



North Eastern Development Finance Corporation Ltd.

Study on micro, small and medium industries marketing infrastructure for all the North Eastern states.



EXECUTIVE SUMMARY

TITLE OF THE STUDY

STUDY ON MICRO, SMALL & MEDIUM INDUSTRIES MARKETING INFRASTRUCTURE FOR ALL THE NORTH EASTERN STATES

INTRODUCTION

Micro, small and medium enterprises (MSMEs) have been instrumental in the economic growth of the country. With over 50 million MSMEs in India manufacturing more than 6,000 products, they contribute 33.4% to India's manufacturing output. The sector has sustained an annual growth rate of over 10% in the last few years contributing close to eight percent, to the national Gross Domestic Product.

A majority of these MSMEs are located in rural areas, and hence prove to be critical for social inclusion and economic development especially in the economically backward areas of the country. Further MSMEs are the largest employer after agriculture, providing 110 million jobs across industries.

The North East Region (NER) comprises of less than 1% of the total MSMEs in India. Manufacturing sector forms 18% of the NSDP of the region while services sector being the major contributor forms 52% of the NSDP. The states are enriched with natural mineral resources as well as offers suitable climatic conditions for a variety of exotic agriculture and horticulture products. Despite the region, being replete with resources, the states have been left behind in terms of economic growth as compared to other parts of the country. One of the major reasons is limited connectivity and lack of basic infrastructure to facilitate transportation of goods to the rest of India. Also, one of the key infrastructure requirements for industries to be established and to carry out business activities successfully is marketing infrastructure. NER greatly lacks this support which plays a vital role in facilitating the transport of manufactured goods to buyers and consumers.

In this context, North Eastern Development Finance Corporation Limited (NEDFi), undertook the initiative under its Techno Economic Development Fund (TEDF) and engaged EY LLP through competitive bidding to conduct a study on "MSME Marketing Infrastructure for all the North Eastern States".

PROJECT RATIONALE

To help NEDFi achieve this outcome of improving Marketing Infrastructure in NER, EY has prepared a report covering all 8 states viz. Arunachal, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Recommendations and roadmap have been provided for developing Marketing Infrastructure in the region.

The following are the terms of reference of the study:

1. Status of Micro, Small and Medium industries in the NER under different sectoral spaces.
2. Study on the available resources and existing marketing infrastructure and gap, if any.
3. Assessment of key focus areas for improving industry attractiveness for the NER (state specific).
4. Assessment of existing policy interventions by the Central and State governments in the region, for the development of marketing infrastructure.
5. Stakeholders' perspective on the respective state's and region's marketing infrastructure and key insights on improving the same.
6. Study on existing logistic support for marketing of MSME products, and suggestions for measures to improve effectiveness. Branding of local products and formulating a strategy for global positioning of MSME products.
7. Use of e-commerce for wider reach.
8. Measures for value addition by way of quality certification, fair practice code, packaging etc.
9. Assess current status as well as opportunities for greater access to domestic markets, SAARC, ASEAN and other international markets.

APPROACH TO THE STUDY

The EY team undertook a comprehensive secondary research to understand the existing economic scenario and status of MSMEs including challenges faced in terms of marketing infrastructure across different sectors. This was followed by extensive primary research in the form of in-depth interviews and focus group discussions with MSMEs; one on one discussions with other stakeholders including industry associations, government officials from various departments – Commerce and Industries, horticulture, agriculture, sericulture etc. Based on these inputs the EY team has shortlisted six sectors for the purpose of study. These sectors were approved by the internal committee and all of them have good growth potential across the eight states. The six focus sectors are as follows:

1. Agriculture & Horticulture
2. Food Processing
3. Non-Timber Forest Produce (NTFP) including Bamboo and Spices
4. Textiles, Handicrafts and Sericulture
5. Hospitality & Tourism
6. Meat processing

Further, based on field visits and thorough research on existing research papers on marketing infrastructure etc., a matrix for primary survey was developed, as a prerequisite to the design of survey questionnaire. Subsequently, the team developed survey questionnaires for each of the six focus sectors. Additionally, two separate surveys were also designed targeted at exporters and medical tourism.

The team conducted field surveys to understand the current status, availability, challenges faced and requirement of MSMEs in terms of marketing infrastructure for the identified focus sectors. Responses from a total of 2,051 MSMEs were assessed across eight states. The EY team also interacted with 380 stakeholders from the NER and other parts of the country for this study.

The report has been prepared on the basis of extensive in-depth interviews and discussions with various stakeholders, secondary research on each of the six identified focus sectors and qualitative/quantitative primary surveys analysis.

MSMEs in NER

In the absence of large-scale manufacturing and heavy industrialisation, NER comprises of MSMEs primarily. Currently there are 73,889 registered MSME Units across the 8 states. The region is dominated by micro industries which constitute 82% of the total MSMEs as per Udyog Aadhar registration. Manufacturing units form 56% percent of the total MSMEs, and the remaining cater to the Services sector.

Both manufacturing and services units employ around 43 million people. The total investment stands at INR 15 lakh which is just 1% of the total MSME investment in the country.

There has been an overall increase in the number of MSMEs established in the last 10 years in NER. However, the percentage of MSMEs as compared to the total registrations in India has declined. NER comprised of 2% of registered MSMEs as per the SSI registration till 2006 which declined to 1.34% during EM registration as recorded between 2007 and 2015. Further, only 0.77% of units are registered from NER today as per Udyog Aadhar¹. Industries are being established at a much slower pace as compared to the rest of the country. This clearly indicates that, the region lags in terms of industry attractiveness and has failed to establish a business ecosystem at par with other parts of the country. Hence, there is an urgent need to ramp up the industrial setup and provide a conducive industrial environment backed by systematic investments and adequate infrastructure to encourage establishment and sustenance of MSMEs in the region.

MARKETING INFRASTRUCTURE IN NER

For any business activity to be successful, it is of utmost importance that the entire value chain is supported by sound marketing infrastructure so that the right product reaches the right buyer at the right time. A well-developed marketing infrastructure is a necessity to reduce losses, increase shelf life and store products during demand fluctuation. The North East region, which produces a variety of exotic agriculture and horticulture products, some specific only to the region, requires special sophisticated storage and marketing infrastructure like packaging units, sorting & grading facilities, chilling units, controlled atmosphere storage

and cold chain for transportation of perishable products.

Moreover, NER being landlocked requires special attention in terms of infrastructure availability and connectivity options. Its hilly terrain and limited road and rail routes make the movement of goods difficult. Hence, a wide network of well-planned marketing infrastructure is required in the region.

Since the region is surrounded by 5,182 km of international border, which is 99% of its geographical boundary, presence of robust export infrastructure is also the need of the hour to boost international trade from the region.

At present the region has very limited marketing infrastructure. Most of the infrastructure is concentrated in Assam near the state capital. States like Manipur, Mizoram, Nagaland and Arunachal Pradesh are far behind in terms of basic infrastructure like roads. The marketing infrastructure covered in this report includes:

- Post-harvest infrastructure
- Wholesale/regulated markets
- Packaging and integrated pack houses
- Storage facilities
- Abattoir/Slaughterhouses
- Quality testing and assurance facilities
- Export infrastructure

i. POST-HARVEST INFRASTRUCTURE

Post-harvest infrastructure is the most critical requirement for perishable products. It prevents losses and preserves the major quantum of yield during the initial hours from plucking/cutting from field. It comprises sorting, grading, washing, drying facilities, ripening chambers etc. followed by packaging and appropriate storage to maintain the quality, grade and freshness of the products. NER lacks in such infrastructure. Most the activities like sorting and grading is carried out manually. Traditional methods of sun drying are widely being practiced even now by growers as well as some processing units. Hence there is a need to establish modern mechanised post-harvest infrastructure especially when the region has abundant naturally growing perishable products.

ii. WHOLESALE AND REGULATED MARKETS.

