

EXECUTIVE SUMMARY

COMPREHENSIVE STUDY ON AVAILABLE SKILL, SKILL GAP AND SKILL DEVELOPMENT POTENTIALS IN ASSAM

I. INTRODUCTION

Employability of the growing young population is an important factor in the economic development of a region. Skill development increases the employability of workforce which in turn contributes to further economic growth of the region. This report has been prepared by North Eastern Development Finance Corporation Ltd. (NEDFi) on the overall skill development scenario in the state of Assam. The study aims to understand the characteristics of Skill Development System operational in Assam, Traditional Skills of the state, Aspiration and Skill Development Needs of various categories of population of the state and the Global, National and Local Skill requirement trends. Based on the understanding of these aspects, the study recommends strategies to take the skill development efforts in the state to the next level in the short to medium term.

Assam is the second largest state of northeast India with an area of 78,438 sq. Kms constituting a population of 3,12,05,576 (2011 census), meaning, that the population density of the state is approximately 398 persons per sq. km. It is the most populous north eastern state in India. The state is bound by Arunachal Pradesh to the north, Nagaland and Manipur to the east, Mizoram and Tripura to the south and Meghalaya to the west. It shares international borders with Bangladesh to the west and Bhutan to the north. It has a sex ratio of 958 females per 1,000 males, which is higher than the national average of 943. The state has thirty-three districts, namely, Barpeta, Baksa, Biswanath, Bongaigaon, Cachar, Charaideo, Chirang, Darrang, Dhemaji, Dhubri, Dibrugarh, Dima Hasao, Goalpara, Golaghat, Hailakandi, Hojai, Jorhat, Kamrup, Kamrup (Metro), Karbi Anglong East, Karbi Anglong West, Karimganj, Kokrajhar, Lakhimpur, Majuli, Morigaon, Nagaon, Nalbari, Sibsagar, Sonitpur, South Salmara-Mankachar, Tinsukia and Udalguri. The state capital which is Dispur is located in Guwahati.

The overall approach towards the study has been a combination of extensive consultation with major stakeholders in the state, review of literature on skill development, secondary data collection from various sources and extensive primary surveys. As a part of secondary research, reports and articles on skill development and related areas published by the government as well as The World Bank, Asian Development Bank, International Labour Organization etc. were also reviewed.

An important aspect of the study is the extensive primary data collection and its analysis related to aspirations and skill development needs of various categories of population in the state. In this connection, extensive primary surveys were conducted in all 33 districts of Assam at all revenue circles. As a part of primary interactions, a questionnaire survey was conducted among 10,134 persons across seven strata viz. school students, graduate & post graduate students, vocational students, school drop-outs, vocational students trained under various skill initiatives, persons engaged in vocations and unemployed persons. In addition to this, in-depth consultation with various stakeholders, detailed interactions with major vocational institutions in the state including ITIs, Polytechnics, Senior Secondary

and Higher Secondary Schools imparting Vocational Education, Colleges imparting vocational education, Vocational Training Providers and Government Departments responsible for skill development in the state and few industries were carried out. Focus Group Discussions with interest groups such as teacher/trainers of vocational institutes, parents of students, were also organized. Detailed interaction with senior government officials of the state were carried out for an insight on declared policy priorities and skilling initiatives of their respective departments.

II. EDUCATION AND EMPLOYMENT CHARACTERISTICS OF ASSAM

Education is the foundation and employment (both wage and self-employment) is the ultimate desired outcome of skill development. So an attempt has been made here to understand the characteristics of educational system of Assam in terms of Literacy Rate, Gross Enrolment Ratio (GER) at various Educational levels, School Drop-outs, Transition Rates etc. Similarly, understanding of the employment characteristics of Assam is based on parameters like Labour Force Participation Rate (LFPR), Worker Population Ratio and Sector-wise distribution of workers of the state.

Literacy Rates: The literacy rate of Assam is 73.18 %, which is slightly higher than that of the national rate of 73%. It implies that out of the total population of 3,12, 05,576 persons in the state, 1,91, 77,977 (2011 census) persons possess the ability of reading and writing. The male literacy stands at 77.8% and the female literacy rate at 66.27%.

Educational Attainment: The educational attainment of the population of Assam between the age group 5-29 years lags behind India in terms of education attainment at the Higher Secondary, Diploma/Certificate, Graduate and Post Graduate and above levels, whereas Assam fares better in terms of Below primary (18.3%), Upper Primary (17.6%) and Secondary (10.7%) level.

Gross Enrolment Ratio (GER): The Gross Enrolment Ratio (GER) at the Primary level in Assam is better than the national average. Also, Assam has fared better than the national averages at the Upper Primary and the Elementary levels. However, at the Secondary and the Higher Secondary level, the state lags behind the national average.

Drop-out Rate: The drop-out rate at primary level in Assam is 15.36%, which is quite high when compared to the national average of 4.13% (2015-16). The drop-out rates at the Upper Primary level is also quite high at 10.51% in 2015-16.

Transition rate: The transition rate of Assam from Primary to Upper Primary is better than the national average over two consecutive years. However, in the year 2014-15, the transition rate of the state declined. This is a matter of concern as a low transition rate is an indicator of unbalanced development of education. With regards to the transition rate from Elementary to Secondary levels of the state, over the course of three consecutive years, it is observed that Assam has lagged behind India. Again, the transition rates have not improved in the Secondary to Higher Secondary level over the course of three consecutive years from 2012-13 to 2014-15 and is seen to be lagging behind in comparison to India.

Labour Force Participation Rate: The Labour Force Participation Rate of the state is 52.7% as compared to the national rate of 52.4%, which indicates that Assam is slightly in a better position than India as a whole.

Worker Population Ratio: The worker population ratio at 50.6% is less than the national average of 50.5%.

Sector-wise Employment: The primary sector has provided 52% employment in Assam (2015-16) in both rural and urban areas. The employment in primary sector in Assam is more than the national average of 49.42%, which indicates the importance of the primary sector in the state's economy. It is worth mentioning that in the rural areas, 58.5% labour force is engaged in the primary sector as against 6.9% labour force in the urban areas. In the tertiary sector, 35.7% workforce is employed in the urban as well as rural areas. The employment in this sector is more in comparison with the national average of 30.2%. The urban workforce engaged in the tertiary sector is 75.4% and the rural workforce is 29.8%. It is seen that in Assam the dominance of the secondary sector is the least as only 12.3 % from rural areas as well as from the urban areas are engaged in it, whereas, at the national level, 22.5 % of the workforce are engaged in the secondary sector. This implies, only 11.7% from the rural areas and 17.7 % from the urban areas are engaged in the secondary sector.

III. CHARACTERISTICS OF SKILL DEVELOPMENT SYSTEM OF ASSAM

The existing skill development system of Assam almost mirrors the prevailing system in practice in other parts of the country. The understanding of Characteristics of Skill Development system of the state mainly depends upon the understanding of the Technical Vocational Education and Training (TVET) System, Traditional Skill Sectors, Initiatives of various Central and State Government and its implementation status along-with Financial Resources available with the key departments engaged in skill development which are discussed here.

a. Technical and Vocational Education and Training (TVET) System of Assam

The TVET system of Assam mainly depends on the vocational education and training provided by Industrial Training Institutes (ITIs), Polytechnics, Government Secondary and Higher Secondary Schools providing vocational education, Government Colleges providing vocational education and Private Vocational Training Providers (VTPs). Characteristics of all these institutions are briefly discussed below:

Industrial Training Institutes (ITI): There are currently twenty eight (28) Government ITIs imparting vocational training courses affiliated to the National Council for Vocational Training (NCVT) and State Council for Vocational Training (SCVT). The twenty eight government ITIs are situated in the districts of Jorhat, Guwahati, Morigaon, Dhemaji, North Lakhimpur, Tinsukia, Nalbari, Barpeta, Golaghat, Tezpur, Dima Hasao, Dhubri, Karimganj, Karbi Anlong, Dibrugarh, Goalpara, Cachar, Udalguri, Sivsagar, Udalguri, Kokrajhar, Hailakandi, Bongaigaon and Nagaon. ITI Jorhat has the highest enrolment capacity of 1,136 followed by ITI Nagaon with a capacity of 853, ITI Guwahati with 779, ITI Cachar with 705, ITI Tezpur with 674 and ITI Bongaigaon has a capacity of

500. ITI Diphu has an enrolment capacity of 426, followed by ITI Tinsukia with 369, ITI Gargaon with 342, ITI Barpeta with 305, ITI Kokrajhar with 289, ITI Dhemaji with 252 and ITI Nalbari has a capacity of 231. ITI Haflong has a capacity of 226, followed by ITI South Salmora with 210, ITI Dhansiri with 163, ITI Marigaon and ITI (Women) Tinsukia each has a capacity of 147. ITI Bhergaon and Women ITI (Guwahati) each has a capacity of 126 while ITI (Women) Mazbat and ITI Majuli each have a capacity of 105. ITI Dhemaji, ITI Goalpara and ITI Hailakandi each have an enrolment capacity of 100 while ITI (Women) North Lakhimpur and ITI (Women) Silchar each have a capacity of 63. As per the department data of F.Y. 2015-16, the total enrolment capacity of 28 ITIs stands was 4,805, which is 55.06 percent of the total enrolment capacity representing a poor picture of the state of Assam.

Apart from these ITIs, works is in progress for the establishment of another twenty nine (29) ITIs which have been proposed at Boko (Kamrup-Rural), Ghilamora (North Lakhimpur), Badarpur (Karimganj), Ledu (Tinsukia), Titabor (Jorhat), Golaghat, Sadiya (Tinsukia), Biswanath Chariali (Sonitpur), Rangia(Kamrup-Rural), Pathsala(Barpeta), Dhudhnoi (Goalpara), Moran (Sivsagar), Lahowal (Dibrugarh), Nazira (Sivsagar), Sonari (Sivsagar), Jamaguri (Sonitpur), Duliajan (Dibrugarh), Golokganj (Dhubri), Bortika (Golaghat), Jonai (Dhemaji), Bokajan (Karbi Anlong), Abhoyapuri (Bogaigaon), Nalbari, Jorhat, Kakopathar (Tinsukia), Kajalgaon (Chirang), Suklai (Udalguri), Kohra (Golaghat) and Mongoldoi. Out of these 29 ITIs, 10 ITIs have completed construction and rest of the ITIs undergoing construction.

There are 21 new ITIs are in pipeline at various locations within Assam. The directorate showed their interest in running short term industry relevant courses in these new and existing ITIs if sufficient funding is provided. The courses in these ITIs run under the guidelines of NCVT and SCVT. Maximum trades are under NCVT and few trades are under SCVT. Recently 6 courses at the ITIs were made NSQF complaint. These courses are Electrician, Welder, Fitter, Mechanic-Diesel, Mechanic-Motor Vehicle and Turner. The directorate has also planned to introduce new trades such as Multi Media & Animation, Plumbing Fire & Industrial Safety and Aquaculture which are demand driven.

During the survey, interactions with teachers/trainers of ITIs highlighted that most of the teachers were of the opinion that extensive counselling is much needed to make the students well aware of their future and get a proper way of life. The recruitment and placement of students in many ITIs are not happening with the tie up arrangement with industry partners. Besides, there were no record keeping provisions for the successful students to keep a track of them, in case of their placements and achievements. Teachers also opined that because of the low degree of industrial development, there is a dearth of industrial undertakings in the state, and as a result, the level of local placements goes down. Few of them also reported that SCVT courses are not up to date with the current industry requirement and the students have been learning the same old contents with near obsolete equipment. However, the course under NCVT complies with industry standards with up to date laboratory. Most teachers expressed that there was a lack of infrastructural facilities in the institutions. Lack of separate hostel facilities for boys and girls, laboratories, library, modern tools and equipment, buildings, staff quarters etc. were some

of the common problems plaguing most ITIs of the state. Teachers also felt that there was a need for re-skilling of people engaged in vocations. This is because few of the students who acquired training in certain courses, have no industry relevance or are no longer in demand. So, it is essential that re-skilling of previously trained personnel also takes place. Most teachers also expressed lack of motivation in their job, as they had limited scope for career advancement. They also voiced their dissatisfaction regarding their low salary and other benefits. This could also be a reason for the dearth of manpower in ITIs. Regarding skill development, the teachers felt that there is a need for the establishment of more ITIs with new, relevant courses, which have large area coverage. This would benefit more people and inaccessible places within the state can be reached. In many cases, seats are fewer than demand which is a matter of concern to make provision for more number of seats in preferred trades.

There is a lot of demand for ITI graduates in Fitter, Mechanic- Motor Vehicle, Mechanic-diesel and Electronics related trades. The main demand comes from Oil Sector PSUs such as ONGC, Oil India, Indian Oil, NRL, Major Auto Players such as Hyundai, Maruti Suzuki and Major Electronics Player such as Samsung, LG, etc. The directorate is making an effort on its own to introduce self –sustaining demand –driven course having state of art facilities in collaboration with industry partners. e.g, at Guwahati ITI, they have tied up with Hyundai for providing advanced training to the students who have graduated in Mechanical-diesel and Mechanical-Motor Vehicle trades. In similar manner, for Electronics related trades such as Refrigeration and Air-conditioning, Electrical, Electronics and IT trades; they have tied up with Samsung. They are also planning to automate the Mechanical Section of the institute by introducing cutting edge machines such as CNC for which IOC in-principle has agreed to sponsor. Similar Initiatives in collaboration with industries are on in other ITIs as well. e.g, at Bongaigaon ITI, the directorate has initiated the process on setting up of E-lab in partnership with BRPL. Nagoan ITI has got into collaboration with TATA Motors for MMV trade and Havells for Electrical and Electronics trade. At Jorhat ITI, NRL has modernized the welding section.

In terms of placement at ITIs, the interaction revealed that the overall placement scenario is good ITI graduates are quite in demand in companies such as Oil PSUs, Maruti Suzuki, Hyundai, L&T, Gammon, and other local enterprises. Campus recruitment keep happening at regular intervals at ITI Guwahati in which students of other ITIs also appears.

Polytechnics: Currently, there are 21 Polytechnic Institutions under this Directorate viz., Nowgong Polytechnic, Nagaon, Prince of Wales Institute of Engineering & Technology, Jorhat, Bongaigaon Polytechnic, Bongaigaon, Dibrugarh Polytechnic, Dibrugarh, Silchar Polytechnic, Silchar, Girls' Polytechnic, Guwahati, Residential Girls' Polytechnic, Golaghat, Diphu Polytechnic, Diphu, Assam Textile Institute, Guwahati, Kamrup Polytechnic, Goalpara Polytechnic, Nalbari Polytechnic, Barpeta Polytechnic, Baksa Polytechnic, Sonitpur Polytechnic, Lakhimpur Polytechnic, Dhemaji Polytechnic, Sibsagar Polytechnic, Golaghat Polytechnic and Karimganj Polytechnic.

Out of the 21 Polytechnics, 11 Polytechnics viz., Kamrup Polytechnic, Goalpara Polytechnic, Nalbari Polytechnic, Barpeta Polytechnic, Baksa Polytechnic, Sonitpur

Polytechnic, Lakhimpur Polytechnic, Dhemaji Polytechnic, Sibsagar Polytechnic, Golaghat Polytechnic and Karimganj Polytechnic have commenced from the year 2017 and hence no data could be collected. The combined enrolment capacity of the remaining 10 polytechnics stands at 1545 for the F.Y. 2015-16 and the enrolment stands at 1523, which is 98.57% of the enrolment capacity portraying a positive picture in the state.

During interactions with teachers it was reported by most of the teachers that the institute is unable to provide education as per the industry requirements due to the absence of adequate infrastructure and quality laboratory equipment. In most of the cases, students are using the same age old outdated laboratory equipment. It was also reported that there is a scarcity of faculty members in different departments. Along with the crunch of human resources, there are also other infrastructural issues concerning canteen facility, laboratory, internet connectivity, hostel facility, etc. which needs to be paid attention to. The absence of a quality guest house within the premises and absence of separate fund for recruitment process/ activity makes it difficult to invite industries for campus recruitment. However, the present industrial scenario in the state is not adequate to recruit students across all the trades. This might be the reason for which students are forced to go out of the state to seek better jobs. Few of the students have secured self-employment through entrepreneurial activity in certain trades. Training for teachers (held for 7-10 days) is conducted under the Ministry of Human Resources and National Institute of Technical Teachers' Training & Research (NITTTR)-Kolkata and Extension Centre-Guwahati. The Technical Education in the states is in big expansion mode. The number of Polytechnics in the state is going to increase from the present 10 to 31. Similarly the number of government engineering colleges is going to increase to 10 from present 2. This expansion is going to happen in a very short period of time. These added facilities can be utilized for running community colleges in these premises imparting high level scientific and technological skilling in trades such as Basic Welding, Advanced Welding, CNC, Robotics and Automation Technology, Fitting, Machining, Construction, Carpentry, Plumbing, Foreman-Formwork & Shuttering, Foreman: Reinforcement, Bar Bending and Fixing, Quality Control Lab and Field Technician, Field Technicians in Air conditioning, Refrigeration and Washing Machine, Infrastructure Engineer, ICT Engineer etc. Presently 6 polytechnics are running community colleges under such framework. One of the major challenges that the polytechnics are going to face in near future is the fund constraint to meet the recurring expenditure such as salary for faculties and staff of the newly proposed polytechnics that will come in near future. The government needs to ensure that sufficient funding takes place to meet this recurring expenditure.

Vocational Education in Government Secondary and Higher Secondary Schools:

The vocational streams in secondary schools were started by the Directorate of Secondary Education in the year 1987-88 as per the direction of MHRD, Govt. of India at +2 levels in higher secondary schools as a centrally sponsored scheme. The Assam Higher Secondary Education Council conducted the examination for vocational stream and a total of 6391 students have successfully passed from 150 higher secondary schools in Assam during the year 2010 to 2016. The subjects introduced in 150 nos of HS schools are framed by AHSEC (*Assam Higher Secondary Education Council*) with the help of PSSCIVE (*Pandit Sunderlal Sharma Central Institute of Vocational Education*), Bhopal.

