Chapter 3

Science and Technology Institutes in Assam

3.1 Introduction

The word, ‘Science’ is derived from the Latin word ‘scientia’ which means ‘knowledge’. However, in due course, the term has been limited in its usage to refer to the natural and physical sciences, including metaphysics and theology which were one part of it. Generally, science is the study, description, experimental investigation, and theoretical explanation of the nature and behaviour of phenomena in the physical and natural world. Science has been used in technology for human purposes, as science is an unbiased study of the real world. The word technology is originally derived from the Greek “techno logia” which means systematic treatment of an art. The application of science for industrial processes is known as technology. It is the system of knowledge and action applicable to any recurrent activity.

Assam is an important geographical location of India situated in North East corner of India. It is situated between 89°5’-96°1’ East longitude and 24°3’-27°58’ North latitude and bordered by Kingdom of Bhutan on the north and Arunachal Pradesh on the north eastern; Nagaland and Manipur on the east; Meghalaya, Mizoram and Tripura on the south and Bangladesh, Meghalaya and West Bengal on the West. Assam is surrounded by hills and mountains along with the mighty Himalayan range in its three sides and serves as a gateway to the South East Asia with its capital city at Guwahati. Assam is an attractive and multilingual state with an incredible range of diverse cultures and
landscapes and said to be the land of blue hills and red rivers. Total area of the state is 78,438 sq. km., which is 2.39% of the total area of India. The population of Assam as per 2011 census is 31,169,272. The climatic condition of Assam is 'Tropical Monsoon Rainforest Climate' and temperate region and witnesses heavy rainfall and humidity and differs from time to time; humid tropical in plains and sub alpine in hills. The location, situation and topography of Assam make its climate different from the rest of India and the overall weather is dry in winter and hot and wet in summer.

3.2 History of Science and Technology in India

India has a very rich and long tenure heritage of S & T. Before considering the progress of S & T in India since independence, it is necessary to understand what we mean by the terms S & T. Science can be defined as any systematic activity that seeks to gain or impart knowledge about the physical world. Technology is that activity which seeks to put this knowledge to productive use. As these definitions show, S & T are clearly interlinked in the present day world. The reliance on nature could be overcome by developments in science.

3.2.1 In ancient India

In ancient India, religion and science worked in close proximity. The different branches of science in the ancient period are:

a) Astronomy: Jyotishvedanga texts established systematic categories in astronomy. For the first time Aryabhata explained separate sections on astronomical definitions, methods of determining the true position of the planets, description of the movement of
the sun and the moon and the calculation of the eclipses. The reason he gave for eclipse was that the earth was a sphere and rotated on its axis and when the shadow of the earth fell on the moon, it caused lunar eclipse and when the shadow of the moon fell on the earth, it caused solar eclipse. Aryabhatta’s theories showed a distinct departure from astrology which stressed more on beliefs than on scientific explorations.

b) Mathematics: In ancient time the people possessed a good knowledge of measurement and geometry. The town planning of Harappa proved that. By third century AD, mathematics developed as a separate stream of study. The three main contributions in the field of mathematics were the notation system, the decimal system and the use of zero. The notations and the numerals were carried to the West by the Arabs. These numerals replaced the Roman numerals.

Zero was discovered in India in the second century BC. Brahmagupta’s Brahmasputa Siddhanta is the very first book that mentioned ‘zero’ as a number. Aryabhatta discovered algebra and also formulated the area of a triangle, which led to the origin of Trignometry.

c) Medicine: Disease curing processes and medicines were mentioned for the first time in the Atharva Veda. The remedies recommended were replete with magical charms and spells. From 600 BC began the period of rational sciences. Takshila and Baranasi emerged as centres of medicine and learning. The plants and herbs used for medicinal purposes have been mentioned in Charaksamhita. Surgery came to be mentioned as a separate stream around fourth century AD. Sushruta was a pioneer of this discipline. He
considered surgery as “the highest division of the healing arts and least liable to fallacy”. The surgeons in ancient India were familiar with plastic surgery (repair of noses, ears and lips). Both the Charaksamhita and the Sushrutsamhita became the predecessors of the development of Indian medicine in the later centuries.

d) Metallurgy: The glazed potteries and bronze and copper artefacts are found in the Indus valley excavations point towards a highly developed metallurgy. The vedic people were aware of fermenting grain and fruits, tanning leather and the process of dyeing. By the first century AD, mass production of metals like iron, copper, silver, gold and of alloys like brass and bronze were taking place. The iron pillar in the Qutub Minar complex is indicative of the high quality of alloying that was being done.

e) Geography: In the ancient period, voyages and navigation were not a familiar foray for the Indians. However, Lothal, a site in Gujarat has the remains of a docklands proving that trade flourished in those days by sea. In the early medieval period with the development of the concept of tirtha and tirtha yatra, a vast mass of geographical information was accumulated. They were finally compiled as parts of Puranas.

3.2.2 Medieval period: During the medieval period (eleventh to eighteenth century) S & T in India developed along two lines: one concerned with the already charted course of earlier traditions and the other with the new influences which came up as a result of Islamic and European influence.
Muslim rulers attempted to reform the curriculum of primary schools. Some important subjects like arithmetic, geometry, astronomy, accountancy, public administration and agriculture were included in the course of studies for primary education.

a) **Biology:** The medieval rulers as warriors and hunters, kept in their possession different animals such as horses, dogs, cheetahs and falcons. Animals, both domesticated and wild, existed in their menageries. Akbar showed special interest in producing good breeds of domestic animals, elephants and horses. Jahangir as a naturalist, was interested in the study of plants and his court artists in their floral portraiture describe some fifty-seven plants.

b) **Mathematics:** Brahmagupta, the great 7th century mathematician has given a description of negative numbers as debts and positive numbers as fortunes, which shows that ancient Bharatiyas knew the utility of mathematics for practical trade.

In the early medieval period, the two outstanding works in mathematics were Ganitasara by Sridhara and Lilavati by Bhaskara. Ganitasara deals with multiplication, division, numbers, cubes, square roots, mensuration and so on. Ganesh Daivajna produced Buddhivilasini, a commentary on Lilavati, containing a number of illustrations.

c) **Chemistry:** Before the introduction of writing on paper, ancient literature was preserved generally on palm leaves in South India and birch-bark (bhoj-patra) in Kashmir and other northern regions of the country. Use of paper began during the medieval period. The Mughals knew the technique of production of gunpowder and its
use in guns. Indian craftsmen learnt the technique and evolved suitable explosive compositions. They were aware of the method of preparation of gunpowder using saltpetre, sulphur and charcoal in different ratios for use in different types of guns. The principal types of fireworks included those which pierced through air (rockets), produced sparks of fire, blazed with various colours and ended with explosion. The attar of roses was a popular perfume, the discovery of which is attributed to the mother of Nurjehan.

d) **Astronomy:** Mehendra Suri, a court astronomer of Firoz Shah developed an astronomical instrument called Yantraja. Parameshvara and Mahabhaskariya were famous families of astronomers and almanac-makers. Nilakantha Somasutvan produced a commentary on Aryabhatta. Kamalakar studied the Islamic ideas on astronomy. Jaipur Maharaja, Sawai Jai Singh II set five astronomical observatories in Delhi, Ujjain, Varanasi, Mathura and Jaipur.

e) **Medicine:** The Sarangdhara Samhita recommends use of opium for medicines. The rasachikitsa system, dealt mainly with a host of mineral medicines including metallic preparations. The Tuhfat-ul-Muminin was a Persian treatise written by Muhammad Munin in seventeenth century which discusses the opinions of physicians. The Unani Tibb is an important system of medicine which flourished in India in the medieval period. Ali-bin-Rabban summarized the whole system of Greek medicine as well as the Indian medical knowledge in the book Firdausu-Hikmat.
f) **Agriculture**: In the medieval period, the pattern of agricultural practices was more or less the same as that in early and early ancient India. Some important changes, however, were brought about by the foreigners such as the introduction of new crops, trees and horticultural plants. The principal crops were wheat, rice, barley, millets, pulses, oilseeds, cotton, sugarcane and indigo. The Western Ghats continued to yield black pepper of good quality and Kashmir maintained its tradition for saffron and fruits. Ginger and cinnamon from Tamilnadu, cardamom, sandalwood and coconuts from Kerala were becoming increasingly popular. Tobacco, chillies, potato, guava, custard apple, cashew and pineapple were the important new plants which made India their home in the sixteenth and seventeenth centuries.

