

CHAPTER 8

SCOPE OF EXPORTS AND INVESTMENTS IN SERVICES SECTOR IN ASSAM

8.1. INTRODUCTION

Today, Services Sector has turned to be the most prominent sector of the Indian Economy contributing to 58 per cent of India's GDP. Its impressive growth over the years make it the key driver of India's growth potential in the Indian as well as overseas market. The service sector was robust even during the global recessionary phase in FY2012 by maintaining its growth momentum. This growth has been mainly driven by sectors like tourism, transport and communication, information technology and information technology-enabled services and real estate. It is also the second largest employer after agriculture in India. India's trade in services has been consistently on a rise and the services sector accounts for the largest share in FDI inflows in India.

There has been a paradigm shift in Indian Economy from an agricultural dominating economy to a service dominated economy. In this respect, some economists consider India as an outlier among South Asian countries and other emerging markets. After the economic reforms of the 1990s, India has become a positive outlier in terms of the share of services.

Liberalisation and reforms are considered to be the important factors contributing to the growth of services sector in India. With constant rise in the per capita income of the households, there is a change in their demand pattern and services like education and personal and health care services have come to the forefront as discretionary consumption need. Technological innovations and availability of high skilled manpower in India has also led to the growth of services like information technology (IT) and IT enabled services (ITES). High government expenditures on certain services like community, social and personal services has also led to high growth of services in India.

8.1.1. Classification of the Services Sector in India

In India, the National Income Classification given by Central Statistical Organization is followed. The service sector as per National Income Accounting comprises of the following:

1. Trade, Hotels and Restaurants
 - a. Wholesale and retail trade; repair of motor vehicles and motorcycles
 - b. Accommodation and food service activities
2. Transport, Storage and Communication
 - a. Transportation
 - b. Storage
 - c. Railways
 - d. Information and communication
3. Financing, Insurance, Real Estate, Business Services, Construction
 - a. Financial and insurance activities
 - b. Real estate activities
 - c. Professional, scientific and technical activities
 - d. Administrative and support service activities
4. Community, Social and Personal Services
 - a. Public administration and defence; compulsory social security
 - b. Education
 - c. Human health and social work activities

- d. Arts, entertainment and recreation
- 5. Other service activities
 - a. Activities of households as employers; undifferentiated goods and services producing activities of households for own use
 - b. Activities of extra-territorial organisations and bodies

8.2. CONTRIBUTION OF THE SERVICES SECTOR IN INDIA'S GDP GROWTH

In world GDP of US\$70.2 trillion in 2011, the share of services accounted for 67.5 per cent. The top 15 countries in terms of services GDP includes the major developed countries like Brazil, Russia, India, and China. Among the top 15 countries with highest overall GDP in 2011, India ranked 9th in overall GDP and 10th in services GDP. A comparison of the services performance of the top 15 countries in the eleven-year period from 2001 to 2011 shows that the increase in share of services in GDP is the highest for India (*Economic Survey, 2012-13*).

India's services sector has emerged as a prominent sector in terms of its contribution to national and state income, trade flows, FDI inflows, and employment.

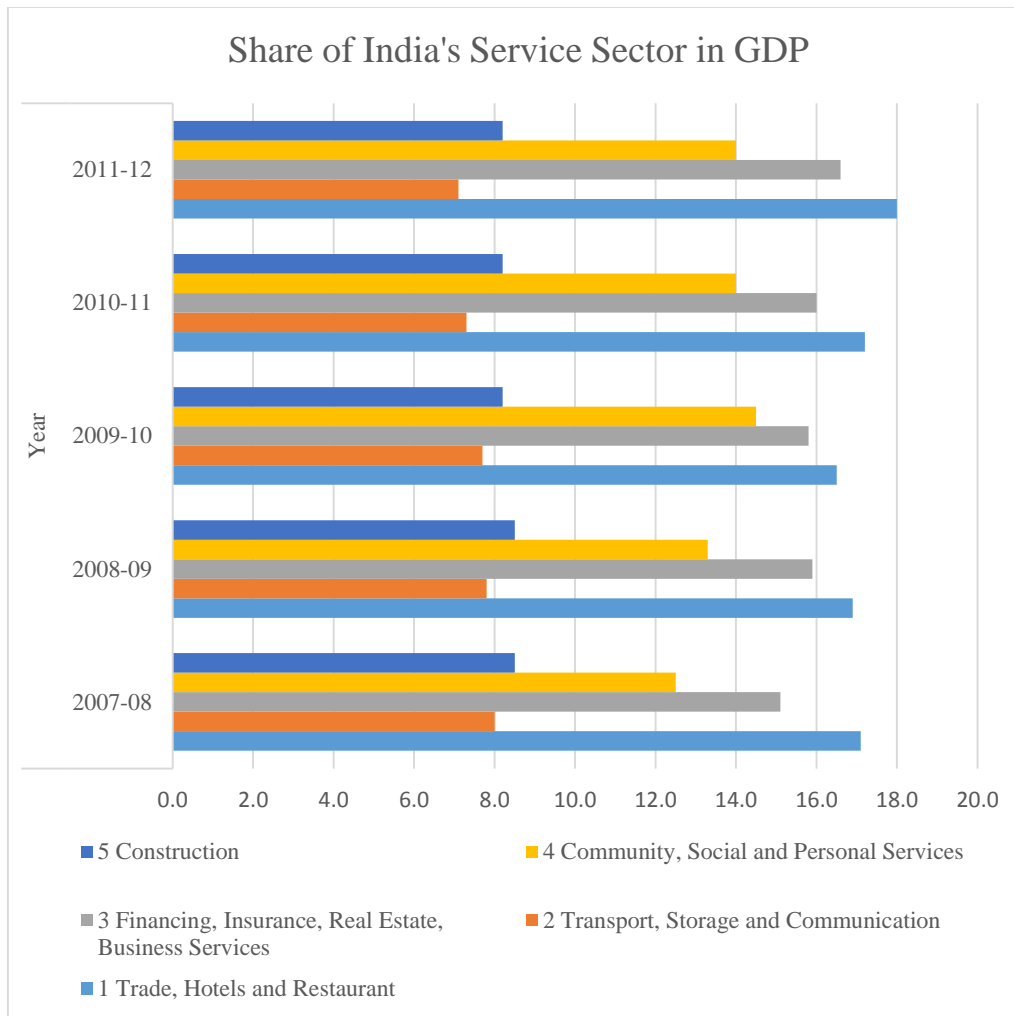


Figure 8.1: Share of Services Sector in India's GDP. **Source:** Central Statistical Organization (CSO)

It could be analysed from figure 8.1 that the share of services in GDP of India have increased from 61.2 per cent in 2007-08 to 63.9 per cent in 2011-12. With an 18.0 per cent share, trade, hotels, and restaurants as a group is the largest contributor to GDP among the various services, followed by financing, insurance, real estate, and business services with a 16.6 per cent share. Both these services showed perceptible improvement in their shares over the years. Community, social, and personal services with a share of 14.0 per cent is in third place. Construction, a borderline services inclusion, is at fourth place with an 8.2 per cent share and Transport, Storage and Communication is at fifth place with a 7.1 per cent share in GDP.

