



सत्यमेव जयते

# **ECONOMIC SURVEY**

## **ASSAM: 2021-22**

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



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Dr. Himanta Biswa Sarma



মুখ্যমন্ত্রী, অসম  
Chief Minister, Assam

Dispur  
27 Magh, 1428 Bhaskarabda  
10.02.2022

## MESSAGE

I am very happy to know that the Directorate of Economics and Statistics, Assam is bringing out its annual publication '**Economic Survey Assam, 2021-22**'.

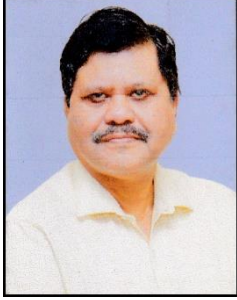
Economic Survey holds immense significance as it provides an insight into the economic situation of the State. I am confident that 'Economic Survey, Assam, 2021-22' would be able to prove itself invaluable by collection, compiling and analysing important economic data. This survey would be a key resource in preparing policies and programmes for the State.

I wish the Directorate of Economics and Statistics, Assam all the very best for the endeavour and hope that 'Economic Survey Assam, 2021-22' would be able to achieve the desired results.

(Dr. Himanta Biswa Sarma)



**Jishnu Barua, IAS**  
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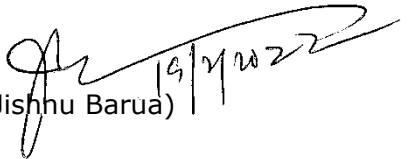
## **MESSAGE**

It is heartening to note that the Director of Economics and Statistics, Assam is publishing the 'Economic Survey of Assam, 2021-22', This process of annual documentation and analysis of socio-economic development statistics is crucial for policy formulation and implementation. Economic Survey, Assam 2021-22 is an essential document for policy makers, researchers and students.

I hope the publication sets a roadmap for achievement of the socio-economic objectives the state has set for itself.

I extend my best wishes to the editorial team.

Dated: 19<sup>th</sup> February, 2022

  
(Jishnu Barua) | 19/2/22



**Paban Kumar Borthakur, IAS**  
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## MESSAGE

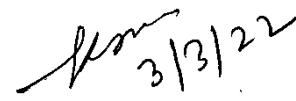
It is a matter of great satisfaction that the Directorate of Economics and Statistics, Assam is bringing out the Annual Publication '**Economic Survey Assam, 2021-22**' highlighting latest economic scenario.

The Directorate of Economics and Statistics, Assam has been entrusted with the task of collecting, compilation and analysis of the data on different sectors of economic and incorporating the details in the current issue the '**Economic Survey Assam, 2021-22**'.

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 the staff of the Directorate of Economics and Statistics, Assam associated with the publication.

March 3, 2022

  
(P.K. Borthakur)





**FOREWARD**

The Directorate of Economics and Statistics, Assam has been publishing "Economic Survey, Assam" annually with a view to maintain the data 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 details 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, 2021-22" endeavour has been made to depict and review the latest developments and trends in the sectoral performance of the State's economy. However, in spite of Covid -19 pandemic situation, efforts have been made to collect information from various field relevant to preparation of this report and provide information on achievements of various measures/ programmes undertaken by the state Government for all round development through collected data made available by the different Government Departments, Organisation, Institutions and Agencies. The Directorate acknowledge with gratitude to co-operation extended by the various Government Departments/Organisations in making relevant data/information available for bringing out this publication.

I extend sincere gratitude for the efforts made by the Officers and Staff associated directly and indirectly in compiling and designing this publication.

I also extend my sincere appreciation to the Addl. Chief Secretary to the Govt. Of Assam, Transformation and Development Department for his valuable guidance in adding a new Chapter "Dawn of New Horizon" in this publication.

I Expect this publication will definitely be beneficial for Administrator, Planners, Academicians, Researchers and many others.

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

March/2022

Nirupama Talukdar



Director of Economics and Statistics, Assam

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## Assam at a Glance

Sl. No.	Item	2018-19	2019-20	2020-21
1	Geographical Area (sq. km.)	78438	78438	78438
2	Administrative Setup-(in no.)			
	Revenue Circles	-	-	185
	District	-	-	35
	No.of Gaon Panchayat	-	-	2200
	Inhabited Villages	-	-	25372
	Un -inhabited villages	-	-	1023
	No.of Towns	-	-	214
3	Population as per Census 2011 (in "000)			
	Total	-	-	31205
	Male	-	-	15939
	Female	-	-	15266
	Rural	-	-	26807
	Urban	-	-	4398
	Scheduled Cast	-	-	2231
	Scheduled Tribes	-	-	3884
	Density of Population(per sq. km.)	-	-	398
	Literacy rate (percentage)	-	-	72
	Sex ratio(Female per thousand male)	-	-	958
	Percentage of urban population	-	-	14.1
4	Gross State Domestic Product (GSDP)			
	i)At current Price	309336	377405	381004 #
	ii) At Constant Price	231040	251923	250923 #
	Net State Domestic Product (NSDP)			
	i)At current Price	276625	332142	333991 #
	ii) At Constant Price	204627	223483	221521 #
	Agriculture & ,Forestry and Fishing			
	i)At current Price	46136	72937	80358 #
	ii) At Constant Price	33291	41516	42294 #
	Service Sector (Rs. In crore)			
	i)At current Price	116769	134130	127800 #
	ii) At Constant Price	73916	79443	77464 #
5	Rainfall-percent to Normal(in mm)	75.77	96.36	-
6	Agriculture-(Area in "000 Ha.)			
	Net area sown	2723	2699	-
	Gross cropped area	4004	3975	-
7	Area under principal crops(in "000 ha.)			
	Rice	2425	2401	2360 *
	Wheat	16	11	9 *
	Maize	32	37	41 *
	Rape & Mustard	286	289	286 *
	All cereals	2479	2454	2416 *
	All pulses	150	144	142 *
	All foodgrains	2629	2598	2558 *

Assam at a Glance

Sl. No.	Item	2018-19	2019-20	2020-21
	Sugarcane area	31	30	30*
	Cotton	1	1	1*
	Total Fruits & Vegetables	207	209	206*
8	Production of principal crops (in "000 tonnes)			
	Rice	5437	5215	5214*
	Wheat	23	14	13*
	Maize	105	128	148*
	Rape & Mustard	184	177	185*
	All cereals	5569	5360	5378*
	All pulses	113	106	109*
	All foodgrains	5682	5467	5487*
	Sugarcane (cane)	1093	1218	1093*
	Total Fruits & Vegetables	2507	2470	2471*
9	Index number of agricultural production	150.86	147.51	144.22*
10	Agriculture Census (as on 2015-16)			
	Number of operational landholding(in "000)	-	-	2741\$
	Area of operational landholding(in "000)	-	-	2976\$
	Average size of operational landholding (ha.)	-	-	1.09\$
11	Livestock Census-as on 2019			
	Total livestock (in "000)	-	-	18077
	Total poultry (In "000)	-	-	NA
12	Forest (Reserved Forest) Area(sq.km.)	13590	13590	13590
13 (i)	Index of Industrial production of Assam	111.24	112.00	.....
13 (ii)	Index of Mineral production of Assam ( All	89.55	84.82	79.67*
14	Electricity-(Million Kwh)		-	
(i)	Gross Unit Generation (MU) under APGCL	1594	1546	1390
(ii)	Total Consumption	6968	7257	7458
(iii)	Industrial consumption	1127	1075	1012
(iv)	Domestic consumption	3477	3817	4225

# Data for the year 2020-21 (1st PE)

\* Data for the year 2020-21 (P)

\$ Data for the year 2015-16

## Assam at a Glance

Sl. No.	Item	2018-19	2019-20	2020-21
15	Banking -(Scheduled Commercial)			
	Banking offices	2348	2889	2925
	Banking office for rural population	481	477	477
16	Education-			
(i)	Lower Primary schools(in nos.)	36262	36684	36323
(ii)	Enrolment in Lower Primary School (in"000)	2650	2618	2650
(iii)	High and Higher Secondary schools (in nos.)	5142	4313	4301
(iv)	Enrolment (in "000) in High & Higher scndary schools	783	780	1565
17	Health-			
(i)	Civil Hospital (including sub-divisional civil Hospital)	39	38	39
(ii)	State Dispensaries	278	154	154
(iii)	Beds per lakh population (Estimated population)	53.35	60	61
(iv)	Birth rate	21.1 @	21.0^	....
(v)	Death rate ( " )	6.4 @	6.3^	....
(vi)	Infant mortality rate ( " )	41 @	40^	....
18	Transport-			
(i)	Railway route length (in Km.)	2518.99	2518.99	2520.13
(ii)	Total road length (in km.)	57848	58884.00	58944
(iii)	Motor vehicles on Road (in "000 Nos.)	3725	4167	4419
(iv)	Road Length per lakh of population	185.38	188.69	163.74
(v)	Road Length per "00sq. Km. of Area (in km.)	73.75	75.07	75.15

@ Data for the year 2018

^ Data for the year 2019

## Chapter-I

### DAWN OF A NEW HORIZON

A new government under the dynamic leadership of Chief Minister Dr. Himanta Biswa Sarma took the reins of power on 10<sup>th</sup> May, 2021 to make Assam one of the developed states in the country. The government with this mission has embarked on its endeavour to bring about meaningful and substantive transformation. A series of steps have been initiated to put the economy on a robust platform. The new government has accorded importance on meeting the Sustainable Development Goals (SDG) to improve the living standards of the people by directly intervening on the causes of poverty. Considering the importance of SDP growth for a vibrant economy, State government has taken a slew steps from infrastructure development to reform in governance.

It is true that for overall development of the state, huge chunk of investment is required for creating physical infrastructure and improving quality of lives through advanced health care facilities, education, sports and other recreational avenues. Therefore, State government has decided to join hands with NABARD through AIFA in accelerating its inclusive and sustainable economic and infrastructural transformation.

During the course of its journey, Assam government like several others also faced the scourge of COVID 19 pandemic and its impact on the life and economy of the state. However, with timely, cautious and pragmatic approaches the pandemic has been managed without much disruption to state's economy. This helped the state to retain its SDP growth rate at a positive rate of 0.95% compared to other states where it was by and large negative.

Moreover, to bring governance to the finger tips of our people, State government has launched Mission Basundhara. This mission will have a far reaching social and economic consequence in a broad spectrum of things like use of land, transferability and credit, leasing and mortgage. It will also give the psychological relief to the non-residents persons of the State to settle their land issues from far off places. Similarly, State government has come out with 'SADBHAVANA' mission to reduce pendency of public petitions by resolving the same in a time bound manner. This will help expedite resolution of public grievances and make the governance system more efficient and save valuable time of the petitioners. Similarly, State government has taken a bold step to restructure the Micro-Finance sector by announcing Assam Microfinance incentive and relief scheme 2021 which will rebuild the Micro-Finance sector and give a fillip to new economic activities in the state, mostly in the rural areas. The government has also initiated steps to contain the rising incidences of road accidents and the resultant fatalities. Similarly a mission type approach has been taken to eliminate the menace of drug abuse from the society. All these steps have yielded positive results.

Minimum support price, in short MSP is another incentive scheme of Government of India to purchase paddy etc. at a promised price. However, due to lack of a properly harmonized system, the farmers of the state could not avail of the benefit of the scheme to the desired extent. State Government has taken major initiatives this year to establish collection centres, farmer registration etc. and hundreds of farmers across the state are

able to get the MSP. This will not only increase the farmers' income but also increase the SDP. Similarly, various steps taken to improve the power sector, has shown immediate results of improvement in billing, collections and reduction of arrears of APDCL. Steps taken to complete crop cutting experiments will help popularize the PMFBY and enable farmers to register their claims on time. Thus these new initiatives of the State Government are bringing a new dawn to state's economy.

### **(I) INFRASTRUCTURE DEVELOPMENT:**

To give a paradigm shift to infrastructure development of the state, Assam Infrastructure Finance Authority (AIFA) was formed to take up major infrastructure projects not covered under NLCPR, EAP, State Plan, RIDF or any other schemes. The aim and objective of AIFAs is to take up projects of critical infrastructure for speedy overall development of the State.

Government of Assam took a decision to make AIFA a major financing agency for funding larger Infrastructure projects. Under this, shelf of projects amounting to nearly Rs. 11,100 crores has been identified in diverse sectors across the State. This additional capital has been enthused from term loan under NIDA (NABARD Infrastructure Development Assistance) for which a MoU was signed on 4h August, 2021.

Many important projects in diverse sectors are being undertaken under NIDA which would reduce the urban-rural gap and pave way towards a holistic development of the rural areas including their economy.

#### **(A) NIDA will extensively be used to create academic infrastructure as seven universities will be taken up under this projects. These universities are-**

- (i) Rabindra Nath Tagore University at Hojai.
- (ii) Bhattadev University at Bajali.
- (iii) Madhavdev University at Narayanpur.
- (iv) Birangana Sati Sadhani University at Golghat.
- (v) Aniruddha Sport University at Chabua.
- (vi) Majuli University of Culture at Majuli
- (vii) Assam Women's University at Jorhat.

#### **(B) Three engineering colleges are being constructed under NIDA fund. These colleges are-**

- (i) Behali Engineering College
- (ii) Bongaigaon Engineering College.
- (iii) Sualkuchi Engineering College.



**(C)** Seven numbers of Medical Colleges also will be taken up under NIDA Fund viz. -

- (i) Tamulpur Medical College.
- (ii) Bongaigaon Medical College.
- (iii) Dhemaji Medical College.
- (i) Golaghat Medical College.
- (ii) Morigaon Medical College.
- (iii) Charaideo Medical College.
- (iv) Biswanath Medical College.

Besides six numbers of Government Colleges (ongoing), nine numbers of Model Women Colleges (ongoing), 11 numbers of Integrated D.C. Offices, 10 numbers of District Stadia, 40 numbers of Mini Stadia will be taken up under the fund. Two cold storages at Guwahati Airport and Azara GP area for transporting Agro Exports to have also been taken up under NIDA fund.

For the development of tourism sector it has been proposed to construct an auditorium, museum, land scapping at Jongalbolohu Archaeological site. To develop Handloom Textiles & Sericulture sector it has been proposed to establish one sericulture college. Under Social Welfare department, it has been proposed to establish 2000 Model Anganbadi Centres.

Other infrastructure development like construction of two bridges at Ghunakhuti and Pagladiya, construction of overbridges at- Mission Chariali, Tezpur, Kokrajhar to Rupsi Airport Road, Rowta to Misamari Road, Gohpur-Dholpur Road via Ghagrabasti road, NH-52 (Dirak gate) Building Pengeree and Dergaon Chariali to Golaghat.

Hon'ble Prime Minister Shri Narnendra Modi has launched Government of Assam's flagship program 'Asom Mala' for improvement of state highways and major district roads on February 7, 2021. The programme is being implemented with the objective to build high speed corridors with best quality road infrastructure and proper highway and safety standards for efficient transportation. The program is implemented with different sources of funding which includes SOPD, externally aided projects and NABARD Infrastructure Development Assistance.

APWD Building has played a vital role in infrastructure development in the state. Currently APWD(B) is executing various schemes under different departments.

## **(II) POWER SECTOR REFORMS:**

Energy as always has been a catalyst in economic development through its role as a production input and a direct component in human well-being. It has a major role to play in reducing poverty by improving productivity and enhancing the general quality of life. Due to this strong positive correlation between energy and economic development and their direct impact on GDP, insufficient energy supply in relation to its demand leads to a negative impact on economic development and state GDP. The new government has given importance to the power sector from economic and social point of view. Following

are the major efforts and achievements of power sector in power generation and distribution since 2021.

- Electrification of household: Since June 2021 out of 4.80 lakh left out household, total 2.35 lakh households have already been electrified and the remaining is expected to be completed before March, 2022.
- “Sonali Xaishab Bikashita Axom” programme: Out of 48231 numbers of Anganawadi and Primary Schools, total 24000 numbers have already been electrified.

### **Bill Collection and Employment generation**

Bill collection is nothing but revenue collecting endeavour of Assam Power Distribution Company Limited (APDCL). The pre-paid wallet-based collection agents are engaged for collection of revenue from rural areas. This has not only boosted the revenue collection of APDCL, but also created opportunities for rural employment. APDCL has been able to collect Rs 4502 crore since June 2021 to January 2022. The collection efficiency from April 2021 to January 2022 was 99 per cent as reported by APDCL. Again, in respect of arrear it has come down from Rs. 2210 crore in the month of June 2021 by Rs.519 crore in January 2022. Accumulated dues of around Rs. 800 crore were liquidated out of better revenue stream. Moreover, APDCL has earned rebate of around Rs. 23 crore for timely payment of dues.

During the last financial year 2021-22 Assam Govt. has taken steps to convert all loans and grants of AEGCL into equity and waiving of interest outstanding on such loans up to 31<sup>st</sup> March, 2021.

### **(III) PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)**

Pradhan Mantri Fasal Bima Yojana (PMFBY) is being implemented in the State from 2016. Through PMFBY, government of Assam primarily aims at expanding crop insurance in the State. The scheme seeks to provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crops due to natural calamities, pests and diseases. In addition, PMFBY proposes to stabilize the income of farmers to ensure their sustenance continuance in farming.

Farmer’s share of premium up to 1 hectare of insured area is fully subsidized by Assam Government. It means farmer growing notified crop on land up to 1 hectare, would be able to get crop insurance for Rs. 1 only. The scheme is implemented at Gaon Panchayat (GP) level as Unit of Insurance for all the districts of Assam except districts in BTR, KAAC and NCHAC areas. However, Block is the Insurance Unit (IU) for BTR (Kokrajhar, Chirang, Baksa and Udalguri), KAAC (Karbi Anglong and West Karbi Anglong) and NCHAC (Dima Hasao) area. Five Insurance Companies were empanelled for Rabi-2021-22 onwards to next three years.

**ACTIVITIES TAKEN IN 2021-22:**

1. Sali Paddy (Winter Paddy) was notified for Kharif-2021 and Summer Paddy and Sugarcane is notified for Rabi-2021-22.
2. For Kharif-2021, Crop Cutting Experiments at Revenue Circle level have been completed by two outsourced agencies under the supervision of Directorate of Economics & Statistics (DES) which was never done before due to shortage of manpower.
3. Five Insurance Companies namely AICIL, HDFC Ergo, Reliance, SBI and Future Generali Insurance Companies are selected for next 3 Years w.e.f. from Rabi-2021-22 onwards by tendering.
4. Insurance Unit has been lowering down to Gaon Panchayat (GP) level instead of Revenue Circle (RC) in new contract with ICs to increase claim for the farmers.
5. Automatic Weather Stations (AWS) are installed at Golaghat, Dhemaji and Kamrup on pilot basis to monitor climatic conditions and provide Weather advisory on real time.
6. 'Crop Insurance Week' was celebrated in first week of July and December.



Fasal Bima Week launce

Level



Awareness Programme in Gaon Panchayat

**(IV) MINIMUM SUPPORT PRICE (MSP)**

Minimum Support Price (MSP) for paddy to maximum possible farmers of the state is priority area of the Hon'ble Chief Minister. His vision is to procure all surplus paddy produced in the state to be distributed through the Public Distribution System (PDS) for Welfare schemes like NFSA, MDM etc.

The gap of price between MSP and local markets is approximately Rs. 500/- per quintal. This may be one major reason for state's farmers gradually giving up paddy cultivation- the major source of food income for largest section of people in the state.

MSP motivates the farmers to grow more paddies for enhanced productivity. The concomitant scheme of incentivization of millers will help in capacity building of the Milling Industry. Rural godowns already promoted by CMS-GUY will add to the storage capacity of the state. The scaling up of operation of paddy procurement would result in

increased disposable income in the hands of the farmers who are generally forced to sell their agricultural produce in a throw away price without any bargaining power. It would help the State economy by increase in agricultural GDP.

With this vision, Hon'ble Chief Minister wants to reach out to the state farmers with a quantum leap in paddy procurement at par with other paddy producing states of the country with Assam occupying the ninth position among the largest paddy producing states in India.

Paddy procured under KMS 2021-22 (first crop) through Govt. Agencies is 66762 MT (@Rs.1940 per quintal) where 9765 nos. of farmer are benefited. Here 179 nos. of active paddy procurement centres are involved.



Paddy procurement centre



Issue of paddy procurement certificate

## (V) MANAGEMENT TO COMBAT COVID-19 PANDEMIC IN ASSAM

**Evolution of COVID in our state and in country:** Starting in the month of December, 2019 in Wuhan province of China, the spread of COVID-19 across the globe was extremely rapid. India, being one of the major countries with a large diaspora, immediately got affected by the pandemic. Assam is not an exception.

Accordingly, to combat Covid 19 pandemic, efforts were taken with meaningful integration of policies, plans and guidelines. Strengthening existing systems and creation of new infrastructure, empowering health care officials and front line workers, reaching out to the community, financial assistance to the needy, awareness creation in community, mass vaccination campaign and timely SoPs with safety as priority, without hampering economy essentially featured in the COVID care management.

In fact, the management of COVID pandemic by the State government was even commented well by WHO in their global publication. However, despite the best efforts of the Government, the impact of COVID pandemic on Economy and social life was of considerable nature. Unexpected and unprecedented challenges came up.

**Challenges due to nation-wide lock down:**

- Patients stranded outside the State
- Pilgrims/ Tourists etc stranded outside the State
- Students stranded outside the State.
- Persons stranded outside India.
- Workers stranded outside the State – Livelihood was a challenge due to lockdown

In order to immediately address the financial difficulties of Assamese people across the country and even outside the state, the Govt of Assam undertook massive financial assistance to persons who are stuck up outside Assam.

- An amount of Rs. 155.84 crores transferred to the bank account of 3,89,613 beneficiaries in two instalments @Rs. 2,000/- per instalment.
- An amount of Rs. 4.30 crores paid to persons suffering from critical diseases who are stuck up within the country.
- Total 889 beneficiaries received 1<sup>st</sup> instalment of Rs. 25,000/- and
- Total 832 beneficiaries received 2<sup>nd</sup> instalment of Rs. 25,000/- each.
- Financial Assistance to persons of Assam origin who are stuck up in Foreign Countries: Rs. 73.47 lakhs paid to 97 beneficiaries.

- **Challenges ahead after relaxation of lockdown:**

- Preparation for screening of probable huge influx.
  - Quarantine of persons coming from outside the State.
  - Increasing trend of cases in other major cities of the country.
- Number of persons entered Assam from outside the State during lockdown in 2020-21 = 28,54,173 (By Road = 13,67,559, By Train = 7,46,971, By Air = 7,39,643).
  - Number of Institutional Quarantine facilities created during 2020-21 to keep the persons coming from outside the state = 2,296
  - Number of beds were available in the Institutional Quarantine facilities created during 2020-21 to keep the persons coming from outside the state = 96,680
  - Total number of persons were kept in Institutional Quarantine in 2020-21 during lockdown and after lifting of Lockdown = 4,84,872

**The actual spread of the COVID -19 infections in the state:**

The pandemic had a pattern of increasing and decreasing trends, with a variance of about 3-4 weeks delay compared to the western parts of the country. Further, because of the strictest measures against spread of the disease and early detection mechanism through '3T's, Testing, Tracing and Treatment, State government could restrict the number of cases to a great limit and saved many precious lives. The testing facilities, treatment facilities including quarantine/isolation institutions were brought up to the mark and as per requirement in rapid pace.

To summarize the tremendous efforts of the government, the following developments made in a short span of time, itself would be self explanatory:

- Govt. of Assam provided best of the COVID Treatment in Public Health Facilities
- All the health institutions were strengthened, HR were trained and empowered and pressed in to service in each location.
- Medicines like Remdesivir and Tocilizumab were procured on time and were provided free for BPL families and at the purchase value for APL families (for both Public and Private health facilities).
- Up to March 2020, only 400 ICU beds in various Medical Colleges & Hospitals including Paediatric beds in SNCU and only about 120 numbers could be earmarked for COVID patients.
- Only 300 numbers of oxygen supported beds dependent on Oxygen Cylinders.
- **Significant improvement of Health infrastructure, particularly ICU Beds and Oxygen Supported beds :**
- ICU beds up to 1,680 with almost 1,000 COVID ICU beds including 134 beds for children.
- Oxygen supported beds up to 5,000 plus with Medical gas pipelines, additional oxygen cylinders and oxygen concentrators.
- Daily Medical Oxygen production up from 50 MT per day to 120 MT per day as on date.
- 87 numbers of PSA plants in Assam, of which 76 has been commissioned already.
- Liquid Medical Oxygen storage capacity up from 200 MT to 600 MT as on date.
- 19 LMO tanks already commissioned with another 34 in pipeline.

With best of the efforts, the loss of lives due to COVID was minimal in the state of Assam. However, government was extremely considerate for the affected families. Though the loss of a family member cannot be compensated, government understood that many families faced serious financial crisis due to loss of the bread earner of the family. Hence a slew of steps were taken by the State government to support the families in time of their need:

- Government of Assam took full responsibility of last rites as per rituals of persons who lost their lives due to Covid and around 4,500 families were given assistance up to Rs 10,000/- as financial grant for cremation expenditure.
- Chief Minister's COVID support schemes for family members of COVID deceased
- Chief Minister's COVID Widow Scheme: 1,885 beneficiaries
- Prarthana Scheme: 795 beneficiaries
- Chief Minister's Sishu Seva Scheme: 8 families

State government also took up the responsibility of ensuring safety of all the citizens by massive vaccination drive against COVID-19. As on date, 4,32,68,972 doses of vaccination have been administered with 2,33,86,151 first Dose, 1,96,24,728 second dose and 2,58,093 'Precaution' Doses. Of these, 2.12 crore male and 2.18 crore female have received vaccination, which is good reflection of gender equality. State government not only spent money for vaccine procurement and delivery, but also for incentivising the

coordinated activity and mobilization of public across the state, especially the citizens with difficulties to reach nearest vaccination centres.

During the pandemic, Assam Police personnel worked as frontline warriors on 24x7 basis conducted vehicular checking and lodged 218 nos. cases against the violators of Disaster Management Act and other provisions of law.

## **(VI) MISSION BASUNDHARA**

To streamline and resolve land revenue matters in the state, a mission mode project for purification of land records through a simplified online application and accelerated service delivery mechanism, polygon survey of NC villages and re-survey of cadastral villages were brought under '**Mission Basundhara**' and launched by Hon'ble Chief Minister, Assam on October 2, 2021. The mission envisages to make land related services easily accessible to citizens, reduce the pendency in updation of land records and create an ease of doing business environment in the land management ecosystem.

**The features of the three components of the mission, timelines are:**

### **A. Purification of land records in a mission mode:**

Nine land revenue services provided through the Mission Basundhara Portal which is a one-stop contactless interface for people to access land related services in a smooth, hassle-free manner. The online application period by citizens through the portal was from October 2, 2021 – December 7, 2021, and disposal of cases received shall be within May 10, 2022.

The nine land related services provided through the portal are – i. Mutation by right of inheritance ii. Mutation after deed registration iii. Partition of undisputed cases iv. Annual Patta to Periodic Patta Conversion v. Reclassification of land less than one bigha vi. Striking out names of persons who are no longer in possession under Rule 116, ALRR, 1886 vii. Allotment Certificate to Periodic Patta viii. Legacy data updation/rectification ix. Mobile number update of Pattadar.

The implementation of the mission is complementary to the goals of DILRMP (Digital India Land Records Modernization Programme) of providing of authentic land parcel aimed at reducing land related litigations, enabling transparent property transactions, and equitable growth. Thus, Mission Basundhara is a major modern land governance initiative aimed at providing a comprehensive database for planning developmental, regulatory activities while providing citizen services based on land records data and pave the way to an accurate land titling regime.

## **(VII) SADBHAVANA**

Project Sadbhavana, is a mission mode project which was launched by Hon'ble Chief Minister, Assam on 1<sup>st</sup> February, 2022 which aims to dispose files pertaining to old cases at Assam Secretariat within 10<sup>th</sup> May, 2022.

This project is running in a strictly time-bound manner, started on 1<sup>st</sup> February 2022 and window of two (2) months is given in the 1<sup>st</sup> phase to all the citizens for their pending applications.

For registration and quoting the file number or reference to government communication regarding the old cases which is available online in the government Sadbhavana portal.

The link to open and apply under Sadbhavana is <https://rtps.assam.gov.in/sadbhavana/>.

So far, 700+ applications under various service categories across all administrative departments under Govt. of Assam have been received. A tracking status facility is also available on the website for the applicants. Under IEC activities, a Training cum Workshop has been conducted on 5<sup>th</sup> February 2022 to the Nodal officers of all the Administrative Departments to expedite the grievance applications. For creation of public awareness about Project Sadbhavana news in several leading daily newspapers both in Vernacular and English medium has been published.

Department of Administrative Reforms, Training, Pension & Public Grievance is designated as the Nodal Department for this project. The department monitors the activities on a day-to-day basis and over all progress on disposal cases received at Sadbhavana.

In a massive move, Project Sadbhavana aims at providing assistance and support to the people of the state in times of hardship and distress, as well as taking governance to people's doorstep.

This project has a holistic approach and would be helpful to ease out the repetitive visits/follow ups by the applicants for their service at the Secretariat/Departments. The spirit of the project is to help people who are seeking government response, the officers and staff responsible for the implementation of the project should adopt sympathy and empathy for public interests.

This project has made a single window for all the cases pertaining to services applied by the resident (applicant) or organization under various departments. Since it is a time bound project, departments are bound to resolve the cases and inform the applicants which will invariably impact positivity among residents towards the government.

Through this service, residents/applicants will be benefited economically and by saving their time.

### **Way forwards:**

In the upcoming phase of this project, Government is planning to weed out and clearing the old cases (physical copies) after successfully disposing all the pending cases and



move to a digital platform by introducing and implementation of e-Office system at Janata Bhawan (Assam Secretariat). It will enormously increase the productivity of the department and make them more accountable and transparent.

Department has been asked to categorize the files as per norms and once categorized, GAD will initiate action for disposal of archiving at the State Archive as per manual.

The e-Office system is targeted to be made operational across all departments in the secretariat by May 10, 2023 by the government.



Training Programme for e-office at AASC

## **(VIII) FIGHT AGAINST DRUG ABUSE**

Drugs abuse is a curse to the society which is creating new challenges for Law enforcement agencies as well as degrading the social values. Present Government has taken stern sincere steps and result oriented action under Assam Police against Drug trafficking.

A mobile App in the name and style of 'Drugs Free Assam' has been developed by Assam Police in association with the NIC. The app was launched on 10th of December, 2021 by the DGP, Assam. The App has already been downloaded more than one thousand times and received 4.8 ratings out of 5 from the users. More than 100 complaints have been received till now through the App in response from the well-wishers of the society. CID, Assam has compiled a handbook for the Investigating Officers of NDPS Act Cases. The handbook was released by DG, NCB on 10th of December' 2021 to help and guide IO and Supervisory Officers in the field

Auto generated SMS alert is sent to the SPs and OCs for submission of timely Charge Sheet from 15/06/2021. Training on 'Digital Forensics, Dark Net and Crypto currencies' for the Police Officers of NE states, CPMFs including Assam Rifles and other Central Agencies like, CBN DRL, Customs, etc. were conducted in association with the Narcotics Control Bureau, New Delhi. Training is conducted for investigating officers for improving capacity of I/O.

Numbers of Model FIRs have been devised and circulated. It may be emulated by other NE States. Detention order against 20 numbers of habitual drug traffickers have been obtained under PIT NDPS Act, 1988.

The matter of sharing of satellite imagery of suspected areas has been taken up with NCB. Focus has been given on time bound and professional investigation Operation against drug traffickers has been intensified and has resulted in recovery of large quantities of drugs. The estimated market value of the seizure of drugs in 2021 is 404.69 crores. The number of cases registered are 980 and 2271 during 2020 and 2021 respectively and 343 number of cases registered till 13<sup>th</sup> February of 2022. The number of person arrested associated with drug trafficking are 1652 and 3851 in the year 2020 and 2021 respectively and 602 number of person related with drug trafficking is arrested up to 13<sup>th</sup> February, 2022. This drive against drug abuse is appreciated by the well-wishers and victims of drug abuse of the society. Government of Assam is taking various awareness campaigns to reduce the attraction on drugs and giving much emphasis on drugs free Assam. Government of India is also appreciating the recent achievements of Assam Police in the fields of drug abuse.



## (IX) ROAD SAFETY

Each year in Assam nearly 3500 people die in traffic accidents and approximately 6000 people suffer injuries. Road accidents continue to be a leading cause of death, disabilities and hospitalization in the country despite our committed efforts to reduce them. Thus in recent times the Transport Department, the nodal Lead Agency has taken various steps with involvement of Police Department to ensure road safety to find out sustainable solution. Some of the initiatives are as follows:

- Introduction of traffic interceptor vehicle and speed guns in each District Transport Office to ensure adherence to speed limit in order to reduce accident due to over speeding.
- Poor maintenance and servicing of old vehicles not only damages the environment but also poses great safety hazard on road. The department has

taken appropriate steps and establish automated testing stations across the state to ensure vehicle performance capability.

- The automated Driving testing track system tests, records and evaluates the skills of the driver before issuing the driving license.
- The department has also taken steps to install CCTV surveillance camera system at identified location to ensure adherence to traffic rules. Along with Speed monitoring system in select stretched CCTV surveillance system is also proposed to be implemented to capture the safety requirement of vehicles/driver's behaviour/use of helmet etc. and other traffic violations like signal breaking etc.
- Assam has also taken steps for implementation of Vehicle Location Tracking Device system under MoRT&H funded "NIRBHAYA" framework. Once the project is implemented all over the state the safety of the traveller can be ensured through location tracking of the vehicle in centralized command and control centre as well as through panic button fitted in the vehicle, which will generate alert to the concerned law enforcing agency to take necessary steps.
- To set up Accredited Driving Training Centre as per Central Motor Vehicles Rules, 1989 vide Notification No. 394(E) dated 7th June 2021 to make the driving training scientific and systematic, vest the Accredited Driver Training Centre with certain functions like testing of aspirants for issue of driving license and to make Accredited Driver Training Centre a commercially viable business proposition. This will ensure setting up of scientific and systematic driving training Institutes, inculcate good behaviour in driving training aspirants, issue of Driving License based on scientific and systematic driving training and strengthen road safety.

#### **INITIATIVES BY APWD (NH Works)**

- Road Safety Engineering measure on the APWD NHs network is a continuous process under the sanctioned jobs of the Ministry of Road Transport and Highways.
- Assam PWD NH had identified many junctions on NHs with SH/MDR. Temporary rectification measures for 42 (Forty Two) Nos. of Black Spots declared under basis of Accidents data have been taken up and works have already completed. Speed calming measures taken by providing Transverse bar marking, Reflective Road Signage to restrict and warn the traffic, speed calming at the feeder roads connecting the Highway by providing Bituminous Road Hump. STOP Sign, Give way Sign and Speed Breaker Ahead Sign at the Feeder Roads connecting the NH have been installed at various locations. Traffic calming measures have been provided by Transverse Bar marking also. Permanent rectification measures (Long term) for the Black Spots shall be carried out after recommendation of Empanelled Road Safety Auditor of MoRT&H. work
- Hoarding exists in National Highway but hoardings and objects which have obstructed the driver's view are being removed from time to time engaging departmental workers.

- The APWD (NH) had already sent requirement of Streetlights and High Mast Lights to the MoRT&H. Once the Ministry approves this the installation will be done by the PWD(NH). The Ministry had approved the list of works to be sanctioned which includes the proposal for Illumination of Dhola Sadia Bridge over river Brahmaputra, including its approaches using solar hybrid system.

### **Road Safety: involvement of Police Department:-**

The Assam police under the instructions and guidance of Government of Assam and in cooperation with Transport Department and other agencies is working hard for the safety of the people on road.

Action taken in this regard: - the following result oriented actions are taken to decrease the road traffic accidents:-

- A) In connection with road traffic accidents, Hon'ble Supreme Court of India passed many instructions time to time. The instructions of Supreme Court are compiled and executed by Assam Police so that road accident could be decreased. Further the instruction of Government of Assam is also executed with the help of transport department. Regular vehicle checking is conducted and non-FIR (MV Act) cases are submitted. An Amount of Rs. 30,99,31635/- is realized as fine in the year 2021. During the year 7411 nos. of RTA cases are reported and there are 3036 number of fatal cases. Assam Police keeps sharp surveillance over rush driving etc. to reduce Road Traffic Accidents.
- B) Steps were taken in co-operation with NHAI to identify the black spot on highways and also proper signboard was set up for safe drive to evade accidents.
- C) Notably with all round efforts of Assam Police in co-operation and extensive awareness drive of Government of Assam, the ratio of road accidents on the date 31<sup>st</sup> December 2021 is lowered to a negligible level in comparison with 31<sup>st</sup> December 2020.

### **(X) Assam Microfinance Incentive and Relief Scheme (AMFIRS), 2021**

The **Assam Microfinance Incentive and Relief Scheme (AMFIRS), 2021** is an endeavour of present government to provide incentive and relief to the stressed microfinance borrowers of Assam. The scheme was launched on 28<sup>th</sup> November 2021 by Hon'ble Chief Minister. The Scheme offers the incentives and reliefs to eligible microfinance borrowers of following three categories

- Category 1: To maintain and continue good credit discipline, provide incentive of Rs. 25,000/- or outstanding balance to borrowers who have been repaying regularly.
- Category 2: Pay the overdue amounts to borrowers whose payments are overdue by 1-89 days but not to Non Performing Assets (NPA). All such borrowers will also be encouraged to make timely instalment payment so that their accounts remain standard and credit culture is reinforced.
- Category 3: Consider to provide partial or full relief based on evaluation to borrowers who are stressed, destitute and whose accounts have become NPA.

In Assam, it is estimated that, there are 26 lakh Microfinance borrowers. The Category 1 of this scheme shall cover about 11 lakh beneficiaries and the total amount estimated is of Rs. 2,200 crores under this Category.

Till February 2022, around 6 lakh eligible beneficiaries of Category-1 of 25 districts have been covered and a total amount of Rs. 1100 crore (approx.) has been utilized. The remaining beneficiaries will be covered in phased manner.

The above accounts are just the indicative of the performance of the State Government in the last 10 months. The State Government intends to transform this journey into a mass movement. With determined effort and commitment of the State Government to continue the work for the development of Assam and leveraging the support and co-operation of the Government of India, the dream is to make Assam one of the leading states in the development paradigm of our country.

## ASSAM ECONOMY – AN OVERVIEW

### AREA AND POPULATION

Assam, a state 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.-Bhutan and Bangladesh. 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 countries' landmass, providing shelter to 2.6% of India's population as per census, 2011. For administration and revenue purposes, the State has presently 35 districts, including six newly created districts namely Biswanath, Charaideo, Hojai, South Salmara, West Karbi Anglong, Majuli, Bajali and Tamulpur.

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

### STATE INCOME

As per first provisional estimates, the Gross State Domestic Product (GSDP) of the State at current prices is estimated to achieve at Rs. 381003.97crore during 2020-21 indicating a growth of 0.95 percent over the preceding year and the GSDP of the State at constant prices is estimated at the level of Rs.250922.83crore indicating a negative growth of (-)0.40 percent which is mainly caused by acute pandemic COVID-19 prevailing in the year affecting the economic activities of all sectors. However state economy is expected to witness annual growth rate of GSDP at 13.89 percent and 9.13 percent both at current and constant(2011-12) prices over the year respectively. It reflected that the State economy has recovered over the year. During 2020-21 (PE-1), the percentage

contribution of Agriculture and Allied sector, Industry sector, Service sector and Taxes & Subsidies to total GSDP of Assam at current prices are 22.32, 27.28, 40.41, and 10 percent respectively and at real terms (base-2011-12 prices) same contribution are recorded as 19.05, 33.55, 36.11 and 11.29 percent respectively. The share of agriculture and its allied activities in GSDP at current prices has increased from 19.89 percent in 2011-12 to 22.32 percent in 2020-21 (PE-1) but the share of Industry sector in GSDP at current prices has declined from 30.63% in 2011-12 to 27.28 percent in 2020-21 (PE-1). Similarly the share of contribution of the Service sector to GSDP at current prices has also decreased from 43.97 percent in 2011-12 to 40.41% in 2020-21 (PE-1). The annual growth rate of GVA in respect of Agriculture and Allied sector at current prices for the year 2020-21 (PE-1) is estimated at 9.57 percent as against 6.64 percent at constant (2011-12) prices and in 2021-22 (QE) the growth rate of GVA of Agriculture and Allied Sector is expected to achieve a growth of 12.62 percent at current prices and 5.88 percent at constant (2011-12) prices. The annual growth rate of GVA for Industry sector is estimated at a negative rate of (-)4.51 percent during 2020-21 (PE-1) as compared to the growth estimated at 12.30 percent in 2021-22 (QE) at current prices. The growth of GVA under Industry sector at constant (2011-12) prices is recorded (-)5.89 in 2020-21 as compared to the expectation of 10.73 percent growth in 2021-22 (QE). During 2020-21 (PE-1) the Service sector also witnessed (-)2.64 percent negative growth of GVA at current prices against growth is expected at the rate of 12.75 percent in 2021-22 (QE). Similarly, the growth rate of GVA of the Service sector is estimated at (-)2.13 percent in 2020-21 (PE-1) and 7.25 percent in 2021-22 (QE) at constant (2011-12) prices. The per capita income of the State in terms of NSDP at constant (2011-12) prices is estimated at Rs.63,214.00 for the year 2020-21 (PE-1) which is against Rs.64,755.00 in 2019-20 (PE) with a decreasing rate of (-)2.38 percent. But as per quick estimate for the year 2021-22 (QE) per capita income in terms of NSDP is estimated to achieve at the level of Rs.67,661 at constant (2011-12) prices and showing an increasing rate of 7.03 percent. Similarly the per capita income in terms of NSDP at current prices is estimated at the level of Rs. 95309 in the year 2020-21 (PE-1) as against Rs. 96240 during 2019-20 (PE) showing a declining rate of (-)0.97 percent. As per quick estimate for the year 2021-22 (QE) the per capita NSDP at current prices is estimated to achieve at a level of Rs. 1,05,454.00 with a growth rate of 10.64 percent over the year 2020-21 (PE-1).

**STATE FINANCE**

In F.Y 2021-22 (B.E), total revenue receipts of the state is expected to achieve the level of Rs. 88979.40 crore as against Rs. 64902.19 crore in F.Y 2020-21(R.E) with a of Rs. 24077.21 crore in Revenue Receipt Account. During the F.Y 2021-22 (B.E), an amount of Rs. 21177.54 crore is expected to come from tax revenue and Rs. 6097.60 crore as non-tax revenue. The share of Central Taxes was Rs. 21721.44 crore in the F.Y 2019-20. It is expected to increase from Rs. 18629.32 crore in F.Y 2020-21(R.E) to Rs. 20818.82 crore in F.Y 2021-22(B.E) registering an increase of 11.75 percent. Resource flow from the Centre was Rs. 42427.05 crore in the F.Y 2019-20 and it is expected to attain Rs. 61704.26 crore in F.Y 2021-22(B.E) as against Rs. 44868.97 crore in F.Y 2020-21(R.E) with an increase of 37.52 percent.

Total revenue expenditure was Rs. 65817.28 crore in F.Y 2019-20(Actual). It is expected to increase from Rs. 64519.59 in F.Y 2020-21(R.E) to Rs. 84405.47 crore in F.Y 2021-22(B.E) with an annual growth of 30.8 percent over the previous year.

Capital receipts was 14257.60 crore in F.Y 2019-20 (Actual) and it is expected to attain the level of Rs.23150.82 crore in F.Y 2021-22(B.E) as against Rs. 17942.74 in F.Y 2020-21(R.E). Capital expenditure was Rs.13185.42 crore in F.Y 2019-20 (Actual) and it is expected to increase from Rs. 12399.39 in F.Y 2020-21(R.E) to Rs. 19490.99 crore in 2021-22 (B.E) .

Borrowing of State Government was Rs. 16637.57 crore in F.Y 2019-20 and it increased to Rs. 21452.85crore in F.Y 2021-22(B.E). It is expected that revenue deficit to be Rs.4573.93 crore while fiscal deficit was estimated at Rs. 15028.04 crore in F.Y 2021-22 (B.E).

Collection of tax revenue of the state was 14966.77 in F.Y 2019-20 (Actual) and it has slightly declined to Rs. 14922.28 in F.Y 2021-22.

**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 2925 as on March 2021 from 2889 as on March 2020. With the increase in the bank networking, the dependence per bank offices in Assam has been considerably decreased over the years and reduced from 38.31 Sq.km as on March 2015 to 26.82 Sq.km as on March 2021. However, average population covered per bank branch office in Assam was calculated at 12,307 (based on projected Population as on 1<sup>st</sup> March, 2021) compared to All India average of 9,074 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. 1,66,270 crore in March 2020, has increased to Rs. 1,75,579 crore in March 2021. The total volume of credit disbursed by the banks has been increased to Rs. 81,870 crore in March 2021 from Rs. 70,658 crore in March 2020, thereby, recorded a growth of 15.87 percent. The per capita deposit at the end of March 2021 was Rs.48,774 showing an increase of about 2 percent over per capita deposit of Rs. 47,961 on 31<sup>st</sup> March 2020. The per capita credit as on March 2021 increased to Rs. 22,742 from Rs. 20,381 in March 2020 showing a growth of 11.58 percent during 2021 over the previous year.

The Credit-Deposit ratio of Scheduled Commercial Banks in Assam has marginally increased to 46.63 percent at the end of March, 2021 compared to 42.49 percent during the year 2019-20. However, the Quarterly Statistics on Deposit and Credit released by the RBI (as on 31<sup>st</sup> March, 2021) reveals that out of the 33 districts in the State, only 13 districts has crossed the 60 percent benchmark thresholds fixed for CD Ratio of Scheduled Commercial Banks operating in the State while 12 districts has reached within 40-60 percent level, achievement in 8 districts were less than 40 percent. Therefore, there were altogether 20 nos of poor performing districts and may need some special focus and intervention.

## **AGRICULTURE**

Agriculture plays a vital role in the economy of the state. The State has produced 5213852 (in tonnes) with an average yield 2237 kg/hectare in the year 2020-21(P.E.) as against production of 5214804 (in tonnes) with an average yield of 2199 (kg/hect) in the year 2019-20. During the year 2020-21 the rice production decreased by 0.02 percent while average yield of Autumn rice increased by 2.65 percent, winter rice decreased by 0.01 percent and summer rice increased by 8.05 percent.

The total area coverage for rice production autumn is 1.17 lakh hectares, winter rice is 18.64 lakh hectares and summer rice is 3.80 lakh hectares. in the year 2020-21 (PE) as against 1.27 lakh hectares in autumn rice, 18.78 lakh hectares in winter rice and 3.96 lakh hectares in summer rice in 2019-20.

Area covered for total pulses is 1.24 lakh hectares, total food grains is 25.58 lakh hectares and total oilseeds (excluding coconut) is 3.30 lakh hectares in the year 2020-21 (PE) as against 1.44 lakh hectares in total pulses, 25.98 lakh hectares in total food grains and 3.11 lakh hectares in total oilseeds (excluding coconut) in the year 2019-20.

The total number of Kissan Credit Card issued was 304280 nos. and credit limit sanctioned was Rs.2164.66 crores during the year 2020-21.

The actual rainfall received in the State during 2020 (January to December) was 2653 mm while the normal is 2377 mm and deviation (%) was 12% during the year 2020.

Contribution of Agriculture Sector to the State Domestic Product and growth rate of the sector vis a vis other sectors during 2020-21 is discussed in the chapter of State Income.

### **MILK, MEAT AND EGG PRODUCTION**

The Cattle population constitutes the largest group with more than ten million counts as per the 20<sup>th</sup> Livestock Census 2019. Out of the total Cattle, indigenous /non descript cattle comprises 1 crore 1 lakh while crossbred cattle population comprises 7.6 lakhs. In the census 4.2 lakhs Buffalo were found while Sheep was counted to be 3.3 lakhs in numbers. Goat and Pig comprised of about 43 lakhs and 20 lakhs numbers respectively during the 2019 Livestock Census.

The total production of Milk in the State for the year 2020-21(P) was estimated at 1004 Million litres as against 975 Million litres in the previous year (2019-20) there by recorded growth rate of 2.97% in 2020-21(P).

The Egg production during the period 2019-20 for both Fowls and Ducks has increased to 514 million nos against a production of 501 million nos in the previous year and the increase in Egg production was 2.7 percent over the previous year.

The total Meat production in 2020-21(P) was 54.36 (in 000 Tonnes) and 52.42 (in 000 Tonnes) in the year 2019-20 respectively and the increase of Meat production is thus 2.64% in the year 2020-21(P) over the previous year.

There were 311 nos of dispensaries in the state, 804 nos of Sub-Centre/FAC/SMC and 19 nos of key village centres functioning in the State as on Mar-2020. The number of live stock and poultry vaccinated was 2157486 and 498308 respectively during the year 2020-21.

### **FISHERY**

Fishery and aquaculture are playing very significant roles in socio economic development of the state providing rural employment, nutritional support and livelihood security thereby reducing poverty and 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 3.93 Lakh MT during 2020-21 against the corresponding nutritional requirement of around 4.00 Lakh MT. The demand of fish during 2019-20 was 3.93 Lakh MT against the production of 3.73 Lakh MT. The demand of fish for the State was calculated 11 kg per capita consumption taking 90% as fish eating population out of the estimated population of the State. However, the per capita consumption has been enhanced to 12 kg for the year 2020-21 and as a result the demand of fish during the year has become 4.00 Lakh MT. The fish production for the year 2020-21 is 3.93 Lakh MT and which has almost achieved the demand. It should be mentioned that the total production of fish in the State contains the total disposal quantities of fish (marketed) and subsistence catch of fish (catch by non professional for own consumption purpose). The subsistence catch of fish for the year 2020-21 is about 9% of total production of fish in the State.

Fish is one of the most important cuisines of the people of Assam and more than 90% of the people in the state prefer fish in their meal and thus demand for fish in the State is ever increasing. 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**

As per the India State Forest Report 2021 (ASFR) of Forest Survey of India, Dehradun, the Recorded Forest Area (RFA) of Assam was 26,836 Sq KM and the total Forest Cover Area is 28,312 Sq. KM, which is 34.21% and 36.09% respectively to total geographical area of the State. In terms of forest canopy density classes, the state has 3017 Sq KM of Very Dense Forest, 9,991 Sq KM Moderately Dense Forest and 15,304 Sq Km Open Forest. Report of ISFR 2021 shows that the forest area in the State has lost 15 Sq KM compared to the ISFR 2019. Mentionable that, the entire North Eastern States have lost their forest cover as per assessment made in 2021 by the Forest Survey of India, Dehradun, compared to the 2019 ISFR. The Tree cover and Dense Forest cover in out side recorded forest area has however increased by 126 Sq KM and 222 Sq KM respectively in the State during the period. In respect of Growing stock in the Recorded Forest Area (RFA) it was decreased to 112.68 million cum. in 2021 Compared to 115.40

million cum ISFR 2019. Regarding growing stock of Bamboo bearing tree areas during 2021, it was 10,659 Sq KM and total green weight equal to 38,600 thousand tonnes, which was 9.6 % of country's growing stock of bamboo. During 2020-21, the total value of forest product in the state was 2409.92 crores and revenue collection of Forest Department was 352.77 crore as reported by the Forest Deptt. Assam has become the second State in the country to have the highest number of National Parks after Madhya Pradesh, after formal notification of two new National Parks, namely Raimona and Dihing Patkai increasing the total tally of National Parks to seven in the State.

## **INDUSTRY**

The Industry sector comprises of mining & quarrying, manufacturing, electricity, gas, water supply & other utility services and construction. The Annual Survey of Industries (ASI) is the major source of industrial statistics providing estimates of various aggregates like input, output, capital, employment, value added etc. pertaining to registered manufacturing sector. ASI principally covers all factories registered under the section 2m (i) and 2m (ii) of the Factories Act, 1948. In terms of Net Value Added with a share of 1.12 percent at All-India level the State is in the 19<sup>th</sup> position out of 34 states & union territories whereon ASI was conducted and reported in the ASI 2018-19. However, it is at the 16<sup>th</sup> position in respect of number of workers engaged in the sector. Selected characteristics of industries in Assam vis-a-vis All-India based on ASI 2018-19 are given in in the Industry Chapter under Table-11.2.

However, inspite of the Pandemic situation affecting all strata of lives, the State Government has introduced many schemes for the benefit of MSME Sector as a whole which includes infrastructure development, investment/power/transport subsidies, tax holidays and also industry specific incentive for tea, tourism, bamboo etc. and incorporated in the Industry chapter. Contribution of Industry & Mining Sector to the State Domestic Product and growth rate of the sector Vis a Vis other sectors during 2020-21 are also discussed in the chapter of State Income.

## **MINES AND 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 2020-21, among the major minerals of the State the trend shows that except Sulphur, production of all major minerals has declined compared to the production of previous year. The increase in production of Sulphur over the previous year was about 10 percent. In percentage terms the decline in production of Coal, Natural Gas (Utilised), Petroleum (Crude) Oil and Limestone in the State during 2020-21 were 93.29%, 3.85%, 4.18% and 4.12% respectively over the previous year. The production of coal was abysmally low during 2020-21 as reported by the Indian Bureau of Mines (IBM). However, colliery wise data received from the Directorate of Geology and Mining, Assam have reported a total production of 246.59 thousand M.T of coal in Assam during 2020-21, which was over six times the reported figure of Indian Bureau of Mines (IBM). The Directorate of Geology and Mining, Assam has also reported a State's earning of Rs.15.01 crore as revenue from the extracted coal.

### **POWER**

The installed capacity of APDCL's generating plants in Hydel and Thermal sector was 341.955 MW as on March, 2020-21 compared to 376.155 MW in 2019-20 and 375.355 MW in 2018-19. Source-wise electricity generated in Assam, now also includes use of some renewable solar energy.

The energy requirements of the State has been worked out at 11463 Million Units (MU) for the year 2020-21 which was 11472 MU in 2019-20 and 10058 MU in 2018-19. The peak demand for electricity in the State has increased from 1894 MW in 2018-19 to 2051 MW in 2019-20 and further to 2073 MW in 2020-21. Domestic energy consumption has increased by about 11 percent during 2020-21 over the previous year. However, the power shortage was kept within five percent of the total requirements through outsourced power. Aggregate Transmission and Commercial Losses was 20.92 percent in 2019-20 which has also improved to 19.02 percent during 2020-21.

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) and by the end of 2020-21 all the targets were accomplished and reported 100 percent completion.

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 also to cater the irrigation needs of the Agriculture Sector.

## TRANSPORT AND COMMUNICATION

The road network in Assam comprised of total 58944 km of roads consisting of 3882.98 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 2020-21. Out of the total 55061 km road length maintained by the PWD, 32605 km is blacktopped; 654 km is cement concrete, 5782 km is interlocking cement concrete block pavement (ICBP) and 16020 km is metalled and un-metalled roads.

The on road vehicle population in the State was 4418715 as on March 2021. The density of motor vehicles in Assam was 56.3 per sq. km. during the year 2020-21 as against 53.1 vehicles per sq. km. during the year 2019-20. At present Assam has total railway route length of 2520.13 km. which is 3.71% of the total Railway Route length of the country.

Over the recent years, it was observed that wireless telephone and devices has been taken over the ubiquitous landline phones. As on March 2020, there were 2,37,39,004 numbers of wireless telephone subscribers in the state which was 99.5% of the total subscribers of 2,38,58,531. The tele-density of the state stood at 68.66% per hundred of population.

## SOCIAL SECTOR

### EDUCATION

In Assam, the number of Government/Provincialised in Lower Primary schools is 35856 of which 34694 are in rural areas and 1162 are in urban areas. Likewise, the total number of Upper Primary schools is 5668 of which 5350 are in rural areas while 318 are in urban areas, as per DISE 2020-21.

As per, DISE 2020-21, the average annual Drop-out Rate in Lower Primary level in the State during 2020-21 is 3.3 against 4.3 in 2019-20 which was 4.3 while this rate was 3.1 percent in 2018-19. Likewise in the Upper Primary level, the drop-out rate is 4.9 in 2020-21 and it was 3.4 percent during the year 2019-20. In case of the drop-out rate among the districts, South Salmara registered highest of 6.6 percent followed by Dima Hasao 6.4 percent and Darrang 6.4 percent in Lower Primary level while lowest is in Kamrup-Rural (0.5) percent. Similarly, in the upper Primary Level, this rate is highest in South Salmara (15) and the lowest is Kamrup Metro (0.2) followed by West Karbi Anglong (0.8), Dhemaji (0.8) during the period 2020-21. The Transition Rate from primary to upper primary in the state is 97.5.

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 infrastructure in Assam has been improving over the years. At present, there are 6 Medical Colleges and Hospitals, 25 Civil Hospitals + MMCH (Annex Building of GMCH), 3 Tuberculosis Hospitals, 3 Leprosy Hospitals, 1 Cancer Hospital, 14 Sub-divisional Civil Hospitals, 850 Rural and 56 Urban PHCs, 12 FRUs, 201 CHCs, 184 State Dispensaries, 4690 Sub-centres, 130 Mobile Medical Units (80 for Tea gardens and 50 for non-tea gardens), 15 Boat Clinic with 21475 numbers of total beds in the state at the end of 2020-21. There is 3 Nursing Colleges in Guwahati, Dibrugarh and Silchar with 6 Para-medical institutions, 3 Dental Colleges, 275 Polyclinics and 556 Diagnostics Centres as of December 2020. The Referral Hospitals inside the state is 7 and outside the state are 31.

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 and 229 during 2015-17 against the all India level; of 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. There are also 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 @224/- under MGNREGA scheme, Gas

connection etc. The physical allocation during Financial Year 2019-20 target was to construct 2,56,043 houses, out of which houses sanctioned and completed was 2,23,561 and 1,96,752 respectively. For the financial year 2019-20 against fund receipt of Rs.1, 46,109.44 lakh, fund utilised was Rs.2, 04,669.07 lakh. For the financial year 2020-21, the target provided by Government of India was 3, 65,976 houses, out of which sanctioned and completed houses was 2, 69,511 and 20,480 respectively.

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 March 2021, a total of 31.82 Lakh rural households across all blocks and districts of Assam have been mobilized to promote a total of 2.95 Lakh Self-Help Groups (SHG) ever since its inception in 2011.

In order to empower women SHGs financially, the Government of Assam launched Kanaklata Mahila Sabalakaran Asoni on 1<sup>st</sup> 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 2021, Rs. 298.8 Cr. has been granted as Revolving Fund to 2, 06,385 SHGs under the Kankaklata Mahila Sabalakaran Asoni since its launch. Further, Rs.252.70 Crore as Capital Subsidy (@Rs.50, 000 per SHG) has been released to 50,541 SHGs during FY 2020-21 under the Vistarista-Kanaklata Mahila Sabalakaran Yojana.

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**CHAPTER – II**

**POPULATION**

**Important Features**

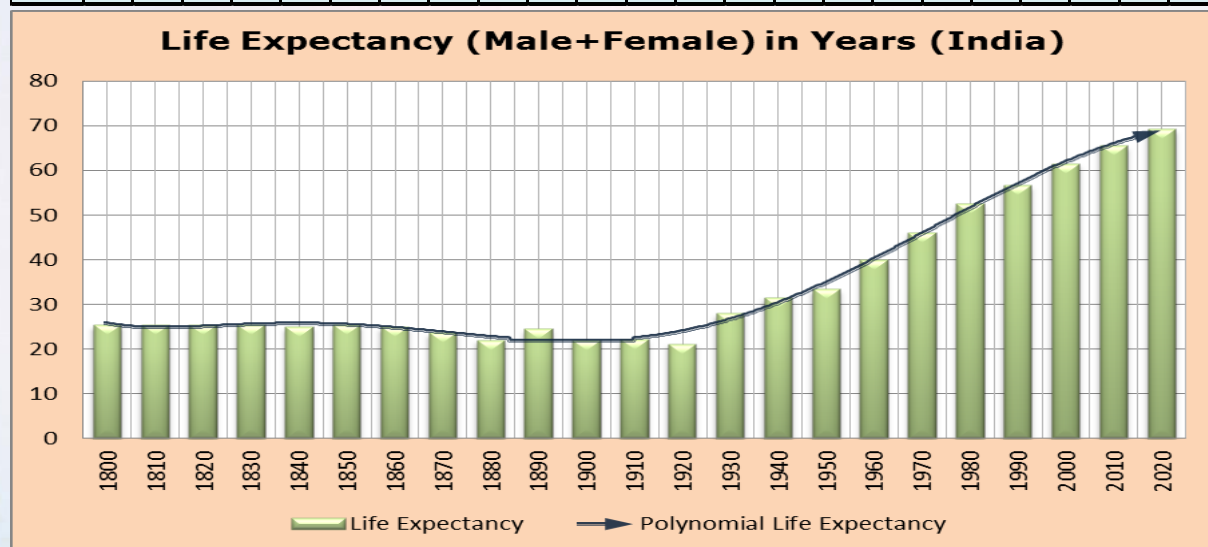
Assam, a state situated between 24008’N-27059’N latitude in the northeast region of India, is the gateway to the region, the premier, largest and the most vibrant of the eight states comprising the Northeast. It borders seven states namely, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura 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 35 districts, including six newly created districts namely Biswanath, Charaideo, Hojai, South Salmara, West Karbi Anglong , Majuli,Bajali and Tamulpur.

**Life Expectancy at Birth:**

The data available from Sample Registration Survey (SRS), 2013-17 that Kerala has the highest life expectancy at birth ( Age 75.2) in India while Assam has 66.2. 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 (from 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

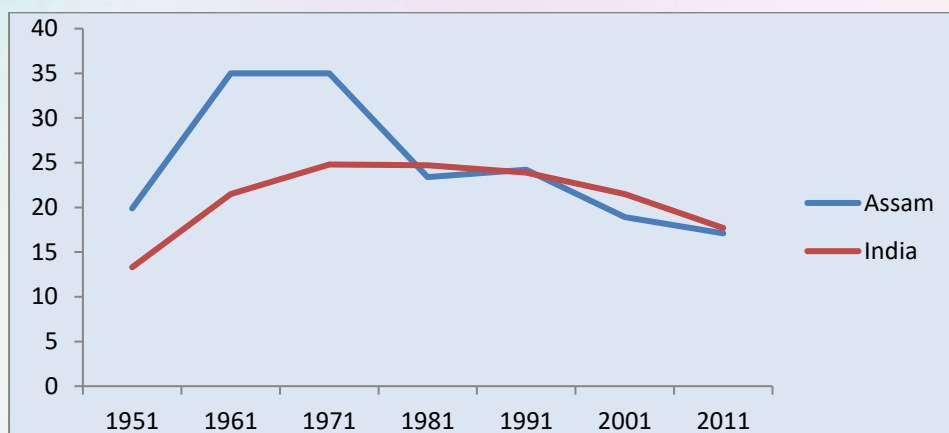


Source:Census India

### 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 is 17.07% against 17.68% for India as a whole.

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



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

**Table 2.2: Density of Population in NE States, 2011**

States	Population (Nos)	Density (per sq km)
Arunachal Pradesh	1382611	17
Assam	31205576	398
Manipur	2855794	127
Meghalaya	2964007	132
Mizoram	1091014	52
Sikkim	607688	86
Tripura	3671032	350
Average India	1210854977	325

Source: Census of India 2011

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

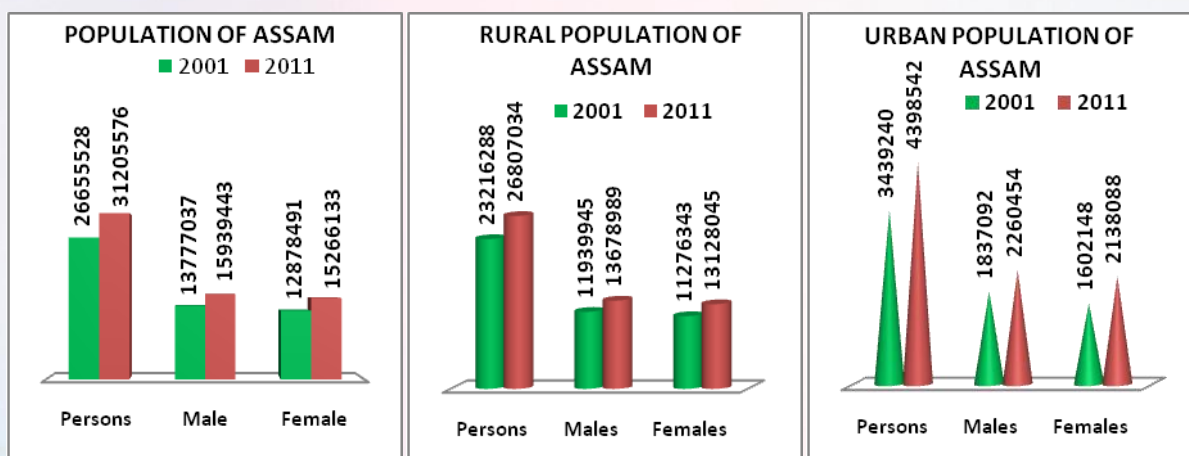
**TABLE – 2.3: Population Features at a Glance of Assam**

Particulars	Unit	2001 Census	2011 Census
Population	Lakh	267	312
Decadal Growth	Percentage	18.92	17.07
Change in percentage of decadal	Percentage	(-) 5.32	(-)1.8
Density	Per Sq. Km.	340	398
Sex-Ratio	Females per	935	958
Literacy	Percentage	63.25	72.19
(a) Male	Percentage	71.28	77.85
(b) Female	Percentage	54.61	66.27
Urban Population	Percentage	12.90	14.09
(a) Male	Percentage	53.41	51.39
(b) Female	Percentage	46.58	48.61
Rural Population	Percentage	87.10	85.90
(a) Male	Percentage	51.43	51.03
(b) Female	Percentage	48.57	48.97
SC Population	Percentage	7.40	7.15
ST Population	Percentage	12.83	12.45

Source:Census India

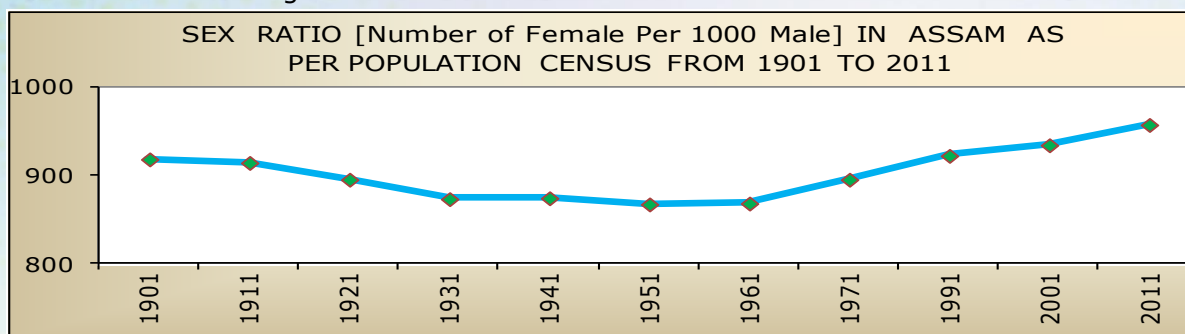
**Population : Rural and Urban**

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.

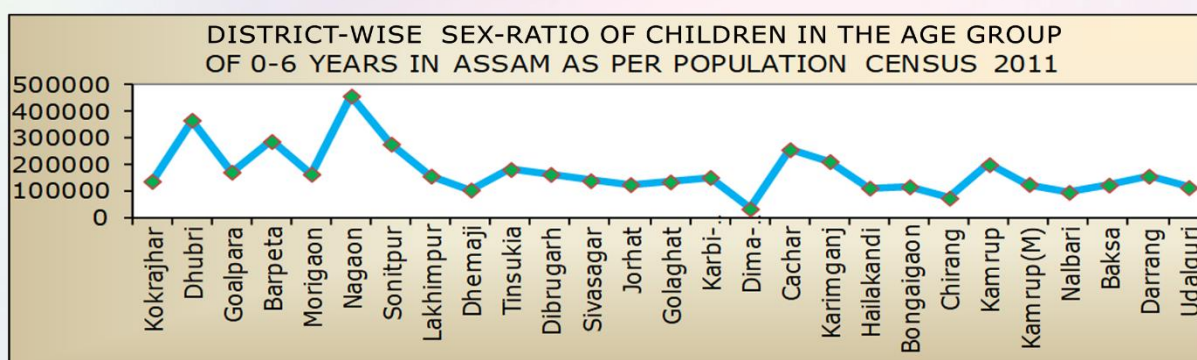


Sex Ratio

The sex ratio for all ages for rural area was 960 and for urban area was 948 in 2011.



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 selected States**

State	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
1	2	3	4	5	6	7
Andhra Pradesh	983	996	965	987	978	993
Gujarat	945	949	880	880	920	919
Karnataka	977	979	942	963	965	973
Kerala	1059	1078	1058	1091	1058	1084
Madhya Pradesh	927	936	898	918	919	931
Maharashtra	960	952	873	903	922	929
Rajasthan	930	933	890	914	921	928
Uttar Pradesh	904	918	876	894	898	912
Assam	944	960	872	946	935	958
All-India	946	949	900	929	933	943

**Districtwise 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 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) in 2011.

On the other hand, Sex Ratio at birth (0-1 year) in Assam as per 2011 Census was 957. 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 it is 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

Source: Census of India.

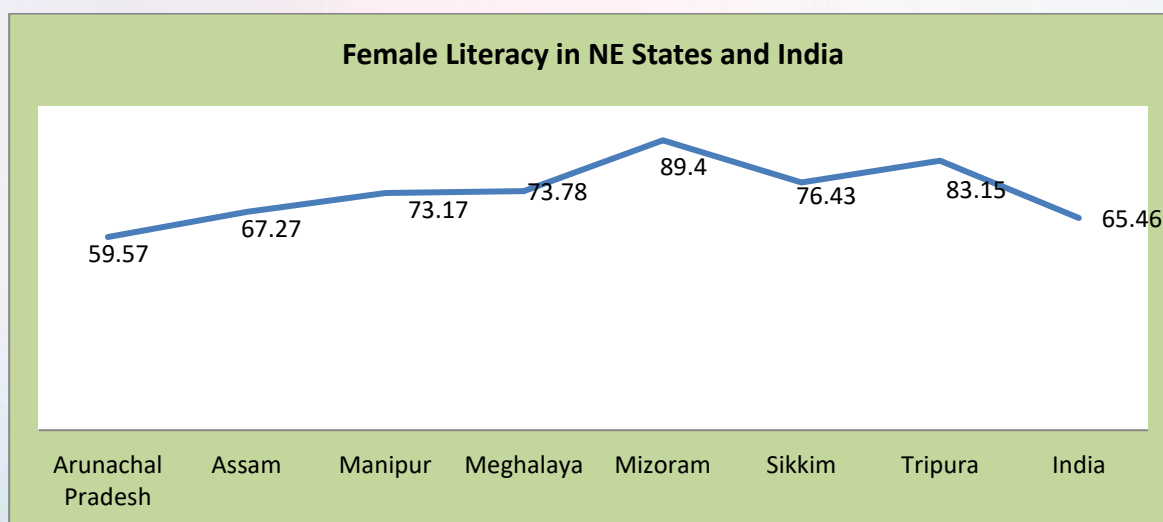
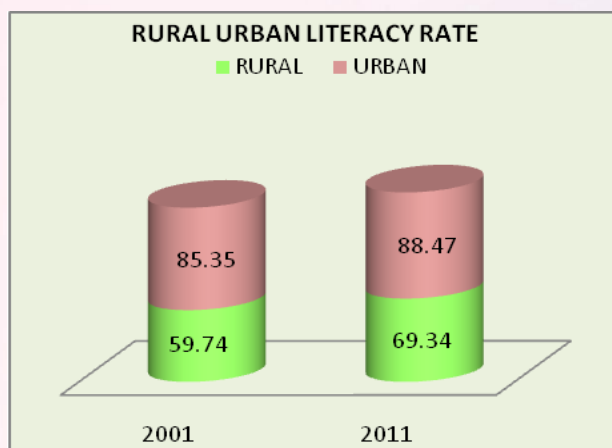
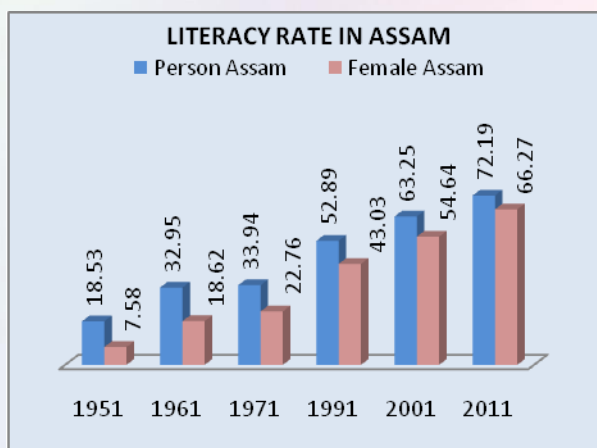
### Literacy Rate

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



**Language wise distribution of population:** As per Census,2011 the Growth rate of all scheduled languages in Assam is 18.11% compared to 2001. Again mother tongue wise some major language speaking population in Assam are - Assamese (15095797), Bengali (9024324), Hindi (2101435) and Bodo(1416125) and total of All Scheduled Languages speaking population is 28952961.

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

**Table2.7: 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	2058.90
Tamil	5672	5229	-7.81
Telugu	27463	26630	-3.03
Urdu	4715	8293	75.89
All Scheduled Languages	24512931	28952961	18.11

Source: Census of India.

### Assam Highlights – 2011 census

The Census Directorate of Assam highlighted the following points 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: Census 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 are given below.

**Table:2.9:Some Characteristics of population of Assam**

Characteristics	Highest	Lowest
Total Population	Nagaon (28,23,768)	Dima Hasao(2,14,102)
Total Rural Population	Nagaon (24,54,234)	Dima Hasao (151,613)
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	Baksa (974)
	Rural	Morigaon (975)
	Urban	Hailakandi (992)
Density	Kamrup Metro (2,010)	Dima Hasao (44)

Source: Census of India.



**Household Characteristics:** As per Census,2011 availability of drinking water within premises is 54.8% and near premises is 26.7% with total available drinking water facilities 81.5% in Assam .Similarly latrine facility available within premises in Assam is 64.9%

**Table 2.10 : Percentage of households by source of drinking water, and availability of latrine facility in selected States**

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

\*Excluding of Institutional households

Source: Office of the Registrar General Of India

### Use of Fuel .

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

The per centage of households by source of fuel for cooking in selected States is given in the Table.2.10

**Table: 2.11 Percentage of households by source of Fuel for Cooking in selected State:**

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

# including Telegana

Source: Office of the Registrar General , India

**SLUM POPULATION**

As per Census, 2011, thirty one 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 of Assam 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 and 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, according to Census 2011. The corresponding figure for literacy at all India level is 68 percent with 73 % and 62 % for male and female literacy respectively.

\*\*\*\*\*

## CHAPTER-III

### STATE INCOME

State Domestic Product (SDP) is the total value of goods and services produced during any financial year within the geographical boundaries of a state. Also called the State Income, 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 economic prosperity of the State and to study the structural changes taking place in the economy. SDP estimates over a period of time reveal the extent and direction of the changes in the level of economic development. 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 in formulation of the plans for overall economic development.

During the period of last three years i.e. 2018-19 to 2021-22, the State achieved annual average growth rate of 6.17% in terms of Gross State Domestic Product (GSDP) at constant (2011-12) prices reflected a moderate growth of the State Economy despite the state facing COVID-19 pandemic along with the rest of country and the world. During this period, the agriculture and allied sector achieved a favorable growth rate of 13.04 percent as against 2.43 percent and 4.48 percent in industry and service sector respectively. During the lock down period, the industry and service sector had been adversely affected where human activities were involved, resulted lower growth rate in these sectors. During this period of 2018-19 to 2021-22 at current prices, annual average growth rate of GSDP is estimated to attain at the level of 13.43 percent.

#### **3.1 Gross State Domestic Product (GSDP)**

As according to quick estimates for 2021-22, Gross State Domestic Product (GSDP) of the state of Assam at current prices has recorded at 433925.44 crore as against 381003.97 crore in 2020-21 reflecting a growth of 13.89 percent. GSDP at constant (2011-12) prices is estimated at Rs. 273836.71 crore for 2021-22 as compared to Rs.250922.83 crore for 2020-21 registering a growth of 9.13 percent .

Quick estimates shows that the State economy is expected to witness real GSDP expansion of 9.13 per cent in 2021-22 after contracting in 2020-21. This implies that overall economic activity has recovered from past pandemic levels.

#### **3.2 Net State Domestic Product (NSDP)**

As per quick estimates for 2021-22, Net State Domestic Product (NSDP) of the state of Assam at current prices has estimated at Rs.373075.79 crore as against Rs.

333991.49 crore in 2020-21 reflecting a growth of 11.70 percent. NSDP at constant (2011-12) prices is estimated at Rs. 239372.85 crore for 2021-22 as compared to Rs. 221521.15 crore for 2020-21 registering a growth of 8.06 percent.

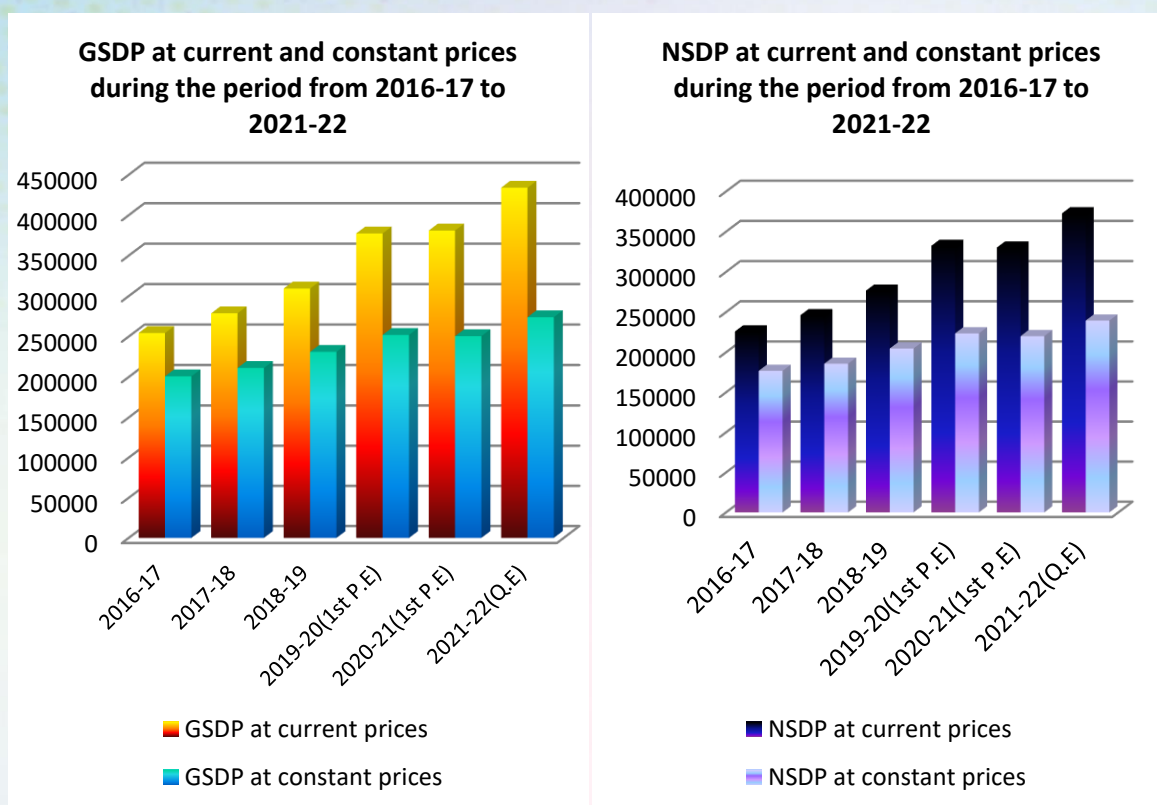
The GSDP and NSDP of Assam at both current and constant prices during the period from 2011-12 to 2021-22 (Q.E) is presented in **Table 3.1**.

<b>Table 3.1</b>					
<b>(Rs. in crore)</b>					
<b>Sl. No.</b>	<b>Year</b>	<b>GSDP</b>		<b>NSDP</b>	
		<b>Current prices</b>	<b>Constant prices (2011-12)</b>	<b>Current prices</b>	<b>Constant prices (2011-12)</b>
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	201308.80	167628.67
6	2016-17	254382.36	202080.85	222396.52	179631.90
7	2017-18	283164.90	219919.38	253726.41	195262.28
8	2018-19	309336.32	231039.56	276624.76	204627.05
9	2019-20(P.E)	377404.81	251923.50	332142.48	223483.22
10	2020-21(1 <sup>st</sup> P.E)	381003.97	250922.83	333991.49	221521.15
11	2021-22(Q.E)	433925.44	273836.71	373075.79	239372.85

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

Source: Directorate of Economics and Statistics, Assam

The GSDP and NSDP of Assam at both current and constant prices during the period from 2016-17 to 2021-22 is shown in following Bar Diagram.



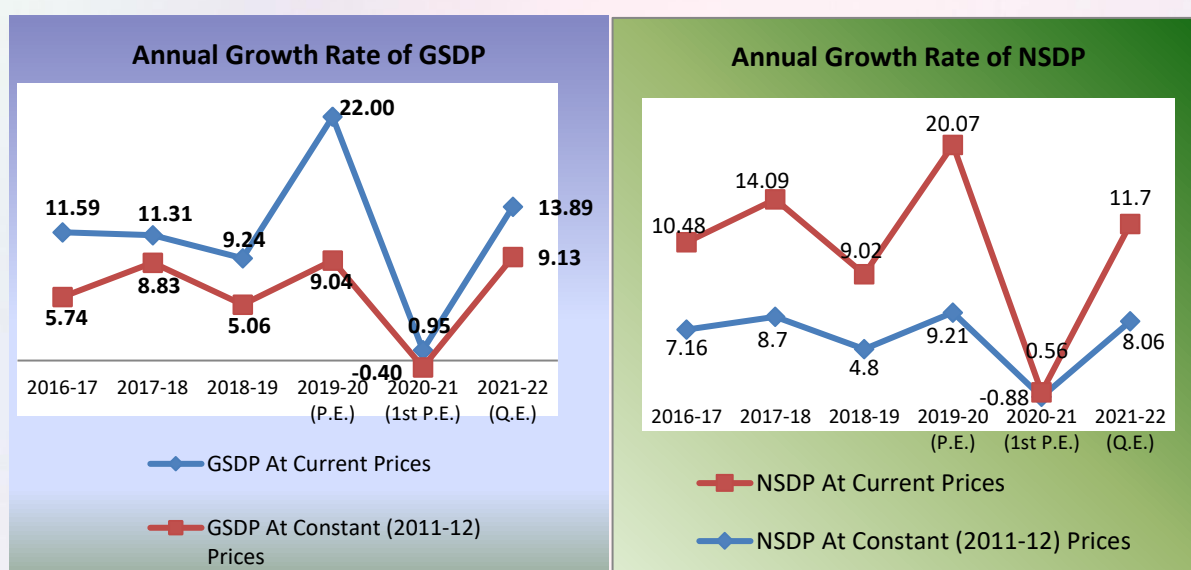
The annual growth rate in terms of GSDP and NSDP of Assam during the period from 2016-17 to 2021-22(Q.E) at both current and constant prices is presented in **Table 3.2**.

TABLE 3.2					
Annual growth rate of GSDP and NSDP of Assam (in percentage)					
Sl. No.	Year	GSDP		NSDP	
		Current Prices	Constant (2011-12) Prices	Current Prices	Constant (2011-12) Prices
1	2016-17	11.59	5.74	10.48	7.16
2	2017-18	11.31	8.83	14.09	8.70
3	2018-19	9.24	5.06	9.02	4.80
4	2019-20 (P.E.)	22.00	9.04	20.07	9.21
5	2020-21 (1st P.E.)	0.95	-0.40	0.56	-0.88
6	2021-22 (Q.E.)	13.89	9.13	11.70	8.06

Source: Directorate of Economics and Statistics, Assam

From Table 3.2, it is expected that annual growth rate of GSDP both at current and constant prices for 2021-22(Q.E.) will achieve at 13.89 percent and 9.13 percent over the preceding year respectively. During the same year, NSDP at current prices has achieved annual growth rate of 11.70 percent and 8.06 percent at constant (2011-12) prices over the previous year respectively. It reflected that the State economy has recovered over the previous year. The negative growth rate was recorded in terms of GSDP and NSDP at constant prices (2011-12) during the year 2020-21(1<sup>st</sup> P.E) as (-)0.40 percent and (-)0.88 percent respectively which is mainly caused by acute pandemic COVID-19 prevailing in the year effecting the economic activities of all sectors of the state adversely and irresistibly.

The average annual growth rate in terms of GSDP and NSDP of Assam during the period from 2016-17 to 2021-22 at both current and constant prices is shown in the following line diagrams.



### 3.3 SECTORAL COMPOSITION OF GSDP:

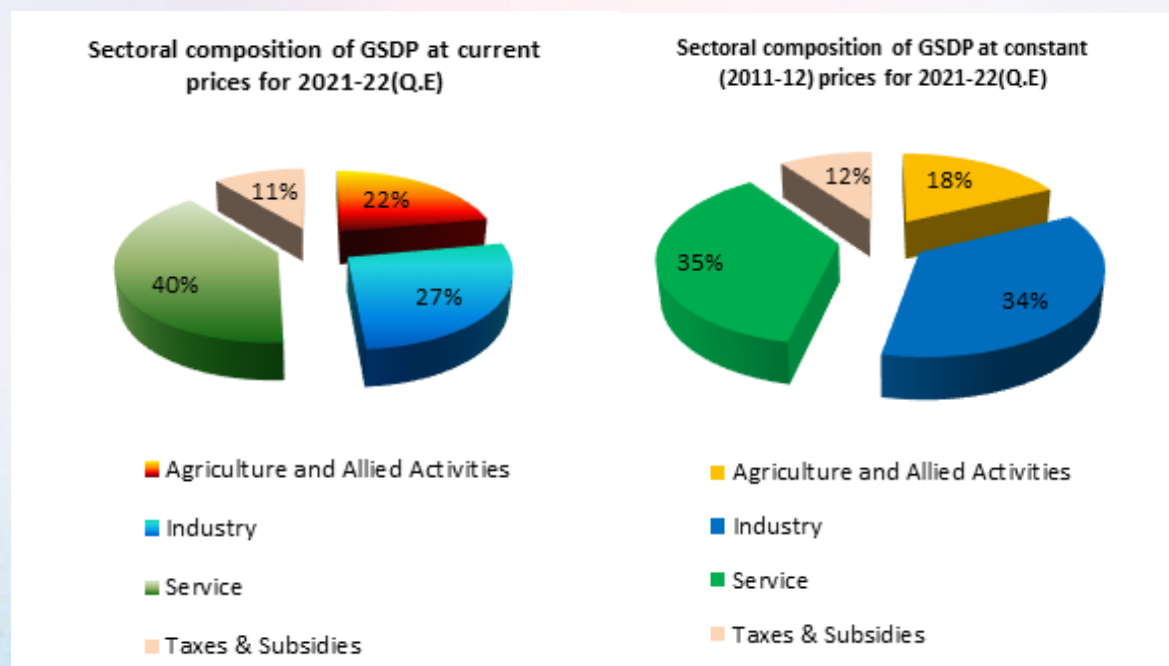
The sectoral composition of State Domestic Product (SDP) depicts the contribution of different sectors in percentage in the economy over a period of time which not only indicates the real structural changes taking place in the economy but also facilitates formulation of various plans and programmes for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

<b>Table 3.3</b>					
<b>Sectoral Composition of GSDP at Current Prices ( In Percentage )</b>					
<b>Sector</b>	<b>2011-12 (Base year)</b>	<b>2018-19</b>	<b>2019-20 (P.E.)</b>	<b>2020-21 (1st P.E.)</b>	<b>2021-22 (Q.E.)</b>
Agriculture and Allied Activities	19.89	16.28	20.56	22.32	22.07
Industry	30.63	32.50	28.84	27.28	26.90
Service	43.97	42.43	41.90	40.41	40.00
Taxes & Subsidies	5.51	8.79	8.70	10.00	11.03

Source: Directorate of Economics and Statistics, Assam

<b>Table 3.4</b>					
<b>Sectoral Composition of GSDP at constant (2011-12) Prices ( In Percentage )</b>					
<b>Sector</b>	<b>2011-12 (Base year)</b>	<b>2018-19</b>	<b>2019-20 (P.E.)</b>	<b>2020-21 (1st P.E.)</b>	<b>2021-22 (Q.E.)</b>
Agriculture and Allied Activities	19.89	15.75	17.79	19.05	18.48
Industry	30.63	37.60	35.51	33.55	34.04
Service	43.97	37.08	36.75	36.11	35.48
Taxes & Subsidies	5.51	9.57	9.95	11.29	11.99

Source: Directorate of Economics and Statistics, Assam



As per Quick Estimates for 2021-22, the percentage contribution of agriculture & allied sector, industry, service and taxes & subsidies to GSDP of Assam at current prices have estimated at 22.07 percent, 26.90 percent, 40.00 percent and 11.03 percent as compared to 19.89 percent, 30.63 percent, 43.97 percent and 5.51 percent respectively in the year 2011-12 i.e. during the period of ten years. The reason of increase in contribution of agriculture and allied sector to GSDP both at current and constant prices is revision of prices of various items, inclusion of new items and capturing data in large scale and mitigation of previous data gap . The contribution of Industry sector has been increasing over the time.

### 3.4. ANNUAL GROWTH RATE OF GVA IN AGRICULTURE AND 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 Gross Value Added (GVA) in respect of Agriculture and its Allied sector at current prices for the year 2021-22 is estimated to achieve a growth of 12.62 percent at current prices as against 5.88 percent at constant(2011-12) prices. The annual growth of GVA in respect of Crop sector, Livestock sector, Forestry & Logging sector and Fishing sector at current prices for 2021-22 (Q.E) is estimated at 12.79 percent,12.90 percent,10.78 percent and 13.53 percent as against 6.34 percent, 6.48 percent, 6.33 percent and 3.02 percent at constant (2011-12) prices. Mitigation of data gap in agriculture and allied sector during the year 2019-20 (P.E) has caused substantial growth in GVA.

<b>Table 3.5</b>		
<b>ANNUAL GROWTH RATE OF GVA IN AGRICULTURE AND ITS ALLIED SECTOR</b>		
<b>Sector</b>	<b>2021-22(Q.E)</b>	
	<b>Current Prices</b>	<b>Constant Prices (2011-12)</b>
Crop	12.79%	6.34%
Livestock	12.90%	6.48%
Forestry and Logging	10.78%	6.33%
Fishing and aquaculture	13.53%	3.02%
<b>Agriculture and Allied Sector</b>	<b>12.62%</b>	<b>5.88%</b>

Source: Directorate of Economics and Statistics, Assam



### 3.5. ANNUAL GROWTH RATE OF GVA IN INDUSTRY SECTOR

The Industry sector comprises of Mining & Quarrying, Manufacturing, Electricity, Gas, Water Supply & Other Utility Services and Construction. As per 1st Provisional Estimates for 2020-21, annual growth rate in Industry sector is estimated at (-)5.89 percent at constant (2011-12) prices as against (-)4.51 percent at current prices over the previous year. At constant (2011-12) prices, the annual growth of the sub-sectors for 2020-21(1<sup>st</sup> P.E.) is estimated at (-)5.40 percent in Mining and Quarrying, (-)4.80 percent in Manufacturing, 1.60 percent in Electricity, Gas, Water Supply & Other Utility Services and (-)10.08 percent in Construction respectively. The reason behind the negative growth rate in GVA in Industry sector during 2020-21 was direct or indirect impact of COVID-19 pandemic where human activities were involved. During the first phase of lock down period and subsequent periods in 2020-21, these sectors viz. (i) Mining and Quarrying, (ii) Manufacturing, and (iii) Construction had adversely affected.