### 3.2.3 In Modern India

In India, the role of S & T in national development has been duly recognised by the government. The Second Five Year Plan emphasised that “the most important single factor in promoting economic development is the community’s readiness to apply modern S & T”. In 1971, the Department of Science and Technology (DST) was set up to promote new areas of S & T. Similarly, State Councils of Science and Technology have also been established at the state levels. As part of the national policy, the government is promoting various research and development schemes to encourage scientific activities. In this section, we will take up some of the main areas in which scientific knowledge and modern technology have made an impact.

a) **Agriculture**: It is mainly because of the application of modern S & T in agriculture that India is able to produce 135 million tonnes of food grains today as compared to 50
million tonnes thirty years ago. In these efforts, the Indian Council for Agricultural Research has played a leading role. Through seventy three agricultural, thirty two veterinary, eight agricultural engineering and one dairy college, the ICAR (Indian Council for Agriculture Recharge) has been playing a key role in the scientific education of the farmers as well as others engaged in different sectors of agriculture, animal husbandry, fisheries and forestry.

b) **Industry:** It is in the field of industry that modern S & T made its earliest and the most revolutionary impact. In India the government has consistently tried to use modern S & T for industrial development. Two government organisations, Council for Scientific and Industrial Research (CSIR) and Defence Research and Development Organisation (DRDO) cover between them a wide range of S & T research for civil and defence purposes. A large number of items have emerged from CSIR laboratories for industrial production, such as, indigenous agricultural machinery, chemicals, drugs and pesticides, products in the areas of food technology, furnished leather goods, glass and ceramics, colour television, and receiver sets. The research carried out in the field of coal, such as, upgrading of coal and extraction of electricity from coal has been effectively utilized. In the area of defence, India’s own technological capability has increased considerably.

c) **Nuclear Energy:** India’s aim is to utilise nuclear energy for peaceful purposes. During the last sixty three years, since the establishment of the Atomic Energy Commission in 1948, India has made significant progress in the field of nuclear technology. In 1957, the Bhabha Atomic Research Centre (BARC) was established at
Trombay. It is the largest single scientific establishment in the country. Nuclear power stations have already been established at Tarapur (Maharashtra), Kota (Rajasthan), Kalpakkam (Tamil Nadu), Narora (UP) and Kakrapar (Gujarat). The adoption of modern technology has led to the increase in indigenous content of nuclear power reactors constructed in India.

d) Space Technology: The Indian space programme is directed towards the goal of self-reliance in the use of space technology for national development. Over the years, the space programme has established itself with a succession of achievements. They include the launching of the first Indian space satellite Aryabhatta in 1975 and then Bhaskara I and Bhaskara II from the Soviet Union, the Rohini satellite on India’s own SLV-3 rocket and the Apple satellite on the European Arianne rocket. A far reaching experiment in education through satellite, SITE, was conducted in India in 1975. Subsequently, INSAT I-IB, launched in 1983, provided radio, television, telecommunication and meteorological services. A perspective of major space mission planned for the decade 1985-95 aims at using space technology for nationwide application in communication, survey and management of natural resources and meteorology.

e) Electronics: Since independence, India has acquired the capability to produce a wide variety of electronic goods such as radio and television sets, communication systems, broadcasting equipments, radars, nuclear reactors, power control systems and underwater systems. A very large part of the components required for these are produced indigenously. Today, India is exporting electronic goods to different parts of
the world. Further, computers have been introduced to improve efficiency and enhance production.

**f) Medical and Health Sciences:** In the field of medicine, there have been many achievements. Major advances have been made in preventing and treating various diseases. Small pox has been eradicated. Treatment of diseases like tuberculosis, malaria, filaria, goitre, and cancer has been considerably improved. Research is being carried out to control communicable diseases. Research based activities have already increased life expectancy appreciably and death rate has declined, while schemes such as the immunisation programme have reduced infant mortality considerably.

**g) Ocean Development:** India has significant interests in the field of ocean development, such as, exploration of offshore oil, fishery resources to increase food supplies, etc. A department of Ocean Development was established in 1981, under the charge of the Prime Minister, to coordinate and direct India’s activities in the field of ocean research. This department has two vessels ORV Sagar Kanya and FORV Sagar Sampada, which have advanced facilities for working in the field of physical, chemical, biological, geological and geophysical oceanography and meteorology. India’s achievements during the past few years include sea-bed mining using the research ship Gaveshna and setting up of research station named Dakshin Gangotri on the Antartica.

**h) Other Areas:** Apart from the major areas mentioned above, India has made much progress in several other fields as well. These include the activities of the Oil and Natural Gas Commission in oil exploration and refining and of the National Committee
for Environment Planning in environment protection and production of solar energy. A Central Ganga Authority has been set up to check pollution in the river Ganga by using sewage treatment plants

3.3 Science and Technology Education in India

India has a strong base in modern technology. In past years, India has made rapid progress in the frontier areas of S & T like space research and atomic energy. It also has the third largest scientific and technical manpower in the world. In India, higher education in S & T grew with the establishment of the IITs and a network of other engineering institutions. Technical Education System in our country has grown in large scale system offering opportunities for education and training in a wide variety of trades and disciplines at certificate, diploma, degree, postgraduate degree and doctoral levels in institutions located throughout the country.

In India, the responsibilities of higher education have been vested to the Department of Higher Education (DHE), placed under the Ministry of Human Resource Development. The DHE is organized into six sub-units, or “bureaux”, each being responsible for one of the following areas:

a) Universities and higher education, minorities education, book promotion and copyrights
b) Technical education
c) Distance education and scholarships
d) Planning
The Department of Higher Education carries out a substantial part of its work through 90 autonomous organizations charged with specific responsibilities and promoting higher education and research at the national and state levels. The followings are some among the most important organization listed:

**a) Association of Indian Universities (AIU):** The major objectives of AIU are to coordinate the work of the universities; establish equivalence of degree awarded by Indian and foreign universities, acting as a bureau of information, conducting research on various aspects of university development; organizing training and orientation programmes for university administrators, and establishing and maintaining higher education databases