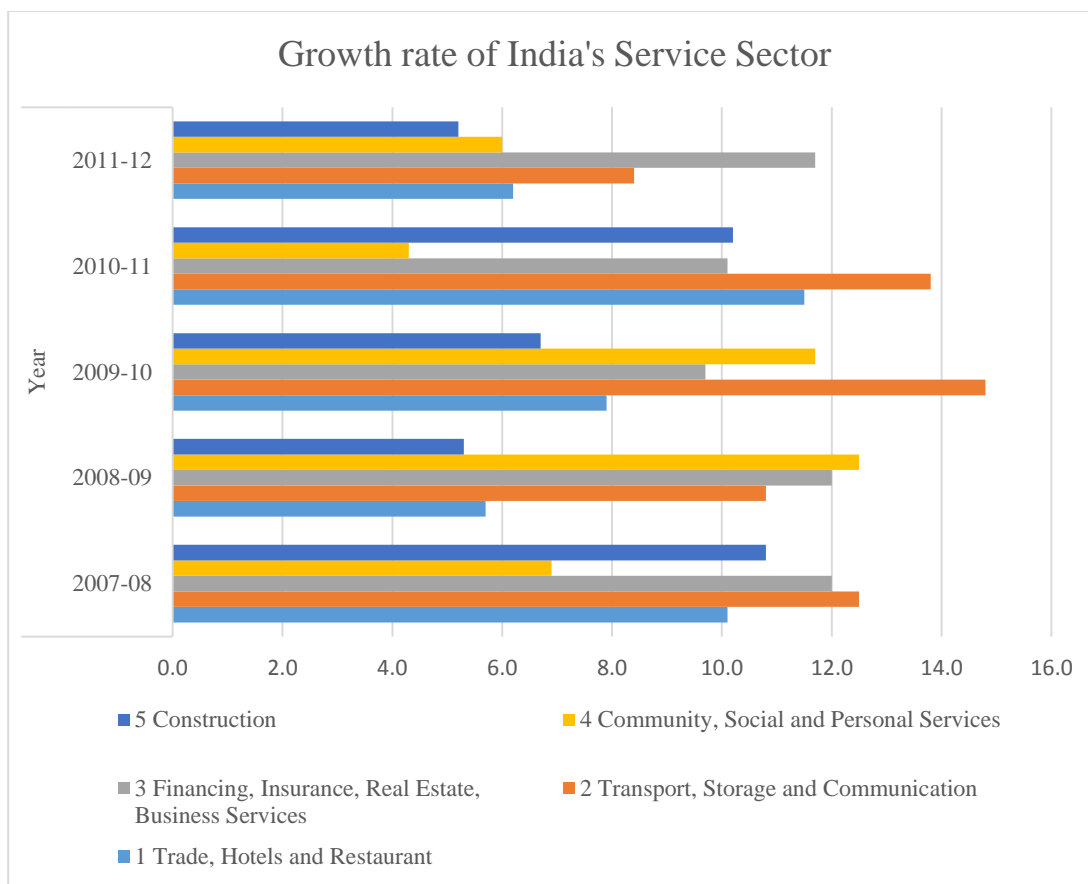


Figure 8.2: Growth Rate of India’s Service Sector. **Source:** Central Statistical Organization (CSO)

The CAGR of the services sector GDP for the period 2007-08 at 10.3 per cent has been higher than 7.9 per cent CAGR of overall GDP during the 2011-12 period which could be seen in figure 8.2 above. In 2010-11 and 2011-12, there has also been a deceleration in growth rate of services sector at 9.8 per cent and 7.9 per cent respectively. Among the major broad categories of services, ‘financing, insurance, real estate, and business services’, continued to grow robustly both in 2010-11 and 2011-12 at 10.1 and 11.7 per cent respectively. While in 2011-12 growth in ‘trade, hotels, and restaurants’ and ‘transport, storage, and communication’ slowed down to 6.2 per cent and 8.4 per cent respectively.

8.3. TRADE AND INVESTMENT IN SERVICES IN INDIA

Reforms along with technological advancements, growth of multinational corporations and new modes of supply models developed by GATS (General Agreement of Trade in Services), and large unsaturated domestic market have enhanced India's trade and investment in services.

8.3.1. Exports in Services in India

The General Agreement in Trade in Services (GATS) under the World Trade Organization (WTO) covers four Modes of delivery of services in cross-border trade.

Mode 1 - Cross Border Supply

Mode 2 - Consumption Abroad

Mode 3 - Commercial Presence

Mode 4 - Movement of Natural Persons

Ministry of Commerce and Industry, Government of India, with a view to give proper direction, guidance and encouragement to the Services Sector, has set up an exclusive Export Promotion Council for Services in the name of Services Export Promotion Council (SEPC). SEPC was registered under the Societies Registration Act in November, 2006. SEPC has been mandated to promote export of services in the following sectors:-

- Healthcare Services
- Legal Services
- Accounting and Auditing Services
- Hotel and Tourism Related Services
- Environmental Services
- Entertainment Services
- Maritime Transport Related
- Distribution Services
- Architectural Services

- Educational Services
- Advertising Services
- Consultancy Services
- Marketing Services
- Printing and Publishing Services

Services export is one of the key thrust areas of the Government of India. As per WTO, it ranked India as 8th largest exporter (3.3% of world exports) and 7th largest importer (3.1% of the world imports), in commercial services trade. Services exports have recorded about seven fold increases in ten years from US\$ 20.76 billion in 2002-2003 to US\$ 142.325 billion in 2011-2012 and US\$ 105.84 billion up to December, 2013 (*SEPC, 2015*).

India's share of services exports in the world exports of services, which increased from 0.6 per cent in 1990 to 1.0 in 2000 and further to 3.3 per cent in 2011, has been increasing faster than the share of merchandise exports in world exports.

The composition of India's services exports has undergone significant change, away from traditional services such as transport and travel towards miscellaneous services, in particular, business services, the main item being software services. Software services alone have contributed close to 40 per cent of total services exports indicating the growing importance of this segment and India's growing competitiveness in the Information Technology (IT) and IT-enabled services sector. Other miscellaneous services, mainly business services have also become important in India's services exports.

Figure 8.3 depicts the overwhelming share of total services exports which is accounted for by the software and other miscellaneous services in 2012. These two services segments also emerges as the most important net foreign exchange earner within the service sector. Services such as News Agency Services and Royalties, Copyright and License Fee are not into trade so far as India is concerned.

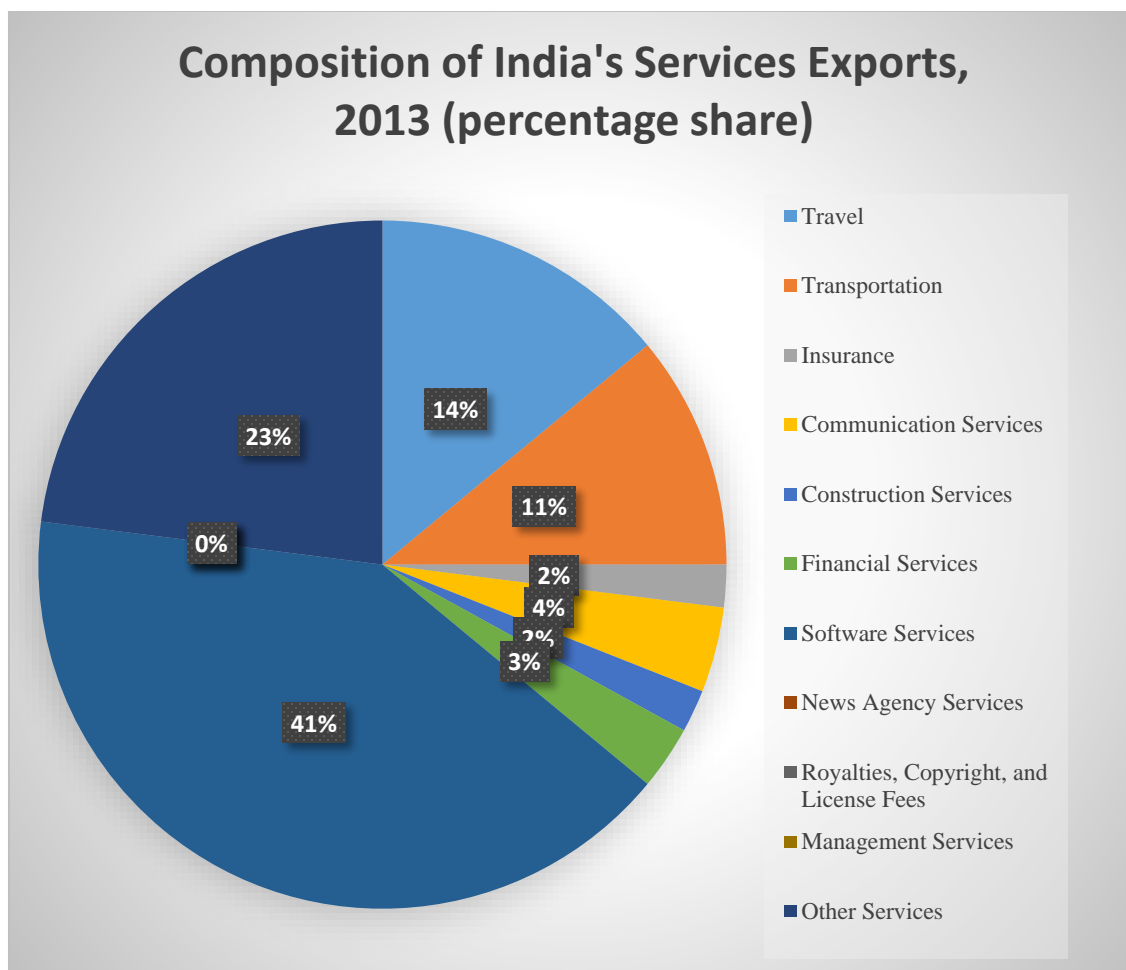


Figure 8.3: Composition of India's Services Exports, 2012 (percentage share). **Source:** Reserve Bank of India

8.3.2. Investments in Services in India

FDI in services has also grown over the past decade, in part reflecting the liberalization of many erstwhile government monopoly services such as telecommunications, banking, and insurance during the 1990s. Services today account for around 50 per cent of India's total FDI flows. A 2004 World Bank study finds that the FDI in services has grown more rapidly than the FDI in manufacturing in India.