Agriculture marketing in India is governed by the Agriculture Produce Market Committee (APMC) Act. As agriculture is a state subject, different states, at their discretion, have adopted marketing reforms under the Act. Wholesale regulated markets have been established by some of the states in NER to facilitate selling of agriculture/forest products by farmers and growers at competitive prices. Overall, NER comprises of 2,867 agriculture produce markets, out of which 281 are wholesale markets and 2,586 are rural periodic markets. The high number of local rural markets clearly indicates that the agriculture markets in the region are highly un-organised with only 10% formal trading structure established. Manipur is the only state in NER which does not follow the APMC Act.

iii. PACKAGING AND INTEGRATED PACK HOUSES

Pack house facility is extremely important especially for perishable products. Packaging not only reduces losses and spoilage during transportation of products but also enhances visual appeal and hygiene. It also helps in establishing a brand image in the market. The region lacks in such packaging facilities. Moreover, there is immense shortage of basic packaging material. Most of it is procured from Kolkata, Mumbai or Delhi as Guwahati is relatively expensive. MSMEs face difficulty in transportation of perishable products as well as delicate items like handicraft products. They often suffer losses due to breakage and product damage. The government has realised the need of such infrastructure in the region and is promoting the establishment of such facilities. APEDA has recently funded 7 projects for packaging facility in NER focussing on export requirement.

iv. STORAGE

Cold storage facilities along with cold chain services are an urgent requirement in NER to support storage

and transportation of perishable products. There are total of 115 Cold storage facilities registered with a total capacity of 2.9 lakh MT in NER which is only 1% of the total installed capacity in the country². A total of 12 cold chain projects have been planned in NER by Ministry of Food Processing Industries, out of which 6 have been completed. Most of the cold storages functional in NER store in-bound products and are privately owned. Further, several cold storages were found to be non-functional especially the ones located near farm gate as observed during field visits. Hence there is a need to relook at the cold storage establishment strategy. Efforts may be concentrated on creating cold storages at logistics hubs in NER initially and then near farm gates supported by a network of cold chain. At the same time, there is a need to undertake pre-processing activities and educate the producers regarding the same for farm gate storage.

Apart from cold storages, network of warehouses is equally important for temporary storage of non-perishable as well as finished processed goods. A clean hygienic storage facility is a must for consumable products like spices and processed food items. NER States have a total warehousing capacity of 4,19,421 MT provided by 10 Central Warehousing Corporation (CWC) warehouses across three states (six in Assam, three in Tripura and one in Nagaland) and 47 State Warehousing Corporations (SWC) warehouses (41 in Assam and six in Meghalaya). Additionally, Central Railside Warehouse Company Limited (CRWC) has one, 3,500 MT warehouse located at Pandu Port in Guwahati, Assam with four compartments and additional amenities like weigh bridge and vendor rooms.

v. SLAUGHTER HOUSES

The meat sector in NER is highly unorganised despite huge demand. Cattle or live animals are kept in the backyard of individual sellers and slaughtered as per customer demand. Fresh meat is sold in small local markets and rural haats across the region. As a result, there is dearth of modern hygienic slaughterhouses in the region. Meat processing is also at a very nascent stage, owing to fresh meat preferences of local people. Currently some of the NER states are importing cattle from neighbouring states to fulfil their meat demand. Pork and chicken are the two meat varieties widely consumed by the local population in NER. Beef is popular among the tribal population in the region. The Ministry of Food Processing Industries (MoFPI) has also approved modernisation and construction of new abattoir projects. A total of 9 projects across the country, were approved during 11th plan out of which 6 have been completed. Two projects from NER, approved during 11th plan have been completed. Additionally, 6 projects from NER have been approved in the 12th plan, out of which 3 have been completed.

vi. QUALITY TESTING AND ASSURANCE FACILITIES

Laboratory testing and certification is the most important process which ensures health safety and hygiene to consumers. It is one of the prerequisites for international exports as well as imports especially for food products. Keeping in mind the region's ability to produce food products, it is of utmost importance to provide adequate quality testing and certification labs in the region. There are only 4 State/ Public food laboratories located in NER. States of Arunachal Pradesh and Mizoram do not have state/public food laboratories, referral labs or NABL accredited labs notified by FSSAI. The food authority introduced Mobile food laboratories out of which 9 have been deployed in NER states. Due to unavailability of specialised labs, most of the MSMEs have to avail services from labs located in cities such as Delhi, Mumbai, Kolkata, Guwahati, depending on the type of product.

vii. EXPORT INFRASTRUCTURE

NER trade takes place with the neighbouring countries through Land Customs Stations (LCS) and recently developed Integrated Check Posts (ICP). Majority of the trade takes place with Bangladesh through Assam, Meghalaya and Tripura. There are 109 LCS/ICS in the country. A total of 38 LCS and ICS are located in NER and currently only 29 are functional. The total value of goods exported stood at US\$122 million and imports at US\$314 million during 2016–17 recording a growth of 9% and 4% respectively as compared to the previous year. Other export infrastructure includes border haats. There are only 4 border haats functional for local trade. These border haats are weekly/biweekly markets to facilitate small trade of products like vegetables, fruits, spices, bamboo, broom sticks, small agricultural implements, fruit juices, toiletries, household plastic items etc. The trade through border haats is allowed only for personal consumption.

International export through air is very limited. Out of 11 airports located in NER, only 2 are international airports. Further, only Guwahati airport has cargo export facility. Domestic freight movement via NER airports stood at 35,000 MT while international export volume stood at mere 10 MT during 2019.

viii. STAKEHOLDER PERSPECTIVE

The EY team interacted with various stakeholders, across the MSME ecosystem to understand the challenges and issues of MSMEs related to marketing infrastructure in all the eight states in NER. The following stakeholders, which play a crucial role in development and growth of MSMEs have been identified for interaction during primary research.

- Central government departments/ organisations such as Ministry of Micro Small and Medium Enterprises, Ministry of Food Processing Industries, Ministry of Agriculture & Farmers’ Welfare (Horticulture Dept.), Ministry of Textiles- Office of DC Handloom, Agricultural and Processed Food Products Export Development Authority (APEDA), Tribal Cooperative Marketing Development Federation of India (TRIFED), Handicraft & Handloom Exports Corporation of India etc.
- State government departments such as industries department, agriculture and horticulture department, animal husbandry and veterinary, sericulture, handloom and handicraft, tourism, inland waterways etc.
- Industry Associations – CII, FIEO, FICCI FLO, Indo-Ukhrul Chamber of Commerce & Industry, All Manipur Entrepreneurs’ Association (AMEA), Tripura Tourism Development Forum, Tripura Chamber of Commerce & Industries, FINER, All India Manufacturers’ Organisation, All Assam Small Scale Industry Association etc.
- MSMEs across sectors – food processing, plastics, bamboo and cane handicrafts, bamboo furniture, silk handloom, tourism and hospitality, Spice processing, meat processing, organic foods etc.
- Large enterprises in the region such as HUL, Pran Foods Ltd, DS Group, Shija Hospitals, Thangjam Agro, Bhogali Jalpan, Sigma Spices, etc.
- Exporters and Traders based in and outside NER procuring or exporting products from NER states Logistics and transport service providers such as SpiceJet, AAICLAS, CRIS (rail freight), Assam Inland Waterways Dept.

The EY team also conducted multiple Focus Group Discussions (FGDs) across different sectors. This helped in understanding the on-ground challenges from buyer and seller perspectives, across the value chain and gave a clear understanding of existing processes and prevalent business practices in the region.

During interaction with various stakeholders, specially MSMEs, several concerns pertaining to shortage of skill, technology upgradation, connectivity, lack of working capital and funding etc. were highlighted. However, keeping in mind the scope of the study, emphasis has been laid on challenges and needs of marketing infrastructure in the region. The EY team categorised issues as per the scope of the work. The table below mentions some of the critical issues and challenges expressed by various stakeholders during one on one interactions, FGDs, common across the eight NER states.

S.NO	PARAMETER/SECTOR	CHALLENGES
1.	Industry Attractiveness	<p style="text-align: center;">Challenges faced by MSMEs in the region</p> <ul style="list-style-type: none"> ● Tedious and cumbersome process of availing schemes accompanied with excessive documentation and frequent follow up with various officers at different organisations/levels –major deterrent for MSMEs ● High logistics and transportation cost for MSMEs in the region except for Assam, which is well connected by air, rail and road with rest of India ● Challenges faced by large/medium players operating in the region ● Raw materials sourced from outside the state, local produce costs higher ● Unable to avail govt. subsidy and corporate tax benefits- documents submitted several times however repeatedly asked citing documents lost or in new formats/format changed
S.NO	PARAMETER/SECTOR	CHALLENGES