**b) University Grants Commission (UGC):** The main responsibility of UGC is to coordinate, determinate and arrange for the maintenance of higher education standards, as well as the release of grants. Established under the University Grants Commission Act, 1956, the UGC has the unique distinction of being the only grant-giving agency in the country which has been vested with two responsibilities: providing funds on the one hand; and coordinating, establishing and monitoring standards in institutions of higher education on the other
c) Central Advisory Board of Education (CABE): The CABE is responsible for coordination and cooperation between union and states’ governments

d) Indian Council for Agriculture Research (ICAR): The mandate of ICAR is to co-ordinate agricultural research and development programmes, develop linkages at national and international level, and enhance the quality of life of the farming community

e) Council of Scientific and Industrial Research (CSIR): The aims of CSIR are to provide industrial competitiveness, social welfare, strong S & T base for strategic sectors and advancement of fundamental knowledge

f) Indian Council of Social Science Research (ICSSR): ICSSR supports research of individual scholars by offering them fellowships in social science disciplines

g) All India Council for Technical Education (AICTE): AICTE provides planning, co-ordinated development, and qualitative improvement of the technical education system throughout India. The All India Council for Technical Education (AICTE) was set up in 1945 to maintain the standard of technical education. AICTE is responsible for the planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country.
In India, technical education is imparted at various levels such as: certificate, diploma, degree, post-graduate and research in specialized fields, catering to various aspects of technological development and economic progress. According to AICTE Act, “Technical Education” means programs of education, research and training in the following fields:-

a) Engineering & Technology
b) Architecture
c) Town planning & Management
d) Pharmacy & Applied Arts and crafts
e) Such other programmes or areas as the Central Govt. may declare in consultation with the council by a gazette notification.

3.4 Science and Technology Education in Assam

The name "Assam" is derived from the term "Asom" which, in Sanskrit, refers to unequal or unrivalled. Assam is said as the gateway to the North-eastern States and is appropriately described as the sentinel of Northeast India. Educational History in Assam began with the annexation of Assam with the British Empire in accordance with the treaty of "Yandabu" in 1826. After the Independence in 1947, a rapid expansion took place in the field of education. The Assam government has followed policies and decisions taken at the national level for implementation in the state. It has followed the mandate of National Policy on Education (1986) and Programme of Action (1986, revised in 1992) in terms of intervention in Higher Education. The University Grants Commission and National Assessment and Accreditation Council (NAAC) have been playing a major role in the aspect of quality higher education.
To fortify the growth and development of higher education in Assam, the post of Director of Public Instruction (DPI) was created in 1874 at Shillong, the then capital of undivided Assam. DPI's office catered to all aspects of education viz. Elementary, Secondary, Higher, Adult, Technical etc. of the entire state that included the present day Meghalaya, Mizoram and Nagaland. In 1973, the office was shifted to Guwahati, the present capital of Assam.

In 1901, the first college in Assam Cotton College was established. The first technical institute, Assam Textile Institute, formerly known as Government Weaving Institute was established in the year 1920 under the administrative control of the Department of Industries. Then “His Royal Highness the Prince of Wales” presently known as “H. R. H. The Prince of Wales Institute of Engineering & Technology” Technical School was established at Jorhat in the year 1927 under the administrative control of the Department of Industries and Science and Technology. There were only 16 colleges prior to independence. There was no University, no Medical and Engineering Colleges and not even single professional colleges in the pre-independence period except one research institute on tea research known as Toklai Experimental Station established in the year 1911 at Jorhat. After independence, first University was established in 1948 at Guwahati as Gauhati University.

Indifferent attitude of the colonial rulers, lack of proper communication in this region, sparse populated, and lack of proper administration in this region might be some of the reasons for the hindrance of proper spread of higher education in pre-independence
period of Assam. However, in post independence era, the growth of higher education in Assam is quite satisfactory. There are 12 universities including two central universities, one Medical university, one Agricultural university, one Open university, one Sanskrit university, one Science & Technology university, four private universities, five medical colleges, some engineering colleges and institutes including one Indian Institute Technology, one National Institute of Technology, one Petroleum Technology Institute, one Indian Statistical Institute (ISI), some state and central government research institutes including North East Institute of Science and Technology (NEIST), Indian Grain Storage Management and Research Institute (IGSMRI), Institute of Advanced Study in Science and Technology (IASST), North Eastern Regional Institute of Water And Land Management (NERIWALM), Regional Medical Research Center (RMRC) NE Region, Center of Plasma Physics (CPP), Regional Agricultural Research Station (RARS), Assam Science Technology and Environmental Council (ASTEC) etc. and more institutes of learning are likely to come out.

3.5 Science and Technology Institutes in Assam

There are 55 (fifty five) numbers of S & T institutes located in different parts of Assam. Among the all S & T institutes, some of the institutes are engaged only with the research and development activities in a particular field and some others are educational institutes concerned only with S & T education and to some extent research work leading to PhD and again some other educational institutes are concentrating only on S & T education.
The educational institutes are providing S & T education in various streams and academic institutes like electronic & communication, electrical, computer science, information technology, chemical, mechanical, architecture, automobile through under graduate, graduate and post graduate degree. The results of these institutes are satisfactory over the period. All the courses are DTE, Assam and AICTE approved. Now, the state government is out to develop Assam as a state of S & T and the state is actively making serious efforts to make Assam an equally rich state like developed states in the field of Science and Technology.

A list of S & T institutes is prepared including location, established year and website address (where available) appended in Annexure III. These institutes are governed by central government, state government and NPPP (not-for-profit public private partnership) mode. The various data and information about the institutes are collected by personal visit and through questionnaire. Moreover, some additional information is also collected from the annual report, progress report, websites, over phone calls and through e-mail.

A brief description is given covering all details about the institutes especially nature, type and history of the institutes along with the libraries. The institutes’ description is prepared as alphabetical arrangement.

- **Agro-Economic Research Centre (AERC), 1954**

Agro-Economic Research Centre (AERC) was established in the year 1954 at Jorhat sponsored by Ministry of Agriculture, Government of India. The main activities of this centre are to
conduct village surveys, studies, investigations of the fundamental problems being experienced in an agricultural economy and rural development. It also tries to provide technical advice to the central as well as state governments on the issues referred to by them.

The AERC Library was set up in the year 1954 along with the establishment of the institute at Jorhat. The collection of the library is based on the subjects of Agriculture, Agricultural economy and rural development. The library is operating in a single room attached with the main building. There are one professional and two non-professional staff working in the library.

- **Assam Agricultural University (AAU), 1969**

In the entire North-Eastern Region of India, Assam Agricultural University (AAU) is the first institute of its kind. The AAU was established in 1969 at Jorhat. It conducts research and training in the fields of agriculture and veterinary science.

The AAU library is named as Rev. B M Pugh library which was established with the establishment of the university in 1969. It has its branch libraries at the College of Vety. Science, Khanapara, Guwahati; College of Fishery Science, Raha; Biswanath College of Agriculture, Biswanath Chariali and Lakhimpur College of Veterinary Science at Lakhimpur.

The total collection of the AAU library is 197859 which comprise of reference books, rare books, general books, special collection etc. The library has 75 journals, 6854 reports and 13 news papers. The Library provides the services like lending, reference and displaying of reading materials as well as lending of books from Text Book Bank besides having facilities of documentation, reprography etc.
• **Assam Engineering College (AEC), 1955**  
Assam Engineering College (AEC) was established in 1955 as the first engineering college in the north-eastern India. It is a premier technical institute of the entire country located in Jalukbari area of Guwahati city. It was inaugurated by Pandit Jawaharlal Nehru. It is affiliated to Gauhati University and approved by the All India Council for Technical Education (AICTE).

It offers Bachelor of Engineering (BE) courses in Civil Engineering, Mechanical Engineering, Electrical Engineering, Chemical Engineering, Electronics and Telecommunication Engineering, Computer Science and Engineering, Instrumentation Engineering and Industrial & Production Engineering. It also offers Masters of Engineering/ Technology (ME/ MTech) courses in Civil Engineering, Electrical Engineering, Mechanical Engineering (ME) and Master in Computer Application (MCA) course. All the departments are having research facility and offer PhD programs.