Table 3.6				
Annual Growth Rate of GVA in Industry Sector during 2020-21 (1st P.E.) and 2021-22 (Q.E) (In percentage)				
Sector	2020-21		2021-22	
	Current Prices	Constant (2011-12) Prices	Current Prices	Constant (2011-12) Prices
Mining & Quarrying	-4.91	-5.40	7.20	7.22
Manufacturing	-4.30	-4.80	16.23	10.98
Electricity, Gas, Water Supply and other utility services	1.90	1.60	13.53	8.72
Construction	-6.10	-10.08	13.33	16.38
<b>Industry Sector</b>	<b>-4.51</b>	<b>-5.89</b>	<b>12.30</b>	<b>10.73</b>

Source: Directorate of Economics and Statistics, Assam

### 3.6. ANNUAL GROWTH RATE OF GVA IN SERVICE SECTOR

The Service sector comprises of Trade, Repair, Hotel & Restaurants, Transport, Storage, Communication & Services related to Broadcasting, Financial Services, Real Estate, Ownership of Dwelling and Professional services, Public Administration and Other Services.

As per 1<sup>st</sup> Provisional Estimate 2020-21, the GVA of Service Sector has shown a negative growth rate of (-) 2.65 percent at current prices as against (-) 2.13 percent at Constant (2011-12) Prices. Estimation for the sub-sector Trade, Repair, Hotels & Restaurants has shown a substantial loss during the 1<sup>st</sup> and 2<sup>nd</sup> Lockdown period, 2020-21. Moreover other two vital sub-sectors the Real Estate and Transport have also incurred substantial losses during the same year due to COVID-19 pandemic.

<b>Table 3.7</b>				
<b>Annual Growth Rate of GVA in Service Sector during 2020-21 (1st P.E.) and 2021-22(Q.E)</b>				
<b>Sector</b>	<b>2020-21</b>		<b>2021-22</b>	
	<b>Current Prices</b>	<b>Constant (2011-12) Prices</b>	<b>Current Prices</b>	<b>Constant (2011-12) Prices</b>
Trade, Repair, Hotels & Restaurants	-5.54	-3.99	11.48	0.59
Transport, Storage, Communication and services related to broadcasting	-6.94	-5.34	10.21	10.41
Financial Services	0.71	-1.60	14.56	10.89
Real Estate, Ownership of dwelling & Professional Services	0.69	-2.22	11.45	9.06
Public Administration	1.49	4.23	16.73	11.53
Other Services	-1.60	-2.45	13.33	6.99
<b>Service Sector</b>	<b>-2.65</b>	<b>-2.13</b>	<b>12.75</b>	<b>7.25</b>

Source: Directorate of Economics and Statistics, Assam

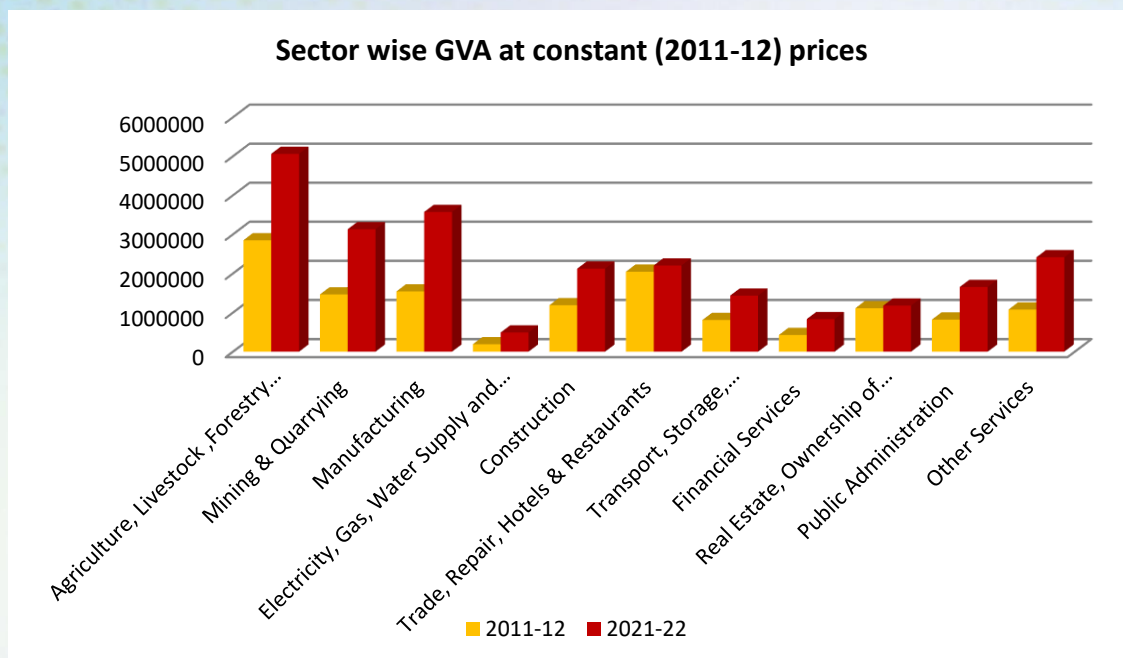
### 3.7 Sectoral Annual Average Growth Rate

The sectoral annual average growth rate in terms of GVA at constant (2011-12) prices during the period from 2011-12 to 2021-22 is shown in **Table 3.8**.

The average annual percentage growth rate in respect of GSDP at constant prices during the period from 2011-12 to 2021-22(Q.E) is recorded at 15.70 percent in Electricity, Gas, Water Supply and other utility services which is highest amongst all the sub-sectors of economy, followed by manufacturing (13.20 percent). Other services (12.40 percent), mining and quarrying (11.37 percent) and public administration (10.13 percent) respectively.

<b>Table 3.8</b>				
<b>Sectoral Annual Average Growth Rate in terms of GVA at constant (2011-12) prices during a decade</b>				
<b>New base (2011-12) series</b>				
<b>(Rs. In Lakh)</b>				
<b>Sl. No.</b>	<b>Sector</b>	<b>2011-12</b>	<b>2021-22 (Q.E)</b>	<b>Annual Average Growth Rate (in %)</b>
1	Agriculture, Livestock ,Forestry and Fishing	2848113	5061857	7.77
2	Mining & Quarrying	1464989	3130604	11.37
<b>A</b>	<b>Primary</b>	<b>4313102</b>	<b>8192461</b>	<b>8.99</b>
3	Manufacturing	1540255	3573913	13.20
4	Electricity, Gas, Water Supply and other utility services	191883	493090	15.70
5	Construction	1188747	2123773	7.87
<b>B</b>	<b>Secondary</b>	<b>2920885</b>	<b>6190776</b>	<b>11.19</b>
6	Trade, Repair, Hotels & Restaurants	2045676	2204624	0.78
7	Transport, Storage, Communication and services related to broadcasting	810091	1433865	7.70
8	Financial Services	427077	831906	9.48
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1177697	0.59
10	Public Administration	821723	1654461	10.13
11	Other Services	1077923	2414347	12.40
<b>C</b>	<b>Tertiary</b>	<b>6295033</b>	<b>9716900</b>	<b>5.44</b>
12	Total GSVA at Basic Prices	13529020	24100137	7.81
13	Taxes on Products	1203476	3647901	20.31
14	Subsidies on Products	415005	364367	-1.22
<b>15</b>	<b>Gross State Domestic Product</b>	<b>14317491</b>	<b>27383671</b>	<b>9.13</b>

Source: Directorate of Economics and Statistics, Assam



### 3.8 Per Capita Income

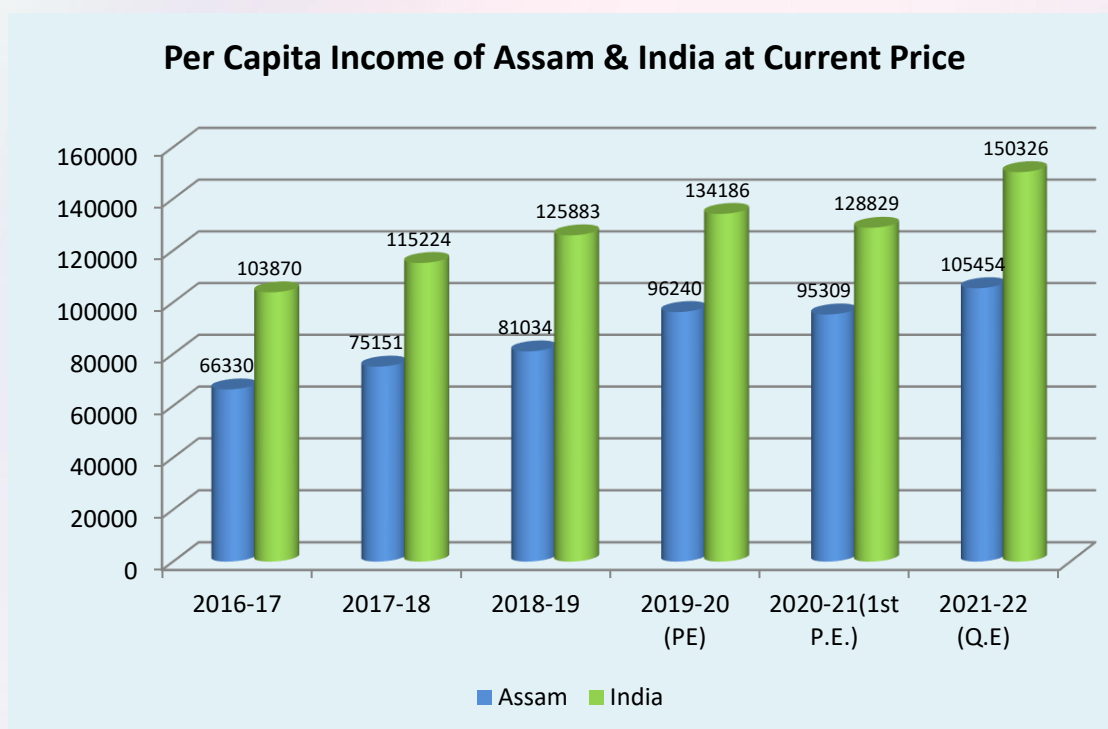
The per capita income of the State in terms of NSDP at constant (2011-12) prices is estimated at Rs. 67661.00 for the year 2021-22 (Q.E) as against Rs.63214.00 in 2020-21 (1<sup>st</sup> P.E) with an increase of 7.03 percent. The average annual growth during the period from 2011-12 to 2021-22 is estimated at 6.45 percent. The per capita NSDP at current prices for the year 2021-22(Q.E) is estimated at Rs.105454.00 as against Rs.95309.00 in 2020-21(1<sup>st</sup> P.E) registering a growth of 10.64 percent.

<b>Table 3.9</b>				
<b>Per Capita Income of Assam and All India</b>				
<b>In Rs.</b>				
<b>Year</b>	<b>Assam</b>		<b>India</b>	
	<b>Current Prices</b>	<b>Constant (2011-12) Prices</b>	<b>Current Prices</b>	<b>Constant (2011-12) Prices</b>
<b>2011-12</b>	41142	41142	63462	63462
<b>2012-13</b>	44599	41609	70983	65538
<b>2013-14</b>	49734	43002	79118	68572
<b>2014-15</b>	52895	44809	86647	72805
<b>2015-16</b>	60817	50642	94797	77659
<b>2016-17</b>	66330	53575	103870	83003

Year	Assam		India	
	Current Prices	Constant (2011-12) Prices	Current Prices	Constant (2011-12) Prices
<b>2017-18</b>	75151	57835	115224	87586
<b>2018-19</b>	81034	59943	125883	92241
<b>2019-20 (PE)</b>	96240	64755	134186	94566
<b>2020-21(1st P.E.)</b>	95309	63214	128829	86659
<b>2021-22 (Q.E)</b>	105454	67661	150326	93973

Source: Directorate of Economics and Statistics, Assam and MoSPI, Govt. of India

Per Capita income of Assam and India at current price is shown in the following Diagram.



Sector wise comparison of annual growth rate of GSVA between India and Assam for the year 2020-21 over 2019-20 is presented in Table 3.10.

<b>Table 3.10</b>					
<b>Sl. No.</b>	<b>Industry</b>	<b>Annual Growth Rate ( in %)</b>			
		<b>Current price</b>		<b>Constant price</b>	
		<b>India</b>	<b>Assam</b>	<b>India</b>	<b>Assam</b>
<b>1</b>	Agriculture, Forestry and Fishing	6.6	9.57	3.6	6.64
<b>2</b>	Mining & Quarrying	-17.9	-4.9	-8.5	-5.4
<b>3</b>	Manufacturing	-4.7	-4.3	-7.2	-4.8
<b>4</b>	Electricity, Gas, Water Supply and other utility services	0.2	1.9	1.9	1.6
<b>5</b>	Construction	-6.3	-6.1	-8.6	-10.1
<b>6</b>	Trade, Repair, Hotels & Restaurants	-15.5	-5.5	-18.2	-4.0
<b>7</b>	Transport, Storage, Communication and services related to broadcasting	-15.5	-6.9	-18.2	-5.3
<b>8</b>	Financial Services	0.9	0.7	-1.5	-1.6
<b>9</b>	Real Estate, Ownership of dwelling & Professional Services	0.9	0.7	-1.5	-2.2
<b>11</b>	Public Administration	0.4	1.5	-4.6	4.3
<b>11</b>	Other Services	0.4	-1.6	-4.6	-2.5
<b>12</b>	<b>Total GSVA at Basic Prices</b>	<b>-3.0</b>	<b>-0.5</b>	<b>-6.2</b>	<b>-1.9</b>
<b>13</b>	<b>GDP/GSDP</b>	<b>(-)7.25</b>	<b>(+)0.95</b>	<b>(-)2.97</b>	<b>(-)0.40</b>

Source: Directorate of Economics and Statistics, Assam and MoSPI, Govt. of India

Table 3.11

Share of Contribution of GVA of India and Assam at current Prices					
Sl. No.	Sector	GVA in 2020-21 (Rs. in Crore)			
		All India		Assam	
		Current Prices	Share (%)	Current Prices	Share (%)
1	Agriculture , Forestry & Fishing	3616523	20.19	85023	24.80
2	Mining & Quarrying	292120	1.63	35537	10.36
3	Manufacturing	2585740	14.43	37921	11.06
4	Electricity, Gas, Water Supply & Other Utility Services	484477	2.70	7270	2.12
5	Construction	1282048	7.16	23205	6.77
6	Trade, hotels , transport, communication and services related to broadcasting	2941477	16.42	65373	19.06
7	Financial , Real Estate& Professional Services	3950786	22.05	29051	8.47
8	Public Administration, Defense and other Services	2761996	15.42	59527	17.36
<b>GVA at Basic Prices</b>		<b>17915167</b>	<b>100</b>	<b>342907</b>	<b>100</b>

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

Table 3.12

**Share of Contribution of GVA of India and Assam  
at constant (2011-12) Prices**

Sl. No	Sector	GVA in 2020-21 (Rs. in Crore)			
		All India		Assam	
		Constant (2011-12) Prices	Share (%)	Constant (2011-12) Prices	Share (%)
1	Agriculture, Forestry & Fishing	2040079	16.38	47807	21.48
2	Mining & Quarrying	294644	2.37	29198	13.12
3	Manufacturing	2107068	16.92	32203	14.47
4	Electricity, Gas, Water Supply & Other Utility Services	306254	2.46	4535	2.03
5	Construction	946396	7.6	18248	8.20
6	Trade, hotels , transport, communication and services related to broadcasting	2208388	17.73	34903	15.68
7	Financial , Real Estate& Professional Services	2872815	23.07	18301	8.22
8	Public Administration, Defense and other Services	1677786	13.47	37400	16.80
<b>GVA at Basic Prices</b>		<b>12453430</b>	<b>100</b>	<b>222596</b>	<b>100</b>

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



## CHAPTER-IV

### STATE FINANCE

State finance has undergone major changes during the period 2001-17. Compare 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 raising of 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.

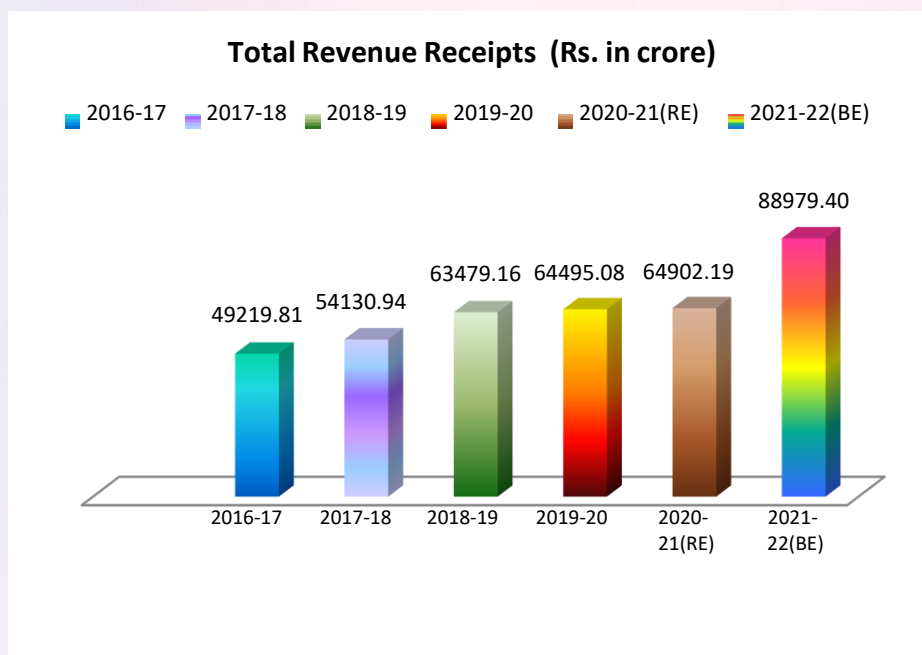
#### 4.1 State's Revenue

##### 4.1.1 Revenue Receipts

The revenue receipts consist of central taxes, state taxes, non-tax revenue and grants-in-aid from Government of India. Component wise revenue receipts are shown in Table 4.1. In 2021-22 (BE), total revenue receipts of the state is expected to achieve at the level of Rs. 88979.40 crore as against Rs. 64902.19 crore in 2020-21(RE) with a surplus of Rs. 24077.21 crore in Revenue Receipt Account. The total revenue receipts of the State was Rs. 49219.81 crore in 2016-17 and it has grown up to Rs. 64495.08 in 2019-20 with an annual growth of 31.03 percent

Table 4.1								
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	
2016-17	12079.56	4353.12	16432.68	20188.64	10444.07	2154.41	32787.12	49219.81
	Grants							
2017-18	13215.52	4071.97	17287.49	22301.54	14541.91		36843.45	54130.94
2018-19	15924.85	8221.29	24146.14	25215.85	14117.17		39333.02	63479.16
2019-20	16528.69	5539.34	22068.03	21721.44	20705.61		42427.05	64495.08
2020-21 (RE)	17133.61	2899.61	20033.22	18629.32	26239.65		44868.97	64902.19
2021-22 (BE)	21177.54	6097.60	27275.14	20818.82	40885.44		61704.26	88979.40

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

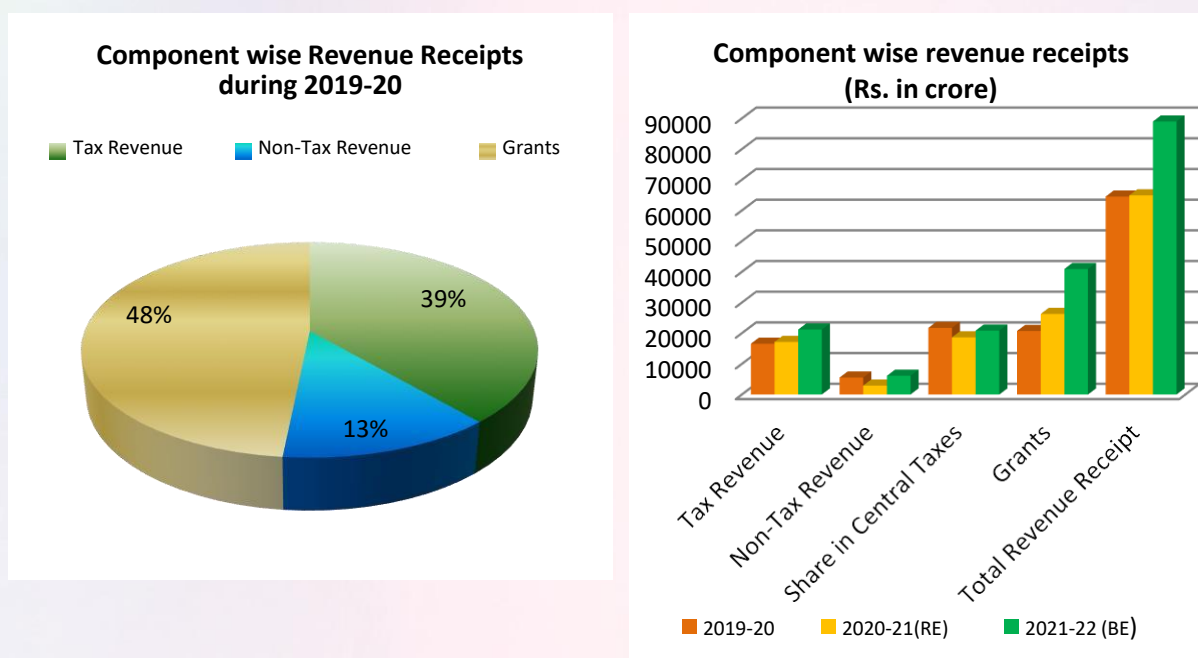


### 4.1.2 State's Own Resources

The total State's own tax revenue receipts was Rs. 16432.68 crore in 2016-17 and it has increased to Rs. 22068.03 in 2019-20 with annual growth rate of 8.57 percent. It was expected that the receipt of State's own revenue resources to increase to Rs. 27275.14 in 2021-22(BE) with a projected annual growth of 11.80 percent. During the 2021-22 (BE), an amount of Rs. 21177.54 crore is expected to earn from the tax revenue and Rs. 6097.60 crore from non-tax revenue. The own tax revenue to total revenue receipts accounted for 34.22 percent in 2019-20 and it is expected to decrease 30.65 percent in 2021-22(BE).

### 4.1.3 Transfer from the Centre

The share of Central Taxes was Rs. 21721.44 crore in the 2019-20. It is expected to increase Rs. 20818.82 crore in 2021-22(BE) as against Rs. 18629.32 crore in 2020-21(RE) with an increase of 11.75 percent. Resource flow from the Centre was Rs. 42427.05 crore in 2019-20 and it is expected to attain Rs. 61704.26 crore in 2021-22(BE) as against Rs. 44868.97 crore in 2020-21(RE) with an increase of 37.52 percent.



### 4.2 Revenue Expenditure

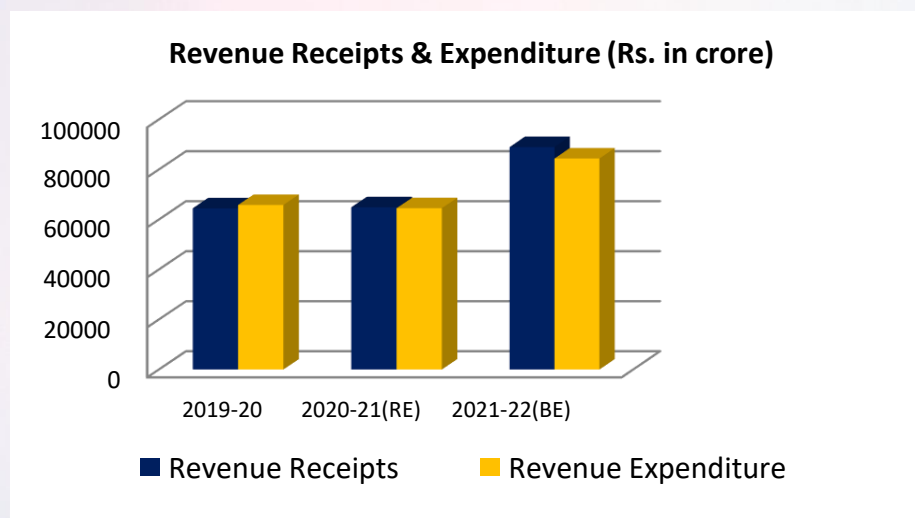
Revenue expenditure on component of salary, pension and interest payment is shown in Table 4.2.

<b>Revenue Expenditure</b>							
<b>(Rs. in crore)</b>							
<b>Year</b>	<b>Plan Expenditure</b>		<b>Non-Plan Expenditure</b>			<b>Pension</b>	<b>Total Revenue Expenditure</b>
	<b>Total</b>	<b>Salary</b>	<b>Total</b>	<b>Interest Payment</b>	<b>Salary</b>		
2016-17	13433.64	1450.04	35929.08	2963.75	17759.09	6564.64	49362.72
	<b>Interest Payment</b>	<b>Salary</b>	<b>Pension</b>	<b>Other</b>		<b>Total Revenue Expenditure</b>	
2017-18	3205.32	25751.61	8287.34	18236.67		55480.94	
2018-19	3844.37	26177.73	8112.26	18764.64		56899.00	
2019-20	4438.87	27008.30	9609.02	24761.09		65817.28	
2020-21(RE)	5199.18	26803.09	10329.01	22188.31		64519.59	
2021-22(BE)	7063.73	NA	8696.63	NA		84405.47	

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

Total revenue expenditure was Rs. 49362.72 crore in 2016-17 and it had increased to Rs. 65817.28 crore in 2019-20 with annual growth of 8.33 percent. The salary expenditure to total revenue expenditure was 38.91 percent in 2016-17 and it increased to 41.04 percent in 2019-20 registering annual growth of 0.53 percent during the period. During the period from 2016-17 to 2020-21 (RE), salary expenditure and pension expenditure had increased by 1.40 times and 1.57 times respectively.

Another component of revenue expenditure is interest payment. The share of interest payment to the total revenue expenditure was 6.00 percent in 2016-17, and it had increased to 6.74 percent in 2019-20. The share of interest payment expenditure to total revenue expenditure has increased from 8.06 percent in 2020-21(RE) to 8.37 percent in 2021-22 (BE). The share of pension to total revenue expenditure was about 13.30 percent in 2016-17 and it is expected to decline to 10.30 percent in 2021-22(BE).

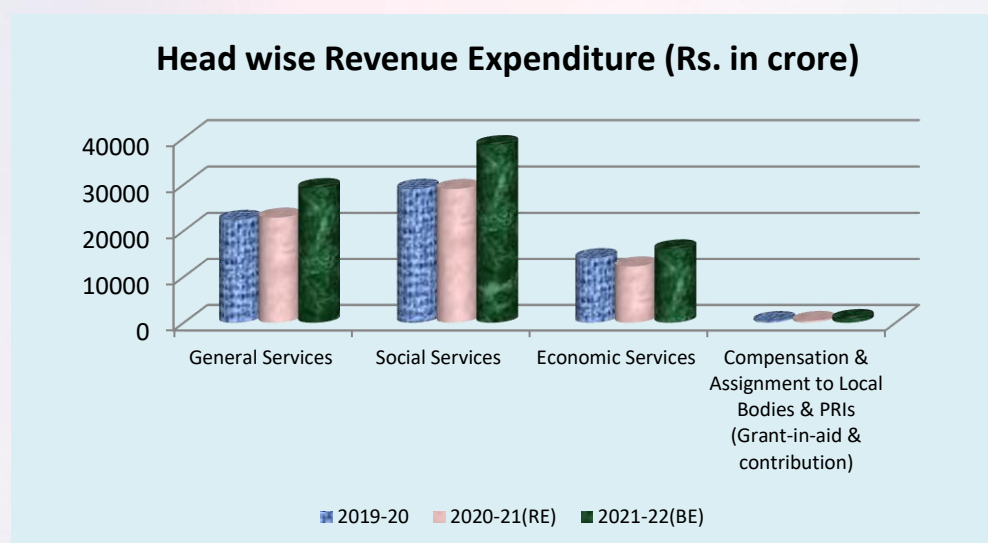


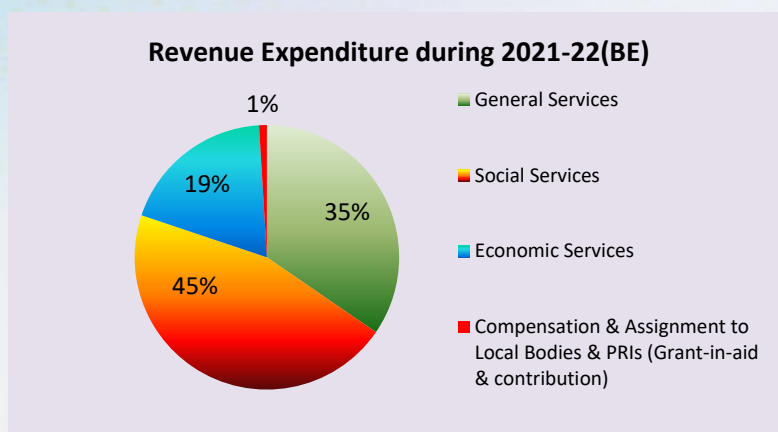
### 4.2.1 Revenue Expenditure under Different Heads

Revenue expenditure under different heads is presented in Table 4.3. Out of the total revenue outlay for 2021-22(BE), Social Services accounted for 45.57 percent, General Services for 34.58 percent, Economic Services for 18.91 percent and Grants in Aid for 0.94 percent respectively. The relative shares of expenditures in 2016-17 under the four heads viz. General Service, Social and Community Services, Economic Services and Grants-in-aid were 34.69 percent, 45.93 percent, 18.06 percent and 1.32 percent respectively.

Table 4.3						
Revenue Expenditure under Different Heads						
Sources of Revenue	2016-17	2017-18	2018-19	2019-20	2020-21 (RE)	2021-22 (BE)
General Services (GS)	17123.19 (34.69%)	22057.80 (39.76%)	21058.64 (37.01%)	22350.35 (33.96%)	22829.34 (35.38%)	29186.70 (34.58%)
Social Services (SS)	22673.14 (45.93%)	21373.17 (38.52%)	25334.44 (44.53%)	29060.46 (44.15%)	29014.03 (44.97%)	38466.15 (45.57%)
Economic Services (ES)	8914.03 (18.06%)	11924.92 (21.49%)	10232.02 (17.98%)	14039.94 (21.33%)	12236.27 (18.97%)	15957.73 (18.91%)
Compensation & Assignment to Local Bodies & PRIs (Grants-in-aid & contribution)	652.36 (1.32%)	125.05 (0.23%)	273.89 (0.48%)	366.23 (0.56%)	376.95 (0.58%)	794.88 (0.94%)
<b>Total Expenditure (1+2+3+4)</b>	<b>49362.72</b>	<b>55480.94</b>	<b>56898.99</b>	<b>65817.28</b>	<b>64519.59</b>	<b>84405.47</b>

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





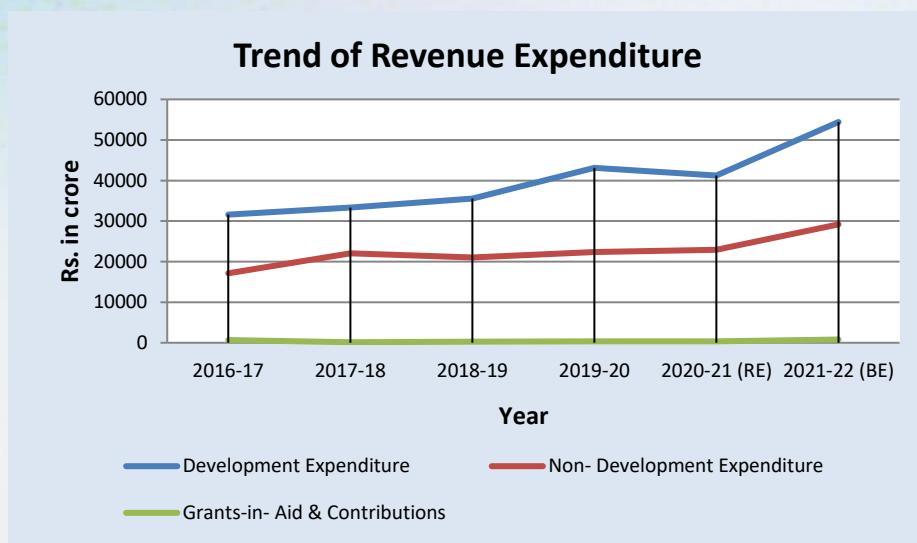
#### 4.2.2. Trend of Revenue Expenditure

The trend of revenue expenditure is shown in **Table 4.4**.

The contribution of development expenditure to total revenue expenditure was 63.99 percent in 2016-17 and it slightly grown-up to 64.48 percent in 2021-22 (BE). On the other hand, the share of non-development expenditure to total revenue expenditure has almost shown similar trend during the period from 2016-17 to 2021-22(BE). Grants-in-Aid and contributions had slightly come down from 1.32 percent in 2016-17 to 0.94 percent in 2021-22 (BE).

Table 4.4						
Trend of Revenue Expenditure						
Rs. in crore						
Year	Development Expenditure			Non-Development Expenditure	Grants-in-Aid & Contributions	Total
	Social Services	Economic Services	Total	General Services		
2016-17	22673.14 (45.93%)	8914.03 (18.06%)	31587.17 (63.99%)	17123.19 (34.69%)	652.36 (1.32%)	49362.72 (100.00%)
2017-18	21373.17 (38.52%)	11924.92 (21.49%)	33298.09 (60.01%)	22057.80 (39.76%)	125.05 (0.23%)	55480.94 (100%)
2018-19	25334.44 (44.53%)	10232.02 (17.98%)	35566.46 (62.51%)	21058.64 (37.01%)	273.89 (0.48%)	56898.99 (100%)
2019-20	29060.76 (44.15%)	14039.94 (21.33%)	43100.70 (65.48%)	22350.35 (33.96%)	366.23 (0.56%)	65817.28 (100%)
2020-21 (RE)	29014.03 (44.97%)	12236.27 (18.97%)	41250.30 (63.94%)	22892.34 (35.48%)	376.95 (0.58%)	64519.59 (100%)
2021-22 (BE)	38466.15 (45.57%)	15957.74 (18.91%)	54423.89 (64.48%)	29186.70 (34.58%)	794.88 (0.94%)	84405.47 (100%)

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



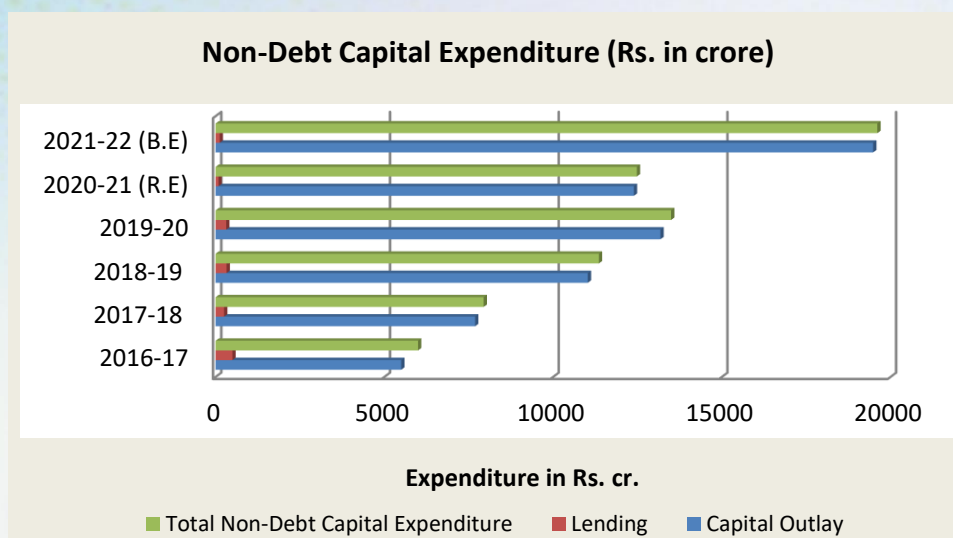
### 4.3 Non-Debt Capital Expenditure:

Non-debt capital expenditure consists of capital outlay and lending. This excludes loan repayment. The trend of non-debt capital expenditure of the state is presented in **Table 4.5**.

The Table 4.5 reveals that total capital outlay to total expenditure has increased from Rs. 5502.08 crore (9.94 percent) in 2016-17 to Rs. 13185.42 crore (16.62 percent) in 2019-20 and it is expected to reach around Rs. 19490.99 in 2021- 22(BE). During the period from 2016-17 to 2021-22(BE), the share of lending to total expenditure of the state has come down from 0.90 percent to 0.12 percent. The share of total non-debt capital expenditure to total expenditure was around 10.84 percent in 2016-17 and it is expected to increase 18.86 percent for 2021- 22(BE).

Year	Capital Outlay			Lending			Total Non-Debt Capital Expenditure	Total Revenue Expenditure	Total Expenditure
	Plan	Non-Plan	Total	Plan	Non-Plan	Total			
2016-17	5270.25	231.83	5502.08	227.97	271.41	499.38	6001.46	49362.72	55364.18
2017-18			7692.84			254.07	7946.91	55480.94	63427.85
2018-19			11034.08			328.07	11362.15	56899.00	68261.15
2019-20			13185.42			316.16	13501.58	65817.28	79318.86
2020-21 (RE)			12399.39			87.80	12487.19	64519.59	77006.78
2021-22 (BE)			19490.99			123.60	19614.59	84405.47	104020.06

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



### 4.3.1 Receipts and Expenditure on Capital Account

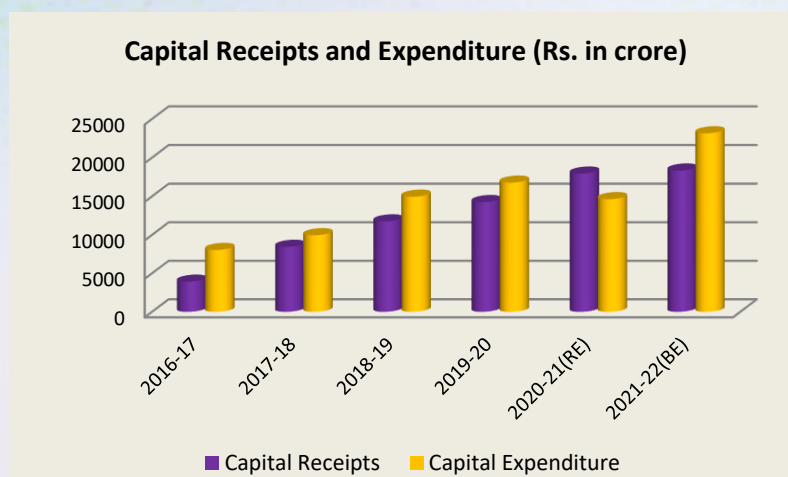
Total receipts and capital expenditure on Capital Account from 2016-17 to 2021-22(BE) is shown in Table 4.6.

It is seen from the Table 4.6 that capital receipts have increased from Rs. 3920.31 crore in 2016-17 to Rs.14257.60 crore in 2019-20 with annual growth of 65.92 percent and it is expected to increase by Rs.18338.14 crore in 2021-22(BE). Capital expenditure increased from Rs. 8044.09 crore in 2016-17 to Rs. 16770.85 crore in 2019-20 with annual growth of 27.12 percent and it is expected that capital expenditure to be reached at Rs.23150.82 crore in 2021-22(BE).

Receipt and Expenditure on Capital Account						
Rs. in crore						
Year	Receipts		Expenditure			
	Total	Of which Internal Debt	Total	Of which		
				Capital Outlay	Disbursement of Loans and Advances	Repayment of Public Debt
2016-17	3920.31	3844.36	8044.09	5502.08	499.38	2042.63
2017-18	8451.78	8377.51	9955.51	7692.84	304.07	1958.60
2018-19	11757.58	11665.49	14951.51	11034.08	328.07	3589.36
2019-20	14257.60	14143.29	16770.85	13185.42	416.16	3169.27
2020-21(RE)	17942.74	16382.36	14635.17	12399.39	87.80	2147.98
2021-22(BE)	18338.14	18182.08	23150.82	19490.99	123.60	3536.23

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





### 4.3.2 Borrowings and Repayment

The status of borrowing, repayment and net loans of the state during is shown in **Table 4.8**.

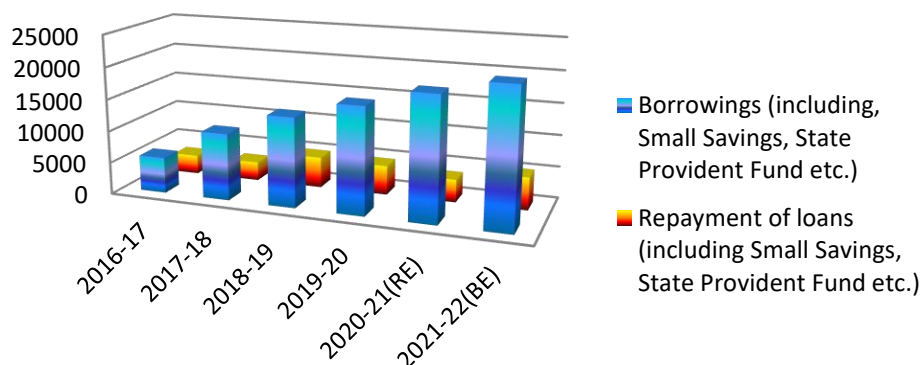
Table 4.8			
Borrowings and Repayment			
Rs. in crore			
Year	Borrowings (including, Small Savings, State Provident Fund etc.)	Repayment of loans (including Small Savings, State Provident Fund etc.)	Net Loans
2016-17	5649.45	2993.91	2655.54
2017-18	10476.20	2960.07	7516.13
2018-19	14003.87	4857.53	9146.35
2019-20	16637.57	4588.75	12048.83
2020-21(RE)	19256.58	3569.54	16681.05
2021-22(BE)	21452.85	5140.38	16312.47

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

The sources of borrowings of the State Government are open market borrowing, loans from financial institutions like NABARD (under RIDF, WIF schemes etc.), loans from Government of India against EAPs.

The table shows that borrowing of state government was Rs.5649.45 crore in 2016-17 and it increased to Rs.21452.85 crore in 2021-22(BE). Repayment of loans was Rs.2993.91 crore in 2016-17 and it increased to Rs.5140.38 in 2021-22(BE).

## Borrowing and Repayment of loans (Rs. in crore)



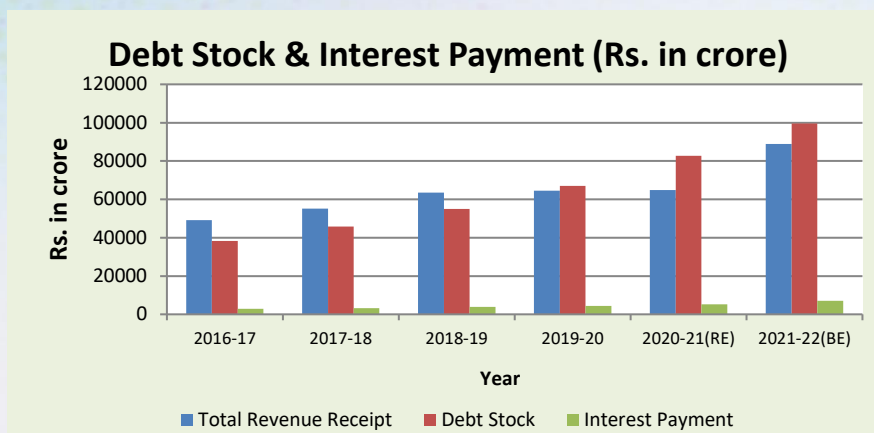
## 4.3.3 Debt Stock and Interest Payment

The total debt stock and interest to total revenue receipts in terms of percentage is shown in **Table 4.10**.

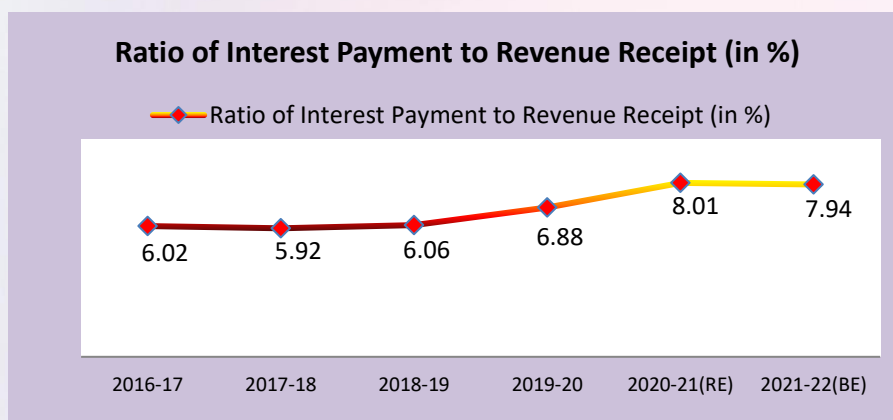
Table 4.10				
Interest Payment to Revenue Receipt				
Rs. in crore				
Year	Total Revenue Receipts	Debt Stock	Interest Payment	Ratio of Interest Payment to Revenue Receipt (in %)
2016-17	49219.81	38345.77	2963.75	6.02
2017-18	55130.94	45861.90	3205.32	5.92
2018-19	63479.16	55008.25	3844.37	6.06
2019-20	64495.08	67054.03	4438.87	6.88
2020-21(RE)	64902.19	82741.07	5199.18	8.01
2021-22(BE)	88979.40	99510.85	7063.73	7.94

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

It is seen from the Table 4.10 that debt stock has been gradually grown up from Rs. 38345.77 crore in 2016-17 to Rs.99510.85 crore in 2021-22(BE). Simultaneously, interest payment has grown up from Rs. 2963.75 crore in 2016-17 to Rs. 4438.87 crore in 2019-20 and it expected to increase Rs. 7063.73 crore in 2021-22(BE). Ratio of Interest Payment to Revenue Receipt was 6.02 percent in 2016-17 and it increased to 7.94 percent in 2021-22(BE).



Year wise ratio of interest payment to total revenue receipt is shown in the following diagram and it is observed that the same has increased from 5.92 in 2017-18 to 8.01 in 2020-21(RE) and expected to decline to 7.94 in 2021-22 (BE).



#### 4.3.4 FISCAL SECNARIO OF THE STATE

The trend of fiscal parameters of the State is shown in Table 4.11.

Year	Revenue Deficit(+)/Surplus(-)	Fiscal Deficit(+)/Surplus(-)	Primary Deficit(+)/Surplus(-)
2016-17	(+)142.92	(+)6125.78	(+)3162.03
2017-18	(+)1350.01	(+)9342.21	(+)6136.89
2018-19	(-)6580.16	(+)4779.06	(+)9346.69
2019-20	(-)1322.19	(+)14915.80	(+)10476.93
2020-21 (RE)	(-)382.60	(+)12102.03	(+)6902.85
2021-22 (BE)	(+)4573.93	(+)15028.04	(+)7964.32

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

In 2016-17, the state faced revenue deficit of Rs. 142.92 crore and a fiscal deficit of Rs. 6125.78 crore. In 2019-20, the state attained a revenue surplus of Rs. 1322.19 crore against a fiscal deficit of Rs.14915.80 crore. And it is expected that revenue deficit will attain at the level of Rs.4573.93 crore against fiscal deficit of Rs. 15028.04 crore in 2021-22 (BE).

The long-term trends in major fiscal indicators of the State Government is presented in Table 4.12

<b>Table 4.12</b>						
<b>Fiscal Indicators of State Government</b>						
<b>Figures in parenthesis are as a per cent of GDP at current price (Rs. in crore)</b>						
	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21 (RE)</b>	<b>2021-22 (BE)</b>
Revenue Receipts	49219.81 (19.3)	54130.94 (19.1)	63479.16 (20.5)	64495.08 (17.1)	64902.19 (17.0)	88979.40 (20.5)
State's Own Tax Revenue	12079.56 (4.7)	13215.52 (4.7)	15924.85 (5.1)	16528.69 (4.4)	17133.61 (4.5)	21177.54 (4.9)
State's Own Non-Tax Revenue	4353.12 (1.7)	4071.97 (1.4)	8221.29 (2.7)	5539.34 (1.5)	2899.61 (0.8)	6097.60 (1.4)
Total State's Tax Revenue	16432.68 (6.5)	17287.49 (6.1)	24146.14 (7.8)	22068.03 (5.8)	20033.22 (5.3)	27275.14 (6.3)
Share in Central Taxes	20188.64 (7.9)	22301.54 (7.9)	25215.85 (8.2)	21721.44 (5.8)	18629.32 (4.9)	20818.82 (4.8)
Capital Receipts	3920.31 (1.5)	8451.78 (3.0)	11757.58 (3.8)	14267.6 (3.8)	17942.74 (4.7)	18338.14 (4.2)
Total Receipts	53140.12 (20.9)	62582.72 (22.1)	75236.74 (24.3)	78762.68 (20.9)	82844.93 (21.7)	107317.50 (24.7)
Revenue Expenditure	49362.72 (19.4)	55480.94 (19.6)	56899 (18.4)	65817.28 (17.4)	64519.59 (16.9)	84405.47 (19.5)
Non-Debt Capital Expenditure	6001.46 (2.4)	7946.91 (2.8)	11362.15 (3.7)	13501.58 (3.6)	12487.19 (3.3)	19614.59 (4.5)
Total Expenditure	55364.18 (21.8)	63427.85 (22.4)	68261.15 (22.1)	79318.86 (21.0)	77006.78 (20.2)	104020.10 (24.0)
Fiscal Deficit(+)/Surplus(-)	+6125.78 (2.4)	+9342.21 (3.3)	+4779.06 (1.5)	+14915.80 (4.0)	+12102.03 (3.2)	+15028.04 (3.5)
Revenue Deficit(+)/Surplus(-)	+142.92 (0.1)	+1350.01 (0.5)	-6580.16 (-2.1)	-1322.19 (-0.4)	-382.60 (-0.1)	+4573.93 (1.1)
Primary Deficit(+)/Surplus(-)	+3162.03 (1.2)	+6136.89 (2.2)	+9346.69 (3.0)	+10476.93 (2.8)	+6902.85 (1.8)	+7964.32 (1.8)
GDP at Current Price	254382.36	283164.90	309336.32	377404.81	381003.97	433925.44

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

#### 4.4 Collection of Tax Revenue

The collection of tax revenue of the state was Rs.14049.44 crore in 2018-19 and it had increased to Rs.14966.77 in 2019-20 with annual growth of 6.53 percent. During 2020-21, the Commissionerate of Taxes, Assam had collected Rs.14,922.28 crores (provisional) against actual collection of Rs.14,966.77 crores in 2019-20.

##### 4.4.1 Revenue collection under GST:

During 2020-21, the Commissionerate of Taxes, Assam had collected Rs. 9,769.19 crores (including of GST compensation of Rs. 1,157.57 crores) against Rs. 10,039.30 crores (including GST compensation of Rs 1284.00 crores) in 2019-20.

Details Head wise revenue collection is given in Table 4.13

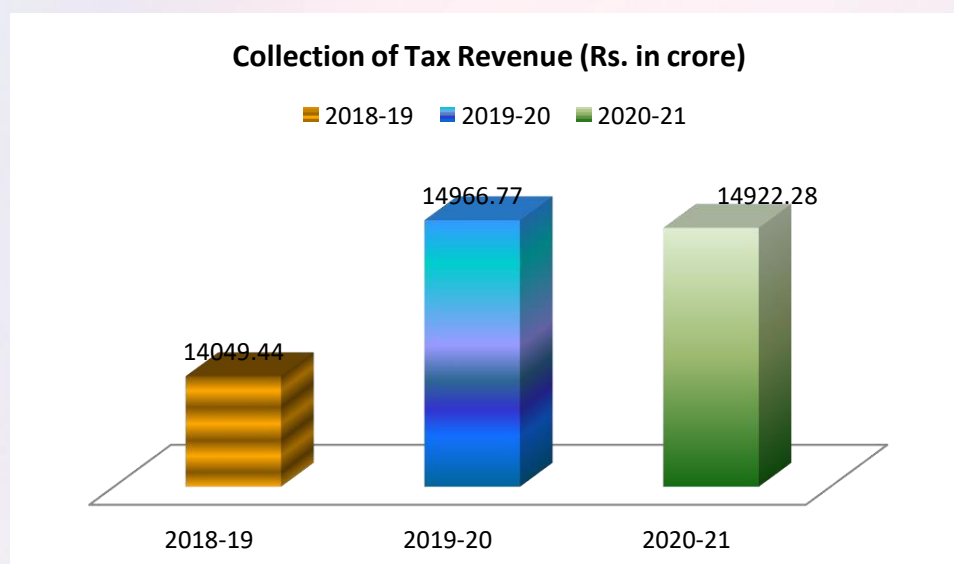
Table 4.13				
HEAD OF ACCOUNT WISE AND ACT WISE REVENUE COLLECTION IN ASSAM				
Rs. in crore				
Sl.No.	Head of Accounts and Act	2018-19	2119-20 (Actual)	2020-21 (Provisional)
1.	0022: Taxes on Agricultural Income	13.45	6.87	6.93
2.	0028: Other Taxes on Income & Expenditure (Professional Tax)	232.02	189.92	188.54
3.	0029: Land Revenue-Cess on Specified Land, Coal & Tea	53.51	13.06	5.83
4.	0040: Sales Tax			
	(a) 111-3298 Value Added Tax (VAT)	4607.05	4324.32	4601.06
	(b) 101-Central Sales Tax (CST)	206.44	156.63	163.07
	(c) 102-5653 Assam Health Infrastructure and Services Development Fund Act	0.00	0.00	0.00
5.	0042: 106-3299 Assam Entry Tax(AET)	6.90	41.16	4.53
6.	0043: Taxes and Duties on Electricity	72.75	194.56	183.06
7.	0045: Other Taxes on Commodities and Services			
	(a) 101 Amusement & Betting Tax	0.04	0.00	0.03
	(b) 105: Luxury Tax ( Hotel and Lodging Houses)	0.74	0.95	0.04
<b>Sub Total (1 to 7) Non GST</b>		5192.90	4927.47	5153.09
8.1	0006 :State Goods and Services	3560.80	4212.37	3895.34
8.2	Settlement of IGST return	3867.32	4340.97	4148.37
8.3	Provisional/Advance Settlement of IGST	973.42	201.96	567.91
<b>Sub Total (of SGST and IGST settlement)</b>		8401.54	8755.30	8611.62
<b>Total without GST Compensation (GST+Non GST)</b>		13594.44	13682.77	13764.71
<b>Compensation under GST</b>		455.00	1284.00	1157.57
<b>Grand Total</b>		<b>14049.44</b>	<b>14966.77</b>	<b>14922.28</b>

Source: Commissionerate of Taxes, Assam

#### 4.4.3 Steps taken by the Government of Assam for welfare of the State

**a) Tax Holiday to Tea Industries:** To give a boost to the Tea Sector in the State of Assam and promote sustainable growth, the Government of Assam has already declared Tax Holiday for three years for payment of tax in respect of green tea leaves grown and bought by the tea estates w.e.f. 1<sup>st</sup> January 2019 under the Assam Taxation (on Specific Land) Act, 1990. Further to promote and support the tea sector which suffered a setback due to changing climate conditions and other factors, the Government of Assam also granted exemption from payment of Agricultural Income w.e.f. 1st April, 2020 for a period of three years under the Assam Agriculture Income Tax Act, 1939.

**b) State GST reimbursement under the Industrial Policy of Assam:** The State of Assam is the first State in the entire country in the GST regime to roll out GST reimbursement scheme to attract and induce investment by Industries through the Assam Industries (Tax Reimbursement for Eligible Units) Scheme, 2017. Under this scheme, an amount of Rs. 176.91 crores have already been sanctioned to the eligible units in the last financial year 2020-21 and Rs. 783.61 crore sanctioned so far.



## CHAPTER-V AGRICULTURE

Agriculture and allied activities play a very important role in the socio-economic development of Assam. It is the backbone of the state's economy and holds the key to the overall development of the state. Agriculture significantly contributes to the state's economy and provides as a main source of occupation and livelihood support to 70 percent rural population. At present in Assam, agriculture contributes about 20 percent revenue to the Gross State Domestic product (GSDP). The total number of farmer's family in Assam is 2741722 as per agriculture census 2015-16. 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 2015-16 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 predominance of small and fragmented land holdings along with insecure tenancy. 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**  
**GROSS STATE DOMESTIC PRODUCTS OF AGRICULTURE & ALLIED SECTOR**  
**BASE YEAR (2011-12) at CONSTANT PRICES**

(Rs. in lakh)

SI No.	Industry sector	2018-19	2019-20(PE)	2020-21(1 <sup>st</sup> PE)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1	Agriculture, Forestry and Fishing	3638722	4482864	4780686
1.1	Crops	2719183	3198597	3415030
1.2	Livestock	170997	448387	477439
1.3	Forestry & Logging	173932	195799	208982
1.4	Fishing and Aquaculture	574609	640080	679235

Source: Directorate of Economics and Statistics, Assam

TABLE-5.2

**GROSS STATE DOMESTIC PRODUCTS OF AGRICULTURE & ALLIED SECTOR AT CURRENT PRICES***(Rs. in Lakhs)*

SI No.	Industry sector	2018-19	2019-20(PE)	2020-21 (1 <sup>st</sup> PE)
1	2	3	4	5
1	Agriculture, Forestry and Fishing	5035434	7759978	8502335
1.1	Crops	3685044	4306224	4667627
1.2	Livestock	350498	803382	866738
1.3	Forestry & Logging	309904	1211881	1374287
1.4	Fishing and Aquaculture	689988	1438491	1593683

Source: Directorate of Economics and Statistics, Assam

**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 Directorate of Agriculture, Assam during the period 2001-02 to 2020-21 has issued 37 lakhs Kisan Credit Cards (KCC) and sanctioned Rs. 15437.03 crores as credit. The figures of KCC issued and sanctioned an amount of credit for the past three years are presented in Table 5.3.

TABLE - 5.3

**Kissan Credit Cards (KCC) issued & financing**

SI No.	Year	No of KCC issued	Credit limit sanctioned (Rs. in crore)
1	2018-19	298629	1415.58
2	2019-20	312618	1502.75
3	2020-21	304280	2164.66

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 'Har khet 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. To develop the Government of Assam has distributed 7663 numbers of tractors, 9708 nos. of Shallow Tube Wells (STW), distributed in the year 2020-21, as against 6521 nos. of tractors, 3540 nos. of powertiller, 25028 nos. of Shallow Tube Wells (STW) and 74 nos. of rotovators distributed in the year 2019-20. 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 "O Majuli". Productivity of most of the crops in the state is very low compared to the average 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. Despite the constraints, the Agriculture Department, Assam has been given 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, establish market linkage and 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 and making the farmers vulnerable to the situations.

Table 5.4 presents crop season wise rainfall pattern for the last five years as follows in Assam.

**TABLE - 5.4**  
**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	(-) 33.2	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	2295.8	(-) 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	628.2	1067.0	(-) 41	Deficient	9978.5	10452.0	(-) 5	Normal

Source: Directorate of Agriculture, Assam

Table - 5.4 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. 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.

**TABLE - 5.5**  
**SEASON-WISE RAINFALL PATTERN IN ASSAM**

Season		2018	2019	2020
<b>1</b>		<b>2</b>	<b>3</b>	<b>4</b>
Winter (January & February)	Actual	21.2	30.9	33.0
	Normal	47.4	47.4	47.8
	Deviation (%)	-55%	-35%	-31%
Summer (March to May)	Actual	480.2	614.4	555.4
	Normal	592.9	578.7	578.6
	Deviation (%)	-19%	6%	-4%

Season		2018	2019	2020
1		2	3	4
Monsoon (June to September)	Actual	2338.0	1504.0	1878.6
	Normal	3066.4	1584.7	1584.6
	Deviation (%)	-24%	-5%	19%
Post Monsoon (October to December)	Actual	98.0	97.5	185.8
	Normal	169.9	126.0	165.7
	Deviation (%)	-42%	-23%	12%
All Season (January to December)	Actual	2937	2247	2653
	Normal	3877	2337	2377
	Deviation (%)	-24%	-4%	12%

Source: Directorate of Agriculture, Assam

Above Table -5.5 shows that in all season (January to December) in the year 2020 the actual rainfall pattern was 2653 mm as against 2247 mm in 2019. And normal rainfall was 2377 mm in 2020 as against 2337 mm in the previous year. The deviation is 12% during 2020 as against -4% in 2019.

**TABLE - 5.6**  
**MONTH-WISE RAINFALL PATTERN IN ASSAM DURING 2020**

(in mm)

Month	Normal	Actual	Departure from	Status
January	472.9	408.3	16	Normal
February	419.4	882.6	-52	Deficient
March	615.3	2098.7	-71	Scanty
April	3367	5139	-34	Deficient
May	11012	8387	31	Excess
June	16143	12229	32	Excess
July	15697	12939	21	Excess
August	7330	9937	-26	Deficient
September	11550	7682	50	Excess
October	4445	3597	24	Excess
November	543.2	597.9	-9	Normal
December	29.3	280.7	-90	Scanty
TOTAL	71624.1	64178.2	12	Normal

Source: Directorate of Agriculture, Assam

Above Table-5.6 shows that natural rainfall in the month of January, November, May, June, July, September and October were excess in 2020 and only February and August is rainfall deficient months in 2020.

### 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 2020-21 was 23.60 lakhs hectares. Total area under paddy shows a steady decline mainly due to decline in area under Autumn rice (ahu rice). Area under Winter Rice and Summer Rice marginally declines. The area under Autumn rice is 11.65 lakhs hectares, winter rice is 18.64 lakh hectares and Summer rice is 38.00 lakh hectares during the year 2020-21 (provisional). The total rice area has decreased (-1.69)% in the year 2020-21 over the previous year 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.

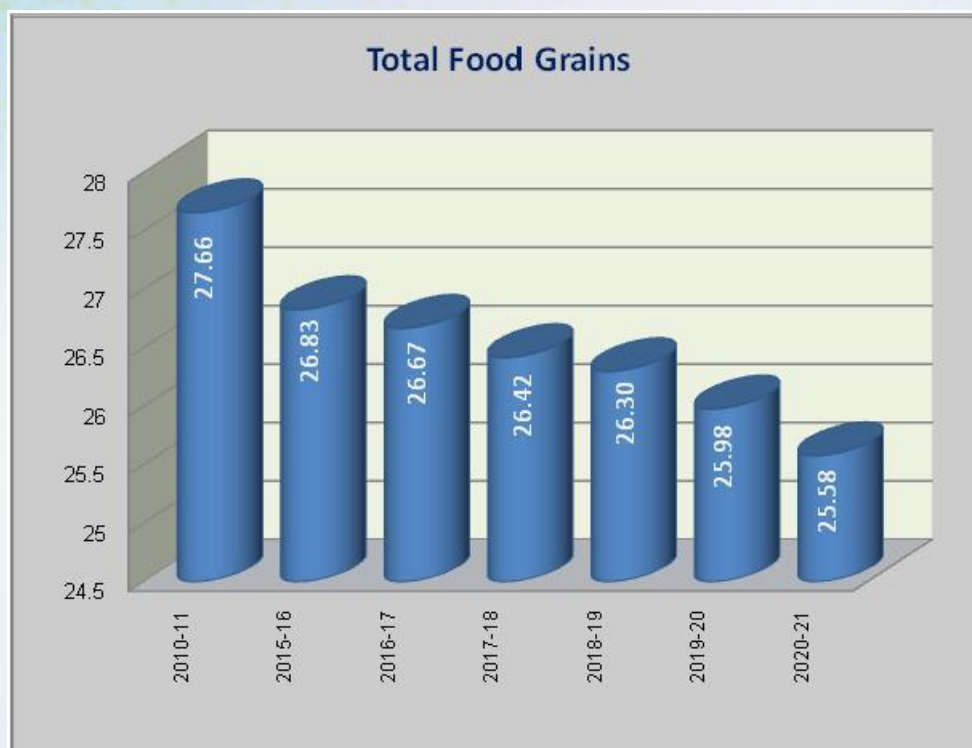
**TABLE-5.7**  
**AREA UNDER CROPS IN ASSAM DURING THE PERIOD 2010-11 and 2015-16 to 2020-21(P)**

(In lakh hectares)

Year	Autumn Rice	Winter Rice	Summer Rice	Total Rice*	Wheat	Total Pulses	Total Food grains	Total Oilseeds (excl. Coconut)
2010-11	3.13	18.59	3.99	25.70	0.44	1.17	27.66	2.64
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
2020-21	1.17	18.64	3.80	23.60	0.09	1.42	25.58	3.30

\*Total may not be equal due to rounding off.

Source: Directorate of Agriculture, Assam



## PRODUCTION

The food grain production in the state is showing an increasing trend since 2011-12. The total food grains production was 5466 thousand tonnes in 2019-20, which has marginally increased to 5487 thousand tonnes in the year 2020-21 over the previous year 2019-20.

## YIELD

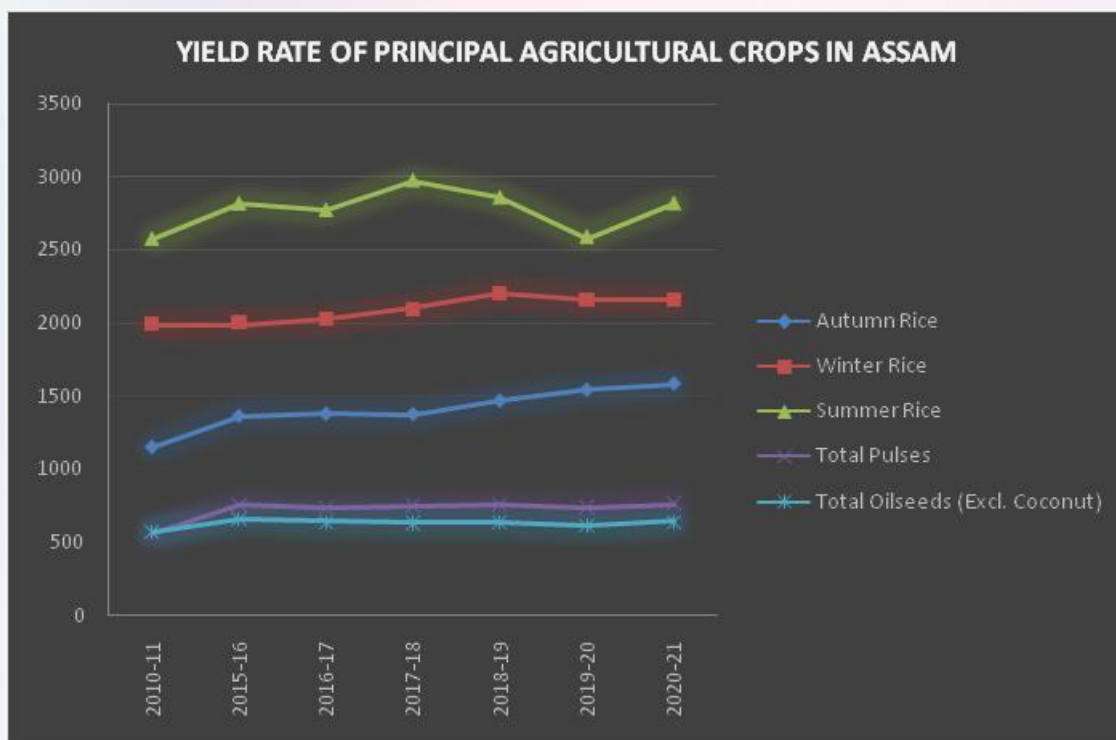
The Yield rate of rice shows oscillations during the years 2010-11 to 2020-21 for autumn and summer rice. The yield rate of autumn rice is 1585 Kg/Hect, winter rice is 2157 kg/hect and summer rice is 2820 kg/hect. in the year 2020-21 (P) as against 1543 kg/hect., 2160 kg/hect., 2593 kg/hect. for autumn rice, winter rice and summer rice respectively for the previous year 2019-20. The yield rate for autumn rice has increased 2.65 percent, winter rice has decreased 0.14 percent and summer rice has increased 8.05 percent in 2020-21 over the previous year 2019-20. There is a marginal increase 1.70 percent in total rice, 1.89 percent increase in total pulses and 4.33 percent increases in total oil seeds in 2020-21 over the previous year 2019-20. Table-5.8 represents the yield rate for last seven years in Assam.

**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)
2010-11	1155	1993	2577	572	580
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
2020-21	1585	2157	2820	764	647

Source : Directorate of Economics and Statistics, Assam



### AREA UNDER HIGH YIELDING VARIETIES

The Agriculture Department Assam focuses to raise productivity of the agriculture sector by adopting and distributing High Yielding Variety of seeds among the farmers at

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 2011-12 to 2020-21 area under HYV seeds in case of autumn rice decreases from 2.19 lakh hectares to 0.93 lakh hectares, winter rice increases from 12.8 lakh hectares to 15.49 lakh hectares and summer rice decreases from 4.02 lakh hectares to 1.86 lakh hectares. This has been shown in the following Table 5.9 for the last ten 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
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)
2020-21	0.93	15.49	1.86	18.28 (77.46)

*Note : 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, Assam.*

### **HYBRID RICE**

Agriculture Department Assam 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 kharif rice (Autumn+Winter) is 112.568 in thousand hectares and for rabi (Summer rice) is 177.862 thousand hectares in the year 2019-20. In the current year 2020-21 the area of kharif rice is declined to 99.29 thousand hectares, Rabi rice is 175.00 thousand hectares. Total area under hybrid rice decreases 5% in 2020-21 over the previous year. This has been presented in the 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
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
2020-21	99.29	175.00	274.29	11.62

N.A.: Not Available

Source: Directorate of Agriculture, Assam

### INDEX OF AGRICULTURAL PRODUCTION

The Index of Agricultural Production for all crops (Base triennium ending 2007-08=100) for the State is at 144.22 in 2020-21 in all commodities as against 147.51 in 2019-20. The Table- 5.11 shows the Index of Agricultural Production for last six 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	139.8	151.3	145.5
2020-21	158.23	126.75	144.22	141.0	134.8	136.8

- 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, RBI- Annual Report/ Ministry of Agriculture, Govt. of India.



**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 40.05 lakh hectares and net sown area is 27.00 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 at Table-5.12

**TABLE-5.12**

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

*Source: Directorate of Agriculture, Assam*

The table shows there is a marginal increase in cropped intensity in 2019-20 over the previous year 2018-19 and the growth of cropped intensity in 2019-20 is 0.54% over the previous year.

**HORTICULTURE:**

Assam produces a wide range of horticultural products 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 tonnes 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 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 2020-21, area under horticulture crops was 7.97 lakh hectares, production was 99.96 lakh MT and average yield was 48001 Kg/hectare which is shown in the Table-5.13.

**TABLE-5.13**

**AREA, PRODUCTION AND PRODUCTIVITY OF HORTICULTURAL CROPS DURING 2010-11 TO 2020-21**

Year	Fruitscrops			Tubercrops			Spicescrops			Vegetablecrops			Plantations		
	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	
2019-20	1.47	25.26	15099	1.13	8.14	7203	1.14	4.17	3644	2.89	55.00	18987	.92	2.13	2322
2020-21 (estimated)	1.61	24.88	15481	1.29	10.80	8362	1.26	6.04	4792	2.92	55.84	19091	.92	2.44	2642

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

Source: Directorate of Horticulture, Assam.

**INTEGRATED NUTRIENT MANAGEMENT**

**FERTILIZER AND MANURE**

Fertilizer plays a significant role in augmenting the productivity of crops. The State 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, 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 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 and 67.51 Kg./Hectare in 2020-21. Consumption of fertilizer during summer and Rabi seasons is low because of non-availability of water. Table-5.14 presents the detail of consumption of fertilizer in Assam for last six years.

**TABLE-5.14**  
**CONSUMPTION OF (CHEMICAL) FERTILISERS**

(Fig in '000 MT)

Fertilizer	YEARS					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Nitrogen	169.20	153.506	156.78	148.12	182.05	190.10
Phosphorus	33.50	37.61471	50.10	42.17	44.84	51.50
Potash	39.90	39.8450	45.00	38.81	40.75	47.77
Consumption (kg/Ha)	62.60	55.03	60.01	56.05	66.84	67.51

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

*Source: Directorate of Agriculture, Assam*

**TABLE-5.15**  
**SEASON WISE CONSUMPTION OF FERTILIZER IN TERMS OF NUTRIENTS**  
**DURIG 2018-19 TO 2020-21 (IN MT)**

Year	Seasonwise crops	NUTRIENT			
		N	P	K	TOTAL
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	138657.60
	TOTAL	182050.40	44842.80	40747.47	267640.67
2020-21	KHARIF	90692.62	23527.82	21938.47	136158.9
	RABI	99408.98	27981.05	25834.09	153224.1
	TOTAL	190101.6	51508.87	47772.56	289383.04

Source: Directorate of Agriculture, Assam.

#### **SOIL HEALTH MANAGEMENT:**

The Agriculture Department, Assam, 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 5.16 presents the number of soil sample tested and issued during 2017-18 to 2020-21.

**TABLE-5.16****SOIL SAMPLE TESTED AND SOIL HEALTH CARD ISSUED (Nos)**

2017-18		2018-19		2019-20		2020-21	
Soil Sample Tested	Health card Issued	Soil Sample Tested	Health card Issued	Soil Sample Tested	Health card Issued	Soil Sample Tested	Health card Issued
801496	801496	278618	1295388	58203	63110	Nil	Nil

Source: Directorate of Agriculture, Assam

**INTEGRATED PEST MANAGEMENT (IPM):**

For sustainable agricultural production Integrated Pest Management is a key component. 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, Assam 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. The consumption of chemical and bio-pesticides during the last three years is presented in Table-5.17.

**TABLE-5.17****CONSUMPTION OF PESTICIDES**

(Figure in MT)

Pesticide Consumption	2018-19	2019-20	2020-21
Chemical Pesticide	439.95	410.39	465.10
Bio-Pesticide	233.50	242.35	259.50

Source: Directorate of Agriculture, Assam

**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 low. 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, Assam 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

The Agriculture Department, Assam is continuously making efforts towards popularisation of improved varieties and use of quality seeds. The Seed Replacement Rate (SRR) of some of the important crops for last seven years is presented in Table-5.18.

**TABLE-5.18**  
**SEED REPLACEMENT RATE (SRR) IN ASSAM**

(Figure in %)

<b>Crops</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
Paddy	32.77	42.26	44.37	42.7	38.59	39.1	39.88
Blackgram	44.66	32	33	32.43	--	31.8	32.02
Greengram	76	34.91	35.54	42.16	--	38.01	40.63
Lentil	30.11	57.42	57.01	38.1	--	--	--
Rape & Mustard	45.24	42	43	43.04	45.03	45.09	46.01
Jute	63.22	55.83	54.21	65.87	52.43	52.39	52.40

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 namely paddy, mustard and seeds of pulses as per feasibility. 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 these three notified laboratories are about 20,000 samples.

## **SYSTEM OF RICE INTENSIFICATION**

Adoption of the System of Rice Intensification (SRI) 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**

The factors like fragmented and small land holdings, farmers' poor economic conditions and nonavailability of situation specific prototypes of farm implements stand as serious hindrance to mechanization of agriculture of the state. Therefore, the Department has under taken serious efforts to boost farm mechanization. The Agriculture Department, Assam 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 2019-20 and 0.97 HP in 2020-21.

**TABLE-5.19**  
**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
2020-21	7663	0	0	0	0	0.97

Source: Directorate of Agriculture, Assam.

## IRRIGATION

To achieve the goal of increasing cropping intensity and raising crop yield provisioning of irrigation in the agriculture sector is the prime necessity. Considering the uncertainties faced in the production of Kharif crops due to floods, the 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-5.20**  
**IRRIGATION INFRASTRUCTURE CREATED BY THE AGRICULTURE DEPARTMENT**

Component of irrigation	Year				
	2016-17	2017-18	2018-19	2019-20	2020-21
Shallow Tube Wells (Nos)	2705	40	4831	37376	9708
Low Lift Pumps (Nos)	154	0	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 and 4.99% in the year 2020-21 of net cropped area 18.49%. Following table 5.19 shows the irrigation potential created by the Agriculture Department for the last five years.



**TABLE-5.21**  
**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)
2020-21	97712	4.99 (18.49% of Net Cropped Area)

Source : Directorate of Agriculture, Assam

### **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 crop 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 (three) crops in Kharif season, 4 (four) crops in Rabi season and 1 (One) crop in summer 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. For the 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, need of money after harvest for repayment of agricultural debt and other contingencies force the farmers to sell 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 5.22).

**TABLE -5.22****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. The Department has also taken initiative for establishment of market infrastructure, storage facility and 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 PROVIDE 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 for export of Red Bao Paddy to USA;
- Export of Pineapple cubes, orange, ginger, dendrobium orchids to other states and countries;
- 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 deficient in oil seed production. Agriculture Department has launched 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 Agriculture Department, Assam 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 and production 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 SHGs 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 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 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.

Assam Government rolled out the PMFBY from the Rabi season of 2016-17 with an aim to benefit about 5.5 lakh farmers. In the year 2021, the scheme covered Kharif area of 311914.02 hectares and 606515 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- 5.23 show the status of implementation of the scheme in Assam.

**TABLE-5.23**  
**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)
Kharif2016	4312.95	51749	NA	691.42	501.68	23398
Rabi2016-17	36692.00	8516	3011.99	173.22	33.60	282
Kharif2017	38519.50	42723	23308.32	1033.94	50.97	1440
Rabi2017-18	4328.08	5595	3469.40	163.82	56.97	478
Kharif2018	13263.51	25076	NA	324.33	9.23	428
Rabi2018-19	42661.38	50488	21176.45	NA	NA	NA
Kharif 2019	233422.60	381537	138265.73	5647.11	1735.90#	38251#
Rabi 2019-20	332036.36	632672	267414.58	8710.37	4587.27#	73858#
Kharif 2020	577674.55	827490	327543.51	15204.62	5504.53#	82760#
Rabi 2020-21	602379.72	965577	474426.59	17387.40	NA	NA
Kharif 2021	311914.02	606515	185276.91	8752.76	NA	NA

*Note : #Kharif'2019 onwards claims are pending due to no release of premium subsidy to the Insurance companies*

*Source : Directorate of Agriculture, Assam.*

## **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.

### **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.
- To 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. Provide subsidised transport facilities to safeguard the growers from financial losses in the harvest season.

### **PROCEDURE FOR SALE**

1. Fix the price by District Agricultural Officer (ADO) in consultation with farmers.
2. In case the farmers of the APMGs are not getting remunerative price. The DAO will facilitate sale of the products.

### **MARKET INTELLIGENCE SCHEME**

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 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 scheme is to collect and dissemination of daily and weekly wholesale and retail prices of market 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.

### **SCHEME FOR QUALITY CONTROL AND AGMARK GRADING**

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.

## CHAPTER-VI

### IRRIGATION

The Economy of Assam is mainly rural and agrarian in nature. Agriculture of Assam is primarily rain-fed. Because of adverse and unpredictable weather condition experienced by the state from time to time as well as to pursue double/ multiple cropping and modernization of agricultural practices and for a sustainable development in the agricultural sector, the irrigation facility is undoubtedly the most important pre-requisite and highly essential.

The availability of assured irrigation facility is paramount for sustainable development in agriculture as well as economic development of the state. The state of Assam is rich in water resources with two major rivers system-The Brahmaputra and the Barak along with numerous tributaries which contributes the rich surface water resources of the state. The ground water availability in the state are following under safe category.

Out of the total geographical area of 78.44 lakh hectare the gross cropped area of the State is 40.04 lakh hectare and the net sown area is 27.23 lakh hectare for 2019-20. The ultimate irrigation potential of the State is estimated at 27 lakh hectare. It is planned to irrigate 17 lakh hectare 10 lakh hectare from surface water resources and 7 lakh hectare from ground water sources through Minor Irrigation Schemes and 10 lakh hectare through Major & Medium Irrigation Projects.

There are three types of Irrigation Schemes executed by Irrigation Department, Assam. They 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 are of three types.

1. Surface Flow Irrigation Scheme: This type is done by constructing diversion weir across the river to pass water through canal system by surface gravity flow.
2. Surface Lift Irrigation Scheme: This type is also taken up on surface water sources by lifting of water by pump from river, lake or pond etc. and water is passed through canal system.
3. Ground Water Lift Irrigation Schemes: This type 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.

For development of irrigation in the state Irrigation Department, Agriculture Department, Panchayat & Rural Development and Soil conservation department have different themes & programmes. Irrigation Department executes Major, Medium and Minor Irrigation Projects, the Agriculture Department constructs shallow tube wells and Panchayat and Rural Development Department and Soil Conservation Department take up temporary nature and seasonal nature schemes.

**IRRIGATION INFRASTRUCTURE:**

Irrigation Department has alone created an irrigation potential of 10.41 lakh hectare up to 31/03/2021.

The category wise number of Government Irrigation Schemes executed by Irrigation Department up to 2020-21 is given at Table-6.1

**TABLE-6.1****Number of Government Irrigation Schemes up to 2020-21**

Status of Irrigation Schemes	Category	Number of Government Irrigation Schemes up to 2020-21		
		Major & Medium	Minor	Total
Completed	Surface Flow	13	1614	1627
	Surface Lift	3	483	486
	G W Lift		785	785
	Total	16	2882	2898
	PMKSY-HKKP-		2348	2348
Ongoing	Surface Flow	3	378	381
	Surface Lift	1	139	140
	G W Lift		465	465
	Total	4	982	986
	PMKSY-HKKP-		7347	7347
Total irrigation schemes		20	3864	3884
Total PMKSY HKKP-Tube Wells			9695	9695

Source: Chief Engineering, Irrigation Department, Assam

**CREATION OF IRRIGATED AREA AND UTILISATION OF POTENTIAL:**

Irrigation potential created by the state during 2020-21 is shown in Table-6.1. Out of the Gross Cropped Area of 40.87 lakh hectares 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, Assam has created irrigation potential through ASMIDC Ltd and provisioned private Shallow Tube wells (STWs) and Low Lift Points (LLPs).



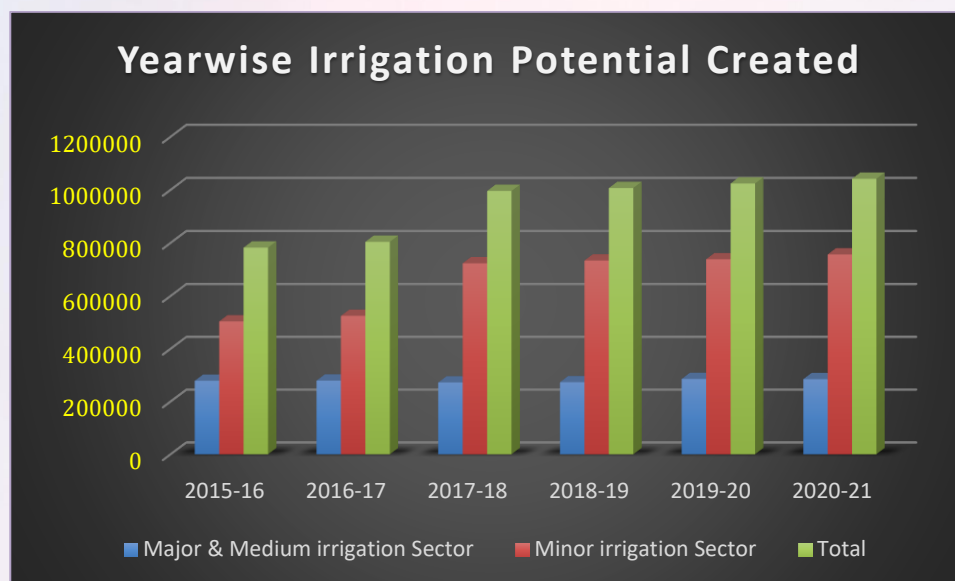
**TABLE-6.2**  
**IRRIGATION POTENTIAL CREATED UPTO THE YEAR, 2020-21**

(in hectares)

Year	Major & Medium irrigation Sector	Minor irrigation Sector	Total
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
2020-21	284921	756900	1041821

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:**

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 as given at Table 6.3

TABLE-6.3

**Irrigation potential utilized during the year (out of the cumulative created potential through Government irrigation Schemes)**

Year	Kharif crops season			Rabi & Pre-Kharif crops season			Total		
	Major & Medium	Minor	Total	Major & Medium	Minor	Total	Major & Medium	Minor	Total
2018-19	64878	130233	195111	3683	42002	45685	68561	172235	240796
2019-20	73557	181170	254727	4725	38110	42835	78282	219280	297562
2020-21	64726	187655	252381	2279	36889	39168	67005	224544	291549

*Source: Chief Engineer, Irrigation Department, Assam*

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 for their repair in time.
- 2) Damage by Natural calamities like flood, storm etc.
- 3) Erratic power supply in respect of the electrically operated irrigation schemes.
- 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.
- 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.
- 10) Stealing of motors/pumps and other accessories.
- 11) Imposition of irrigation service charges 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 various Departments, a state level co-ordination committee, a District Level Co-ordination Committee was constituted.

Pradhan Mantri Krishi Sinchai Yojana (PMKSY) is a scheme under which District Irrigation Plans (DIP) for all the districts approved and State Irrigation Plan (SIP) Assam has been prepared. Table 6.4 shows district wise activities proposed by Irrigation Department under PMKSY for the five years and as approved by the District Irrigation Plans.

**TABLE-6.4**  
**NUMBER OF IRRIGATION SCHEME PROPOSED**

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
<b>Total</b>		<b>4201</b>	<b>23301</b>	<b>6710</b>	<b>2402</b>	<b>501</b>	<b>1524</b>	<b>38639</b>	<b>888455</b>	<b>31134.9063</b>

Source: Chief Engineer, Irrigation Department, Assam

Under PMKSY-HKPP 4779 nos. of Tube-well points (2344 Solar and 2435 electrical) during the year 2019-20 have taken up to create potential of 19116 hectare in 18 districts.

In phase-II PMKSY-HKPP-GW, 4916 numbers of tube wells points have been sanctioned by Govt. of India (1243 are solar operated and 3673 are electrically operated upto) March 2020-21.

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 from 2000-01 the central assistance under AIBP received in respect of Minor Irrigation Sector. 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. were also taken.

**TABLE - 6.5**  
**PHYSICAL AND FINANCIAL TARGET AND ACHIEVEMENT UNDER CENTRAL SECTOR AND CSS**

Name of Scheme	Physical Achievement (in Hectare)						Financial Achievement (Rs.In Lakh)					
	2018-19		2019-20		2020-21		2018-19		2019-20		2020-21	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
<b>A.4701CO.M&amp;MIrrigation</b>												
ChampamatiIP	169	0	169	169	0	0	129.91	0	129.91	129.91	0	0
<b>B.4702CO.MinorIrrigation</b>												
<b>1.AIBPMinor</b>	-	-	-	-	-	-	27000.0	4061.60	36842.13	8683.62	21200.0	11714.25
<b>2.PMKSYHKPP</b>												
<b>(a)Electrical</b>							19800.0	0	9362.09	952.39	45000.0	5074.25
<b>(b)Solar</b>	-	-	19116	0	38780	9392	27000.0	0	12784.18	1180.32	13500.0	6437.41
<b>3.RMIS</b>	6 <sup>th</sup> Minor Irrigation Census and Census of Water Bodies with reference year 2017-18 is going on and 100% field works have already been completed and data are already uploaded in the portal of Govt. of India. Final approved reports of both the censuses are awaited from the ministry of Jal Shakti.						243.0	45.72	708.50	95.05	184.0	0
<b>C.4705CO.onCAD</b>												
CADWM	33729	15779	26119	6991.3	26069	120	4042.50	789.95	2050.00	746.07	937.97	70.47
<b>D.4552-CO.Minor</b>												
NLCPR	1470	900	570	0	0	0	882.04	721.49	732.58	0	659.32	0

Source: Chief Engineer, Irrigation Department, Assam

**TABLE - 6.6**

**PHYSICAL AND FINANCIAL TARGET AND ACHIEVMENT UNDER STATE PLAN**

Name of Scheme	Physical Achivement (in Hectare)						Financial Achivement (Rs.InLakh)					
	2018-19		2019-20		2020-21		2018-19		2019-20		2020-21	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
<b>A.4701CO. M &amp; M Irrigation</b>												
State Plan (Normal Works)	-	-	-	-	-	-	562.1	293.89	560	82.38	201.81	156.04
<b>B.4702CO. Minor Irrigation</b>												
1.State Plan & S OPD	3909	1380	6747	730	2913	330	3475.02	633.31	7852.67	3863.84	3013.6	1531
2.TSP	568	2	687	349	429	0	430.0	421.83	494.0	456.08	412.14	398
3.SCSP	663	6	2742	775	1425	100	1000.0	364.57	1050.0	479.91	945.25	547.16
4.AIBP(a) Short fall of AIBP 2007-08,2 008-09, 2009-10	66808	4892	61916	4954	60521	6595	3606.3	245.98	1308.91	729.25	1861.1	996.85
(b)Projected State Share of CSS(AIBP)							3000	376.84	4391.8	1075.5	585.5	474.83
5.NEC (State Share)	0	0	0	0	0	0	0	0	5.67	5.67	4.85	0
6.CMSGUY	0	0	142	142	0	0	0	0	132	44	0	0
7.PMKSY HKKP (State Share)												
(a)Electrical	-	-	-	-	-	-	22000	0	1040.23	31.41	6412.5	610.89
(b)Solar	-	-	-	-	-	-	3000	0	1420.46	37.52	2137.5	671.37
<b>C.4705CO.on CAD</b>												
CADWM under SOPD	-	-	-	-	-	-	4012.5	345.33	1497.17	1124.2	211.23	141.22

Source: Chief Engineer, Irrigation Department, Assam

**TABLE: 6.7**  
**PHYSICAL AND FINANCIAL TARGET AND ACHIEVMENT UNDER OTHER SCHEMES**

Name of Scheme	Physical Achivement (in Hectare)						Financial Achivement (Rs.InLakh)					
	2018-19		2019-20		2020-21		2018-19		2019-20		2020-21	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
<b>A.4701CO. M &amp; M</b>												
LTIF under NABARD (Dhansiril P)	21972	0	21972	0	21972	10972	11601.0	0	11601.0	0	11602.0	0
<b>B.4702CO. Minor</b>												
NABARD (a) RIDF-Loan Assistance under	1400	120	1280	1220	2472	240	6000.0	943.67	150.00	26.73	317.3	48.59
(b)RIDF-Loan Assistance under	1950	0	1950	0					3220.00	1968.32	6028.6	3713.78

*Source: Chief Engineer, Irrigation Department, Assam*

Sufficient fund is required for operation and maintenance of Irrigation Schemes and on the other hand adequate fund is not available for the 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 charges collected from the beneficiaries are deposited to the public exchequer. The position of realization of the charges for the last three years is given at Table 6.8.