2.	Agriculture And Horticulture Products	<ul style="list-style-type: none"> No value chain established to export goods out of the states/NER Small scattered MSME units across the state Farmers have small farm holdings resulting in low production volume eNAM not being used Inadequate pack houses and sorting/grading facility Sorting/grading undertaken manually in most of the cases Other than Assam, very few cold storages in other states. Mostly cold storages are not functional due to improper location/high operational cost/low utilisation/no maintenance. Those which are functional are majorly used for storing potatoes or other inbound products into the states Absence of pre-cooling /chilling units Lack of technical know-how and dedicated cold storage operators leading to spoilage and loss of farmers trust
3.	Food Processing	<ul style="list-style-type: none"> Lack of aggregators, making it difficult for MSMEs to directly deal with farmers Except Assam, other states MSMEs highlighted lack of mandis, auction centres, other similar infrastructure to facilitate easy bulk buying of raw material Very few primary processing units and low production volume makes it difficult for existing ones to survive Inadequate/No Labs for quality testing and certification; Guwahati or Kolkata are the nearest feasible options No pack houses and packaging material has to be sourced from either Kolkata or Guwahati, leading to increase in price of final products Unavailability of adequate raw material/ingredients like preservatives, food colouring etc. and high cost involved in import
4.	NTFP	<ul style="list-style-type: none"> Lack of standards and specifications set for bamboo wood furniture No bamboo testing and certification facility across NER Lack/No primary processing centres and packaging units for honey
5.	Hand-loom & Handicraft	<ul style="list-style-type: none"> Lack of dedicated marketing complexes except Assam No packaging facility and unavailability of packaging material. The challenge is more severe for MSMEs in states other than Assam Low silk production in the states of Arunachal Pradesh, Tripura, Mizoram, Nagaland and Sikkim MSMEs in Assam, Manipur, Meghalaya and Tripura highlighted competition from Power loom products as one of the major concerns
6.	Tourism	<ul style="list-style-type: none"> Lack of interstate air connectivity within NER States Limited availability of 3 star and above rated accommodation facility in Manipur, Mizoram, Tripura, Arunachal Pradesh and Nagaland Need to develop and popularise more tourist spots in the states of Nagaland, Manipur, Mizoram and Tripura
7.	E- commerce	<ul style="list-style-type: none"> Poor internet connectivity in villages preventing MSMEs in rural areas from selling directly through online/Social Media Perception that payment policy/ terms and conditions for selling on e-commerce are not friendly
S.NO	PARAMETER/SECTOR OR	CHALLENGES
8.	Export	<ul style="list-style-type: none"> Negligible awareness of/ listing and sale process on GeM/other government portals Limited items are allowed to be exported from India by Bangladesh High duties levied by Myanmar on exporting goods to protect domestic market High penetration and easy availability of cheaper Chinese products/goods in both Myanmar and Bangladesh markets No functional Border Haats in Manipur, Mizoram and Nagaland
9.	Large/Medium Players operating in the region	<ul style="list-style-type: none"> Lack of aggregators, making it difficult for MSMEs to directly deal with farmers Low volume of products/raw material produced

STRATEGIC RECOMMENDATIONS

Based on discussions with various stakeholders, leading practices study and findings of the primary survey of MSMEs, EY has provided strategic recommendations to bridge the marketing infrastructure gap in the region across the shortlisted sectors. Also, other issues pertaining to ecosystem strengthening have also been touched upon. The EY team also conducted a consumer survey to understand traveller insights and perceptions of North East food, handloom and handicraft products to help formulate promotion and branding themes. Further, strategies on enhancing market reach through e-commerce and exports of North East local products has also been provided. Lastly, insights on improving industry attractiveness and existing schemes by Central and State governments on marketing infrastructure development have been discussed.

i. INDUSTRY ATTRACTIVENESS

With the growing number of small-and-medium enterprises in India, ease of doing business plays a crucial role in the region's economic growth. Local businesses are impacted by the processes, rules, and regulations set up by governments. Regulatory constraints such as cumbersome business registration procedures, tax and credit structure, poor infrastructure facilities and a lack of access to information hinders entrepreneurship and negatively impacts investment, employment and trade in the region.

DPIIT collaborated with the World Bank to assess the business environment in each state and engaged key stakeholders and Subject Matter Experts to evaluate areas for improvement. Based on their findings they developed a comprehensive Business Reform Action Plan and set up nodal agencies to implement remedial measures. As a part of their analysis, they developed a state wise ranking of the Ease of Doing Business. Andhra Pradesh and Uttar Pradesh were the highest performing states and had a ranking of 1, and 2 respectively falling in the 1st quartile of states. In contrast, states in the North East region performed poorly and ranked in the 4th quartile.

Overall, NER's poor performance in comparison to other states can be attributed to a lack of reform implementation and inadequate infrastructure. A large part of the region is covered by forests, which limits the area for constructing roads, railways and other infrastructure. Another major challenge is finding available land for commercial use. Entrepreneurs find it hard getting land allotments in industrial estates and receiving building approvals.

In order to improve industry attractiveness, State governments need to create an environment that fosters entrepreneurship and drives the economy towards growth and sustainability. A strong focus is needed to overhaul complicated tax registration, filing and payment mechanism in the NER and improve ease of doing business. Single window systems can be easily implemented at a low cost which will help provide information to new and existing users. The EY team on analyzing the reforms has identified low hanging fruits for each of the state based on those that were easy to implement and had been implemented by other states in the region. These reforms are identified by DPIIT and can be implemented relatively easily and quickly.

The survey analysis has provided some good insights related to industry attractiveness parameters with average industry attractiveness rating across all sectors and states is 2.95 out of 5, indicating that MSMEs are not very happy with the facilities provided to them for undertaking business in the region. Ease in getting electricity connections received the highest rating, with a mean score of 3.36 while ease of transportation of finished products/ raw materials via Air received the lowest rating, with a mean score of 1.79. None of the parameters received an average rating of 4 or 5, which can be substantiated from the Ease of Doing Business survey results as well, wherein, none of the states figured among top 15 states in India. Further, for transportation by rail and air, 70% and 74% MSMEs respectively gave a rating below 3, the highest margin amongst all indicators. Out of this 54% gave a rating of 1 for rail and 63% gave a rating of 1 for air, thus indicating the work required in improving connectivity from the region with rest of India.

Additionally, since connectivity is a key factor for attracting industries to North East and has significant impact for MSMEs in the North East in terms of ease of doing business, the EY team has studied this in detail analysing the achievements so far and gaps which still need to be addressed in terms of road, rail, air and internet connectivity.

Though, connectivity has greatly improved over the last few years, it is still one of the biggest challenges faced by MSMEs in the region. During field visits, MSMEs and other stakeholders across sectors highlighted the lack of adequate infrastructure and transportation facilities available as their biggest challenge. This has led to increased time and cost for MSMEs, restricting the sale of products for many within the region. Some of the suggestions on enhancing existing initiatives on connectivity improvement include:

- **Freight Subsidy Scheme:** The government should reinstate the erstwhile Transport Subsidy Scheme, wherein instead of providing subsidy to any part of India, subsidy can be provided to MSMEs till Guwahati. Also, a robust mechanism should be developed to ensure transparent fund flow and monitoring. Subsidizing logistics cost for MSMEs till Guwahati will help them to remain competitive in domestic as well as international market. The scheme should be in place till the time connectivity in the region is at par with other parts of India, which is expected to be achieved in next 5–7 years.
- **Kisan Rail:** The Finance Minister recently announced the development of the Kisan Rail project to help farmers transport perishable goods with refrigerated coaches. The first such railway link is planned from Nashik, Maharashtra to Danapur, Bihar. Similar service should be introduced in NER to help transport local produce to other part of the country at reduced time and cost.

ii. **MARKETING INFRASTRUCTURE:**

Sector wise recommendations along with market survey analysis focusing on marketing infrastructure are as follows:

A. PERISHABLES AND PROCESSED FOODS (AGRI- HORTI AND SPICES)

The diverse agro-climatic conditions of the North East Region, varied soil types, coupled with abundant rainfall has made the region replete with a variety of unique high value agricultural and horticultural products. Farm gate production levels are increasing but market reach and marketing infrastructure remains deficit as observed and learnt through field visits. In the absence of sound marketing facilities, farmers heavily depend on local traders and middlemen for disposal of their farm produce which is sometimes sold at throw-away prices or just wasted.

In such a scenario, it is essential to have a sound marketing infrastructure to not only provide a selling platform, but evacuation, and storage facilities to reduce wastage and facilitate easy procurement by traders, exporters and processors. Also, adequate post-harvest infrastructure will ensure primary value addition through sorting-grading and help fetch better price in the market.

The wide variety of perishable products in NER provides the opportunity to create food processing as one of the leading industries in the region providing livelihood options to the local population. However, there are several challenges which these micro and small units face in order to grow their business and sell products outside the state. To capitalise on the opportunities posed by the food processing sector, it is important to take urgent measure to address gaps prevalent across the value chain. Primary survey has been conducted for both MSMES dealing with agriculture/horticulture produce and processed foods. The findings of both the surveys are as under:

a) **AGRI- HORTI MSME SURVEY:**

A total of 466 MSMEs dealing with agri-horticulture products were interviewed from across the 8 NER states. These also included FPOs, farm owners, cooperative societies.