The average share of various services segment in India's inward FDI flows is shown in figure 8.4. It indicates that software services and finance, insurance, real estate, telecom,

and various business services (here all aggregated) accounted for over 30 per cent of India's inward FDI inflows.

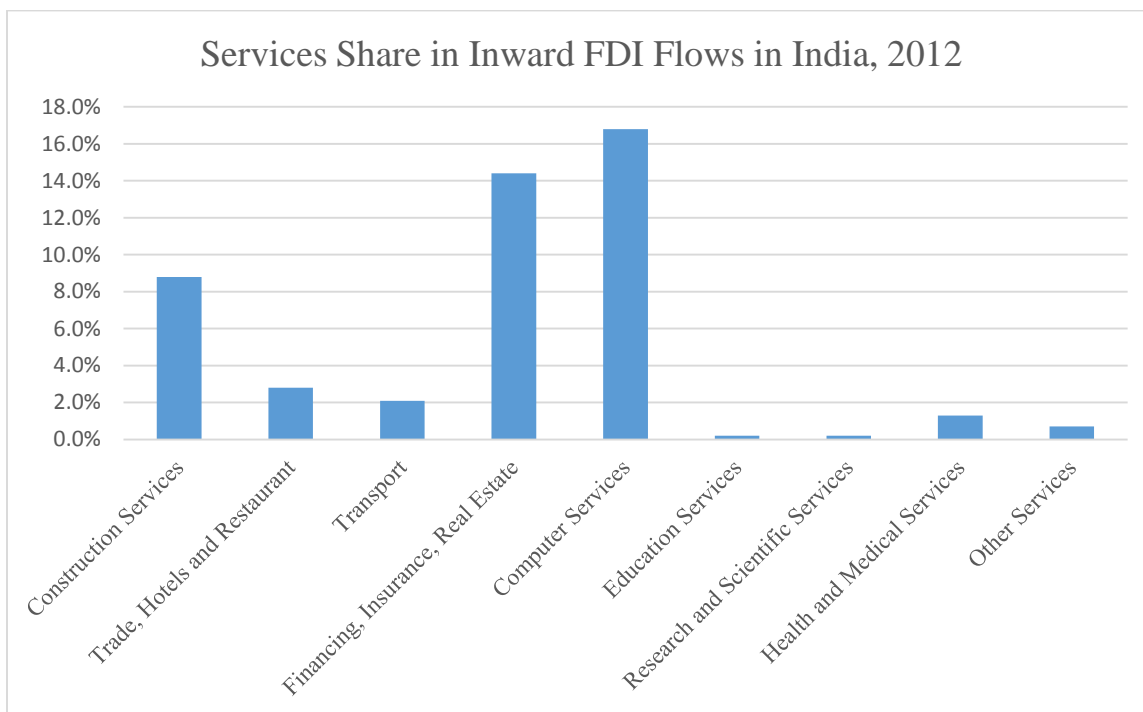


Figure 8.4: Services share in Inward FDI Flows in India, 2012. **Source:** Reserve Bank of India

8.3.2.1. Services Liberalization in India

The services sector has been an integral part of India's overall reform process. Key services such as telecom, banking, and insurance have been gradually opened up to FDI, with relaxation of foreign equity ceilings and institution of more transparent and streamlined FDI regulations. The services sector is also becoming an important part of India's bilateral and regional initiatives, as there is growing recognition of the role such agreements can play in enhancing India's export interests in the service sector while also inducing the much needed FDI and technology transfer in key services such as telecom, transport, logistics, and construction, among others, with clear efficiency and productivity spill overs for the economy.

Telecommunications services have experienced the greatest amount of liberalization. Today, fully owned firms are allowed in several segments of the telecom sector. Similarly, in financial services, there has been considerable liberalization since 1991. From an earlier limit of 20 per cent minority participation for foreign banking companies or financial companies in private Indian banks, through technical collaboration or through the Foreign Investment Promotion Board (FIPB) route, the limit has been raised considerably since then. There are other areas such as health services, and construction and engineering services where India has autonomously liberalized fully. In the higher education services sector, there has been considerable domestic debate about the desirability of liberalization but foreign equity participation has been permitted up to 100 per cent under the automatic route since 2000 for entry through franchises, twinning arrangements, study centres, and program collaboration. In the distribution services sector, unilateral liberalization has varied across segments. While non-retail segments such as wholesale trading, export trading, cash and carry are permitted up to 100 per cent through automatic route, the retail segment is only partially open up to 51 per cent in single brand retailing subject to FIPB approval and subject to certain conditions. Another service sector where there is strong domestic stakeholder sensitivity is accountancy services. However, the sector remains closed to FDI and foreign services providers are not allowed to undertake statutory audit of companies in India. In the legal services sector, there is domestic opposition to the opening up to foreign commercial presence as well as cross-border delivery of legal services.

Thus, the approach to autonomous liberalization is varied considerably across sectors.

8.4. CONTRIBUTION OF SERVICES SECTOR IN ASSAM'S GSDP GROWTH

Presently, the services sector holds a place of prominence in the share of GSDP estimates in the economy. The sectoral composition of GSDP of Assam has undergone a considerable change during the past few years. It has been observed from figure 8.5 that share of Agriculture and Allied sector in the GSDP has declined from 26 per cent in 2004-05 to 22

per cent in 2011-12. A similar trend is also seen in case of industry sector which has come down from 27 per cent in 2004-05 to 22 per cent in 2011-12. But the services sector has shown an encouraging trend in the state economy.

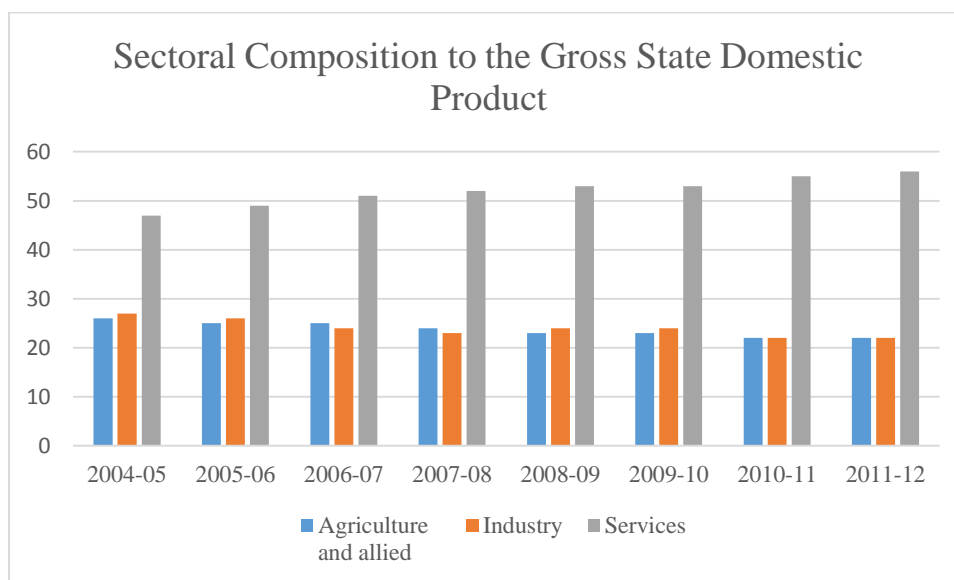


Figure 8.5: Sectoral Composition to the Gross State Domestic Product. **Source:** Directorate of Economics and Statistics, Assam

It is consistently showing an upward trend from 2004-05 to 2011-12 with a percentage contribution of 56 per cent in 2011-12. The state economy has witnessed a picturesque change over the periods as the primary sector witnessed a shift to services sector and the services sector has flourished very rapidly in the State's economy. This is mainly due to the rapid diversification in the Communication Sector, Transport Sector, Trade and Business Services, Banking Services, Hotel and Catering Services and ancillary services.

Sector	Percentage Change over Previous Year		
	2009-10	2010-11	2011-12
Trade, Hotels and Restaurant, Transport, Storage and Communication	8.6	8.65	7.22
Banking and Insurance, Real Estates and Business Services	10.41	15.16	13.49

Public Administration and Other Services	11.45	13.57	10.17
Total Services	10.01	11.57	9.34

Table 8.1: Services Sector Growth Rate at Constant (2004-05) Prices. **Source:** Directorate of Economics and Statistics, Assam

Although the growth of the services sector has gone down to 9.34 per cent in 2011-12 from 11.57 per cent in 2010-11 as can be seen from table 8.1, but the services sector has radically changed the structure of the state economy and generated sufficient level of employment particularly in the private sector of the economy. It is hoped that this sector would be able to provide larger employment opportunity for the young generation of the state in the near future.