**Table 6.8**  
**Irrigation charges realised**

<b>Year</b>	<b>Irrigation Service Charges realised (<i>in Rupees</i>)</b>
2018-19	785490
2019-20	784999
2020-21	575135

For the financial year 2021-22 no schemes have been sanctioned yet due to pandemic and other reasons. Therefore, only spill over works are being continued in the state. The targeted potential of 2495 hectare for SOPD, SCSP, 814 hectare for SOPD-TSP and 11129 hectare for SOPD-G have been taken up for the year 2021-22. Physical target from tube wells (Solar & Electrical) under PMKSY-HKPP is 29388 hectare against the financial estimate during 2021-22. The Physical target from the schemes under AIBP is 42408 hectare. The targeted potential for Dhansiri Irrigation project is 11000 hectare during 2021-22.

## CHAPTER-VII

### FLOOD AND FLOOD CONTROL MEASURES

#### FLOODS AND THE DAMAGES

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. 56,194 sq. km and 22,244 sq. km areas fall under the Brahmaputra and Barak Valley respectively.

Brahmaputra is one of the largest rivers in the world and rank fifth in 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 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 sq. km excluding 3(three) hill districts. The local rainfall run off 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 Sq Km as assessed by the Rastriya Barh Ayog 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 is about 10.2 % of the total area of the country and 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 and average annual area affected by flood is 9.31 Lakh Hectares. The flood protected area of the state is 16500 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 erosion is 8000Ha.



## FLOOD AND EROSION PROBLEM OF THE STATE

The Brahmaputra and Barak rivers with their 48 nos. of major tributaries and innumerable sub-tributaries have criss-crossed the plains of both valleys. Floods, river bank erosion and drainage congestion are major problems faced by the state during the monsoon season. The flood 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 Crores and particularly in 1998, the loss was about Rs. 500 Crores and during the year 2004 it was about Rs. 771 Crores.

After the unprecedented floods in the country in 1954, the Govt. of India announced a National Policy on Floods comprising three phases viz.- immediate, short-term and 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, Assam has taken up works primarily for the general development of the rural sector and for the protection of major townships in both the valleys of Brahmaputra and Barak. 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. The achievements of the Department is shown at Table 7.1.

**Table – 7.1**  
**Physical achievement of Flood Protection Measures upto March'2020**

Nature of Work	Total upto 2019-20	DURING 2020-21		Total upto 2020-21
		Target	Achievement	
1	2	3	4	5
Construction of Embankments (km)	4486.44	-	-	4486.44
Anti Erosion and Town Protection Works (nos)	1063	25	25	1088
Construction of Major Sluice (nos)	104	2	2	106
Construction of Minor Sluice (nos)	545	-	-	545
Drainage Channel (km)	892.216	-	-	892.216
Raising & Strengthening of Embankment (km)	909.492	11.032	11.032	920.524

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

***Flood management schemes taken up:***

Following flood and erosion management schemes had been sanctioned by Water Resources Department, Assam during 2020-21, 44 nos. of scheme under NABARD (RIDF-XXVI) for Rs. 86.84 Cr., 32 Nos. of Schemes under State Plan (SOPD-G) costing Rs. 101.61 Cr. and 5 Nos. of Scheme under Rejuvenation of Kollong river (SOPD-ODS) costing Rs. 21.56 Cr.

The ongoing projects of Water Resources Department during the year 2020-21 are – 10 schemes under CM Special Package, 52 schemes under SOPD-G, 4 schemes under Kollong (SOPD-ODS), 84 schemes under NABARD (RIDF-XXIII, RIDF-XXIV, RIDF-XXV & RIDF-XXVI), 1 scheme under Ministry of DoNER (NESIDS), 1 scheme under Signature Project (UTTORON) and 38 schemes under SOPD-FDR.

***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 have been taken for fortification of embankments of Brahmaputra River at a 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 and the Water Resources Department has already completed the works under Tranche-I and Tranche-II. Now the Department is contemplating to prepare a proposal for next phase of the project under ADB funding for Tranche-III.

Scheme wise target and achievement of Project (Assam Integrated Flood & River Bank Erosion Risk Management Investment Program – AIFRBERMIP), Tranche-II under Asian Development Bank is given at Table - 7.2.

**Table – 7.2**  
**Tranche – II (2018-2022)**

Two sub projects were considered under following these three locations.

1	Dibrugarh Sub Project	Fortification of DTP Dyke	9.1 Km
		Bank Protection Works	3.75 Km
		Pro-Siltation Measures	
2	Palashbari-Gumi Sub Project	Bank Protection Works at Palashbari (including one Four Shutter Sluice Gate at Kalbhug Channel)	5.6 Km
		Bank Protection Works at Gumi	7.3 Km
3	Kaziranga Sub Project	Fortification of embankment	3.8 Km
		Bank Protection Works (including three Sluice Gates)	4 Km
		Pro-Siltation Measures	
I	<b>Total cost of Tranche-II</b>	USD 52.51 Million / INR 515.02 Crore	
	a. ADB's Loan	USD 49.16 Million / INR 353.95 Crore	
	b. Govt.s Share	USD 10.5 Million / INR 161.25 Crore	
II	Benefitted Area	Targeted / Achieved = 90120 Hectare	
III	Population Benefitted	Targeted / Achieved = 7,80,000 Nos	

Source: Water Resource Department, Assam

**Physical and Financial Targets of the Scheme proposed to be taken during the financial year 2021-22:**

Tentative Tranche wise allocation of **Assam Integrated River Basin Management Project (AIRBMP)** under World Bank funding is as under–

External funding for the project = USD 500 Million

State Share for the project = USD 125 Million

Tranche-I for the project for an amount of USD 100 Million (External Assistance = USD 80 Million, State Share = USD 20 Million) is proposed as for the following locations.

**Buridehing River Basin:**

Targeted Fortification of existing Embankment = 20.1 Km.

Targeted Anti Erosion Works and Pro siltation Measures = 18.55 Km at 30 different locations.

**Beki River Basin:**

Targeted Fortification of existing Embankment = 4 Km.

Targeted Anti Erosion Works and Siltation Measures = 13.67 Km at 11 different locations.

***Schemes proposed under the aegis of World Bank:***

Water Resource Department, Assam has posed the Assam Integrated River Bank Management Project for funding from World Bank at a cost of USD 500 million. The integrated project is proposed for the rivers (i) Buridehing, (ii) Beki, (iii) Jiabharali, (iv) Gainadi-Jiadhal, (v) Bhogdoi, (vi) Singhla and (vii) Jatinga. The revised PPR estimated to cost USD 625 million was submitted to Department of Economic Affairs, Govt. of India during March, 2020 and DEA concurred upon the proposal and posed it to World Bank. In the first phase, the department has proposed to take up integrated river basin management works in Buridehing and Beki River in Dibrugarh & Barpeta district respectively.

***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 work will be started soon at the proposed cost of Rs. 14.51 crore.

***Breach/cuts of 2020 and Restoration works under SOPD-FDR & SDRF for 2020-21***

During floods of 2020, 24 breaches occurred at different locations of 17 embankments of Brahmaputra valley and the Department has already closed 24 breaches. For closing breaches, including restoration of severely damaged embankment sections and locations, 129 nos. of schemes for Rs. 355.47 Crore under SDRF have been recommenced in the 42<sup>nd</sup> and 43<sup>rd</sup> SEC meeting held on 1<sup>st</sup> December, 2020.

***National Hydrology Project:***

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- 7.3**  
**DISTRICT WISE DAMAGE OF FLOOD MANAGEMENT STRUCTURES**  
**(EMBANKMENTS AND OTHERS) IN ASSAM, DURING THE FLOOD OF 2020**

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 metres)
1	2	3	4	5	6	7
1	Goalpara	Brahmaputra dyke	B/dyke from Kharmuza to Nichinpur	1	1	250
2	Barpeta	Tributary dyke	Deojara L/B embankment.	1	1	45
		Tributary dyke	Pahumara L/B embankment.	1	2	160
3	Lakhimpur	Tributary dyke	Subansiri R/B embankment.	1	1	90
4	Dhemaji	Tributary dyke	Gainadi R/B embankment.	1	1	70
			Kumatiya L/B embankment.	1	1	120
			Kumatiya R/B embankment.	1	1	250
5	Golaghat	Brahmaputra dyke	B/dyke KRF Boundary to Diffalupathar	1	1	200
6	Kamrup	Tributary dyke	L/B embankment of Puthimari	1	3	70
		Tributary dyke	R/B embankment of Puthimari	1	1	25
7	Nalbari	Tributary dyke	Mora Pagdia R/B embankment.	1	2	100
		Tributary dyke	Noona R/B embankment.	1	1	12
8	Baksa	Tributary dyke	Puthimari R/B	1	1	150
		Tributary dyke	Puthimari L/B	1	3	140
9	Darrang	Tributary dyke	Nonoi L/B embankment.	1	1	30
10	Biswanath	Tributary dyke	Ghiladhari R/B embankment.	1	1	18
11	Hojai	Tributary dyke	Kopilli dyke from Kharikhana to Jugijan	1	2	110
<b>Total</b>				<b>17</b>	<b>24</b>	<b>1840</b>

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

## CHAPTER –VIII

## LIVESTOCK, ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

## ANIMAL HUSBANDRY:

Animal Husbandry is one of the important sector of the state economy for creation of opportunities for boosting up major livestock products like Milk, Egg and Meat in the state for achieving the goal of self sufficiency. The Animal Husbandry Department, Assam has been implementing various development and health oriented schemes for rural people for attaining the objectives of protecting the livestock from various diseases and to bridge the gap between demand and supply of livestock products in the state.

LIVESTOCK POPULATION AS PER 20<sup>th</sup> LIVESTOCK CENSUS:

According to the 20<sup>th</sup> Livestock Census 2019, the Cattle population constitutes the largest group with more than ten million. Out of the total Cattle indigenous /non descript cattle comprises 1.1 crore while crossbred cattle population comprises 7.6 lakhs. Buffalo comprises 4.2 lakhs while Sheep was 3.3 lakhs numbers. Goat and Pig comprised of about 43 lakhs and 20 lakhs numbers respectively in 2019. Table 8.1 shows the details of livestock census, 2019. The above figure shows that the Indigenous cattle constitute the major part.

Table - 8.1  
Livestock and Poultry in Assam as per 20<sup>th</sup> Census (in Lakh)

Sl. No.	Livestock species	Quantity (in lakh)
1	Total Cattle	109.09
	a. Crossbred Cattle	07.69
	b. Indigenous Cattle	101.40
2	Buffaloes	04.22
3	Sheep	03.32
4	Goat	43.15
5	Pigs	20.99
6	Duck	120.19
7	Poultry	331.06
8	Horse and Ponies	0.127

Source: Directorate of Animal Husbandry & Veterinary, Assam.

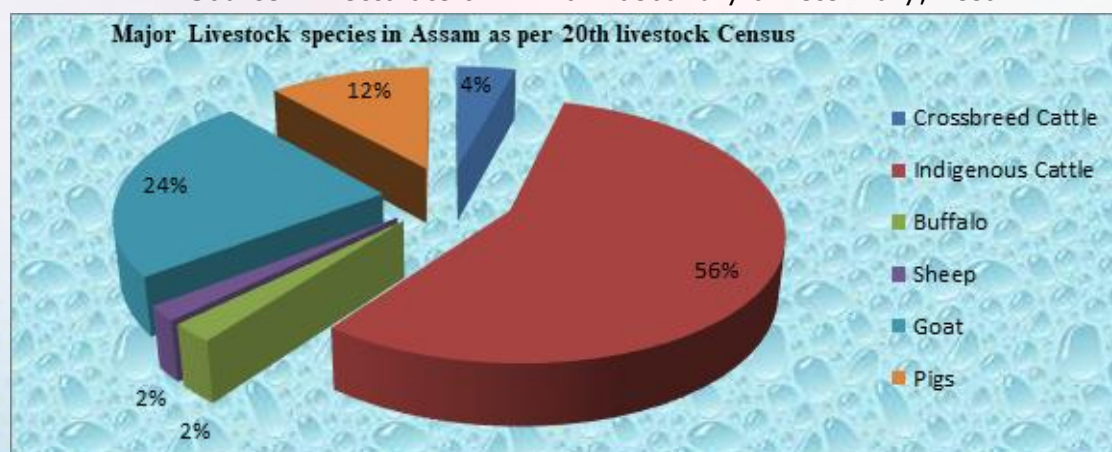
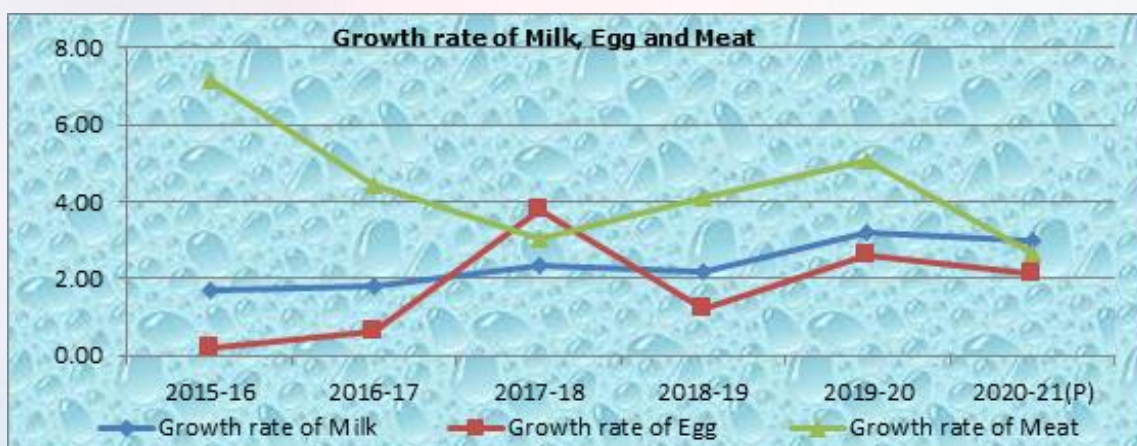
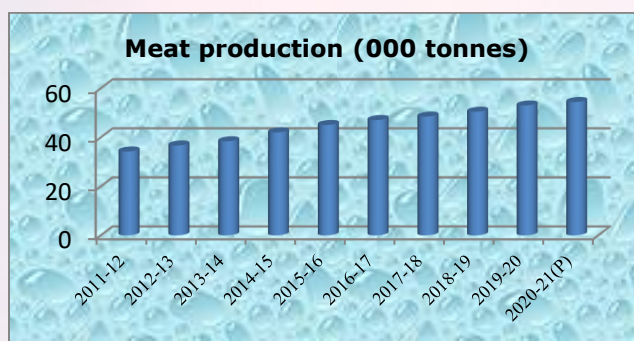
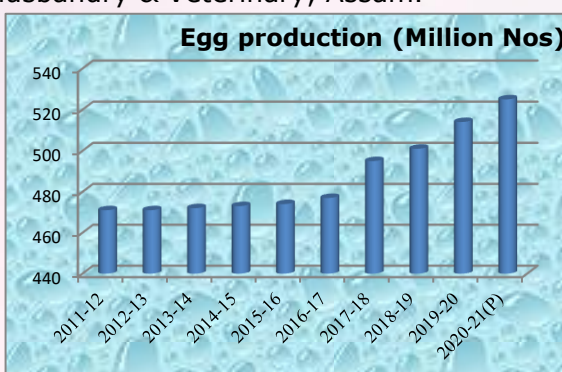
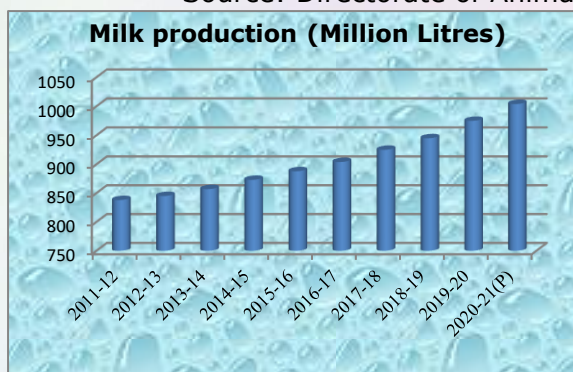


Table - 8.2  
Trend of live stock products in Assam

Item	2011-12	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)	Growth rate for the year 2020-21 (p)
Milk (million litres)	838	888	904	925	945	975	1004	2.97 %
Egg (million nos)	471	474	477	495	501	514	525	2.14 %
Meat (000 tonnes)	34.19	45	47	48.43	50.42	52.96	54.36	2.64 %

Source: Directorate of Animal Husbandry & Veterinary, Assam.



Source: Directorate of Animal Husbandry & Veterinary, Assam.

**SOME IMPORTANT ACTIVITIES:****A. BREED UP-GRADATION THROUGH ARTIFICIAL INSEMINATION PROGRAMME:**

Despite having sizeable number of cattle, milk production in the State is not meeting the needs as the majority of the 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 assisted increase of milk production to a considerable extent in the State, achievements in case of production of cross breed animal was not very satisfactory. At present, breed up-gradation programme is carried out under AACP, RKVY and NPCBB Schemes.

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

- The State of the ART Frozen Semen production center, at Barpeta will be strengthened to enhance semen production;
- 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;
- The number of frozen semen banks would be increased to improve the network of A.I. activities;
- Stall feeding practices and quality animal rearing would be promoted on cluster basis.

**B. PIG DEVELOPMENT SCHEMES**

Assam is characterized by a sizable proportion of people, who rears pigs and it is an integral in their way of life. The present population scenario of pig in Assam comprises of non-descript local varieties, exotic hybrids and genetically graded pigs. However, the large majority of the pig population in this part of the country belongs to the non-descript type.

The schemes in operation under pig development are as follows:

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

**GOVT. PIG FARMS:**

At present, the A. H. & Veterinary Department, Assam has Nineteen numbers of Pig Farms and they are:

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

Among these farms, 15 numbers of Govt. Pig Farms are only functioning. The department is possible step to make the farms functional to its full strength with funds from different schemes like NLM, RKVY, APART, SOPD-G, IPDPNE, NEC, RIDF etc.

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

In common with other livestock species, piggery serves as a way of bringing additional income to rural families and requires little capital. A. H. & Veterinary Department, Assam has been emphasizing 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 last few years, the A. H. & Veterinary Department, Assam has taken some farmer-centric approach for economic upliftment and social safeguard of rural poor particularly the woman folk of the society. In coming years too, more farmer-centric approach has been proposed under NLM, RKVY, APART, State Owned Priority Development (SOPD-G), IPDPNE, NEC, Assam Milk, Meat and Egg Mission (AMMEMS) under Chief Minister Samagra Gramya Unnayan Yojana (CMMSGUY), Rural Infrastructure Development Fund (RIDF) etc. where besides giving emphasis on production and productivity, more emphasis would be given for marketing of produce by organizing the pig rearers into organized and registered entity.

#### **WORKS UNDER RKVY DURING 2021-22:**

Rearing of Pig is going to conduct 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 covered for the activities are Golaghat, Goalpara, Jorhat, Sonitpur, Dibrugarh, Tinsukia, Cachar, Morigaon, Bongaigaon, Dhemaji, Lakhimpur and Sivasagar.

**WORKS UNDER RKVY FOR SOPD-G DURING 2020-21:**

1. Rearing of Pig through PRG in different districts of the state. A total of 250 units of 10 members each will be supported and all the members will be covered in 5 Nos. FPC. The districts proposed for the activity are Nagaon, Dibrugarh, Morigaon and Dhemaji.
2. Rehabilitation of pig farmers affected due to African Swine Fever (ASF) outbreak. Under this component, the actual ASF affected farmers who have lost their pigs due to ASF outbreak will be supported. The total pig farmers to be supported under SOPD-G, 2021-22 will be about 14000 small farmers and about 250 Commercial farmers. The small pig farmers will be supported for construction of pig sty with an amount of Rs. 5000.00 each and the commercial pig farmers will be supported for development of bio-security infrastructure with an amount of Rs. 20000 each.
3. The department will also implement a component for self sufficiency in pork production in Assam during five year period of 2021-22 to 2025-26. Under the component, establishment of multiplier pig breeding farm, small scale fattening unit etc. will be supported.

**ONGOING/ PROPOSED PROJECTS UNDER AMMEMS UNDER CMSGUY:**

Intensive Pig Development Project in different districts of the state has been proposed covering the rural poor and the pilot project in Chatia LAC has already been started. More projects will be implemented in Majuli, Jalukbari in Kamrup and Golaghat LAC.

**WORKS UNDER APART:**

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.

**C. FODDER DEVELOPMENT**

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

The Animal Husbandry and Veterinary Department, Assam has also proposed to establish 6 (six) feed mill and fodder block making units in PPP mode to provide available source of fodder for cattle to enhance milk production.

Under SOPD scheme an amount of Rs. 47.50 Lakhs was allotted for fodder seed distribution in different units for 2021-22 and subsequently distribution has made among the units.

#### D. COORDINATED CATTLE BREEDING PROJECT

Our Non- Descriptive Indeginous Cattle & Buffaloes are the main source of milk production with their very low production potentiality. So their genetic improvement has become the top priority.

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

Table - 8.3  
Cattle Breeding Activities in Assam

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	No. of A.I. done	1,750 Nos.
2012-13	No. of A.I. done	750 Nos.
2013-14 to 2015-16	No. of Calf born	65 Nos.
2016-17 to 2021-22	No. of Calf born	42 Nos.

Source: Directorate of Animal Husbandry & Veterinary, Assam.

#### E. POULTRY DEVELOPMENT:

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 therefore, a large number of people are directly engaged in poultry sector in the state.

Table-8.4

Physical and Financial achievements for Development of Poultry in Assam during 2018-19 to 2020-21

Name of the Scheme	Financial						Physical		
	2018-19		2019-20		2020-21		2018-19	2019-20	2020-21
	Target	Acvmt.	Target	Acvmt.	Target	Acvmt.	Achievement	Achievement	Achievement
100% Assistance to State poultry farm under CSS	Nil	Nil	Nil	Nil	Nil	Nil	Egg Production: 2,20,403 Nos.	Egg Production: 3,84,312 Nos.	Egg Production: 4,15,319 Nos.
							DOC: 55453 Nos.	DOC: 67,619 Nos.	DOC: 69,890 Nos.
							Farmers Benefited: 1,323 Nos.	Farmers Benefited: 3,252 Nos.	Farmers Benefited: 4,725 Nos.
Broiler Raising Programme	50.00 (L)	100%	Nil	Nil	Nil	Nil	11,94,915 Kg	10,53,515 Kg	Nil
Broiler Chick Distribution Programme	Nil	Nil	Nil	Nil	95.00 L	50%	Meat Production: 1.80 L Kgs	1.85 L Kgs	100%
							Farmers Benefited: 1000 Nos.		

Source: Directorate of Animal Husbandry & Veterinary, Assam.

## F. National Project on Rinderpest Eradication:

National Project on Rinderpest Eradication (NPRE) 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 districts from time to time. Team of doctors from Rinderpest headquarter have visited various dispensaries /hospitals /sub centres regularly to enquire about the occurrence of Rinderpest or Rinderpest like diseases. The Veterinary Doctors and Veterinary Field Assistant (VFA) Placed in different district under Rinderpest Eradication Scheme are also engaged in various NPRE Scheme activities. The occurrence of Rinderpest or Rinderpest like disease were not reported / found during the search operation from the entire state. Now a day's National Project on Rinderpest Surveillance and monitoring (NPRSM) is being doing instead of NPRE for which a fund has been released from the Govt. of India as 100% Central share. This scheme is mainly for diseases control and monitoring. The R.P. has been partially Eradicated for which works are been done as Village search, stock route and so on.

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

## ACHIEVEMENTS OF NERDDL & ANIMAL HEALTH CENTRE FOR THE YEAR 2020-21, AND ACTION PLAN FOR 2021-22

### PHYSICAL PROGRESS

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

Table – 8.5  
Diseases diagnosed for specimen by NERDDL

Name of the section	No. of samples processed	Diseases diagnosed
Parasitological	121	Theileriosis, Strongyle ove , Trichomoniasis, Babesiosis , Paramphistomiasis, Nematodiasis, Fascioliasis, Coccidiosis, Trematode
Bacteriological	334	Salmonellosis, Coli bacillosis, Staphylococcosis, Diplococcosis, Pasteurella Spp.
Serological	1681	Test done against H5N1, PRRS, PPR, CSF
Virological (Morbid)	2873	African Swine Fever, Avian Influenza
Toxicological	83	Negative for poisoning -51, positive for Organo Phosphorus insecticide-14, Aflatoxin- 4, heavy metal poisoning-10
Biochemistry	138	Liver function test-29, Albuminuria-34, Glucose in urine-30, Hb-45
Pathological	103+16 (BSE) + 24 (Autopsy)	BSE negative status, Pneumonia, Bronchopneumonia, hepatitis, Splenomegaly, Enteritis, cardio respiratory failure, glomerulonephritis, necrotic ulcer etc

Source: Directorate of Animal Husbandry & Veterinary, Assam.

### **Testing facilities created in North Eastern Regional Disease Diagnostic Laboratory (NERDDL)**

- 1) Virology laboratory is equipped with BS III standard and Equipped with Molecular line testing, RT-PCR, PCR, and immunological diagnostic works were made for most of the diseases including African swine fever, CSF, PRRS, PPR, New Castle disease, IBR etc.
- 2) The diagnostic services for bacteriological services include isolation and identification of organisms, antimicrobial sensitivity tests and diagnostic tests like ELISA for all the commonly occurring diseases of the region.
- 3) The parasitological, laboratory is well equipped with all the facilities for diagnosis of all kinds of parasitic diseases. However cultural works for parasitology is yet to be initiated.
- 4) Pathology and Histopathology laboratory is well equipped to handle all types of animal diseases. Diagnosis of BSE testing equipped with ELISA Kits.
- 5) The toxicology laboratory is yet to be fully equipped and is functioning with the help of state forensic laboratory.

### **G. 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. 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. ALDA implemented NPCBB Phase - I from 2004-05 to 2006-07, NPCBB Phase - II from 2006-07, NPCBB Phase II Extended from 2013-14, and implementing RGM (Rastriya Gukul Mission) from 2018 onwards. Presently ALDA is implementing Nationwide Artificial Insemination Programme (NAIP) from 2018-19. Presently the Phase- III of NAIP is being implemented from August 2021.

The objectives of ALDA are: to Production of clean & quality Frozen semen, expansion of the state cattle breeding network, establishment of Liquid Nitrogen (LN) grid in the state - Strengthen & streamline the Frozen semen & Liquid nitrogen distribution network, capacity building of AI service delivery network, Creation of awareness among farmers, to conserve & improve Indigenous available Swamp buffaloes, self employment generation synergistically with increased AI coverage.

### **QUALITY FROZEN SEMEN PRODUCTION AT BARAPETTA**

FSBS, Barapetta is a Frozen semen production unit of ALDA. It focuses production of quality Frozen semen of bull for the Cattle Breeding programme of the state. The station is located at Barapetta, 5 KM from Barpeta Road Railway Station towards Manas National Park. This station is only A graded semen station of the N E Region( awarded by CMU OF Govt of India) and is also an ISO 9001: 2015 (Quality Management System) certified institute. At present, the Barapetta station is maintaining 14 nos of breeding bulls. (Jersey = 05, Holstein Friesian = 05 & Sahiwal = 04 nos). The station has the following follower bulls- 15 Nos of Bulls, 4 Nos Murrah(HGM) & 1 No. Sahiwal (HGM) brought from Punjab, 5 Nos H.F (HGM) brought from Bangalore. 5 Nos H.F (HGM) bull calves were

imported from Germany and 2 nos of ET born Pure Jersey Bull calves brought from Uttarakhand as per Govt of India allotment.

**Table- 8.6**  
**PRODUCTION OF FROZEN SEMEN AT FROZEN SEMEN BULL STATION,**  
**BARAPETTA**

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Frozen Semen Production	301522	650185	598430	613861	383735	282215

Source: Directorate of Animal Husbandry & Veterinary, Assam.

### **Semen Distribution Network**

ALDA is having 1 nos of Central Frozen Semen Banks (CFSB) and 17 Regional Frozen Semen Banks (FSB) with eight nos of 6000 liter vertical silo and eight nos of 3000 lit vertical silo to maintain buffer stock of LN & FS. A new FSB has been established at Akajan in the last year to cover 20 AI centers of Dhemaji district. 37 no of LN vans were deployed for carrying semen from the regional FSB to all rural and interior AI centers of the state to facilitate AI at farmer's doorstep and 10 vehicles were distributed in the current Financial year for more coverage. The Agency has 2 nos of 5000 ltr LN Transport tankers and 2 nos 6000 litters of new LN tankers procured last year to carry Liquid Nitrogen in the 33 districts.

Table-8.7  
Frozen Semen Distribution

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Frozen Semen distribution	229815	433938	438907	445377	443173	437249

Source: Directorate of Animal Husbandry & Veterinary, Assam.

### **Capacity Building**

71 Veterinary officers (VO) were trained on Field AI management, Infertility, AI data management, semen production, Quality control, Breeding bull management and fodder production.

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 VFAs were trained.

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.

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 on implementation of INAPH.

33 os of Veterinary Cattle Sector officers were trained on Herd Registration under DADF.

**Self Employment Generation** - As per Govt of India Guideline ALDA is creating Self Employment Generation by Training and induction of Multipurpose Artificial Insemination Technician for Rural India (MAITRI) s in the field. In 2020-21, 982 unemployed youths were trained as per provision of Rashtriya Gokul Mission (RGM) at Rani, Dimow and Gunghoor training Institute and engaged in their respective location for efficient doorstep AI delivery 24X7. In the current year another 1500 is targeted to be trained. MAITRI were trained for 4 months (45 days classroom & 75 days in field). After completion of training, AI kit & 3 Liter Mobile Cryocan and other logistics will be provided to MAITRIs. ALDA have provided one Tablet PC to all MAITRIs for uploading AI reports individually under RGM.

Table- 8.8  
Artificial Insemination Status

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	165529
2020-21	434885	164310

Source: Directorate of Animal Husbandry & Veterinary, Assam.

### **INSTITUTE OF VETERINARY BIOLOGICALS (IVB)**

The Veterinary Biological means a medicinal preparation made from living organisms and their products widely used in the field of immunization and disease diagnosis of animals and birds. These immunizing agents may be classified as vaccine, immunoglobulin, antiserum, antitoxin or antigen, which play a vital role in immunoprophylaxis and diagnosis of diseases. Vaccine is an immuno-biological substance designed to produce specific protection against a given disease. It stimulates the production of protective antibody and other immune mechanisms. Vaccine may be prepared from live modified organisms, inactivated or killed organisms, extracted cellular fractions, toxoid or combination of these. More recent preparations are sub-unit or recombinant vaccine. Immunoglobulin is internationally accepted for proteins of animal origin and the term antisera are applied to materials prepared in animals like horses. The specific immunoglobulin or more specifically antisera or antitoxin has also tremendous healing power against a particular disease.

Although many of the vaccines currently licensed for use in animals are produced by conventional methods, the advent of biotechnology has provided an opportunity for developing new generation vaccines with improved efficacy and greater safety. The inactivated vaccines often contain many irrelevant substances, some with undesirable activity. The main disadvantage of inactivated vaccine is slow and short lived immune response. The live attenuated vaccines can produce adverse reactions including immunosuppression and also have a very short self life. Despite these limitations, conventional vaccines will continue to be used until superseded by safer and more effective sub-unit or genetically engineered live vaccines with DNA technology.

When feasible, effective and safe, vaccination is one of the most cost-effective measures for controlling of infectious diseases. Some infectious diseases with wildlife reservoirs as in the case of rabies can only be prevented and controlled with vaccination strategy. Therefore, the benefits of vaccine are not only confined to reduce morbidity

and decrease mortality among the animals and birds but also to prevent the transmission of zoonotic diseases in the human population. So, a reliable supply of pure, safe, potent and effective vaccine is essential for maintenance of animal health and the successful operation of national disease control or eradication programme.

The facilities available in IVB are-

Bacterial vaccine section, viral vaccine section, antirabic section, quality and Standardization section, small animal laboratory farm, storage and issue section.

**PRESENT STATUS OF IVB:**

a) **PRODUCTION:**

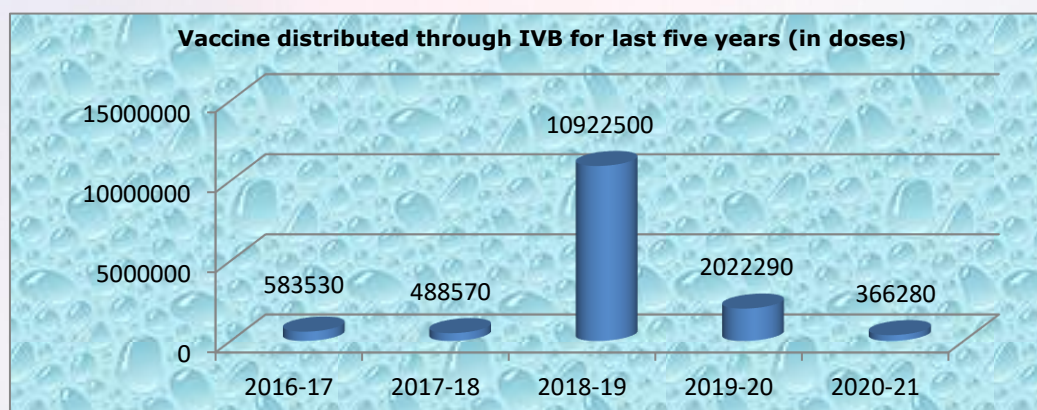
HS and BQ vaccine (for bacterial disease) has produced at IVB in February, 2021 are 16,120 doses and 20,600 doses respectively. Similarly, 86,500 doses vaccine of Duck Plague (viral disease) has produced in February, 2021.

Table- 8.9

Vaccine Production, Procurement & Distribution by IVB from April'2020 to February'2021 (in doses)

Vaccine	Brought Fwd	Production	Procurement	Distributed
HS	0	25,320	0	10,100
BQ	12,980	29,560	0	19,980
HS+BQ	0	0	18,000	18,000
Anthrax	50	25,400	0	23,700
RD R2B	16,450	38,400	0	54,750
Duck Plague	58,500	1,91,500	0	1,97,150
CSF	0	25,850	20,000	42,600
TOTAL	87,980	3,36,030	38,000	3,66,280

Source: Directorate of Animal Husbandry & Veterinary, Assam.



**DISEASE STATUS IN THE STATE OF ASSAM:**

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 of 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 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, Tripenosomiasis 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. The animal deases previllance in Assam during 2015-16 to 2019-20 are shown at Table 8.10.

Table-8.10  
Animal Disease status of Assam (Outbreak)

Name of Disease	2015-16	2016-17	2017-18	2018-19	2019-20
F.M.D.	74	45	53	52	7
Anthrax	2	2	2	5	1
PPR	3	3	10	16	8
Brucellosis	8	4	11	8	3
H.S.	9	13	12	20	14
B.Q.	24	21	11	14	10
Enterotoxaemia	24	9	13	20	15
Goat Pox	3	3	1	0	1
Duck plague	17	6	7	11	8
Ranikhet Disease	72	109	105	31	45
Classical Swine Fever	20	18	23	21	19

Source: Directorate of Animal Husbandry & Veterinary, Assam.

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.

#### **VACCINE DELIVERY TARGETS FOR THE YEAR 2020-21:**

1. HS vaccine	: 10.00 lakh doses
2. B.Q vaccine	: 05.00 lakh doses
3. H.S + BQ combine vaccine	: 05.00 lakh doses
4. Anthrax Live spore vaccine	: 03.00 lakh doses
5. Enterotoxaemia vaccine	: 05.00 lakh doses
6. Goat Pox vaccine	: 05.00 lakh doses
7. RD R2B vaccine	: 15.00 lakh doses
8. RD F1 vaccine	: 10.00 lakh doses
9. Duck Plague vaccine	: 15.00 lakh doses
10. Anti Rabic Vaccine	: 02.00 lakh doses

#### **BIOLOGICAL PRODUCTION UNITS/ DISEASE DIAGNOSTIC LABORATORIES:**

##### **(1) BIOLOGICAL PRODUCTION UNIT:**

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.

At present the required equipments/ instruments are sufficient for production of vaccine in traditional ways. However, for switching into cell culture technology of vaccine production, there will be needs for procurement of some other equipments and instruments. Deep Freeze(-80°C), Fermenter, incubator room with roller facility, freeze drier, Microscope, Phase contrast microscope, ELISA Reader and Washer, Real time PCR machine, electronic balance, Water purification system, digital P<sup>H</sup> meter and other machineries. These are required to increase production of vaccines to fulfill the increasing demand of vaccines from Assam and NE states.

##### **(2) 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.

Epidemiological facets of diseases are to be closely monitored at the state level, to give effect to the control program, to meet the requirement of faster, efficient and reliable processing and dissemination of information on the occurrence of infectious

diseases and to cater the need of timely information requirement of O.I.E. and other International Organizations. Facilitation of dissemination of the query based disease outbreak management information for proper and effective monitoring of animal disease control programme to augment the livestock development and production is very much essential. Creating awareness among the farmers and breeders of the region is also essential which will eventually help to check the spread of various diseases.

### INTEGRATED SAMPLE SURVEY SCHEME:

The integrated sample survey estimates Major Livestock Products like Milk, Egg, & Meat seasonally and annually for the state. The said survey for the year 2020-21, could not be done due to the onslaught of Covid-19, Lockdown and restrictions imposed for entry into the villages and hence projected estimate of the state as a whole for the year 2020-21 was prepared and presented in 8.11.

Table-8.11  
Estimation amount of Milk, Egg and Meat

Item	2020-21
Milk ( Million Ltrs)	1004
Egg (Million No)	525
Meat ( 000 tonnes)	54.36

Source: Directorate of Animal Husbandry & Veterinary, Assam.

### WORLD BANK FINANCED ASSAM AGRIBUSINESS AND RURAL TRANSFORMATION PROJECT (APART)

Assam Agribusiness and Rural Transformation Project (APART) is a World Bank financed Project which started implementation in the year 2017-18 and is scheduled to close in Sep. 2024 (seven years duration). The Project Development Objective (PDO) of APART is to *"add value and improve resilience of selected agri value chains, focusing on smallholder farmers and agro entrepreneurs and to advance Assam's COVID-19 response"*

### THE PROJECT WOULD ACHIEVE THE PDO AS FOLLOWS:

- (i) Enabling investments in agri-enterprises, improving the investment environment and investment promotion, and facilitating access to finance for agribusiness enterprise;
- (ii) Facilitating the growth of agri-enterprise clusters to increase competitiveness, revenue and employment growth, and supporting development of a modern supply chain; and
- (iii) Fostering the development of climate resilient production clusters, and improving producer access to knowledge, technologies, markets, and infrastructure so that they are able to respond to market opportunities and climate variability.

### KEY PROJECT INDICATORS (KPIs)

- (i) Farmers reached with agricultural assets or services (number), of which female (number)

Value added is measured by:

- (ii) Increase in price premium of commodities sold by beneficiaries in the selected value chains (percent);
- (iii) Share of selected commodities sold through new marketing channels (percent).

Resilience is measured by:

- (iv) Farmers adopting improved agricultural technology<sup>10</sup> (number), of which female (number).

#### **PROJECT BENEFICIARIES:**

APART targets a wide range of beneficiaries including farmers, farmer producer organizations (FPO), and entrepreneurs especially in the Micro Small and Medium Enterprise (MSME) segment. It is estimated that about 500,000 farming households will directly benefit from project activities. The project has a strong gender focus and targets to reach out to 30% women beneficiaries in the project.

#### **COMPONENTS OF APART**

**Component A:** Enable Agri-Enterprise Development- The objective of this component is to enable investments in agri-enterprises, improve investment environment and promote investment, reduce business and transaction costs, facilitate access to finance for agribusiness MSMEs, and, where appropriate, facilitate process and regulatory changes

**Component B:** Facilitating Agro Cluster Development- The objective of this component is to enhance competitiveness of agri-enterprises in specific geographic clusters, and upgrade infrastructure for agricultural trade, in these clusters to enable producers and other value chain participants to access new markets.

**Component C:** Fostering Market-led Production and Resilience Enhancement- The objective of this component is to enable producers of the priority value chains, in the targeted clusters, to take advantage of the rapidly changing market demand, and enhance resilience of agriculture production systems for increasing production and managing risks associated with climate change

**Component D:** Project Management, Monitoring and Learning- This component will ensure effective implementation of the project activities, and monitor and evaluate project implementation progress, outputs and outcomes, building on implementation experience of AACCP

The APART intervention have been continued mainly on PORK VALUE CHAIN (PVC) and MILK VALUE CHAIN (MVC). The PVC is implemented by Animal Husbandry and Veterinary Dept in Association of National and International Knowledge partners viz. ICAR-NRC on Pig and International Livestock Research Institute (ILRI) and the MVC is implemented by WAMUL(Formal sector) and Department of Dairy Development, GoA.

The project is being implemented in 19 undivided districts namely: Nagaon, Cachar, Bongaigaon, Sonitpur, Barpeta, Karbi Anglong, Kamrup, Dhubri, Golaghat, Kokrajhar, Lakhimpur, Darrang, Sivasagar, Jorhat, Goalpara, Morigaon, Nalbari, Bongaigaon, Dhemaji and Hailakandi.

In the livestock sector, broadly there are two components under APART:

1. **PORK VALUE CHAIN:** Being implemented by the Animal Husbandry & Veterinary Department (AHVD)
2. **MILK VALUE CHAIN:**
  - a. *Formal milk value chain:* Being implemented by West Assam Milk Producers Cooperative Union Limited (WAMUL)
  - b. *Informal milk value chain:* Being implemented by Directorate of Dairy Development (DDD)

Out of the above 16 districts, the piggery development scheme called Pork Value Chain (PVC) interventions have been implemented in 16 districts, namely: Sonitpur, Barpeta, Karbi Anglong, Kamrup, Golaghat, Kokrajhar, Lakhimpur, Darrang, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari, Bongaigaon, Dhemaaji and Hailakandi. The Pork Value Chain (PVC) covers production, aggregation, processing and marketing. The project is being implemented through clusters and value chain approach. A total of 79 Pig Bandhus have been engaged in the selected clusters as service providers. In five Pig Breeding farms, necessary bio-security infrastructure have been developed due to emergence of African Swine Fever (ASF).

In Milk Value Chain (MVC), under formal sector, the main thrust area is the doorstep delivery of Artificial Insemination of the crossbred as well as indigenous cows of the state through Mobile Artificial Technician (MAIT), organize reproductive health and mastitis management camps and vaccination against prevalent viral and bacterial diseases.

In informal sector under Directorate of Dairy Development strengthening of Dairy Cooperative Societies have been continued along with training and capacity development of milk value chain actors viz. milk producers, milk traders, sweet makers and cottage processor.

### **RASHTRIYA KRISHI VIKAS YOJANA (RKVY)**

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 11<sup>th</sup> Five year Plan. Since inception of the programme in the State, various development projects have been implemented in each district of the State to raise the level of productivity in agriculture and allied sectors.

The primary target area for Agricultural sector development through RKVY had been identified as Agriculture, Horticulture, Animal Husbandry, Research, Fishery and Dairy. Apart from these, other related sectors were also considered from time to time for RKVY Programme on the basis of C-DAP (Comprehensive District Agriculture Plan) and SAP (State Agriculture Plan). To achieve the 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.

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- 8.13

Physical and financial progress of RKVY-RAFTAAR 2020-21 as on 31st October, 2021

Components	Physical		Financial (Rs. In lakhs)		Remarks
	Target	Achievements	Target	Achievements	
Construction of 2nd floor of Assam Veterinary Council Building	1 Unit	Under Progress	60.00	0.00	
Skill Development Programme at RILEM, Assam (Ongoing project)		Under Progress	80.00	13.09	
Rural Side outlet/Farmers Service Centre (PPP mode)	6 Unit	Under Progress	60.00	0.00	
Administrative Cost			16.00	0.00	
Grand Total			216.00	13.09	

Source: Directorate of Animal Husbandry & Veterinary, Assam.

**DAIRY DEVELOPMENT:**

The Dairy Development, Assam envisages the reduction of the current milk market share of 95 % by the unorganized sector and transforming it to the fold of organized sector and it proposes to focus on the complete suite of services to the unorganized sector such as formation of more & more Primary Dairy Cooperative Societies (DCS), their capacity building, supporting them with the dairy inputs for milk procurement, primary processing and marketing, creation of cold chain facilities & milk processing infrastructure for milk value addition, linking the dairy farmers with ALDA for AI support and AH & Vety Department for feed & fodder, animal health, disease control supports etc, quality assurance training to abide by the FSSAI norms, supporting the dairy farmers with credit linkages under KCC, NPDD, DIDF and other relevant schemes and making linkages of DCSs /Dairy groups with prospective milk buyers under Formal/ Organized Sector.

For enhancement of milk production in the state some important initiatives are being taking up in 2021-22 with an amount of Rs.4000.00 Lakh Budget allotment.

- A.** Use of Sex sorted / Sexed Frozen semen of High yielding breeds alongside the ongoing AI program in gradual manner in suitable dairy belts for maximizing the female cross breed population resulting increase in milk production.
- B.** Induction of High yielding Murrah Buffalos and Gir cows in selected pockets for direct increase in Milk production as well as availability of Murrah & Gir calves in the State.
- C.** Establishment of Commercial dairy farms in selected locations through induction of 80 Nos of high genetic material (HGM) cows and value addition unit and marketing facility with the involvement of progressive dairy entrepreneurs of the State by way of bank linkage.
- D.** Providing seed money to the 200 nos of Dairy Cooperative Societies **(DCS)**.

Under Assam Milk, Meat and Egg Mission (AMMEMS) of Chief Ministers' Samagra Gram Unnayan Yojana (CMSGUY) necessary supports to the dairy farmers of Bajali Milk Union, Sitajakhala Dugdha Utpadak Samabai Samitee and Kanyaka Bohumukhi Pam, Sootea, Sundarpukhuri Dairy Cooperative, Nazira have already been provided for establishment of Milk Processing Plant, value addition, feed and fodder development and induction of high yielding milch cattle for enhancement of milk production.

To provide marketing platform for the local milk brands a Multi Brand Milk Mall is under construction at Khanapara under RIDF-XXV and another two at Jorhat and Dibrugarh are proposed under RIDF-XXVII. Dairy Development, Assam, had proposed for rejuvenation of some old milk processing plants under the Town Milk Supply Schemes (TMSS) have been proposed. It is going to roll out the Kissan Credit Card (KCC) initiative of Govt of India to the members of Dairy Cooperative Societies (DCS) of the state in addition to the newly revised Govt of India schemes such as NPDD, DIDF, AHIDF etc. Govt. has initiated the process for processing of 10.00 Lakh ltrs of milk per day in coming days for which necessary MoU has been signed with National Dairy Development Board.

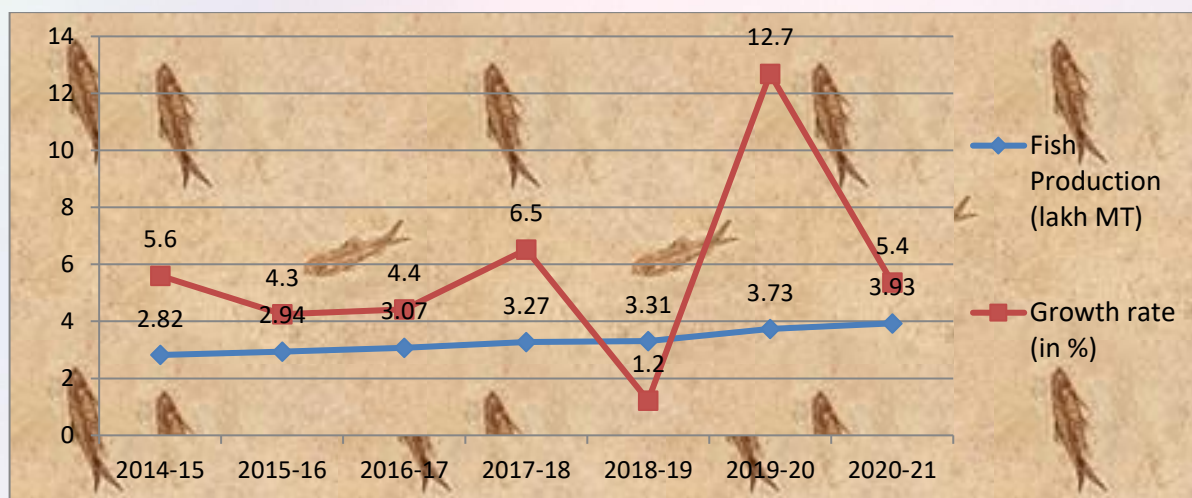
## Chapter - IX

### FISHERIES

Assam is endowed with vast fishery resources in the form of rivers, ponds, derelict water bodies and beels/wetlands covering a total water spread area of over 2.45 Lakh hectare excluding the 10607.29 KM length of riverine fisheries including Brahmaputra and Barak and thus possessing a congenial environment for pisciculture activities. The state is also rich in diverse fish-fauna with more than 380 fresh water species and more than 150 fish species having ornamental importance and 50 species with overseas ornamental value.

Fishery and aquaculture are playing a very significant role in socio economic development of the state providing rural employment, nutritional support and livelihood security thereby reducing poverty and 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 3.93 Lakh MT during 2020-21 against the corresponding nutritional requirement of around 4.00 Lakh MT.

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



Source: Department of Fisheries, Assam

#### RELEVANCE OF THE SECTOR IN THE STATE ECONOMY:

The demand of fish during 2019-20 was 3.93 Lakh MT against the production of 3.73 Lakh MT. The demand of fish for the State was calculated 11 kg per capita consumption taking 90% as fish eating population out of the estimated population of the State. However, the per capita consumption has been enhanced to 12 kg for the year 2020-21 and as a result the demand of fish during the year has become 4.00 Lakh MT. The fish production for the year 2020-21 is 3.93 Lakh MT and which has almost achieved the demand.

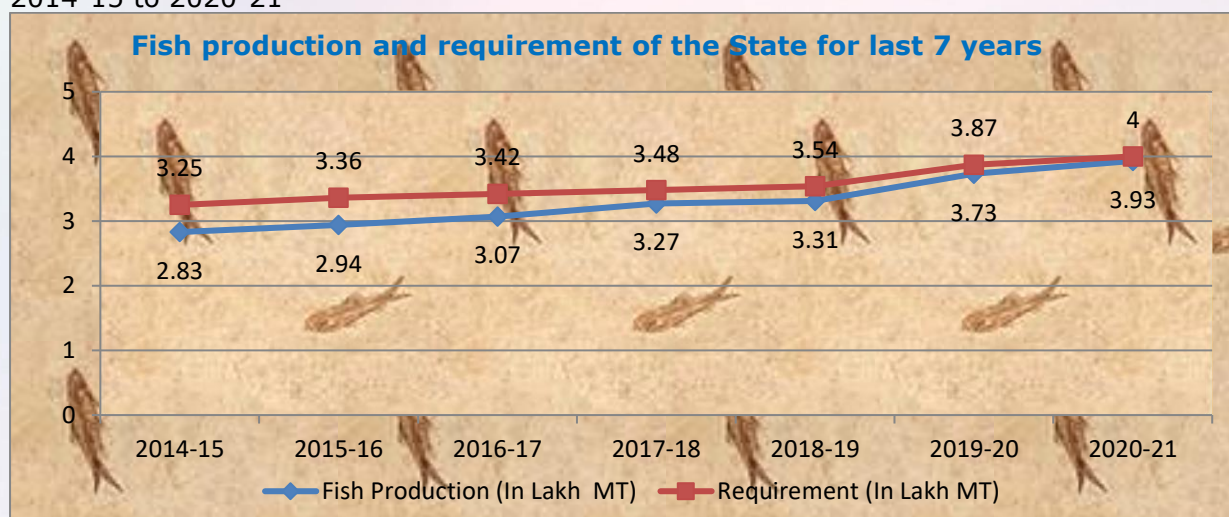
The total production of fish in the State contains the total disposal quantities of fish (marketed) and subsistence catch of fish (catch by non professional for own



consumption purpose). The subsistence catch of fish for the year 2020-21 is about 9% of total production of fish in the State.

Around 90% of the people in the state prefer fish in their meal; therefore fish occupies an important place in the lives of the people. Fish farming has been one of the common activities in the rural areas. Thus, the fishery sector is considered as an important economic activity in the socio-economic context in the state, providing scope for employment generation especially in the rural areas through fish production and its related activities. Most of the people engaged in the Fishery Sector, either in the culture or in the capture fisheries is not very sound economically. Initial investment in setting up of a fish pond or a farm attracts for comparatively large fund and besides this there is lack of awareness, knowledge and skill on scientific fish farming among the masses. The Department of Fisheries is playing an important role in solving these issues and contributing technical backstopping as well as facilitating financial and material help to the fish farmers. Moreover, the State and the Central Government are continually supporting the sector for the last few years. Fishery Sector has in the state has reached at a significant position in the state economy. Now, fish farming is significantly a commercial activity for many rural youth and entrepreneurs of the state.

The following graph shows the production and requirement of fish in Assam during 2014-15 to 2020-21



Source: Department of Fisheries, Assam

For over all development of Fishery sector the following steps are being taken up by the Department.

- 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 of 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:**

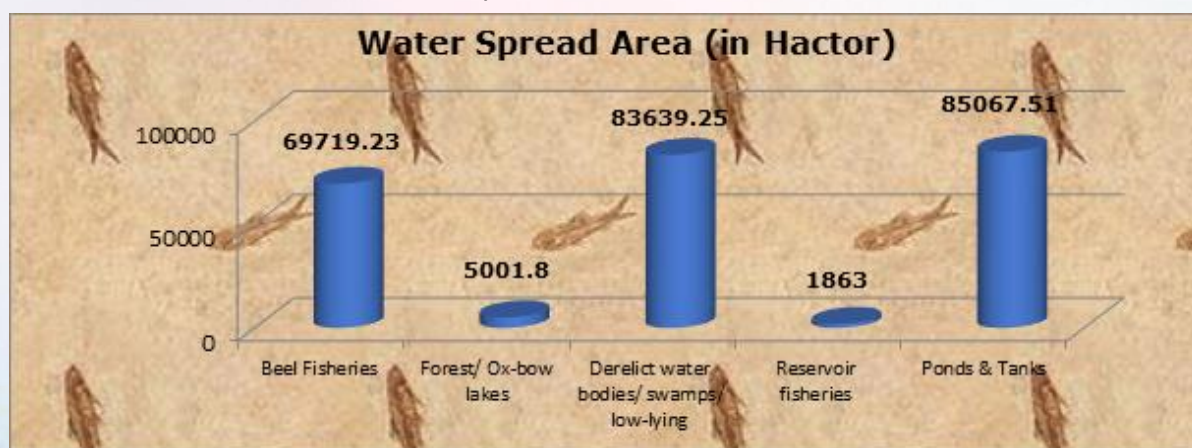
Although the resources potential for fish production is high, scientific fish farming and management is being practiced only in a small portion. Culture based capture fisheries’ enhancement programme has been undertaken in some of the beels and low-lying areas which has resulted in increasing the productivity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

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

**Table- 9.1  
FISHERY RESOURCES**

Sl. No.	Resources	Number	Water Spread Area
1	River Fisheries	Main River 2, Tributaries-53	10607.29 (Km.)
2	Beel Fisheries	1904	69719.23 Ha
3	Forest/ Ox-bow lakes	493	5001.8 Ha
4	Derelict water bodies/ swamps/ low-lying	4434	83639.25 Ha
5	Reservoir fisheries	2	1863 Ha
6	Ponds & Tanks	501800	85067.51 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 : 22 NOS.  
 (B) PRIVATE : 500 NOS.

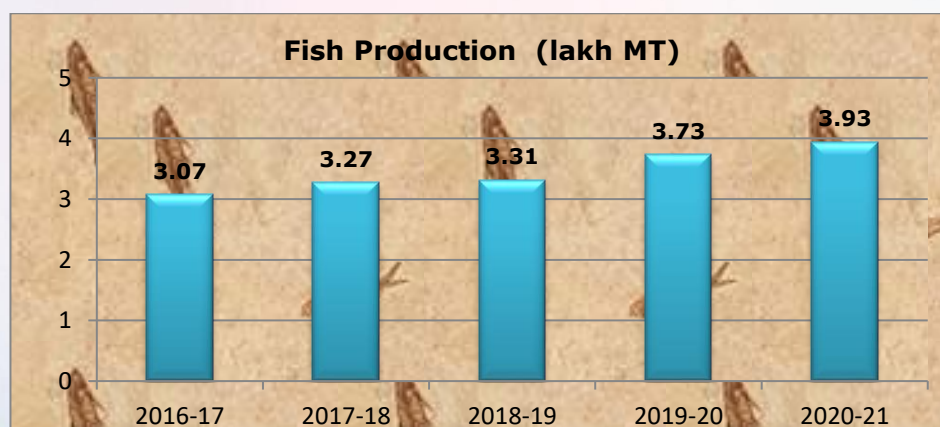
**DEPARTMENTAL FARM**

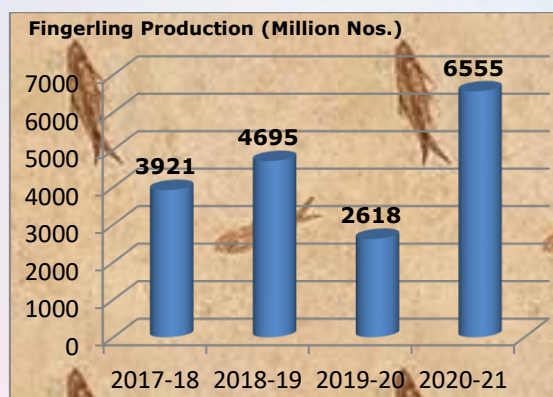
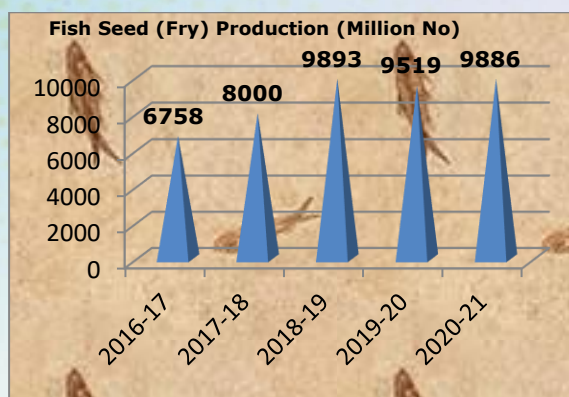
TOTAL FARM : 107  
 FUNCTIONAL : 30  
 NON FUNCTIONAL : 12  
 LEASED FARM : 60  
 ABANDONED : 5  
 FISHERIES TRAINING CENTRE : 9 NOS.  
 FISH FEED MILL : 25 NOS.

Table-9.2  
**FISH & FISH SEED PRODUCTION:**

Year	Fish (Lakh MT)	Fish Seed (Fry) (Million Nos.)	Fingerling (Million Nos.)
2017-18	3.27	8000	3921
2018-19	3.31	9893	4695
2019-20	3.73	9519	2618
2020-21	3.93	9886	6555

Source: Department of Fisheries, Assam





Source: Department of Fisheries, Assam

Table-9.3  
Financial allocation and expenditure during 2018-19 to 2020-21

(Rs in Lakh)

Sl. No	Category	2018-19		2019-20		2020-21	
		Allo.	Exp.	Allo.	Exp.	Allo.	Exp.
1	SOPD-(G & ODS) including SCSP	1389.49	950.30	2022.00	815.18	1451.96	353.93620
2	CSS- (Blue Revolution)						
	Central Share	1500.00	283.12	800.00	241.02	2716.90	2716.90
	State share	166.66	157.59699	88.89	29.42519	300.68	0.00
3	RIDF						
	Loan Share	7600.00	5809.73	2850.00	1909.5531	5289.30	870.51825
	State Share	400.00	0.00	150.00	150.00		
	<b>Total</b>	<b>11056.15</b>	<b>7200.75</b>	<b>5910.89</b>	<b>3145.18</b>	<b>9758.84</b>	<b>3941.35445</b>

Source: Department of Fisheries, Assam

## DEVELOPMENT SCHEMES / PROGRAMMES

### A. SOPD SCHEMES

#### 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 enhancement of fish and fish seed production. The following major beneficiary oriented activities have been implemented under this scheme including general area and SCSP:

- a) Construction of new pond and development of existing areas both for individual and community

- b) Provision fish culture input and material supply for increasing fish productivity in beneficiaries pond as well as in departmental farms

Additionally, a five-year project titled "Gene Bank - Scientific Conservation Programme for Indigenous Fish (SCoPIF)" is being implemented covering both experimental and natural habitat by involving the College of Fisheries, Raha. The project aims at conserving the fish biodiversity of the State with a scientific approach for development of standardized propagation technology for selected endangered fish species to suit the local environment, developing a directory of indigenous fish species along with a data base and establishment of a fish gene-bank.

## **2. MARKETING AND TRANSPORT OF FISH:**

Marketing of fish in hygienic condition 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. Development of fish marketing infrastructure in the form of hygienic fish markets and retail outlets has been taken up under this scheme so as to support affordable price for the consumers and remunerative price for the producers.

## **B. RURAL INFRASTRUCTURE DEVELOPMENT FUND (RIDF):**

Department of Fisheries, Assam has been implementing different fishery related infrastructure development programmes under NABARD's 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.

## **C. CENTRALLY SPONSORED SCHEMES**

### **I. BLUE REVOLUTION/ PRADHAN MANTRI MATSYA SAMPAKA YOJANA (PMMSY):**

The components are-

- 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.

**NATIONAL WELFARE FUND FOR FISHERMEN:****Group Accident Insurance Scheme (GAIS) Under PMMSY**

Group Accident Insurance Scheme (GAIS) is now a sub-component of Pradhan Mantri Matsya Sampada Yojana (PMMSY) from 2020-21 and its implementing authority is National Fisheries Development Board(NFDB) which was earlier implemented by FISHCOPFED. Fishermen, fish workers, fish farmers and any other categories of persons directly involved in fishing and fisheries related allied activities collectively called "Fishers" are covered under Group Accident Insurance Scheme (GAIS). Men or women fishers who are in the age group from 18 years to 70 years as identified by State/UT fisheries department are insured under the scheme in two Policies i.e Group Janata Personal Accident Insurance (GJPA) and Special Contingency Policy. Under GJPA the fishers shall be eligible for insurance coverage upto Rs.5.00 Lakh for "Death" or "Permanent total disability". Under Special Contingency Policy it up to Rs. 2.50 Lakh for "Permanent partial disability" and Rs. 25,000 for "Accidental hospitalization". The premium for both the policies is free for the insurers. The premium will be borne by and shared between the Central and State Government in the ratio 90:10 for North Eastern and Himalayan States, i.e. Rs. 65.20 by the Central Govt. and Rs. 7.24 by the State Govt. The Insurance cover will be for a period of 12 months and premium shall be paid annually.

The management of claims for the above said Insurance scheme will be done by Providence India Insurance Broking Pvt. Ltd as intermediary for insurance coverage of fishers through M/s Oriental Insurance Company Limited (OICL).

**D. FISHERY MISSION SOCIETY UNDER CMSGUY**

The Fishery Mission Society for Chief Ministers Samagra Grammya Unnayan Yojana (FMS-CMSGUY) which is 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 to achieve the goal of double 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)
4. Cage Culture in Selected Beels of Assam (phase-II, 2021-22)

## **E. ASSAM AGRIBUSINESS AND RURAL TRANSFORMATION PROJECT (APART)**

### **SUB-COMPONENT: Fisheries Value Chain**

The fish value chain is to be implemented by the Department of Fisheries and the district 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.).

### **F. RASTRIYA KRISHI VIKASH YOJANA (RKVY):**

RKVY, a flagship programme of Government of India introduced in the State during 2008-09 was also implemented during last three years of the 12<sup>th</sup> five year plan period, it 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 implementing under RKVY are Development of existing pond, Low-lying areas converted to community tank, construction of new ponds and creation of nursery & rearing tanks.

### **G. KISAN CREDIT CARD (KCC) TO FISH FARMERS:**

The Union Government, in the budget of 2018-19 had announced their decision to extend the facility of KCC to the farmers of Animal Husbandry and Fisheries to help them acquiring loan from commercial bank, RRBs, Small Finance Banks and Cooperatives for readily purchasing pisciculture inputs such as fish seed, fish feed, lime, medicines etc. The fish farmers may also use the card to draw case for purchase of net, boat, vessels etc. Fish harvest and procurement of bicycle /tricycle with vessels etc. are for fish marketing purposes. The District level machinery of Fishery Department facilitates fish farmers, fishers and fish traders to obtain KCC and guide them to submit application to the banks in a holistic approach.

### **ACHIEVEMENTS UNDER THE SCHEMES /PROGRAMMES**

During 2020-21, the Department has implemented various schemes / programme and its activities under State Own Priority Development (SOPD), Chief Ministers Samagra Gramya Unnayan Yojana (CMSGUY), Flagship programme of central Govt. Rashtriya Krishi Vikash Yojana (RKVY), World Bank aided Assam Agribusiness and Rural Transformation Project (APART), National Fisheries Development Board (NFDB) and Centrally Sponsored Scheme Pradhan Mantri Matsya Sampada Yojana (PMMSY). The PMMSY, a five years project, was launched in 2020-21 with a project period 2020-21 to 2024-25 which is an umbrella scheme with two components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS).

The CSS component is further segregated into Non-beneficiary oriented and beneficiary oriented sub-components / activities under the following three broad heads:

1. Enhancement of production and productivity
2. Infrastructure and post-harvest management
3. Fisheries Management and Regulatory Framework.

The Department has successfully implemented the earlier centrally sponsored programme Blue Revolution - Integrated Development & Management of Fishes which project period was over on 2019-20. Almost all the major activities undertaken under the programme was completed except some activities which are at the brink of completion.

Among the developmental activities during 2020-21 include the supply of Inputs and Materials for Fish and Fish Seed production in 16 Departmental Farm; honorarium has been paid to 77 Matsya Mitras who were engaged as support Extension Workers; establishment of two Fish Retail Outlet; construction work of ongoing fish markets; completion of Fishery Eco-tourism Spot of Gopinath Bordoloi Tank at Guwahati and development of 7.5 ha of water bodies under Co-operative Societies/ Community/ Group under SOPD. Under Rural Infrastructure Development Fund (RIDF) project (2018-19 to March, 2022) till 30<sup>th</sup> September, 2021 approximately 892.5 ha new Individual Pond have been excavated against the target of 1050 ha and 327.25 ha have been excavated against the target of 385 ha in case of Community Tank during same period.

Under RKVY, 2020-21 selection of beneficiaries is under process for conversion of 45 ha of water logged area into fish pond.

Under World Bank funded APART 287.51 ha Carp Mola Polyculture; 441.62 ha Technology in Beel Fisheries and 21.54 ha Fresh Water Prawn Demonstration have been performed covering 3767 beneficiaries besides Climate Resilient Paddy cum Fish Culture have been practiced in 288.90 hector.

Under CMSGUY 150 cages (15 batteries) have been installed in beels out of targeted 23 batteries and inputs have been supplied in 204.10 hector ponds constructed under RIDF-XXIII with the funding assistance from CMSGUY.

Under the PMMSY there are 10 nos. of Fresh Water Fish Hatcheries; 15 nos. of Ornamental Fish Rearing Unit; 17 nos. of large and medium size RAS; 38 nos. of medium and small size Bioflock; 6 nos. of live fish vending centers; 14 nos. of mini fish feed mills and 4 nos. of fish feed plants have been established. Moreover 97.53 hector fish rearing pond and 203.43 hector of pond for fish culture have been newly created; 20 nos. of cages have been installed and 37 hector of pen culture have been developed. Boat and Nets to 43 fish farmers; Refrigerated vehicle to 4 entrepreneurs; Insulated vehicles to 3 entrepreneurs; Motor Cycle with Ice Box to 95 entrepreneurs; Cycle with Ice Box to 392 entrepreneurs and E-rickshaw with Ice Box to 114 entrepreneurs have been distributed. Besides these, 16519 fishers have been supported for livelihood. However, the full achievements are yet to be achieved against the target based on the sanction receive from the Central Government and is being continued during 2021-22 too.



Under KCC (Fishery) till 29/10/2021, the Department has issued 2591 nos. of KCC loan to fish farmers, of amount more than Rs. 17.80 Crore.

## **SCHEMES /ACTIVITIES PROPOSED DURING 2021-22**

### **1. SOPD SCHEMES**

Fish and Fish Seed Farming: Major activities taken up are input & material supply in departmental farms for supporting fish productivity and implementation of ongoing project '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 14 ha water area.

### **2. FISHERY EXTENSION SERVICE:**

Continuation of the extension support system through engagement of 75 Matsya Mitras.

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

Establishment of 44 nos. small Feed Mill; 5 nos. medium Feed Mill; 70 nos. refrigerated four wheeler vehicle; 351 three wheeler vehicle with ice box have been approved under RIDF-XXVI during 2020-21 and beneficiaries have already been selected and is under implementation in this current year.

### **4. 'PRADHAN MANTRI MATSYA SAMPADA YOJANA (PMMSY):**

Detail Project Report has been submitted to GoI proposing the following multiple Fishery development activities:

Establishment of 35 nos. of Fish Hatchery, 105 nos. of various kinds of ornamental unit, 175 nos. of Bioflock with various sizes, 42 nos. of Feed Mill, 10 nos. of cold storage, 5 nos. of Ice Plant, 3 nos. of Fish Feed Plant, 22 nos. Fish KIOSK, 1 Matsya Seva Kendra and 1 Disease diagnostic and Quality Testing Lab. Moreover, creation of 520 ha new rearing and new fish culture pond, input in 500 hector pond for fish farming including Integrated Fish Farming and livelihood support to 21000 fishers along-with 16 nos. cage culture and pen culture in 60 ha are also proposed. Besides, boats and nets to 26 fishers; three wheeler with ice box to 88; Motor cycle with ice box to 300; Cycle with ice box to 437 entrepreneurs are proposed to be distributed.

### **5. RASTRIYA KRISHI VIKASH YOJANA (RKVY):**

Under RKVY-RAFTAAR proposal submitted proposing the activities for 10 hector air breathing fish farming; 40 hector for existing pond; 40 unit of Kuchia culture; promotional support to 5 groups of women entrepreneurs for value added fish products; supply 90 unit of water pumps for better management of ponds and conduction of training/ awareness/ exposure visit/sensitization programme for 27 batches.

## CHAPTER-X

### FORESTRY

Forestry is a vital sector of the state. Forest and trees are at very basis of life on our planet. The United Nations Forum on Forests 15 recognizes that over 1.6 billion people depend on forest for subsistence , livelihood , employment and income generation and recognised that forest provide a wide range of goods and services which create opportunities to address many of the pressing sustainable development challenges. The role of forests and trees in the provision of goods for rural communities is fundamental to their well being and food security. Continuum of forest states exists between primary natural forests and plantation all of which can supply wood, fibre, fuel wood, and non wood forest products as well as provide important ecosystem services such as biodiversity conservation, climate regularisation, carbon storage and water supply. Plantation are able to efficiently produce high quantities of wood products that may alleviate pressure on natural forests , create job that support rural development and provide range of ecosystem services , specially when established on degraded lands.

The State of Assam criss-crossed by hills, valleys and an intricate river system. Physiographically, Assam is dominated by the Brahmaputra. Assam has diverse habitat type ranging from tropical ever green 'rain forest' to the subtropical forests .The mandate of Forest Department is to manage forest, forest produces and wild life as per the National Forest Policy within the relevant Constitutional framework of the country. The State covers an area of 78,438 sq. km. having four distinct physiographic units, viz. the Brahmaputra valley of Assam proper, the Barak valley, the Karbi-Anglong Plateau and the North Cachar Hills endowed with rich flora and fauna diversity. Forestry, in Assam is a significant sector of the state economy. As per the constitutional provision, the forestry has come in the concurrent list and the Forest Department of Assam has its authority to maintain the forest, its produce along with the all-round development of 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 timbers 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 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 harbouring the big mammals – like Rhino, Tiger, Gangetic River Dolphin, Asiatic Buffalo etc. The state is enriched with extensive forest area and wealth like valuable forest products and also rich with different species and strains of flora and faunas.

People of Assam from time immemorial 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 Tribes 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 plants and animals found in the forest of Assam. The Table No.-10.1 depicts significantly rich biodiversity of the state.

**TABLE-10.1****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:**

Recorded Forest Area included all area recorded as forest in Govt. records. Both Forest cover and Recorded Forest Area (RFA) describe the extent of forest but have different meanings. The 'Forest Cover' refers to all tree patches that have canopy density of more than 10% and area of one hectare or more in size, irrespective of land use, legal status and ownership. It may include orchards, bamboo, and palms etc. Assam constitutes 3.46% of country's total Recorded Forest Area as per India State of Forest Report (ISFR) 2021. The total recorded forest area in Assam is 26,836 square km. which is 34.21% of the total geographical area of Assam while it has 23.58% of all India level during this period. Out of total recorded forest area, total reserved forest area of the state is 17,864 square km. and Un-classed State forest constitutes 8,972 square KM which is 66.58 % and 33.42 % to the Total Recorded Forest Area of the state

respectively . It is significant that as per ISFR 2021 assessment entire North Eastern states have lost their Forest cover . The lost area of forest of these states were (1) Arunachal Pradesh -257 Sq KM, (2) Assam – 15 Sq. KM, (3) Meghalaya-73 Sq. KM,(4) Manipur-249 Sq KM (5) Mizoram- 186 Sq. KM, (6) Tripura 4 Sq. KM,(7) Nagaland-235 Sq.KM and (8) Sikim -1 Sq. km. Assam has witnessed in increase of Dense Forest, Open Forest and Tree Cover as per assessment in 2021 by Forest Survey of India, Dehradun over in ISFR 2019.

### **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 2021 of Forest Survey of India (FSI) Dehradun, the forest cover of Assam has decreased by 15 sq. km. compared to the forest cover as assessed in 2019. However, in respect of Forest and Tree cover out side Recorded Forest Area (RFA) was increased by 126 Sq. KM & 222 Sq.KM respectively compared to the 2019 ISFR assessment. Some more details about forest and tree cover statistics of the state of Assam as per ISFR 2021 are furnished below.

#### **Forest and tree cover in Assam as per ISFR 2021**

Recorded Forest Areas	: 26,836 sq. km.
Total Forest cover area	: 28,312 sq. km.
Area of tree cover	: 1,630 sq.km
Recorded Forest Area cover to Geographical area	: 34.21%.
Forest Cover to total geographical area	: 36.09%.
Reserve Forest area	: 1359026.70hect.(source PCCF)
Area under Very Dense Forest Cover	: 3,017 sq.km.
Area under Moderately Dense Forest Cover	: 9991 sq.km.
Area under Open Forest	: 15,304 sq.km.
Scrub	: 228 sq.km.

Source: India State of Forest Report, 2021

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, 2019 and 2021 Table No. 10.2 may be referred. It is clear that as per the assessment of 2021 , very Dense Forest was found to be 222 Sq. Km. and Open Forest was 51 sq. KM a marginal increase compared to 2019 ISFR assessment at the same time Moderately Dense Forest has decreased by 288 Sq. KM. The following pie diagram (Figure-I and Figure- II) shows the percentage of composition of forest cover in the State.

**TABLE -10.2**  
**TREND OF FOREST COVER IN ASSAM**

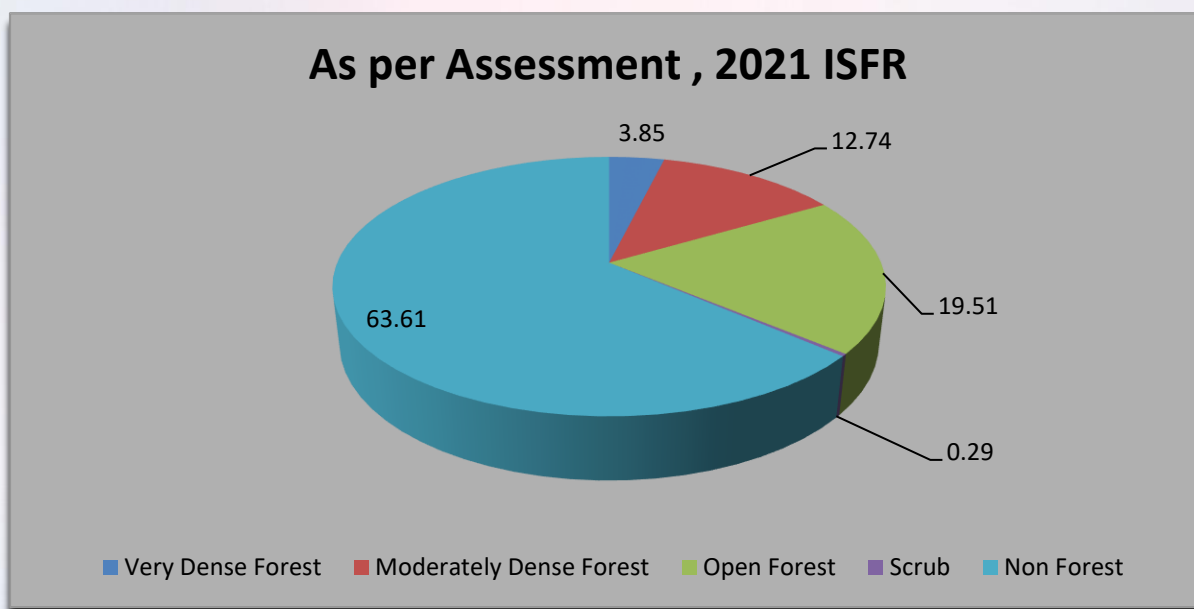
(Area in square Km)

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 (64.50)	78,438 (100.00)
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 (100.00)
As per Assessment in 2017 ISFR	2797 (3.57)	10192 (12.99)	15116 (19.27)	217 (0.28)	50116 (63.89)	78,438 (100.00)
As per Assessment in 2019 ISFR	2795 (3.56)	10279 (13.10)	15253 (19.44)	173 (0.22)	49,938 (63.66)	78,438 (100)
As per Assessment in 2021 ISFR	3017 (3.85)	9991 (12.74)	15304 (19.51)	228 (0.29)	49898 (63.61)	78438 (100)

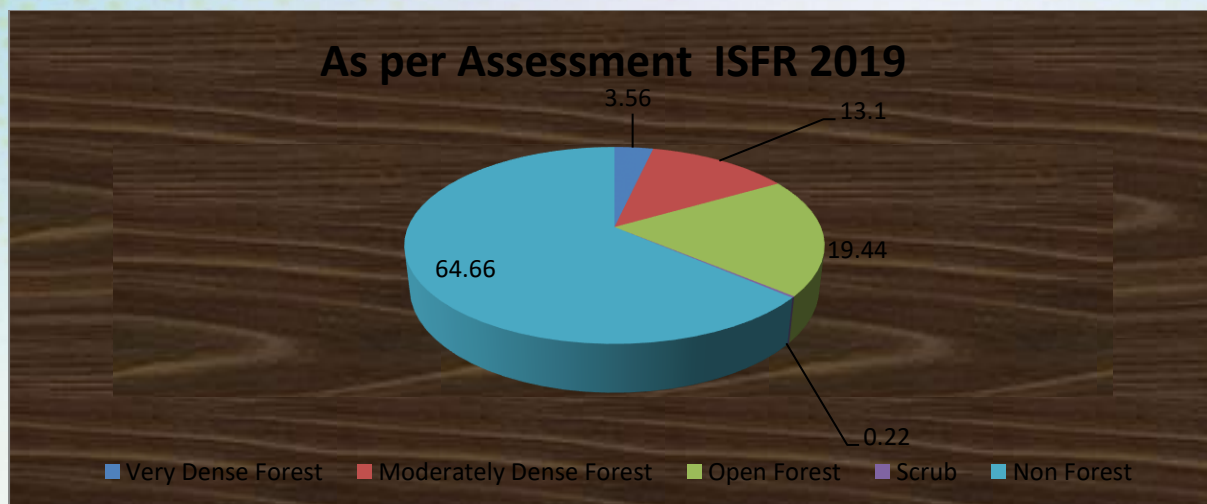
Note: Figures in brackets indicate percentage to the total geographical area.

Source: India State of Forest Reports, 2013, 2015, 2017 ,2019 and 2021

**Forest Cover in Assam ( in Percentage to total geo. area)**



**FIGURE-I**



**FIGURE-II**

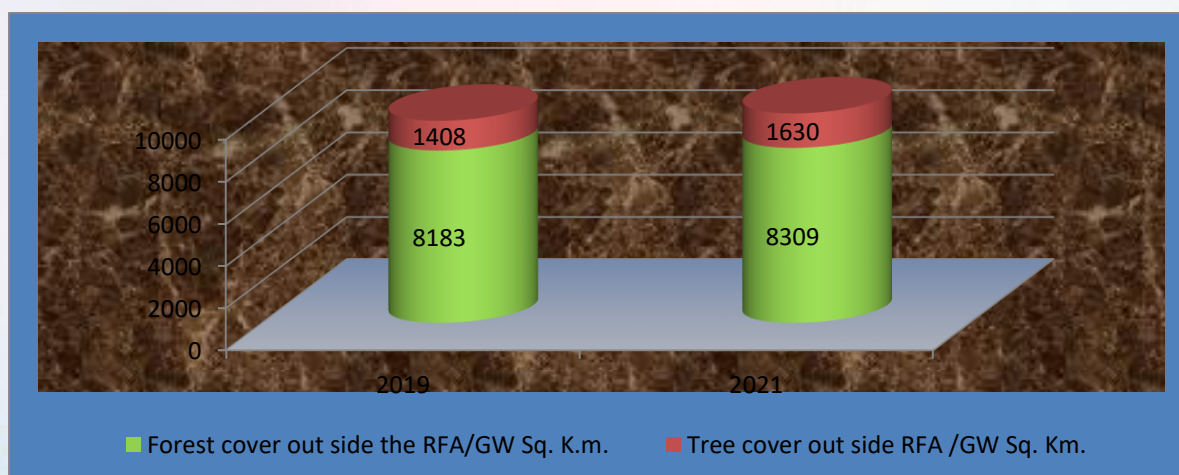
State has also witnessed significant changes in tree cover outside the forest areas. Table 10.2 shows forest cover and tree cover as assessed during last two assessments made by Forest Survey of India, Dehradun.

**TABLE-10.2**  
**FOREST AND TREE COVER OUT SIDE RECORDED FOREST AREA IN ASSAM (as per ISFR 2021)**

Items	Units	2019	2021
Forest cover out side the RFA/GW	Sq. Km.	8183	8309
Tree cover out side RFA /GW	Sq. Km.	1408	1630

Source: India State of Forest Report, 2021

**FOREST COVER AND TREES OUT SIDE RECORDED FOREST AREA( in Sq. km.)**



**FIGURE-III**

**GROWING STOCK IN ASSAM STATE FOREST:**

In simple term, Growing stock is the value of all living trees in the forest area. Periodic estimation of growing stock of wood is essential for developing National policies and strategies for sustainable use of forest resources. Growing stock is an indicator of sustainability and productivity of forest. Estimation of growing stock inside the forest and out side the forest is essential for assessment of volume of timber for sustainable use by the people. As per 2021 estimation report, it reveals that present growing stock of Assam both inside and outside forest is 112.68 million Cum. and 23.94 million cum ( total 136.62 Million cum) respectively with a productivity of 41.99 million cum inside forest/Ha and 5.12 million cum. Tree Out side Forest (TOF) per Ha. The Table -10.4 shows the growing stock of bamboo in the state. It is revealed from the Table that the growing stock in the state is decreased in 2021 w.r.t. ISFR 2019 assessment.

**TABLE-10.4**  
**GROWING STOCK OF FOREST IN ASSAM ( as per ISFR 2021)**  
(in million Cum.)

Growing Stock (GS)	2019 Assessment	2021 Assessment	Change w.r.t 2019	%of Country's G.S.
Growing Stock in Recorded Forest Area	115.40	112.68	-2.72	2.57
Growing Stock in TOF	22.96	23.94	0.98	1.35
Total	138.36	136.62	-1.74	

Source: India State of Forest Report,2021.

**BAMBOO RESOURCES IN THE FOREST OF ASSAM:**

Bamboo, the most diverse group of plants in the grass family belong to the sub-family bambusoidae of the family of Poaseae (Graminae). Bamboos are one of the fastest growing perennial plants in the world. They are found in the tropical, sub-tropical and mild temperate region of the world. In India bamboo grows naturally almost though out the country except in Jammu and Kashmir. 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. Assam is rich in bamboo resources and most of its forest are richly stocked with bamboo and cane of various species. Assam bearing only 7.13 % of total country's bearing area. The total bamboo bearing tree area in the country is 1,49,443 sq. km. as per 2021 ISFR report, compared to 1,60,037 Sq. KM in 2019 as per ISFR a decrease of 10,594 Sq. KM. There was 10,659 Sq. KM of bamboo bearing area in Assam in 2021 against 10,525 Sq. KM in 2019 showing an increase of 134 Sq. KM. 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 the forest department. If we see the bamboo bearing area under different classes in Recorded Forest Area of Assam, we found that there are

449 Sq.KM of Pure Bamboo bearing area, 2300 Sq. Km Dense and 7,798 Sq.Km. Scattered bearing area in Assam as per ISFR 2021.

For promotion of bamboo sector in the Government of India and Government of Assam has taken many initiatives to further develop its potentiality. Government of Assam has already set up a Bamboo Technology Park at the Industrial Growth Centre, Chaygaon of Kamrup district with innovative facilities from where incense sticks and handicrafts are produced benefiting entrepreneurs. Assam has become the first country's state of the art Bamboo Technology Park to boost cultivation in the state and the region. Recently to boost the Rural economy of Assam, the Chief Minister of Assam laid the foundation stone of a Bamboo Industrial Park in Dima Hasao district with a cost of 50 crores. The project will be implemented by the DoNER Ministry G.O.I. which will help the local entrepreneur to establish MSME for their sustainable development. Contribution of bamboo in the Socio Economic Cultural and Ecological development in certain geographic area is significant. Bamboo contributes to subsistence need of about 2.5 billion people around the world. The following Table-10.5 shows the growing stock of bamboo in side the recorded forest areas which includes culms of one year of age. It is very clear that Assam is in a significant position in respect of area of bearing trees and production also.

**TABLE-10.5**  
**GROWING STOCK OF BAMBOO IN ASSAM ( as per 2021 ISFR )**

Growing Stock (GS)		% of country's GS of Bamboo.
Bamboo bearing area inside RFA (in sq.km.)	10,659	7.12 %
Total No. Of culms (in million)	5,656	10.60%
Total green weight (in "000" tonnes)	38,600	9.60%

Source: India State of Forest Report, 2021.

#### **STATE FOREST PROFILE:**

As per Forest profile of the State the total reserved forest area of Assam is 13,59,026.70 hectares, according to the estimation of Forest Department in 2020-21, where 3,64,142.20 hectares are presently under encroachment by 2,05,209 nos. of households. The reserved forest area constitutes about 17.32 percent of total geographical 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 the 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 need to be rebuild again.



The State Forest Department has identified few thrust areas and initiated the following actions:

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

### FOREST ROADS:

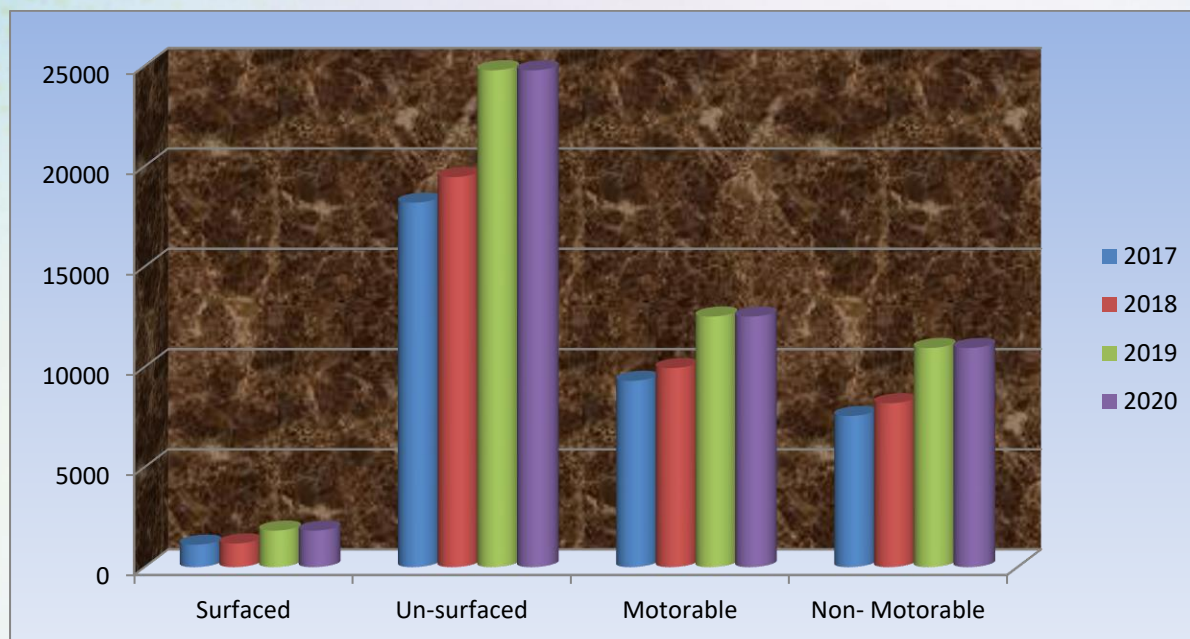
The Forest Department, Assam is entrusted the task of maintenance and management of forest, forest product and wildlife in the state. For the purpose of patrolling inside the forest area of Assam, to harvest the forest produces, for both improvement, development and creation of infrastructure the existence 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 improved roads and culverts and proposed to continue the improvement of forest roads with culvert and drainage systems 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. Mentionable that due to Covid-19 situation during 2020-21 no new forest road construction was taken up. The trend of forest road construction since 2016 is shown in Table -10.6.

**TABLE-10.6**  
**FOREST ROADS IN ASSAM (CUMULATIVE):**

(length in KM)

Category of Roads →	Surfaced	Un-surfaced	Motorable	Non-Motorable
2016	1077.953	16229.357	7972.050	6938.570
2017	1122.403	18187.632	9310.375	7558.52
2018	1180.218	19459.197	9946.08	8194.38
2019	1825.187	24779.121	12513.273	10947.111
2020	1825.187	24779.121	12513.273	10947.111

Source: Office of the PCCF & Head of Forest Force, Assam

**Forest Roads in Assam (K.M.) (cumulative)****FIGURE-IV****OUT TURN OF FOREST PRODUCE & REVENUE:**

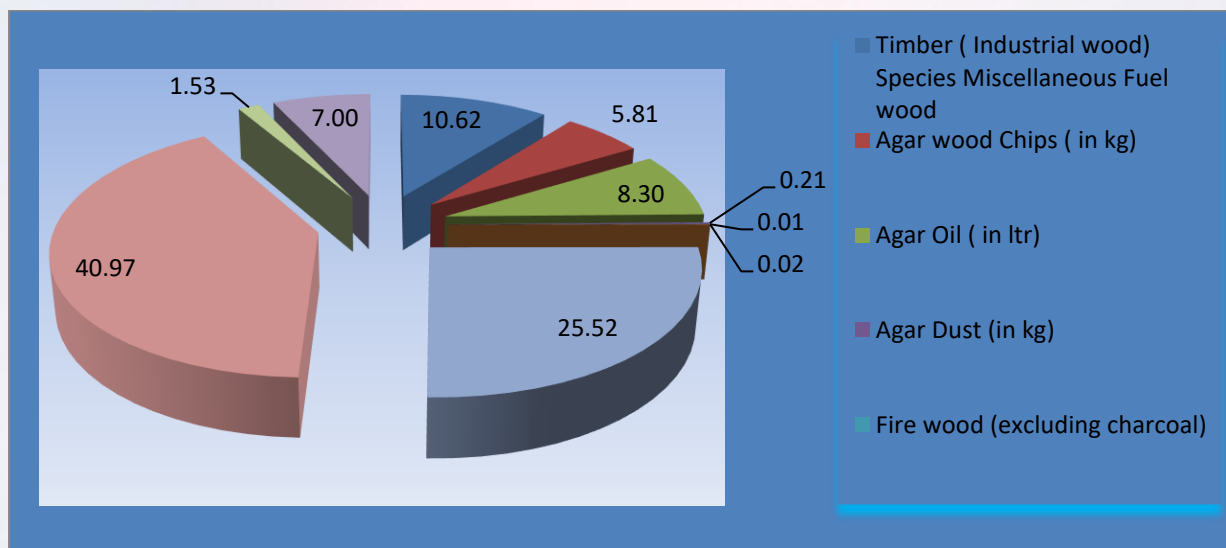
Forests are sources of natural resources to be used for various manufacturing activities. In the context of conservation, forests are however not seen as a revenue generation source. The forests are, however, source of livelihood of people living in forest fringe villages. The forests produces in the state are being harvested following the laid down principles, working plan of forest to ensure sustainability. 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, Agar etc. 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 10.7 and in Table 10.8 presents revenue generated from forest in the state. It is important to mention that recently the Govt. of Assam has given importance to increase the area and production of Agar wood in the state. It is expected that the high value out turn of Agar oil will help to boost the state economy specially in micro economic level.

