhaygaon - 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 shared by the government of India and Rs. 115.24 lakh was shared and released by the state government. The IGC project at Chhaygaon, Chatabari & Patgaon locations was completed in 2007. The extension of IGC, Chhaygaon project at Jambari location was completed in 2012. All the plots of IGC Chhaygaon-Chatabari, Patgaon & Jambari were allotted to the industrial units within two years from the time of inception. During 2019-20 Rs. 61.824 lakhs fund received and one infrastructure was completed. At present altogether 30 units at Chatabari location, 26 units at Jambari location and 6 units at Patgaon are functional. Upgradation work of IGC with a project cost Rs. 966.00 lakh under the Department of Industries & Commerce, Assam is going on and till 31st March'2020 Rs. 720.91 lakh fund released.

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 opportunities by engaging in trades with the neighbouring countries. For facilitating the Border trade with the neighbouring Countries of Bangladesh, Bhutan and even Myanmar, government of Assam and government of India have taken initiatives to create infrastructure facilities establishing 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 cost (both the 1st and 2nd phase) of Sutarkandi project was Rs. 2563.00 lakh; a larger share of Rs. 2400.00 lakh was borne by the Central Government and the rest by the State Government. The project was completed through AIDC and the trade centre is now functional. .

ii. Border Trade Centre, Mankachar:

The government of Assam had approved setting up of this Border Trade Centre under ASIDE scheme at Mankachar of present South Salmara district. The approved cost of the project was Rs. 466.00 lakh. The central government shared Rs. 380.83 lakh of the costs and the state government's share was Rs. 85.00 lakh. The project was implemented by AIIDC and is operational with normal trade transactions.

**iii. Trade Facilitation Centre, Jagun, Tinsukia
(Along Stilwell Road to Myanmar)**

A Trade Facilitation Centre (TFC) has been set up at Jagun, located about 3 Km from Jairampur (the Assam - Arunachal Pradesh border point) and 20 Km from Panchu Pass (the Indo- Myanmar Border on the Stilwell Road). Infrastructure development for the Trade Centre was done by the AIIDC in a plot of land measuring 12 acres with a project cost of Rs. 598.00 lakhs. The project is now completed with amenities of warehouse, parking yard, loading and unloading platform. The Government of India has released 530.98 lakhs for this project till the end of the year 2017-18.

iv. Border Trade Centre, Golokganj (Sonahat)

This Border Trade Centre is located at 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 28th 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 for the project.

v. Border Trade Centre at Daranga ,Baksa (Indo-Bhutan Border)

The Border Trade centre has been established in Baska district in a plot of land measuring 48 bigha (16 acres) with a project cost Rs. 1433.88 lakhs to facilitate formal trade with Bhutan. Parking yards, warehouse and residential quarters for custom officials, weigh bridges, loading and unloading platforms has been constructed in the trade centre. The project is being completed by AIIDC Ltd. Rs. 1402.71 lakhs has been released up to 31st March'2020. The centre is completed except the cold storage.

4. Food Processing Industrial Park:

The Ministry of Food Processing Industries, government of India has approved setting up of a Food Processing Industrial Park at Chhaygaon in Kamrup district with a project cost (revised) of Rs. 496.00 lakh. The central government share for this project is Rs. 350.00 lakh and state government share is Rs.146.00 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 still the year 2017-18. The project is completed by ASIDC and plots allotted to 16 units, out of which 8 units are operational. The rest of the units are in the process of to establish their required infrastructure. .

5. Integrated Infrastructure Development Centres (IIDC):

The Ministry of MSME, government of India has approved setting up 11 (eleven) 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 63 units are functioning in different IID centres as indicated below:

1. IID Centre, Nalbari	:	Nil.	7. IID Centre, Rangia	:	19
2. IID Centre, Malinibeel	:	1	8. IID Centre, Bandardewa	:	3
3. IID Centre, Titabar	:	1	9. IID Centre, Parbotipur	:	2
4. IID Centre, Dalgaon	:	8	10.IID Centre, Serfanguri	:	Nil.
5. IID Centre, Demow	:	3	11.IID Centre, Silapathar	:	Nil.
6. IID Centre, Bhomoraguri:		12			

6. North East Mega Food Park, Nathkuchi, Nalbari:

With the objective of providing adequate infrastructure for the food processing industries of the region along with creation of 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 and term loan. The central government has released Rs 4500 lakhs and the state government has released Rs 2824.16 lakh against their shares till 2017-18. The park is located along the NH-31 at a distance of 90 KM from Guwahati and will accommodate 27 food processing units. Construction for the Mega Food Park was started on May 28, 2015; as on 2018-19, a total of 14 units are functioning in the park. One new food park is also under process of initiation at Ulupathar covering 1.7 lakh sq. mt. areas near Margherita in Tinsukia district.

ONGOING INFRASTRUCTURE PROJECTS:

1. Plastic Park:

To facilitate development of downstream industries based on the products of the Assam Gas Cracker Project (Brahmaputra Cracker and Polymer Ltd), government of

Assam has proposed to set up a Plastic Park at Gelapukhuri in Tinsukia district under the Department of Chemical & Petrochemicals, Ministry of Fertilizers, Govt. of India. The primary aim of the proposed park is to facilitate polymer based downstream industries. It is proposed to provide following facilities in the park-

- 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 park shall have an area of 500 acres and approved project cost of the park is Rs.9365.00 lakhs. The government of The India shall share Rs. 4000.00 lakh for the project and the state government shall bear Rs.5365.00 lakh. AIDC Limited has been designated as the nodal agency for implementation of the project. The central government has released Rs 2200.00 lakh and the state government has released Rs. 4765 lakh. Up to 2019-20 almost 60% of work the park has been completed.

2. Bamboo Park:

A Bamboo Technology Park is under construction at Chhaygaon in Kamrup district, about 60 km from Guwahati city. The proposed park is being developed in PPP model with the assistance from the Ministry of Commerce and Industry, Government of India, Government of Assam and private promoters. Estimated cost of the project is Rs. 6228 lakh out of which the share of central government is Rs. 5263 lakh, and the state government shall contribute Rs 390.00 lakh. Project budget shall have a term loan of Rs. 575.00 lakh. The government of India has released Rs 5105.21 lakh and the state government has released Rs. 151.4 lakh of which Rs 101.40 is equity share and Rs. 50.00 lakh is grant. Objective of the park is to create integrated infrastructure for promotion of bamboo based industries in the state. The project is already commissioned with one unit functioning in the park.

3. Tea Park :

The first Integrated Tea Park of the North East is being set up at Chhaygaon in Kamrup District. Common facilities planned in park are space for Tea Auction Centre, Tea Research and Development facilities, Exhibition Hall, Convention Centre, packaging of tea and tea tasting facility etc. The Assam Industrial Development Corporation Ltd. is the nodal agency for construction of the Tea Park. The final DPR for the Total Project Cost of Rs. 9344.96 lakh is yet to be approved. Up to 31st March'2020 Rs. 1484.45 lakh has been released by the government and project is in progress by completing 50% of the park. The state received revenue of Rs. 30.63 lakh during 2016-17 from renting out the sheds of Industrial and Commercial Estates under DI&CC. The revenue from rent increased to Rs. 44.36 lakh in 2017-18; but decreased to Rs. 26.98 lakh during 2018-19.

Major Schemes being implemented by Department of Industries and Commerce, Government of Assam:

1. Prime Minister Rojgar Yojana (PMRY)/Prime Minister Employment Generation Programme (PMEGP):

The Prime Minister Rojgar Yojana (PMRY) was a Centrally Sponsored Scheme launched on October 2, 1993 with the objective of providing employment to the educated unemployed youth. The scheme facilitates self-employment through setting up of manufacturing or service enterprises and business ventures. The scheme provisioned a limited amount of bank loan with a proportion of subsidy for the interested and qualified educated youth on the recommendation of Task Force Committees constituted for the purpose. The programme was effective till March 31, 2008; and thereafter a new scheme namely Prime Minister Employment Generation Program (PMEGP) was 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 for the scheme is being routed through the identified Banks.

TABLE-11.3
TARGET AND ACHIEVEMENT OF PMEGP

Year	Physical target (in Nos.)	Total Cases sanctioned (in Nos.)	Physical achievement (in Nos.)	Financial achievement (Rs. in lakh.)	P.C. of Physical achievement	P.C. of financial achievement to sanction
2016-17	3776	3773	3773	3499.4	99.92	92.7
2017-18	6386	3267	2166	2269.6	33.92	69.0
2018-19	4203	2080	3736	4165.7	88.88	49.0
2019-20	4382	265	934	1145.3	21.31	6.04

Source: Commissionerate of Industries and Commerce, Assam

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 investment made in plant and machineries (for manufacturing sector) or in equipment (in case of service enterprises) as under

A) Manufacturing Enterprises:

- a) **Micro:** Fixed investment in plant and machinery up to Rs.25 lakh.
- b) **Small:** Fixed investment in plant and machinery above Rs. 25.0 lakh and up to Rs.5 Cr.
- c) **Medium:** Fixed investment in plant and Machinery above Rs. 5 Cr up to Rs. 10Cr.

B) Service Enterprises:

- a) **Micro:** Fixed investment in equipment up to Rs. 10 lakh.
- b) **Small:** Fixed investment in equipment above Rs. 10 lakh and up to Rs. 2 Cr.
- c) **Medium:** Fixed investment in equipment above Rs. 2 Cr and up to Rs. 5 Cr.

In the year 2017-18, the state had 47048 SSI / MSME units providing employment to 282942 of persons. In 2018-19 the number of SSI / MSME units was increased to 48171 with an addition of 1123 numbers of registered units and

employment by 8543. From the year 2016-17 the state shows declining trend both in number of SSI / MSME registered and number of employment generated (Table-11.5).

TABLE- 11.4
SOME STATISTICS ON SSI/MSME OF ASSAM

YEAR	No. of SSI / MSME	Employment (in nos.)	Average no. of Employment in 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	1.50
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	60687.43	27.88
2017-18	1539	14442	9	47452.20	30.83
2018-19	1123	8618	8	20081.26	17.88
Cumulative Total	48514	294114	6	828956.54	9.43

Source: Commissionerate of Industries and Commerce, Government of Assam

3. 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 as well as in abroad to market their products. All registered micro and small entrepreneurs are eligible for this scheme. Till the end of November 2019 altogether 4001 entrepreneurs have availed the benefit under this scheme. The nature of assistance under the scheme is as follows:

- Within the state: Maximum ceiling of Rs. 5,000.00 per entrepreneur towards the rent of the stall and TA/DA of Rs. 500.00 per day per stall for 5 days. The participant not resident of the district where the event takes place gets TA/DA at the rate of Rs. 600.00 per day per stall for 5 days.
- Outside the state: Selected participants is reimbursed 50% of the stall rent subject to a ceiling of Rs. 15,000.00 and actual sleeper class return railway fare for 2 (two) persons per unit. In addition an amount of Rs. 500.00 per person per day is provisioned for the fair period towards food and lodging expenses.
- Outside the country: Selected participants is provided free stall space on sharing basis and economy class air fare for one person per unit along with Rs. 1000.00 per person per day for the towards food & lodging expenses.

4. **Sarothi : The Start-Up Assam:**

The Sarothi scheme is for first generation entrepreneurs of the state to provide assistance to set up their entrepreneurial venture. This support scheme is conceived to assist in getting loan or financial assistance from bank / financial Institutions for any new venture. A major problem as observed in the state is banks and financial institutions are reluctant to provide loan for new ventures considering the risks involved. The Chief Minister's Start-up Fund named **Sarothi** was started in 2016-17 with an endowment amount of Rs. 10 Cr. 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 the entire state. The beneficiaries who avail the loan will be supported by the state government through an annual interest subvention of 5%. In the year 2016-17 altogether 253 entrepreneurs were supported under this scheme with an amount of Rs. 10 crore. The physical target for the year 2017-18 was to support 1298 entrepreneurs.

5. **SVAYEM:**

Swami Vivekananda Assam Youth Empowerment Yojana (SVAYEM) 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. The quantum of assistance would be up to Rupees one lakh for new entrepreneurs and up to Rupees two lakh for existing entrepreneurs. Beneficiary contribution to be borne by 25% at the maximum of the total project cost. The quantum of subsidies is limited to 20% of sanctioned amount. For year 2020-21 loan disbursed to the amount of Rs. 64.58 crores to 8554 numbers of enterprises.

6. **Assam Agribusiness & Rural Transformation Project:**

Assam Agribusiness and Transformation Project (APART) is a word bank funded project implemented by the Government of Assam with a project period of 7 years, which was signed on 30th Oct, 2017. Assam Rural Infrastructure and Agriculture Services (ARIAS) Society is the co-ordinating agency for the project. The project is under process proposed to be implemented by eight line departments of the state.

INSPECTOR OF FACTORIES:

Altogether 289 new factories were registered with the office of the Inspector of Factories in 2019. With this addition total number of registered factories in the state reached 7225 with a growth of 4.2 per cent over the previous year. The number of daily workers engaged in the factories in 2019 was 285841 which was 279246 in 2018; average number of daily worker engaged per factory being 40.

TABLE-11.5
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
2018	6945	279246	40
2019	7225	285821	40

Source: O/o The Chief Inspector of Factories, Assam

SOME MAJOR INDUSTRIES IN ASSAM:

TEA INDUSTRY:

The Tea industry occupies an important place in Assam's economy. 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 in the 50's and 60's of the 19th, 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 the existing tea estates owned by reputed Indian as well as multinational Companies, common people of the state also ventured into the profession of tea plantation establishing small tea gardens. The tea industry of the state now provides average daily employment to more than 6.86 lakh persons, which is more than 60 percent of the total average number of labour employed in a day (i.e. on an average 11.1 lakh labour are employed per day) in the tea sector of the country in tea industry.

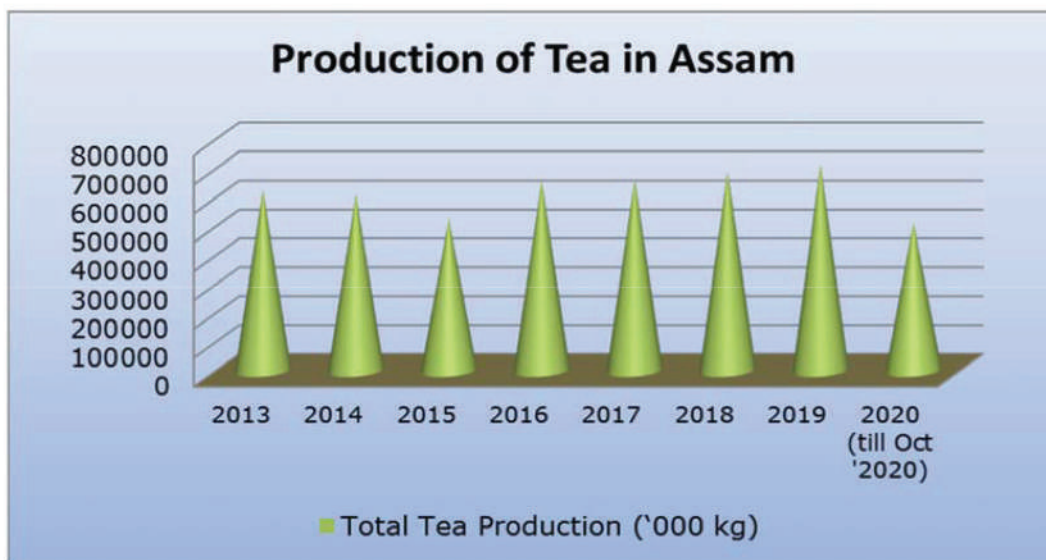
Assam has witnessed a spurt in the growth of small tea holdings during the last three decades and there is more than 1.19 lakh small holdings accounting for about 236million kg of made tea. Most of the Small Tea Growers (STGs) are first generation young and educated entrepreneurs who have started contributing immensely towards transformation of socio-economic life of rural Assam. The data of Tea Board of India, 2020, there are 118756 nos. registered Small Tea Growers (with an area up to 10.12 hectares of land) in Assam. Total number of small tea gardens in the state is 118756 which together produced about 235636thousand kg of tea in 110857 hectares of land. The number of tea estates (i.e. with holding above 10.12 hectares) in the state is 765 upto October'2020. The estate sector produces 278397 thousand kg of tea in total 232,399 hectares of land. The production of tea in Assam was 514033 thousand kgs upto October'2020 produced in 337 thousand hectares of land.

TABLE-11.6
TEA STATISTICS OF ASSAM

Year	No of Tea Gardens	Area under Tea ('000 hectares)	Total Tea Production ('000 kg)	Average Yield (Kg/Hect.)
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
2018	101850	338	691910	2047
2019	108136	337	716490	2126
2020 (till Oct '2020)	119521	343	514033	1498

Note: Area, Production and Average yield have been estimated and subject to revision.

Source: Tea Board of India.



The Guwahati Tea Auction Centre, since its establishment in 1973 has been actively taking part in trading of the tea produced in the states of North-eastern region of India. Table-11.8 presents the statistics of quantity and average price of tea sold in the Guwahati Tea Auction Centre.

TABLE-11.7
QUANTITY AND AVERAGE PRICE OF TEA SOLD
IN GUWAHATI TEA AUCTION CENTRE

Year	Leaf				Dust			
	CTC		Orthodox		CTC		Orthodox	
	Quantity (million kg)	Average Price (Rs. per kg)	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	86.70	140.93	1.40	186.40	41.20	146.80	Nil	Nil
2016	38.12	137.71	0.32	186.03	17.78	143.65	Nil	Nil
2017	116.43	136.01	1.47	186.36	47.76	151.02	Nil	Nil
2018	115.06	130.00	1.36	170.93	50.59	141.30	Nil	Nil
2019	115.66	136.11	4.24	167.29	51.24	145.64	0.00036	58.33
2020 (upto October)	28.27	264.71	2.05	274.34	15.45	267.40	0.091	184.18

Source: Guwahati Tea Auction Centre

RUBBER PLANTATION:

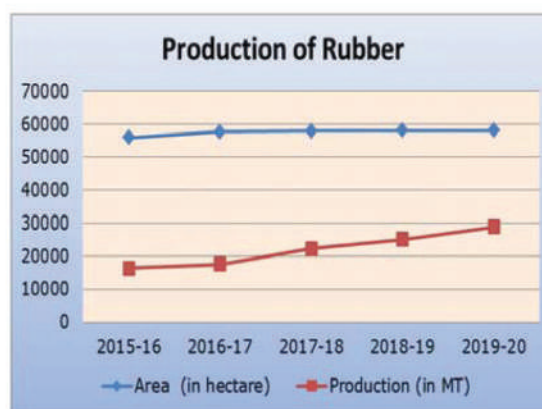
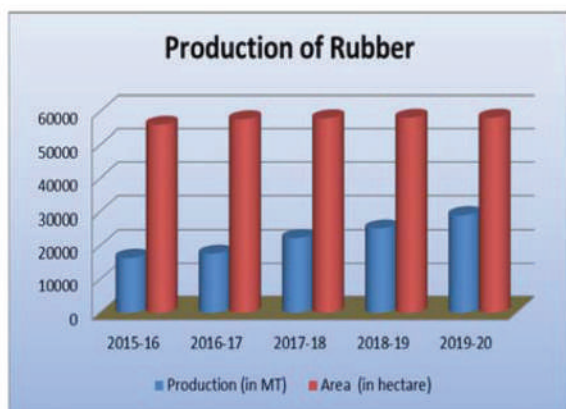
The rubber plantation has gained popularity in Assam due to congenial agro-climatic condition in the state. The Rubber Board has identified Assam as a "Potential state" from the "productivity" point of view as the state has ample scope for expansion of rubber plantation

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 increased considerably during the same period. During 2017-18 the production of rubber had increased by 27% as compared to previous year. In 2018-19 the production of rubber has increased by 13%. In 2019-20 the production of rubber shows a 14.60 % increase in production over the previous year. The data on growth of area, production and employment generation in rubber plantation sectors are presented in the Table-11.9. Considering the growth of plantation areas and production trend of rubber, there is vast potential for setting up of industries to add value of rubber in the state.

TABLE-11.8
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
2018-19	58120	25246	20858	182873
2019-20	58129	28931	26659	192503

Source: The Rubber Board, Zonal Office, Guwahati



COFFEE PLANTATION:

Coffee is grown in Assam and the rest of North Eastern states, but not in abundance. Coffee is planted in two districts, Karbi Anglong and Dima Hasao of the state. Meghalaya, Nagaland and Mizoram are the important coffee producing states in the North East region of India.

TABLE-11.9

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	180.00	116.00	1228
2016-17	1158.24	42.90	152.00	102.00	1318
2017-18	1248.82	39.50	118.68	110.53	1543
2018-19	1278.02	39.15	118.28	122.20	1652
2019-20	400.95	36.50	129.00	119.00	954

*Price /Kg is quoted as per average price realized on ICTA

Source: Coffee Board N.E. Region, Guwahati.

KHADI AND VILLAGE INDUSTRY (KVI):

With a view to generate rural employment and upliftment of 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. 28.00 Crore in 2019-20; a slight improvement compared to Rs. 27.45 Crore in 2018-19 and Rs. 26.76 crore in 2017-18. The total earning from sales is estimated at Rs. 34.60 crores in 2019-20. Total person engaged in KVI was 79885 in 2019-20, 79737 in 2018-19 and 66844 in 2017-18 with 6270 Nos. of centres working. During 2019-20 the value of commodities produced by the KVIC was 13.27 crores employing 5337 Nos. of persons and with total sale Rs. 14.78 crores.

TABLE-11.10
STATE WISE PHYSICAL PERFORMANCE OF KHADI
IN NORTH EASTERN REGION AS ON 31.12.2020

State	Production (Rs. Lakhs)	Sales (Rs. Lakh)	Cummulative Employment (in Lakh)
1	2	3	4
Arunachal Pradesh	9.90	8.31	31
Assam	666.31	819.48	5118
Manipur	6.97	6.57	166
Meghalaya	17.55	20.34	59
Mizoram	1.69	2.07	14
Nagaland	4.00	24.63	295
Sikkim	0.00	0.00	0
Tripura	0.40	7.65	25
Total	706.82	889.05	5708

SERICULTURE:

Traditionally, sericulture has been a major cottage industry of the state. Sericulture is practiced in Assam from time immemorial and continues to be an important farm based labour-intensive activity providing gainful livelihood to more than 3 lakh families in rural and semi-urban areas of the state. Moreover, sericulture has able to create sustainable forward linkages with establishment of value adding yarn reeling and weaving activities primarily in the rural household sector of the state. These activities require relatively low investments, but yield higher returns.

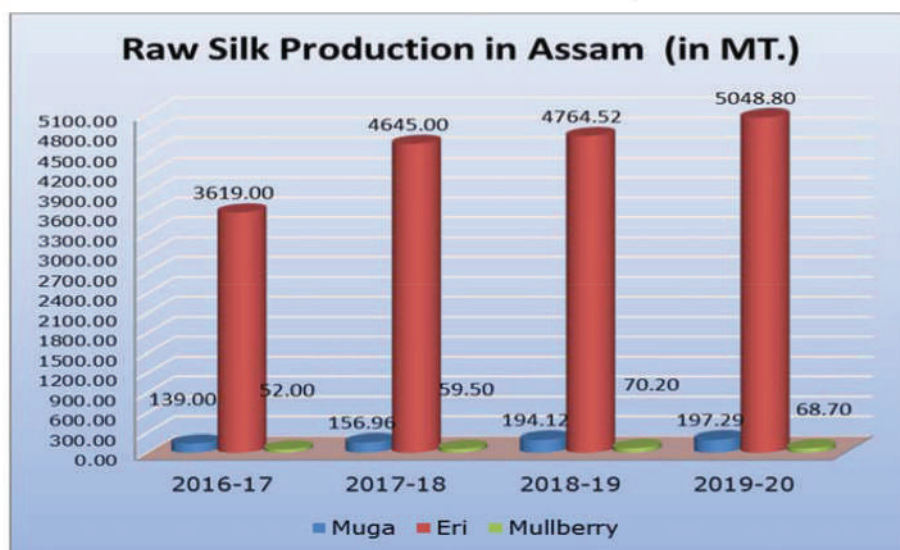
The Muga (the golden silk) yarn is very specific to the state; now has received geographical identity. In addition to the traditional Muga, Eri and Mulberry are other two important natural yarns produced in the state. The state has also seen introduction of Oak Tassar in the hills districts. The state accounts for more than 85 percent of global Muga Silk produced. 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 crores. The state is also a Major producer of Eri Silk (about 62 percent) of the country.

Table-11.11 provides the detail on the variety of raw silk produced in the state during past 3 years.

TABLE - 11.11
PRODUCTION OF NATURAL YARN IN ASSAM
(IN MT.)

Item	2016-17	2017-18	2018-19	2019-20
Muga	139.00	156.96	194.12	197.29
Eri	3619.00	4645.00	4764.52	5048.80
Mullberry	52.00	59.50	70.20	68.70
Total	3810.00	4861.46	5028.84	5314.79

Source: Directorate of Sericulture, Assam



The sericulture industry has undergone changes with respect to loom, fabric, design and technology. 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. 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 however have declined to an extent in recent times because of various reasons (Table-11.12). The production of silk in the state however has increased from 4861.46 MT in 2017-18 to 5028.84 MT in 2018-19 recording a growth of 3.35 percent. The performance of sericulture sector is presented in Table-11.12

TABLE-11.12
SERICULTURE ACTIVITIES IN ASSAM

Sl. No.	Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	Sericulture Villages	Nos.	10740	10746	11411	11281	11281	9935	8726	8726	8642
2	No. of Families Engaged	Nos.	254516	291592	282073	652406	496901	319405	310582	307877	309530
3	Area under Silk Worm food Plants	Hect.	24268	26827	33790	15417	11434	15983	11585		
3.1	Eri	Hect.	8044.00	9172.50	15796.00	6601.00	5510.00	7176.00	5936.00		30319.46
3.2	Muga	Hect.	9400.00	10230.00	10371.00	5995.00	4383.00	5931.58	4369.00		10762.49
3.3	Mulberry	Hect.	6824.00	7424.00	7623.00	2821.00	1541.00	2875.00	1280.00		2526.34
4	Yield of Cocoons										
4.1	Eri-cut Cocoons	MT.	1622.51	2514.16	3182.00	3050.00	3317.00	4350.58	6300.00		6311.00
4.2	Muga Cocoons	Lakh Nos.	5812	5450	6361	6528	6864	6480	7865		9865.66
4.3	Mulberry Reeling Cocoons	MT.	129.28	225.00	340.50	268.00	328.00	439.05	576.00		584.89
5	Production of Silk Yarn	MT.	1187.42	2068.00	2700.04	2497.40	2712.80	3647.49	4866.46		5048.80
5.1	Eri Raw Silk	MT.	1061.61	1934.00	2545.60	2345.00	2555.00	3468.25	4650.00		497.29
5.2	Muga Raw Silk	MT.	114.56	109.00	127.20	126.00	127.00	129.60	156.96		68.70
5.3	Mulberry Raw Silk	MT.	11.25	25.00	27.24	26.40	31.02	49.64	59.50		

Source: Directorate of Sericulture, Assam.

HANDLOOM:

Handloom weaving is a precious part of generational legacy and has been kept alive by the skilled weavers engaged in the age old tradition since antiquity in Assam. In Assam, handloom weaving is inexorably linked with Assamese culture and heritage. In the handloom sector women are involved in significant number, primarily with subsidiary capacity. The sector continues to play very important role in terms of employment generation and socio-economic development of Assam. The sector in Assam has gradually grown to meet market demand with commercial production. The state had an estimated number of 19.48 lakh weavers during 2017-18. There were 221 handloom demonstration circles in the state covering 14273 villages. In the year 2017-18, 9 Yarn Banks were established by the Directorate under state sponsored scheme. In 2019-20 there were 102 Handloom Training Centres in the state accommodating 1565 trainees. Handloom production during the year 2019-20 was 17026 Meters. In addition, 98 Weavers Extension Service Units produced 1,62,242 meters of cloth during 2019-20.

TOURISM:

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 segments of the tourism sector and therefore the government of Assam has given thrust on this sector. In Assam the ideal time to visit for tourism 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 promote the tourism destinations in the state.

The tourism department of the state has made considerable amount of investment in infrastructure as well as in creation of other facilities over the years with the financial assistance from the central government, state government and the NEC. To tap the unexplored potentials and growth of the tourism sector, special emphasis has been given on Tourism Circuit Development, Destination Development, Wayside Amenities etc., through public and private partnership approach. Under the scheme Swadesh Darshan the state government through the ATDC has undertaken a project with financial allocation of Rs. 9835.54 lakh for development of Tezpur-Majuli- Sivasagar as the 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 for the benefit of different sections of the society and tap all sources of tourism potential. The state government has made all basic arrangements for construction of a chain of 5 Star Hotels in collaboration with private investors and Indian Hotel Company Ltd. Eco-tourism aims at the appreciation of both nature and traditional cultures. Assam has several ethnic groups residing in harmony in spite of the differences in practices of rites and rituals, festivals and attires. The fascinating legacy of art and crafts, the three unique varieties of Silk, the Golden Muga, the White Pat and Warm Eri provide opportunities to discover the rich heritage of the state. In the state, one can hear the rhythms of the shuttles of looms in the craft village, which get momentum with the advent of spring. The state has also put special priority for development of religious tourism and cultural festivals like "Ambubachi Mela" in Kamakhya Temple and Dol Utsav in Barpeta. One can opt for short cruises or can avail longer sailing to Kaziranga National Park or to the sits of Vaishnavite culture at 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 are important endeavour to attract tourists. The Table-11.13 shows the number of arrival of tourists in the state during past three years.

TABLE-11.13
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
2018-19	6027002	41209
2019-20	5146307	18594

Source: Directorate of Tourism, Assam

TABLE-11.14
STATUS OF REVENUE EARNED FROM THE TOURISTS LODGE

(Rs. in lakh)

Lodge/Year	2015-16	2016-17	2017-18	2018-19	2019-20
Kaziranga	1554390	900601	1021570	983650	833900
Sivasagar	735175	762694	802957	1027444	892834
Bhalukpong	177000	85600	51600	144200	124800
Chandubi	107400	214800	178040	524800	409000
Barpeta Road	163100	262400	376100	350800	400764
Total	2737065	2226095	2430267	3030894	2661298

Source: Directorate of Tourism, Assam

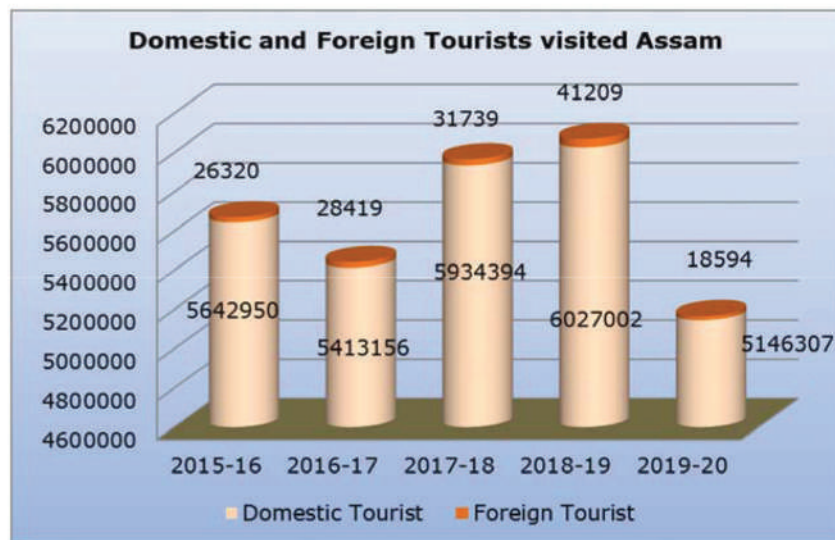
The state has seen increase in arrival of foreign tourists over the years. The Table-11.15 shows the trend of number of tourists visited the National Parks in Assam during the last three years.

TABLE-11.15
NUMBER OF TOURIST VISITED NATIONAL PARKS IN ASSAM

Name of The National Park	Domestic Tourist					Foreign Tourist				
	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
Kaziranga N. Park	464945	462741	475061	168738		6679	7891	8467	7443	6073
Nameri N. Park	184763	195305	196491	13847		1165	1206	1263	1116	97
Orrang N. Park	111667	112037	114399	8544		897	907	911	527	14
Manash N. Park	214230	217464	261201	42,329		897	904	1565	658	98
Dibru Saikhowa N. Park	207655	261303	274660	1793		1005	1112	1167	24	4
Pobitora										218

Source: Directorate of Tourism, Assam

Considering the potential and importance of development of the tourism sector the government of Assam has launched a new tourism Policy 'Tourism Policy of Assam 2018' with a aim to double the tourist inflow to the state in next five years.



Key Highlights of "Tourism Policy of Assam 2018"

- The policy aims at creating a policy framework to push tourism as a major economic sector of Assam, increasing the inflow of tourists' by at least two to three folds in the next five years.
- The main focus of the policy is to make Assam a film making destination by offering a range of incentives to movie producers to come and shoot in the state.
- The policy also encourages 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.
- The policy also offers a range of financial benefits for constructing approach roads and installing renewable energy sources at tourist places/units.

ANNEXURE-11.1

**NUMBER OF REGISTERED MSME UNITS, INVESTMENT IN PLANT & MACHINERY
AND WORKERS UNDER THE COMMISSIONERATE OF INDUSTRIES, ASSAM**

District	Unit Registered during the year 2018-19				Investment in Plant & Machinery (Rs. in Lakh)	No. of workers
	Micro	Small	Medium	Total	2018-19	2018-19
1	2	3	4	5	6	7
Kokrajhar	10	3	1	14	1423.26	117
Dhubri	24	1	0	25	251.83	167
Goalpara	59	8	0	67	111.00	489
Barpeta	66	10	0	76	907.76	429
Morigaon	15	3	0	18	459.30	140
Nagaon	71	8	0	79	446.16	687
Sonitpur	31	2	0	33	462.93	227
Lakhimpur	14	0	0	14	24.33	50
Dhemaji	40	14	0	54	706.00	1132
Tinsukia	48	12	0	60	498.46	323
Dibrugarh	41	12	0	53	768.89	367
Sivasagar	71	61	0	132	3360.36	854
Jorhat	20	1	0	21	105.67	97
Golaghat	62	41	0	103	1980.38	655
Karbi Anglong	7	1	0	8	77.54	62
Dima Hasao	12	0	0	12	49.71	49
Cachar	22	5	0	27	220.45	176
Karimganj	6	1	0	7	64.08	31
Hailakandi	4	0	0	4	13.74	4
Bongaigaon	7	2	0	9	120.91	47
Chirang	18	3	0	21	277.32	194
Kamrup	41	2	2	45	1746.79	323
Kamrup (M)	94	31	2	127	3948.00	1281
Nalbari	53	3	0	56	457.27	335
Baksa	12	5	0	17	331.78	107
Darrang	21	2	0	23	212.47	108
Udalguri	18	0	0	18	48.96	92
Assam	887	231	5	1123	19075.35	8543

Source : Commissionerate of Industries and Commerce, Assam.

ANNEXURE-11.2

INDUSTRIAL ESTATES AND OTHER INFRASTRUCTURE IN ASSAM, 2018-19

(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 Functioning
1	2	3	4	5	6	7
Kokrajhar						
Dhubri	Gauripur	13591.64	7	1	652.00	0
Goalpara						
Barpeta	Tikagaria	66914.50	0	0	0.00	0
Barpeta	Bichankuchi	3305.66	3	0	0.00	0
Morigaon	Dolbari	13382.80	0	0	0.00	1
Nagaon	Senchowra	28104.08	24	24	7839.59	23
Sonitpur	Dhekiajuli	38338.00	30	24	2074.00	8
Lakhimpur	Rajabari, Bihpuria	130909.09	6	4	91.13	2
Dhemaji						
Tinsukia	Tinsukia (Borguri)	149833.60	50	50	34788.00	46
Tinsukia	Ulup Pathar, Margherita	169735.00	0	0	0.00	0
Dibrugarh	Lahowal	21421.63	12	11	14548.14	9
Sivasagar	Sivasagar (Darikapar)	40140.00	28	28	10006.00	28
Jorhat	Cinamora	34069.77	29	29	16041.50	19
Golaghat	Numaligarh	12754.00	0	0	12754.00	1
Karbi Anglong	Bokajan	80266.00	5	5	0.00	5
Karbi Anglong	Hamren	20066.00	4	0	0.00	0
Dima Hasao	Umrangsu	2675.52	8	6	0.00	5
Cachar						
Karimganj	Badarpur Ghat	29442.00	28	25	2151.43	14
Hailakandi						
Bongaigaon	New Bongaigaon	38795.00	35	34	23133.00	43
Chirang	Bengtol Gate	93680.30	0	0	35788.09	0
Chirang	Amguri	121450.00	0	0	20074.30	0
Kamrup (M)	Bamunimaidan	86836.00	63	63	16656.00	73
Kamrup						
Nalbari	Nalbari	48776.00	25	21	13951.00	10
Baksa	Bennibari	329143.00	11	11	123428.00	11
Baksa	Dhepargaon	48640.32	1	1	3242.69	1
Darrang						
Udalguri						
Assam		1622269.91	369	337	337218.87	299

(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	77445.00	7	1	63049.09	16
Tinsukia	Buraburi, Sadiya	267600.00	0	0	267600.00	0
Tinsukia	Doomdooma	749347.00	1	1	749347.00	1
Tinsukia	Lakhimpuria Nepali	401400.00	0	0	0.00	0
Sonitpur	Dolabari	61470.00	8	8	50051.00	15
Sonitpur	Dhekiajuli	31728.00	0	0	0.00	0
Sonitpur	Sundarbari	46749.00	3	3	15131.00	2
Sonitpur	Gotlong	9090.00	0	0	7681.09	4
Sonitpur	Biswanath Chariali	16052.00	5	5	1308.00	2
Darrang	Mangaldai	63345.00	20	18	36306.88	15
Darrang	Dolgaon	29324.66	0	0	5351.22	0
Dibrugarh	Beheating	32373.79	12	11	17251.53	14
Kamrup	Kalapahar	14049.00	13	13	6074.00	29
Kamrup	Rani	82974.00	40	40	21505.60	29
Dima Hasao	Umrangsu	2675.52	6	6	0.00	0
Cachar	Malinibeel	43151.00	3	3	42151.00	14
Kamrup	Bamunimaidan	160595.00	34	34	25789.00	52
Kamrup	Bonda	32573.97	21	21	7775.00	36
Lakhimpur	Bechagaon	120398.40	0	0	0.00	0
Goalpara	Kothakuthi, Rongjuli	7224.00	0	0	0.00	0
Assam		2249565.34	173	164	1316371.41	229

Source : Commissionerate of Industries and Commerce, Assam

CHAPTER –XII

POWER

Power is an important component of the economic infrastructure of a state required for overall development of the economy. Electricity is a key input in the core sectors of the economy viz; Agriculture, Industry, Irrigation, Transport & Communication which plays an important role in the economic upliftment of the state. Hence, the growth of the Power sector is directly related to the development and growth of the economy of a state.

The development of power sector in Assam will help in achieving the larger objectives of poverty alleviation along with industrial and economic growth in the State. Electricity consumption is one of the most important indices that decide the development level of a nation. The growth and development of a region is determined to a large extent by energy availability and per capita consumption of energy.

The Assam State Electricity Board (ASEB) is a state government electricity regulation board of the state of Assam in India. It manages the generation, transmission and distribution of electricity in the state with its subsidiary 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)

The APGCL which started its operation in August-2005 was constituted to explore and execute the power generation activity in the state sector. This company is responsible for development of both the Thermal and Hydro Power Projects – to generate electricity and meet the energy demands in the state to the greatest possible extent.

The AEGCL was formed out of the restructured Assam State Electricity Board in 2003 and was notified as the State Transmission Utility (STU). Its core business is to efficiently transport electrical power from electrical power bulk heads to the distribution company networks in the state of Assam. Assam Electricity Grid Corporation Limited inherited 3862 circuit kms of EHV lines above 66 kV voltage class and 38 numbers of EHV sub-stations having a total transformation capacity of 1636.50 MVA at its birth in 2003.

After 2003 with the inclusion of new sub stations and transmission lines its transmission capacity was increased up to 6951 MVA , line length 5707 Ckt kilometer and No. of Substation 67 Nos. which includes 1 No. 400 KV, 12 Nos. of 220 KV, 54 Nos. of 132 KV substations as on March-2020.

Assam Electricity Grid Corporation Limited is playing a strategic role as it is the largest 'STU' in the NE region. It also understands its responsibility towards the entire North East India and is always extending a helping hand by way of transporting a fair share of power to the other sister states of the region.

Assam Electricity Grid Corporation Limited has consistently maintained the transmission system availability over 99% which is at par with other National Transmission Utilities.

Assam Electricity Grid Corporation Limited vows to ever strive till all transmission bottlenecks get eradicated. It pledges to deliver unrelenting brilliance in performance, deliver power efficiently but economically, show high safety standards, and is committed to respecting environmental and heritage issues.

Assam Power Distribution Company Limited (APDCL): The primary purpose of the Company is to undertake distribution, trading and supply of electricity in the state of Assam in accordance with provisions of applicable law and all activities ancillary to it. It also has the mandate to develop, maintain and operate the power distribution system in the state of Assam. In carrying out the work of supplying power, APDCL reaches every part of the state.

Vision:

The Assam Power Distribution Company Limited (APDCL) has a vision "to be the catalyst for holistic growth of the state of Assam by powering agriculture and industry: lighting homes – rural and urban, and generating internal resources for continually improving technology and delivery systems to induce customers' delight".

MISSION:

Its mission is to make APDCL the pride of Assam with its 15 Key Strategies to be undertaken to achieve its mission.

Key Strategies for achievement of mission are as follows:

- Planning in advance for procurement of sufficient quantity of power to meet demands.
- Mobilizing sufficient resources to undertake capacity enhancement of distribution substations and lines.
- Extension of network to make electricity available to all villages & hamlets.
- Awareness of customers on consumption & utilization of power.
- Replacement of Magnetic meters with Electronic meters.
- Accurate monthly billing, 100% revenue collection & Energy audit.
- Appointment of franchisees for incrementing service efficiency.
- Detection of unauthorized use of power through vigilance cell.
- Training of Employees on customer centric behavior.
- Consumer Indexing & Modernization of Complaint booths
- Strong financial discipline • Generating Customer confidence
- Master plan for HT/LT ratio
- Reduction of AT&C loss by phase conversion
- Replacement of overhead lines with underground cables

INSTALLED CAPACITY AND GENERATION OF POWER

The installed capacity of APGCL in the state was 376.155 MW in 2019-20. Power generation in Assam is insufficient to meet the rising demand and this deficit is being met by purchasing of power from the Central Government Grids and neighbouring states. Gross power generation in the state was 1545.97 MU in 2019-2020, which were 1594.15 MU in 2018-2019 and 1489.84 MU in 2017-2018 recorded a fluctuation in generation of power in the state.

The installed capacity of power generation plants of the state and generation of power during the last three years is presented in Table - 12.1

TABLE - 12.1

INSTALLED CAPACITY AND GENERATION OF ELECTRICITY IN ASSAM

Installed Capacity of Generating Plant (MW)		2017-18	2018-19	2019-20.
Hydel	KLHEP	100	100	100
	M. SHEP St-I	0	4.4	5.2
	M. SHEP St-II	3	4.5	4.5
Gas	LTPS	105	60	60
	NTPS	97	77	77
	LRPP	0	69.755	69.755
Waste Heat Recovery Unit	LTPS WHRU	37.2	37.2	37.2
	NTPS WHRU	22.5	22.5	22.5
Total	APGCL	364.7	375.355	376.155
Gross Unit Generation (MU)				
Hydel	KLHEP	490.057	369.288	398.528
	M. SHEP St-I.	0	0.762	18.96
	M. SHEP St-11.	10.73	7.65	9.42
Gas	LTPS	663.4021	472.091	362.0055
	NTPS	325.652	314.373	352.863
	LRPP	0	429.9894	504.1998
Total	APGCL	1489.8411	1594.1534	1545.97
AUX Consumption (MU)				
Hydel	KLHEP	0.822	0.621	0.612
	M. SHEP St-I.	0	0.005	0.054
	M. SHEP St-11.	0.057	0.068	0.061
Gas	LTPS	48.075	41.3882	33.8158
	NTPS	19.256	21.205	15.026
Total	APGCL	68.21	17.168569	59.0333
Net Unit Generation (MU)				
Hydel	KLHEP	489.23	268.66	397.92
	M. SHEP St-I.	0	0.757	18.906
	M. SHEP St-11.	10.673	7.582	9.359
Gas	LTPS	615.3271	430.703	228.1897
	NTPS	306.396	293.168	237.837
	LRPP	0	422.108	494.7353
Total	APGCL	1421.62	1522.978	1486.095

Source: Assam Power Generation Corporation Ltd (APGCL).

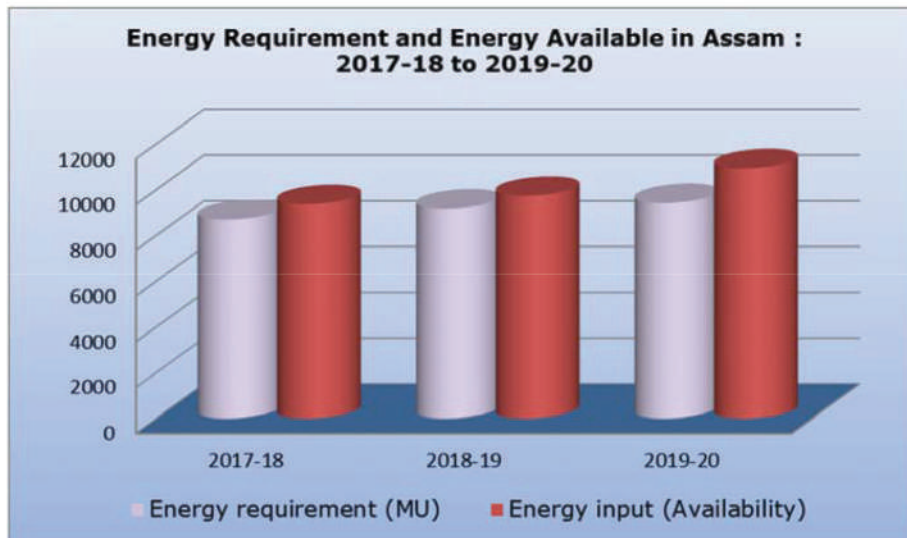
Power Supply Position:

Energy requirement in Assam was worked out at 9413 Million Units (MU) for the year 2019-2020. The requirement was 9173 MU for the year 2018-19 and 8694 MU for the year 2017-18. The state however generated 1545.97 MU of power in 2019-2020, 1594.15 MU in 2018-19 and 1489.84 MU in 2017-18. The peak demand of electricity in the state has increased from 1745 MW in 2017-18, to 1809 MW in 2018-19 and further to 1956 MW in 2019-2020. The shortfall of power during these periods was nil as per available records. The requirement and shortage of electricity in Assam is shown in table 12.2.

**TABLE – 12.2
REQUIREMENT AND SHORTAGE OF ELECTRICITY IN ASSAM**

Item	2017-18	2018-19	2019-20
Energy requirement (MU)	8694	9173	9413
Energy input (Availability)	9364	9730	10933
Shortage (MU)	-670	-557	-1520
Peak demand (MW)	1745	1809	1956
Peak demand met (MW)	1745	1809	1956
Shortage (MW)	0	0	0
Shortage in %	0	0	0

The energy requirement and energy available in Assam during the years 2017-18 to 2019-20 is depicted in the diagram below:



TRANSMISSION, DISTRIBUTION & COMMERCIAL LOSSES:

The power supplied through various stages of transformation from sources to final consumers involves energy loss known as transmission, distribution and commercial losses. The aggregate transmission and commercial losses in the state was 15.71% in 2017-18, 20.05% in 2018-19 and 21.07% in 2019-2020. Wastage of power at the stages of transmission is a matter of concern in a state like Assam having serious shortage of power supply, though the state has put efforts to mitigate the losses. The state has taken the following measures to bring down transmission and distribution losses:-

1. Energy accounting and electricity live ring fencing under capital R-APDRP.
2. Repair and maintenance and re-conducting or 33KV, 11KV and LT lines.
3. Changing and replacing of electro mechanical meters to electronic meters.
4. Establishment of police stations in different circles for theft detection.
5. Energy bill payments through net banking procedures.

The figures of transmission, distribution and commercial losses in the state are presented in Table - 12.3.

TABLE – 12.3

**TRANSMISSION & DISTRIBUTION (T&D) LOSSES AND AGGREGATE
TRANSMISSION & COMMERCIAL (AT & C) LOSSES**

Item	2017-18	2018-19	2019-20
Energy Input (MU) (at APDCL end Available)	8273	8678	8900
Energy Billed (MU)	6814	6968	7257
T&D Losses (MU)	1459	1710	1643
T&D Losses (%)	17.64	19.71	18.46
Amount Billed (Rupees in crore)	4747	5072	5617
Amount Realized (Rupees in crore)	4858	5050	5483
Collection Efficiency (%)	102.34	99.57	97.61
Overall Efficiency (%)	84.29	79.95	78.93
AT&C Losses (%)	15.71	20.05	21.07

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, LT (Dom A, Dom B) and HT (Dom) categories, while commercial categories include LT (Com) & HT (Com) categories.

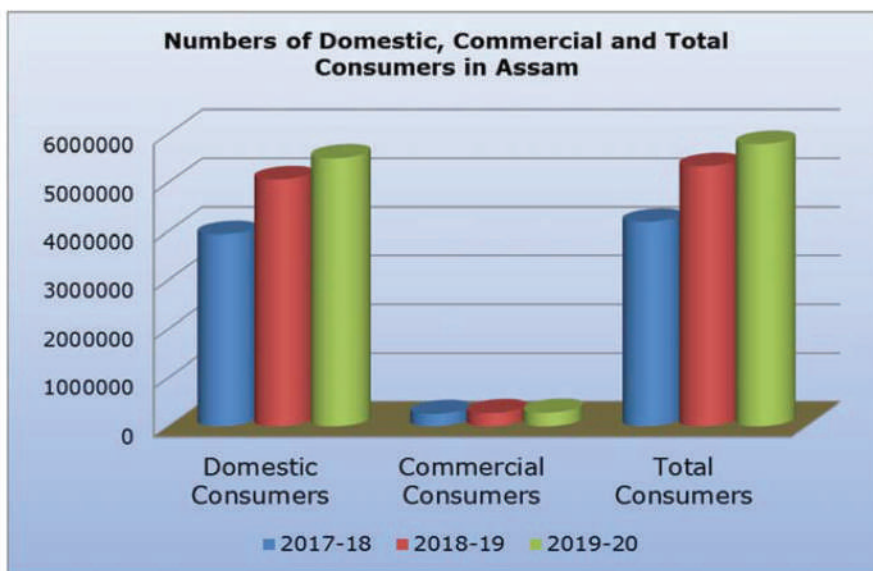
The total number of consumers in Assam - Domestic and Commercial are shown in Tables -12.4.

TABLE – 12.4
Total Number of Consumers in Assam

Year	Domestic	Commercial	Total
2017-18	3930544	255996	4186540
2018-19	5060876	274171	5335047
2019-20	5501547	282299	5783846

Source; Assam Power Distribution Company Ltd. (Commercial Wing)

The diagram below shows the number of Domestic, Commercial & Total consumers in Assam



Sector wise electricity consumption in Assam is shown in Table-12.5.

Table-12.5**Sector wise Electricity Consumption in Assam in MU**

Sector	Period			% change in 2019-20 over 2018-19
	2017-18	2018-19	2019-20	
Industrial Including irrigation)	1448	1642	1586	-3.41%
Agriculture	35	47	47	0.00%
Domestic	3704	3477	3818	9.81%
Commercial	979	1097	1112	1.37%
Public services*	13	16	16	0.00%
Others	635	690	678	-1.74%

Note: *Government office, Government Institution (School, College etc), Public Lighting and Water Supply Works

Sector wise electricity consumption in Assam during the year 2019-20 is depicted in the attached diagram.