- **Critical factors:** Transportation of goods was the most critical factor with 65% of the respondents citing it, followed by procurement of raw materials at 40 %, warehouse facility at 35% and cold storage facility at 32.8%.
- **Marketing infrastructure:** Out of the total MSMEs, about half of them, 49% used some type of infrastructure facilities as asked in the survey. Warehouses were the most used facility, with 15.4% of the MSMEs using it, followed by quality testing/certifications facility at 11.5%. Border haats were also popular with 6% respondents using it. Out of the 51% of MSMEs who did not use any of the listed marketing infrastructure facilities, 75% stated that these were not available near their units, 24% responded saying that they were unable to access these facilities and 14% felt that it was not required in their business. While almost 10% found it highly priced, about 4% stated that these facilities were not sufficient for their produce. Additionally, some facilities were available, but non-functional. This problem was faced by about 3.5% of the respondents.
- **Quality testing:** Only 8% of the MSMEs interviewed undertook quality testing and certification for their products. Organic certification was the most popular type of certification undertaken (53%). Major reasons for not getting quality testing were – 42% were not aware at all, 32% cited no testing facility in the vicinity, 14% said it was not mandatory for the products they sold.
- **Marketing methods:** Word of mouth and personal selling remains the primary means of marketing with 81% and 48% of respondents using it. Further, personal selling, dealer and distributor network and word of mouth were the top three effective ways of selling products.
- **Products sold outside the State:** Only 11% of the respondents sold their products outside the state and out of these 88% sold within NER; major state being Assam and Manipur. The only states outside NER where products were sold are West Bengal and Delhi NCR. Lack of manpower was found out to be the major reason for not selling outside the state, standing at 44%. Other challenges faced included production not adequate to cater other states (38%), lack of service provider (32%) and lack of transportation facilities (30%). This indicates that apart from improving infrastructure and connectivity, there is a need for skilled labour and improving the buyer seller connecting platforms/forums.

b) **FOOD PROCESSING MSMES:**

A total of 283 respondents were interviewed covering the entire region through field survey. Brief profile of MSME respondents is given below:

- **Critical factors:** Overall, procurement of raw material was the most critical factor with 52.3% respondents citing it, followed by packaging (44.2%), transportation of goods (42.4%).
- **Marketing infrastructure:** Out of the total respondents, 35.4% didn't avail any of the marketing facilities listed. Warehouse was the most used facility, with 33.6% of the MSMEs using it, followed by quality testing and certification (26%) and cold storage facilities (14%).
- **Quality testing:** Around 40% of the respondents interviewed undertook quality testing and certification for their products. Around 80% of these had FSSAI licence, 10% had ISO food safety standards, 6% organic food certifications and only 3% HACCP certification. Other certifications included Agmarks. Further major reasons for not getting quality testing was lack of awareness (30%) and unavailability of such facilities in their area (28%), followed by respondents saying, not applicable and lack of knowledge on how to apply for the testing and certification processes.
- **Marketing methods:** Word of mouth and personal selling remains the major means of marketing with 84 % and 48% of respondents using it, respectively. Further the MSMEs were asked to rate the effectiveness of the means of marketing adopted by them on a 1 to 5 scale (5 being most effective) - personal selling, dealer & distributor network and word of mouth have been most effective with rating touching 5.
- **Participation in fairs, exhibitions and festivals:** Around 28% of the responders participated in fairs, exhibitions and festivals to sell their products while the remaining 72% did not. Out of those who participated, 67% participated within NER. The remaining 33% participated in fairs, exhibitions etc. organised in Delhi/NCR, West Bengal, and Maharashtra primarily, outside the region. Major reasons for not participating included, lack of awareness, time constraint and not useful.
- **Products sold outside the state:** Only 17% of the respondents sold their products outside the state and 59% sold within NER states; major state being Assam. The top three reasons for not selling outside the region included lack of service provider in the area (32%), lack of finance (28%) and high cost of transportation (24%).

c) **RECOMMENDATIONS**

Stakeholder feedback, insights from field visits and primary survey results have been considered while formulating recommendations. Further value chain mapping and root cause analysis has been undertaken to identify the core issues regarding the non-functional infrastructure across the states. Keeping these underlying issues in mind, recommendations on bridging the marketing infrastructure gap and addressing critical factors for successful ecosystem development of the food processing sector utilising the local resources have been provided.

I. POST-HARVEST INFRASTRUCTURE:

- **Collection centres & sorting-grading facilities**

Collection centres play an important role in aggregation of farm produce in the hills and the mountainous regions where there are small and scattered landholdings. In the context of the NER states, the collection centres are the first link in the value chain.

These collection centres should be present across all districts to facilitate evacuation of produce. In the initial phase the collection centres can be established based on high crop producing districts. Based on the production of various crops, the tentative location for creating collection centres at district level has been provided. The existing collection centres should be evaluated in terms of adequacy and facilities for value addition like sorting, grading, washing and packaging and upgraded to meet the requirement. The collection centre should be equipped with basic value addition infrastructure such as sorting grading facilities depending on the type of crops being handled. Also, packaging facility for transportation should be available.

● Cold storage

The current production levels of fruits and vegetables is way more than the consumption in the region. As per APEDA report, the marketable surplus levels range from 95% for pineapples to ~20% for vegetables like brinjal, chilli. Also, due to minimal presence of food processing units in the region, local utilisation is very less. This calls for urgent requirement of storage as well as transportation facilities to move produce from the region to consumption hubs across the country. The total installed capacity of cold storages in NER is 2.8 lakh MT with 67% in Assam. Majority of the cold storages functioning in the region were used to store in-bound products and potato. As per National Centre for Cold-chain Development (NCCD), the total requirement in the region stands at 1.32 lakh MT.

Further, the stakeholders also, raised the concern of lack of cold storages across the region. They were of the view of establishment of mini cold storages – 50–100 MT capacity suited for low volume produce, to be established near the farm gates to facilitate farmers sell the surplus produce at the appropriate time and price.

Contrary to this, the majority of cold storage projects developed – both low and high capacity were unable to pick up and many were found to be non-functional or defunct except in Assam and Tripura where majorly in-bound products and potatoes were stored.

The approach for development of cold storages in the region has been this developed creating this peculiar situation in mind.

Development of network of small cold storages (20–50MT), preferably multi chamber (each chamber of 5–10 MT) at farm gate supported by robust cold chain infrastructure consisting of refer vans, proper primary processing and packaging for storage.

Establishment of large cold storages at logistics hub for storing out-bound goods during transit

Cold chain infrastructure requires considerable amount of investment and hence, considering the current scenario of operation as well as basic infrastructure such as poor roads, lack of electricity supply etc., prevalent in the region, key considerations for establishing cold storages have also been provided.

II. Logistics Support:

While connectivity in Assam has improved greatly, other NER states are struggling to push their goods out of their states. MSMEs not only face logistics issues in procuring raw material from local sources but also to send them outside the region. This is due to high cost of transportation because of poor road infrastructure, and illegal taxes being charged along the highways in states like Manipur and Nagaland. Hence, measures for improving logistics support in the region for evacuation of local products has been provided. These are:

- Deployment of mobile infrastructure
- Increased marketing and promotion of digital solutions such as ‘Kisan Rath’ app developed by Central Government and ‘1917’ initiative by i-Team- Government of Meghalaya
- Introduction of air freight subsidy to support MSMEs transport perishable products to different parts of the country till the time road infrastructure is strengthened in states like Arunachal Pradesh, Nagaland and Manipur.
- Stringent regulations and measures are required to curb illegal taxes and extortion of transporters
- which have been choking movement of goods in and out of the State and exploiting MSMEs in the region.

● Quality testing & certification facilities

Though there exist food testing laboratories at the health dept, the facilities were not sufficient and specialised for sophisticated testing required for the sector. This was one of the major concerns raised by MSMEs during field interactions. MSMEs had to often send their samples to Kolkata, Delhi and Mumbai to get the requisite testing and certifications done. And especially when samples had to be sent repeatedly, this led to added cost and delay due to connectivity issues. Further, Guwahati has one regional Food Testing Laboratory certified by FSSAI, however the facility was under renovation and upgradation.

Hence, there is a need to not only expand the network of food testing laboratories to support the upcoming as well as established food processing units in the region but also strengthen the capabilities of existing laboratories and create sophisticated ones for advanced testing especially for export compliances. Some of the steps to be taken for establishment of testing laboratories along with

tentative locations are:

- Establishment of at least one NABL accredited food testing lab notified by FSSAI in each of the state capitals.
- Existing labs should be upgraded so as to have sophisticated testing capabilities.
- Existing infrastructure at colleges campus and research institutes may be utilised to house food product testing facilities.
- Laboratories may be supported with advisory services on product improvement and other queries related to food product formulation.
- Food testing facility should be made available at each Land Customs Stations (LCS) and Integrated Check Posts to ensure safe and hygienic cross border food/food product import and export.
- **Institutional strengthening**

There are minimal processing units in the region; most of them micro/house-hold units manufacturing small quantities of candies, jams, pickles enough for the local market. Further, several government owned processing units are defunct, while some struggle to sustain and compete in the market. There are a few small and medium food processing units operating in the region but procuring most of the raw material from outside NER. Several challenges have been revealed through stakeholder interactions related to the entire value chain which impacts the sector growth. These include low volumes/ lack of aggregation and on time evacuation/delivery and high prices quoted by producers. Further issues include lack of know-how on basic value addition processes i.e. sorting, grading etc. and the necessary business acumen to negotiate deals and honour trades deter processors from purchasing local produce.