**TABLE: 10.7**  
**OUT-TURN /AVERAGE PRICE AND VALUE OF FOREST PRODUCTS IN ASSAM,**  
**YEAR 2020-21**

Sl. No.	Name of Product	Total Out turn	Average Price (in Rs.)	Value (In crore )	% to total product
1	2	3	4	5	6
1	Timber ( Industrial wood) Species Miscellaneous Fuel wood ( in Cubic Mtr)	128007	20000.00	256.01	10.62
2	Agar wood Chips ( in kg)	40000	35000.00	140.00	5.81
3	Agar Oil ( in ltr)	20000	100000.00	200.00	8.30
4	Agar Dust (in kg)	500000	100.00	5.00	0.21
5	Fire wood (excluding charcoal) (cubic mtr)	23141	150.00	0.3471	0.01
6	Broom grass (in kg)	94000	60.00	0.5640	0.2
7	Sand (Cubic Mtr)	4100670	1500.00	615.1005	25.52
8	Stone ( Cubic Mtr)	4936726	2000.00	987.3452	40.95
9	Silt/Clay (Cubic Mtr)	2462845	150.00	36.9427	1.53
10	Others( sand gravel) (in Cubic Mtr)	1053848	1600.00	168.6157	7
	Total			2409.9292	100

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

**Contribution of different forest product to the total forest product (in %)**



**FIGURE-V**

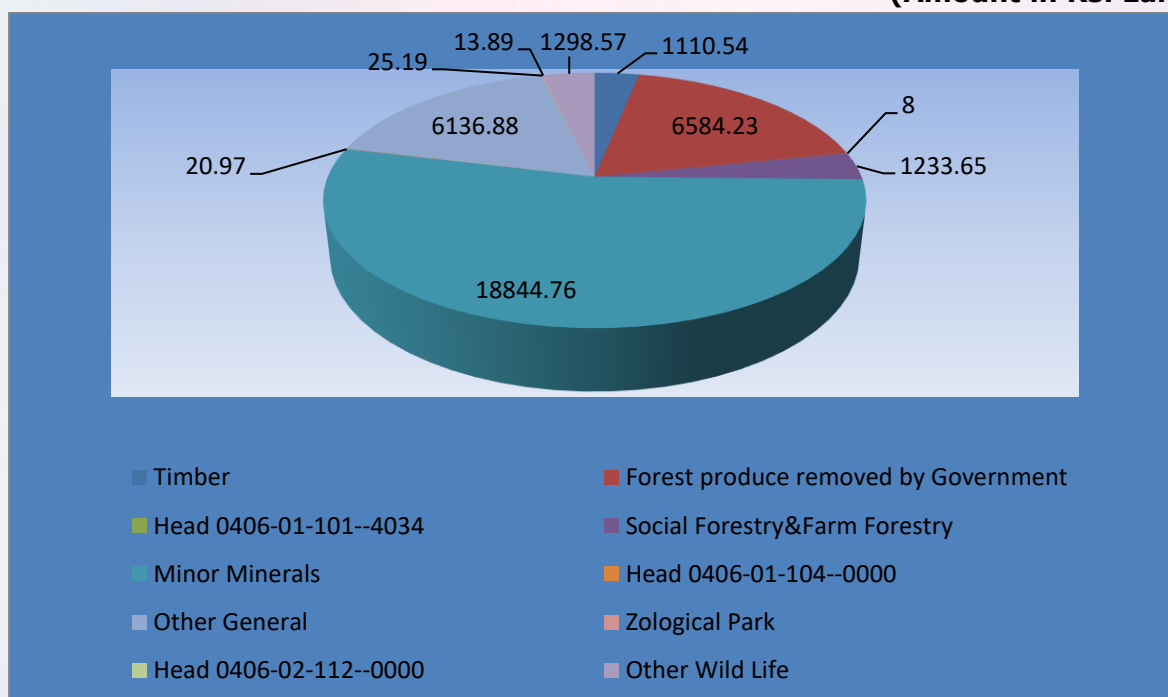
**TABLE- 10.8**  
**REVENUE EARNED BY FOREST DEPTT. FROM DIFFERENT SOURCES ,2020-21**

Sl. No.	Item	Total Rev. Earned (Rs. In lakh)
1	Timber	1110.54
2	Forest produce removed by Government	6584.23
3	Head 0406-01-101--4034	8
4	Social Forestry&Farm Forestry	1233.65
5	Minor Minerals	18844.76
6	Head 0406-01-104--0000	20.97
7	Other General	6136.88
8	Zological Park	25.19
9	Head 0406-02-112--0000	13.89
10	Other Wild Life	1298.57
<b>Total (Rs. in lakh)</b>		<b>35276.68</b>

Source: PCCF & Head of Forest Force, Assam

**Revenue Earned by Forest Department**

(Amount in Rs. Lakh)



**FIGURE-VI**

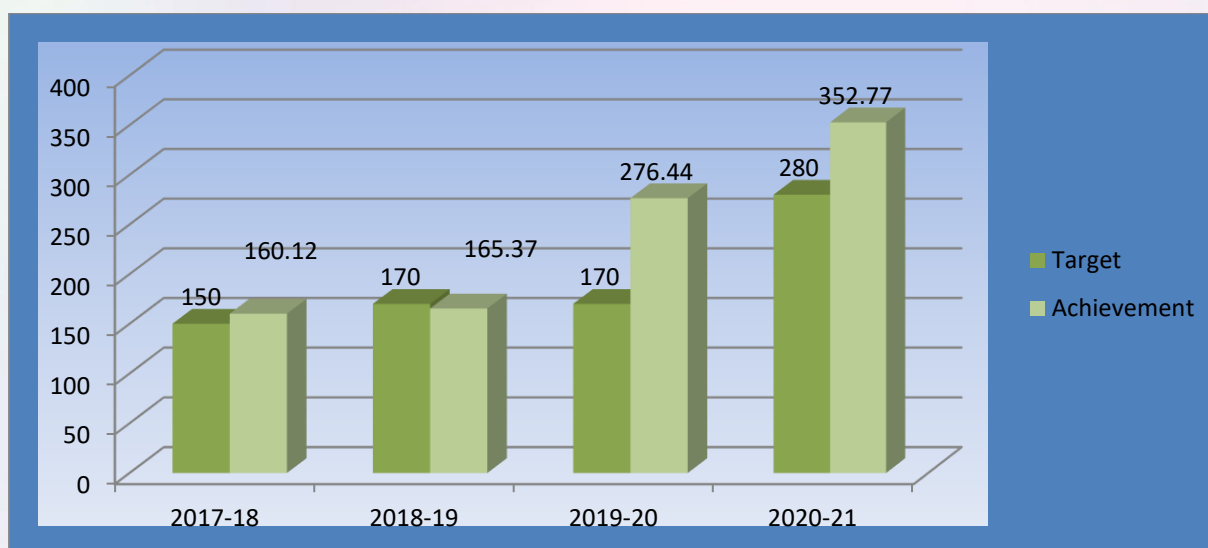
Source : PCCF & Head of Forest force. Assam

**TABLE-10.9**  
**Target and achievement of revenue collection of Forest Department, Assam**  
 (Rs. in Crore)

SI No.	Year	Target	Achievement
1	2017-18	150	160.12
2	2018-19	170	165.37
3	2019-20	170	276.44
4	2020-21	280	352.77

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

### Achievement of Revenue collection (Rs. In Crores)



**FIGURE-VII**

### FOREST COVER AND ECONOMIC DEPENDENCY OF FOREST FRINGE VILLAGES:

In India the rural population is about 68% of the country's 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 ISFR 2019, there are 3 nos. of Hill district with a 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 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 interrelated subject. The schemes implemented by the forest department for over all development of forest and wild life are mostly labour oriented and these labourers are engaged from the forest dwellers. The nurseries plantation , maintenance of plantation by weeding , cutting of forest climbers etc. 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 is not only provides invaluable ecological services to the nation ,but also providing invaluable ecological services for the environments security to the nation, forest also contribute significantly to economy specially that of rural and marginalised strata of the society. Forest and trees out side 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 cane and Sital Pati enterprises on commercial basis where large numbers of youth is directly and indirectly engaged in these economic activities. More over Govt has emphasised to plant Agar and Chandan sapling to encourage the common people for their economic development in the state. In addition of these, forest tourism like tourist spot 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 is playing a vital role in the sate economy, yet inspite of large potentiality of this sector the initiatives taken by the govt. is not sufficient .

### **PROTECTED AREA - NATIONAL PARK AND SANCTUARIES:**

The Protected Area Network (PAN) of Assam includes 7 National parks and 18 wildlife sanctuaries covering an area about 4044 Sq. KM constituting approx 5 percent of the total geographical area of the state. Presently there are four Tiger reserves in Assam. 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 favourable habitat for birds, animals and natural vegetations. 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 languor to the one horned rhinoceros. Two national parks of the state are designated as world heritage sites by the UNESCO in 1985. Category wise wildlife protected areas of the state is presented in Table 10.10

TABLE-10.10

## AREA OF THE NATIONAL PARKS AND WILD LIFE SANSTURIES IN ASSAM

Name of the National Park	Location (District)	Area in sq. km.
Kaziranga National Park	Golaghat, Nagaon, Sonitpur and Biswanath.	429.93 (Extended area 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
Raimana National Park	Darrang , Kokrajhar	422
Dihing Patkai Natinal Park	Dibrugarh , Tinsukia	234.26
Name of the Wildlife Sanctuaries	Location (District)	Area in sq. km
Bhejan-Borajan-Padumoni WLS	Tinsukia	7.22
Panidehing WLS	Sivasagar	33.93
Hollongpar 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
Barail WLS	Cachar, Karimganj	326.25
Amchang WLS	Kamrup (Metro)	78.64
Deepor Beel Wildlife Sanctuary	Kamrup (Metro)	4.14
North Karbi Anglong WLS	Karbi Anglong	70.30
Bardoibam Beelmukh WLS	Lakhimpur, Dhemaji	11.25

Source: PCCF &amp; Head of Forest Force.

## **CONSERVATION OF WILDLIFE: THE SEVEN NATIONAL PARKS OF ASSAM:**

At present there are seven national parks in the state and out of these two national parks Kaziranga and Manas of the state are recognised by the UNESCO as world heritage sites. The brief note on these National Parks are as below:

### **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 (core area 429.93) sq km. It is known by world as one of the one horned Rhinoceroses home. . Not just this, It's a vibrant and beautiful Tiger Reserve that hold some special and significant position in the wild life map of India. In every year large number of tourist from home country and abroad visited to this National Park and enjoy their natural beauty. But it very sad that during 2020-21 due to Covid-19 pandemic situation in the Country and rest of the world, this tourist visit to this site is badly hampered . For what state has lost a good amount of revenue from this sector.

### **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 were visited to the Manas National park including of 754 foreign tourists but due to Covit-19 pandemic situation the park was closed during 2021-21 and no tourists were visited from home country and abroad during this period.

### **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 seven 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.

### **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 visited to this park in every year.

#### **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, Hollock Gibbons and Leopard. It is also home to some restricted range of Bird species.

#### **6. Raimona National Park:**

In the month of June 2021 Government of Assam declared the State's Six National Park Called Raimona National Park named after the historical Capital of Bijni estate, Raimona. It is spreading over 422 Sq. Km. in the Kokrajhar District under Bodoland Territorial Region (BTR) combining part of Ripu Chirang Reserve Forest. Raimona is a home of legendary elephant and rare butterfly, and also Gee's Golden Langur, the one of the most endangered Primates of the world. Conservationists expect that the declaration of Raimona to boost transboundary wild life management in the greater Manas landscape.

#### **7. Dihing Patkai National Park:**

Dihing Patkai National park as 7<sup>th</sup> National Park of the state declared by Govt of Assam in the month of June 2021 .After declaration of this parks Assam now becomes the second state having highest National Park in country followed by 12 in Madhya Pradesh. The area of this park is around 234.26 Sq. Km. Located in the district of Dibrugarh and Tinsukia. It is believed to be the last remaining contiguous patch of lowland rainforest in Assam. The Dihing Patkai National park is famous for major elephant habitat and 310 species of butterflies and tiger and clouded leopard.

#### **NATIONAL RHINO VISION :**

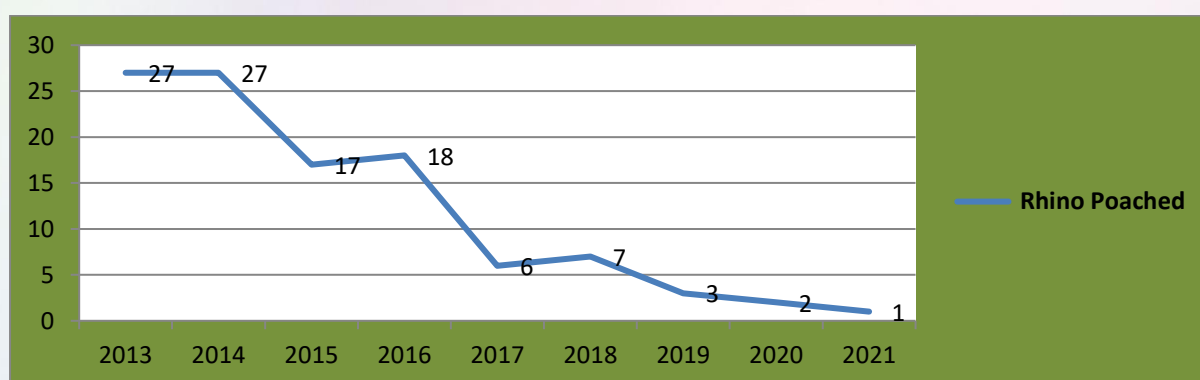
Indian Rhino Vision (IRV) 2020 is a joint program of Forest Department, international agencies and local communities.

#### **Rhino protection in Assam :**

At present the world famous one horned Rhino Protection in Assam is one of the challenging task before the Government. Kaziranga is the home land of this world famous one horned Rhinos in Assam. Success of Rhino conservation can be illustrated by example of the Kaziranga National Park. Significant that for more than 85% of one horned Rhino's the save shelter is Kaziranga. After formation of the present Govt. it has taken strong steps against the rhino poachers in the state and significantly state has seen the positive results of its efforts. Government has adopted the zero tolerance in respect of wild life crime. To conserve the Rhino, Govt. has initiated some strong steps

like.. constituting of Fast Track Courts, Formation of Anti Rhino Poaching Task Force, Deployment of Additional Forces, Used Unmanned Arial Aircraft(Drone), Modernisation of Arms and Ammunitions and creation Special Rhino Protection Force with 112 nos. of personnel etc. For this strong steps the poaching of one horned Rhino in the state has decreased in magic like play. Data reveals that during 2013 & 2014 the rhino poaching was 27, but from 2015 it was decreased to 17, 2016 it was 18, 2017 it was 6, 2018 it was 7, in 2019 it was 3, in 2020 it was 2 and in 2021 it was only 1. Govt has expected that if the protection mechanism will do their work perfectly the rhino poaching in near future will be '0' which was a big dream of the state Govt. and the mass peoples of the state. The following Diagram (Figure-VIII) shows the achievement of Forest Department in respect of world famous one horned Rhino poaching in Assam since in the last few years.

**Trend of One Horned Rhino Poaching in Assam**



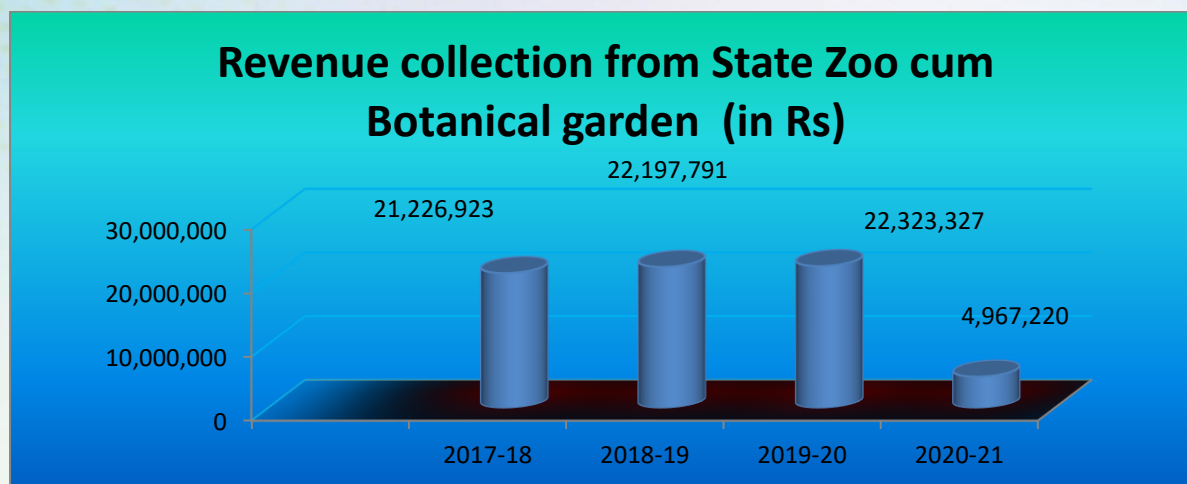
**FIGURE-VIII**

**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
2020-21	193327	90	193417	49,67,220.00

Source: PCCF & Head Forest Force, Assam.

**FIGURE-IX**

In the above table it is depicted that the revenue collection in the State Zoo cum Botanical Garden has decreased in the last year. The low collection may be attributed to Covid-19 pandemic and lockdown and restrictions imposed by the State Govt. in 2020-21.

## **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 was conducted in 1972 and 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 2020-21 Govt. has spent Rs. 2646.64 lakh for all round development of infrastructure and security for tiger protection, infrastructural development and for all round protection and Habited management for tiger. During 2020-21 Govt. has spent Rs. 1747.62 lakh for Kaziranga, Rs. 460.042 lakh for Manas, Rs. 131.89 lakh for Nameri and Rs. 307.098 lakh for development of Orang Rajib Gandhi National Park for all round development.

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

Tiger	2019	190
Elephant	2017	5719
Rhino	2018	2652
Eastern Swamp Deer	2018	1169
Leopard	2000	248

Source: PCCF & Head Forest Force, Assam.

**Project Elephant:**

There are 32 No. of notified Elephant Reserve in the Country spreading 15 states. As per Ministry of Environment and, Forest and Climate Change there are 5 Nos. Project Elephant in the State they are Sonitpur, Dihing Patkai, Kaziranga, Dhanshiri, Lamding and Chirang Ripu. 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 Rs. 93.53 lakh, in 2018-19 Rs. 293.08 lakh, in 2019-20 Rs. 241.44 Lakh and in 2020-21 Rs. 47.80 lakh has been utilised by the Govt. for 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. establishment of anti poaching camp, immunization of livestock, logistic support quick action to scare way elephant from human habitation and crop fields. utilised for protection of Elephant. But in spite of Govt. initiative there are huge effort to be done to decrease the man elephant conflicts in the state.

**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 project has four technical components:

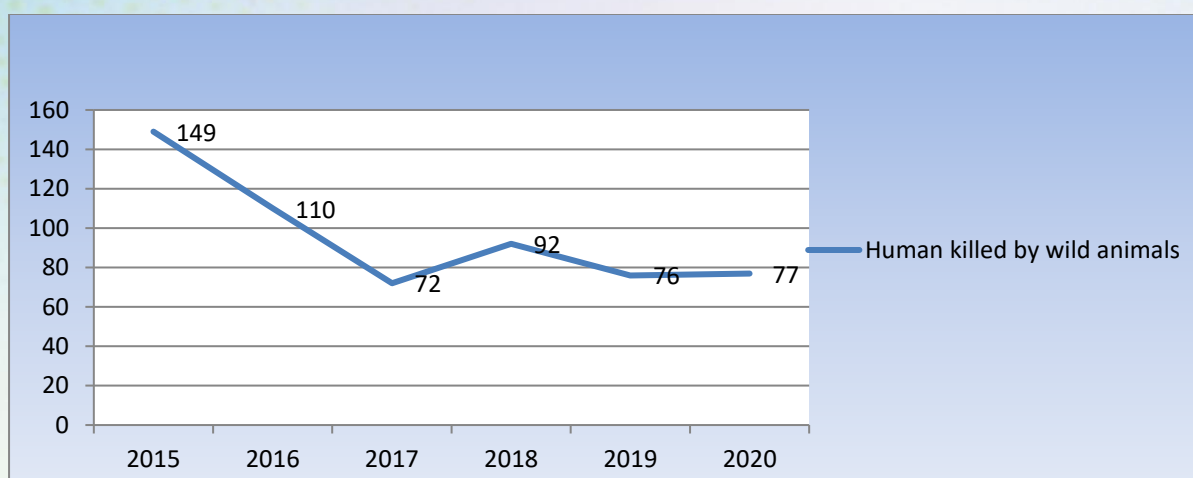
- ⇒ Institutional strengthening of the forest department
- ⇒ Multi-layer strategic planning
- ⇒ Sustainable forest management
- ⇒ Value addition and openings of market opportunities for the goods and services generated by communities through sustainable use of forest and non forest resources.

### **Participation of NGOs and People in APFBC**

The state views NGO's as not only as agencies that will help the Govt. 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 more than 159 Joint Management Committees 57 EDC actively working for conservation and sustainable development of forest Bio-diversity . During 2020-21 the target of Forest Dept. In respect of foreign funding was Rs. 96.12 Cr. But financial achievement was only Rs.2.95 Cr. as reported by forest dept. up to Nov. 2021 for all round development of forest conservation, Rehabilitation and Productivity the Assam Project Forest and Biodiversity Conservation Phase-II has received Rs. 33.9636 crore from AFD and its state share and utilised Rs. 17.5271 crore (51.65%) to protect the State's natural ecosystem and habitats as reported by Project Director of APFBC.

### **Man-Animal conflict Scenario of the State.**

The man-animal conflict is a very old issue in the state of Assam. But the conflict has emerged as one of the most challenging problems for wild life management and conservation in recent time. In Assam Human elephant conflict in particularly has attained an alarming height in the recent years followed by men-leopard conflict and men-monkey conflict. The human elephant conflict create considerable economic hardship for the effective farmers by way of crop and property damage .Human death due to encounter with elephants are also a serious concern and vise versa. The principal reasons for such conflict is fragmentation of elephant corridors, loss of habitats, food crisis in forest area etc. Observing this increasing man –elephant conflict an immediate reasonable and acceptable solution is urgently required in the state. As a first step an adequate financial support is felt necessary to the victims as ex-gratia. Accordingly, the Govt . has initiated action and during 2020-21 issued FOC for Rs. 374.04 lakh for reduction man elephant conflicts in the State. The following figure explains the scenario of man elephant conflict in the state during the recent period.

**Records of human killing by wild animals, since 2015.****FIGURE-X****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 been giving financial support under SOPD and CSS scheme to develop elephant proof solar powered fencing and around the reserve forest areas, dig 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 forms.

**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. Forest Department has received FOC for Rs. 174.37 lakh for construction of anti poaching camps at water retention structure for wild animal, provisioning of piglets to fringe villagers under eco development activity. The scheme includes preparation of management plans, surveys, and demarcation of boundaries for protection of wildlife habitats areas and prevent anti-poaching activities. During 2020-21 forest department has utilised Rs 311.93 Lakh from AFD and State share to meet the development of forest conservation under different programme.

**STATE CAMPA and its achievement during 2020-21**

State Compensatory Aforestation 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 Aforestation Fund Act, 2016 and Compensatory Aforestation Fund Rule, 2018 The government of Assam has constituted State Compensatory Aforestation Fund (SCAF), Assam on 11th Feb, 2019 and carries various activities under State CAMPA. During 2020-21 the activities of State CAMPA and their success is depicted in the following Table 10.13.

**TABLE-10.13**  
**Physical achievements of STATE CAMPA during 2020-21**

Activities	Physical Achievement
Site Specific Plantation	1008.742 Ha.
Aided Natural Regeneration	450 Ha.
Afforestation	2110 Ha.
Sal Coppice Management	517 Ha.( creation & Management)
Apurugiya Brikhya Plantation	25 Ha.(maintenance)
Building Construction	5 Nos.
Nurseries (.)	1.5 Ha.(31 Nos.) 3.0 Ha. (14 Nos.)
Establishment of Sahitya Manishi Upaban ( Bio Diversity park)	24 Nos. (72 Ha.)

Source: PCCF & Head Forest Force, Assam.

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## CHAPTER – XI

### INDUSTRY, TRADE AND MINING

Industrialization in Assam dates back to the days of first commercial plantation of tea and then commissioning of Digboi Refinery on 11<sup>th</sup> December 1901. Digboi Refinery is the India's oldest operating refinery and one of the oldest operating refineries in the world. The historic Digboi Refinery has been termed as the "Gangotri of the Indian Hydrocarbon sector". Apart from pioneering in tea and refining there are huge onshore oil & gas productions. Lucrative location of the State in the NE region of India bordering East & South-East Asian economies and presence of banks and financial bodies, communication, power and rapidly developing transportation sector is leveraging further the attractiveness of the State to attract manufacturing and trading businesses from the mainland well complemented by the "Look East" policy of GoI. The state has a modest industrial base covering segments like petrochemicals, fertilisers, textiles, cement, plastic, traditional handlooms & handicrafts and tourism that offer gainful employment to thousands. Oil and natural gas, apart from tea estates, bring in most of the industrial revenues to Assam.

#### INDEX OF INDUSTRIAL PRODUCTION [IIP](Base: 2011-12=100):

The Index of Industrial Production (IIP) is an index which shows the growth rates in different industry groups of the economy in a stipulated period of time. The IIP covers three broad sectors, namely Mining, Manufacturing and Electricity and annualised compilation is done based on the computed IIPs on month to month. Along with all strata of the economy the three sectors of IIP compilation was also adversely affected by the pandemic situation prevailing in the country, the situation also greatly hindered timely data collection mechanism of both at the States and at Union Government level. Table-11.1 below shows the movement of All India IIP from 2012-13 to 2020-21

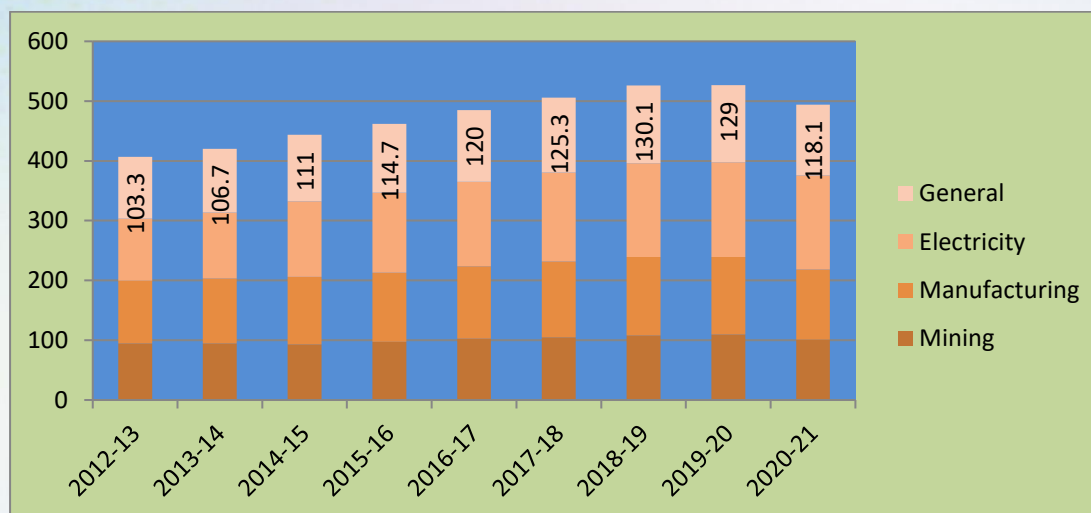
**TABLE-11.1**

SECTOR WISE ALL INDIA IIP (Base year 2011-12=100)									
Sector	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Mining	94.7	94.6	93.3	97.3	102.5	104.9	107.9	109.6	101
Manufacturing	104.8	108.6	112.7	115.9	121	126.6	131.5	129.6	117.2
Electricity	104	110.3	126.6	133.8	141.6	149.2	156.9	158.4	157.6
General	103.3	106.7	111	114.7	120	125.3	130.1	129	118.1

*Source: National Statistics Office (NSO)*



A diagrammatic presentation of the movement of IIP in India for the last nine years from 2012-13 to 2020-21 is as below:



### ANNUAL SURVEY OF INDUSTRIES (ASI):

ASI is the major source of industrial statistics providing estimates of various aggregates like input, output, capital, employment, value added etc. pertaining to registered manufacturing sector. ASI covers all factories registered under the section 2m (i) and 2m (ii) of the Factories Act, 1948. In terms of Net Value Added with a share of 1.12 percent at All-India level the State is in the 19<sup>th</sup> position out of 34 states & union territories whereon ASI was conducted and reported in the ASI 2018-19. However, it is at the 16<sup>th</sup> position in respect of number of workers engaged in the sector. Selected characteristics of industries in Assam vis-a-vis All-India based on ASI 2018-19 are given at Table-11.2.

TABLE-11.2

<b>Characteristics of industries in Assam vis-a-vis All-India: ASI 2018-19</b>		
<i>(Value figures in Rs.Lakh &amp; Others in Number)</i>		
Characteristics	<b>ASSAM</b>	<b>ALL-INDIA</b>
No of Factories	5,020	2,42,395
Workers	2,00,433	1,27,98,588
Total Input	64,33,955	77,43,77,980
Total Output	81,00,540	92,81,79,908
Net Value Added	14,15,078	12,76,46,637

Source: MOSPI, GOI

**MINING SECTOR:**

Table-11.3 shows the trend of production of some major minerals in Assam during the last ten years.

**TABLE-11.3**

## MINERAL PRODUCTION IN ASSAM

Year	Coal ('000 Tonnes)	Natural Gas (Utilised) MCM	Petroleum (Crude) Oil ('000 Tonnes)	Lime Stone ('000 Tonnes)	Sulphur ('000 Tonnes)
1	2	3	4	5	6
2011-12	590	2726	5023	242	5457
2012-13	605	2681	4861	292	3706
2013-14	665	2655	4718	208	5334
2014-15	797	2726	4447	681	5794
2015-16	397	2903	4513	442	4322
2016-17	600	2907	4202	1597	6571
2017-18	782	3034	4345	1432	8339
2018-19	783	3083	4222	1651	6956
2019-20	596	2931	4093	1552	5955
2020-21	40	2818	3922	1488	6545

Source : Indian Bureau of Mines

The trend shows that during the year 2020-21, except Sulphur, production of all major minerals has declined compared to the production of previous year. The increase in production of Sulphur over the previous year was about 10 percent. In percentage terms the decline in production of Coal, Natural Gas (Utilised), Petroleum (Crude) Oil and Limestone in the State during 2020-21 were 93.29%, 3.85%, 4.18% and 4.12% respectively over the previous year. As compared to the previous year's data, production of coal was abysmally low as reported by the Indian Bureau of Mines (IBM). However, colliery wise data received from the Directorate of Geology and Mining, Assam have reported a total production of 246.59 thousand M.T of coal in Assam during 2020-21, which was more than six times over the reported figure of IBM. The Directorate of Geology and Mining, Assam has also reported a State's earning of Rs.15.01 crore as revenue from the extracted coal.

**Industrial infrastructural facilities in Assam:**

Creation of environment for industrialization by setting up Industrial infrastructure in the perspective of industrial development and attract investment through proper planning is the prime objective of the State Government. To achieve the goal, the department of Industries, Commerce and Public Enterprise is creating a good

number of infrastructural facilities as well as upgrading the existing ones located in different districts of the state. With a view to provide infrastructure facilities to the Prospective Entrepreneurs/ Investors Assam Industrial Development Corporation (AIDC) and Assam Industrial Infrastructure Development Corporation (AIIDC) are continuously engaged in creation & development of new Industrial parks by procuring more land in the State. Statement showing the number of UAM/UDYAM (MSME) units setup in Assam during 2020-2021 is given at Annexure-11.1 and Industrial Estates and Other Infrastructure in the State may be seen at Annexure-11.2

### **Major Schemes/ Policies implemented by Industries, Commerce & Public Enterprise Department:**

Industries, Commerce & Public Enterprise Department is implementing various schemes of Government of Assam & Government of India to support and catalyse industrialisation in the state.

#### **A. Government of Assam:**

- I. Industrial & Investment Policy of Assam, 2019:** Assam is a land of 3 Ps, they are Potentiality, Possibility and Prosperity. Industrial development is a top priority and Government is committed to sustainable eco-friendly investment through capital formation, inclusive industrial growth and creation of gainful employment. Through good governance and policy initiative, State Government is envisaging Assam as a preferred destination for investment. The policy is valid for a period of 5 years. w.e.f. 01-09-2019. Under the policy any eligible enterprise both in manufacturing as well service sector unless specified in negative list can avail following benefits :
- i. State Goods and Service Tax (SGST) reimbursement: Reimbursement of SGST for a maximum period of 15 years. (Ranging from 150% to 250 % of eligible Fixed Capital Investment)
  - ii. Power Subsidy: @ Rs.2 per unit for a period of 5 years subject to a maximum of Rs.50 lakh per annum.
  - iii. Subsidy on Generating set: 50% of the cost of Generating set subsidy subject to a ceiling of Rs.20.00 lakh.
  - iv. Stamp Duty Reimbursement: 100 % stamp duty exemption subject to a ceiling of Rs.25.00 lakh on purchase of land. 45 nos of beneficiaries have availed of this facility during 2020-21 with an approved/disbursed amount of about Rs.4 crores.
  - v. Technology Transfer and Quality Certification, ZED Certification: 75% subsidy on Technology transfer subject to a ceiling of Rs.10.00 lakh.
  - vi. Interest Subsidy on Working Capital Loan: 2% Interest subsidy on working Capital for 5 years subject to a ceiling of Rs.50.00 lakh.
  - vii. Financial assistance to MSMEs listed in Stock Exchange : @30% of the cost of Public Issue expenses subject to a ceiling of Rs.5.00 lakh for getting listed in Stock Exchange.
  - viii. Assistance for Environmental Compliance : @50% of the capital cost subject to a ceiling of Rs.25.00 lakh.
  - ix. Incentives to Private Sector Infrastructure developer: @30% of the cost of subject to a ceiling of Rs.300.00 Lakh Cr. The land area should not be below 30 acres.
  - x. Incentives as per budget Speech of 2019-20: @ Rs.10,000 (Rupees ten thousand) to the units against each local youth employed by the units

**II. BIPONI:** The objective of the scheme is to support Micro & Small enterprises to participate in different trade fairs and events within the State, in the Country and abroad for marketing of their products and also getting the exposure. Under the scheme, for the events organised within the State, the participants coming from other districts are given Rs.5,000.00 towards stall rent and Rs.500.00 per day to meet the expenditure on travelling, food and lodging. For participating outside the State, selected participants will be provided stall rent with a maximum ceiling of Rs.15,000, sleeper class to and fro railway fare for two person and each member will get Rs.500.00 per day towards food and lodging for the fair period. The scheme also includes free stall space for the selected participants for events outside the Country. The participant will also be provided with Economy Class Air fare and Rs.1,000.00 per person per day for lodging and expenditure on food.

3577 nos of entrepreneurs have attended 34 different events during the year 2020-21 availing the incentives under BIPONI and an amount of Rs.2.89 crores were approved/disbursed to these beneficiaries.

**III. Export & Logistic Policy of Assam, 2019:** The Export & Logistic Policy of Assam, 2019 is announced for a period of 5 years w.e.f. 01-11-2019. The Policy aims at boosting exports where Assam has competitive advantage through increased market penetration as well as to explore new markets for the products of Assam.

- i. Enhancing ease of doing exports through creation of simple, effective and efficient institutional mechanisms, simplified processes and efficient organization and coordination with the stake holders
- ii. Strengthen the export infrastructures of the state such as Inland Container Depots(ICDs), Border Trade Centres, Common Facility Centres, Integrated Cold Chain, Logistic Park, River ports and material handling facilities, Air Cargo facilities, quality testing labs, connectivity to ports, Integrated Cold Chain, etc.
- iii. Establishing a product specific park viz.- Tea Parks, Bamboo Parks, Food Park, Pharmaceutical parks, Plastic parks, etc.
- iv. Transforming of small business and artisans through cross border e-commerce. Under the policy following benefits are available

#### **IV. Infrastructural Support:**

- (a) Govt. of Assam will encourage projects for development of exports undertaken under Trade Infrastructure & Exports Scheme (TIES) or any other central or State funded schemes.
- (b) Setting up or up-gradation of export related infrastructure and logistics like state-of-art Multi Modal Logistic Parks (MMLP) , Logistic Park, Spices Park , Inland Container Depots (ICD), Container Freight Stations (CFS), Air Cargo Facilities, Common Facility Centres, Pack houses, Integrated Cold Chain facilities, Vapour Heat Treatment (VHT) facilities, Export Products exhibition Centre, Quality Testing Centres and Trade facilitation centres, product specific Industrial Parks, etc
- (c) Ensuring supply and availability of quality power, high speed internet, facility etc. at Land Customs Stations (LCSs) and at other infrastructures created for Export & related Logistical supports.
- (d) The state shall endeavour to improve the road connectivity to Border Trade Centres, LCSs, River ports, Industrial parks, railway stations etc. to easy access as well as to reduce the cost of transportation in a time bound manner.

- (e) Improve the LCS Infrastructure
- (f) Creating Towns of Export Excellence (TEE)
- (g) Development of Quality management infrastructure.
- (h) Information dissemination: The State will increase availability and access of information regarding the existing infrastructure facilities for exporters to increase efficiency.

**V. Institutional support for export promotion:**

- (a) Formation of Assam State Export Promotion Council (ASEPC)
- (b) Develop Export Promotion Portal
- (c) Skill Development & Capacity Building

**VI. Awareness Generation**

**VII. Export Promotion & Facilitation Strategies :**

- (a) Recognition/ Award for export excellence
- (b) Promotion of export Clusters
- (c) Promotion of Value-added export

Apart from supports indicated above following incentives are also available under the Policy:

- i. Capital Investment Subsidy: @ 30% of the eligible fixed capital Investment subject to a ceiling of Rs.10 (ten) Crore for creation of export Infrastructure like MMLP, ICD, CFS etc.
- ii. Capital Investment Subsidy for reefer vehicle, etc: @ 30% subject to a ceiling of Rs.1 (one) Crore for purchase of insulated, reefer transport/mobile pre cooling unit.
- iii. Capital Subsidy for setting up of Primary Production Centres: @ 30% subject to a limit of Rs.1 (one) Crore for the setting up of Primary Processing Centre (PPC) for Agri-Horticulture produces
- iv. Subsidy for obtaining Quality Certification: @50 % subject to a ceiling of Rs.50 (fifty) lakh for obtaining Organic certification, Quality certification, ISO, ZED, etc.
- v. Freight Subsidy: @ 20% subject to a ceiling of Rs.50.00 Lakh only per annum for a period of five years per unit for on Air freight from the Airport of Assam to Foreign destination on finished products produced from locally available raw materials of the State.
- vi. The objective of the scheme is to provide special assistance for micro enterprises in the rural Assam producing traditional items.

**VIII. The Assam Bamboo and Cane Policy, 2019:** The policy aims at sustainable development and utilization of bamboo and Cane resources of the State through scientific management and stakeholders' participation. It is valid for a period of 5 years w.e.f. 01-01-2020. Under the policy any eligible unit can have following additional benefits availed from other Policies as indicated in the policy document.

- i. Capital Investment Subsidy: @50% on eligible Plant & Machinery and Internal Electrical Installations subject to a ceiling limit of Rs.5.00 Crore
- ii. For Start-ups in Bamboo & Cane sector, a grant of uptoRs.5.00 lakh will be provided for innovative ideas.
- iii. Distribution of Tools and Machineries for the artisans in Bamboo & Cane sector.
- iv. 100% sponsorship of training in ITI & Skill Development Centres

- v. 50% Subsidy on Fixed Capital Investment including Civil Works for establishment of "Souvenir shops" for bamboo and Cane products in the places of tourist attraction with a maximum ceiling of Rs.5.00 Lakh whichever is lower.
- vi. 50% Subsidy on the cost of development of Online portal for marketing of bamboo and Cane products with a maximum ceiling of Rs.5.00 Lakh whichever is lower.

**IX. Assam Ethanol Production Promotion Policy, 2021:** This policy aims to achieve the following objectives for the overall growth and development of green-field new 100% ethanol manufacturing industrial units in the State with a goal of providing remunerative returns to investors, farmers and all other stakeholders. Under the policy an eligible 100% green-field standalone Ethanol Manufacturing Units in Assam will be entitled to avail the following financial incentive:

- i. Power Subsidy: @ Rs.1.00 per unit, in addition to Power Subsidy offered under Industrial and Investment Policy of Assam 2019, for a period of 5 years with an upper ceiling of Rs.75.00 lakh per annum.
- ii. Interest Subvention Incentive: @ 5% interest subsidy on working capital loan for 5 years subject with a ceiling of Rs.50.00 lakh per annum in addition to interest subsidy offered under Industrial and Investment Policy of Assam 2019 & NEIDS 2017.
- iii. Tax-Related Incentives: 100% SGST reimbursement for a period of 5 years, upper limit being 250% of Fixed Capital Investment in addition to the reimbursement of the central share of the CGST, IGST and Income Tax offered under NEIDS 2017.
- iv. Exemption of Land Conversion Fees: 100% exemption of fees for conversion of class of land to industrial land.
- v. Employment Cost Subsidy: 50% reimbursement (in case of male workers) and 100% reimbursement (in case of female workers) of expenditure on account of contribution toward ESI and EPF scheme for a period of 5 years for new units for those employees who are permanent residents of Assam; subject to a maximum limit of Rs.1000.00 per month per employee in addition to the Employment Incentive offered under NEIDS 2017.
- vi. Skill Development Subsidy: 20% of the cost of Plant and Machinery, with maximum Rs.5.00 Cr. in addition to 30% Capital Subsidy offered under NEIDS 2017.

**X. Electric Vehicle Policy of Assam, 2021:** The policy aims to a material improvement in Assam's air quality by bringing down emissions from transport sector, create robust infrastructure for electric vehicles, a pool of skilled workforce for the EV industry etc. GoA has announced Electric Vehicle Policy of Assam, 2021 for a period of 5 years w.e.f. 04-09-2021.

- i. The incentives for all types of electric vehicles shall be based on the electric vehicle battery capacity with an upper ceiling of 40% of the ex-factory price of the vehicle.
- ii. Exemption of registration charges and road tax on 2, 3 & 4-Wheeler Electric Vehicles for 5 years.
- iii. 100% Waiver on parking charges for Electric Vehicles for 5 years.
- iv. Retro-fitment incentive @ 15% up to Rs.15,000.00 for 3-Seater auto rickshaws.

**XI. Assam Startup Policy (Amendment) 2018 :** To create an ecosystem for start-ups in Assam and establish Assam as the entrepreneurial hub of Northeast India, GoA has announced Assam Startup Policy, 2017 which is further amended in the year 2018.

**XII. The Assam Agarwood Promotion Policy, 2020:** To Promote cultivation of the scented wood on commercial scale and generate employment avenues and livelihood opportunities in the State, GoA had declared the "The Assam Agarwood Promotion

Policy, 2020” for a period of 5 years w.e.f. 01-01-2021. Under this policy the following fiscal incentives are available :

- i. Incentives for Nursery creation
- ii. Incentives for cultivation
- iii. Incentives for the artificial induction of Agarwood
- iv. Incentives for Harvesting
- v. Incentives for processing of Agarwood
- vi. Incentives for Research
- vii. Support to training
- viii. Marketing support

To facilitate setting up of an Industrial Unit, Industries, Commerce & Public Enterprise Department has the following schemes, Policies

**XIII. The Assam MSME (Facilitation of Establishment and Operation) Act, 2020**

**XIV. Assam Ease of Doing Business (Amendment Act), 2020**

**XV. Assam Agribusiness & Rural Transformation Project (APART):**

Assam Agribusiness and Transformation Project (APART) is a world bank funded project implemented by the Government of Assam under coordination of Assam Rural Infrastructure and Agriculture Services (ARIAS) Society . The Assam Agribusiness and Rural Transformation Project (APART) aims to “add value and improve resilience of selected agriculture value chains focusing on smallholder farmers and agro-entrepreneurs in targeted districts of Assam.” During 2020-21, the project interventions was taken up in 23 prioritized Districts of Assam i.e. Kokrajhar, Barpeta, Nalbari, Darrang, Sonitpur, Goalpara, Nagaon, Cachar, Karbi Anglong, Golaghat, Dhubri, Morigaon, Jorhat, Sivasagar, Hojai, Biswanath Chariali, West Karbi Anglong, Kamrup (M), Kamrup(R), Mankachar, Charaideo, Majuli and Lakhimpur . As a part of the project implementation strategy, APART follows the approach of cluster development and value chain development. Hence to strengthen the production cluster 34 new Farmer Producer Companies (FPCs) had been formed and extended support for reinforcement of 18 existing Farmer Producer Companies (FPCs). Similarly to strengthen the enterprise cluster baseline survey for identification of about 5000 agro based enterprises was successfully completed and mobilization of over 2200 agro based enterprises into the cluster level Industry Associations by forming 18 new Industry Associations in the districts been achieved.

**B. Government of India:**

Following schemes/ policies of Govt. of India are implemented by Industries, Commerce & Public Enterprise Department

**I.** North East Industrial Development Scheme (NEIDS)

**II.** Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PMFME) &

**III.** 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 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. Target given under the PMEGP and achievement during the last five years are shown in Table-11.4.

**TABLE-11.4**  
**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	92.70
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	3100	2579	3548.74	68.85	32.39
2020-21	5836	3370	2936	4943.70	59.95	33.89

Source: Commissionerate of Industries and Commerce, Assam

Note: Physical and financial targets are subject to revision from time to time.

**INSPECTOR OF FACTORIES:**

Altogether 287 new factories were registered with the office of the Inspector of Factories in 2020. With this addition total number of registered factories in the state reached 7512 which is an increase of 3.82 percent over the previous year. The number of daily workers engaged in the factories in 2020 was 294692 which was 285823 in 2019; average number of daily worker engaged is about 40 per factory.

**TABLE-11.5**  
**REGISTERED FACTORIES IN ASSAM**

Year	Number of Factories	Number of Daily Workers	Average no. of daily workers per Factory
2015	5799	219903	38
2016	6158	243821	39
2017	6729	269276	40
2018	6945	279246	40
2019	7225	285821	40
2020	7512	294692	39

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 last century, as of today, Assam Tea has maintained its international reputation and commands significant share in the World Tea Market. The total area under tea cultivation in Assam accounts for more than half of the country's total area under tea. In addition to 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 provides about seven lakh daily employment which is more than 60 percent of the total daily employment generated by this sector in the country.

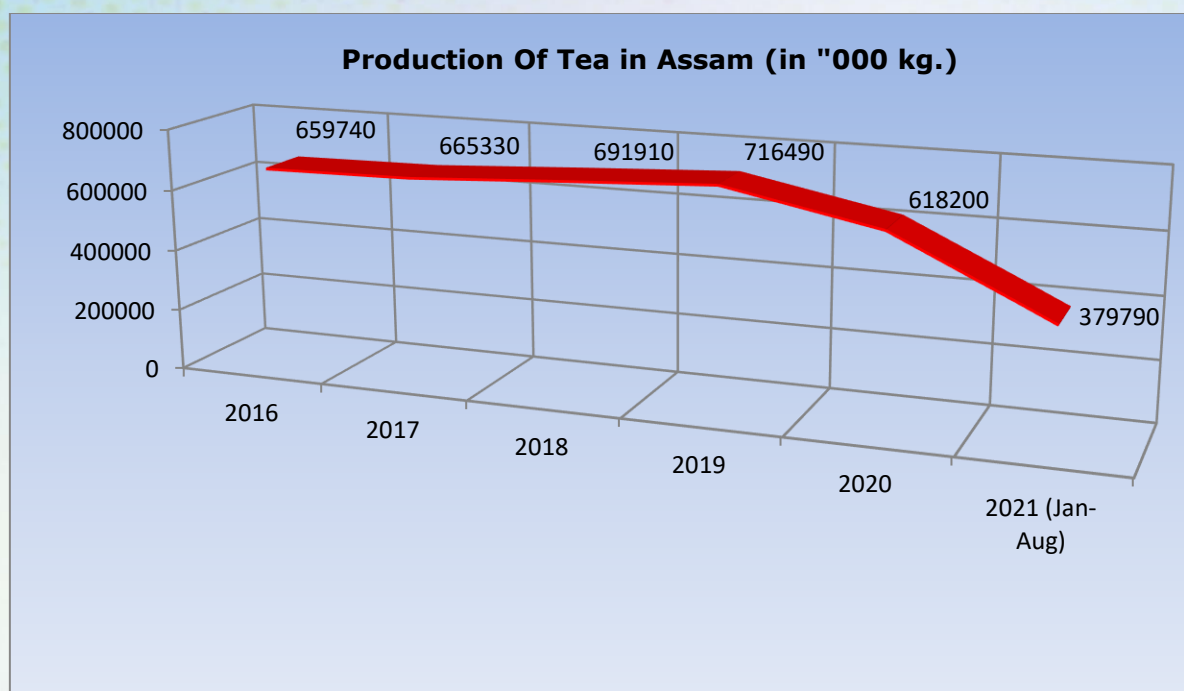
Assam has witnessed a spurt in the growth of small tea holdings during the last three decades and there is 1.22 lakh small holdings as on 31.08.2021 accounting for about 114.8 million kg of made tea. Most of the Small Tea Growers (STGs) are first generation young and educated entrepreneurs who have started contributing immensely towards transformation of socio-economic life in rural Assam. As per Tea Board of India, 2021, in there are 121675 nos. registered Small Tea Growers (with an area up to 10.12 hectares of land) in Assam and they have all together produced about 177730 thousand kg of tea in 114801 hectares of land during Jan-Aug/2021. The number of big grower tea estates (i.e. with holding above 10.12 hectares) in the state is 765 and they have produced 202060 thousand kg of tea in 232,399 hectares of land during the same period. The total production of tea in Assam was 379790 thousand kg during the period of January to August, 2021. Year wise no of gardens, area, production and average yield of tea in the State is given in the Table-11.6.

**TABLE-11.6**  
**TEA STATISTICS OF ASSAM**

<b>Year</b>	<b>No. of Gardens including Small Tea Growers</b>	<b>Area under Tea ( 000 hectares)</b>	<b>Production ('000 kg.)</b>	<b>Average yield (kg/Hect.)</b>
2016	85344	311	659740	2121
2017	88442	314	665330	2119
2018	101850	338	691910	2047
2019	108136	337	716490	2126
2020	122440	347	618200	1781
2021 (Jan-Aug)*	122440	347	379790	1094

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

Source: Tea Board of India.



Visualising the need to increase the margin of the tea sector and to ensure long term financial sustainability of the Tea Industry as an additional support to tea sector; Assam is implementing four components of benefits under Assam Tea Industries Special Incentives Scheme (ATISIS), 2020 to increase the production of Orthodox and speciality tea [Green tea/White tea/Oolong tea/Singhpo tea/Purple Tea/Yellow tea or other Speciality tea (not manufactured through CTC (Crush, Tear, Curl)] viz.- Interest Subvention on Working Capital, Orthodox or Speciality Tea Production Subsidy, Subsidy for Orthodox & Speciality Tea Unit for Plant & Machinery & Agricultural Income Tax Holiday. The Tax Holiday of Agricultural Income for the Tea Industry is for three years from 2019-20 to 2021-21. It may be noted here that present production of speciality tea in the State is just about 11 percent of total tea produced.

#### **Guwahati Tea Auction Centre (GTA):**

Since its establishment in 1973 the GTA has been actively taking part in trading of the tea produced in the states of North-eastern region of India. Table-11.7 presents the statistics of quantity and average price of tea since 2015 sold in the GTA.

**TABLE-11.7**  
**QUANTITY AND AVERAGE PRICE OF TEA SOLD**

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	.00036	58.33
2020	108.31	194.63	112.27	221.56	49.72	207.75	0.12008	171.41
2021 (Jan to Aug)	71.68	185.72	73.69	231.28	30.86	181.33	0.088	113.76

*Source: Guwahati Tea Auction Centre*

### **RUBBER PLANTATION:**

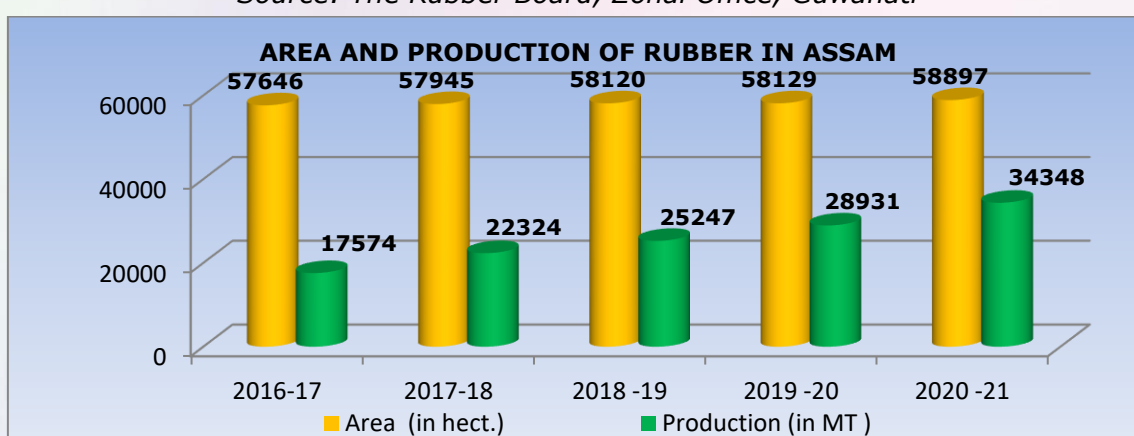
The rubber plantation has gained popularity in Assam due to congenial agro-climatic condition in the state. The Rubber Board has identified Assam as a "Potential state" from the "productivity" point of view as the state has ample scope for expansion of rubber plantation

The area under rubber cultivation has grown from 16.5 thousand hectares in 2006-07 to 58.9 thousand hectares in 2020-21. The tapping area as well as production of rubber has also increased considerably during the same period. In 2020-21 the production of rubber shows a 18.72 % increase in production over the previous year. The data on growth of area, production and employment generation in the rubber plantation sector is presented in the Table-11.8. Considering the growth of plantation areas and production trend of rubber, there is vast potential for setting up of industries to add value to the rubber cultivated and produced in the state.

**TABLE-11.8**  
**AREA AND PRODUCTION OF RUBBER IN ASSAM**

Year	Area (in hect.)	Production (in MT )	Tapping Area (in hectare)	Employment Generation ( in nos)
1	2	3	4	5
2016-17	57646	17574	15139	179856
2017-18	57945	22324	16099	189790
2018 -19	58120	25247	20859	182873
2019 -20	58129	28931	26659	192503
2020 -21	58897	34348	29052	176771

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 cultivated in two districts of Assam namely Karbi Anglong and Dima Hasao. Meghalaya, Nagaland and Mizoram are the other coffee producing states in the North East Region of India. Trend of Area under coffee plantation, production and employment generation for the last five years may be seen under Table 11.9.

**TABLE-11.9**  
**AREA, PRODUCTION AND EMPLOYMENT UNDER COFFEE PLANTATION**

Year	Area (in Hect.)	Production (in MT)	Price (Rs./Kg.)		Employment Generation (Nos.)
			Arabica	Robusta	
1	2	3	4	5	6
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
2020 -21	415.45	37.50	122.00	126.00	992

\*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 Board was Rs.28.32 Crore in 2020-21; a slight improvement compared to Rs.28.00 Crore in 2019-20 and Rs. 27.45 crore in 2018-19. The total earning from sales is estimated at Rs. 31.63 crores in 2020-21. Total person engaged through KVI Board was 65938 in 2020-21, 79885 in 2019-20 and 79737 in 2018-19. Total value of production in the KVI Sector during 2020-21 was Rs.1647.16 crore and employment generated in this sector including PMEGP was 6,03,549 nos and earning a sales value of Rs.2138.44 crores. Table 11.10 outlined the status of Khadi and Village Industries in Assam during 2020-21.

**TABLE-11.10**  
**STATUS OF KHADI AND VILLAGE INDUSTRIES IN ASSAM DURING 2020-21**

Industry	Value of Production (Rs. in Lakh)	Sales (Rs. In Lakh)	Employment (in Nos)	Wages (Rs. In Lakh)
1	2	3	4	5
<b>A. Khadi &amp; Polyvastra</b>				
1. Cotton & Muslin	95.23	122.65	962	42.85
2. Silk	900.61	628.63	5258	549.34
3. Woolen	0	0.12	0	0
4. Polyvastra	2.43	6.48	14	2.43
Total - A: (Khadi and Poly)	998.27	757.88	6234	594.68
<b>B- Village industries (including PMEGP)</b>	163717.96	213085.76	597315	90707.34
<b>Grand Total (A + B)</b>	164716.23	213843.64	603549	91302.02

Source: KVI Board, Assam, Note: PMEGP - Prime Minister Employment Generation Programme.

**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 employment 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 lower investments and but yield higher returns.

The Muga (the golden silk) yarn is unique to the state; and received geographical identity for the same. In addition to the traditional Muga; Eri and Mulberry are other two important natural yarns produced in the state. The state has also producing Oak Tassar

in the two hill districts. The state accounts for more than 85 percent of global Muga Silk production. The state is also a Major producer of Eri Silk (about 62 percent) of the country.

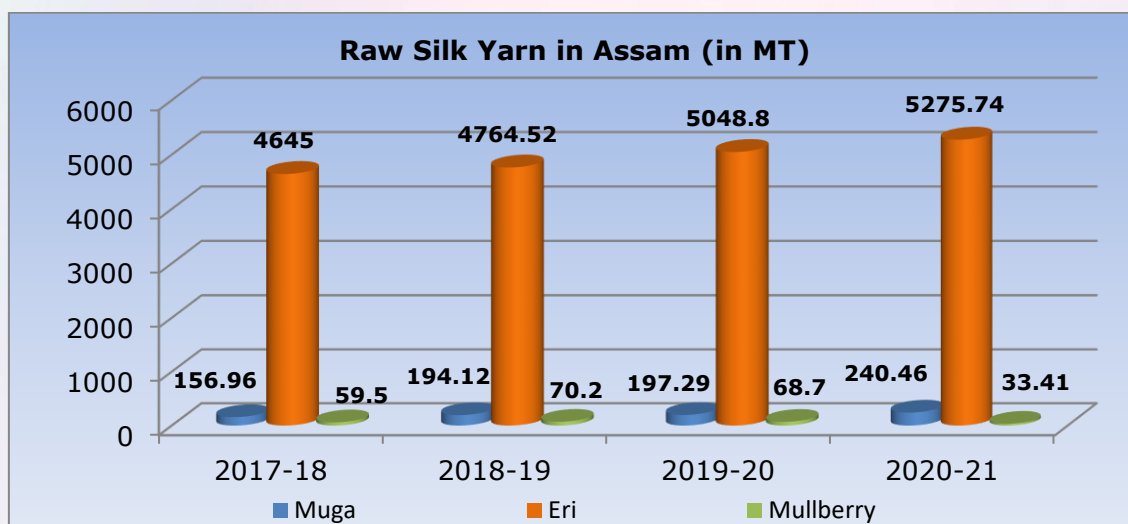
Table-11.11 provides the detail on the variety of raw silk produced in the state during past four years.

**TABLE-11.11**  
**Production of Raw Silk/Yarn in Assam (in MT)**

Item	2017-18	2018-19	2019-20	2020-21
Muga	156.96	194.12	197.29	240.46
Eri	4645.00	4764.52	5048.8	5275.74
Mullberry	59.50	70.2	68.7	33.41
Total	4861.46	5028.84	5314.79	5549.61

Source: Directorate of Sericulture, Assam

Productions of Muga, Eri and Mulberry Raw Silk/Yarn in the last four years in visual graphics are given below:



The sericulture industry has undergone changes with respect to loom, fabric, design and technology. Muga silk in particular and the other natural silks in general have 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. The total production of silk yarn in the state however has increased from 5314.8 MT in 2019-20 to 5549.6 MT

in 2020-21 recording a growth of 4.42 percent. The performance of sericulture sector is presented at Table-11.12

**TABLE-11.12**  
**SERICULTURE ACTIVITIES IN ASSAM**

ITEMS	UNIT	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
SERICULTURE VILLAGES	Nos.	10740	10746	11411	11281	11281	9935	8726	8726	8642
NO. OF FAMILIES ENGAGED	Nos.	254516	291592	282073	652406	496901	319405	310582	307877	309530
AREA UNDER SILKWORM FOODPLANTS	Hect	24268	26827	33790	15417	11434	15983	11585	NA	43608
ERI	Hect	8044	9172.5	15796	6601	5510	7176	5936	NA	30319.5
MUGA	Hect	9400	10230	10371	5995	4383	5931.58	4369	NA	10762.5
MULBERRY	Hect	6824	7424	7623	2821	1541	2875	1280	NA	2526.34
YIELD OF COCOONS										
ERI-CUT COCOONS	MT.	1622.51	2514.2	3182	3050	3317	4350.58	6300	NA	6311
MUGA COCOONS	Lakh Nos.	5812	5450	6361	6528	6864	6480	7865	NA	9865
MULBERRY REELING COCOONS	MT.	129.28	225	340.5	268	328	439.05	576	NA	584.89
PRODUCTION OF SILK YARN										
ERI RAW SILK	MT.	1061.61	1934	2545.6	2345	2555	3468.25	4650	NA	5048.8
MUGA RAW SILK	MT.	114.56	109	127.2	126	127	129.6	156.96	NA	197.29
MULBERRY RAW SILK	MT.	11.25	25	27.24	26.4	31.02	49.64	59.5	NA	68.7

Source: Directorate of Sericulture, Assam.

### HANDLOOM:

Handloom weaving is a 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 the State's 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 has gradually grown to meet market demand with commercial production. The state had an estimated number of 1,70,986 full time weavers and 10,70,526 nos of part time weavers during 2020-21. There were 231 handloom demonstration circles in the state covering 19118 villages. In the year 2020-21, 33 nos of Yarn Banks were functioning under the Directorate of Handloom and Textiles providing yarn at subsidised rates under state

sponsored scheme to overcome the constraints faced by the weavers on availability of quality yarn at reasonable price. A total number of 1,28,260 weavers were benefitted from the Yarn Banks. In 2019-20 there were 102 Handloom Training Centres in the state accommodating 1580 trainees. Combined Handloom production during the year 2020-21 in the weavers extension service units and handloom production centres of the Directorate was 1,85,772 Meters.

The Handloom Research and Designing Centre (HRDC) under the Directorate is continuously providing assistance in design, pattern, weaving and dying with special emphasis on eco-friendly natural die and has developed 84 nos of new designs and 15 nos of natural dyes in the year 2020-21.

## **TOURISM:**

Tourism in Assam is based on wildlife, natural beauty, unique flora & fauna, holy shrines, lush green tea gardens, turbulent rivers, vibrant and colorful 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 October to May. To make Assam as 365 days tourist destination and to boost the Tourism sector in the State, Government has made endeavours to promote all season Tourism. A campaign has been undertaken both in national and international forum to promote the tourist destinations in the state.

Tourism Department, Assam has made investments 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 Developments, Wayside Amenities etc., through public and private partnership approach. Under the scheme "Development of Kamakhya Temple and Pilgrimage Destination in and around Guwahati under PRASAD" funded by the Ministry of Tourism, Govt. of India for Rs. 2990.00 lakh has completed by State Government through ATDC Ltd. Under the Centrally Sponsored scheme Swadesh Darshan "Manas – Pobitora – Nameri – Kaziranga – Dibru Saikhowa as Wildlife Circuit in Assam" and "Development of Tezpur – Majuli – Sivasagar as Heritage Circuit in Assam" with financial allocation of Rs. 9467.94 lakh and Rs. 9097.68 lakh respectively the State Govt. through ATDC has undertaken and nearing completion. 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 section 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 craft, 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 shuttle 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 and cultural tourism



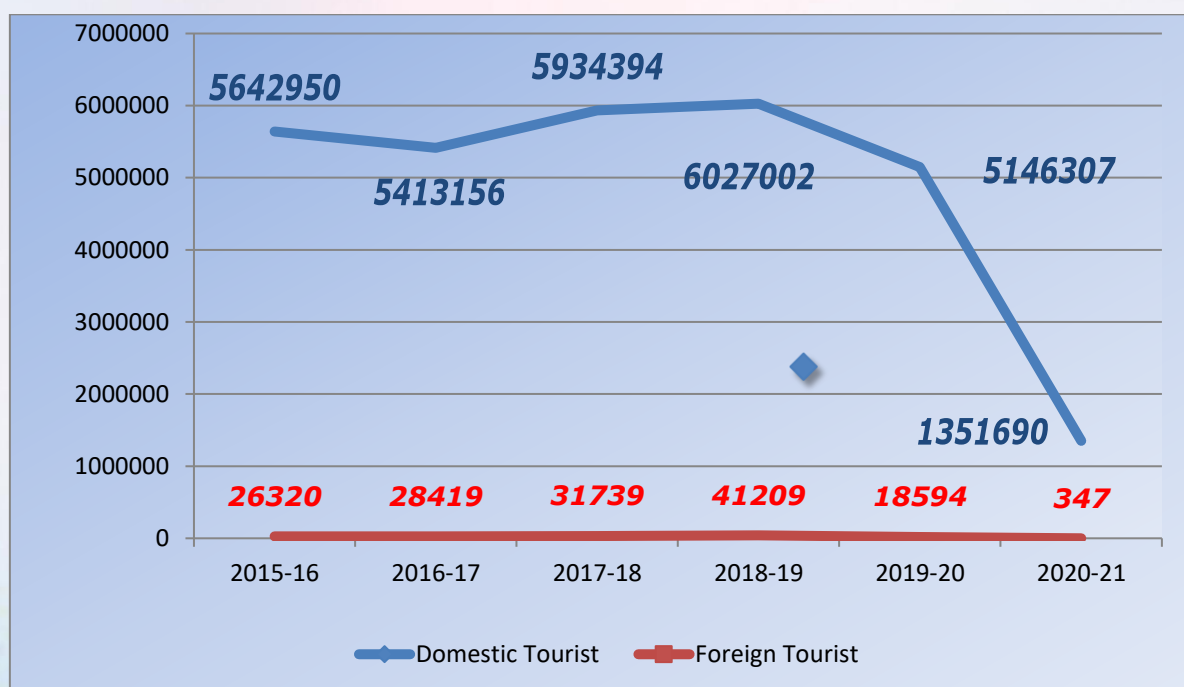
covering festivals like “Ambubachi Mela” in Kamakhya Temple and Dol Utsav in Barpeta. One can opt for short cruises or can avail longer sailing to Kaziranga, Golf Resort, Ahom kingdom in Sivasagar. The Brahmaputra Beach Festival, Kite Festival, Kaziranga Golf Competition etc. are organized in collaboration with the Tourism Department are important endeavour to attract tourism. Table-11.13 shows the number of arrival of tourist in the state during past six 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
2020-21	1351690	347

Source: Directorate of Tourism, Assam

The trend of tourist footfall recorded during the last six years may be seen in the following graph.



The state has seen a declining trend in arrival of foreign and domestic tourists in the last two years. Table-11.14 shows the trend of number of tourists visited the National Parks in Assam during the last three years.

**TABLE-11.14**  
**NUMBER OF TOURIST VISITED NATIONAL PARKS IN ASSAM**

Name of the National parks	Domestic Tourist						Foreign Tourist					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Kaziranga N. Parks	464945	462741	475061	168738	130937	123561	6679	7891	8467	7443	6073	278
Nameri N. Parks	184763	195305	196491	13847	5044	7751	1165	1206	1263	1116	97	09
Orrang N. Parks	111667	112037	114399	8544	992	890	897	907	911	527	14	11
Manash N. Parks	214230	217464	261201	42329	18233	55272	897	904	1565	658	98	7
Dibru Saikhuwa N. Parks	207655	261303	274660	1793	601	461	1005	1112	1167	24	4	4
Pobitora N. Parks	189102	181264	295129	219066	11514	14900	310	304	503	625	218	2

*Source: Directorate of Tourism, Assam*

Considering the potential and importance of developments of the tourism sector the governments of Assam has launched a new tourism Policy "Tourism Policy of Assam 2018" with an 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 movies 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 percent 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.

**ASSAM SCIENCE TECHNOLOGY AND ENVIRONMENT COUNCIL (ASTECC):**

Even though ASTEC did not come directly under the purview of Industry and Mining and perform under the Department of Science, Technology & Environment the sum of mandated activity of ASTEC forms inevitable part as facilitator in the growth of the Industry Sector. Constituted in 1986-87 as an autonomous council ASTEC is implementing programmes through three scientific divisions in the sectors of science & Technology, Environment and Remote Sensing. The Patent Information Centre (PIC) is helping researchers and entrepreneurs by providing guidance in respect of registering their IPR and in filing patents, trademarks, logos, Geographical Indication and Intellectual Property Right (IPR) related aspects. It is an ongoing process and application for patent, industrial design, trademarks, copyrights and related rights, IPR Commercialisation, GI Authorised User registration are regularly entertained in the ASTEC and thus included in this Chapter for general information.

## 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, and Transport & Communication which plays an important role in the economic progress and thus growth of the Power sector is directly related to the development and growth of the economy.

A developed power sector will certainly assist in achieving the larger objectives of industrial and economic growth in the State and the resultant poverty alleviation. Electricity consumption is one of the most important indicators 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 erstwhile Assam State Electricity Board (ASEB) formed the three utilities on 10<sup>th</sup> December, 2004 to meet the power requirement of the state.

1. Assam Electricity Grid Corporation Limited (AEGCL)
2. Assam Power Generation Corporation Limited (APGCL)
3. Assam Power Distribution Company Limited (APDCL)

### 1. Assam Electricity Grid Corporation Limited

Assam Electricity Grid Corporation Limited, a vibrant growth oriented Public Sector Company registered under 'Companies Act, 1956'. It was formed out of 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. AEGCL inherited 3862 circuit kms of EHV lines above 66 kV voltage class and 38 numbers of EHV substations 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 has increased up to 7143 MVA, line length 5737 Ckt kilometre, 1373 KM of Optical Fibre network and no. of substation 68, which includes 1 no. 400KV, 12 nos. of 220KV, 55 no. of 132KV substations as on march 2021. Voltage level wise transmission lines under AEGCL in Circuit KM from 2018-19 to 2020-21 is given in Table 12.1

**Table - 12.1: VOLTAGE LEVEL-WISE EXISTING TRANSMISSION LINES (IN CIRCUIT KM)**

Sl. No.	Name of Transmission Lines	2018-19	2019-20	2020-21
A	Total 400KV Transmission Lines	7.20	7.20	7.20
B	Total 220KV Transmission Lines	1723.96	2048.00	2048.05
C	Total 132KV Transmission Lines	3022.70	3039.00	3069.19
D	Total 66KV Transmission Lines	613.00	613.00	613.00
Total		5366.86	5707.20	5737.45

Source: AEGCL

AEGCL 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.

AEGCL has consistently maintained the transmission system availability over 99% which is at par with other National Transmission Utilities.

AEGCL 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.

Technical Progress of AEGCL is given in Table 12.2 below:

**Table - 12.2: TECHNICAL PROGRESS OF AEGCL**

Parameters	FY 2018-19	FY 2019-20	FY 2020-21
No. of Sub-stations	65	67	68
Transformation Capacity (in MVA)	6585	6972	7143
Transmission Network (in CKT-KM)	5366.93	5707.22	5737
OPGW Network (in KM)	1373	1373	1373
Transmission Loss (%)	3.54	3.46	3.34

Source: AEGCL

## 2. Assam Power Generation Corporation Limited

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. The installed capacity of APGCL in the state was 341.955 MW in 2020-21. Gross power generation in the state was 1389.60 MU in 2020-21, which were 1545.97 MU in 2019-2020 and 1594.15 MU in 2018-2019 recorded a decreasing trend 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 - 12.3.

**Table - 12.3: INSTALLED CAPACITY AND GENERATION OF ELECTRICITY IN ASSAM**

A. Installed Capacity of Generating Plant (MW)		2018-19	2019-20	2020-21
Hydel	KLHEP	100.000	100.000	100.000
	Myntriage SHEP, Stage-I	4.400	5.200	6.000
	Myntriage SHEP, State-II	4.500	4.500	4.500
Gas	LTPS	60.000	60.000	60.000
	LRPP	69.755	69.755	69.755
	NTPS	77.000	77.000	42.000
Waste Heat Recovery Unit	LTPS WHRU	37.200	37.200	37.200
	NTPS WHRU	22.500	22.500	22.500
Total	APGCL	375.355	376.155	341.955
B. Source wise Gross Unit Generation (MU) in Assam				
Hydel	KLHEP	369.288	398.528	202.618
	Myntriang SHEP Stage-I	0.762	18.960	19.287
	Myntriang SHEP, Stage-II	7.650	9.420	11.964
Gas	LTPS	472.091	362.006	447.573
	LRPP	429.989	504.200	477.074
	NTPS	314.373	252.863	231.079
Total	APGCL	1594.153	1545.976	1389.595
C. Auxiliary Consumption (MU)				
Hydel	KLHEP	0.621	0.612	0.565
	Myntriang SHEP Stage-I	0.005	0.054	0.193
	Myntriang SHEP, Stage-II	0.068	0.061	0.120
Gas	LTPS	41.388	33.816	36.959
	LRPP	7.881	9.465	9.666
	NTPS	21.205	15.026	12.353
Total	APGCL	71.169	59.033	59.856
D. Net Unit Generation (MU)				
Hydel	KLHEP	368.660	397.920	202.055
	Myntriang SHEP Stage-I	0.757	18.906	19.094
	Myntriang SHEP, Stage-II	7.582	9.359	11.844
Gas	LTPS	430.703	328.190	410.614
	LRPP	422.108	494.735	467.408
	NTPS	293.168	237.837	218.726
Total	APGCL	1522.978	1486.947	1329.741

Source: APGCL, Guwahati

### 3. 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:**

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 behaviour.
- 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

#### **Power Supply Position:**

Energy requirement in Assam was worked out at 11463 Million Units (MU) for 2020-21. The requirement was 11472 MU for 2019-20 and 10058 MU for 2018-19. However, gross units generated in the State were 1389.595 MU of power in 2020-2021 which was about 12 percent of the energy requirement of the period. The own source generation were 1545.97 MU in 2019-20 and 1594.15 MU in 2018-19 in the State. At the same time the peak demand of electricity in the state has increased from 1894 MW in 2018-19, to 2051 MW in 2019-20 and further to 2073 MW in 2020-2021. The shortfalls of power during these periods were 5 percent or less as per available records. The requirement and shortage of electricity in Assam is shown in Table 12.4.

**Table - 12.4: REQUIREMENT AND SHORTAGE OF ELECTRICITY IN ASSAM**

Item	2016-17	2017-18	2018-19	2019-20	2020-21
Energy Requirement (MU)	9526	9680	10058	11472	11463
Energy Availability (MU)	9200	9365	9730	10941	11004
Shortage (MU)	326	315	328	531	459
Peak demand (MW)	1679	1823	1894	2051	2073
Peak Demand Met (MW)	1634	1741	1810	1956	1990
Shortage (MW)	45	82	84	95	84
Shortage (in %)	3%	5%	4%	5%	4%

Source: APDCL

After the whole energy sector of the country made interconnected through the National Grid, power scenario has been improved considerably. Table 12.5 has shown the scenario of power requirement and sourcing the same during 2016-17 to 2020-21.

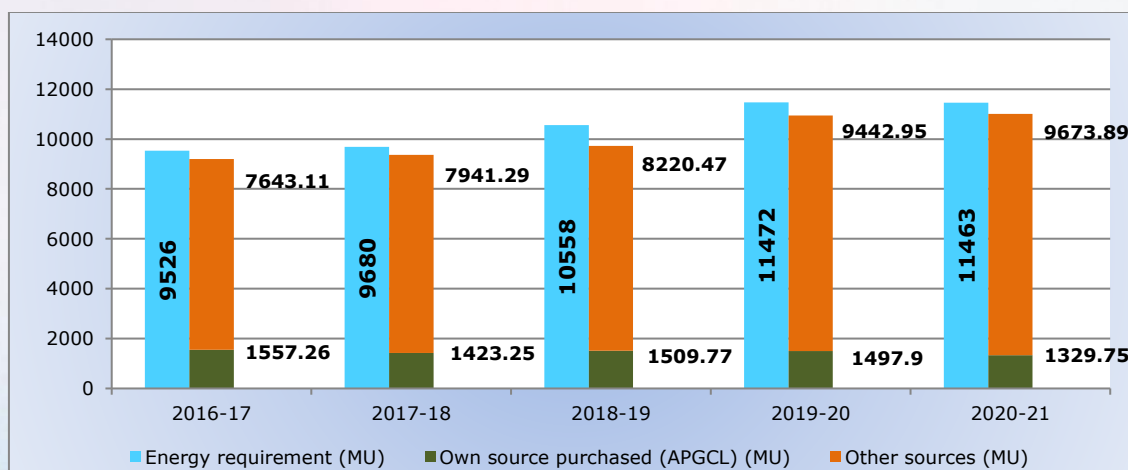
**Table - 12.5: ENERGY REQUIREMENT & AVAILABILITY**

Year	Energy Requirement (MU)	Own Source Purchased (APGCL) (MU)	Other Sources (MU)
2016-17	9526	1557.26	7643.11
2017-18	9680	1423.25	7941.29
2018-19	10558	1509.77	8220.47
2019-20	11472	1497.90	9442.95
2020-21	11463	1329.75	9673.89

Source: APDCL

The energy requirement and own source (AEGCL) procurement as well as from outside source to meet the demand during the last five years is depicted in the diagram below:

**Figure 12.1: TREND OF ENERGY REQUIREMENT & AVAILABILITY**





**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 19.94% in 2018-19, 20.92% in 2019-20 and 19.02% in 2020-21. Wastage of power at the stages of transmission is a matter of concern in a state like Assam having 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 - 12.6.

**Table - 12.6. TRANSMISSION, DISTRIBUTION AND COMMERCIAL LOSSES OF ENERGY**

Item	2016-17	2017-18	2018-19	2019-20	2020-21
Energy Input (MUS) (At APDCL end)	7948	8273	8678	8912	9156
Energy Billed (MUS)	6526	6814	6968	7257	7458
T & D Losses (MUS)(in %)	1422(17.89)	1459(17.64)	1710(19.7)	1655(19.06)	1698(18.55)
Amount Billed (Rs. in crore)	4234	4759	5080	5392	5374
Amount realised (Rs. in Crore)	3933	4871	5065	5268	5343
Collection Efficiency (in %)	92.91%	102.34%	99.71%	97.70%	99.43%
Overall Efficiency (in %)	76.29%	84.29%	80.06%	79.08%	80.98%
Aggregate Transmission and Commercial Losses (%)	23.71%	15.71%	19.94%	20.92%	19.02%

Source: APDCL T&D losses: Transmission and Distribution losses

AT&C losses: Aggregate Transmission and Commercial Losses

**Number of Electricity Consumers:**

The domestic categories of consumers include Jeevan Dhara, LT (Domestic A, Domestic 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-12.7

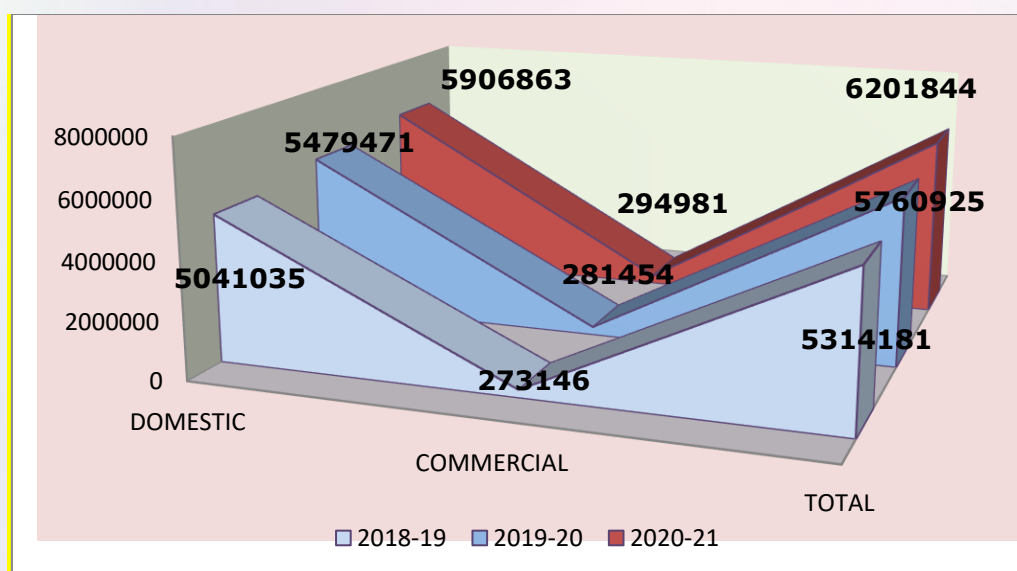
**Table - 12.7: TOTAL NUMBER OF ELECTRICITY CONSUMERS IN ASSAM**

YEAR	DOMESTIC	COMMERCIAL	TOTAL
2018-19	5041035	273146	5314181
2019-20	5479471	281454	5760925
2020-21	5906863	294981	6201844

Source: Assam Power Distribution Company Ltd.

The diagram below shows the number of Domestic, Commercial & Total consumers in Assam from 2018-19 to 2020-21.

**Figure 12.2: NUMBER OF ELECTRICITY CONSUMERS IN ASSAM**



Sector wise electricity consumption in Assam is shown in Table-12.8

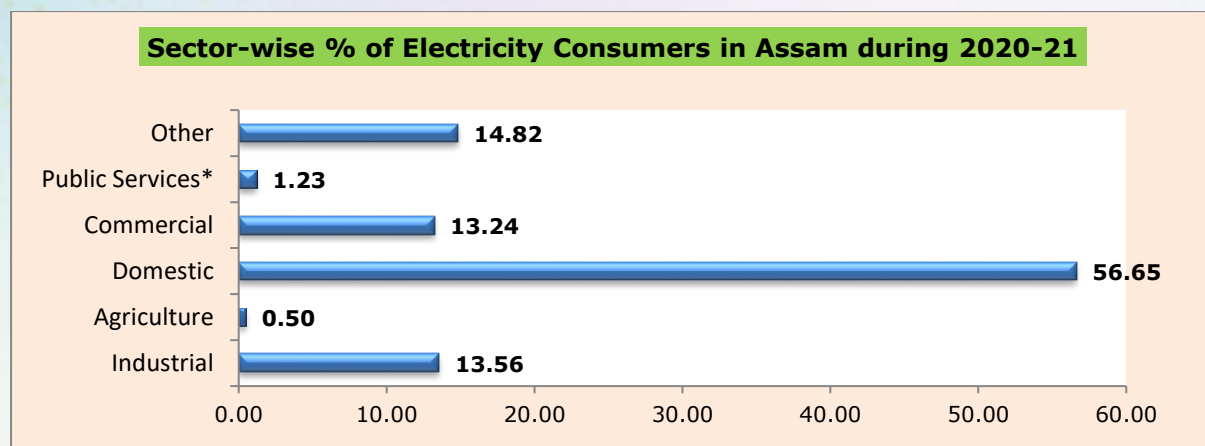
**Table - 12.8: SECTOR WISE ELECTRICITY CONSUMPTION IN ASSAM IN MU**

Sector	Period					Percentage Change in 2020-21 over 2019-20
	2016-17	2017-18	2018-19	2019-20	2020-21	
Industrial	817.13	887.94	1127.35	1075.02	1011.56	-6%
Agriculture	36.48	34.71	46.71	46.83	37.27	-20%
Domestic	3422.87	3703.25	3476.59	3817.36	4224.86	11%
Commercial	1005.77	979.01	1096.95	1111.75	987.22	-11%
Public Services*	103.86	83.68	102.14	96.07	91.44	-5%
Other	1140.36	1125.21	1118.44	1109.73	1105.50	0%

Source: APDCL \* Public Lighting and water Supply Works

Sector wise electricity consumption in Assam during the year 2020-21 is depicted in the attached diagram in percentage.

**Figure 12.3: SECTOR-WISE % OF ELECTRICITY CONSUMERS IN ASSAM DURING 2020-21**



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 – 12.9 shows the amount of energy purchased in Assam during the last three years (the figure also includes purchase from its sister concern, i.e. AEGCL)

**Table – 12.9: ELECTRICITY PURCHASED, ASSAM**

Year	MU Purchased/generated (ex-bus)	All charges total (Rs. in Crores)	Avg. rate (Rs./kWh)
2018- 19	9730.24	5100.59	5.24
2019-20	10940.85	5530.19	5.05
2020-21	11003.64	5807.24	5.28

Source: APDCL

## REGULATORY MEASURES AND ELECTRICITY TARIFFS

Assam Electricity Regulatory Commission (AERC) was established as per the Electricity Act, 2003 with the responsibility to determine tariff for generation, supply and transmission of electricity, regulating price of electricity procurement, facilitating intra-state transmission, issue licences for such activity and act as an adjudicator upon disputes between parties. The activities of the Commission are guided by the National Electricity Policy, National Electricity Plan and tariff policy published under section 3. The Commission issued a number of important directives for compliance by the utilities within specified time frames. The revised category-wise tariffs applicable for APDCL for 2020-21 with effect from April 1, 2020 is provided at Annexure-12.1

## APDCL-RURAL ELECTRIFICATION

For electrifying the rural areas the Power Department has a number of ongoing and completed initiatives under the flagship programme of Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and

Pradhan Mantri Sahaj Bijli Har Ghar Yojana-SAUBHAGYA. The following table presents the sanctions and financial utilization of different schemes in Assam as on 15.12.2021.

**Table - 12.10: FINANCIAL UTILISATION OF DIFFERENT SCHEMES IN ASSAM**

Name of Scheme	Sanctioned Cost	Grant received from REC	Loan received from REC	State TAX received from GOA	State Share received from GOA	Total Fund received	Total Fund Utilized
1	2	3	4	5	6	7=3+4+5+6	8
RGVY XII Plan	1621.06	1304.64	144.39	110.38	0.00	1559.41	1474.02
DDUGJY	1274.08	853.03	114.10	67.85	63.70	1098.68	991.31
Saubhagya	1104.95	684.06	91.29	30.12	53.32	858.79	2187.56
Addl. Infra	1493.57	1081.56	134.42	40.71	72.08	1328.77	
DDG	261.18	178.12	13.45	4.98	14.10	210.65	210.91
Total	5754.84	4101.41	497.65	254.04	203.20	5056.30	4863.80

Source: APDCL

Table 12.11 presents year wise physical progress of Electrification under XII Plan, DDUGJY (erstwhile RGVY)

**Table - 12.11: YEARLY ACHIEVEMENT OF ELECTRIFICATION UNDER DDUGJY**

Particulars	Target	Yearly Achievements			Total Achievement	% of Achievement
		2018-19	2019-20	2020-21		
Un-Electrified Villages (Nos.)	887	0	0	0	887	100%
Partially Electrified Villages (Nos.)	9515	2595	869	25	9515	100%
BPL HHS (Nos.)	521128	323584	15420	220	521128	100%
11 KV Line (CKT Kms)	8553.06	2465.68	1236.222	50.5	8553.06	100%
LT 3 PH Line (CKT Kms)	7132.21	2417.80	781.465	120.35	7132.21	100%
LT 1 PH Line (CKT Kms)	9922.70	3227.87	2288.67	0	9922.70	100%
63 KVA DTR (Nos.)	2160	631	400	7	2160	100%
25 KVA DTR (Nos.)	12818	4875	1938	55	12818	100%
16 KVA DTR (Nos.)	843	269	0	51	843	100%

Source: APDCL

**Table - 12.12: STATUS OF ELECTRIFICATION UNDER DDUGJY**

Particulars	Target	Yearly Achievements			Total Achievement	% of Achievement
		2018-19	2019-20	2020-21		
Un-Electrified Villages (Nos.)	903	0	0	0	903	100%
Partially Electrified Villages (Nos.)	3890	1789	370	506	3890	100%
SAGY Village (Nos.)	220	96	34	0	220	100%
BPL HHS (Nos.)	184218	133905	200	0	184218	100%
11 KV Line (CKT Kms)	4645.90	3013.62	48	18.57	4645.90	100%
LT 3 PH Line (CKT Kms)	2594.19	1377.25	77.12	1.72	2594.19	100%
LT 1 PH Line (CKT Kms)	4796.98	2834.15	283.42	1.05	4796.98	100%
63 KVA DTR (Nos.)	1795	1065	338	1	1795	100%
25 KVA DTR (Nos.)	3593	1069	361	13	3593	100%

Source: APDCL

[N.B. It is to be noted that electrifications were completed in all the un-electrified Census Villages in the State by 31<sup>st</sup> December, 2017 (No of CENSUS Village 26395-Census 2011), except 160 no. of villages which are either un-inhabited or located in PGR/VGR]

**Table - 12.13: DDUGJY-METERING STATUS**

Item	Target	Yearly Achievements			Total Achievement
		2018-19	2019-20	2020-21	
Feeder Metering (No.)	260	53	132	75	260 (100%)
DTR Metering (No.)	17118	-	5498	11620	17118 (100%)

Source: APDCL

**Table - 12.14: STATUS OF ELECTRIFICATION UNDER SAUBHAGYA**

Particulars	Target	Yearly Achievements			Total Achievement	% of Achievement
		2018-19	2019-20	2020-21		
Households (Nos.)	1360125	1160125	197807	41756	1399688	103%
11 KV Line (CKT Kms)	6348.77	3691.81	2206.28	450.68	6348.77	100%
LT 3 PH Line (CKT Kms)	6924.31	3653.03	2911.86	359.42	6924.31	100%
LT 1 PH Line (CKT Kms)	12859.43	6545.91	5646.03	667.49	12859.43	100%
63 KVA DTR (Nos.)	4359	2273	1785	301	4359	100%
25 KVA DTR (Nos.)	6538	3193	2893	452	6538	100%

Source: APDCL

**Table - 12.15: FINANCIAL STATUS UNDER XII PLAN, DDUGJY AND SAUBHAGYA SCHEMES**

Plan	Financial Year 2018-19		Financial Year 2019-20		Financial Year 2020-21	
	Amount Received	Amount Expenditure	Amount Received	Amount Expenditure	Amount Received	Amount Expenditure
XII Plan	327.58	330.90	184.95	128.88	115.47	131.67
DDUGJY	287.01	327.30	494.16	292.64	2.74	143.67
SAUBHAGYA	814.95	854.04	759.73	656.83	476.91	431.29
TOTAL	1429.54	1512.24	1438.84	1078.35	595.12	706.63

Source: APDCL

**INITIATIVES ON SOLAR POWER GENERATION IN ASSAM:**

The current energy scenario and the deteriorating environmental plight even threatening extinction of humanity have compelled nations to embrace Renewable Energy research & development. Economic development of a state resembles the overall growth in various sectors. Consumption of electricity in Assam is increasing at a steady pace every year hence; to reduce the conventional energy consumption growth in renewable energy field is extremely crucial.