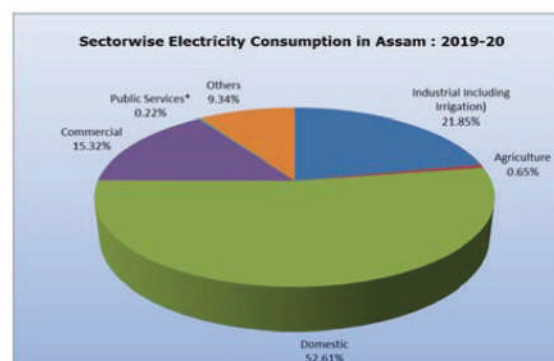


Table-12.6 shows the total amount of electricity generated in Assam in Million Units (MU) from state sector plants.

Table-12.6**Source wise Electricity generated in Assam in MU**

Source	Electricity generated			% change in 2019-20 over 2018-19
	2017-18	2018-19	2019-20.	
In the state (excluding central sector)				
Thermal	-	-	-	-
Natural gas	989.0541	1216.4534	1119.0683	8.00%
Hydro	500.787	377.7	426.908	13.02%
Renewable	-	-	-	-
From the Central Sector				
CSGS	-	-	-	-

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 of the state has been purchasing electricity from different sources and agencies. Table – 12.7 shows the amount of energy purchased in Assam during the last three years.

Table – 12.7
ELECTRICITY PURCHASED, ASSAM

Year	Units purchased / generated (ex-bus) in MU	Total cost (Rs. in Crore)	Average rate (Rs/Kwh)
2017-18	9364.54	4506.31	4.81
2018-19	9730.24	5100.59	5.24
2019-20	10925.47	5449.35	4.99

Source: Chief General Manager (Com & EE), APDCL, Bijulee Bhawan, Guwahati.

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 RGGVY is a scheme for attaining goal of providing access to electricity to 8406 non-electrified villages and connection to around 10 lakh BPL households in 13081 already electrified villages of the state. In Assam, RGGVY was implemented from April 2007 with assistance of 90% grant from Government of India and rest 10% of the requirement procured as loan by the Rural Electrification Corporation (REC), the nodal agency for the programme. Under RGGVY, electrification works of 8348 un-electrified villages and 12841 partially electrified villages have been completed. In addition electricity connection was provided to 1214398 BPL households free of cost.

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

The DDUGJY has been taken up since 2014-15. This scheme envisages feeder separation, strengthening of sub transmission and distribution network, metering at all levels - including the 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 DDUGJY, a total of 2732 villages were electrified as on Dec-2017. Altogether a total of 26,235 villages were electrified out of the total census (2011) villages of 26395 villages in Assam, a difference of 160 villages which cannot be electrified as it is un-inhabited.

The following tables present the status of electrification and coverage in the villages of Assam under different schemes.

STATUS OF ELECTRIFICATION IN VILLAGES UNDER DDUGJY:

Total villages in Assam as per census 2011	Un-electrified village as on 31.03.2015	Achievement under 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.

COVERAGE AND ACHIEVEMENT AS ON 31.08.2020

No. of projects sanctioned	UEV (No.)		IEV (No.)		SAGY (No.)		BPL HHS (No.)	
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
27	2892	2732*	13973	13552	220	220	705410	696285

Note: *Un-inhabited + Villages which cannot be electrified (PGR/VGR) = 160 Nos.

Source: Office of the CGM (RE), APDCL Guwahati

The following table presents the progress under the DDUGJY in Assam

PROGRESS UNDER DDUGJY (as on 31.08.2020)

Plan	Sanctioned Cost (Rs. in Cr.)	Amount Released (Rs. in Cr.)	Utilization (Rs. in Cr.)	Balance (Rs. in Cr.)
XII Plan, DDUGJY	1621.07	1419.75	1307.3	112.45
DDUGJY (Ph-I)	1274.08	1092.17	901.85	190.32
DDUGJY (Ph-II)				
DDG	260.62	210.65	195.33	15.32
SAUBHAGYA	2598.53	1687.06	1811.06	-124
TOTAL	5754.29	4409.63	4215.54	194.09

Source: Office of the CGM (RE) APDCL Guwahati

SAUBHAGYA AND GRAM SWARAJ ABHIYAN (GSA):

Pradhan Mantri Sahaj Bijli Har Ghar Yojana – ‘Saubhagya’ a new scheme was launched by the Honourable Prime Minister on 25th September 2017. The scheme provisioned free electricity connections to all households (both APL and poor families) in rural areas and poor families in urban areas. The Saubhagya scheme was launched in Assam by the Chief Minister of Assam on 23rd January 2018. The drive to make people aware of the scheme was started on 16th March 2018.

A detailed project report for the scheme Saubhagya was submitted on 23rd March, 2018 involving an amount of Rs. 5098.17 crores. The Rural Electrification Corporation (REC) Limited has released Rs. 248.08 crores as ad-hoc advance to implement the scheme. The following tables present the detailed progress report and progress of the Saubhagya Scheme.

Detailed Project Report of the Saubhagya Scheme

Particulars	Cost (Rs. In Cr.)	No. of Revenue villages (no.)	No. of Households (no.)	Revised provisional sanction (Rs. In Cr.)
Rural on grid	4932.59	25015	1862823	2440.08
Rural off grid	74.58	365	6376	154.51
Urban (economically poor households)	91	96	8817	3.97
Total	5098.17	25476	1878016	2598.56

Progress under the Saubhagya Scheme:

SAUBHAGYA	Household connections under SUBHAGYA Dashboard (in Lakhs)		Balance Households as on 31-3-2019 (In Lakhs)	Additional Identified Households as on 31.08.2020
	Coverage	Achievements (as on 31.3.2019)		
	19.04	17.45		
HH connections released against SAUBHAGYA w.e.f 11th Oct-2017			11.6	14.25
HH connections released against XII plan/DDUGJY w.e.f 11th Oct 2017			5.85	5.85
Total Households			17.45	20.1

Source: Office of the CGM (RE) APDCL, Guwahati

GRAM SWARAJ ABHIYAN (GSA-I)

Target		Achievement as on 31.3.2019	
Village	Household	Village	Household
3042	283215	3042	283215

GRAM SWARAJ ABHIYAN (GSA-II)

Target		Achievement as on 31.3.2019.	
Village	Household	Village	Household
2728	405544	2728	405544

Source: Office of the CGM (RE) APDCL, Guwahati

The following tables present physical progress of electrification and status under the DDUGJY.

Progress of Electrification (2016-17 to 2019-20)

Items	Target	Achievements				Total Achievements
		2016-17	2017-18	2018-19	2019-20	
Un-electrified Villages (nos.)	887	621	266	-	0	887
Partially Electrified Villages (nos.)	9515	2210	2650	2595	869	8324
BPL HHS (nos.)	521128	99898	81291	323584	15420	520193
11KV LINE (CKT Kms)	8553.06	2278.11	1745.55	2465.68	1236.222	7725.562
LT 3-Ph Line (CKT Kms)	7132.21	2081.21	1156.24	2417.8	781.465	6436.715
LT 1-Ph Line (CKT Kms)	9922.7	2720.94	1797.3	3227.87	2288.67	10034.78
63 KVA DTR (Nos.)	2160	718	398	631	400	2147
25 KVA DTR (Nos.)	12818	3199	2380	4875	1938	12392
16 KVA DTR (Nos.)	843	120	161	269	0	550

Source: Office of the CGM (RE) APDCL, Guwahati

Status of Electrification under DDUGJY (2016-17 to 2019-20)

Items	Target	Achievements				Total Achievements
		2016-17	2017-18	2018-19	2019-20	
Un-electrified Villages (nos.)	903	597	306	-	0	903
Partially Electrified Villages (nos.)	3890	241	984	1789	370	3384
BPL HHS (nos.)	184218	15275	34838	133905	200	184218
11KV LINE (CKT Kms)	4645.90	402.01	1163.70	3013.62	48	4627.33
LT 3-Ph Line (CKT Kms)	2594.19	367.27	770.83	1377.25	77.12	2592.47
LT 1-Ph Line (CKT Kms)	4796.98	480.16	1198.20	2834.15	283.42	4795.93
63 KVA DTR (Nos.)	1795	127	264	1065	338	1794
25 KVA DTR (Nos.)	3593	564	1586	1069	361	3580

Source: Office of the CGM (RE) APDCL, Guwahati

Status of Electrification under Saubhagya (2018-19 to 2019-20)

Items	Target	Yearly Achievements		Total Achievement
		2018-19	2019-20	
Households (Nos.)	1360125	1066098	197807	1263905
11 KV Line (CKT Kms)	6348.77	3691.81	2206.28	5898.09
LT 3 PH Line (CKT Kms)	6924.31	3653.03	2911.86	6564.89
LT 1 PH Line (CKT Kms)	12859.43	6545.91	5646.03	12191.94
63 KVA DTR (Nos.)	4359	2273	1785	4058
63 KVA DTR (Nos.)	6538	3193	2893	6086

Source: Office of the CGM (RE) APDCL, Guwahati

Financial status under XII plan, DDUGJY and Saubhagya (2017-18 to 2019-20)**Rs. in Crore**

Plan	2017-18		2018-19		2019-20	
	Amount Received	Amount Expenditure	Amount Received	Amount Expenditure	Amount Received	Amount Expenditure
XII Plan	155.34	360.91	327.58	330.90	184.95	128.88
DDUGJY	231.54	133.77	287.01	327.30	494.16	292.64
SAUBHAGYA	41.99	-	814.95	854.04	759.73	656.83
TOTAL	428.87	494.68	1429.54	1512.24	1438.84	1078.35

Source: Office of the CGM (RE) APDCL, Guwahati

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, to meet a nation's growing energy needs. As the demand for electricity exceeds the supply in Assam, the state now has taken initiatives on solar power generation to complement the existing sources of supply.

STATUS OF DDG (DDUGJY Scheme), NRE, APDCL:

The government of India has sanctioned DPRs involving 288 crores for electrification of remote villages of Assam through Solar Standalone System and Solar Micro grids. The project will be implemented under DDUGJY.

The total households to be covered under Standalone system & Micro grid is 41,822

INITIATIVES TAKEN UP BY APGCL FOR PROMOTION OF RENEWABLE ENERGY:

Government of Assam has taken various steps to initiate renewable energy programmes in addition to the financial assistance received from the Ministry of New and Renewable Energy (MoNRE). 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 widely dispersed un-electrified hamlets of electrified villages. Provisioning of solar power comes in handy for the remote Char (Riverine islands of Brahmaputra River) villages of the state. The households of villages are often forced to shift, due to frequent inundation caused by River Brahmaputra. Solar photovoltaic based home lighting system has become a welcome relief for the people living in such remote villages. Hybrid Solar and Wind lighting prototypes is another useful application being developed based on renewable energy sources. The hill areas of the state are ideal for placing wind generated power stations.

Different Wind Resource Assessments have been done in Assam with Collaborative Projects between The Assam Energy Development Agency and the National Institute of Wind Energy, Chennai under MoNRE (GOI) have assessed the wind resources

of the state. The state has already commissioned a few Wind Monitoring Stations in the state (ANNEXURE table 12.1). Solar Photovoltaic Power Plants (off-Grid) are also installed in Assam under Jawaharlal Nehru National Solar Mission (JNNSM) and Special Area Demonstration Project Programme.

Grid interactive solar photovoltaic power plant on the roof top terrace of buildings is a viable option to generate solar energy. 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 roofs or vacant land of government/ semi government offices, hospitals and educational institutions. Implementation of the projects would meet partial load of office buildings during working days and contribute the surplus power available to the Grids 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, steps have been taken in this direction to cover a few important places of tourist attraction which needs a good infrastructure including uninterrupted power supply. Towards this a Rs, 3000.00 lakh was given to install dedicated feeder line to provide uninterrupted power supply at tourist places of Kamakhya, Kaziranga, Majuli, Tezpur, Sualkuchi, Manas, and Pabitora.

Various new projects were taken up in the State for the renewable power sector in recent past. In 2017-18, six new power projects with an installed capacity of 247 MW were allocated 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 hydroelectric 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 (Aggregate technical & commercial) losses in these towns with introduction of Supervisory Control and Data Acquisition system along with Smart Grid Pilot Project. These two projects are expected to help in maintaining round the clock power supply in Guwahati City.

The Table below depicts the Physical Performance of APDCL under Renewable Energy during the year 2019-20:

Annexure - I
Renewable Energy
Physical Performance of APDCL during 2019-20

Sl No	Name of Districts	#1 Smart Street Lighting system (Fig in Nos)	#2 Grid connected Rooftop Solar Power Plant (Fig in KWp)	#3 Rooftop Solar PV Station (Fig in KWp)	#4 Off-Grid Rural Electrification (Fig in Nos)
1	Kokrajhar	11	17	25	578
2	Dhubri	10	0	20	8630
3	Goalpara	14	0	20	4038
4	Barpeta	27	65	25	12220
5	Morigaon	4	0	20	0
6	Nagaon	16	37	35	0
7	Sonitpur	20	0	25	1544
8	Lakhimpur	6	0	10	561
9	Dhemaji	14	0	10	1138
10	Tinsukia	23	60	10	887
11	Dibrugarh	21	40	15	910
12	Sivasagar	21	0	25	0
13	Jorhat	20	63	20	517
14	Golaghat	20	17	20	268
15	Karbi Anglong	0	40	20	4158
16	Dima Hasao	0	0	5	3126
17	Cachar	14	20	15	1537
18	Karimganj	4	0	15	423
19	Hailakandi	10	0	5	1551
20	Bongaigaon	13	0	10	0
21	Chirang	0	0	10	0
22	Kamrup	20	19	35	1186
23	Kamrup (M)	20	197	15	0
24	Nalbari	13	0	20	1396
25	Baksa	11	0	15	0
26	Darrang	16	29	15	2105
27	Udalguri	2	0	10	0
28	Biswanath	0	0	0	0
29	Charaideo	0	0	0	0
30	Hojai	22	0	0	0
31	Majuli	0	0	0	0
32	South Salmara	0	0	0	0
33	West Karbi Anglong	0	0	0	0
TOTAL		372	604	470	46773
Foot Notes:					
#1: Smart Street Lighting system in Identified Urban Areas under Annual Plan, 2019-20, Government of Assam					
#2: Grid connected Rooftop Solar Power Plant at different locations in the State of Assam under IPDS during 2019-20					
#3: Rooftop Solar PV Station on Government Buildings & Off - Grid Solar Plant at Primary Health Center located in off-Grid Remote villages under Annual plan of Assam, 2019-20					
#4: Off-Grid Rural Electrification works in Assam through Standalone Solar PV System under Saubhagya Scheme in 2019-20					

Source: General Manager (NRE) APDCL Guwahati - 781001

The Directorate of Agriculture in Assam has been utilizing renewable energy by the installation of Solar PV Pump sets in the different districts of the State. The Table below shows the Physical Progress of Renewable Energy Related Performance of Agriculture Department.

Annexure - II

RENEWABLE ENERGY RELATED PERFORMANCE OF AGRICULTURE DEPARTMENT

(District wise Physical Progress)

Sl. No.	Districts	Installation of Solar PV Pumpset			
		Progress		Progress	
		During 2018-19	Cumulative	During 2019-20	Cumulative
1	Kokrajhar			425	425
2	Dhubri	220	220	333	553
3	Goalpara	75	75	460	535
4	Barpeta	288	288	762	1050
5	Morigaon	374	374	270	644
6	Nagaon	262	262	452	714
7	Sonitpur	30	30	55	85
8	Lakhimpur	102	102	98	200
9	Dhemaji	130	130	116	246
10	Tinsukia	111	111	48	159
11	Dibrugarh	46	46	20	66
12	Sivasagar	21	21	27	48
13	Jorhat	38	38	7	45
14	Golaghat			158	158
15	Karbi Anglong			72	72
16	Dima Hasao				
17	Cachar	3	3	53	56
18	Karimganj			12	12
19	Hailakandi			24	24
20	Bongaigaon	43	43	221	264
21	Chirang			150	150
22	Kamrup	67	67	58	125
23	Kamrup (M)	6	6	8	14
24	Nalbari	10	10	97	107
25	Baksa			168	168
26	Darrang	32	32	737	1057
27	Udalguri	95	95	516	611
28	Biswanath	225	225	70	295
29	Charaideo	15	15	50	65
30	Hojai	110	150	492	642
31	Majuli	7	7	32	39
32	South Salmara	120	120	575	695
33	West Karbi Anglong				
	TOTAL	2718	2758	6566	9324

Source: Directorate of Agriculture, Assam

The Table in Annexure - III shows the progress of Grid connected Rooftop Solar during the years 2018-19 and 2019-20.

Annexure - III
DISTRICTWISE PERFORMANCE RELATED TO RENEWABLE ENERGY
GRID CONNECTED ROOFTOP SOLAR
(Physical Progress)

Sl No	Districts	Work Description		Work Description	
		During 2018-19 (In KW)	Cumulative (Upto Mar-2019)	During 2019-20 (In KW)	Cumulative (Upto Mar-2020)
1	Kokrajhar	23.760	23.760	NIL	23.760
2	Dhubri				
3	Goalpara	139.975	139.975		139.975
4	Barpeta				
5	Morigaon				
6	Nagaon	63.850	63.850		63.850
7	Sonitpur	242.460	242.460		242.460
8	Lakhimpur				
9	Dhemaji				
10	Tinsukia	189.730	189.730		189.730
11	Dibrugarh	161.950	161.950		161.950
12	Sivasagar	8.000	8.000		8.000
13	Jorhat	490.900	490.900		490.900
14	Golaghat	43.470	43.470		43.470
15	Karbi Anglong				
16	Dima Hasao				
17	Cachar				
18	Karimganj				
19	Hailakandi				
20	Bongaigaon				
21	Chirang				
22	Kamrup	43.000	43.000		43.000
23	Kamrup (M)	3898.410	3898.410		3898.410
24	Nalbari				
25	Baksa				
26	Darrang	40.000	40.000		40.000
27	Udalguri	84.800	84.800		84.800
28	Biswanath				
29	Charaideo				
30	Hojai	34.520	34.520		34.520
31	Majuli				
32	South Salmara				
33	West Karbi Anglong				
TOTAL		5464.025	5464.025		5464.025

Source: Assam Energy Development Agency GS Road Guwahati -781005

CHAPTER - XIII

TRANSPORT AND COMMUNICATION

The state of Assam being the gateway of the North East region of India, assumes a significant role to keep its transport sector, particularly the surface transport sector at complete state to facilitate speedier economic development of the region. Due to its geographical isolation, transport has been a major bottleneck in the process of economic progress of the not only of Assam, but for the entire north east region. The contribution of the transport and communication sector to the state Gross Domestic Product in 2019-20 at constant (2011-12) prices (New base) is calculated at 5.00 percent. The figure-I shows the trend of the contribution of the transport and communication sector to the GSDP of Assam.

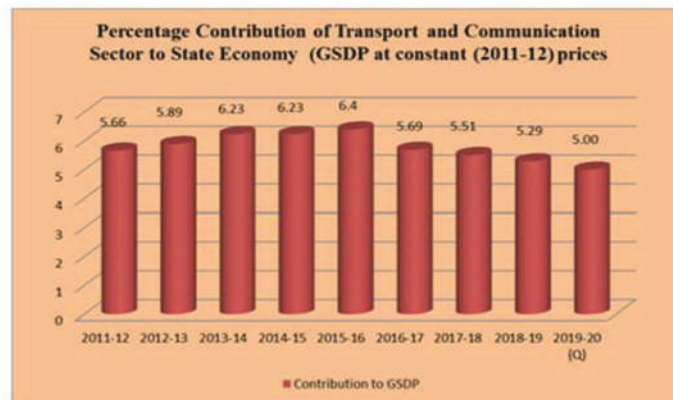


FIGURE-I

The position of the State with regard to the existing means of transport and communications is described briefly in the following paragraphs.

ROADS:

The road network in Assam comprises of total 58882 km of roads consisting of 3890 km national highways, 2530 km state highways, 4379 km major district roads, 1739 km urban roads and 46344 km rural roads. Out of the total 54992 km road length maintained by the PWD, 31493 km is blacktopped; 650 km is cement concrete, 5566 km is inter- locking cement concrete block pavement (ICBP) and 17284 km is metalled and un-metalled roads.

In line with 'Bharat Mala', the Government of Assam proposes a programme named 'Axom Mala' to undertake the improvement of state highways and major district roads network and the reconstruction and maintenance of roads and rehabilitation of RCC bridges.

An amount of Rs 5000 crore under two externally aided projects for implementation of Asom Mala, is given topmost priority for land acquisition, utility shifting etc for these projects. Under Road Network Master Plan (RNMP), a vision is made of building a road network of 57617 km approx length covering the National Highways, State Highways, Major District Roads, Rural and Urban Roads.

The table-13.1 shows the road length network maintained by the state PWD in Assam.

TABLE-13.1
ROAD NETWORK IN ASSAM

(in Km.)

Item	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Surfaced Road*	23948	25546	27003	28480	30048	31493
Unsurfaced Road	20914	19316	18551	18917	20784	17284
National Highway	3834.68	3862.53	2782.34	3900.44	3890	3893
State Highway	2530	2530	2530	2530	2530	2530
Major District Road	4379	4379	4379	4379	4379	4379
Rural Road	36544	36544	37030	40367	45336	46344
Urban Road	1409	1409	1615	1714	1714	1739

*Excluding National Highways, Source: Office of the Chief Engineer PWD (Roads), Assam.

The table above shows that the length of surfaced roads in Assam has increased by 7575 km during 2014-15 to 2019-20, an increase of 32 percent. In the rural areas of the state, the length of rural road has increased from 36544 km in 2014-15 to 46344 in 2019-20 km, an increase by 27 percent.

The effort of the state PWD is on to bring down the number of semi-permanent timber bridges from 5450 in 2001 to 1000 by March 2019. Out of the total 1000 number of RCC Bridges, the PWD has sanctioned the conversion of 757 number of timber bridges into RCC bridges under various funding sources, of which 69 have been completed and 542 are at various stages of completion. The government of Assam has proposed to construct 4 more bridges over River Brahmaputra namely (a) Dhubri – Phulbari (b) Gohpur – Numaligarh (c) Disangmukh – Tekeliphutaand (d) Kamalabari - Nematighat.

The Government has recently completed a ropeway bridge connecting South and North Guwahati at a cost of Rs 56 crore. Moreover highly mechanised foot bridges are also constructed in different places of Guwahati for smooth crossing of the pedestrians. To ease the traffic congestion in Guwahati City, two flyovers – one at Ganeshguri which is completed and opened another at Supermarket junction is under process. Moreover one new flyover also will be constructed at Maligaon Chariali to ease the traffic congestion. Alternative road to Kamakhya temple will be ready within financial year 2020-21. Further nine additional flyovers at various locations on national highways are planned to be constructed by National Highway Authority of India (NHAI). Moreover to ease traffic congestion in Guwahati, an alternate Ring Road has been proposed from Changsari to Narengi via Jalah and Kurua passing through Narengi, Khanapara, Basistha, Azara, Jalukbari and Changsari utilising the proposed 6-Lane Bridge over River Brahmaputra between Narengi and Kuruwa.

PRADHAN MANTRI GRAM SARAK YOJANA (PMGSY) :

The Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched by the Govt. of India to provide connectivity to unconnected Habitations as part of a poverty reduction strategy. Govt. of India is endeavoring to set high and uniform technical and management standards and facilitating policy development and planning at State level in order to ensure sustainable management of the rural roads network. Till 31st March 2020, 15164 villages have been covered under rural connectivity programme. Out of the

total 15164 villages, 5991 villages have population more than 1000, 4649 villages have population of 500 or more and 3107 villages have population in between 250 to 500 and 1417 villages have population less than 250.

NATIONAL HIGHWAYS:

The Ministry of Road Transport and Highways is responsible for the development and maintenance of the national highways. The capacity of national highways in term of handling traffic (passenger and goods) needs to keep pace with industrial growth. The government of India has approved the implementation of an umbrella programme for the national highways – “Bharatmala Pariyojana Phase-I” on 24th October 2017, for construction and up-gradation of national highways of 34,800 kms length over a period of 5 years (2017-18 to 2021-22) at an estimated outlay of Rs. 5,35,000 Crore. The programme focuses on optimizing efficiency of freight and passenger movement across the country by bridging critical infrastructure gaps through effective interventions like development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor.

The programmes envisage development of ring roads/bypasses and elevated corridors to decongest the traffic passing through cities and enhance logistic efficiency. Hence 28 cities have been identified for ring roads; 125 choke points and 66 congestion points have been identified for their improvements. It is estimated that more than 35 crore man-days of employment shall be generated under Phase-I of the programme.

NATIONAL HIGHWAYS IN NORTH-EASTERN REGION:

The Ministry of Road Transport and Highways Government of India, has been paying special attention to the development of National Highways in the North-Eastern-Region region and 10 per cent of the total budget allocation is earmarked for North-Eastern-Region. The total length of National Highways in North-East is 13,658 km and these are being developed and maintained by four Agencies-the state Public Works Departments (PWD), Border Roads Organisation (BRO), National Highway Authority of India (NHAI) and National Highway and Infrastructure Development Corporation Limited (NHIDCL). Of the total length of 13,658 km, about 12063 km is with the NHIDCL and respective state PWDs, 864 km is with NHAI and 731 km is with BRO.

Some of the important steps undertaken by the Government of India for the development of the national highways in the North Eastern Region are:

- A length of 110 Km of National Highway No. 44 in the State of Meghalaya (Jowai- Meghalaya/Assam border {Ratachhera} stretch) falls under NHDP Phase-III, work on which has been completed.
- Under the Inter State Connectivity (ISC) & roads of Economic Importance (EI) scheme, 29 projects amounting to Rs. 1475.04 crore are under progress.
- Under the Central Reserve Force, 220 works amounting to Rs. 3732.54 crore are in progress for the improvement of state roads.
- Another 76 works costing Rs. 5983.33 crore under National Highway Other Projects NH (O) are in progress.

ASSAM:

- As on 31st December, 2020, 26 improvement works costing Rs 939.64 crore are in progress under NH (O) in Assam.
- A length of 667 Km connecting Silchar to Srirampur via Lumding-Daboka-Nagaon Guwahati in Assam has been entrusted to NHAI & NHIDCL as part of East West corridor under NHDP Phase-II East West Corridor portion of Assam. Work in 636 km has been awarded by NHAI and about 610 km, including 18 km of Guwahati bypass, have been completed so far. For balance 31 km length, to be awarded by NHIDCL.
- Under CRF, 41 works amounting to Rs 1335.14 crore are in progress for the improvement of State roads.
- Under Inter-State Connectivity (ISC) scheme, one work amounting to about Rs 96.18 crore is in progress.
- Government has approved implementation of Arunachal Pradesh Package of Roads & Highways covering 2319 Km of roads at an estimated cost of Rs 15643 crore. Out of 2,319 Km, 139 km falls in the state of Assam.

The physical achievement (in km) of SARDP-NE (Phase A+ Arunachal Pradesh) was 3445 km upto 31st December 2020, out of the total 6418 km. An amount of Rs 760 crore is earmarked for the period 2020-21 under this scheme.

The Dhola-Sadiya 2-lane Bridge (bridge length is 9.15 Km.) connecting Dhola and Sadiya Ghats upto Islampur (NH 37 extension) constructed at a cost of Rs. 950 crore was inaugurated on 26th May, 2017. This longest river beam bridge in India is named after Dr. Bhupen Hazarika. This project not only saves 4 hours travel time between Assam and Arunachal Pradesh, but also promotes socio-economic activity around the area.

Necessary steps have also been taken for construction of a flyover at Mission Chariali Junction in Tezpur district during Financial Year 2020-21. NHAI has proposed to construct 14 flyovers at Basistha chariali, Lokhra, Gorchuk, Boragaon on Guwahati Bypass; 2 flyovers on either side of the Baihata Bypass at Baihata Chariali; Pathsala, Simalaguri near Barpeta Road, Chapaguri (Bongaigaon), BRPL Refinery, Raha, Dimow, Barghat near Nagaon, Kathiatali near Doboka and 1 Rail Over Bridge at Jagiroad.

MOTOR VEHICLES:

The state has seen rapid increase of number of motor vehicles on road in past few years. The number of vehicle on road in the state has reached 4167346 as on March 2020 compared to 3725529 as on March 2019, an increase of 12 percent over 2019. Out of the total 4167346 motor vehicles during 2019-20 on the road about 65.05 percent vehicles were two wheelers.

According to the motor vehicle registering authority of the State as many as 473668 new motor vehicles were registered during the year 2019-20 in the state whereas 502525 was added in 2018-19 which is a decrease of 5.74 percent than that of the previous year.

The total number of motor vehicles on road in the state was recorded about 11.86 percent growth during April 2019 to March 2020; compared to 16.62 percent growth during April 2018 to March 2019 showing a decreasing trend.

The density of motor vehicles in Assam was 53.1 per sq km of road in 2019-20 compared to 47.5 per sq. km of road during the year 2018-19 and 42.2 vehicles per sq km of road during the year 2017-18. Motor vehicle density in road of Assam has significantly increased from 6.8 per sq. km of road in the year 2000-01 to 53.1 per sq. Km in the year 2019-20 as seen in the Figure II below-

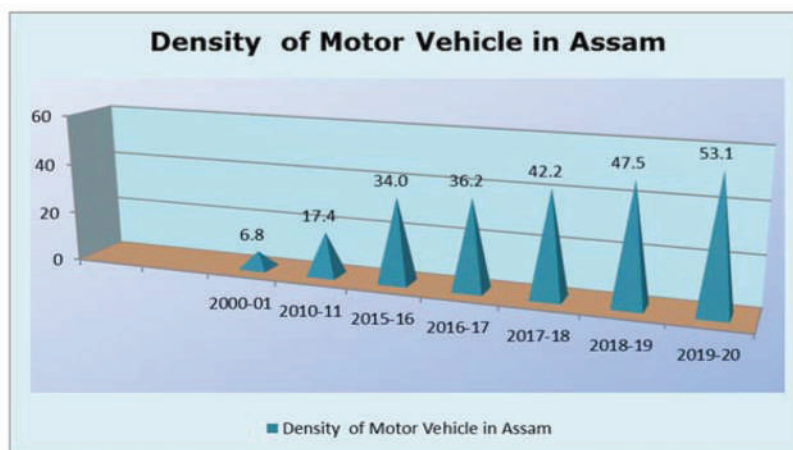


FIGURE II

The time series data on number of motor vehicles registered as well as motor vehicles on road in the state are presented in table -13.2.

TABLE-13.2
NUMBER OF MOTOR VEHICLES 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
2018-19	502525	640	1565	3725529	4749	11603
2019-20	473668	604	1610	4167346	5313	13354

Source: Office of the Commissioner of Transport and Directorate of Economics and Statistics, Assam.

The Figure III below depicts the increase in the number of motor vehicles registered and the numbers of vehicles on- road which shows significant increase over the years.

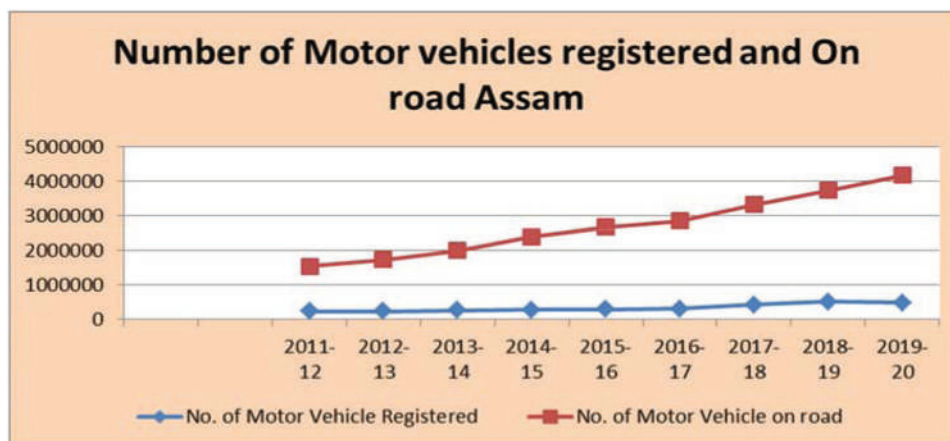


FIGURE-III

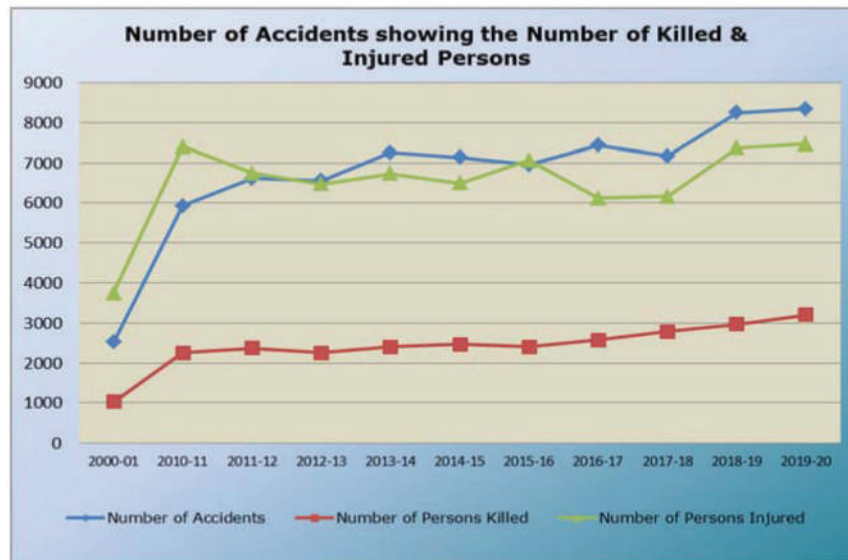
The state has recorded increasing number of road accidents over the years. During the year 2019-20, the number of road accidents reported in the state was 8350, a 1.2 percent increase over the previous year 2018-19. The number of persons killed in 2019-20 recorded 8.2 percent increase compared to the year 2018-19. The number of persons killed per 100 accidents recorded was 38.4 during 2019-20; an increase than the figure of 36.0 person killed per 100 accidents during 2018-19. The severity of road accidents in Assam is evident from the Table-13.3 below.

TABLE-13.3
NUMBER OF ROAD ACCIDENTS AND PERSONS KILLED AND INJURED 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
2018-19	8248	2966	7375	36.0
2019-20	8350	3208	7473	38.4

Accident Severity:* Number of persons killed per 100 Accidents.

Source: Office of the Additional Director General of Police, Criminal Investigation Department, Assam.



The Commissionerate of Transport of Assam in addition to providing fast and comfortable services to the commuters has provisioned commuter taxi (trekkers) services and post-paid city taxi services to create self-employment avenues of unemployed youth. The scheme has become not only very popular in the greater Guwahati city, but across the state of Assam. The collection of transport revenue by the Department of Transport during the year 2019-20 was 874.64 crore against 899.87 crore in 2018-19. The collection of transport revenue during 2019-20 compared to 2018-19 recorded a slight decrease of 3 percent.

ASSAM STATE TRANSPORT CORPORATION:

Public road transport system is the most important means of communication to provide affordable access to all knock and corners of the state as well as for movement of goods. 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, was one of the premier public enterprises of the state with its headquarters in Guwahati. ASTC primarily provided passenger services 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.

As a step towards improvement of passenger amenities the state government has 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 ISBT are functional. ISBTs are also 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. It is 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 and improve the present status of existing 100 of station buildings, both major and minor, spread all over the state.

The Government has taken initiative to uberize ASTC; under this scheme encouragement will be provided to young entrepreneurs, small businessmen and Self Help Groups to enter this industry. The government will provide seed money upto 25% for purchasing buses, out of which 10% will be given in the form of subsidy while the rest 15% will be given in the form of an interest-free loan to be repaid over a period of 5 years.

Mukhyamantrir Grammya Paribahan Achoni Yojana

The scheme "Mukhyamantrir Grammya Paribahan Achoni Yojana" was launched by the state transport department. Under the scheme, Light Motor Vehicle Service will be launched in all the villages of the state to improve rural connectivity and generate employment in the villages. One vehicle would be provided to one beneficiary per village. In the first phase of the scheme, 10,000 villages would be covered with a financial outlay of Rs 100 crore. The state government shall financially assist the eligible entrepreneurs with 25 per cent of the cost of the vehicle or Rs 1 lakh, whichever is less.

SWACHH KAMAKHYA-CLEAN & GREEN TECHNOLOGY:

Kamakhya Temple, one of the prime pilgrimage destinations of India, draws people from different parts of India throughout the year. The fourday AmbubachiMela, has its own significance and draws about 2 million pilgrims every year. To make provision of adequate transports and amenities of sanitation are major challenges to the state. The government of Assam has initiated a scheme called "SwachhKamakya –Clean and Green Technology, 2017".The ASTC is currently operating a fleet of 8 buses from morning to evening during the Ambubachi Mela days. Under the scheme the government has proposed to introduce 100 e-buses which will be purchased at the interval of 2 years upto 2027.The routes to be covered are from LGBI Airport, ISBT-Betkuchi, Khanaparamini ISBT, Narengi, Jalukbari and Kamakhya Railway Station etc.

TABLE-13.4
PERFORMANCE OF ASSAM STATE TRANSPORT CORPORATION

Year	Average No. of own vehicle held	Average No. of own vehicle held on road	Fleet utilisation (%)	Total km operated during the year	Monthly Average 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)
1	2	3	4	5	6	7	8	9
2010-11	357	299	84.00	159.45	85.30	6:01	1189	95.12
2011-12	538	441	82.00	222.36	123.61	5:01	1170	92.25
2012-13	665	540	81.00	248.48	136.64	4:01	1344	76.31
2013-14	751	559	74.00	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
2018-19	953	639	67.05	245.83	218.50	5:01	1367	80.17
2019-20	929	705	75.89	234.23	286.03	5:01	1339	90.65

Source: Assam State Transport Corporation.

The performance of ASTC during the period 2010-11 to 2019-20 is evident from the table-13.4.

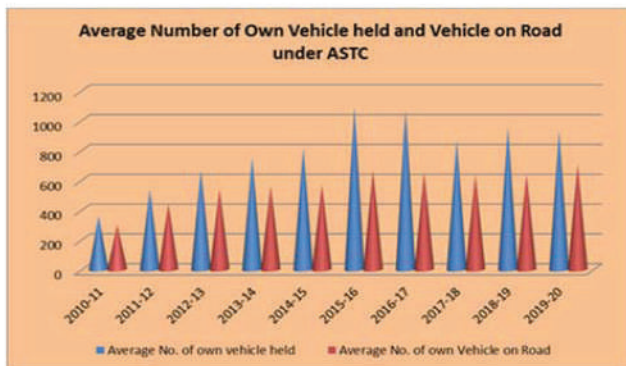


FIGURE-IV

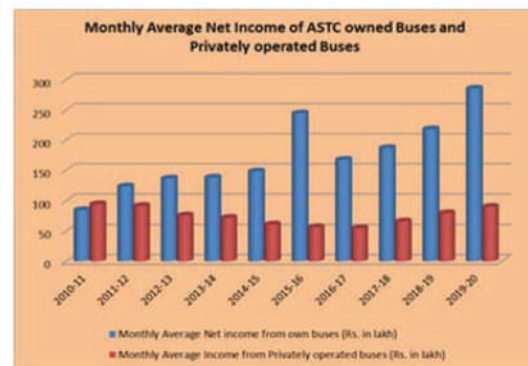


FIGURE-V

The average number of own vehicles of the ASTC on road was 929 in 2019-2020 compared to 953 in 2018-19. The number of private buses operated under ASTC was 1339 in 2019-2020 against 1367 in 2018-19, which shows a slight decline.

The ASTC is implementing Dharmajyoti Scheme, which provides 50 percent subsidy on bus fare to the pilgrims for visiting religious places within as well as outside the state of Assam. The scheme has become very popular and more than 2(two) lakh pilgrims have availed the facility.

RAILWAYS:

Assam at present has total railway route length 2518.99 km. The entire railway length is broad gauge railway. The running track kilometre of Railways under broad gauge railway is 2667.52 kms in Assam. According to the Indian Railways Yearbook 2019-20, the total railway route length of India as on 31st March, 2020 was 63,950 km, of which electrified route length was 39,329 km. Assam shares 4.17 percent of the total railway route length of the country; but has no electrified route.

The development of rail infrastructure in North Eastern Region is one of the priority areas of the Ministry of Railways. The endeavour of the Government is to provide rail connectivity to all the sister states in the region and thereafter, extend the same to the capital cities. Out of 8 States of North Eastern Region, rail network connectivity now exists in 7 States. Sikkim is being connected with the new line project Sivok-Rangpo (44 km). Presently, 19 Railway projects (13 New Lines and 6 Doubling), costing `75,579 crore for 2,008 km length, falling fully/partly in Assam and North Eastern Region are under different stages of planning/approval/execution. The total number of passengers carried by NF Railway was 111 million in 2019-20 compared to 110.32 million in 2018-19..The revenue generated from the goods carried was Rs 954.33 crores in 2019-20, whereas the revenue generated from the passengers carried by NF railway was Rs 2740.71 crores in 2019-20.

The Bogibeel rail-cum-road bridge, the fifth bridge across the Brahmaputra River is now a lifeline for the people of North-East region. 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 and was inaugurated by Prime Minister of India on 25th Dec, 2018. The project was completed an estimated cost of Rs

5900 crore. It connects 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 districts and Arunachal Pradesh. It starts from Chaulkhowa station and Moranhat Station at south bank and joins in between Sisibargaon and Siripanistation of Rangia – Murkongselek section of railway in north bank.

AIR TRANSPORT:

Assam is well connected with the rest of the country through Air Transport. The state has six operational civil airports located at Guwahati, Tezpur, Jorhat, Dibrugarh, North Lakhimpur and Silchar. All major airlines including private commercial airlines viz., Indigo, Go-air, Air Asia, Spice jet etc. are operating their flights to and from Guwahati from different locations of the country. In addition to these civil airports, small private airstrips in the interior areas are also present to address the need of the corporate houses.

In the Guwahati sector, the movement of air traffic as well as passenger traffic (both domestic and international) has been increasing rapidly. The records show that air traffic movement (for LGBI Airport, Guwahati and Mohanbari Airport, Dibrugarh and Silchar Airport published by the DGCA) has gone up by 27 percent during 2018-19 compared to the previous year. Similarly average number of flights handled has gone up by 23 percent in 2018-19. In respect of handling of freights, the growth was calculated at 29 percent in 2018-19 over the previous year 2017-18. The average number of flight per day is 164 in 2018-19 which was only 125 in 2017-18 (Table-13.5).

TABLE-13.5
AIR TRANSPORT STATISTICS IN 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
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
2018-19 #	60014	6639457	25567	N.A.	164	15741	70

* Figures excluding Lakhimpur, Tezpur and Jorhat Airport. # includes all airports of Assam.

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 region of India.

The number of aircraft movement, passengers as well as freight handled in the LGB International airport during the period from 2011-12 to 2018-19 is detailed in the Table-13.6.

TABLE-13.6

AIR TRANSPORT STATISTICS OF LGB INTERNATIONAL AIRPORT GUWAHATI

Year	Aircraft Movement	Passenger handle (No)		Freight loaded/unloaded (Tonne)
		Embark / Disembark	Transit	
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	3
2017-18	455	46680	NA	22
2018-19	643	49845	NA	27

Source: Directorate General of Civil Aviation Statistical Division, New Delhi and Airport Authority.

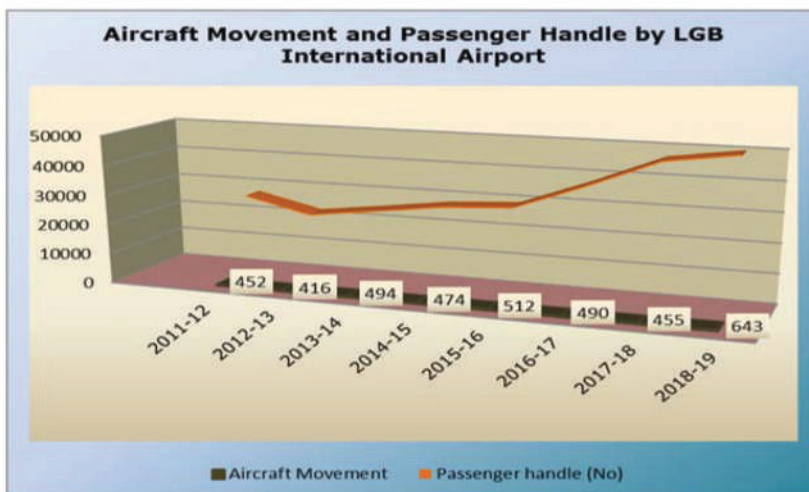


FIGURE -VI

The figure VI above shows the aircraft movement and the passengers handled by the LGB International Airport, Guwahati which has considerably increased over the years.

In January 2019, Guwahati won bids for two international destinations under the UDAN scheme, destinations being most anticipated Dhaka and Bangkok-Don Mueang.

In February 2019, the Airport has been privatised and given on lease for 50 years to Adani Group at highest bid of Rs. 160 per passenger.

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 Lakhipur 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.

The Government of Assam launched a project for transformation of the Inland Water Transport (IWT) system on the National Waterways in the state of Assam. The project will develop an efficient river transport system which would be safe, secure and comfortable for the large volume of passenger and cargo carried by vessels by IWT. The Assam Inland Water Transport Development Society (AIWTDS) has been formed by the Government of Assam under Transport Department to implement the project. The project is conceptualized to promote inland water transport as eco-friendly, economic and convenient mode of transport and is aimed to help in regional and economic development of Assam and nearby states by providing better connectivity and access to the hinterland. The government of Assam is implementing a World Bank funded "Assam Inland Water Transport Project" through which a comprehensive River Information System (RIS) will be set up for real-time monitoring of all boats/vessels operating on the River Brahmaputra with an Integrated Command Control Centre (ICCC). Furthermore, the National Technology Centre for Ports, Waterways and Coasts (NTCWPC) has been engaged to help implementation of Night Navigation facilities on Brahmaputra. Further an incentive based scheme of the IWT named "Jibondinga" is being set up for an efficient and sustainable ferry service system in the State.

To introduce faster moving water transportation by Inland Water Transport (IWT) ferry services, government of Assam has proposed to procure **Fibre Reinforced Plastic (FRP)** Boats to be utilized as river taxi for development of ferry services on the river Brahmaputra. Further the government propose to set up floating terminals at different ferry points of the river Brahmaputra and Barak to provide safe, secure and easy embarking and disembarking to IWT vessels. IWT Assam is working in synergy with Inland Waterways Authority of India (IWAI) under the Ministry of Shipping. Government of India for development of floating terminals under Central Sector Scheme (100% Grant-in-Aid) at different ferry points in the states.

RO-RO SERVICE:

On October 11, 2018, Inland Water Authority of India (IWAI) launched a Roll-on-Roll-off (RO-RO) service from Neamati to Manjuli Island in Assam.

- i. It will reduce the road route distance of 423 km to 12.7 km via river route.
- ii. For the commencement of the service a new vessel MV Bhupen Hazarika has been procured at a cost of Rs. 9.46 crore.

- iii. The vessel is 46.5-metre-long, 13.3-metre-wide and has the carrying capacity of 8 trucks and 100 passengers.
- iv. The IWAI is also planning to procure more such Ro-Ro vessels for use on river Brahmaputra.
- v. Earlier, IWAI had started a similar Ro-Ro service between Dhubri and Hatsingimari with 190 km of reduced travel distance.
- vi. Further, Floating terminals have also been constructed at 11 locations along the length of the Brahmaputra waterway. These are: Hatsingimari, Dhubri, Jogighopa, Tezpur, Silghat, Biswanathghat, Neamati, Sengajan, Bogibeel, Dibugarh/ Oakland and Oriumghat.
- vii. This will enable connectivity not only to Assam but also too many parts of North-east.

Besides these state 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 total number of passengers carried by the waterways was 6585905 in 2019-20 as compared to 14,899,522 in 2018-19 which shows a decline of 56 percent and the total amount of goods carried is 69313 quintals in 2019-20 which was 306,040 quintals in 2018-19 again a decline of 22 percent. The revenue earned by the IWT declined to 3.5 crore during 2019-20 as compared to Rs 7.6 crore in 2018-19.

COMMUNICATION:

POSTAL COMMUNICATION:

The Assam Postal Circle has a network of 4011 post offices and 12427 letter boxes [as on 31st March 2019] out of which 11304 post offices in 2018-19 and 3736 post offices in 2017-18 are located in rural areas. On an average, each post office serves a population of 20968 persons and covers 25.75sq. in rural areas and 74.24sq 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 a 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 project. 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 and 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 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 553 telephone exchanges with 7 Telecom Districts are functioning in the state (as on March 2019).

It is evident from the status of telecom facilities in Assam shown in the Table 13.7 that the overall tele-density (Telephone per 100 of population) of the state as on November 2020 was 68.66 as against the national average 86.55. While the urban tele-density of Assam stood at 167.16 as on November 2020 compared to 175.45 as on March 2019, the rural tele-density was only 50.88 as on November 2020 and was higher over the previous year. However, in respect of overall tele-density as well as urban tele density the position of Assam stood far below the national average [overall 88.81 and Urban 139.01 as on November 2020. In respect of rural segments also tele-density of Assam was considerably below the national average (Rural-59.08) during the same period

TABLE-13.7
TELECOM STATISTICS OF ASSAM

Item	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8	9
Direct Exchange Lines Fixed	1430077	1463773	1427318	1503449	1667066	2124457	2672377	NA
Rural Telephone Connections	445399	459014	449347	482397	547081	743833	926372	NA
Village Public Telephones (VPTs)	24688	24692	24692	24663	5297	4876	4393	NA
Total Telephones	Wire Line Phones (Fixed DEFS)	194395	183984	178191	167434	130810	134850	119527
	Wireless Phones (GSM+CDMA)	14387664	15278208	16433438	17150891	20536756	1989877	2560859
	Total	14582059	15462192	16611629	17318325	20694170	2124727	2672377
Tele density (%) (Telephone per 100 populations)	Urban	130.92	126.27	129.05	132.26	148.86	154.12	175.45
	Rural	31.13	34.36	37.41	39.18	46.63	51.49	57.29
	Total	46.51	48.74	51.9	53.95	63.25	68.41	76.87
Public Call Offices (Local + STD + Highway)	11929	11207	10350	8909	6321	5379	4763	NA

Source: Annual Reports- 2020-21 of Department of Telecommunication, Govt. of India.
Assam Circle.

The total number of telephone connections as on November 2020 was 23994397 compared to 2672377 in 2018. But there is an increase of 7.2 percent in wire-line

phones in 2019 compared to 2018. This is due to the increase in the use of wireless phones.

In respect of wireless phone [mobile segment] connections, there were 2.15 crore mobile subscribers in Assam as on August 2020. BSNL provides only around 13.28 percent of the total mobile connections in the state as on August 2020.

The Table-13.8 shows no Reliance wireless network service due to the closure of the network in Assam. On the other hand, there is a remarkable increase in the Reliance Jio network customers from 5028609 numbers in September 2018 to 8658069 in August 2020, an increase of 72 percent as most of the customers have ported to Reliance Jio network due to poor network of other providers. Whereas the Vodafone and Idea network have joined together and has come under one banner.

TABLE-13.8

WIRELESS SUBSCRIBERS IN ASSAM (As on 31st August, 2020)

Fig. in Nos.

Circle	Wireless Subscriber Group					Total
	Bharati	Reliance	Vodafone Idea	Reliance Jio	BSNL	
Assam	8387563	-	3719563	8658069	2863248	21559846
India	322831817	17658	300149421	402668297	118819923	1147922578

Source: Telecom Subscriptions Reports, TRAI

The Table-13.8 above shows the wireless subscribers in Assam and All India, where Reliance Jio network is the highest provider of the network both in Assam and India.