This indicates that there is not only dearth of physical infrastructure but a need for institutional strengthening from the government to handhold producers and sensitise manufacturers. Some of the activities which can be undertaken by concerned stakeholders are as follows:

The State Marketing board should carry out regular market intelligence exercises and guide producers.

C. NON-TIMBER FOREST PRODUCTS (BAMBOO AND HONEY)

The North East Region is covered with 65% of forests covering 1,70,541 sq. km of area as per the Forest Survey of India, 2019, thus providing opportunity to capitalise on the ample non-timber forest resources, the rich forest foliage dwells. A large number of communities, especially the local tribes depend on NTFPs for their livelihood.

However, the sector remains highly organised with informal market linkages. For the purpose of this study, honey and bamboo are the two NTFPs covered in this section considering the immense market potential for large scale development, not only domestic but international as well. While NER has over one third of bamboo resources of the country, wild honey from the region can be scaled up to cater to its huge demand specially in the export market. Further, existing value chain for the two products has been assessed in NER and marketing infrastructure gaps and challenges have been delved upon to formulate solutions for its development.

- **MSME Survey findings:** A total of 152 respondents have been interviewed covering 8 states through door to door survey.
- **Critical factors for business operation:** Transportation of goods was the most critical factor with 37% of the MSMEs citing it, followed by warehouse facility (26%), procurement of raw materials (24%), availability of working capital (24%) and forum for buyer-seller meet (14%).
- **Marketing initiatives undertaken by MSMEs:** Overall, word of mouth and personal selling remains the major means of marketing with 77% and 33% of respondents using it. Further the MSMEs were asked to rate the effectiveness of the means of marketing adopted by them on a 1 to 5 scale (5 being most effective) - personal selling, dealer and distributor network and word of mouth have been most effective with rating touching 5.

- **Products sold outside the State:** Only 11% of the respondents sold their products outside the state and out of these 55% sold within NER states major state being Assam. The top 5 states outside NER where products were sold to are Delhi NCR, followed by Maharashtra, Tamil Nadu, Bihar and Gujarat. The topmost reason stated was lack of service providers to facilitate selling. This indicates there is a need for improved buyer seller connecting platforms/forums.
- **Marketing infrastructure facilities used and reasons for not using:** Out of the total MSMEs, only 27% of them availed the listed marketing infrastructure facilities. Warehouses was the most used facility, with 17% of the MSMEs using it. Further, warehouses and other infrastructure received an average rating of 3 on satisfaction across all the four parameters— availability, accessibility, cost and adequacy. Border Haats received the most satisfaction with average ratings touching 4.5. Out of the 73% of MSMEs who did not use any of the marketing infrastructure, close to 60% felt that it is not required in their business and around 40% said that it's not available near their units. While 10% were unable to access; 5% found it highly priced. Both, Non-functional and not sufficient was selected by less than 1% respondents.
- **Quality testing:** Only 1% of the MSMEs interviewed undertook quality testing and certification for their products. Organic certification was the popular type of certification undertaken. Major reasons for not getting any test were - Not aware at all (31.1%), 23.8% felt it was not mandatory for the products they sold, 7.9% said they had no testing facility in the vicinity and 4.6% felt there was lack of transparency in the process to get certification.
- **Frequency of participation in fairs, exhibitions and festivals:** Around 6% of the MSMEs participated in fairs, exhibitions and festivals to sell their products while the remaining 94% did not. Out of those who visited, 73% participated within NER. The remaining 27% participated in fairs, exhibitions etc. organised in Delhi and Kolkata primarily.
Recommendations focussing on marketing infrastructure development for the bamboo and honey sector

I. BAMBOO:

- Resource mapping

While proposing a bamboo technology park/ bamboo specific growth centre/industrial estate, resource mapping of bamboo plantation in the surrounding region, up to 25 km of radius should be undertaken to estimate the quantity and type of raw material available. The same should be done in case a bamboo processing plant is set up in the region to help identify and assess the feasibility of setting up their unit in that area.

Alternatively, a component of resource mapping and the grant or loan against the cost associated with it should be made as part of the scheme guidelines for the private player to undertake the task.

- Integrated approach for developing bamboo processing in NER

Systematic and organised cultivation of bamboo making it a zero-waste industry

Developing infrastructure to strengthen bamboo value chain

Creation of Bamboo Depots & Markets

Establishment of testing and certification facility for bamboo in NER

getting products standards and specifications for specific bamboo products especially ones for industrial and building material use such as bamboo strip board, bamboo timber, bamboo compressed board, bamboo compaq

- Publicity and adoption of bamboo products

Position bamboo as eco-friendly alternative to timber

The bamboo products can be categorised as per product utility and accordingly target audience.

Categorisation based on high value/low volume and low value/high volume products has been conducted for bamboo products for short, medium and long term development

Buzz marketing of Bamboo products

- Policy Intervention

Bamboo Transit permit

Requirement of forest licence for setting up of a bamboo processing industry

II. HONEY:

- Establishment of Collection Centres: Honey collection network with appropriate storage should be established across districts catering to villages and clusters producing honey. The following factors should be considered while establishing a collection centre.

- ◇ Volume of honey produced per village/district

- ◇ Concentration of bee keeping clusters

- ◇ Space adequacy

- ◇ Availability of utilities - electricity, water supply especially in rural areas

- ◇ Storage requirement

- ◇ Transportation/distance from processing units

- ◇ Mobile Collection Centres

- Establishment of honey testing and quality certification facilities: Based on the levels of testing required for addressing different markets, the possible suggestions for establishment of honey testing and quality certification facilities in NER along with tentative locations has been provided

- Establishment of honey based CFCs: Based on the bee keeping & honey processing clusters identified by the Ministry of MSME, State Honey Mission, and field visits undertaken by EY team, a tentative list of districts across NER wherein honey based CFCs can be developed has been provided

- Registration with National Bee Board (NBB)

Introduction of Beekeeper and honey processor ID Card

Database creation of beekeepers and processing units which will not only benefit the beekeepers in availing government benefits but also help the government in designing policies, schemes for the development of sector and beekeepers

- Promotion of Honey from NER: Honey processing being a highly demanding activity involving high working capital coupled with uncertainty in availability of raw material should be positioned as a high value low volume product. Brief branding and positioning themes for varieties of honey available in NER has also been provided in the report

C. HAND-LOOM AND HANDICRAFT

Handloom and handicraft sector in North East is a reflection of the region's culture and tradition. Abundant raw material, especially bamboo, cane and silk varieties have given rise to diverse variety of crafts as well as natural coloured and exquisitely patterned hand woven fabrics.

North Eastern states accounted for 21% of the total silk produced in India during 2018-19. Apart from this, handloom industry is the oldest cottage industry and the second largest employer after agriculture in the region with 60% of the total weaver concentration of the country. Similarly, handicraft sector forms an integral part of the village industries, especially among the economically and socially backward population. Each of the eight states have their unique craft ranging from carpetmaking, wood carving, pottery, jewellery and metal work.

However, despite the uniqueness, domestic and international recognition of the handloom and handicraft products, the sector suffers from several challenges. A number of issues were brought out through stakeholder discussions across the states.

- **MSME survey analysis:** To capture the challenges faced by MSMEs in this sector, a total of 588 respondents have been surveyed across the 8 states including artisans and weavers. The findings are as under.

- **Critical factors affecting business operations:** The top three critical factors affecting the business operation were procurement of raw material (55.5%), transportation of goods (38.2%) and availability of manpower (34.6%) as highlighted by the MSMEs.
- **Marketing methods used to market products:** Word of mouth and personal selling dominate the marketing communication methods. Further, dealer and distributor network have been the most effective means followed by word of mouth and personal selling, overall, across the states.
- **Products sold outside the state:** Around 20% of the total respondents were found to be selling their products outside their own state. Among these, 41% of the MSMEs sold their products within North East Region and 59% sold outside North east region. The top reasons revealed for not selling outside were lack of service provider, lack of finance followed by respondents feeling it was not applicable for their products.
- **Quality testing:** A total of 94% MSMEs did not get quality test or certifications and only 6% undertook quality tests or certifications. Majority of the MSMEs felt that quality testing and certification was not applicable for the products and hence did not get it done. Other reasons included lack of awareness of such procedures, lack of testing facilities and procedure being non mandatory.
- **Participation in fairs, exhibitions and festivals:** As per the survey findings, 69% respondents did not participate in Fairs/ Exhibitions and Festivals while 31% actively participated. Out of the latter, 51% of the MSMEs attended fairs across various states within North East Region and 49% of MSMEs visited other states outside the region. The major reason for not attending these fairs included lack of awareness (40%) and lack of knowledge on participation process (26%). Around 12% of the MSMEs did not find these useful and another 12% faced manpower issues which prevented them from participation

- **Recommendations**

I. MARKETING INFRASTRUCTURE

a) Expand reach to more tier 1 cities

Each of the states in North east, in addition to NEHHDC have at least one State handloom and Handicraft showroom in the State capital city, with some states having more outlets in Kolkata and Delhi. While other State emporiums like Garvi Gurjari, Boynika, Rajasthali have a larger footprint within the state as well as outside the state. Some of them have their own website, brand and sell through e-commerce platforms as well. Further, as revealed from the EY consumer survey 33% of tourists/buyers bought local products from State emporiums within NER and 22% from outside NER. It is important for state emporiums to increase their foothold in other parts of India to not only increase their sales but also to popularize local products. Below are recommendations to improve marketing infrastructure within NER and outside the region.

b) Franchisee model for state run emporiums

Currently the emporiums and retail outlets are owned and operated by the state agencies. Considering the limited capacities of running these emporiums by the government due to implicit issues like several layers of approval, shortage of manpower, public procurement processes which delay processes and lead to inefficiencies. It is recommended that a franchisee model may be explored for running these state-owned handicraft and handloom outlets under the respective state brand.

c) Handloom and handicraft Bazaars

Apart from the government run emporiums, there are small shops owned by local entrepreneurs, artisans and weavers. These shops are scattered and located out of the main markets in some cases.