8.5. EXPORTS AND INVESTMENTS IN SERVICES IN ASSAM

As it has been previously mentioned in the introductory chapter 3 that in terms of the outstanding investments of the total outstanding investments, the services (other than financial) sector accounted for around 34.0 per cent in Assam. Most of the domestic investments that is occurring within the state is the result of Public-Private Partnership Projects (PPP).

The FDI induced liberal policy of the Government has failed to make any headway in attracting FDI in the state. This reflects the apathetic situation of the region in so far as investment climate is concerned.

Trade liberalization in services sector is yet to be realized in the state of Assam, when trade liberalization has become a success story as far as Indian Economy is concerned. Although services sector has tremendous potential to generate investments through exports, but it has still not been turned into a reality.

8.6. SCOPE OF EXPORTS IN SERVICES IN FEW SELECTED SECTORS OF ASSAM

To understand and analyse the scope of exports in the state of Assam in the services sector in the days to come, a primary study has been conducted considering two services namely –Education Services and Information Technology (IT) and Information Technology Enabled Services (ITES). As it has been already mentioned above that there is no data as of now available in terms of exports in services from the state of Assam. Therefore, to understand and analyse the scope of exports in Higher Education sector, a total of 10 universities from around the state have been taken into account to study whether exports is taking place in this sector and in which mode of delivery of services, cross-border trade is happening. Similarly, 10 Information Technology companies have been taken into account from around the state to see and analyse whether there is any scope of exports in this sector and presently which mode of delivery of services of cross border trade is happening in this industry.

8.6.1. Overview of the Higher Education Sector

The Indian Higher Education System has been exhibiting an impressive growth in the last two decades. The country is fast moving towards becoming one of the world’s largest system of higher education. As marked by Adam Smith, the great economist, “It is the comparative advantage in human skills that gives nations an edge rather than just a difference in physical endowments”. The number of institutions have been growing annually, especially the private sector has a key role to play in the growth of the higher education sector particularly in the field of Engineering and Management.

In the last decade, the number of universities in the country has grown at CAGR of 7.5 per cent, number of colleges has grown at CAGR of 11 per cent (*UGC, 2013*). India’s higher

education system is the world’s third largest with respect to student enrolment next only to China and USA (UGC, 2010).

Higher Indian Education Landscape

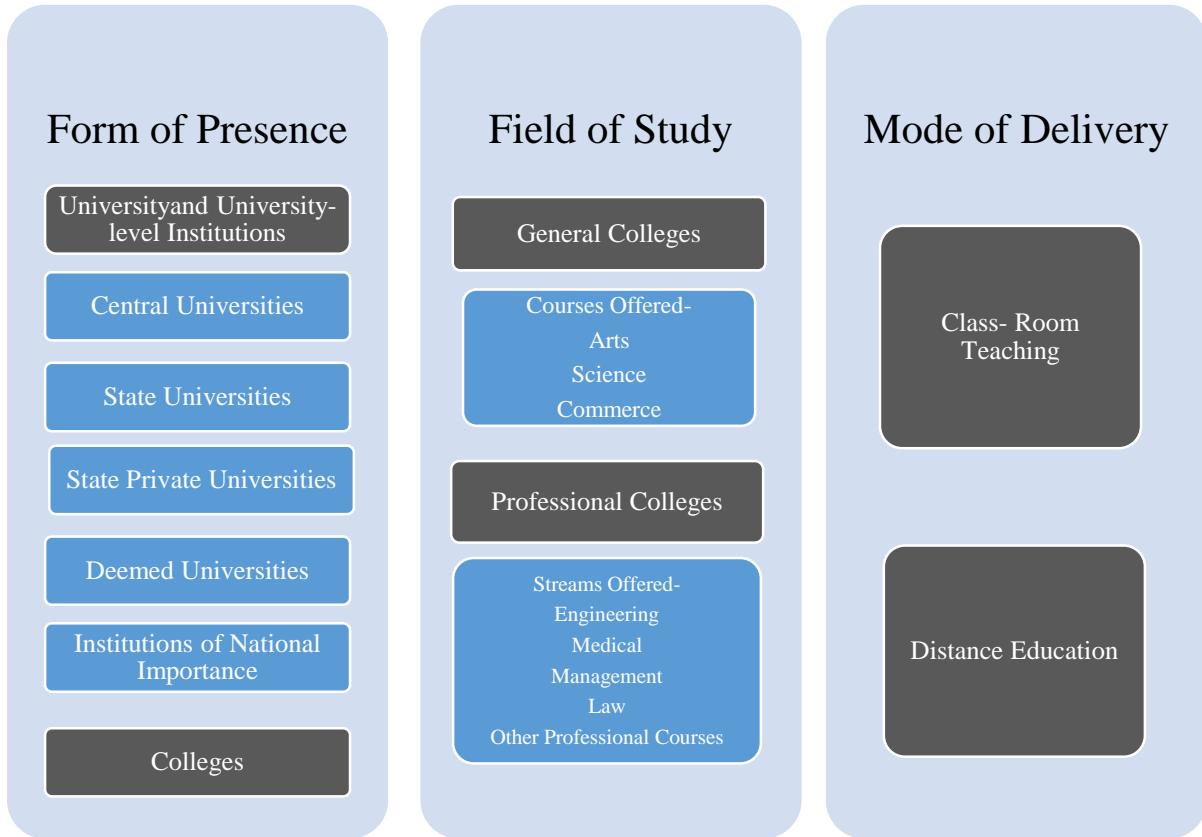


Figure 8.6: Higher Education System Landscape. **Source:** FICCI, UGC

With internationalization becoming the buzzword in today’s world, education services have started moving across borders through education service providers. General Agreement on Trade in Services (GATS) covers four modes of delivery of services in cross border trade in education services.

Cross Border Services (Mode 1)	Cross Border Supply of Education Services using Technological means.
Consumption abroad (Mode 2)	Usage of Educational services in the territory of another country.

Commercial Presence (Mode 3)	Expansion of an Educational Institute Into a Foreign Country.
Movement of natural persons (Mode 4)	Educational Professionals enter into a foreign territory to provide their services.

The worldwide market for education services is rising faster than the growth rate observed in many countries. In general, the education services are mostly traded through student mobility (Mode 2). The governments of many developed and developing nations are of the idea that mobility needs to be promoted. The Association of Indian Universities have been constantly working to upgrade the scale of inflow of foreign students in the country and presently the country is witnessing a little over 25,000 in 2013 of International students in various prominent Indian Universities.

Some developing countries are also trying to establish a strong presence in the foreign markets by trying to establish their subsidiary in the foreign land. Sensing a huge demand for professional education, a number of foreign education providers have opened their operations across different parts of the country. Government of India has allowed 100 per cent FDI in higher education. Majority of the foreign providers are opening in India through collaborations made with Indian Institutions.

Assam boasts of the most wide ranging networks of higher educational institutions in the whole of North-Eastern Region of India. Assam has developed into a top educational destination at the state as well as at the national level. Directorate of Higher Education has been established at the state level for expansion and promotion of Higher Education and also providing financial grants to institutions during the time of crisis of the institutions. The number of institutions under the administrative control of Higher Education in Assam are as follows:

Type of Institutions	State (General)	Central	Private	Total Number of Institutions
Universities	5	2	3	10
Govt. Colleges	7	-	-	7
Provincialized Colleges	189	-	-	189
Non-Govt. Colleges	175	-	-	175
Adhoc Law Colleges	5	-	-	5
Others	199	-	-	199
			Total	585

Table 8.2: Number of Institutions in Assam. **Source:** Directorate of Economics and Statistics, Assam, 2012-13

The number of state technical institutions and state medicals colleges have also risen over the years with a number of initiatives being taken up by the Directorate of Technical Education and Directorate of Medical Education respectively.