The subjects which were introduced as vocational courses are *Accountancy & Auditing, Office Procedure & Management, Office Secretary Ship, Maintenance and Repairs of domestic electrical appliances, Repairs and maintenance of Radio TV recorder, welding practice, Inland fisheries, Agriculture & Horticulture, Textile designing, Agriculture Machinery Maintenance, Bleaching Dyeing and Fabric painting, computer technique, automobile engineering, Tailoring and Embroidery, Commercial art, Turning Practice, Bakery and Confectionery*. From 1987-88 to 1994-95 sessions, Govt. of Assam allowed 150 higher secondary schools to introduce vocational education programme to produce skilled manpower in different trades. But, the response in terms of number of students seeking admission in vocational course was not encouraging. A total amount of Rs 11,97,79,190/- was released by the Govt. of India during the period from 1987-88 to 2000-01 as central assistance for implementation of the centrally sponsored scheme of vocationalization of secondary education in Assam.

During the interaction with NEDFi team, it was highlighted that 297 nos of full time vocational teacher posts were created in the 1990, but with the withdrawal of central assistance in the year 2000, the posts become personal and the numbers came down to 199 in the year 2015. There was a clause set by state Govt. in the year 2000, according to which the posts which were created during the central assistance shall stand abolished, that is there is no replacement of teachers once the post falls vacant with no reasons. However, in the year 2012, 158 numbers of part time vocational teachers were regularized by the Govt. and at present, the total no of teachers tallying to 357 numbers comprising both 199 old posts and 158 new posts of higher secondary schools. It was also reported that, of the 150 higher secondary schools, certain higher secondary schools have zero enrolments due to non-existence of vocational teachers. Besides, in certain higher secondary schools, enrolment position is going down in spite of having vocational subject teacher due to lack of guidance and counselling. Some of the challenges which were highlighted during the interaction with NEDFi team were lack of vertical and horizontal movements of successful students, lack of sincere initiatives of the head of the institutes towards enrolments, lack of adequate infrastructure, lack of fund to replace obsolete equipment, lack of financial support for self-employment of successful students, lack of entrepreneurial training, state level certification procedure, inadequate teachers and low social acceptance of successful students.

The scheme Rashtriya Madhyamik Shiksha Abhijan (RMSA) was launched in the state of Assam in the year 2009 during the 11th five-year plan. The Ministry of Human Resource Development (MHRD), Govt. of India approved implementation of vocational education under NVEQF (*National Vocational Education Qualification Framework*) in the year 2015 from class IX onwards in 57 higher secondary schools of Assam with a total enrolment capacity of 2850 comprising two trades viz; Information Technology (IT/ITES) and Retail and accordingly released Rs.13.19 crore to the state. The Project Approval Board Meeting of RMSA, MHRD, Govt. of India approved Rs. 2553.86 lakh for vocational education scheme for 95 more schools in addition to existing 57 schools during 2015-16. The trades to be implemented in these 95 schools will be done through third party with introduction of trades like IT/ITES, Retail, Healthcare and Private security and from the academic year 2018-19, Tourism will also be introduced in 100 new schools under RMSA.

During the interactions various issues came to light with regard to running of vocational education in these schools. There are no proper facilities for conducting practical classes and bare minimum facilities are usually available due to which it is very difficult to provide quality vocational education. Students in general are not interested in taking up vocational education and are more interested in undertaking higher education. Most of the students who undertake vocational streams in schools do not join any vocation. Most of them are going for degree courses mainly in arts subjects. The students in these schools are mainly from economically backward classes of society. Many students after completion of course wish to start their own work in the concerned trade but due to lack of credit linkage, they could not do so. So there is need to provide credit linkages to these students so that they can start their own work. No Detention Policy till class 8 has done immense harm as it has been seen that in class 9, lots of candidate are failing to pass the exam and creating an unusual situation having more number of students in class 9 than its capacity which is creating problems for schools. Thus, more focus should be given to education related to Science, Maths and Technology as educating in other streams do not prepare students for job market. Sufficient autonomy should be provided to Government Schools for raising funds for engaging expert agencies which help in improving the learning outcomes at schools. Even though the parents of students studying at these schools come mainly from economically lower strata, most of them are willing to contribute funds as per their capacity for the betterment of their wards. Offering vocational education and training in general schools traditionally meant for providing normal schooling have not met the desired results due to various issues such as lack of facilities, lack of latest equipment and teaching aids for providing practical classes, lack of sufficiently trained facilities and majority of students not being interested in pursuing vocational education. Majority feels that, ideally, there should be different setup all together in the form of separate vocational schools for providing vocational education and training to the students who are interested in doing so or due to poor performance in normal schooling, are at the risk of dropping out. In any case, majority were of opinion that the vocational education and training should be only after completion of matriculation and not before that.

Vocational Education in Government Colleges: The vocational programme in colleges is new and accordingly there seems to be a lot of teething trouble besetting these programmes. The Assessment and Certification of the programme is divided into the SSC and the university concerned due to which it has become complicated. There is need for simplification in the Assessment and Certification process. In case of many of the trades, syllabus and assessment tools are ready up to level 6 or 7 of NSQF not beyond that which is creating a problem for B.Voc Programme which are designed for higher levels. For many of the locally relevant trades QPs are not available. SSCs are not providing support to the programme in a manner desired and most of their attention is focussed on short term training provided under schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY).

Private Vocational Training Providers (VTPs): There are various organizations and institutes besides the ITIs and Polytechnics which play a pivotal role in providing trainings in various trades under schemes such as Pradhan Mantri Kaushal Vikas Yojana

(PMKVY), Deen Dayal Upahyaya – Grameen Kaushal Yojana (DDU-GKY), Deendayal Antyodaya Yojana - National Urban Livelihood Mission (DAY-NULM) etc. They are the Private Vocational Training Providers (VTPs) from both within and outside the state which are imparting various vocational courses under skill initiatives of the state government. The State Government of Assam organizes various training programmes through Department of Labour and Employment, Skill Development & Entrepreneurship. As a part of the study, interactions were held with few local VTPs and the major issues faced by Private VTPs are that the time duration of the courses offered under such as PMKVY, DDU-GKY etc, are not sufficient to impart employable skills to the trainees, delay in Assessment & Certification due to third party assessment system, delay in getting certificates, employers are not interested in recruiting candidates trained in short term training programmes etc.

b. Traditional Skills of Assam

Assam comprises of a number of various indigenous and non-ethnic communities spread across the entire landscape. The traditional knowledge of the ethnic women of Assam is greatly appreciated and recognised by all sections of society. The womenfolk are also involved in cultivation and harvesting of agricultural produce, fermentation of food to culinary skills and marketing and entrepreneurship. The people are blessed with traditional skills like weaving and handloom, production of handicrafts, production of quality silk, cane and bamboo items, brass and bell-metal utensils, cotton fabrics, mask-making and toys, pottery, jappi making, traditional Assamese jewellery and paintings. While women are known for being expert weavers, men excel in crafts like black smithy, pottery, cane and bamboo work, woodcraft, mask making, etc.

Assam's silk fabric is quite popular and has earned recognition from all over the world. The state is home to several types of silks, the most prominent and prestigious being muga, the golden silk exclusive to this state. Muga apart, there is paat, and eri, the latter being used in the manufacture of warm clothes. Of a naturally rich golden colour, Muga is the finest of India's wild silks. It is produced only in Assam. The 'king of silk' muga known for its glossy fine texture and durability, exclusively found in Assam and the traditional garments like *mekhela chador* and saris are made from this silk. In the silk village of Sualkuchi, in Kamrup district of Assam, even men are engaged in weaving and production of handloom cloth. As per handloom census more than 14.01 lakh weavers and 11.11 lakhs looms available in Assam, besides more than 16.43 lakhs handloom workers are working in handloom sector.

The people of Assam have traditionally been craftsmen from time immemorial. Though Assam is mostly known for its exquisite silks and the bamboo and cane products, several other crafts are also being made here. Each regions of Assam is known for art and handicrafts peculiar to the region. Cane and bamboo is grown in abundance here and most of the household articles are made out of it.

Bell-metal and brass are most commonly used metals by the Assamese artisans to make traditional utensils and fancy articles. The Xorai and bota have in use for centuries, to offer betel-nut and paan while welcoming distinguished guests. Hajo and Sarthebari, are

engaged in producing traditional bell-metal and brass articles. They have also used their innovative skills to design modern day articles to compete with the changing times.

Masks have been widely used in folk theatres and bhaonas with the materials ranging from terracotta to pith to metal, bamboo and wood. Similarly, among the tribals too, the use of masks is varied and widespread, especially in their colourful dances which again revolve chiefly around their typical tribal myth and folklore. Such traditional masks have of late found their way to the modern-day drawing rooms as decorative items and wall-hangings, thus providing self-employment opportunities to those who have been traditionally making them.

Jewellery-making and designing were two important ancient industries in Assam and goldsmiths and gold traders flourished in Kamrup, Goalpara, Barpeta and Sivasagar whereas Jorhat town became the centre of the gold and silver craft for superior enamelling work known as minakari in Assamese. In Terracotta sector, two categories of people – Kumars and Hiras – made pottery their own. But the ones that carved out a niche are the terra cotta craftsmen of Asarikandi in Dhubri district. The distinctive style has made Asarikandi an ethnic art brand in India. Asarikandi is also known for its sola pith craft, made from the soft core of a special kind of reed. Terracotta as has dominated the handicrafts scene of Assam since time immemorial and various common figures of gods and goddesses to mythological characters, toys, vases, etc. are made by these artisans.

The Assam Apex Weavers and Artisans Cooperative Federation Ltd. (ARTFED) is a federation of weavers and artisans, which organizes handloom weaving and other such cottage industries of the state on a cooperative basis. It helps to create employment opportunities to lakhs of weavers as well as artisans who are engaged in handloom weaving or handicrafts' activities throughout the year. It also works towards the social and economic development of the weavers as well as assisting them in marketing their products. ARTFED deals in products of cane & bamboo, wood crafted products, shittal pati, terracotta products, bell-metal products, handmade bags, jute crafts, handwoven curtains, cushion covers, duvet covers, quilts, shams, bed linen, table linen, shower curtain, kimmano fabrics etc. on rare muga, eri and mulberry silk.

In order to encourage production and promotion of handloom and handicrafts, the Department of Handloom and Textiles, Government of Assam, has undertaken various initiatives to generate revenue by utilising and promoting the traditional skills sector of the state. The department has initiated various schemes like Handloom Training Centre, Handloom Training Institute, Weavers Extension Service Unit, Handloom Production Centre (HPC), Research & Development, Publicity & Exhibition, Special state sector schemes, Power loom Industry, Chief Minister's Employment Generation Programme, Setting up of Yarn Banks and Production of Handloom Fabrics. Integrated Handlooms Development Scheme (IHDS) has been formulated as a Centrally Sponsored Plan Scheme by merging the essential components, with or without modifications, of the four schemes i.e. Deen Dayal Hathkargha Protsahan Yojana (DDHPY), Integrated Handloom Training Project (IHTP), Integrated Handloom Cluster Development Scheme (IHCD) and Workshed-cum-Housing Scheme, implemented during the 10th Plan. The North East Region Textile Promotion Scheme (NERTPS) has been started in the state. NERTPS is

an umbrella scheme for development of various segments of textiles, i.e. silk, handlooms, handicrafts, apparels and garments. The scheme had a total outlay of Rs.1, 038.10 crore in the 12th Five Year Plan. Under the scheme a foundation for an apparel and garment manufacturing centre was laid down on 19th May, 2015. The project worth Rs.18 crores was fully funded by the Union government and would be completed in three months' time. Once completed, would benefit 1,200 people and would help in skill upgradation, garment development and marketing. On the 28th January, 2017 the project was inaugurated by the central Minister of Handloom and Textiles, Smt Smriti Zubin Irani in Guwahati.

The Scheme of Fund for Regeneration of Traditional Industries (SFURTI) is a scheme for regeneration of traditional industries, initiated by the Ministry of Micro, Small and Medium Enterprises. The official agency for implementation of the scheme in Assam is Indian Institute of Entrepreneurship (IIE) which is situated in Guwahati, Assam. Under this scheme, efforts are made to make traditional industries more competitive, market-driven, productive, profitable and sustainable for the people involved in them. The institute was also planning to launch the SFURTI scheme at Mirza (Chayani-Borduar Block) in Kamrup district for making traditional handloom industries more productive and competitive by organising traditional handloom industries into clusters. IIE planned to initiate soft as well as hard interventions in the form of capacity building (training) of beneficiaries, product development (design and product diversification), market promotion and formation of producer organisations. Hard interventions would include providing improved looms to the beneficiaries, setting up of Common Facility Centre etc., which will help the beneficiaries to get empowered in the long run.

Some NGOs and developmental organisations are also coming forward and working towards promotion of traditional skills and livelihood opportunities. Rashtriya Gramin Vikas Nidhi (RGVN), Social Action for Appropriate Transformation and Advancement in Rural Areas (SATRA PROJECT), National Bank for Agriculture and Rural Development (NABARD), CSR initiatives of Numaligarh Refinery Ltd. (NRL), Power Grid Corporation of India Ltd., etc. are working for promotion of traditional skills and sustainable livelihood opportunities. Trades like livestock rearing, piggery, dairy farming, handloom and handicraft sector and Non Timber Forest Products (NTFP). Moreover, there is a Multi-Disciplinary Training Centre running under the Khadi and Village Industries Commission (KVIC) under the Ministry of Micro, Small and Medium Enterprises, Govt. of India in Kumarikatta of Nalbari, and Roha, Nagaon district where trainings of different duration are imparted in trades like Khadi: Spinning Refresher, Silk Spinning & Reeling and Khadi Technology; Village Industries: Bee Keeping, Carpentry and Wood Designing, Tailoring and Embroidery.

c. Initiatives of the Central Government & State Government for Skills Development in Assam

At the Central Government level, currently, apart from the nodal Ministry in Skill Development & Entrepreneurship, there are as many as 20 ministries which are working in the area of skill development in their respective domains. In the state of Assam most of these ministries have a presence with their schemes and programmes under the state

government departments are briefly discussed below. As a part of the study, the NEDFi study team interacted with various departments under Government of Assam to gain insight into the initiatives undertaken by the departments towards skill development and the findings are discussed below:

1. Department of Skill, Employment & Entrepreneurship, Assam

The Department of Skill, Employment & Entrepreneurship operates through the Directorate of Employment & Craftsmen Training and the Assam Skill Development Mission (ASDM).

i. Directorate of Employment & Craftsmen Training

The Directorate implements three schemes, viz. Craftsmen Training Scheme (CTS), Employment Service Scheme and Apprenticeship Training Scheme (ATS). The Craftsmen Training Scheme (CTS) is being implemented through the twenty-eight (28) Industrial Training Institutes (ITIs), the details of which have already been discussed in the previous section focussing on the Industrial Training Institutes (ITIs) of the state. The CTS under which 28 ITIs in the state are functioning have received a fund of Rs. 3340.37 lakhs in the F.Y. 2014-15 out of which Rs.3218.64 was utilized. In the F.Y. 2015-16, Rs.6989.98 lakhs has been allotted in F.Y 2015-16, out of which Rs. 1.179 Lakhs was utilized.

The SDI scheme closed in June 2016 and the assessment of the department with regard to performance of the scheme is poor. The main reason for this poor performance was that the trainings provided under the SDI scheme were very short term and were not demand driven. Due to this, many of the trainees trained under the scheme were not employable and because of which many employers were not interested in recruiting them resulting in poor placement of these trainees. The SDIS had received funds worth Rs.1727 lakhs in the F.Y. 2014-15 out of which Rs 1170.85 was utilized.

ii. Assam Skill Development Mission (ASDM)

The Department also has created the Assam Skill Development Mission which operating under it and is presently focused towards implementation of short-term training programmes (e.g. PMKVY). The main aim of the Mission is capacity building of the youth and delivery of quality skill training leading to meaningful employment to stimulate economy of the state. Some of the steps undertaken by the ASDM to fulfil its mandate are setting up of a Skill City, setting up 9 Centres of Excellence in the state, Focus trainings on the key areas of economy based on demand, Improvement in Industrial Linkages, New mobilization policy, quality control, setting up a Smart Portal, Technology based monitoring etc. The Assam Skill Development Mission (ASDM) has signed an MOU with ITE, Singapore to establish North East Skill Centre in Guwahati focussing on trades Beauty & wellness, Retail services, Hospitality operations and Food & Beverage services to replicate skilling of ITE, Singapore model in Assam. ASDM will take similar initiative with scheme development schools of South Korea for automobile, Japan for electronics and Taiwan for floriculture to introduce their skilling model in the

state. ASDM has signed agreement with sector Skill councils of NSDC. Initiative has been taken to take constructed but not utilized 25 nos buildings from different departments, Govt. of Assam to be used as Skill training centre. ASDM is also going to signed MOU with schools and colleges to run skill development courses after school hours. The Mission will skill the youth of the state by implementing PMKVY 2.0, Employability based Skill Training, Skilling for Self-employment and Entrepreneurship Development Scheme.

Further, under **Apprenticeship Training Scheme**, the successful ITI trainees are engaged as apprentices in various fields in the Government establishment, public and private establishments. There are 54 establishments in Assam which are looking after the apprentices. Few of the prominent establishments working in Assam are North Eastern Region Farm Machinery Training and Testing Institute, Oil India Limited, Havells India Limited,, Oil and Natural Gas Corporation (ONGC), Indian Oil Corporation Ltd, Prasar Bharati, Doordarshan Kendra, Hindustan Uniliver Ltd, CSIR-NEIST, Vivanta by Taj, Cement Corporation of India, Hindustan Paper Corporation, Guwahati Refinery, Sunrise Biscuit Company, The Assam Cooperative Jute Mills Ltd, BSNL Assam Telecom Circle, Magnet Electrical Engineering, Pratap Technocrats Private Ltd, Radisson Blue, Steels worth Pvt Ltd, Emami Ltd, Assam Gas based Power Plant, N.F Railway, DNP Limited, Assam Petrochemical Ltd, Pepcon Software, Assam Gas Company, Bongaigaon Refinery, Assam Power Distribution Company Limited (APDCL) and Numaligarh Refinery Limited (NRL).

2. Department of Education, Assam

The Education Department is another key department in the state providing skill development courses through polytechnics, secondary schools and colleges established under the department. The Department through the Directorate of Secondary Education, Directorate of Higher Education and the Directorate of Technical Education works for the promotion of skill development through the polytechnics, secondary schools and colleges respectively.