Nevertheless, these are lesser known brands and are known only to the locals. It is recommended that the government should create an Urban Haat or a “Craft Bazaar” where all the artisans weavers and micro units including self-help groups can establish their stalls. This will create visibility and attract tourists. These markets should be publicised, and their visibility should be increased on digitalmedia as well. It can become a major attraction for tourists looking for local products from the region to take back home as souvenirs.

III. Quality certification and packaging

Product quality plays a key role in case of handloom and handicraft products. Since, these products are aesthetics driven, consumers pay special attention to quality and durability. Moreover, while exporting quality and certification are of utmost importance. In line with this, the government of India has several quality certifications viz. Silk Mark, India Handloom Brand, Handloom mark, Craft Mark etc. to ensure adherence to quality and fair trade practices in the handloom and handicraft sector. The application process, fee and the time taken to obtain each of these quality marks has been provided. The State Government should propagate the benefits and assist the MSMEs in getting these quality marks.

Further, quality is supported by packaging which not only enhances the aesthetic appeal but also prevents product damage during transportation. As learnt through field visits, lack of proper packaging material at affordable rates is one major issue which the MSMEs face. Most of them import from Kolkata, Delhi or Mumbai which leads to added transportation cost and delays at times. Hence there is a need to provide quality packaging material at affordable rates locally. Measures which State Governments should take:

- Develop packaging clusters in the region
- Emphasize and communicate these benefits to producers of handloom and handicraft products and sellers alike during trainings and capacity building programs
- Easily accessible and segregated information on labelling norms for popular products or important links detailing such information should be made available

IV. Enhancing Cluster Development Approach

The advantages of developing clusters have been well realised and accepted by state and central governments alike. This is evident through a number of schemes developed by various departments and agencies to support MSMEs and producers directly across sectors. However, the cluster development in the handloom and handicraft sector has not taken up as intended to realise the envisaged benefits. To understand how the clustering approach can be made more effective through focussed production activities and targeted marketing and promotion, the case study on One District– One Product (ODOP) concept has been discussed. Implementation strategies for NER, have been derived through the case study of ODOP program implementation in Uttar Pradesh.

V. Branding and Marketing

The local handloom and handicraft from North East are the lesser known amongst the people at large. This has been revealed from the EY Consumer Survey, wherein 47% said that they did not know about the local NER handloom and handicraft products and 17% said they were somewhat aware. Leaving 35% of the respondents, who were aware of these local products.

Hence there is a need for branding and promotion of the local handloom and handicrafts to not only enhance visibility but create awareness across the country. Based on the survey findings, popular products preferred by consumers, their positioning and branding themes have been identified for promotion and branding activities.

● **Popularity of products:**

Among handloom products, women apparels, home furnishings and silk fabrics were the top 3 most purchased products. Product diversification into more universal products using traditional motifs and patterns is required. Further, decorative items, home furnishings, accessories were the top 3 products most popular handicraft items. Kitchen utility items is one area where eco-friendly wooden and bamboo products can be produced and marketed to promote a healthy lifestyle.

● **Positioning and pricing**

Today, the size of the industry is declining with more and more artisans, craftsmen and weavers looking for better livelihood options keeping the craft as a supplementary or a secondary source of income. Hence the products should be carefully positioned as low volume high value and high value low volume and targeted at the right segment. The product positioning has been supported by survey findings.

c. Branding themes

Based on the top of the mind recall of handloom and handicraft products which consumers associated with, themes for branding handloom and handicraft products has been provided.

VI. Other recommendations

a. Availability of yarn

To make yarn banks more successful by improving yarn availability, quality and reach, the following initiatives have been dealt with, which should be undertaken by the State as well as the Central Govt. departments.

- Supply of natural fibre yarn
- Quality yarn
- Regular supply
- Improved reach
- Affordable prices to weavers

b. Collaboration with institutes/organisations to improve designs and increase sales

Since majority of the handloom and handicraft producers are based in rural parts of the state, the weavers and artisans seldom are equipped or exposed to the prevailing market trends and new products. In order to bridge this gap, existing between the type of products being manufactured and consumer demand, state handicraft and handloom department should collaborate with leading management, design and fashion institutes to support the weavers and artisans in product design, innovation and marketing.

The collaboration with such institutes should be done for at least a period of 5 years which should be extended if required. Institutes located in and near NER should be preferred for convenience and effective long-term association. A list of probable institutes which can be collaborated with is has been provided. Further, a robust mechanism for operation and implementation of such an intervention, with clear roles and responsibilities of each of the stakeholder has been discussed and broad level responsibilities of the state government and the design institute have been outlined.

d. Tourism

Given the potential tourism sector offers in the North East Region, it must be capitalised to support MSMEs, promote inclusive growth, drive employment and livelihood opportunities at large.

A two-pronged strategy is recommended to create a sustainable ecosystem attracting tourists and ensuring incredible traveller experience.

- Create a pull through branding and marketing activities to attract tourists in the region
- Create an enabling environment by making improvements in soft and hard infrastructure that provides a quality experience.

Further, there is a stark difference in the tourism sector among the NER states. While Sikkim, Assam and Meghalaya are much sought after tourist destinations as revealed through annual tourist footfall, the other states remain hidden owing to various reasons such as poor connectivity, lack of infrastructure, safety issues etc. Hence, for the purpose of providing the recommendation, the states have been divided into two categories for more targeted solutions. Category 1 states include Assam, Meghalaya and Sikkim whereas Category 2 states include Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura

- **MSME survey findings:** A total of 381 firms were surveyed to gain a better understanding of tourist facilities in the North East.
- **Critical factors for business operation:** For Category 1 states availability of manpower was the top-most critical factor followed by travel infrastructure, internet connectivity, safety and availability of working capital. On the other hand, Category 2 states have travel infrastructure as the most critical factor followed by regular demand and inter-state air connectivity. Overall, majority of the MSMEs have selected travel infrastructure - road and rail as a critical factor.
- **Marketing initiatives undertaken by MSMEs:** On asking the MSMEs on the marketing initiatives, 59% undertook some kind of marketing initiatives whereas 41% did not. Word of mouth, internet/digital marketing and direct marketing through SMS, e-mail were the top three popular mediums with 29%, 28% and 14% selections respectively. Overall, the most effective marketing technique adopted is word of mouth with a mean score of 4.3 on a scale of 1 to 5 (5 being most effective). Promotional sales (offer discounts and other concessions) ranked second with a mean of 4 and direct marketing third with a mean of 3.9.
- **Yearly marketing budget:** Around 58% of MSMEs undertook paid marketing while 42% relied on free sources. Out of those undertaking paid marketing, majority of the MSMEs i.e. 33% had an annual budget of less than INR 10,000.
- **Use of online platform for services being offered:** Around 52% of MSMEs used online platform for listing services. Almost equal proportion (41%) of MSMEs used their own websites and were listed on aggregator booking sites such as MakeMyTrip, GoIBIBO, Expedia etc. As per the respondents, who used online platforms mentioned, own website and aggregator websites to have highest level of response while Government tourism websites were reported to provide medium response rate. The primary reason cited for not using such platforms was that the respondents did not know how to get listed on the online sites (37.4%); 18.9% respondents thought using online platforms is costly, 13.5% felt they are not effective and only 1% did not use owing to poor internet connectivity.
- **Participation in fairs, festivals and other tourism promotion events:** As per the survey, only 15% participate in the Fairs/ Exhibitions and festivals. The major reason cited for not participating in such events were lack of enough time to participate (24%) and lack of awareness about the tourism promotion events (22%).