**Assam Energy Development Agency**

The Assam Energy Development Agency (AEDA) will ensure the convergence in the areas of New and Renewable Sources of Energy (NRSE) for the State of Assam by disseminating information to initiate, promote, support and co-ordinate all activities in the field of Renewable Energy Sources with other stakeholders and by concerted efforts of governments, local institutions, NGOs, the private sector as well as the international community towards the promotion of different DRE technologies. As a technical entity in new and renewable energy sources within the state, the organisation is responsible for exploring and promotion of various renewable energy technologies through different decentralized power generation models to achieve SDG7.

AEDA is implementing various types of renewable projects in the solar field, viz. Rooftop SPV, Solar Street Lights, Floating Solar Power plants since inception.

#### **Rooftop Solar Photovoltaic Plants**

Rooftop Solar plants has become ubiquitous in Assam from the last few years, as this is the optimum way of utilising the free unused space on the top of the roof for minimising the electricity consumption from the utility. AEDA has already executed a total capacity of around 5464.825 kW of solar PV plants under 14 MW capacity project up to the end of 2019-20 and 1529.9 kW of rooftop solar PV projects under 8 MW capacities in different districts all over Assam was implemented during 2020-21. District wise status of implementation is given in Table-12.16.

**Table - 12.16: DISTRICT WISE 8MW GRID-CONNECTED ROOFTOP SPV PLANTS IN ASSAM DURING 2020-2021**

Sl. No.	Districts	Total Nos.	Capacity in kW
1	Kamrup (M)	195	1210.91
2	Kamrup	2	7.26
3	Dibrugarh	1	11
4	Tinsukia	4	28.59
5	Sivsagar	11	54
6	Jorhat	26	120.71
7	Nagaon	4	33
8	Golaghat	1	6
9	BiswanathChariali	1	3
10	Lakhimpur	1	3
11	Baksa	1	6.51
12	Barpeta	4	8.05
13	Nalbari	3	12.87
14	Dhubri	1	8
15	Goalpara	1	2
16	Bongaigaon	2	15
	Total	258	1529.9

*Source: Assam Energy Development Agency*

#### **Off-grid projects commissioned by AEDA**

AEDA collaborated with Climate Cell of ASTE Council in Practicing Climate Resilient Practices in Hatimuria, Mayong Revenue Circle, Morigaon. Two numbers of systems of 1kW at Hatimuria Arunudoy Yuva Vikas Samiti and 2kW at off-grid solar power plant In Hatimuria Balika LP School Are Installed.

AEDA along with NORTHEAST RENEWABLE ENERGY RESEARCH LAB-Jorhat with the initiative of Government of Assam executed a project of Hatching Quail Eggs through low cost Solar Incubator.

#### **Support extended by AEDA to various industrial organisations**

AEDA supported AIIDC for installing 50 nos. Solar Street Lights in Tinsukia and 33 nos. in Sivasagar. Also supported ARIAS to survey 20 potential sites for installing solar systems for public facilitation centre in Dima-hasao and Karbi-Anglong autonomous district.

### Solar Street Light

Solar Street light is one of the most beneficial elements on the societal level, as it is designed to light up rural roads during the night hours. Keeping in view, its environmentally friendly uses and advantageous in lowering huge quantity of carbon emission AEDA has allocated 13959 nos. of Solar Street lights till date in several districts of Assam and is targeting to install the remaining 6051 nos. by March'22 under the initiative of Ministry of New and Renewable Energy (MNRE), GOI.

**Table - 12.17: DISTRICT WISE SOLAR STREET LIGHT PROJECTS UNDER AEDA**

Sl. No.	District	2019-20 (no.)	2020-21 (no.)	Total (nos.)
1	Baksa	130	480	610
2	Barpeta	0	10	10
3	Biswanath	0	770	770
4	Bongaigaon	0	1500	1500
5	Cachar	20	0	20
6	Dhemaji	0	0	0
7	Dibrugarh	0	360	360
8	DimaHasao	0	0	0
9	Goalpara	0	10	10
10	Golaghat	0	70	70
11	Jorhat	30	690	720
12	Kamrup (M)	0	130	130
13	Kamrup (R)	0	90	90
14	KarbiAnglong	0	20	20
15	Karimganj	100	0	100
16	Lakhimpur	0	2000	2000
17	Nagaon	0	100	100
18	Nalbari	0	20	20
19	Sivasagar	400	1215	1615
20	Sonitpur	40	1117	1157
21	Tinsukia	0	100	100
22	Udalguri	0	0	0
	Total	720	8682	9402

*Source: Assam Energy Development Agency*

In addition to the activities of Power Department including AEDA towards increasing the use of renewable energy sources, the Agriculture and Irrigation Department of the State has also started contributing to popularise the use of renewable energy by installation of Solar PV Pump sets for irrigation. Annexure-12.2 and Annexure-12.3 shows the Physical Progress of Renewable Energy Related Performance of Agriculture and Irrigation Department till the end of 2020-21.

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## 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 up its transport sector, particularly the surface transport sector 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 not only of Assam, but for the entire north east region.

## ROADS

The road network in Assam comprises of total 58944 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 55061 km road length maintained by the PWD, 32605 km is blacktopped, 654 km is cement concrete, 5782 km is inter- locking cement concrete block pavement (ICBP) and 16020 km is metalled and un-metalled roads. Table-13.1 shows the road length network maintained by the state PWD in Assam.

TABLE 13.1: ROAD NETWORK IN ASSAM (in KM)

Items	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Surfaced Road*	25546	27003	28480	30048	31493	32605
Unsurfaced Road	19316	18551	18917	20784	17284	16020
National Highway	3862.53	2782.34	3900.44	3890	3893	3882.98
State Highway	2530	2530	2530	2530	2530	2530
Major District Road	4379	4379	4379	4379	4379	4379
Rural Road	36544	37030	40367	45336	46344	46344
Urban Road	1409	1615	1714	1714	1739	1739

\*Excluding National Highways

Source: Office of the Chief Engineer PWD (Roads), Assam

The table shows that the length of surfaced roads in Assam has increased by 7059 km during 2015-16 to 2020-21 with an increase of 27 percent. In the rural areas, the road length has increased from 36544 km in 2015-16 to 46344 in 2020-21 km with an increase by 27 percent.

ASOM MALA (AS ON 31<sup>ST</sup> MARCH, 2021)

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. It is an umbrella programme with different roads projects from various funding sources including State's own budgetary resources under SOPD, Externally Aided Projects (EAP), etc under it. The vision is to develop best quality infrastructure through (i) Improvement and up gradation of state highways and major district roads to highway standards meeting road safety norms; and (ii) Developing high speed road corridors for efficient transportation for fostering growth.



An 18 (eighteen) number of contracts for improving 343 km of roads mostly to two lanes with paved shoulders are in progress under SOPD. The total sanctioned amount including cost of DPR preparation, project management, land acquisition, utility shifting, etc is Rs. 2750 crore. The Asian Infrastructure Investment Bank (AIIB) funded Assam Secondary Road Network Improvement Project (ASRIP), procurement for improvement and upgradation of 6 roads in 8 contract packages for about 250 km are to be initiated in the first part of the financial year 2021-22. The total cost of the road and bridge works along with the land acquisition, utility shifting, etc is expected to be Rs. 3500 crore.

Under the externally aided Assam Road Network Improvement Project (ARNIP) aided by Asian Development Bank (ADB), procurement for improvement and upgradation of 6 roads in 11 contract packages for about 313 km are to be initiated in the latter half of the financial year 2021-22. The total cost of the road and bridge works along with the land acquisition, utility shifting, etc is also expected to be of similar value as that of the aforesaid EAP.

### **ROAD NETWORK MASTER PLAN**

The Road Network Master Plan for improving the state roads with a long term perspective is under preparation as part of the Asom Mala program and is expected to be completed within 2021-22. It is being prepared considering different aspects of road connectivity, accessibility and mobility requirements including enhancement of road network required in the next 20 years to support economic growth and all-round development of the state. Extensive data, sectoral plans, projects reports are being collected and analyzed for ascertaining the growth of population, urbanization, employment, etc. towards determining the travel demand. The adoption of the plan is expected to support development of all sectors including transport, industry and commerce, tourism, agriculture, mining, etc.

### **NEW ROADS AND BRIDGES**

The State intends to carry forward the road improvement works and supplement the programme by taking up four more roads and two major bridges. It includes road from Kokrajhar town to Rupsi airport; Rowta Missamari ; Dirak gate Bijulibon Pengeree; and Gohpur Dolpur (Ghagrabasti to Hawajan). It will exclude the road sections coming under PMGSY Phase III. The total length is expected to be about 173 km. There will also be two major bridge works, one over river Subansiri at Ghunasuti for a length of about 2.4 km to provide connectivity between Lakhimpur and Bebejia; another bridge over river Pagladiya of length of about 1 km to provide connectivity between Kumarikata to Jalah. Procurement of works is planned to be started in 2021-22.

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 which is also completed. Moreover one new flyover is under construction at Maligaon Chariali to ease the traffic

congestion. Alternative road to Kamakhya temple will be ready very soon. 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**

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 endeavouring 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 31<sup>st</sup> March 2021, 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, Government of India, 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 NH 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 NH in the North Eastern Region are:

- A length of 110 Km of NH 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 NH Other Projects NH(O) are in progress.

### ASSAM

- |   |
|---|
| <ul style="list-style-type: none"> <li>• <i>As on 31<sup>st</sup>December, 2020, 26 improvements work costing Rs 939.64 crore are in progress under NH(O) in Assam.</i></li> </ul>  |
| <ul style="list-style-type: none"> <li>• <i>A length of 667 Km connecting Silchar to Srirampur via Lumding-Daboka-Nagaon Guwahati in Assam has been entrusted to NHAI &amp; 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.</i></li> <li>• <i>Under CRF, 41 works amounting to Rs 1335.14 crore are in progress for the improvement of State roads.</i></li> </ul> |
| <ul style="list-style-type: none"> <li>• <i>Under Inter-State Connectivity (ISC) scheme, one work amounting to about Rs 96.18 crore is in progress.</i></li> </ul>  |
| <ul style="list-style-type: none"> <li>• <i>Government has approved implementation of Arunachal Pradesh Package of Roads &amp; 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.</i></li> <li>• <i>Government has upgraded 701.85 kilometres of road under NHAI and 929.23 kilometres of road under NHIBCL to 4-lane national highways.</i></li> </ul>  |

The physical achievement (in km) of SARDP-NE (Phase A+ Arunachal Pradesh) was 3445 km upto 31<sup>st</sup> 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 26<sup>th</sup> 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 Barpetta Road, Chapaguri (Bongaigaon), BRPL Refinery, Raha, Dimow, Barghat near Nagaon, Kathiatiali near Doboka and 1 Rail Over Bridge at Jagiroad.

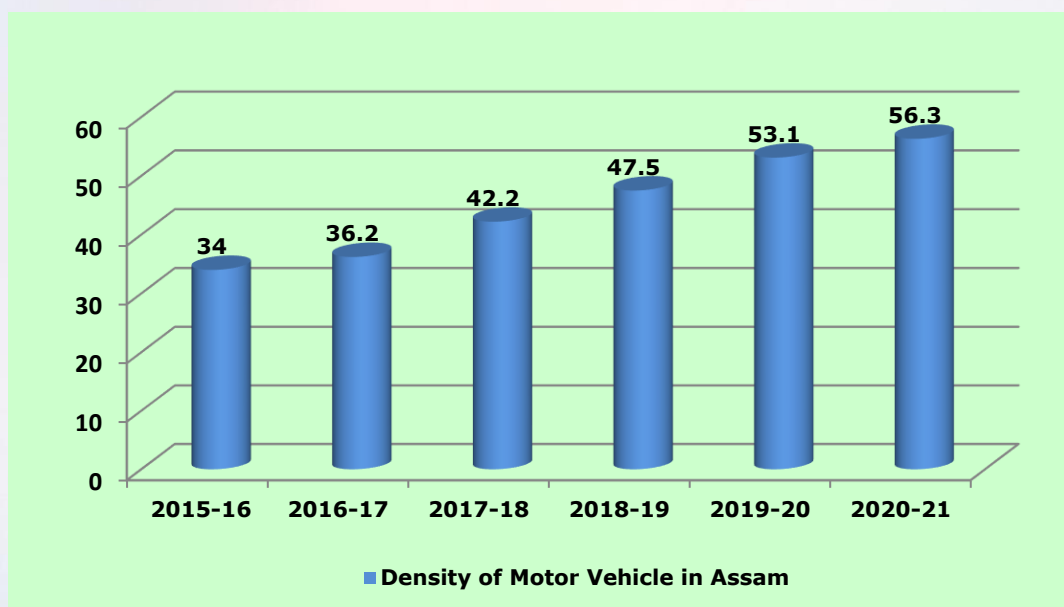
## MOTOR VEHICLES

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 4418715 as on March 2021 compared to 4167346 on March 2020 and 3725529 on March 2019, an increase of 6.03 percent in 2021 over 2020. Out of the total 4418715 motor vehicles during 2020-21 on road, about 65.15 percent vehicles were two wheelers.

According to the motor vehicle registering authority of the State as many as 251214 new motor vehicles were registered during the year 2020-21 in the state whereas 473668 was added in 2019-20 which is a decrease of 46.94 percent than that of the previous year which is due to the pandemic Covid-19.

The density of motor vehicles in Assam is 56.3 in 2020-21 whereas it 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. Motor vehicle density in road of Assam has significantly increased from 6.8 per sq. km of road in the year 2000-01 to 56.3 per sq. Km in the year 2020-21 as seen in the Figure 13.1 below.

**FIG.13.1. DENSITY OF MOTOR VEHICLE IN ASSAM**

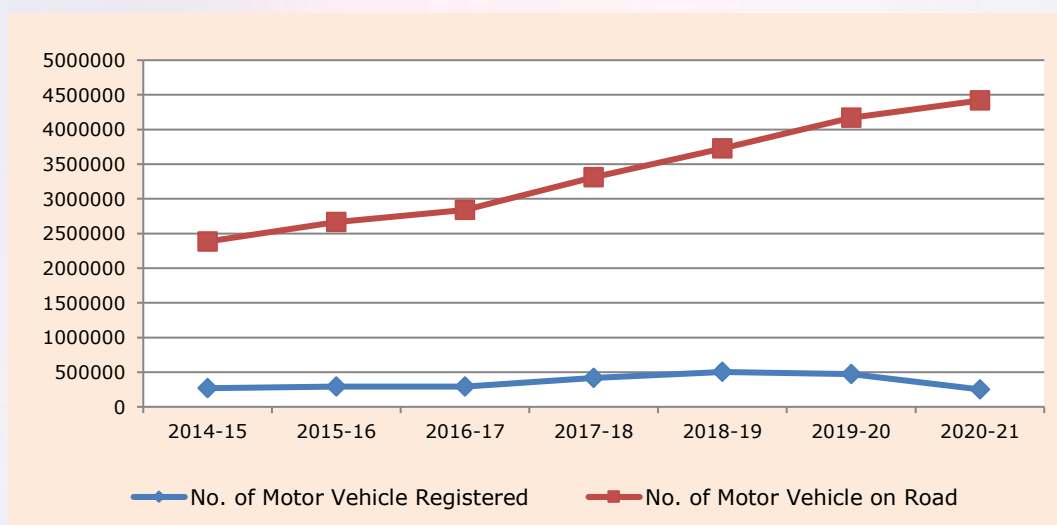


**TABLE 13.2: NUMBER OF MOTOR VEHICLES REGISTERED AND MOTOR VEHICLE ON ROAD IN ASSAM**

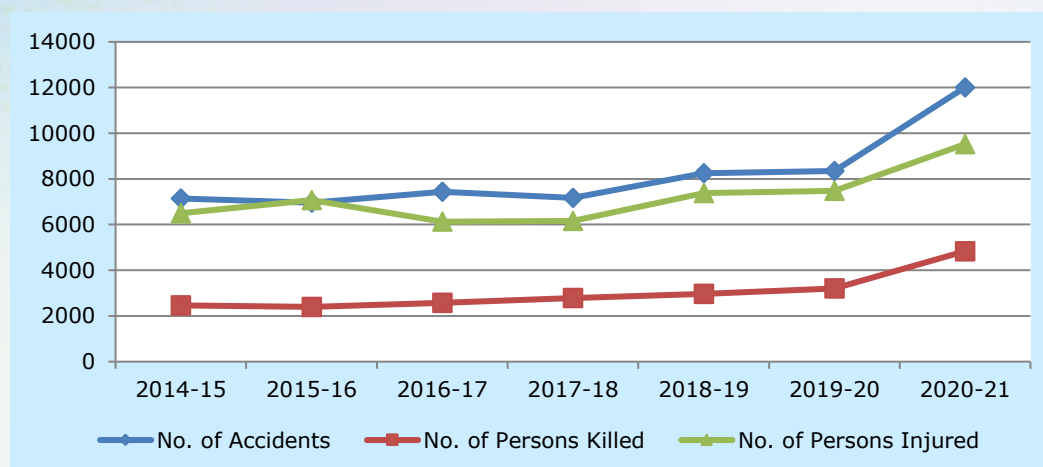
Year	No. of Motor Vehicle Registered	No. of Motor Vehicle per		No. of Motor Vehicle on Road	No. of Motor Vehicle on Road per	
		100 Sq. km	Lakh of Population		100 Sq. km	Lakh of Population
2000-01	52518	67	198	534885	682	2017
2010-11	199076	253	655	1363625	1738	4484
2011-12	226010	288	725	1528269	1948	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
2020-21	251214	320	805	4418715	5633	14160

Source: Office of the Commissioner of Transport, Assam

Figure 13.2 shows the increase in the number of motor vehicles registered and the numbers of vehicles on road which shows significant increase over the years.

**FIG.13.2. NUMBER OF MOTOR VEHICLES REGISTERED AND THE NUMBERS OF VEHICLES ON ROAD IN ASSAM**

The number of persons killed in 2020-21 was 4835 which was 3208 in 2019-20. The number of persons killed per 100 accidents recorded was 40.25 during 2020-21; where it was 38.4 person killed per 100 accidents during 2019-20.

**FIG.13.3. TREND OF NUMBER OF ROAD ACCIDENTS & PERSONS KILLED, INJURED IN ASSAM**

The Commissionerate of Transport, 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 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 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 parts 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 ISBTs 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 SHGs to enter this industry. The government will provide seed money up to 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

The scheme “Mukhyamantrir Grammya Paribahan Achoni” 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

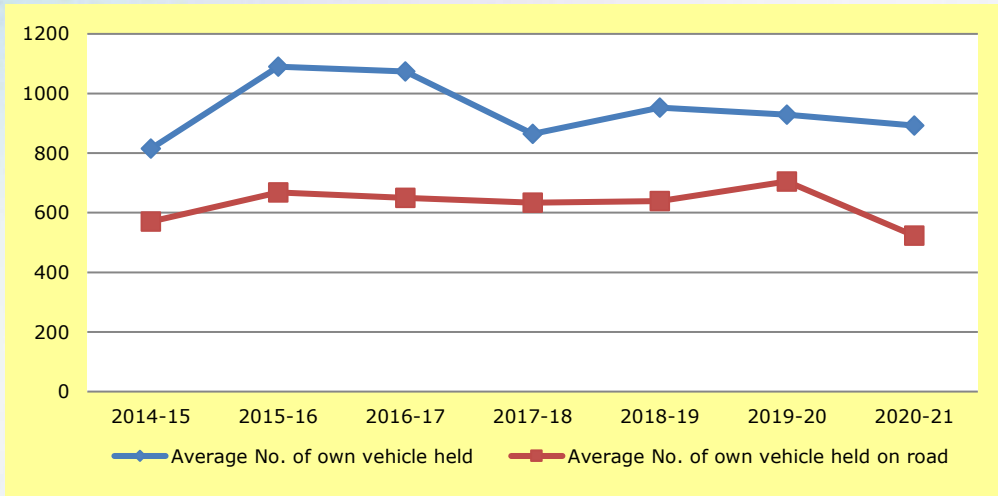
Kamakhya Temple, one of the prime pilgrimage destinations of India, draws people from different parts of India throughout the year. The four day Ambubachi Mela, has its own significance and draws about 2 million pilgrims every year. To make provision of adequate transports and amenities of sanitation are major challenges to the state. The Government of Assam has initiated a scheme called “Swachh Kamakya –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. The performance of ASTC during the period 2010-11 to 2020-21 is in Table- 13.3.

**TABLE 13.3: PERFORMANCE OF ASSAM STATE TRANSPORT CORPORATION**

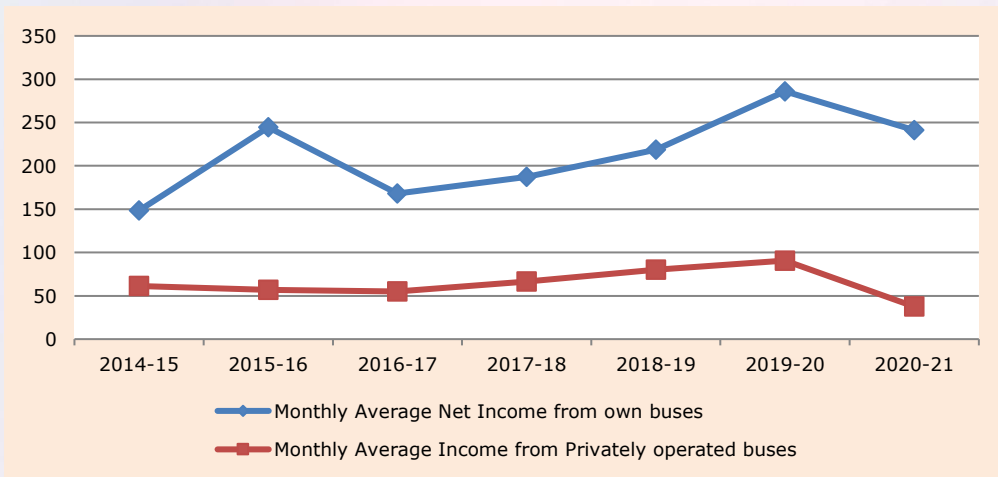
Year	Average No. of own vehicle held	Average No. of own vehicle held on road	Fleet utilisation (%)	Total km operated during the year	Monthly Average Net Income from own buses (Rs. in lakh)	Staff-Bus Ratio	No. of Private buses operated under ASTC	Monthly Average Income from Privately operated buses (Rs. in lakh)
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
2020-21	892	523	58.63	160.89	241.18	7:01	713	37.56

Source: Assam State Transport Corporation

**FIG.13.4. TREND OF AVERAGE NUMBER OF OWN VEHICLE HELD & AVERAGE NUMBER OF OWN VEHICLE HELD ON ROAD**



**FIG.13.5. TREND OF MONTHLY AVERAGE NET INCOME OF ASTC OWNED BUS & PRIVATELY OPERATIONAL BUS**



The average number of own vehicles of the ASTC on road was 523 in 2020-21 compared to 705 in 2019-20 which shows a decline of 25 percent due to the Covid-19 pandemic. The number of private buses operated under ASTC is 713 in 2020-21 whereas in 2019-20 it was 1339 and 1367 in 2018-19, which shows a declining trend as seen in Table 13.3.

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 2520.13 km as on 31.03.2021. The running track kilometre of Railways under broad gauge railway is 2519.79 kms and in Assam and 4151.31kms respectively in North Eastern Railway. According to the Indian Railways Yearbook 2019-20, the total railway route length of India as on 31<sup>st</sup> March, 2020 was 67956 km, of which electrified route length was 39,329 km. Assam shares 3.71 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 25<sup>th</sup> Dec, 2018. The project was completed at 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 Siripani station of Rangia – Murkongselek section of railway in north bank.

## AIR TRANSPORT

Assam is well connected with the rest of the country through Air. The state has seven operational civil airports located at Guwahati, Tezpur, Jorhat, Dibrugarh, North Lakhimpur, Dhubri and Silchar. All major airlines including private commercial airlines viz., Indigo, Go-air, Air Asia, Spice jet, Vistara etc. are operating their flights to and from Guwahati from different locations of the country and an international flight to Thailand from Guwahati. In addition to these civil airports, small private airstrips in the interior areas are also present to address the need of the corporate houses.

The Lokapriya Gopinath Bordoloi International Airport, Guwahati is the only International Airport in the North-East region of India.

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 Lakhimpur and Bhanga as National Waterways No.6 for unified development of the waterways for shipping and navigation and transportation of cargo to the North Eastern Region particularly in the states of Assam, Nagaland, Mizoram, Manipur, Tripura and Arunachal Pradesh.

The Government of Assam has launched a project to transform the quality of Inland Water Transport (IWT) services and integrate high quality passenger and vehicle ferry services into Assam's wider transport network system with the financial assistance from the World Bank. The World Bank has sanctioned an amount of Rs. 770 crore towards realising this goal to the Assam Inland Water Transport Development Society (AIWTDS), an autonomous society registered under Transport Department, Government of India.

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.

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 1979198 in 2020-21 compared to 6585905 in 2019-20 and to 14,899,522 in 2018-19 which shows a decline of 69 percent in 2020-21 over 2019-20 due to covid-19 pandemic. Further the total amount of goods carried is 42030 quintals in 2020-21 and was 69313 quintals in 2019-20 again a decline of 39 percent. The revenue earned by the IWT declined to 1.6 crore in 2020-21 compared to 3.5 crore during 2019-20.

## COMMUNICATION

### POSTAL COMMUNICATION

The Assam Postal Circle has a network of 4005 post offices and 4466 letter boxes [as on 31<sup>st</sup> March 2021] out of which 3687 post offices in 2020-21 are located in rural 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 4005 modernised post offices and 4005 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.

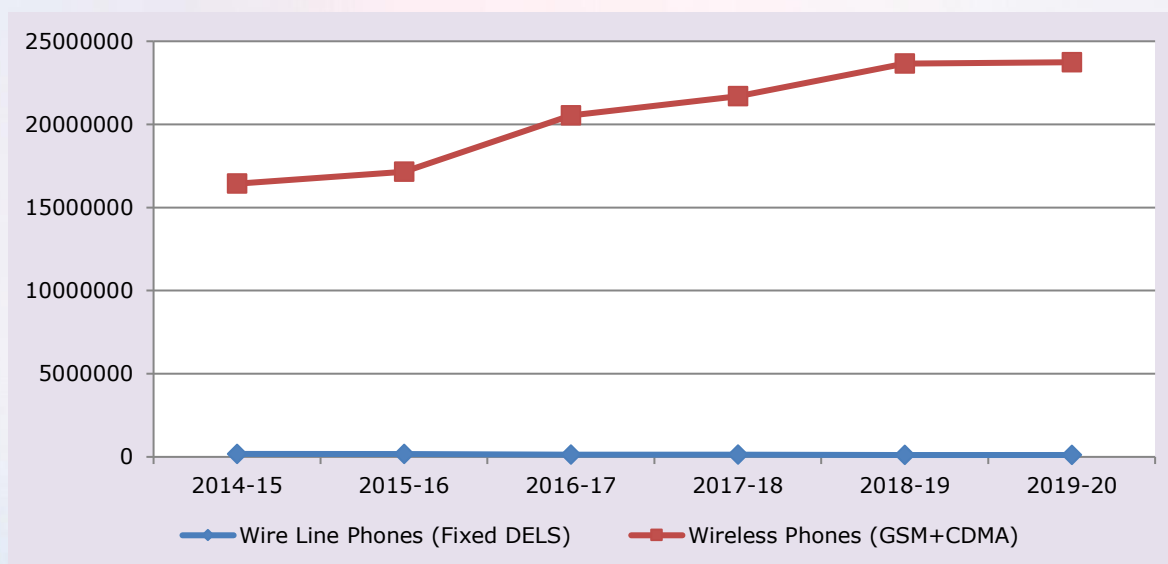
It is evident from the status of telecom facilities in Assam shown in the Table 13.4 that the overall tele-density (Telephone per 100 of population) of the state as on November 2020 was 68.66 as against the national average 86.55. While the urban tele-density of Assam stood at 167.16 as on November 2020 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.

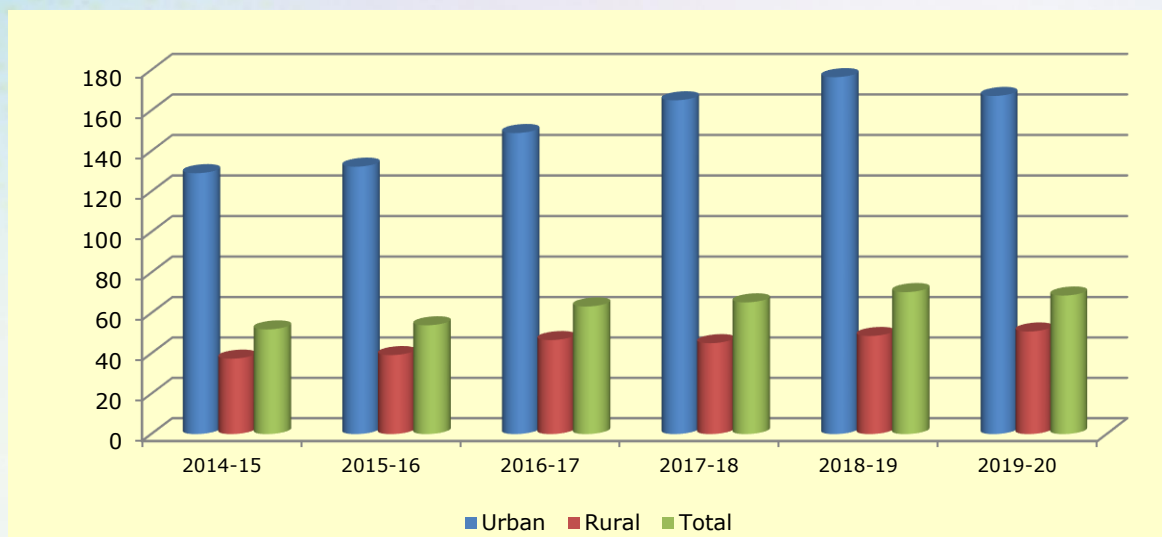
**TABLE 13.4: TELECOM STATISTICS OF ASSAM**

Item		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
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 DELS)	194395	183984	178191	167434	130810	134850	111518	119527
	Wireless Phones (GSM+CDMA)	14387664	15278208	16433438	17150891	20536756	21703793	23656788	23739004
	Total	14582059	15462192	16611629	17318325	20694170	21838643	23768306	23858531
Tele density (%) (Telephone per 100 population)	Urban	130.92	126.27	129.05	132.26	148.86	165.02	176.53	167.16
	Rural	31.13	34.36	37.41	39.18	46.63	45.09	48.66	50.88
	Total	46.51	48.74	51.9	53.95	63.25	65.29	70.35	68.66
Public Call Offices (Local + STD + Highway)		11929	11207	10350	8909	6321	5379	4763	NA

Source: Department of Telecommunication, Govt. of India, Assam Circle

**FIG.13.6. TREND OF TOTAL WIRE-LINE & WIRELESS PHONE**



**FIG.13.7. TELE-DENSITY FIGURES IN ASSAM**

The total number of telephone connections as of 2019-2020 was 23858531 compared to 23768306 in 2018-19 and 21838643 in 2017-18. There is an increase of only 1(one) percent in wire-line phones in 2020 compared to 2019. This is due to the increase in the use of wireless phones.

In respect of wireless phone connections, there were 2.44 crore mobile subscribers in Assam as on October 2021. BSNL provides only around 12.73 percent of the total mobile connections in the state as on October 2021.

Table-13.5 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 8658069 in August 2020 to 8737018 in October 2021, an increase of 0.9 percent as most of the customers have ported to Reliance Jio network due to poor network of other providers, whereas Vodafone and Idea networks have joined hands together and has come under one banner.

**TABLE 13.5: WIRELESS SUBSCRIBERS IN ASSAM (AS ON 31<sup>ST</sup> AUGUST, 2020)**

Circle	Wireless Subscriber Group					Total
	Bharati	Reliance	Vodafone-Idea	Reliance Jio	BSNL	
Assam	9748436	-	2844345	8737018	3111491	24441292
India	353976283	5404	269026082	426598763	11337141	1166299754

Source: Telecom Subscriptions Reports, TRAI

**FIG.13.8. COMPARISON OF PERCENTAGE OF WIRELESS SUBSCRIBER GROUP IN ASSAM & INDIA**

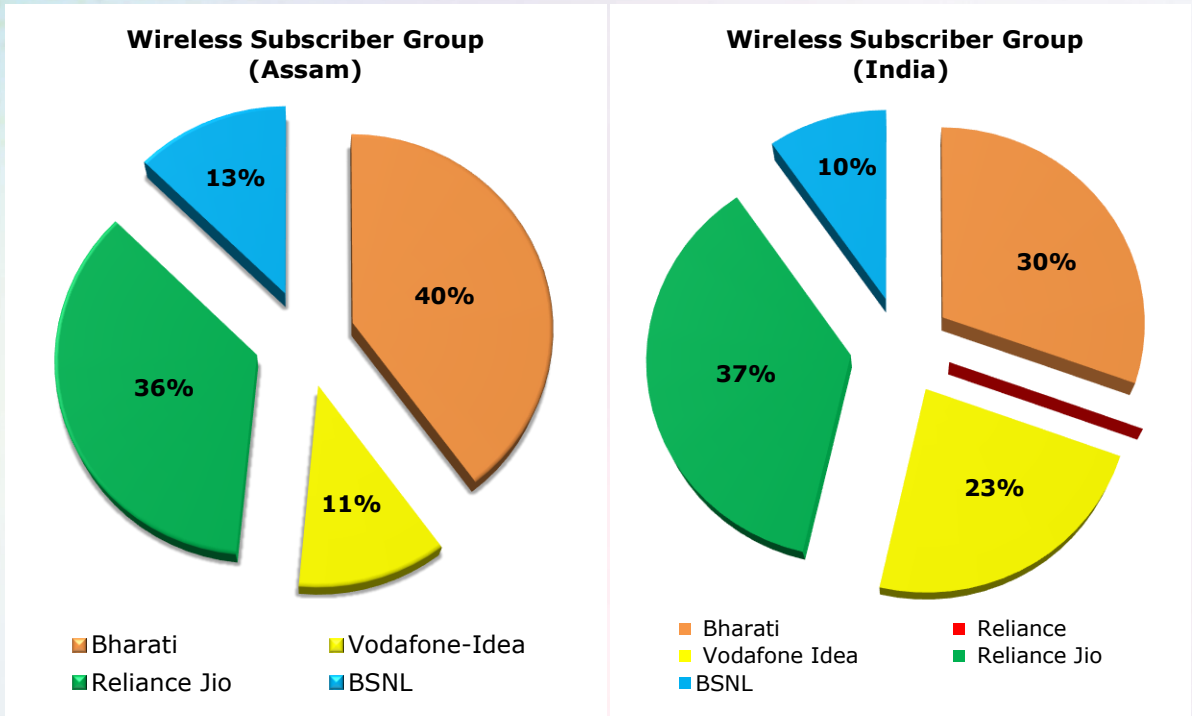


Table-13.5 as well as Fig.13.8 show the wireless subscribers in Assam and All India, where Reliance Jio network is the highest provider of network both in Assam and India.

## CHAPTER -XIV

## INSTITUTIONAL FINANCE

Institutional Finance is playing an important role in economic Development of the State by mobilizing of deposits and disbursement of credit to various sectors of the economy. The Government has increasingly began to tap institutional finance from banks and other term lending institutions for financing various development programmes in Assam as a supplement plan of financing and in this regard Banks/Financial Institutions are playing an important role. These institutions cater to credit needs of all sections of the society as well infrastructure projects. Scheduled commercial banks and nationalised banks are actively engaged in providing credit in rural areas. Non-banking financial institutions are financial intermediaries playing an important role in capital formation. These institutions cater to the increasing financial needs of household/micro finance/corporate sector.

**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. As per the SLBC Report there are 13 public sector banks, 15 private banks, 1 regional rural bank. As on 31<sup>st</sup> March, 2021 a total number of 2925 banking offices of SCB (about two percent of the total banking offices in India) were functioning in the State. Of which 48.9 percent were in rural areas, 28.6 percent were in semi-urban areas and 22.4 percent in urban areas. The Credit-Deposit Ratio (CDR) of the SCB in State was 46.63 percent as per the quarterly statistics released by the RBI whereas, that of All-India was 71.47 percent in the year. The facility of Automated Teller Machine in the State was 3887 as against 235588 at All India Level as on 31<sup>st</sup> March, 2021. Growth of SCB in the State and status of deposits and credit since 2010 are given in Table 14.1 and district wise status of CD Ratio in respect of all SCBs and of RRB (AGVB) are given at Annexure 14.1 and 14.2.

**Table - 14.1: GROWTH OF SCHEDULED COMMERCIAL BANKS IN ASSAM & INDIA**  
(as on 31<sup>st</sup> March, 2021)

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	8900111	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
2021	2925	150207	175579	15439970	81870	11035347

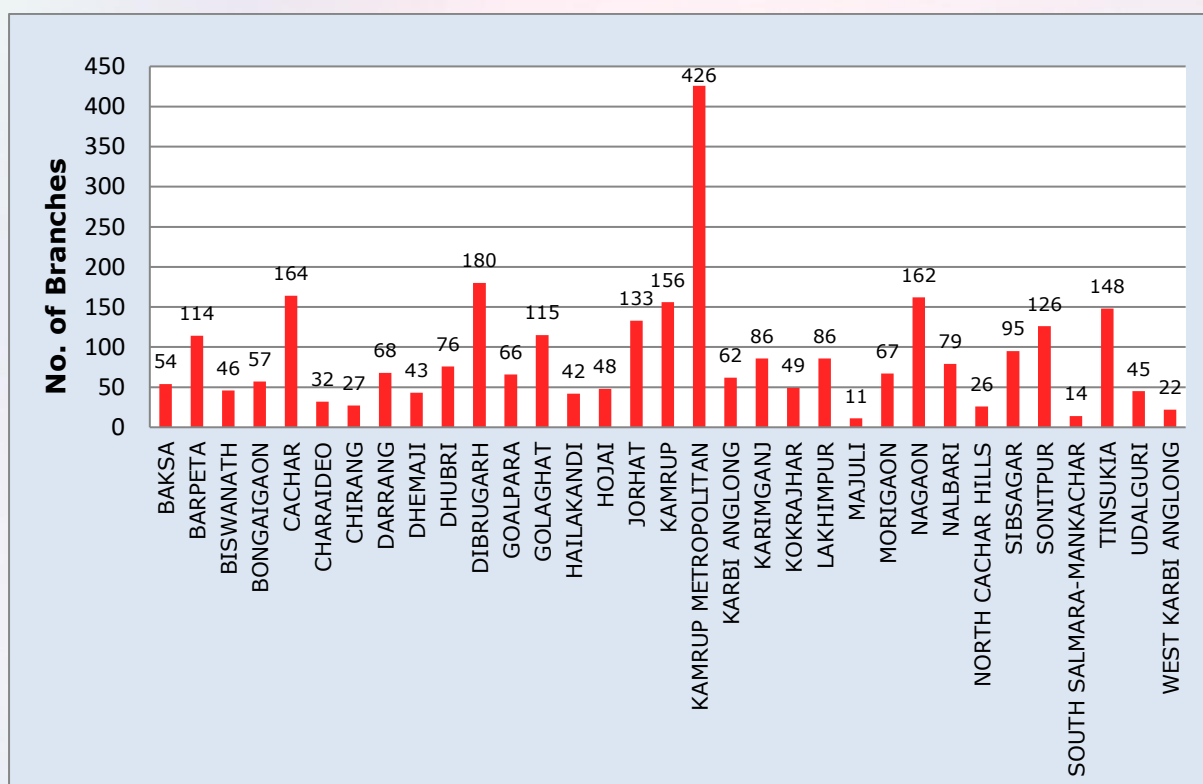
\*Reporting Offices Only

Source: Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2010 to March 2021 of RBI

In Assam, there were 2925 SCB branches (Reporting offices only) in the State as on 31<sup>st</sup> March, 2021. 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. However, as seen from the Table 14.1 over the period from 2010 to 2021 the compound annual growth of bank branches in Assam has been 6.69 percent which is higher than the all-India growth of 5.43 percent. Although compound annual growth of deposits in Assam (12.19 percent) had been higher than the all-India level (11.63 percent), the share of the State’s deposit in all-India total in 2021 was merely 1.14 percent. Similarly for credit compound annual growth in Assam (14.59 percent) had been higher than the all-India level (11.46 percent), but the share of the State in all-India total was only 0.74 percent. This clearly indicates the low rate of deposit mobilization as well as credit absorption in the State compared to the all-India level. During 2021, the State stands at 46.63 percent which is below the national credit-deposit ratio of 71.47%.

The distribution of bank branches (as on 31.3.2021) across the districts shows that only ten districts in the State have more than 100 numbers of bank branches. In other words, banking network coverage is not up to the mark in the State.

**FIG.14.1. DISTRICT-WISE NUMBER OF SCHEDULED COMMERCIAL BANKS IN ASSAM: MARCH, 2021**



Among the districts Kamrup (M) has the highest number (426) of bank branches and Majuli has the lowest number (11) of bank branches.

Out of the total 2925 reporting branches of SCBs in the State, 1469 are Public Sector Banks, 778 are Private Sector Banks, 481 Regional Rural banks, 196 Small Finance



Banks/Co-operative Banks and 1 (one) Foreign Bank. As per data from RBI, number of reporting offices of SCB branches in rural areas were 1432, and in semi-urban and urban areas were 837 and 656 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 31<sup>st</sup> March, 2021 is 12307 against all-India average of 9074 persons per bank branch [As per projected population, 136,30,06,000 persons in India and 3,59,98,752 persons in Assam as on 1<sup>st</sup> March, 2021]. 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 in eight districts the figure is above 15000 and in five districts each operating branch has to serve more than 20000 populations.

### Credit-Deposit of Scheduled Commercial Banks:

Of the total 2925 SCB branches as on 31<sup>st</sup> March 2021, 49 percent are in rural areas, 28.6 percent are in semi-urban areas and 22.4 percent are in urban areas of the State. Table-14.2 shows Deposit and Credit of SCBs in the State.

**Table – 14.2: CREDIT & DEPOSIT OF SCHEDULED COMMERCIAL BANKS IN ASSAM**

Item	Rural		Semi-Urban		Urban	
	2020	2021	2020	2021	2020	2021
No. of Reporting offices	1404	1432	824	837	661	656
Deposits (Rs. in Crore)	34659	39220	45410	48488	86201	87871
Credit (Rs. in Crore)	18702	22271	21536	24812	30419	34786
C-D Ratio (in %)	54	56.78	47	51.17	35	39.59

Source: Reserve Bank of India

Although the rural areas have more 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 for 2021, more than 50 percent was from urban areas, 27.6 percent from semi-urban areas and 22.34 percent from rural areas. In respect of credit disbursement, the share of rural branches was 27.2 percent and the share of semi-urban and urban branches are 30.31 percent and 42.49 percent respectively as on 31-03-2021. This is because of capacity to save and invest in rural people in the State continues to be low.

The trend of CD Ratio of SCB 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 46.63 percent as on 31-03-2021, which is however a slight improvement of previous year's position.

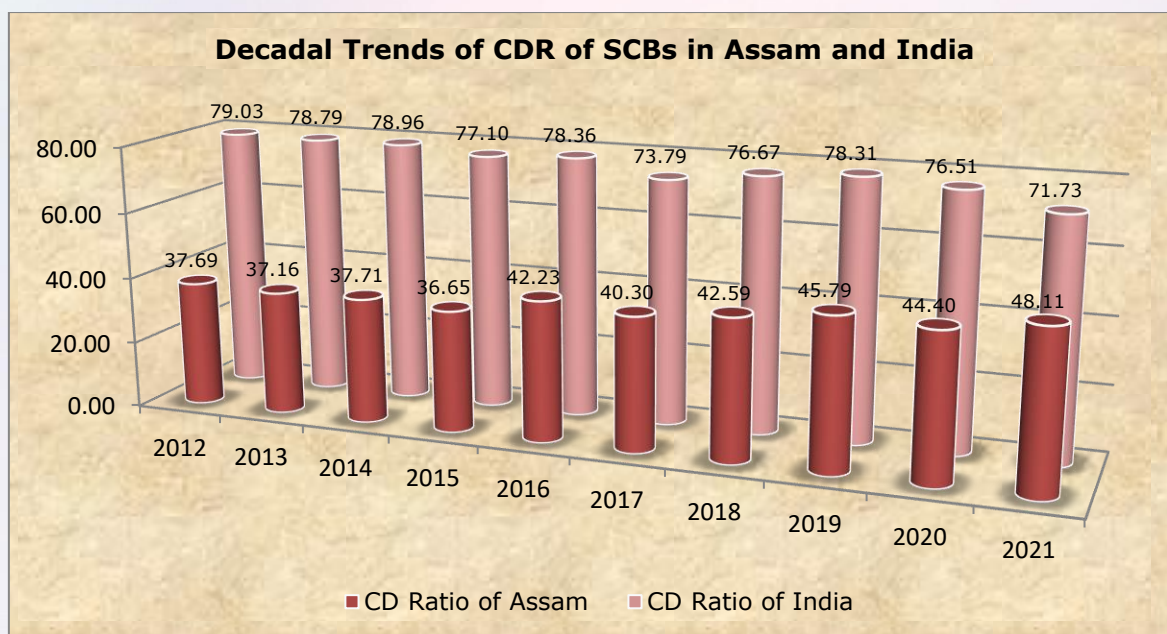
The share of aggregate deposits and credit as on 31-03-2021 of Private Sector Banks in Assam was 15.2 & 29.45 percent respectively and of Public Sector Banks was 77.44 & 62.59 percent respectively. Table-14.3 shows bank group wise deposits and credit of SCBs.

**Table - 14.3: BANK GROUP-WISE DEPOSITS AND CREDIT OF SCBs IN ASSAM (AS ON 31<sup>ST</sup> MARCH, 2021)**

Bank Group	Reporting offices (in Numbers)		Deposit (Rs. in Crore)		Credit (Rs. in Crore)		Credit Deposit Ratio (CDR) (in %)	
	2020	2021	2020	2021	2020	2021	2020	2021
Private Sector Banks	748	778	23200	26693	20303	24113	87.51	90.33
Public Sector Banks	1469	1469	130978	135969	44438	51242	33.93	37.69
Regional Rural Banks	481	481	11118	11510	4043	4404	36.36	38.26
Small Finance Banks/ Co-operative Banks	17	196	817	1238	1773	2080	217.01	168.01
Foreign Bank	1	1	156	169	100	31	64.10	18.34
All SCBs	2348	2925	166270	175579	70658	81870	42.49	46.63

Source: Reserve Bank of India

**FIG.14.2. DECADAL TRENDS OF CDR OF SCBS IN ASSAM AND INDIA**

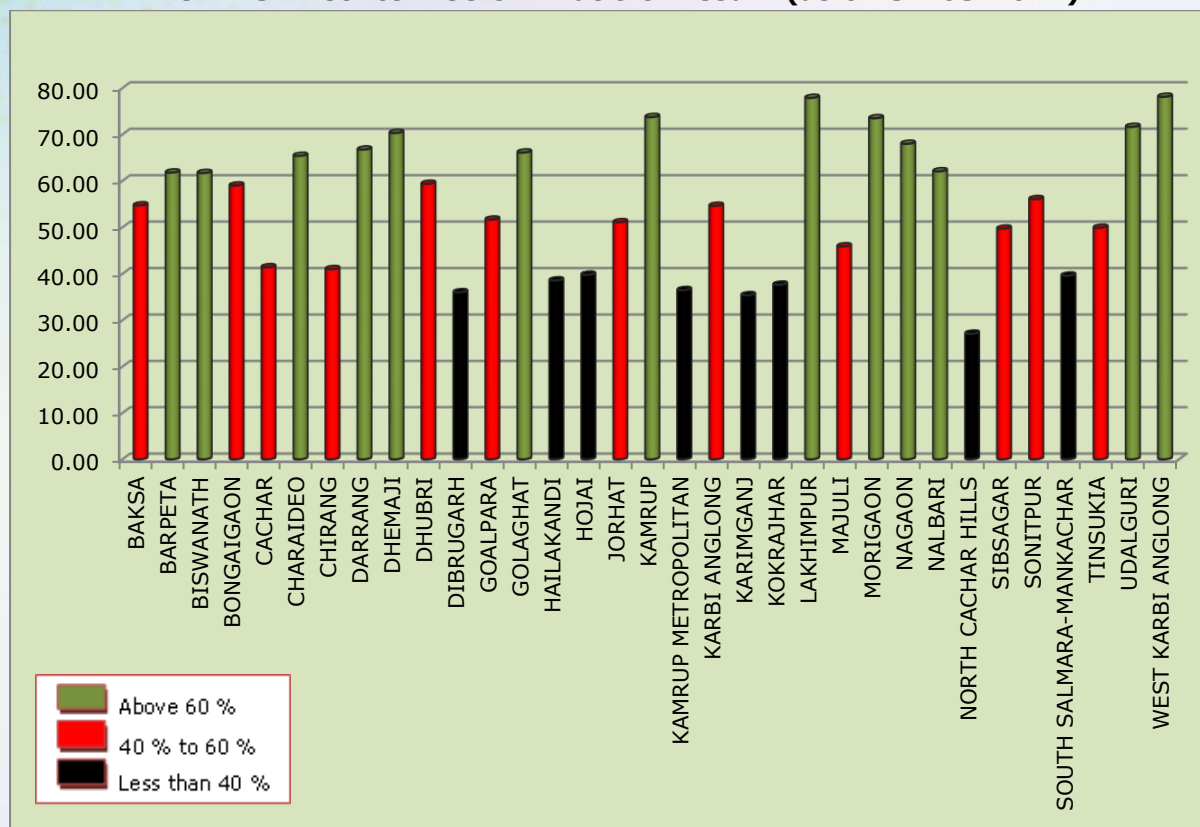


Source: Handbook of Statistics on Indian States, RBI

In Assam, only 13 districts have crossed the 60 percent benchmark fixed for CD Ratio while 12 districts have reached within 40-60 percent level and 8 districts have less than 40 percent. Altogether, there are 20 nos of poor performing districts which need special focus and intervention.

The graph presented below shows district wise status of CD Ratio as on 31.03.2021.

**FIG.14.3. District wise C-D Ratio of Assam (as on 31-03-2021)**



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 shares of aggregate deposits (as on 31-03-2021) of Private Sector Banks in Assam were 15.2 percent and of Public Sector Banks were 77.44 percent.

The deposit accounts of banks show that in 2021, 50.5 percent of the accounts are savings and 41.6 percent are term deposits. Only 7.9 percent deposits were current account type. In rural and semi urban areas of Assam, 62.5 percent and 56.7 percent were savings while 32.2 percent and 36 percent were term deposits respectively. In urban areas however, 48.8 percent deposits of the banks were term deposits accounts. Lower proportion of term deposits in rural and semi urban areas also shows lower long term saving capacity in those areas and also denotes less disposable fund within the banking system for long term investment through credit creation. Table 14.4 shows type wise deposits of SCB in Assam.

**TABLE - 14.4: DEPOSIT OF SCB IN THE STATE BY TYPE OF ACCOUNT (As on 31<sup>st</sup> March, 2021)**

Type of Account	Deposit (Rs. in Crore)								
	2020				2021				% increase in 2021 over 2020
	Rural	Semi-Urban	Urban	Total	Rural	Semi-Urban	Urban	Total	
Current	1681	3059	7990	12730	2082	3527	8242	13851	8.81
Savings	22235	25221	34311	81767	24506	27479	36732	88717	8.50
Term	10743	17130	43900	71773	12631	17483	42897	73011	1.72
Total	34659	45410	86201	166270	39220	48488	87871	175579	5.60

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 as on 31<sup>st</sup> March, 2021. 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. Trends of priority and non-priority sector advances in Assam for the last three years in percentage may be seen at Table-14.5.

**TABLE: 14.5. PRIORITY AND NON-PRIORITY SECTOR ADVANCES IN ASSAM (as on 31<sup>st</sup> March)**

Type of Advance (in %)	Public			Private			RRB (AGVB)			Assam Co-op Apex Bank		
	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019
PSA to Total Adv	52	56.5	59.2	56	66.04	65.7	86	87.69	87.1	86	9.71	8
WSA to PSA	50	23.27	21.2	54	49.24	65.5	99	73.3	73.1	2	62.72	76.4
WSA to Total Adv	26	12.38	12.6	30	32.52	43	85	64.28	63.7	2	6.09	6.1

NB: PSA=Priority Sector Advance; WSA=Weaker Section Advance

Source: Reports of State Level Bankers Committee, Assam

The Annual Credit Plan of the Banks in Assam for the year 2020-21 shows that against a target of Rs. 14774 crore credits to Agriculture and allied sector, achievement was 36.36 percent. Of the target achieved, 14.28 percent was under Crop Loan. The achievement was less than the target achieved for the previous financial year 2019-20, where as, achievement under Agriculture and Allied Sector was 45 percent and achievement under Crop Loan was 23 percent. 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 installment after the crop production. On the other hand the high target achievement under MSME is largely due to the programmes implemented under various government schemes.

Table-14.6 shows Annual Credit Plan performance during 2018-19 to 2020-21.

**TABLE – 14.6: SECTOR-WISE SUMMARY UNDER ANNUAL CREDIT PLAN**

(Rs. in crore)

Sector	2018-19			2019-20			2020-21		
	Target	Achieved	Achievement (in %)	Target	Achieved	Achievement (in %)	Target	Achieved	Achievement (in %)
Agri Priority Sector	13868	7193	52	15758	7119	45	14774	5373	36.36
Crop Loan	7878	1956	25	8899	2072	23	8524	1218	14.28
MSME	4622	11211	243	5869	10614	181	8778	12561	143.09
Other Priority Sector	3123	1929	62	2378	2277	96	3503	1444	41.22
Total Priority Sector	21612	20332	94	24005	20010	83	27056	19379	71.62

Source: Report of State Level Bankers' Committee, Assam

Priority Sector advances (PSA) increased by 14.16 percent during 2021 over the previous year and PSA stands at 55 percent of the Total Advances made by all Bank Groups. It is observed that PSA to Total Advances were 86 percent among the RRB (AGVB) and Co-operative (Assam Co-operative Apex Bank) Bank Group. It is also observed that Priority Sector Advance made by the Co-operative (Assam Co-operative Apex Bank) Bank Group has increased from Rs.140 crore in 2020 to Rs.1223 crore in 2021. It was due to exclusion of food credit amount of the Assam Co-operative Apex Bank shared with the Banking Consortium from the basket of PSA in 2020. Tables 14.7 & 14.8 shows Bank group-wise Priority Sector Advances and Total Advance to PSA & WSA as on 31st March, 2021.

**TABLE: 14.7.**

Bank Group-Wise Priority Sector Advance (Rs. in Crore)			
Bank Group	2020	2021	Percent increase
Public	25858	30742	18.89
Private	15937	16168	1.45
RRBs	3546	3780	6.6
Co-operative	140	1223	773.57
Total	45481	51913	14.14

**TABLE: 14.8.**

Bank Group-Wise Total Advance to PSA & WSA(Rs. in Crore)					
(as on 31.03.2021)					
Bank Group	Total Advance	PSA Advance	Weaker Section Advance (WSA)	WSA to Total Adv (%)	PSA to Total Adv (%)
Public	59209	30742	15367	26	52
Private	28728	16168	8656	30	56
RRBs	4404	3780	3725	85	86
Co-operative	1429	1223	29	2	86
Total	93770	51913	27776	30	55

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. KCC 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 128133 no. of KCC were issued in Assam for the year 2020-21 and compounded to a total of 1100805 no. of outstanding KCC made available by the Banks in Assam since start. Under KCC, a total amount of Rs.911 crore disbursed during 2020-21 to households engaged in Agriculture, Animal Husbandry and Fisheries.

**TABLE: 14.9. BANKWISE PROGRESS UNDER KCC OF ASSAM DURING FY-2020-2021 & O/S (as on 31-03-2021)**

Bank Group	Current Year Disbursed KCC No.	Current Year Disbursed KCC Amount (Rs.Lakh)	Total O/S KCC No.	Total O/S KCC Amount (Rs.Lakh)
Public	100613	73592.09	650796	411780.52
Private	6284	5258.51	155354	45703.76
RRB	20908	11161.40	279700	121867.86
Co-operative	328	1115.44	14955	4540.59
Grand Total	128133	91127.44	1100805	583892.73

Source: Reports of State Level Bankers Committee, Assam

**REGIONAL RURAL BANKS:**

The two RRBs in the State, Assam Gramin Vikash Bank (AGVB) and Langpi Dehangi Rural Bank (LDRB) operating in the Brahmaputra Valley and Barak Valley have been amalgamated with effect from 1<sup>st</sup> April, 2019 as Assam Grameen Vikash Bank covering entire geographical area of the State through its network of 473 branches. Further, after amalgamation of United Bank of India (sponsor bank of AGVB) with the Punjab National Bank, the sponsorship of the bank has gone to Punjab National Bank w.e.f 1<sup>st</sup> April, 2020. District wise deposit and credit status of RRBs are given at Annexure 14.2.

The aggregate deposit of RRBs was Rs.11431 crore at the end of March, 2021 compared to Rs.11118 crore on 31<sup>st</sup> March, 2020 registering an increase of about 3 percent in 2021 over the previous year. As on 31<sup>st</sup> March, 2021, the aggregate volume of credit was Rs.4366 crore compared to Rs.4043 crore on 2020 showing a rise of 8 percent. The C-D Ratio of RRBs was 38.1 percent at the end of March, 2021 compared to 36.3 percent as of March, 2020.

#### **ASSAM CO-OPERATIVE APEX BANK LTD:**

The Assam Co-operative Apex Bank Ltd was established as a State Cooperative Bank under the short Term Cooperative Credit Structure of the State in 1948. The Bank with a network of 67 (sixty seven) branches and 6(six) Zonal Offices spread throughout the state extending all financial services including loans & advances and issuing of KCC to small & marginal farmers of the state for seasonal Agricultural operation and other activities allied to agriculture and other Term Loan through the primary Agricultural Credit Societies (PACS) and also directly to farmers / SHG/JLGs/Individuals/ firms & companies & other. Out of 774 nos of registered PACS (Gaon Panchayat Level Samabai Samittee) at bottom of the structure operating in the state, the Bank has adopted 543 number of PACS for economic development of farmers of which only 290 PACS has availed Credit from the Bank. CD Ratio of the Bank was estimated at 43.64% as on 31-03-2021 against 41.4% as on 31-03-2020. Share of the Bank's Credit flow to priority sector as on 31.03.2021 stood at 85.54% as against 9.70% for the corresponding period as on 31-03-2020 which includes credit participation for food procurement through Food Credit Consortium.

**TABLE: 14.10. POSITION OF TOTAL ADVANCES TO PRIORITY & NON –PRIORITY SECTOR OF ASSAM CO-OPERATIVE APEX BANK LTD**

(Rs. In Crore)

Category	As on 31.03.2020	As on 31.03.2021
[A] Priority Sector: -		
[i] Agriculture	87.57	1191.00
[ii] MSME	17.64	15.37
[iii] Others	34.40	16.39
<b>TOTAL</b>	<b>139.61</b>	<b>1222.76</b>
[B] Non –Priority	1298.31	206.60
Total ( A+B)	1437.92 Cr	1429.36 Cr
[C] CD Ratio	41.39 %	43.64%
[D] Share of priority Sector to total Adv	09.70%	85.54%

Source: Assam Co-operative Apex Bank Ltd.

#### **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 SHG 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, 2021 number of SHG linked with bank credit was 120163 with an outstanding credit amount of Rs.1095 crore. While till the end of 2019-20, a total of 101111 numbers of SHGs were credit linked with credit amount of Rs. 782 Crore.

**TABLE: 14.11. BANK GROUP WISE GOVERNMENT SPONSORED SCHEME STATUS AS ON 31.03.2021**

(Rs. in crore)

Bank Group	NRLM o/s No.	NRLM o/s Amt.	NULM o/s No.	NULM o/s Amt.	PMEGP o/s No.	PMEGP o/s Amt.	SHG o/s No.	SHG o/s Amt.	SUI o/s No.	SUI o/s Amt.
Public	32300	319.06	3303	25.44	25778	358.3	45249	389.55	1133	151.5
Private	499	5.64	111	0.75	113	1.51	970	11.48	83	7.44
RRB (AGVB)	43289	462.7	855	10.09	9001	140.74	73035	679.42	60	8.01
Co-op Apex	1789	10.35	0	0	0	0	909	14.85	0	0
<b>Total</b>	<b>77877</b>	<b>797.8</b>	<b>4269</b>	<b>36.28</b>	<b>34892</b>	<b>500.6</b>	<b>120163</b>	<b>1095</b>	<b>1276</b>	<b>167</b>

NRLM/NULM: National Rural/Urban Livelihood Mission, PMEGP: Prime Minister's Employment Generation Programme, SUI: Stand Up India

Source: State Level Banker's Committee Report, Assam

### Financial Inclusion:

The basic objective of financial inclusion is provision of banking services to under privileged section and to unbank and under-banked 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 unbanked household, based on the guiding principles of banking the unbanked, securing the unsecured, funding the unfunded and serving unserved and underserved areas. As on 31.03.2021 total numbers of accounts under PMJDY was 18263197 and 57.84 percent of the total accounts were opened by female. Out of these PMJDY Accounts 8348019 no. of Accounts has activated RuPay cards and 808005 Accounts were seeded with respective Aadhar numbers. During the year the State Government has disbursed an amount of Rs. 240 crore for providing incentive of Rs. 3,000/- under Phase III of Assam Chah Bagicha Dhan Puraskar Scheme, 2018 to 7,46,667 no. of beneficiaries as a part of Financial inclusion activities aiming to inculcate banking habits among the tea garden workers and to encourage them to utilize the digital payment facility.

On April 5<sup>th</sup>, 2016, Government of India has 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. Disbursements achieved during the FY-2020-21 by all Bank Groups are given at Table 14.12.

**Table - 14.12: ACHIEVEMENT UNDER STAND UP INDIA (SUI) AS ON 31.03.2021**  
(Amongst women, SC & ST category)

Bank Group	No. of Female A/c	Disbursement	SC Male A/c	Disbursement	ST Male A/c	Disbursement
Public	359	36.70	177	18.85	124	12.68
Private	24	4.97	2	0.67	6	1.02
RRB (AGVB)	26	4.91	13	2.38	23	4.54
Co-op Apex Bank	0	0.00	0	0.00	0	0.00

Source: State Level Banker's Committee Report, Assam

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 SCBs, Non-Banking Financial Companies (NBFCs) and Micro-Finance Institutions (MFIs). In turn, MUDRA Ltd. offers refinancing to MLIs for PMMY loans extended by them.

**Table – 14.13: PMMY (MUDRA) STATUS IN ASSAM (As on 31<sup>st</sup> March, 2021)**

Category	Outstanding Number			Outstanding Amount (Rs. in Crore)		
	2019	2020	2021	2019	2020	2021
Sishu	469823	520164	447180	1799	1200	922
Kishore	229248	116030	228394	1886	1617	2467
Tarun	6837	18294	20892	502	1111	1092
Total Mudra	705908	654488	696466	4187	3928	4481

Source: State Level Bankers' Committee, Assam Report

### Redesigned Swami Vivekananda Youth Empowerment Yojana (RE-SVAYEM):

During covid-19 pandemic Atma Nirbhar Bharat Abhiyan had been launched promoting 'Local for Vocal'. Government of Assam had been trying to promote micro, small and medium enterprises since long. SVAYEM scheme was earlier announced in the Budget of 2018-19. As the reach of that scheme has remained limited and the objectives could not be achieved as envisaged, hence, having learnt the shortcomings, **RE-SVAYEM** scheme has been announced in the Assam budget 2020-21. The main target is the youth groups of Assam with entrepreneurial mindset. The scheme will help them to start economically productive small businesses in the rural areas.

For 2020-21, the target has been set as two lakh youths of the state who are either member of an SHG, JLG, FPO or such similar groups. Government of Assam envisaged providing the incentive to 2 lakh youths who are members of such groups and the achievement was 142865.

**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. Rs.9344.82 crore has been sanctioned to Govt. of Assam for the year 2020-21 under RIDF for 4710 No. of different infrastructure projects such as roads & bridges, irrigation, agriculture, rural drinking water, infrastructure for rural education etc. The amount sanctioned for 2020-21 is 14% over the sanctioned amount of 2019-20 and number of Projects taken up under RIDF has also increased from 4138 to 4710 during the period. As against the total amount of loan sanctioned, the state has so far availed an amount of Rs.7341.64 crore. Of the total sanction, more than 56 % of the sanctioned amount has gone to rural connectivity (roads and bridges) while next three major activities funded under RIDF during 2020-21 are Flood Control, Agriculture and Infrastructure for Rural Education.

**Table – 14.14: RIDF PROJECTS SANCTIONED TO GOVT. OF ASSAM***(Rs. in crore)*

Sl. No.	Activity	Number of Projects Sanctioned	Loan Sanctioned	Loan Disbursed (Cumulative) as on 31-03-2021
1	Rural Roads	765	2138.47	1559.74
2	Rural Bridge	1870	3115.45	2542.60
3	Irrigation	314	399.67	322.85
4	Agriculture	106	987.19	846.60
5	Flood Control	338	1159.73	957.27
6	Small Hydel Projects	2	46.14	46.14
7	Fisheries	398	170.57	136.77
8	Pay & Use Toilet	21	8.30	2.49
9	Animal Husbandry & Veterinary	334	244.70	169.00
10	Marketing Infrastructure	6	33.99	30.95
11	Revitalization of Sericulture Farm	40	23.04	20.97
12	Rural Go down	246	100.91	93.86
13	Cattle Feed Plant	1	5.30	1.59
14	Soil Conservation Projects	124	118.28	67.08
15	Infrastructure for Rural Education	142	733.83	531.76
16	Rural Drinking Water	3	59.25	11.97
Total		4710	9344.82	7341.64

*Source: NABARD, Assam Regional Office***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 2081 numbers of projects for an amount of Rs.3547.79 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 27 percent out of eight states.

**TABLE: 14.15.LOAN SANCTION AND DISBURSEMENT BY NEDFi**

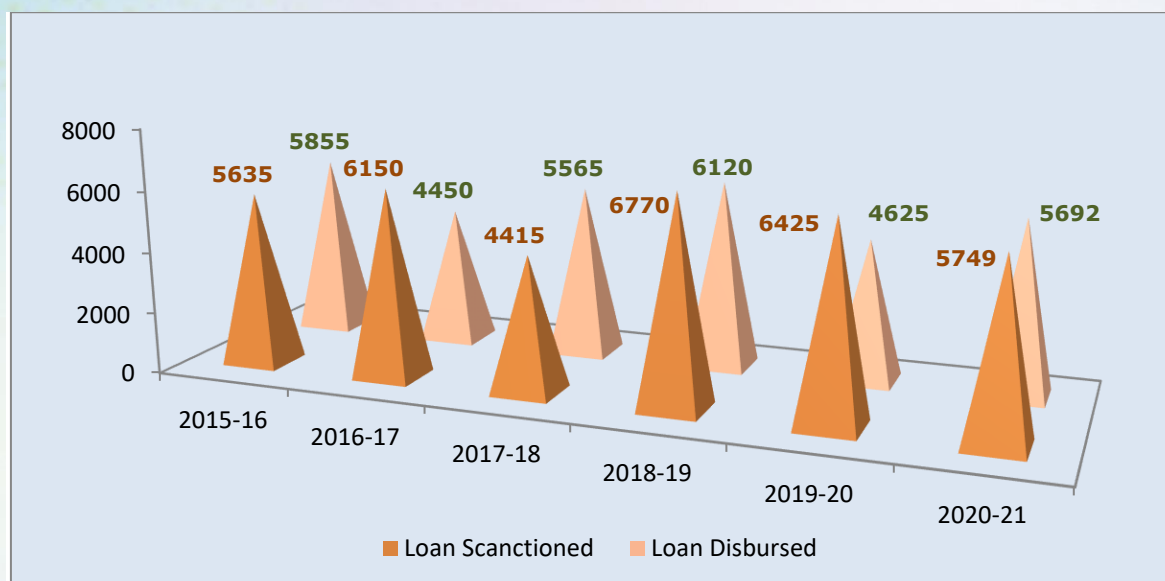
(Rs. in crore)

Year	No. of Project	PFD+MSE		Micro Finance		Total Sanctioned	Total Disbursed
		Amount Sanctioned	Amount Disbursed	Amount Sanctioned	Amount Disbursed		
2018-19	123	121.12	93.98	67.7	61.2	188.82	155.18
2019-20	144	209.05	121.94	64.25	46.25	273.30	168.19
2020-21	204	227.7	162.9	8.15	33.65	235.85	196.46

Source: Annual Report of NEDFi

#### Micro Finance:

The "NEDFi Micro Finance Scheme" was launched by the Corporation to assist the grass root small borrowers in unserved and underserved areas of the North Eastern Region. Through the Scheme, the Corporation provides wholesale micro credit to Micro Finance Institutions (MFIs) of the region for on-landing to low income individuals for carrying out various income generating activities in farm and non-farm sectors. During the Financial Year (2020-21) the Corporation sanctioned, under this Scheme, an amount of Rs. 27.30 crore and disbursed Rs.50.60 crore, out of which an amount of Rs.8.15 crore was sanctioned and Rs.33.65 crore disbursed in Assam. As on March 31, 2021, the cumulative sanctions and disbursements in NER under the Scheme were Rs.882.40 crore and Rs.872.16 crore respectively out of which Rs.574.90 crore sanctioned and Rs.569.16 crore disbursed in Assam. The "NEDFi Micro Finance Scheme" has touched the lives of more than eight lakh beneficiaries in the region out of which more than 90% are women.

**FIG. 14.4. LOAN SANCTIONED/DISBURSED BY NEDFI IN ASSAM (RS. IN LAKH)****Disbursement of Central Subsidies:**

The Corporation is a nodal agency for disbursement of Central Subsidies under North East Industrial Policy 1997 (NEIP), North East Industrial and Investment Promotion Policy 2007 (NEIIPP) and North East Industrial Development Scheme 2017 (NEIDS) which is administered by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India. The Corporation is thus facilitating disbursement of Central subsidies to various industrial units in the region. The detail of disbursement under various schemes during the year is evident from the Table-14.16.

**Table - 14.16: SCHEME WISE DISBURSEMENT OF SUBSIDIES BY NEDFI***(Rs. in Crore)*

Scheme	2018-19	2019-20	2020-21	Cumulative as on 31.03.2021
Transport Subsidy (TS)	961.62	248.40	167.61	4330.70
Central Capital Investment Subsidy	558.11	605.76	147.46	2764.37
Central Interest Subsidy	92.23	27.61	27.03	455.93
Central Comprehensive Insurance Subsidy	25.21	5.76	35.99	89.71
Freight Subsidy	126.45	118.26	149.04	412.63
Total	1763.65	1005.79	527.23	8053.34

*Source: Annual Report, NEDFi*

**ASSAM FINANCIAL CORPORATION (AFC):**

Assam Financial Corporation (AFC) was established on 19<sup>th</sup> April, 1954 under State Financial Corporation's Act, 1951 with a view to provide financial assistance to micro, small and medium scale industries with the main objectives of accelerating the industrial growth of the region, promotion of self-employment etc. and has active presence throughout the state with 11 Branch Offices including one Microfinance Branch and the head office located in Guwahati.

During the year the Corporation dealt with 23 no. of applications in MSME and CRE sector involving an amount of Rs.7.86 crore and sanctioned an amount of Rs.6.36 crore to 20 nos of applicants as against sanction of Rs.13.86 crore to 39 nos of applicants in the previous year. During the year the Corporation sanctioned Rs.4.02 crore to 12 nos of applicants for setting up of various processing & manufacturing projects in MSME sector. On the other hand, the Corporation sanctioned Rs.2.33 crore to 8 nos of applicants for setting up of various service sector projects both in MSME and CRE sector. In respect of disbursement of loan, against the previous year's disbursement of Rs.9.47 crore the Corporation's disbursement amount decreased to Rs.5.00 crore during the year. During the year the Corporation has not sanctioned and disbursed loan in Microfinance sector. The sanction and disbursement performance of the Corporation was affected during the 2020-21 due to CAA agitation followed by COVID-19.

The Corporation's net effective sanction and disbursement since inception up to the end of March, 2021 are presented in the Table-14.17.

**Table - 14.17: NET EFFECTIVE SANCTION AND DISBURSEMENT: AFC**

(Rs. in crore)

Sector	No of Project	Amount Sanctioned	Amount Disbursed
Manufacturing	6045	159.12	146.78
Service	795	105.29	93.554
Micro finance	47	47.72	47.72
TOTAL	6887	312.13	288.05

Source: Assam Financial Corporation

**Micro Finance under AFC:**

The AFC has also started assisting the weaker section through the micro finance scheme. The Corporation, since inception of Micro Finance, has assisted 47926 beneficiaries with an amount of Rs.47.72 Crore. Table 14.18 shows year wise break up of Micro Finance beneficiaries assisted up to March 2021.

**Table - 14.18: MICRO FINANCE BENEFICIARIES ASSISTED SINCE INCEPTION**

No. Assisted	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
No of SHG assisted	NIL	217	10	188	60	-	900
No of JLG assisted	NIL	648	2117	600	725	-	7761
No of SHG Beneficiary assisted	NIL	1221	100	1830	650	-	8494
No of JLG Beneficiary assisted	NIL	3363	10585	3500	3625	-	39532
Total Beneficiary assisted	NIL	4584	10685	5330	4275	-	47926

Source: 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 programme in Assam are Dhubri, Goalpara, Barpeta, Darrang, Baksa, Hailakandi and Udalguri. Table-14.19 shows certain financial indicators of the districts in comparison to State as a whole.

**TABLE: 14.19. BANKING IN THE ASPIRATIONAL DISTRICTS OF ASSAM (AS ON 31<sup>ST</sup> MARCH, 2021)**

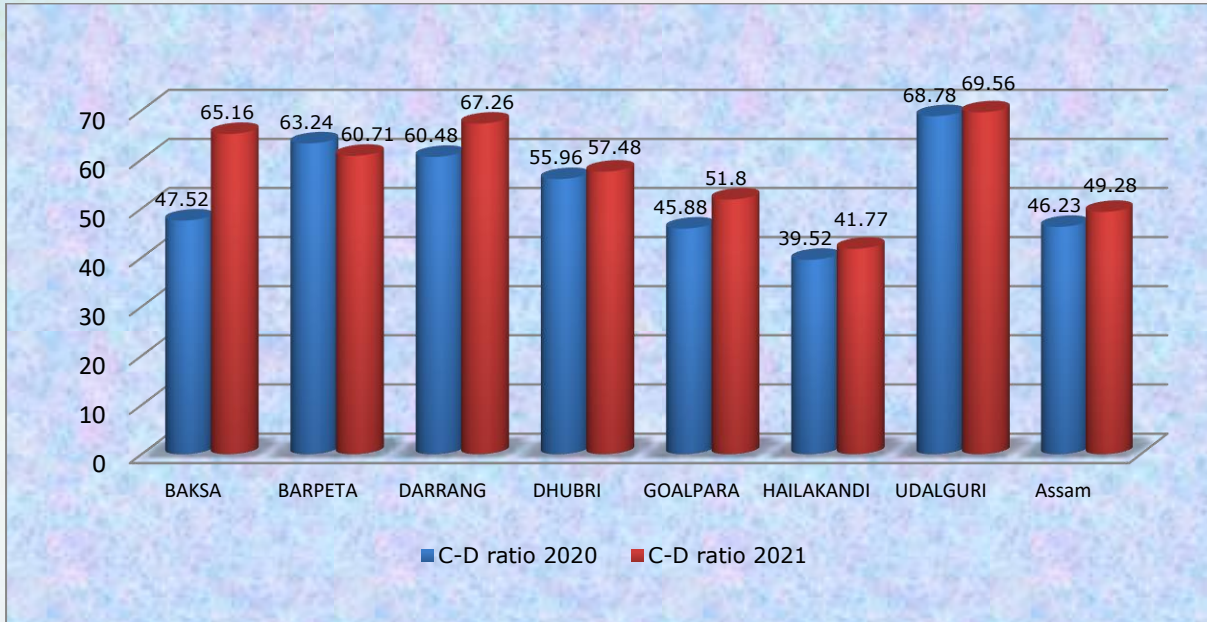
(Rs. in crore)

District Name	Total Bank Branch	Total Deposit		Total Credit	
	2020	2020	2021	2020	2021
Baksa	49	1034	1563	491	1018
Barpeta	120	4246	4302	2685	2612
Darrang	71	2103	2283	1272	1536
Dhubri	84	2947	3265	1649	1877
Goalpara	70	2157	2231	990	1155
Hailakandi	45	1576	1669	623	697
Udalguri	42	1202	1488	827	1035
<b>Assam Total</b>	<b>2972</b>	<b>162511</b>	<b>176408</b>	<b>75129</b>	<b>86939</b>

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 2019-20 and 2020-21.

**FIG.14.5. CREDIT DEPOSIT RATIO OF ASPIRATIONAL DISTRICTS**



Source: State Level Bankers' Committee, Assam Report

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## CHAPTER – XV

### CO-OPERATION

Cooperatives are playing a very significant role in the socio-economic development of our state especially the rural areas of Assam. All the Cooperative Societies in Assam are registered under the Assam Cooperative Societies Act, 1949 (Since repealed and enactment of the Assam Cooperative Society Act, 2007) are under the administrative control of the Cooperation Department.

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 urban and 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 in urban and 6 in 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 5<sup>th</sup> 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.

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 13719 nos. of Cooperative Societies include 2245 nos. of GPSS/LAMPS, 2265 nos. of GPBMSS, one State Level Apex Bank for short term agricultural cooperative credit, one State Agricultural and Rural Development Bank (ASCARD Bank) for long and medium term agricultural credit, one State Level Housing Federation (HOUSEFED), one State level Fishery Cooperative Federation (FISHFED), one State level Cooperative Jute Mill (Assam Cooperative Jute Mill Ltd., Silghat), 8 nos. of urban cooperative banks and various types of other Cooperative Societies.

**TABLE – 15.1:**  
**STATISTICS OF CO-OPERATIVE SOCIETIES IN ASSAM**

Year	Number of Societies	Membership	Share Capital	Working Capital
		(in '000 nos)	(Rs. in Crore)	(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
2019-20	11649	-	-	-
2020-21	13719	-	-	-

*Source: Registrar of Co-operative Societies, Assam*

#### **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 Gaon Panchayat Samabai Samity (GPSS) / Large Area Multipurpose Cooperative Societies (LAMPS) (Primary Agriculture Co-operative Societies: 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 (PACS):**

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 GPSS and LAMPS are the grass root level two tier short term cooperative credit structure. These two societies viz. GPSS and LAMPS in Assam are known as PACS. 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 LAMPS. PACS are the backbone of the cooperative movement which measures the development of Rural India. These societies have been playing vital role in flow of Cooperative agricultural credit to the farmer members. These societies in addition to flow of agricultural credit have been successfully doing as a handling agent of PDS under poverty elevation scheme of Govt. of India and mid- day meal scheme. At present there are 2245 nos. of PACS in the State.

The societies 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 (GPBMSS):**

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. There are 2265 nos. of GPBMSS in the state for Socio- economic development of women of rural areas, with a view to upgrade SHGs under NRLM, 680 Village Organisations were registered under the Assam Cooperative Societies Act.

To upgrade SHGs under NRLM, 438 nos. of SHGs were registered under the Assam Cooperative Societies Act in the year 2016-17. These societies are doing some activities like handloom, knitting, embroidery, pickle making for economic upliftment of women members. Some of the societies are doing PDS business as an agent of GPSS of their respective area of operation.

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.

#### **CO-OPERATIVE BANKS:**

There are three (3) types of Co-operative Bank in the State, viz., (1) Assam Co-operative Apex Bank Ltd. (2) ASCARD Bank 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.

#### **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. GPSS are also adopted by this bank. Presently the bank is implementing the package of 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.

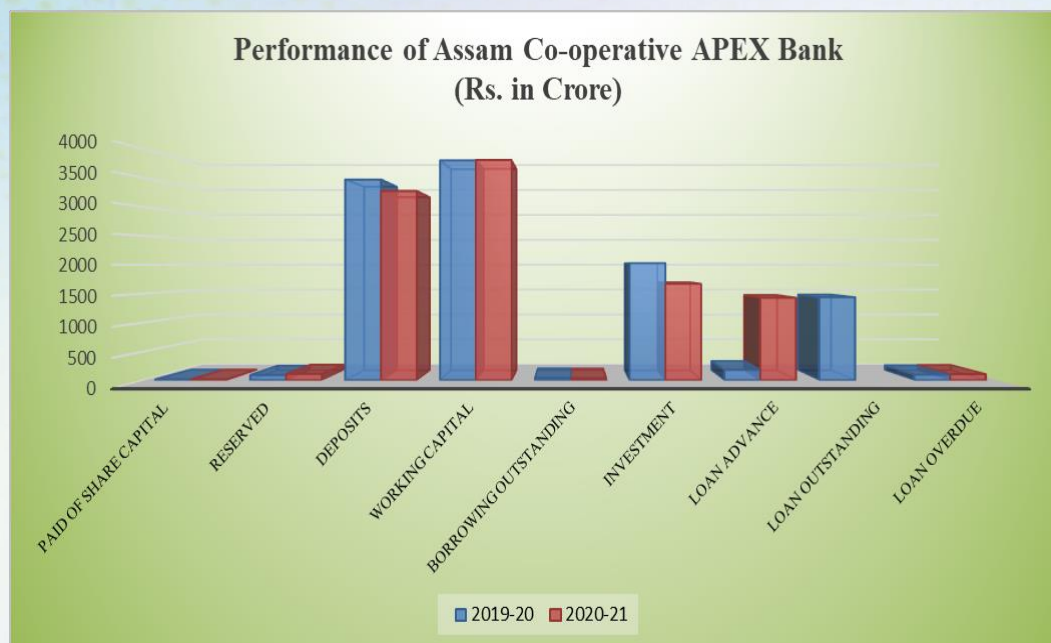
The membership of the bank has increased from 92,000 in 2015-16 to 107,000 numbers in 2020-21. The share capital has increased to Rs.16.71 crores in 2020-21 from Rs. 11.75 crores in 2015-16. The working capital increased from Rs. 1921.94 crores in 2015-16 to Rs. 3811.09 crores in 2020-21.

The performance of the Assam State Cooperative Apex Bank during the last six years is shown in the Table-15.2.

**TABLE – 15.2**  
**PERFORMANCE OF APEX BANK, ASSAM**

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Bank Branches	No	67	68	68	68	67	67	67
Membership	Unit"000"	94	92	94	94	3054	105	107
Paid of share Capital	Rs in Crore	10.84	11.75	13.44	14.86	15.27	16.34	16.71
Reserved	-- Do --	43.03	51.76	65.03	84.1	85.64	90.87	109.69
Deposits	-- Do --	1888.50	2039.81	2870.66	3426.54	3213.71	3473.64	3275.56
Working Capital	-- Do --	2079.81	1921.94	2379.61	3136.59	3264.53	3804.65	3811.09
Borrowing Outstanding	-- Do --	4.87	7.46	25.49	28.89	21.88	39.6	34.62
Investment	-- Do --	1028.60	1079.15	1394.78	1557.36	1790.95	2027.14	1668.57
Loan Advance	-- Do --	287.95	278.57	394.25	154.48	496.75	179.83	1427.59
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	98.05	105.81

*Source: Registrar of Co-operative Societies, Assam*



### **ASSAM STATE CO-OPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANK LIMITED:**

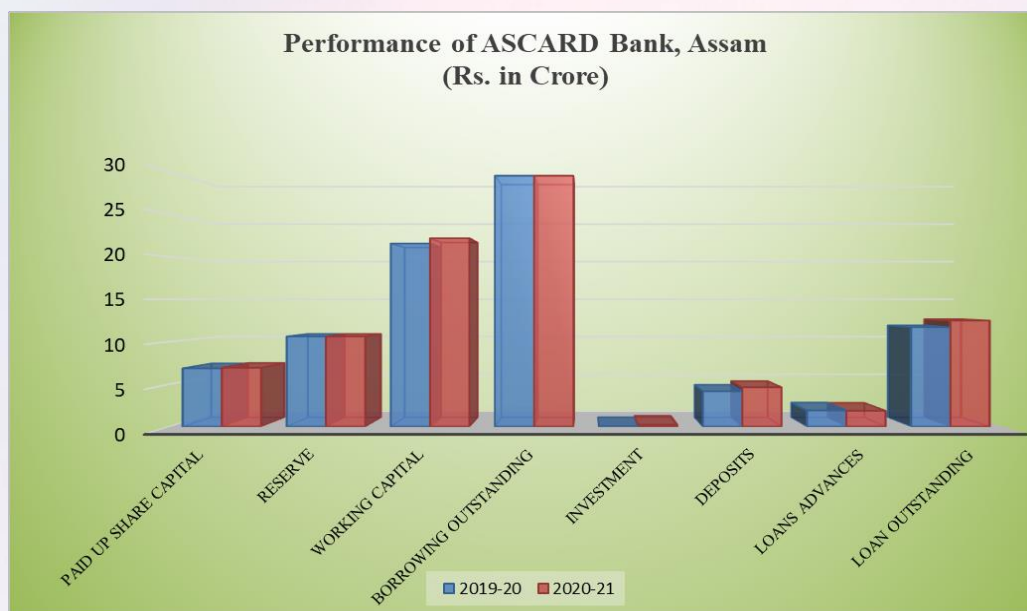
The Assam State cooperative Agriculture Rural Development Bank Ltd. (ASCARD) was registered during the year 1955-56. It is a land mortgage Bank. This Bank is not a bank under the Banking Regulation Act but the bank is regulated under the Assam Cooperative Land Mortgage Bank Act, 1960 and the Assam Cooperative 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 about 50 thousand members. The primary Land Mortgage Bank (PLMB) in the District level were later on 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. The contribution of the bank for delivery of long term agricultural cooperative credit was very vital. 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 for study of the revival aspects of the bank. The committee has submitted its report to the Govt. and it is now under consideration of the Govt.

The data containing important indicators of bank performance are presented in the Table – 15.3.

**TABLE – 15.3**  
**PERFORMANCE OF ASCARD BANK ASSAM**

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Bank Branches	No	28	28	28	28	28	28	28
Membership	No	46771	47610	54076	48208	48000	50000	44660
Paid up Share Capital	Rs. in Crores	6.36	6.37	6.48	6.58	6.74	6.86	6.93
Reserve	Do						10.61	10.61
Working Capital	Do	12.41	13.31	13.96	14.79	14.88	21.55	22.17
Borrowing Outstanding	DO						29.52	29.52
Investment	Do						0.04	0.22
Deposits	Do	0.95	1.05	1.50	2.62	3.58	4.16	4.63
Loans Advances	Do	0.36	0.43	1.42	1.81	1.17	1.9	1.87
Loan Outstanding	Do	8.46	8.42	9.02	9.94	10.98	11.70	12.48

Source: Registrar of Co-operative Societies, Assam



**URBAN CO-OPERATIVE BANK:**

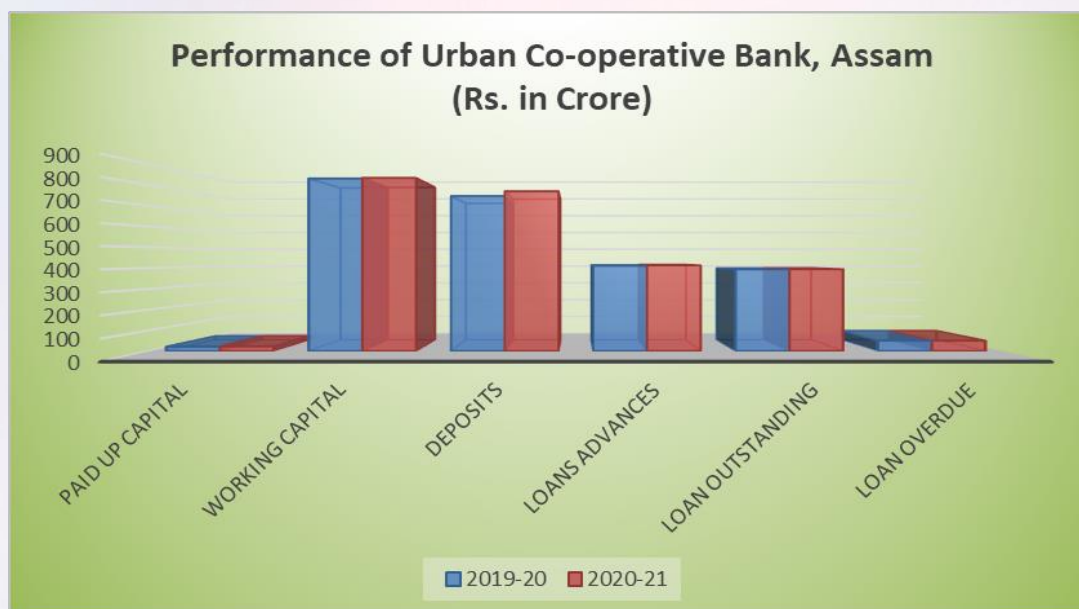
Assam at present has 8 numbers of urban co-operative banks (UCBS) with 25 branches. Till recent past, multiplicity of command, absence of clear-cut demarcation between the functions of the State Government and RBI in respect of the Banks, led to operational difficulties in implementing regulatory and supervisory measures pertaining to UCBS. To sort out the difficulty, a 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 93 thousand in 2020-21 against 32 thousand in 2015-16. Similarly paid up share capital has increased to Rs.22.50 crores in 2020-21 from Rs. 13.18 crores in 2015-16. Working Capital has also increased to Rs. 834.19 crores in 2020-21 from Rs. 723.69 crores in 2015-16. Loan outstanding has increased to Rs. 394.51 crores in 2020-21 from Rs. 257.24 crores in 2015-16.

**TABLE – 15.4**  
**PERFORMANCE OF URBAN CO-OPERATIVE BANK, ASSAM**

Particulars	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Bank Branches	NO	25	25	25	25	26	25	25
Membership	'000'NO	30	32	40	62	88	90	93
Paid up Capital	Rs in Crores	7.36	13.18	15.93	17.74	20.25	21.50	22.50
Working Capital	DO	687.97	723.69	773.1	600.27	828.6	831.17	834.19
Deposits	DO	604.89	479.48	690.29	724.22	767.97	747.12	769.98
Loans Advances	DO	217.71	259.87	207.85	264	405.28	410.69	412.70
Loan Outstanding	DO	236.24	257.24	194.82	272.07	390.38	393.51	394.51
Loan overdue	DO	21	26.76	23.06	30.65	36.85	50.28	50.28

Source: Registrar of Co-operative Societies, Assam



**THE ASSAM APEX COOPERATIVE FISH MARKETING AND PROCESSING FEDERATION LTD.**

Assam Apex Cooperative Fish Marketing & Processing Federation Ltd. shortly known as FISHFED is an apex level cooperative federation registered under the Assam Cooperative Societies Act, 2007. The main objective of the federation is to help the fishermen community in their socio economic development through the primary fishery

cooperative societies by increasing the production of fishes through member societies as well as through it's own project and marketing the production through various market and sales booths of FISHFED by eliminating the middlemen assuring better price to the fishermen and an assured market to the consumer.