The AEC library was established with the establishment of the college. The total collection of the library is 59802 and offers lending service, CAS (Current Awareness Service), OPAC, and new arrival service.

• **Assam Engineering Institute (AEI), 1948**  
The Assam Engineering Institute was established on 16\textsuperscript{th} January 1948. It is located in Chandmari at the heart of Guwahati city as one of the premier Institutes in the North
East India, catering to the needs of technical manpower in various fields of engineering. Presently, the institute offers the students 3 years Diploma in Civil, Mechanical, Electrical, Electronics & Telecommunication, Chemical and Computer Engineering Department with total capacity of 240 students. A post polytechnic Diploma course on computer application is also being offered. All the courses are under the state council for Technical Education, Assam and recognized by the All India Council for Technical Education (AICTE).

The AEI library was initiated along with the initiation of the institute in the year 1948. The library has collection of 28669 books. It offers various services like lending service, SDI (Selective Dissemination of Information) CAS, OPAC and new arrival service.

- **Assam Pollution Control Board (APCB), 1975**

Assam Pollution Control Board (APCB) was established in 1975 as an autonomous statutory organization under the provision of section 4 of the Water (Prevention & Control of Pollution) Act 1974 with a view to protecting the environment and preventing and controlling the pollution of water and air in the State of Assam. The main activity of the board is to advise and liaison with the State Government on any matter concerning environmental pollution, Collection and dissemination of data and information on pollution and environmental problems and preparation of reports thereon, Investigation and research relating to pollution and environmental problems, Monitoring of industrial/trade effluents, water bodies, air and soil, and laboratory analysis thereon etc.
The APCB library was started with the beginning of the board. The library is operating in a single room with the total collection of 560 books. One non professional staff is working as in-charge of the library.

- **Assam Remote Sensing Application Centre (ARSAC), 1988**
  The Assam Remote Sensing Application Centre (ARSAC) was established in 1988 at Guwahati by the Assam Science Technology & Environment Council (ASTEC). It is declared as an autonomous council of the Department of Science, Technology & Environment, Govt. of Assam. The primary activities of ARSAC are to develop remote sensing techniques and their application for natural resources management in the state.

  The ARSAC library was founded with the establishment of the centre in 1988. The library is operating in a single room attached with the main building. The collection of the library is 7600 books which include the subjects of Environment, Chemistry, Physics, Mathematics, and Biology.

- **Assam Science and Technology University (ASTU), 2010**
  Assam Science and Technology University was established in 2010 by the Act, 2009 and notified by the Govt. of Assam. The aim of ASTU is to create a common platform for all existing Engineering Colleges and Institutes to follow same course curriculum. At present, the university is running in a temporary office at 2nd floor of Directorate of Technical Education, Kahilipara. The university offers Bachelor Degree course on B Pharm and master courses on M Pharm, MCA, M Tech (CSE), and MBA.
ASTU library is not fully set up. The University has some collection of books on the subjects of pharmaceutics, computer science, engineering and technology. There is no library professional.

- **Assam Textile Institute (ATI), 1920**

Assam Textile Institute (ATI) was established in 1920 by Late Rai Bahadur Kanaklal Baruah. It is the only institute, which offers courses on Textile Technology, Garment Technology and Fashion Technology under one roof. The institute is situated at Ambari of Guwahati city. It offers Diploma Course in Textile Technology, Semester System Diploma course in Textile Technology, Diploma courses in Fashion Technology and Garment Technology and Post-Matric two years Certificate course.

The library of Assam Textile Institute was initiated with the establishment of the institute. Currently the total collection of the library is 9383 which includes text books, reference books, journals, back volumes, standards, newspapers, magazines, CD-ROMs etc. It has facilities of documentation, reprography etc. The library is open for faculty, students, researchers and others also.

- **Bineswar Brahma Engineering College (BBEC), 2006**

Bineswar Brahma Engineering College (BBEC) was established in 2006 at kokrajhar. The college offers bachelor degree courses on Chemical Engineering and Electrical Engineering.
The BBEC library was founded along with the establishment of the college in 2006. The library has total collection of 5392 no of books. The library offers lending service, CAS, SDI and new arrival service.

- **Bongaigaon Polytechnic (BP), 1986**

Bongaigaon Polytechnic (BP) was established in 1986 at Barshan Gaon in Bongaigaon. The college is affiliated to Council for Technical Education (AICTE), Ministry of Human Resource Development, Government of India and is recognized by University Grant Commission of India, New Delhi. The Institute currently offers Diploma Courses in Civil Engineering, Electrical Engineering and Automobile Engineering.

The BP library was founded since the establishment of the institute in the year 1986. The total collection of the library is 15616. It is housed with books, periodical, newspaper etc. The library offers different services like lending, CAS, SDI, and new arrival service.

- **Centre of Plasma Physics-Institute for Plasma Research (CPP-IPR), 1991**

The Centre of Plasma Physics (CPP) was established in 1991 under the department of Science and Technology, Govt. of Assam. Centre of Plasma Physics (now renamed as Centre of Plasma Physics –Institute for Plasma Research) is one of the leading research organizations in North East India. It is situated at Sonapur in the outskirt of Guwahati city. The main activity of the CPP-IPR is to involve fundamental and applied research in plasma physics and associated technologies.
The CPP-IPR library was established along with the establishment of the institute. The CPP-IPR library is located in the main building of CPP-IPR. The total collection of the library is 1892 including journals, scientific magazines, thesis and newspapers. The library provides lending service, reading room service and reprographic service.

- **Citrus Research Station (CRS), 1978**

Citrus Research Station (CRS) was established in 1978 at Tinsukia district of Assam under Assam Agricultural University, Assam. The main objective of the station is to facilitate research and development (R & D) activity in different species of citrus such as mandarin (Citrus Reticulata), sweet orange (Citrus Sinensis) and acid lime (Citrus Aurantifolia).

CRS library was started in the same year 1979 along with the initiation of the station. There is no separate building or room for the library. The library has a small collection of documents like books, reports etc. There is no library professional staff in the library.

- **Coal Survey Laboratory (CSL), 1953**

CSL was established in the year 1953 at Jorhat, Assam as one of the prominent units of Central Fuel Research Center (CFRC). The aim and objectives of this center are physical & chemical census and to find out the standards of coal found in North Eastern Region of India and report it to the Central Fuel Research Center.
The CSL Library was established along with the establishment of the laboratory in the year 1953. The library has little collection of books and journals on the subjects of Coal, Oil Shale, Fuel and other general energy related topics. The library is operating in a single room attached with the main building. The library has only one non-professional staff.

- **Central Inland Fisheries Research Institute (CIFRI), 1971**

The Central Inland Fisheries Research Institute (CIFRI) regional centre was established in 1971 at Guwahati. It is the oldest premier research institute in the field of inland fisheries research and training in North East India. The main objectives of the institute are to conduct investigations for a proper appraisal of inland fishery resources of the country and to develop suitable methods for their preservation and optimum utilization.

The CIFRI library was founded with the main institute in 1971. The regional library of CIFRI is functioning with a single room attached with the main building at Guwahati. The library has a total collection of 2700 books including journal and newspaper. The library is functioning without library professional staff.