- **Recommendations on improvement of soft and hard infrastructure:**

- i. **Marketing Infrastructure**

- Accommodation

- Category 1: Promotion of MICE tourism, promotion of less explored destinations to avoid overcrowding of tourist destinations

- Category 2: Lease out Govt. properties to private players, relaxation of land acquisition norms for hospitality sector, encourage women participation

- Create new attractions:

- **Wine tourism and agri tourism:** Critical success factors to develop and promote these tourist attractions are listed below:

- State government should support in providing land for creating such attractions. PPP model can be explored

- Support and subsidy in providing high quality seeds, saplings and other planting material

- Such attractions should be strategically located

- The farm experience or activities should be made a part of existing festivals.

- Marketing and promotion on national and international platforms, with emphasis on social media.

- Support infrastructure viz. adequate parking space, public convenience should be established.

- **Film tourism:** Steps to be undertaken by the state governments for simplifying, incentivizing, and promoting film production in NER are:

- Inclusion in Tourism Policy

- Simplifying the administrative process

- Incentivizing film productions

- Promote Media and Entertainment sector at large

- Plan responsible and sustainable tourism

- Capacity Building

- Leverage tourism infrastructure to promote local products

Tourist destinations are popular hotspots for showcasing local products from the states. Lot of international tourist destinations have a small eating joint/café and a souvenir shops created near the entry/exit points. Such infrastructure should be developed at popular tourist spots in North East as well in an organised way. The entry and exit points can be managed to have compulsory exit routes via these small gift shops or food joints. The infrastructure created should preserving the natural heritage/landscape site aesthetics and at the same time keep unnecessary crowding and blocking of pathways/roads at bay which may hinder traffic movement and discourage tourists from stalling for purchasing local products and souvenirs.

Participation in tourism Fairs:

Though the state Dept organises several fairs and tourism events for tour operators and agencies in and outside NER. However, each time only select few operators and agencies are assisted in participating these tourism fairs. To ensure level playing field, it is important to give opportunities to different tourism service providers. Hence, while shortlisting the applicants for any festival and fairs, it is recommended that fresh applicants may be given preference over applicants who have participated in last 2–3 years.

NER travel packages

Owing to proximity and small geographical size tourists may want to visit more than one state on a vacation to North East. This has been validated through the survey results which reveal that nearly 60% of the respondents preferred travelling to 2–3 states while planning their trip to NER. In such a scenario, it is advisable for state tourism departments to design travel circuits and provide itineraries covering 2 or more adjoining states with travel days ranging from 5 to 15 days.

Hence, state governments should take up the following initiatives to facilitate tour operators/tourists

- Plan festivals and events in such a way to avoid overlap or in tandem

- Make maps and pamphlets related to tourist spots and circuits available to tour operators and travel agencies at subsidised rates

- Provide clear information on permit requirement, special timings and permissions for specific

tourist spots.

- Capacity Building to Travel agencies and tour operators on soft skills, customer relation building, flexibility to suit customer requirement and overall professionalism.

- **Promotion and Marketing**

- **Consumer survey:** EY team recorded responses from 850+ respondents across India to identify the perception which will be useful in creating a marketing strategy including themes for market campaign, marketing medium, target audience and address adverse perception and concerns. Based on the survey analysis, marketing themes have been identified to boost tourism in the region. These are:

- Improved Connectivity,
- Safety,
- Collaborative approach to enhance tourist experience
- Comfort
- Natural beauty/landscapes
- Adventure Activities

- **Marketing communication:** To identify appropriate channels for branding and promotion, survey results on traveller inspiration for vacation and choice of booking medium have been discussed. Further digital marketing strategies – social media marketing, content marketing, mobile marketing banner marketing has been discussed in the report in detail.

e. **MEAT PROCESSING**

The total meat processing capacity in India is over 1 million tons per annum with a utilisation ranging from 40 to 50%. India exported 405.64 MT of processed meat to the global market, worth INR 13.52 crores or US\$1.95 million during the year 2018–19. The major export destinations were UAE, Myanmar, Qatar, Maldives and Bhutan⁴. Since, Myanmar and Bhutan are among the major export destinations, hence these countries should be tapped for exporting meat and meat products from North East Region, in line with the Act East Policy of GoI.

Currently, the meat sector across the eight states in NER is highly unorganised. The farmers lack scientific rearing and hygiene practices. Middleman or traders pick up live animals from the doorstep of farmers for further sale to butchers or processors. The local shopkeepers keep live animals or slaughtered meat for sale due to preference of fresh meat amongst consumers in the North East as learnt through field visits. Despite challenges, the region, provides ample opportunity for the meat sector to grow. In order to capitalise on the opportunities posed by the meat processing sector, it is important to address the existing challenges pertaining to production, marketing infrastructure at large and strengthen the value chain in the region.

- **MSME Survey findings:** Findings of the survey results from 181 respondents in the meat sector areas under:
- **Critical factors for business operation:** The top-most critical factors affecting their business operation were - procurement of raw material (36%), followed by transportation and availability of cold storage facilities/refer vans. Out of these, availability of manpower was the most critical factor with a mean rating of 3.65 on a 1 to 5 scale with 5 being the most critical, followed by cold storage facility and availability of working capital with mean score of 3.53 and 3.27 respectively.
- **Marketing Infrastructure:** Out of the total MSMEs surveyed, only 30% availed marketing infrastructure facilities – cold storage, refer vans, mandis and quality testing. Around, 35% of MSMEs mentioned that they don't need these facilities, indicating the prevalence of butchering animals in the backyard of shop/house. 42% of MSMEs mentioned that facilities are not available near them followed by 13% highlighted their inability to access the facilities. Both these data points indicate lack of marketing infrastructure facilities in the region for the sector.

- **Marketing methods:** Overall, across NER, word of mouth remains the widely used mode of marketing communication. Around 50% of the MSMEs used this method and this can be attributed to the fact that most consumers prefer buying meat from local butcher shops. Around 20% used methods of personal selling and 18% through dealer and distribution network. Further, dealer and distributor network proved to be the most effective means of marketing, followed by word of mouth, personal selling, direct marketing.
 - **Products sold outside the State:** Only 6% of the respondents sold their products outside the state. As per the survey analysis, 30% felt that selling outside their state was not applicable, 12% cited lack of transport facilities and 11% felt there was no or very little demand outside their states.
 - **Quality Testing and Certification:** Over 90% of the respondents don't get any kind of quality testing or certification. Amongst the MSMEs undertaking certifications FSSAI was the most popular certification availed followed by Animal Health Certification and ISO food safety standards. Further, out of those MSMEs who were not getting any kind of quality testing and certification, around 30 % of were not aware, 19% felt that they do not have testing facility in the vicinity, 10% expressed that it is not mandatory for products they sell. Another 10% were aware of the requirement but did not know how to apply and 5% felt that there was lack of transparency in getting any kind of quality testing and certification of their products.
Based on the field visit observations and stakeholder discussions the team has mapped the existing value chain highlighting the prevalent gaps in infrastructure across the meat sector. Additionally, rootcause analysis has been undertaken to delve into the reason for non-functional infrastructure such as slaughterhouses across the states.
The following are the recommendations for creation of marketing infrastructure and strengthening value chain to promote and support MSMEs in meat processing sector and ensure high quality products from the region for local consumption and eventually to facilitate export from the region. These have been formulated based on survey findings, root cause analysis, field visits, and in-depth stakeholder discussions.
- i. **Creation of marketing infrastructure**
- Slaughterhouses:
Keeping in mind the existing unorganised nature of the business activities prevalent in the region, it is recommended that a phase wise approach for development of slaughterhouses should be adopted. During the initial phases, emphasis should be laid on creating infrastructure near urban areas while strengthening the implementation of laws pertaining to slaughtering and selling of freshmeat and meat products at the same time. Accordingly, a three phased approach: - Short term (0 to 2 years), medium term (3 to 5 years) and long term (beyond 5 years) have been proposed.
 - **Mobile slaughterhouses:** In the short term, for facilitating rural farmers and encouraging them to take up scientific methods of slaughtering along with small meat sellers, mobile slaughterhouses should be introduced. These mobile slaughterhouse vans can be put in a rural livestock markets or rural haats and weekly markets. This will help farmers in availing the slaughtering services and, at the same time reduce transportation cost, especially in areas of low population density.

Creation of meat processing units:

Currently only 21% of meat is processed in the country as per MOFPI study. Though the meat consumption in NER is high, it is primarily in the form of fresh meat. Preference for processed meat is limited to relatively urbanised towns and cities in the region like Guwahati, Imphal, Dimapur, Kohima, Shillong etc. However, due to change in lifestyle and taste preferences by the younger generation, the market of processed meat for personal as well as commercial consumption is set to rise in the region. Further looking at export potential from the state to the neighbouring countries processing units integrated with slaughterhouse facilities should be developed.