In Assam, the vocational education programme was started by the Directorate of Secondary Education in the year 1987-88 as per the direction of MHRD, Govt. of India at +2 levels in higher secondary schools as a centrally sponsored scheme. Some of the challenges which were highlighted during the interaction with NEDFi team were lack of vertical and horizontal movements of successful students, lack of sincere initiatives of the head of the institutes towards enrolments, lack of adequate infrastructure, lack of fund to replace obsolete equipment, lack of financial support for self-employment of successful students, lack of entrepreneurial training, state level certification procedure, inadequate teachers and low social acceptance of successful students. The Assam Higher Secondary Education Council conducted the examination for vocational stream and a total of 6391 students have successfully passed from 150 higher secondary schools in Assam during the year 2010 to 2016.

The Directorate of Higher Education has introduced B.Voc courses in 5 Government colleges from the academic year 2016-17. The directorate is going to start B.Voc courses in another 20 colleges from the academic year 2018-19. During interactions, it was

highlighted that a grant of Rs 20.00 lakhs would be allotted to each of these proposed colleges for starting the vocational courses. The 5 colleges where vocational courses are being introduced are B.N. College, Dhubri, Sarighat College, Nalbari Commerce College, Majuli College, N.C College Badarpur. The trades which are being introduced as vocational courses in these colleges are Information Technology, Tourism and Software development. The tie up arrangement with industry partners to complete the practical part of the vocational courses offered in 5 different colleges is yet to be finalized. There seems to be no clear cut instructions from sector skill council to finalise the selection of industry partners in Assam. Besides, some of the industries in the few trades are not available within the state which is delaying the process of completing the courses in time.

The Rashtriya Uchchar Shiksha Abhijan (RUSA) was started in the State of Assam in 2013 to reform the higher education sector. The Project Approval Board (PAB) has approved proposals of the State worth Rs.337 crores, comprising of Rs.303.3 crore as Central share (90%) and Rs.33.7 crore (10%) as State's share.

Further, the Directorate of Technical Education is providing vocational courses through its 10 polytechnics and the combined enrolment capacity stands at 1545 for the F.Y. 2015-16 and the enrolment stands at 1523, which is 98.57% of the enrolment capacity portraying a positive picture in the state.

3. Department of Agriculture, Assam

The Agriculture department is conducting skill development trainings as a part of extension services provided to farmers in the form of Farmers Field Schools, Agri-Clinics and Agri-Business Centers and technical backstopping from Krishi Vigyan Kendras (KVKs). The department has undertaken initiatives in agricultural sector like the National Food Security Mission where the farmers have benefitted through the cluster demonstrations and cropping system based trainings. The department has started Cropping System based trainings under the National Food Security Mission (NFSM) scheme. Each training consists of four sessions i.e., one each before Kharif and Rabi seasons and one each during Kharif and Rabi seasons. In the F.Y 2013-14, 35100 persons were trained through 1170 nos. of trainings while in F.Y 2014-15, 12150 persons were trained through 405 nos. of trainings. An amount of Rs.161.28 lakhs was allotted for the F.Y. 2013-14 while Rs. 56.70 lakhs were allotted in the F.Y 2014-15 for this purpose of which the entire amount was utilized.

4. Department of Fisheries, Assam

The department of fisheries conducts various training under different schemes like RKVY, NFDB etc for the farmers. The departmental officers and staff have also been undergoing different training programs conducted by other institutes/departments. Presently the department is conducting a 12 months pre-service training programme for Fishery Demonstrator.

In the F.Ys 2013-14 and 2015-16, the enrolment for the training of fishery demonstrator stood at 30 and 29 respectively. The fund allocated for this course amounted to Rs. 5

lakhs in F.Y. 2013-14 and Rs. 5.22 lakh in F.Y 2015-16, of which the entire amount was utilized.

Few of the emerging areas for skill training which came out during the interactions are Organic aquaculture, Post-harvest management in aquaculture, Production of value added products, and integrated fish farming. The major challenges associated with the in-house training are inadequate hostel facility, lack of resource persons, insufficient training materials and inadequate fund provision for training.

5. Department of Industries & Commerce, Assam

The department of Industries & Commerce in Assam has been promoting skill development in the state through its flagship programme Multi-Disciplinary Skill Development (MDS), which was inaugurated on 4th May 2012. The programme was designed to effectively address the issues of skill development, enhance employability of unemployed youths as well as to take advantage of the growing demand for skilled manpower nationwide with the growth of economy. The Industries and Commerce Department plans not only to train youths for acquiring skills but also plans to extend hand holding support to these trained youths for placement by creating job studio. The database of the trained and skilled youths will be uploaded in the departmental E-portal, which will act as interface between employee and employer. The scheme also has provision for training of entrepreneurs to enhance their skills to compete internationally. The entrepreneurs once trained will also be engaged as master trainers to train more and more numbers of entrepreneurs throughout the state to upgrade their skills.

The various trades offered under MDS are Fashion Designer/Readymade Garments Making, Jacquard Weaving with Reeling & Spinning, Special Security Personnel, Offset Printing Machine Operator, Construction Machine Operator, Cement Industries Machinery Operator, Iron & Steel Industry Machine Operator, Solar Energy Equipment Operator, Packaging Operator, Plastic Processing Machine Operator, Hot Mix Plant Assistant, Oil Rig Driller, Mechanized Process of Incense Stick (Dhoop) making, Areca Nut Leaf Plate/Bowl Making, Cane Mat (Shital Pati) Industries, Water Hyacinth Products Making, Jute Diversified Products Making, Soft Toy Making, Photo Frame Making, Decorative Candle Making, Advanced Training on Assamese Jewellery, Fruits And Vegetables Processors, Bakery, Hospitality: Food & Beverage, Cooking & House Keeping, Retail: Sales & Marketing, Auto CAD, Tally and Basic Accounting, Computer Hardware Repairing & Networking, Call Centre Operator (BPO), Beauty Care, Spa & Wellness Therapist, Fabrication Works, Mason, Bar Bending, Plumber, Carpenter, Painter including Car Painting, Industrial Electrical Electrification & House Wiring, Electrical/Electronic Equipment's Repairing, Transformer Repairing, Agricultural Equipment Repairing, Battery Assembling and Inverter Repairing, Mobile Phone Repairing, Excavator/Dumper Operator and Repairing, Driver cum Mechanic, Medical Representative, Physiotherapist, Nursing, Optical Assistant, Ward Boy/Girl and Blood Sample Collector, Bedside Attendant/Child, Old Age & New Born Care.

Initially, the department engaged Govt. undertaking training institutes to provide MDS training since F.Y 2011-12. Some private training providers have also been engaged to

provide MDSD training in the F.Y. 2013-14. During the year 2011 to 2013-14, 2393 nos of youths were trained in 24 nos of trades, of which 1048 have been placed in various industries & service sectors and 823 nos. of trainees were self-employed. In the F.Y. 2014-15, 1331 nos of trainees had been sponsored to 16 Skill Training Service Provider (STSPs) in 24 different trades. In the F.Y. 2014-15, a total of Rs. 400.00 lakhs has been allotted for MDSD training. The department planned to set up the MDSD training Centre in each development block of Assam and to upgrade CITI of Kalapahar, Guwahati as state level skill development centre. The department has already set up four such MDSD training Centres in Badarpurghat (Karimganj), Margherita (Tinsukia), Samaguri (Nagaon) and Mukalmuwa (Nalbari) and 8 numbers of existing infrastructure has been renovated for providing MDSD training. The constructions of 12 such MDSD centres are going on at different parts of Assam.

6. Department of Urban Development, Assam

The department started National Urban Livelihood Mission which is implementing various skill developments training under the component “Employment through Skill Training & Placement”. The mission is at implementation stage in Assam from 2015-16. Currently skill training is provided in 16 different sectors viz. Housekeeping, IT & ITES, Construction, Electronics, Media, Retail, Automotive, BFSI, Apparel, Healthcare, Gems & Jewellery, Beauty, Plumbing, Rubber, Green and Logistics. The other emerging areas where attention might be paid are Tourism & Hospitality, Retail, Construction, Plumbing, Automotive, Plastic, Hydrocarbon (Oil & Gas), Handloom, Bamboo based handicrafts, etc.

In the F.Y 2015-16, 1100 persons completed training whereas in F.Y 2016-17, 5231 persons completed training in 17 different trades. An amount of Rs. 2226 lakhs have been allotted to the department in the F.Y. 2016-17 under skill development component. The allocation of fund under skill component was Rs.2884 lakhs and Rs.4337 lakhs for the F.Y. 2014-15 and F.Y. 2015-16 respectively.

The skill trainings implemented by the department is outsourced to Private Skill Training Providers. During the interaction with NEDFi team, the major challenges faced in the implementation of the programme are unavailability of information on local skills in demand, unavailability of professional local skill training agencies of Assam, poor linkages of available skill training agencies with the job market, youth not willing to go outside their municipal areas for job and delay in certification.

7. Department of Horticulture & Food Processing, Assam

Horticulture is an important sector for the state which has huge economic potential waiting to be exploited for employment generation for various categories of population. The Department of Horticulture & Food Processing conducted 200 hours (30 days) of Gardeners Training under Horticulture Mission for North East

and Himalayan States (HMNEH). The programme was conducted in collaboration with Small Farmer’s Agribusiness Consortium (SFAC) and KVK, Kahikuchi during the F.Y 2016-17. An amount of Rs.8.68 lakhs was sanctioned by the Government to be utilized

under different heads to conduct and complete the training programme. 50 trainees from different districts of Assam were trained in this programme.

8. Department of Sericulture, Assam

The Department of Sericulture has undertaken various skill initiatives through Special Plan Allocation (SPA), Catalytic Development Programme (CDP), Integrated Sericulture Development Programme (ISDP), Intensive Bivoltine Sericulture Development Programme (IBSDP) and Employable Skill Development in Assam under NEC (ESD).

A total of 3790 trainees were trained under the various schemes in the F.Y 2015-16, while 2900 trainees were trained in the F.Y. 2014-15 and 2425 trainees were trained in F.Y. 2013-14. The total fund allocation and utilization during the F.Y.2015-16 under IBSDP was Rs. 11.00 lakhs while it was Rs.120.00 lakhs under ISDP. A total of 9115 farmers got self-employed out of which 3214 are males and 5901 are females.

The Department of Sericulture has 1 Training Institute at Titabar, in which only certificate course for Sericulture Demonstrator is provided. After completion of the training, trainees are posted as Sericulture Demonstrator in different parts of the state, subject to vacancies. The department conducts training in two trades viz. Pre Cocoon Technology (from nursery to cocoon production) and Post Cocoon Technology (from reeling, spinning up to yarn production). During the interactions with NEDFi team, few emerging pockets for this industry have been highlighted which are Sivasagar, Dhemaji, North Lakhimpur, Dhakuakhana, Silchar, Goalpara and Kamrup. The Department highlighted the need to motivate the people from home based to commercial based production in this sector.

9. Department of Animal Husbandry & Veterinary, Assam

The Department of Animal Husbandry & Veterinary has undertaken training programmes on Introduction of Gopal Mitra by Area Livestock Development Agency (ALDA) of Animal Husbandry & Veterinary Department. In the F.Y. 2014-15, a total of 174 trainees were enrolled while 50 trainees were enrolled in the year F.Y 2015-16.

10. Department of Handloom & Textiles, Assam

The Department of Handloom & Textiles conducted various training under Block level cluster under National Handloom Development Programme (NHDP). The skill development trades which are being imparted under this scheme are Weaving, Dyeing and Designing. The total enrolment for the Block Level Cluster scheme under NHDP in different trades during the F.Y. 2015-16 was 2240 and all of them were self-employed. The fund allocation and utilization under NHDP scheme was Rs 262.64 lakhs in the F.Y. 2015-16.

The department also imparted training through Handloom Training Centres and Handloom Training Institute. Under the Handloom Training Centre scheme, the enrolment stood at 810 in F.Y 2015-16, 1144 in F.Y 2014-15 and 1170 in F.Y. 2013-14. The fund allocation under this scheme was Rs. 11.95 lakhs out of which Rs. 7.77 lakh was utilized in the F.Y. 2015-16. The total enrolment under the Handloom Training

Institute scheme stood at 49 in the F.Y. 2015-16, 53 in F.Y. 2014-15 and 41 in 2013-14. The fund allocation under this scheme was Rs. 1.72 lakh out of which Rs. 1.17 lakh was utilized in the F.Y. 2015-16.

Under Block level cluster scheme of Govt., there are altogether 91 clusters throughout Assam. Advanced training to weavers of the clusters is provided by Weaver Service Centre located at Khanapara in Guwahati on Jacard Machine, Dobi, Dyeing Technology. The yarn is supplied by NHDC at subsidised rates and ARTFED and AGMC provide support in Marketing of the products. There are approximately 1800 primary weaving cooperative societies throughout the state and 1 society is composed of approximately 100 families. There are training centres throughout the state which provides training in Handloom technology. There are 98 Weaver Extension Service Centre and 20 nos. of Handloom Production Centres. The Training Centre provides 1 year artisan course in Weaving, Dyeing and Printing

The major challenges faced by Textile & Handloom sector is lack of Garment Manufacturing facilities including Hosiery items. Training programme in Garment Design, Manufacturing and Embroidery needs to be introduced. Also, computerised system needs to be introduced in Handloom sector to make marketing easier and faster.

11. Department of Panchayat & Rural Development, Assam

The department is implementing schemes Deen Dayal Upadhaya Grameen Kaushalya Yojana (DDU-GKY) and Rural Self Employment Training Institute (RSETI) scheme through the Assam State Rural Livelihood Mission (ASRLM).

ASRLM is currently implementing Deen Dayal Upadhaya Grameen Kaushalya Yojana (DDU-GKY) across the state of Assam. The ASRLM is providing skill development training and placement through PPP mode to rural youth (15-35 years) in sectors like Hospitality, Healthcare, Information & Technology, Banking & Accounting, Construction, etc. Since it started, 12,642 youth have been trained and 9144 youth have been offered jobs in various national and multinational companies after successfully completion of training.

Under the Rural Self Employment Training Institute (RSETI) scheme, there are 26 functional RSETIs in Assam (including 1 RUDSETI) and as on 31st March, 2017, 430 courses were covered and training was provided for duration ranging from 10 days to 45 days as approved by NSQF. There are different trades which are divided into groups such as, **Agricultural Programmes, Product Programmes, Process Programmes, General Programmes and Other programmes.** The **Agricultural Programmes** include trades like, *Dairy, Poultry, Apiculture, Horticulture, Sericulture, Mushroom cultivation, Floriculture, Fisheries;* the **Product Programmes** include trades like, *Dress Designing for Men and Women, Rexine utility articles, Agarbatti Making, Football Making, Bags, Bakery products, Leaf Cup making, Recycled Paper Manufacturing;* **Process Programmes** include trades like, *Dress Designing for Men and Women, Rexine utility articles, Agarbatti Making, Football Making, Bags, Bakery products, Leaf Cup making, Recycled Paper Manufacturing, Two wheeler repairs, Radio/TV repairs, Motorrewinding, Electrical transformer repairs, Irrigation Pump set repairs, Tractor & Power*

*tiller repairs, Cell Phone repairs, Beautician course, Photography and Videography, Screen printing, Photo Lamination, Domestic Electrical Appliances repair, Computer Hardware & DTP, the **General Programmes** includes skill development programmes for women and **Other programmes** include *Leather, Construction, Hospitality and any other sector depending on local requirements.**

In the F.Y. 2015-16, 14556 trainees were enrolled, out of which 248 trainees were placed and 8964 trainees acquired self-employment. During the interaction with NEDFi team, it was reported that one of the constraints faced in implementation of DDU-GKY is mobilization of the right candidate with right aptitude for the training. Recently, a pilot 'Star Alumni' mobilization camp was also organized in two blocks and has become very successful. Two candidates from the respective districts which have completed training and 1 year of placement were selected as the star alumni to speak about their journey of success and their experiences as trainee of DDU-GKY. More number of candidates has enrolled themselves for the programme in the exposed blocks as compared to unexposed blocks. Job melas and counselling sessions were organized at block level to mitigate the problem associated with unemployment of trainees. The major constraints associated with RSETIs are inadequate awareness programme, lack of credit linkage to avail loan upon successful completion of training and tracking of trained candidates.

d. Assessment of Effectiveness of Short-Term Placement Linked Skill Development Programmes

In order to assess the effectiveness of Short-Term Skill Placement Linked Development Training provided under the skilling initiative of the State, a primary survey was conducted among the trainees who had completed their course under various skilling initiatives of the state. Apart from interacting with these trainees, interactions were also held with other stakeholders in order to understand the major challenges faced in the implementation of the scheme. A total of 428 successful trainees were contacted for this purpose. The average age of the respondents was 23 years of which 67% were males and 33% females. The database of trainees under Short-Term Skill Placement Linked Development Training revealed that training was provided in trades such as Accountancy, Automobile, Basic Cosmetology, BPO, Customer Care Executive, IT & ITES, Electronics, Field Sales Executive, Food & Beverage, Garment Technology, General Duty Assistant, Hospitality Assistant, Housekeeping, Retail Trainee Associate, Sales Person, Secretarial Practice, Security Guard, Textile Technology etc.

During the survey, out of total respondents, only 27% were found employed, 9% self-employed and the remaining persons (64%) are still looking for a job. The sectors in which the trainees were mostly employed are IT & ITES followed by Banking & Accountancy, Retail, Hospitality, Health & Allied, Security Guard and Teaching. The average salary of the employed persons was around Rs. 8500 who were mainly engaged in Assistant level jobs like Accounts Assistant, Computer Operator, Lab Assistant, Driver, Field Investigator, Front Office Executive, General Duty Assistant, Hospitality Assistant, Housekeeping, Security Guard, Call Centre Executive, Customer Care Executive, Sales Executive, Teacher, Trainer etc. In majority of the cases, the source of knowledge about the job was provided by the training provider (65%), followed by family (16%), friends

(15%), media (1%) and others (4%). It was observed that many trainees left their first job due to problems like low salary, health problems and adjustment problems etc. Most of the students reported that attending the training had brought positive impact in their technical skills, communication skills and personality development. Only 5% of the trainees were either employed or self-employed before attending the training programme and stated that the training helped in improving their technical skills. Out of the total respondents, 57% of the respondents considered the training programme as somewhat sufficient, 29% as sufficient and 14% as not sufficient for them. When it came to practical knowledge, 60% respondents found it somewhat sufficient while 21% found it sufficient and 19% felt that it was not sufficient for gaining practical knowledge. In terms of overall satisfaction with the training programme, only 7% were found to be very satisfied, 33% were satisfied, 53% of the respondents were neither satisfied nor dissatisfied and remaining 8% were dissatisfied.

e. Governance Model

In order to govern various skill development initiatives in the state, the government of Assam has created institutions such as Department of Skill, Employment & Entrepreneurship, Directorate of Craftsmen Training and Assam Skill Development Mission (ASDM).