ANNEXURE - I

REVENUE COLLECTION UNDER COMMISSIONERATE OF TRANSPORT, ASSAM

(Rs. in Crore)

Sl. No.	District Authority	2019-20	
		Target	Achievement
1	2	3	4
1	Kamrup (R&L)	293.99	212.19
2	Kamrup (RTA)	3.10	1.43
3	Kamrup (Enforcement)	8.26	8.68
4	Kamrup (Rural)	41.12	41.02
5	Barpeta	24.51	25.47
6	Nalbari	16.86	17.12
7	Goalpara	16.69	14.00
8	Dhubri	21.3	17.51
9	Sonitpur	47.38	40.75
10	Darrang	21.96	17.46
11	Lakhimpur	30.77	28.85
12	Dibrugarh	61.05	52.44
13	Tinsukia	52.62	39.88
14	Dhemaji	10.03	13.10
15	Sivasagar	56.00	43.92
16	Jorhat	52.78	37.44
17	Golaghat	27.18	26.08
18	Nagaon	54.2	47.27
19	Morigaon	12.93	12.20
20	Dima Hasao	2.07	2.65
21	Karbi-Anglong	12.61	13.99
22	Karimganj	10.15	9.20
23	Hailakandi	8.34	7.98
24	Cachar	44.31	39.26
25	Boxirhat, M.V. Checkgate	0	0
26	Srirampur, M.V. Checkgate	0	0
27	Kokrajhar	16.10	16.81
28	Bongaigaon	26.49	22.51
29	State Transport Authority	54.06	31.26
30	Digarkhal, M.V. Checkgate	0	0
31	Udalguri	7.33	8.80
32	Chirang	12.36	11.18
33	Baksa	6.46	7.14
34	Hojai	2.00	1.94
35	Biswanath	4.00	2.65
36	Majuli	3.00	1.08
37	Charaideo	1.00	0.86
38	South Salmara	1.00	0.52
	Total	1064.05	874.64

R&L = Registered & License, RTA= Regional Transport Authority

Source: Office of the Commissioner of Transport, Assam

ANNEXURE - II

STATISTICS ON MOTOR VEHICLES IN ASSAM DURING THE YEAR 2019-20

Sl. No.	Types of Vehicle	No. of Vehicles Registered during the year 2019-20	No. of Vehicles Registered (Progressive) upto 31.03.2020	No. of Vehicles on Road during 2019-20
1	2	3	4	5
1	Multi Axle Vehicle	994	4083	3425
2	Articulated Vehicle	806	5142	4448
3	Medium	496	22289	20249
4	Heavy	4803	125085	115029
5	Four Wheelers	19532	157201	137586
6	Three Wheeler	3016	50119	46803
7	Stage Carriage	8	2105	1466
8	Contract Carriage	776	17029	15097
9	Omni Buses	118	1392	1118
10	Mini Buses	78	2546	2370
11	School Buses	206	1926	2320
12	AATT	6	12076	9748
13	Motor Cabs	3668	21097	17853
14	Maxi Cabs	1057	9647	10197
15	Others Taxi	854	35857	42459
16	Auto Rickshaw	13905	137189	152475
17	Two Wheeler	335000	2881439	2710763
18	Car	62949	770530	726734
19	Tractor	10255	75728	65874
20	Trailer	3047	26049	22007
21	Crane	74	1692	1850
22	Govt. Vehicle	845	24305	21246
23	Fire Brigade	50	130	127
24	Ambulance	348	2907	2854
25	Others	767	8651	14205
26	E-Rickshaw	10010	20334	19043
Total		473668	4416548	4167346

Source: Office of the Commissioner of Transport, Assam

CHAPTER -XIV INSTITUTIONAL FINANCE

Financial institution plays a vital role in the economic development of a country. It encourages both savings and investment and also creates links between savers and investors and also facilitates the expansion of financial markets and aids in financial deepening and broadening. It accelerates the rate and volume of savings through provision of various financial instruments and efficient mobilization of savings. It aids in increasing the national output of the country by providing the funds to the corporate customers to expand their respective business. Well-developed financial institutions can generate growth by increasing the pool of funds and by reducing the risk and enhancing the productivity of fund transfers from savers to investment projects. By doing so, they promote various sectors of the economy such as agriculture, housing, infrastructure, industries, trade, real estate and others. The interest of the investors in financial instruments is secured by central bank of the country and various regulatory bodies like the RBI, SEBI etc.

BANKING INSTITUTION:

Commercial banks are the biggest financial intermediaries. They comprises of both scheduled and non-scheduled banks. The Scheduled Commercial Banks comprises of Public Sector Banks, Regional Rural Banks (RRB), Small Finance Banks, Private Banks, Cooperative Banks and Foreign Banks. There are 12 public sector banks, 22 private banks, 10 small finance banks and 43 regional rural banks in the country at present.

TABLE – 14.1
GROWTH OF SCHEDULED COMMERCIAL BANKS
IN ASSAM AND INDIA
(at the end of March)

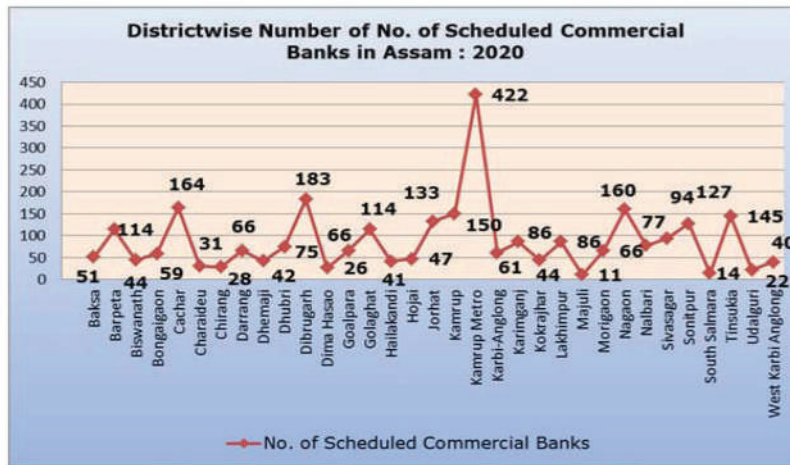
Year	Number of Offices*		Deposits (Rs. in Crore)		Credit (Rs. in Crore)	
	Assam	India	Assam	India	Assam	India
2010	1434	83997	49545	4601926	18311	3345619
2011	1504	89110	59101	5426510	21053	4076868
2012	1574	96059	67455	6174147	25171	4821527
2013	1682	104647	77730	7051332	28576	5506496
2014	1861	115822	85069	8028220	31713	6264290
2015	2047	125863	97378	8922111	35911	6878472
2016	2177	132587	103794	9659968	42671	7520929
2017	2276	137770	122307	10751439	48776	7927003
2018	2289	139240	134643	10750614	57307	7825359
2019	2348	141756	147203	12558671	65070	9818367
2020	2889	148904	166270	13750146	70658	10449562

*Reporting Offices only.

Source: Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2008 to March 2020 of RBI.

In Assam there were a total of 2889 Scheduled Commercial Bank (SCB) branches (Reporting offices only) in the State as on 31st March, 2020. The share of SCB branches in Assam is less than two percent of the total SCB branches at all-India level and this indicates the low coverage of banking services. Over a period of ten years the compound annual growth of bank branches in Assam has been 7.26 percent which is higher than the all-India growth of 5.89 percent. Although compound annual growth of deposits in Assam (12.87 percent) had been higher than the all-India level (11.57 percent), the share of the State in all-India total was barely 1.21 percent. Similarly for credit compound annual growth in Assam (14.46 percent) had been higher than the all-India level (12.06 percent), but the share of the State in all-India total was only 0.68 percent. This clearly indicates the low rate of deposit mobilization and credit absorption in the State compared to the all-India level.

The distribution of bank branches (as on 31.3.2020) across the districts shows that only ten districts in the State have more than 100 numbers of bank branches. In other words, there is urgent need for expansion of bank branches in Assam.



Kamrup (M) has the highest number (422) of bank branches among the districts and Majuli has the lowest number (11) of bank branches.

Out of the total 2889 reporting offices of SCBs in the State, 1469 are Public Sector Banks, 748 are Private Sector Banks, 481 Regional Rural banks, 190 Small Finance Banks and 1 (one) Foreign Bank. As per data from RBI website, number of reporting offices of SCB branches in rural areas is 1404, and in semi-urban and urban areas is 824 and 661 respectively. The low banking services in Assam is reflected by high population coverage per bank branch. Population served by per bank branch in the State as on as on 31st March, 2020 is 12000 against all-India average of 9047 persons per bank branch [As per projected population, 1347121000 persons in India and 34668000 persons in Assam as on 1stMarch, 2020]. The rural areas are more disadvantaged as population served per bank branch in rural areas of Assam is 25147. The population coverage in semi-urban and urban areas taken together is 3431 persons. Of the total districts in Assam, in 13 districts, population served per bank branch is less than the State average. In Kamrup (M), the banking coverage is best developed and population served per bank branch is 3191 persons while South Salmara with lowest

number of bank branches has highest number of persons (55511) served per bank branch.

CREDIT-DEPOSIT OF SCHEDULED COMMERCIAL BANKS:

Of the total 2889 reporting offices as on 31st March 2020, 49 percent are in rural areas, 29 percent are in semi-urban areas and 23 percent are in urban areas of the State. The table-14.2 shows Deposit and Credit of SCBs in the State.

Table-14.2

Deposits and Credit of Scheduled Commercial Banks in Assam

Item	Rural		Semi-Urban		Urban	
	2019	2020	2019	2020	2019	2020
No. of reporting offices	1066	1404	675	824	607	661
Deposit (Rs. in crore)	29707	34659	39854	45410	77642	86201
Credit (Rs. in crore)	16332	18702	19642	21536	29095	30419
C-D Ratio (in %)	55	54	49	47	37	35

Source: Reserve Bank of India

Although the rural areas have higher share of bank branches, the share of deposit and credit is higher for the urban and semi-urban bank branches. Of the total deposit mobilisation by banks, 52 percent was from urban areas, 27 percent from semi-urban areas and 21 percent from rural areas. In respect of credit disbursement, the share of rural branches was 26 percent, semi-urban and urban branches shared 31 percent and 43 percent respectively as on 31-03-2020. This is because capacity to save and invest in rural areas in the State continues to be highly limited.

The trend of Credit-Deposit Ratio of Scheduled Commercial Banks in Assam has been less than the stipulated benchmark of 60 percent as per the RBI guideline. The State could achieve the target of only 51 percent as on 31-03-2020, which is less than the previous year's position of 52 percent.

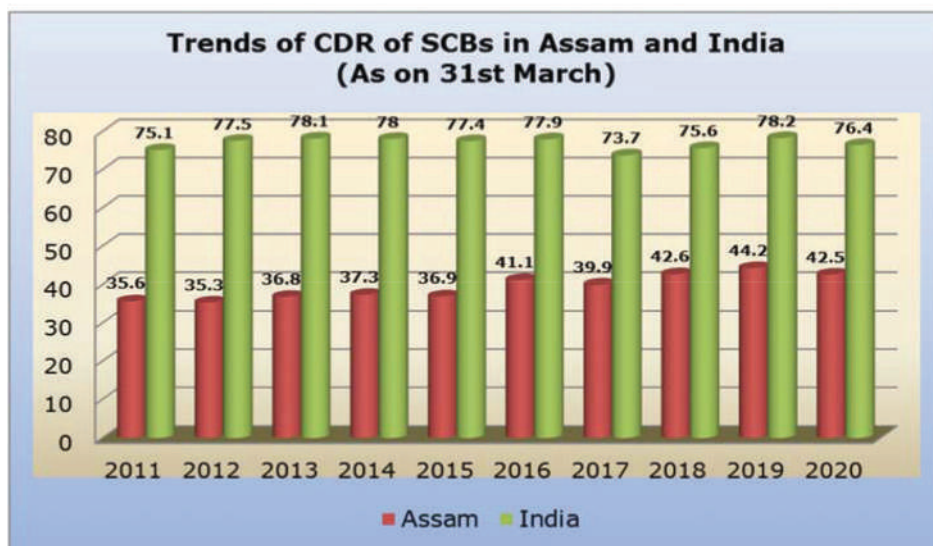
The share of aggregate deposits and credit as on 31-03-2020 of Private Sector Banks in Assam was 13.95 & 28.73 percent and of Public Sector Banks was 78.77 & 62.89 percent respectively. The table-14.3 shows bank group wise deposits and credit of SCBs.

Table-14.3
Bank Group-wise Deposits and Credit of Scheduled Commercial Banks
in Assam as on 31st March of the year

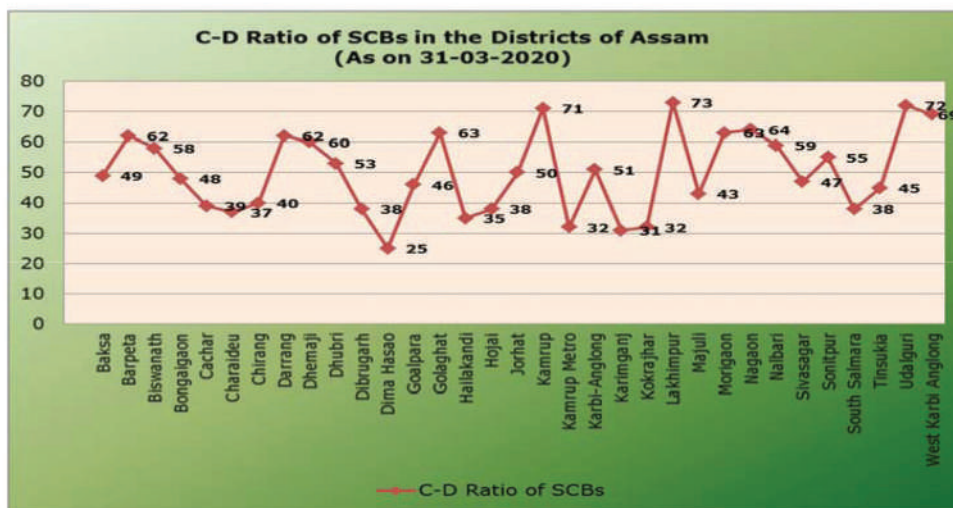
Bank Group	Reporting Offices (In No.)		Deposits (Rs. in crore)		Credits (Rs. in crore)		Credit Deposit Ratio (CDR) (in %)	
	2019	2020	2019	2020	2019	2020	2019	2020
Private Sector Banks	375	748	21136	23200	18279	20303	86.48	87.51
Public Sector Banks	1474	1469	115715	130978	42105	44438	36.39	33.93
Regional Rural Banks	481	481	10148	11118	4135	4043	40.75	36.36
Small Finance Banks / Co-operative Banks	17	190	56	817	412	1773	735.71	217.01
Foreign Bank	1	1	146	156	139	100	99.21	64.10
All SCBs	2348	2889	147203	166270	65070	70658	44.20	42.49

Source: Reserve Bank of India

The trends in credit deposit ratio in Assam are far less than the national average which clearly reflects the poor credit absorption capacity of the economy. While the credit off take against deposit mobilization has been more than 75 percent at the all India level, the State economy has just able to absorb half the deposits mobilized by the banking institutions within the State. The graph below shows the trend of CDR in Assam and India.



The CD Ratio of SCBs in the districts of Assam is presented in the graph given below:



Source: Quarterly Statistics on Deposit and Credit of Scheduled Commercial Bank in India, RBI

DEPOSITS OF COMMERCIAL BANKS:

Even though private sector banks are functioning in Assam, the public sector banks remain the backbone of financial infrastructure in the State. The bulk of deposit mobilization is facilitated by the public sector banks rather than the private sector banks in the State. The share of aggregate deposits (as on 31-03-2020) of Private Sector Banks in Assam was 13.95 and of Public Sector Banks were 78.77.

The deposit accounts of banks shows that 49 percent of the accounts are savings deposit and 42 percent are term deposits. Only 9 percent deposits were current account type. In rural and semi urban areas of Assam, 64 percent and 56 percent were savings deposit while 31 percent and 36 percent were term deposits respectively. In urban areas only 51 percent deposits of the banks were term deposits accounts. Lower proportion of term deposits also shows lower long term saving capacity of the people and also less disposable fund within banking system for long term investment through credit creation. The table below shows type wise deposits of SCB in Assam.

TABLE-14.4
DEPOSIT OF SCB IN THE STATE BY TYPE OF ACCOUNT
(As on 31st March)

Type of Account	Deposits (Rs. in crore)								% change in total over 2019
	2019				2020				
	Rural	Semi-Urban	Urban	Total	Rural	Semi-Urban	Urban	Total	
Current	1649	3242	7710	12600	1681	3059	7990	12730	1.03
Savings	18853	22287	31205	72345	22235	25221	34311	81767	13.02
Term	9205	14325	38727	62258	10743	17130	43900	71773	15.28
Total	29707	39854	77642	147203	34659	45410	86201	166270	12.95

Source: Quarterly Statistics on Deposits and Credit of SCB, Reserve Bank of India

CREDIT SUPPORT

The public sector banks are the major supplier of credit requirements in the State. The share of credit for Private Sector Banks in Assam was approximately 29 percent while the same for Public Sector Banks was approximately 63 percent.

In order to ensure availability of credit to agriculture, weaker section of the population and other small scale sectors, the banks have to ensure at least 40 percent of the credit to these priority sectors of the economy. More than 50 percent of the loans from banks are made available to priority sectors in Assam. Although share of credit to weaker section is proportionately less in case of PSBs, it should be emphasized that PSB are engaged in financing of all income generating programmes of the government through SHG –Bank linkage programme, and thus the Public Sector banks provide an indirect coverage to weaker section of the population.

TABLE-14.5
PRIORITY AND NON-PRIORITY SECTOR ADVANCES IN ASSAM
(As on 31st March 2020)

TYPE OF ADVANCE	Public			Private			RRB			AACB		
	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018
PSA / TOTAL ADV	56.50	59.2	57.2	66.04	65.7	61.1	87.69	87.1	86.3	9.71	8.0	21.0
WSA / PSA ADV	23.27	21.2	18.9	49.24	65.5	62.7	73.30	73.1	72.4	62.72	76.4	37.5
WSA / TOTAL ADV	12.38	12.6	10.8	32.52	43.0	38.3	64.28	63.7	62.5	6.09	6.1	7.9

NB: PSA=Priority Sector Advance; WSA=Weaker Section Advance

The Annual Credit Plan of the Banks in Assam for the year 2019-20 shows that against a target of Rs. 15758 crore credits to Agriculture and allied sector, achievement was 45 percent. Of the target achieved, 23 percent was under Crop Loan. The achievement was less than the target achieved for the previous financial year (2017-18), where, achievement under Agriculture and Allied Sector was 52 percent and achievement under Crop Loan was 25 percent. The high target achievement under MSME is largely due to the programmes implemented under various government schemes. The Table-14.6 shows Annual Credit Plan performance during 2018-19 and 2019-20.

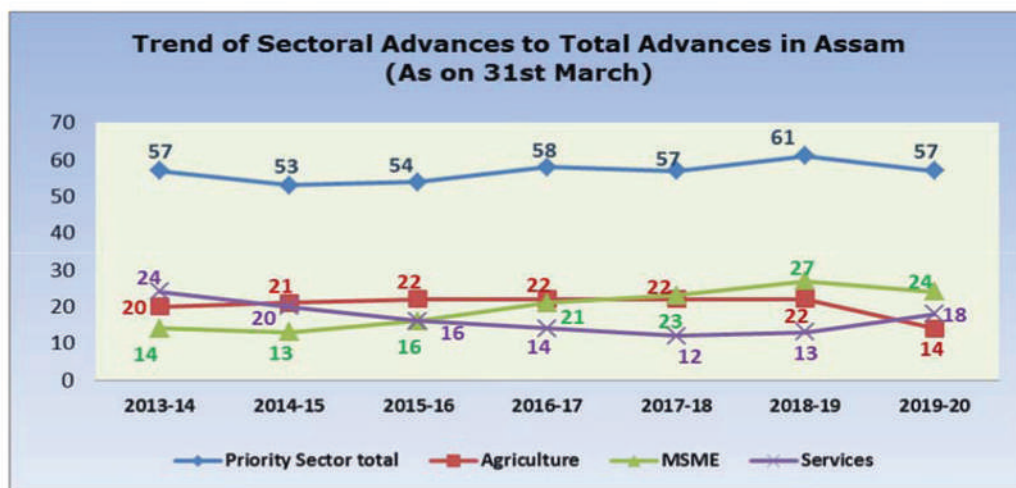
TABLE-14.6
SECTOR-WISE SUMMARY UNDER ANNUAL CREDIT PLAN
(Rs. in crore)

Sector	2018-19			2019-20		
	Target	Achieved	Achievement (In %)	Target	Achieved	Achievement (In %)
Agri Total	13868	7193	52	15758	7119	45
Of which Crop Loan	7878	1956	25	8899	2072	23
MSME	4622	11211	243	5869	10614	181
Other Priority Sector	3123	1929	62	2378	2277	96
Total	21612	20332	94	24005	20010	83

Source: State Level Bankers' Committee, Assam Report

While the share of agricultural credit has remained almost constant during the period 2013-14 to 2018-19 but slid down to 14 percent at the end of 2019-20, the share of MSME showed an increasing trend during the first 6 years but came down in 2019-20. However, the Services which showed a declining trend during the first six years jumped to 18 percent in 2019-20 against 13 percent share in 2018-19. The interchange of the intensity of fund flow among the priority sectors has kept the total share of priority sector at almost 53-61 percent of the total credit flow in the economy of the State.

The figure below shows the trend of priority sector advances in total, Agriculture, MSME and Services sector to the total advances during the last seven years i.e. from 2013-14 to 2019-20.



The tables 14.7 & 14.8 shows bank group-wise and occupation wise total priority sector outstanding advances as on 31st March.

TABLE-14.7

Bank Group-Wise Outstanding Advances (Rs. in crore)			
Bank Group	2019	2020	Percentage change
Public	24952	25858	8.5
Private	12849	15937	42.1
RRB	3603	3546	(-) 3.9
AACB	96	140	(-) 48.4
Bank Total	41500	45481	15.4
NEDFI	714	541	(-) 8.2
RIDF	2941	3811	33.3
Grand Total	45155	49832	15.9

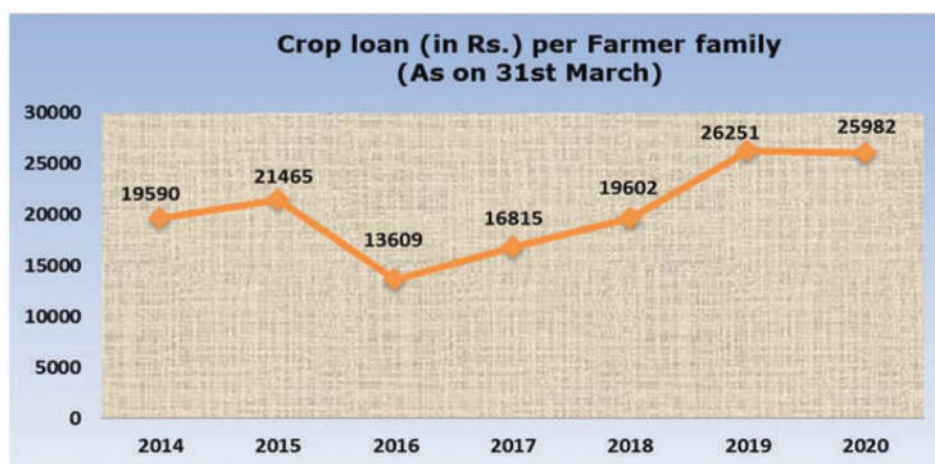
TABLE-14.8

Occupation-wise Outstanding Advances in Assam (Rs. in crore)			
Occupation Group	2019	2020	Percentage change
Agriculture	16329	17566	11.1
MSME	19553	23088	22.7
Others	9274	9178	11.5
Total	45156	49832	15.9

Source: State Level Bankers' Committee, Assam Report

The Annual Credit Plan for the year 2019-20 shows that total agriculture credit disbursed in the State was Rs.7119 crore (45.2 percent) against commitment of

Rs.15758 crore. In other words less than half of the target could be achieved which shows the low credit absorption in agricultural sector due to institutional and other sector specific issues. During the year achievement under crop loan was Rs.2072 crore against a commitment of Rs.8899 crore. In other words only 23 percent of the funds allocated for crop loan could be disbursed. The crop loan target achievements varied across bank groups- in respect of PSB it was 23 percent, in respect of private banks it was 16 percent and RRBs and AACB achieved a target of 42 percent and 4 percent only. Crop loan is one of the most important means of short term advance extended to the farmers and agriculturists by banks and co-operative societies. The loan amount can be used to purchase improved seeds, fertilizers, machinery etc. The crop loans are usually repaid in single instalment after the crop production. The graph below shows estimated crop loan per farmer family [Total farmer family 27.42 lakh as per Agri Census, 2015-16].



Source: State Level Bankers' Committee, Assam Report

Besides, crop loan there are also KCC holders in the State which provide credit support to needy farmers. 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. A total number of 312618 KCC cards were issued in Assam for the year 2019-20 adding to the pool 1097039 number of total outstanding KCC cards made available over the years. The sanction of new cards added credit limit to the tune of Rs. 1502.75 crore during the year 2019-20. The Scheme, thus, covered around 40 percent of the total farmer family (there are 27.42 lakh farmer families as per Agriculture Census 2015-16) of the State at the end of March 2020.

TABLE – 14.8
PROGRESS UNDER KISHAN CREDIT CARD SCHEME

Year	Achievement		Outstanding position	
	Card issued (In No.)	Amount (Rs. in Crore)	Card issued (In No.)	Amount (Rs. in Crore)
2011-12	37174	1303	967220	3078
2012-13	265797	932	1329203	3935
2013-14	308306	1506	1586687	15511
2014-15	281889	1331	1809898	6299
2015-16	217460	1084	1706822	6913
2016-17	281773	1260	1786652	7573
2017-18	349362	1492	1950214	8212
2018-19	298629	1416	1123661	5271
2019-20	312618	1503	1097039	5633

Source: Reports of State Level Bankers Committee, Assam.

REGIONAL RURAL BANKS:

Regional Rural Banks [RRBs] were established under the Regional Rural Bank Act, 1976 with an objective to boost rural economy by providing credit to farmers, agricultural labourers, artisans, small entrepreneurs, etc. The two RRBs in the State, Assam GraminVikash Bank [AGVB] and LangpiDehangi Rural Bank [LDRB] operating in the Brahmaputra Valley and Barak Valley have been amalgamated with effect from 1st April, 2019 and will be called as Assam GrameenVikash Bank. At present there are 359 branches in rural areas, 94 branches in semi-urban areas and 20 branches in urban areas.

The aggregate deposit of RRBs was Rs.11118 crore at the end of March, 2020 compared to Rs.10148 crore on 31st March, 2019 registering an increase of about 10 percent in 2020 over the previous year. The downward trend of volume of credit of RRBs continued during 2018-19 also. As on 31st March, 2020, the aggregate volume of credit was Rs.4043 crore compared to Rs.4135 crore on 2019 showing a fall of 2 percent compared to a 5 percent fall in aggregate credit as on 31st March, 2019 over the previous year. The C-D Ratio of RRBs was 36 percent at the end of March, 2020 compared to 41 percent as of March, 2019. The performance of RRBs is presented in the table-14.9.

TABLE-14.9
ACHIEVEMENTS OF REGIONAL RURAL BANKS IN ASSAM
(PRIORITY SECTOR) AS ON 31ST MARCH

(Rupees in crore)

Year	Achievement under Annual Credit Plan			Ach of RRBs to all Banks (in %)
	Target all Banks	Ach All Banks	Ach of RRBs	
2011	3548	2895	703	24
2012	4510	4585	767	17
2013	6420	4638	618	13
2014	10671	6474	787	12
2015	10012	6128	861	14
2016	7793	8945	712	8
2017	11105	11244	777	7
2018	194407	22464	1023	5
2019	21612	20332	390	2
2020	24005	20010	930	5

Source: State Level Bankers' Committee, Assam Report

ASSAM STATE COOPERATIVE APEX BANK LIMITED:

The Assam Co-operative Apex Bank Ltd. (ACAB) was established in 1948 and the Bank has developed and expanded its activities/ operations over the years. The Bank has a network of 67 branches and 6 Zonal Offices, spread throughout the state. At the end of March, 2020, deposit and credit of ACAB was Rs.3473 crore and Rs.1438crore respectively. The C-D ratio of APEX Bank was estimated to be 41.4 in 2019-20 against a ratio of 38.42 at the end of March, 2019.

The total priority sector advances as on 31st March, 2020 was Rs.139.62 crore of which agriculture comprised of Rs.88 crore (63 percent), MSME Rs.18 crore (13 percent) and others Rs.34 crore (24 percent). Out of the total advances under Agriculture during the year 2018-19, share of crop loan was Rs.43 crore (31 percent).

MICRO-FINANCE:

The Micro Finance Scheme is an effective instrument to meet the financial demands of small entrepreneurs. It is regarded as an effective programme for poverty alleviation and providing financial support for livelihood activities especially for women. The micro-finance programme of NABARD started in the year 1992 with formation of 500 Self Help Groups (SHGs). The Self Help Groups Bank linkage (SHGBLP) programme was started as a bank outreach programme, which with the passage of time developed into a holistic programme for capacity development in livelihood with adequate social and financial support in rural areas.

In Assam, the programme has gathered momentum from the year 2001-02 onwards. Till the end of March, 2020 number of SHG linked with bank credit was 101111 with an outstanding credit amount of Rs.782 crore. During 2019-20, a total of 30925 numbers of SHGs were credit linked and the credit amount was Rs.453 crore.

TABLE-14.10
FINANCING OF SELF HELP GROUPS BY BANKS AS ON 31ST MARCH

(Rs. in crore)

Item	Current Year			Cumulative 2019-20
	2017-18	2018-19	2019-20	
Number of Deposit Account.	19499	14704	20316	391539
Deposit Amount	17.57	4.53	20.44	298.2
Number of Credit linked accounts under NRLM (Nos.)	12718	10717	21622	51472
Credit amount under Credit linkage under NRLM	122.54	126.16	333.55	437.2
No. of SHGs with direct Credit linkage	15595	6254	9303	49639
Credit amount under Direct Credit linkage to SHG	168.17	91.36	119.74	345.21
Total number of credit linked accounts	28313	16971	30925	101111
Total credit under Credit linkage	290.71	217.52	453.29	782.41

Source: State Level Bankers' Committee, Assam Report

FINANCIAL INCLUSION:

The basic objective of financial inclusion is provision of banking services to under privileged section and to unbank and underbanked regions in the country. The Government initiated the National Mission for Financial Inclusion (NMFI), namely, Pradhan Mantri Jan Dhan Yojana (PMJDY) in August, 2014 to provide universal banking services for every unbaked household, based on the guiding principles of banking the unbanked, securing the unsecured, funding the unfunded and serving unserved and underserved areas. PMJDY aimed at providing banking service points throughout rural India by mapping over 6 lakh villages into 1.6 lakh Sub Service Areas (SSAs). Each SSA typically comprise of 1,000-1,500 households. Out of 1.6 lakh SSAs, 1.3 lakh SSAs are covered through interoperable, online BCs and remaining 30,000 are covered through bank branches. BCs deployed in rural areas also provide interoperable Aadhaar Enabled Payment System (AePS) banking services. Approximately 5013404 households have been identified of which 99 percent households have been covered under PMJDY in Assam.

On April 5th, 2016, Government of India launched the Stand Up India scheme for promoting entrepreneurship amongst women, SC & ST category, who have been facing difficulties in accessing credit and also delay in getting access to any credit facility for income generating work. The scheme intends to leverage the institutional credit

structure to reach out to these underserved sectors of the population in starting Greenfield enterprise. It caters to both ready and trainee borrowers. The Scheme facilitates bank loans between Rs.10 lakh and Rs.1 crore to at least one Scheduled Caste/ Scheduled Tribe borrower and at least one Woman borrower per bank branch of Scheduled Commercial Banks for setting up Greenfield enterprises in trading, manufacturing and services sector. To extend collateral free coverage, Government of India has set up the Credit Guarantee Fund for Stand Up India (CGFSI). The scheme is built on the concept of providing handholding support to those borrowers who might have a project in mind but lack the confidence and capability to start up.

An important aspect of financial inclusion is enabling the flow of credit to small businesses. In pursuance of the announcement in the Union Budget 2015-16, the Micro Units Development finance Agency (MUDRA) was set-up and the Pradhan Mantri Mudra Yojana (PMMY) launched on 8th April, 2015. For achieving sustained expansion in the flow of credit to the non-corporate small business sector, loans up to Rs. 10 lakh without collateral are extended to borrowers under PMMY. These loans are extended through partner Member Lending Institutions (MLIs) – such as Scheduled Commercial Banks, Non-Banking Financial Companies (NBFCs) and Micro-Finance Institutions (MFIs). In turn, MUDRA Ltd. offers refinance to MLIs for PMMY loans extended by them.

TABLE-14.12
PMMY IN ASSAM AS ON 31ST MARCH

Category	Outstanding Number			Outstanding Amount (Rs. in crore)		
	2018	2019	2020	2018	2019	2020
Sishu	470566	469823	520164	1659	1799	1200
Kishore	127179	229248	116030	1284	1886	1617
Tarun	7966	6837	18294	500	502	1111
Total	605711	705908	654488	3443	4187	3928

Source: State Level Bankers' Committee, Assam Report

COVERAGE OF TEA GARDENS BY BANKS:

As on 31st March, 2020 number of tea gardens covered by banks was 1123 against 821 tea gardens as on 31-03-2019. During 2020, against a total of 531509 numbers of labourers, 761889 bank accounts were opened. A total of 399026 nos. of Rupay/ ATM cards were issued against the accounts opened. In 432 gardens POS/ ATM were installed.

RURAL INFRASTRUCTURE DEVELOPMENT FUND (RIDF):

To meet the infrastructure gaps "Rural Infrastructure Development Fund (RIDF)" was created in NABARD during the financial year 1995-96 with a corpus of Rs.2000 crore.

The corpus under RIDF is announced every year by GoI/RBI and as on 31st March 2019, Rs.7114.46 crore has been sanctioned to Govt. of Assam for the year 2019-20

under RIDF for 3645 Nos of different infrastructure projects such as roads & bridges, irrigation, drinking water supply, education, animal husbandry, water harvesting, etc. As against the total amount of loan sanctioned, the state has so far availed an amount of Rs.4968.69 crore. Of the total sanction, the major chunk (65 %) of the sanctioned amount has gone to rural connectivity (roads and bridges) and 11 % to irrigation and flood control.

TABLE-14.13
RIDF PROJECTS SANCTIONED TO GOVT. OF ASSAM

(Rs. in crore)

Sl. No.	Activity	Number of Projects sanctioned	Loan sanctioned	Loan disbursed (Cummulative) as on 31-03-2020
1	Rural Roads	662	1390.45	1123.48
2	Rural Bridge	1876	3115.45	2194.48
3	Irrigation	291	366.42	234.63
4	Agriculture	62	938.4	826.17
5	Flood Control	294	1077.24	886.59
6	Small Hydel Projects	2	46.14	46.14
7	Fisheries	136	147.53	102.86
8	Pay & Use Toilet	21	8.3	2.49
9	Animal Husbandry & Veterinary	334	244.7	160.51
10	Marketing infrastructure	6	33.99	30.95
11	Revitalisation of Sericulture Farm	40	23.04	20.97
12	Rural Godown	246	100.91	85.01
13	Cattle Feed Plant	1	4.73	0
14	Soil Conservation Projects	113	108.72	47.44
15	Infrastructure for rural Education	54	520.28	341.62
16	Rural Drinking water	1	19.33	0
Total		4138	8195.64	6103.44

Source: State Focus Paper 2021-22 Assam, NABARD, Assam Regional Office

SWAMI VIVEKANANDA ASSAM YOUTH EMPOWERMENT (SVAYEM) YOJANA:

Swami Vivekananda Assam Youth Empowerment (SVAYEM) Yojana is a flagship program to provide financial support to the youths of Assam to take up income generating activities in the manufacturing, trading and service sector. About One lakh youth of Assam covering all the districts will be provided suitable credit support for taking up income generating enterprises.

Financial assistance under the scheme is to be provided by all Public Sector/Private Sector/Regional Rural Banks. The quantum of assistance is limited to Rupees One lakh for new entrepreneurs and up to Rupees two lakh for existing

entrepreneurs and the maximum beneficiary contribution is 25 percent of the total project cost. The quantum of subsidy will be limited to 20 percent of sanctioned limit subject to Rs20,000 for new entrepreneurs and 40 percent of sanctioned limit subject to Rs40,000 for existing entrepreneur.

TABLE-14.14
SVAYEM: POSITION OF LOAN SANCTIONED AND SUBSIDY
CLAIMED BY BANKS (as on 31st March, 2020)

(Rs. in crore)

Target	Disbursement		Outstanding	
No.	No.	Amount	No.	Amount
91446	8554	64.58	9835	99.21

Source: State Level Bankers' Committee, Assam Report

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.

NEDFi till the end of March, 2019 has provided financial assistance to 1733 numbers of projects for an amount of Rs.3038.64 crore in Assam. The sectors assisted are agriculture and allied activities, agro food processing, bamboo & wood based construction, educational & training institutes, handloom & handicraft, hospitals & nursing homes, tourism & hospitality, etc.

Of the total projects sanctioned by NEDFi, share of Assam is approximately 17 percent. The State's share in the total sanctioned and disbursed amount for projects by NEDFi is 50 percent and 54 percent respectively.

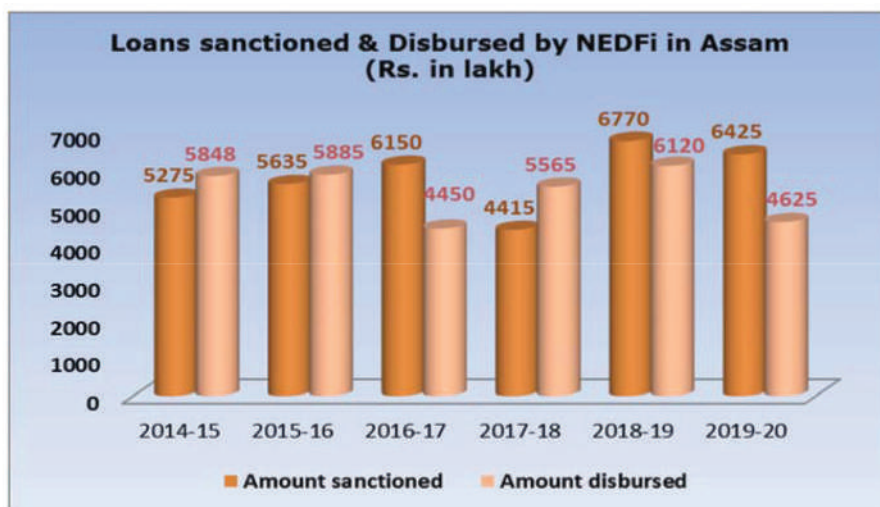
TABLE-14.15
LOAN SANCTION AND DISBURSEMENT BY NEDFi

(Rs. in crore)

Year	No. of Projects		Amount Sanctioned		Amount Disbursed	
	Assam	NER	Assam	NER	Assam	NER
2014-15	69	428	150.70	312.03	207.26	387.20
2015-16	66	422	246.55	361.86	172.78	302.99
2016-17	77	472	210.91	394.88	185.27	349.09
2017-18	98	553	150.88	289.16	156.72	251.41
2018-19	123	693	188.82	359.55	155.18	286.77
2019-20	144	691	273.30	440.73	168.19	319.43

Source: Annual Report of NEDFi

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) of the region. As on 31st March 2020, the Corporation sanctioned Rs.855.10 crore and disbursed Rs.821.56 crore, through which it has been able to cover more than 7 lakh beneficiaries. More than 90 percent of the beneficiaries under the scheme are women. The graph below presents loans sanctioned and disbursed by NEDFi in Assam at the end of March under micro finance.



Source: NEDFi, Assam

DISBURSEMENT OF CENTRAL SUBSIDIES:

The Corporation is a nodal agency for disbursement of Central Subsidies under NEIP 1997 & NEIIPP 2007, which is administered by the Department of Industrial Policy and Promotion, Ministry of Commerce, Govt. of India. The Corporation is thus facilitating disbursement of Central subsidies to various industrial units in the region. The details of disbursement under various schemes during the year may be evident from the table-14.15.

TABLE-14.16
SCHEME WISE DISBURSEMENT OF SUBSIDIES BY NEDFi
(Rs. in Crore)

Scheme	2017-18	2018-19	2019-20	Cummulative as on 31 st March, 2020
Transport Subsidy (TS)	281.27	961.62	248.4	4162.99
Central Capital Investment Subsidy (CCIS)	475.55	558.11	605.76	2616.91
Central Interest Subsidy	77.71	92.23	27.61	428.9
Central Comprehensive Insurance Subsidy	2.6	25.21	5.76	53.73
Freight Subsidy	0.01	126.45	118.26	263.59
Total	837.14	1763.65	1005.79	7526.12

Source: Annual Report, NEDFi

ASSAM FINANCIAL CORPORATION (AFC):

The Assam Financial Corporation was established as a Joint State Financial Corporation under Section 3(A) of the SFC's Act 1951, in the year 1954. The AFC covered the erstwhile-undivided Assam with two union territories of Manipur and Tripura. The Corporation has been persistently working for provision of working capital needs and term loans to entrepreneurs and other industrial and service promotion investments in Assam.

At present the Corporation has 2 numbers of DGM branches, 3 numbers of Senior Manager level branches, 6 numbers of Branch Manager level offices, 2 numbers of field offices and one Satellite Office to provide need based customer service. AFC lends out its fund through recovery as well as fund received from Govt. of Assam. During the year 2019-20, Corporation received 35 no. of applications involving an amount of Rs.11.78 crore and sanctioned an amount of Rs.12.89 crore to 36 applicants as against Rs.24.86 crore to 42 applicants in the previous year. AFC sanctioned Rs.5.02 crore to 13 applicants for setting up of various processing and manufacturing projects in MSME sector. On the other hand the Corporation sanctioned Rs.8.84 crore to 26 applicants for setting up various service sector projects both in MSME and Commercial Real Estate (CRE) sector.

The Corporation's net effective sanction, disbursement and outstanding loans and advances since inception up to the end of March, 2020 are presented in the table-14.16.

TABLE-14.17
NET EFFECTIVE SANCTION, DISBURSEMENT AND OUTSTANDING
OF LOANS & ADVANCES IN ASSAM

(Rs. in crore)

Amount Sanctioned (effective)				Amount Disbursed		Loan Outstanding	
Small Scale		Others		Small Scale	Others	Small Scale	Others
Number	Amount	Number	Amount	Amount	Amount	Amount	Amount
6021	153.31	800	106.45	142.57	92.75	25.92	30.93

Source: Annual Report, 2019-20, Assam Financial Corporation

MICRO FINANCE UNDER AFC:

The AFC has also started assisting the weaker section through the micro finance scheme. The Corporation, as on 31st March, 2020 an amount of Rs.7.85 crore was disbursed against sanction of Rs.5.85 crore. Under the micro finance schme, the total number of beneficiary assisted under Micro Finance during 2019-20 was 4275 out of which SHG beneficiary assisted was 650 and JLG beneficiary assisted was 3625.

The Table 14.16 shows year wise break up of Micro Finance beneficiaries assisted up to March 2019.

TABLE-14.18
MICRO FINANCE BENEFICIARIES ASSISTED SINCE INCEPTION

No. assisted	2014-15	2015-16	216-17	2017-18	2018-19	2019-20	Total since inception
SHG	93	0	217	10	188	60	900
JLG	1117	0	648	2117	600	725	7761
SHG beneficiary	733	0	1221	100	1830	650	8494
JLG beneficiary	5589	0	3363	10585	3500	3625	39532
Total Beneficiary	6322	0	4584	10685	5330	4275	47926

Source: Annual Report, 2019-20, Assam Financial Corporation

ASPIRATIONAL DISTRICTS OF ASSAM:

The 'Transformation of Aspirational Districts' Programme aims to expeditiously improve the socio-economic status of 117 districts from across 28 states. The programme focuses on 5 main themes - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development, and Basic Infrastructure, which have direct bearing on the quality of life and economic productivity of citizens. The districts which are identified as backward and included under the programmed are Dhubri, Goalpara, Barpeta, Darrang, Baksa, Hailakandi and Udalguri. The table-14.17 shows certain financial indicators of the districts in comparison to State as a whole.

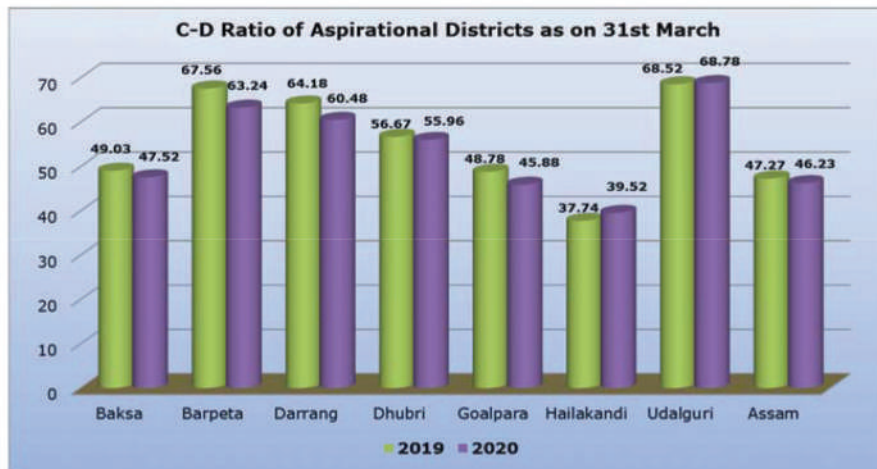
TABLE-14.19
GLANCE AT BANKING IN THE ASPIRATIONAL DISTRICTS OF ASSAM
AS ON 31ST MARCH

(Rs. in crore)

District-Name	Total Bank Branch		Deposit		Credit	
	2019	2020	2019	2020	2019	2020
Dhubri	82	84	2683	2947	1521	1649
Goalpara	66	70	1816	2157	886	990
Barpeta	117	120	3617	4246	2443	2685
Darrang	71	71	1839	2103	1180	1272
Baksa	43	49	869	1034	426	491
Hailakandi	43	45	1406	1576	530	623
Udalguri	36	42	1111	1202	761	827
Assam	2531	2972	148430	162511	70156	75129

Source: State Level Bankers' Committee, Assam Report

The graph below shows the credit-Deposit ratio of the Aspirational Districts at the end of the year 2018-19 and 2019-20.



ANNEXURE-14.1
DISTRICTWISE DISTRIBUTION OF AGGREGATE DEPOSIT AND
GROSS BANK CREDIT OF SCHEDULED COMMERCIAL BANKS IN ASSAM

(As in March 2020)

District	Nos. of Reporting Offices	Amount (Rs. in Crore)		Credit Deposit Ratio (%)
		Deposit	Credit	
1	2	3	4	5
Kokrajhar	44	2702	865	32.0
Dhubri	75	2723	1452	53.3
Goalpara	66	2188	1010	46.2
Barpeta	114	4107	2533	61.7
Morigaon	66	1901	1192	62.7
Nagaon	160	5550	3558	64.1
Sonitpur	127	5218	2862	54.8
Lakhimpur	86	2598	1901	73.2
Dhemaji	42	1444	866	60.0
Tinsukia	145	6988	3139	44.9
Dibrugarh	183	11381	4301	37.8
Sivasagar	94	4915	2319	47.2
Jorhat	133	7066	3544	50.2
Golaghat	114	3471	2196	63.3
Karbi-Anglong	61	1786	904	50.6
Dima Hasao	26	1029	261	25.4
Cachar	164	8710	3374	38.7
Karimgaj	86	3766	1185	31.5
Hailakandi	41	1687	589	34.9
Bongaigaon	59	2998	1440	48.0
Chirang	28	1455	582	40.0
Kamrup	150	4580	3256	71.1
Kamrup Metro	422	65567	20691	31.6
Nalbari	77	2525	1483	58.7
Baksa	51	1115	551	49.4
Darrang	66	2029	1259	62.1
Udalguri	40	1220	876	71.8
South Salmara	14	347	131	37.8
West Karbi-Anglong	22	286	199	69.6
Biswanath	44	1377	793	57.6
Charaideo	31	1062	393	37.0
Hojai	47	2246	853	38.0
Majuli	11	232	100	43.1
Assam	2889	166270	70658	42.5

Source: Quarterly Statistics on Deposit and Credit of Scheduled Commercial Bank in India, RBI

ANNEXURE-14.2
DISTRICTWISE DISTRIBUTION OF AGGREGATE DEPOSIT AND
GROSS BANK CREDIT OF ALL REGIONAL RURAL BANKS IN ASSAM

(As in March 2020)

District	Nos. of Reporting Offices	Amount(Rs. in Crore)		Credit Deposit Ratio (%)
		Deposit	Credit	
1	2	3	4	5
Kokrajhar	11	304	95	31.3
Dhubri	12	314	107	34.1
Goalpara	12	313	120	38.3
Barpeta	19	561	229	40.8
Morigaon	12	219	119	54.3
Nagaon	36	776	240	30.9
Sonitpur	25	500	189	37.8
Lakhimpur	20	352	175	49.7
Dhemaji	9	322	87	27.0
Tinsukia	14	265	85	32.1
Dibrugarh	17	266	119	44.7
Sivasagar	13	362	110	30.4
Jorhat	15	331	118	35.6
Golaghat	26	500	155	31.0
Karbi-Anglong	32	441	288	65.3
Dima Hasao	10	176	72	40.9
Cachar	23	641	118	18.4
Karimgaj	17	373	70	18.8
Hailakandi	9	275	52	18.9
Bongaigaon	9	288	76	26.4
Chirang	7	174	69	39.7
Kamrup	19	525	230	43.8
Kamrup Metro	16	915	211	23.1
Nalbari	17	436	200	45.9
Baksa	13	254	138	54.3
Darrang	15	329	161	48.9
Udalguri	12	209	125	59.8
South Salmara*				
West Karbi-Anglong	16	132	108	81.8
Biswanath	8	188	51	27.1
Charaideo	10	246	82	33.3
Hojai	3	65	11	16.9
Majuli*				
Assam	477	11052	4010	36.3

Note: * Indicate the Districts having no data for RRB

Source: Quarterly Statistics on Deposit and Credit of Scheduled Commercial Bank in India, RBI

ANNEXURE-14.3
DISTRIWISE PRIORITY SECTOR ADVANCES, 2019-20
(As on March 2020)

(Amount in Rs. Lakh)

District	Agriculture (Excluding RIDF)	MSME (Excluding NEDFi)	Other Priority	Crop Loan
1	2	3	4	5
Baska	16983.96	10947.28	8051.59	9731.42
Barpeta	68459.85	78096.85	33667.16	28513.82
Biswanath	23828.94	14780.71	14330.14	14595.62
Bongaigaon	24616.66	56047.13	20061.44	10073.02
Cachar	69555.77	142218.83	30037.59	33324.50
Charaideo	13727.31	11432.78	4517.20	6323.98
Chirang	11767.08	15267.11	6979.79	6366.72
Darrang	37053.35	36043.10	16698.24	17699.53
Dhemaji	23021.21	21074.09	15865.93	15043.39
Dhubri	51283.08	50954.15	16723.66	19326.93
Dibrugarh	79208.08	141245.53	54413.69	37121.19
Dima Hasao	3579.43	2887.27	3242.72	697.57
Goalpara	25384.48	24747.49	13753.74	12328.25
Golaghat	75849.13	53520.23	24584.20	33619.57
Hailakandi	14851.62	21029.58	10665.12	9855.50
Hojai	20123.76	21381.78	12110.50	15023.43
Jorhat	73399.03	111249.76	46592.07	22933.71
Kamrup	98751.47	112016.32	38300.67	38743.10
Kamrup Metro	92765.50	738220.42	258336.88	22658.44
Karbi-Anglong	18750.51	8807.30	16557.77	9920.24
Karimganj	31496.73	47644.36	16084.28	13756.42
Kokrajhar	14665.47	12156.82	11565.29	10492.60
Lakhimpur	56873.49	46819.64	33223.62	32136.06
Majuli	5134.96	4220.76	4981.00	2134.75
Morigaon	64241.60	28182.72	12238.21	22288.26
Nagaon	109237.81	102435.36	48743.68	44823.85
Nalbari	32139.63	34216.38	24018.91	13084.54
Sivasagar	45481.17	70441.61	23915.13	14092.15
Sonitpur	62788.03	104730.60	40907.12	18241.85
South Salmara	1962.54	2568.41	2308.74	749.50
Tinsukia	70232.87	116895.37	32857.89	34685.48
Udalguri	30636.31	11665.57	15356.17	21457.05
West Karbi-Anglong	7660.98	745.46	6157.58	5389.78
Assam	1375511.81	2254690.77	917847.72	597232.22

Source: State Level Banker's Committee Report, Assam

CHAPTER – XV

CO-OPERATION

Co-operative movement in Assam made its first formal appearance in an organised manner and under the patronage of the Government with a legal backing in the year 1904 under the co-operative societies Act 1904. The 1904 Act classified societies as (a) urban and (b) rural. Urban societies had share capital with limited liabilities but the rural societies had no share capital and the liabilities were unlimited. The Shillong Co-operative Town Bank Ltd. was the first cooperative credit society organised and registered in Assam on 3rd September, 1904. In total 10 cooperative credit societies were registered out of which 4 were urban and 6 rural.