8.6.1.1.A Collective Study on 10 Educational Institutions in Assam

It has been rightly mentioned above that a primary study has been done on the education sector to understand its present status in terms of exports and its future possibilities of enhancing exports in this sector. Since the study is confined to the higher education system, a total of 10 universities from around the state is studied. The ten universities considered are as follows:

List of Universities under Study	
Sl. No.	Name of the University
1	Assam Don Bosco University
2	Assam Down Town University
3	Kaziranga University

4	Gauhati University
5	Dibrugarh University
6	Cotton College State University
7	Assam Science and Technology University
8	K.K. Handiqui State Open University
9	Assam University
10	Tezpur University

The following information was collected from all the 10 universities named above for the present study:

1. Type of Institution:

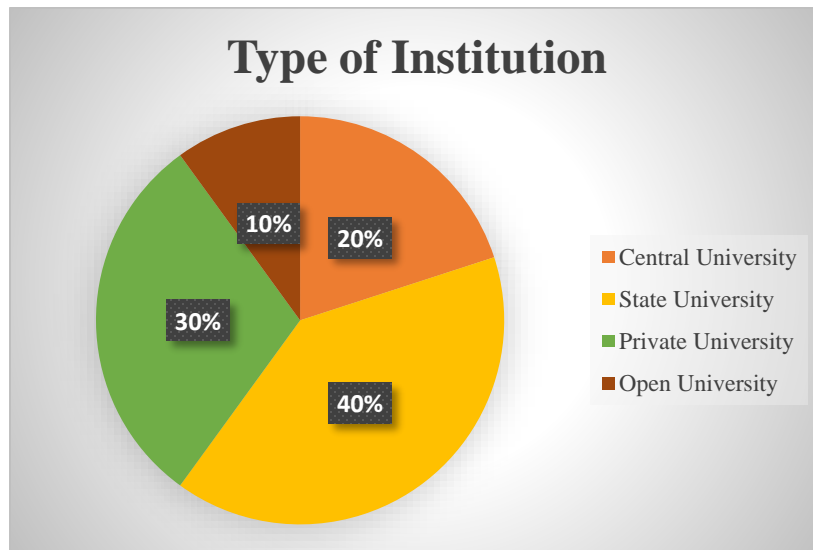


Figure 8.7: Type of Institution. **Source:** Field Study, Author

Data Analysis

- The figure clearly depicts that out of 10 universities considered, four are state universities, three are private universities, two are Central Universities and one is

Open University. A good mixture of all kinds of Universities in the Higher Education Sector are considered.

- This indicates that the Directorate of Higher Educations is encouraging all forms of educational institutions in the state.

2. Year of Establishment:

Data Analysis

- Year of establishment of the various Universities vary from each other.
- Moreover, it could be seen that the Private Universities within the state have mushroomed up very recently.
- There are two state universities which are in their nascent stage of establishment.
- Other than that, both the Central Universities and the other State Universities are established names in the state.

3. Courses Offered:

- Courses offered by the 10 Universities ranges from Undergraduate Courses, Post-Graduate Courses, Integrated Master's Degree, M.Phil., PhD, Certificate Courses, Vocational Courses, Post-Graduate Diploma Programmes, Distance Learning Courses, D.Sc./D.Litt., IPP, Online Courses.

Data Analysis

- It could be very well understood that all the Universities are offering all the conventional/ general courses. But apart from that, Universities now are also emphasizing on offering professional courses which are becoming very popular in the state.
- The private universities are offering online courses which is a very new concept in this part of the region.

- Integrated Master's Degree is also booming in the region which are being offered by the Private Universities and few state universities.
- The striking part is Central Universities are not offering unconventional courses like Integrated Master's Degree and Online Distance Learning Courses which are becoming popular in today's time. Rather, they are sticking to the basic conventional courses.

4. Number of Schools/ Departments /Centre:

- Assam Don Bosco University has three schools and number of departments under its banner.
- Assam Down Town University has five schools and number of departments under its banner.
- Kaziranga University has four schools and number of departments under its banner.
- Cotton College State University has five schools and number of departments under its banner.
- Gauhati University has five basic functional Schools and number of Departments.
- K .K. Handiqui State Open University has six Departments.
- Presently, Assam Science and Technology University has various departments under its affiliated colleges.
- Assam University has 16 schools and 35 departments under the various schools.
- Tezpur University has four schools and number of departments under its banner.
- Dibrugarh University has five schools and number of Departments under its banner.

Data Analysis

- As the Universities keep growing with time, it could be seen that the number of Schools and Departments under each school is rising consistently indicating that the Universities are continuously updating and enhancing new courses with passage of time.

5. Total intake capacity of students:

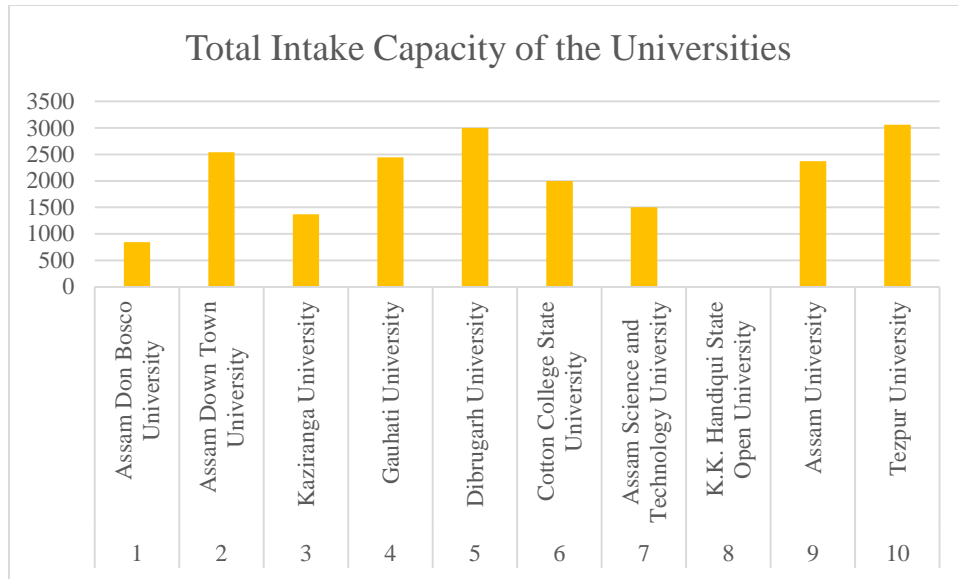


Figure 8.8: Total Intake Capacity of the Universities. **Source:** Filed Study, Author

Data Analysis

- It could be seen from the figure 8.8 above, that the intake capacity of every University vary greatly from each other.
- Those Universities who offer diversified courses, their total intake capacity is also relatively higher. The Central Universities like Tezpur University and Assam University have a relatively higher total intake capacity. State University like Dibrugarh University has a total intake capacity of around 3000 students.
- Since K.K. Handiqui State Open University is an Open University, therefore, their intake capacity is open.

6. Provision for Student Exchange Programmes:

Sl. No.	Name of the University	Student Exchange Programme
1	Assam Don Bosco University	Yes
2	Assam Down Town University	Yes

3	Kaziranga University	Yes
4	Gauhati University	Yes
5	Dibrugarh University	Yes
6	Cotton College State University	Yes
7	Assam Science and Technology University	No
8	K.K. Handiqui State Open University	No
9	Assam University	Yes
10	Tezpur University	Yes

Table 8.3: Provision for Student Exchange Programmes. **Source:** Field Study, Author

Data Analysis

- It could be seen from the above data depicted in table 8.3 that all the Universities excepting two has provision for Student-Exchange Programmes. This indicates that possibility and scope of Exports in Education Services under Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade is possible.

7. Absorption of Foreign Students in the Universities:

Sl. No.	Name of the University	Foreign Students
1	Assam Don Bosco University	Yes
2	Assam Down Town University	Yes
3	Kaziranga University	Yes
4	Gauhati University	Yes
5	Dibrugarh University	Yes
6	Cotton College State University	No
7	Assam Science and Technology University	No

8	K.K. Handiqui State Open University	No
9	Assam University	Yes
10	Tezpur University	Yes

Table 8.4: Foreign Students Studying in the Universities. **Source:** Field Study, Author

Data Analysis

- As it was rightly mentioned in the previous analysis that possibility of Exports in Education Services under Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam is possible. But the data compiled in table 8.4 reveals that Exports in Education Services under Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam is happening from eight of the universities out of 10 universities under study.
- Although, the number of foreign students in the eight universities ranges from 2 to 10, but this positive sign indicates that there is a huge potential in the Education Sector of Assam to attract foreign students from the neighbouring countries as well as from other parts of the world in the days to come.
- In other words, Exports in Education Services under Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam is taking place but the revenue generated from it by the Universities is quite low as the intake is relatively low at present state.