Department of Skill, Employment & Entrepreneurship: The department for Skill, Employment and Entrepreneurship was formed on 26th September, 2016. Assam Skill Development Mission (ASDM) is being operationalised under this Department. A District Mission Management Unit has been set up in every district for implementing the mission with the Deputy Commissioners as the Chairman, District Executive Committee. The Directorate of Employment & Craftsmen Training is also operating under this Department.

Directorate of Employment & Craftsmen Training: The Directorate of Employment & Craftsmen Training, Assam is providing vocational training through its 28 Govt. ITIs of the state under Craftsman Training Scheme of Government of India, with the objective to provide semi-skilled/skilled workers to industry by systematic training. The Directorate is also working towards reducing the unemployment among educated youths by equipping them with suitable skills for Industrial Employment & self-Employment.

Assam Skill Development Mission (ASDM): Assam Skill Development Mission is registered under Society Act in 2015 and is working under the Skill, Employment & Entrepreneurship Department, Govt. of Assam with the vision of capacity building of unemployed youth and to deliver quality skill training leading to meaningful employment to stimulate economy of the state. The Mission started its functioning from January, 2017 as an apex body of all skill initiatives in the state to achieve skilling target of 1.50 lakhs youth in a year. The mission will look after the provision of quality skill training for gainful employment of educated unemployed youth. It will encourage development of entrepreneurs in different sectors besides implementing central sponsored skilling schemes in the state. The Apex Body also works towards improving

employability, creating skilled manpower, generating productive assets and stimulating rural economy.

Apart from these key entities, there are other departments also conducting various skill developments training either through their in-house experts or through private experts and institutes, under various Central and

State Government schemes. The department of Panchayat & Rural Development is implementing schemes through the Assam State Rural Livelihood Mission (ASRLM). ASRLM is currently implementing Deen Dayal Upadhaya Grameen Kaushalya Yojana (DDU-GKY) across the state of Assam. ASRLM is also implementing the Rural Self Employment Training Institute (RSETI) scheme, which was based on the Rural Development Self Employment Training Institute (RUDSETI) model to alleviate the unemployment problem. The Agriculture department is conducting skill development trainings as a part of extension services provided to farmers in the form of Farmers Field Schools, Agri-Clinics and Agri-Business Centers and technical backstopping from Krishi Vigyan Kendras (KVKs). The department of fisheries conducts various training under different schemes like RKVY, NFDB etc. for the farmers. The department of Industries & Commerce in Assam has been promoting skill development in the state through its flagship programme called Multi-Disciplinary Skill Development (MDSD). The department of Urban Development is implementing “Employment through Skill Training & Placement” under National Urban Livelihood Mission. The Department of Horticulture & Food Processing completed 200 hours (30 days) Gardeners Training under Skill Development Training Programme under Horticulture Mission for North east and Himalayan States (HMNEH).

This governance structure has succeeded to some extent in bringing the required focus and co-ordination among departments in skill development activities within the state. However, there are a few important governance related issues which needs to be addressed, which are Effective Planning of Skill Development Schemes, Strengthening & Effective Utilization of Existing TVET Institutions, Strengthening the Regulatory and Quality Control Body for Skill Development at the State Level, Labour Market Intelligence System (LMIS) and Adequate Availability of Skilled Teachers/Trainers for Skill Development Trainings.

f. Quality Assurance System

A closer look at the Skill Development system of the state of Assam reveals that even though the state has taken up the initiative to ensure quality control and quality assurance system by formation of State Council for Vocational Training (SCVT), yet its scope is limited to vocational trainings conducted through ITIs only. There exists no single quality control mechanism to regulate various skill development schemes being implemented in the state. In view of this, the State Council for Vocational Training needs to broaden its scope. Over the last few years, the central government has been working hard towards creation of a single quality assurance framework through steps such as development and implementation of National Skill Qualification Framework (NSQF),

creation of Sector Skill Councils (SSC) which helps in creating National Occupational Standards (NOS) for different sectors bringing the much needed industry perspective into the skill training standards. These initiatives of central government aimed at developing a quality assurance framework is expected to help shifting emphasis to outcome based learning - both in the general and vocational space. The framework suggested here for a quality assurance system is based upon the Total Quality Management (TQM) Approach. In order to achieve the TQM approach, there is a need to establish a comprehensive quality management system (QMS) which takes into account the issue of Quality Control and Quality Assurance as the most important part of the skill development efforts put in by the various stakeholders of the skill eco-system. The features of suggested quality management system are:

1. Preparation of a realistic skilling plan for the state removing redundancy in training and mobilization and taking into consideration the nature of the economy, availability of resources and skilling needs of each district taking into consideration the existing and upcoming sectors of each district in which people are engaged or willing to engage both in terms of wage employment and self-employment.
2. Monitoring and regulating the quality of general education provided at elementary and secondary levels in the state, as the cognitive skills which lay the foundation for employability, are mainly dependent upon the quality of education at these levels.
3. To see the relevance of courses offered by premier vocational institutions like ITIs and Polytechnics and to suggest any necessary alterations in the course curriculum, duration of courses etc. if required.
4. To check the quality of trainings provided in Government Higher Secondary Schools having vocational subjects. The areas in which the QMS should look into are the quality of available training infrastructure, quality of teachers and trainers and also the relevance of providing such training at school level.
5. Selection and empanelment of the Vocational Training Providers who have the requisite qualifications for providing high-end skill training in the areas or sectors in which the state needs to intensify its skilling efforts. The selection should be based upon the proven capacity and ability of the VTPs in providing skill trainings within the state.
6. Clear guidelines to control the quality of trainings provided by vocational training institutions and periodic quality checks and certification of the training providers to take care of quality aspect of issues such as physical infrastructure, teaching/training aids, tools, implements etc. available with institutions providing vocational training in the state.
7. Concurrent Process Monitoring of the various skill development schemes to keep a close watch upon the quality of implementation on real time basis, so that the quality issues can be addressed as and when required.

IV. ASPIRATIONS AND SKILL DEVELOPMENT NEEDS

As a part of the study, in order to assess the Aspiration and Skill Development Needs of various categories of population in the state, a detailed primary survey was undertaken in all the 33 districts of the state at block level covering 10134 samples. These categories are: (i) School Students, (ii) Graduate & Post Graduate Students, (iii) Vocational Students, (iv) School Dropouts, (v) Persons Engaged in Vocations & (vi) Unemployed Persons. Focus Group Discussions were also held with Parents of Students and Teachers and Trainers of institutions like ITIs and Polytechnics on issues regarding awareness of career options among parents, views on TVET system, and other issues of teacher/trainer of TVET system. The primary survey was designed in such a way so as to get the results at 95% Confidence Interval and 5% Margin of Error.

School Students: In order to understand the aspirations and skill development needs of school students, 1870 students (980 male and 890 female) studying at secondary and higher secondary level were contacted for questionnaire survey. Out of the total sample students, 81% of all the student respondents wanted to work in government sector, 7% were looking for private jobs, 7% wanted to be entrepreneurs, 4% had no specific plans and the remaining 2% had no career plans at all. This clearly highlights the fact that most of the respondents wish to work in the government sector. In connection with the income expectations, 51% of the respondents expected salary between Rs. 20,000 - 50,000; while 14% respondents expected above Rs. 50,000 per month. It was also seen that 6 % respondents expected less than Rs.10, 000 and 18% Rs. 10,001-Rs.20,000 per month. Out of all the respondents 10% did not answer when asked about their salary expectations. It was found that parents serve as a major influence in their children's career development as agreed by 79% of the respondents. Significant number of students wanted to study general higher education like B.A (37%), B.Sc (17%) and B.com (8%). The remaining respondents chose various courses like MBBS (12%), B.Tech (10%), Vocational Education (10%), LLB (3%), BBA (1%), B.Pharma (1%), and others (1%) etc. The 10% students wanted to study in vocational education were mainly interested in Beauty & Wellness (12%), Electronics (12%), Healthcare (11%), Sports (11%), Tourism & Hospitality (8%), Education & Training (8%), Handloom & Handicrafts (6%), Media and Entertainment (4%), Automobile (4%), Life Sciences (3%), Aviation (3%), Oil & Gas (3%), Agriculture & Allied (3%), Security guard (3%), Construction (2%) , Gems & jewellery (2%), Retails (1%), Textile (1%), Dancing(1%), IT & ITES (1%), Iron & steel (1%), Plumbing (1%), Telecom (1%), Banking (1%) etc. The school students were mainly interested in trades such as IT & ITES, Healthcare and allied Services, Beauty & Wellness, Tourism& Hospitality, Sports. It was observed that most of the students (66% of respondents) were not aware about the Vocational Skills Programmes provided by Government and only 34% were acquainted with those programmes.

Graduate & Post Graduate Students: To understand the aspiration and skill development needs of graduate and post graduate students, a separate questionnaire was designed. Interactions were held with 1660 graduate and post graduate students (863 male and 797 female) in all revenue circles in Assam. When the respondents were asked about their career plans, a large number of the students (88%) chose service as their career goal while 7% choose entrepreneurship and 4% did not have any idea about their career goals. It was observed that huge number of students wanted to go for government jobs (82%)

and 7% chose private sector as a career. It was seen that 47% of the respondents expected salary between Rs. 10,001-30,000; while 34% respondents expected between Rs. 30,001-50,000 per month. A few respondents expected below Rs. 10,000 (4%) and above Rs.50, 000 (6%) respectively. Parents were found to be the most influential (81%). After parents, elder relatives play the most significant role in deciding their career plan as 11% respondents agreed to it. Out of the total respondents, 56% were ready to move out of Assam for career development, while the rest did not have such plan. The trades in which this category of respondents showed interest are Banking Financial services & Insurance, Education & Training, IT & ITES, Construction, Tourism & Hospitality etc. It was found that 52% had awareness about the Vocational Skills Programmes being provided by the government and 94% of the respondents were interested in attending Skills Development Programmes for their career development.

Vocational Students: Interactions were held with a separate questionnaire with 1480 vocational students (870 male and 610 female) studying in institutions like Polytechnics, ITIs, Private Vocational Training Providers, Govt. Higher Secondary Schools, Govt. Colleges with vocational streams. Migration tendency was noticed among the student respondents as 57% were ready to move out of Assam for career growth. Majority of vocational student respondents joined the training due to interest in the trade (54%) and 39% in order to improve chances of employment. It may be seen that 34% expected a salary or income of Rs. 10001-20000. 12% expected a monthly salary or income of Rs. 10,000 and below, 31% of the respondents desired a monthly income between Rs. 20,001-30000 and 19% wished to earn between Rs. 30001-50000, while 3% had a high expectation of salary of Rs. 50000 and above. The Vocational Students were mainly interested in trades like Oil& Gas, IT & ITES, Electronics, Banking Financial services and Insurance, Tourism and Hospitality, Automobile etc. It was observed that 95% respondent students wished to attend general skill development programme which includes Computer Knowledge, English speaking, Interview skills, Communication and Personality development etc and the residual 5% respondent students had no such aspiration.

School Dropouts: To understand the aspiration and skill development needs of school drop-outs, a separate questionnaire was designed and interactions were held with 1586 school drop outs (932 male and 652 female) in Assam at all revenue circles. Majority of the students dropped out at the middle level, followed by secondary level and primary level. Majority of the respondents (55%) cited financial issues as the main reason for dropping out, whereas the others felt that family issues (31%), health issues (6%), issues related to school (3%) were the reasons for dropping out of school. A few (5%) of the respondents cited 'others' as the reason for dropping out. Majority of the school dropouts were unemployed and unable to earn a living and only a few were seen to be self-employed and earning their livelihood. The employed/self-employed respondents were working as a Retailer, Businessman, Tailor, Driver, Labour/Wage Earner, Mechanic, Beautician, Farmer, Handloom & Handicrafts, Constructor, Brick Layer, Welder & Fabricators, IT & ITES and Jewellery Designer etc. It was seen that 82% of the respondents did not possess vocational skills and the remaining 18% responded affirmatively and agreed to possess some kind of skill and were found mainly engaged in

Cutting , Knitting & Weaving; Handloom & Handicrafts, Beauty and Wellness, Driving, Electronics, IT & ITES, Mechanic, Construction, Agriculture & Allied Activities, Sports, Lab Technician, Food Processing, Mason, Tourism & hospitality etc. Most of these respondents (69%) were satisfied with the training that they had undergone, 17% were neither satisfied nor dissatisfied and the remaining 10% were dissatisfied due to the reasons like insufficient training (40%), lack of teaching aids (12%), no demand for that particular trade (16%) and poor teaching (32%). Further, the respondents were asked if they wanted to continue formal education if distance learning programme is offered to them to which half of the school dropouts replied affirmatively on being asked and rest showed lack of interest in continuing formal education. The trades of interest of this category are Beauty and Wellness, Electronics, Agriculture & Allied Activities, Mechanics, Food Processing.

Person Engaged in Vocations (PEVs): During our survey, 1574 persons (994 male and 580 female) engaged in vocations were contacted covering all the revenue circles of the state. It was found that 69% of the respondents were self-employed, 24% were regular workers whereas residual 7% were contractual workers. The respondents were asked about their satisfaction level with their current occupation. 97% of the respondents agreed to have different levels of job satisfaction with the present occupation. 74% respondents were not ready to move out of Assam for better livelihood, given the opportunity while 26% were found ready. It was found that out of the total respondents, 83% of the respondents were satisfied with their present level of skills. Further they were asked if they wanted to attend additional skill development programme for career development. 83% of the respondents replied positively and the reasons for choice are interest in that trade, high demand of that particular trade, chances of the trade leading to self-employment etc. 68% of respondents were not interested in further skill development programme. The respondents who were self-employed stated that lack of money and lack of raw materials along with marketing support were the major difficulties in pursuing their occupation. For respondents who were wage employed, lack of technical skills and soft skills were the major difficulties encountered in pursuing their occupation. In order to deal with these difficulties, the major facilities needed are support for loan, marketing support and availability of raw materials in case of self-employed persons and in case of wage employed persons, the facilities needed are training in technical skills and soft skills. Further, they were asked about the expected monthly stipend if they joined a full time vocational course, taking a break from their present work to which 11% of the respondents from the samples expected monthly stipend within the range of Rs. 10,001-20,000, 5% expected within 20001-30000, 4% expected within 5001-10000, 6% respondents thought that they would get more than 30,000. The respondents were also asked whether they were willing to continue formal education if distance learning programme was offered to them and 67% respondents replied negatively as they did not wish to continue with any formal general education. The trades of interest of PEVs are Retail, Tailoring, Weaving & Knitting, Beautician, IT & ITES and Mechanics.

Unemployed Persons: Interactions were held with 1536 unemployed persons (906 males and 630 females) selected randomly from the population. The respondents were taken from the unemployed persons of working age group. It was also noted that 77% of

respondents had tried to get a job (Govt. job-59%, Private job-14%, both private and Government job-4%), but could not manage to obtain a decent job. 23% respondents told that they had never tried to get a job. However, 68% of these respondents had tried to self-employed, but they highlighted some difficulties in becoming self-employed which are, lack of money (56%), lack of skills (34%), lack of guidance (10%) etc. The trades of interest are Banking, Financial Services and Insurance, Beauty & wellness, Electronics, Handloom & Handicrafts and Agriculture & Allied Activities.

Focus Group Discussions with Parents: Parents in most districts are not aware about the vocational courses being implemented by VTPs, Polytechnics and ITIs. Most of the parents are found to be sceptical in sending their wards outside the state for higher education. However, in a few districts (including those which are not very developed) parents were in favour of sending their children outside for pursuing fashion designing and hotel management. In many cases, parents preferred their wards to complete education up to the post-graduation level. Parents expressed their desire for the need of career counselling for their wards as they themselves are not qualified enough to provide proper guidance to them regarding career. The guardians of private schools are well aware and acquainted with the student's counselling and knew the importance of it. However, guardians with poor economic background and low education level fail to feel the importance of it. In many cases public schools do not conduct any career counselling for its students. Parents possessing traditional skills, in most cases are not in favour of passing those on to their children and do not want them to take it up as livelihood option. This is because they believe that demand and income from traditional skills is declining. Parents in the remote area find it difficult to send their children to schools due to transportation and communication problems. Most of the parents preferred Science, Commerce and Arts streams instead of Technical Education. In most of the cases, children decide about their career and it depends on the academic performance and financial position of their parents. From the discussions with parents, it was clear that there was an interest in technical or vocational courses, but they think that there is a dearth of quality trainers/instructors in the institutions providing vocational training.

Focus Group Discussion with Teachers/ Trainers of Industrial Training Institutes (ITIs): Most of the teachers were of the opinion that extensive counselling is much needed to make the students well aware of their future and get a proper way of life. The recruitment and placement of students in many ITIs are not taking place. Besides, there is no record keeping provision for the successful students to keep a track in case of placement. Teachers also opined that because of the low degree of industrial development, the level of local placements is minimal. Few of them also reported that SCVT courses are not up to date with the current industry requirements and the students have been learning the same old contents with age old equipment. Most teachers expressed that there was a lack of infrastructural facilities in the institutions. Lack of separate hostel facilities for boys and girls, laboratories, library, modern tools and equipment, buildings, staff quarters etc. were some of the common problems plaguing most ITIs of the state. Teachers also felt that there was a need for re-skilling of people engaged in vocations. This is because few of the students who got trained in certain courses, have no industry relevance or are no longer in demand. So, it is essential that re-skilling of previously

trained personnel also takes place. Most teachers also expressed lack of motivation towards their job, as they had limited scope for career advancement. They also voiced their dissatisfaction regarding their low salary and other benefits. This could also be a reason for the dearth of manpower in ITIs. Regarding skill development, the teachers felt that there is a need for the establishment of more ITIs with new, relevant courses, which have large area coverage. This would benefit more people and inaccessible places within the state can be reached. In many cases, seats are fewer than demand which is a matter of concern to make provision for increasing the number of seats in required trades.