- **Central Institute of Plastics Engineering & Technology (CIPET), 1999**

Central Institute of Plastics Engineering & Technology (CIPET) Guwahati started functioning in the year 1999 and later in 2002 it was shifted to its own building at Changsari. CIPET Guwahati Testing laboratory has been attributed by National Accreditation Board for Testing & Calibration Laboratories. The main objective of CIPET Guwahati is to develop skilled manpower for the plastics and allied industries.
through various Long Term Training Programmes. It also conducts from time to time number of long term and short term courses to create self-employment opportunities for the unemployed youth of the North Eastern Region.

The CIPET library started functioning along with the establishment of the institute. The library’s total collection is 2185 including books, journals and newspaper. The library provides lending, CAS and SDI services.

- **Central Institute of Technology (CIT), 2006**

The Central Institute of Technology (CIT) was established in 2006 in Kokrajhar District of Bodoland Territorial Council (BTC) in Assam. It is a centrally funded Institute under the Ministry of Human Resource Development, Government of India. Currently, CIT offers Diploma courses in Computer Science Engineering (CSE), Control and Instrumentation (CAI), Electronics and Communication Engineering (ECE) and Food Processing Technology (FPT), Construction Technology and Animation and Multimedia. It also offers degree programmes in Computer Science and Engineering, Electronics and Communication Engineering, Instrumentation Engineering, Food Processing Technology, Civil Engineering (Construction Technology) and Information Technology.

The CIT library was set up along with the institute in 2006. The library has a collection of 52230 books. The library provides lending, OPAC, CAS, SDI, New arrival, reprography, internet and document delivery services to the users.
• Central Muga, Eri Research and Training Institute (CMER&TI), 1987
The CMERTI was established in 1987 at Lahdoigarh, Jorhat under the control of Central Silk Board (CSB), Ministry of Textiles, Govt. of India. It is an apex Research Institute for providing research and developmental support for Muga and Eri sericulture. CSB established an exclusive Research and Training Institute for muga in the year 1987 and named as Central Muga Research & Training Institute at Lahdoigarh, Jorhat. It came into being as a full-fledged Research & Training Institute in 1999 and during the same year, it was renamed as Central Muga Eri Research & Training Institute.

The library of CMER&T1 was initiated with the establishment of the institute in 1999. The library is running in a single room attached with the main institute. The library has a collection of 10948 books. The library provides lending CAS, SDI services to the users with the help of a non professional staff.

• Defence Research Laboratory (DRL), 1980
The Defence Research Laboratory (DRL) was established in 1980 at Tezpur. The laboratory has focused its research and development studies on control of malaria, quality of drinking water and plant materials for human and animal causes.

The DRL library was established along with the establishment of the laboratory. The library has a total collection of 6500 books. It has also collection of reference books, periodicals and news paper.
• **Dibrugarh Polytechnic (DP), 1965**

Dibrugarh Polytechnic was established in 1965 at Lahoal in Dibrugarh. This is a diploma level engineering institute in the eastern part of Assam. The institute is under the Directorate of Technical Education, Government of Assam and is recognised by All India Council for Technical Education (AICTE). At present, there are three branches of engineering, namely Civil, Mechanical and Electrical Engineering.

The DP library was started with the establishment of the institute. The total collection of the library is 20840 including periodicals, reports, newspaper and 22 non book materials. Library offers only lending service to the users. There is no library professional in the library.

• **Diphu Polytechnic (DiP), 2010**

Diphu Polytechnic was established in the year 2010 at Diphu, Karbi Anglong under the Directorate of Technical Education. The institute offers diploma courses in Civil Engineering, Mechanical Engineering, Electrical Engineering, Electronics & Telecommunication Engineering. Diphu Polytechnic library was established along with the institute. There is no separate room for the library. There is no library professional in the library.

• **Forensic Science Laboratory (FSL), 1967**

Forensic Science Laboratory (FSL) was established in 1967 at Shillong the capital of undivided Assam. In 1969 it was shifted to Guwahati and in 1978 it was permanently set up at Kahilipara, Guwahati.
FSL library was set up along with the opening of the laboratory. The library has total collection of 5000 books comprising journals, magazines and reports.

- **H. R. H. The Prince of Wales Institute of Engineering & Technology (PWIET), 1927**

His Royal Highness The Prince of Wales Institute of Engineering and Technology was established in 1927 with the financial aids of rupees one lakh from a great Assamese timber merchant Late Bholanath Boruah, who had given the money to the British Government in 1922 for establishing a technical school in the name of 'Prince of Wales' at Jorhat. It imparts technical education in Civil Engineering, Electrical Engineering, Mechanical Engineering, Agriculture Engineering, Automobile Engineering, Electronics & Telecommunication Engineering and Instrumentation Technology.

The library of PWIET was started along with the institution. The library has total collection of 10006 books. It has also the collection of journals and news papers. It offers lending service and CAS to the user.

- **Horticultural Research Station (HRS), 1972**

Horticulture Research Station (HRS) was established in 1972 at Kahikuchi, Guwahati under the control of Department of Horticulture, Assam Agriculture University.
The HRS library was started along with the institute in a single room attached to the station. The library has 1600 no. of books including reports, journals and newspapers. The library is looking after by a non professional staff.

- **Indian Grain Storage Management and Research Institute (IGSMRI), 1981**

  Indian Grain Storage Management and Research Institute (IGSMRI) was established in 1981 at Jorhat. Indian Grain Storage Management and Research Institute (IGMRI) is responsible to investigate the nature, extent and degree of losses due to insects, rodents, birds and micro organisms under different agro climatic conditions and to develop code of practices for proper grain storage and handling by recommending cost effective techniques for control of stored grain pests.

  The IGSMRI was set up with the establishment of the library. The library has no separate building. The library has a total collection of 3700 books including journal and reports. The library offers lending service and CAS to the user by a non professional staff.

- **Indian Institute of Handloom Technology, (IIHT), 1982**

  Indian Institute of Handloom Technology, (IIHT) was established in 1982 at Khanapara Guwahati. It offers Diploma in Handloom Technology. There are five central and four State Sectors of Indian Institute of Handloom Technology (IIHT), established in India. All IIHT are providing 3 years Course of Diploma in Handloom & Textile Technology.
The IIHT library was established along with the commencement of the institute. It has small collection of books which is looked after by a non professional staff.

- **Indian Institute of Information technology, Guwahati (IIITG), 2013**

Indian Institute of Information Technology, Guwahati (IIITG) was established in 2013 at Guwahati by the Central Govt. in NPPP (not-for-profit public private partnership) mode. IIITG offers B.Tech courses in Computer Science and Engineering and Electronics Communication Engineering.

The IIITG library started operation along with the establishment of the institute. The library offers lending service, CAS and SDI service.

- **Indian Institute of Technology Guwahati (IITG), 1994**

Indian Institute of Technology Guwahati,(IITG) was established in 1994 at Amingaon, Guwahati. It is the sixth Indian Institute of Technology established in India by the Government of India. The academic programme of IIT Guwahati initiated in 1995. At present the Institute has eleven departments and three inter-disciplinary academic centres covering all the major engineering, science and humanities disciplines, offering BTech, BDes, MA, MDes, M Tech, MSc and PhD programmes.

The IITG library was established in the year 1994 along with the establishment of the Institute. The Library of the Institute was named after the renowned and much revered literary figure Sahityarathi Lakshminath Bezbaroa on 5th December, 2014. The Lakshminath Bezbaroa Central Library is operating in four storied building in the IITG.
premises. It provides all necessary supports for teaching, learning, research activities of the Institute by creating state-of-the-art facilities and offering innovative services to the academic community. The Library currently has 1,54,564 printed volumes and 2291 subscribed current journals. The Library provides access to 12835 e-journals. The database for the entire collection is available through web-based On-Line Public Access Catalogue (WebOPAC).