The co-operation movement in Assam has completed more than 100 years, geographically covering almost all the villages in the State and functionally covering almost all the economic activities. But despite this impressive and noticeable growth, the co-operative movement could not gather inherent strength to grow and survive in the present day free market economy. The co-operative sector, which legitimately belongs to the voluntary sector, was increasingly being absorbed in the vortex of the state sector. As a result, the co-operatives, which truly belong to the members, were wrongly being perceived as state owned enterprises.

Since the Assam economy is predominantly rural in character, an extensive network of sound and viable co-operatives can help tremendously in giving right shape to the socio-economic structure of Rural Assam in particular and for achieving the much needed overall economic growth and social transformation of the State. But, the co-operative sector failed to achieve its desired objective due to existence of good number of uneconomic and dormant cooperatives. Therefore, to strengthen the role of existing Cooperative Societies towards socio-economic development as well as their impact on poverty reduction, employment generation and social integration the Assam Cooperative Act, 2007 has been enacted to give renewed fillip to the effort of the State Government to promote voluntary formation, autonomous functioning, democratic control and professionalism to the cooperative societies.

This act is amended by the Assam Legislative Assembly as “The Assam Co-operative Society (Amendment) Act 2012 with effect from 5th February 2013 with insertion of separate Chapter for Co-operative Credit Society” as per MOU signed by the State Government with Central Government and NABARD in the year 2012 for revival of Short Term Cooperative Credit Structure (STCCS). However, setting up of the Assam Rajiv Gandhi University of Co-operative Management under the academic guidance of Indian Institute of Management, Ahmedabad with the State Government initiative brings some hope to the co-operative sector to achieve professionalism and quality performance of various societies in the State as envisaged.

The Government of Assam proposed to strengthen the cooperative societies by giving logistic support in terms of better regulation, better facilitation and by closing the sick cooperatives and nurturing the good and economically viable cooperatives.

The mandates of the Co-operative Department are:

- Registration Supervision, Assistance, Counselling, Audit and all round development of the Co-operative movement.
- To provide Co-operative Education Training and publicity of cooperative movement
- Election and Audit of Co-operatives societies
- Implementation of various development schemes through co-operative societies in different sectors of the economy i.e. agriculture, farming, fisheries, dairy industries, processing, marketing, primary housing, consumer banking, healthcare, education and other agricultural and allied sectors.
- Promotion of autonomous functioning, democratic control and professional management of co-operative societies.
- Liquidation of societies.

TABLE – 15.1:
STATISTICS OF CO-OPERATIVE SOCIETIES IN ASSAM

Year	Number of Societies	Membership (in '000 nos)	Share Capital (Rs. in Crore)	Working Capital (Rs. in Crore)
2013-14	8835	4513	103.23	3171.31
2014-15	9222	4416	84.37	3279.71
2015-16	10252	4291	90.27	3125.64
2016-17	10246	3035	25.32	1112.34
2017-18	10642	4173	58.92	4336.46
2018-19	11649	4527	101.22	4844.76

Source: Registrar of Co-operative Societies, Assam

At present there are 11649 nos. of different types of Co-operative Societies in the State covering almost all sectors of economy including State Level Co-operative societies such as ASCARD Bank, APEX Bank, APOL, HOUSEFED, and FISHFED. Various types of Primary Co-operative Societies like Gaon Panchayat level Co-operatives (GPSS), women Co-operatives, Housing Co-operatives, Fishery & Pisciculture co-operatives, Farming Co-operatives, Consumer Co-operatives, Tourism Co-operatives, handloom Co-operatives, Dairy Co-operatives, etc. are also organized for specific purposes and performing various economic activities.

These societies have contributed a lot to the state economy by providing employment opportunity and controlling market price as well as well empowering women socially and economically.

These 11649 number of co-operative societies include 2202 nos. of Gaon Panchayat Level Multipurpose Co-operative Society (GPLMCS), Large Size Multipurpose Co-operative Societies in hilly areas which are basically Primary Agricultural Co-operative Societies (PACS), 2586 nos. of Gaon Panchayat Level Multipurpose Women's Co-operative society, 01 no. State Level Apex Cooperative Bank (Apex Bank) for short term agricultural cooperative credit, 01 nos. State Agricultural and Rural Development

Bank (ASCARD Bank) for Long and Medium term agricultural credit, 01 no. State-level Housing Federation (HOUSEFED), 01 no. State-level Fishery Cooperative Federation (FISHFED), 01 no. State Level Co-operative Jute Mill (Assam Co-operative Jute Mill Limited, Silghat), 08 numbers of Urban Cooperative Banks and various types of other co-operative societies.

THE CO-OPERATIVE STRUCTURE IN ASSAM:

There are four major types of cooperatives in rural areas of Assam:

- The Primary agricultural credit or service societies
- Agricultural non-credit societies
- Co-operative farming societies
- Other agro-based cooperative societies - Dairy, Fishery, Horticulture, Handloom, Sericulture and ones promoting local handicrafts and artisans. For instance, Assam Coop. Bell Metal Utensil & Manufacturing Society Ltd in Sarthebari, Barpeta which is one of the oldest registered Society of the State, provides a platform as well as means of marketing to the local artisans engaged in that craft.

Assam has a two tier Cooperative Credit Structure. The Assam Cooperative Apex Bank Ltd. is in the upper tier and the GPSS/LAMPS (PACS) are at the bottom of the structure. The Assam Cooperative Apex Bank Ltd. offers services mainly in agricultural credit.

The Cooperation Department has emphasized the creation of awareness about the Cooperative Movement among the rural people through information and publicity by the way of Sammanita Samabay Sajagata Achoni.

PRIMARY AGRICULTURE CO-OPERATIVE SOCIETIES:

The cooperative societies were initially divided into credit and non credit societies. However, keeping with changing circumstances, there has been reorganization and today there are multipurpose cooperative societies which address both credit and non credit requirements of the rural poor.

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. The Gaon Panchayat Samabai Samiti (GPSS) were organised in 1973 to function in the plain districts of the state. The GPSS were organised mainly for issue of Agriculture credit and distribution of essential commodities. On the other-hand, Agricultural credit in the two hill districts of the state is routed through Large Area Multipurpose Cooperative Societies (LAMPS). The Primary Agriculture Credit societies (PACS) are the backbone of the cooperative movement which measures the development of Rural India.

As on Mar-2021, there are a total of 2177 number of GPSS in the State that deals in procurement and distribution of essential commodities. The GPSS have remained pre occupied with PDS and are functioning as PDS outlets in most of the cases in the State. 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.

These societies can play a vital role as a financial institution for rural poor who are unable to take the benefit of institutional finance.

GAON PANCHAYAT LEVEL WOMEN MULTIPURPOSE CO-OPERATIVE SOCIETIES:

With a view to improving the socio-economic status of women almost 2014 numbers of Gaon Panchayat level multipurpose women cooperative societies were 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.

To upgrade self help groups (SHGs) under NRLM, 438 nos. of SHGs were registered under the Assam Cooperative Societies Act in the year 2016-17.

Some of the women cooperatives are currently engaged in PDS business as an agent of GPSS of their respective areas of operation. The Government has launched a scheme in the name and style of "SAMANNITA MAHILA SAMABAI SABALIKARAN" and "SAMABAI BIPONI" for the betterment of the society for the years 2017-18 and 2018-19. At present there are 2416 nos. of women multipurpose co-operative Societies in Assam.

PROCESSING COOPERATIVES:

A large number of Processing Units have been setup in the state under co-operative sector comprising of rice and oil mill e.g., Spinning Mill, Mustard Oil Mill, Jute Mill, etc. The Eastern Agro processing and Tea Warehousing Cooperative Society Ltd., The Assam Polyester Cooperative Society Ltd. (APOL) are organisations under the cooperative sector in the state.

Assam Cooperative Jute Mills at Silghat (1959) in Nagaon District is one of the most successful cooperative industries in Assam. This industry is earning profit continuously and has been awarded with ISO certificate. The Society has taken initiative to expand 1 unit of Assam Cooperative Jute Mills Ltd. at Bihdubi with Rs. 47 Crores from NDCD in 2017-18. The Central Govt. had provided Rs. 25.60 Lakhs as Grants-in-Aid. The State Govt. had also written off accumulated tax liabilities of pre-closure period to the tune of Rs. 96 Lakhs and Rs. 46.39 Lakhs.

The Eastern Agro Processing and Tea Warehousing Cooperative Society (EAPTWCS) have been functioning without any financial assistance from the Government and is performing well and has been earning profit. The society's Value of Sale was Rs.13.21 crores in the FY 2017-18, in the FY 2018-19 it was Rs. 12.10 Crores, a dip of approximately 8% compared to that of the previous FY.

CO-OPERATIVE BANKS:

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 which provides employment to the unemployed youths. The State Government has 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 at present with one apex level Society, HOUSEFED, Assam, rendering service to its members. This federation has provided housing facilities to the Central and State Government employees and extended loan for dwelling houses to the low and middle income group of people in the urban / rural areas of the State.

CONSUMER CO-OPERATIVE:

Consumer Co-operatives are enterprises owned by consumers and managed democratically, whose objectives are to fulfil the needs and aspirations of their members. They co-operate within the market system, independently of the state, as a form of mutual aid, oriented towards service rather than pecuniary profit. There are 38 urban consumer stores with more than 250 affiliated primary consumer stores and 640 Tea Garden Consumer stores in the state. These Co-operative societies extend yeoman services 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 subsidized rates. These procured essential items required scientific storage for their proper preservation for long periods.

Some of the cooperative societies have also been recognized for their performances and rewarded. These include Karimganj Wholesale Consumer Co-operative Society Ltd. (KWCCS), Mahabhairav Consumer Co-operative Store Ltd. of Tezpur, NRL Employees Consumer Cooperative Ltd. of Golaghat District bagged the "Best Performing Consumer Cooperative Societies Award" during the year 2016-17.

DAIRY CO-OPERATIVES:

The most important step in developing dairy enterprises through co-operatives in Assam was the establishment of Milk Unions in line with the Anand Milk Union Limited. The first of such Milk Union in Assam is the East Assam Milk Producers' Cooperative Union. It was established in the year 1968; with its headquarter at Jorhat. Its operating area comprised of Sibsagar, Tinsukia, Dibrugarh, Jorhat and Golaghat districts. The West Assam Milk Producers' Co-operative Union Limited (WAMUL) came into existence in 1976 covering the erstwhile three undivided districts viz. Goalpara, Kamrup and Nagaon. The objectives were to enhance milk production in the state to make it self-sufficient for milk requirement, to create infrastructural facilities like that for milk procurement, milk distribution, etc. and to ensure supply of inputs to the farmers at their door steps at a reasonable price. The products of WAMUL are given the brand name of Purabi. WAMUL is managed by the National Dairy Development Board (NDDB), and markets a daily average quantity of over 50,000 litres of liquid milk and 7000 litres worth of milk products in Guwahati and towns of Upper and Lower Assam.

Besides there are 562 numbers of primary dairy cooperatives societies and three more regional levels milk union namely East Assam Milk producers Cooperative Union Ltd. (EAMUL), West Assam Milk Producers Ltd. (WAMUL) and Cachar and Karimganj District Milk producer Cooperative Union Ltd. (CAMUL). Though there is vast potential in

the dairy sector, the growth of the dairy cooperative societies is not satisfactory. A number of primary cooperative societies not covered by government department viz., Sitajakhala Dugdha Utpadak Samabai Samity Ltd. (SJDUSS), Kamdhenu Dairy Cooperative Society Ltd., Sundapukhuri Dairy Cooperative Society Ltd. etc. are performing well.

The management of WAMUL, EAMUL and CAMUL were handed over to the National Dairy Development Board (NDDB) New Delhi, a year back, with a view to revive the weak organizations towards a successful dairy cooperative in the line of AMUL model. For the development of dairy cooperatives, Govt. has been providing financial assistance in phased manner.

OTHER COOPERATIVES:

In addition to the above mentioned Co-operative Societies, there are a large number of cooperatives like, poultry, piggery, duckery, goatery, cane & bamboo, brick manufacturing, transport & communication, rickshaw puller, bee keeping, blacksmith, bell metal utensils manufacturing, tourism etc. in the State which are involved in various livelihood promotion activities.

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 was 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. Gaon Panchayat Samabai 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 Apex Bank has 68 branches including the Head Office. All the branches have been computerized and implementing core banking solution like other Nationalised and Commercial Banks. The bank provides ATM facilities to its customers like other commercial banks for smooth running of the banking business. The Apex Bank also offers RTGS/NEFT facilities for its customers.

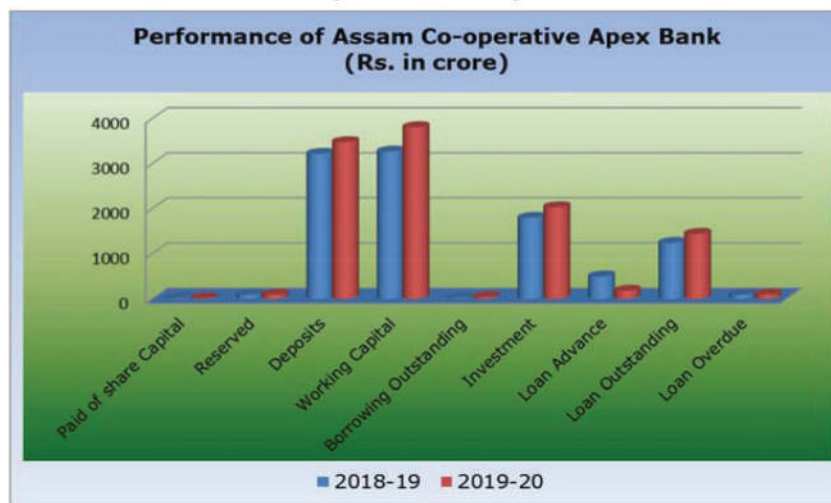
The membership of the bank has increased from 94,000 in 2014-15 to 3268302 numbers in 2019-20. The share capital has increased to Rs.16.34 crores in 2019-20 from Rs.10.84 crores in 2014-15. The working capital increased from Rs.2079.81 crores in 2014-15 to Rs.3804.65 crores in 2019-20.

The performance of the Assam State Cooperative Apex Bank during the last six years is shown in the table below:

TABLE – 15.2
PERFORMANCE OF APEX BANK, ASSAM

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Bank Branches	No	67	68	68	68	67	68
Membership	Unit“000”	94	92	94	94	3054	3268
Paid of share Capital	Rs in Crore	10.84	11.75	13.44	14.86	15.27	16.34
Reserved	-- Do --	43.03	51.76	65.03	84.1	85.64	90.87
Deposits	-- Do --	1888.50	2039.81	2870.66	3426.54	3213.71	3473.64
Working Capital	-- Do --	2079.81	1921.94	2379.61	3136.59	3264.53	3804.65
Borrowing Outstanding	-- Do --	4.87	7.46	25.49	28.89	21.88	39.6
Investment	-- Do --	1028.60	1079.15	1394.78	1557.36	1790.95	2027.14
Loan Advance	-- Do --	287.95	278.57	394.25	154.48	496.75	179.83
Loan Outstanding	-- Do --	787.33	879.27	850.65	884.29	1234.81	1436.33
Loan Overdue	-- Do --	88.06	95.83	91.16	71.9	88.72	98.03

PERFORMANCE OF ASSAM CO-OPERATIVE APEX BANK
(Rs. in crore)



ASSAM STATE CO-OPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANK LIMITED (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 provides medium and long term agricultural credit. It has 28 Nos. of Branches throughout the state with more than 50 thousand members. Formerly, the primary Land Mortgage Bank (PLMB) in the District level and later on the PLMBs 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. Due to various constraints, the

financial position of the ASCARD Bank is not so good, for which the State Information and Transformation Ayog (SITA) has constituted an expert committee under the leadership of Shri Bhaskar Baruah, Retd IAS, for study of the revival aspects of the bank. The committee has already submitted its report to the honourable Chief Minister of Assam. The report is now under active consideration of the Government. There has been marginal increase in share capital from Rs. 6.36 crores in 2014-15 to Rs. 6.86 crores in 2019-20. Working Capital has increased to Rs. 145.26 crores in 2019-20 from Rs. 12.41 crores in 2014-15.

The data containing important indicators of bank performance are presented in the table below:

TABLE – 15.3:
PERFORMANCE OF ASCARD BANK ASSAM

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Bank Branches	No	28	28	28	28	28	28
Membership	No	46771	47610	54076	48208	48000	50000
Paid up Share Capital	Rs. in Crores	6.36	6.37	6.48	6.58	6.74	6.86
Working Capital	Do	12.41	13.31	13.96	14.79	14.28	14.5
Deposits	Do	0.95	1.05	1.5	2.62	3.58	4.16
Loans and Advances	Do	0.36	0.43	1.42	1.81	1.17	1.9
Loan Outstanding	Do	8.46	8.42	9.02	9.94	10.98	11.12

URBAN CO-OPERATIVE BANK:

Assam at present has 8 numbers of urban co-operative banks (UCBS) with 26 branches. Till recent past, multiplicity of command, absence of clear-cut demarcation between the functions of the State Government and RBI in respect of the Banks, 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 with respect to regulatory control of RBI over UCBS during the year 2008 such that functioning of such banks can be improved and confidence of depositors can be restored.

As per latest data available total membership of the UCBS functioning in Assam was 90.844 nos. in 2019-20 against 30 thousand in 2014-15. Similarly paid up share capital has increased to Rs.21.50 crores in 2019-20 from Rs. 7.36 crores in 2014-15. Working Capital has also increased to Rs. 410.69 crores in 2019-20 from Rs. 217.71 crores in 2014-15. Loan outstanding has increased to Rs.393.51 crores in 2019-20 from Rs. 236.24 crores in 2014-15.

TABLE – 15.4
PERFORMANCE OF URBAN CO-OPERATIVE BANK, ASSAM

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Bank Branches	NO	25	25	25	25	26	25
Membership	'000'NO	30	32	40	62	88	90
Paid up Capital	Rs in Crores	7.36	13.18	15.93	17.74	20.25	21.5
Working Capital	DO	687.97	723.69	773.1	600.27	828.6	831.17
Deposits	DO	604.89	479.48	690.29	724.22	767.97	747.12
Loans Advances	DO	217.71	259.87	207.85	264	405.28	410.69
Loan Outstanding	DO	236.24	257.24	194.82	272.07	390.38	393.51
Loan overdue	DO	21	26.76	23.06	30.65	36.85	50.28

STATE LEVEL NON-CREDIT CO-OPERATIVE SOCIETIES:

There are a few state level non-credit co-operative societies functioning in Assam. The performances of these societies are presented in the Table below:

TABLE – 15.5
STATISTICS RELATED TO STATE LEVEL
NON-CREDIT CO-OPERATIVE SOCIETIES IN ASSAM

Name of Societies	Year	No. of Societies	No. of Memberships	Rupees in Lakhs		
				Paid up share Capital	Paid up working Capital	Value of sales
Assam Co-operative Jute Mill Ltd.	2017-18	1	659	323.93	957.82	4438.4
	2018-19	1	659	323.93	165.73 (prov.)	5178.91
	2019-20	1	659	323.93	139.25 (prov.)	4930.92
HOUSEFED	2017-18	1	412	1626.34	14023.12	NA
	2018-19	1	419	1620.31	15926.45	NA
	2019-20	1	419	1618.93	19752.68	NA
Eastern Agro Processing & Tea Warehousing Cooperative Society Ltd.	2017-18	1	503	97.9	1972.55	1321.21
	2018-19	1	505	97.92	2158	1210
	2019-20	1	504	97.92	2078	1306
The West Assam Milk Producer's Co-operative Union Ltd	2017-18	196	9480	92.4	-	9406.42
	2018-19	224	12365	92.4	-	10218.05

ASSAM STATE CO-OPERATIVE UNION (ASCU):

The Assam State Co-operative Union (ASCU) is an apex level co-operative organization for promotion of co-operative education, training, publicity and propaganda activities in the State of Assam. It was registered on 12th 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 CO-OPERATIVE SOCIETY LIMITED (APOL):

The Assam Polyester Co-operative Society Ltd. is the only surviving co-operative spinning mill in Assam. It was registered on 14th September 1981 under the Assam Co-operative 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 activities like spinning, dyeing, 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. More than 600 employees were engaged in production of yarn in different counts and these were 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 was State Share 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 was Rs.2804.35 lakhs. The Government of Assam provided an amount Rs.100.00 lakhs as revival assistance to APOL during the year 2017-18.

However, to cut down its operational cost, the Government of Assam had sanctioned an amount of Rs.1243.55 lakhs for implementing Voluntary Retirement Scheme for 380 numbers of employees. For last few years the Mill has stopped its function.

With a view to revive the APOL and to make it a profit-making mill, the Government has already initiated action for looking for a suitable partner to run the mill. Information regarding APOL is placed below:

Table-15.6

Assam Polyester Co-operative Society Limited

Name of Societies	Year	No. of Societies	No. of Members	Rupees in Lakhs		
				Paid up Share Capital	Paid up Working Capital	Value of Sales
APOL	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	-	-	-
	2018-19	26	4588	1635.31	Nil	Nil
	2019-20	26	4588	1635.31	Nil	Nil

Infrastructure support under Rural Infrastructure Development Fund (RIDF):

The State Cooperative Department has initiated steps for boosting 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 a mobilization advance 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 1st December 2018, out of 244 Godowns, construction of 222 Godowns has been completed and the remaining was in progress.

As per NABARD's State Focus Paper, 2019-20 an amount of Rs.100.91 crores has been sanctioned to the State Govt. of Assam against 246 nos. of projects under co operative sector under RIDF scheme.

TABLE – 15.7
NO. OF CO-OPERATIVE SOCIETIES
BY TYPES OF CO-OPERATIVE IN ASSAM

Sl. No.	Types of Co-operative society	No. of Societies
1	State Level Co-operative societies	38
2	Gaon Panchyat Samabay Samity / Primary Agriculture Credit Societies (714-old+1488-New)	2,202
3	Large Area Multipurpose Co-operative Societies (60-old+26 New)	86
4	Village Council Multipurpose Co-operative Societies (BTC)	114
5	Wholesale and Consumer Society	315
6	Women Multipurpose	2,416
7	Primary Dairy	571
8	Thrift and Credit	905
9	Poultry and Duckery	251
10	Agriculture/Krishipam/Farming	480
11	Primary Fishery	527
12	Primary Housing	199
13	Industrial	531
14	Marketing and Processing	115
15	Labour and Contract	124
16	Other Co-operative	549
17	Co-operative bank	9
18	Livestock	1,182
19	SHG Federation	107
20	Trading	382
21	Village Organisation	324
22	Agro Producer Co-operative	222
Total:		11,649

ADMINISTRATIVE REFORMS:

In order to strengthen the cooperative movement in the State, there is need to create an environment for functioning of the Cooperative Societies. Bureaucratization of cooperative system has sapped its voluntary mode of functioning. There is need to provide a more democratic space in the light of Vaidanathan Committee's recommendation. Participation of women in cooperative sector also needs to be encouraged in the State and a sound management practice should be developed which can go a long way in creating rural employment and livelihood security among the rural households in the State.

Table-15.8
State Level Co-operative Societies with status

Sl. No.	Name of the Society	Status
1	Assam Coop: Apex Bank Ltd.	Functional
2	Assam State Agriculture & Rural Development Bank Ltd.	Functional
3	West Assam Milk Producers Coop: Union Ltd.	Functional
4	Assam Coop: Housing Federation Ltd.	Functional
5	Assam Apex Fish Marketing & Processing Federation Ltd.	Functional
6	Eastern Agro Processing & Tea Warehousing Coop: Society Ltd.	Functional
7	Assam State Coop: Union Ltd.	Functional
8	Assam Polyester Coop: Society Ltd.	Functional
9	Assam Coop: Jute Mills Ltd.	Functional
10	Union Coop: Bank Ltd.	Functional
11	Kamrup Telecom Dist. BSNL Staff Coop: Society Ltd.	Functional
12	Assam State SC Thrift & Credit Coop: Society Ltd.	Functional
13	Setu Thrift & Credit Coop: Society Ltd.	Functional
14	Asomi Thrift & Credit Coop: Society Ltd.	Functional
15	Procesta Thrift & Credit Coop: Society Ltd.	Functional
16	Assam State Coop: Federation Ltd.	Functional
17	Assam Diploma Engineers Welfare Coop: Society Ltd.	Functional
18	Assam Bahumukhi Samabai Samiti Ltd.	Functional
19	Assam Weavers Coop: Society Ltd.	Non Functional
20	Assam Tea Planters Coop: Society Ltd.	Non-Functional
21	Assam Cadre Management Coop: Society Ltd.	Non Functional
22	Assam State Educational Development Coop: Society Ltd.	Non Functional
23	Assam Nava Nirman Bahumukhi Samabai Samiti Ltd.	Functional
24	Navika Multipurpose Coop: Society Ltd.	Functional
25	Kaziranga Jatia Orchid Aru Jaivik Baichitra Udyan S.S. Ltd.	Functional
26	Shrimanta Shankardev Sangha Thrift & Credit CS Ltd.	Functional
27	Assam vegetable Growers CS Ltd.	Functional
28	Sarat Chandra Singha Coop: Sugar Mill Ltd.	Functional
29	The Cooperative City Bank Ltd.	Functional
30	Nagarik Samabai Bank Ltd.	Functional
31	Industrial Coop: Bank Ltd.	Functional
32	Guwahati Urban Coop: bank Ltd.	Functional
33	SBI office thrift & Credit CS Ltd.	Functional
34	Assam Rural Development Union Thrift & Credit CS Ltd.	Functional
35	Brahmaputra Besa Kina Marketing CS Ltd.	Functional
36	Assam Circle BSNL thrift & Credit CS Ltd.	Functional
37	Inland waterways (Assam Sector) Thrift & Credit CS Ltd.	Functional

Table-15.9

Details of Primary/District Level Co-operative Societies, 2019-20

Sl. No.	Type of Cooperative Societies	Nos. of Societies
1	GPSS	2202
2	LAMPS	86
3	Village Council Multipurpose Coop: Societies (BTC)	114
4	Wholesale Consumers	315
5	Women Multipurpose	2416
6	Primary Dairy	571
7	Thrift and Credit	905
8	Poultry & Duckery	251
9	Agri/Krishipam/Farming	480
10	Primary Fishery	527
11	Primary Housing	199
12	Industrial	531
13	Marketing & Processing Coop:	115
14	Labour and Contract Coop:	124
15	Other Coops:	549
16	State Level Coop:	38
17	Bank and Branches	9
18	Livestock	1182
19	SHG Federation	107
20	Trading	382
21	Village Organization	324
22	Agro Producers' Coop:	222
Total		11649

CHAPTER – XVI

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:

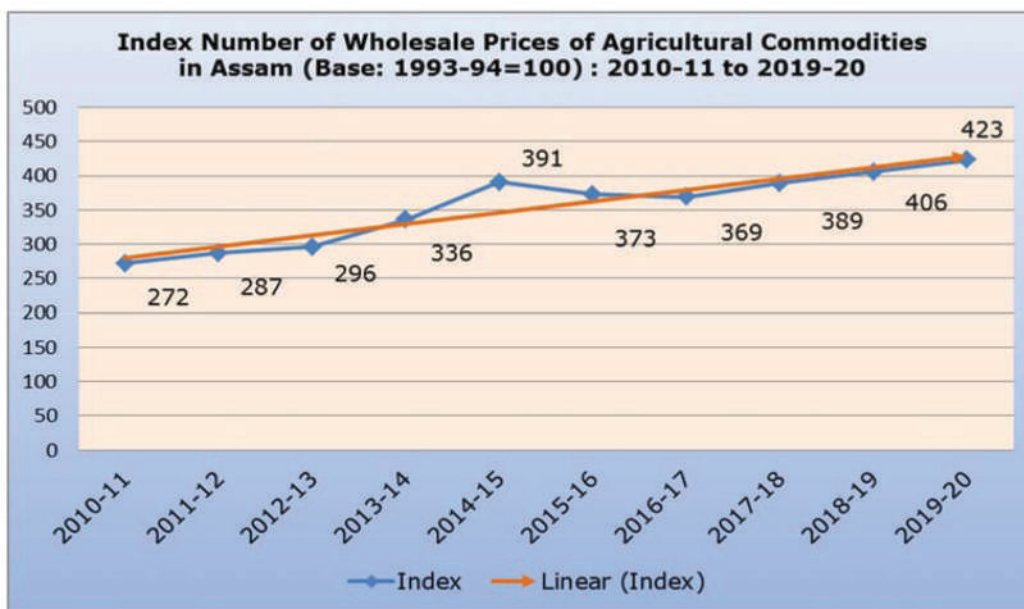
Inflation is measured by taking into account of the wholesale Price Index (WPI) based on the prices in the Wholesale markets and the Consumer Price Index (CPI) based on the Prices of the Consumer purchases from the retail trade market.

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.

TABLE-16.1
INDEX NUMBER OF WHOLESALE PRICES OF
AGRICULTURAL COMMODITIES IN ASSAM FOR LAST TEN YEARS

Year	Index	Percentage Variation
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
2018-19	406	4.37
2019-20	423	4.18

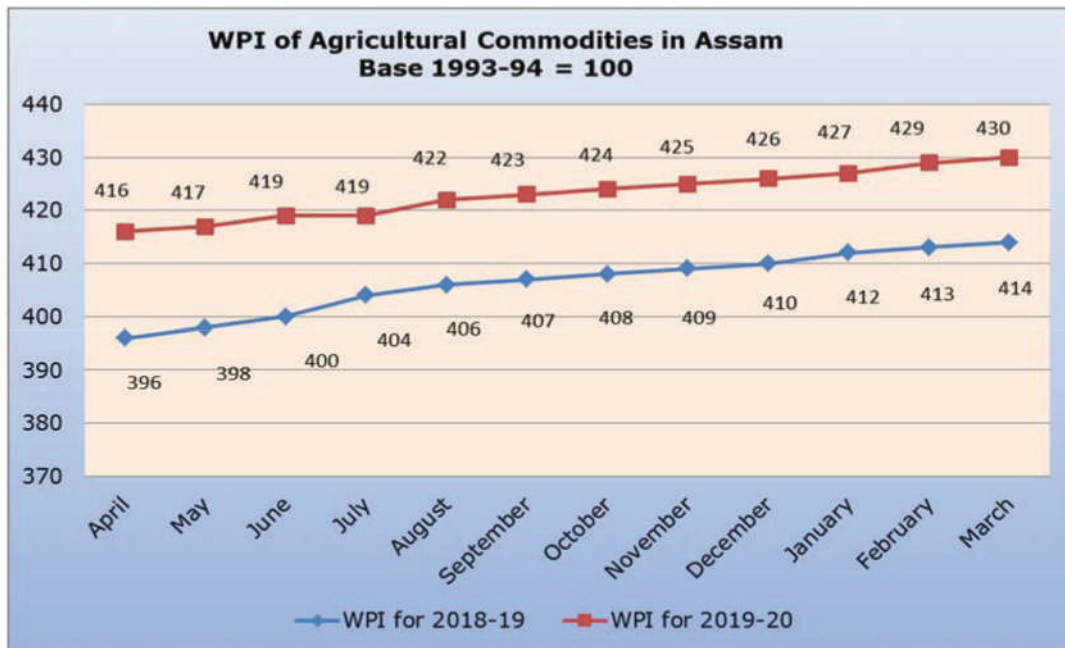


In the last ten years highest increase was 16.37% in 2014-15 as 391 over 336 in 2013-14. During, 2015-16, remarkable decrease was observed in the index point by 4.6% as 373 over 391 in 2014-15. Ultimately it was increased by 4.18 percent in 2019-20 as 423 over 406 in 2018-19. The month to month trend 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 2018-19 Base 1993-94=100		Year 2019-20 Base 1993-94=100	
Month	Index	Month	Index
April' 2018	396	April' 2019	416
May' 2018	398	May' 2019	417
June' 2018	400	June' 2019	419
July' 2018	404	July' 2019	419
Aug.' 2018	406	Aug.' 2019	422
Sept.' 2018	407	Sept.' 2019	423
Oct.' 2018	408	Oct.' 2019	424
Nov.' 2018	409	Nov.' 2019	425
Dec.' 2018	410	Dec.' 2019	426
Jan.' 2019	412	Jan.' 2020	427
Feb.' 2019	413	Feb.' 2020	429
March' 2019	414	March' 2020	430



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 analyses 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 2019 is calculated as 147.8, 144.0 and 146.7 against the All India annual average indices 144.9, 142.8 and 143.9 respectively. The increase in general Indices for Rural, Urban and Combined in Assam during 2019 over 2018 are 6.9%, 5.2% and 5.0% 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 2019 and 2020 with base 2012=100.

TABLE NO - 16.3
CONSUMER PRICE INDEX NUMBER (GENERAL) FOR RURAL, URBAN AND
COMBINED FOR 2019 AND 2020, (Base 2012=100)

Month	ASSAM			ALL INDIA		
	Rural	Urban	Combined	Rural	Urban	Combined
January'19	144.2	137.1	142.7	141	138	139.6
February'19	144.1	137.7	142.8	141	138.6	139.9
March'19	144	138.8	142.9	141.2	139.5	140.4
April'19	143.9	140	143.1	141.7	140.6	141.2
May'19	145	141.4	144.3	142.4	141.5	142
June'19	145.9	142.7	145.2	143.6	142.1	142.9
July'19	147.4	144.6	146.8	145.6	143.3	144.2
August'19	148.5	146.5	148.1	145.7	144.2	145
September'19	150.7	148.7	150.3	146.7	144.7	145.8
October'19	151.7	149.4	151.2	148.3	146	147.2
November'19	152.7	149.9	152.1	149.9	147	148.6
December'19	154.9	150.7	150.7	152.2	148.3	150.4
Annual average 2019	147.8	144	146.7	144.9	142.8	143.9
January'20	154.1	150.5	153.4	151.9	148.2	150.2
February'20	152.6	150.4	152.1	150.4	147.7	149.1
March'20	151.3	151.3	151.3	149.8	147.4	148.7
April'20	Data not available for both the months of April & May due to COVID-19					
May'20						
June'20	164.8	157	163.2	152.7	150.8	151.8
July'20	163	160.4	162.5	154.7	152.9	153.9
August'20	162.7	161.4	162.4	155.4	154	154.7
September'20	163.6	162.5	163.4	157.5	155.2	156.4
October'20	165.7	164	165.3	159.7	156.8	158.4
November'20	165	164.3	164.9	160.7	156.9	158.9
December'20(P)	162.7	162.4	162.6	158.5	156	157.3
Annual Average 2020	133.8	132	133.4	155.3	152.6	153.9

NOTE: - CPI not compiled for April, May, 2020

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 DIFFERENT CENTRES OF ASSAM**

Sl. No.	Period (Month / Year)	Guwahati	Morioni (Jorhat)	Doomdooma (Tinsukia)	Labac (Silchar)	Rangapara (Tezpur)	Sivasagar
1	2	3	4	5	6	7	8
Base 2001 = 100							
1	January '2020	293	277	301	282	264	
2	February'2020	292	274	298	279	261	
3	March '2020	291	271	296	277	261	
4	April '2020	294	279	310	285	264	
5	May '2020	292	279	300	289	264	
6	June '2020	296	280	301	294	270	
7	July '2020	302	282	311	294	272	
8	August '2020	302	283	311	290	279	
Base 2016 = 100							
Sl. No	Period (Year / Month)	Guwahati	Biswanath	Doomdooma	Labac	Numaligarh	Sivasagar
9	September '2020	126.8	125.7	131.5	116.9	116.6	120
10	October '2020	129.1	128.1	134.9	119.1	118.7	121.1
11	November '2020	128.8	130.9	137.8	121.1	119.7	121.7
12	December '2020	127.3	127.5	136.4	120.2	117.9	119.8

Source: Directorate of Economics and Statistics, Assam.

The point to point rate of inflation in the five centres of Assam during the year 2020 depicted in the following graph-

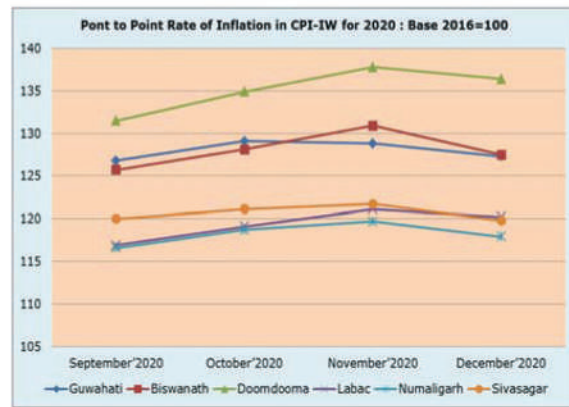
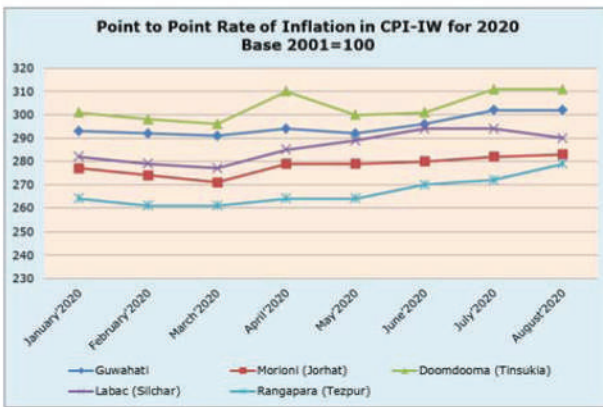
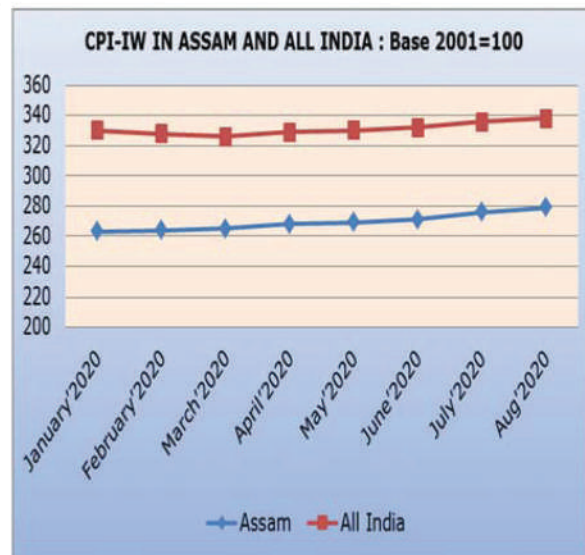


TABLE NO – 16.5
CPI-IW in Assam and All India.
(Base : 2001=100)

Months	Assam	All India
January'2020	263	330
February'2020	264	328
March'2020	265	326
April'2020	268	329
May'2020	269	330
June'2020	271	332
July'2020	276	336
Aug'2020	279	338



It is seen that during February'2019, CPI-IW for Assam 1 point increase against the All India Index remains constant. Then it is seen gradually increased and increased upto 279 in Aug'2019 against All India Index point increased upto 320.

CONSUMER PRICE INDEX NUMBER FOR WORKING CLASS POPULATION IN ASSAM WITH BASE 2001=100 AND IN OLD BASE 1982=100:

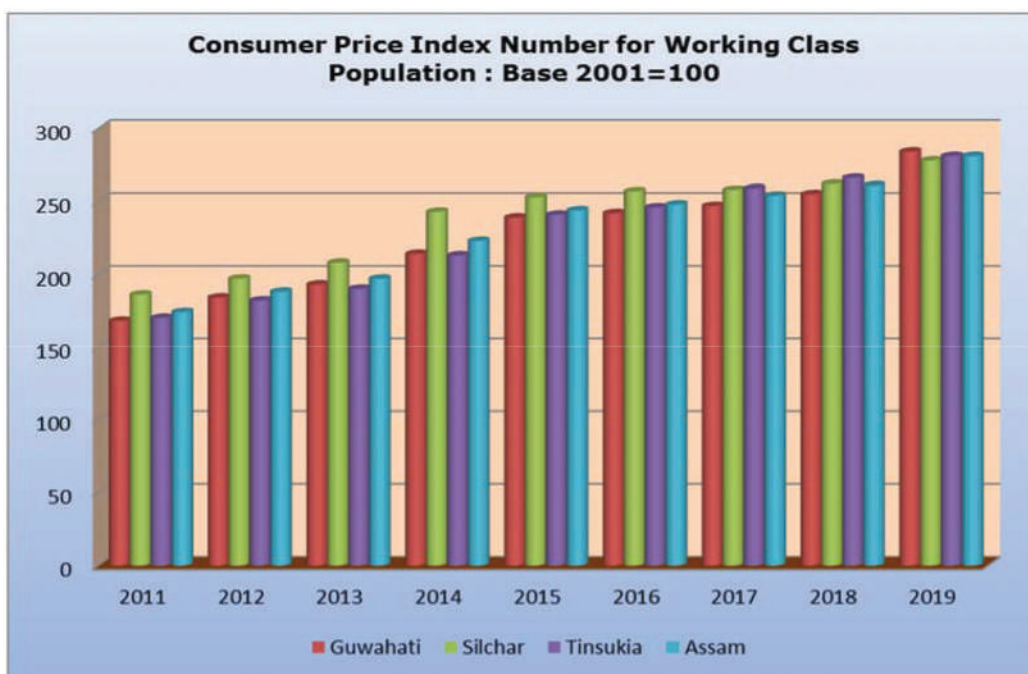
The CPI for Working Class Population for the State is compiled by Directorate of Economics and Statistics, Assam taking into account the weighted average of the indices of the three centres viz. Guwahati, Silchar and Tinsukia.

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 2011 to 2019.

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	2	3	4	5	6
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	255 (3.24)	262 (1.55)	266 (2.70)	261 (2.76)
9	2019	284 (11.37)	278 (6.11)	281 (5.64)	281 (7.66)

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 and lowest increase was 1.64 in 2016. Ultimately the CPI rose 7.66 percent in 2019 to 281 over 261 in 2018.

Among 3 centres of working class population Guwahati centre recorded highest increase by 29 points i. e. an increase of 11.37 percent in the year 2019 over 2018.

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 numbers.

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 5095466 numbers of PH families covering 22303663 numbers of population and a total of 691511 numbers of AAY families covering 2810877 numbers of population have been selected till date (Grand total of PH and AAY families are 5888219 numbers and population are 25114540 numbers as per ERCMS as on 10/02/2021. 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
2017-18	1,82,97,53,520	1,83,92,55,657
2018-19	2,79,45,40,903	2,37,03,73,225
2019-20	1,40,67,75,853	1,35,69,80,011

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	15,52,525	1425537	141,12,81,630/-
2019-20	14,30,000	991719	98,18,01,810/-

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
 - Total : Rs. 1600.00**
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	768	5,08,60,800/-
2019-20	788	287	1,90,06,575/-

❖ The items distributed through AAMAR DUKAN :

- | | |
|---|--|
| <ul style="list-style-type: none"> i. 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), | <ul style="list-style-type: none"> 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	96,00,000/-
2019-20	220	Nil	Nil

CONSTRUCTION OF GODOWN:

The GOI had sanctioned an amount of Rs. 957.00 lakhs to the Government of Assam during the 2017-18 for construction of Food Storage Godowns under Central Sector Scheme. The construction works of 5 numbers are under progress. For first time the construction of Godown in Majuli district has taken up by the Government.

The physical and financial achievements of the scheme in the last three years are shown below:

Name of the Scheme	Financial year	Financial achievement		Physical achievement	
		Budget provision (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Target	Achievement
Construction of Godown	2016-17	0	0	0	0
	2017-18	0	0	0	0
	2018-19	957	29.72	6 Nos. of Godowns	5 Nos. are under progress
	2019-20	957	631.10823	6 Nos. of godowns	1 No. of godown completed 100% and 4 Nos. Godowns are work under progress for completion

It is to be noted that 66 Numbers of Godowns under Assam State Agriculture Marketing Board and 43 Numbers under Assam State Warehousing Corporation with storage capacity 4775 MT and 116662 MT respectively. Again there are already 38 Numbers of Godowns under Food Corporation of India.

AFFORDABLE NUTRITION AND NOURISHMENT ASSISTANCE SCHEME:

The scheme has been launched w.e.f March'2019 to March'2020 the Government is providing Rice to the Tea Garden beneficiaries of NFSA Card holders at free of cost and the other beneficiaries of the NFSA card holder are getting Rice @ Rs. 1.00 per kg per month. But w.e.f. April'2020 the Government has provided Rice under the scheme at free of cost to all beneficiaries.

Scheme wise Target and achievement (both financial and physical) under World Bank, Asian Development Bank and other foreign investment/assistance and public –private partnership are nil for last three years: Nil

Target and achievement (both financial and physical) of any other implemented scheme are nil for last three years: Nil

Target and achievement of Revenue receipt under different sector during last three years also nil.

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 24th December and World Consumer Day on 15th 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 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.

Annexure- 16.01

MONTHLY ALLOCATION OF PDS ITEMS IN ASSAM

(During the period January 2020 onwards to latest Month available)

Month	NFSA Rice (in MT)		Wheat	SK Oil
	AAV Rice	PH Rice	(in MT)	(in KL)
1	2	3	4	5
Jan-20	24211.005	110258.09	5781.67	13392
Feb-20	24207.085	110234.83	5781.67	13380
Mar-20	24205.07	110210.44	5781.67	13380
Apr-20	24213.63	110224.43	5781.67	13440
May-20	24217.9	110335.64	5781.67	13356
Jun-20	24203.9	110343.16	5781.67	13356
Jul-20	24219.37	110428.72	5781.67	12876
Aug-20	24216.465	110598.782	5781.67	12852
Sep-20	24213.98	110785.27	5781.67	12744
Oct-20	24213.245	110987.015	5781.67	12816
Nov-20	24213.945	111066.73	5781.67	12828
Dec-20	24210.27	111151.86	5781.67	12828
Assam	290545.865	1326624.967	69380.04	157248

AAV= Antrodoya Anna Yojona;

PH= Priority House; NFSA= National Food Security Act.

ANNEXURE - 16.02
DISTRICT WISE FAIR PRICE SHOP HOLDER
OF "AAMAR DUKAN" IN ASSAM, 2019-21

District	Nos. of "Aamar Dukan"	Nos of Fair Price Shop
1	2	3
Kokrajhar	26	1241
Dhubri	26	1973 (including S. Salmara)
Goalpara	26	1021
Barpeta	26	1983
Morigaon	26	1171
Nagaon	26	2911 (including Hojai)
Hojai	26	--
Sonitpur	26	2035 (including Biswanath)
Biswanath	26	--
Lakhimpur	26	1864
Dhemaji	26	1359
Tinsukia	26	1604
Dibrugarh	26	1693
Sivasagar	26	1957 (including Charaideo)
Jorhat	26	1598 (including Majuli)
Golaghat	26	2017
Karbi Anglong	26	806
Dima Hasao	Nil	371
Cachar	26	2041
Karimganj	26	1155
Hailakandi	26	899
Bongaigaon	26	710
Chirang	26	569
Kamrup	26	1751
Kamrup Metro	26	785
Nalbari	23	785
Baksa	26	864
Darrang	26	1018
Udalguri	26	1220
South Salmara	26	--
Charaideo	26	--
Majuli	26	--
Assam	803	37401

ANNEXURE - 16.03

**DISTRICT WISE AAY, PHH AND TOTAL NUMBER OF RATION CARD AND
MEMBERS DETAILS AS PER ONLINE ALLOCATION FOR THE MONTH OF
NOVEMBER, 2020**

District	AAY Rice (In MT)	PHH Rice (In MT)	Total Cards	AAY Members (Nos.)	PHH Members (Nos.)	Total Members (Nos.)
1	2	3	4	5	6	7
Kokrajhar	814.975	3465.575	190999	93428	693115	786543
Dhubri	1321.460	6907.000	345825	167925	1381400	1549325
Goalpara	683.725	3574.535	178237	87011	714907	801918
Barpeta	1319.815	6046.195	309094	156843	1209239	1366082
Morigaon	717.255	3569.415	187780	81785	713883	795668
Nagaon	2016.840	10088.805	445780	266301	2017761	2284062
Sonitpur	1418.795	7002.485	383667	161722	1400497	1562219
Lakhimpur	854.945	3736.885	199557	103777	747377	851154
Dhemaji	597.835	2488.320	136718	68448	497664	566112
Tinsukia	1108.065	4752.455	259410	114440	950491	1064931
Dibrugarh	1063.545	4947.205	258265	114671	989441	1104112
Sivasagar	1090.775	4170.950	241895	118925	834190	953115
Jorhat	1073.485	3771.065	228612	121497	754213	875710
Golaghat	1026.235	3829.155	222250	110254	765831	876085
Karbi Anglong	470.295	3287.375	146116	58643	657475	716118
Dima Hasao	207.025	699.415	35880	25882	139883	165785
Cachar	1298.360	6194.250	323578	155015	1238850	1393865
Karimganj	775.110	4554.440	234436	90015	910888	1000903
Hailakandi	525.210	2600.070	128825	56972	520014	576986
Bongaigaon	568.820	2590.725	135960	72935	518145	591080
Chirang	504.490	1748.140	100256	47073	349628	396701
Kamrup	1440.040	5246.425	295853	170994	1049285	1220279
Kamrup (M)	278.425	3530.055	182300	33676	706011	739687
Nalbari	775.180	2677.250	155825	92299	535450	627749
Baksa	801.605	3208.955	194588	87397	641791	729188
Darrang	625.275	3413.720	164631	73334	682744	756078
Udalguri	836.360	2965.865	167561	87844	593173	681017
Assam	24213.945	111066.730	5853898	2819106	22213346	25032452

ANNEXURE - 16.04
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	1609803.940	1537192.91	69379.32	69379.32	46392.89
2017	1625751.96	1600147.007	1561633.22	69379.32	69379.32	67138.38
2019	1625751.96	1613321.720	1478742.21	69372.00	69372.00	63591.00
2020	1625347.79	1617170.832	1596437.929	69372.00	69372.00	69372.00

Source: Directorate of Food and Civil Supplies and Consumer Affairs, Assam

CHAPTER – XVII

LABOUR, EMPLOYMENT AND WAGES

Work is part of everyone's daily life and is crucial to one's dignity, well-being and development as a human being. Economic development means not only creation of jobs but also working conditions in which one can work in freedom, safety and dignity. Ministry of Labour & Employment, one of the oldest and important Ministries of the Government of India, is functioning to ensure that it remains focussed on improving life and dignity of labour force of the country by protecting & safeguarding the interest of workers, promotion of their welfare and providing social security to the labour force both in Organized and Unorganized Sectors by enactment and implementation of various Labour Laws, which regulate the terms and conditions of service and employment of workers. The State Governments are also competent to enact legislations, as labour is a subject in the Concurrent List under the Constitution of India.