8. Course fee and Concessions in Tuition Fee for Foreign Students:

Sl. No.	Name of the University	Same Course Fee for Foreign Students	Concessions In Tuition Fee for Foreign Students
1	Assam Don Bosco University	Yes	No
2	Assam Down Town University	Yes	No
3	Kaziranga University	Yes	No
4	Gauhati University	No	Yes

5	Dibrugarh University	No	Yes
6	Cotton College State University	No	Yes
7	Assam Science and Technology University	No	No
8	K.K. Handiqui State Open University	No	No
9	Assam University	No	Yes
10	Tezpur University	No	Yes

Table 8.5: Course fee and Concessions in Tuition Fee for Foreign Students. **Source:** Field Study, Author

Data Analysis

- Excepting the three private universities in the state, three state universities and two Central Universities are not charging same fee for foreign students. Rather, they are providing concessions in tuition fee for foreign students.
- This is an important strategy that could also be adopted by the private universities to attract more and more foreign students in the state and allow Exports to boost up through Mode 2 supply.

9. Facilities provided to foreign students:

Sl. No.	Facilities Provided to Foreign Students	Charged/Free
1	On-campus accommodation	Charged
2	Library	Free
3	Internet access	Free
4	Cafeteria	Charged
5	Food	Charged
6	Personal Computer	No

7	Work Station	Free
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Table 8.6: Facilities provided to foreign students. **Source:** Field Study, Author

Data Analysis

- It could be seen that from the table above that most of the facilities that are provided within the premises of the University are charged. But facilities such as internet access and work stations are provided to all free of cost, which are vital components of academic life.

10. Overseas branch of the University:

- Out of the 10 universities under study, none of the universities have any overseas branch outside the country of India.

Data Analysis

- Since none of the Universities have overseas branch, this indicates that exports in Education Services under Commercial Presence (Mode 3) mode for delivery of services in Cross-Border Trade in Assam is not taking place.
- The scope of Commercial presence in the foreign land can also happen with Private Universities coming into prominence in the field of Education in Assam.

11. Joint Ventures/ Collaborations with Foreign affiliates:

Sl. No.	Name of the University	Joint Ventures/Collaborations with Foreign Affiliates
1	Assam Don Bosco University	Yes
2	Assam Down Town University	Yes
3	Kaziranga University	Yes

4	Gauhati University	Yes
5	Dibrugarh University	Yes
6	Cotton College State University	No
7	Assam Science and Technology University	No
8	K.K. Handiqui State Open University	No
9	Assam University	Yes
10	Tezpur University	Yes

Table 8.7: Joint Ventures/ Collaborations with Foreign affiliates. **Source:** Field Study, Author

Data Analysis

- Excepting three universities, the Universities have gone for foreign collaborations with foreign universities. Foreign collaborations also enhance the chances of foreign students coming into the University through Student Exchange programmes.
- This would augment the possibility of Exports in Education Sector of Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam.
- Collaborations with foreign institutions also enhances the chance of getting FDI in the host country.

12. Online Courses offered and enrolment of foreign students in the courses:

Sl. No.	Name of the University	Online Courses Offered	Foreign Students enrolled in the online courses
1	Assam Don Bosco University	Yes	Yes
2	Assam Down Town University	Yes	Yes
3	Kaziranga University	Yes	Yes
4	Gauhati University	No	No

5	Dibrugarh University	No	No
6	Cotton College State University	No	No
7	Assam Science and Technology University	No	No
8	K.K. Handiqui State Open University	No	No
9	Assam University	No	No
10	Tezpur University	No	No

Table 8.8: Online Courses offered and enrolment of foreign students in the courses. **Source:** Field Study, Author

Data Analysis

- It could be clearly seen from the above data that all the three private universities of the state are offering online courses. Most importantly, majority of the students enrolled in the said courses are foreign students.
- This indicates that Exports in Education Services under Cross-Border Services (Mode 1) mode for delivery of services in Cross-Border Trade in Assam is taking place.
- The rest of the seven universities including the Central and State Universities are not offering any such course. But there is a huge scope in the future for exports under this mode for delivery of services in Cross-Border Trade.

13. Faculties Visiting Foreign Colleges and Guest Lectures at Foreign Colleges:

Sl. No.	Name of the University	Faculties Visiting Foreign Colleges	Faculties acting as Guest lecturers in the foreign colleges
1	Assam Don Bosco University	Yes	Yes
2	Assam Down Town University	Yes	Yes
3	Kaziranga University	Yes	Yes

4	Gauhati University	Yes	Yes
5	Dibrugarh University	Yes	Yes
6	Cotton College State University	Yes	Yes
7	Assam Science and Technology University	No	No
8	K.K. Handiqui State Open University	No	No
9	Assam University	Yes	Yes
10	Tezpur University	Yes	Yes

Table 8.9: Faculties Visiting Foreign Colleges and Guest Lectures at Foreign Colleges. **Source:** Field Study, Author

Data Analysis

- There are eight out of 10 universities whose faculties visit foreign colleges. In these, universities, few faculties are also acting as Guest Lecturers in the foreign colleges but the number of faculties acting as guest lecturers in the foreign colleges is relatively low and the number is ranging from 5 to 10.
- Since Educational Professionals are moving to foreign territories to provide their services, therefore, Exports in Education Services under Movement of Natural Persons (Mode 4) mode for delivery of services in Cross-Border Trade in Assam is taking place.

8.6.2. Overview of the Information Technology (IT) Sector

The Indian Software and Information Technology industry has started growing with the inception of liberalization policy in 1991. The industry grew with a growth rate of over 37.5 per cent per year from 1995 to 2000. The contribution of the sector in the overall GDP growth rate accounted for more than 28 Per cent from 2000 to 2002. Moreover, domestic software has grown at 46 per cent while software exports have grown at 62 per cent in the

last 5 years. Information Technology Enables Services (ITES) have also been important contributors to rapid growth of Indian Economy.

The sector also has a great potential of generating employment opportunities up to 2 million by 2014 (*Economic Survey, 2012-13*). Software exports are also contributing greatly towards the overall export growth of the nation. Software exports contributed to about 20 per cent of India's total export revenue in 2003-04. The figure has increased to more than 44 per cent in 2013.

The contribution of the software services sector in the country has been in many forms:

- Creation of Jobs

The software and ITES-BPO sectors accounted for 8, 13, 000 jobs in 2003-04. Of these, nearly 5, 00, 000 jobs in software and 2, 45, 000 jobs in ITES-BPO were created in export-oriented activities alone.

- Expanding the base of entrepreneurs

Apart from creation of jobs for technical professionals, the software industry has provided opportunities for expanding the base of entrepreneurs as the initial start-up costs are low and economies of scale do not become significant for services enterprises.

- Reversing the brain drain

The brain drain issue in India has fairly reduced as renewed opportunities are created within the country.

- Creating a Brand Value for the country in Knowledge-based Industries

With the emergence of outsource of knowledge-intensive services such as software, it has helped the country change its public persona and the potential of the country in knowledge-based industries has rightly surfaced into the limelight.

- Capital Inflows

The development of the software industry has led to an increased flow of capital into the country in various forms, namely, FDI by MNCs in their subsidiaries in India, Foreign Institutional Investments in India in the stock purchases of software companies, and capital raised abroad through exports.

The Indian Software industry has been specializing in the export of low-end software development services which has created a niche primarily in the field of low cost and availability of pool of talents. Because of this ready advantage, two-thirds of the Indian Software industry revenue is generated from exports. Indian suppliers provide three types of software outsourcing (*Arora et al., 2001*). First, onsite consultancy at clients' premises, or "bodyshopping," involves software professionals who act as temporary employees of clients. Second, software and technology development contract work in contrast is almost entirely in India and then outsourced to the foreign client. Third, the mixed case involves work both onsite at the client's premises and in India, typically with an initial team that specifies the project inside the client firm and with the bulk of development following in India.

General Agreement on Trade in Services (GATS) covers four modes of delivery of services in cross border trade in business-related services. Typical examples of trade in Software Services in four modes of supply are as under:

Cross Border Services (Mode 1)	Cross border supply of IT-related services using technological means.
Consumption abroad (Mode 2)	Usage of IT-related services in the territory of another country.
Commercial Presence (Mode 3)	Expansion of an IT firm into a foreign country.
Movement of natural persons (Mode 4)	IT professionals enter into a foreign territory to provide their services.

Information Technology in Assam is still in its nascent stage of development. But till recently, a number of IT and ITES companies have been set up in the state. With a view to promote trade and investment in the field of IT, the Government of Assam has amended the Information Technology Policy of Assam, 2000.

Under the policy, Software Technology Park (STP) would also be set-up in the state. At present, STP is under operation adjacent to LGB International Airport in Guwahati, and an STP park is under construction at Azara, in Kamrup District, Guwahati. Presently, 26 units got registered under STP, other units are under various stages of implementation.