Focus Group Discussion with Teachers/ Trainers of Polytechnics: It was reported by most of the teachers that many of the institutes are not being able to provide education as per the industry requirements due to the absence of adequate infrastructure and quality laboratory equipment. In most of the cases, students are using the same age old outdated laboratory equipment. It was also expressed that there is scarcity of faculty members in different departments. Along with the crunch of human resources, there exists infrastructural issues concerning canteen facility, laboratory, internet connectivity, hostel facility, etc. which need to be paid attention to. Training for teachers (held for 7-10 days) are conducted under the Ministry of Human Resources and National Institute of Technical Teachers' Training & Research (NITTTR)-Kolkata and Extension Centre-Guwahati.

Focus Group Discussion with Teachers/ Trainers of Government Secondary and Higher Secondary Schools with vocational streams: There are no proper facilities for conducting practical classes. Just bare minimum facilities are usually available due to which it is very difficult to provide quality vocational education. Students in general are not interested in taking up vocational education. They are more interested in undertaking higher education. Most of the students who undertake vocational streams in schools do not join any vocation. Most of them are going for degree courses mainly in arts subjects. The students in these schools are mainly from economically backward classes of society. Many students after completion of course wish to branch out on their own in the concerned trade but due to lack of credit linkage, they cannot do so. So there is need to provide credit linkages to these students so that they can start their own work. No Detention Policy till class 8 has done lots of harm. Because of this, in class 9, lots of candidates are failing to pass the exam and creating an unusual situation having more number of students in class 9 than its capacity. This situation is creating problems for schools. More focus should be given to education related to Science, Maths and Technology as education in other streams does not prepare students for job market. Sufficient Autonomy should be provided to Government Schools for raising funds for engaging expert agencies which help in improving the learning outcomes at schools. Even though the parents of students studying at these schools come mostly from economically lower strata, most of them are willing to contribute funds as per their capacity for the betterment of their wards. Offering vocational education and training in general schools traditionally meant for providing normal schooling have not met the desired results due to various issues such as lack of facilities, latest equipment and teaching aids for providing practical classes, lack of sufficiently trained facilities and majority of students not being interested in pursuing vocational education. Majority feel that, ideally, there should be different setup all together in the form of separate vocational schools for providing

vocational education and training to the students who are either interested in doing so or due to poor performance in normal schooling are at the risk of dropping out. In any case majority were of opinion that the vocational education and training should begin after completion of matriculation and not before that.

Focus Group Discussion with Teachers/ Trainers of Government Colleges with vocational streams: Most of the teachers were of the opinion that career counselling at school and college level is of great importance to enable students to have access to proper career guidance and inform them about the possible scope and opportunities relating to different vocational courses and other studies. Most teachers of the colleges felt the need for introduction of vocational courses along with general education courses. Doing so would help students in opting other career options apart from the conventional courses of study. Teachers also expressed that there exists lack of funds for skill development courses in the colleges. Teachers suggested that there should be some partnership with the private industries/ employers for internship of vocational students. Most of the teachers expressed their opinion to develop good infrastructures in line with the vocational courses for better delivery of the content. The selection of the trades to be shortlisted as vocational courses in colleges/schools should be based on the local demand and in compliance with the local people. Most of the teachers were of the opinion that the trades in demand for vocational streams include *Banking, Tourism Management, Manufacturing, Computer Application, Fashion Designing, Web Developer, Software Developer, Help Desk Assistance, Boutique Manager, Organic Farming, Composting, Floriculture, Value Addition, Food Processing, IT/ITES Etc.*

V. SKILL REQUIREMENT TRENDS

The analysis on skill requirement trends focuses on the demand side requirements in terms of abilities and proficiencies required across different jobs and work settings in general. The approach here is to assess the skill requirements in the promising sectors and also take into account the national and global skill requirement trends so that the working population is not only ready for opportunities within the state but in case of limited or lack of opportunities in their chosen fields, they are suitably equipped to take up opportunities available

anywhere in the world. In today's globalised world, skilling efforts should take into consideration the trends in skill requirement globally. This is more so when our country is not only aiming to become a global hub for supply of skilled manpower but also planning to become a world class manufacturing hub with the newly launched "Make in India" initiative. This requires deeper understanding of the skill requirements outside the state both nationally and globally, the changing pattern in the world of work and current hiring trends across major industry sectors.

a. Global Skill Requirement Trends

A study done by McKinsey Global Institute in June 2012, has predicted that globally there will be a potential shortage of 38 million to 40 million high-skills workers, a potential shortage of nearly 45 million medium-skill workers and a potential surplus of 90

million to 95 million low-skills workers by the year 2020. As a result of technological advancement and globalization that have happened around the world in the past three decades, a situation is emerging where there will be few high- skills workers available and insufficient number of jobs for medium- and low-skills workers. Advanced economies are at the forefront of the technological advancement in Knowledge-Intensive Manufacturing and Information Communication Technology (ICT). Advancement in these two areas has brought sweeping changes in the employment pattern not only around the advanced economies but in developing economies too.

The ILO Report on Changing Pattern in the World of Work says that adoption by advanced economies of knowledge-intensive manufacturing which is mainly based on labour saving technologies has resulted in improved productivity on one hand and decline in manufacturing employment on the other. The upshot of this is increased demand for high-skill workers, reduced demand for medium-skill workers and virtually no demand for low skill workers in manufacturing sector in advanced economies. The Report also says that automation of manufacturing has led to a stabilization of the share of industrial employment in the global scenario, although the absolute numbers employed in these sectors continue to rise. China and its East and South-East Asian neighbours have become a new hub for manufacturing jobs, while employment in industry in most industrial countries is in steady decline. An additional feature of change in manufacturing is that it is increasingly necessary for producers wherever they are located to keep close to the technological frontiers of their industry. For developing countries, this suggests that manufacturing is unlikely to absorb much of their increased labour supply as unskilled, strongly labour-intensive, technological options become less viable on global markets. This shows that there will more demand for high skill workers and less demand for medium and low skilled workers in manufacturing sectors in developing economies too in future.

The ILO Report further added that there is an increased demand in occupations across varied sectors of services. In industrial countries, some of the fastest growth is in business services of a managerial, technical or professional character. Also expanding are social services such as health and education, as well as hotels and catering, retail and transport. The direct effect of advancement in ICT on employment are, on one hand, creation of new jobs in producing and delivering new products and services and, on the other hand, loss of jobs in redundant technologies or in firms that fail to keep pace with innovations in ICTs. Exports of services using high-speed internet connections have given rise to sectors such as Business Process Outsourcing (BPO) and Knowledge Process Outsourcing (KPO) in developing countries like India. The services sector is growing fast in not only advanced economies but in developing economies like India and China leading to growth in employment.

It is very important to have an understanding of jobs having global demand so that the youths can train themselves with employable skill and institutions skill providing training can align their courses with the global demand. Prominent among global industries which are facing acute manpower shortages currently are Construction, Oil & Gas and Petrochemical Refineries, Energy, Engineering, Hospitality, Manufacturing, Information & Communication Technology (ITC) and Mining.

b. Effect of Innovation on New Evolving Skill Sets

An ILO Report on Changing Pattern in the World of Work says that the process of innovation and diffusion of new information and communication technologies (ICTs) that took off in the 1990s constitutes a radical transformation of the means of production, distribution and exchange. It has already profoundly affected international trade and investment, the movement of capital and labour, and many work processes and products. It has also accelerated the shift towards services and their outsourcing internationally. In turn, these factors have fed back into the further development of ICTs in a continuing circle of incremental innovations built on the breakthrough of the miniaturization of electronic circuits. The report further says that the rapid spread, ongoing development and pervasiveness of this flow of innovation is driving a massive reconfiguration of world production and distribution, as well as the management systems of enterprises and public agencies with major consequences for employment patterns. These developments along with the growing importance of sustainable development and shift to a low carbon economy are bringing significant and rapid changes in labour markets and skill needs. These innovations have necessitated familiarization of young workers with new kind of skills so that they stay relevant in the rapidly changing economy. The new skill sets which have become critical for performance in today's innovation led economies can be broadly classified as STEM (Science, Technology, Engineering and Mathematics) skills, Learning & Innovation skills, Life & Career skills, Information Media & Technology skills and Green skills.

STEM skills involve skilling in science, technology, engineering and mathematics. Learning and Innovation skills involve creativity and innovation skill, critical thinking and problem thinking skill, communication and collaboration skills. Life and Career skill consist of skill such as flexibility, adaptability, initiative and self-direction, social and cross cultural skills, productivity and accountability, leadership and responsibility etc. Information, Media and Technology skills involve information literacy, media literacy and ICT (Information Communication Technology) literacy etc. Green skills are increasingly gaining importance as the economy of the world is slowly but surely moving in the direction of low carbon economy. Green economy has got its own set of unique skill requirements. Green skills are the specific skills required to adapt products, services or operations to meet adjustments, requirements or regulations designed to stand further climate change or adapt to the impact it is already having. A recent report published by The Institute for the Future (ITF) has taken a deeper look at the skills which is available at present, mapped them against the various trends that are impacting the work place and identified certain skills that we will be needed for moving forward. The key skills and capabilities which are going to be in great demand in the next few years are Sense making, Social Intelligence, Novel & Adaptive Thinking, Cross -Cultural Competencies, Computational Thinking, New Media Literacy, Trends disciplinarily, Design Mindset, Cognitive Load Management and Virtual Collaboration.

c. National Skill Requirement Trends

The McKinsey Global Institute Study referred earlier has forecasted a GDP growth rate of 7.4% per year up to 2030 (Compared with 6.6% from 1990 to 2010), and annual productivity growth of 5.9%, up from 5.0% in the past two decades. This implies that,

India will move workers out of agriculture at a faster rate and will create 160 million new jobs in manufacturing and services. Services are projected to contribute 73% of the incremental value in the Indian Economy and 79% of the net new non-farm jobs in the next decade. Retail and wholesale trade and knowledge-intensive service sectors such as finance, real estate, health and social services are projected to generate 28 million jobs in the next decade, up from 20 million in the past decade. India is also likely to add 15 million jobs in manufacturing in the next decade which is nearly double the 8 million created in the past decade. This figure may further increase with Government of India's newly launched "Make in India" campaign. With this level of service sector and manufacturing job growth, the low skill jobs is likely to decline from 74% of employment in 2010 to 62% by 2020.

In the recent publication of India Skill Report 2017, it is mentioned that the growth of overall hiring intent has been decreasing every year in general. It is seen that Telecom and allied and Core Sector are the leading sectors with an increase of over 10% in the hiring numbers in the coming year. It is followed by sectors like BFSI, BPO, KPO & ITES, Engineering and Automotive, Hospitality, Internet Businesses and Software, Hardware & IT, who's hiring numbers, are expected to increase by 5-10%. Other sectors like FMCG, Manufacturing, Pharma & Healthcare and Others & Diversified are the sectors whose hiring numbers are expected to increase by 0-5%. Domain wise hiring mix of individual industry sectors in India Skill Report 2017 shows that in sectors such as BFSI, BPO, KPO & ITES, Hospitality, there seems to be a clear focus on hiring candidates from general degree courses who can be trained to meet the business needs. Candidates from ITI have been hired mostly for Engineering and automobiles, Telecom & Allied. Diploma background candidates are going to have more hiring opportunities in Engineering & Automotive, Hospitality and Pharmaceuticals & Healthcare. In case of Engineers, the percentage in overall hiring will be more for sectors such as Telecom & Allied, Core Sector (Oil & Gas, Power, Steel, Minerals etc.), Software & IT, Other Manufacturing (not including FMCG, CD, Automotive & Engineering) and Engineering & Automotive. Candidates of management background are hired almost across all the sectors. Contrary to that the percentage of Vocational Graduates in overall hiring across all the sectors have been found low except hospitality and BFSI (Banking, Financial Services & Insurance). With regards to the skills preference of employers when looking for prospective employees, the India Skills Report study gave much useful insight. Apart from the domain expertise, this year, employers were given options like Numerical & Logical ability, Communication, Cultural fitment, Integrity & Values, Result Orientation, Adaptability, Interpersonal skill and Learning agility. On asked to rate the most important skills they preferred, the top 4 skills chosen by the larger segment of employers (almost 60%) were domain expertise, communication skills, integrity & values and learning agility. It is worth mentioning that preferences differ for some industry sectors. For instance, majority of employers from BPO/KPO/IPES sectors chose communication, Core sector, Engineering & Auto, Pharma & Healthcare and Telecom employers chose domain expertise. For the rest of the sectors, Integrity & values along with Domain expertise or Learning agility have been chosen as the most important trait.

d. Skill Requirement Needs of Assam

In order to give impetus to the local economy of a region, it is important to understand the skill development needs of the region. Also, to create opportunities for local wage and self-employment, it's necessary to understand the Potential Sectors Capable of Developing Enterprise and Employment Generation and the Skill Development Requirements. During the primary survey of this study, an effort was made to understand the Potential Sectors Capable of Developing Enterprise and Employment Generation and the Skill Development Requirements for each district of the state. The findings are given in the following table:

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
<i>Tinsukia</i>	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Tourism and Hospitality 4. Horticulture 5. Handloom and Handicrafts 6. Healthcare and wellness 7. Fisheries 8. Construction 9. Food processing 10. Tea processing 	<ol style="list-style-type: none"> 1. The district is a principal commercial centre in Assam. The district has industrial set up like IOC at Digboi (Oldest Refinery of Asia), Coal India, OIL India Ltd, Ply wood factories, Bottling plants, Hindustan Liver Limited, Cosmetic Industry etc. Hence, skill upgradation is required for plumber, fitter, automobile repairer, electrician, motor mechanic, mobile repairer etc. 2. Skill development is required in Cooking & Culinary, Knitting, Tailoring, Fast food outlets and Restaurants 3. Skill upgradation is required for small tea growers in the area of cultivation and processing of tea (organic tea). 4. Skill upgradation is required in case of floriculture, piggery, poultry, goat farming, fishery, duckery, dairy etc. 5. The district being famous for <i>Borajan wildlife sanctuary, Bordubi Tilinga Mandir, Asia's oldest oil field (Digboi), Coal fields, Tea gardens and Tea factories</i> attracts tourist in larger size. Hence, skill upgradation is required in Tourism and Hospitality sector in the areas of tour operator, tour guide, hotel management and hospitality. 6. Skill is needed for commercial production and post-harvest management of oranges, turmeric, ginger, papaya, areca nut, mustard and other

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<p>citrus fruits.</p> <ol style="list-style-type: none"> 7. Skilling is required for incorporation of new design in traditional handloom and handicrafts products and their marketing. 8. Skill development is required for scientific post- harvest management practices like preservation, processing, packaging of fruits and vegetables for value added products. 9. Skill development is required for beauty and wellness industry.
Dibrugarh	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Tourism and Hospitality 4. Horticulture 5. Handloom and Handicrafts 6. Healthcare and wellness 7. Fisheries 8. Construction 9. Food processing 10. Tea processing 	<ol style="list-style-type: none"> 1. The district has various industrial set ups like ONGC, GAIL, OIL India Ltd, BCPL etc. Hence, skill upgradation is required for plumber, fitter, automobile repairer, electrician, motor mechanic, mobile repairer etc. 2. Skill upgradation is required in scientific sugarcane cultivation and processing of molasses on commercial scale. 3. Skill upgradation is required in case of floriculture, piggery, poultry, duckery, goat farming, fishery, dairy etc. 4. The presence of <i>Dibru Saikhowa National Park, Green lusher of tea gardens along with many ancient monuments like Temples (dol) and Maidams</i> makes the district a tourist hot spot. Hence, skill upgradation is required in Tourism and Hospitality sector in the areas of tour operator, tour guide, hotel management and hospitality. 5. Skill development is required in Cooking & Culinary, Knitting, Tailoring, Fast food outlets and Restaurants 6. Skill is needed for commercial production and post-harvest management of spices, pulses & oilseeds and citrus fruits. 7. Skill upgradation is required for small tea growers in the area of cultivation and processing of tea (organic tea). 8. Skilling is required for incorporation of new design in traditional handloom and handicrafts products and their marketing.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<p>9. Skill development is required for scientific post-harvest management practices like preservation, processing, packaging of fruits and vegetables for value added products.</p> <p>10. Skill development is required for beauty and wellness industry.</p>
Sivsagar (Charaideo)	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Tourism and Hospitality 4. Horticulture 5. Handloom and Handicrafts 6. Sericulture 7. Healthcare and wellness 8. Fisheries 9. Construction 10. Food processing 11. Tea processing 	<ol style="list-style-type: none"> 1. The region has various industrial set ups like ONGC, OIL India Ltd, BCPL, GAIL etc. Hence, skill upgradation is required for plumber, fitter, automobile repairer, electrician, motor mechanic, mobile repairer etc. 2. The district being the ancient capital of Assam in <i>Ahom era</i> is famous for many ancient monuments and places like <i>Tanks and Temples, Namdangstone bridge and Maidams</i>. Hence, skill upgradation is required in Tourism and Hospitality sector in the areas of tour operator, tour guide, hotel management and hospitality. 3. Rearing and reeling of <i>Muga silk</i> and extraction of <i>Agaru</i> oil are the cottage industries which are dominant in this region. Skill upgradation is required in scientific rearing and reeling of <i>Muga</i> and manufacturing of various perfume products. 4. Skill is needed for commercial production and post-harvest management of potato, sweet potato, rice, turmeric, ginger, papaya, areca nut, mustard and citrus fruits to develop value added products. 5. Skilling is required for incorporation of new design in traditional handloom and handicrafts products and their marketing. 6. Skill upgradation is required in case of food processing, floriculture, piggery, poultry, goat farming, duckery, fishery, dairy etc. 7. Skill development is required for beauty and wellness industry 8. Skill development is required in Cooking &