- **Institute of Advanced Study in Science & Technology (IASST), 1979**

Institute of Advanced Study in Science & Technology (IASST) was set up in the year 1979 by the Assam Science Society as a premier research establishment in the North-East India. In 2004, the institute was shifted to its present location at Paschim Boragaon Garchuk, Guwahati. In 2009, the institute was taken over by Department of Science and Technology, DST, Govt. of India as an autonomous multidisciplinary research organisation.

The IASST library was started with the inception of the Institute in 1979. Later, the library was renamed as Knowledge Resource Center. The library has a total collection of 11966 books in the areas of physical sciences, life sciences, environmental sciences, mathematical & statistical sciences and instrumentation sciences. Apart from these subjects, there are books on computer sciences, electronics, scientific biographies, general science, literature, nature and fine arts. The library offers lending, reference, resource sharing, on-line public access catalogue (OPAC), Access to e-resource, reprography, internet services to the users.
• **Institute of Biotechnology and Geotectonics Studies (IBGS), 1989**

Institute of Biotechnology and Geotectonics Studies (IBGS) was established in 1989 at Oil and Natural Gas Commission (ONGC) Complex, Jorhat. It offers research on Bioremediation of oily waste, oil, petroleum and others.

The IBGS library was founded in the year 1989 at Jorhat along with the establishment of the institute. There is no separate room for the library. The library has a collection of books on the subjects of biotechnology, geology, oil, petroleum and others. There is no library professional in the library.

• **Jorhat Engineering College (JEC), 1960**

Jorhat Engineering College was established in 1960 at Jorhat. It is the second Government Engineering College in Assam. The college is affiliated to Dibrugarh University, Dibrugarh, Assam and is accredited by the AICTE. The college currently offers B.E. courses in Civil, Electrical, Mechanical, Computer Science & Engineering and Instrumentation Engineering, Master of Computer Application (MCA.) and M.E. course in Mechanical Engineering, Civil Engineering and Electrical & Instrumentation Engineering.

The Central Library at Jorhat Engineering College was established in 1960 along with the establishment of the college. The total collection of the library is 56,181. The library offers lending service, CAS and new arrival service to the users.
- **Jorhat Institute of Science & Technology (JIST), 1971**

Jorhat Institute of Science & Technology (JIST) was established in 1971 at Jorhat by the Govt. of Assam affiliated by Dibrugarh University. Formerly, the institute was known as Science College, Jorhat which was renamed in 2008 as Jorhat Institute of Science & Technology. The college offers bachelor’s degree in science (Physics, Chemistry, Mathematics and Information Technology) along with two B.E Courses in Electronics & Telecommunication Engineering, Power Electronics & Instrumentation Engineering.

JIST library was initiated along with the establishment of the college. The library has a total collection of 14011 books including journal and magazine.

- **Jyoti Chitraban Film and Television Institute (JCFTI), 1961**

Jyoti Chitraban Film and Television Institute (JCFTI) was established by the Government of Assam in 1961 at Kahilipara, Guwahati. It is the first Film Studio & Film Institute in Northeast India. It is named after the first Assamese Film Producer Jyoti Prasad Agarwala. In 1999, it was renamed as Jyoti Chitraban Film and Television Institute. The Government of Assam has bifurcated JCFTI from the Jyoti Chitraban (Film Studio) Society, Kahilipara, and converted it by a cabinet decision to a full-fledged Government Institute under the name & style of "Regional Government Film and Television Institute" under the Department of Cultural Affairs on 1st March 2011. Regional Government Film and Television Institute (RGFTI) is approved by - All India Council For Technical Education, Ministry of HRD, Government of India, in July 1999. RGFTI is affiliated to - State Council for Technical Education, Assam, on 6th
March 2000. The institute offers 3 years Diploma in Audiography and Sound Engineering, Motion Picture Photography, Film and Video Editing, 1 year Certificate course in Applied Acting (Film & TV)

JCFTI library was set up along with the initiation of the institute. The library has a total collection of 7000 books including journals, magazines and reports. There is no library professional in the library.

- **Livestock Research Station (LRS), 1981**

LRS was established in 1981 at Mondira, Hekra -781127.Kamrup, Assam under the control of Assam Agricultural University, Jorhat. The station has the responsibility for research and development works on livestock in the state of Assam.

The LRS Library was established in 1981 along with the establishment of the station at Mondira, Kamrup. The total collection of the library is 2800. The library has collection on the subjects of Livestock, Veterinary medicine and others. One non professional staff is working in the library. The library is operating in a single room attached with main building. There is no library professional in the library.

- **National Bureau of Soil Survey and Land Use Planning (NBSSLUP), 1979**

The regional centre of National Bureau of Soil Survey and Land use Planning was established in 1979 at Jorhat. Initially, it was started in the Assam Agricultural University campus. Later on, it was shifted to Jamuguri Road, Jorhat as a full fledged
institute. Its main activities are research, human resource development and capacity building of farmers through farmers-scientist interaction.

NBSSLUP library was established with the establishment of the institute. The total collection of the library is 6550 including books, periodicals, and newspaper. The library is running by a non professional staff.

- **National Institute of Malaria Research (NIMR), 1986**

  National Institute of Malaria Research (NIMR) was established in 1986 at Sonapur, Kamrup as a field station under Disease Vector Control Project. In 2008, the station was shifted to Chachal, Guwahati. The main objective of the institute is to field test newer interventions for containment of malaria transmission and subsequent transfer of technology to strengthen the national malaria control programme.

  The NIMR library was set up along with the initiation of the institute. The library of the institute is operated by sharing a small space in the office room of the institute. The library has a collection of 350 books. There is no library professional working in the institute.

- **National Institute of Technology (NIT), 1967**

  National Institute of Technology (NIT) was established in 1967 at Silchar as Regional Engineering College. In 2002, it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology. The main objectives of the institute are to train and transform young men and women into responsible thinking engineers, technologists and
scientists, to motivate them to attain professional excellence and to inspire them to proactively engage themselves for the betterment of the society.

NIT, Silchar library was established in 1977. It is a hybrid library with the state-of-the-art technological applications. The Library holds knowledge resources predominantly related to S & T, Social Science and other allied subjects. The library has a total collection of 95000 books including reports, journals, thesis etc. The library is fully computerized which offers different services through the seven library sections such as circulation section, book bank section, reference and readers’ advisory service, acquisition section, periodical section, technical section, computer section

- **National Research Centre on Pig (NRCP), 1990**

National Research Centre on Pig (NRCP) was established in 1990 at Rani, Guwahati by the approval of Indian Council of Agricultural Research (ICAR). The main objective of the centre is to bring in excellence in pig production, health and product processing through innovative research in order to provide technology backstopping for enhanced pork production, employment generation and poverty reduction among socially and economically weaker sections through the medium of pig husbandry.

NRCP library was established along with the establishment of the centre. The library is functioning in a single room attached to the centre. The library has the collection of books on the subjects of Pig, Pig production, Pig health, pork production, Pig husbandry and others. The library is looking after by a non professional staff.
- **North East Institute of Science and Technology (NEIST), 1961**

North East Institute of Science and Technology (NEIST) was established in 1961 at Jorhat by Council of Scientific and Industrial Research (CSIR), New Delhi, as multidisciplinary R&D work relevant to the country in general and North Eastern Region in particular. It was formerly known as Regional Research Laboratory. The institute is mainly involved in R & D activities to develop indigenous technologies by utilising the immense natural wealth of India. The laboratory has generated more than 100 technologies in the areas of Agro-technology, Biological and Oil Field Chemicals. The laboratory also developed expertise in the areas like Natural Products Chemistry, Drug and Drug Intermediates, VSK cement, Plant Technology, Agro-technologies, Petroleum Microbiology and Petrochemicals, Crude oil transportation, Paper and Paper Products, Beneficiation Chemicals, Ecology and Environmental Studies, Geotechnical investigations, Foundation Design Engineering, soil and building materials etc. NEIST library was established with the establishment of the institute. The total collection of the library is 47451 including books, periodicals, and news papers.