8.6.2.1. A Collective Study on 10 Information Technology Companies in Assam

It has been rightly mentioned above that a primary study has been done on the Information Technology (IT) sector to understand its present status in terms of exports and its future possibilities of enhancing exports in this sector. A total of 10 Information Technology Companies from around the state is studied. The ten companies considered are as follows:

List of Companies	
Sl. No	Name of the Organization
1	Zaloni Technologies
2	Bohniman Systems (P). Ltd.
3	I Innovation Technologies
4	WEBX Technologies Pvt. Ltd.
5	Scube Solutions
6	Glomindz Software (P) Ltd
7	Web.com (India) Pvt. Ltd.
8	Zantrik Technologies Pvt. Ltd.
9	ABH Software
10	Vasp Technologies

The following information was collected from all the 10 companies named above for the present study:

1. Type of Organization:

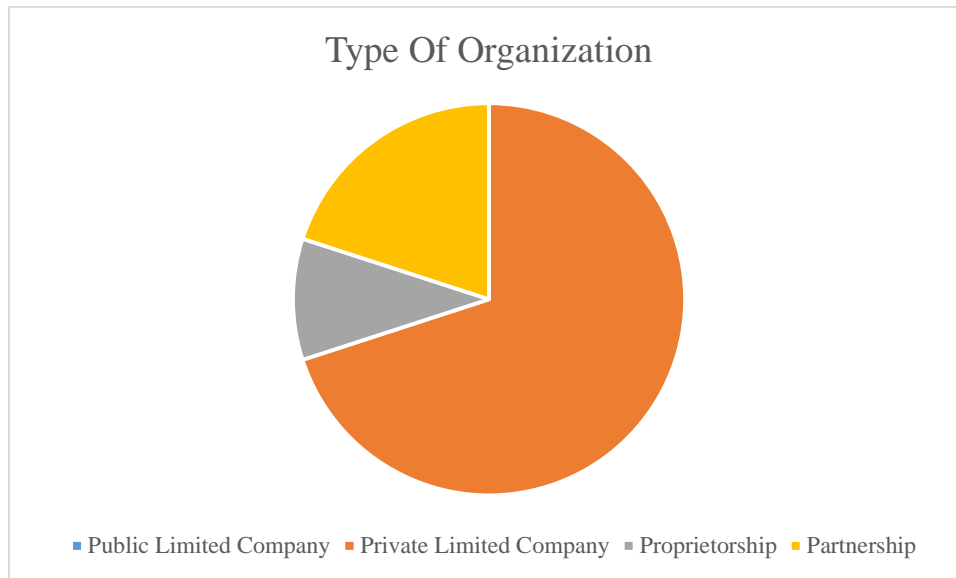


Figure 8.9: Type of Organization. **Source:** Field Study, Author

Data Analysis

- It could be very well analysed from figure 8.9 that out of 10 companies considered, seven of them are private limited companies, two are partnership firms and one is also a proprietor firm.
- This indicates that software companies in Assam is heavily dominated by the private sector.

2. Annual Revenue Generation of the Companies:

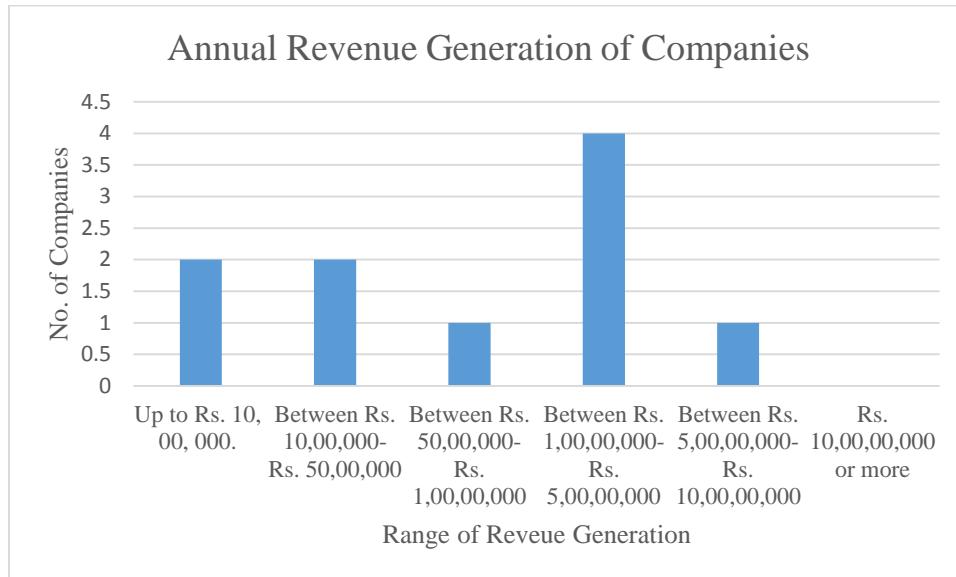


Figure 8.10: Annual Revenue Generation of the Companies. **Source:** Field Study, Author

Data Analysis

- It is evident from figure 8.10 that four out of 10 companies' annual revenue generation is between Rs. 1, 00, 00, 000 – Rs. 5, 00, 00, 000. This indicates that these companies are mostly operating at small-scale levels in the state.
- It is also seen that few companies are also operating at micro-level in the state.
- There is one organization whose annual revenue generation also reaches between Rs. 5, 00, 00, 000 – Rs. 10, 00, 00,000. This company is mostly undertaking big projects for Government of India but doesn't have overseas clientele.

3. Subsidiary Unit of the Companies outside the India:

Name of the Organization	Subsidiary unit outside India
Zaloni Technologies	No
Bohniman Systems (P). Ltd.	No
I Innovation Technologies	No

WEBX Technologies Pvt. Ltd.	No
Scube Solutions	No
Glomindz Software (P) Ltd	No
Web.com (India) Pvt. Ltd.	No
Zantrik Technologies Pvt. Ltd.	No
ABH Software	No
Vasp Technologies	No

Table 8.10: Subsidiary Unit of the Companies outside the India. **Source:** Field Study by Author

Data Analysis

- It is seen that none of the IT companies operating from Assam have subsidiary units outside the country. As it is already mentioned that most of the companies in today's time are operating at small-scale level, and therefore they have not yet considered this form of operation.
- Another factor that could be analysed is that Exports in Information Technology Services under Commercial Presence (Mode 3) mode for delivery of services in Cross-Border Trade in Assam is not happening as of now.

4. Companies' form of off-shore operations:

Company's form of Offshore Operations	No. of Companies indulged in Off-shore Operations
Work Done in India and Supplied to another country	5
Work Done in India and Supplied to India	5

Body-shopping (Work done outside India by the company's employee and acting as a Temporary Employee of the Client)	0
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Table 8.11: Companies' form of off-shore operations. **Source:** Field Study, Author

Data Analysis

- The information provided in table 8.11 shows that out of 10 companies studied, five of the companies are indulged in off-shore operations. The rest of the five companies are operating within India. They are rendering their services primarily to Indian clients.
- Those who have overseas operations are working from India and providing their services to clients in another country. This indicates that Exports in Information Technology Services under Cross-Border Services (Mode 1) mode for delivery of services in Cross-Border Trade in Assam is taking place.
- Few companies also mentioned that they are in the process of finalizing to start- off their off-shore operations. This indicates that there is a high possibility of boosting exports from Mode 1 in IT sector from Assam.
- But since, there is no movement of IT professionals of the companies into a foreign territory to provide their services, Exports in Information Technology Services under Movement of Natural Persons (Mode 4) mode for delivery of services in Cross-Border Trade in Assam is not happening as of now. But it has been anticipated that very soon it is surely going to take place from these companies. Therefore, it can be said that there is high scope for exports to take place through Mode 4 which is commonly referred as Body-shopping in IT fraternity.

5. Place of Companies' off-shore operations:

Those companies that mentioned that they are dealing with foreign clients and have off-shore operations in the form of working from within India and supplying their services to their foreign clients, also revealed the countries where their clientele base is in.

Sl. No.	Place of Companies' offshore Operations
1	USA
2	Europe
3	UK
4	South Asia
5	Dubai

Table 8.12: Place of Companies' Offshore Operations. **Source:** Field Study by the Author

Data Analysis

- The five companies that have off-shore operations, stated the above countries (table 8.12) to be their major overseas clients.
- Out of these five companies, one company has primarily clients only from USA. Other companies have quite s scattered clientele network.