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<p>Culinary, Knitting, Tailoring, Fast food outlets and Restaurants</p> <p>9. Skill upgradation is required for small tea growers in the area of cultivation and processing of tea (organic tea).</p>
Jorhat (Majuli)	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Tourism and Hospitality 4. Horticulture 5. Handloom and Handicrafts 6. Sericulture 7. Healthcare and wellness 8. Fisheries 9. Construction 10. Food processing 11. Tea processing 	<ol style="list-style-type: none"> 1. The district has industrial set ups like ONGC and Oil India Ltd. Hence, skill upgradation is required for plumber, fitter, automobile repairer, electrician, motor mechanic, mobile repairer etc. 2. The presence of <i>Gibbon wild life sanctuary, world heritage site like Majuli and many ancient monuments and places like Maidam, Temples and Vaishanava Satras</i> makes the district a tourist destination. Skill upgradation is required in Tourism and Hospitality sector in the areas of tour operator, tour guide, hotel management and hospitality. 3. The traditional mask making and pottery being popular in Majuli need marketing skills. 4. Skilling is required for scientific cultivation and management of vegetables including spices, pulses and oilseeds. 5. Rearing and reeling of <i>Muga silk</i> and extraction of <i>Agaru</i> oil are the cottage industries which are dominant in this region. Skill upgradation is required in scientific rearing and reeling of <i>Muga</i> and manufacturing of various perfume products. 6. Skilling is required for incorporation of new design in traditional handloom and handicrafts products and their marketing. 7. Skill development is required for scientific post-harvest management practices like preservation, processing, packaging of fruits and vegetables for value added products. 8. Skill development is required for beauty and wellness industry. 9. Skill development is required in Cooking & Culinary, Knitting, Tailoring, Fast food outlets and Restaurants. 10. Skill upgradation is required for small tea growers in the area of cultivation and processing of tea (organic tea). 11. Skill upgradation is required in case of duckery, floriculture, piggery, poultry, goat

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		farming, fishery, dairy etc.
<i>Golaghat</i>	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Tourism and Hospitality 4. Horticulture 5. Handloom and Handicrafts 6. Sericulture 7. Healthcare and wellness 8. Fisheries 9. Construction 10. Food processing 11. Tea processing 	<ol style="list-style-type: none"> 1. Skill development is required in Cooking & Culinary, Knitting, Tailoring, Fast food outlets and Restaurants. 2. Skill upgradation is required for small tea growers in the area of cultivation and processing of tea (organic tea). 3. Skill upgradation is required in scientific sugarcane cultivation and processing of molasses on commercial scale. 4. Skill upgradation is required in case of duckery, piggery, poultry, goat farming, fishery, dairy etc. 5. The presence of <i>Kaziranga National Park</i> makes the district a tourist hot spot. Hence, skill upgradation is required in Tourism and Hospitality sector in the areas of tour operator, tour guide, hotel management and hospitality. 6. Skilling is required for incorporation of new design in traditional handloom and handicrafts products and their marketing. 7. Skill development is required for scientific post-harvest management practices like preservation, processing, packaging of fruits and vegetables for value added products. 8. Skill development is required for beauty and wellness industry 9. Skilling is required for scientific cultivation and management of vegetables including spices, pulses and oilseeds. 10. Rearing and reeling of <i>Muga silk</i> and extraction of <i>Agaru</i> oil are the cottage industries which are dominant in this region. Skill upgradation is required in scientific rearing and reeling of <i>Muga</i> and manufacturing of various perfume products. 11. Skills need to be developed in mobile repairing, electrician, motor mechanic, carpentry, painter, masonry, computer etc.
<i>Udalguri</i>	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 	<ol style="list-style-type: none"> 1. Skill upgradation is required in case of floriculture, piggery, poultry, duckery, goat farming, fishery, dairy etc. 2. Skills need to be developed in mobile

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	3. Tourism & Hospitality 4. Horticulture 5. Handloom & Handicrafts 6. Fishery 7. Construction 8. Food processing 9. Rubber processing 10. Sericulture	repairing, electrician, motor mechanic, plumber, carpentry, painter, masonry, computer etc. 3. Udalguri district being famous for vegetable production need skill upgradation in scientific cultivation, preservation and marketing of produce. 4. Skill training is required in Computer Science and IT sector. (Hardware & Software). 5. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 6. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 7. Skill development is required in the area of Rubber plantation and Rubber based industry. 8. The region has various tourist places like <i>Orang (Rajiv Gandhi) Wildlife Sanctuary, Bornadi sanctuary, Bhairabkunda</i> etc. Hence, skill upgradation is required in Tourism in the areas of tour operator, tour guide and hotel management. 9. Skilling is required for scientific cultivation and management of vegetables including spices, pulses and oilseeds 10. Skill development is required for scientific mushroom cultivation 11. Skill upgradation is required in rearing and reeling of silkworms
Darrang	1. Agriculture 2. Animal Husbandry 3. Tourism & Hospitality 4. Horticulture 5. Handloom & Handicrafts 6. Sericulture 7. Fishery 8. Construction	1. The district has Orang (Rajiv Gandhi) Wildlife Sanctuary and many natural beels which has been the home of thousands of migratory birds along with other aquatic resources. Hence, skill upgradation is required in Tourism in the areas of tour operator, tour guide and hotel management. 2. Skill upgradation is required in scientific rearing and reeling of <i>silk worms</i> 3. Skill upgradation is required in case of duckery, bakery and confectionary, floriculture, piggery, poultry, goat farming, fishery, dairy etc. 4. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	9. Food processing 10. Tea processing	5. Darrang being famous for vegetable production need skill upgradation in scientific cultivation, preservation and marketing of produce including pulses and oilseeds. 6. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 7. Skill upgradation is required for scientific jute cultivation and processing 8. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 9. A post-harvest skill is required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce.
Sonitpur(Biswanath)	1. Agriculture 2. Animal Husbandry 3. Tourism & Hospitality 4. Horticulture 5. Handloom & Handicrafts 6. Healthcare and wellness 7. Sericulture 8. Fishery 9. Construction 10. Food processing 11. Tea processing	1. The district has various tourist places like <i>Chitralekha Udyan, Agnigarh, Rudrapada temple, Mahabhairav temple</i> etc. Hence, skill upgradation is required in Tourism in the areas of tour operator, tour guide and hotel management. 2. Skill upgradation is needed in commercial cultivation of pineapples, oranges and banana 3. A post-harvest skill is required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 4. Skill development is required for beauty and wellness industry 5. Skill upgradation is required for small tea growers in the area of cultivation and processing (organic tea). 6. Skill upgradation is required in case of duckery, bakery and confectionary, floriculture, piggery, poultry, goat farming, fishery, dairy etc. 7. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 8. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 9. Skill development is required in Cooking &

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		Culinary, Fast food outlets and Restaurants. 10. Skill upgradation is required in scientific rearing and reeling of <i>silk worms</i>
Lakhimpur	<ol style="list-style-type: none"> 1. Agriculture 2. Animal Husbandry 3. Horticulture 4. Handloom & Handicrafts 5. Healthcare and wellness 6. Sericulture 7. Fishery 8. Construction 9. Food processing 	<ol style="list-style-type: none"> 1. Skill upgradation is required in case of floriculture, piggery, duckery, poultry, goat farming, fishery, dairy etc. 2. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 3. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 4. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 5. Lakhimpur being famous for Muga (Silk worm) need skill upgradation in pre cocoon and post cocoon technology. 6. Skill upgradation is needed in commercial cultivation and value addition of Paddy 7. A post-harvest skill is required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 8. Skill development is required for beauty and wellness industry
Dhemaji	<ol style="list-style-type: none"> 1. Horticulture 2. Agriculture 3. Animal Husbandry 4. Handloom & Handicrafts 5. Healthcare and wellness 6. Sericulture 7. Fishery 	<ol style="list-style-type: none"> 1. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 2. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 3. Dhemaji being famous for Muga (Silk worm) need skill upgradation in pre cocoon and post cocoon technology. 4. Skill upgradation is required in case of duckery, piggery, poultry, goat farming, fishery, dairy etc. 5. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	8. Construction 9. Food processing 10. Tea processing	6. Skill development is required for beauty and wellness industry 7. Skill upgradation is needed in commercial cultivation of pineapples, oranges, banana, spices and pulses. 8. A post-harvest skill is required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 9. Skill upgradation is required for small tea growers in the area of cultivation and processing (organic tea).
Nagaon, (Hosai)	1. Tourism & Hospitality 2. Handloom & Handicrafts 3. Food Processing 4. Construction 5. Animal Husbandry 6. Fishery 7. Horticulture 8. Agriculture	1. The district has many naturally occurring waterfalls along with diversified flora and fauna (<i>Kaziranga National park</i>) which brings lot of opportunities in the tourism sector. Hence, skill upgradation is required in tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 2. Skill upgradation is required in handloom & handicrafts items. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 4. Skill upgradation is required in scientific fish culture, hatchery, fish feed manufacturing and processed fish products. 5. Skilling is required in commercialization of piggery, duckery, dairy, poultry and goat farming. 6. Skill upgradation is needed in scientific cultivation and management of pulses and oilseeds. 7. Skill upgradation can be done in commercial rice cultivation and value addition 8. Skill upgradation is required for 'Agar' perfume based industry and its marketing. 9. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 10. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry Computer etc. 11. Skill upgradation is required for beauty and

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		wellness industry
Morigaon	<ol style="list-style-type: none"> 1. Tourism & Hospitality 2. Handloom & Handicrafts 3. Food Processing 4. Construction 5. Animal Husbandry 6. Fishery 7. Horticulture 8. Agriculture 	<ol style="list-style-type: none"> 1. The district is famous for <i>Pobitora sanctuary along with historic places like Sitajakhala, Kachasila hills, Sivakunda, Joon beel mela and Mayong</i>. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 2. The region being populated by tribal community need skill upgradation in handloom & handicrafts and food processing items. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 4. Asia's largest dry fish market is situated at <i>jagiroad</i> in Morigaon district. Skill upgradation is required in scientific fish culture, hatchery, fish feed manufacturing and processed fish products. 5. Skilling is required in commercialization of piggery, duckery, poultry and goat farming. 6. Skill upgradation is needed in scientific cultivation and management of pulses and oilseeds. 7. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 8. Skills need to be developed in Bakery and Confectionary, Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 9. Skill upgradation is required for dairy and development of dairy products.
Karbi Anlong (West Karbi Anlong)	<ol style="list-style-type: none"> 1. Animal Husbandry 2. Handloom & Handicrafts 3. Food processing 4. Tourism & Hospitality 5. Construction 	<ol style="list-style-type: none"> 1. Skill upgradation is required in case of piggery, poultry, and goat farming 2. Handloom and handicrafts sectors need skill upgradation for incorporation of new design and marketing particularly in case of cane and bamboo products. 3. Skill upgradation is required in the area of scientific production, storage, processing, packaging and transportation of spices like turmeric, ginger and black pepper. 4. Skill upgradation is required for commercial production of rubber and rubber based industry

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	<ol style="list-style-type: none"> 6. Forestry 7. Horticulture 8. Agriculture 9. Computer & IT 10. Rubber processing 	<ol style="list-style-type: none"> 5. Skill is required for scientific cultivation and processing of pineapple, jackfruit, oranges, maushumbi, pears, arecanut, Assam lemon and coconut. 6. Skill upgradation is required for citronella plantation 7. Skill upgradation is required for timber based industry, stone crushing industry, lime stone based industry and broom making. 8. Skill training is required in computer science and IT sector. (Hardware & Software). 9. Industrial development has taken place in this region due to the presence of various cement plants (<i>Bokajan Cement plant</i>). Hence, skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 10. '<i>Marat Longri wildlife sanctuary</i>' being famous for wild elephant along with other diversified flora and fauna is located in Karbi Anlong. The district also has trekking expedition alongside the rocky hills with enchanting sight and sound which brings lot of potential to tourism sector. Hence, skill upgradation is required in Tourism in the area of tour operator, tour guide, travel agent and hotel management 11. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 12. Skill upgradation is required for incorporation of new design in Bamboo & Cane works
<i>Dima Hasao</i>	<ol style="list-style-type: none"> 1. Animal Husbandry 2. Handloom & Handicrafts 3. Food processing 4. Tourism & Hospitality 5. Construction 6. Floriculture 	<ol style="list-style-type: none"> 1. '<i>Jatinga</i>' being famous for the phenomenon of birds "<i>committing suicide</i>" is located on a spur of the Haflong ridge, the head quarter of Dima Hasao district. The historic place like '<i>Maibang</i>' along with numerous natural waterfalls (<i>Panimoor</i>) make the region a tourist destination. Hence, skill upgradation is required in Tourism in the area of tour operator, tour guide, travel agent and hotel management. 2. Industrial development has taken place in this region due to the presence of various cement

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	7. Horticulture 8. Agriculture 9. Rubber processing 10. Forestry	<p>plants. The hydel plant that has come up under <i>North East Electric Power Corporation (NEEPCO)</i> with dams in the <i>Kopili</i> river. Hence, skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc.</p> <ol style="list-style-type: none"> 3. Skill upgradation is required in case of piggery, poultry and goat farming. 4. Handloom and handicrafts sectors need skill upgradation for incorporation of new design and marketing particularly in case of cane and bamboo products. 5. Skill upgradation is required in the area of scientific production, storage, processing, packaging and transportation of spices like turmeric, ginger and black pepper. 6. Skill upgradation is required for commercial production of rubber and rubber based industry. 7. Skill development is required in floriculture in case of orchids and nursery management. 8. Skill is required for scientific cultivation and processing of pineapple, jackfruit, oranges, maushumbi, pears, arecanut, Assam lemon and coconut. 9. Skill upgradation is required for timber based industry, stone crushing industry, lime stone based industry and broom making. 10. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants.
Cachar	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Food processing 3. Agriculture 4. Horticulture 5. Animal Husbandry 6. Construction 	<ol style="list-style-type: none"> 1. Entrepreneurship skill is required for traditional cane & bamboo products like <i>Shittal pati</i> and other wooden works as large number of population are engaged in this activity. 2. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 4. The southern part of Cachar is home to the <i>Dhaleswari wildlife sanctuary</i> which is rich in

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	7. Fishery 8. Tourism and Hospitality	<p>diverse exotic species and has lot of potential in tourism sector. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management.</p> <ol style="list-style-type: none"> 5. Skill is required for scientific jute cultivation, processing and jute crafts. 6. Skill upgradation is required for scientific cultivation and post-harvest management of ginger, turmeric, chillies and vegetables. 7. Entrepreneurship skill development is required in dairy, goat farming, poultry and pottery. 8. Skill upgradation is required in scientific fish culture, fish feed manufacturing, processed fish products and marketing. 9. Skill development and marketing of traditional garments, decorative textile is required in <i>Lakhipur</i> area of Cachar as the area is dominated by Naga and Manipuri community which is famous for traditional attire. 10. Commercialization of pineapple, Assam lemon, maize, papaya, banana and tomato can be encouraged through skill upgradation in scientific cultivation and management practices. 11. Skill upgradation is required in case of scientific mushroom cultivation
<i>Hailakandi</i>	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Food processing 3. Agriculture 4. Horticulture 5. Animal Husbandry 6. Construction 7. Forestry 	<ol style="list-style-type: none"> 1. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 2. Skill upgradation is required for traditional cane & bamboo products 3. Skill upgradation is required for scientific cultivation and post-harvest management of spices like ginger, turmeric, black pepper and chillies. 4. Entrepreneurship skill development is required in dairy, goat farming, poultry and pottery. 5. Commercialization of pineapple, Assam lemon, maize, papaya, banana and tomato can be encouraged through skill upgradation in scientific cultivation and management

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<p>practices.</p> <ol style="list-style-type: none"> 6. Skilling is required in food processing in <i>dry fish</i> and <i>muri</i> making 7. Skill upgradation is needed in scientific cultivation of pulses and oilseeds. 8. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 9. Skill upgradation is required for scientific management of timber and timber based industry 10. Skill upgradation is required in case of scientific mushroom cultivation
Karimganj	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Food processing 3. Agriculture 4. Horticulture 5. Animal Husbandry 6. Construction 7. Forestry 	<ol style="list-style-type: none"> 1. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 2. Skill upgradation is required for scientific management of timber and timber based industry 3. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 4. Skilling is required in mushroom production, fodder cultivation and vermi-compost making. 5. Skill development is required in water hyacinth and jute crafts 6. Skill upgradation is needed in scientific cultivation of pulses and oilseeds 7. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Carpentry, Painter, Masonry, Computer etc. 8. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 9. Skill development is required in dairy, goat farming, poultry and pottery. 10.10.
Barpeta	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 	<ol style="list-style-type: none"> 1. Skill upgradation is required in the area of procurement of raw material and selling of <i>brass and bell metal</i> products. Introduction of new design is also required in these products for better price realization. 2. Skill upgradation is required in dairy, goat

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	<ol style="list-style-type: none"> 4. Construction 5. Agriculture 6. Horticulture 7. Tourism & Hospitality 8. Food processing 	<p>farming, poultry and fishery.</p> <ol style="list-style-type: none"> 3. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 4. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 5. The <i>satra</i> located at the heart of the city which is known as <i>Kirtan Ghar</i> attracts devotees from all over the Assam. The <i>Manas Natural Park</i> which is situated in the foothills of Bhutan brings lot of opportunities in tourism sector. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 6. Skill upgradation is required in scientific cultivation and management of black gram, green gram, jute, potato, mustard, areca nut and vegetables. 7. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 8. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products, Weaving and Tailoring. 9. Skilling is required in mushroom production, fodder cultivation and vermi-compost making.
Bongaigaon	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Construction 4. Healthcare & Wellness 5. Agriculture 6. Horticulture 7. Tourism & 	<ol style="list-style-type: none"> 1. Industrial development has taken place in this district with the establishment of <i>Bangaigaon Refinery & Petrochemicals</i>. Hence, skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 2. The presence of <i>Bagheswari temple</i>, <i>Reserve forests like Kakoi Jana and Kochugaon</i>, <i>wet land like Tamranga lake along with historical places like Jogighopa and Panchratna</i> attracts tourist in mass scale to this district. Hence, skill upgradation is required in Tourism for value added services and hospitality in the