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 as per Population Census 2011

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

Fig. in Nos.

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 Fig.-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

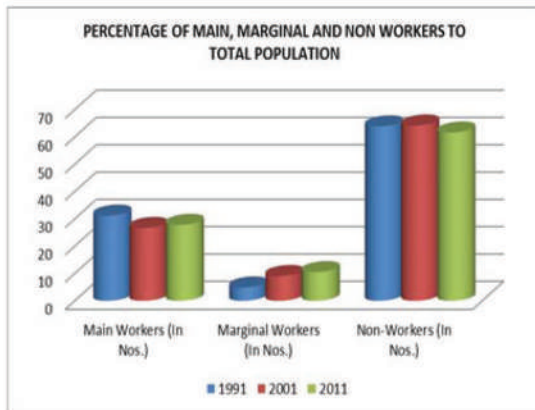


Fig.-II

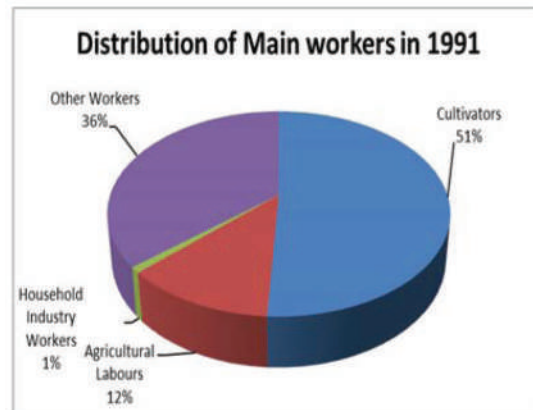


Fig.-III

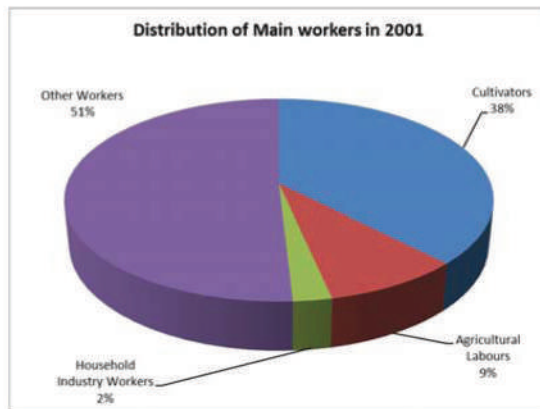
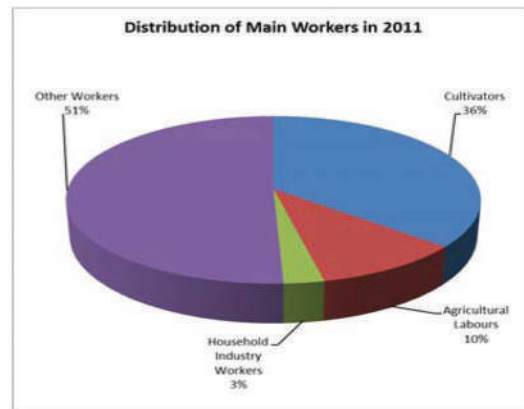


Fig.-IV



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:

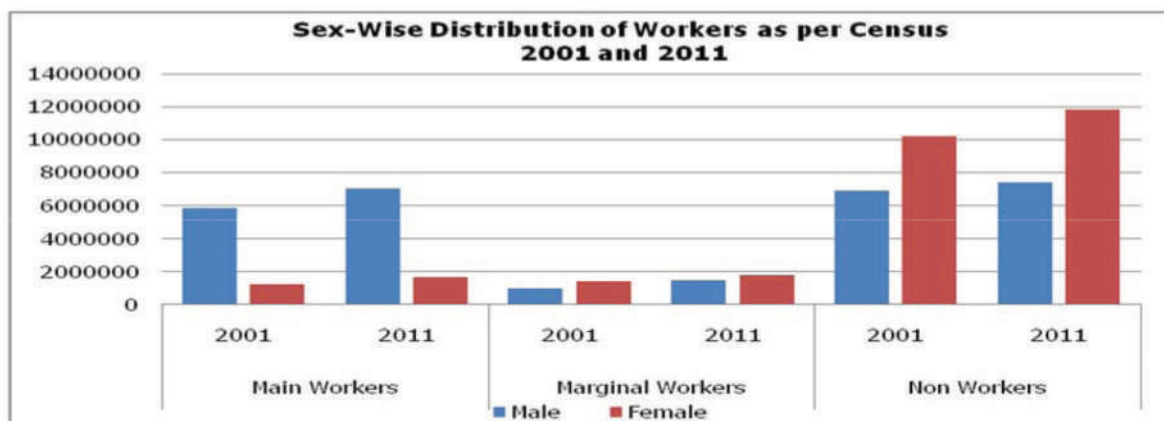


FIGURE-V

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.

PERIODIC LABOUR FORCE SURVEY (PFLS)

The Periodic Labour Force Survey (PLFS) was conducted by National Statistical Office (NSO) from July 2018 to June 2019. The survey was spread over 12,720 FSUs (6,983 villages and 5,737 urban blocks) covering 1, 01,579 households (55,812 in rural areas and 45,767 in urban areas) and enumerating 4, 20,757 persons (2, 39,817 in rural areas and 1, 80,940 in urban areas). Estimates of the labour force indicators are based on the usual status (ps+ss) approach and current weekly status approach for classification of the population by activity statuses. The reference period for usual status Primary Status and Subsidiary Status (ps+ss) approach is 1 year and for current weekly status approach, it is 1 week. Certain findings of this report are:

Labour Force Participation Rate

Labour force participation rate (LFPR) is defined as the percentage of persons in the labour force in the population. The result of the PFLS Report 2018-19 reveals that the Labour Force Participation rate in respect of the age-group 15 years and above according to usual status approach in Assam is 34.6 percent in rural areas, 34.5 percent in urban areas and 37.5 percent taking urban and rural areas as a whole against the all India rate of 37.7 percent 36.9 percent and 37.5 percent respectively. The table given below shows the Labour Force Participation Rate (per 1000) for persons aged 15 years and above in the State.

TABLE-17.2

LABOUR FORCE PARTICIPATION RATE (IN PERCENT) ACCORDING TO USUAL STATUS (ps+ss) 2018-19

State	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Assam	58.7	8.8	34.6	53.2	13.6	34.5	58.1	9.3	34.5
India	55.1	19.7	37.7	56.7	16.1	36.9	55.6	18.6	37.5

Source: Annual Report PFLS 2018-19.

As seen in the table above and in the graph below the Labour Force Participation Rate (LFPR), according to usual status (ps+ss) method is high among urban male person 56.7 percent compared to male rural counterparts 55.1 percent. Whereas female LFPR is more in rural areas 19.7 percent than urban areas 16.1 percent.

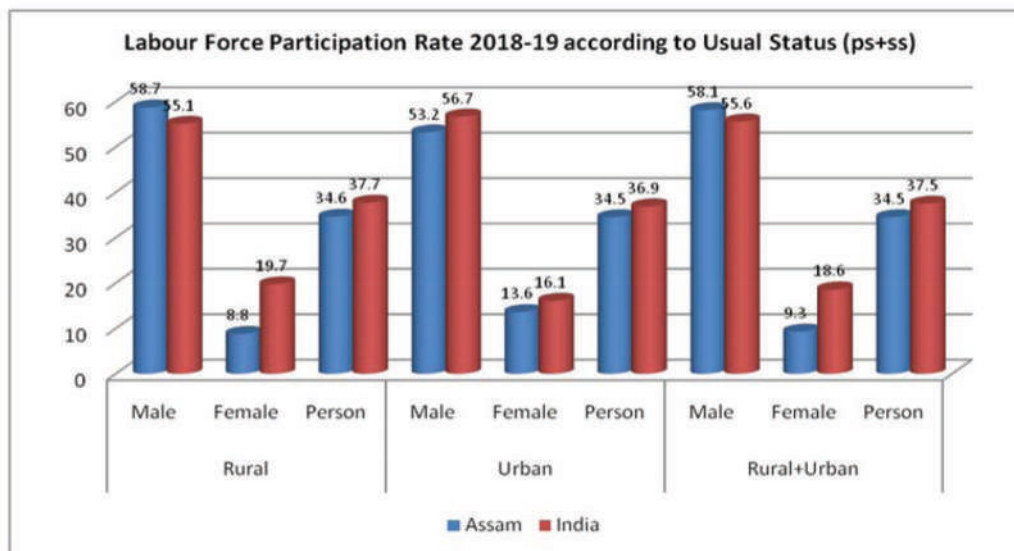


FIGURE-VI

Unemployment Rate

Unemployment Rate (UR) is defined as the percentage of persons unemployed among the persons in the labour force. The Unemployment Rate among the persons aged 15 years to 59 years who were available for work could not get work during the reference period is shown in the table 17.3 below. In rural areas the unemployment rate is 6.6 percent whereas in urban areas the unemployment rate is 11.1 percent in Assam whereas the unemployment rate at all India level in India is 5.4 and 8.0 respectively according to the usual status (ps+ss) approach as seen in the graph figure VII. The female unemployment rate is 5.2 percent which is higher than the male rate of 8.2 percent.

The study reveals that the female unemployment rate in urban areas of the State during the reference period is 15.6 percent which is significantly higher than the unemployment rate of 7.2 percent in rural areas as seen in the table below.

TABLE: - 17.3

UNEMPLOYMENT RATE (UR) (in percent) ACCORDING TO USUAL STATUS (ps+ss) 2018-19

State	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Assam	6.5	7.2	6.6	10.3	15.6	11.1	6.9	8.2	7.1
India	5.6	3.5	5	7.1	9.9	7.7	6	5.2	5.8

Source: PFLS Report 2018-19.

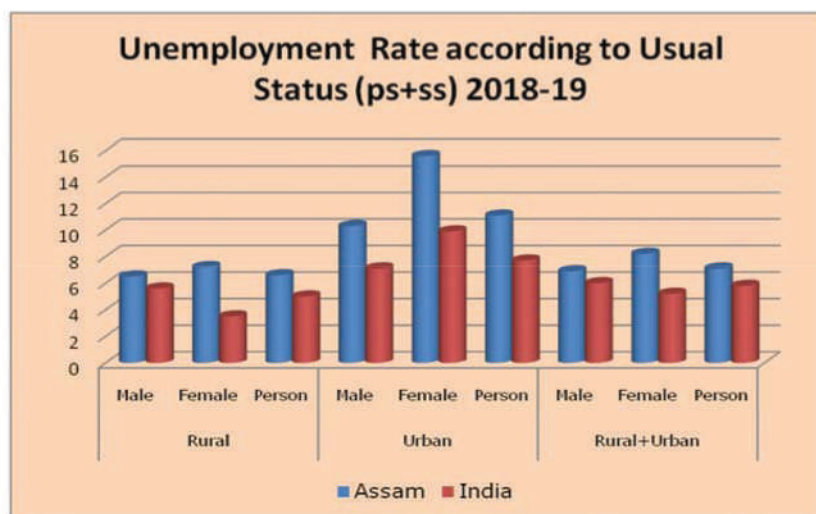


FIGURE-VII

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 2016 were 82 thousand and 1.45 lakh respectively. Out of these 82 thousand establishment, 61 thousand (74 percent) were shops, 15 thousand (18 percent) were commercial establishments and 5 thousand (6 percent) were Cinemas, theatres, Hotels and Restaurants that employed 69 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 to 2014 and 2016 is shown in Table 17.4.

Table – 17.4

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
2016	61	69	15	50	5	20	82	141

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 2010 to 2019 as per data collected through Employment Market Information Programme is shown in figure-VI.

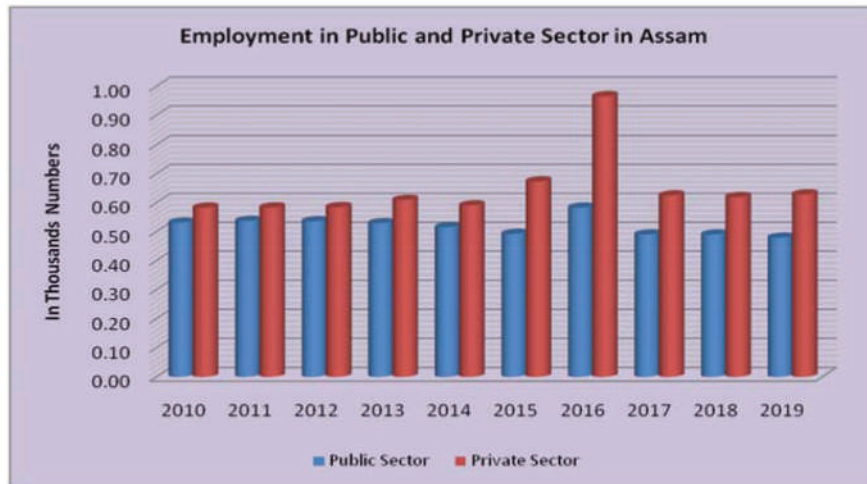


FIGURE-VIII

The total employment in the public and private sector establishments under EMI programme in 2019 was 11.08 lakhs (in public sector 4.79 lakh and in private sector 6.19 lakh) whereas it was 11.08 lakh (in public sector 4.89 lakh and in private sector 6.19 lakh) in 2018 which shows a slight decrease in public sector. During 2019, female employment was 36.9 percent compared to 36.6 percent of the total employment in 2018. Out of the total 4.79 lakh employment in public sector, share of local bodies was 1.67 percent and share of State Quasi Government was 8.56 percent during the year 2019. The figure IX shows the composition of public and private sector employment in Assam during 2019.

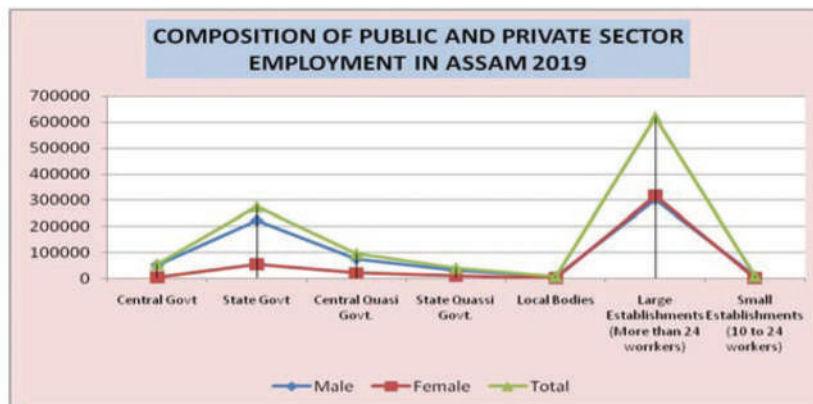


FIGURE-IX

Women Employment in Organized Sector

The employment of women in organized sector of the State was 817 thousand in 2019 as against 406 thousand during 2018 which is 36.9 percent of the total employment in 2019, seen in the table 17.5.

TABLE – 17.5
EMPLOYMENT OF WOMEN IN ORGANIZED SECTOR

(In '000 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
2018	91.4	489.9	314.7	619.7	406.2	1109.7	36.6
2019	90.2	479.2	318.7	628.9	408.9	1108.1	36.9

Source: Directorate of Employment and Craftsmen Training, Assam

The Figure-X shows a slight decrease of women employment in public sector whereas a slight increase in private sector in the year 2019.

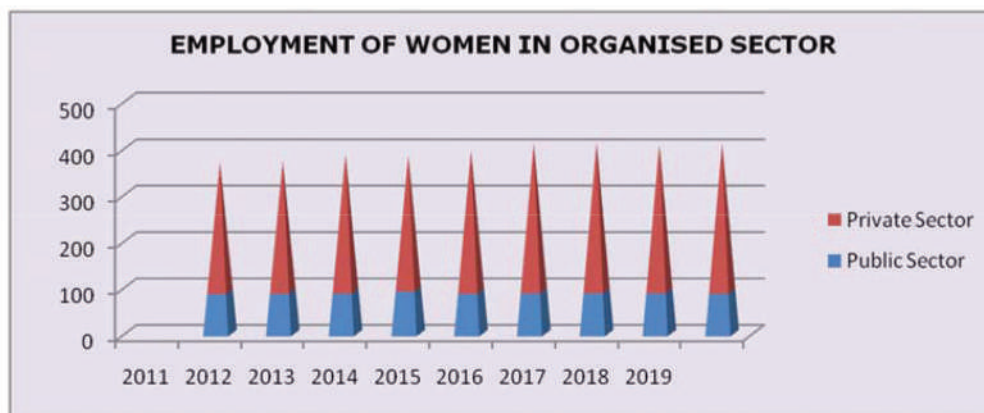


Figure-X

Un-Employment Scenario in the State

The State has employment exchanges comprising of 47 general, 1(one) special 1(one) for unskilled applicants, 1(one) for professional and executive office, guwahati and 3 Employment Information and Guidance Bureau. Moreover, there are 29 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 increased by 1.12 percent in 2019 over 2018.

TABLE – 17.6

EMPLOYMENT THROUGH EMPLOYMENT EXCHANGES

YEAR	No. in Live Register	Percentage increase/decrease 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	9.7	2672	1028
2016	2010603	4.94	2147	582
2017	1963376	(-) 2.35	2395	1023
2018	2024446	(-) 3.11	833	985
2019	2047195	1.12	557	97

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 1718492 in 2019 as against 1699977 during 2018 thereby showing an increase of 1.08 percent over 2018. The number of educated job seekers has increased at all level of education in 2019 over 2018. The year 2019 shows a considerable decrease in registration of Engineering Graduates, ITI passed, Diploma holders (Eng) and a slight decrease in Medical Graduates, Agriculture Graduates, respectively. The detail distributions of the educated job seekers are shown in the table below.

TABLE – 17.7
DISTRIBUTION OF EDUCATED JOB-SEEKERS

Fig. in Nos.

Level of Education	Registration		Placement		Percentage increase/decrease in live register
	2018	2019	2018	2019	
Engineering Graduate	1638	604	44	2	-0.49
Medical Graduate	94	76	15	0	-11.54
Agriculture Graduate	29	27	2	0	-0.68
Veterinary Graduate	42	30	2	0	-1.49
Passed out Trainees (ITI)	16962	1269	51	3	-1.12
Post Graduates	2953	1309	115	2	-0.65
Graduates	32153	25048	174	33	-1.11
H.S.S.L.C.	80496	53803	148	57	-1.12
H.S.L.C.	59300	44696	244	46	-1.58
Diploma Holders (Eng.)	4373	731	25	2	0
Others	5867	3634	125	4	-0.90
Total	203907	131227	928	149	-1.09

Source: Directorate of Employment and Craftsmen Training, Assam

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 unskilled labour, wage rate of male ploughman increased by 4 percent and male Reaper and Harvester increased by 2 percent. During 2018-19, the female wage rate for Reaper and Harvester decreased by 2 percent over the previous year as seen in the table below:

TABLE – 17.8

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		
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
2018-19	369	322	295	249	292	233	289	229

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

A financial scheme launched by Assam govt for the small entrepreneurs and businesses to get term loan at a subsidized rate of interest of 5% P.A. under the Sarothi Start-Up scheme. The new Ventures will get a loan of up to Rs 10 lakh at a lower interest rate of 5% on the loan. Assam govt planned to boost the industrial sector with local entrepreneurs by providing loan at lower interest rates. Small start-ups and entrepreneurs will get better fund for their business. Assam Gramin Vikash Bank has the authority to disburse loans under Sarothi Yojana.

The major features on the scheme under the financial sector of the state are shown below.

- An applicant can avail a loan up to Rs 10 Lakh with 5% interest subvention.
- 15% of the cost of Business needs to be invested by the owners and rest will be invested by the bank.
- Every year, the beneficiaries will be selected by DICC along with AGVB branches either to accept the loan or not.
- The loan amount will be disbursed after the inspection of the business done by DICC.

- Disbursement and recovery of loan will be regulated by the Dept of Industries & Commerce, Assam.
- The loan should be repaid in duration of 5 years as per term.

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. The government have allocated a sum of Rs.300 crore in 2018-19 for this scheme. The government will expand the program and provide necessary support to offer loans at subsidized rates to cover additional one lakh youths.

In this redesigned SVAYEM Scheme Assam 2021, government will provide Rs. 50,000 each to 2 lakh youth to encourage entrepreneurship. The redesigned SVAYEM Scheme Assam 2021 will be launched with a budget of Rs. 1000 crore which is to be spent without any banking linkage. The 2 lakh beneficiaries would have to be part of self-help groups, joint liability groups etc. SVAYEM Scheme 2021 will provide financial support to the youths to take up income generating activities in manufacturing, trading and service sector. By utilising the Rs. 50,000 seed money received in this scheme, selected youths can start their business ventures.

Kanaklata Mahila Sabolikaran Yojana (KAMS):

Government of Assam with the noble aim of Empowering Women by forming Self Help Groups and capacitating them on the path of sustainable livelihood launched Kanaklata Mahila Sabolikaran Yojana (KAMS) on first day of April 2018. The scheme aspires to boost the confidence of rural women to take up measures for their economic development and reduce the poverty and unemployment problems they face in their daily lives. In the Financial Year 2019-20, a total of 1,98,402 Self Help Groups(SHG) received a total amount of Rs.285.06 Cr under KAMS scheme.

National Rural Livelihood Mission

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. Till March 2020, a total of 30,29,884 number of rural households across all blocks and districts of Assam have been mobilised to promote a total of 2,83,790 Self Help Groups since inception. A total of also 16,544 Village Organisations and 445 Cluster Level Federations have been promoted under ASRLMS. Till March 2020, a total of 92,669 numbers of SHGs have been provided Community Investment Fund amounting to Rs 464.52 cr. The SHGs promoted under ASRLM are linked for credit with various banks and loans availed so far is Rs 1122.cr by 1,16,911 SHGs till 2020.

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY):

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), the Skill Training and placement program of the Ministry of Rural Development Govt. of India focuses on the rural poor youth and give emphasis on sustainable employment. DDU-GKY aims to skill rural youth who are poor and provide them with jobs having regular monthly wages. It is a part of the National Rural livelihood Mission (NRLM-The mission for poverty reduction and promoting rural livelihoods). In the past three years a total of 35,138 rural poor youth have been trained under various skill courses and out of them 29,327 youths have been offered jobs and 15,546 have been placed. During the last three years the achievements of DDU-GKY under NRLM in the table below:-

TABLE-17.9**YEARWISE ACHIEVEMENT OF DDU-GKY UNDER NRLM**

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
No. of SHG formed	33433	108555	47231
No. of SHG provided Revolving Fund	22313	24034	25417
No. of village organisation formed	968	3454	7007
No. of SHG provided with Community Investment Fund	16388	20345	29212

Source: NRLM

Mahatma Gandhi National Employment Guarantee Act (MGNREGA)

The Mahatma Gandhi National Employment Guarantee Programme was introduced during the 11th 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 2019-20 a total of 623.83 lakh mandays were generated against a total of 533.72 lakh mandays in 2018-19 and , 481.26 lakh mandays generated in 2017-18 and 408.00 lakh mandays in 2016-17. Since inception up to 2019-20, 48.11 lakhs and more than 45.68 lakh numbers of rural households in 2018-19, have been provided with job card. Out of the total employment generated, 41.77 percent of jobs were provided to women in 2019-20 against 41.02 in 2018-19 and 38.51 percent during 2017-18 and 36.45 percent in 2016-17. A number of 30053 household were provided 100 days employment in 2019-20.

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 2019-20 is reflected in the table below.

TABLE – 17.10

TARGET AND ACHIEVEMENT OF PMEGP DURING THE YEAR 2009-10 TO 2019-20

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. in Lakh)
1	2	3	4	5	6
2009-10	1292	1550	2440	2440	1899.71
2010-11	3193	4469.66	4756	4756	4801.1
2011-12	5047	7065.8	5280	5280	5544.99
2012-13	4644	6500.2	7336	7336	5801.15
2013-14	4588	6210.97	8049	8049	7219.9
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	2269.6
2018-19	4203	-	2080	3736	4166
2019-20	4382	-	265	934	1145

Source: Directorate of Industries and Commerce, Assam

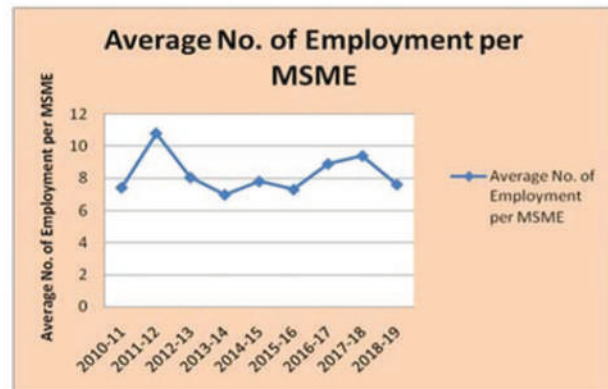
Small Scale Industries/Micro, Small and Medium Enterprise (MSME)

The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. It contributes significantly in the economic and social development of the country by fostering entrepreneurship and generating largest employment opportunities at comparatively lower capital cost, next only to agriculture. A number of statutory and non-statutory bodies work under the aegis of the Ministry of MSME which include the Khadi Village Industries Commission (KVIC) and the Coir Board besides National Small Industries Corporation (NSIC)

TABLE-17.11

No. of SSI & MSME unit and Employment

Year	No. of SSI/MSME Unit	Employment
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
2018-19	1123	8543



SOURCE: DIRECTORATE OF INDUSTRIES AND COMMERCE, ASSAM

FIGURE-XI

National Institute for Micro, Small and Medium Enterprises (NIMSME) and Mahatma Gandhi Institute for Rural Industrialisation (MGIRI).

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. Government of India Scheme envisages financial assistance to State Governments for setting up new and modernizes existing Mini Technology Centres. Till 31st, December 2017, under the scheme, Rs. 1.45 crore has been sanctioned to Government of Assam for technology centre at Tinsukia.

The graph below (Figure XI) shows the average number of employment per SSI/MSME unit which has decreased in 2018-19 by 27 percent in case of number of units and 40 percent in case of employment as seen in the table 17.9.

KHADI & VILLAGE INDUSTRIES COMMISSION

Khadi & Village Industries Commission (KVIC) established under the Khadi and Village. Industries Commission Act, 1956 (61 of 1956), is a statutory organization under the aegis of the Ministry of MSME. The main objectives of KVIC include:-

- The social objective providing employment in rural areas;
- The economic objective of producing saleable articles; and
- The wider objective of creating self-reliance amongst people and building up a strong rural community spirit

Production of Silk in 2019-20 is by far the largest rural productivity programme. It provides the rural communities a high value for their effort while providing the consumers value for money. KVIC is a statutory organization tasked with the role of promoting the production and sale of Khadi.

TABLE -17.12**Achievement of Khadi and Village Industries in Assam during 2019-20**

Sl. No	Industry	Vaue of production (in lakh)	Sales (in lakh)	Employment (in numbers)	Wages (Rs in lakh)
1	2	3	4	5	6
1	Khadi & Polyvastra	-	-	-	-
2	Silk	1242	1297	4482	275
3	Polyvastra	9.3	9.25	47	1.62
Total		1251.3	1306.25	4529	276.62

SOURCE: Khadi and Village Industries Commission.

Factory Employment

During 2019, there was 7225 number of factories employing 285841 numbers of persons compared to 6945 number of factories registered employing 279246 numbers of persons in 2018 showing an increase of 4.2 percent over the previous year . The maximum number of workers were engaged in manufacturing of other non-metallic mineral products (36%) followed by manufacturing of food products (30%), manufacturing of chemical and chemical products (5%) and the rest distributed amongst of factories as per NIC-2008.

MIGRANT WORKERS

The Covid-19 has left the workers in worst condition in the year 2020. The workers living outside the states were forced to come back to their native states to maintain survival. Similarly in Assam there was a flow of migrant workers. The Government of Assam started initiative to maintain records of these workers returning to the state on the basis of their age, skills and other parameters so that they can get employment. According to Government estimates, around 3.41 lakh people have returned to the state during the lockdown.

SAMPARKA, application software has been launched by Government of Assam to solve the problem of unemployment of migrant works to a great extent. This application include parameters like the country and the state from where they have come back, their skills, age and other related parameters. Further the government has decided to provide job cards to all migrant workers who returned to the state and give them work under MGNREGA.

CHAPTER -XVIII PANCHAYAT & RURAL DEVELOPMENT

The Panchayat and Rural Development Department is responsible for alleviation of rural poverty, enhancement of rural livelihoods by generating self employment opportunities for the people living below the poverty line through implementation of various programmes from time to time and to strengthen the Panchayati Raj Institutions (PRIs) of the state. The Department is concerned with empowering the PRIs to enable them to increase the capabilities of the rural poor through self employment programme and by developing critical infrastructures in the rural areas. With this mandate, the Panchayat and Rural Development department has been implementing various schemes for development of rural infrastructure and upliftment of quality of life of rural people in the state.

The schemes implemented by the Department are broadly classified into three categories:

- I. Self employment;
- II. Wage employment;
- III. Welfare scheme for the disabled, widows & other down trodden people living below the poverty line.

SCHEMES IMPLEMENTED BY THE PANCHAYAT & RURAL DEVELOPMENT DEPARTMENT:

The Department is presently implementing the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Awas Yojana – Gramin (PMAY-G) and National Social Assistance Programme (NSAP), Central Finance Commission Grant and State Finance Commission Grant etc.

MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MGNREGA):

Implementation of MGNREGA has led to beginning of a new era in providing employment opportunities to the rural poor during their lean agricultural season when they require wage employment for boosting their purchasing power. Under this programme, 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. of India bears 100% burden of wage expenditure for the job card holders. For the expenditure of material part, Govt. of India pays 75% and the rest 25% is borne by the State Govt. The wage material ratio is 60:40.

During the financial year 2017-18 against the approved labour budget of 500.00 lakh (mandays) 480.86 lakhs mandays were generated. Likewise, 532.84 lakhs mandays were generated against the approved labour budget of 500.00 lakh mandays during 2018-19. For the financial year 2019-20, 624.04 lakhs mandays were generated against the approved labour budget of 615 lakhs mandays due to increase in demand of work. For the financial year 2020-21 against the approved labour budget 650 lakhs mandays 536.66 lakhs mandays was generated (upto 31-12-2020). Under this Programme number of works completed for the financial year 2017-18 were 55921 Nos. whereas

number of works completed in the financial year 2018-19 was 142606. In the financial year 2019-20 number of works completed was 76907 whereas 90420 Nos. of works have been completed during the financial year 2020-21 (up to 15-12-2020). The women participation rate in MGNREGA in Assam is on the increase beyond its mandatory 33%.The women participation rate in MGNREGA was 38.10% in 2017-18, 41.08% in 2018-19, 41.77% in 2019-20 and 43.21% in 2020-21 (upto end of Dec 2020). Moreover, 10928 Nos. of household completed 100 days work in 2017-18 while it was 18360 Nos. of household in FY 2018-19. In the financial year 2019-20, 30041 number of households completed 100 days works. During the financial year 2020-21, 14578 Nos. of household completed 100 days work upto 15-12-2020.

As far as financial achievement is concerned, during the financial year 2017-18, the utilization position was Rs. 153076.33 lakh against fund receipt of Rs. 155186.00 lakh. During the financial year 2018-19, state received an amount of Rs. 142038.23 lakh and out of which the amount of Rs. 133844.52 lakh has been utilized. For the financial year 2019-20 the amount Rs. 148812.56 lakh has been utilized against the fund receipt Rs. 152341.23 lakh. Also for the financial year 2020-21 (Up to 02-01-2021) the amount Rs. 141175.08 lakh has been utilized against the fund receipt of Rs. 156824.71 lakh.

As per direction of the Ministry of Rural Development, Govt. of India, all the assets created under MGNREGA are now being geo-tagged with the help of Indian Space Research Organisation (ISRO). Till date, 2532412 assets have been geo-tagged against 253433 assets ID shared with National Remote Sensing Centre (99.92%).

TABLE-18.1

Programme	Year	Physical (Person days in lakh)		Financial (Rs. in lakh)	
		Target	Achievement	Fund Received	Utilised
MGNREGA	2014-15	401.01	314.24	60326.84	49748.40
	2015-16	432.74	486.33	103393.12	62065.44
	2016-17	408.00	467.52	168885.44	149989.63
	2017-18	500.00	481.26	155186.00	153058.36
	2018-19	500.00	533.36	134353.86	134353.86
	2019-20	615.00	624.04	152341.23	148812.56
	2020-21	650.00	536.669 (upto 31 st Dec,20)	156824.71	141175.08 (upto 2 nd Jan,21)

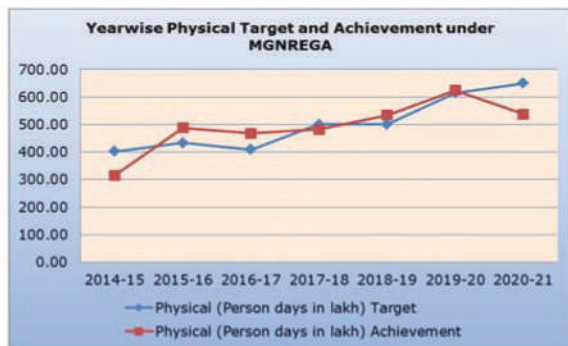


Figure-1

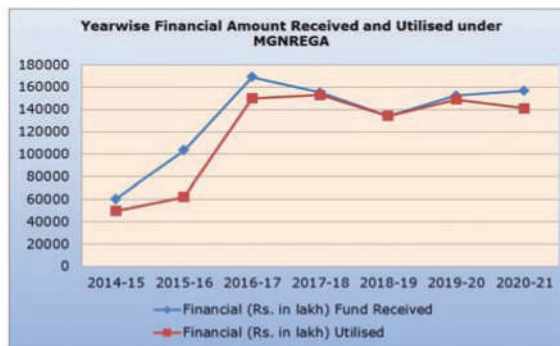


Figure-2

SWA-Nirbhar Nari Atma-Nirbhar Asom:

It is a convergence programme between the Commissionerate of Panchayat & Rural Development Department and the Assam State Rural Livelihood Mission & 12 other line departments launched in October 2020 to provide permanent assets to the SHG members holding active Job Card. The scheme is aiming for benefiting more than 4.00 lakh beneficiaries.

PRADHAN MANTRI AWASS YOJANA – GRAMIN (PMAY-G):

The PMAY-G provides dwelling units to the BPL people without a house or with dilapidated house in rural areas. The erstwhile IAY programme has been restructured as PMAY-G and was launched in 2016-17 as Pradhan Mantri Awas Yojana- Gramin. PMAY-G aims at providing a pucca house, with basic amenities, to all houseless households and those households living in kutcha and dilapidated houses by 2022. Keeping this in view PMAY-G was started in 2016-17. Under this scheme, a unit assistance of Rs. 1,30,000/- has been directly transferred to beneficiary's bank account in three instalments. Some other mandatory provisions such as toilet facilities @12,000/- in convergence with State Public Health Engineering or SBM and benefit of 95 days wages @213/- under MGNREGA scheme, Gas connection etc. The minimum size of the house should not be less than 25 sqm. For the financial year 2017-18 the target was to construct 40,119 houses. Out of which, the nos. of houses sanctioned and completed was 35123 and 32108 nos respectively. The state did not receive any financial and physical allocation during FY 2018-19 from Government of India. For the financial year 2019-20 target was to construct 256043 houses. Out of which the nos. of houses sanctioned and completed was 215679 and 141782 respectively. For the financial year 2017-18, the fund received was Rs 158255.61 lakhs and Rs 145846.48 lakhs was utilized. For the financial year 2019-20 against the fund receipt of Rs146109.44 lakhs utilization was Rs 204668.75. Likewise, for the financial year 2020-21 a target of 365976 nos of houses has been provided by Govt. of India against the estimated cost of Rs 475768.78 lakhs.

NATIONAL SOCIAL ASSISTANCE PROGRAMME (NSAP):

It is a central sector programme to promote social security through financial support to the rural BPL families and the fund is borne by the GoI on 100% basis. However, the State Govt. is to pay the Minimum Mandatory Provision (MMP) under IGNOAPS @Rs.50/- P.M. against the GoI's share of Rs.200/- P.M. (for 60 to 79 yrs. age category) and Rs.500/- P.M. (for 80 yrs and above yrs age category). In respect of other Sub -Schemes under NSAP, there is no provision of MMP. Presently there are four Sub -Schemes (components) running under NSAP, and these are - Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS), Indira Gandhi National Disability Pension Scheme (IGNDPS) and National Family Benefit Scheme (NFBS).

INDIRA GANDHI NATIONAL OLD AGE PENSION SCHEME (IGNOAPS):

The objective of this scheme is to provide financial support to the rural people living below the poverty line who have attained the age of 60-79 yrs. and 80 yrs. and above. During the financial year, 2017-18, 694441 no. of beneficiaries have been assisted by utilizing an amount of Rs.15470.88 lakh, while in FY 2018-19, 694441 of beneficiaries were assisted for the purpose utilizing an amount of Rs.33543.97 lakh.

Also, 707635 no. of beneficiaries of such categories have also been assisted during the financial year 2019-20 utilising an amount of Rs.29420.88 lakh. Similarly 705328 no of beneficiaries of such categories have also been assisted during the financial year 2020-21(as on 30th November 2020) utilising an amount of Rs 11886.94 lakh. The monthly pension norm (for 60-79 yrs.) is Rs.250/- (including @Rs50/- as Minimum Mandatory Provision) while for the 80 yrs.and above, it is @Rs550/-(including @Rs50/- as Minimum Mandatory Provision).

INDIRA GANDHI NATIONAL WIDOW PENSION SCHEME (IGNWPS):

It aims to provide monthly financial assistance @Rs.300/- to all the identified pensioners who are widowed at the age of 40-79 yrs. of age and Rs.500/- P.M. to those who are 80 yrs. of age and above. During FY 2017-18, 107794 beneficiaries had been assisted utilizing an amount of Rs.2488.61 lakh while in FY 2018-19, 107472 no. of beneficiaries were assisted with the utilized amount of Rs.4516.77 lakh. Similarly FY 2019-20, 112245 no. of beneficiaries were assisted with the utilized amount of Rs 4264.40 .Also , 112282beneficiaries were also assisted for the purpose in financial year 2020-21 (as on 30th November 2020) utilizing an amount of Rs 2032.21 lakh.

INDIRA GANDHI NATIONAL DISABLED PENSION SCHEME (IGNDPS):

It is also implemented to provide financial support @Rs.300/- P.M. in the age group of 18 – 79 yrs. and @Rs.500/- P.M. to those beneficiaries who are at the age group of 80 yrs. and above. During the financial year 2017-18, 34326 nos. of beneficiaries were assisted utilizing an amount of Rs.956.60 lakh while it was 34010 nos. in 2018-19 against utilization of Rs.1450.70 lakh. Also in the financial year 2019-20, 35624 nos. of beneficiaries were assisted utilizing an amount of Rs.1336.93 lakh. Similarly, total assisted such beneficiaries during 2020-21 (as on 30th November 2020) was 35492 nos and an amount of Rs 723.40 lakh was utilized accordingly.

NATIONAL FAMILY BENEFIT SCHEME (NFBS):

It is implemented with the objective of providing one time financial assistance @Rs. 20,000/- at the death of the bread earner of the BPL family. During 2017-18, no. of such families assisted was 1699 nos. utilizing an amount of Rs. 349.56 Lakh.

STATE SOCIAL ASSISTANCE PROGRAMME:

- i. **Swahid Kushal Konwar Sarbajanin Briddha Pension Scheme:** Government of Assam had launched this universal old age pension scheme in the financial year 2018-19, basically to cover the deprived old aged beneficiaries in the IGNOAPS scheme. This scheme launched initially with 2 lakh beneficiaries, currently benefitted a total number of 12,56,698 number beneficiaries across all districts.
- ii. **Indira Miri Universal Widow Pesion Scheme:** Government of Assam introduced this universal widow pension scheme in 2019-20 covering widow beneficiaries belonging to both BPL and APL families who are deprived of Indira Gandhi National Widow Pension Schemes (IGNWPS).Under this scheme, eligible beneficiaries are provided with monthly pension of Rs. 300/- and one-time financial assistance of Rs. 25000/- to eligible beneficiaries. As on November, 2020, a total of 1,69,930 numbers of beneficiaries have been identified and monthly pension is being provided to them during current financial year.

Central Finance Commission Grants:

The period covered by Central Finance Commission is for every five years. The 14th Finance Commission covered period from 2015-16 to 2019-20. Under 14th Finance Commission, the grants are received against two components viz. Basic Grant and Performance Grant exclusively for Gaon Panchayats, the lowest tier of Panchayati Raj System of the state. 90% of the Grant is Basic Grant and 10% is 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 14th Finance Commission (2016-17 to 2019-20) Grants, a total amount of **Rs. 4301.32 Cr** have been transferred to all the 2197 numbers of GPs during the year (2016-17 to 2019-20) out of which **3193.21 Cr** has been utilized till date. Under this programme, **1,40,699** Nos. of schemes in the sectors like water supply, sanitation, sewerage, solid waste management etc. have been taken out of which **38,639** Nos. schemes have been completed and **1,02,078** Nos. schemes are ongoing.

The 15th Finance Commission has been effective from 2020-21. Under the 15th finance commission Grant besides Gaon Panchayats, there is also provision for allocation of fund to the Anchalik Parishad & Zilla Parishad in ratio of 70:15:15 respectively. Under 15th Finance Commission Grant funds are also allocated to sixth schedule districts. Assam has already received an amount of Rs. 802.00 Cr being 1st Instalment in the current financial year for 2020-21, out of which Rs.204.16 cr. has already been released to the ZPs and APs.

State Finance Commission Grants:

An amount of Rs. 5971.50 lakhs was released to the PRIs Assam, under 5th Assam State Finance Commission for the financial year 2017-18. Out of which an amount of Rs 2795.47 lakhs incurred to pay the monthly remuneration of 5 months to 27364 representatives of Zilla Parishads, Anchalik Panchayats & Gaon Panchayats. Rs.13227.00 lakh was released to the 26 Zilla Parishads under 5th Assam State Finance Commission during the financial year 2019-20, out of which Rs.6381.00 Lakh is incurred to pay the monthly remuneration to all 27364 representatives of Zilla Parishad, Anchalik Panchayat & Gaon Panchayat for 12 months during April 2019 to March 2020.

ASSAM STATE RURAL LIVELIHOODS MISSION: Promotion Rural Livelihoods.

A: Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)

Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) which is being implemented by Assam State Rural Livelihoods Mission (ASRLM), in the State of Assam has crossed several milestones. Till March 2020, a total of **30,29,884** rural households across all blocks and districts of Assam have been mobilized to promote a total of 2,83,790 Self-Help Groups ever since its inception in 2011. These SHGs are being organized further to higher level federations like Village Organizations (VO) and Cluster Level Federations (CLF) to provide a common platform for collective action for socio-economic development. A total of 16,544 Village Organizations and 445 Cluster Level Federations have been promoted under ASRLMS since inception

ASRLM in a Nutshell	
➤ No. of Districts covered	: 33
➤ No. of Blocks covered	: 219
➤ No. of GPs and VDCs covered	: 2,656
➤ No. of Villages covered	: 24,280
➤ No. of HOUSE- holds covered	: 30,29,884
➤ No. of SHGs formed	: 2,83,790
➤ No. of VOs formed	: 16,544
➤ No of CLFs formed	: 445

Community Funds / Credit Linkages	
➤ Amount	: Rs. 176.59 Cr.
➤ Community Investment fund	: 92,669 SHGs
➤ Amount	: Rs. 464.52 Cr.
➤ Credit Linkage	: 1,16,911
➤ Amount of Loan Sanctioned	: Rs. 1122.70 Cr.
❖ SHG members covered under Insurances packages	
✓ Health	: 1.47 lakhs SHG members
✓ PMSBY	: 2.32 lakh SHG members
✓ PMJJBY	: 1.62 lakh SHG members
✓ APY	: 47471 SHG members

These Community Based Organization (SHGs, VOs and CLFs) are provided with various grants like, Revolving Fund (RF), Community Investment Fund (CIF), etc. An amount of Rs.15000/- per SHG is provided to the eligible SHGs as RF to inculcate the habit of thrift and accumulate their own funds towards meeting their credit needs in the long-run and immediate consumption needs in the short-run. Till March 2020, a total of **1,34,000 SHG** have been provided Revolving Fund amounting to a total of **Rs. 176.59 Cr.** Community Investment Fund of Rs. 50,000/-per SHG is also provided to the SHGs in order to facilitate them to initiate a sustainable livelihood practice. Till March 2020, a total of **92,669 SHGs** have been provided Community Investment Fund amounting to a total of **Rs. 464.52 Cr.**

Further, the SHGs promoted under ASRLM are also linked for Credit with various banks. Till March'2020, **1,16,911 SHGs** (Including repeat linkage) have availed loans from various banks, amounting to **Rs. 1122.7 Crs** since inception.

The SHG members are also covered under various Health and Life insurance Scheme. A total of **1.47 lakhs SHG members** are covered under Health Insurance Schemes, **2.32 lakh SHG members enrolled** under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and **1.62 lakh SHG members** are enrolled under the Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY). Under Atal Pension Yojana (APY) a total of **46,929 SHG members** have enrolled themselves till March 2020.

During FY 2014-15, Assam State Rural Livelihoods Mission (ASRLM) partnered with Kerala State Poverty Eradication Mission, Kudumbashree - NRO for implementing **PRI CBO (Panchayati Raj Institutions - Community Based Organisations)** Convergence Pilot Project in Assam in 36 GPs of two Blocks viz. Laharighat (Morigaon District) and Bajiagaon (Nagaon District). Subsequently, ASRLM scaled up the project to 4 new blocks i.e. Barhampur (Nagaon District), Laokhowa (Nagaon District), Dhekiajuli (Sonitpur District) and Borsala (Sonitpur District) at first phase from FY 2017-18 and then in second phase to 19 blocks across 11 Districts including Sixth scheduled District Karbi Anglong from FY 19-20 onwards. The main objective of the partnership between ASRLM and Kudumbashree NRO was to create a model for supporting both PRI and CBO networks for effective convergence leading to sustainable and better implementation of NRLM. In the long run, it is envisaged to result in the creation of a robust institutional structure of the poor that is closely linked to local governance and development.

B. National Rural Economic Transformation Project (NRETP)

The Union Cabinet had approved implementation of an Externally Aided Project namely "National Rural Economic Transformation Project (NRETP)" under the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) of Ministry of Rural Development, Govt of India through loan assistance from World Bank in the month of February 2019.

The project will support enterprise development programs for rural poor women by creating a platform to access finance including start-up financing options to build their individual or collectively owned and managed enterprise. The project will involve developing financial products using digital financial services to help small producer collectives scale up and engage with the market. Assam is one of the 13 states of the country where implementation of NRETP is going on since FY 2019-20. In Assam, the NRETP is being implemented in 20 Blocks of 5 Districts viz. Tinsukia, Dhemaji, Hailakandi, Nagaon and Udalguri.

Assam State Rural Livelihoods Mission (ASRLM) has taken up various initiatives and rolling out mechanism in the 20 selected blocks. Some of them are listed as follows:

1. Development of one Model Cluster Level Federation in each block.
2. Channelizing Community Funds, CBO Start-Up Funds, Credit Linkages and Insurance facilities with more emphasis
3. Additional Funding in terms of Viability Gap Fund (VGF)
4. Development of designated cadres like Business Development Service Provider (BDSP), Udyog Sakhi, Banking Correspondent Sakhi, Digipay Sakhi etc
5. Setting up One Stop Facility (OSF) Centers, Custom Hiring Centers (CHC), Community Managed Training Center (CMTC) etc.
6. Dual Authentication of CBO Saving Accounts
7. Promotion of Producer Groups, Producer Enterprises, Organic Clusters, Artisans Clusters etc.

C. Start-Up Village Entrepreneurship Programme (SVEP)

SVEP, the sub-scheme under the National Rural Livelihoods Mission (NRLM) has the objective of helping SHG and their family members to set-up small enterprises in the non-farm sector. The programme aims to develop an eco-system for entrepreneurship development in the identified blocks.

Under SVEP an eco-system for enterprise development are to be developed through:

- a) Community Enterprise Fund (CEF), a dedicated fund for providing loans to entrepreneurs.
- b) Business Support Services for enterprise development through identifying business ideas, preparation of business plans, accessing loans from banks, maintaining accounts and supporting in marketing etc.
- c) The services are provided through a cadre of Community Resource Persons-Enterprise Promotion (CRP-EP) in each block.
- d) Dedicated center called the Block Resource Centre (BRC) is set up for providing all information required for entrepreneurs

The project has been started in the month of July 2019 for a period of 4 years.

The project is being implemented in 3 blocks, viz Hajo (Kamrup District), Pub Mangaldai (Darrang District), & Sidli Chirang (Chirang District)

A total of 3624 enterprises will be supported under this project.

D. Kanaklata Mahila Sabalikiran Asoni (KAMS)

The Kanaklata Mahila Sabalikiran Asoni a flagship programme of the Govt of Assam announced in the Budget 2017-18 and launched on the 1st of April 2018. Initially an amount of Rs. 250 crores was earmarked under the Scheme. Under this scheme financial grant of Rs.25000/- as Revolving Fund are being provided to each women SHGs. However, Rs. 10,000/ to each eligible SHG are provided as additional Revolving fund to each women SHG which have already received Rs.15000/- as Revolving Fund under DAY-NRLM. Later, another amount of Rs.65 Cr. was granted under the scheme realizing the need of the rural masses and its successful implementation. Till march 2020, Rs.285.06 Cr. has been granted as Revolving Fund to 1,98,402 SHG under the Kankaklata Mahila Sabalikiran Asoni since its launch.

Kanaklata Mahila Sabalikiran Asoni (KAMS) in a Nutshell	
2018-19:	
2.1.0.	Rs.10,000 granted to 1,09,842 SHGs
2.1.1.	Rs. 25,000 granted to 43,604 SHGs
2.1.2.	Total 1,53,446 SHGs granted Amount of Rs. 218.85 Crore
2019-20:	
I.	Rs. 10,000 granted to 30,790 SHGs
II.	Rs. 25,000 granted to 14,166 SHGs
III.	Total 44,956 SHGs granted Amount of Rs. 66.21 Crore
Cumulative Total	
	1,98,402 SHGs have been granted an Amount 285.06 Crore

E: Deen Dayal Upadhyaya Grameen Kaushalya Yojana, (DDU-GKY)

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is a part of the National Rural Livelihood Mission (NRLM), tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth. DDU-GKY is uniquely focused on rural youth between the ages of 15 and 35 years from poor families. Vision of DDUGKY programme is "Transform rural poor youth into an economically independent and globally relevant workforce".

DDU-GKY in a Nutshell	
➤ Trained	: 51,492
➤ Job offered	: 44,031
➤ Placed	: 27,422

DDU-GKY programme is being implemented in Public Private Partnership (PPP) mode through various Project Implementing Agencies (PIAs). As on 31st March 2020, total **51,492** youth were trained and job offer was made to **44,031** youths. Amongst which, **27,422** youths have already completed minimum three months period in the provided jobs. Indicative trades where training is being offered are Basic Car Servicing,

Business Correspondent, BPO Voice/Non-Voice, Assistant Fashion Sales and Showroom Representative, Electrician Domestic, Food and Beverage Service-Steward, Sewing Machine Operator, Solar lighting technician, optical Fibertechnician etc.