The Assam Apex Cooperative Fish Marketing and Processing Federation (FISHFED) is being handed over to Fishery Department, Govt. of Assam with a decision of the Cabinet.

**ASSAM COOPERATIVE JUTE MILL LTD.**

Assam Cooperative Jute Mills Ltd. 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 one unit of Assam Cooperative Jute Mills Ltd. at Bihdubi with Rs. 47 Crores from NCDC in 2017-18. The Central Government had provided Rs. 240.60 lakhs as grant-in-aid. The State Government had also written off accumulated tax liabilities of pre-closure period to the tune of Rs. 96.00 lakhs & Rs. 46.39 lakhs. Further, the State Govt.had provided 50% power subsidy for 5 years from 01/01/1986 to 31/12/1990 amounting to Rs. 48.12 lakhs for its rehabilitation. The Mill had liquidated most of the old liabilities and also acquired some assets out of those funds, but could not put in sound financial footing up to the year 1992-93 in spite of sufficient subsidies from the Govt. for its revitalization.

**TABLE – 15.5**

**Performance of Assam Co-operative Jute Mill Limited**

Name of Societies	Year	No. of Societies	No. of Members hips	Rupees in Lakh		
				Paid up share Capital	Paid up working Capital	Value of sales
Assam Co-operative Jute Mill Ltd.	2013-14	1	1825	325.79	1237.92	3811.42
	2014-15	1	659	323.93	929.34	4510.55
	2015-16	1	659	323.93	957.82	4438.40
	2016-17	1	659	323.93	926.65	5244.66
	2017-18	1	659	323.93	957.82	4438.40
	2018-19	1	659	323.93	165.73	5178.91
	2019-20	1	659	323.93	139.25	4930.92
	2020-21	1	659	323.86	392.73	4954.03

*Source: Registrar of Co-operative Societies, Assam*

**ASSAM POLYESTER CO-OPERATIVE SOCIETY LIMITED:**

The Assam Polyester Co-operative Society Ltd. (APOL) 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.

The APOL has stopped its functioning from the year 2016. The Govt. of Assam has now decided to revive the spinning unit of APOL and started action accordingly. The Govt. has already earmarked Rs. 10.00 crore towards revival of APOL during the 2017-18 financial year. The Govt. has also constituted a committee for monitoring the process of revitalization and the sustainable running of the spinning unit of APOL. The Govt. has already sanctioned and released VRS to the employees of closed units. With a view to revive the APOL and to make it profit making the Govt. have already initiated action for searching a suitable partner of APOL to run the Mill.

**Table-15.6**  
**Assam Polyester Co-operative Society Limited**

Name of Societies	Year	No of Societies	No of members	Rupees in lakh		
				Paid up share capital	Paid up working capital	Value of sales
Assam Polyester Cooperative Society Ltd.	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
	2020-21	26	4588	1635.31	Nil	Nil

*Source: Registrar of Co-operative Societies, Assam*

#### **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 Limited (EAMUL). It was established in the year 1968; with its headquarters 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.

Presently, there are 562 numbers of primary dairy cooperatives societies and three numbers of regional levels milk union namely 1. East Assam Milk producers Cooperative Union Ltd. (EAMUL), 2. West Assam Milk Producers Ltd. (WAMUL) and 3. 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 a phased manner.

#### **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.

**Table-15.7**  
**Performance of HOUSEFED**

Name of Societies	Year	No. of Societies	No. of Memberships	Rupees in Lakh		
				Paid up share Capital	Paid up working Capital	Value of sales
HOUSEFED	2014-15	1	418	1653.21	15050.69	NA
	2015-16	1	418	1642.51		NA
	2016-17	1	412	1636.60	15744.76	NA
	2017-18	1	412	1626.34	14023.12	NA
	2018-19	1	419	1620.31	15926.45	NA
	2019-20	1	419	1618.93	13752.68	NA
	2020-21	1	419	1618.66	13658.26	NA

*Source: Registrar of Co-operative Societies, 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, Spinning Mill, Mustard Oil Mill, Jute Mill, etc. The Eastern Agro processing and Tea Warehousing Cooperative Society Ltd. (EAPTWCS), APOL are the prestigious organisations under the cooperative sector in the state. Due to financial constraints APOL remained non-functional for some time.

EAPTWCS is functioning without any financial assistance from the government and is performing well and earning continuous profit. This society has earned net profit to the tune of Rs. 281.19 lakh during the year 2019-20.

**Table-15.8****Performance of Eastern Agro Processing and Tea Warehousing Cooperative Society Ltd.**

Name of societies	Year	Nos. of Societies	Nos. of members	Rupees in lakh		
				Paid up share capital	Paid up working capital	Value of sales
Eastern Agro Processing and Tea Warehousing Cooperative Society Ltd. (EAPTWCS)	2014-15	1	504	98.08	1850.00	1611.00
	2015-16	1	503	98.13	2107.00	1384.00
	2016-17	1	504	98.15	2459.65	1314.03
	2017-18	1	503	97.90	1972.55	1321.21
	2018-19	1	505	97.92	2158.00	1210.00
	2019-20	1	504	97.92	2078.00	1306.00
	2020-21	3	514	98.00	2009.00	1568.00

*Source: Registrar of Co-operative Societies, Assam*

**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 service to the urban people and maintain 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 begged the "Best Performing Consumer Cooperative Societies Award" during the year 2016-17.

#### **OTHER COOPERATIVES:**

In addition to the above mentioned Co-operative Societies, there are a large number of cooperatives in 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. The financial assistance to these societies will go a long way in enabling economically weaker section of the society to achieve their economic upliftment.

#### **ASSAM STATE CO-OPERATIVE UNION:**

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.

#### **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 of successful co-operatives in other cooperatively developed states of India.

#### **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 GPSS, LAMPS and other cooperative societies with the help of the 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 and released an amount of Rs. 195.87 lakh as state share for construction of 244 numbers rural godowns during the year 2017-18. As on 1<sup>st</sup> December 2018, out of 244 Godowns, construction of 222 Godowns has been completed and the remaining 22 Godowns are also completed during 2020-21.

#### **STATUS OF FUND UTILIZED FOR THE YEAR 2020-21 (SOPD-G): -**

The Cooperation Department had received an allocation of Rs. 11014.16 lakh under SOPD for the year 2020-21, which was earmarked as follows: -

1. Revenue –	Rs. 4255.36 lakh
2. Capital –	Rs. 6758.80 lakh
<b>Total allocation</b>	<b>Rs. 11014.16 Lakh</b>

Table – 15.9

**Allocation of Fund under SOPD under various schemes for 2020-21 of  
Cooperation Department**

Rs. in Lakh					
Sl. NO	Name of the Scheme	Amount earmarked	Amount proposed	Status of sanction	Ceiling Received
1	Major works	128.25	6.52	6.52	Nil
2	Incentive to best performing Cooperative Societies	52.25	52.21	52.21	Nil
3	Assistance to Other Coops:	2646.88	2643.88	44.5	44.5
4	ARGUCOM	180	Nil	Nil	Nil
5	RIDF (XXI & XXIII)	1694.44	1608.34	1563.93	1094.5
6	WIF	1666.67	Nil	Nil	Nil
7	Assistance to Women Coops:	47.5	46.9	46.9	36.85
8	Dairy Cooperatives	115.68	115.65	115.65	84
9	Software development	95	Nil	Nil	Nil
10	Assistance to GPSS	1109.5	1060.3	9.5	Nil
11	Assistance to ACJM Ltd (NCDC)	2669.44	2669.44	2669.44	2669.44
12	Share capital contribution	500	500	Nil	Nil
13	Multi Commodity Building construction at Paschim Boragaon in Kamrup (Metro)	100	Nil	Nil	Nil
14	AMC for IT	3.8	3.8	3.8	3.8
15	Network bandwidth cost	4.75	Nil	Nil	Nil
<b>Total</b>		<b>11014.16</b>	<b>8707.04</b>	<b>4512.45</b>	<b>3933.09</b>

*Source: Registrar of Co-operative Societies, Assam*

**TABLE – 15.10**  
**NO. OF CO-OPERATIVE SOCIETIES**  
**BY TYPES OF CO-OPERATIVE IN ASSAM IN 2019-20 & 2020-21**

Sl. No.	Types of Co-operative society	No. of Societies	
		2019-20	2020-21
1	State Level Co-operative societies	38	46
2	Gaon Panchyat Samabay Samity (GPSS) / Primary Agriculture Credit Societies (PACS)	2,202	808
3	Large Area Multipurpose Co-operative Societies (LAMPS)	86	1437
4	Village Council Multipurpose Co-operative Societies (VCMCS) (BTC)	114	97
5	Wholesale and Consumer Society	315	372
6	Women Multipurpose	2,416	2265
7	Primary Dairy	571	880
8	Thrift and Credit	905	849
9	Poultry and Duckery	251	285
10	Agriculture/Krishipam/Farming	480	603
11	Primary Fishery	527	650
12	Primary Housing	199	231
13	Industrial	531	369
14	Marketing and Processing	115	90
15	Labour and Contract	124	283
16	Other Co-operative	549	799
17	Co-operative bank & Branches	9	94
18	Livestock	1,182	872
19	SHG Federation / Area Level Federation (ALF)	107	452
20	Trading	382	350
21	Village Organisation	324	680
22	Agro Producer Co-operative	222	551
23	Horticulture		20
24	Sericulture & Weaving		19
25	Cooperative Union		18
26	Multipurpose		157
27	Piggery		442
<b>Total</b>		<b>11,649</b>	<b>13,719</b>

*Source: Registrar of Co-operative Societies, Assam*

Table-15.11

Districtwise & Typewise List of Cooperative Societies: 2020-21

Sl. No.	Districts	Type of Co-operative Societies																											
		State Level Cooperative Societies	Gaon Panchayat Samity (GPSS) Area Multipurpose Cooperative Societies (LAMPS)	GPSS (New)	Gaon Panchayat Level Women Multipurpose Cooperative Societies (GPBMS)	Consumer Cooperatives	Dairy Cooperatives	Pisciculture / Fishery	Poultry/ Duckery	Piggery	Village Council Multipurpose Cooperative Societies (VCMCS) (BTC)	Village Organization (VO)	Area Level Federation (ALF)	Multipurpose	Bank & Branches	Cooperative Union	Industrial	Housing Cooperative	Trading	Contract/ Transport	Farming/ KPSS	Agro Producers' Cooperative	Live Stock	Horticulture	Sericulture & Weaving	Thrift & Credit	Others Cooperative	Processing Cooperative	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
3	Kamrup (M)		33	88	119	66	56	38	3	0	0	52	63	9	15	0	0	53	54	1	82	0	0	0	0	161	21	0	914
4	Kamrup		9	30	39	3	9	10	6	0	0	0	0	0	14	0	0	1	19	3	6	0	0	0	0	28	36	2	215
5	Nalbari		22	43	63	2	65	24	4	0	0	0	23	27	6	1	20	1	21	1	17	0	0	0	0	50	5	0	395
6	Barpeta		41	88	130	10	20	39	4	0	0	0	0	0	4	0	0	0	22	0	31	0	0	0	0	15	6	20	430
7	Goalpara		22	59	81	7	19	18	0	0	0	0	14	16	0	0	18	0	0	10	39	32	0	0	0	49	33	12	429
8	Bongaigaon		13	47	44	8	36	12	0	0	0	37	4	0	0	0	0	0	2	0	0	13	0	0	0	8	42	0	266
9	Dhubri		27	81	94	4	153	20	0	0	0	10	27	46	0	0	0	0	0	33	4	0	0	0	0	0	388	0	887
10	S. Salmara		13	39	46	0	16	0	0	0	0	9	6	0	0	1	0	0	0	0	0	0	0	0	0	10	67	0	207
11	Kokrajhar		30	0	57	5	24	29	50	48	10	0	8	1	1	1	71	0	56	18	30	25	28	0	1	15	18	0	526
12	Udalguri		21	0	84	42	68	26	112	315	63	0	0	0	0	0	43	0	4	0	54	10	479	20	0	28	3	0	1372
13	Nagaon		43	130	173	12	44	41	46	0	0	15	35	2	0	0	9	53	70	11	37	19	0	0	0	40	3	0	783
14	Morigaon		28	57	85	4	34	45	11	0	0	27	19	0	3	0	3	3	19	2	16	45	0	0	0	6	12	0	419
15	Hojai		18	46	66	9	17	12	1	0	0	41	8	0	3	1	12	1	29	4	8	22	0	0	0	12	3	0	313
16	Sonitpur		29	49	66	22	34	23	2	0	0	28	16	6	1	0	15	3	1	0	9	24	0	0	0	25	0	6	358
17	Biswanath		13	40	66	11	10	8	2	3	0	50	0	0	3	0	16	1	3	4	12	14	0	0	0	5	4	0	265
18	Lakhimpur		28	53	81	8	8	39	0	16	0	41	11	4	5	1	16	11	3	5	16	44	0	0	0	16	3	15	424
19	Dhemaji		14	51	65	11	8	17	0	6	0	96	31	0	0	0	18	10	0	3	19	42	3	0	0	12	11	3	420
20	Darrang		21	54	68	8	54	16	6	0	0	13	18	1	2	1	4	0	0	0	28	73	0	0	0	45	9	0	421
21	Golaghat		40	45	102	12	15	24	0	0	0	0	33	0	0	1	0	5	0	8	17	0	0	0	0	9	10	1	322
22	Sibasagar		22	61	80	11	19	16	6	4	0	0	27	14	8	1	13	39	0	65	0	35	0	0	0	107	8	0	536
23	Charaideo		11	27	38	6	9	0	0	3	0	20	6	1	3	1	1	3	1	10	2	0	0	0	0	32	3	0	177
24	Jorhat		29	61	91	39	35	35	24	0	0	123	35	0	0	6	0	38	8	75	20	10	0	0	0	56	33	19	737
25	Majuli		6	14	20	0	15	18	0	14	0	21	0	17	2	1	22	1	2	3	8	0	0	0	0	2	0	1	167
26	Dibrugarh		35	58	93	24	6	13	0	0	0	42	27	0	15	0	0	0	0	16	4	20	0	0	0	21	19	7	400
27	Tinsukia		22	64	87	19	11	9	0	1	0	0	8	0	8	1	5	0	0	4	0	5	0	0	0	6	20	0	270
28	Cachar		39	42	87	3	16	0	0	0	0	0	0	0	1	0	5	7	0	0	6	18	0	0	0	0	0	0	224
29	Hailakandi		16	47	64	3	4	6	6	0	0	22	5	0	0	1	5	1	0	0	2	25	0	0	0	27	6	4	244
30	Karimganj		33	63	50	13	7	23	1	0	0	0	6	4	0	0	7	0	0	0	0	10	0	0	0	54	23	0	294
31	K. Anglong		49	0	0	1	31	57	0	11	0	0	0	1	0	0	3	0	0	0	27	0	168	0	0	0	0	0	348
32	W. K. Anglong		20	0	5	1	3	13	0	0	0	0	1	0	0	0	15	0	5	0	0	0	10	0	0	0	4	0	77
33	Dima Hasao		24	0	0	6	4	1	0	0	0	0	7	1	0	0	2	0	0	0	8	0	16	0	0	3	0	0	72
34	Baksa		24	0	72	0	30	16	0	0	0	33	0	7	0	0	0	0	26	0	70	65	153	0	18	5	0	0	519
35	Chirang		13	0	49	2	0	2	1	21	24	0	14	0	0	0	46	0	5	7	31	0	15	0	0	2	9	0	241
	<b>Total</b>	<b>46</b>	<b>808</b>	<b>1437</b>	<b>2265</b>	<b>372</b>	<b>880</b>	<b>650</b>	<b>285</b>	<b>442</b>	<b>97</b>	<b>680</b>	<b>452</b>	<b>157</b>	<b>94</b>	<b>18</b>	<b>369</b>	<b>231</b>	<b>350</b>	<b>283</b>	<b>603</b>	<b>551</b>	<b>872</b>	<b>20</b>	<b>19</b>	<b>849</b>	<b>799</b>	<b>90</b>	<b>13719</b>

Source: Registrar of Co-operative Societies, Assam

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## 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. The Price rise 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. To measure the relative change in price level with reference to time/geographical location and other characteristics the price index is constructed, which is a barometer of economic activities. Assam in particular and the country as a whole is experiencing price rise in varying degree in the last few years and the country is going through high inflation.

#### 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. The 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:

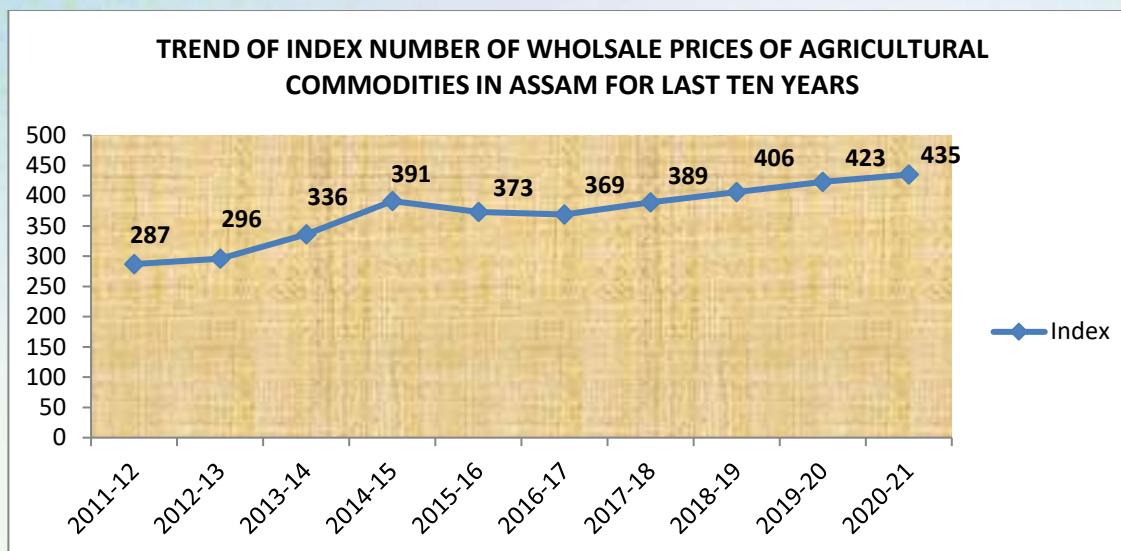
The Directorate of Economics and Statistics compiles the WPI of agricultural commodities with base 1993-94=100. The Table 16.1 depicts WPI of Agricultural commodities in Assam for last ten years.

**TABLE-16.1**  
**INDEX NUMBER OF WHOLESALE PRICES OF AGRICULTURAL COMMODITIES IN ASSAM FOR LAST TEN YEARS**

Year	Index	Percentage Variation
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	4.19
2020-21	435	2.84

Source: Directorate of Economics and Statistics, Assam





Index of Wholesale Price was increased by 2.84 percent in 2020-21 as against 4.19 percent in 2019-20 over previous year. The month to month trend of WPI of agricultural commodities in Assam is given at Table 16.2.

**TABLE NO-16.2**

**MONTH TO MONTH TRENDS OF WPI OF AGRICULTURAL COMMODITIES IN ASSAM**

Year 2019-20, Base 1993-94=100		Year 2020-21, Base 1993-94=100		Percentage increase in 2020 over 2019
Month	Index	Month	Index	
April' 2019	416	April' 2020	434	4.32
May' 2019	417	May' 2020	435	4.31
June' 2019	419	June' 2020	436	4.06
July' 2019	419	July' 2020	436	4.06
Aug.' 2019	422	Aug.' 2020	437	3.55
Sept.' 2019	423	Sept.' 2020	438	3.55
Oct.' 2019	424	Oct.' 2020	439	3.54
Nov.' 2019	425	Nov.' 2020	440	3.53
Dec.' 2019	426	Dec.' 2020	441	3.52
Jan.' 2020	427	Jan.' 2021	427	0
Feb.' 2020	429	Feb.' 2021	428	-0.23
March' 2020	430	March' 2021	429	-0.23

Source: Directorate of Economics and Statistics, Assam

**CONSUMER PRICE INDEX NUMBERS:**

The Consumer Price Index (CPI) numbers are intended to represent the average changes over time in the prices paid by the ultimate consumer for a fixed basket of goods and services. The analysis of different types of CPI are presented:

**CPI (GENERAL) FOR RURAL, URBAN & COMBINED:**

The National Statistics Office (N.S.O.), Ministry of Statistics and Programme Implementation, Govt. of India, 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 CPI Number (with base 2012=100) in Assam for Rural, Urban and Combined for the year 2021 is calculated as 164.5, 164.3 and 164.4 against the All India indices 161.9, 160.8 and 161.4 respectively. The increase in general Indices for Rural, Urban and Combined in Assam during 2021 over 2020 are 2.39%, 3.66% and 2.50% respectively. Table 16.3 shows the month wise CPI (General) for Rural, Urban and Combined in Assam and All India for the year 2020 and 2021 (base 2012=100).

**TABLE - 16.3**  
**CONSUMER PRICE INDEX NUMBER (GENERAL) FOR RURAL, URBAN AND COMBINED FOR 2020 AND 2021, (Base 2012=100)**

Month	ASSAM			ALL INDIA		
	Rural	Urban	Combined	Rural	Urban	Combined
January'20	154.0	150.5	153.3	151.9	148.2	150.2
February'20	152.6	150.4	152.1	150.4	147.7	149.1
March'20	151.3	151.1	151.3	149.8	147.4	148.7
April'20	Calculation not done due to Covid-19					
May'20						
June'20	164.8	157.0	163.2	152.7	150.8	151.8
July'20	163.8	161.4	163.3	155.1	153.1	154.2
August'20	162.7	161.4	162.4	155.4	154.0	154.7
September'20	163.8	162.5	163.5	157.6	155.2	156.5
October'20	165.7	164.0	165.3	159.8	156.7	158.4
November'20	165.2	164.3	165.0	160.7	156.9	158.9
December'20	162.7	162.4	162.6	158.5	156.0	157.3
Ten month	160.66	158.5	160.2	155.19	152.6	153.98
January'21	160.1	160.8	160.2	156.8	155.8	156.3
February'21	157.1	159.7	157.6	156.7	156.5	156.6
March'21	157.1	159.2	157.5	156.7	156.9	156.8
April'21	158.9	160.9	159.3	157.7	158.1	157.9
May'21	162.0	164.2	162.5	161.0	159.7	160.4
June'21	164.6	164.2	164.5	162.1	160.4	161.3
July'21	165.7	165.8	165.7	163.2	161.8	162.5
August'21	166.9	166.0	166.7	163.6	162.2	162.9
Sept.'21	168.4	166.7	168.0	164.0	162.3	163.2
Oct.'21	170.8	168.2	170.3	166.3	164.6	165.5
Nov.'21	171.7	168.7	171.1	167.6	165.6	166.7
Dec.'21	170.2	166.9	169.5	167.0	165.1	166.1
Annual	164.5	164.3	164.4	161.9	160.8	161.4

Source: labour Bureau, Ministry of Labour, Govt. of India

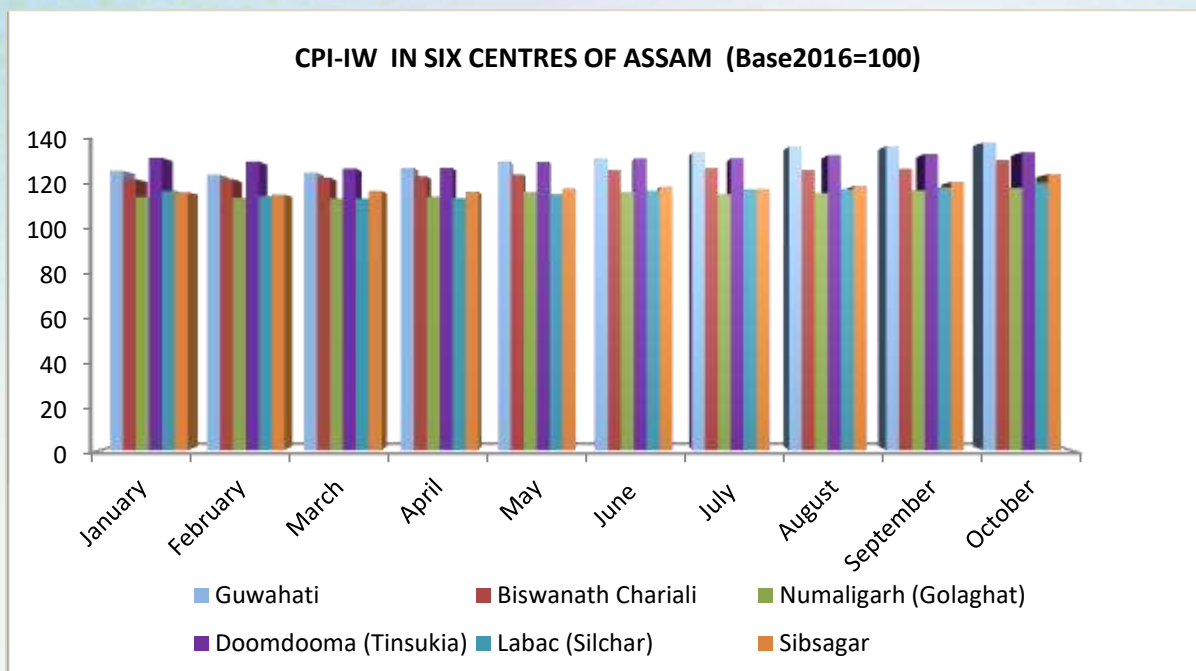
**CPI FOR INDUSTRIAL WORKERS (CPI-IW):**

CPI-IW is the oldest index among the CPI indices as its dissemination started as early as 1946. CPI-IW 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 public sector employees besides fixation and revision of minimum wages in scheduled private sector employees respectively. It is also used for measuring 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 -IW with new base 2001=100 and in old base 1982=100 are constructed and compiled by taking weighted average of the indices for the Six centres namely, Guwahati, Biswanath Chariali, Doomdooma (Tinsukia), Labac (Silchar), Numaligarh (Golaghat) and Sibsagar .

**TABLE-16.4**  
**CPI-IW IN SIX CENTRES OF ASSAM**  
**(Base 2016 = 100)**

Sl. No.	Period	Guwahati	Biswanath Chariali	Numaligarh (Golaghat)	Doomdooma (Tinsukia)	Labac (Silchar)	Sibsagar	Assam (P)	India
1	2	3	4	5	6	7	8	9	10
1	Sept'20	126.8	125.7	116.6	131.5	116.9	120.0	123	118.1
2	Oct. 20	129.1	128.1	118.7	134.9	119.1	121.1	125	119.5
3	Nov. '20	128.8	130.9	119.7	137.8	121.1	121.7	127	119.9
4	Dec ' 20	127.3	127.5	117.9	136.4	120.2	119.8	125	118.8
5	Jan. '21	126.8	123.0	114.9	132.7	117.7	117.1	122	118.2
6	Feb. '21	125.0	123.1	114.5	131.0	115.3	116.0	121	119.0
7	March'21	125.9	123.7	114.2	127.8	114.2	117.7	121	119.6
8	April '21	128.2	124.3	115.1	128.2	114.4	117.3	121	120.1
9	May'21	131.1	125.1	117.1	130.9	116.2	118.8	123	120.6
10	June '21	132.5	127.1	117.1	132.4	117.8	119.6	124	121.7
11	July ' 21	135.2	128.0	116.2	132.6	118.5	118.6	125	122.8
12	Aug'21	137.8	127.3	116.7	133.9	118.5	120	126	123.0
13	Sept.21	138.0	127.7	117.9	134.5	119.2	121.8	127	123.3
14	Oct.' 21	139.7	131.7	119.0	135.3	121.4	125.3	129	124.9
Annual Average (Ten Month Average)		132.02	126.1	116.27	131.93	117.32	119.22	123.9	121.32

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



**ANNUAL AVERAGE TREND IN CPI-IW:**

The annual average CPI-IW of five centres of Assam and All India are depicted in the following table:

**TABLE NO – 16.5  
CONSUMER PRICE INDEX NUMBER FOR INDUSTRIAL WORKERS (GENERAL)  
CPI-IW (General), Base 2001=100**

Sl. No.	Period	Base 2001 = 100						
		Guwahati	Morioni	Doom-Dooma	Labac	Ranga-para	Assam	All India
<b>1</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>9</b>
1.	2013	198	195	196	216	186	198	232
2.	2014	214	217	213	243	213	220	247
3.	2015	239	238	241	253	231	244	268
4.	2016	243	241	246	257	237	245	274
5.	2017	247	243	259	258	241	249	281
6.	2018	252	246	263	260	245	253	292
7.	2019	277	261	278	277	254	269	313
8.	2020	295	278	304	286	266	286	331

Source: labour Bureau, Ministry of Labour, Govt. of India

N.B. Due to base change i.e.2016=100 in Sept'20 eight month Average is calculated for 2020

During the year 2020, the CPI-IW in Assam increased to 286 from 269 in 2019 i.e. an increase of 6.32 percent against 5.75 percent increase in all India CPI to 331.

The rate of increase of the index point in different centres in 2020 over the previous year was recorded highest in Doom-dooma by 9.35 percent whereas CPI for Labac was lowest with an increase of 3.74%.

### **CPI FOR WORKING CLASS POPULATION IN ASSAM WITH BASE 2001=100:**

The CPI -WC Population for the State is compiled by the Directorate of Economics and Statistics, Assam taking into account the weighted average of the indices of the three centres viz. Guwahati, Silchar and Tinsukia.

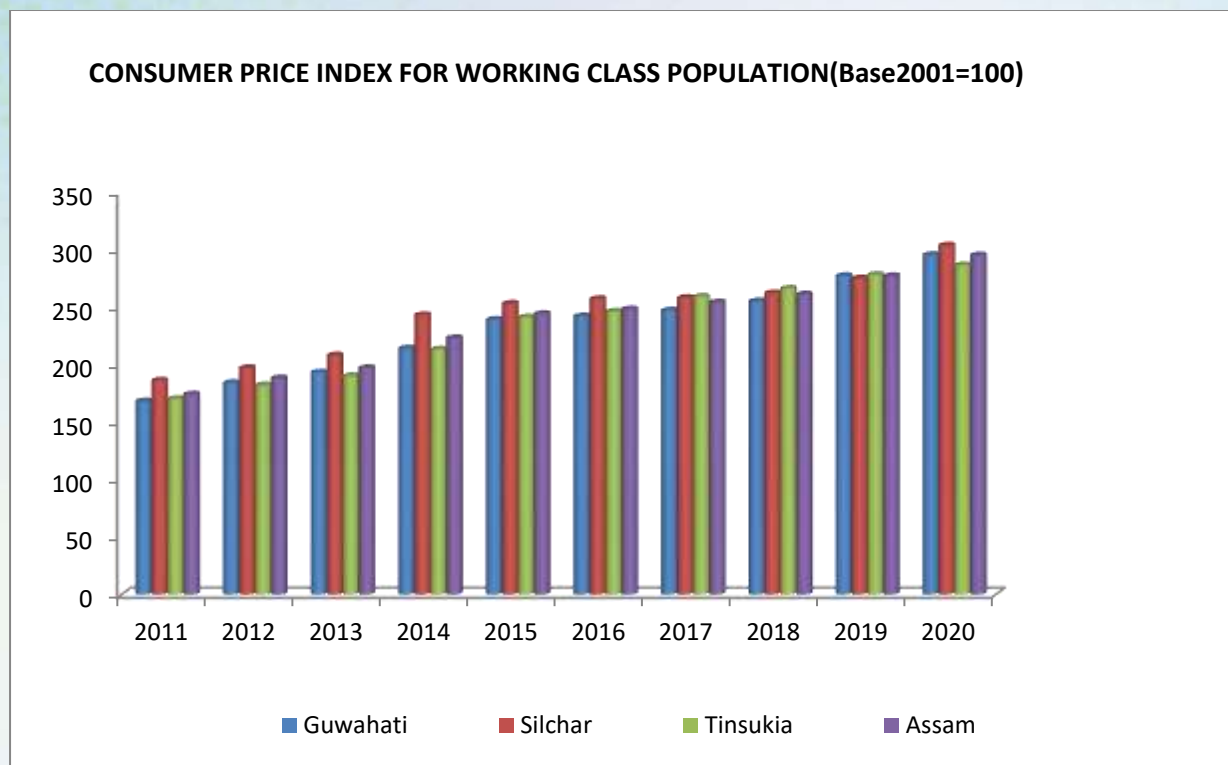
The index no. on old base 1982=100 is obtained by multiplying the index no. on new base 2001=100 by the linking factors provided by the Labour Bureau. Most of the private agencies use these indices for calculation of Variable Dearness Allowance (VDA) while computing the minimum rate of wages. Table 16.6 depicts the CPI for working class ` population with base 2001=100 from 2011 to 2020.

**TABLE – 16.6**  
**CPI-WC IN ASSAM (Base 2001 = 100)**

<b>Sl. No.</b>	<b>Period</b>	<b>Guwahati</b>	<b>Silchar</b>	<b>Tinsukia</b>	<b>Assam</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
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	277 (8.63)	275 (4.96)	278 (4.51)	277 (6.13)
10	2020	295.3(6.5)	303.5(10.4)	286.3(2.61)	294.9(6.45)

*Note: Figures in bracket indicates change in rate from previous year*

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



The annual average CPI-WC ( base 2001=100) in Assam was increased by 6.45% to 294.9 in 2020 from 277 in 2019. In the last ten years the highest increase was 13.20%. In 2014 as 223 over 197 in 2013 and lowest increase was 1.64 in 2016. Ultimately the CPI -WC increased 6.45 percent in 2020 to 294.9 over 277 in 2019.

Among 3 centres of working class population Guwahati centre recorded highest increase by 18 points i. e. an increase of 6.5 percent in 2020 over 2019.

### **CPI FOR AGRICULTURAL LABOURERS (CPI-AL):**

The Labour Bureau, Shimla ,Govt.of India has been compiling CPI for Agricultural Labourers for 20 states including Assam with the base year 1986-87. CPI-AL is being utilized for fixation and revision of wages engaged in agricultural occupation under Minimum Wages Act, 1948. At all India level from 20 states 600 villages have been selected for the purpose of collecting the retail prices and this data is being utilized for the computation of index numbers. The collection of retail prices in the selected villages have been entrusted to Field Operations Division (FOD) of NSSO, Govt. of India.

The CPI -AL for the State of Assam and All India with Food and General Index for the years 2013 to 2021 are presented in Table 16.7

TABLE-16.7

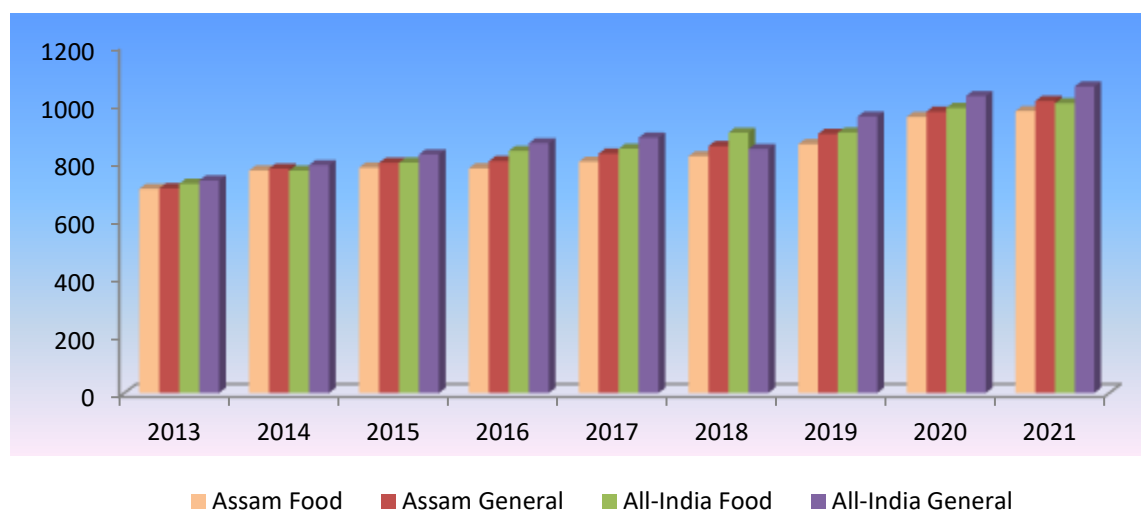
## CPI-AL IN ASSAM AND ALL INDIA FOR THE YEAR 2013 TO 2021

Sl. No	Year	Assam		All-India	
		Food	General	Food	General
1	2013	706	708	724	735
		(10.65)	(8.58)	(13.48)	(12.73)
2	2014	770	776	769	788
		(9.06)	(9.60)	(6.22)	(7.21)
3	2015	780	796	797	825
		(1.29)	(2.57)	(3.64)	(4.69)
4	2016	777	802	837	864
		(-0.38)	(0.75)	(5.01)	(4.73)
5	2017	800	828	845	883
		(2.96)	(3.24)	(0.96)	(2.20)
6	2018	819	854	854	900
		(2.37)	(3.14)	(1.06)	(1.93)
7	2019	861	896	901	956
		(5.12)	(4.91)	(5.50)	(6.22)
8	2020	955	973	986	1027
		(10.92)	(8.59)	(9.43)	(7.43)
9	2021	975	1010	1002	1060
		(2.09)	(3.80)	(1.62)	(3.21)

Note: Figures in bracket indicates increase rate over previous year

Source: Labour Bureau, Govt. of India.

CPI-AL IN ASSAM AND ALL INDIA(2013-2021)(Base 1986-87=100)



It is observed that during the nine years period highest increase in Food Index for the State was observed in 2020 by 10.92% over 2019. Highest increase in Food Index is also observed in All India level during 2013 over 2012 period and the highest increase in General Index in Assam has been observed in 2014 by 9.60% over 2013 and at all India level during 2013 by 12.73% over 2012.

### **PUBLIC DISTRIBUTION SYSTEM:**

Public Distribution System(PDS) 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. PDS in India is perhaps the largest distribution system of its type in the world. PDS 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 , 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.

#### **1)Scheme wise Targets and Achievements (Both financial and physical) under CS and CSS.**

#### **NATIONAL FOOD SECURITY ACT 2013 (NFSA'13):**

The National Food Security Act, 2013 was launched in the month of December, 2015 throughout the State. Total targeted population under NFSA in the State is 2,52,18,001. Total Antodaya Anna Yojana (AAY) families to be covered are 7,04,000 nos. The target was fixed by the Government @84.17% in respect of Rural Areas and 60.35% in respect of urban areas on the Census population of 2011 census report.

A total of 5199569 numbers of Priority Household (**PH**) families covering 22284684 numbers of population and a total of 691222 numbers of AAY families covering 2805728 numbers of population have been selected till date (Grand total of PH and AAY families are 5890791 numbers and population are 25090412 numbers) as per Ration Card Management System (**RCMS**) as on 11/11/2021. The sub allocation of NFSA Rice is made online.

The sanction of fund in respect of transportation and commissioned cost of Rice under NFSA Rice from December, 2015 are given at Table16.8 (both Central and State Share).



**Table 16.8: NFSA Rice details**

YEAR	TRANSPORTATION COST	COMMISSION
2016-17	183,83,67,273	196,80,72,250
2017-18	182,97,53,520	183,92,55,657
2018-19	279,45,40,903	237,03,73,225
2019-20	140,67,78,853	135,69,80,011
2020-21	187,80,89,160	226,77,82,840

Source: Directorate of Food and Civil Supplies, Assam

**Pradhan Mantrir Ujjwala Yojana** : Under the Scheme free LPG connections has been provided to the BPL households on the basis of the Socio Economic Caste Census (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.

**Table 16.9:PMUY status**

Financial Year	Target	Target achieved	Fund released to OMCs
2017-18	10,65,603	11,28,137	Rs.100,59,46,920/-
2018-19	1552525	1425537	Rs.141,12,81,630/-
2019-20	1430000	991719	Rs.98,18,01,810/-

Source: Directorate of Food and Civil Supplies, Assam

As per Government's letter on 16/06/2017, the Government of Assam has paid to the Oil Marketing Companies against their bills @Rs.990.00 per beneficiary, 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

## 2) Scheme wise Targets and Achievements (both Financial and Physical) under State Sector.

### 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 "Amar Dukan" at a price lesser than that of open market.

**Table 16.10:Progress of Amar Dukan Scheme**

Financial Year	Target	Target achieved	Fund released
2016-17	588	588	Rs.3,89,40,300/-
2017-18	588	588	Rs.3,89,40,300/-
2018-19	830	768	Rs.5,08,60,800/-
2019-20	788	287	Rs.1,90,06,575/-
2020-21	788	236	Rs.1,56,29,100/-

Source: Directorate of Food and Civil Supplies, Assam

### The items distributed through AAMAR DUKAN are-

(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), (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" 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 "Amar Dukan on Wheels" and the Government has proposed to increase the items upto 36 numbers.

**Table 16.11 Progress of Amar Dukan on wheels**

Financial Year	Target	Target achieved	Fund released
2017-18	200	145	72,50,000/-
2018-19	220	192	96,00,000/-

Source: Directorate of Food and Civil Supplies, Assam

### CONSTRUCTION OF GODOWN:

The GOI had sanctioned an amount of Rs.957.00 lakhs to the Govt. of Assam during the 2017-18 for construction of Food Storage Godowns under Central Sector Scheme. The construction work of 5 numbers are under progress. For first time the construction of Godown in Majuli District has taken up by the Govt.

The physical and financial achievement of the scheme in the last three years are shown below:

**Table 16.12 Progress of Construction of Godown**

Financial year	Financial achievement		Physical achievement	
	Budget provision (Rs.in lakhs)	Expenditure (Rs.in lakhs)	Target	Achievement
2018-19	957.00	29.72	6 nos. of Godowns	5 nos. are under progress
2019-20	957.00	631.10823/-	6 nos. of Godowns	1 no. of Godown completed 100% and 4 nos. are in progress
2020-21	1005.51	17.11726/-	6 nos. of Godowns	2 nos. of Godown completed 100% and 4 others are under progress

Source: Directorate of Food and Civil Supplies, Assam

It is to be noted that there are 66 nos. of Godowns under Assam State Agriculture Marketing Board and 43 nos. under Assam State Warehousing Corporation with storage capacity 4775MT and 116662 MT respectively. Apart from this there are 38 nos. of godown 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/- per Kg per

month .But w.e.f. April/2020 the Govt.has provided Rice under the scheme at free of cost to all the beneficiaries.

### **CONSUMER COURTS:**

Under the provisions of Consumer Protection Act 1986, the Food and Civil Supplies Department being the State Nodal Centre has one State level Consumer Redressal Forum at Guwahati and 23 District level Consumer Redressal Forums. To create consumer awareness among the masses, the department has undertaken various activities such as advertisements through the print and electronic media, distribution of pamphlets, leaflets, organizing painting and essay competition among children and observance of National Consumers Day on 24<sup>th</sup> December and World Consumer Day on 15<sup>th</sup> March.

Under the scheme, internet connectivity to 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:**

The data of all the selected beneficiaries and GPSS/ Fair Price Shop have been digitized as a part of end to end computerization of supply chain management under NFSA, 2013. Internet connectivity is being provided up to GPSS level as part of Component-1 of the end to end computerization of TPDS. The State Transparency Portal [www.fcs.assam.gov.in](http://www.fcs.assam.gov.in) has been developed for the purpose.

### **ONLINE GRIEVANCE REDRESSAL SYSTEM:**

For redressing the grievances of common consumers, online Grievance Redressal System headed by an Additional Deputy Commissioner in each district of the State is being set up for speedy redressal of the grievances of the public.

### **MEASURES TAKEN UP TO CHECK PRICE RISE OF ESSENTIAL COMMODITIES:**

The State Administration along with District and Sub-Division holds regular meetings with trading community and also holds monthly coordination meetings with the FCI, Railways, IOC, trade and public bodies to have information on availability of stock and price. The price of essential commodities is monitored on daily basis by reviewing the daily price bulletins. Steps are also taken to ensure home delivery of LPG cylinders and to reduce the margin of Wholesale and the retail prices of commodities by monitoring the prices of essential commodities collected from the major Indian Cities. To check price rise Vigilance and Monitoring Committees has been constituted at the District, Sub-Divisions and District Council level.

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## CHAPTER – XVII

### LABOUR, EMPLOYMENT AND WAGES

Work is a 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. High rate of economic growth, however, is not a sufficient condition for poverty alleviation; the pattern and sources of growth as well as the manner in which its benefits are distributed are equally important from the point of view of achieving the goal of poverty alleviation. In this context, employment plays a key role in developing countries. Employment and Un-employment statistics is an important input for policy and planning purpose. In the policy context, the most critical factor that impinges on labour supply is the Labour Force Participation Rate (LFPR) as it is commonly known. LFPR is a measure of the proportion of a country's working age population that engages actively in the labour market, either by working or by looking for work. It provides an indication of the relative size of the supply of labour force by sex and age group. Ministry of Labour & Employment is one of the oldest and important Ministries of the Government of India. It has been 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 got 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. Table 17.1 shows the trend of Main workers, Marginal workers and Non-workers in Assam during last three censuses.

**TABLE -17.1**  
**DISTRIBUTION OF TOTAL WORKERS, MAIN WORKERS, MARGINAL WORKERS AND NON-WORKERS IN ASSAM**

Year	Population	Total Workers	Main Workers				Marginal workers	Non-Workers	
			Total	Cultivator	Agril. Labour	House hold Industry Workers			Others worker
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	19237885

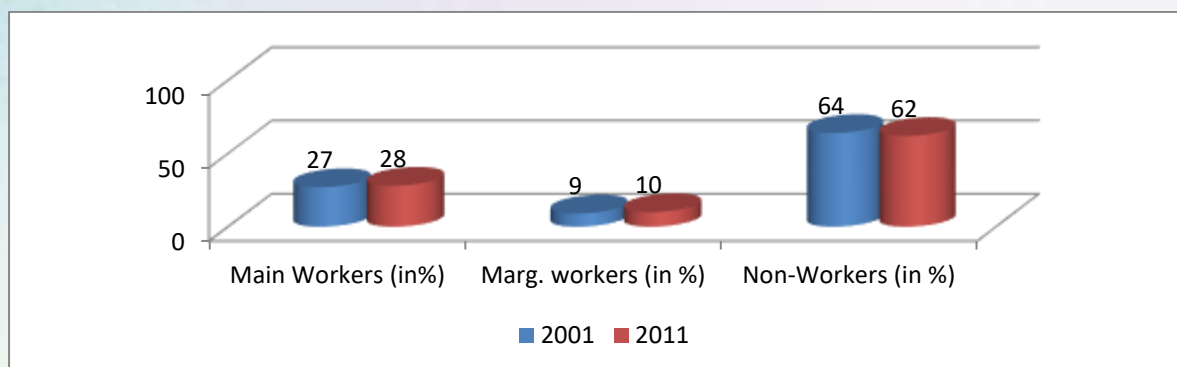
Source : Census of India

The **Figure I** below shows that proportion of main workers to total population in Assam has increased from 26.68 percent in 2001 to 38.35 percent in 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 was though shows an increasing trend in absolute numbers during 2011 compare to 2001, but in percentage it showed a decline in 2011 (about 64% in 2001 to 61% in 2011) which is indicating a positive impact on the state economy.

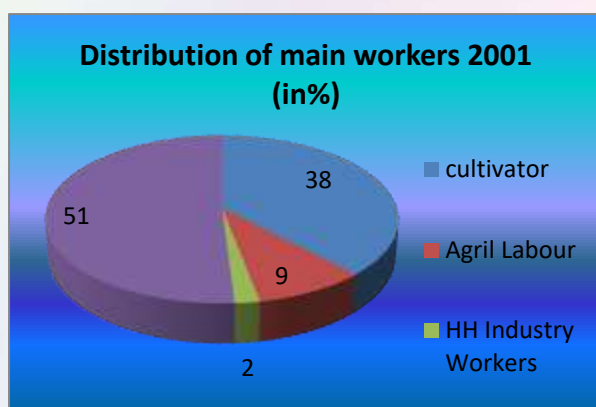
The **Fig.-II and Fig.-III** shows that there is a shift in the composition of total main workers from agricultural sector to non-agricultural sector. During 2001 and 2011 of the total main workers, proportion of workers in agricultural sector was 46 percent as against 63 percent in 1991. On the other 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 percentage share of male and female main workers was 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.

**Percentage of Main, Marginal and Non workers to total population as per 2001 and 2011 census:**

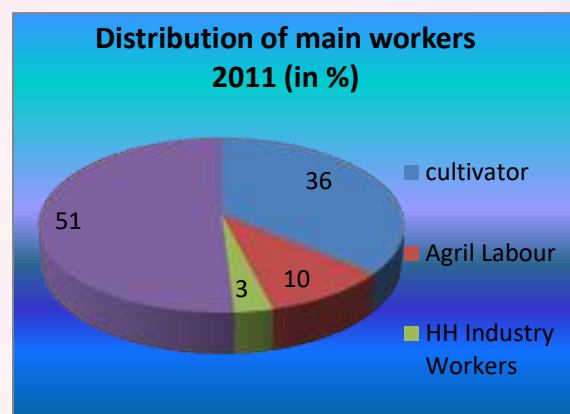
**FIGURE-I**



**FIGURE-II**



**FIGURE-III**



**PERIODIC LABOUR FORCE SURVEY (PLFS):**

The Periodic Labour Force Survey (PLFS) was conducted regularly every year by National Statistical Office (NSO). During last year NSO. has conducted PLFS during July 2019 to June 2020. The survey was among 12,569 FSUs (6,913 villages and 5,656 urban blocks) covering 1, 00,480 households (55,291 in rural areas and 45,189 in urban areas) and enumerating 4, 18,297 persons (2, 40,231 in rural areas and 1,78,066 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.

**Labour Force Participation Rate (LFPR):**

Labour force participation rate (LFPR) is defined as the percentage of persons in the labour force in the population. The result of the PLFS Report 2019-20 reveals that the LFPR in respect of the age-group 15 years and above according to usual status

approach in Assam is 47 percent in rural areas, 46.3 percent in urban areas and 46.9 percent taking urban and rural areas as a whole against the all India rate of 55.5 percent 49.3 percent and 53.5 percent respectively. The Table 17.2 shows the LFPR for persons aged 15 years and above in Assam.

**TABLE-17.2**

**LABOUR FORCE PARTICIPATION RATE (IN PERCENT)**

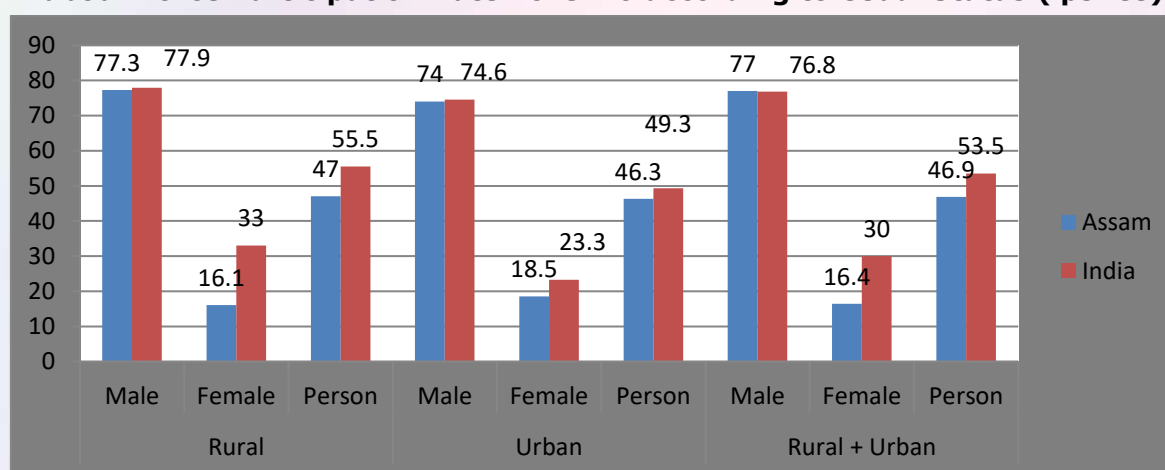
**ACCORDING TO USUAL STATUS (ps+ss) 2019-20 ,(Age group 15Yr.and above)**

State	Rural			Urban			Rural + Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
<b>Assam</b>	77.3	16.1	47	74	18.5	46.3	77	16.4	46.9
<b>India</b>	77.9	33.	55.5	74.6	23.3	49.3	76.8	30	53.5

Source: Annual Report PLFS 2019-20

**FIGURE-IV**

**Labour Force Participation Rate 2019-20 according to Usual Status ( ps+ss)**



As seen in the Table 17.2 and in the graph the LFPR, in Assam according to usual status (ps+ss) method is high among Rural male person 77.3 percent compared to male Urban counterparts 74 percent. Whereas female LFPR is more in Urban areas 18.5 percent than Rural areas 16.1 percent.

**Unemployment Rate:**

Unemployment Rate (UR) is defined as the percentage of persons unemployed among the persons in the labour force. The UR among the persons aged 15 years to 59 years who were available for could not get work during the reference period is shown in the Table 17.3 below. In rural areas the unemployment rate is 8.2 percent, in urban areas the unemployment rate is 9.0 percent in Assam, whereas the unemployment rate at all India level is 4.3 and 7.4 respectively according to the usual status Primary Status and Subsidiary Status (ps+ss) approach as seen in the graph Figure V. The female unemployment rate in Assam is 14.3 percent which is higher than the male rate of 7.1 percent.



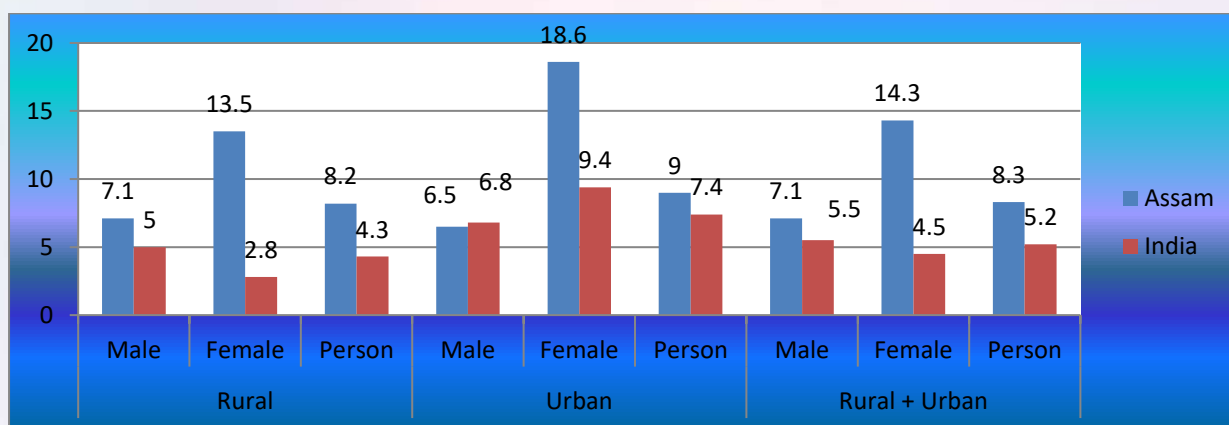
The study reveals that the female UR in urban areas of the State during the reference period is 18.6 percent which is higher than the unemployment rate of 13.5 percent in rural areas as seen in the Table 17.3. It is also clear from the data that the Female UR in Assam as a whole is very high 14.3 percent compare to the all India figure of 4.5 percent. That is, Assam is in back foot in case of women empowerment and participation in employment in different sector.

**TABLE: - 17.3**  
**UNEMPLOYMENT RATE (IN PERCENT) ACCORDING**  
**TO USUAL STATUS (PS+SS) 2019-20**

State	Rural			Urban			Rural + Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Assam	7.1	13.5	8.2	6.5	18.6	9.0	7.1	14.3	8.3
India	5.0	2.8	4.3	6.8	9.4	7.4	5.5	4.5	5.2

Source: Annual Report PLFS 2019-20

**FIGURE- V**  
**Unemployment Rate in 2019-20 according to Usual status (ps+ss)**



**Employment in Shops and Commercial Establishments:**

The Labour Bureau, 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 UTs. The report on shops and establishment in Assam is prepared on the areas covered under the Assam Shops and Establishment Act, 1971. In the last report published by the Labour Bureau in 2018 with reference to 2016 data it shows that there were 82873 thousand establishments in Assam covered under the Act and total 1,41,449 persons directly engaged in these establishment.

### Employment Market Information Programme:

Employment Market Information (EMI) Unit is an important unit of the employment Exchanges that deals with collection of all information related to labour market. 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 2014 to 2020 as per data collected through Employment Market Information Programme is shown in figure-VI.

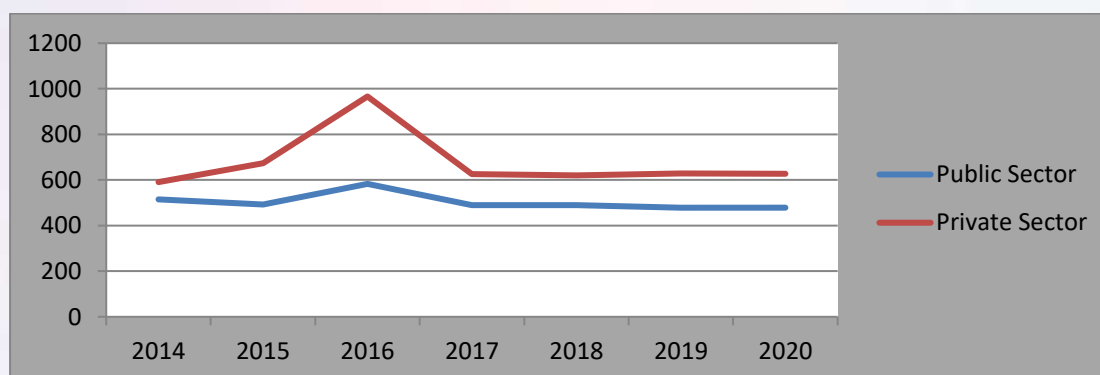
### Employment in Public and Private Sector in Assam:

The total employment in the public and private sector establishments under EMI programme in 2020 was 11,05,401 Nos. ( public sector 4.78,721 Nos. and private sector 6,26,680 Nos.) whereas it was 11,08,121 Nos. (in public sector 4,79,140 Nos. and in private sector 6,28,981 Nos.) in 2019 which shows a decrease in both public & Private sector. The main cause for this decreasing may be the Covid-19 Pandemic situation prevailing in the State and rest of the Country. Gender empowerment in the country is a big challenge in the country, the women employment both in public and Private sector shows a different picture of the state.

During 2020, female employment in both the sectors were 35.6 percent compared to 36.9 percent of the total employment in 2019. The male employment during 2020 in Public sector and Private sector were 389314 and 321689 nos. respectively compared to 388919 Nos. and 310287 Nos. respectively in the year 2019. This shows a increasing trend of male employment, but it is depicted an inverse picture in 2020 in over all employment of women compared to 2019 year.

**FIGURE-VI**

#### Employment in Public and Private Sector in Assam (in '000' Nos.)



### Women Employment in Organized Sector:

It is felt that to become a developed economy women empowerment is very essential. Table 17.4 reveals that the employment of women in organized sector in the State was 394.4 thousand in 2020 as against 408.9 thousand during 2019, which is 35.6

percent of the total employment in 2020. It also shows that the employment share of women participation in work in organised sector was going down in 2020. The main cause for this inverse affect may be due to the prevailing Covid-19 pandemic situation in the state and rest of the country.

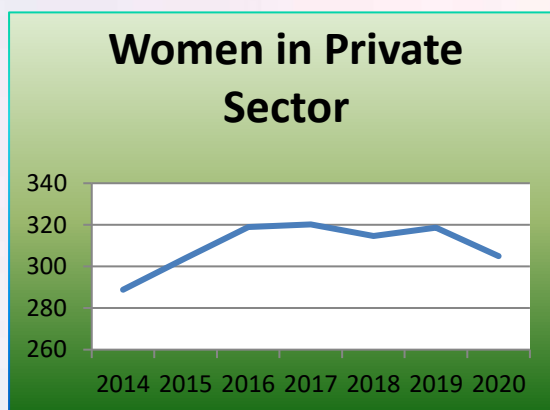
**TABLE – 17.4**  
**EMPLOYMENT OF WOMEN IN ORGANIZED SECTOR**

(in thousands)

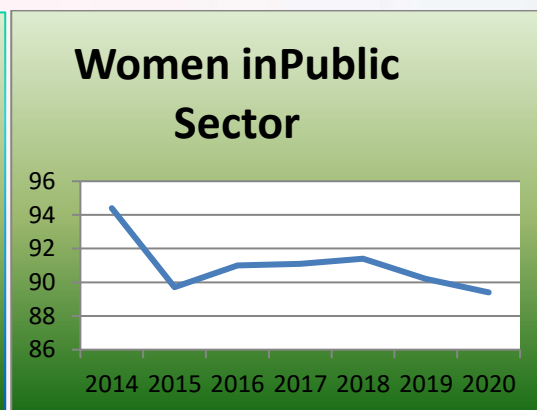
Year	Public Sector		Private Sector		Public and Private Sector		Percentage share of women in organised sector
	Women	Total	Women	Total	Women	Total	
<b>2014</b>	94.4	515.2	288.8	590.8	383.2	1106.0	34.6
<b>2015</b>	89.7	492.4	304.1	673.7	393.8	1166.2	33.8
<b>2016</b>	91.0	583	319.0	966.4	410.0	1549.4	26.5
<b>2017</b>	91.1	490	320.2	625.3	411.4	1115.5	36.9
<b>2018</b>	91.4	489.9	314.7	619.7	406.2	1109.7	36.6
<b>2019</b>	90.2	479.2	318.7	628.9	408.9	1108.1	36.9
<b>2020</b>	89.4	478.7	305.0	626.7	394.4	1105.4	35.6

Source: Directorate of Employment and Craftsmen Training, Assam

**FIGURE-VII**



**FIGURE-VIII**

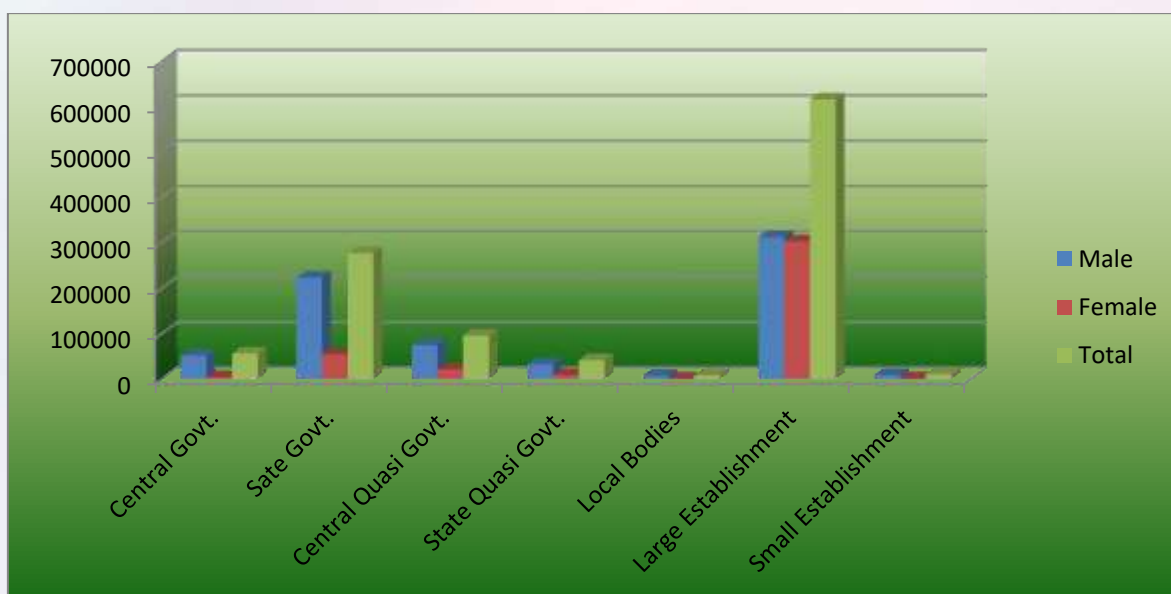


**TABLE-17.5**  
**Composition of Public and Private sector Employment in Assam**  
 (as on 31-12-2020)

Sector	Male	Female	Total
<b>PUBLIC SECTOR</b>			
Central Govt.	51964	4305	56269
State Govt.	223227	54220	277447
Central Quasi Govt.	74734	20886	95620
State Quasi Govt.	32440	8929	41369
Local Bodies	6949	1067	8016
<b>PRIVATE SECTOR</b>			
Large Establishment	312854	303330	616184
Small Establishment	8835	1661	10496
<b>Total</b>	<b>711003</b>	<b>394398</b>	<b>1105401</b>

Source: Directorate of Employment and Craftsmen Training, Assam

**FIGURE-IX**



### 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. The Districts of BTAD, Baksa, Chirang and new districts have no Employment Exchange at present. The Table 17.6 shows that the number of unemployed as per Live Register and it shows an increase by 1.63 percent in 2020 over 2019.

**TABLE – 17.6**  
**EMPLOYMENT THROUGH EMPLOYMENT EXCHANGES**

Year	No. on Live Register	Vacancy Notified	Placement against
2014	1746520	2829	1099
2015	1915886	2672	1028
2016	2010603	2147	582
2017	1963376	2395	1023
2018	2024446	833	985
2019	2047195	557	97
2020	2080767	231	84

Source: Directorate of Employment and Craftsmen Training, Assam

The size of the educated job seekers is considerably high, which is a great challenge before the growing economy. From the records of the Live Register of Employment Exchanges, the registered educated job seekers stood at 17,46,671 Nos. including others in 2020 as against 17,18,492 during 2019 thereby showing an increase of 1.63 percent in 2020 over 2019. The number of educated job seekers has increased at all level of education in 2020 over 2019. In the year 2020 it shows a significant increase of live registration in respect of Graduate and H.S.S.L.C. passed out unemployment. In respect of Medical Graduates, it is generally assumed that though they are in the list of job seeker yet they are otherwise employed as self employment for their personal income. The detail distributions of the educated job seekers are shown in the Table 17.7.

**TABLE – 17.7**  
**DISTRIBUTION OF REGISTRATION OF EDUCATED JOB-SEEKERS IN ASSAM AS PER EDUCATIONAL BACKGROUND.**

(Fig. in Nos.)

	No. Registered during	No. Registered during	No. Registered during	Total Educated Job Seekers, 2020 (Live Register )
	2018	2019	2020	
Engineering Graduate	1638	604	1221	8136
Medical Graduate	94	76	88	865
Agriculture Graduate	29	27	65	297
Veterinary Graduate	42	30	39	345
Post Graduate	2953	1309	1436	17311
Graduate	32153	25048	54329	333430
Passed out ITI Trainees	16962	1269	1395	16913
Diploma Holder	4373	731	1759	9521
H.S.S.L.C.	80496	53803	124621	716369
H.S.L.C.	59300	44696	54780	595184
Others	5867	3634	3482	48300
Total	203907	131227	243215	1746671

Source: Directorate of Employment and Craftsmen Training, Assam

Observing the burning problem of unemployment in the state the Government of Assam has taken some positive initiative to decrease the burden. Pertaining this initiative, Govt has decided to capture the actual nos. of unemployment youths in the State. Govt. has launched a online portal for live registration of educated unemployment youth in the Dist. Employment Exchange Offices. Moreover, Govt. has started to engaged 100,000 Nos.(One Lakh ) unemployment youth in the Government job in different department which will impact in Government works for further economic development. State Govt. also started different employment orientated programme/schemes to engaged more unemployment youth in full time or part time and create opportunities for their self employment. Moreover during 2019-20 Directorate of Employment Craftsman & Training has organised 3 job melas two in Guwahati and one in Silchar and offered job to 51 unemployment youth .

#### **Average Daily Wage Rate in Rural Areas:**

As per data collected by the Directorate of Economics & 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 both skilled and un-skilled labour, wage rate of male ploughman and reaper and harvester are in increasing trend. As per RBI sources the average daily wage rate of Men in general agricultural labour in rural areas in Assam for 2019-20 was Rs. 252.2. against all India rate of Rs. 286.6. The following Table -17.8 shows the trend of average wage rate in rural area in Assam.

**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	Black Smith	Plough Man	Herdsman	Reaper and harvester		Man	Women
	Man	Man	Man	Man	Man	Women		
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
2019-20 (p)	422	401	318	300	319	255	305	240

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:

#### **RE-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. This scheme has been redesigned by Government of Assam to reach out to the more educated youth of Assam as Re-SVAYEM 2020. 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. In this redesigned SVAYEM Scheme Assam 2021, government decided to provide Rs. 50,000 each to 2 lakh youth to encourage entrepreneurship. The beneficiaries would have to be part of self-help groups, joint liability groups etc. RE-SVAYEM Scheme 2021 will provide financial support to the youths to take up income generating activities in manufacturing, trading and service sector. For this positive initiative from Govt. it is expected that in future it will help to set up some new MSMEs and ultimately the foundation of rural economy would be strong.

#### **Kanaklata Mahila Sabolikaran Yojana (KAMS):**

Government of Assam with the noble aim of Empowering Women by forming SHGs 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 2020-21, a total of 206,385 SHG received a total amount of Rs.298.8 Cr under KAMS scheme.

#### **National Rural Livelihood Mission:**

National Rural Livelihoods Mission (DAY-NRLM) is being implemented through Assam State Rural Livelihoods Mission (ASRLM), is working to reduce poverty by enabling the poor households to access gainful self-employment. Till March 2021, a total of 31.82 lakh number of rural households across all blocks and districts of Assam have been mobilised to promote a total of 2.95 lakh SHGs since inception. A total of 17,835 Village Organisations and 676 Cluster Level Federations have been promoted under ASRLMS. Till March 2021, a total of 1,22,644 numbers of SHGs have been provided

Community Investment Fund amounting to Rs 671.36cr. The SHGs promoted under ASRLM are linked for credit with various banks and so far they availed loans for an amount of Rs. 1929.46.cr by 1,90,488 SHGs for their self employment.

#### **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY):**

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is the Skill Training and placement program of the Ministry of Rural Development, Govt. of India. It is uniquely focus on Rural Youth between 15-30 years from poor families with a vision to transform rural poor youth into an economically independent and globally relevant workforce and provide them with jobs having regular monthly wages and emphasis on their sustainable employment. 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 53,109 no. of rural poor youth have been trained under various skill development courses and out of them 29,297 youths have been have been employed also.

#### **Mahatma Gandhi National Employment Guarantee Act (MGNREGA):**

The MGNREGA 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.

Under this programme during 2020-21 a total of 913.11 lakh mandays were generated against a total 623.08 lakh mandays in 2019-20. Since inception up to 2019-20, 48.11 lakhs numbers of rural households have been provided with job card. Out of the total employment generated, 41.77 percent of jobs were provided to women 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. 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..



**Khadi & Village Industries Commission:**

Khadi & Village Industries Commission (KVIC) established under the Khadi and Village. Industries Commission Act, 1956, is a statutory organization under the aegis of the Ministry of MSME. The main objectives of KVIC are

- To provide employment in rural areas;
- To produce saleable articles; and
- To create self-reliance amongst people and building up a strong rural community spirit.

The performance (target and achievement) under PMEGP for the year 2020-21 is reflected in Table 17.9

**TABLE – 17.9****Summary of Agency wise performance of PMEGP for the year 2020-21**

Name of Agency	Physical performance		Financial performance (Rs. In lakh)		Employment performance (in nos.)	
	Target	Achievement	Target	Achievement	Target	Achievement
DICC	2363	1826	5907.5	3010.37	18904	14608
KVIC	1737	423	4341.54	784.74	13896	3384
AKVIC	1736	687	4340	1148.61	13888	5496
TOTAL	5836	2936	14589.04	4943.72	46688	23488

Source: Khadi and Village Industries Commission, GOI.

Apart from PMEGP, it is to note that total employment generated under the Khadi & Village Industries sector during 2020-21 was 6,03,549.

Besides above, Govt. has also been implementing some employment oriented programmes i.e. Rural Self Employment Training Institute for self employment and establishment of small enterprises, Start-Up Village Entrepreneurship Programme (SVEP) under NRLM for helping SHG and their family members to set up enterprises in non farm sector to increase the radius of employment opportunities and overall upliftment of Rural economy as well as state economy as a whole.

**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. The SSI sectors have a major contribution towards creating employment in the State. Presently the SSI have been sub-divided into Micro, Small and Medium Enterprise under the Micro, Small and Medium Enterprises Development (MSMED) Act 2006. 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) , the Coir Board of India and National Small Industries Corporation (NSIC). The schemes of Government of India envisages financial assistance to State Governments for setting up new and modernizes existing Mini Technology Centres As per report up to 31<sup>st</sup> March 2021, there were total 45215 Nos. of Micro ,6141 Nos. of Small and total 554 Nos. of Medium Enterprises unit in the state with a total Nos. of workers 5,04,037, which is a positive sign in developing economy of the state. Moreover, during 2020-21 there were 17463 nos. of Micro, 2322 nos. of Small and 273 of nos. Medium enterprise has been registered under UAM/UDAYAM. Where 230821 Nos. of unemployment youth got opportunity for engagement. The following Table-17.10 shows the trend of MSME unit set up in the state .

**TABLE-17.10**  
**District wise Number of UAM/UDYAM unit setup and employment generated during 2020-21, Assam.**

Sl. No.	Name of District	Total No. of MSME registered during 2020-21	Total Employment	Sl. No.	Name of District	Total No. of MSME registered during 2020-21	Total Employment
1	2	3	4	1	2	3	4
1	Baska	259	1289	17	Kamrup(R)	1561	36702
2	Barpeta	1148	7033	18	Karimganj	504	2881
3	Biswnath	297	3921	19	Kokrajhar	223	2157
4	Bongaigaon	523	6752	20	Lakhimpur	942	8675
5	Cachar	1209	11173	21	Majuli	84	460
6	Chirang	356	4090	22	Morigaon	405	2913
7	Darrang	456	6286	23	mankachar	27	169
8	Dhemaji	662	3772	24	Nagaon	2180	17478
9	Dibrugarh	1093	26392	25	Nalbari	686	4932
10	Dima Hasao	85	371	26	Sivsagar	726	20632
11	Dhubri	76	312	27	Sonitpur	137	4332
12	Goalpara	473	2483	28	Tinsukia	1023	10440
13	Golaghat	828	7324	29	Udalguri	474	3495
14	Hailakandi	818	6024	30	Chaodeo	0	0
15	Jorhat	42	379	31	West Karbi Anglong	26	190
16	Kamrup(M)	2735	27764				
	<b>TOTAL</b>					<b>20058</b>	<b>230821</b>

Source – Commissionerate of Industries and Commerce, Assam.

UAM-Udyog Aadhar Memorandum,UDYAM-Govt. portal for Registration of MSME.

**Factory Employment:**

Manufacturing generates more economic activity than other sector. Establishment of factory is more important in the state for speedy development in the production and employment perspective. As reported by Chief Inspector of Factories till 2019-20, there were 7512 number of factories in the state with 2,94,692 numbers of employment compared to 7,225 number of factories and 2,85,823 numbers of employment in 2019 showing an increase of 3.10 percent both in factories and nos. of employment. It is estimated from the data base that there were maximum number of workers engaged in manufacturing and other non-metallic mineral products (37%) followed by manufacturing of food products (29%), 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 and 2021. The workers living outside the states were forced to come back to their native state for survival. Similarly in Assam there was a inflow 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/workers were returned to the state during the lockdown.

**SAMPARK :**

An 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. For the safety life of the migrant workers the State Govt. has launched a new scheme manes as " Assam Migrant Workers; food security scheme" in order to provide relief in the form of dry ration to the Migrant workers of the state during the period of lock down, restriction etc. Due to Covid- Pandemic. Govt. has expected that this scheme will be benefited to the Labour class who were identified by e-SHRAM portal.

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**CHAPTER -XVIII****PANCHAYAT & RURAL DEVELOPMENT****PANCHAYAT& RURAL DEVELOPMENT DEPARTMENT**

Panchayat & Rural Development (P&RD) Department, Assam is responsible for alleviation of rural poverty, enhancement of rural livelihoods by providing self-employment to the people living below the poverty line through implementation of various schemes and programmes and to strengthen the Panchayati Raj Institutions (PRIs). The Development is concerned with empowering the PRIs to enable them to increase the capability of the rural poor through self employment generation programmes and by developing critical infrastructures in the rural areas. With this mandate, the P&RD. Department has been implementing various schemes for development of rural infrastructure and upliftment of quality of life of rural people. The schemes implemented by the Department are broadly classified into 3 categories:

- i) Self-Employment.
- ii) Wage Employment.
- iii) Welfare scheme for the Disabled, Widows & other down trodden people living below poverty line.

**SCHEMES IMPLEMENTED BY THE P&RD**

Department is presently implementing Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Awas Yojana – Gramin (PMAY-G), National Social Assistance Programme (NSAP), Central Finance Commission Grant and State Finance Commission Grant etc.

**MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT**

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. Under the MGNREGA scheme, present labour wage rate in Assam is Rs.224/- per day.

During the financial year 2018-19, against the approved labour budget of 500.00 lakh (mandays), 532.47 lakhs mandays were generated. Likewise, 623.08 lakh mandays were generated against the approved labour budget of 615 lakh mandays during 2019-20. For the financial year 2020-21, 913.11 lakh mandays were generated against the approved labour budget of 900 lakh mandays due to increase in demand of work. For the financial year 2021-22, against the approved labour budget 650 lakhs mandays 480.35 lakhs mandays have been generated so far. Under this programme, no. of works completed for the financial year 2018-19 was 122114; whereas no. of works completed in the financial year 2019-20 was 142699. In the financial year 2020-21, no. of works

completed was 49704; whereas 2907 no of works have been completed during the financial year 2021-22 (till 30-11-2021). The women participation rate in MGNREGA in Assam is on the increase beyond its mandatory 33%. Women participation rate in MGNREGA was 41.08% in 2018-19, 41.77% in 2019-20, 44.08% in 2020-21 and 46.46% in 2021-22 (till 30-11-2021). Moreover, 18359 no. of household completed 100 days' work in 2018-19, while it was 29979 no. of household in FY 2019-20. In the financial year 2020-21, 71699 no. of households completed 100 days' works. During the financial year 2021-22, 9741 no. of households completed 100 days' works till 30-11-2021.

As regards the financial achievement, during 2018-19, the utilization position was Rs.1338.45 Cr. against fund receipt of Rs.1427.00 Cr. During 2019-20, state received an amount of Rs.1476.24 Cr. out of which the amount of Rs.1476.29 Cr. has been utilized. For 2020-21, the amount of Rs.2525.27 Cr. has been utilized against the fund receipt of Rs 2877.38 Cr. Also, for 2021-22 (up to 30-11-2021) an amount of Rs.1385.97 Cr. has been utilized against the fund receipt of Rs 1572.13 Cr.

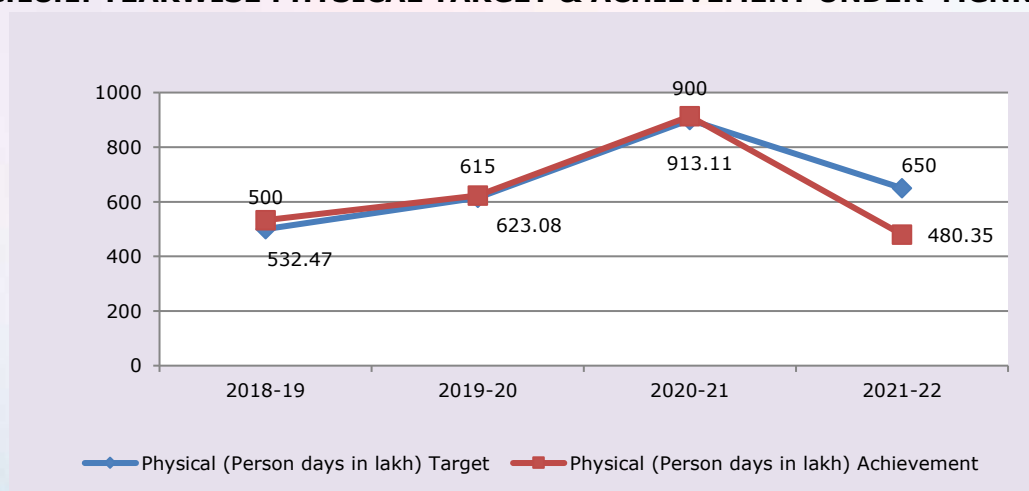
As per direction of the Ministry of Rural Development, Govt. of India, all the assets created under MGNREGA are now being geo-tagged with the help of Indian Space Research Organization (ISRO). Till date, 2564362 assets have been geo-tagged against 256798 assets ID shared with National Remote Sensing Centre (99.86%).

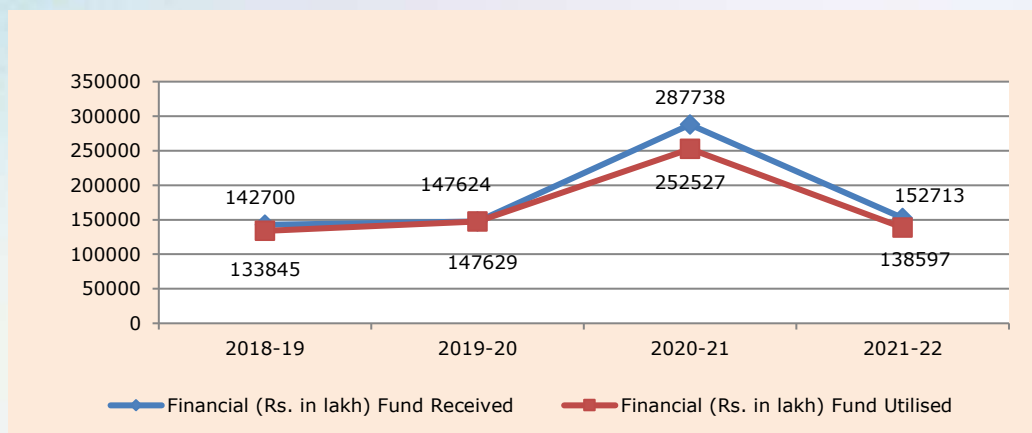
**TABLE 18.1: YEAR-WISE PHYSICAL & FINANCIAL ACHIEVEMENT OF MGNREGA**

Year	Physical (Person days in lakh)		Financial (Rs. in lakh)	
	Target	Achievement	Fund Received	Fund Utilised
2018-19	500	532.47	142700	133845
2019-20	615	623.08	147624	147629
2020-21	900	913.11	287738	252527
2021-22	650	480.35 (Till 30-11-21)	152713	138597 (Till 30-11-21)

Source: Commissionerate of Panchayat & Rural Development, Assam

**FIG.18.1. YEARWISE PHYSICAL TARGET & ACHIEVEMENT UNDER 'MGNREGA'**



**FIG.18.2. YEARWISE FINANCIAL AMOUNT RECEIVED & UTILISED UNDER 'MGNREGA'****PRADHAN MANTRI AWASS YOJANA – GRAMIN (PMAY-G)**

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 accounts in three installments. There are also 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 @224/- under MGNREGA scheme, Gas connection etc. The minimum size of the house should not be less than 25 sqm. The state did not receive any physical and financial allocation during 2018-19 from Government of India. For 2019-20 target was to construct 2,56,043 houses, out of which houses sanctioned and completed were 2,23,561 and 1,96,752 respectively. For 2019-20 against receipt of Rs.1,46,109.44 lakh, Rs.2,04,669.07 lakh was utilized. For 2020-21, the target given by Government of India was 3,65,976 houses, out of which sanctioned and completed houses were 2,69,511 and 20,480 respectively. During 2020-21, Rs.1,50,342.502.lakh was released and utilization was Rs.1,26,406.41 lakh. Besides, for 2021-22, a new target of 7lakh houses has been given to the state as per the revised definition of kutcha house. The total estimate for these houses would be Rs.9,10,000 lakh.

**NATIONAL SOCIAL ASSISTANCE PROGRAMME (NSAP)**

It is a central sponsored programme to promote social security through financial support to the rural families who live below the poverty line. Under NSAP, there are four schemes being implemented in the state.

- I) Indira Gandhi National Old Age Pension Scheme (IGNOAPS)
- II) Indira Gandhi National Widow Pension Scheme (IGNWPS)
- III) Indira Gandhi National Disability Pension Scheme (IGNDPS)
- IV) National Family Benefit Scheme (NFBS).

**(I) INDIRA GANDHI NATIONAL OLD AGE PENSION SCHEME (IGNOAPS)**

This old age pension scheme is for the people aged 60 years and above and meant for BPL families. The quantum of assistance is Rs. 250/- (Rs. 200 from Central Govt. and Rs. 50 is from the State Govt.) per month for beneficiaries aged between 60-79 years and Rs. 550/- per month for beneficiaries aged 80 years and above. In 2018-19, 694441 nos. of beneficiaries have received monthly pension utilizing an amount of Rs. 33543.97 lakh. In 2019-20, 707635 nos. of beneficiaries have received pension utilizing an amount of Rs. 29420.88 lakh. In 2020-21, 705328 nos. of beneficiaries have received pension utilizing an amount of Rs. 32966.69 lakh and In 2021-22 (Up to 15<sup>th</sup> November 2021), 661993 nos. of beneficiaries have received pension utilizing Rs. 14858.535 lakh.

**(II) INDIRA GANDHI NATIONAL WIDOW PENSION SCHEME (IGNWPS)**

This widow pension scheme is for widows aged 40 years and above belonging to a BPL family. The quantum of assistance is Rs. 300/- per month. In 2018-19, 107472 nos. of beneficiaries have received monthly pension utilizing an amount of Rs. 4516.77 lakh. In the 2019-20, 112245 nos. of beneficiaries have received pension utilizing an amount of Rs. 4264.40 lakh. In 2020-21, 112282 nos. of beneficiaries have received pension utilizing an amount of Rs. 5016.189 lakh and In 2021-22 (Up to 15<sup>th</sup> November 2021), 109656 nos. of beneficiaries have receipt pension utilizing Rs. 2059.74 lakh.

**(III) INDIRA GANDHI NATIONAL DISABILITY PENSION SCHEME (IGNDPS)**

The scheme is for the beneficiaries belonging to a BPL family. The eligible age for the pensioner is 18 years and above and the disability level has to be 80%. The monthly pension amount is Rs.300/- per month. In 2018-19, 34010 nos. of beneficiaries have received monthly pension utilizing an amount of Rs. 1450.7 lakh. In the 2019-20, 35624 nos. of beneficiaries have received pension utilizing an amount of Rs. 1336.93 lakh and in 2020-21, 35612 nos. of beneficiaries have received pension utilizing an amount of Rs. 1579.515 lakh and In 2021-22 (Up to 15<sup>th</sup> November 2021), 33947 nos. of beneficiaries have received pension utilizing Rs. 635.706 lakh.

**(IV) NATIONAL FAMILY BENEFIT SCHEME (NFBS)**

This scheme is implemented with the objective to provide financial assistance to a BPL family whose breadwinner has died. The quantum of assistance is Rs. 20,000/-, however Govt. of Assam has added a top-up amount of Rs. 5000/- for those, whose breadwinners died on or after 1<sup>st</sup> April 2019. In 2020-21, 1740 nos. of beneficiaries have received this benefit by utilizing Rs. 348 lakh.

**STATE SPONSORED SOCIAL ASSISTANCE PROGRAMME:****i) SWAHID KUSHAL KONWAR SARBAJANIN BRIDDHA PENSION ACHONI (SKKSBPA):**

In 2018-19, Govt. of Assam has launched this universal old age pension scheme basically to cover the deprived beneficiaries from the IGNOAPS. The quantum of monthly assistance is Rs. 250/-. In 2020-21, 1263563 nos. of beneficiaries have received pension utilizing an amount of Rs. 41825.254 lakh and In 2021-22 (up to 15<sup>th</sup> November 2021), 1271201 nos. of beneficiaries have received pension utilizing Rs. 3197.039 lakh.

**ii) INDIRA MIRI UNIVERSAL WIDOW PENSION SCHEME (IMUWPS):**

This scheme was launched in 2019-20 for the widows aged between 18-59 years. The quantum of monthly assistance is Rs. 300/-. It has also a component of one-time financial assistance of Rs. 25000/- to those widows who lost their husbands within the age of 45 years. In 2020-21, 170034 nos. of beneficiaries have received pension utilizing an amount of Rs. 6217.935 lakh and in 2021-22 (up to 15<sup>th</sup> November 2021), 181881 nos. of beneficiaries have received pension utilizing Rs. 3372.156 lakh.

**CENTRAL FINANCE COMMISSION GRANT:**

The period covered by Central Finance Commission is for every five years. The 14<sup>th</sup> Finance Commission covered period from 2015-16 to 2019-20. Under 14<sup>th</sup> Finance Commission, the grants were 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 transferred as the Basic Grant and 10% as 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 shed, community hall etc. in rural areas.

Under 14<sup>th</sup> Finance Commission Grant during 2015-16 to 2019-20, a total amount of Rs 5101.35 Cr has been received from the Government of India and transferred to all the 2197 nos. of GPs, out of which Rs. 5070.66 Cr. has been utilized till date. Under this programme, 1,78,927 nos. of scheme in the sector like water supply, sanitation, sewerage, solid waste management etc. have been taken out of which 1,41,486 nos. scheme has been completed.

The 15<sup>th</sup> Finance Commission has been effective for the period from 2020-21 to 2025-26. Unlike 14<sup>th</sup> Finance Commission Grant, which was only for Gaon Panchayats, the 15<sup>th</sup> Finance Commission Grants have also been allocated to the Zilla Parishads, Anchalik Panchayats and Gaon Panchayats in the ratio of 70:15:15 respectively. Under 15<sup>th</sup> Finance Commission Grant funds are allocated to Sixth Schedule Districts also. The Untied Grant can be used by the Rural Local Bodies for location specific felt need, except for salary or other Establishment expenditure. The Tied Grants are to be used for basic services of sanitation and maintenance of open defecation free status supply of drinking water, rainwater harvesting and water recycling.

Assam has received the allocation of Rs. 1604 Cr. for the year 2020-21. For general areas the allocation is Rs. 1337.1 cr. and for sixth scheduled areas the allocation is Rs. 266.9 Cr for 2020-21. The PRIs has received amounting to Rs. 884.81 Cr of the total allocation. Under 15<sup>th</sup> Finance Commission 33,883 nos. of scheme has been taken for the 2020-21, out of which 5,282 nos. schemes has been completed.

For 2021-22, Assam has got the allocation of Rs 1186 Cr. For general areas the allocation is Rs. 988.66 Cr. and for sixth scheduled areas the allocation is Rs.197.32 Cr for 2021-22. The PRIs has received amounting of Rs.494.33 Cr of the total allocation for 2021-22. Under 15<sup>th</sup> Finance Commission 40,876 nos. of scheme has been taken for 2021-22, so far.