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	Hospitality 8. Food processing	areas of tour operator, tour guide, travel agent and hotel management. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 4. Skill upgradation in the form of new design is needed in traditional sectors in case of Cane & Bamboo products 5. Skill upgradation is required in dairy, goat farming, poultry, piggery and fishery. 6. Skill development is required for beauty and wellness industry. 7. Skill upgradation is required in scientific cultivation and management of black rice, black gram, buck wheat, green gram, potato, banana, pineapple, mustard and areca nut. 8. New design intervention along with marketing skills is required in weaving sectors particularly in making traditional attires like mekhela, gamosa, sador, dokhona, aronai etc. 9. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 10. Skilling is required in mushroom production and vermi-compost making. 11. Skill development is required in water hyacinth crafts.
<i>Dhubri (South Salmara Mankachar)</i>	1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 4. Construction 5. Agriculture 6. Horticulture 7. Tourism & Hospitality 8. Food processing	1. The presence of <i>Chakrashila Wildlife Sanctuary</i> along with other tourist places like <i>Rangamati mosque, Panchpeer dargaha and Mahamaya dham</i> brings opportunities in tourism in this district. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 2. Post-harvest skill is required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 3. New design intervention along with marketing skills is required in weaving and tailoring sectors 4. Skill upgradation is required in dairy, goat farming, poultry and fishery.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<ol style="list-style-type: none"> 5. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 6. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 7. Skill upgradation and marketing is required in jute crafts, water hyacinth crafts and Terracotta work. 8. Skilling is required in mushroom production, fodder cultivation and vermi-compost making.
Goalpara	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 4. Construction 5. Agriculture 6. Horticulture 7. Food processing 	<ol style="list-style-type: none"> 1. Skill upgradation is required in scientific cultivation and management of black rice, black gram, green gram, potato, mustard and areca nut. 2. New design intervention along with marketing skills is required in handloom and handicraft sector. 3. Skill upgradation is required in dairy, goat farming, poultry, piggery and fishery. 4. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 5. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 6. Goalpara being famous for '<i>Darangiri</i>' banana market need skill upgradation for processing, packaging and value added banana products. 7. Skilling is required in mushroom production and vermi-compost making. 8. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce
Kamrup	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 	<ol style="list-style-type: none"> 1. '<i>Sualkuchi</i>' situated at Kamrup is known as "<i>Manchester of the East</i>" for its famous silk and silk based attires. Skill upgradation is required for production, processing, value addition and marketing of silk products.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	<ol style="list-style-type: none"> 3. Fishery 4. Floriculture 5. Construction 6. Healthcare & Wellness 7. Agriculture 8. Horticulture 9. Tourism & Hospitality 10. Food processing 	<ol style="list-style-type: none"> 2. The district has tourist places like <i>Madan Kamdev Temple, Haygriva Madhab Temple, Poa Macca, Daul Govinda Mandir and Sualkuchi</i>. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 3. Skill upgradation is required in scientific cultivation and management of potato, banana, pineapple, mustard, areca nut and vegetables. 4. Skill upgradation is required in Bamboo & Cane works and betel nut leaf dish making. 5. Skill upgradation is required in dairy, goat farming, poultry, piggery and fishery. 6. Skill upgradation is required in floriculture and floriculture based industries 7. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 8. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 9. Skill development is required for beauty and wellness industry. 10. New design intervention along with marketing skills is required in handloom and handicraft products. 11. Skilling is required in mushroom production and vermi-compost making. 12. Skill development is required in water hyacinth crafts. 13. Skill upgradation is required for <i>brass and bell metal</i> industry.
Kokrajhar	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 4. Construction 5. Healthcare & Wellness 	<ol style="list-style-type: none"> 1. Skill upgradation is required in dairy, goat farming, poultry, piggery and fishery. 2. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 4. Skill development is required for beauty and wellness industry.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	<ol style="list-style-type: none"> 6. Agriculture 7. Horticulture 8. Tourism & Hospitality 9. Food processing 	<ol style="list-style-type: none"> 5. The presence of <i>Chakrashila Wildlife Sanctuary and Mahamaya temple</i> bordering Dhubri district adds tourist opportunities in this district. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 6. Skill upgradation is required in scientific cultivation and management of black rice, black gram, green gram, potato, banana, mustard and areca nut. 7. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce. 8. New design intervention along with marketing skills is required in handloom and handicraft products. 9. Skilling is required in mushroom production and vermi-compost making.
<i>Kamrup Metropolitan</i>	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Floriculture 4. Construction 5. Healthcare & Wellness 6. Tourism & Hospitality 7. Food processing 	<ol style="list-style-type: none"> 1. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 2. Skill development is required for beauty and wellness industry. 3. The presence of <i>Kamakhya temple, Balaji temple, Umananda temple, Nabagraha temple, Guwahati Planetarium, State Zoo-cum Botanical garden, Srimanta Sankardeva Kalakshetra</i> brings lots of opportunities in tourism in this district. Hence, skill upgradation is required in Tourism for value added services and hospitality in the areas of tour operator, tour guide, travel agent and hotel management. 4. Skill upgradation is required in floral nursery and floriculture based industries 5. New design intervention along with marketing skills is required in handloom and handicraft products. 6. Skill development is required in dairy and dairy based products 7. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy,

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		<p>Carpentry, Masonry, Steel fabrication etc.</p> <p>8. Skilling is required in mushroom production and vermi-compost making.</p> <p>9. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce</p>
Nalbari	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 4. Construction 5. Agriculture 6. Horticulture 7. Food processing 8. Sericulture 	<ol style="list-style-type: none"> 1. Marketing skill is required in case of traditional <i>Jappi</i> making and <i>fish net</i> making 2. Skill upgradation is required in bamboo & cane works and betel nut leaf dish making. 3. Skill upgradation is required in dairy, goat farming, poultry and fishery. 4. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 5. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants. 6. Skill upgradation is required in scientific cultivation and management of rice, black gram, green gram, jute, potato, banana, mustard and areca nut. 7. New design intervention along with marketing skills is required in weaving sectors particularly in making traditional attires 8. Skilling is required in mushroom production and vermi-compost making. 9. Skill development is required in water hyacinth crafts. 10. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 11. Skill upgradation is required in floral nursery and floriculture based industries 12. Skill upgradation is required in rearing and reeling of silk worms
Chirang	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 	<ol style="list-style-type: none"> 1. Skill upgradation is required in Bamboo & Cane and water hyacinth crafts. 2. Skill upgradation is required in dairy, goat farming, poultry, piggyery and fishery. 3. Industrial development has taken place in this region with the establishment of Bongaigaon

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
	<ol style="list-style-type: none"> 4. Construction 5. Agriculture 6. Horticulture 7. Food processing 	<p>Refinery & Petrochemicals. Hence, skills need to be developed in Bakery and Confectionary, Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc.</p> <ol style="list-style-type: none"> 4. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 5. Skill upgradation is required in scientific cultivation and management of black rice, black gram, green gram, potato, banana, pineapple, mustard and areca nut 6. New design intervention along with marketing skills is required in weaving and tailoring sectors particularly in making traditional attires 7. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce 8. Skill upgradation is required in case of scientific mushroom cultivation
Baksa	<ol style="list-style-type: none"> 1. Handloom & Handicrafts 2. Animal Husbandry 3. Fishery 4. Construction 5. Agriculture 6. Horticulture 7. Food processing 	<ol style="list-style-type: none"> 1. Skill upgradation is required in dairy, goat farming, poultry, piggery and fishery. 2. Skills need to be developed in Mobile Repairing, Electrician, Motor Mechanic, Plumber, Welder, Fitter, Turner, Bricklayer, Leather worker, Computer, Black smithy, Carpentry, Masonry, Steel fabrication etc. 3. Skill development is required in Cooking & Culinary, Fast food outlets and Restaurants 4. Skill upgradation is required in scientific cultivation and post-harvest management of rice, black gram, green gram, potato, banana, pineapple, mustard and areca nut 5. New design intervention along with marketing skills is required in handloom and handicraft products. 6. Skilling is required in mushroom production and vermi-compost making. 7. Skill development is required in water hyacinth crafts. 8. Post-harvest and value addition skills are required in the area of storage, packaging, processing and transportation of major agriculture and horticulture produce.

Zone/ Districts	Potential Sectors capable of Developing Enterprise and Employment Generation	Skill Development Requirements
		9.

e. Sectors of Economy in which the state of Assam needs to intensify its Skilling Effort

In order to identify the sectors of economy in which Assam should intensify its skilling effort, it is important to understand the major economic activities in which people of Assam are engaged presently as well as the key areas of economic activities identified by the state as a matter of policy priority, along with the aspiration of youth in terms of preferred area in which they desire to be skilled.

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
1	Agriculture & Allied Sectors such as Horticulture, Animal Husbandry, Fishery and Sericulture	<p>Agriculture & Horticulture: Agriculture is the primary sector in the state's economy. The agro-climatic conditions of the state favour growing of a variety of fruits, vegetables/ spices like coconut, banana, pineapple, orange, ginger, turmeric, chillies, pepper etc. Mechanized and scientific cultivation of Agriculture and Horticultural produces are being adopted in the state. Until recently, horticulture was practiced as a largely non-commercial activity. With better quality planting material, organic farming, adequate research support and better know-how, the state could easily cause a major boom in horticulture and food processing sector. The sector has the potential to grow at a rapid pace in Assam with the increasing demand for processed food. The wastage of perishables due to non-availability of adequate processing infrastructure. With the favourable agro climatic conditions that are conducive for a wide range of products, opportunities in the sector abound in processing, sourcing, inclusive farming, logistics and cold chains. Promotion of food processing industries in the small scale sector will not only check the wastage of these valuable resources and add value to them, but will also encourage the growers to grow more fruits. Assam being famous for Tea and Rubber need new sets of skill for scientific cultivation and processing for small growers. Skill upgradation is required for scientific cultivation, preservation and processing of citrus, pineapple and spices like ginger, turmeric, chillies, black pepper. The preservation, processing, value addition, packaging and marketing skills is required in case of pulses & oilseeds, jute, tomatoes, betel nut, banana, sugarcane, potatoes. Skills on pest management, disease management, weed management, water management, soil health</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>management, mechanization, land use and marketing of produce is needed for entrepreneurship development. Skill is required in apiculture, mushroom cultivation, fodder cultivation and vermi-composting. Integrated farm management technique is highly needed to maintain sustainability and to reduce cost of fertilizers through scientific management of on farm and off farm residues. Favourable climatic and geographical conditions in the state offer tremendous scope for floriculture as there is a high demand for flowers within the state for various rituals and occasions. Many species of orchids are available in Assam, which has tremendous commercial potential along with other seasonal flowers like Chrysanthemum, Jerbera, Marigold, Tube rose etc. Skill is required in different propagation techniques like budding, grafting, cutting, layering for raising commercial seed stock nursery of important crops. Assam is a forerunner in the production of medicinal and aromatic plants. The state has a very favourable environment for the growth and development of allied industries as the state is one of the richest repositories of medicinal and aromatic plants (MAP) in the world. There are more than 300 species of commercially important medicinal plants produced in the state. However the state needs a scientific approach for the exploration, conservation and value addition in the field of Medicinal and Aromatic Plants (MAP) industries. This offers a huge business opportunity for investors.</p> <p>Animal Husbandry: Animal Husbandry is potentially one of the most important sectors for rapid socio-economic development of the State. Livestock is basically a component of production system and is contributing to sustainable agricultural system. Fast growth is essential not only to achieve higher productivity levels in livestock products but also for income generation of rural households of the State. Livestock in the State is thus highly livelihood oriented and is generally owned by small and marginal farmers and landless agricultural labourers. The high consumption rate of meat in the state makes it play an important role in the state economy and sectors like Poultry, Dairy, Piggery, Goat Farming and Duckery have vast scope in the state. Skills are required for scientific rearing, marketing and development of value added in case of birds and animals. Up gradation of Skills are also required in the allied activities like artificial insemination, poultry feed production, fodder management, breeding & Seed production, dairy product development and Vaccination.</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>Fisheries: Assam is endowed with vast fishery resources in the form of rivers, ponds, derelict water bodies, beels covering about 2.85 lakh ha. With the two major river system viz. the Brahmaputra and the Barak along with their tributaries, fish occupies an important place in the lives of the people of the State and fish farming has been one of the common activities in the rural areas. Fishery sector in the state being one of the promising sectors lacks importance among the rural people despite having scope and opportunities. Skill upgradation is required in scientific fish culture, scientific pond management, composite fish farming, fish feed formulation, dry fish making, rice cum fish culture and their storage and marketing.</p> <p>Sericulture: The state is home to the production of four varieties of silk worms, such as Eri, Muga, Oak Tassar and Mulberry. Sericulture has a lot of potential in Assam and offers one of the highly profitable business sectors as the state offers tremendous potential for the development of large scale industries based on silk. Assam state government has established a number of silk processing and spinning units in the state. The state also provides a host of other infrastructure services necessary for sericulture industry. Assam's silk fabrics have earned immense recognition from all over the world. The state is home to several types of silks, the most prominent and prestigious being muga, the golden silk exclusive to this state. The agro-climatic condition is very favourable and all types of silk viz. Eri, Muga, Oak Tassar and Mulberry are abundantly grown in the state. There is a huge domestic and international demand for the diversified silk items and cultural attire made out of silk in the state. Skills are required in case of scientific silk rearing, host plant management, disease management, reeling, spinning and preservation of seed cocoon for next generation. Skill can also be done around the cocoon wastage to developed different processed food products. Skill intervention can be made in cluster mode in few pockets located at Sibsagar, Dhokuakana, Dhemaji, North Lakhimpur, Goalpara, Silchar and Kamrup.</p> <p>Tea:The Tea Industry of Assam plays a vital role in the State as well as in the national economy. The tea industry of Assam also possesses a significant reputation in the global economy. Assam alone produces more than half of India's tea production and about 1/6th of the tea produced in the world. The total area under Tea Gardens in the State is</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>322 thousand Hectares. Assam tea is famous for its distinct quality, especially for its strong liquor, rich taste and colour. Tea is grown both in the Brahmaputra and Barak plains. Some of the districts where tea gardens are mostly found in Assam are Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat, Nagaon and Sonitpur. Tea industry in Assam engages about 17% of the workers in the state. Assam is home to one of the world's oldest and largest Tea Research Centres at Toklai in Jorhat.</p> <p>Rubber: Assam is ideally suited for rubber plantation and there is enough scope for large scale rubber cultivation. As there is a potential area of 3 lakh hectares in the state out of which only 28,102 hectares are being under rubber plantation leaving a balance of over 2.70 lakh hectares, The Rubber Board has identified Assam as a "potential state" to "replicate the Tripura success story" and plans to bring 2 lakh hectares area under rubber plantation in the state in near future. Skill development is required in regards to land preparation, nursery rising, plant protection, latex extraction, credit linkage, preservation, value added product and marketing.</p> <p>Jute: Jute is natural renewals waste fibre having sufficient strength for commercial use in manufacturing mainly sacks, twine, packing materials and different type of diversified products. It is bio-degradable and eco-friendly. Assam is the third largest producer of Jute in the country after West Bengal and Bihar and account for 7.87 per cent of its total area and 6.68 per cent of its total production. Skill upgradation is required in regards to Plant protection, harvesting, bundling of fibres and marketing.</p>
2	Tourism & Hospitality Sector	<p>Assam is regarded as a virtual paradise for numerous tourists and travelers coming from various parts of the globe. Assam has great diversity of wildlife, like the Indian one-horned rhinoceros. Apart from the internationally known Kaziranga National Park and the Manas National Park, both of which are World National Heritage sites as well as Tiger Reserves. The many other national parks and wildlife sanctuaries such as Pobitora, Orang, Nameri, Barail, Panidihing and Dibru Saikhowa have their individual beauty and charm. The mighty Brahmaputra river and its many tributaries, and many beels (lakes)</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
	<p>have immense potential for tourism development like river cruises connecting the tourism destinations and water sports, white water rafting and kayaking. River tourism along with water based adventure tourism integrated into other tourism developments like rural and wildlife tourism will be a major thrust of tourism promotion.</p> <p>Assam tea is world renowned and is a brand ambassador for Assam. The tea gardens rolling out green carpets for miles are ideal to meet the pursuit of romantic and exotic experience of modern tourists. Many tea gardens have 18-hole golf courses- another major attraction for modern tourists. Assam in the 19th and 20th centuries had been a busy area for exploration of tea, oil and forests. Assam has many old pilgrim places of great significances, foremost being the most venerable Kamakhya temple. Hajo is another center where people from three religions Hindu, Muslim and Buddhism come for pilgrimage. The rich cultural heritage of Assam, like the mythological Agni Garh in Tezpur, ancient Madan Kamdev temple, the unique secular traditions of Hajo, the unique Phat Bihu of Dhakuakhana, the rich and unique heritage of vaishnavite culture in Bkordowa , Barpeta , Majuli and the royal remains of the Ahom rule in upper Assam provide great opportunities for promotion of cultural tourism.</p> <p>The whole tourism potentialities of the state can be grouped together under the following categories: (a) Wildlife, (b) Nature Tourism, (c) Tea tourism (d) Eco Tourism, (e) Cultural Tourism (f) Pilgrim Tourism (g) Golf Tourism and (h) Adventure Tourism (i) Others. Over the centuries, people of various ethnic, religion and linguistic background have been attracted to the fertile valley of Assam making it a mosaic of various cultures. With an impressive 35% forest cover and thousands of hectares under tea cultivation, Assam has five national parks including the World Heritage Sites of Kaziranga and Manas, and 20 Wildlife sanctuaries. The great Indian one-horned rhino is one of Assam's most famous denizens. The mighty river Brahmaputra and Barak with their 120 tributaries ensure a fertile land dotted with more than 3,500 wetlands, 800 expansive tea estates and 25 major wildlife preserves housing rare species of flora and fauna</p>	
	With the large number of ethnic tribes like Bodo, Mising,	