F. RURAL SELF EMPLOYMENT TRAINING INSTITUTES (RSETIs)

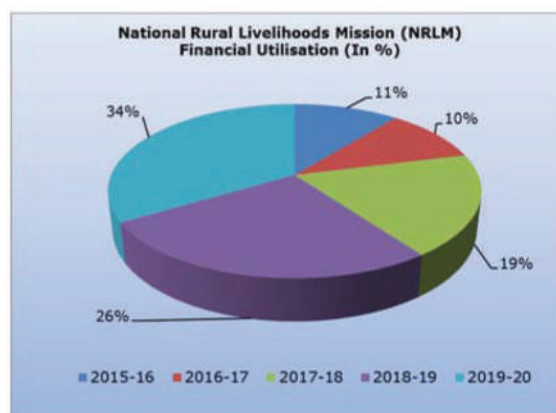
The primary focus of the programme is skill development and skill up-gradation for self-employment & entrepreneurship development. In Assam, ASRLM has been implementing RSETI (Rural Self Employment Training Institute) program with 100% financial assistance from MoRD, Govt. of India. RSETI programme was first rolled out in Assam in 2009-2010. As on 31st March, 2020, there are **26 RSETIs** operating in 26 districts of the State. Indicative trades where training are being offered are Homemade Agarbatti Maker, Dairy Farming, Vermi Compost Making, Paper Cover Envelope & File Making, Soft Toys Maker and Seller, Goat Rearing, Poultry, Mushroom Cultivation, Piggery, Bee Keeping etc. Till 31st March, 2020, 1,00,660 candidates have been trained out of which, **72,113** are Rural Poor trained under various skill development trades.

RSETI in a nutshell	
➤ No of RSETIS	: 26
➤ Total Trained	: 100660
➤ TOTAL RURAL POOR TRAINED	: 72113

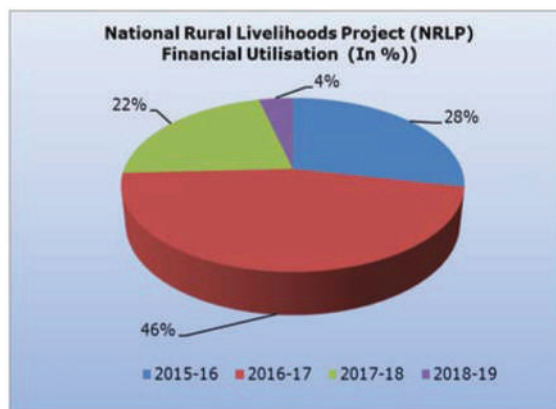
The programme is being sponsored through six Nationalized Banks in Assam as follows.

- 1) Assam Grameen Vikash Bank (Kamrup (M), Kamrup, Sonitpur, Jorhat & Bongaigaon),
- 2) Canara Bank (Nagaon),
- 3) Central Bank (Tinsukia),
- 4) State Bank of India (Dima Hasao, Baksa, Chirang, Udalguri, Diphu),
- 5) Punjab National Bank (Morigaon, Dibrugarh, Dhemaji, Lakhimpur, Cachar, Sivsagar, Karimganj & Golaghat)
- 6) UCO Bank (Goalpara, Kokrajhar, Barpeta, Darrang, Nalbari and Dhubri)

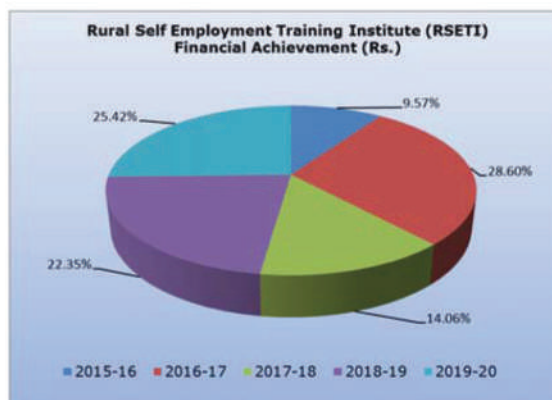
Year	Financial	
	Target (Rs.)	Utilisation (Rs.)
2015-16	1,23,42,75,692.00	81,39,60,716.00
2016-17	88,88,78,093.00	76,77,10,078.00
2017-18	1,56,31,24,865.92	1,42,37,02,226.02
2018-19	2,11,74,88,000.00	1,98,48,02,000.00
2019-20	-NA-	2,52,45,78,000.00



Year	Financial	
	Target (Rs.)	Utilisation (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
2018-19	3,92,37,000.00	3,64,67,000.00
2019-20	Project closed	Project closed



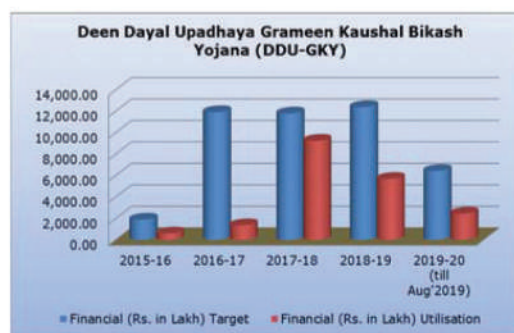
Year	Financial	
	Target (Rs)	Achievement (Rs)
2015-16	84,14,117.00	68,31,041.00
2016-17	2,09,43,076.00	2,04,05,842.00
2017-18	1,01,76,158.00	1,00,28,418.00
2018-19	3,61,27,000.00	1,59,47,000.00
2019-20	-NA-	1,81,37,000.00



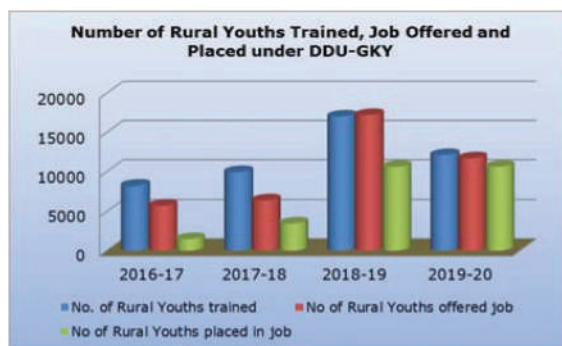
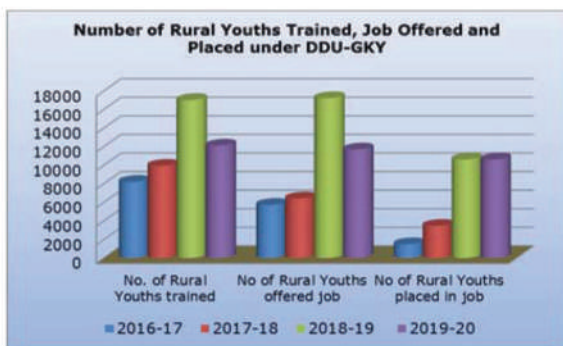
Shift of emphasis from training to career progression:

Incentives for job retention, career progression and foreign placements.

Year	Financial (In Rs.)	
	Target	Utilisation
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
2018-19	1,23,79,72,000.00	56,85,40,000.00
2019-20 (Till Aug'2019)	64,16,76,000.00	24,49,89,000.00



Sl No	Particulars	2016-17	2017-18	2018-19	2019-20
1	No. of Rural Youths trained	8200	9927	17011	12096
2	No of Rural Youths offered job	5718	6407	17202	11682
3	No of Rural Youths placed in job	1479	3464	10603	10611
4	Total Fund available (Rs. in Crore)	119.02	118.16	123.79	167.13
5	Total Fund utilised (Rs. in Crore)	13.63	92.37	56.85	101.13

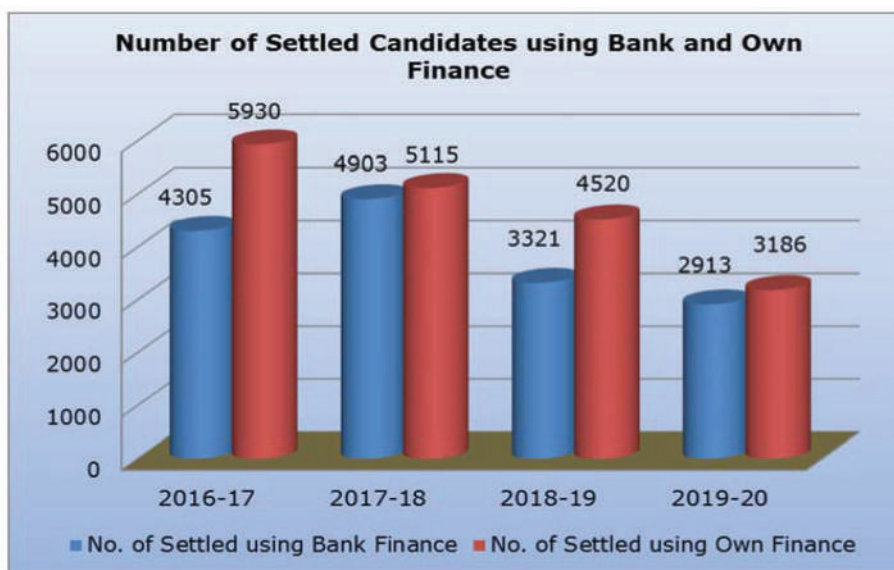


N. B: DDU-GKY does not have a yearly target. Instead it has total cumulative target of 1,29,392 youths which need to be trained and 70% of which need to be placed during the period of FY 2016-2022.

YEAR WISE PROGRESS OF ASRLM UNDER DDU-GKY:

Year wise Progress of ASRLM under RSETI					
Sl. No	Year	2016-17	2017-18	2018-19	2019-20
1	Total Trained Target	13604	13920	12880	12639
2	Total BPL Trained Target	9523	9744	9016	8847
3	Achievement of Total Trained	15057	14262	13087	11922
4	Achievement of BPL Trained	10798	8867	9552	9159
3	Achievement of Settled	10235	10018	7841	6099
3.1	No. of Settled using Bank Finance	4305	4903	3321	2913
3.2	No. of Settled using Own Finance	5930	5115	4520	3186

Source: RSETI MIS PORTAL



SKILL DEVELOPMENT TRAINING/STRENGTHENING OF EXTENSION TRAINING CENTRES PROGRAMME UNDER SIPRD:

The State Institute of Panchayat and Rural Development (SIPRD), Assam has been organising skill development training programmes on different activities for providing self employment avenues for unemployed youths, farmers, weavers, artisans and entrepreneurs as well as giving thrust for upgrading the skill of traditional activities for income generation and livelihood promotion. The government of India has been providing 100% grant for strengthening the infrastructure of SIPRD and state government also borne its share of 10% of total recurring grant. The SIPRD has two full-fledged campus in Guwahati one at Khanapara and another at Kahikuchi. 12 Extension Training Centres have been under SIPRD in different zones of the state. Satellite based training network has been established in Kahikuchi campus of SIPRD with 16 nos. of Satellite Interactive Terminals. Trainings have become more accessible to the grassroot level functionaries and other stakeholders through this satellite based training system of SIPRD in Assam. More over the Ministry of Panchayati Raj has sanctioned and released fund for setting up 11 nos. of District Panchayat Resource Centres (DPRC) in the district wherein SIPRD do not have any Extension Training Centre. 6 out of total 11 DPRCs have been completed so far. The institute has been making effort continuously for building the capacity of the officials, elected representatives of PRIs, officials of line department and other stakeholders on preparation of holistic gaon panchayat development plan. During the year 2019-20, the institute prepared a comprehensive Annual Training Action Plan to impart training to 533794 persons on different training programme covering various subject. In 2019-20 the institute organised 7331 courses and covered 356855 persons of different clientele groups on various subject.

ANNEXURE-18.01
DISTRICT WISE PHYSICAL ACHIEVEMENT UNDER MGNREGA
IN ASSAM DURING 2019-20

Sl. No.	District	Employment Generated (Mandays) [in Nos.]				
		SCs	STs	Others	Total	Women
1	2	3	4	5	6	7
1	Kokrajhar	27059	781880	1578693	2387632	1059210
2	Dhubri	23800	1120	3187367	3212287	1303076
3	Goalpara	26057	165956	533716	725729	327721
4	Barpeta	74115	45537	3252641	3372293	1332230
5	Morigaon	183530	164058	1549016	1896604	758298
6	Nagaon	181342	75130	3013271	3269743	1236181
7	Sonitpur	82052	142813	2466014	2690879	1146191
8	Lakhimpur	202887	1355503	3440786	4999176	2470393
9	Dhemaji	78935	1329346	1343514	2751795	1358983
10	Tinsukia	11687	63293	800519	875499	382442
11	Dibrugarh	60321	200215	1421265	1681801	821730
12	Sivasagar	22802	31070	567967	621839	278055
13	Jorhat	51767	89504	804300	945571	430565
14	Golaghat	65570	178239	1272582	1516391	647018
15	Dima Hasao	3290	270980	18725	292995	108081
16	Cachar	279234	42672	4046662	4368568	1178993
17	Karimganj	229096	16638	2441755	2687489	908501
18	Hailakandi	78769	18653	764637	862059	200655
19	Bongaigaon	37883	8459	721219	767561	304315
20	Chirang	119982	1142821	1097822	2360625	1121952
21	Kamrup (R)	142791	175830	1994020	2312641	856878
22	Kamrup (M)	43125	29696	68188	141009	60782
23	Nalbari	52524	31539	2630837	2714900	1018814
24	BAKSA	163018	903678	1370966	2437662	1204501
25	Darrang	32503	3934	1152173	1188610	520413
26	Udalguri	162003	1618762	2021427	3802192	1713201
27	Biswanath	83665	263929	1010288	1357882	612954
28	Majuli	124075	412380	503278	1039733	411666
29	Charaideo	3742	6954	266095	276791	124108
30	Karbi Anglong	57821	1360544	210616	1628981	786964
31	South Salmara	16583	991	1080919	1098493	558058
32	Hojai	224148	51397	1821710	2097255	813352
	Assam	2946176	10983521	48452988	62382685	26056281

Note: In NREGASoft, the category-wise (SCs, STs, Others) Nos. of persondays generated by Men and Women separately is not available.

Source: Office of the Commissionerate of Panchayat and Rural Development, Assam.

ANNEXURE-18.02
DISTRICT WISE JOB CARDS ISSUED AND EMPLOYMENT
PROVIDED IN ASSAM DURING 2019-20

Sl. No.	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	7
1	Kokrajhar	176577	66994	62197	792	305
2	Dhubri	196010	91130	79904	1014	179
3	Goalpara	141782	37569	31911	119	101
4	Barpeta	289452	109156	98353	1172	2181
5	Morigaon	167904	77062	69224	102	108
6	Nagaon	226394	112978	103036	1303	59
7	Sonitpur	168494	88222	77950	713	69
8	Lakhimpur	207404	113450	106396	10563	222
9	Dhemaji	133994	84851	76327	875	198
10	Tinsukia	167648	52545	44800	224	50
11	Dibrugarh	181378	92797	81973	436	183
12	Sivasagar	103473	38843	33972	121	76
13	Jorhat	142985	52151	43878	122	55
14	Golaghat	169835	77968	71193	515	83
15	Dima Hasao	30640	13450	11235	8	10
16	Cachar	248293	128711	110951	1021	91
17	Karimganj	192690	101014	89151	762	84
18	Hailakandi	121507	43129	35504	78	34
19	Bongaigaon	113077	35489	31506	335	41
20	Chirang	106060	59106	56312	2080	35
21	Kamrup (R)	44308	88599	77703	961	83
22	Kamrup (M)	262367	5052	4262	0	2
23	Nalbari	137200	70484	64494	2118	40
24	Baksa	215931	99903	91868	330	150
25	Darrang	157212	45976	37110	364	66
26	Udalguri	165878	104288	97344	1307	181
27	Biswanath	135702	55690	50438	214	537
28	Majuli	36681	27217	24409	1181	20
29	Charaideo	64847	18669	16164	50	33
30	Karbi Anglong	143291	74920	68880	99	55
31	South Salmara	59668	34831	32255	500	18
32	Hojai	102455	56929	49719	574	129
	Assam	4811137	2159173	1930419	30053	5478

ANNEXURE-18.03

**DISTRICT WISE TARGET AND PHYSICAL ACHIEVEMENT
UNDER PMAY-G ASSAM, 2019-20 (Report as on 15 Dec'2020)**

Sl. No.	District	Annual Target (No. of houses)	House Completed against Target	Under Construction (Sanctioned before 2019-20)	% of achievement against target
1	2	3	4	5	6
1	Kokrajhar	9791	4331	7964	44%
2	Dhubri	12089	4875	10231	40%
3	Goalpara	6926	3165	5431	46%
4	Barpeta	11181	5540	11109	50%
5	Morigaon	6953	3668	6283	53%
6	Nagaon	20667	12107	18218	59%
7	Sonitpur	11411	6327	9605	55%
8	Lakhimpur	7731	5644	7395	73%
9	Dhemaji	6487	4862	6394	75%
10	Tinsukia	15353	8591	12041	56%
11	Dibrugarh	13627	9430	11949	69%
12	Sivasagar	3107	2088	2722	67%
13	Jorhat	2943	2202	2853	75%
14	Golaghat	10595	7157	10421	68%
15	Dima Hasao	1571	433	683	28%
16	Cachar	13875	7928	11455	57%
17	Karimganj	12422	7047	8970	57%
18	Hailakandi	3718	1619	2514	44%
19	Bongaigaon	3105	2068	2675	67%
20	Chirang	3400	2358	3276	69%
21	Kamrup (R)	10257	8274	9266	81%
22	Kamrup (M)	1077	689	798	64%
23	Nalbari	4017	3065	3944	76%
24	Baksa	11760	5678	10180	48%
25	Darrang	9970	4813	7001	48%
26	Udalguri	6688	2952	5246	44%
27	Biswanath	5966	2715	4573	46%
28	Majuli	663	639	663	96%
29	Charaideo	5854	3588	5400	61%
30	Karbi Anglong	8058	2808	5631	35%
31	South Salmara	3362	813	2800	24%
32	Hojai	11419	4308	7988	38%
Assam		256043	141782	215679	55%

Source: Office of the Commissionerate of Panchayat and Rural Development, Assam

ANNEXURE-18.04

DISTRICT WISE PHYSICAL ACHIEVEMENTS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM DURING 2019-20

(Rs. in Lakh)

Sl. No.	District	Indira Gandhi National Old Age Pension Scheme	Indira Gandhi National Widow Pension Scheme	Indira Gandhi National Disability Pension Scheme
1	2	3	4	5
1	Kokrajhar	26910	3926	1452
2	Dhubri	26347	7664	2086
3	Goalpara	22170	4691	1344
4	Barpeta	19414	5099	1176
5	Morigaon	28315	4552	1563
6	Nagaon	56132	6441	2488
7	Sonitpur	27518	4361	1540
8	Lakhimpur	26984	4148	1568
9	Dhemaji	17185	2353	837
10	Tinsukia	25488	4519	1646
11	Dibrugarh	23714	3436	248
12	Sivasagar	21160	4281	1352
13	Jorhat	31720	2255	700
14	Golaghat	22353	3413	1287
15	Dima Hasao	4417	279	104
16	Cachar	30120	6131	2245
17	Karimganj	20942	5489	1755
18	Hailakandi	18413	2290	923
19	Bongaigaon	14101	2641	702
20	Chirang	8061	2031	617
21	Kamrup (R)	55672	4594	871
22	Kamrup (M)	8074	740	111
23	Nalbari	32687	3184	701
24	Baksa	25644	3984	1352
25	Darrang	17922	3172	1115
26	Udalguri	15825	5168	1477
27	Biswanath	25789	2353	913
28	Majuli	7582	458	254
29	Charaideo	10073	1902	577
30	Karbi Anglong	9133	2368	621
31	South Salmara	7226	2187	608
32	Hojai	21471	2167	712
Assam		708562	112277	34945

Source: Office of the Commissionerate of Panchayat and Rural Development, Assam

ANNEXURE-18.05

DISTRICT WISE FINANCIAL ACHIEVEMENTS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM DURING 2019-20

(Rs. in Lakh)

Sl. No.	District	Indira Gandhi National Old Age Pension Scheme	Indira Gandhi National Widow Pension Scheme	Indira Gandhi National Disability Pension Scheme
1	2	3	4	5
1	Kokrajhar	876.15	141.14	52.72
2	Dhubri	964.95	274.13	75.5
3	Goalpara	839.14	167.6	48.86
4	Barpeta	806.77	189.98	46.1
5	Morigaon	1047	163.28	56.71
6	Nagaon	2681.1	245.09	101.77
7	Sonitpur	1099.26	162.65	58.75
8	Lakhimpur	1054.88	150.31	57.84
9	Dhemaji	718.86	84.7	30.33
10	Tinsukia	1086.51	162.68	60.04
11	Dibrugarh	747.43	123.77	8.98
12	Sivasagar	788.98	159.65	50.89
13	Jorhat	1061.19	82.85	26.26
14	Golaghat	745.76	122.09	46.62
15	Dima Hasao	141.23	10.17	3.81
16	Cachar	1202.01	219.52	82.17
17	Karimganj	903.82	200.07	64
18	Hailakandi	746.44	84.02	33.54
19	Bongaigaon	487.43	94.16	25.93
20	Chirang	293.34	72.43	22.63
21	Kamrup (R)	2400.21	166.98	31.97
22	Kamrup (M)	330.37	26.67	4.01
23	Nalbari	1066.16	114.27	25.39
24	Baksa	964.58	149.13	54.53
25	Darrang	667.58	116.45	41.32
26	Udalguri	560.11	187.85	54.11
27	Biswanath	834.64	77.63	30.26
28	Majuli	236.86	15.03	8.39
29	Charaideo	334.15	62.73	19.11
30	Karbi Anglong	378.49	91.17	23.13
31	South Salmara	563.16	172.75	45.13
32	Hojai	885.45	74.48	25.39
	Assam	27514	4165.46	1316.18

Source: Office of the Commissionerate of Panchayat and Rural Development, Assam

CHAPTER-XIX

SOCIAL SECTOR

Social Sector Development is one of the most rewarding investments available to promote national development. With this view, the State Government has been making all possible efforts to develop social sector in the state, according to desired priorities. Development of social activities like education, health, family welfare, safe drinking water, sanitation, welfare programme for women, children, SC & ST sub sectors, development of marginalized groups and backward regions etc. have assumed fairly important. The Government is committed towards overall development of all sections of society.

EDUCATION:

Education is one of the key inputs for balanced social & economic development. Education empowers people with skills & knowledge which ultimately help to boost economic growth. A number of schemes have been initiated by the Government for encouraging development of education among various sections of the population in the State. Development in these sectors can build up strong edifice of a stimulating economy in terms of rising income and employment opportunities, productivity, technology advancement and finally enhanced quality of life in the State. Education may be both formal and informal. Formal education consist of Pre-school, Primary, Upper Primary, Secondary to Senior Secondary, Technical or non-technical or may be Vocational in form.

PRIMARY & UPPER PRIMARY EDUCATION:

In Assam, the number of Government/Provincialised under department of Elementary in Lower Primary schools is 36210 of which 35053 are in rural areas and 1157 are in urban areas. Likewise, the total number of Upper Primary schools is 5718 of which 5402 are in rural areas while 316 are in urban areas, as per DISE 2019-20.

DROP-OUT RATE:

As per, DISE 2019-20, the average annual Drop-out Rate in Lower Primary in the State during 2019-20 is 4.3 while this rate was 3.1 percent in 2018-19 and 5.60 percent in 2016-17. Likewise in the Upper Primary level, the drop-out rate is 3.4 during the year against 1.9 percent in 2018-19 and 2.51% in 2016-17 respectively. The drop-out rate among the districts, Dima Hasao registered highest of 7.8 percent followed by South Salmara 7.7 and Karbi Anglong 7.7 in Lower Primary level while lowest is in Majuli. Similarly, in the upper Primary Level, this rate is highest in South Salmara (10.4) and the lowest is Kamrup Metro (-2.6) followed by Biswanath (-0.1), Majuli (-0.5) during the period. The Transition Rate from primary to upper primary in the state is 99.4

PUPIL-TEACHER RATIO:

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 Lower Primary level of the State during the year 2019-20 has been remain the same at 22 as it was during 2018-19. Similarly, in the Upper Primary level the PTR during the period has dropped to 20 against 21 in 2018-19. The graph below shows the PTR of Lower Primary and Upper Primary in the State during 2019-20 and 2018-19, as per U-DISE 2019-20.

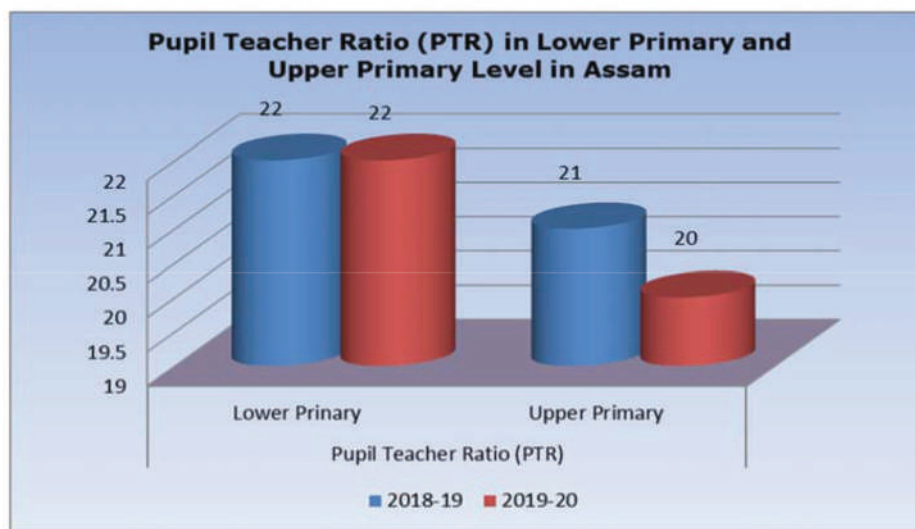


FIG.-1

SOURCE: U-DISE 2019-20

GROSS ENROLMENT RATIO (GER):

Gross Enrolment Ratio or Gross Enrolment Index is a 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).

TABLE - 19.1

Category	2017-18		2018-19	
	Assam	India	Assam	India
1. Elementary Schools (Class I-VIII)	101.4	93	104.5	96.1
2. Secondary Schools (Class IX-X)	78.4	79.4	72.8	76.9
3. Sr.Secondary School (Class XI-XII)	38.9	56.5	30.9	50.1
4. Higher Education (18-23yr age group)	18.7	26.3	18.7	26.3

Source: Economic Survey-2020-21

The above table shows that the Gross Enrolment Ratio at Elementary schools (Class I-VIII) during 2017-18 was 101.4 while it is 104.5 during 2018-19 showing significant rise in Assam. In Secondary School (Class IX-X) the GER during 2017-18 was 78.4 percent while in 2018-19 it dropped to 72.8. Likewise, the Gross Enrolment Ratio at Sr.Secondary School during 2017-18 was 38.9 and decreased to 30.9 percent during 2018-19, as per Economic Survey report, 2020-21.

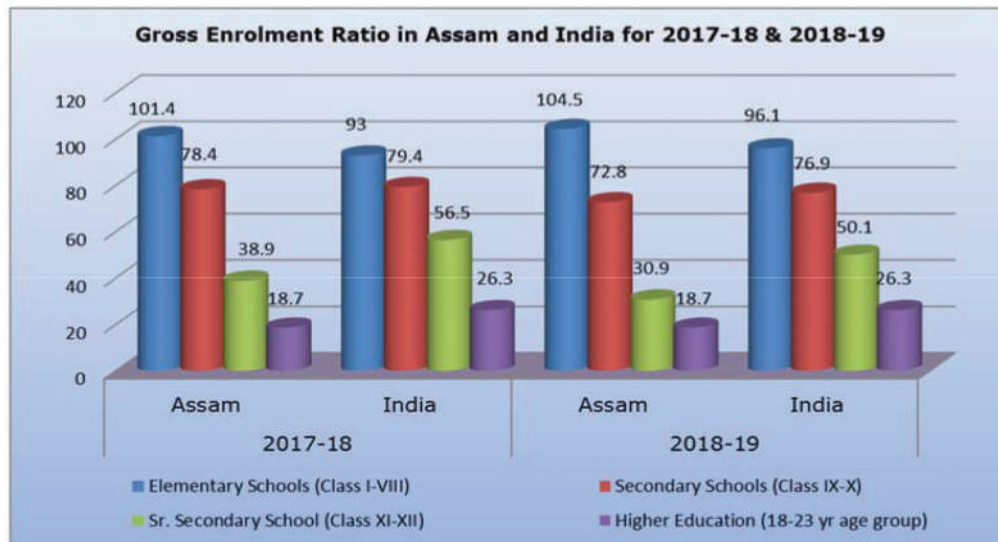


Fig-2

SAMAGRA SHIKSHA ABHIYAN:

The Union Budget, 2018-19, has proposed to treat school education holistically without segmentation from pre-nursery to Class 12. Samagra Shiksha - an overarching programme for the school education sector extending from pre-school to class 12 has been, therefore, prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes. It subsumes the three Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE). As per report available,

SECONDARY EDUCATION:

Secondary education plays a fundamental but complex role in preparing young people for the labour market, especially for people who leave secondary education for a job. 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 2019-20, there were 3479 numbers of Secondary Schools and 834 numbers of Higher Secondary Schools (both Govt. and provincialized) with a total of 4313 schools and 251 numbers are Junior Colleges, 97 Sanskrit and Pali Tools (Prov.)133 Senior Madrassa,250 Pre-senior Madrassa ,13 Title Madrassa,4 Arabic College as per the latest data available 2019-20

In the High School Leaving Certificate (HSLC) examination held during the year 2020, the number of students appeared was 342224 of which 221756 passed with 64.80 percent.Out of which 48278 got first division, 77850 stood second division and 221756 got third division.The percentage of male and female passed was 62.91 and 66.93 respectively which shows a better female percentage than male. Likewise in the High Madrassa students appeared were 9347 of which the number of passed was 5951(63.67%).The pass percentage of male was 65.25 and female was

62.62. Similarly, in the Higher Secondary examination held during 2020 in Arts stream, the number of candidates appeared was 168367 of which the number of passed was 131794 (including Institutional private and Non-institutional private). The pass out percentage was 78.28 which is higher than 2019 (75.14%) and 2018 (74.68%). In Commerce Stream also the total candidates appeared was 17713 of which pass out number was 15619 (88.18%) showing an upward trend than the previous year. In Science stream, out of 39574 appeared, the 88.06% passout with 486 were 1st Rank holder.

The table 19.2 below shows the facilities in the Higher Secondary Schools as per DISE 2019-20

TABLE - 19.2
GOVERNMENT/PROVINCIALISED HIGH AND
HIGHER SECONDARY SCHOOLS HAVING FACILITIES

Facilities	2019-20
Number of schools)	4313
Available Drinking Water	4450
Boundary Wall /Fencing	1198
Available Girls Toilet	6254
Computer Lab	2740
Ramps	3081
Playground	3442
Library	3054
Electricity connection	4337

Source: U-DISE-2019-20.

HIGHER EDUCATION:

The Directorate of Higher Education and Directorate of Secondary Education was 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 of educational institutions in general with special focus to rural and backward areas. The numbers of Higher Educational institutions in Assam is given in Table-19.3 below:

Table – 19.3
NUMBER OF HIGHER EDUCATIONAL INSTITUTIONS
IN ASSAM AS ON 2019-20

Institutions	Numbers
Universities (including private and Deemed University)	18
Government Colleges	4
Provincialised Colleges	292
Private Colleges	67
Govt.Model College	11
Govt.Law College	1
Non-Government Law College	25
Literary & Voluntary Organization	25

Source : Directorate of Higher Education, Assam.

STEPS TO BOOST HIGHER EDUCATION DEPARTMENT IN THE STATE

- I.** Govt. of Assam has taken various initiatives under the Pragyan Bharati Scheme like free waiver, Subsidy on mess dues for hostel boarders, free textbooks etc. Rs. 3.02 crore released for Girls' Common Room facilities to 302 numbers of Government & Provincialised colleges @ Rs.1 lakh each. Additionally, Students excursion grants to 302 colleges @ Rs.1 lakh each and the will continued in 2020-21.
- II.** Scholarship for Minority Girl Students within 2020-21 and an expected 8000 students will benefit from this.
- III.** Rs. 5 crore has been earmarked for the establishment of Srimanta Sankardeva Chair in leading University in the country.
- IV.** Government is also committed to provide infrastructure development grants to the existing State Universities and newly established universities, Government and Provincialised colleges. With this vision an amount of Rs. 2512 crore has been allocated for higher education for the year 2020-21 (Source: Budget Speech-2020-21)
- V.** A number of ten (10) new Government Law Colleges has been established in Dhubri, Nalbari, Rangia, Nagaon, Diphu, Jorhat, Dibrugarh, Tezpur, Silchar and North Lakhimpur.
- VI.** A number of ten (10) new B.Ed. colleges will be established at Karbi Anglong (West), Bongaigaon, Baksa, Nalbari, Kamrup, Morigaon, Dima Hasao, Sivsagar, Biswanath and North Lakhimpur

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 government of Assam proposes to establish

three new medical colleges in Charaideo, Goalpara and Biswanath. North Lakhimpur Medical College will be operationalizing soon. The construction work of Dhubri and Nagoan Medical College will be completed in the FY 2021-22. The medical colleges under construction in Kokrajhar, Tinsukia and Nalbari will also be completed in the FY2021-22. Efforts are on to select a suitable site for Karimganj Medical College is also underway. Seats in medical education are also in a rising trend. The new AIIMS being established near Guwahati with the active support of the Government of India, will start its operations from 2020-21 giving an impetus to the medical education in Assam. The table below shows that in nine (9) numbers of educational institutions under the Directorate of Medical education in Assam the total enrolment is 1076 of which 379 are female and total number of teachers was 1651 in 2019. However, information about Diphu Medical College is not available which have started last year.

TABLE - 19.4
DIRECTOR OF MEDICAL EDUCATION ASSAM 2019

Sl. No.	Institution	No. of Institution	Intake Capacity (MBBS/ BDS)	Enrolment		No. of Teachers	
				Female	Total	Female	Total
1	2	3	4	5	6	7	8
1	Gauhati Medical College, Guwahati	1	200	60	200	184	468
2	Assam Medical College, Dibrugarh	1	200	70	200	136	359
3	Silchar Medical College, Silchar	1	125	30	123	55	290
4	Jorhat Medical College, Jorhat	1	125	50	125	59	162
5	F.A.A. Medical College, Barpeta	1	125	40	125	46	152
6	Tezpur Medical College, Tezpur	1	125	45	125	61	168
7	Regional Dental College, Guwahati	1	50	30	50	18	41
8	Government Dental College, Dibrugarh	1	63	28	63	2	6
9	Government Dental College, Silchar	1	63	26	63	2	5

Source: Director of Medical Education.

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.

National Health Mission (NHM)

Government of India launched the National Health Mission (NHM) to carry out necessary architectural correction 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 National Health Mission (NHM) for child and mothers health.

The National Health Mission encompasses its two Sub- Missions, The Nation Rural Health Mission and the National Urban Health Mission. The main Programmatic components include health systems strengthening in rural and urban areas, Reproductive –Maternal- Neonatal Child and Adolescent health and communicable and non-communicable diseases. The core public health mandate of the National Health Mission is to provide equitable, affordable and quality health care services to the people of Assam.

The State Government along with National Health Mission has taken up schemes to strengthen existing health facilities and also to build new public health infrastructure in Rural, Hilly, Char, Tribal and Tea Garden areas to reduce Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and Crude Birth Rate (CBR) in the state.

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 + MMCH (Annex Building of GMCH), 3 Tuberculosis Hospital, 3 Leprosy Hospital, 1 Cancer Hospital, 14 Sub-Divisional Civil Hospitals, 946 Rural and 56 Urban PHCs, 74 FRUs, 178 CHCs, 268 State Dispensaries and 4644 Sub Centers, 130 Mobile Medical Unit (80 for tea Gardens and 50 for Non-Tea Gardens, 15 Boat Clinic with 18886 numbers of total beds in the State at the end of 2018.
- 3Nos. of Nursing Colleges at Guwahati, Dibrugarh and Silchar with 6Nos. Of Para-medical institutions and 3 Dental Colleges as on December,2020
- Referral Hospitals inside the state is 7 and outside the state are 31.

HEALTH INDICATORS IN ASSAM, 2019:

The health indicators released by Registrar General of India (RGI) shows that the Under Five Mortality rate in Assam is still 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

HEALTH INDICATORS IN ASSAM, 2020:

The health indicators released by Registrar General of India (RGI) shows that the under the Five Year Mortality Rate in Assam is still high than the all India rate. The neo natal mortality is also higher that that of India. The table shows a comparison of some health indicators of Assam and India.

Table – 19.5**TRENDS IN SELECTED HEALTH INDICATORS: 2019**

Activity	Total		Rural		Urban	
	Assam	India	Assam	India	Assam	India
Crude Birth Rate (CBR)	21.1	20	22.2	21.6	14.6	16.7
Crude Death Rate (CDR)	6.4	6.2	6.6	6.7	5.1	5.1
Infant Mortality Rate. (IMR)	41	32	44	36	20	23
Neo-Natal mortality rate	39	21.7	42	42.5	22	28.5
Under 5 (Five) mortality rate	78	42.2	84	82	42	52

Source: SRS Bulletin, 2018 & NFHS 2019-20 Annual Health Survey 2010-11

Table -19.6**INFANT MORTALITY RATE BY SEX AND RESIDENCE, 2018**

Country / state	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
INDIA	32	32	33	36	36	36	23	22	23
ASSAM	41	40	44	44	42	46	20	20	21

Source: SRS Bulletin, May 2018

The graph below shows that by sex the female Infant Mortality Rate in all India and State of Assam(44) is higher than male Infant Mortality Rate. By residence, the data also reveals that in Rural areas the Infant Mortality Rate is higher (44) than Infant Mortality Rate in urban (20)

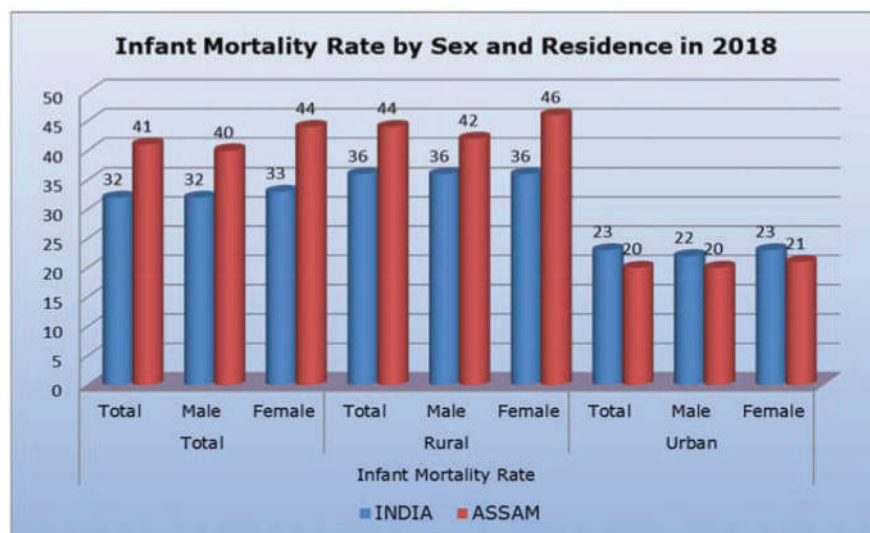


Fig-3

Source: NFHS-5

The Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) of Assam since last four years are given below No.19.7

Table – 19.7

**Crude Birth Rate (CBR), Crude Death Rate (CDR),
Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) of Assam**

Year	Crude Birth Rate	Crude Death Rate	Infant Mortality Rate	Total Fertility Rate
2015	22.0	7.1	47	2.3
2016	21.7	6.7	44	2.3
2017	21.2	6.5	44	2.3
2018	21.1	6.4	41	1.9

In 2018, the birth rate for Assam was 21.1 births per 1000 inhabitants. Birth Rate in Assam fell gradually from 22 births per 1000 inhabitants in 2015. Similarly, Crude Death Rate also showing a declining trend from 7.1 in 2015 to 6.4 deaths per 1000 inhabitants in 2018. Likewise, Infant Mortality Rate of the state is falling significantly due to various health related measures taken up by Government of Assam. The IMR of the state in 2018 is 41 deaths per 1000 live births while it was 76 in 1999 and 47 in 2015. In India, IMR in 2018 is 28.3 deaths per 1000 live births. Madhya Pradesh registered the highest 48 and Kerala has lowest 7 deaths per 1000 live births. The graph shows below reveals the trend of Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) in Assam since 2015 to 2018.

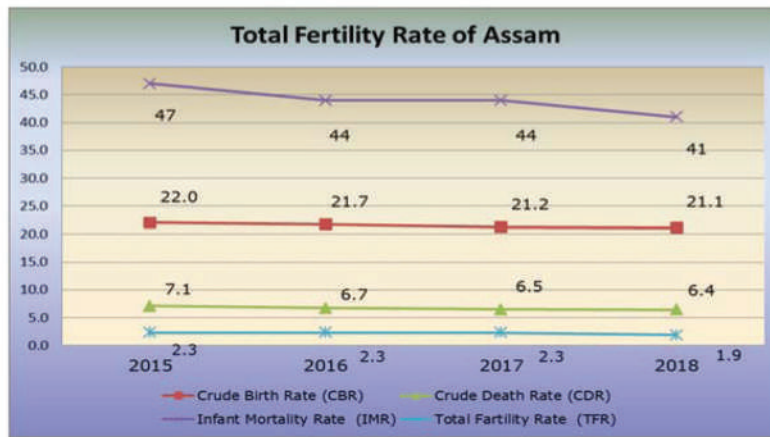


FIG-4

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. According to the latest data published in 2020 life Expectancy in India is: Male 67.4, Female 70.3 and total Life Expectancy is 69.42 which gives India a World Life Expectancy ranking of 125.

The data available from Sample Registration Survey (SRS), 2010-14 that Kerala has the highest life expectancy at birth (74.2) and lowest in Assam (61.9). Among the countries in the world, the highest life expectancy is HongKong ranked first with 85.29 years followed by Japan with 85.03 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 2016-18 is presented through the graph given below.

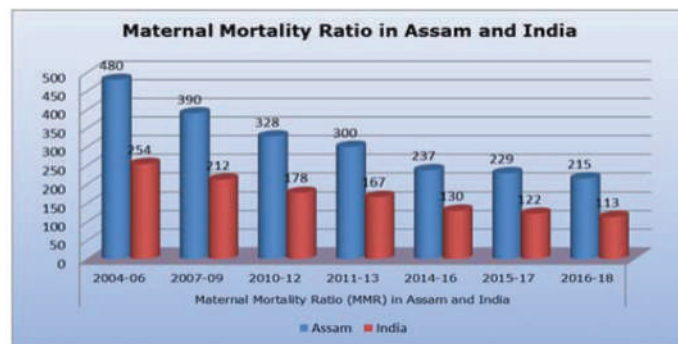


Fig-5

Source: SRS Bulletin, Registrar General of India & NITI Aayog.2020

The above graph depicts that there is an overall decline of the Maternal Mortality Rate (MMR) during the period from 2004 to 2018. 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. During 2016-18, the MMR of the state is 215, while it was 229 during 2015-17. 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, 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.

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, the number of institutional deliveries in Assam increased by 68 percent and is on an increasing trend, resulting in a decline of MMR due to various interventions like Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSY), and Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) etc. Institutional delivery in the state has improved by 19.12%. During NFHS-4, it was 70.6, while in NFHS-5, it is 84.1. Likewise, institutional births in public facilities have also improved significantly by 24.0%. During NFHS-4, it was 60, while in NFHS-5, it rose to 74.4. Similarly, births in public facilities delivered by caesarean section (5) also improved by 17.83%. During NFHS-4, it was 12.9, while in NFHS-5, it rose to 15.2, since 2015-16 to 2019-20. The graph below shows the trend of institutional delivery in Assam.

Institutional Delivery in Assam, since 2015-16 to 2019-20

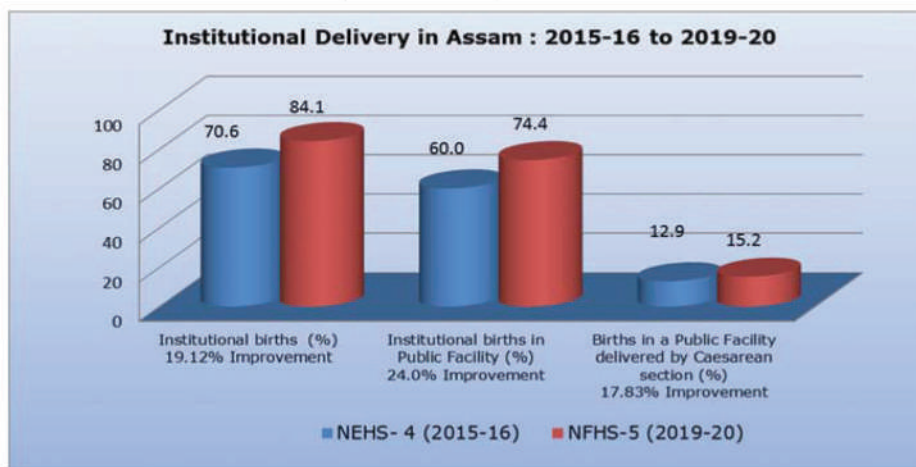


Fig-6

Source: NFHS-5 Report, 2019-20

SOME IMPORTANT GOVERNMENT SCHEMES:**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 53.40 lakhs mothers have got benefitted in the State from 2005-06 to November'2020.

i. Benefit to mother for delivery in Government and Accredited Hospitals

- Rs. 1400.00 is for women from Rural Area
- Rs. 1000.00 is for women from Urban Area

ii. Rs. 500.00 for Home Delivery for BPL Women (Benefit to mother)

2. SNEHA SPARSHA:

Sneha Sparsha, literally meaning the 'touch of love', is the recent unique Health Care Initiative for Children below 12 years of age for the APL and BPL families with annuan income less than Rs 2.50 lakh that aims at bearing expenditure of very high – end specialized treatment of 10 numbers of earmarked disesses launched by the Department of Health & Family Welfare, Government of Assam on 7th June, 2013. Till 30th November, 2020 the number of beneficiaries is 539.

Table-19.8
NUMBER OF BENEFICIARIES UNDER "SNEHASPASHA"
DURING 2013-14 TO 2020-2021

Sl. No	Year	No. of Beneficiaries under SNEHA SPARSHA
1	2013-14	50
2	2014-15	56
3	2015-16	61
4	2016-17	75
5	2017-18	98
6	2018-19	127
7	2019-20	66
8	2020-21 (Apr-Nov)	6
TOTAL		539

Source: NHM Report Assam, 2020

3. 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, neo natal disease and burn covering individuals in BPL and APL families upto an annual income of Rs. 5 lakhs. This is a completely cashless programme . Presently six more "diseases and scenarios" have been added to the extended Atal Amrit Abhiyan. These are ICU packages, trauma, critical care paediatrics and paediatric surgery, bone marrow transplantation, Japanese Encephalitis (JE) and Acute Encephalitis Syndrome. So far total 27,424 cancer patients followed by 20263 nos. of kidney patients and 6470 nos. of heart patients have been benefited from this scheme .

4. WAGE COMPENSATION SCHEME FOR PREGNANT WOMEN OF TEA GARDEN AREAS :

On 1st October 2018 , Govt. has started another new scheme for pregnant women of tea garden areas. Wage Compensation Scheme for Pregnant Women of tea garden areas of Assam taken up under state health budget for better health and nutrition by providing Rs. 12000.00 to each pregnant women of tea garden areas so that she can better look after herself and her un-born baby without compromising the livelihood of her family. Total 39108 pregnant women have been benefited with Rs 3074.19 Lakhs transferred to the bank account of pregnant women till date.

5. 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, Garmur (Majuli) and one new District Hospital at Hojai has been approved. Further, a total of 128 Model Hospitals have been approved to be set up across the state; out of these, construction of 97 has been completed. Besides, altogether more than 62 Model Hospitals have been made functional with OPD, Delivery and Laboratory facilities.

6. Providing Comprehensive primary healthcare to tea garden population through dedicated Mobile Medical Units (MMUs):

Government of Assam 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 (MMU) services in the state on 20th 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 445 tea garden labourers will improve drastically which will also contribute to the reduction of Maternal and Infant Mortality in the state.

Table –19.9
PERFORMANCE OF MMUS
From 20th June, 2017 to 30th November 2020

Sl No.	Item	Performance till 30 th November 2020
1	No. of camp held	110141
2	No of patient treated	5216010

Source: NHM Report 2019

7. 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:

- i) Ensure the availability of a minimum set of diagnosis appropriate to his 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 11th 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, exists for monitoring of the performance of PPP service provider.

Number of patients availed services under this scheme till 30th November, 2020

- X-Ray services = 1431185
- CT-Scan Services =502565
- Laboratory services =3372064

8. Free Drugs Services:

The Government of Assam has taken various initiatives for procurement of quality drugs. The essential drug are procured in Generic 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 numbers of free drugs has been significantly increased from 238 to 848 to treat communicable and non communicable diseases along with super-speciality diseases like

Cancer, Nephro, Hemophilia, Thelessemia etc. "Assam Medical Service Corporation Limited" (AMSCL) is incorporated on 2016, as the central procurement agency of the state. For transparent for procurement of drugs a scientific e-tendering system has been adopted by the Govt.

9. Accredited Social Health Activist (ASHA):

ASHAs form the backbone of NHM programme Approximately 31955 ASHAs (Rural ASHA=30,619 and Urban ASHA=1336) 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.

10. Referral Transport services:

In the changing life styles, an integration of multiple services to provide quick and comprehensive emergency response is required. Further, with increase in the number of road traffic accidents, high rate of birth related emergencies, bomb blast and other calamities demand a centralized emergency management system. Although there are referral transports available in the health facility but their services always do not address all the medical emergencies and cater very few of the rural population. Looking at the demand for comprehensive emergency system Govt. of Assam has entered into a MoU with the GVK-EMRI, Hyderabad on 8th July, 2008. The 108 Mrityunjay Emergency Response Services was formally inaugurated on 6th November, 2008 at Guwahati. The objective of the partnership is to improve access of the general public to services like Medical, Police and Fire. There are in total 695 ambulances covering all districts by 108 Mrityunjay Emergency Services. This Service has also 7 Boat Ambulances equipped with emergency medicines to respond to medical emergencies in riverine areas and during floods is one of the most unique approaches to improve response efficiency in the region along with 235 numbers of Adarani Drop Back Services. Total number of beneficiaries served by 108 is 4298000 and Adarani services is 1976656 since inception to till November, 2020.

11. Susrusha:

A total 386 patients who have undergone kidney transplantation have received the financial benefit under this scheme during August 2010 to March, 2019. Under Susrusha, an amount of Rs.1.00 lakh is granted as financial assistance to people who have undergone kidney transplantation after 1st April 2010

12. 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 75, 86,975 patients visited Sanjeevani since 1st March 2011 to 31st March 2019.

13. Janani Shishu Suraksha Karyakram (JSSK):

Government of Assam has launched Janani Shishu Suraksha Karyakram (JSSK) on 1st June, 2011, which entitles all pregnant women delivering in public health

institutions to absolutely free and no expense delivery including Caesarean section. The initiative stipulates free drugs, diagnostics, blood and diet, besides free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborns accessing public health institutions for treatment upto 1 year after birth.

i) Free Operation for Children Having Congenital Heart Disease :

Govt of Assam has initiated a scheme for free treatment of children with congenital heart defects in Narayana Hridayalay Hospital Bangluru, Kolkata and Guwahati. According to the scheme, the Govt. bears all medical expense; to and fro fare for the Patient and a guardian and other expenses during treatment for the patient. A total of 8020 operations has been conducted till 17th December, 2020 since inception

The following table -19.10 depicts the services under the scheme till December, 2020

Table-19.10
Free Operation for Children Having Congenital Heart Disease,
During 2010-11 to 20-21

Sl. No.	Year	Number
1	2010-11	364
2	2011-12	436
3	2012-13	381
4	2013-14	776
5	2014-15	779
6	2015-16	745
7	2016-17	691
8	2017-18	1293
9	2018-19	1079
10	2019-20	908
11	2020-21(till Dec.)	568
TOTAL		8020

Source: NHM Report Assam, 2019

COVID-19:

The COVID-19 is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome(SARS) and some types of common cold. 'CO' stands for Corona, 'VI' for virus and 'D' for disease. Most people who fall with COVID-19 will experience mild to moderate symptoms and recover without special treatment. The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes or exhales. These droplets are too heavy to hang in the air and quickly fall on floors or surfaces. A person can be infected by breathing in the virus if he or she is within close proximity of someone who has COVID-19 or by touching a contaminated surface and then his or her eyes, nose or mouth.