**STATE FINANCE COMMISSION GRANT:**

Assam Finance Commission is constituted for every five years. The latest State Finance Commission is 6<sup>th</sup> Assam State Finance Commission which is effective for the period from 2020-21 to 2024-25. During 2021-22, an amount of Rs 192.70 Lakh, Rs 779.35 Lakh & Rs 5712.20 Lakh have been transferred to Zilla Parishad, Anchalik Panchayat & Gaon Panchayat respectively for paying remuneration to Elected Members of PRIs for 10<sup>th</sup> months w.e.f to April'2020 to January 2021.

**ASSAM STATE RURAL/URBAN LIVELIHOODS MISSION****(A) Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)**

Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) which is being implemented by ASRLM. Till March 2021, a total of **31.82 Lakh** rural households across all blocks and districts of Assam have been mobilized to promote a total of **2.95 Lakh** Self-Help Groups (SHG) ever since its inception in 2011. These SHGs are being organized further to higher level federations like Village Organisations (VO) and Cluster Level Federations (CLF) to provide a common platform for collective action for socio-economic development. A total of 17,835 Village Organisations and 676 Cluster Level Federations have been promoted under ASRLMS since inception.

**TABLE: 18.2. BRIEFOF 'ASRLM'**

<b>ASRLM in a Nutshell</b>		<b>Community Funds/Credit Linkages</b>	
No. of Districts covered	33	Revolving Fund (RF)	1,85,460
No. of Blocks covered	219	SHGs (Excluding KAMS) Amount	Rs. 206.91 Cr.
No. of GPs and VDCs covered	2701	Community Investment fund	1,22,644
No. of Villages covered	24,895	SHGs Amount	Rs.671.36 Cr.
No. of Households covered	31,82,712	Credit Linkage	1,90,488
No. of SHGs formed	2,95,683	Amount of Loan Sanctioned	Rs. 1929.46 Cr.
No. of VOs formed	17,835	<b>SHG Members Covered Under Insurance Packages</b>	
No. of CLFs formed	676	Health	8.55 lakhs SHG members
		PMSBY	7.98 lakh SHG members
		PMJJBY	6.37 lakh SHG members
		APY	69480 SHG members

*Source: Assam State Rural Livelihood Mission*

These Community Based Organizations (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 2021, a total of 1,54,962 SHGs have been provided RF amounting to a total of Rs.206.91Cr. CIF 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 2021, a total of 1,22,644 SHGs have been provided CIF amounting to a total of Rs.671.36 Cr.

Further, the SHGs promoted under ASRLM are also linked for Credit with various banks. Till March 2021, 1,90,488 SHGs (Including repeat linkage) have availed loans from various banks, amounting to Rs. 1929.46 Cr. since inception.

The SHG members are also covered under various Health and Life insurance Schemes. A total of 8.55 lakhs SHG members are covered under Health Insurance Schemes, 7.98 lakh SHG members enrolled under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and 6.37 lakh SHG members are enrolled under the Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY). Under Atal Pension Yojana (APY) a total of 69,480 SHG members have enrolled themselves till March 2021.

During 2014-15, Assam State Rural Livelihoods Mission (ASRLM) partnered with Kerala State Poverty Eradication Mission, Kudumbashree - NRO for implementing Panchayati Raj Institutions- Community Based Organisations (PRI-CBO) 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) in the first phase from FY 2017-18 and then in second phase to 19 blocks across 11 Districts including the Sixth scheduled District Karbi Anglong from FY 19-20 onwards. The PRI CBO convergence Project will be further taken forward to 15 more blocks in the year 2021-22. 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) Deendayal Antyodaya Yojana- National Urban Livelihoods Mission (DAY-NULM)**

To alleviate poverty and vulnerability of the urban poor, National Urban Livelihoods Mission was launched by the Ministry of Housing and Urban Poverty Alleviation. This scheme has achieved some noteworthy milestones in the state of Assam till 2020-21. A total sum of Rs.115.7 lakhs in the form of Revolving Fund has been released in 2020-21. Similarly, ALFs have been provided Revolving Fund amounting to a total of Rs.30.5 lakhs. Moreover, 72.48 lakhs has been released for skill training and 59.7 lakhs for self-employment programmes. Although there is a declining trend as compared to 2019-20 in the number of beneficiaries in 2020-21, yet the number of beneficiaries in the skill training and self employment programmes has increased significantly by 11% and 86% respectively. The following Table- 18.3 depicts the achievement of Deendayal Antyodaya Yojana- National Urban Livelihoods Mission.

**TABLE 18.3: ACHIEVEMENTS OF 'DAY-NULM'**

Sl. No.	No. of Income Generation Scheme under operation	No. of Manpower/Groups to whom facilities provided		Fund released (in Lakhs)	
		2019-20	2020-21	2019-20	2020-21
1	RF to SHGs @ Rs 10,000	3798	1157	379.8	115.7
2	RF to ALFs @ Rs 50,000	70	61	35	30.5
3	Skill Training	6341	7039	688.18	72.48
4	Self Employment Program (Individual, Group & SHG Bank Linkage)	848	1519	19.99	59.7

Source: Assam State Urban Livelihood Mission

### (C) National Rural Economic Transformation Project (NRETP)

The Union Cabinet has approved the Implementation of an Externally Aided Project namely "National Rural Economic Transformation Project (NRETP)" under the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) through loan assistance (IBRD Credit) from World Bank in the month of February 2019. Ministry of Rural Development (MoRD), GoI has signed a \$250 million loan agreement with the World bank for National Rural Economic Transformation Project (NRETP) that aims to help rural women in rural households shift to a new generation of economic initiatives by developing viable enterprises for Farm and Non-Farm products.

NRETP project is additional financing to the \$500 million National Rural Livelihoods Project (NRLP) approved by the World Bank in July 2011. 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. The project is currently being implemented across 13 states, 161 districts and 584 blocks across the country. In Assam also the NRETP Project is being implemented in 5 Districts and 20 Blocks, The Districts are Tinsukia, Dhemaji, Hailakandi, Nagaon, and Udalguri.

Ever since its implementation, 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 20 Model Cluster Level Federation of SHG members. The Model CLFs have been provided an amount of Rs.2.5 Lakh per CLF as Infrastructure Development Fund.
2. These MCLs have been channelized Community Funds, CBO Start-Up Funds, Credit Linkages and Insurance facilities with more emphasis
3. Organizing various capacity building programmes at all level for Mission Staff, Cadres and SHG members
4. 3 Community Managed Training Center (CMTC) has been developed under the MCLFs for which an amount of Rs.7.50 per CLF has been released.
5. Additional Funding in terms of Viability Gap Fund (VGF) amounted of Rs.1.28 Crs has been released as 1<sup>st</sup> Trench amongst the 20 MCLFs.
6. Development of designated cadres like Business Development Service Provider (BDSP), Udyog Sakhi, Banking Correspondent Sakhi, Digipay Sakhi etc
7. Up-Scaling and Capacity Building of the cadres with the help of institution like RSETI, KVK, IIE etc.
8. Setting up One Stop Facility (OSF) Centers, Custom Hiring Centers (CHC).
9. Community Enterprise Fund of Rs.20 Lakh per Block has also been released.
10. Dual Authentication of CBO Saving Accounts have been initiated.
11. Promotion of Producer Groups, Producer Enterprises, Organic Cluster's, Artisans Clusters etc
12. Intensify regular NRLM component wise activities in the selected blocks. The 20 NRETP Blocks are Itakhuli, Sadiya, Kakopathar, Guijan, Dhemaji, Sissiborgaon, Murkongselek, Machkhuwa, Lala, Hailakandi, Algapur, Katlicherra, Udalguri, Bhergaon, Mazabat and Rowta.

**TABLE 18.4: ACHIEVEMENTS OF 'NRETP'**

Sl. No.	Particulars	Achievement (Till March'21)
1	No. of Model Cluster Level Federations (CLFs) identified	20
2	No. of SHG Members working as BC Agents	85
3	No. of Producer's Group (PG) formed	369
4	No. of Mahila Kisans covered under Organic Cultivation	5714

*Source: Assam State Rural Livelihood Mission*

#### **(D) Start-up Village Entrepreneurship Programme (SVEP)**

SVEP, the sub-scheme under the 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 is to be developed through:

- Community Enterprise Fund (CEF), a dedicated fund for providing loans to entrepreneurs.
- 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.
- The services are provided through a cadre of Community Resource Persons-Enterprise Promotion (CRP-EP) in each block.
- 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. Till September 2021, 1172 enterprises have been supported under three blocks namely Hajo (Kamrup) 349 Nos., Pub Mangaldoi (Darrang) 470 Nos. and Sidli Chirang (Chirang) 353 Nos.

Moreover, new five blocks have been approved by Ministry of Rural Development (MoRD), Govt. of India namely Pachim Nalbari (Nalbari), Pub Chaiduar (Biswanath), North West Jorhat (Jorhat), Demow (Sivasagar) and Sapekhati (Charaideo) for preparation of DPR under SVEP.

#### **(E) Kanaklata Mahila Sabalikiran Asoni (KAMS)**

Kanaklata Mahila Sabalikiran Asoni, a flagship programme of the Govt of Assam announced in the Budget 2017-18 and launched on the 1<sup>st</sup> 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 SHG. However, Rs. 10,000/ is 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 2021, Rs. 298.8 Cr. has been granted as Revolving Fund to 2,06,385 SHGs under the Kankaklata Mahila Sabalikiran Asoni since its launch. Further, Rs.252.70 Crore as Capital Subsidy (@Rs.50, 000 per SHG) has been released to 50,541 SHGs during 2020-21 under the Vistarista-Kanaklata Mahila Sabalikiran Yojana.

**TABLE 18.5: DETAILS OF GRANTED AMOUNT TO SHGs UNDER 'KAMS'**

Year	Details of Granted Amount
2018-19	Total 1,53,446 SHGs granted Amount of Rs. 218.85 Cr.
2019-20	Total 44,615 SHGs granted Amount of Rs. 65.28 Cr.
2020-21	Total 8,324 SHGs granted Amount of Rs. 14.67 Cr.
<b>Cumulative Total</b>	2,06,385 SHGs have been granted an Amount 298.8 Cr.

Source: Assam State Rural Livelihood Mission

#### **(F) Deen Dayal Upadhyaya Grameen Kaushalya Yojana, (DDU-GKY)**

DDU-GKY is a part of the NRLM, tasked with the dual objectives of adding diversity to the incomes of rural poor families and catering 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 to "Transform rural poor youth into an economically independent and globally relevant workforce".

DDU-GKY programme is being implemented in Public Private Partnership (PPP) mode through various Project Implementing Agencies (PIAs). As on 31<sup>st</sup> March 2021, total 53,019 youth have been trained. Amongst which, 29,297 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 Fiber technician etc.

**TABLE 18.6: PERFORMANCE OF 'DDU-GKY' AS ON MARCH 2021**

DDU-GKY	
Trained	53,019
Placed	29,297

Source: Assam State Rural Livelihood Mission

#### **(G) 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 program with 100% financial assistance from MoRD, Govt. of India. RSETI programme was first rolled out in Assam in 2009-2010. As on 31<sup>st</sup> March, 2021, 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 Composting Making, Paper Cover Envelop & File Making, Soft Toys Maker and Seller, Goat Rearing, Poultry, Mushroom Cultivation, Piggery, Bee Keeping etc. Till 31<sup>st</sup> March, 2021, 1,07,833 candidates have been trained out of which, 77,431 are Rural Poortrained under various skill development trades.

The programme is being sponsored through following six Nationalized Banks in Assam.

- 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)

**TABLE 18.7: PERFORMANCE OF 'RSETI' AS ON MARCH 2021**

RSETI	
No of RSETIS	26
Total Trained	1,07,833
Total Rural Poor Trained	77,431

*Source: Assam State Rural Livelihood Mission*

### **CAPACITY BUILDING AND TRAINING FOR PRI'S, OFFICIALS AND OTHERS:**

The State Institute of Panchayat & Rural Development (SIPRD) under the P&RD Department, Government of Assam is the premier institute of Assam in the field of training and research in the extensive areas of rural development. The institute has been functioning since its inception in 1998 and has been relentlessly working for imparting training to the elected representatives of PRIs of Assam. The institute has been regularly organising different training programmes to build the capacity of the officials of PRIs, Rural Development and other line departments, elected representatives of Panchayats, representatives of nongovernmental organisations, SHG members, unemployed youth, women, farmers and other stakeholders involved in the broad field of rural development and Panchayati Raj.

SIPRD, Assam has been organising skill development training programmes on different activities for building the capacity of the Elected Representative, Officials and others for better planning implementation of Rural Development programmes as well as strengthening of PRI's. The Government of India has been providing 100% grant for strengthening the infrastructure of SIPRD and State Government also born its share of 10% of total recurring grant. The SIPRD has two full fledged campuses in Guwahati- one at Khanapara and another at Kahikuchi.

12 Extension Training Centers have been under SIPRD in different zones of the State Satellite based training networks has been established in Kahikuchi campus of SIPRD with 16 no. of Satellite Interactive terminals. Trainings have become more accessible to the grass root level functionaries and other stakeholders through this satellite based training system of SIPRD in Assam. Moreover, the Ministry of Panchyati Raj has sanction and released fund for setting up 11 no. of District Panchayat Resource Centers (DPRC) in the District wherein SIPRD do not have any Extension Training Centre, & 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 2020 21, the Institute prepared a comprehensive annual training action plan to impart training to 339942 persons on different training programme, covering various subjects. In 2020-21, the institute organised 3008 courses and cover 142371 persons of different clientele groups on various subjects.

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## **CHAPTER-XIX**

### **SOCIAL SECTOR**

The Government of Assam has been making 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 Schools/ Institutes under department of Elementary in Lower Primary schools is 35856 of which 34694 are in rural areas and 1162 are in urban areas in 2020-21. Likewise, the total number of Upper Primary schools is 5668 of which 5350 are in rural areas while 318 are in urban areas, as per DISE 2020-21.

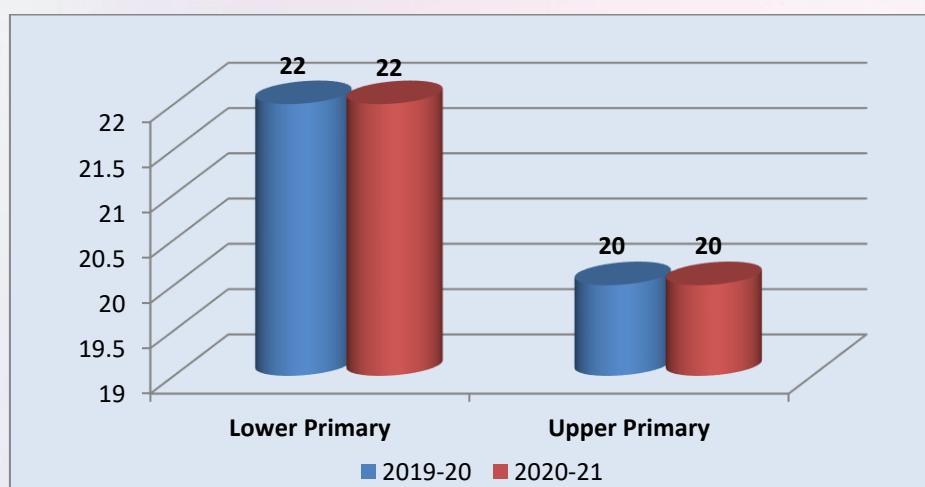
#### **DROP-OUT RATE**

As per, DISE 2020-21 , the average annual Drop-out Rate in Lower Primary in the State during 2020-21 is 3.3% against 4.3% in 2019-20, while this rate was 3.1% in 2018-19. Likewise in the Upper Primary level, the drop-out rate is 4.9% in 2020-21 and it was 3.4% during 2019-20. The drop-out rate among the districts is highest in South Salmara with 6.6%, followed by Darrang with 6.4% in Lower Primary level while lowest is in Kamrup-Rural. Similarly, in the Upper Primary Level, this rate is highest in South Salmara (15%) and the lowest is Kamrup Metro (0.2%) followed by West Karbi Anglong (0.8%), Dhemaji (0.8%) during the period 2020-21. The Transition Rate from primary to upper primary in the state is 97.5%.

## 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 2020-21 has been remain the same at 22 as it was during 2019-20. Similarly, in the Upper Primary level the PTR during the period has remained the same 20 in 2020-21 which is same as in 2019-20 against 21 in 2018-19. The graph below shows the PTR of Lower Primary and Upper Primary in the State during 2020-21 and 2019-20, as per U-DISE 2020-21.

**FIG.19.1. PTR IN LOWER PRIMARY & UPPER PRIMARY LEVEL IN ASSAM**



Source: U-DISE, 2020-21

## 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: GROSS ENROLMENT RATIO OF ASSAM & INDIA**

Category	2018-19		2019-20	
	Assam	India	Assam	India
Elementary Schools (Class I-VIII)	104.5	96.1	107.4	97.8
Secondary Schools (Class IX-X)	72.8	76.9	74.0	77.9
Sr. Secondary School (Class XI-XII)	30.9	50.1	30.9	51.4

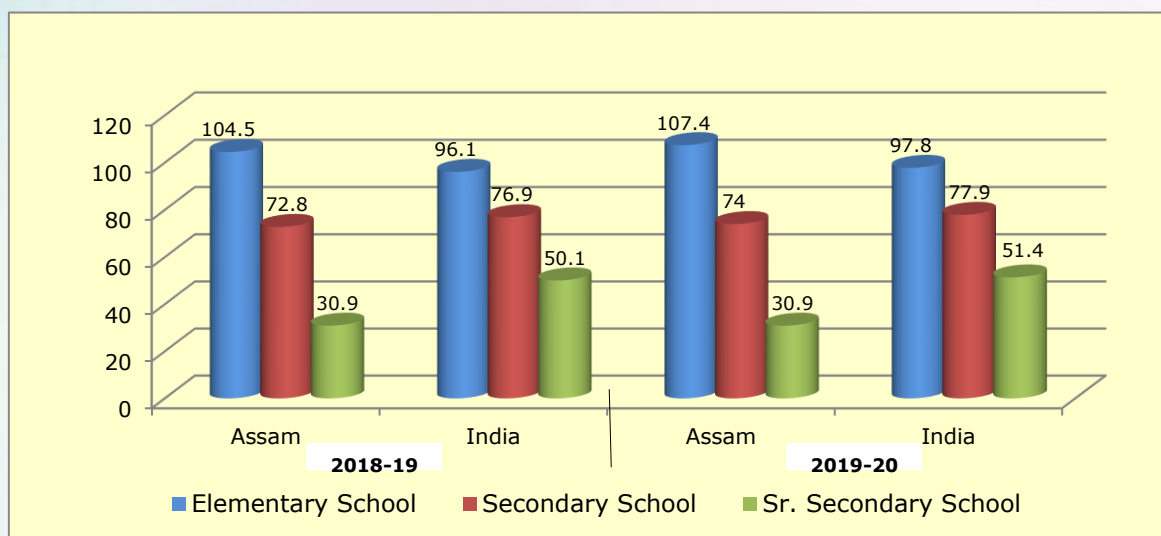
Source: U-DISE+, GOI, 2019-20

Table 19.1 shows that the GER at Elementary schools (Class I-VIII) during 2019-20 was 107.4% while it was 104.5% during 2018-19, showing a significant rise in Assam. In Secondary School (Class IX-X), the GER during 2019-20 was 74.0%, while in 2018-19, it



was 72.8%. However, the GER at Sr. Secondary School is low, i.e. during 2018-19, it was 30.9% and has remained the same during 2019-20 as well, as per U-DISE+ 2019-20.

**FIG.19.2. GROSS ENROLMENT RATIO OF ASSAM & INDIA**



Source: U-DISE+ 2019-20, GOI

### **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).

### **SECONDARY EDUCATION: RMSA**

Strengthening of Existing Schools (Class IX-XII): In terms of Manual on Financial Management & Procurement, Samagra Shiksha, in Secondary level, works valued up to Rs.30.00 lakh, in a school were executed by the concerned SMDCs of the schools, but the beyond Rs.30.00 lakh, the works were executed either through PWD(Bldg.) a total of 2,278 schools were sanctioned under various activities like ACR, Science Laboratory, Art/Craft Room, Computer Room, Library, Toilet Block, Drinking Water Facility, CWSN Toilet, Removal of Architectural Barrier, Lab Equipments for Science Laboratory.

Since inception of RMSA in the state of Assam, the following works have been approved up to 2020-21 and progress against thereof as follows:

**TABLE 19.2: PROGRESS CHART OF DIFFERENT ACTIVITIES UNDER 'RMSA' IN ASSAM TILL MARCH 2021**

Sl. No.	Activity	Approved unit	Progress as on March 2021
1	Additional Class Room	2,445	2,220
2	Science Lab	2,159	1,431
3	Computer Lab	1,802	1,199
4	Library	1,046	939
5	Art/Craft room	224	162
6	Toilet block	845	750
7	Drinking water facility	262	183
8	CWSN toilet	131	85
9	Removal of architectural barrier	1,036	1,036

Source: Samagra Shiksha (RMSA), Assam

**(i) New School Building (Upgradation from Upper Primary to Higher Secondary)**

A total of 12 schools were approved for upgradation from upper primary to secondary at a unit cost of Rs.69.42 lakh per school. A total of 9 schools were approved for upgradation from secondary to higher secondary at a unit cost of Rs.244.42 lakh per school. All works are under progress.

**(ii) Training of members of School Management & Development Committee (SMDC)**

The SMDCs were constituted in all Secondary & Sr. Secondary Schools (Govt. and Provincialised) in the state during 2020-21. Members of SMDCs were targeted to be trained to equip them with the new trends of quality education and to focus their roles in preparation and implementation of effective School Development Plan.

**(iii) Released of Annual Grant (up to highest class X or XII):**

As per the framework of Samagra Shiksha, necessary instruction has been given to the schools for utilization of the grants for mainly sanitization and other safety measures related to COVID-19 situation and incurring other recurring cost such as consumable for play materials, sports equipment, laboratories, electricity charge, internet, fluoride & arsenic free drinking water, teaching aids, installation of bio-metric attendance system etc. Achievement of Annual Grants in 2020-21 is as given at Table 19.3.

**TABLE 19.3: ACHIEVEMENT OF ANNUAL GRANTS IN 2020-21**

Sl. No.	Strategy	Achievement	
		Physical	Financial
A	School Grant -(Enrol $\geq$ 1 - 30 )	19	4.75
B	School Grant -(Enrol $>$ 30 - 100 )	561	140.25
C	School Grant - (Enrol $>$ 100 and $\leq$ 250 )	1424	712.00
D	School Grant - (Enrol $>$ 250 and $\leq$ 1000 )	2194	1645.50
E	School Grant - (Enrol $>$ 1000)	154	154.00
<b>Total For Annual Grant (up to Highest Class X or XII)</b>		<b>4352</b>	<b>2656.50</b>

Source: Samagra Shiksha (RMSA), Assam

**(iv) Orientation programme for teachers at secondary level on safety and security:**

An orientation programme on safety and security was conducted for 61,256 teachers at secondary level in which key areas of concern on safety and security were covered:

- Health & hygiene.
- COVID-19 safety measures.
- Disaster preparedness and response.
- Prevention of Children from Sexual Offences (POCSO) Act.
- Prevention of Sexual Harassment of Women at Work Place (POSH) Act.
- Child rights and child protection.
- Nutrition and healthy food habits.
- Basic first aid.

**(v) Kala Utsav:**

The programme is categorized in 09 different genres Vocal Music-Classical, Vocal Music-Folk, Instrumental Music-Classical, Instrumental Music-Folk, Dance-Classical, Dance-Folk, Visual Art-2D, Visual Arts-3D, Indigenous Toys and Games of school students at the secondary stage in the country. More than 3000 students participated in the district level competitions of Kala Utsav 2020.

**(vi) Science and Maths Olympiad:**

A total 23,210 students of classes VI to XII registered online for appearing in the Assam Olympiad 2021.

**(vii) Teachers Exchange Programme:**

The training of teachers of the secondary level through an online platform is being conducted since March, 2021.

**(viii) Some of the Initiatives during COVID-19 Pandemic:****“Gyan Brikshya” an educational TV Channel:**

Tele classes from standard I-X are being telecast through cable network (ACC & GTPL) from the central studio at State Mission Office of Samagra Shiksha, Assam during COVID-19 pandemic for providing uninterrupted education to the students of Assam.

**Biswa Vidya Programme:** During the initial period of COVID-19, classes for the students of classes IX & X, Science & Mathematics were telecast through Doordarshan Kendra, Guwahati from 10:00 a.m. to 12:00 noon. Biswa Vidya programme at Doordarshan Kendra was telecast four days a week.

YouTube channel “Biswa Vidya” and “Gyan Brikshya” is being made available for the greater benefit of the students. E-contents of “Gyan Brikshya” were being made available at JIO platform as JIO has the highest subscribers in Assam in comparison to any other provider

**(ix) Services during COVID-19 Pandemic:**

During the COVID-19 pandemic, various accessibility measures in digital and non-digital forms have been initiated to cover all learners with special needs. Beside, regular online classes, individual supports have been provided through WhatsApp, video calls/chats, phone calls, messages or sometime through visiting CWSN home. The details are furnished at Table 19.4.

**TABLE: 19.4. COVERAGE OF EDUCATIONAL SERVICES DURING COVID-19 PANDEMIC**

No. of CWSN covered	No. of CWSN covered through Home based education	No. of parents/ care giver counseling
2670	203	1843

Source: Samagra Shiksha (RMSA), Assam

**(x) Other Specific Initiatives during COVID-19 Pandemic:**

- Engaged parents/guardians/siblings to assist CWSN.
- Conducted subject specific special sessions for learners with disabilities enrolled in Class X and Class XII.
- Development of TLM using house hold materials for parents/guardians of CWSN.
- Convergence with local NGO/institution working in the field of disability rehabilitation.

**(xi) Mission Clear Vision:**

For the prevention and elimination of visual impairment among the school going children, a month long free eye check-ups programme jointly initiated by Samagra Shiksha, Assam and National Health Mission, Assam on 3rd December 2020 to 4<sup>th</sup> January 2021.

**(xii) Kasturba Gandhi Balika Vidyalaya (KGBV) – IV (Girls Hostel)**

For providing residential facility to these girls, 100 bedded Girls Hostels (KGBV-IV) are being constructed in 78 High & Higher Secondary school campuses out of 81 Educationally Backward C. D. Blocks. A total 41 KGBV (type IV) were made functional as girl's hostels at secondary level in various districts during 2020-21. KGBVs (type-IV) initiated enrolment of girl students from classes IX and X covering a total of 2028 girl students in 2020-21 before the lockdown of COVID-19 pandemic.

Table 19.5 shows the facilities in the Higher Secondary Schools as per DISE 2020-21:

**TABLE 19.5: FACILITIES AT GOVERNMENT/PROVINCIALISED HIGH & HIGHER SECONDARY SCHOOLS**

Facilities	2020-21
Number of Schools	4301
Available Drinking Water	4230
Boundary Wall / Fencing	2883
Available Girl's Toilet	3883
Computer Lab	2693
Ramps	3522
Playground	3343
Library	3539
Electricity Connection	4254

Source: DISE 2020-21

**HIGHER EDUCATION:**

The Higher Education Department in Government of Assam has been playing an important role for expansion and quality development of Higher Education sector through the Universities and Colleges. The State Government has been providing adequate fund for infrastructure development of these institutions as well as establishing new Universities, Colleges and introducing additional streams to existing colleges to enhance access to Higher Education. Govt. has also launched some new schemes under Higher Education in the interest and benefits of the students.

The numbers of Higher Educational institutions in Assam is given in Table 19.6.

**TABLE 19.6: HIGHER EDUCATIONAL INSTITUTIONS IN ASSAM AS ON 2020-21**

Institutions	Numbers
Universities (Including Private and Deemed University)	20
Government Colleges	4
Government Model Colleges	11
Provincialised Colleges	321
Non-Government Colleges	92
Literary & Voluntary Organization	25
Government Law College	1
Non-Government Law Colleges	26

*Source: Directorate of Higher Education, Assam*

**MAJOR ACHIEVEMENTS IN HIGHER EDUCATION DURING LAST THREE YEARS:****1. Fee Waiver Scheme:**

Govt. has introduced Fee Waiver Scheme for reimbursement of admission fees /tuition fees for poor and BPL students admitted in colleges and universities for enhancing Gross Enrolment Ratio in Higher Education. The fund released and numbers of beneficiaries under the scheme for last three years as in Table 19.7.

**TABLE 19.7: RELEASED FUND AGAINST BENEFICIARIES UNDER FEE WAIVER SCHEME**

Year	Amount released	No. of Beneficiaries
2018-19	Rs. 9173.30 lakh	278729
2019-20	Rs. 7723.13 lakh	189434
2020-21	Rs.16192.61 lakhs	407581

*Source: Directorate of Higher Education, Assam*

**2. Distribution of Scooters to Girl Students:**

Govt. has introduced the scheme for providing scooters to girl students who secured 1<sup>st</sup> Division in HSLC Examination.

**TABLE: 19.8. DISTRIBUTION OF SCOOTERS TO GIRL STUDENTS**

Year	Amount released	No. of Beneficiaries
2017-18	Rs. 500.00 lakh	1000 numbers of girl students
2020-21	Rs.13286.86 lakh	22245 numbers of girl students as Banikanta Kakati Award under Pragyan Bharati
2018-19 & 2019-20 (Being provided during 2021)	Rs.9020.96 lakh	15160 numbers of girl students as Banikanta Kakati Award under Pragyan Bharati

Source: Directorate of Higher Education, Assam

### 3. Book Grants To Students:

During 2019, book grants have been provided to UG level students of Rs.1000/- each. During the year 2020-21, the grants enhanced to Rs.1500/- each. The numbers of students benefitted is shown in the table below:

**TABLE 19.9: STUDENTS RECEIVING BOOK GRANTS**

Year	Amount released	No. of Students
2019-20	675.31 lakh	67531
2020-21	4433.63 lakh	295575

Source: Directorate of Higher Education, Assam

### 4. Introduction of Science Stream:

Govt. has approved 50 numbers of existing provincialised Colleges for introduction of additional Science stream for giving more emphasis to Science Education under Higher Education. Govt. has released Rs.10.00 lakh each to 50 Colleges for Laboratory facilities. Govt. has sanctioned 320 nos. of teaching & non-teaching posts in the 1st phase and classes have also been started in 16 colleges during 2020-21.

### 5. Bhasa Gaurav Achoni:

Govt. has introduced Bhasa Gaurav Achoni to preserve and promote vernacular languages and cultural traditions of the State for making corpus fund and financial assistance to authors as Lekhok Sambardhana during 2020-21.

**TABLE 19.10: BENEFICIARIES UNDER "BHASHA GAURAV ACHONI"**

Type	Amount Released	No. of Beneficiaries
Corpus Fund	4320.00 lakh	21 numbers Sahitya Sabhas
Lekhok Sambardhana	300.00 lakh	600 authors @Rs.0.50 lakh each

Source: Directorate of Higher Education, Assam

**6. Appointment of Teaching & Non-Teaching Employees:****TABLE 19.11: APPOINTMENTS IN TEACHING & NON-TEACHING POST**

Year	Category of Posts	No. of Incumbents
2018-19	Teaching & Non-Teaching	123 numbers against vacancies.
2019-20	Teaching & Non-Teaching	157 numbers (in 5 Govt. Model Colleges)
2020-21	Teaching & Non-Teaching	- 1626 numbers in 33 provincialised new Colleges and addl. Posts of 134 provincialised Colleges - 36 numbers in Govt. Model College, Kaziranga.

Source: Directorate of Higher Education, Assam

**TECHNICAL EDUCATION**

Technical education in Assam started with the establishment of Prince of Wales Institute of Engineering and Technology at Jorhat before independence in 1927. It was followed by Assam Engineering Institute and Assam Engineering College in Guwahati in 1948 and 1956 respectively. At present, there are 7 Govt. Engineering Colleges and 27 Polytechnic Institutions in Assam. Besides the state run technical institutes, there are two national level institutes, the National Institute of Technology (NIT), Silchar and Indian Institute of Technology (IIT), Guwahati.

The Tables (19.12 and 19.13) depict the enrolment statistics of students in these government run engineering and polytechnic institutions in Assam.

**TABLE 19.12: ENROLMENT AT THE STATE GOVT. ENGINEERING COLLEGES IN ASSAM FOR THE YEAR 2021-22**

Sl. No.	Institution	Total Intake	Total		Scheduled Caste		Scheduled Tribes	
			Female	Total	Female	Total	Female	Total
1	Assam Engineering College, Guwahati	420	133	409	9	25	18	54
2	Jorhat Engineering College, Jorhat	315	86	306	4	17	16	43
3	Jorhat Institute of Science & Technology, Jorhat	240	68	189	0	12	6	22
4	Bineswar Brahma Engineering College, Kokrajhar	240	68	214	6	16	12	27
5	Barak Valley Engineering College, Karimganj	240	41	166	03	10	05	20
6	Golaghat Engineering College, Golaghat	180	61	166	6	12	8	14
7	Dhemaji Engineering College, Dhemaji	180	40	163	4	12	6	21

Source: Directorate of Technical Education, Assam

**TABLE 19.13: ENROLMENT AT THE STATE GOVT. POLYTECHNIC IN ASSAM FOR THE YEAR 2021-22**

Sl. No.	Institution	Total Intake	Total		Scheduled Caste		Scheduled Tribes	
			Female	Total	Female	Total	Female	Total
1	Assam Engineering Institute, Guwahati	285	43	241	4	23	9	45
2	Diphu Polytechnic, Diphu	69	13	52	1	3	4	15
3	POWIET, Jorhat	260	37	247	6	22	6	42
4	Assam Textile Institute, Guwahati	70	28	47	1	3	8	12
5	Dibrugarh Polytechnic, Dibrugarh	140	122	38	4	13	4	19
6	Bongaigaon Polytechnic, Bongaigaon	120	19	113	0	9	2	13
7	Nowgong Polytechnic, Nagaon	170	26	150	3	17	4	24
8	Girls Polytechnic, Guwahati	160	123	123	12	12	24	24
9	Silchar Polytechnic, Silchar	220	23	210	3	27	7	24
10	Baksa Polytechnic, Baksa	180	34	164	2	13	7	30
11	Barpeta Polytechnic	180	36	164	1	12	5	21
12	Dhemaji Polytechnic, Dhemaji	180	36	153	1	14	5	32
13	Lakhimpur Polytechnic, Lakhimpur	180	36	165	2	13	9	32
14	Karimganj Polytechnic, Karimganj	180	23	162	0	14	4	27
15	Golaghat polytechnic, Golaghat	180	39	167	4	12	8	26
16	Goalpara Polytechnic, Goalpara	180	24	193	0	12	2	25
17	Nalbari Polytechnic, Nalbari	180	25	173	2	15	4	25
18	Kamrup Polytechnic, Kamrup	201	24	175	3	11	5	23
19	Sibsagar Polytechnic, Sibsaagar	201	40	178	5	11	8	31
20	Sonitpur Polytechnic, Sonitpur	180	28	158	5	14	3	30
21	RGP, Golaghat	60	53	53	3	3	11	11
22	Morigaon Polytechnic, Morigaon	180	35	175	3	14	7	34
23	Tinsukia Polytechnic, Tinsukia	180	43	156	4	13	4	20
24	Chirang Polytechnic, Chirang	180	27	170	3	18	5	23
25	Odalguri Polytechnic, Odalguri	180	22	256	2	12	4	22
26	Hailakandi Polytechnic Hailakandi	180	21	156	3	26	7	50

Source: Directorate of Technical Education, Assam



**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 has been operationalizing recently. The construction work of Dhubri and Nagoan Medical College is under way. The new AIIMS being established near Guwahati with the active support of the Government of India, will start its operations soon to give an impetus to the medical education in Assam.

The table below shows that in ten (10) numbers of educational institutions under the Directorate of Medical education in Assam, the total enrolment is 1176, of which 382 are female and total number of teachers was 1773 in 2020.

**TABLE 19.14: EDUCATIONAL INSTITUTIONS UNDER DIRECTOR OF MEDICAL EDUCATION ASSAM, 2020**

Sl. No.	Institution	No. of Institution	Intake Capacity (MBBS/ BDS)	Enrolment		No. of Teachers	
				Female	Total	Female	Total
1	Gauhati Medical College, Guwahati	1	200	55	200	184	468
2	Assam Medical College, Dibrugarh	1	200	60	200	136	359
3	Silchar Medical College, Silchar	1	125	45	125	55	290
4	Jorhat Medical College, Jorhat	1	125	30	125	59	162
5	F.A.A. Medical College, Barpeta	1	125	45	125	46	152
6	Tezpur Medical College, Tezpur	1	125	35	125	61	168
7	Diphu Medical College Diphu	1	100	45	100	30	122
8	Regional Dental College, Guwahati	1	50	20	50	18	41
9	Government Dental College, Dibrugarh	1	63	24	63	2	6
10	Government Dental College, Silchar	1	63	23	63	2	5

*Source: Directorate of Medical Education, Assam*

**HEALTH AND FAMILY WELFARE**

Health care performance in Assam exhibits sustained improvements over the years. These improvements are the outcomes of centred and continued efforts of the

Government towards establishing an efficient system of health care and family welfare through effective planning, financing, human 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, and access to preventive and medical care, public hygiene, information system on health care and nutrition and skilled manpower.

### **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 were taken by NHM for child and mother's health.

The NHM encompasses its two Sub- Missions, The Nation Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM). 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 NHM is to provide equitable, affordable and quality health care services to the people of Assam.

The State Government along with NHM has taken up schemes to strengthen existing health facilities and also to build new public health infrastructure in Rural, Hilly, Char, and 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 ASSAM**

The status of health infrastructure in Assam has been improving over the years.

- At present, there are 6 Medical Colleges and Hospitals, 25 Civil Hospitals + MMCH (Annex Building of GMCH), 3 Tuberculosis Hospitals, 3 Leprosy Hospitals, 1 Cancer Hospital, 14 Sub-divisional Civil Hospitals, 850 Rural and 56 Urban PHCs, 12 FRUs, 201 CHCs, 184 State Dispensaries, 4690 Sub-centres, 130 Mobile Medical Units (80 for Tea gardens and 50 for non-tea gardens), 15 Boat Clinic with 21475 numbers of total beds in the state at the end of 2020-21.
- 3 Nursing Colleges in Guwahati, Dibrugarh and Silchar with 6 Para-medical institutions, 3 Dental Colleges, 275 Polyclinics and 556 Diagnostics Centres as of December 2020.
- Referral Hospitals inside the state is 7 and outside the state are 31.

**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 than that of India.

The table below shows a comparison of some health indicators of Assam and India.

**TABLE 19.15: TRENDS IN SELECTED HEALTH INDICATORS, 2019**

Activity	Total		Rural		Urban	
	Assam	India	Assam	India	Assam	India
*Crude Birth Rate (CBR)	21	19.7	22.1	21.4	14.5	16.4
*Crude Death Rate (CDR)	6.3	6.0	6.4	6.5	5.2	5.0
#Infant Mortality Rate (IMR)	31.9	35.2	33.1	38.4	22.7	26.6
#Neo-Natal Mortality Rate	22.5	24.9	23.4	27.5	15.2	18.0
#Under 5 Mortality Rate	41.9	42.2	39.9	45.7	33.0	31.5

Source: \*SRS Bulletin October 2021, #NFHS-5

The Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) of Assam since last five years are given below in the table:

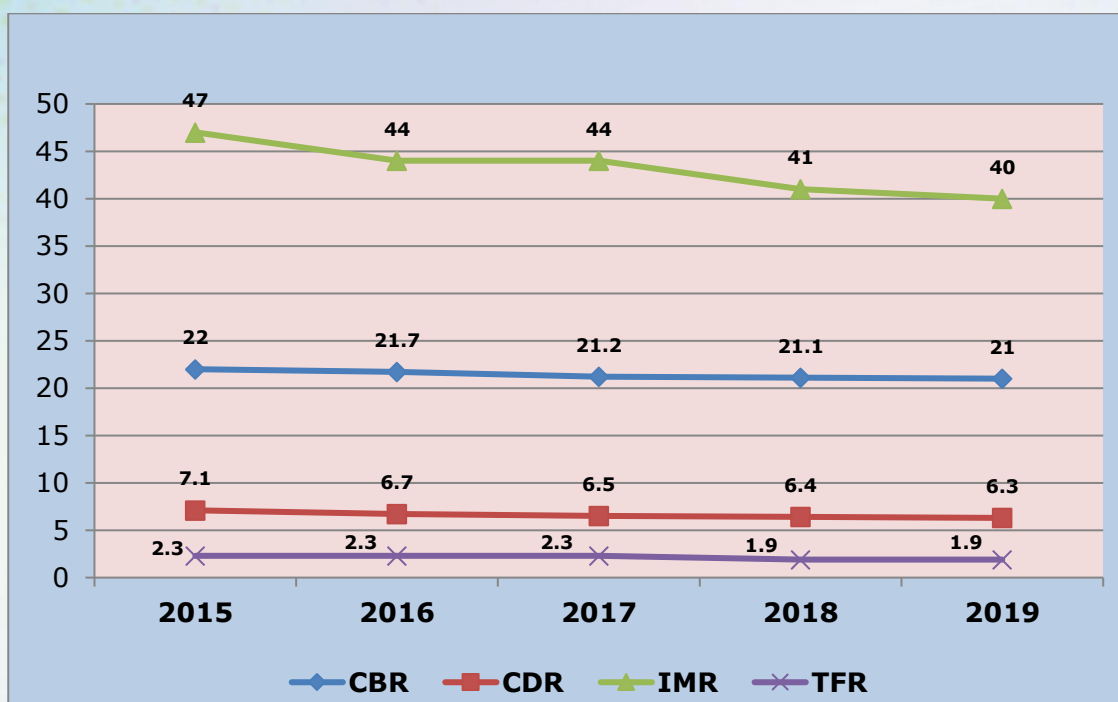
**TABLE 19.16: CBR, CDR, IMR & TFR OF ASSAM, 2019**

Year	CBR	CDR	IMR	TFR
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
2019	21.0	6.3	40	1.9

Source: NFHS-5

In 2019, the birth rate for Assam was 21 births per 1000 inhabitants. Birth Rate in Assam fell gradually from 22 births per 1000 inhabitants in 2015 to 21 births per 1000 inhabitants in 2019. Similarly, Crude Death Rate has also shown a declining trend from 7.1 deaths in 2015 to 6.4 in 2018 to 6.3 deaths per 1000 inhabitants in 2019. 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 2019 is 40 deaths per 1000 live births, while it was 76 in 1999, 47 in 2015 and 41 in 2018. In India, IMR in 2019 is 30 deaths per 1000 live births. Madhya Pradesh registered the highest 46 and Kerala has lowest 6 deaths per 1000 live births. Similarly, the Total fertility Rate has come down from 2.3 in 2015 to 1.9 in 2019, which is below the replacement level of 2.1.

The following graph 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 2019.

**FIG.19.3. TRENDS OF HEALTH INDICATORS OF ASSAM, 2015-2019**

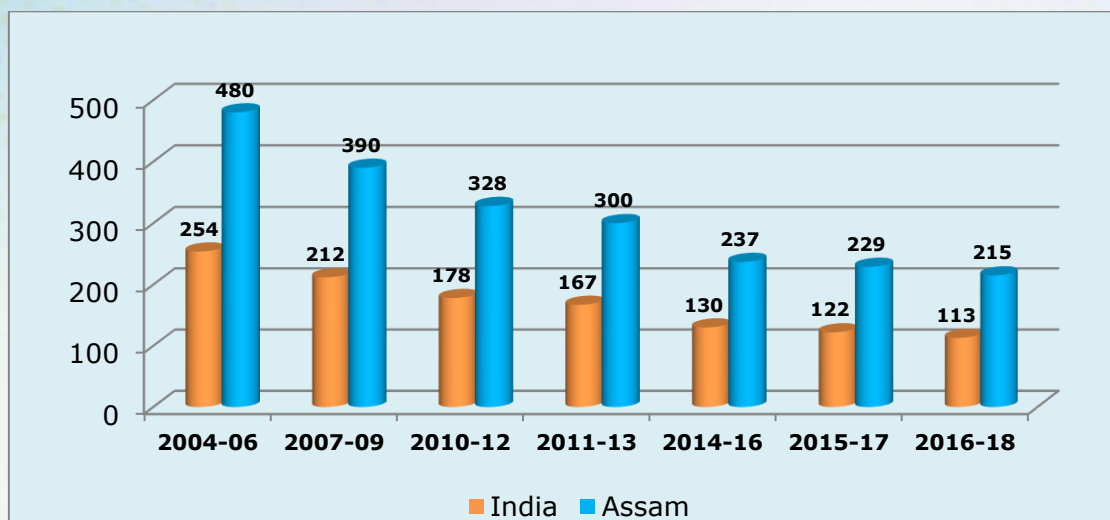
### LIFE EXPECTANCY

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), 2014-18 that Kerala has the highest life expectancy at birth (75.3) and lowest in Assam (66.9). Among the countries in the world, the highest life expectancy is Hong-Kong 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.19.4. TREND OF MATERNAL MORTALITY RATIO IN ASSAM & INDIA**

Source: SRS Bulletin, Registrar General of India & NITI Aayog 2020

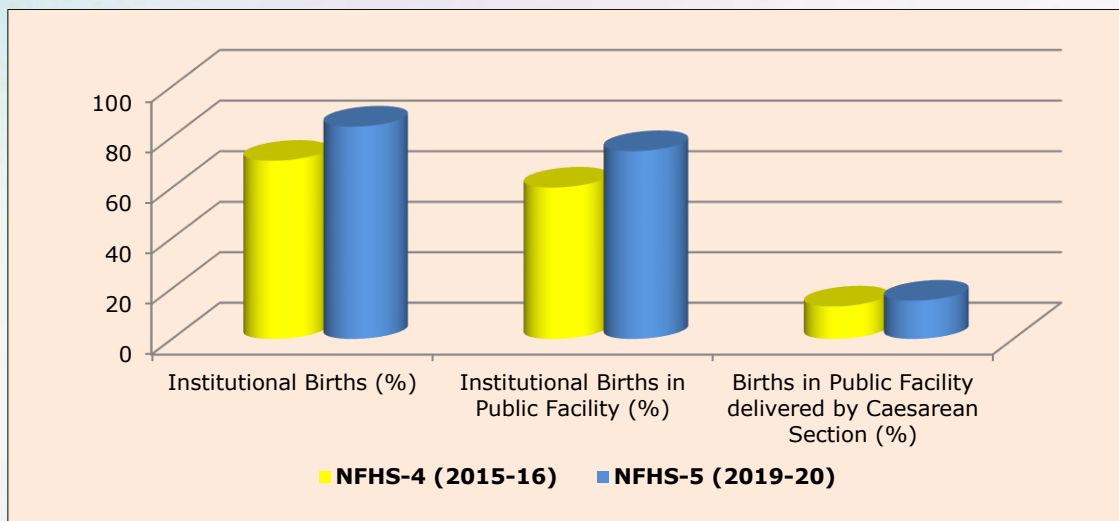
The above graph depicts that there is an overall decline of the Maternal Mortality Rate (MMR) during the period from 2004 to 2018. However, the rate is still very high in Assam in comparison to All India rate due to some major factors like infections and anaemia during childbirth especially among rural women. There is a downfall of MMR at the All India level from 130 in 2014-16 to 113 in 2016-18. Likewise, at the state level, downfall in the MMR was from 229 to 215. 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. Factors responsible for downfall in MMR includes increase in institutional deliveries, involving private doctors to provide free health checkups to the pregnant women at government hospitals, decline in child marriage, reduction in teenage pregnancies etc..Moreover, a facility in public hospitals and health centers, free drugs and diagnostics among other incentives to pregnant women has led to the increase in admission for delivery in Government hospital. Among the Indian states Kerala has lowest MMR of 43 followed by Maharashtra 46 in 2016-2018.

#### **INSTITUTIONAL DELIVERY:**

The Govt. under NHM has taken various initiatives to increase institutional delivery in Assam. Institutional delivery in Assam till 2006-07 was not so encouraging. During 2007-08 number of institutional delivery in Assam increased by 68 percent and is on an increasing trend resulting in decline of MMR due to various interventions like Janani Suraksha Yojana (JSY), Janani Sishu Suraksha Karyakram (JSSY), 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 Facility has also improved significantly by 24.0%.During NFHS-4 it was 60 while in the NFHS-5 it rose to 74.4. Similarly, Births in public health facility delivered

by caesarean section (5) also improved by 17.83%. During NFHS-4, it was 12.9 while in the NFHS-5, it rose to 15.2 since 2015-16 to 2019-20. The graph below shows the trend of Institutional delivery in Assam.

**FIG.19.5. INSTITUTIONAL DELIVERY IN ASSAM, 2015-16 TO 2019-20**



Source: NFHS-5, 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 12<sup>th</sup> 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) SNEHASPASHA:**

Snehasparsha, 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 annual income less than Rs 2.50 lakh that aims at bearing expenditure of very high –end specialized treatment of 10 numbers of earmarked diseases launched by the Department of Health & Family Welfare, Government of Assam on 7<sup>th</sup> June, 2013. Till 30<sup>th</sup> November, 2020 the number of beneficiaries is 539.

**TABLE 19.17: BENEFICIARIES UNDER "SNEHASPASHA" DURING 2013-14 TO 2020-2021**

Sl. No.	Year	No. of Beneficiaries under "Snehasparsha"
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	6
<b>TOTAL</b>		<b>539</b>

*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 up to 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 a total of 81370 cases have been treated under AAA saving precious lives of the economically weaker segments of our population and preventing these families from financial penury. In 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 1<sup>st</sup> 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 19.18: PERFORMANCE OF MMUs  
(From 20<sup>th</sup> June, 2017 to 30<sup>th</sup> November 2020)**

Sl. No.	Items	Performance till 30 <sup>th</sup> November, 2020
1	No. of camps held	110141
2	No. of patients treated	5216010

*Source: NHM Report 2020*

#### 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 11<sup>th</sup> May 2017, to ensure availability of minimum set of diagnostic service at health institutions up to PHC level.

Under Chief Minister's Free Diagnostics services, CT SCAN, X-RAY and laboratory service are being provided free of cost to all irrespective of APL/BPL status under public private partnership (PPP) arrangement. An online dashboard kept in public domain, exits for monitoring of the performance of PPP service provider.

**TABLE 19.19: PATIENTS AVAILED CHIEF MINISTER'S FREE DIAGNOSTIC SERVICES (Till 30<sup>th</sup> November, 2020)**

Sl. No.	Services	No. of Beneficiaries till 30 <sup>th</sup> November, 2020
1	X-Ray	1431185
2	CT-Scan	502565
3	Laboratory	3372064

*Source: NHM Report 2020*

#### **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" (AMSCCL) 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 Mrityunjoy 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 Mrityunjoy 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 are 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 31<sup>st</sup> March 2019.

### **13) JANANI SISHU SURAKSHA KARYAKRAM (JSSK):**

Government of Assam has launched 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 up to 1 year after birth.

### **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 Hridayalyay 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 have been conducted till 17th December, 2020 since inception.

The following table depicts the services under the scheme till December, 2020:

**TABLE 19.20: FREE OPERATION FOR CHILDREN HAVING CONGENITAL HEART DISEASE DURING 2010-11 TO 2020-2021**

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
<b>TOTAL</b>		<b>8020</b>

Source: NHM Report Assam, 2020

### 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. Altogether 59,98,857 tests 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 31<sup>st</sup> December 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 avail.

### 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 Latrin (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. In the year 2020-21, the physical target and achievement in case of household toilet was 320734 target and 17918 constructed respectively. Whereas the public toilet target was need based and constructed was 2074.

**2) Neer Nirmal Pariyojana:**

The 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 Cr.

**TABLE 19.21: 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 (Up to 30 <sup>th</sup> September 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

Source: PHE (W), Assam

**3) Jal Jeevan Mission (JJM):**

JJM is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India. The programme will also implement source sustainability measures as mandatory elements; The Jal Jeevan Mission will be based on a community approach to water and will include extensive Information, Education and communication as a key component of the mission. JJM looks to create a jan andolan for water, thereby making it everyone's priority. With the launch of JJM, Rural Water Supply and Sanitation Project for low income states (RWSS-LIS) stands subsumed into JJM.

**TABLE 19.22: PHYSICAL ACHIEVEMENT UNDER JAL JEEVAN MISSION (JJM)**

State	Total Rural Household		Households covered with FHTC		Households covered without FHTC	
	2020	2021 (As on March '21)	2020	2021 (As on March '21)	2020	2021 (As on March '21)
Assam	63,35,015	63,35,015	5,07,217	5,65,772	56,67,661	57,69,243

Source: PHE (W), Assam

**SOCIAL WELFARE:**

The Social Welfare Department, Govt. of Assam has been implementing various schemes for the welfare of the Persons with Disabilities so as to bring them equally to the mainstream of the society to live with honour and dignity. In pursuance of the Persons with Disability Act, 1995 (now RPwD Act,2016) and through various welfare measures, necessary efforts have been made to give them an empowerment in the fields, such as, Health, Education, Employment, Self-employment, Sports and other all activities. The schemes are as follows:

**1) Integrated Child Development Services Scheme:**

ICDS is World's largest community based programme. The Scheme is targeted at children up to the age of 6 years, 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 61715 no. of 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:

- To improve the nutritional and health status of children in the age group 0-6 years.
- To lay the foundation for proper psychological, physical and social development of the child.
- To reduce the incidence of mortality, morbidity, malnutrition and school drop- out rate.
- To achieve effective coordinated policy and its implementation amongst the various departments to promote child development.
- 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.

**Steps 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 number of 41763 Anganwadi buildings has been constructed.

## 2) 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 19.23: GOALS & TARGETS OF POSHAN ABHIYAAN**

Sl. No.	Objectives	Target
1	Prevent and reduce stunting in children (0-6 years)	By 6% @2% P.A.
2	Prevent and reduce under-nutrition (underweight prevalence) in children (0-6 years)	By 6% @2% P.A.
3	Reduce the prevalence of anemia among young children (6-59 months)	By 9% @3% P.A.
4	Reduce the prevalence of anemia among women and adolescent Girls in the age group of 15-49 years	By 9% @3% P.A.
5	Reduce Low Birth Weight (LBW)	By 6% @2% P.A.

*Source: Directorate of Social Welfare, Assam*

## 3) 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.

## 4) Integrated Child Protection Scheme (ICPS):

ICPS is aimed at building a protective environment for children in difficult circumstances & other vulnerable children, through government-civil society partnership. ICPS brings together multiple existing child protection schemes under one umbrella & integrates additional interventions for protecting children & preventing harm.

- Child Welfare Committees (CWCs) are functional in all 33 no. District of Assam.
- Juvenile Justice Board (JJBs) are Constituted in all 33 no. District of Assam & functional in all District.
- 20 no. State Adoption Resource Agencies are operational as on November 2020.
- 32 no. NGO run CCIs are operational in Assam receiving Grant in aid under ICPS.
- 5 no. Open shelter are operational in Assam under ICPS grant in aid.

- A total of 123 no. 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.
- 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:
  - Prescribed rules for institutions under JJ
  - Principal of JJ Act
  - Child Right issues
  - Psychological support
  - How to deal children in conflict with law from the psychological point of view

### 5) National Crèche Scheme for the Children of Working Mother:

Under the Scheme, children in the age group 0-6 years from families with monthly income below Rs. 12,000/- are eligible to avail the benefits of this scheme. In addition to being a safe space for the children, the crèches provide services such as supplementary nutrition, pre-school education and emergency health care, etc. The Scheme provides support to voluntary organizations for setting up crèche for children of working and ailing mothers. Under the scheme a Voluntary Organization can run a crèche for 25 children below six years of age. 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 19.24: CRÈCHE CENTRES IN ASSAM**

CRÈCHE Centers	Numbers
Social welfare Board (SWB)	229
Indian Council of Child Welfare (ICCW)	364
BAJSS	48

*Source: Directorate of Social Welfare, Assam*

### 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.

#### 1) Pradhan Mantri Matru Vandana Yojana:

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 instalments:

- First Instalment: at early registration of pregnancy @Rs. 1,000.00.
- Second Instalment: received at least one ANC (can be claimed after 6 months of pregnancy) @Rs. 2,000.00.
- Third Instalment: 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 Jan 2017 till Nov 2021; 7,99,207 Nos. of beneficiaries have been enrolled in the PMMVY-CAS Portal against the indicative Target i.e. 7,43,571 Nos. till December 2021 as given by the Ministry. Accordingly, 7,08,892 Nos. of beneficiaries have received benefits under the scheme as on Nov 2021. The State Achievement against the given target is 107%. Till date, the State has received Rs. 366.63 Cr (Central & State Share) in Escrow Account for payment to beneficiaries through Direct Benefit Transfer (DBT) mode and accordingly as on Nov 2021 the utilization percentage is 87.58%. Assam's All India Ranking in implementation of the scheme based on percentage achieved against the indicative target is 8th. Moreover, under the scheme 22, 03,163 Nos. of applications have been received till date from eligible beneficiaries, and 19,57,269 Nos. of applications have been paid (Percentage 88.83%).

## **2) 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. 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 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.

### **3) Beti Bachao Beti Padhao (BBBP):**

BetiBachao, BetiPadhao (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 BetiBachaoBetiPadhao 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.

### **4) 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 districts of Assam.

**TABLE 19.25: 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	Crime 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	POSCO	Other POSCO crime	50
11	Sexual violence	Attempt to rape	53
12	Social Welfare	Govt. welfare scheme related	27
<b>TOTAL</b>			<b>2967</b>

*Source: Directorate of Social Welfare, Assam*

### 5) One Stop Centre (OSC):

One Stop Centers (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. One Stop Centre (OSC) is functioning in all districts of Assam.

#### 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

### 6) 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 Ujjawala in different districts of Assam.

There are altogether 19 Nos. of Ujjawala Homes selected for continuation in the State in following district for the year 2021-22 in 18 districts: Goalpara, Kamrup, Kamrup (M), Dhemaji, Golaghat, Dhubri, Kokrajhar, Bongaigaon, Barpeta, Udalguri, Karimganj, Sonitpur, Nagaon, Dibrugarh, Tinsukia, Lakhimpur, Cachar (2 Nos.) and Hailakandi.

### **7) 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 defense 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 morale danger. There are altogether 17 Nos. of Swadhar Greh in 12 districts of Assam.

Karimganj, Hailakandi, Kamrup (M) 3 Nos. , Nagaon 2 Nos. , Dhubri, Cachar, Golaghat, Dibrugarh, Morigaon 2 Nos. , Sonitpur 2 Nos. , Lakhimpur, and Jorhat.

### **8) State Commission for Women:**

Assam State Commission for women is a statutory body under the "Assam State Commission for women Act, 1994". It consists of the Chairperson, Vice Chairperson, 7 (seven) members and Member Secretary appointed by the State Government. The Functions of the Commission include -A) to investigate and examine all matters relating to women. B) Look into complaints and take up suo-moto notices relating to issues of women. The budgeted amount for the current financial year 2021-22 for salary is Rs 84.40 lakhs.

### **9) Financial Assistance to Victim of Rape:**

In furtherance of the goal of ensuring restorative justice to affected women, the above scheme aims to provide:

- Financial assistance to victims of rape
- Support services such as shelter, counselling, medical aid, legal assistance, education and vocational training depending upon the needs of the victim.

### **10) Working Women Hostel:**

The objective of the scheme is to promote availability of safe and conveniently located accommodation for working women, with day care facility for their children, wherever possible, in urban, semi urban, or even rural areas where employment opportunity for women exist.

**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.

**1) Deen Dayal Divyangjan Pension:**

It is a new scheme which was launched by Hon'ble Chief Minister, Assam on 10<sup>th</sup> January, 2019. The objective of the scheme is to provide monthly pension of Rs.1, 000/- to each of the persons with disabilities for taking care of their health. In 2019-20 this pension achnoni 1, 60,612 Nos. beneficiaries benefitted and till now 1, 60,612 Nos. beneficiaries benefitted for 2021-22.

**2) Rehabilitation Grants to Persons with Disabilities (PwDs):**

Rehabilitation grants were provided @ Rs.10, 000 to each of the persons with disabilities for their self-employment and rehabilitation up to 2017-18. But from 2019-20, the grant amount has been enhanced to Rs. 20,000. During the year 2020-21, no. beneficiaries (including backlog beneficiaries of 2019-20) were benefitted from this scheme.

**3) Scholarships to Students with Disabilities:**

Scholarships are provided to the students with disabilities @Rs.200/- pm (i.e., 2400/- yearly) to each who are studying in schools and colleges. During the year 2020-21, 1419 Nos. of students were benefitted from this scheme. Apart from this, scholarships are also provided to the students with disabilities Rs.3, 000/- p.m. to each (i.e. 36,000/-yearly) who are pursuing medical & technical education courses. During the year 2020-21, 45 Nos. of students were benefitted from this scheme.

**4) 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.

**5) 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. An amount of Rs.1.71 crore only has been earmarked in the budget for 2021-22.

### 6) 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:

**TABLE 19.26: UDID STATUS IN ASSAM (AS OF NOVEMBER 2020)**

Particulars	Total No.
Nos. of UDID cards generated	79,540
Nos. of Districts started generating UDID cards	33

*Source: Directorate of Social Welfare, Assam*

### 7) 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 2021-22, Rs. 374.68 lakhs has been earmarked for SIPDA.

### 8) Welfare Of Transgender Community:

This scheme was 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. on 20<sup>th</sup> March, 2020. State Transgender Welfare Board, Assam has been constituted and is registered under Societies Registration Act, 1980. During the year 2021-22, Rs. 202.50 lakh is allotted for the scheme.

### 9) Chetona:

Chetona is a scheme for sensitization of Senior Citizens about various schemes implemented by Social Welfare Department, Assam. During the year 2021-22 Rs.8.00 Lakh is allotted for the scheme.

## **Annexure**

**Annexure-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

**ANNEXURE-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

Sl. No.	District	Area in Sq. Km.	Population	Rural Population	Urban Population	Population Density per Sq. Km.
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



**ANNEXURE – 2.3**  
**DECADAL PERCENTAGE VARIATION IN POPULATION OF ASSAM**

District	1901-1911	1941-1951	1951-1961	1961-1971	1971-1991	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.

**ANNEXURE-2.4**  
**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

Sl. No	District	Scheduled Castes			Scheduled Tribes		
		Total	Male	Female	Total	Male	Female
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	W.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
	<b>ASSAM</b>	<b>2231321</b>	<b>1145314</b>	<b>1086007</b>	<b>3884371</b>	<b>1957005</b>	<b>1927366</b>

**ANNEXURE-2.5:  
POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN ASSAM(2011 Census)**

District	Male	Female	Rural	Urban	Total
Kokrajhar	70085	66839	131397	5527	136924
Dhubri*	127251	122314	230424	19141	249565
Goalpara	87457	84200	152141	19516	171657
Barpeta	146777	141052	273296	14533	287829
Morigaon	83746	80073	155116	8703	163819
Nagaon*	157143	151066	287622	20587	308209
Sonitpur*	96365	93044	175651	13758	189409
Lakhimpur	80016	76723	146289	10450	156739
Dhemaji	53457	50790	98352	5895	104247
Tinsukia	92777	89049	155228	26598	181826
Dibrugarh	83168	80042	140283	22927	163210
Sivasagar*	40097	38394	70527	7964	78491

District	Male	Female	Rural	Urban	Total
Jorhat*	52104	50428	81332	21200	102532
Golaghat	68662	66131	125120	9673	134793
Karbi-Anglong*	50925	48621	88914	10632	99546
Dima-Hasao	16480	15934	25067	7347	32414
Cachar	131417	125357	222673	34101	256774
Karimganj	107638	104322	200334	11626	211960
Hailakandi	56936	54342	106617	4661	111278
Bongaigaon	59099	57293	105251	11141	116392
Chirang	37201	36014	69176	4039	73215
Kamrup	101716	98345	186844	13217	200061
Kamrup(M)	64444	60942	27333	98053	125386
Nalbari	48458	46875	87759	7574	95333
Baksa	62498	60374	121332	1540	122872
Darrang	79437	76971	150916	5492	156408
Udalguri	57410	55864	109653	3621	113274
Biswanath*	44988	43465	85313	3140	88453
Majuli*	11324	10738	22062	0	22062
Charaideo*	31005	29884	57762	3127	60889
West Karbi-Anglong*	26503	25632	49493	2642	52135
South Salmara*	59841	58856	114855	3842	118697
Hojai*	77060	74671	133191	18540	151731
<b>Assam</b>	<b>2363485</b>	<b>2274645</b>	<b>4187323</b>	<b>450807</b>	<b>4638130</b>

**ANNEXURE-2.6:  
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	17.40	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	13.40	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	17.60	17.25	965	963
19	Hailakandi	100976	111278	18.60	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	11.80	10.00	943	936
24	Nalbari	97847	95333	14.20	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

**ANNEXURE-2.7**  
**POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN INDIA (2011 Census)**

State	Total	Male	Rural	Urban	Total
Jammu & Kashmir	1084355	2018905	1593008	425897	2018905
Himachal Pradesh	407459	777898	712822	65076	777898
Punjab	1665994	3076219	1945502	1130717	3076219
Chandigarh	63536	119434	4270	115164	119434
Uttarakhand	717199	1355814	990776	365038	1355814
Haryana	1843109	3380721	2285112	1095609	3380721
NCT of Delhi	1075440	2012454	56716	1955738	2012454
Rajasthan	5639176	10649504	8414883	2234621	10649504
Uttar Pradesh	16185581	30791331	25040583	5750748	30791331
Bihar	9887239	19133964	17383701	1750263	19133964
Sikkim	32761	64111	49218	14893	64111
Arunachal Pradesh	107624	212188	172289	39899	212188
Nagaland	149785	291071	217482	73589	291071
Manipur	174700	338254	236843	101411	338254
Mizoram	85561	168531	93384	75147	168531
Tripura	234008	458014	365309	92705	458014
Meghalaya	288646	568536	490592	77944	568536
Assam	2363485	4638130	4187323	450807	4638130
West Bengal	5410396	10581466	7820710	2760756	10581466
Jharkhand	2767147	5389495	4367507	1021988	5389495
Orissa	2716497	5273194	4525870	747324	5273194
Chattisgarh	1859935	3661689	2924941	736748	3661689
Madhya Pradesh	5636172	10809395	8325731	2483664	10809395
Gujarat	4115384	7777262	4824903	2952359	7777262
Daman & Diu	14144	26934	7438	19496	26934
Dadra & Nagar Haveli	26431	50895	28504	22391	50895
Maharashtra	7035391	13326517	7688954	5637563	13326517

State	Total	Male	Rural	Urban	Total
Andhra Pradesh	4714950	9142802	6152022	2990780	9142802
Karnataka	3675291	7161033	4517645	2643388	7161033
Goa	74460	144611	54014	90597	144611
Lakshwadeep	3797	7255	1815	5440	7255
Kerala	1768244	3472955	1823664	1649291	3472955
Tamil Nadu	3820276	7423832	3911302	3512530	7423832
Puducherry	67527	132858	44514	88344	132858
A & N Islands	20770	40878	26415	14463	40878
INDIA	85732470	164478150	121285762	43192388	164478150

**ANNEXURE – 2.8**  
**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	82.80	17.54	12.94
3.	Punjab	27743338	895	551	75.84	20.10	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	19.90
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	61.80	28.62	25.42

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
11.	Sikkim	610577	890	86	81.42	33.06	12.89
12.	Arunachal Pradesh	1383727	938	17	65.38	27.00	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	87.10	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	15.60
30.	Goa	1458545	973	394	88.70	15.21	8.23
31.	Lakshadweep	64473	946	2149	91.85	17.30	6.30
32.	Kerala	33406061	1084	860	94.00	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	26.90	6.86

Source : Census of India, 2011.



**ANNEXURE – 2.9**  
**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	10.0	6.7
1996	27.6	28.9	20.7	9.6	10.2	5.8
1997	28.2	29.0	20.7	9.9	10.3	5.9
1998	27.9	28.7	20.2	10.0	10.5	6.0
1999	27.0	28.0	18.9	9.7	10.1	6.2
2000	26.9	27.9	18.6	9.6	10.0	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	6.0
2003	26.3	27.2	18.0	9.1	9.5	5.9
2004	25.1	27.0	14.3	8.8	9.3	5.5
2005	25.0	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	9.0	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	24.0	15.5	8.0	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	22.0	23.2	15.3	7.1	7.4	5.1
2016	21.7	22.8	15.0	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
2019-	21.0	22.1	14.5	6.3	6.4	5.2

Source : Registrar General of India.

**ANNEXURE – 2.10  
INFANT MORTALITY RATE IN ASSAM AND INDIA**

SECTOR	ASSAM /INDIA	YEARS											
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Rural	Assam	66	64	60	58	58	56	52	50	46	46	44	42
	India	58	55	51	48	46	44	43	41	38	37	36	34
Urban	Assam	39	37	36	34	33	32	27	25	22	21	20	19
	India	36	34	31	29	28	27	26	25	23	23	23	20
Total	Assam	64	61	58	55	55	54	49	47	44	44	41	40
	India	53	50	47	44	42	40	39	37	34	33	32	30

Source : Registrar General of India.

**ANNEXURE – 2.11  
INFANT MORTALITY RATE BY SEX IN ASSAM AND INDIA**

SECTOR	ASSAM /INDIA	YEARS												
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	Assam	64	62	58	56	55	54	53	49	47	43	41	40	38
	India	55	52	49	46	43	41	39	37	35	33	32	32	30
Female	Assam	67	65	64	60	56	57	55	49	47	45	46	44	41
	India	56	55	52	49	46	44	42	40	39	36	34	33	31
Total	Assam	66	64	61	58	55	55	54	49	47	44	44	41	40
	India	55	53	50	47	44	42	40	39	37	34	33	32	30

Source : SRS Bulletin, Registrar General of India.

**ANNEXURE – 2.12**  
**DISTRICT-WISE NUMBER OF VILLAGES, GAON PANCHAYAT, COMMUNITY DEVELOPMENT BLOCK, ANCHALIK 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.	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	-	-

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)
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
<b>Assam</b>		<b>26395</b>	<b>2200</b>	<b>219</b>	<b>189</b>	<b>26</b>

N. B \* Indicates newly created Districts.

**ANNEXURE – 2.13  
PROJECTED TOTAL POPULATION BY SEX AS ON 1<sup>st</sup> MARCH -2011-2036:INDIA  
AND ASSAM('000)**

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

Year	INDIA			ASSAM		
	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7
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

**ANNEXURE – 2.14  
PROJECTED TOTAL POPULATION BY AGE AND SEX AS ON 1<sup>st</sup> MARCH -2011-  
2021: ASSAM('000)**

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

**ANNEXURE – 2.15  
DISTRICT WISE ESTIMATED POPULATION**

Sl.No.	District	Population As per 2011 Census	Estimated Population in 2021
1.	Baksa	950,075	1,096,007
2.	Barpeta	1,693,622	1,953,762
3.	Bongaigaon	738,804	852,284
4	Cachar	1,736,617	2,003,361
5.	Chirang	482,162	556,222
6.	Darrang	928,500	1,071,118
7.	Dhemaji	686,133	791,523
8.	Dhubri	1,949,258	2,248,664
9.	Dibrugarh	1,326,335	1,530,060
10.	Dima Hasao	214,102	246,988
11.	Goalpara	1,008,183	1,163,040

Sl.No.	District	Population As per 2011 Census	Estimated Population in 2021
12.	Golaghat	1,066,888	1,230,762
13.	Hailakandi	659,296	760,564
14.	Jorhat	1,092,256	1,260,027
15.	Kamrup	1,517,542	1,750,636
16.	Kamrup Metropolitan	1,253,938	1,446,543
17.	Karbi Anglong	956,313	1,103,203
18.	Karimganj	1,228,686	1,417,412
19.	Kokrajhar	887,142	1,023,407
20.	Lakhimpur	1,042,137	1,202,209
21.	Morigaon	957,423	1,104,483
22.	Nagaon	2,823,768	3,257,499
23.	Nalbari	771,639	890,163
24.	Sivasagar	1,151,050	1,327,851
25.	Sonitpur	1,924,110	2,219,653
26.	Tinsukia	1,327,929	1,531,899
27.	Udalguri	831,668	959,412

Source: Census India

**ANNEXURE – 2.16  
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	Andhra Pradesh	32.30	23.40	29.90	22.8	17.7	21.1	10.96	5.81	9.20
2	Arunachal Pradesh	33.60	23.50	31.10	26.2	24.9	25.9	38.93	20.33	34.67
3	Assam	36.40	21.80	34.40	39.9	26.1	37.9	33.89	20.49	31.98
4	Bihar	55.70	43.70	54.40	55.3	39.4	53.5	34.06	31.23	33.74
5	Chhattisgarh	55.10	28.40	49.40	56.1	23.8	48.7	44.61	24.75	39.93
6	Delhi	15.60	12.90	13.10	7.7	14.4	14.2	12.92	9.84	9.91
7	Goa	28.10	22.20	25.00	11.5	6.9	8.7	6.81	4.09	5.09
8	Gujarat	39.10	20.10	31.80	26.7	17.9	23.0	21.54	10.14	16.63

Sl. No	State	Using TENDULKAR Methodology (Poverty Headcount Ratio)								
		2004-05			2009-10			2011-12		
		Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
9	Haryana	24.80	22.40	24.10	18.6	23.0	20.1	11.64	10.28	11.16
10	Himachal Pradesh	25.00	4.60	22.90	901	12.6	9.5	8.48	4.33	8.06
11	Jammu & Kashmir	14.10	10.40	13.20	8.1	12.8	9.4	11.54	7.20	10.35
12	Jharkhand	51.60	23.80	45.30	41.6	31.1	39.1	40.84	24.83	36.96
13	Karnataka	37.50	25.90	33.40	26.1	19.6	23.6	24.53	15.25	20.91
14	Kerala	20.70	18.40	19.70	12.0	12.1	12.0	9.14	4.97	7.05
15	Madhya Pradesh	53.60	35.10	48.60	42.0	22.9	36.7	35.74	21.00	31.65
16	Maharashtra	47.90	25.60	38.10	29.5	18.3	24.5	24.22	9.12	17.35
17	Manipur	39.30	34.50	38.00	47.4	46.4	47.1	38.80	32.59	36.89
18	Meghalaya	14.00	24.70	16.10	15.3	24.1	17.1	12.53	9.26	11.87
19	Mizoram	23.00	7.90	15.30	31.1	11.5	21.1	35.43	6.36	20.40
20	Nagaland	10.00	4.30	9.00	19.3	25.0	20.9	19.93	16.48	18.88
21	Odisha	60.80	37.60	57.20	39.2	25.9	37.0	35.69	17.29	32.59
22	Puducherry	22.90	9.90	14.10	0.2	1.6	1.2	17.06	6.30	9.69
23	Punjab	22.10	18.70	20.90	14.6	18.1	15.9	7.66	9.24	8.26
24	Rajasthan	35.80	29.70	34.40	26.4	19.9	24.8	16.05	10.69	14.71
25	Sikkim	31.80	2.90	31.10	15.5	5.0	13.1	9.85	3.66	8.19
26	Tamil Nadu	37.50	19.70	28.90	21.2	12.8	17.1	15.83	6.54	11.28
27	Tripura	44.50	22.50	40.60	19.8	10.0	17.4	16.53	7.42	14.05
28	Uttar Pradesh	42.70	34.10	40.90	39.4	31.7	37.7	30.40	26.06	29.43
29	Uttarakhand	35.10	26.20	32.70	14.9	25.2	18.0	11.62	10.48	11.26
30	West Bengal	38.20	24.40	34.30	28.8	22.0	26.7	22.52	14.66	19.98

Sl. No	State	Using TENDULKAR Methodology (Poverty Headcount Ratio)								
		2004-05			2009-10			2011-12		
		Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
31	Andaman & Nicobar							1.57	0.00	1.00
32	Chandigarh							1.64	22.31	21.81
33	Dadra & Nagar Haveli							62.59	15.38	39.31
34	Daman & Diu							0.00	12.62	9.86
35	Lakshadweep							0.00	3.44	2.77
<b>All India</b>		<b>42</b>	<b>25.5</b>	<b>37.2</b>	<b>33.8</b>	<b>20.9</b>	<b>29.8</b>	<b>25.70</b>	<b>13.70</b>	<b>21.92</b>

Source: Planning Commission, Govt. of India.

**ANNEXURE-2.17  
STATE- WISE INFORMATION ON SLUM POPULATION IN INDIA-CENSUS 2011**

Sl	Area Name	Towns reporting Slums	Total No. of House-holds	Slum Population			% of Total slum popn. to urban popn.	Slum Population ( 0-6yrs)		
				Persons	Male	Female		Persons	Male	Female
	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 Pr.	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	32.0	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



ECONOMIC SURVEY, ASSAM, 2021-22

Sl	Area Name	Towns repor-ting Slums	Total No.of House-holds	Slum Population			% of Total slum popn. to urban popn.	Slum Population ( 0-6yrs)		
				Persons	Male	Female		Persons	Male	Female
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	14.0	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	14.0	863392	457036	406356
27	Uttarakhand	31	93911	487741	257624	230117	16.0	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	17.0	16002	8222	7780

**ANNEXURE -2.18**  
**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
<b>All Schedule Tribes</b>	<b>Total</b>	<b>7,94,768</b>	<b>38,84,371</b>	<b>19,57,005</b>	<b>19,27,366</b>
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
Singhpoh	Total	533	2,342	1,175	1,167
Khampati	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, Haupt, Haolai, Hengna, Hongsungh, Hrangkhwal, Rangkhoh, Jongbe, Khawchung, Khawathlang, Khothalong, Khelma, Kholhou, Kipgen, Kuki, Lengthang, Lhangum, Lhoujem, Lhouvun, Lupheng, Mangjel, Misao, Riang, Sairhem, Selnam, Singson, Sithou, Sukte, Thado, Thangngeu, Uibuh, Vaiphei					

## ANNEXURE-2.19

## 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
<b>All Schedule Castes</b>	<b>Total</b>	<b>4,95,475</b>	<b>22,31,321</b>	<b>11,45,314</b>	<b>10,86,007</b>
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.

## Appendix 3.1

## GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CURRENT PRICES (Rs. In

## New base (2011-12) series

SI No	Sector	2011-12	2018-19	2019-20(P.E)	2020-21 (1st P.E)	2021-22 (Q.E)
<b>1</b>	<b>Agriculture, Forestry and Fishing</b>	<b>2848113</b>	<b>5035434</b>	<b>7759978</b>	<b>8502335</b>	<b>9575075</b>
1.1	Crops	2061487	3685044	4306224	4667627	5264741
1.2	Livestock	159289	350498	803382	866738	978536
1.3	Forestry & Logging	231388	309904	1211881	1374287	1522415
1.4	Fishing and	395949	689988	1438491	1593683	1809383
2	Mining & Quarrying	1464989	3623744	3737030	3553686	3809389
<b>A</b>	<b>Primary</b>	<b>4313102</b>	<b>8659178</b>	<b>11497008</b>	<b>12056021</b>	<b>13384464</b>
3	Manufacturing	1540255	3651565	3962498	3792111	4407462
4	Electricity, Gas, Water Supply and other utility services	191883	684608	713475	727031	825433
5	Construction	1188747	2093851	2471204	2320461	2629685
<b>B</b>	<b>Secondary</b>	<b>2920885</b>	<b>6430024</b>	<b>7147177</b>	<b>6839603</b>	<b>7862580</b>
6	Trade, Repair, Hotels & Restaurants	2045676	4367349	4938104	4664715	5200121
6.1	Trade and repair services	1961211	4212501	4761577	4508489	5019870
6.2	Hotel and restaurants	84465	154848	176527	156226	180251
7	Transport, Storage, Communication and services related to broadcasting	810091	1635792	2012311	1872561	2063708
7.1	Railways	158334	303310	363093	378122	460240

SI No	Sector	2011-12	2018-19	2019-20(P.E)	2020-21 (1st P.E)	2021-22 (Q.E)
7.2	Transport by means other than Railways	436288	823109	1053729	945472	997486
7.2.1	Road Transport	356262	724845	915005	823322	879370
7.2.2	Water	43626	35950	42091.00	37905	42182
7.2.3	Air Transport	0	24624	41291.0000	35522	38868
7.2.4	Services Incidental to Transport	36400	37690	55342	48723	37065
7.3	Storage	6594	19009	20561	18308	20617
7.4	Communication & Services related to Broadcasting	208875	490364	574928	530659	585366
8	Financial Services	427077	871795	1009967	1017172	1165319
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1636719	1874942	1887936	2104184
10	Public	821723	1643045	2257538	2291210	2674483
11	Other Services	1077923	2970898	3721059	3661522	4149651
<b>C</b>	<b>Tertiary</b>	<b>6295033</b>	<b>13125598</b>	<b>15813921</b>	<b>15395116</b>	<b>17357466</b>
12	Total GSVA at Basic Prices	13529020	28214800	34458106	34290740	38604510
13	Taxes on Products	1203476	3076218	3682048	4247299	5337799
14	Subsidies on Products	415005	357386	399673	437642	549765
<b>15</b>	<b>Gross State Domestic</b>	<b>14317491</b>	<b>30933632</b>	<b>37740481</b>	<b>38100397</b>	<b>43392544</b>
16	Population (in '00 )	314410	341370	345120	350430	353780
17	Per Capita (in Rs.)	45538	90616	109355	108725	122654

SI	Sector	2011-12	2018-19	2019-	2020-21	2021-22
D	Agriculture	2848113	5035434	7759978	8502335	9575075
E	Industry Sector	4385874	10053768	10884207	10393289	11671969
F	Service Sector	6295033	13125598	15813921	15395116	17357466
G	Taxes on Products - Subsidies on Products	788471	2718832	3282375	3809657	4788034
<b>GSDP (Current Prices)</b>		<b>14317491</b>	<b>30933632</b>	<b>37740481</b>	<b>38100397</b>	<b>43392544</b>

Source: Directorate of Economics and Statistics, Assam

<b>Appendix 3.2</b>						
<b>GROSS STATE DOMESTIC PRODUCTS OF ASSAM AT CONSTANT PRICES (Rs. in Lakh)</b>						
<b>New base (2011-12) series</b>						
SI No	Sector	2011-12	2018-19	2019-20(P.E)	2020-21 (1st P.E)	2021-22 (Q.E)
1	Agriculture, Forestry and Fishing	2848113	3638722	4482863	4780686	5061857
1.1	Crops	2061487	2719183	3198597	3415030	3631548
1.2	Livestock	159289	170997	448387	477439	508374
1.3	Forestry & Logging	231388	173932	195799	208982	222217
1.4	Fishing and aquaculture	395949	574609	640080	679235	699718
2	Mining & Quarrying	1464989	3024828	3086460	2919791	3130604
<b>A</b>	<b>Primary</b>	<b>4313102</b>	<b>6663550</b>	<b>7569323</b>	<b>7700477</b>	<b>8192461</b>
3	Manufacturing	1540255	3363102	3382696	3220327	3573913
4	Electricity, Gas, Water Supply and other utility services	191883	482251	446399	453541	493090

SI No	Sector	2011-12	2018-19	2019-20(P.E)	2020-21 (1st P.E)	2021-22 (Q.E)
5	Construction	1188747	1817144	2029332	1824821	2123773
<b>B</b>	<b>Secondary</b>	<b>2920885</b>	<b>5662497</b>	<b>5858427</b>	<b>5498689</b>	<b>6190776</b>
6	Trade, Repair, Hotels & Restaurants	2045676	2313574	2282875	2191681	2204624
6.1	Trade and repair services	1961211	2225097	2191837	2111659	2113159
6.2	Hotel and restaurants	84465	88477	91038	80022	91465
7	Transport, Storage, Communication and services related to broadcasting	810091	1268736	1371808	1298615	1433865
7.1	Railways	158334	224354	251162	256788	286062
7.2	Transport by means other than Railways	436288	631108	666675	627368	701524
7.2.1	Road Transport	356262	555766	578026	544905	611493
7.2.2	Water Transport	43626	27564	31050	29886	32943
7.2.3	Air Transport	0	18880	30460	26607	29893
7.2.4	Services Incidental to Transport	36400	28898	27139	25970	27195
7.3	Storage	6594	14345	14927	13173	14453
7.4	Communication & Services related to Broadcasting	208875	398929	439044	401286	431826
8	Financial Services	427077	696411	762390	750192	831906
9	Real Estate, Ownership of dwelling & Professional Services	1112543	1132260	1104421	1079903	1177697

SI No	Sector	2011-12	2018-19	2019-20(P.E)	2020-21 (1st P.E)	2021-22 (Q.E)
10	Public Administration	821723	1143067	1423220	1483422	1654461
11	Other Services	1077923	2011991	2313299	2256623	2414347
<b>C</b>	<b>Tertiary</b>	<b>6295033</b>	<b>8566038</b>	<b>9258013</b>	<b>9060436</b>	<b>9716900</b>
12	Total GSVA at Basic Prices	13529020	20892085	22685763	22259602	24100137
13	Taxes on Products	1203476	2502618	2811797	3163834	3647901
14	Subsidies on Products	415005	290747	305210	331153	364367
<b>15</b>	<b>Gross State Domestic Product</b>	<b>14317491</b>	<b>23103956</b>	<b>25192350</b>	<b>25092283</b>	<b>27383671</b>
16	Population (in '00 )	314410	341370	345120	350430	353780
<b>17</b>	<b>Per Capita (in Rs.)</b>	<b>45538</b>	<b>67680</b>	<b>72996</b>	<b>71604</b>	<b>77403</b>
D	Agriculture	2848113	3638722	4482863	4780686	5061857
E	Industry Sector	4385874	8687325	8944887	8418480	9321380
F	Service Sector	6295033	8566038	9258013	9060436	9716900
G	Taxes on Products -Subsidies on Products	788471	2211871	2506587	2832681	3283534
<b>GSDP (Constant Prices)</b>		<b>14317491</b>	<b>23103956</b>	<b>25192350</b>	<b>25092283</b>	<b>27383671</b>

Source: Directorate of Economics and Statistics, Assam



<b>APPENDIX 3.3</b>					
<b>NET STATE DOMESTIC PRODUCTS(NSDP) OF ASSAM AT CURRENT PRICES ( Rs. in Lakh)</b>					
<b>New base (2011-12) series</b>					
SI No	Industry Sector	2011-12	2019-20(P.E)	2020-21(1st P.E)	<b>2021-22 (Q.E)</b>
<b>1</b>	<b>Agriculture, Forestry and Fishing</b>	<b>2620851</b>	<b>7293682</b>	<b>8035765</b>	<b>8729252</b>
1.1	Crops	1888760	3910495	4271898	4684136
1.2	Livestock	153834	794456	856690	926082
1.3	Forestry & Logging	228850	1208550	1371804	1456993
1.4	Fishing and aquaculture	349407	1380181	1535373	1662041
2	Mining & Quarrying	1288077	3138558	2981944	3318978
<b>A</b>	<b>Primary</b>	<b>3908928</b>	<b>10432240</b>	<b>11017709</b>	<b>12048230</b>
3	Manufacturing	1274688	3425588	3244032	3644346
4	Electricity, Gas, Water Supply and other utility services	130994	465762	466880	506565
5	Construction	1131858	2195262	2080889	2244709
<b>B</b>	<b>Secondary</b>	<b>2537540</b>	<b>6086612</b>	<b>5791801</b>	<b>6395620</b>
6	Trade, Repair, Hotels & Restaurants	2002198	4503280	4114679	4514363
6.1	Trade and repair services	1919528	4344221	3974962	4348603
6.2	Hotel and restaurants	82670	159059	139717	165760
7	Transport, Storage, Communication and services related to broadcasting	672353	1273592	1175930	1260684
7.1	Railways	102300	163530	168664	194200
7.2	Transport by means other than Railways	394121	725903	651446	689851
7.2.1	Road Transport	307628	632244	568737	601727

SI No	Industry Sector	2011-12	2019-20(P.E)	2020-21(1st P.E)	<b>2021-22 (Q.E)</b>
7.2.2	Water Transport	37671	34217	29225	31399
7.2.3	Air Transport	0	28559	24664	27190
7.2.4	Services Incidental to Transport	31431	30883	28820	29535
7.3	Storage	5654	18715	17053	18305
7.4	Communication & Services related to Broadcasting	170278	365444	338767	358328
8	Financial Services	420333	986302	971704	1023593
9	Real Estate, Ownership of dwelling & Professional Services	942080	1382260	1343142	1486858
10	Public Administration	634052	1797666	1890246	2088155
11	Other Services	1046848	3469921	3284281	3702042
<b>C</b>	<b>Tertiary</b>	<b>5717864</b>	<b>13413021</b>	<b>12779982</b>	<b>14075695</b>
12	Total NSVA at Basic Prices	12164332	29931873	29589492	32519545
13	Taxes on Products	1203476	3682048	4247299	5337799
14	Subsidies on Products	415005	399673	437642	549765
<b>15</b>	<b>Net State Domestic Product</b>	<b>12952803</b>	<b>33214248</b>	<b>33399149</b>	<b>37307579</b>
16	Populatiuon (in '00 )	314410	345120	350430	353780
<b>17</b>	<b>Per Capita (in Rs.)</b>	<b>41197</b>	<b>96240</b>	<b>95309</b>	<b>105454</b>
D	Agriculture	2620851	7293682	8035765	8729252
E	Industry Sector	3825617	9225170	8773745	9714598
F	Service Sector	5717864	13413021	12779982	14075695
G	Taxes on Products - Subsidies on Products	788471	3282375	3809657	4788034
<b>NSDP</b>		<b>12952803</b>	<b>33214248</b>	<b>33399149</b>	<b>37307579</b>

Source: Directorate of Economics and Statistics, Assam

<b>Appendix 3.4</b>						
<b>NET STATE DOMESTIC PRODUCTS (NSDP) OF ASSAM AT CONSTANT PRICES (Rs. in Lakh)</b>						
<b>New base (2011-12) series</b>						
<b>SI No</b>	<b>Sector</b>	<b>2011-12</b>	<b>2018-19</b>	<b>2019-20 (P.E)</b>	<b>2020-21 (1<sup>st</sup> P.E)</b>	<b>2021-22 (Q.E)</b>
<b>1</b>	<b>Agriculture, Forestry and Fishing</b>	<b>2620851</b>	<b>3329147</b>	<b>4151552</b>	<b>4229375</b>	<b>4317755</b>
1.1	Crops	1888760	2461170	2925799	2942232	2958758
1.2	Livestock	153834	164180	441505	470557	501521
1.3	Forestry & Logging	228850	171745	193329	196512	206809
1.4	Fishing and aquaculture	349407	532051	590919	620074	650667
2	Mining & Quarrying	1288077	2583849	2634157	2518254	2780153
<b>A</b>	<b>Primary</b>	<b>3908928</b>	<b>5912996</b>	<b>6785709</b>	<b>6747629</b>	<b>7097908</b>
3	Manufacturing	1274688	2960301	2977471	2846462	3074174
4	Electricity, Gas, Water Supply and other utility services	130994	296747	269465	274585	297925
5	Construction	1131858	1689170	1864751	1704382	1886750
<b>B</b>	<b>Secondary</b>	<b>2537540</b>	<b>4946217</b>	<b>5111687</b>	<b>4825429</b>	<b>5258849</b>
6	Trade, Repair, Hotels & Restaurants	2002198	2181516	2139102	2011418	2031437
6.1	Trade and repair services	1919528	2102678	2058883	1937347	1958009
6.2	Hotel and Restaurants	82670	78838	80219	74071	73428

SI No	Sector	2011-12	2018-19	2019-20 (P.E)	2020-21 (1 <sup>st</sup> P.E)	2021-22 (Q.E)
7	Transport, Storage, Communication and services related to broadcasting	654962	849037	913238	865663	925206
7.1	Railways	102300	60245	92275	94425	103046
7.2	Transport by means other than Railways	376730	518807	541810	504848	553447
7.2.1	Road Transport	307628	461615	475250	444216	487660
7.2.2	Water Transport	37671	20490	24457	23398	25331
7.2.3	Air Transport	0	12614	19777	17710	19418
7.2.4	Services Incidental to Transport	31431	24088	22326	19524	21038
7.3	Storage	5654	13014	13474	12268	13378
7.4	Communication & Services related to Broadcasting	170278	256970	265679	254122	255335
8	Financial Services	420333	680134	743027	726383	773274
9	Real Estate, Ownership of dwelling & Professional Services	942080	874757	832687	818615	877883
10	Public Administration	634052	899430	1124666	1166391	1300176
11	Other Services	1046848	1906748	2191619	2157906	2389018
<b>C</b>	<b>Tertiary</b>	<b>5700473</b>	<b>7391621</b>	<b>7944339</b>	<b>7746376</b>	<b>8296994</b>

SI No	Sector	2011-12	2018-19	2019-20 (P.E)	2020-21 (1 <sup>st</sup> P.E)	2021-22 (Q.E)
12	Total NSVA at Basic Prices	12146941	18250834	19841735	19319434	20653751
13	Taxes on Products	1203476	2502618	2811797	3163834	3647901
14	Subsidies on Products	415005	290747	305210	331153	364367
15	<b>Net State Domestic Product</b>	<b>12935412</b>	<b>20462705</b>	<b>22348322</b>	<b>22152115</b>	<b>23937285</b>
16	Population (in '00 )	314410	341370	345120	350430	353780
17	<b>Per Capita (in Rs.)</b>	<b>41142</b>	<b>59943</b>	<b>64755</b>	<b>63214</b>	<b>67661</b>
D	Agriculture	2620851	3329147	4151552	4229375	4317755
E	Industry Sector	3825617	7530066	7745844	7343683	8039002
F	Service Sector	5700473	7391621	7944339	7746376	8296994
G	Taxes on Products - Subsidies on Products	788471	2211871	2506587	2832681	3283534
<b>NSDP (Constant Prices)</b>		<b>12935412</b>	<b>20462705</b>	<b>22348322</b>	<b>22152115</b>	<b>23937285</b>

Source: Directorate of Economics and Statistics, Assam

<b>Appendix 3.5</b>				
<b>Movement of Gross State Domestic Products(GSDP) of Assam both at Current and Constant (2011-12) Prices</b>				
Year	Gross State Domestic Product (Rs. in Lakh)		Per Capita Gross State Domestic Product (in Rs.)	
	Current Prices	Constant (2011-12) Prices	Current Prices	Constant (2011-12) Prices
<b>2011-12</b>	14317491	14317491	45538	45538
<b>2012-13</b>	15686424	14734238	49254	46264
<b>2013-14</b>	17774522	15452540	55098	47900
<b>2014-15</b>	19572315	16521230	59894	50558
<b>2015-16</b>	22795882	19110900	68868	57735
<b>2016-17</b>	25438236	20208085	75869	60270
<b>2017-18</b>	28316490	21991938	83871	65138
<b>2018-19</b>	30933632	23103956	90616	67680
<b>2019-20 (P.E.)</b>	37740481	25192350	109355	72996
<b>2020-21 (1st P.E.)</b>	38100397	25092283	108725	71604
<b>2021-22 (Q.E)</b>	43392544	27383671	122654	77403

Source: Directorate of Economics and Statistics, Assam

Appendix 3.6				
Movement of Net State Domestic Products(NSDP) of Assam both at Current and Constant (2011-12) Prices				
Year	Net State Domestic Product (Rs. in Lakh)		Per Capita Net State Domestic Product (in Rs)	
	Current Prices	Constant (2011-12) Prices	Current Prices	Constant (2011-12) Prices
2011-12	12935412	12935412	41142	41142
2012-13	14203946	13251760	44598	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	27662476	20462705	81034	59943
2019-20 (P.E.)	33214248	22348322	96240	64755
2020-21 (1st P.E.)	33399149	22152115	95309	63214
2021-22(Q.E.)	37307579	23937285	105454	67661

Source: Directorate of Economics & Statistics, Assam

**Annexure – 5.1**

**Scheme wise target and achievement of different schemes for the last 3 years**

Year	Name of scheme	Types of scheme	Physical Target	Physical Achievement	Financial Target	Financial Achievement	Remarks
2019-20	Paramparagat Krishi Vikash Yojana (PKVY)	CSS	220 Cluster	220 Cluster	Rs.1437.05 lakh	Rs.1437.05	
2020-21			220 Cluster	220 Cluster	Rs.1113.17756	Rs.1105.64282	
2021-22			220 Cluster	220 Cluster	Rs.643.46898	Nil	Fund not received till date

Year	Name of scheme	Types of scheme	Physical Target	Physical Achievement	Financial Target	Financial Achievement	Remarks
2019-20	Majuli as Organic Hub	SOPD-G	25 Cluster	25 Cluster	Rs.1,80,43,500	Nil	Fund not received till date
2020-21			25 Cluster	25 Cluster	Rs.1,35,91,750	Nil	
2021-22			25 Cluster	25 Cluster	Rs.83,64,750	Nil	

Source : Directorate of Agriculture, Assam

**Annexure – 5.2**

**Area, Production and Average Yield of some Major Horticultural Crops of Assam for the year 2019-20 and 2020-21**

Sl. No.	Name of Crops	2019-20 (Final)			2020-21 (Estimated)		
		Area in Hectare	Production in M. T.	Average Yield in Kg./Hect	Area in Hectare	Production in M. T.	Average Yield in Kg./Hect
1	2	3	4	5	6	7	8
<b>A. FRUIT CROPS</b>							
1	Banana	49445	906683	18337	57754	1096170	18980
2	Pineapple	16606	307519	18518	19650	362739	18460
3	Orange	7339	149513	20372	7412	151093	20385
4	Papaya	14633	203799	13927	14779	206945	14003
5	Assam Lemon	5767	126729	21975	5824	128040	21985
6	Gauva	15712	155077	9870	15869	158245	9972
7	Litchi	6035	58913	9762	6095	59907	9828
8	Jackfruit	22305	207994	9325	22685	213693	9420
9	Mango	4780	62337	13041	5837	63535	10885
10	Other Fruits	4806	47531	9890	4854	48443	9980
<b>TOTAL FRUIT CROPS</b>		<b>147428</b>	<b>2226095</b>	<b>15099</b>	<b>160759</b>	<b>2488810</b>	<b>15481</b>
<b>B.</b>							
1	Potato	104750	756222	7219	115752	985396	8513
2	Sweet Potato	4926	25640	5206	8766	50553	5767
3	Tapeoca	3289	31794	9667	4679	44357	8480
<b>Total Tuber Crops</b>		<b>112965</b>	<b>813656</b>	<b>7203</b>	<b>129197</b>	<b>1080306</b>	<b>8362</b>
<b>C. SPICES CROPS</b>							
1	Chillies	20459	20189	987	20459	20189	987
2	Turmeric	17705	24609	1390	17705	24609	1390
3	Onion	8155	88892	10900	17154	251220	14645
4	Ginger	17786	167803	9434	19451	185951	9559
5	Garlic	10659	67418	6325	10765	68916	6402
6	Coriander	30548	32839	1075	30698	35763	1165



Sl. No.	Name of Crops	2019-20 (Final)			2020-21 (Estimated)		
		Area in Hectare	Production in M. T.	Average Yield in Kg./Hect	Area in Hectare	Production in M. T.	Average Yield in Kg./Hect
1	2	3	4	5	6	7	8
7	Black Pepper	3410	7664	2248	4087	9257	2265
8	Other Spices	5597	7136	1275	5652	7771	1375
<b>TOTAL SPICES</b>		<b>114319</b>	<b>416550</b>	<b>3644</b>	<b>125971</b>	<b>603676</b>	<b>4792</b>
<b>D. VEGETABLE CROPS</b>							
1	Kharif Vegetables	88240	1648764	18685	89122	1674245	18786
2	Rabi Vegetables	201380	3850385	19120	203393	3910230	19225
<b>TOTAL VEGETABLES</b>		<b>289620</b>	<b>5499149</b>	<b>18987</b>	<b>292515</b>	<b>5584475</b>	<b>19091</b>
<b>E. PLANTATION CROPS</b>							
1	Coconut	20752	160226	63	20818	185016	69
3	Cashew nut	3796	5577	14692	3802	3745	985
<b>Total Plantation</b>		<b>24548</b>	<b>165803</b>	<b>14755</b>	<b>24620</b>	<b>188761</b>	<b>1054</b>

Production of Coconut is in "000" nuts, average yield of Arecanut and coconut is nos. per bearing tree

Source : Directorate of Horticulture & Food Processing, Assam

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-5.3

#### 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.

Source : Directorate of Agriculture, Assam

**ANNEXURE-5.4****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

Source : Directorate of Agriculture, Assam

**ANNEXURE-5.5****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 produce (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 produce (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

Source : Directorate of Agriculture, Assam

#### ANNEXURE-5.6

#### AREA, PRODUCTION AND AVERAGE YIELD UNDER FOOD AND NON- FOOD CROPS COVERED BY CROP FORECAST IN ASSAM 2020-21(PROVISIONAL)

Sl No	Name of Crop	Area (in Hect)	Production (In Tonnes)	Average Yield (Kg/Hect)
1	Autumn Rice	116547	181726	1585
2	Winter Rice	1863898	3960549	2157
3	Summer Rice	380025	1071577	2820
	<b>TOTAL RICE</b>	<b>2360470</b>	<b>5213852</b>	<b>2237</b>
4	Maize	41154	147902	3594
5	Wheat	9342	12881	1379
6	Other Cereals and Small Millets	4973	3263	656
	<b>TOTAL CEREALS</b>	<b>2415939</b>	<b>5377898</b>	<b>2254</b>
7	Gram	2089	1549	739
8	Tur (Arhar)	6037	5167	856
9	Rabi Pulses	134177	101984	760
	<b>TOTAL PULSES</b>	<b>142303</b>	<b>108700</b>	<b>764</b>
	<b>TOTAL FOOD GRAINS</b>	<b>2558242</b>	<b>5486598</b>	<b>2170</b>
10	Sesamum	12128	8177	674
11	Rape & Mustard	286353	185175	647
12	Linseed	4920	3026	615
13	Castor	687	317	454
14	Nizer	5563	3152	566
15	Coconut (2019-20)	20800	148845	53
	<b>TOTAL OIL SEEDS</b>	<b>330451</b>	<b>199847</b>	<b>647</b>
16	Cotton (b)	759	395	88

SI No	Name of Crop	Area (in Hect)	Production (In Tonnes)	Average Yield (Kg/Hect)
17	Jute ( c )	62879	773883	2215
18	Mesta (c )	3118	20459	1181
	<b>TOTAL FIBRES</b>	<b>66756</b>	<b>794737</b>	<b>2143</b>
19	Banana	48778	909825	18652
20	Pineapple	16607	315139	18976
21	Orange	13288	185021	13924
22	Papaya	7489	151824	20273
23	Potato	103041	757630	7353
24	Sweet Potato	5015	27388	5462
25	Topeoca	3297	32069	9727
26	Onion	8293	91928	11085
	<b>TOTAL FRUITS &amp; VEGETABLES</b>	<b>205808</b>	<b>2470824</b>	<b>132</b>
27	Areca nut (2019-20)	67223	52124	1009
28	Chillies	20277	20457	1282
29	Turmeric	16492	21143	35845
30	Sugercane	30496	1093128	505
31	Tobacco	100	53	480
	<b>TOTAL MISCELLANEOUS CROPS</b>	<b>134588</b>	<b>1186905</b>	

Source : Directorate of Economics & Statistics, Assam

### Annexure-6.1

#### DISTRICT-WISE AND SEASON-WISE AREA IRRIGATED IN ASSAM THROUGH BARGE

(Through Govt. Surface Lift Irrigation Schemes)

(Area in Hect.)