- **North Eastern Regional Institute of Water and Land Management (NERIWalM), 1989**

North Eastern Regional Institute of Water and Land Management (NERIWalM) was established on 23rd December, 1989 at Tezpur, Assam under the support of North Eastern Council (NEC), Shillong, Ministry of Development of North Eastern Region (DoNER), Government of India. The institute is an autonomous body and has the regional perspective for development of the entire North Eastern region including Sikkim through utilization of Water and Land Resources. The institute organises
capacity building programmes, conducts action research project on actual field problems and provides technical backup services to various state and central Government organization working in the field of water and land management. The institute is fully financed by North Eastern Council (NEC).

NERIWALM library was set up in conjunction with the establishment of the institute. The library has a total collection of 3500 books along with reports, newspapers and back volumes.

- **Nowgong Polytechnic (NP), 1961**

Nowgong Polytechnic (NP) was established in 1961 at Nagaon as a premier technical institute under the Directorate of Technical Education, Govt. of Assam. The institute is approved by the All India Council for Technical Education, New Delhi. It is affiliated to the State Council for Technical Education (SCTE), Assam under the Directorate of Technical Education, Govt. of Assam. Initially, the institute started functioning from Nagaon ITI building and later in 1965 it was shifted to the present site. The Institute has four braches namely Civil, Electrical, Mechanical and Computer Engineering. There are a good number of laboratories and workshops with well equipped instruments and machineries. The institute offers courses on Diploma in Civil Engineering, Diploma in Mechanical Engineering, Diploma in Electrical Engineering, Diploma in Electronics & Telecommunication Engineering and Diploma in Computer Science & Engineering.
The NP library was started after the establishment of the institute. The library has a total collection of 27049 no. of books including periodical and reports. The library provides lending, reference and reprography service to the users.

- **Padmashree Chandra Prabha Saikiani Girls’ Polytechnic (PCSGP), 1964**

Padmashree Chandra Prabha Saikiani Girls’ Polytechnic (PCSGP) was established in 1964 at Bamunimaidan, Guwahati, as a Diploma level technical institute run by the Govt. of Assam under the Directorate of Technical Education, Assam. It is affiliated to the State Council for Technical Education, Assam. It is the oldest technical institute in the North East Region of India for women offering three year Diploma course in four different disciplines. Formerly, it was known as Girls’ Polytechnic. Later in the year 2004, it was renamed as Padmashree Chandra Prabha Saikiani Girls’ Polytechnic.

The PCPS GP library was established along with the establishment of the institute. The library has a total collection of 17618 books including reference book, journals and reports. The library offers lending service, CAS, SDI and new arrival service to the user.

- **Rain Forest Research Institute (RFRI), 1988,**

Rain Forest Research Institute (RFRI), was established in 1988 at Jorhat, Assam. It is one of the constituent institutes of Indian Council of Forestry Research and Education (ICFRE), Dehradun. The main objective of the institute is to cater the forestry related research & extension needs of the North Eastern Region of the country. In 1998, the ICFRE recognised the excellence of the Centre and upgraded it to a full-fledged
Institute and renamed as Rain Forest Research Institute (RFRI) which was formerly known as Institute of Rain and Moist Deciduous Forest Research (IRMDFR). The mandates of the institute are conservation of forest ecosystem with emphasis on natural regeneration, management of shifting cultivation areas, management of community forests, planting practices for eco-restoration, Conservation and sustainable management of bamboos and rattans.

The RFRI library was established along with the establishment of the institute. The library is functioning in a single room with a total collection of 5715 books. The library offers lending service, CAS, SDI and new arrival service.

- **Regional Drugs Testing Laboratory (RDTL), 2002**

The Regional Drugs Testing Laboratory (RDTL) was established in 2002 at Guwahati as one of the five national laboratories of the Govt. of India for quality control of drugs and cosmetic. It is functioning under the administrative control of the Drugs Controller General of India and subordinate office under Directorate General of Health Services, Ministry of Health & Family Welfare. The main objectives of the laboratory are to ensure systematic quality control of drugs and cosmetic manufactured within the country on behalf of the Central and State Drugs Controller Administration and to assist the Central Drugs Standard Control Organization in the testing of drugs and cosmetic.
The RDTL library was set up along with the establishment of the laboratory. There is no separate room for the library. The library has a total collection of 500 books. The library is operated by a non professional staff.

- **Regional Medical Research Centre (RMRC), 1982**

Regional Medical Research Centre (RMRC) was established in 1982 at Dibrugarh and runs with intramural grant from ICMR and extramural adhoc projects from different funding agencies. It conducts research on cardiovascular diseases, rheumatoid heart disease, cancers, haemoglobinopathies, mosquito-borne diseases (malaria, filariasis, Japanese encephalitis, Dengue), influenza, trematode infections, hepatitis, HIV & AIDS in the North Eastern region. It is one of the six regional centres of Indian Council of Medical Research (ICMR). It covers the most remote and less developed eight states of the north-eastern region of India and is responsible for carrying out Biomedical Research in the region. The centre focuses on the research on Mosquito borne diseases, HIV and drug abuse, Trematode infection, Haemoglobinopathies, Cancer nasopharynx, oesophagus, stomach, Cardiovascular diseases, Medicinal plants of NE India and Nutrition. The mission of the centre is to develop north-eastern states of India in bio-medical research and build up scientific man power. The main goal of Regional Medical Research Centre, NE Region is to promote biomedical research in north-eastern states of India and build up technical man power, making a network of health facilities of the region and to collect information about traditional system of medicine with a multidisciplinary approach.
The RMRC library was established in the year 1982 along with establishment of the centre at Dibrugarh. Total collection of library is 7200 comprising books, periodicals, bound periodicals, reports, conference proceedings, research papers, etc. The library collection consists of the subjects of cardiovascular diseases, rheumatoid heart disease, cancers, malaria, filariasis, Japanese encephalitis, influenza, hepatitis, HIV & AIDS.

- **Regional Meteorological Centre (RMC), 1949**

Regional Meteorological Centre (RMC) was established at Guwahati Airport in 1949. In the year 1997 it was updated to RMC. The RMC is associated with study and research of weather and climate change in Assam and North-East Region of India. The centre is well equipped with modern weather forecasting tools and technologies.

The RMC library was initiated with the establishment of the centre. The library has a collection of 1500 books comprising different subjects of weather, climate, and climate change, climate in Assam and North-East Region of India. There is no library professional in the library.

- **Regional Rainfed Lowland Rice Research Station (RRLRRS), 1997**

Regional Rainfed Lowland Rice Research Station (RRLRRS) was established in 1997 at Gerua, Kamrup as a Regional station of Central Rice Research Institute under Indian Council of Agricultural Research, New Delhi to work on the rice development in Eastern India including Assam. The research station was established to tackle the problems of rainfed uplands, and flood prone rainfed lowlands. The research area of the station are to strengthen the breeding strategy to evolve suitable Sali varieties with
tolerance to flood, development of flood resistant rice varieties for lowland, semi deep and deepwater conditions etc.