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>Karbi, Dimasa, Rabha, Tiwa, Deori, Sonowal Kachari, Garo, Hojai, Mech, Hajong, Singpho, etc. there exist distinctive cultural features, facets and forms. The sheer physical beauty of these tribal people, their intricately woven attire ensembles and the striking colors of their clothes coupled with the incredible landscape that they call their homeland makes the composition of Assam's demography one of the most desirably diverse in the world. Majuli is the world's largest river island and it attracts tourists from all over the world. Among one of the most surreal places in India, Majuli is also a strong contender for a place in UNESCO's World Heritage Sites. Mostly inhabited by Tribals, the culture of Majuli is unique and quite interesting and is one of the key reasons why people love this place so much. It is also called the cultural capital of Assam. The festivals celebrated here are all joyous and vibrant. In view of this, skill development is required in Tourism and Hospitality for value added services and hospitality in the areas of Tour operator, tour guide, Food & Beverage Services, Cooking, Front Desk Services, Driving, Housekeeping, Bartender, Restaurant Manager, Maintenance etc.</p>
3	<p>Information Technology & Information Technology Enabled Services (IT& ITES) Sector</p>	<p>Assam has a large manpower base that is highly skilled in Information Technology. As such, opportunities exist for IT enabled services like software development, call centres, back office operations, data entry and conversion, transcription and translation, content development, animation, engineering and design, market research, consultancy and management. IT & ITES industry is an ever-growing sector with latest advanced processes, innovation and product development that require human resource with specialized skills development of foundation and specialization courses across industry verticals like BPO, IT Services, Engineering Services, Software Product development etc.</p> <p>Skill Development is required in the areas of Computer Skills, Programming Skills, Logical and Analytical Skill, Software Architecture, Database Management, Customer Service, Client Management, Communication Skill, Product Development, Enquiry Handling, Soft skills, team management, accent understanding, process flow understanding, IP advisory and filing, understanding patents, legal transcription, process specialist, project management, information security/quality compliance.</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
4	Fashion and Apparel Sector	<p>Assam is a place with deep cultural roots and the people here take pride in the refinement of their cultural roots. This state portrays its beauty not only in its serenity and lush green forests but also in the way the people dress traditionally. The state, with its rich history of traditional arts and crafts, takes pride in being a land of multiple ethnicities and diverse cultures. The tribes that dwell in this beautiful state can be easily distinguished by the colourful and intricately designed costumes. Assam, the state having highest number of handlooms in India is unique with its silk weaving culture, and the traditional designs and products still are the major type of fabrics woven for the domestic market. Sualkuchi, popularly known as Manchester of Assam, one of the World's largest weaving villages where the entire population is engaged in weaving exquisite silk fabrics. A renowned centre of silk production, particularly known for Muga-the golden silk of Assam which is not produced anywhere else in the world. Fashion apparel and designing have become quite popular amongst the present Assamese youth and every year large number of youth enters into this line. The traditional practice of weaving in loin loom is practiced by most of the people of the region and should be continued by adopting few modifications like adopting latest know-how and better marketing linkage and commercialization. The key skills needed for this sector to flourish in the state are Spinning, Fabric Manufacturing, Fabric Processing, Garmenting and Merchandising. With regard to Fabric Manufacturing knowledge regarding yarn count, latest trend and market demand and communication skills is required. In terms of Fabric Processing the skills required are shearing, singeing, de-sizing, scouring, bleaching, dyeing etc. In terms of Garment Making the skills required are cutting, stitching and assembling of the garments. Few ancillary skills are also required to develop in line with this sector viz. sewing skills, creativity and imaginative skills, good fashion sense, computer knowledge (CAD, Corel Draw, Illustrator, and Photoshop etc.), business and marketing skills and the understanding the health and safety standards connected with working under this sector. The state should tap the potential youth of the state and create a platform for fashion designer, fashion illustrator, fashion buyer, pattern maker, custom designer, fashion merchandiser, fashion event co-coordinator, fashion stylist, faculty for institutes, fashion choreographer, fashion photographer, fashion journalist and boutique business.</p>
5	Food Processing	The food processing sector has the potential to grow at a rapid

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
	Sector	<p>pace with the demand for processed food increasing every day. The favourable agro climatic conditions are conducive for the growth of this sector and opportunities in this sector abound in processing, sourcing, logistics and setting up cold chains. The processed food sector covers a wide spectrum of product which includes Rice mills, Atta chakkis, Supari making units, Bakeries, Oil mills, Noodles making, Fruit and vegetable processing units, Meat processing, Spice grinding, Confectionery, Sea food, Extruded foods & Soft drinks. A strong and effective food processing sector would play a significant role in employment generation. There is immediate need to develop the entrepreneurial skills of prospective entrepreneurs in Food Processing Sector through specially designed entrepreneurship skill development courses related to processing and preservation of fruits, spices and vegetables, wine brewing, processing of medicinal plants like Aloe Vera by providing sufficient financial assistance for start-up business in Food Processing Sector. The agro climatic condition of Assam makes it a hub of tropical fruits and vegetables. Different set of skills are required for post-harvest preservation and processing for fruits like jackfruit, orange, banana, pineapple, mango, litchi, guava, water melon etc. for making jams, jelly, pickles and juices. The Processing and preservation of edible bamboo products has higher demand in the state which carries enormous potential for entrepreneurship development. The state has a comparative advantage in the availability of spices like turmeric, ginger, black pepper, garlic and chilies and effective preservation and processing technique will not only boost up the production but also help in generating employability around these commodities. The region being highly industrialized need skills in setting up and operating Bakery and Confectionary, Fast Food outlets and Restaurant.</p>
6	Forest based Industries Sector	<p>Forests provide numerous natural resources for the industry but they are not seen as the source of revenue but rather the source of livelihood of the common populace. Plywood, veneer, pulp and paper, safety match box making etc are the main forest based industries in the state of Assam. In fact, Plywood industry is one of the major industries after tea and petroleum. Timber, bamboo, cane etc are the main useful products from the forests of Assam. Besides, Assam is also famous for medicinal, aromatic and economic plants</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>which are abundantly grown in the region. The aromatic plants which are grown in Assam are Patchouli, citronella, lemongrass, vetiver, sugandhmantri and agar. The medicinal plants which are popularly grown in the state of Assam are Sarpagandha, pippali, amlakhi, hilikha, bhomora and arjuna. There exists immense scope of skill development in the area of value addition to the minor forest produce available in the state such as Bamboo and Cane, Aromatic & Medicinal Plants/Herbs by devising skill development courses in the areas of Procurement, Production, Processing, Entrepreneurial skill, Soft skill, Testing & Quality Control of various non-timber based forest produce available in the state. In view of the growing importance of aromatic and medicinal plants, skill upgradation is required for scientific cultivation of these crops, distillation process and managements of its products.</p>
7.	<p>Handloom & Handicrafts</p>	<p>The people of Assam have traditionally been craftsmen from time immemorial. Though Assam is mostly known for its exquisite silks and the bamboo and cane products, several other crafts are also made here. Different regions of Assam are known for their different forms of art and handicrafts. The Jappi, the traditional sunshade continues to be the most prestigious of bamboo items of the state. Bell-metal and brass have been the most commonly used metals for the Assamese artisan. Traditional utensils and fancy articles designed by these artisans are found in every Assamese household. With tribal art and folk elements form the base of Assamese culture, masks have found an important place in the cultural activities of the people. Gold-washing and jewellery-making were two important ancient industries in Assam. Necklaces carry names like Jonbiri, Dholbiri and Dugdugi while Lokaparo, Thuria and Dighal Keru are popular ear-rings. The rings have names like Patia Angathi and Babari Phulia Angathi while a variety of bracelets include Gam Kharu, Baju and Kangkan. The tradition of paintings and Terracotta in Assam can be traced back to several centuries in the past and has been practicing by local craftsmen. Skill upgradation as well as entrepreneurship development is required in pottery, cane & bamboo crafts, water hyacinth crafts and jute crafts. Designer intervention along with marketing skills is required in weaving</p> <p>sectors particularly in making traditional attire like mekhela, gamosa, sador, dokhona, aronai etc. Entrepreneurship skill</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>development is required in case of traditional Jappi making and fish net making in Nalbari district for better marketing as most of the rural artisan are involved in this activity. Marketing skills in procurement of raw material, intervention of new design and selling of produce is required in bell & brass metal industry in Sarthebari and Hajo area of Barpeta district. The traditional mask making, shittal pati making, basket making, tool making, requires skill up gradation through value addition of its produce. Making of bamboo mats, bamboo tables, bamboo chair, bamboo carpets, chisel, tooth picks etc. have higher demand inside the state.</p>
8	<p>Education and Training Sector</p>	<p>In case of Health & Allied Sector, the state of Assam is underserved which creates employment in both public and private sector within the state. In addition to this there is a huge demand for Health & Allied Sector Workers worldwide. So Skilling in these areas will not only prepare oneself for employment within the state but in case of less or lack of opportunities within the state, one can try for employment anywhere in the world depending upon his/her capability.</p> <p>Skill Development can be initiated for Nursing, Medical Lab Technician, Medical Equipment Technician, Pharmacy Assistant, Dietician Assistant, Dental Assistant, Radiology, Dental Assistant, Operation Theatre Assistant etc. Health & Allied Sector has wide range of skill areas which creates employment in both public and private sectors. This sector could become a viable entrepreneurial avenue for the educated youths of the state. Skill development can be initiated in Nursing, Anaesthesia Technician, Physiotherapist, Blood Bank Technician, Cardiac Care Technician, Dental Assistant, Diabetes Educator, Dialysis Assistant, Histo technician, Medical Equipment technician, Medical laboratory technician, Operating Theatre Technician, Pharmacy Assistant, Phlebotomy technician, Radiology technician, Vision Technician and Refractionist etc. Besides, skill development is also required for beauty and wellness industry as the number of Beauty parlours, Nursing Home, Gymnasium and spa centres are growing.</p>
9	<p>Health & Allied Sector</p>	<p>In case of Health & Allied Sector, the state of Assam is underserved which creates employment in both public and</p>

Sl. No.	Economy/Industry Sectors	Skill Development Requirements
		<p>private sector within the state. In addition to this there is a huge demand for Health & Allied Sector Workers worldwide. So Skilling in these areas will not only prepare oneself for employment within the state but in case of less or lack of opportunities within the state, one can try for employment anywhere in the world depending upon his/her capability.</p> <p>Skill Development can be initiated for Nursing, Medical Lab Technician, Medical Equipment Technician, Pharmacy Assistant, Dietician Assistant, Dental Assistant, Radiology, Dental Assistant, Operation Theatre Assistant etc. Health & Allied Sector has wide range of skill areas which creates employment in both public and private sectors. This sector could become a viable entrepreneurial avenue for the educated youths of the state. Skill development can be initiated in Nursing, Anaesthesia Technician, Physiotherapist, Blood Bank Technician, Cardiac Care Technician, Dental Assistant, Diabetes Educator, Dialysis Assistant, Histo technician, Medical Equipment technician, Medical laboratory technician, Operating Theatre Technician, Pharmacy Assistant, Phlebotomy technician, Radiology technician, Vision Technician and Refractionist etc. Besides, skill development is also required for beauty and wellness industry as the number of Beauty parlours, Nursing Home, Gymnasium and spa centres are growing.</p>
10	BFSI (Banking and Financial Services Insurance) Sector	<p>BFSI Sector is another sector which is having decent employment potential. The projected manpower requirement of the BFSI labour force in the country by 2022 is 8.5 million.</p> <p>In view of this Skill Development is suggested in retail banking, documentation and legal procedures, regulatory affairs, understanding of standard operating procedures, computer skills, accounting skills, communication skills, customer management, asset liability management, risk management product development, business analysis, marketing and selling skills, claims management, portfolio management, credit appraisal etc.</p>
11	Construction Sector	<p>Construction is another sector which has good prospects of generating employment within the state considering the various infrastructure projects undertaken by the state. Skills such as Supervision Skills, skills required for Foreman and Crane operators, Electrical Skills, Welding skills, Bar Bending Skills, Plumbing Skills, Carpentry skills, Surveying Skills, Tiles & Marble fitting skills, Quality Control, Testing Skills, Safety Skills, Painting Skills, Construction Equipment Operating Skills, Machine Experts, Turner, etc.</p>

VI. STRATEGIC REFORMS ROADMAP FOR SKILL DEVELOPMENT SECTOR IN ASSAM

The complete exercise of understanding the Characteristic of Skill Development System operational in the state of Assam, Aspiration and Skill Development Needs of Various Categories of Population of the State and the Global, National and Local Skill Requirement Trends in recent years in the study as documented in previous sections is aimed at developing a comprehensive understanding on the existing skill development scenario in the state of Assam and to identify the ways in which the gains made in the state in the area of skill development can be consolidated further and taken to the next best possible level in short to medium term i.e, within 1 to 5 Years time horizon. The key aspects that have emerged through the study and which have been taken as Strategic Goals for Reforms in Skill Development Sector in the State of Assam are:

- 1. Strengthening the Governance Framework currently governing the Skill Development Ecosystem of the State,***
- 2. Improving the Effectiveness and Utilization of existing Technical, Vocational Education & Training (TVET) Institutions***
- 3. Redesigning the Various Short-Term Placement Linked Skill Development Programmes to Make It More Responsive to Meet both the Supply Side Aspirations and Labour Market Demands***
- 4. Making Provisions for providing Specialised Skill Development Training in Identified Sectors of Economy relevant to the State,***
- 5. Making General Education Provided in Schools an Integral Part of Skill Development Efforts by Improving the Quality and Learning Outcomes of School Education,***
- 6. Improving Industrial Engagement in Skill Development Sector through Investment and Apprenticeship***
- 7. Strengthening the Textiles, Handloom and Handicrafts Sector***
- 8. Making Extensive Provisions for Career Counselling and Information Dissemination.***

These Strategic Goals can be achieved by implementing specific strategies targeted to achieve these goals. The suggested strategies along with their rational and implementation approach are discussed in details in the following sections.

Strategic Goals	Strategies Suggested for achieving the Goals
1. STRENGTHENING THE GOVERNANCE	1.1 Introducing Right Amount of Centralization for Governance of Skill Development Schemes in the State
Strategic Goals	Strategies Suggested for achieving the Goals

<p>FRAMEWORK GOVERNING THE SKILL DEVELOPMENT ECOSYSTEM</p>	<p>1.2 Comprehensive Grass Root Level Planning for Skill Development activities in the state which takes care of duplicities, redundancies and inefficiencies present in the Skill Development Ecosystem of the state,</p> <p>1.3 Formulation of a State Specific Skill Development Policy</p> <p>1.4 Adequate Organizational Structure, Staffing and Capacity Building of the newly created Department of Skill, Employment & Entrepreneurship and Assam Skill Development Mission (ASDM)</p> <p>1.5 Creation of State Council for Skill Development, a Regulatory & Quality Control cum Quality Assurance Body to look into the regulatory and quality aspect of various issues facing Skill Development Ecosystem,</p> <p>1.6 Creation of a State Skill Development Fund and</p> <p>1.7 Introducing concurrent Monitoring & Evaluation of Skill Development Efforts.</p>
<p>2. IMPROVING THE EFFECTIVENESS AND UTILIZATION OF EXISTING TECHNICAL, VOCATIONAL EDUCATION & TRAINING(TVET) INSTITUTINS</p>	<p>2.1 Restructuring & Up gradation of ITIs and Polytechnics as per the Skill Requirement Needs of the State and Industry.</p> <p>2.2 Better Utilization of ITIs and Polytechnics which apart from training for formal sector should also be providing training to informal sector as per the need of the community and industry</p> <p>2.3 Capacity Building of Teachers/Trainers of TVET Institutions</p>
<p>3. REDESIGNING THE VARIOUS SHORT-TERM PLACEMENT LINKED SKILL DEVELOPMENT PROGRAMMES TO MAKE IT MORE RESPONSIVE TO MEET BOTH THE SUPPLY SIDE ASPIRATIONS AND LABOUR MARKET DEMANDS</p>	<p>3.1. Introduction of sufficiently long term courses focusing on higher level skills</p> <p>3.2 Provisions for High-End Specialized Skill Development Training for Educated Unemployed Youth</p> <p>3.3. Simplification of the process of Assessment and Certification</p> <p>3.4 Creation of Labour Market Intelligence System (LMIS)</p>
<p>4. MAKING PROVISIONS FOR PROVIDING SPECIALISED SKILL DEVELOPMENT TRAINING IN SECTORS AND</p>	<p>4.1 Intensifying Skilling Efforts in Sectors Relevant to the State such as :</p> <ul style="list-style-type: none"> • Agriculture & Allied • Food Processing

Strategic Goals	Strategies Suggested for achieving the Goals
<p>DOMAINS RELEVANT TO THE STATE</p>	<ul style="list-style-type: none"> • Forest/Bamboo Based Industries • Handloom & Handicrafts • Tourism & Hospitality • Fashion and Apparel • Information Technology & Information Technology Enabled Services (ITES) • Banking, Financial Services and Insurance (BFSI) • Education & Training • Health & Allied • Construction <p>Apart from the above Sectors, the domains in which skill development is required in the state of Assam for gainful self as well as wage employment are: Repairing of Machinery & Equipment etc., Carpentry, Masonry, Tailoring, Weaving, Cooking & Culinary, Automobile Repairing, Driving, Steel fabrication, Furniture making, Basic Computer literacy, DTP Operator, Electrician, Cosmetology, Plumbing.</p> <p>4.2 Specialized Skill Development Training for Entrepreneurship in the sectors which are relevant to the state,</p> <p>4.3 Provisions for Specialized Skill Development Training for enterprises working in Informal sector, Strengthening of In-house training capabilities of enterprises,</p>
<p>5. MAKING GENERAL EDUCATION PROVIDED IN SCHOOLS AN INTEGRAL PART OF SKILL DEVELOPMENT EFFORTS BY IMPROVING THE QUALITY AND LEARNING OUTCOMES OF SCHOOL EDUCATION</p>	<p>5.1 Create Partnership with Specialized Institutions for Improving the learning outcomes in schools especially up to the elementary level.</p> <p>5.2 Introducing Special Classes in Schools on New Skills Set such as STEM (Science, Technology, Engineering and Mathematics) skills, Learning & Innovation Skills, Life & Career, Information Technology Skills and Green Skills with the help of Specialized Institutions.</p>
<p>6. IMPROVING INDUSTRIAL ENGAGEMENT IN SKILL DEVELOPMENT SECTOR THROUGH INVESTMENT</p>	<p>6.1 Incentivizing Investment in the Key Sectors of Economy Capable of Generating both wage and self-employment in the state</p> <p>6.2 Awareness and Implementation of the Amended Apprenticeship Act 2014 in letter and spirit</p>

Strategic Goals	Strategies Suggested for achieving the Goals
AND APPRENTICESHIP	
7. STRENGTHENING THE TEXTILES, HANDLOOM AND HANDICRAFTS SECTOR	<p>7.1 Modernization of Textiles, Handloom and Handicrafts sector</p> <p>7.2 Creation of a Dedicated Handicrafts division within the Department of Handloom & Textiles.</p> <p>7.3 Facilitating Technical, Marketing, Sales & Distribution Skills and Financial Support to the Traditional Skill Sectors of the state</p>
8. MAKING PROVISIONS FOR CREATING AWARENESS, COUNSELLING AND INFORMATION DISSEMINATION	<p>8.1 Making Provisions for Extensive Career Counselling to different category of Population as per their need for information</p> <p>8.2 Setting up of Information Infrastructure for disseminating information to all on a robust online platform.</p>