6. Range of Services provided by the companies to their off-shore clients:

Those companies that mentioned that they are dealing with foreign clients and have off-shore operations in the form of working from within India and supplying their services to their foreign clients, also cited the following services provided by them to their off-shore clients:

SL. No.	Form of Client Servicing provided by the company to off-shore clients	Name of the Service
1	Hardware and software consultancy and implementation services	IT Purchasing
2	Analysis, design and programming of ready to use systems, including web page development and design, and technical consultancy related to software	IT Systems Design

3	Development, production, supply and documentation of customized software, including operating systems made on order for specific users	Customized Programs
4	Systems maintenance and other support services such as training provided as part of consultancy	Systems Maintenance
5	Data processing services such as data entry, tabulation, and processing on a timesharing basis	Data Processing
6	Web page hosting services, for instance the provision of server space on the internet to host clients' web pages	Web Hosting
7	Computer facilities management	IT Facilities
8	Non-physical exports of high value packaged software products	Packaged Software
9	Exports pertaining to information technology enabled services (ITES) and business process outsourcing (BPO)	Business Process

Table 8.13: Range of Services provided by the companies to their off-shore clients. **Source:** Field Study by the Author

Data Analysis

- The list of services collated in table 8.13 clearly depicts the diversified services that the companies are offering to their off-shore clients.
- One company also mentions about services provided pertaining to information technology enabled services (ITES) and business process outsourcing (BPO) to their clients. This indicates that Exports in Information Technology-Enabled Services (ITES) would be also slowly gearing up from the state, which has got great prospects in future for generating revenue for the state in terms of Exports in ITES.

8.7. SCOPE OF INVESTMENTS IN ASSAM IN THE TWO SERVICES SECTORS STUDIED

With private institutions coming into the picture of Higher Education in Assam, it is definitely boosting investment scenario in the Education Sector with high prospects of growth and development.

In the higher education services sector in India, foreign equity participation has been permitted up to 100 per cent under the automatic route since 2000 for entry through franchises, twinning arrangements, study centres, and program collaboration. It is also mentioned in the analysis above that all 7 out of 10 universities considered from Assam for the study, have entered into joint ventures and collaborations with foreign affiliates. Although Exports in Education Sector of Consumption abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam is not happening presently, but the collaboration with foreign institutions can definitely pave the way for Foreign Direct Investments in the sector through opening up of franchises, twinning arrangements, study centres, and program collaboration by foreign institutions.

With many new Information Technology companies cropping up in the state, the investment scenario in the sector seems to be quite promising. Companies such as Tata Consultancy Services, IBM have also developed their offices in the state. Since FDI up to 100 percent is permitted for IT activities, it may also boost the possibility of attracting inward FDI into the state through this highly promising sector. The Information Technology Policy amended by the Government of Assam can also play a vital role in attracting investments in various forms in this sector in the coming years.

8.8. FINDINGS OF THE STUDY

Contribution of Services Sector in India's GDP

- India's Service Sector has emerged as a prominent sector in terms of its contribution to national and state income, trade flows, FDI inflows and employment.
- Share of services in GDP have increased from 61.2 per cent in 2007-08 to 63.9 per cent in 2011-12.
- Among the major broad categories of services, 'financing, insurance, real estate and business services', have continued to grow robustly both in 2010-11 and 2011-12 at 10.1 and 11.7 per cent respectively.

Exports in Services in India

- WTO has ranked India as 8th largest exporter in commercial services trade.
- Services exports have recorded about seven-fold increases in 10 years from US\$ 20.76 billion in 2002-03 to US\$ 142.325 billion in 2011-12 and US\$ 105.84 billion up to December, 2013.
- Software exports have alone contributed close to 40 per cent of total services exports from India.
- Other miscellaneous services, mainly business services have also become important in India's services exports.

Investments in Services in India

- Services, today, account for around 50 per cent of India's total FDI flows.
- Software services and finance, insurance, real estate, telecom and various business services have accounted for over 30 per cent of India's inward FDI inflows.

Contribution of Services Sector in Assam's GSDP Growth

- The services sector is consistently showing an upward trend from 2004-05 to 2011-12 with a percentage contribution of 56 per cent in 2011-12.

- The services sector in the state has radically changed the structure of the state economy and generated sufficient level of employment particularly in the private sector of the economy.

Exports and Investments in Services in Assam

- In terms of outstanding investments, the services sector accounted for around 34 per cent in Assam.
- Most of the domestic investment within the state is the result of Public-Private Partnership (PPP) Projects.
- Trade Liberalization in services sector is yet to be realized in the state of Assam.

Scope of Exports in Services in few Selected Sectors of Assam

Higher Education Sector

- The Directorate of Higher Education is encouraging all forms of educational institutions in the state.
- Private Institutions within the state have mushroomed up very recently.
- Apart from conventional and general courses, Universities are now emphasising on offering professional courses which are becoming very popular in the state.
- The Private Universities are offering online courses which is a very new concept in this part of the region.
- Integrated Master's Degree is booming in the region which are being offered by the Private Universities and few State Universities.
- Central Universities are not offering Integrated Master's Degree and Online Distance Learning Courses which are becoming popular in today's time.
- Those Universities who offer diversified courses, their total intake capacity is also relatively higher.
- Eight out of 10 Universities has provision for Student-Exchange Programme.
- The number of foreign students in the 8 Universities ranges from 2 to 10 but this positive sign indicates that Exports in Education Services under Consumption

Abroad (Mode 2) mode for delivery of services in Cross-Border Trade in Assam is happening.

- None of the Universities under study has overseas branch which indicates that exports in Education Services under Commercial Presence (Mode 3) mode for delivery of services in Cross-Border Trade in Assam is not taking place.
- The scope of Commercial Presence in the foreign land can also happen with Private Universities coming into prominence in the field of Education in Assam.
- Excepting three Universities, all the other 7 Universities have gone for foreign collaborations with foreign universities.
- Three private universities of the state are offering online courses. Most importantly, majority of the students enrolled in the said courses are foreign students. This indicates that Exports in Education Services under Cross-Border Services (Mode 1) mode for delivery of services in Cross-Border Trade in Assam is taking place. The rest of the seven universities including the Central and State Universities are not offering any such course. But there is a huge scope in the future for exports under this mode for delivery of services in Cross-Border Trade.
- There are eight out of 10 universities whose faculties visit foreign colleges. Few faculties are also acting as Guest Lecturers in the foreign colleges.
- Since Educational Professionals are moving to foreign territories to provide their services, therefore, Exports in Education Services under Movement of Natural Persons (Mode 4) mode for delivery of services in Cross-Border Trade in Assam is taking place.
- This indicates that in future there is a much greater possibility of Exports to take place in the Education Sector from Assam.

Information Technology Sector

- Software companies in Assam is heavily dominated by the private sector.
- Companies are mostly operating at small-scale levels in the state.
- None of the IT companies operating from Assam have subsidiary units outside the country.

- Exports in Information Technology Services under Commercial Presence (Mode 3) mode for delivery of services in Cross-Border Trade in Assam is not happening as of now.
- Out of 10 companies studied, five of the companies are indulged in off-shore operations. The rest of the five companies are operating within India.
- Those who have overseas operations are working from India and providing their services to clients in another country. Therefore, Exports in Information Technology Services under Cross-Border Services (Mode 1) mode for delivery of services in Cross-Border Trade in Assam is taking place.
- There is a high possibility of boosting exports from Mode 1 in IT sector from Assam.
- There is no movement of IT professionals of the companies into a foreign territory to provide their services, and therefore, Exports in Information Technology Services under Movement of Natural Persons (Mode 4) mode for delivery of services in Cross-Border Trade in Assam is not happening as of now.
- There is high scope for exports to take place in Assam through Mode 4 in future.
- Diversified services are offered to companies' off-shore clients.
- Exports in Information Technology-Enabled Services (ITES) is also slowly gearing up from the state, which has got great prospects in future.

Scope of Investments in Assam in the Two Services Sectors Studied

- With private institutions coming into the picture of Higher Education in Assam, it is definitely boosting investment scenario in the Education Sector with high prospects of growth and development.
- Collaborations with foreign institutions can definitely pave the way for Foreign Direct Investments in the sector through opening up of franchises, twinning arrangements, study centres, and program collaboration by foreign institutions.
- With many new Information Technology companies cropping up in the state, the investment scenario in the sector seems to be quite promising.

8.9. CONCLUSION

It has been shown in the chapter that there has been a paradigm shift of Indian Economy from agricultural dominating economy to services dominating economy. India, therefore, has become a positive outlier in terms of share of services. India's trade and investments have also enhanced over the years in services.

The sectoral composition of GDSP of Assam has also seen a transformation during the past few years. Even in terms of domestic investments, the services sector has heavily dominated. Moreover, since trade liberalization is yet to be realized in the state of Assam, an attempt has been made in this chapter to show two sectors which have slowly opened up for trade and has a huge potential in the future to attract investments into the state. If exports slowly opens up further in the sectors under study, foreign investments in these sectors would definitely turn out into reality for the state in the years to come.

The government and the policy-makers would also play a pivotal role in setting less stringent policies for services sector to open up for trade and investments.