The RRLRRS library was started along with the establishment of the station. The library has a total collection of 2500 books covering the subjects of agriculture, rice cultivation, types of land, pesticides, pest, pest control technique and others. There is no qualified library professional in the library. Lending service is offered by a non professional library staff.

- **Regional Sericultural Research Station (RSRS), 1982**

Regional Sericultural Research Station (RSRS) was established in 1982 by Central Silk Board (CSB), Ministry of Textiles, Govt. of India. In order to provide extensive R&D support in muga and eri silk industry in North East India, the Central Silk Board (CSB), Ministry of Textiles, Govt. of India renamed the Central Muga Eri Research Station as Regional Sericultural Research Station, and Regional Muga Research Station.

The RSRS Library was started in 1982 along with the establishment of the station at Jorhat. The total collection of the library is 3700 including books, periodicals, and reports on the subjects of Eri, Muga, Cultivation of nuni tree and others. The library is looking after by a non professional library staff.

- **North Eastern India Ayurveda Research Institute (NEIARI), 1987**

North Eastern India Ayurveda Research Institute NEIARI was established in 1987 at Guwahati, Assam under the Ministry of Health & Family Welfare, Department of Ayush, Govt. of India.
NEIARI Library was introduced in 1987 along with the institute at Bhetapara, Guwahati. Total collection of library is 3200 consisting of books, periodicals, reports, newsletters. The library services are provided by a non professional staff.

- **Residential Girls' Polytechnic (RGP), 1988**

Residential Girls' Polytechnic (RGP) was established in 1988 at Golaghat under the Directorate of Technical Education of Assam. The two branches namely Electronics & Telecommunication and Textile Chemistry & Design offer three year diploma programmes which are duly approved by the AICTE. The RGP library was set up along with the initiation of the institute. The library has a total collection of 7006 books including printed journals and reports.

- **Regional Rice Research Center (RRRC) 1923**

RRRC was established in 1923 at Titabar, Assam under Assam Agricultural University. The centre is associated with the study and research of new varieties of rice, production of high yielding rice in the Brahmaputra valley of Assam. Currently, the center is engaged on the research of reproduction of plants, seeds science, soil science, plants anatomy, plants pathology etc. The main objectives of the center are to promote research and development on current rice cultivation and their site selection for cultivation.

The RRRC Library was started in 1923 at Titabar under Assam Agricultural University. The total collection of library is 2100 consisting of books on the subjects of Rice,
Production of high yielding rice, Seeds science, Soil science, Plants anatomy, Plants pathology, Rice cultivation and others. The library is operating in a single room attached with main building and a non professional staff is working as in-charge of the library.

- **Silchar Polytechnic (SP), 1960**

Silchar Polytechnic (SP) was established in 1960 at Silchar under the Directorate of Technical Education (DTE), Assam and approved by AICTE. The main objective of the institute is to prepare personnel for manning the engineering departments and industries of the country which requires adequate knowledge in know-how and do-how of engineering and technology. The institute provides diploma courses in the field of Civil Engineering, Mechanical Engineering, Electronics & Telecommunication, Electrical Engineering, Science & Humanities approved by DTE Assam and recognised by AICTE.

The SP library was established with the inception of the main institute. The library has a collection of 21890 books which include text books, periodicals, pamphlets reports, proceeding maps, news paper and journals on various topics such as Science, Engineering and other technical and non-technical fields.

- **State Public Health Laboratory (SPHL), 1970**

State Public Health Laboratory (SPHL) was established in 1970 at Bamunimaidan Guwahati, Assam under control of Health & Family Welfare Department, Govt of Assam. The State Public Health Laboratory, Assam is the oldest and one of the major
food testing laboratories in North Eastern India working under the Food Safety and Standards Act, 2006.

SPHL library was established along with the initiation of the laboratory. The collection of the library includes books and reports. The collection is based on the subjects of Food sample, Food analysis, Preventive measures of foods and others. There is no separate room for the library. One non professional staff is working in the library.

- **Sugarcane Research Station (SRS), 1969**

Sugarcane Research Station (SRS) came into existence in the year 1969 at Buralikson, Baruabamungaon, Golaghat, Assam for conducting research on sugarcane in the north east region. The station was earlier owned by the State Department of Agriculture which was later transferred to Assam Agricultural University. The main objectives of this station are to study & research on high yielding sugarcane in dry and wetland areas, to find out variety of pest attack on sugarcane and their control, and also to find out new variety of sugarcane etc.

SRS Library was established in the year 1985 along with the initiation of the station. The collection consists of books and journals on the subjects of Sugarcane, Pest, Pest control, and others. The library is operating within the office room of the station. One non professional staff is working as in-charge of the library.
• **Tezpur University (TU), 1994**

Tezpur University was established in 1994 at Tezpur with the vision to develop human excellence and inculcate leadership through hard work and creativity. The objectives of this Central University are to offer employment oriented and interdisciplinary courses to meet the regional and national aspirations and the development of the state of Assam and also offer courses and promote research in areas which are of special and direct relevance to the region and in the emerging areas in S & T.

The Central Library, Tezpur University was established in 1994 along with the establishment of the University. The library holds 87483 books and subscribes 183 printed journals. The library provides lending service, OPAC Service, SDI service, Orientation Programme for freshers, E-Resource Retrieval Facility, Training & demo on E-Resource retrieval, Content Page Alert service on Current Journals, Current Awareness Services of newly acquired books & other resources, Reference/Information Service, Reservation of Books Service, Reprographic Services.

• **Tocklai Tea Research Institute (TTRI), 1911**

The Tocklai Tea Research Institute was established in 1911 at Jorhat. It is the oldest and the largest research station of its kind in the world. Formerly, it was known as Tocklai Experimental Station. From 1st January, 1964, the management of Tocklai was taken over by the Tea Research Association (TRA) formed as a co-operative research body funded partly by the Council of Industrial and Scientific Research (CSIR) and the Tea Board and partly by members of TRA by way of subscription. From that date the services of Tocklai were made available to all member estates of TRA.
TTRI library came into existence with the inception of the station. But in 1947 central library was developed and finally housed in the main office building. The library has become one of the best special libraries in India. Its stock comprises books, journals and other technical literature. At present, the library holds more than 6700 books, 9 newspapers, 15000 bound volumes of scientific and research journals. Technical literature, bulletins, pamphlets, memorandas, annual reports of other research laboratories, conference proceedings, reprints, reviews, trade journals, maps etc. The library offers lending service, OPAC facility and indexing service to the scientists and technical personnel of the station.

3.6 Library Professionals in Science & Technology Institutes

The libraries in S & T institutes play an important role to offer helping hand in scientific inventions, research and development and in creation of skilled manpower. The exponential growth of published literature in S & T has enhanced the role and importance of libraries in acquiring, organising and communicating the relevant, accurate and precise information to the clientele including scientists and researchers to achieve the organizational goals. These S & T institutes which are included in this study are the centres of higher education, training and research and technical education. The jobs of library professionals in different S & T institutes are not same in respect to their services, designations, remuneration, pay scale and duties. The library professional offers varieties of special services depending upon the nature and type of the S & T institute.
3.7 Summing Up

Though S & T influences the society and mankind, it is seen that the growth of S & T institute in Assam is very slow. The different institutes offer various courses, studies, programmes, schemes, projects, research, training, etc. in different disciplines. The organization and development of the libraries in these institutes are not in standard form except the academic institutes. There is no uniformity of the library professionals’ job in these institutes.