SI No	District	Area irrigated during 2019-20		Area irrigated during 2020-21	
		Kharif	Rabi & Pre-kharif	Kharif	Rabi & Pre-kharif
1	2	3	4	5	6
1	Kokrajhar	608	20	575	10
2	Dhubri	8	139	0	166
3	Goalpara	24	105	45	69
4	Barpeta	118	4	46	142
5	Morigaon	155	655	145	737
6	Nagaon	122	522	1012	399
7	Sonitpur	23	14	15	6
8	Lakhimpur	15	10	0	0

ECONOMIC SURVEY, ASSAM, 2021-22

Sl No	District	Area irrigated during 2019-20		Area irrigated during 2020-21	
		Kharif	Rabi & Pre-kharif	Kharif	Rabi & Pre-kharif
1	2	3	4	5	6
9	Dhemaji	15	9	13	5
10	Tinsukia	10		13	0
11	Dibrugarh	91		325	0
12	Sivasagar	38	15	0	0
13	Jorhat	21	5	17	19
14	Golaghat	550	241	234	130
15	Karbi Anglong	2653	991	1065	807
16	Dima Hasao	30		240	0
17	Cachar	55	790	160	533
18	Karimganj	0		0	0
19	Hailakandi			147	0
20	Bongaigaon	20	11	36	0
21	Chirang	20	2	181	57
22	Kamrup	123	64	43	1168
23	Kamrup(M)	135	40	189	1137
24	Nalbari	83	411	15	11
25	Baksa	47		0	1
26	Darrang	13		15	0
27	Udalguri	365	16	0	4
28	Biswanath	196	5	585	69
29	Charaideo	1920	44	42	15
30	Hojai	20	17	80	0
31	Majuli	410	102	0	0
32	S.Salmara			0	0
33	W.Karbi Anglong				
	<b>Total Assam</b>	<b>7888</b>	<b>4232</b>	<b>5238</b>	<b>5485</b>

## Annexure-6.2

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

(Area in Hect.)

Sl.No.	District	Minor					
		2020 -21					
		Surface flow	Surface lift	Deep Tubewell	ShallowTube well	PMKSY-HKPP Tube wells ph-I (Solar & Electrical)	Total
1	2	3	4	5	6	7	8
1	Kokrajhar	30732	4954	938	100	1680	38404
2	Dhubri	1013	6966	1396	606	88	10069
3	Goalpara	8657	4170	3960	188	180	17155
4	Barpeta	2800	9445	1275	229	1024	14773
5	Morigaon	2550	14243	1685	0	0	18478
6	Nagaon	6272	11040	2695	488	3416	23911
7	Sonitpur	7059	4763	4250	0	1344	17416
8	Lakhimpur	2333	2340	6522	6708	0	17903
9	Dhemaji	1500	4095	1127	2600	0	9322
10	Tinsuka	806	2770	3482	447	0	7505
11	Dibrugarh	0	9719	4262	2700	1656	18337
12	Sivasagar	580	10990	2257	382	360	14569
13	Jorhat	4086	2294	5090	70	880	12420
14	Golaghat	2613	6322	6704	472	688	16799
15	Karbi Anglong	96225	4065	585	535	0	101410
16	Dima Hasao	14003	2289	0	0	0	16292
17	Cachar	11193	6685	311	74	0	18263
18	Karimganj	7499	1504	304	0	0	9307
19	Hailakandi	2051	3540	102	0	0	5693
20	Bongaigaon	5383	2389	1417	606	8	9803
21	Chirang	30258	518	880	0	0	31656
22	Kamrup	21084	10346	3091	61	1896	36478
23	Kamrup(M)	1993	3103	0	0	672	5768

Sl.No.	District	Minor					
		2020 -21					
		Surface flow	Surface lift	Deep Tubewell	Shallow Tube well	PMKSY-HKPP Tube wells ph-I (Solar & Electrical)	Total
24	Nalbari	0	3805	3091	985	0	7881
25	Baksa	47741	3850	655	0	0	52246
26	Darrang	10410	3916	3048	50	1424	18848
27	Udalguri	71110	150	1084	506	0	72850
28	Biswanath	12182	5020	2079	1226	1560	22067
29	Charaideo	212	2650	915	24	0	3801
30	Hojai	3240	6014	1070	0	0	10324
31	Majuli	1104	811	507	5450	1072	8944
32	S.Salmara	685	3984	1390	224	40	6323
33	W. KarbiAnglong	69759	4088	387	210	0	74444
34	Bajali	2407	4623	412	0	0	7442
<b>Assam</b>		<b>479540</b>	<b>167461</b>	<b>66971</b>	<b>24941</b>	<b>17988</b>	<b>756901</b>

**Annexure-6.3**

**DISTRICT-WISE IRRIGATION UTILISED, FUNCTIONING AND NON FUNCTIONING IN, ASSAM**

*(in nos)*

SlNo	District	Functiong Irrigation scheme during 2020-21		Non Functiong Irrigation scheme during 2020-21		Total Irrigation scheme during 2020-21	
		Minor Irrigation Schemes	PMKSY-HKPP Tubewells PhI (Solar&Electrical) (Completed)	Minor Irrigation Schemes	PMKSY-HKPP Tubewells PhI & II (Solar & Electrical) (Ongoing)	Minor Irrigation Schemes	Total PMKSY-HKPP Tubewells Ph I & II (Solar&Electrical)
1	2	3	4	5	6	7	8
1	Kokrajhar	28	210	94	86	122	296
2	Dhubri	26	22	35	78	61	100
3	Goalpara	39	30	84	45	123	75
4	Barpeta	23	128	39	252	62	380
5	Morigaon	30		44	390	74	390

ECONOMIC SURVEY, ASSAM, 2021-22

SINo	District	Functioning Irrigation scheme during 2020-21		Non Functioning Irrigation scheme during 2020-21		Total Irrigation scheme during 2020-21	
		Minor Irrigation Schemes	PMKSY-HKPP Tubewells PhI (Solar&Electrical) (Completed)	Minor Irrigation Schemes	PMKSY-HKPP Tubewells PhI & II (Solar & Electrical) (Ongoing)	Minor Irrigation Schemes	Total PMKSY-HKPP Tubewells Ph I & II (Solar&Electrical)
1	2	3	4	5	6	7	8
6	Nagaon	38	427	107	63	145	490
7	Sonitpur	22	168	29	255	51	423
8	Lakhimpur	30		85	510	115	510
9	Dhemaji	22		43	300	65	300
10	Tinsuka	25		34	690	59	690
11	Dibrugarh	30	276	61	17	91	293
12	Sivasagar	21	45	43	230	64	275
13	Jorhat	55	110	29	240	84	350
14	Golaghat	49	86	49	64	98	150
15	Karbi Anglong	289		123	300	412	300
16	DimaHasao	225		32		257	0
17	Cachar	30		98	990	128	990
18	Karimganj	28		55	570	83	570
19	Hailakandi	10		44	270	54	270
20	Bongaigaon	21	1	46	249	67	250
21	chirang	56		44	0	100	0
22	Kamrup	74	237	91	213	165	450
23	Kamrup(M)	18	84	9	140	27	224
24	Nalbari	26		68	600	94	600
25	Baksa	110		94	150	204	150
26	Darrang	21	178	47	35	68	213
27	Udalguri	30		81		111	0
28	Biswanath	38	195	38	174	76	369
29	Charaideo	12		14	200	26	200
30	Hojai	16		43		59	0
31	Majuli	36	141	19		55	141
32	S.Salmara	6	10	45	90	51	100
33	W.K.Anglong	231		59	150	290	150
34	Bajali	17		26	0	43	0
<b>Assam</b>		<b>1732</b>	2348	1852	7351	3584	9699



## Annexure-6.4

**SECTOR-WISE IRRIGATION POTENTIAL CREATED IN ASSAM 2020-21  
(CUMULATIVE) (Area in Hect.)**

Sl No	District	Irrigation potential created upto 31 <sup>st</sup> March, 2021			
		Minor Irrigation	*PMKSY-HKPP Tube Wells Ph-I (Solar & Electrical) (Completed)	Major/ Medium Irrigation	Total
1	2	3	4	5	6
1	Kokrajhar	36724	1680	4960	4336
2	Dhubri	9981	88		1006
3	Goalpara	16975	180		1715
4	Barpeta	13749	1024		1477
5	Morigaon	18478			1847
6	Nagaon	20495	3416	42063	6597
7	Sonitpur	16072	1344	32131	4954
8	Lakhimpur	17903			1790
9	Dhemaji	9322			9322
10	Tinsuka	7505			7505
11	Dibrugarh	16681	1656	4158	2249
12	Sivasagar	14209	360		1456
13	Jorhat	11540	880		1242
14	Golaghat	16111	688		1679
15	Karbi Anglong	101410		6275	1076
16	DimaHasao	16292			1629
17	Cachar	18263			1826
18	Karimganj	9307			9307
19	Hailakandi	5693			5693
20	Bongaigaon	9795	8		9803
21	chirang	31656		23504	5516
22	Kamrup	34582	1896		3647
23	Kamrup(M)	5096	672		5768
24	Nalbari	7881			7881
25	Baksa	52246		33356	8560
26	Darrang	17424	1424	3000	2184
27	Udalguri	72850		66230	1390
28	Biswanath	20507	1560		2206
29	Charaideo	3801			3801
30	Hojai	10324		41014	5133
31	Majuli	7872	1072		8944
32	S.Salmara	6283	40		6323
33	West Karbi Anglong	74444		2430	7687
34	Bajali	7442		25800	3324
	<b>Assam</b>	<b>738913</b>	<b>17988</b>	<b>284921</b>	<b>10418</b>

\*PMKSY=Pradhan Mantri Kreshi Sinchayee Yojana  
HKPP=Har khet Ko Pani.

## Annexure-6.5

**RENEWABLE ENERGY RELATED PERFORMANCE OF IRRIGATION DEPARTMENT  
(DISTRICT-WISE PHYSICAL PROGRESS)**

SL NO	District	Installation of Solar PV Pumset under RIDF			
		Progress (No)		Progress (No)	
		During 2019-20	Cummulative	During 2020-21	Cummulative
1	2	3	4	5	6
1	Kokrajhar	3	4	0	4
2	Dhubri	0	3	0	3
3	Goalpara	2	2	0	2
4	Barpeta	0	0	0	0
5	Morigaon	4	4	2	6
6	Nagaon	10	14	2	16
7	Sonitpur	8	9	0	9
8	Lakhimpur	6	7	0	7
9	Dhemaji	0	1	0	1
10	Tinsukia	6	6	0	6
11	Dibrugarh	16	20	4	24
12	Sivasagar	0	0	0	0
13	Jorhat	4	4	0	4
14	Golaghat	9	9	2	11
15	Karbi Anglong	0	0	0	0
16	DimaHasao	0	0	0	0
17	Cachar	0	0	0	0
18	Karimganj	0	0	0	0
19	Hailakandi	0	0	0	0
20	Bongaigaon	0	0	0	0
21	Chirang	0	0	0	0
22	Kamrup	60	60	13	73
23	Kamrup(M)	2	3	0	3
24	Nalbari	12	13	0	13
25	Baksa	16	18	2	20
26	Darrang	3	3	0	3
27	Udalguri	0	0	0	0
28	Biswanath	6	9	0	9
29	Charaideo	0	0	1	1
30	Hojai	6	6	0	6
31	Majuli	4	5	5	10
32	S.Salmara	0	0	0	0
33	West Karbi Anglong	0	0	0	0
<b>Total</b>		<b>177</b>	<b>200</b>	<b>31</b>	<b>231</b>
NB : The number of schemes include both completed and ongoing schemes					

**Annexure-7.01**

**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)

**Annexure -8.01**  
**DISTRICT WISE ANNUAL ARTIFICIAL INSEMINATION (A.I) PROGRESS REPORT, 2020-21**

Name of the District	Insemination Done (Numbers)				Calf Born (numbers)							
	In Local		In Crossbred (CB)		By staff				By Gopal Mitra (GM)			
	Staff	GM	Staff	GM	L		CB		L		CB	
					M	F	M	F	M	F	M	F
BAKSA	3829	1306	2413	645	635	623	419	450	115	98	74	55
BONGAIGAON	8569	4610	11125	5083	1748	1698	2007	2027	780	762	921	1394
BARPETA	14973	5178	21981	5305	3060	2550	3747	3650	636	621	619	572
BISWANATH	2340	1222	3262	1303	612	597	835	896	214	211	299	307
CACHAR	5569	338	5265	161	4286	1298	1202	1184	367	57	33	24
CHIRANG	2396	1362	2460	953	626	545	523	525	128	111	81	84
DARRANG	7175	6949	5677	6367	1206	1294	1110	1177	728	777	625	739
DHEMAJI	353	11	734	12	64	53	87	135	0	0	0	0
DHUBRI	6717	1809	5032	1129	1701	1547	1200	1262	196	181	107	107
DIBRUGARH	753	98	6682	307	176	194	1701	1880	11	12	35	111
DIMA HASAO	1035	204	1569	230	34	57	44	83	13	16	14	16
GOALPARA	4835	1768	3764	1368	966	734	773	616	86	57	63	58
GOLAGHAT	3073	735	4519	1666	1123	779	917	1125	98	228	101	138
HAILAKANDI	4221	560	5414	271	908	754	1041	1088	26	13	30	23
HOJAI	4031	2794	5721	2702	934	906	1046	983	239	235	226	254
JORHAT	3360	44	5748	48	778	871	1353	1740	13	9	8	7
KAMRUP	7344	3952	7879	3630	1342	1215	1143	1218	590	562	484	428
KAMRUP (M)	1955	37	16862	610	705	677	2317	2236	8	2	79	56
KARBI ANGLONG	1159	0	1524	0	206	231	274	240	0	0	0	0
KARIMGANJ	2098	846	2675	1191	533	483	673	558	210	173	334	286
KOKRAJHAR	2896	1248	2493	770	628	516	572	516	199	133	112	87
LAKHIMPUR	2274	1739	2067	1115	538	565	451	618	280	261	207	259
MAJULI	30	284	61	48	10	19	5	3	34	32	69	43
MORIGAON	6773	3694	5530	3657	995	1026	834	809	349	330	289	320
NAGAON	11702	5281	14728	4768	1990	1791	1991	2052	457	502	402	463
NALBARI	9913	635	10775	474	2042	1923	2453	2311	30	38	41	42
SIBSAGAR	2044	213	3498	128	665	762	1133	1125	81	125	4	5
SONITPUR	9022	4623	14872	6675	2657	2332	3818	3822	1234	1033	1318	1322
SORAIDEU	674	209	1485	187	243	256	415	314	11	13	5	3
SOUTH SALMARA	1823	751	1111	474	467	393	353	333	73	68	49	53
TINSUKIA	1275	12	9670	160	1205	98	2228	1852	194	2	19	14
UDALGURI	4094	264	3612	240	702	620	708	639	21	31	15	27
WEST KARBI ANGLONG	836	1	1082	0	158	174	281	269	0	0	0	0
TOTAL	139141	52777	191290	51677	33943	27581	37654	37736	7421	6693	6663	7297

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

**Annexure-8.02  
DETAILED REPORT ON THE PHYSICAL & FINANCIAL ACHIEVEMENTS OF THE  
INSTITUTE OF FARM MANAGEMENT (RILEM), RANI FOR THE YEAR 2021-22**

Year & Name of Schemes / Programmes	State Sector				Central Sector			
	Physical		Financial (Rs. In lakhs)		Physical		Financial (Rs. In lakhs)	
	Target	Achievements	Target	Achievements	Target	Achievements	Target	Achievements
Holding A.I. technician training programme (MAITRI) under Rastriya Gokul Mission for the year 2019-20 (Central Sector)	Nil		Nil		320 trainees to be trained	320 trained	99.99 L	99.99 L
Holding of Farmers Training & Extension Programme for the year 2020-21 (State Sector)	320 trainees to be trained	320 trained	29.90 L	29.90 L	320 trainees to be trained	320 trained	99.99 L	99.99 L

**PHYSICAL AND FINANCIAL PROGRESS OF RKVY-RAFTAAR 2020-21 (AS ON 31<sup>ST</sup> OCTOBER, 2021)**

Sl. No	Components	Physical		Financial (Rs. In lakhs)		Remarks
		Target	Achievements	Target	Achievements	
1	Construction of 2nd floor of Assam Veterinary Council Building	1 Unit	Under Progress	60.00	0.00	
2	Skill Development Programme at RILEM, Assam (Ongoing project)		Under Progress	80.00	13.09154	
3	Rural Side outlet/Farmers Service Centre (PPP mode)	6 Unit	Under Progress	60.00	0.00	
4	Administrative Cost	LS		16.00	0.00	
Grand Total				216.00	13.09154	

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

## ANNEXURE – 9.1

## DISTRICTWISE NUMBER AND AREA UNDER FISHERIES IN ASSAM, 2020-21

(Area in Hactare)

District	River Fisheries		Others (Paddy field/canals etc.)	
	Nos.	Area (Ha)	Nos.	Area (Ha)
<i>1</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
Kokrajhar	10	2457	7899	395
Dhubri	11	21216.85	-	40645
Goalpara	8	8356.24	-	33983
Barpeta	9	2209.60	-	5955
Morigaon	5	335.55	9489	8198.89
Nagaon	-	2825	-	30946
Sonitpur	8	20640	-	104910
Lakhimpur	16	2,474.12	51	1851.8
Dhemaji	24	60850	-	18500
Tinsukia	10	26100	-	6894
Dibrugarh	4	13735	-	15762.4
Sivasagar	35	2677.12	-	98879.8
Jorhat	12	1796	-	10403.5
Majuli	4	18704	-	3949
Golaghat	25	7935.76	-	-
Karbi-Anglong	5	4200	-	-
Dima-Hasao	4	450	1550	1062
Cachar	45	5868	550	2380
Karimganj	5	5500	-	3050.6
Hailakandi	4	1588	-	38
Bongaigaon	8	562	-	2105
Chirang	2	480	-	675
Kamrup	74parts	14782.5	558	2766.2
Nalbari	7	2100	-	5040
Baksa	14	1469	60	25.04
Darrang	17	10900	-	1100
Udalguri	5	1325	-	-
Assam	297	241536.74	20157	399515.23

N.B: In some districts number of Derelict Water Bodies/ Swamp, Forest Fisheries, River Fisheries, etc. are not available.

Source: Department of Fisheries, Assam

## ANNEXURE-9.2

## DISTRICT -WISE NUMBER OF HATCHERIES AND FISH SEED PRODUCTION IN ASSAM, 2020-21

District	No. of Hatcheries		Production of Fish Seed (Fry in Million Nos.)	
	Govt.	Private	Govt.	Private
1	2	3	4	5
Kokrajhar	1	6	0.00	16.73
Dhubri	1	12	0.00	36.78
Goalpara	0	10	0.00	34.50
Barpeta	0	79	0.00	4738.90
Morigaon	1	41	0.00	152.77
Nagaon	1	177	0.15	1777.35
Sonitpur	1	15	0.30	170.15
Lakhimpur	2	11	0.00	158.52
Dhemaji	0	7	0.00	0.30
Tinsukia	0	7	0.00	72.00
Dibrugarh	1	4	0.15	6.33
Sivasagar	2	5	0.27	62.54
Jorhat	1	9	0.00	44.20
Golaghat	0	14	0.00	3.00
Karbi-Anglong	2	2	0.21	0.00
Dima-Hasao	0	0	0.20	0.00
Cachar	1	5	0.31	44.00
Karimganj	0	31	0.00	2238.20
Hailakandi	0	4	0.00	19.00
Bongaigaon	1	3	0.00	14.50
Chirang	0	1	0.00	7.00
Kamrup	3	23	0.00	61.92
Nalbari	0	6	0.00	100.20
Baksa	1	13	0.00	67.40
Darrang	2	13	0.98	35.34
Udalguri	1	2	0.00	22.30
Assam	22	500	2.57	9883.93

N.B. The figures regarding the number of hatcheries in the above list are yet to be updated. District which has 0 (Zero) seed production indicates that the Hatcheries are either non functional or defunct temporarily.

Source: Department of Fisheries, Assam

## ANNEXURE-9.3

## SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS UNDER STATE SECTOR (SOPD) FOR THE LAST THREE YEARS (2018-19 TO 2020-21)

Sl No	Item	Unit	2018-19		2019-20		2020-21		Remarks
			Target	Achv.	Target	Achv.	Target	Achv	
1	2	3	4	5	6	7	8	9	10
	<b>General</b>								
1	Fish production	Lakh Ton	3.47	3.31	3.50	3.73	3.94	3.93	
2	Seed production	Million nos	9000	9893	9826	9519	9995	8668	
3	<b>Fish &amp; Fish Seed farming</b>								
	Input and material support for fish production (including SCSP)	Ha	132	74	52.40	51.96	-	-	
	Beneficiaries	Nos	-	447	-	348	-	-	
	Production of Fish Fingerling in rearing tank	Ha.	5	5	-	-	-	-	
	Beneficiaries	Nos	-	53	-	-	-	-	
	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	No of farms	11	11	10	12	15	16	
	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	11.00	14.0	7.50	
		SHGs/ Societies	-	-	-	11	14	7	
	Fishery Eco-tourism Development (GNB tank, Guwahati)	Unit	-	-	1	1	-	-	
4	Grants in Aid to AFDC	No. of beel	-	-	-	-	17	-	

Continue ...



## ANNEXURE-9.3

## SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS UNDER STATE SECTOR (SOPD) FOR THE LAST THREE YEARS (2018-19 TO 2020-21)

1	2	3	4	5	6	7	8	9	10
5	<b>Fishery Extension Service</b>								
	Training of beneficiaries	Nos of training.	-	54	-	-	-	-	
	Trainee	Nos	-	1400	-	-	-	-	
	Celebration of fish farmers day	Events	-	1	1	1	-	15	
	Procurement of Departmental vehicles	Nos	32	32	-	-	-	-	
	Honorarium of Matsya Mitra as support extension workers	Nos of matsya Mitra	75	75	75	75	77	77	
	Awards to fishermen/ fish farmers	Nos	-	-	-	7	-	-	
6	<b>Marketing &amp; Transport</b>								
	Establishment of Fish Retail Outlet	Nos	-	-	2	2	3	2	
	Wholesale Fish Market (NFDB State Share)	Nos	-	-	4	1	4 ongoing markets	1- (100%) and 3- (70-85% progress)	
	Hygienic fish market (State Plan) - ongoing	Nos	-	-	5	3	3 ongoing markets	2- (100%) and 1- (80% progress)	2 partially complete
7	<b>Rural Infrastructure Devt. Fund (RIDF)</b>								
	Fish Landing centre- RIDF-XXI (Total target- 22 Nos.)	Nos.	-	4	-	3	-	-	
	Marketing infrastructure (RIDF-XXI (Total target- 11 Nos.)	Nos	-	1	-	1	-	-	
	Development of Departmental Farm, RIDF-XXI (Total Target-5)	Nos	-	-	-	2	-	-	
	Construction of new individual ponds- (General and ST/SC): RIDF-XXIII	Ha	Approx 892.50 Ha excavated till 30/09/2021 covering 6442 individual beneficiaries. Targeted beneficiaries: 9090						Projects started from 2018-19. Target for individual ponds: 1050 Ha and Target for community ponds : 385 Ha.
	Community tank construction	Ha	Approx 327.25 Ha excavated till 30/09/2021 covering 290 Community. Targeted beneficiaries: 385						

Source: Department of Fisheries, Assam

## ANNEXURE-9.4

## SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS UNDER CENTRAL SECTOR SCHEMES FOR THE LAST THREE YEARS (2018-19 TO 2020-21)

Item	Unit	2018-19		2019-20		2020-21	
		Target	Achv.	Target	Achv.	Target	Achv.
1	2	3	4	5	6	7	8
<b>Central Sector Schemes (CSS)</b>							
<i>Blue Revolution - Integrated Development &amp; Management of Fishes</i>							
Construction of New Pond for promotion of commercial fishery	Ha	-	-	-	69.86	205	203.43
Beneficiaries	Nos.	-	-	-	-	-	-
Creation of fingerling rearing area (Gen)	Ha	53.9	53.9	-	-	-	-
Beneficiary	Nos	474	474	-	-	-	-
Creation of fingerling rearing area (SC/ST area)	Ha	21.1	21.1	-	-	-	-
Beneficiary	Nos	184	184	-	-	-	-
Construction of new seed rearing area	Ha	-	-	-	-	100	97.53
Construction of fish seed hatcheries	No.	20	20	-	-	10	6
Beneficiary	Nos	20	20	-	-	-	-
Infrastructure Solar power system(G)	No.	1	1	-	-	-	-
Beneficiary	No.	1	1	-	-	-	-
Infrastructure Solar power system(SC/ST)	No.	1	1	-	-	-	-
Beneficiary	No.	1	1	-	-	-	-
Housing for SC fishermen	No.	50	50	-	803	-	-
Recirculatory Aquaculture System (RAS)- Gen	Unit	4	2	-	6	10	8
Beneficiary	No.	-	2	-	-	10	8
Establishment of Medium RAS	Unit	-	-	-	-	10	9
Beneficiary	No.	-	-	-	-	10	9
Medium Bioflock culture system	Unit	-	-	-	-	7	6

Continue...

## ANNEXURE-9.4

## SCHEME WISE PHYSICAL TARGETS AND ACHIEVEMENTS UNDER CENTRAL SECTOR SCHEMES FOR THE LAST THREE YEARS (2018-19 TO 2020-21)

Item	Unit	2018-19		2019-20		2020-21	
		Target	Achv.	Target	Achv.	Target	Achv.
Small Bioflock culture system	Unit	-	-	-	-	33	32
Installation of Cage	No.	-	-	-	-	150	20
Pen culture	Ha	-	-	-	-	60	37
Refrigerated Vehicles	No.	-	-	-	-	10	4
Insulated Vehicles	No.	-	-	-	-	5	3
Motor cycle with Ice box	No.	-	-	-	-	100	95
Cycle with Ice Boxes	No.	-	-	-	-	500	392
E-rickshaw with Ice box	No.	-	-	-	-	135	114
Live fish vending center	No.	-	-	-	-	10	6
Mini Fish Feed Mills	No.	-	-	-	-	15	14
Fish Feed Plants	No.	-	-	-	-	4	4
Fish KIOSK	No.	-	-	-	-	22	13
Boats and Nets for Fishermen	No.	-	-	-	-	61	43
Livelihood support for Fishers	No.	-	-	-	-	20000	16519
Fingerling stocking in beels	Ha	-	-	-	-	1580	641.5
Input for Integrated Farming	Ha	-	-	-	-	200	168.95
Ornamental Fish Rearing Unit	No.	-	-	-	-	20	15
Inputs for Freshwater Aquaculture	Ha	-	-	-	-	205	203.43
Solar support system in govt. fish and fish seed farm	No.	-	-	-	1	-	-
<i>National welfare fund for Fishermen (NWFF)</i>							
Fishermen Insurance	Nos.	157325	157325	157325	142716	-	-

Source: Department of Fisheries, Assam

**N.B: Above schemes are newly introduced for the year 2020-21.**

**ANNEXURE-9. 5**  
**SCHEME WISE FINANCIAL TARGETS AND ACHIEVEMENTS UNDER STATE SECTOR**  
**FOR THE LAST THREE YEARS (2018-19 TO 2020-21)**

**(Rs. In Lakh)**

Sl No.	Name of the Scheme	2018-19		2019-20		2020-21	
		Target	Achv.	Target	Achv.	Target	Achv.
<b>General Areas</b>							
1	Head quarter Administration	453.05	331.7531	12.01	0.00	194.26	0.00
2	Fish & fish seed farming (Gen)	382.2	239.86942	311.4	294.97142	142.50	9.10
3	Training in Fisheries	5.5	0.00	20.5	14.75564		
4	Fisheries Extension Service	23.25	15.63497	73.5	57.6	69.86	46.64
5	Marketing & Transport	60.00	0.00	181.59	158.12875	162.58	25.00
6	FFDA Salary (SOPD ODS)	324.00	324.00	293.00	228.12	270.00	269.28
7	District Administration						
	Construction of District Meen Bhawan & Boundary Wall at Nalbari						
	Construction of Boundary Wall of District Meen Bhawan at Golaghat	41.49	39.04	-	-	-	-
	Construction of District Meen Bhawan at Cachar						
8	Grants in Aid to AFDC	-	-	1025.00	0.00	475.00	0.00
Sub-Total (General)		1289.49	950.30	1917.00	753.58	1314.20	350.02
<b>SCSP</b>							
9	Fish Seed Farming	100.00	0.00	105.00	61.60	-	-
Sub-Total (SCSP)		100.00	0.00	105.00	61.60	90.26	0.00
10	Rural Infrastructure Devt. Fund (RIDF)						
	Loan share (NABARD)	7600.00	5809.73	2850.00	1909.5531	5036.1	870.52
	State share	400.00	-	150.00	150.00	53.2	0.00
Sub Total		8000.00	5809.73	3000.00	2059.55	5089.3	870.52
<b>Grand Total</b>		<b>9389.49</b>	<b>6760.03</b>	<b>5022.00</b>	<b>2874.73</b>	<b>6493.76</b>	<b>1220.54</b>

Source: Department of Fisheries, Assam

## ANNEXURE-9. 6

**PHYSICAL TARGETS AND ACHIEVEMENTS UNDER FISHERY MISSION SOCIETY  
FOR CHIEF MINISTER SAMAGRA GRAMYA UNNAYAN YOJANA (CMSGUY) FOR  
THE LAST THREE YEARS (2018-19 TO 2020-21)**

Item	Unit	2018-19		2019-20		2020-21		Remarks
		Target	Achv	Target	Achv.	Target	Achv.	
1	2	3	4	5	6	7	8	9
5 days residential training for fish farmers for RIDF-XXIII beneficiaries	Nos	10000	1450	-	-	-	-	suspended due to COVID-19
5 days residential training for fish farmers for cage culture	Nos	50	50	-	-	-	-	
Cage culture in Beel/ Beel like water bodies (phase-II)	Nos	15	15	15	15	15	15	150 cages @ 10 cages in a battery
Exposure visit of Officer	Nos	-	-	11	11	-	-	
Supply of inputs under 'Ghare Ghare Pukhuri Ghare Ghare Maach'	Ha	-	-	1811.33	533.01		204.10	
Beneficiary	Nos	-	-	10000	2934	-	-	

Source: Department of Fisheries, Assam

## ANNEXURE-10.1

## FOREST DIVISION WISE AREA UNDER RESERVED FORESTS AND ENCROACHMENT IN ASSAM.

Sl. No.	Forest Division	Reserved Forest Area (in hecets.)	Encroached Forest Area (in ha)	No. of Encroachers in forest (Household) Areas
1	2	3	4	5
1	Goalpara	25249.66	5798.25	3668.00
2	Kamrup	35329.55	6384.90	15546.00
3	Kamrup West	68133.89	21069.00	2450.00
4	Kamrup North	4518.61	132.30	882.00
5	Dibrugarh	21794.65	1445.97	0.00
6	Digboi	55714.65	2272.10	665.00
7	Doomdooma	30904.35	9344.80	2306.00
8	Golaghat	94078.87	87213.46	39243.00
9	Jorhat	25037.15	18651.29	1765.00
10	Sivasagar	24085.99	9788.00	3319.00
11	Hamren	10268.00	6282.32	0.00
12	Karbi Anglong East	48033.95	4635.51	2035.00
13	Karbi Anglong West	89371.66	1273.00	0.00
14	Dima Hasao	132633.60	810.16	2674.00
15	Baksa	13323.33	6686.00	4142.00
16	Lakhimpur	31096.55	6856.87	2683.00
17	Dhemaji	49553.45	31001.50	13072.00
18	Nagaon	33640.78	3668.50	486.00
19	Nagaon South	49049.00	12070.00	9658.00
20	Sonitpur East	47428.00	37574.00	39415.00
21	Sonitpur West	44067.77	32200.00	25000.00
22	Cachar (Silchar)	78897.64	5592.20	4030.00
23	Hailakandi	53834.97	11616.00	6786.00
24	Karimganj	48056.81	14018.00	4357.00
25	Aie Valley	6086.80	483.32	237.00
26	Dhubri	1344.97	72.86	321.00
27	Haltugaon	47876.12	16865.83	10944.00
28	Kachugaon	82199.00	2719.26	2796.00
29	Dhansiri	17270.94	3862.20	4094.00
30	Parbatjhora	32023.18	3020.02	1870.00
31	Chirang	55967.81	737.40	765.00
32	Nagaon WL	2155.00	-	-
33	Manah National Park	-	-	-
<b>Assam</b>		<b>1359026.70</b>	<b>364145.02</b>	<b>205209.00</b>

Source : PCCF & Head, Forest Force, Assam, Panjabari,

## ANNEXURE-11.1

STATEMENT SHOWING THE NUMBER OF UAM/UDYAM UNIT SETUP IN THE STATE OF ASSAM FOR THE YEAR 2020-2021

Sl. No.	District	Unit Registered during the year 2020-21				Total Employment	Total Investment in Plant & Machinery (Rs.in Lakh)
		Micro	SMALL	MEDIUM	Total		
1	2	3	4	5	6	7	8
1	BAKSA	241	17	1	259	1289	3108.38
2	BARPETA	1081	67	0	1148	7033	6900.32
3	BISWANATH	274	19	4	297	3921	4797.92
4	BONGAIGAON	429	47	47	523	6752	7279.08
5	CACHAR	1022	172	15	1209	11173	22822.84
6	CHIRANG	322	31	3	356	4090	6034.55
7	DARRANG	418	35	3	456	6286	7543.96
8	DHEMAJI	624	36	2	662	3772	5973.21
9	DIBRUGARH	911	168	14	1093	26392	29900.61
10	DIMA HASAO	82	2	1	85	371	862.23
11	DHUBRI	76	0	0	76	312	270.11
12	GOALPARA	436	36	1	473	2483	5492.03
13	GOLAGHAT	735	91	2	828	7324	14564.16
14	HAILAKANDI	696	108	14	818	6024	18078.7
15	JORHAT	33	9	0	42	379	2238.64
16	KAMRUP (M)	2195	476	64	2735	27764	89208.55
17	KAMRUP (R)	1318	208	35	1561	36702	41969.22
18	KARIMGANJ	454	50	0	504	2881	4783.07
19	KOKRAJHAR	219	4	0	223	2157	2719.2
20	LAKHIMPUR	851	84	7	942	8675	10459.31
21	MAJULI	84	0	0	84	460	191.13
22	MORIGAON	384	20	1	405	2913	2205.9
23	MANKACHAR	27	0	0	27	169	62.65
24	NAGAON	1977	178	25	2180	17478	33518.67
25	NALBARI	613	71	2	686	4932	8700.99
26	SIVASAGAR	638	84	4	726	20632	11677.22
27	SONITPUR	23	96	18	137	4332	21553
28	TINSUKIA	854	165	4	1023	10440	20761.5
29	UDALGURI	421	48	5	474	3495	9206.47
30	CHARAIDEO	0	0	0	0	0	0
31	WEST K.ANGLONG	25	0	1	26	190	50.33
TOTAL		<b>17463</b>	<b>2322</b>	<b>273</b>	<b>20058</b>	<b>230821</b>	<b>392933.95</b>

Source : Commissionerate of Industries and Commerce, Assam

UAM— Udyog Aadhar Memorandum, UDYAM— Only Govt. Portal for Registration of MSME

## ANNEXURE-11.2

## INDUSTRIAL ESTATES AND OTHER INFRASTRUCTURE IN ASSAM, 2020-21

(A) Industrial Estate						
DISTRICT	NAME OF INDUSTRIAL ESTATE	TOTAL AREA (in Bigha-Katha-Lessa)	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
KAMRUP (M)	I/E BAMUNIMAIDAN	56B-04K-10L	92	92	26019.7	80
TINSUKIA	I/E TINSUKIA	112B-09K-09L	71	71	41289.53	50
SIVASAGAR	I/E SIVASAGAR	30B-00K-00L	36	36	10871.4	28
JORHAT	I/E JORHAT	26B-00K-19L	28	28	23916	23
BONGAIGAO N	I/E NEW BONGAIGAON	29B	36	36	27983.31	42
DHUBRI	I/E COLONY GAURIPUR	10B-16L	7	NIL	NIL	NIL
DIBRUGARH	I/E LAHOWAL	16B-2K	12	12	16070.36	20
LAKHIMPUR	I/E RAJBARI BIHPURIA	35B	6	6	7191.38	1
MORIGAON	I/E DALBARI	10B	NIL	NIL	4682.31	1
NAGAON	I/E SENCHOWA	20B-4K-17L	24	24	11556.58	19
SONITPUR	I/E DHEKIAJULI	30B	33	22	9365.55	6
NALBARI	I/E NALBARI	36B-2K-06L	25	25	25649.13	14
TOTAL			370	352		284

(B) Industrial Area, 2020-21						
DISTRICT	NAME OF INDUSTRIAL AREA	TOTAL AREA (in Bigha-Katha-Lessa)	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
KAMRUP (M)	I/A KALAPAHAR	10B-02K-10L	29	29	7923.1	28
KAMRUP (R)	I/A RANI	62B-00K-00L	39	39	21651.96	28
SONITPUR	I/A DOLABARI	48B-00K-00L	28	28	33817	22
DARRANG	I/A MANGALDOI	47B-1K-5L	25	24	44134.52	20
GOLAGHAT	I/A JUNAKINAGAR	55B-00K-7L	7	NIL	16102.88	16
DIBRUGARH	I/A BEHEATING	25B	12	12	17672.67	9
SONITPUR	I/A KUNDERBARI	36B	5	5	21868.075	3
SONITPUR	I/A GOTLONG	7B	NIL	NIL	9363.05	2
BISWANATH	I/A SADHARU	12B-4L	5	5	8289.087	1
TINSUKIA	I/A DOOMDOOMA	56B-1K-17L	NIL	NIL	75411.9	1
TINSUKIA	I/A BURABURI SADIYA	200B	NIL	NIL	NIL	NIL
GOALPARA	I/A KOTHAKULTHI RONGJULI	5B-1K-19L	NIL	NIL	NIL	NIL
TOTAL			150	142		130

Source : Commissionerate of Industries and Commerce, Assam



**Annexure – 12.1**

**CATEGORY WISE TARIFF FOR APDCL'S CONSUMER APPLICABLE WITH EFFECT FROM APRIL'2020**

SL NO	CONSUMER CATEGORY	EXISTING TARIFF		INCREASE /DECREASE IN TARIFF		REVISED TARIFF	
		fixed charges (Rs/kw/mth or Rs/kvA/mth)	Energy charges ( paise per Kwh)	fixed charges (Rs/kw/mth or Rs/kvA/mth)	Energy charges (paise per Kwh)	fixed charges (Rs/kw/mth or Rs/kvA/mth)	Energy charges (paise per Kwh)
1	2	3	4	5	6	7	8
LT Category							
LT-1	Jeevan Dhara 0.5 kw and 1 kwh/day	20*	4.55	No Change	(30)	20	425
LT-II	Domestic A- below 5 kw						
	0 to 120 units per month	40	5.40	10.00	(30)	50	510
	121 to 240 units per month	40	6.65	10.00	(30)	50	635
	Balance units	40	7.65	10.00	(30)	50	735
LT-III	Domestic -B 5 KW and above up to 25 KW	40	7.25	10.00	(30)	50	695
LT-IV	commercial Load above 0.5 kw and up to 25 kw	120	7.60	10.00	(20)	130	740
LT-V	General Purpose Supply						
A	Non -commercial and Non-domestic users			10.00	(20)	145	630
B	Government primary and Secondary/Higher Secondary Schools	135	6.50			70	630
LT-VI	public lighting	120	6.60	No Change	(20)	120	640
LT-VII	Agriculture upto 25 kw	40	4.60	5.00	(15)	45	445
LT-VIII (i)	Small Industries Rural up to 25 kw	40	5.15	10.00	(25)	50	490
LT-VIII (ii)	Small Industries urban up to 25 kw	50	5.40	10.00	(25)	60	515

Source: Assam Electricity Regulatory Commission

Contd...

CATEGORY WISE TARIFF FOR APDCL'S CONSUMER APPLICABLE WITH EFFECT FROM APRIL1'2020

SL NO	CONSUMER CATEGORY	EXISTING TARIFF		INCREASE /DECREASE IN TARIFF		REVISED TARIFF	
		fixed charges (Rs/kw/mth or Rs/kvA/mth )	Energy charges ( paise per Kwh)	fixed charges (Rs/kw/mth or Rs/kvA/mth)	Energy charges (paise per Kwh)	fixed charges (Rs/kw/mth or Rs/kvA/mth)	Energy charges (paise per Kwh)
1	2	3	4	5	6	7	8
LT -IX	Temporary Supply						
	Domestic	80	9.39	5.00	(15)	85	924
	Non- domestic non Agriculture	125	11.49	10.00	(15)	135	1134
	Agriculture	50	5.14	5.00	(15)	45	450
LT -X	Lt Electric Vehicles Charging Stations	120	5.40	10.00	(15)	130	525
	HT category						
HT-I	HT Domestic above 25 kw ( 30kvA)	40	7.25	10.00	(30)	50	695
HT-II	HT commercial above 25 kw (30kVA )	160	7.60	20.00	(35)	180	725
HT-III	public water works	135	6.35	No Change	(15)	135	620
HT-IV	Bulk supply above 25 kw ( 30kvA)						
HT-IV (i)	Educational Institutions	130	6.75	No Change	(15)	130	660
HT IV (ii)	others	170	7.50	10.00	(15)	180	735
HT -V (A)	HT small industries above 25 kw 30kvA) and upto 50kvA	60	5.85	10.00	(25)	70	560
HT- V(B)	HT Industries-1 ( 50 kVA to 150KVA)	140	6.40	20.00	(40)	160	600
HT V ( C)	HT Industries- II above 150 KVA ( option 1)	200	6.90	20.00	(40)	220	650
	HT Industries -II above 150 kva (option 2)	300	6.45	No Change	(35)	300	610
HT-VI	Tea,Coffee & Rubber	250	6.90	20.00	(40)	270	650
HT-VII	Oil & Coal	300	7.75	No Change	(20)	300	755
HT-VIII	HT Irrigation Load above 25 kw (30 KVA)	60	6.10	5.00	(15)	65	595
HT-IX	HT Temporary Supply	160	9.15	10.00	(15)	170	900
HT-X	HT Electric Crematorium	160	4.45	10.00	(15)	170	430
HT-XI	HT Railway Traction	300	6.45	No Change	(35)	300	610
HT-XII	Electric Vehicles Charging Station	160	6.90	No Change	(15)	160	675

## ANNEXURE: 12.2

RENEWABLE ENERGY RELATED PERFORMANCE OF AGRICULTURE DEPARTMENT  
(DISTRICT WISE PHYSICAL PROGRESS)

Sl. No	District	Installation of Solar PV pump set under RIDF			
		Progress (No)		Progress (No)	
		During 2019-20	Cumulative	During 2020-21	Cumulative
1	Kokrajhar	350	350	110	460
2	Dhubri	263	305	21	326
3	Goalpara	369	379	167	546
4	Barpeta	580	703	236	939
5	Morigaon	305	520	205	725
6	Nagaon	512	569	229	798
7	Sonitpur	52	52	48	100
8	Lakhimpur	76	76	8	84
9	Dhemaji	107	143	0	143
10	Tinsukia	122	137	24	161
11	Dibrugarh	39	39	11	50
12	Sivasagar	39	40	6	46
13	Jorhat	21	27	23	50
14	Golaghat	89	109	14	123
15	Karbi Anglong	13	13	85	98
16	Dima Hasao	0	0	0	0
17	Cachar	44	44	38	82
18	Karimganj	6	6	6	12
19	Hailakandi	12	12	13	25
20	Bongaigaon	157	168	47	215
21	Chirang	90	90	34	124
22	Kamrup	55	57	78	135
23	Kamrup (M)	9	11	3	14
24	Nalbari	39	41	62	103
25	Baksa	105	105	42	147
26	Darrang	632	683	449	1132
27	Udalguri	504	511	184	695
28	Biswanath	100	120	72	192
29	Charaideo	48	50	15	65
30	Hojai	174	304	223	527
31	Majuli	28	31	6	37
32	South Salmara	339	351	151	502
33	West Karbi Anglong	0	0	0	0
<b>ASSAM</b>		<b>5279</b>	<b>6046</b>	<b>2610</b>	<b>8656</b>

(Source: Directorate of Agriculture, Assam)

## ANNEXURE: 12.2

<b>Renewable Energy related Performance of Irrigation Department (District wise physical progress)</b>					
<b>SI No</b>	<b>District</b>	<b>Installation of Solar PV pump set under RIDF</b>			
		<b>Progress (No)</b>		<b>Progress (No)</b>	
		<b>During 2019-20</b>	<b>Cumulative</b>	<b>During 2020-21</b>	<b>Cumulative</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Baksa	16	18	2	20
2	Barpeta	0	0	0	0
3	Biswanath	6	9	0	9
4	Bongaigaon	0	0	0	0
5	Cachar	0	0	0	0
6	Charaideo	0	0	1	1
7	Chirang	0	0	0	0
8	Darrang	3	3	0	3
9	Dhemaji	0	1	0	1
10	Dhubri	0	3	0	3
11	Dibrugarh	16	20	4	24
12	Dima Hasao	0	0	0	0
13	Goalpara	2	2	0	2
14	Golaghat	9	9	2	11
15	Hailakandi	0	0	0	0
16	Hojai	6	6	0	6
17	Jorhat	4	4	0	4
18	Kamrup	60	60	13	73
19	Kamrup (M)	2	3	0	3
20	Karbi Anglong	0	0	0	0
21	Karimganj	0	0	0	0
22	Kokrajhar	3	4	0	4
23	Lakhimpur	6	7	0	7
24	Majuli	4	5	5	10
25	Morigaon	4	4	2	6
26	Nagaon	10	14	2	16
27	Nalbari	12	13	0	13
28	Sivsagar	0	0	0	0
29	Sonitpur	8	9	0	9
30	South Salmara	0	0	0	0
31	Tinsukia	6	6	0	6
32	Udalguri	0	0	0	0
33	West Karbi Anglong	0	0	0	0
	<b>Total</b>	177	200	31	231

**NB: The numbers of schemes include both completed and ongoing schemes.**

Source: Director Design, Minor Irrigation, Assam, Ghy-3

## Annexure: 13.1

## Statistics of Motor Vehicles in Assam During the year 2020-21

Sl. No.	Types of Vehicle	No. of Vehicles Registered during the year 2020-21	No. of Vehicles Registered (Progressive) 2020-21	No. of Vehicles Registered on Road during 2020-21
1	Multi Axle Vehicle	556	3876	3981
2	Articulated Vehicle	1031	5401	5479
3	Medium	229	23658	20478
4	Heavy	2072	135875	117101
5	Four Wheelers	9318	147437	146904
6	Three Wheeler	1108	50620	47911
7	Stage Carriage	19	3799	1449
8	Contract Carriage	184	16410	15281
9	Omni Buses	2	1374	1120
10	Mini Buses	3	2681	2373
11	School Buses	1	1972	2321
12	AATT	5	9651	9753
13	Motor Cabs	786	28972	10382
14	Maxi Cabs	114	10593	18568
15	Other Taxi	142	24899	42624
16	Auto Rickshaw	4695	130773	157160
17	Two Wheeler	168383	2997280	2879146
18	Car	44740	831028	771474
19	Tractor	7758	81813	73632
20	Trailer	2992	29298	25079
21	Crane	57	1755	1907
22	Govt. Vehicle	151	25728	21397
23	Fire Brigade	4	131	131
24	Ambulance	171	3181	3025
25	Others	558	19827	14740
26	E-Rickshaw	6135	27400	25299
<b>Total</b>		<b>251214</b>	<b>4615432</b>	<b>4418715</b>

Source: State Transport Authority Assam Guwahati 2020-21.

**ANNEXURE-14.1**  
**DISTRICTWISE DISTRIBUTION OF AGGREGATE DEPOSIT AND**  
**GROSS BANK CREDIT OF SCHEDULED COMMERCIAL BANKS IN ASSAM**

(As in March 2021)

Sl. No.	District	Number of Reporting Offices	Amount (Rs. In Crore)		Credit Deposit Ratio (%)
			Deposit	Credit	
1	BAKSA	54	1290	706	54.72
2	BARPETA	114	4494	2777	61.79
3	BISWANATH	46	1552	957	61.69
4	BONGAIGAON	57	3150	1858	58.99
5	CACHAR	164	9195	3807	41.40
6	CHARAIDEO	32	1176	769	65.38
7	CHIRANG	27	1517	622	41.00
8	DARRANG	68	2182	1456	66.73
9	DHEMAJI	43	1469	1033	70.31
10	DHUBRI	76	2943	1747	59.36
11	DIBRUGARH	180	12999	4682	36.02
12	GOALPARA	66	2207	1140	51.66
13	GOLAGHAT	115	3660	2419	66.10
14	HAILAKANDI	42	1742	672	38.56
15	HOJAI	48	2447	974	39.80
16	JORHAT	133	7773	3971	51.09
17	KAMRUP	156	5026	3706	73.73
18	KAMRUP METROPOLITAN	426	66304	24193	36.49
19	KARBI ANGLONG	62	1960	1071	54.62
20	KARIMGANJ	86	3950	1398	35.38
21	KOKRAJHAR	49	3092	1164	37.65
22	LAKHIMPUR	86	2820	2195	77.86
23	MAJULI	11	274	126	45.90
24	MORIGAON	67	1802	1324	73.48
25	NAGAON	162	5968	4057	67.98
26	NALBARI	79	2785	1728	62.05
27	NORTH CACHAR HILLS	26	1174	318	27.10
28	SIBSAGAR	95	5063	2517	49.71
29	SONITPUR	126	5803	3254	56.06
30	SOUTH SALMARA-MANKACHAR	14	383	152	39.60
31	TINSUKIA	148	7631	3808	49.90
32	UDALGURI	45	1442	1033	71.62
33	WEST KARBI ANGLONG	22	302	236	78.09
<b>ASSAM</b>		<b>2925</b>	<b>175579</b>	<b>81870</b>	<b>46.63</b>
<b>ALL INDIA</b>		<b>150207</b>	<b>15439970</b>	<b>11035347</b>	<b>71.47</b>

(Source: Quarterly Statistics on Deposit and Credit of Scheduled Commercial Bank in India, RBI)

## ANNEXURE-14.2

## DISTRICT WISE NUMBER OF REPORTING OFFICES, AGGREGATE DEPOSIT AND BANK CREDIT OF REGIONAL RURAL BANK (RGVB) IN ASSAM

(Rs in crore)

Sl. No.	District	As on 31.03.2021		
		Number of Reporting Offices	Deposit	Credit
1	BAKSA	13	272	141
2	BARPETA	19	611	234
3	BISWANATH	8	193	59
4	BONGAIGAON	9	259	83
5	CACHAR	23	657	133
6	CHARAIDEO	10	241	88
7	CHIRANG	7	185	75
8	DARRANG	15	350	161
9	DHEMAJI	9	243	96
10	DHUBRI	12	353	111
11	DIBRUGARH	17	305	138
12	GOALPARA	12	336	128
13	GOLAGHAT	26	509	172
14	HAILAKANDI	9	245	60
15	HOJAI	3	57	15
16	JORHAT	15	327	131
17	KAMRUP	19	550	243
18	KAMRUP METROPOLITAN	16	955	227
19	KARBI ANGLONG	32	472	341
20	KARIMGANJ	17	392	80
21	KOKRAJHAR	11	315	99
22	LAKHIMPUR	20	393	198
23	MORIGAON	12	236	130
24	NAGAON	36	811	261
25	NALBARI	17	481	206
26	NORTH CACHAR HILLS	10	182	78
27	SIBSAGAR	13	341	122
28	SONITPUR	25	534	207
29	TINSUKIA	14	259	96
30	UDALGURI	12	235	132
31	WEST KARBI ANGLONG	16	131	122
<b>ASSAM</b>		<b>477</b>	<b>11431</b>	<b>4366</b>
<b>INDIA</b>		<b>150207</b>	<b>15439970</b>	<b>11035347</b>

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 Achieved for the year 2020-21**  
**(As on March 2021)**

(Amount in Rs. Lakh)

Sl. No.	District Name	Agriculture (Excluding RIDF)	Crop Loan	MSME (Excluding NEDFi)	Other Priority	Total Priority
1	BAKSA	11361.97	4728.39	10958.85	2019.89	24340.71
2	BARPETA	20032.34	4781.6	39936.22	5424.19	65392.75
3	BISWANATH	13857.51	3348.81	15088.18	1520.61	30466.3
4	BONGAIGAON	8765.08	2300.56	29019.14	5308.38	43092.6
5	CACHAR	23850.8	4384.8	86799.97	5510.48	116161.25
6	CHARAIDEO	4864.72	474.65	3699.76	597.67	9162.15
7	CHIRANG	7146.17	2019.57	10816.14	1329.27	19291.58
8	DARRANG	15844.29	3451.16	23096.15	2546.31	41486.75
9	DHEMAJI	7686.78	3087.69	11178.2	2157.84	21022.82
10	DHUBRI	17573.85	3692.14	35245.37	2926.29	55745.51
11	DIBRUGARH	30634.32	9949.91	67479.73	9430.99	107545.04
12	DIMAHASAO	2632.6	195.08	1222.89	460.63	4316.12
13	GOALPARA	11963.29	2132.07	15727.37	1372.99	29063.65
14	GOLAGHAT	29085.81	5553.81	31627.69	4056.01	64769.51
15	HAILAKANDI	5349.85	1479.04	14451.69	656.62	20458.16
16	HOJAI	13573.28	1909.72	16921.4	957.08	31451.76
17	JORHAT	27569.95	3613.04	49138.84	6953.49	83662.28
18	KAMRUP R	27798.81	5956.45	60243.48	10483.8	98526.09
19	KAMRUPMETRO	41418.69	5269.24	396282.74	33254.56	470955.99
20	KARBI ANGLONG	11869.98	4340.92	6503.3	5204.33	23577.61
21	KARIMGANJ	13854.96	1128.72	34370.28	909.21	49134.45
22	KOKRAJHAR	7965.7	2985.95	13147.09	1926.42	23039.21
23	LAKHIMPUR	18824.71	6329.06	27424.49	5479.54	51728.74
24	MAJULI	1320.4	484.7	996.16	305.61	2622.17
25	MORIGAON	17456.04	2664.22	12682.81	1420.26	31559.11
26	NAGAON	45946.85	8520.52	58073.89	6652.84	110673.58
27	NALBARI	14150.89	2533.02	20737.71	4560.64	39449.24
28	SIBSAGAR	19631.02	3201.37	37686.55	4536.6	61854.17
29	SONITPUR	26055.72	6361.35	47136.16	5778.42	78970.3
30	SOUTHSALMARA	392.61	71.45	568.78	256.06	1217.45
31	TINSUKIA	28339.7	10044.77	70737.66	6336	105413.36
32	UDALGURI	8386.01	4108.03	6731.32	2625.67	17743
33	WESTKARBI	2107.86	750.2	432.05	1500.6	4040.51
<b>Total</b>		<b>537312.56</b>	<b>121852.01</b>	<b>1256162.1</b>	<b>144459.3</b>	<b>1937933.92</b>

(Source: State Level Banker's Committee Report, Assam)



## Annexure- 16.01

**MONTHLY ALLOCATION OF PDS ITEMS IN ASSAM  
(DURING THE PERIOD January 2018 onwards to latest Month available)**

Month	NFSA Rice (in MT)		Wheat (in MT)	SK Oil (in KL)
	AAY Rice	PH Rice		
1	2	3	4	5
January/2021	24210.585	111042.119	5781.00	12840
February/2021	24206.455	111140.986	5781.00	12840
March/2021	24204.04	111064.078	5781.00	12792
April/2021	24196.34	111064.744	5781.00	10392
May/2021	24200.47	111062.000	5781.00	10356
June/2021	24201.835	111057.236	5781.00	10368
July/2021	24203.62	111063.678	5252.00	10392
August/2021	24201.31	111531.625	5516.00	10356
September/2021	24188.605	111424.93	5516.00	10368
October/2021	24193.575	111432.463	5516.00	10404
November/2021	24193.400	111433.489	5516.00	10368
December/2021	24193.77	111423.42	5516.00	10344
<b>Assam Total</b>	<b>290393.005</b>	<b>1334740.768</b>	<b>67,518.00</b>	<b>131820</b>

AAY= Antrodoya Anna Yojona; PH= Priority House; NFSA= National Food Security Act.

## Annexure- 16.01

DISTRICT WISE FAIR PRICE SHOP HOLDER OF "AMAR DUKAN" IN ASSAM,  
2020-21

District	Nos. of "Aamar Dukan"	Nos. of Fair Price Shop
1	2	3
Kokrajhar	7	1317
Dhubri	7	1395
Goalpara	7	1019
Barpeta	8	2143
Morigaon	8	1165
Nagaon	8	1957
Sonitpur	8	945
Lakhimpur	7	1842
Dhemaji	7	1154
Tinsukia	8	1575
Dibrugarh	8	1662
Sivasagar	7	1253
Jorhat	7	1275
Golaghat	7	2004
Karbi Anglong	7	511
Dima Hasao	7	246
Cachar	8	2034
Karimganj	7	1155
Hailakandi	7	898
Bongaigaon	7	619
Chirang	7	604
Kamrup	8	1720
Kamrup Metro	8	776
Nalbari	7	786
Baksa	7	707
Darrang	8	1101
Udalguri	7	1081
South Salmara	7	433
Biswanath	7	1071
Charaideo	7	674
Hojai	7	895
Majuli	7	281
West Karbi-Anglong	(included in W Karbi-Anglong)	(included in W
Bajali	7	Included in Barpeta
<b>Assam</b>	<b>241</b>	<b>36567</b>

**ANNEXURE-16.03**  
**DISTRICT WISE AAY,PHH AND TOTAL NUMBER OF RATION CARD AND**  
**MEMBERS DETAILS AS PER ERCMS AS ON DECEMBER,2021**

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	813.82	3462.64	191557	92673	692528	785201
Dhubri	1071.665	5440.87	272914	138675	1088174	1226849
Goalpara	682.5	3569.68	177874	86757	713936	800673
Barpeta	1058.68	5206.695	258737	127399	1041339	1168738
Morigaon	716.975	3578.35	189184	81388	715670	797058
Nagaon	1363.95	6792.195	316333	184683	1358439	1543122
Sonitpur	848.19	4803.605	263559	93754	960721	1054475
Lakhimpur	858.025	3747.305	200649	101817	749461	851278
Dhemaji	593.075	2495.635	137290	67716	499127	566843
Tinsukia	1103.375	5083.695	278806	114560	1016739	1131299
Dibrugarh	1063.825	4930.455	257543	114680	986091	1100771
Sivasagar	701.015	2486.835	145878	74800	497307	572167
Jorhat	844.27	3222.74	199466	91584	644548	736132
Golaghat	1025.325	3819.905	222721	109368	763981	873349
Karbi Anglong	372.12	2145.02	103566	44185	429004	473189
Dima Hasao	213.64	689.78	35413	26493	137956	164449
Cachar	1298.57	6179.655	322979	154740	1235981	1390671
Karimganj	775.11	4585.92	235727	89808	917184	1006992
Hailakandi	525.21	2598.785	128971	56907	519757	576664
Bongaigaon	567.14	257.351	135117	72539	514702	587241
Chirang	504.36	1747.105	100484	46724	349421	396145
Kamrup	1439.655	5248.54	296214	170640	1049708	1220348
Kamrup (M)	376.15	3518.155	183382	33239	703631	736870
Nalbari	774.76	2674.045	158049	90474	534809	625283
Baksa	801.395	3208.94	194550	87354	641788	729142
Darrang	625.31	3430.06	166596	72964	686012	758976
Udalguri	837.095	2982.15	168050	88324	596430	684754
Bajali	261.205	840.715	51135	28825	168143	196968
South Salmara	247.905	1481.965	75614	28649	296393	325042
West Karbi Anglong	97.51	1138.955	42982	14594	227791	242385
Majuli	222.67	550.955	31945	27549	110191	137740
Hojai	651.98	3287.29	129636	80753	657458	738211
Charaideo	388.99	1697.5	97549	43759	339500	383259
Biswanath	567.315	2203.77	120321	67374	440754	508128
<b>Assam</b>	<b>24192.77</b>	<b>111423.42</b>	<b>5890790</b>	<b>2805728</b>	<b>22284684</b>	<b>25090412</b>

**ANNEXURE - 16.04**  
**ALLOTMENT, OFF-TAKE AND DISTRIBUTION OF FOODGRAINS TO FPS UNDER NFA**

Year	RICE ( in MT)			WHEAT ( in MT)		
	Allotment by GoI	Off-take by GOA	Distribution to FPS	GOA	Off-take by GOA	Distribution to FPS
1	2	3	4	5	6	7
2016	1604767.44	1609803.94	1537192.91	69379.32	69379.32	46392.89
2017	1625751.96	1600147.007	1561633.22	69379.32	69379.32	67138.38
2019	1625751.96	1613321.72	1478742.21	69372	69372	63591
2021	1626130.92	1625133.773	1378811.4168	67518	67518	67518

Source: Directorate of Food and Civil Supplies and Consumer Affairs, Assam

**ANNEXURE-18.1**

**DISTRICT-WISE PHYSICAL ACHIEVEMENT UNDER MGNREGA IN ASSAM, 2020-21**

**(In Nos.)**

Sl. No.	District	Employment Generated (Mandays)				
		SCs	STs	Others	Total	Women
1	Kokrajhar	32039	899417	1467649	2399105	1104340
2	Dhubri	43609	2935	6288115	6334659	2755457
3	Goalpara	56346	403155	1466931	1926432	884141
4	Barpeta	105029	59619	5138542	5303190	2219345
5	Morigaon	366488	365341	2648043	3379872	1506446
6	Nagaon	162579	88868	4672645	4924092	2029475
7	Sonitpur	77229	157219	2719342	2953790	1395675
8	Lakhimpur	202333	1277919	3669220	5149472	2595868
9	Dhemaji	157415	2073905	2179361	4410681	2293888
10	Tinsukia	27704	120651	1923640	2071995	946913
11	Dibrugarh	83633	288379	2382671	2754683	1368320
12	Sivasagar	44160	62465	806890	913515	406295
13	Jorhat	74092	118710	1201429	1394231	673414
14	Golaghat	94163	267810	1828104	2190077	993163
15	Karbi Anglong	171459	2755717	601485	3528661	1847189
16	Dima Hasao	10926	704095	66533	781554	282971
17	Cachar	329770	52093	5424151	5806014	1854814
18	Karimganj	450383	29616	3955017	4435016	1667624
19	Hailakandi	152981	24299	2640821	2818101	813303
20	Bongaigaon	90556	23709	1570668	1684933	720294
21	Chirang	91884	813215	866250	1771349	864369
22	Kamrup	258476	297001	4057402	4612879	1941370
23	Kamrup (M)	23389	38141	72688	134218	72233

Sl. No.	District	Employment Generated (Mandays)				
		SCs	STs	Others	Total	Women
24	Nalbari	88957	37897	4054488	4181342	1716020
25	Baksa	163445	724911	1024115	1912471	1001792
26	Darrang	90299	10346	3231983	3332628	1519486
27	Udalguri	42351	422340	712650	1177341	532895
28	Biswanath	163958	486742	1756745	2407445	1156570
29	Charaideo	10945	14014	794725	819684	359332
30	Hojai	199754	45137	2119969	2364860	975569
31	Majuli	127951	567303	593952	1289206	529318
32	South Salmara	37533	7696	2103789	2149018	1226608
<b>ASSAM</b>		<b>4031836</b>	<b>13240665</b>	<b>74040013</b>	<b>91312514</b>	<b>40254497</b>

(Source: Office of the Commissioner of Panchayat & Rural Development, Assam)

Note: In NREGA-Soft, the category-wise (SCs, STs, Others) nos. of person-days generated by Men and Women separately is not available.

#### ANNEXURE-18.2

#### DISTRICT-WISE JOB CARDS ISSUED & EMPLOYMENT PROVIDED IN ASSAM, 2020-21 (In Nos.)

Sl. No.	District	Job card Issued	Household Demanded Employment	Household Provided Employment	Household Provided 100 days Employment	Disabled Persons Provided Employment
1	Kokrajhar	111965	66429	63082	912	225
2	Dhubri	180314	154025	142451	4462	234
3	Goalpara	88388	65153	61312	765	221
4	Barpeta	197730	132178	123559	6388	2410
5	Morigaon	137462	109596	99048	1761	142
6	Nagaon	191022	141487	131695	5268	151
7	Sonitpur	130408	99349	91020	913	73
8	Lakhimpur	150969	117934	112257	10741	192
9	Dhemaji	132450	108339	100978	3252	252
10	Tinsukia	108126	83825	77696	560	64
11	Dibrugarh	142298	132902	120928	1087	182
12	Sivasagar	68941	48167	45691	203	113
13	Jorhat	90650	67303	59918	250	99
14	Golaghat	135460	92641	87032	907	114
15	Karbi Anglong	122220	96628	91518	1969	77
16	Dima Hasao	25938	20372	19612	291	14
17	Cachar	191558	156228	140150	1902	104
18	Karimganj	150024	127493	116894	4020	111
19	Hailakandi	95192	86062	79900	991	92
20	Bongaigaon	77322	57794	53620	969	77
21	Chirang	82648	53812	50823	994	26

Sl. No.	District	Job card Issued	Household Demanded Employment	Household Provided Employment	Household Provided 100 days Employment	Disabled Persons Provided Employment
22	Kamrup	160230	122475	110239	5009	114
23	Kamrup (M)	13456	8358	7093	15	1
24	Nalbari	114664	89300	83625	6660	46
25	Baksa	149562	81920	76646	312	135
26	Darrang	101456	86293	77737	4196	115
27	Udalguri	127497	55850	48879	174	84
28	Biswanath	100163	80383	75237	1375	619
29	Charaideo	45919	32178	30323	576	61
30	Hojai	82481	57092	53473	1598	195
31	Majuli	32058	26472	25124	2527	33
32	South Salmara	65378	60075	54846	654	243
<b>ASSAM</b>		3603949	2718113	2512406	71701	6619

(Source: Office of the Commissioner of Panchayat & Rural Development, Assam)

### ANNEXURE-18.3

#### DISTRICT-WISE TARGET, PHYSICAL ACHIEVEMENT & EXPENDITURE DETAILS UNDER PMAY-G IN ASSAM, 2020-21

Sl. No.	District	Annual Target (No. of houses)	House Completed against Target	Sanctioned	% of achievement against target	Utilization of funds (Amount in Lakh)
1	Kokrajhar	8875	406	6495	5	4585.035
2	Dhubri	41528	3378	36729	8	10365.1275
3	Goalpara	19508	836	16814	4	4664.1075
4	Barpeta	52776	417	49612	1	9726.8275
5	Morigaon	26763	2172	21746	8	7869.095
6	Nagaon	25411	2927	20028	12	10713.17
7	Sonitpur	7275	161	3361	2	4496.6675
8	Lakhimpur	5463	151	3637	3	2937.35
9	Dhemaji	1750	16	155	1	2607.735
10	**Tinsukia	4981	0	0	0	4124.4775
11	Dibrugarh	3415	122	787	4	3899.6425
12	*Sivasagar	0	0	0	0	660.465
13	Jorhat	620	11	66	2	867.23
14	Golaghat	3809	187	1083	5	5070.2925
15	Karbi Anglong	1033	72	253	7	3753.62
16	*Dima Hasao	0	0	0	0	711.0675
17	Cachar	17070	431	11615	3	4369.69
18	Karimganj	18364	31	12604	0	3511.365
19	Hailakandi	11890	92	8542	1	2097.4525

Sl. No.	District	Annual Target (No. of houses)	House Completed against Target	Sanctioned	% of achievement against target	Utilization of funds (Amount in Lakh)
20	Bongaigaon	9237	822	7845	9	2500.0625
21	Chirang	3865	68	3274	2	1552.07
22	Kamrup	18571	1171	14129	6	5670.9575
23	Kamrup (M)	492	2	82	0	123.2075
24	Nalbari	7542	1034	6880	14	3378.6025
25	Baksa	4832	78	3326	2	5228.015
26	Darrang	23770	779	11477	3	4769.1475
27	Udalguri	4196	31	2888	1	1870.5375
28	Biswanath	1137	260	1118	23	2696.07
29	**Charaideo	1267	0	0	0	1939.8925
30	Hojai	11744	621	7207	5	5642.715
31	Majuli	119	51	56	43	173.355
32	South Salmara	18558	346	17532	2	3831.685
	<b>ASSAM</b>	<b>355861</b>	<b>16673</b>	<b>269341</b>	<b>5</b>	<b>126406.735</b>

(Source: Office of the Commissioner of Panchayat & Rural Development, Assam)

N.B. \* As there is no beneficiaries left in the Permanent Wait List, therefore no target is given for the FY 2020-21 in respect of the districts Sivsagar and Dima Hasao. However, these districts have sanctioned and completed the houses from preceding year's target.

\*\*Though target was given to Tinsukia and Charaideo for the FY 2020-21, but no sanction was made against the target. However, from preceding year's target they have sanctioned and completed the houses.

## ANNEXURE-18.4

## DISTRICT-WISE PHYSICAL ACHIEVEMENTS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2020-21

(in Nos.)

Sl. No.	District	Indira Gandhi National Old Age Pension Scheme	Indira Gandhi National Widow Pension Scheme	Indira Gandhi National Disability Pension Scheme
1	Kokrajhar	26467	3925	1494
2	Dhubri	27771	7930	2206
3	Goalpara	22174	4691	1371
4	Barpeta	19526	5103	1238
5	Morigaon	27971	4549	1594
6	Nagaon	56773	6443	2551
7	Sonitpur	27564	4363	1597
8	Lakhimpur	26822	4148	1586
9	Dhemaji	17152	2353	838
10	Tinsukia	25496	4519	1685
11	Dibrugarh	23698	3436	252
12	Sivasagar	21100	4292	1373
13	Jorhat	31708	2253	710
14	Golaghat	22334	3413	1302
15	Karbi Anglong	7966	2152	609
16	Dima Hasao	4256	277	106
17	Cachar	29956	6131	2288
18	Karimganj	19683	5490	1772
19	Hailakandi	18160	2388	931
20	Bongaigaon	13995	2636	727
21	Chirang	7882	2031	641
22	Kamrup	55641	4594	884
23	Kamrup (M)	8075	740	111
24	Nalbari	32703	3179	711
25	Baksa	25427	3985	1379
26	Darrang	17873	3171	1128
27	Udalguri	15765	5167	1496
28	Biswanath	25779	2353	928
29	Charaideo	10110	2019	588
30	Hojai	22021	2167	732
31	Majuli	7466	458	255
32	South Salmara	6014	1926	529
	<b>ASSAM</b>	<b>705328</b>	<b>112282</b>	<b>35612</b>

(Source: Office of the Commissioner of Panchayat &amp; Rural Development, Assam)



## ANNEXURE-18.5

## DISTRICT-WISE FINANCIAL ACHIEVEMENTS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2020-21

(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	Kokrajhar	1085.035	176.695	66.403
2	Dhubri	1253.968	346.266	96.198
3	Goalpara	1083.208	210.099	62.109
4	Barpeta	976.73	233.976	55.643
5	Morigaon	1247.524	206.237	71.037
6	Nagaon	3064.801	290.294	113.318
7	Sonitpur	1219.655	191.835	70.336
8	Lakhimpur	1268.993	178.702	69.479
9	Dhemaji	855.844	103.582	36.408
10	Tinsukia	1225.014	200.984	75.217
11	Dibrugarh	884.055	144.176	10.236
12	Sivasagar	986.56	196.414	63.008
13	Jorhat	1287.283	102.772	32.299
14	Golaghat	956.264	152.573	46.61
15	Karbi Anglong	410.956	96.956	27.624
16	Dima Hasao	146.258	10.667	4.027
17	Cachar	1433.053	278.116	103.682
18	Karimganj	1008.369	249.599	80.158
19	Hailakandi	903.297	112.481	42.194
20	Bongaigaon	599.879	118.105	32.209
21	Chirang	363.909	90.18	28.048
22	Kamrup	2932.16	201.898	38.37
23	Kamrup (M)	412.719	33.686	5.065
24	Nalbari	1368.93	142.204	31.941
25	Baksa	1197.852	180.241	62.744
26	Darrang	837.843	143.152	51.418
27	Udalguri	701.939	233.134	68.255
28	Biswanath	1131.847	103.924	40.636
29	Charaideo	490.152	82.532	27.551
30	Hojai	1011.347	96.834	31.947
31	Majuli	327.123	20.906	11.643
32	South Salmara	294.123	86.969	23.702
	<b>ASSAM</b>	<b>32966.69</b>	<b>5016.189</b>	<b>1579.515</b>

(Source: Office of the Commissioner of Panchayat &amp; Rural Development, Assam)

## ANNEXURE-18.6

## DISTRICT WISE TRAINING PROGRAMME CONDUCTED BY STATE INSTITUTE OF PANCHAYAT &amp; RURAL DEVELOPMENT (SIPRD), ASSAM, DURING 2020-21

(In Nos.)

Sl. No.	District	Target		Achievement	
		No. of Programme	No. of Participant	No. of Programme	No. of Participant
1	Kokrajhar	310	15500	70	3070
2	Dhubri	250	1250	120	5375
3	Goalpara	270	1350	130	6500
4	Barpeta	300	15000	65	2860
5	Morigaon	330	16500	130	6258
6	Nagaon	350	17500	136	6660
7	Sonitpur	240	12000	97	4559
8	Lakhimpur	260	13000	90	3960
9	Dhemaji	200	10000	72	3319
10	Tinsukia	250	12500	98	4970
11	Dibrugarh	270	13500	115	5446
12	Sivasagar	240	12000	140	6637
13	Jorhat	250	12500	80	3930
14	Golaghat	210	10500	70	3419
15	Dima Hasao	240	12000	82	3876
16	Cachar	230	11500	110	5115
17	Karimganj	250	12500	115	5320
18	Hailakandi	290	14500	90	4250
19	Bongaigaon	250	12500	135	6330
20	Chirang	250	12500	53	2480
21	Kamrup-(R)	250	12500	165	7820
22	Kamrup-(M)	300	15000	122	5830
23	Nalbari	250	12500	20	935
24	Baksa	230	11500	16	780
25	Darrang	250	12500	60	2836
26	Udalguri	250	12500	65	3110
27	Biswanath	240	12000	80	3817
28	Majuli	150	7500	51	2530
29	Charaideu	150	7500	75	3530
30	Karbi Anglong	150	7500	70	3310
31	West Karbi Anglong	150	7500	80	3836
32	South Salmara	230	11500	98	4698
33	Hojai	250	12500	87	4010
34	Bojali	150	7500	21	995
<b>TOTAL</b>		<b>8240</b>	<b>388600</b>	<b>3008</b>	<b>142371</b>

(Source: Office of the Commissioner of Panchayat &amp; Rural Development, Assam)

## ANNEXURE: 19.1

**NUMBER OF LOWER PRIMARY AND UPPER PRIMARY SCHOOLS  
(GOVERNMENT/PROVINCIAL UNDER DEPT. OF ELEMENTARY EDUCATION)**

Sl. No.	District	Lower Primary		Upper Primary	
		Rural	Urban	Rural	Urban
1	Baksa	1290	6	247	2
2	Barpeta	1616	40	289	14
3	Biswanath	890	14	58	4
4	Bongaingaon	732	32	152	14
5	Cachar	1838	45	269	7
6	Charaideo	616	22	82	4
7	Chirang	758	18	79	9
8	Darrang	1010	21	94	4
9	Dhemaji	1201	22	136	5
10	Dhubri	1438	79	307	26
11	Dibrugarh	1203	45	173	14
12	Dima Hasao	697	53	124	12
13	Goalpara	1329	33	198	9
14	Golaghat	1101	31	172	12
15	Hailakandi	990	24	270	14
16	Hojai	716	40	109	14
17	Jorhat	1048	28	129	2
18	Kamrup Metro	213	235	18	54
19	Kamrup	1707	20	214	1
20	Karbi Anglong	1040	58	131	15
21	Karimganj	1535	24	248	9
22	Kokrajhar	1282	17	208	12
23	Lakhimpur	1457	39	327	11
24	Majuli	439	0	66	0
25	Morigaon	1153	10	168	3
26	Nagaon	1624	47	276	15
27	Nalbari	903	14	146	2
28	Sivasagar	963	38	175	6
29	Sonitpur	915	35	62	8
30	South Salamara Mankachar	321	0	59	0
31	Tinsukia	1016	41	118	13
32	Udalguri	1057	14	156	1
33	West Karbi Anglong	596	17	92	2
<b>ASSAM</b>		<b>34694</b>	<b>1162</b>	<b>5350</b>	<b>318</b>

*(Source: Axom Sarba Siksha Abhiyan Mission & U-DISE+ 2020-21)*

## ANNEXURE: 19.2

DISTRICT-WISE GOVERNMENT/PROVINCIALISED HIGH AND HIGHER  
SECONDARY SCHOOLS HAVING FACILITIES

Sl. No	District	No. of School	Available Drinking water	Boundary Wall/ Fencing	Girls Toilet	ICT Lab	Ramp	Play Ground	Library	Electricity Connection	Integrated Science Lab
1	Baksa	189	185	100	166	107	124	168	150	186	31
2	Barpeta	306	305	166	284	180	246	226	183	304	85
3	Biswanath	92	92	68	79	83	77	80	92	92	22
4	Bongainga	78	78	44	74	55	70	68	49	78	26
5	Cachar	164	144	100	143	110	125	105	149	159	61
6	Charaideo	58	58	43	56	31	50	53	48	58	17
7	Chirang	50	50	39	49	34	43	49	41	50	25
8	Darrang	145	145	109	133	73	112	118	132	144	45
9	Dhemaji	161	161	155	152	59	148	157	160	159	43
10	Dhubri	162	162	93	149	105	118	131	111	160	48
11	Dibrugarh	148	148	117	134	113	129	121	135	148	63
12	Dima	43	32	24	38	11	36	24	42	36	18
13	Goalpara	121	121	82	115	85	121	104	110	120	56
14	Golaghat	167	165	122	143	124	147	136	99	166	43
15	Hailakandi	59	58	45	50	39	39	35	55	58	32
16	Hojai	73	69	43	69	40	59	51	53	73	17
17	Jorhat	177	176	136	164	128	164	131	159	177	58
18	Kamrup Metro	124	112	98	114	102	99	82	112	122	51
19	Kamrup	285	284	178	266	164	222	212	226	284	45
20	Karbi Anglong	86	83	81	79	50	70	72	77	85	45
21	Karimganj	113	107	72	102	58	97	70	84	112	33
22	Kokrajhar	93	93	72	88	82	80	83	56	91	29
23	Lakhimpur	302	302	145	276	158	244	236	276	298	90
24	Majuli	78	78	35	58	34	50	63	48	76	10
25	Morigaon	119	119	80	112	96	93	89	99	119	53
26	Nagaon	224	224	154	198	158	197	169	216	224	51
27	Nalbari	182	182	124	151	95	143	120	160	179	61
28	Sivasagar	155	155	108	127	116	115	111	111	152	58
29	Sonitpur	104	104	70	100	79	102	81	104	104	36
30	South Salamara Mankachar	32	32	10	28	22	21	22	26	31	17
31	Tinsukia	89	88	81	80	57	81	65	84	89	52
32	Udalguri	82	81	58	71	26	65	72	52	81	12
33	West Karbi Anglong	40	37	31	35	19	35	39	40	39	23
	<b>ASSAM</b>	<b>4301</b>	<b>4230</b>	<b>2883</b>	<b>3883</b>	<b>2693</b>	<b>3522</b>	<b>3343</b>	<b>3539</b>	<b>4254</b>	<b>1356</b>

(Source: Axom Sarba Siksha Abhiyan Mission &amp; U-DISE+ 2020-21)