In Assam this COVID-19 pandemic spread out severely during March'2020. For which Government of Assam declared complete Lockdown to control further spread of this virus. All together 59,98,857 test were done against which 2,16,211 positive cases were detected, 2,11,910 recovered and the number of death was 1,045 as per report

received from NHM, Assam as on 31st Dec. 2020. The number of Rapid Antigen Test (RAT) conducted in Assam were 43,38,288 of which 7,18,188 were in Kamrup Metro followed by Cachar 2,33,928 and 2,17,595 in Kamrup Rural. The number of Covid Care Centre in the state was 68 and the number of functional Hospital was 134 as per report available.

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.

1. Swachh Bharat Mission:

In Assam, **SWACHH BHARAT MISSION (G)** has aimed at to provide Individual House Hold Latrine (IHHL) facility to every household in Assam. More than 32 lakh Individual Household Latrines (IHHL) have been constructed and almost 4 lakh dysfunctional toilets have been converted to functional toilets. The Department is implementing the World Bank Funded Neer Nirmal Pariyojana, as part of this scheme water supply is being provided in a total of 63 Gram Panchayats covering 1.16 lakh households in the Districts of Kamrup (M), Jorhat and Hailakandi. The department has undertaken implementation of newly Jal Jeevan Mission (JJM). The programme is being implemented with an objective of providing Functional Household Tap Connection (FHTC) to all rural household by 2024.

2. Neer Nirmal Pariyojana:

Based on the parameters of piped water supply and household water connection, Govt. of India identified Assam, Bihar, Jharkhand and Uttar Pradesh as four most lagging states in the country. Ministry of Drinking Water and Sanitation (MoDWS) and the World Bank have jointly developed the – Rural Water Supply and Sanitation Project for low income states (RWSS-LIS) with an objective to improve piped water supply and sanitation services for selected rural communities in the target states through decentralized service delivery system.

The RWSSP-LIS (renamed as Neer Nirmal Pariyojana) is being implemented in the four states. In Assam, Rural Water Supply & Sanitation Project for low income states has been taken in seven districts of Assam in two batches during the period 2013-2020. In batch -1, Large Multi village schemes on each in Hailakandi, Jorhat and Kamrup (M) district are being implemented with a total projects cost of Rs. 676.30 Crore.

Table - 19.11
Target and Achievement for the EAP (NNP) Large Multi Village Schemes (LMVS) Financial Progress (Rs. in Crore)

2017-18		2018-19		2019-20		2020-21 (Upto 30th Sept'2020)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
326.00	135.83	179.89	107.38	44.04	168.82	853.09	60.77

Table – 19.12
Physical Progress (Upto 30th September'2020)

Name of Scheme	In Percentage
Kamrup LMVS	64%
Jorhat LMVS	78%
Hailakandi LMVS	71%

SOCIAL WELFARE:

Social Welfare Department in the Govt. of Assam committed to contribute towards overall development of Women, children, differently able person, Senior Citizens and Welfare of Transgender community of the society. As of now, the Department executes various schemes under the Ministries of Women & Child Development and Social Justice & Empowerment, Govt. of India and some scheme of state Govt. The Centrally Sponsored Scheme (CSS) in the State has boosted up the Department and the Directorate and the State Level Schemes aims for the improvement of status of Women, Elderly Person and Adolescents girls.

INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) SCHEME:

Integrated Child Development Services is World's largest community based programme. The Scheme is targeted at children up to the age of 6years, pregnant and lactating mothers. ICDS was initially launched in 1975 in one block only, has been expanded over the years and now covering all Blocks of the State. At the initiation the criteria of BPL (Below Poverty Line) was considered for implementation of ICDS, however in 2005 it was expanded to cover all habitations and areas in the entire State based on health and nutrition status of the beneficiaries instead of the BPL criteria. The scheme is implemented through 62153 Anganwadi Centres (AWC) in the State.

The scheme is funded by Central and the State Government in the ratio 90:10 for general assistance and 90:10 for supplementary nutrition for all states of NE region.

OBJECTIVES:

The main objectives of ICDS schemes are-

- (a) To improve the nutritional and health status of children in the age group 0-6 years.
- (b) To lay the foundation for proper psychological, physical and social development of the child.
- (c) To reduce the incidence of mortality, morbidity, malnutrition and school drop-out rate.
- (d) To achieve effective coordinated policy and its implementation amongst the various departments to promote child development.
- (e) To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

Step taken by State Government for ICDS scheme:-

Supplementary Nutrition Programme (SNP) is being implemented in all the ICDS Project.

- Supply of Take Home Ration (THR) among the children of 6 months to 3 years, Pregnant Women & Lactating mother.
- Similarly Hot cook Meal (HCM) among the children of 3 years to 6yrs age group through Anganwadi Centre Managing Committee (AWCMC).
- A numbers of 40400 Anganwadi building has been constructed.

POSHAN ABHIYAAN:

- The Prime Minister's Over arching Scheme for Holistic Nutrition or POSHAN Abhiyaan Or National Nutrition Mission, is Government of India's flagship programme to improve Nutritional out comes for children, pregnant women and lactating mothers.
- Launched by the Prime Minister on the occasion of the International Women's Day on 8 March, 2018 from Jhunjhunu in Rajasthan.
- The POSHAN (Prime Minister's Overarching Scheme for Holistic Nutrition) Abhiyaan Directs the attention of the country towards the problem of malnutrition and address it In a mission-mode.
- POSHAN Abhiyaan aims to reduce malnourishment from the country in a phased Manner, through the life cycle concept, by adopting a synergized and result-oriented approach. The target of the Mission is to bring down stunting among children in the age group of 0-6 years from 38.4% to 25% by the year 2022.

Table – 19.13**Goals and Targets of POSHAN Abhiyaan**

Sl. No.	Objective	Target
1	Prevent and reduce Stunting in children (0-6 years)	By 6% @ 2% p.a.
2	Prevent and reduce under-nutrition (under weight prevalence) in Children (0-6 years)	By 6% @ 2% p.a.
3	Reduce the prevalence of anaemia among young children (6-59 months)	By 9% @ 3% p.a.
4	Reduce the prevalence of anaemia among Women and Adolescent Girls in the age group of 15-49 years	By 9% @ 3% p.a.
5	Reduce Low Birth Weight	By 6% @ 2% p.a.

Scheme for Adolescent Girls (SAG):

The objective of this scheme is 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 number of 68,545 numbers of School dropout Adolescent girls in age group of 11 to 14 years in

23 Districts of Assam has been assessed under Nutrition component @ Rs.9.5/- per day per beneficiaries.

Integrated Child Protection Scheme (ICPS): 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 33 nos District of Assam.
 - Juvenile Justice Board (JJBs) are Constituted in all 33 nos District of Assam & functional in all District.
 - 20 nos State Adoption Resource Agencies are operational as on November 2020.
 - 32 nos NGO run CCIs are operational in Assam receiving Grant in aid under ICPS.
 - 5 nos Open shelter are operational in Assam under ICPS grant in aid.
 - A total of 123 nos CCIs,(Govt and NGO run) registered under Juvenile Justice Act 2015 are working for Children in Care and protection and Children in Conflict with Law.
- (i) State Child Protection Society has organized a series of training programme for deferent stakeholder of Child Protection in collaboration with NIPCCD and NLU following the training modules developed in time to time for the following issues.
- (ii) Prescribed rules for institutions under JJ
- (iii) Principal of JJ Act
- (iv) Child Right issues
- (v) Psychological support
- (vi) How to deal children in conflict with law from the psychological point of view.

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. On 1st January, 2017, the National Crèche Scheme started operation across the 27 districts of Assam. There are 641 numbers of Crèche Centres in Assam. The Break-up of Crèche centre are as follows-

Table – 19.14
Crèche Centre in Assam

Creche Centres	Number
1. Social Welfare Board (SWB)	229
2. Indian Council of Child Welfare (ICCW)	364
3. BAJSS	48

WOMEN SECTOR:

Women empowerment helps in achieving effective social change. The Government is implementing various schemes for empowerment of women. To 'Achieve gender equality and empower all women & girls' is one of the Sustainable Development Goals.

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.

Under PMMVY: A Pregnant Women and Lactating Mother (PW&LM) shall receive a cash benefit of Rs. 5000.00 in three installments.

First Installment: at early registration of pregnancy @ Rs. 1,000.00,

Second installment: received at least one ANC (can be claimed after 6 months of pregnancy) @ Rs. 2,000.00 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. 2,000.00.

Since inception of the Scheme i.e. From January'2017 till November'2020; 6, 08,967 Nos. of beneficiaries have received benefits in the State under the Scheme against the indicative Target i.e. 5,85,911 Nos. till December'2020 as given by the Ministry. Accordingly, based on the target the State Achievement is 103%. Till date, the State has received Rs. 253.16 Cr (Central & State Share) in Escrow Account for payment to beneficiaries through Direct Benefit Transfer (DBT) mode till date and accordingly as on Nov 2020 the utilization percentage is 100%. Assam's All India Ranking in implementation of the scheme based on percentage achieved against the indicative target is 7th. Moreover, under the scheme out of 16, 57,026 Nos. of applications received till date from eligible beneficiaries, 15, 53,090 Nos. of applications have been paid (Percentage 93.72%).

Mahila Shakti Kendra Scheme:

The Government of India has approved a scheme, the Mahila Shakti Kendra to empower rural women through community participation and to create an environment in which they realize their full potential. It is expected to provide an interface for rural women to approach the government for availing their entitlements also empowering them through training and capacity building. In order to implement, community engagement through Student Volunteers is envisioned in 7 Aspirational districts of Assam as part of the MSK Block level initiatives. Student volunteers are likely to play an instrumental role in awareness generation regarding various important government schemes/programmes as well as district/ local specific issues. The scheme at the block level is expected to provide an opportunity to Student Volunteers to participate in the development process by bringing change in their own communities and ensuring that women are not left behind and are equal partners in India's progress. In its implementation, Mahila Shakti Kendra (MSK) in Assam are established in 7 Aspirational districts out of 115 backward districts of India covering 56 blocks in 7 most backward

districts are to be covered under block level initiative. District Level Centre for Women (DLCW) has also been established for 27 districts (older) to be covered in phased manner. These centres are expected to serve as a link between village, block and state level in facilitating women centric schemes and also give foothold for Beti Bachao Beti Padhao (BBBP) scheme at the district level. At the state level technical support on issues related to women has to be provided through State Resource Centre for Women (SRCW) functional under the State Government, Social Welfare Department. SRCW Assam is meant to facilitate implementation of all women centric schemes and programmes of the government, including the district and block level component of MSK and BBBP Scheme.

In Assam SRCW is presently functional under the Department of Social Welfare, GoA from March 2019. The State Task Force, the apex body for MSK has been notified by GoA is headed by the Commissioner and Secretary to the GoA, Social Welfare Department. Fifteen District level Centres are now functioning and others are on process to function DLCW. Three functionaries' i.e. one Women Welfare Officer and two District coordinators are engaged by the District Task Force at DLCW. District Task force headed by the Deputy Commissioner of concern District as Chairperson is the main executing body of the district which was notified by GoA.

The Block Level Committee was also notified by GoA in 56 Blocks Total 56 Blocks of seven Aspirational districts. Block Level Mahila Shakti Kendra is functioning in seven Aspirational Districts viz Barpeta, Baksa, Darrang, Dhubri, Goalpara, Hailakandi and Udalguri. 200 student volunteers are identified in each block from local colleges to engage for community support to empower rural women. Handbook, name of Govt. programmes and Schemes, Resource book etc. are provided from SRCW, Assam to each of trained volunteers. A total of 5600 student volunteers are trained for the first phase and engaging them for community support. Each Student volunteer is entitled to get Rs. 50/- (Fifty) per hour for maximum of 200 hours in six month period.

Beti Bachao Beti Padhao (BBBP):

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. At present, the scheme is carried forward to district like Dhemaji and Cachar. An amount of Rs 25 lakh is allocated for each district of Assam.

SPMU-BBBP / SRCW, Assam had organized International Girl Child Day in collaboration with UNICEF and SCPCR focusing on the issues of Child Marriage and develop a strategic plan to mitigate the issue with student volunteers empowerment under MSK. All District Social Welfare Officers, District Child Protection Officers, Childline functionaries, Women Welfare Officers, District Coordinators, Teacher representatives had attended the programme.

Women Helpline-181:

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 programmes across the country through a single uniform number-181.

Women Helpline (WHL) is now integrated with all One Stop Centre in all 33 District of Assam.

Table – 19.15

**DETAILS REGISTERED CASE UNDER VARIOUS CATEGORIES UNDER
WOMEN HELPLINE, GUWAHATI, ASSAM (181)**

Sl. No.	Crime Category	Crime Type	Total Cases
1	Crime against girls (below 18)	Kidnapping	191
2	Crime against old women	Property dispute	164
3	Crimes against women (ipc)	Other crimes against women (ipc)	516
4	Cyber crime	Other cyber crime	152
5	Domestic violence	Other domestic violence	1638
6	Domestic violence (live-in relationship)	Other domestic violence (live-in relationship)	23
7	Human rights violation of women	Abandoned in mental illness	137
8	Other	Other	15
9	Other than existing categories	Other than existing categories	1
10	Pocso	Other pocso crime	50
11	Sexual violence	Attempt to rape	53
12	Social welfare	Govt. Welfare scheme related	27
Total			2967

ONE STOP CENTRE (OSC):

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.

The OSC now integrated with Women Helpline 181 and other existing helpline. Women affected by violence and need of redressal service could be referred to OSC through Helpline.

Service Provided through One Stop Centre:-

- Emergency Response and Rescue Service

- Medical Assistance
- Assistance to women in lodging FIR/NCR/DIR
- Psycho-social support/counselling
- Legal Aid and Counselling
- Shelter
- Video conferencing Facility

One Stop Centre (OSC) is functioning in all the 33 district of Assam.

Ujjawala Scheme:

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 borne by the implementing agency. There are all together 20 numbers of Ujjawalain different districts of Assam.

There are altogether 14 Nos. of Ujjawala Homes selected for continuation in the State in following district for the year 2020-21.

Goalpara, Kamrup, Kamrup(M), Dhermaji, Hailakandi, Bongaigaon, Kokrajhar, Dhubri, Barpeta, Udalguri, Karimganj, Hojai, Lakhimpur and Cachar 4 Nos. of new proposal in respect of Jorhat, darrang, South-Salmara Mancachar and Sivsagar has been submitted to MWCD, New Delhi for approval.

Swadhar Greh:

Scheme for Women in Difficult Circumstances was launched by the Department of Women and Child Development in 2001-02. The objectives of this scheme are:

1. 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 defence mechanism by the Department of Social Welfare.
2. 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.
3. There are all together 16 numbers of SwadharGreh at different districts of Assam.

Total 16 nos. of Swadhar Greh running in the following District of Assam: Karimganj, Hailakandi, Kamrup (M) - 3 Nos, Nagaon - 2 Nos., Dhubri, Cachar, Golaghat, Dibrugarh, Morigaon - 2 Nos. Nos, Sonitpur - 2 Nos. and Lakhimpur.

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 suomoto notices relating to issues of women.

The budgeted amount for the current financial year (2018-19) for salary is Rs 45 lakh (Rupees Forty Five Lakh) only. The budgeted Amount for the current financial year (2018-19) for repairing and renovation of office building of State Women Commission is Rs 14.20 lakh (Rupees Fourteen Lakh Twenty Thousand) only.

Financial Assistance to Victim of Rape:

In furtherance of the goal of ensuring restorative justice to affected women, the above 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

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.

DISABILITY SECTOR:

Schemes implemented for Persons with Disabilities (PwDS) and Welfare for Elderly Persons/ Old Age Homes and Transgender by Social Welfare Department, Govt. of Assam.

Deen Dayal Divyangjan Pension:

It is a new scheme which was launched by Hon'ble Chief Minister, Assam on 10th January'2019. The objective of the scheme is to provide monthly pension of Rs. 1,000.00 to each of the persons with disabilities for taking care of their health. In 2019-20 this pension achoni 1,55,640 Nos. beneficiaries benefitted and till now 1,60,612 Nos. beneficiaries benefitted for 2020-21.

Rehabilitation Grants to Persons with Disabilities (PwDs):

Rehabilitation grants were provided @ Rs.10,000.00 to each of the persons with disabilities for their self-employment and rehabilitation up to 2017-18. But from 2018-19, the grant amount has been enhanced to Rs. 20,000.00.

Scholarships to Students with Disabilities:

Scholarships are provided to the students with disabilities @ Rs. 200.00 pm (i.e., 2400.00 yearly) to each who are studying in schools and colleges. During the year 2019-20, 1080 Nos. of students were benefitted from this scheme. Apart from this, scholarships are also provided to the students with disabilities Rs. 3,000.00 p.m. to each (i.e. Rs. 36,000.00 yearly) who are pursuing medical & technical education courses. During the year 2019-20, 43 Nos. of students were benefitted from this scheme.

National University:

The Ministry of Social Justice & Empowerment, Department of Empowerment of Persons with Disabilities (Divyangjan), Govt. of India, and New Delhi desires to set up a National University in Assam to focus on various issues for the welfare of Persons with

Disabilities (PwDs). For the purpose, a plot of land comprising 50 acres in Kamrup district has been selected during 2018-19 with a view to setting up of the aforesaid University for greater interest of the students/persons with disabilities in Assam.

College for Students with Hearing Impaired:

The Assam Association of Deaf, Gopinath Nagar, Guwahati, a registered non-government organization has been running a Junior College at Gopinath Nagar, Guwahati to cater to the needs of deaf students. The Govt. of Assam has accorded approval for an amount of Rs. 3.50 crore (Rupees three crore fifty lakh) only for 2018-19 to undertake construction works of permanent building of the aforesaid College. The proposed building is not only for the students of Junior College but also it will cover the students of North East Degree College for Hearing Impaired of the same premises. This year, an amount of Rs. 2.50 crore only has been earmarked in the budget for 2019-20.

Unique Disability ID (UDID) Project:

The Unique Disability ID (UDID) Project is a national web-based portal developed and linked with Centre, States and Districts and other Stakeholders for the purpose of issuance of a Unique ID card to every person with disability as well as disability certificate through an online mechanism across the country. The status of e-UDID card generation in respect of Assam as on 24.11.2020 is as follows:

Nos. of UDID cards generated : 30,365 Nos.

Nos. of Districts started generating UDID cards : 33 Nos.

Scheme for Implementation of Persons with Disabilities Act (SIPDA):

During the year 2019-20, 24 nos. of Govt. Institutions has been access audited for creation of barrier free environment under Accessible India Campaign (AIC), Phase-I. For these 24 buildings, the administrative approval has been received from Govt. of Assam and accordingly action has been taken by PWD (Building) Division, Chandmari.

Under Phase II of AIC, out of 62 nos. of Govt. Institutions within Guwahati city, all buildings have been access audited and the reports have been sent to PWD (Building) Division for preparation of plan & estimate.

During the year 2020-21, Rs. 2.70 Crore has been earmarked for SIPDA.

Welfare of Transgender community:

This is a new scheme which is introduced in 2018-19. Transgender are a section of people in our society. They also have 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, entrepreneurs etc. so as to bring about a transformative change in their lifestyle and livelihood activities with proper rehabilitation. A State Policy for the same has been notified by the Govt. vide Notification No.SWD.128/2019/82 Dated, 20th March, 2020. State Transgender Welfare Board, Assam has been constituted and is registered under Societies Registration Act, 1980. During the year 2020-21, Rs. 142.50 lakh is allotted for the scheme.

Chetona:

Chetona is a new scheme for sensitization of Senior Citizens about various schemes implemented by Social Welfare Department, Assam. During 2019-20, 6 nos. of conclaves have been held in Kokrajhar, Baksa, Kamrup, Dhubri , Bongaigaon, Nagaon districts for which an amount of Rs. 88,02,000/- has been used out of Rs 1 Crore. During the year 2020-21, Rs. 71.25 Lakh is allotted for the scheme.

ANNEXURE - 19.1

**Number of Lower Primary and Upper Primary Schools
(Government / Provincial under Deptt of Elementary)**

Sl. No.	District	Lower Primary		Upper Primary	
		Rural	Urban	Rural	Urban
1	2	3	4	5	6
1	Baksa	1311	0	252	0
2	Barpeta	1619	39	289	14
3	Biswanath	895	14	59	4
4	Bongaigaon	733	32	152	14
5	Cachar	1849	45	270	7
6	Charaideo	631	22	82	4
7	Chirang	759	18	79	9
8	Darrang	1032	21	100	4
9	Dhemaji	1204	19	137	4
10	Dhubri	1438	79	307	26
11	Dibrugarh	1211	45	173	14
12	Dima Hasao	697	53	124	12
13	Goalpara	1339	33	198	9
14	Golaghat	1108	31	172	12
15	Hailakandi	994	24	270	14
16	Hojai	716	40	109	14
17	Jorahat	1055	28	136	2
18	Kamrup Metro	213	234	18	54
19	Kamrup	1738	20	220	1
20	Karbi Anglong	1060	59	132	15
21	Karimganj	1535	24	248	9
22	Kokrajhar	1293	18	208	12
23	Lakhimpur	1484	37	339	11
24	Majuli	443	0	67	0
25	Morigaon	1159	10	168	3
26	Nagaon	1633	49	277	15
27	Nalbari	931	14	152	2
28	Sivasagar	1030	38	175	6
29	Sonitpur	931	38	63	8
30	South Salmara Mankachar	321	0	59	0
31	Tinsukia	1017	41	119	14
32	Udalguri	1062	15	156	1
33	West Karbi Anglong	612	17	92	2
Assam		35053	1157	5402	316

Source: DISE- 2019-20

ANNEXURE - 19.2

DISTRICT WISE GOVERNMENT/PROVINCIALISED HIGH AND HIGHER
SECONDARY SCHOOLS HAVING FACILITIES, 2018-19

Sl. No.	District	No. of Schools	Available Drinking water	Boundary wall / fencing	Available Girls' Toilet	Computer	Ramp	Play Ground	Library	Electricity connection
1	2	3	4	5	6	7	8	9	10	11
1	Baksa	189	193	38	205	96	104	174	127	183
2	Barpeta	307	302	66	443	207	188	241	200	296
3	Biswanath	92	98	42	128	69	66	81	68	96
4	Bongaigaon	78	80	18	143	57	68	71	52	80
5	Cachar	164	143	38	229	106	95	104	123	166
6	Charaideo	58	61	17	122	38	39	57	26	61
7	Chirang	50	51	24	75	40	41	50	39	51
8	Darrang	145	152	37	243	79	98	113	105	150
9	Dhemaji	161	168	59	193	58	126	159	152	158
10	Dhubri	162	169	31	202	87	114	128	112	163
11	Dibrugarh	148	158	72	268	126	133	129	107	160
12	Dima Hasao	43	33	14	51	21	39	22	37	34
13	Goalpara	121	127	25	172	85	117	109	101	126
14	Golaghat	168	179	50	228	128	139	144	85	179
15	Hailakandi	59	56	19	83	37	35	32	37	57
16	Hojai	73	73	14	98	37	56	52	54	74
17	Jorahat	180	193	46	246	143	164	146	134	193
18	Kamrup Metro	124	126	57	344	108	91	87	91	137
19	Kamrup	288	295	50	361	164	176	208	204	277
20	Karbi Anglong	86	86	41	112	54	66	75	76	88
21	Karimganj	113	109	24	154	70	85	70	80	111
22	Kokrajhar	93	99	44	205	62	67	88	52	91
23	Lakhimpur	302	309	57	349	151	195	230	188	278
24	Majuli	78	84	21	85	41	47	62	17	78
25	Morigaon	119	122	19	156	79	90	89	92	117
26	Nagaon	224	231	67	309	142	144	176	198	228
27	Nalbari	182	196	40	233	94	122	128	154	189
28	Sivasagar	157	170	51	217	120	100	123	67	166
29	Sonitpur	104	111	28	198	79	81	84	83	110
30	South Salmara Mankachar	32	33	4	44	14	15	20	26	26
31	Tinsukia	91	100	39	205	73	88	75	76	97
32	Udalguri	82	85	31	102	47	58	75	53	79
33	West Karbi Anglong	40	40	15	51	28	34	40	38	38
	Assam	4313	4450	1198	6254	2740	3081	3442	3054	4337

Source: DISE- 2019-20

Chapter - XX

Assam's march to achieving Sustainable Development Goals (SDGs) - A district disaggregated approach

1. Introduction

The Assam Economic Survey 2018 established the groundwork for conceptually understanding the progress of the state with respect to the SDGs not just through the State lens but also through the lens of district disaggregated data. With an increasing understanding and acknowledgement of data disintegration there is an overarching concerted effort to put into perspective the many indicators and their corresponding levels at which the data needs to be collected.

In this regard, Ministry of Statistics and Programme Implementation (MoSPI), in consultation with Central Ministries / Departments, State and other stakeholders developed the National Indicator Framework (NIF) consisting of 306 national indicators corresponding to the 17 SDGs, following which the states developed state level State Indicators Framework (SIF) and District Indicators Framework (DIF). Each of these indicator frameworks are developed to reflect on the context specific priorities and issues of the state. In Assam, the SIF consists of 300 indicators whereas the DIF consists of 109 indicators. The DIF consists of fewer indicators than that of SIF because it is understood that not all the data are available at the district MIS and some data are collected only at a broader scale, i.e., at a state level; hence, only those indicators are retained for the DIF for which data would be readily available at the district level.

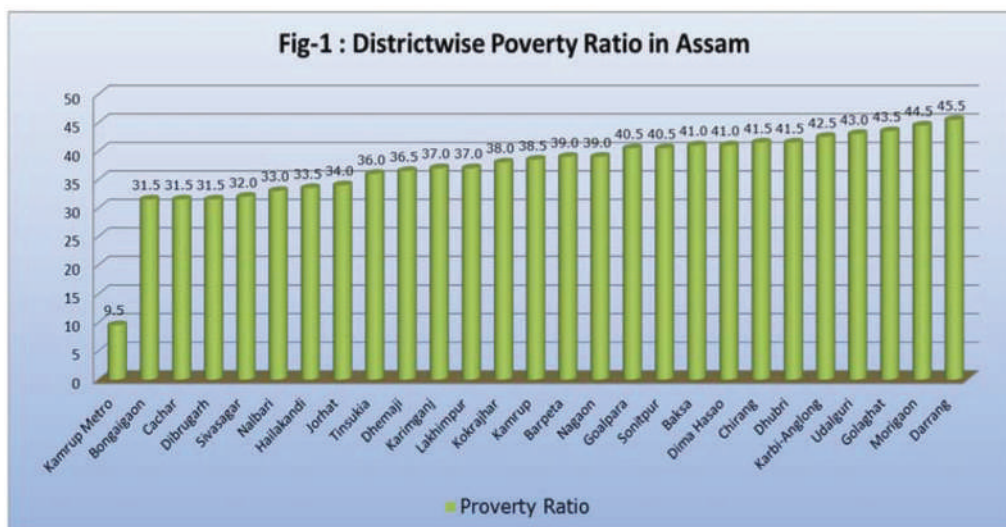
The respective frameworks have been launched in the SDG Conclave as of 24th February, 2020 after getting it vetted by competent bodies, and while the extensive work of data generation is under progress, this chapter presents the comparative picture of districts on some critical SDG indicators where district level data is available viz. Goal-1: End poverty, Goal-2: Zero hunger, Goal-3: Ensure health and wellbeing, Goal-4: Quality education, Goal-5: Gender equality, Goal-6: Water and sanitation, Goal-7: Affordable and clean energy, Goal-8: Sustainable economic growth, Goal-15: Life on land, and Goal-16: Peace and justice respectively. The data is sourced from secondary sources such as Census 2011, NFHS 4 2015-16, MIS crime data 2014, Statistical Handbook Assam 2018, etc. Depending on the indicator periodicity the data has been derived from different sources. Section 2 presents the comparative district-wise data for the Goals and indicators. Section 3 develops a composite index combining the indicators into a single composite index to enable an overall ranking of districts on their current SDG performance. Section 4 provides conclusions.

2. Inter-district comparisons of SDGs

The analysis presented in this chapter, primarily contains data for 27 districts for which data is available, but not for all the 33 districts of Assam as six new districts have been created recently, and their individual data have yet not been collected. It presents information on the districts for 10 Goals. For each Goal, a ranking of districts is presented for each of the indicators used (see the list of indicators in Appendix-1 Table-1). In addition, where more than one indicator is available for a particular Goal—are

combined into a Composite Index for the Goal using the methodology described in Appendix-1. This composite index is used to categorize the districts on each Goal and for all the Goals together in terms of performance and appropriately color coded as explained in Appendix-1.

Goal-1: End Poverty



Source: Assam HDSR 2014

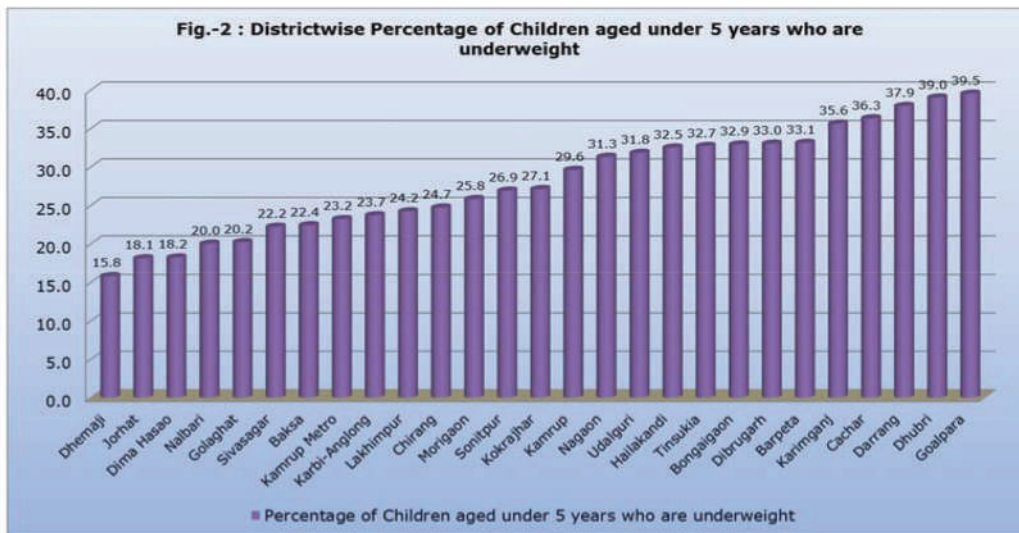
Districts	Index Score
Darrang	0
Morigaon	0.03
Golaghat	0.06
Udalguri	0.07
Karbi Anglong	0.08
Chirang	0.11
Dhubri	0.11
Baksa	0.13
Dima Hasao	0.13
Goalpara	0.14
Sonitpur	0.14
Barpeta	0.18
Nagaon	0.18
Kamrup	0.19
Kokrajhar	0.21
Karimganj	0.24
Lakhimpur	0.24
Dhemaji	0.25
Tinsukia	0.26
Jorhat	0.32
Hailakandi	0.33
Nalbari	0.35
Sivasagar	0.38
Bongaigaon	0.39
Cachar	0.39
Dibrugarh	0.39
Kamrup Metropolitan	1



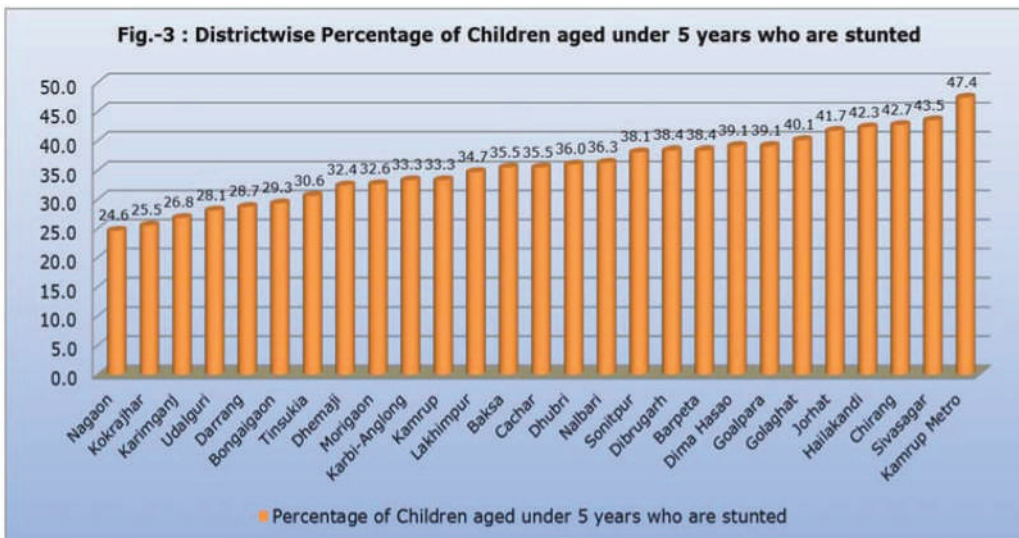
Very poor	0-0.20
Poor	0.21-0.50
Comparatively better	0.51-0.70
Satisfactory	0.71-1.00

The overall poverty ratio of Assam is very high at 37.0 compared to all India average of 21.9 (Assam HDSR 2014). As shown in the Table 1, majority of the districts of Assam fare much worse with districts like Darrang and Morigaon being the worst performers at 45.5 and 44.5, respectively. Following in close quarters are the districts Golaghat, Udalguri, and Karbi Anglong. Moreover, it can be said that except for Kamrup Metropolitan all other enumerated districts fall in the category of poor performers.

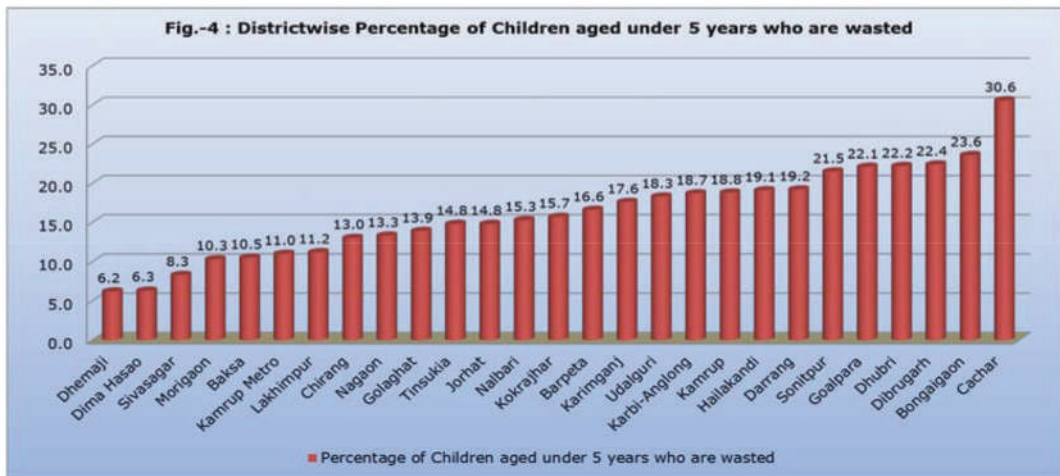
Goal-2: End hunger



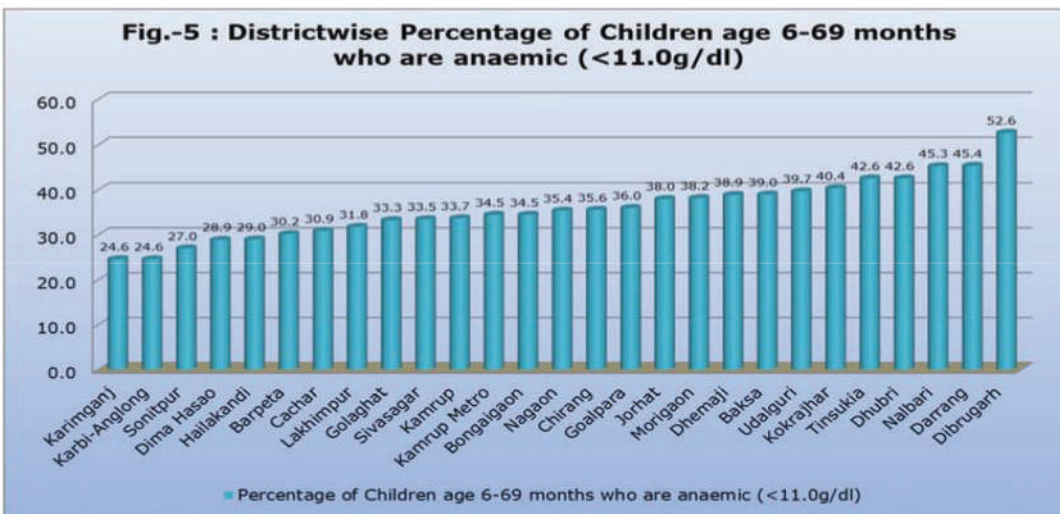
Source: NFHS 4, 2015-2016



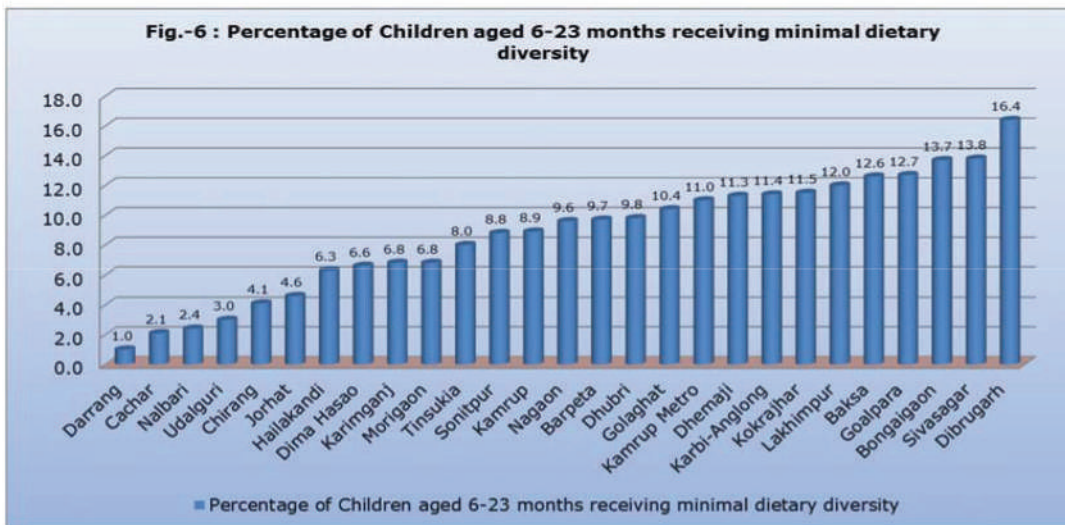
Source: NFHS 4, 2015-2016



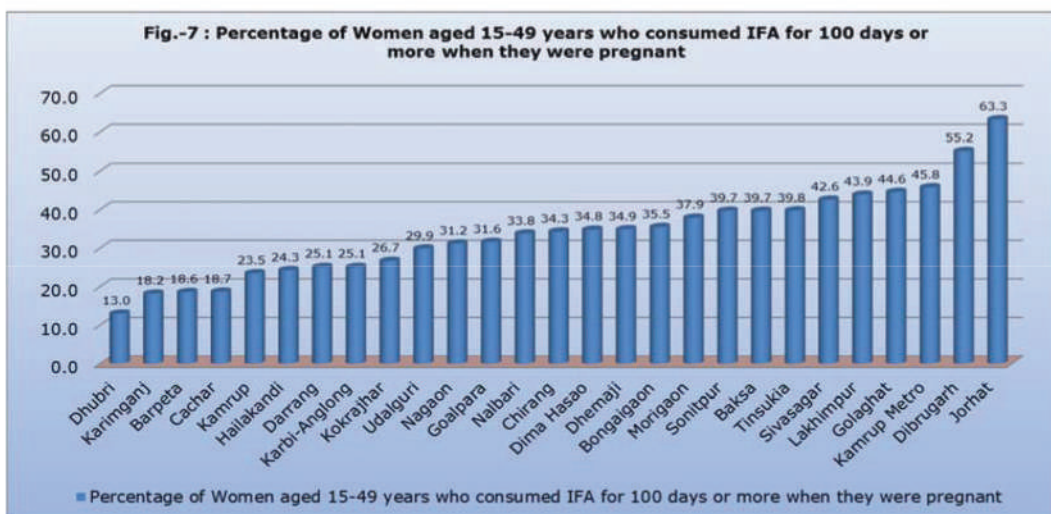
Source: NFHS 4, 2015-2016



Source: NFHS 4, 2015-2016



Source: NFHS 4, 2015-2016



Source: NFHS 4, 2015-2016

Districts	Index Score
Darrang	0.2
Dhubri	0.22
Cachar	0.26
Udalguri	0.35
Goalpara	0.38
Karimganj	0.4
Barpeta	0.43
Hailakandi	0.43
Tinsukia	0.46
Bongaigaon	0.47
Chirang	0.48
Kamrup	0.49
Nagaon	0.5
Dibrugarh	0.51
Nalbari	0.52
Morigaon	0.53
Kokrajhar	0.54
Sonitpur	0.61
Karbi Anglong	0.65
Baksa	0.66
Golaghat	0.68
Dima Hasao	0.68
Dhemaji	0.69
Jorhat	0.71
Sivsagar	0.71
Lakhimpur	0.72
Kamrup Metropolitan	0.74

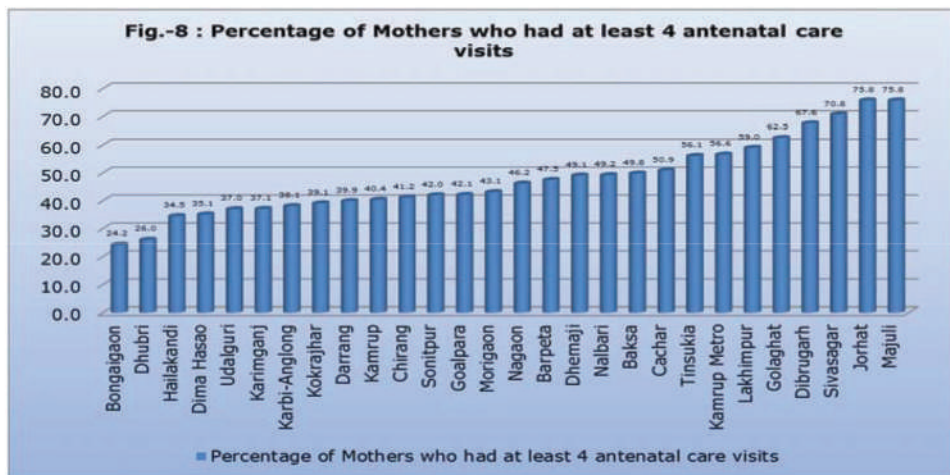
Very poor	0.01-0.35
Poor	0.36-0.53
Comparatively Better	0.56-0.71
Satisfactory	0.72- 1.00

In Assam, there is high prevalence of nutritional deficiencies, with 36.4% of the children under 5 being stunted, 29.8% of the children being underweight, 17% of the

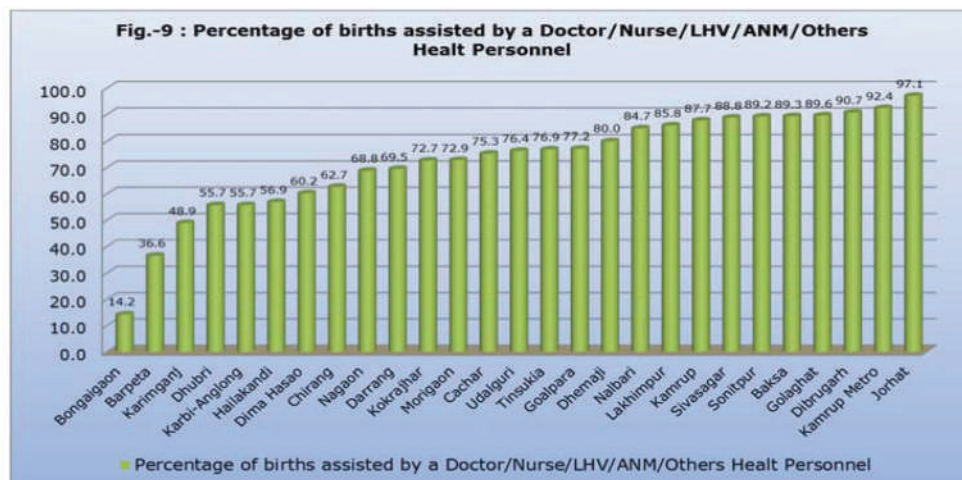
children under 5 being wasted, 69.4% of the children (6-59 months) being anemic, and only 8.9% of the children in the state receiving minimal dietary diversity (NFHS 4, 2015-16). The worrisome outcomes are substantiated by the district disintegrated data where only 9 out of 27 districts show a satisfactory performance (Table 2). However, the level of the satisfactory performance achieved is also relative because the highest itself is too low (for positively increasing indicators), for example, 16.4% shown by Dibrugarh district is itself the highest in the State in terms of minimal dietary diversity received by the children; or the best performing value is already too high (for negatively increasing but declining indicators), for example, 24.6% shown by Nagaon district is the least (or the best) in the State in terms of percentage of children under 5 years of age who are stunted.

Considering that anemia is a major state concern, not just for children but also for women in the reproductive age, it is observed that districts like Jorhat and Dibrugarh have performed well (both above 50%) with respect to consumption of IFA for 100 days or more by pregnant women. Such a good practice needs to be focused and poorly performing districts like Dhubri, Karimjanj, Barpeta, etc. need special attention.

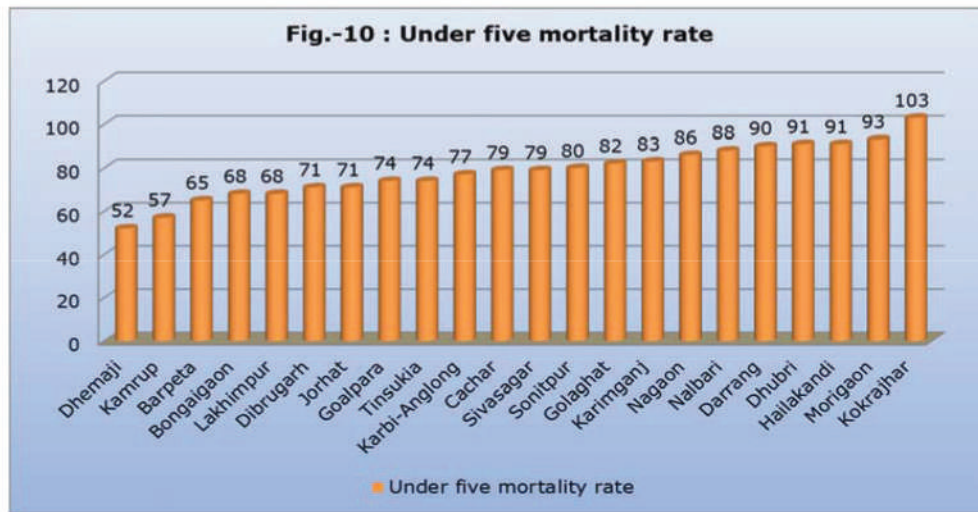
Goal-3: Good health and well-being



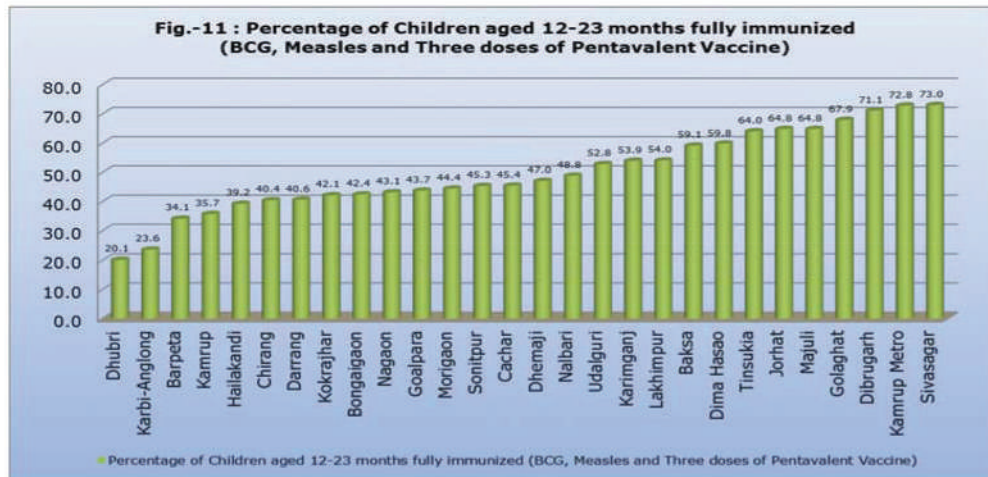
Source: NFHS 4, 2015-2016



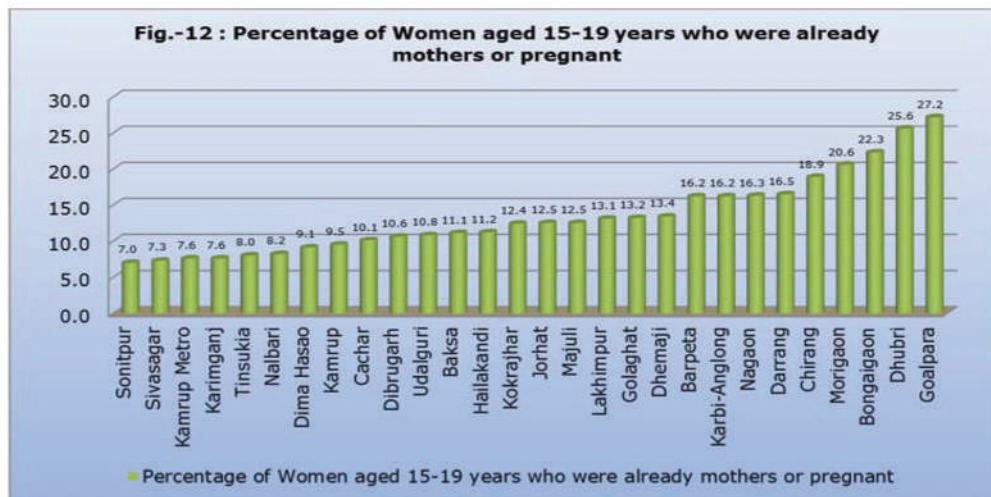
Source: NFHS 4, 2015-2016



Source: NFHS 4, 2015-2016



Source: NFHS 4, 2015-2016



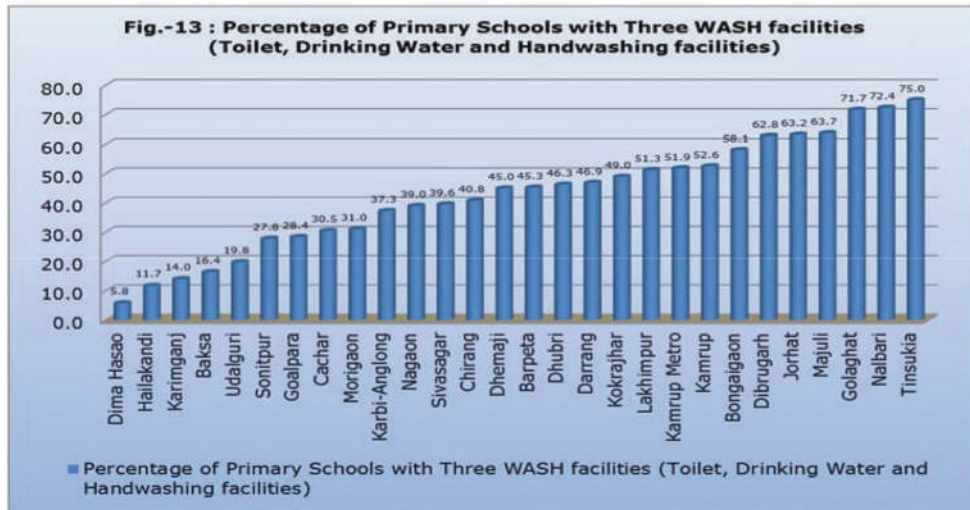
Source: NFHS 4, 2015-2016

Districts	Index Score
Dhubri	0.17
Bongaigaon	0.27
Karbi Anglong	0.38
Morigaon	0.41
Hailakandi	0.42
Goalpara	0.42
Chirang	0.43
Kokrajhar	0.43
Darrang	0.43
Barpeta	0.46
Nagaon	0.48
Karimganj	0.53
Dima Hasao	0.6
Udalguri	0.61
Cachar	0.61
Nalbari	0.62
Sonitpur	0.64
Kamrup	0.65
Majuli	0.67
Dhemaji	0.69
Lakhimpur	0.71
Golaghat	0.73
Baksa	0.73
Tinsukia	0.74
Dibrugarh	0.84
Jorhat	0.84
Sivasagar	0.85
Kamrup Metropolitan	0.88

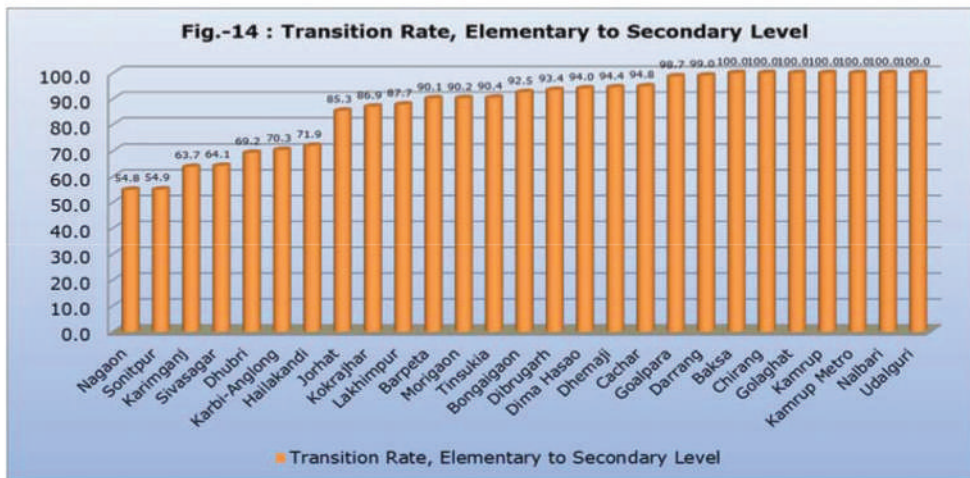
Very poor	0.01-0.35
Poor	0.36-0.53
Comparatively Better	0.56-0.71
Satisfactory	0.72- 1.00

Assam is still battling with serious issues that are impeding its social development. For instance, the Infant Mortality Rate (IMR) in Assam at 44 per 1000 birth and under-five mortality rate at 52 per 1000 live births are among the worst in the country. The Maternal Mortality Ratio (MMR) of the State is 229 per 100,000 live births as of 2015-17, which although is an improvement from 2014-16 MMR of 237, but it is still the highest in the country. The overall MMR of the country is at 122 as of 2015-17. However, there are certain indicators in which Assam is showing some improvement, especially with respect to attendance of skilled medical personnel at birth, mothers with at least 4 antenatal care check-ups as well as full immunization of children. Golaghat, Baksa, Tinsukia, Dibrugarh, Jorhat, Sivasagar, and Kamrup Metropolitan are some of the best performing districts in the State, many a times scoring more than the State average. However, districts like Dhubri, Bongaigaon, Karbi Anglong, Morigaon, etc. as shown in the Table 3 are still some of the worst performers that requires heightened attention and appropriate interventions.

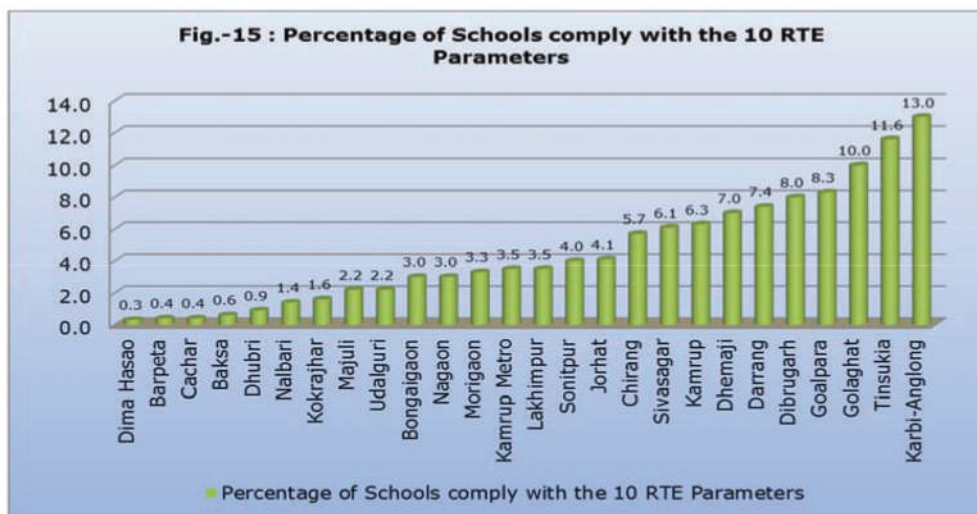
Goal-4: Quality Education



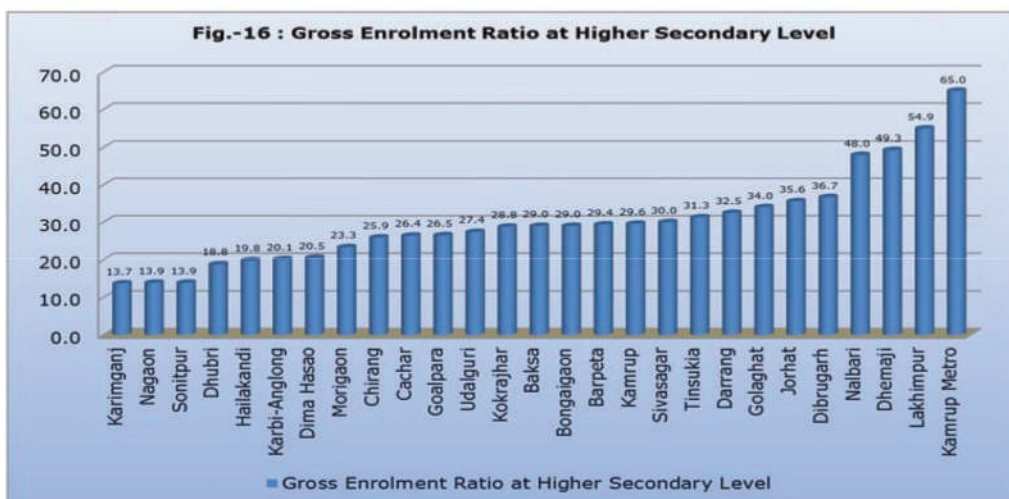
Source: U-DISE 2017-18



Source: U-DISE 2017-18



Source: U-DISE 2017-18



Source: U-DISE 2017-18

District	Index Score
Karimganj	0.11
Sonitpur	0.17
Nagaon	0.19
Hailakandi	0.21
Dima Hasao	0.26
Dhubri	0.28
Baksa	0.4
Cachar	0.41
Morigaon	0.42
Udalguri	0.44
Barpeta	0.46
Kokrajhar	0.47
Majuli	0.52
Karbi Anglong	0.53
Sivsagar	0.53
Bongaigaon	0.57
Chirang	0.59
Goalpara	0.59
Jorhat	0.62
Kamrup	0.67
Darrang	0.69
Lakhimpur	0.71
Dibrugarh	0.76
Dhemaji	0.76
Nalbari	0.77
Tinsukia	0.83
Kamrup Metropolitan	0.85
Golaghat	0.85

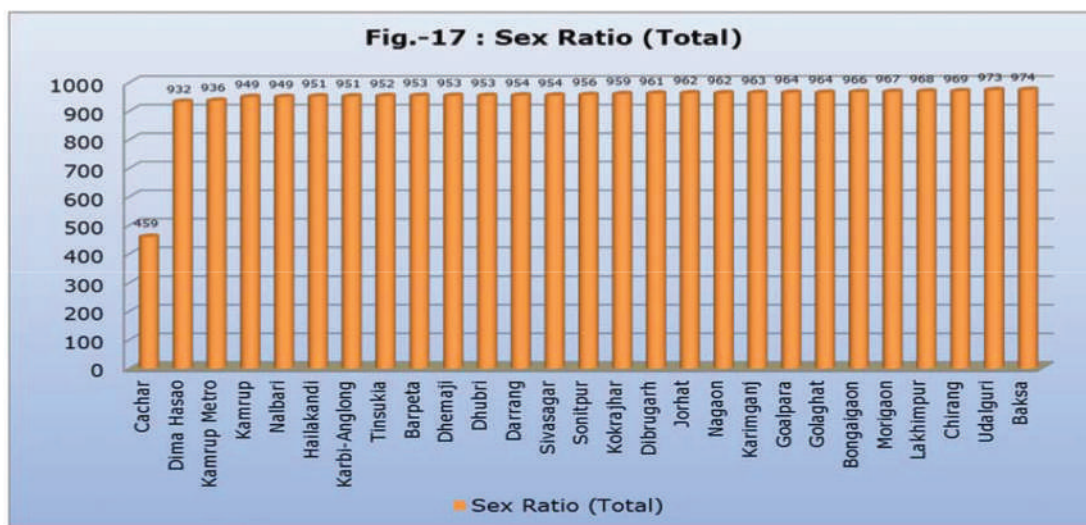
Very poor	0.01-0.29
Poor	0.30-0.48
Comparatively Better	0.49--0.66
Satisfactory	0.67- 1.00

The data on the education indicators presented in Tables 13,14, 15 and 16 are from U-DISE 2016-17. The data indicates that almost all the districts in Assam are doing well in terms of transition rate from elementary to secondary levels, which reflects into the important life transition that affects children’s attainment and well-being in the longer term. This indicator was faring poorly for the longest time; therefore, it is good to see that the latest data by U-DISE demonstrates that all the districts are performing higher than 50%. However, the gross enrolment at secondary level continues to be low with majority of the districts performing below average.

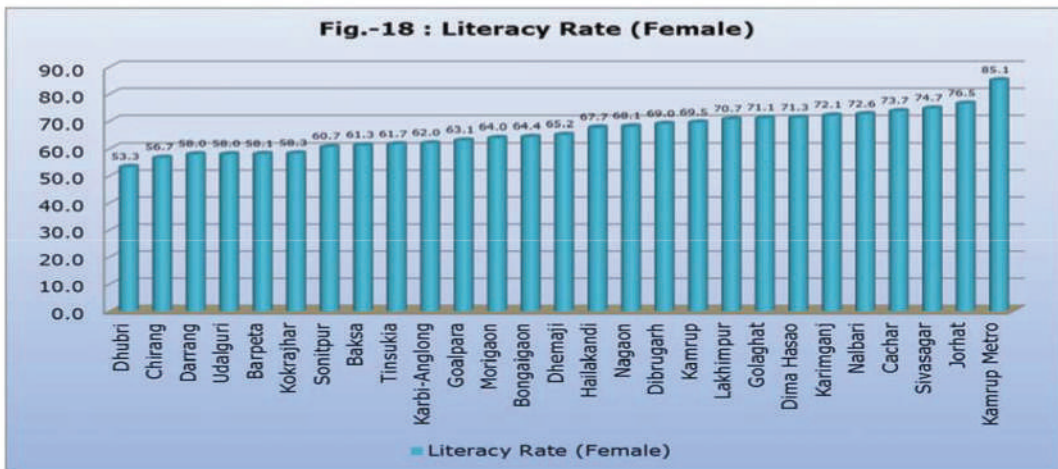
There is a substantial increase in percentage of WASH facilities (toilet, drinking water, and handwashing facilities) in the primary schools, with districts like Golaghat, Nalbari, and Tinsukia doing well with more than 70% of the primary schools with such facilities. This is an important indicator because quality education cannot be provided without effective care for health and hygiene, and in many cases lack of these amenities has been directly correlated with increase in drop-out. Therefore, districts that do not have proper WASH facilities in primary schools, like, Dima Hasao, Hailakandi, Karimganj, etc. requires immediate interventions.

In terms of compliance with 10 RTE parameters, it can be said that all the districts are poor performers, despite the relative estimation. However, Karbi Anglong’s performance in this regard should win some accolades as it demonstrates the district’s efforts in doing better.

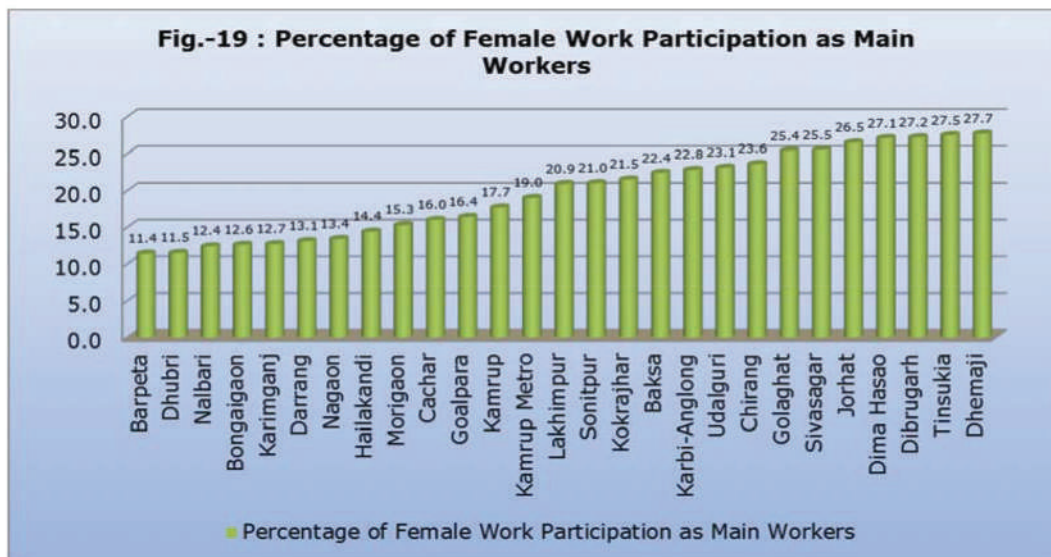
Goal-5: Gender Equality



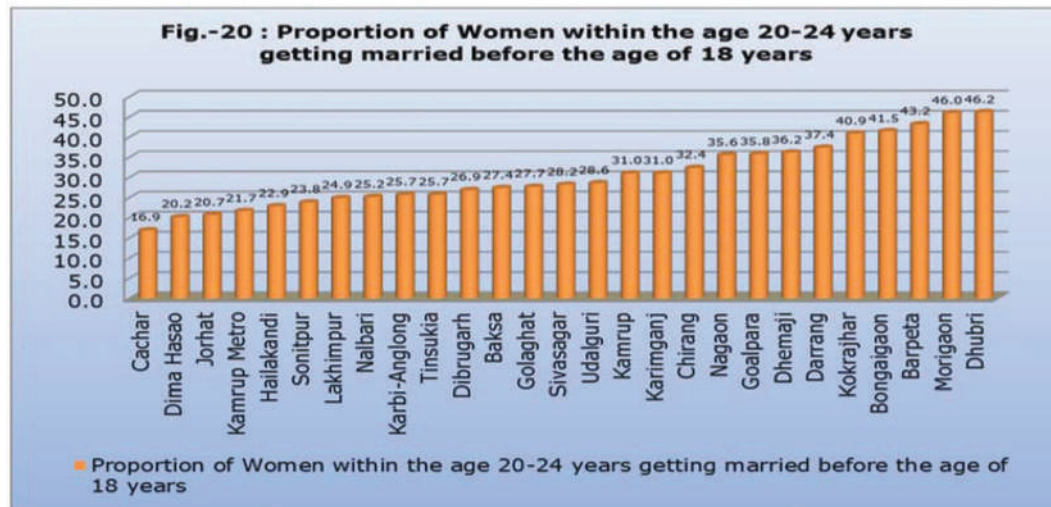
Source: Census 2011



Source: Census 2011



Source: Census 2011



Source: NFHS 4, 2015-16

Districts	Index Score
Dhubri	0.24
Barpeta	0.3
Darrang	0.38
Morigaon	0.39
Bongaigaon	0.39
Cachar	0.48
Nagaon	0.48
Kokrajhar	0.48
Goalpara	0.49
Karimganj	0.54
Chirang	0.58
Nalbari	0.58
Kamrup	0.59
Hailakandi	0.6
Udalguri	0.62
Sonitpur	0.64
Baksa	0.64
Karbi Anglong	0.66
Dhemaji	0.67
Lakhimpur	0.71
Tinsukia	0.73
Golaghat	0.76
Dibrugarh	0.78
Sivasagar	0.78
Kamrup Metropolitan	0.81
Dima Hasao	0.83
Jorhat	0.88

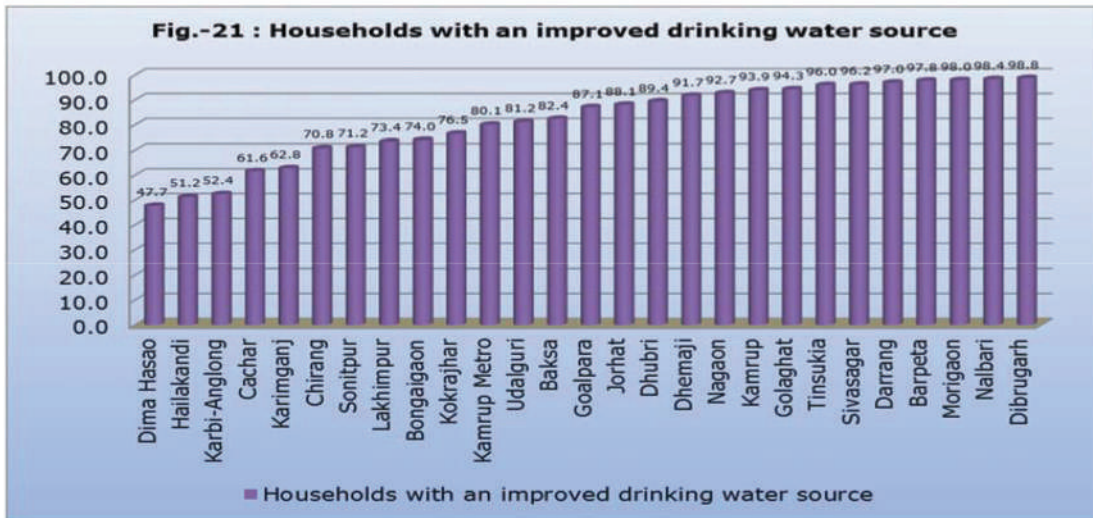
Very Poor	0.01-0.39
Poor	0.40-0.56
Comparatively Better	0.57-0.71
Satisfactory	0.72-1.00

Gender equality in this report is assessed using four indicators: early marriage (from NFHS 4 data 2015-16) and sex ratio, literacy rate, and work participation (from Census data 2011). It is evident that although all the districts in Assam fares poorly in terms of sex ratio, with a State average of 958 females per 1000 males, the situation is worse in case of Cachar with only 459 females per 1000 males, this calls for an immediate intervention and robust measures. Although the literacy rate for females is above 50% for every district, however, Kamrup Metropolitan shows a staggering number of 85% with rest of the districts performing still below 80%. It is important because women's literacy is directly proportional to the well-being of children, family planning, and for increasing the SGDP. Main workers are defined as those who has worked for major part of the reference period, i.e., 6 months or more, and in this case, it is observed that the highest percentage is only 27.7% exhibited by Dhemaji district. Barpeta exhibits the least with 11.4%. Therefore, of the total workforce working across districts in Assam, women constitute barely 19.02% (State average) which is substantially lesser than the male workforce. As reported by the McKinsey Global Institute (2015), if India increases its female labour force participation rate by 10 percentage points by 2025, its GDP could rise by as much as 16 percent as compared to the business-as-usual scenario.

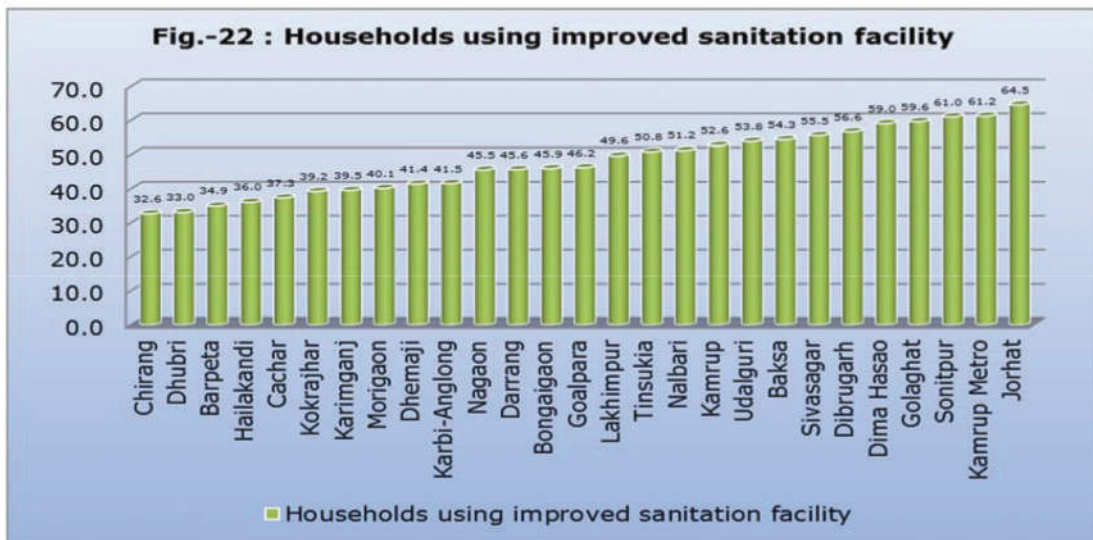
Child marriage is prevalent in Assam and it is evident in Figure 20, where districts like Dhubri, Morigaon, Barpeta, Bongaigaon, and Kokrajhar are infested with the issue. Ironically, even the districts that are otherwise performing well in other parameters still show more than 20% of child marriage prevalence.

Therefore, the picture of gender equality in Assam is still relatively bleak, with districts like Kamrup Metropolitan, Jorhat, Dima Hasao, Sivasagar, Dibrugarh, Golaghat, and Tinsukia doing better than the rest.

Goal-6: Clean Water and Sanitation



Source: NFHS 4, 2015-16



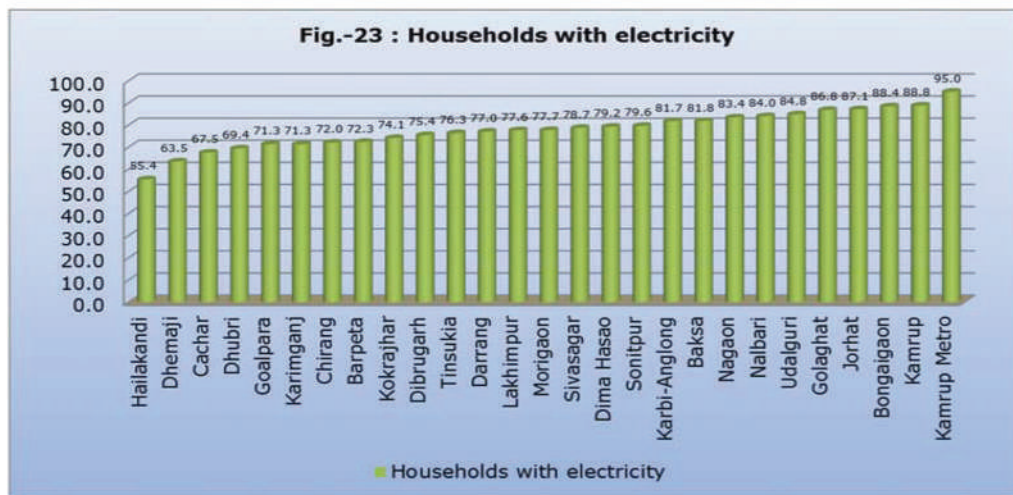
Source: NFHS 4, 2015-16

Districts	Index Score
Hailakandi	0.09
Karbi Anglong	0.19
Cachar	0.21
Chirang	0.23
Karimganj	0.26
Kokrajhar	0.39
Dima Hasao	0.41
Dhubri	0.41
Bongaigaon	0.47
Lakhimpur	0.52
Barpeta	0.53
Dhemaji	0.57
Goalpara	0.6
Morigaon	0.61
Nagaon	0.64
Udalguri	0.66
Sonitpur	0.68
Baksa	0.68
Darrang	0.69
Tinsukia	0.76
Kamrup Metropolitan	0.77
Kamrup	0.77
Nalbari	0.79
Sivasagar	0.83
Dibrugarh	0.88
Golaghat	0.88
Jorhat	0.9

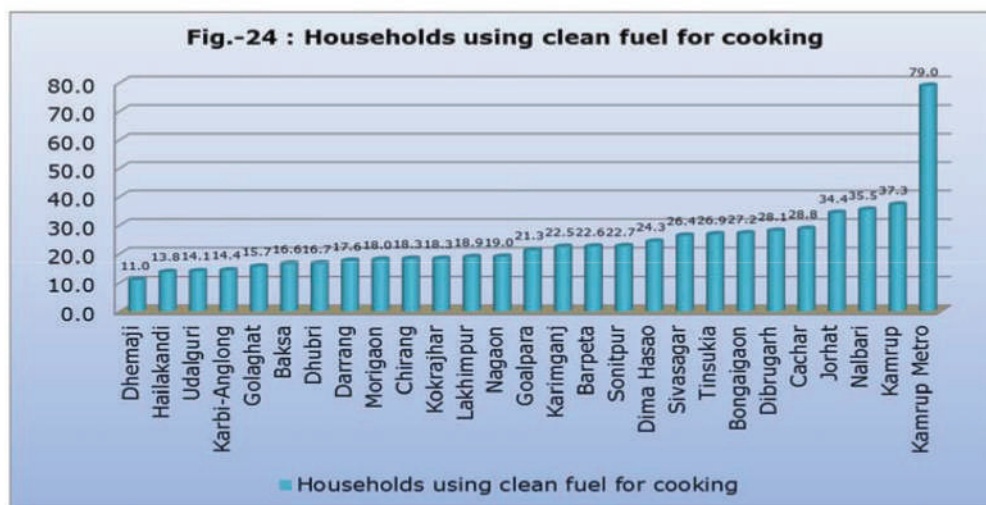
Very poor	0.01 - 0.28
Poor	0.29 - 0.48
Comparatively Better	0.49 - 0.67
Satisfactory	0.68 - 1.00

Data for clean water and sanitation are drawn from NFHS-4 (2015-16). In both respects, Assam is behind the all-India attainments. The districts faring worst are all three Barak valley districts; the lower Assam districts of Chirang, Dhubri, Kokrajhar and Bongaigaon; and the two hill districts of Karbi Anglong and Dima Hasao.

Goal-7: Affordable and Clean Energy



Source: NFHS 4, 2015-16



Source: NFHS 4, 2015-16

Table 7: Composite score for Goal 7

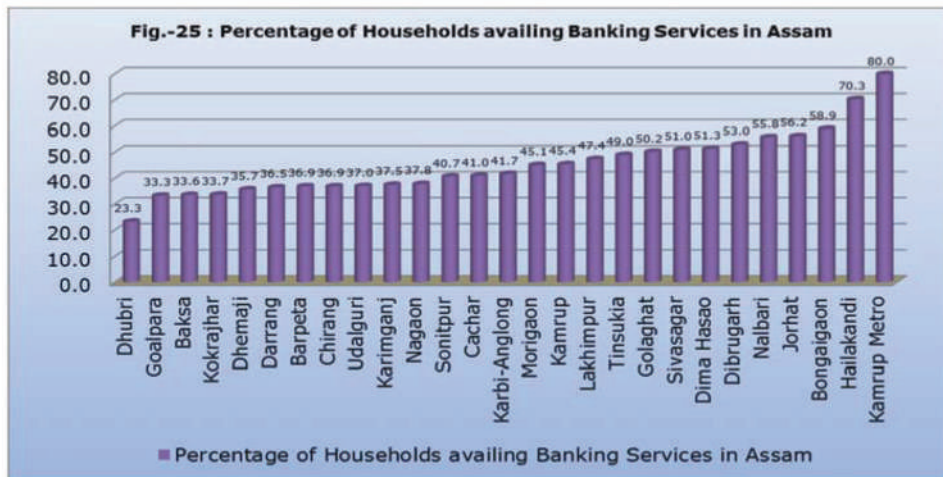
Districts	Index Score
Hailakandi	0.02
Dhemaji	0.10
Dhubri	0.22
Chirang	0.26
Goalpara	0.28
Cachar	0.28
Karimganj	0.29
Kokrajhar	0.29
Barpeta	0.30
Darrang	0.32
Morigaon	0.33
Lakhimpur	0.34
Karbi Anglong	0.36
Baksa	0.37
Dibrugarh	0.38
Tinsukia	0.38
Sonitpur	0.39
Udalguri	0.39
Dima Hasao	0.40
Sivsagar	0.41
Nagaon	0.41
Golaghat	0.43
Bongaigaon	0.54
Nalbari	0.54
Jorhat	0.57
Kamrup	0.62
Kamrup Metropolitan	1.00

Very poor	0.01-0.28
Poor	0.29-0.51
Comparatively Better	0.52-0.77
Satisfactory	0.78-1.00

The data is derived from NFHS 4 (2015-16), and here it is evident that majority, i.e., 22 out of 17 districts are poor performers with respect to overall electrification and use of clean fuel for cooking. Kamrup Metropolitan district staggeringly stands out in

both the indicators for good performance, whereas districts like Bongaigaon, Jorhat, Udalguri, etc. are also good performers in terms of overall access to electricity by the households.

Goal-8: Sustainable economic growth



Source: Census of India, 2011, H-Series

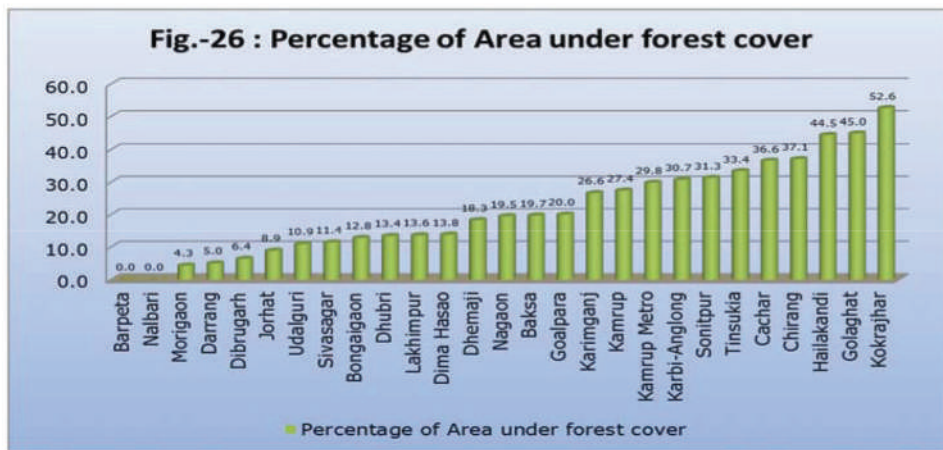
Districts	Index Score
Dhubri	0
Goalpara	0.18
Baksa	0.18
Kokrajhar	0.18
Dhemaji	0.22
Darrang	0.23
Barpeta	0.24
Chirang	0.24
Udalguri	0.24
Karimganj	0.25
Nagaon	0.26
Sonitpur	0.31
Cachar	0.31
Karbi Anglong	0.32
Morigaon	0.38
Kamrup	0.39
Lakhimpur	0.43
Tinsukia	0.45
Golaghat	0.47
Sivsagar	0.49
Dima Hasao	0.49
Dibrugarh	0.52
Nalbari	0.57
Jorhat	0.58
Bongaigaon	0.63
Hailakandi	0.83
Kamrup Metropolitan	1.00

Very poor	0.01- 0.26
Poor	0.27-0.50
Comparatively Better	0.51-0.76
Satisfactory	0.77- 1.00

Goal 8 is meant for promotion of sustainable and inclusive economic growth, providing full and productive employment and decent work for all. Hence, it not only focuses on enumeration of workforce but also on the means of improving the quality of the workforce through easy accessibility to amenities and resources. This is an elaborate goal with an expansive number of indicators, however, owing to limited data availability,

this report only concentrates on the percentage of households availing banking services in the districts. Banking services are important because it is considered as a first step towards many developmental agendas, be it scheme accessibility through direct bank transfer, or seeding of Identity cards with bank accounts for greater transparency. In case of Assam it is observed that districts like Dhubri, Goalpara, Baksa, Kokrajhar, etc. are extremely poor performers that reflects on the overall financial performance of the districts. Moreover, only two districts, i.e., Hailakandi and Kamrup Metropolitan are showing satisfactory performance at 70.3% and 80% respectively.

Goal-15: Life on land



Source: Statistical handbook 2018 (data 2016-17)

Districts	Index Score
Barpeta	0
Nalbari	0
Morigaon	0.08
Darrang	0.10
Dibrugarh	0.12
Jorhat	0.17
Udalguri	0.21
Sivasagar	0.22
Bongaigaon	0.24
Dhubri	0.25
Lakhimpur	0.26
Dima Hasao	0.26
Dhemaji	0.35
Nagaon	0.37
Baksa	0.37
Goalpara	0.38
Karimganj	0.51
Kamrup	0.52
Kamrup Metropolitan	0.57
Karbi Anglong	0.58
Sonitpur	0.60
Tinsukia	0.63
Cachar	0.69
Chirang	0.70
Hailakandi	0.84
Golaghat	0.86
Kokrajhar	1.00

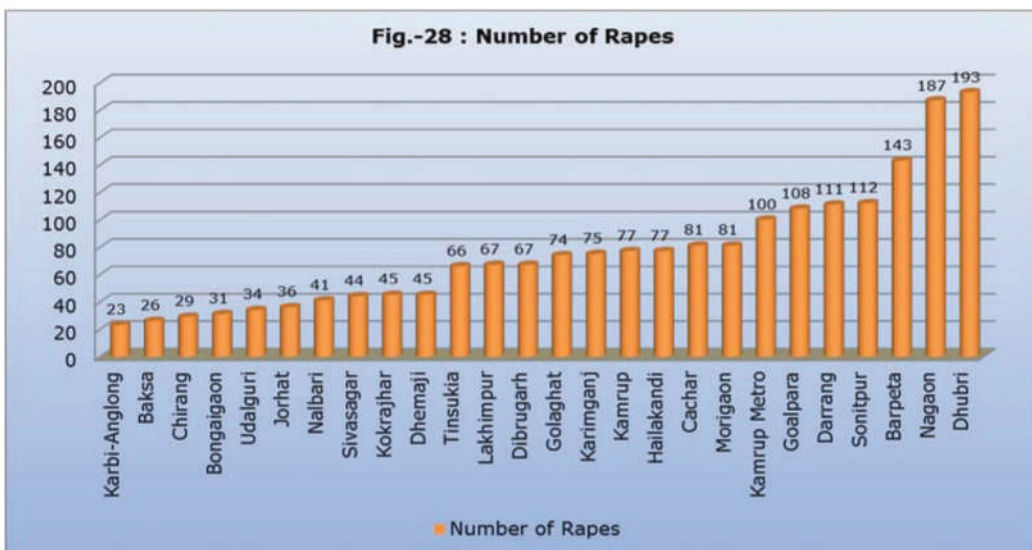
Poorly forested	0.0 - 0.25
Partially forested	0.26 - 0.50
Moderately forested	0.51- 0.75
Thickly forested	0.76- 1.00

The proportion of area under forests in Assam at over 35% well exceeds the Indian average which is a little over 21%. The SDGs target halting further deforestation and encouraging afforestation. Except for the districts Kokrajhar, Hailakandi, and Golaghat, majority of the districts show “very poor” to “poor” performance, with Nalbari and Barpeta being the worst performers with 0 forested area.

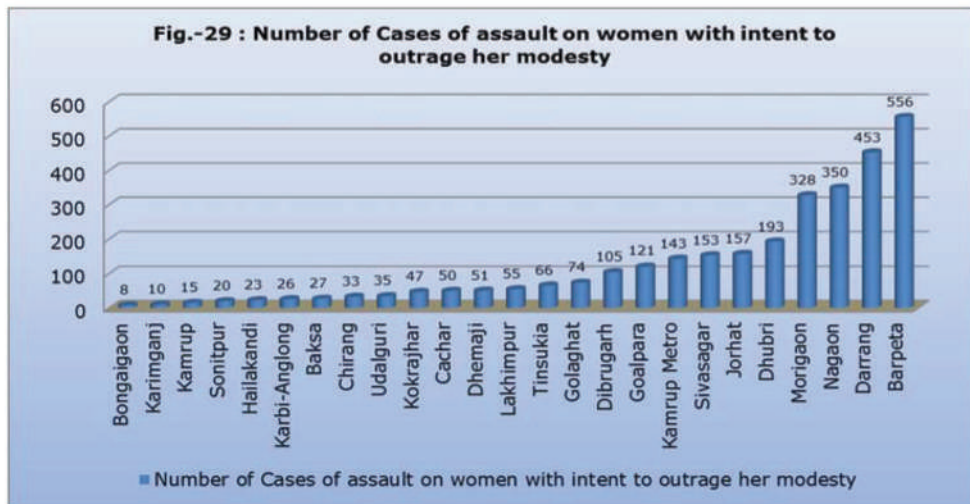
Goal-16: Peace and Justice



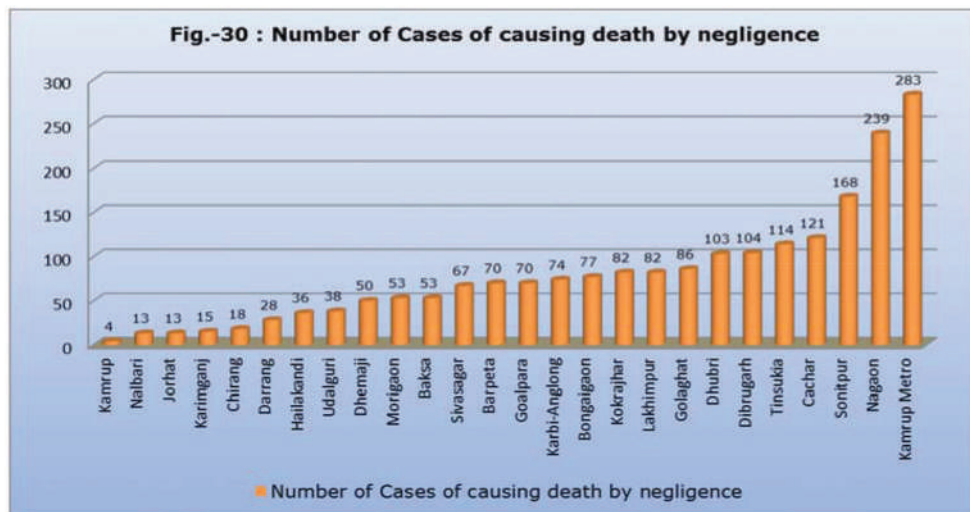
Source: MIS Crime data, 2014



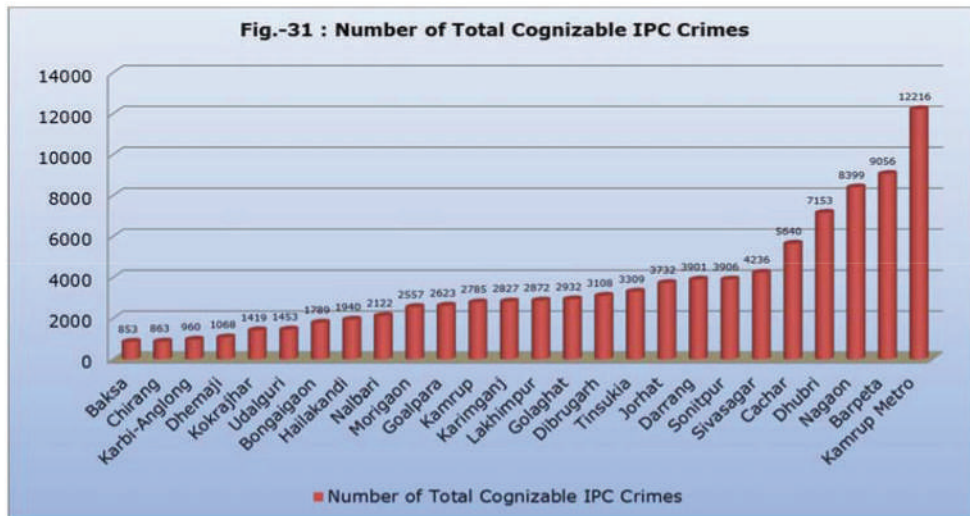
Source: MIS Crime data, 2014



Source: MIS Crime data, 2014



Source: MIS Crime data, 2014



Source: MIS Crime data, 2014

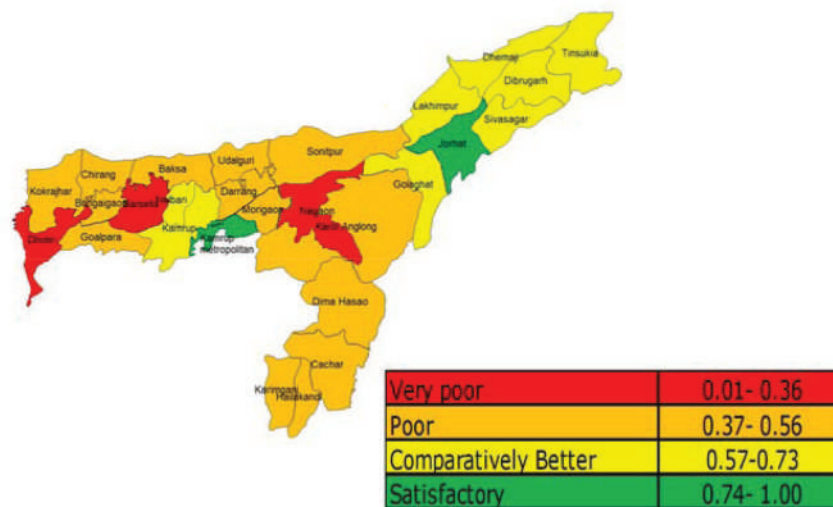
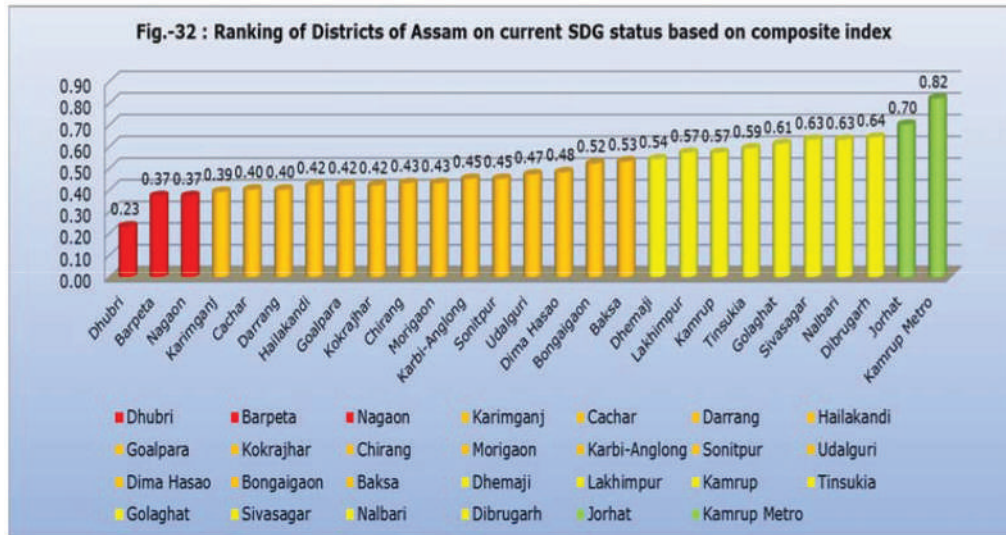
Table 10: Composite score for Goal 16

Districts	Index
Nagaon	0.19
Kamrup Metropolitan	0.32
Barpeta	0.40
Dhubri	0.46
Sonitpur	0.52
Darrang	0.63
Tinsukia	0.65
Cachar	0.66
Golaghat	0.67
Dibrugarh	0.67
Sibsagar	0.68
Goalpara	0.72
Morigaon	0.73
Lakhimpur	0.79
Kamrup	0.80
Kokrajhar	0.80
Jorhat	0.85
Karimganj	0.86
Hailakandi	0.87
Udalguri	0.88
Karbi Anglong	0.90
Nalbari	0.91
Dhemaji	0.92
Bongaigaon	0.92
Baksa	0.92
Chirang	0.93

Very poor	0.01- 0.36
Poor	0.37- 0.56
Comparatively Better	0.57-0.73
Satisfactory	0.74- 1.00

The Goal 16 aims to significantly reduce all forms of violence, and work with governments and communities to end conflict and insecurity. It is an endeavor to understand “what is” in order to know “what needs to be done” by strengthening the rule of the law and human rights. While data on the judiciary system, its efficiency, etc. is still being collected, this report represents the data on the number of crimes committed as it is readily available. It shows that Kamrup Metropolitan and Nagaon districts are the worst performers with Chirang being the best performer in containing the number of crimes committed. Nevertheless, having any number of crimes is never a good sign, therefore, even the districts with satisfactory performance should continue to endeavor to bring down the number of crimes and strengthen the system of judiciary.

3. Overall district rankings based on a composite index



Individual indicators and goals do not provide a total picture on how districts are faring overall on the SDGs. To obtain this overall picture, a composite index is constructed as described in Appendix 1. This composite picture –taking into account the 9 Goals (Poverty, Hunger, Health, Education, Gender Equality, Water and Sanitation, Clean Energy, Sustainable economic growth, and Peace and Justice) as presented individually goal-wise in detail in Section 2 above and combined into a single indicator – is now presented in this section. (Note that the indicator on Forests has been excluded as it being a performance indicator can be argued depending on the geographical context).

Figure 32 shows the inter district position. The bottom 17 districts that have fallen behind the other 10 better performing districts are color coded in red (the poorest performing) and orange (poorly performing). The 10 better performing districts starting from Dhemaji are shown in yellow (comparatively better) and green (the best).

Geographically, more of the Upper Assam districts and some in the periphery of Kamrup Metropolitan like Kamrup and Nalbari districts are performing better; while Barak Valley districts, Dima Hasao, middle Assam districts and lower Assam districts in the western periphery of the state such as Dhubri and Barpeta are some of the worst performers. Although Majuli district does have data in some indicators, but in most cases, it is absent, hence, it is not taken for the final district enumeration.

4. Conclusions

The above analysis attempted to present a disaggregated picture of the SDG performance in the state – disaggregated by districts. It is based on partially available data only on 10 of the 17 SDGs. Nevertheless, it provides considerably more information and insights to enable better and more focused policy making especially in those districts where performance is falling behind.

In future years, it is intended to generate more data on all the 300 indicators identified in the State Indicator Framework for SDGs with an emphasis on deprived groups and pockets of geographical deprivation such as char and border areas, tea intensive areas, and hills. It is also proposed that data will be generated more frequently so that it can assist in better policy making for the SDGs.

Appendix 1

Methodology for Developing Composite Indicators

Data is drawn from various secondary sources for each indicator and a comparative analysis of all the districts has been done. A score index for every goal is generated from the indicators selected to track each respective goal using the following formula:

1. Score index

First, performance of all districts on each individual indicator is given a score. The score index ($S_{\text{indicator}}$) is given by the following formulae:

For a positively increasing indicator,

$$S_{\text{indicator}} = 1 - ((\text{max} - I) / (\text{max} - \text{min}))$$

For a negatively increasing (declining) indicator,

$$S_{\text{indicator}} = 1 - ((I - \text{min}) / (\text{max} - \text{min}))$$

Where "max" is the maximum value of a given indicator across all districts in the sample set; "min" is the minimum value of that indicator in the set of districts, and 'I' is the actual data value of an individual district on that indicator. A score of zero implies that the particular district is the poorest performing in the sample; while a score of one indicates that the particular district is the best performing in the sample. This has been used to demonstrate an inter district ranking based on the score index.

2. Goal score

Next, a Goal score is arrived at for each Goal by averaging across the indicator scores under that Goal. For instance, Goal 3 i.e. Good Health and Wellbeing has 5 indicators; all the score indices ($S_{\text{indicator}}$) would be averaged so as to provide equal weight to all indicators within the Goal into a single Goal score.

3. Composite index score

Finally, averaging all the Goal scores is done to get at the composite index to arrive at a final ranking of the districts based on their performance in all the SDGs.

4. Map and color coding

The final ranking of the districts based on their status on all the SDGs is represented in the form of a map with different color grading representing better performing and relatively poorer performing districts. The map shows inter district inequities based on performance of the districts on the identified 27 indicators of 10 SDGs namely Goals 1, 2,3,4,5,6,7,8 and 16. The color codes show four different categories of performance and the range for each is based on breaking up the composite index values into quartiles.

The list of indicators used in this chapter is in Appendix Table-1 below.

Appendix Table-1

Goal	Indicator
Goal-1 : End Poverty	1.1. Poverty Ratio
Goal-2 : Zero Hunger	2.1. Children aged under 5 years who are underweight (%)
	2.2. Children under age 5 years who are stunted (%)
	2.3. Children under age 5 years who are wasted (%)
	2.4. Children age 6-59 months who are anaemic (<11.0g/dl) (%)
	2.5. Children aged 6-23 months receiving minimal dietary diversity (%)
	2.6. Women aged 15-49 years who consumed IFA for 100 days or more when they were pregnant (%)
Goal-3 : Good health and well-being	3.1. Mothers who had at least 4 antenatal care visits (%)
	3.2. Percentage of children aged 12-23 months fully immunized (BCG, Measles and three doses of Pentavalent vaccine)
	3.3. Percentage of women aged 15-19 years who were already mothers or pregnant.
	3.4. Births assisted by a doctor/nurse/LHV/ANM/other health personnel (%)
	3.5. Under-five mortality rate
Goal-4 : Quality Education	1.1. Percentage of primary schools with three WASH facilities (Toilet, Drinking Water and Handwashing facilities)
	1.2. Transition rate, Elementary to Secondary level
	1.3. Percentage of schools comply with the 10 RTE parameters
	1.4. Gross Enrolment Ratio at Higher Secondary level
Goal-5 : Gender Equality	5.1. Sex ratio(total)
	5.2. Literacy rate (Female)
	5.3. Percentage of female work participation as main workers
	5.4. Proportion of women within the age 20-24 years getting married before the age of 18 years
Goal-6 : Clean water and sanitation	6.1. Households with an improved drinking-water source
	6.2. Households using improved sanitation facility
Goal -7 : Affordable clean energy	7.1. Households with electricity
	7.2. Households using clean fuel for cooking
Goal-8 : Sustainable economic growth	8.1. Percentage of Households Availing Banking Services in Assam
Goal-15: Life on land	15.1. Percentage of Area under forest cover
Goal-16: Peace and Justice	16.1. Number of murder(s)
	16.2. Number of rape(s)
	16.3. Number of assaults on women with intent to outrage her modesty
	16.4. Causing Death by Negligence
	16.5. Total Cognizable IPC crimes