International border quarantine facilities

Since NER shares border with 4 countries, as per trade norms, it is mandatory to have animal quarantine facility at international trade points through the land route. Further, there are 29 functional trade points in NER and there is a need to channelize the movement of livestock through the select trade points and equip them with necessary facilities. In view of this, trade points should be developed to have animal quarantine facilities in the long run based on the trade volume. An Animal Quarantine Check desk can be installed at these check points depending on the import of livestock and livestock products on need basis. A list of trade points where animal quarantine facilities can be developed is provided in the report.

ii. Strengthening the value chain

Creation of awareness and implementation of regulations pertaining to meat slaughtering and hygiene practices

Cleanliness and hygiene are very important for food safety in case of consumption of perishable animal products like meat. One of the major challenges in the region, owing to un-organised market operations in the meat sector, is lack of hygiene and certification undertaken by meat sellers. The NER states, have laws and by laws mandating sale of only certified meat from slaughterhouses through registered/licensed meat selling counters. However, implementation is poor owing to several reasons like – lack of functional slaughterhouses, poor quality meat provided by leased slaughterhouses, delay in supply of fresh meat to traders, preference for fresh meat among consumers etc.

Especially in the wake of COVID 19 outbreak, it is essential not only to educate the meat sellers on meat hygiene – slaughtering and selling practices, but the consumers as well on hygienic meat consumption. Hence, there is a need to implement and channelize meat slaughtering as well as selling practices as per set rules and regulations.

Some of the steps which the state government should take include:

Along with implementation of laws approve funding/projects for setting up slaughterhouse and cold chain infrastructure

Introduce hygiene rating for meat shops

Launch certification symbols and mandate certification to be presented/on display at shop at all times during sale of meat products

Launch awareness campaigns to promote consumers to buy meat only from authorised/certified meat sellers and check for appropriate certification symbol while purchasing

Aggregation models to address scattered resources

The EY team has provided different kinds of aggregation models which can be adopted in stages as per the goals and kind of markets being served starting from FIGs to FPCs. But as learnt through stakeholder interaction there are very few FPOs formed in the livestock sector. Further, the existing ones have been grappling with a number of challenges, thereby hampering the intended benefit. Hence, in order to ensure successful implementation and running of FPOs/ FPCs, several critical factors which should be kept in mind have been discussed. Some of the guidelines which State governments and implementing agencies should consider and incorporate effectively while forming FPOs in order to make them successful have also been discussed.

f. Medical Tourism

The total number of foreign tourist arrivals on medical visa in India have been increasing at a CAGR of 37% since 2014 owing to the state of the art facilities, with well qualified doctors and super speciality treatments being offered at affordable prices. Bangladesh and Afghanistan are the top source countries with maximum tourist arrivals recorded over the years. In such a scenario, the North East Region holds immense potential to be developed as a medical tourism hub targeting the neighbouring countries of Bangladesh, Myanmar and Bhutan owing to proximity, cultural similarity and other various advantages the region has. However, there is a need to build capabilities and have ample accredited hospitals to tap this potential.

Based on the discussions with various stakeholders and SWOT analysis, the EY team has provided strategic recommendations to create infrastructure facilities as well interventions to develop medical tourism in NER, especially targeted at neighbouring countries.

i. Inadequate hospital/medical facilities

The biggest challenge in the region has been observed is the absence of adequate medical infrastructure and shortage of speciality and super Speciality doctors in the region. Apart from Guwahati in Assam, states like Meghalaya, Manipur and Tripura have very few medical facilities capable of providing world class healthcare services. Thus, some of the key suggestions to improve and create quality and safe healthcare organisations include:

Encourage accreditation

Recognition of healthcare organisations by obtaining accreditation standards demonstrates the level of performance of the organisation through an independent assessment by external agency. This helps in gaining patient confidence and assuring reliable and certified information on facilities, infrastructure and level of care. Hence, efforts should be made to encourage existing healthcare facilities to attain NABH accreditation which is nationally acclaimed. Some of the steps which should be undertaken by State Governments are:

Awareness creation: State government should actively create awareness on the benefits and the importance which accreditation holds for medical value travel. Regular awareness camps or workshops should be conducted during Wellness & Medical Tourism Fairs, Shows and Events. Also, sessions by the Tourism department in collaboration with the State Health Department or accreditation agencies should be organised during locally held conferences and events.

Tax holiday: Tax holidays or tax concessions for healthcare organisations having national or internationally recognised accreditation for a fixed time period depending on the Action Plan of the State can be introduced Policy intervention: Objective and aim of developing the state as a medical tourism destination should be introduced in the State Tourism Policy. A comprehensive action plan should be clearly laid out to support focussed implementation approach defining clear roles and responsibilities of the nodal bodies

Building infrastructure and its operation

The team has looked into the possibilities of establishing green field infrastructure to promote medical tourism in the region on PPP mode. The building blocks of PPP guidelines have been identified and discussed. Public-private partnership can be implemented through the following steps:

- Preparation of PPP Policy
- Dedicated PPP Cell to support private players
- Subject Matter Expert engagement
- Establishment of SPVs
- Roles and responsibilities of various stakeholders have also been defined to promote Public-Private partnership to promote medical tourism in NER.
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Leveraging existing initiatives:

Medical tourism has been well recognised as a niche tourism product for promotion in the country. As a result, the Central Government has launched the National Healthcare Portal to facilitate the service providers as well as the foreign tourists visiting India. The medical facilities targeting foreign nationals from NER should get themselves listed on the National Healthcare Portal in order to gain visibility and wider presence. The State government should actively promote and encourage hospitals to be listed and realise the benefits of this initiative. The advantages and benefits of the National healthcare Portal has been listed in the report along with the eligibility criteria and step by step listing process.

Support Facilities

Apart from the medical infrastructure, the support facilities including banking, accommodation, travel means are important parameters which were observed to be poor especially in States like Manipur and Nagaland. Hence, there is a need to improve these amenities in the region which play a crucial role in providing a smooth and comfortable overall experience to the patient and its family.

Banking Facility: The state Government should allow special provision to support high value cash transactions and establish set guidelines and processes to facilitate and monitor these transactions. Arrangement between hospitals catering to foreign tourists and the banks should be made so as to facilitate high value online or cash transactions between bank and hospital by international patients seeking medical treatment while travelling on medical visa in the country.

Accommodation Facility: Safe, convenient and affordable accommodation facilities located near the healthcare facilities are an important consideration which patients bear in mind while opting for foreign medical treatments

Connectivity: The greatest advantage of NER is its proximity to countries like Bangladesh, Bhutan, Myanmar and Nepal which comprise of the majority of medical tourists coming to India. Hence, good direct connectivity holds extreme importance for the development of medical tourism in the region. Some of the efforts which the State Govt. should undertake to make the existing routes more efficient with respect to international medical tourism travel includes:

Regular public transport facilities on the above land routes, starting with weekly runs. The frequency can be increased depending on the footfall.

Direct flight connection with international airports under development/developed like Guwahati, Agartala and Imphal with Dhaka, Yangon, thus facilitating convenient travel for international passengers travelling on medical/e-medical visas.

iv. Marketing and Promotion

In order to strengthen medical infrastructure in the region and attract foreign nationals, the states in NER need to adopt a holistic marketing and communication strategy. Apart from formulation and introduction of Medical Value Travel (MVT) action plan in the State Tourism Policy, there is an

immediate need to effectively communicate the State Vision and objective to the stakeholders in the sector. Phase wise approach has been proposed for promotion and marketing.

Phase I – Supply side: Emphasis is to be laid on promoting the objective and support provided by state government, targeting the supply side – i.e. hospitals, healthcare originations, equipment manufacturers, tour and travel operators etc., to strengthen medical tourism infrastructure and overall ecosystem.

Phase II – Buyer Side: Promotion and marketing should be focussed on consumers – i.e. medical treatment seekers from target markets or countries. Since word of mouth communication plays a critical role in selection of healthcare providers, it is of utmost importance that the states are strengthened and capacitated to service international medical tourists first before reaching out to the target markets.

A strategic roadmap has also been prepared to effectively communicate NER as a Medical tourism hub, across various stakeholders.

v. Immigration Facility for Medical Tourists

As per visa regulations in India, currently there are three types of medical visas provided and these are:

Regular Medical Visa and Medical attendant Visa

Medical Visa on Arrival

e-Medical visa and e-Medical Attendant Visa

The rules for obtaining the above medical visas differ from country to country. Medical e-visa facility is available for Myanmar while Bangladesh nationals are eligible for only regular medical visas. Apart from this, Bangladesh and Myanmar Nationals are permissible within 16km in India for maximum of 10 days on issuance of Border Pass only.

In order to attract foreign patients seeking medical help, it is important to streamline immigration and medical visa process making compliance and procedural work efficient, easy and fast. Advantage lies when medical visa can be obtained conveniently, preferably online for Border Country nationals and be permitted through land immigration routes especially through e-medical visas to save travel time and cost. Hence, to promote MVT in NER it is important to re-visit the prevailing visa issuing rules as well as immigration facilities. Some of the processes which can be revaluated, and State governments can take up with the Central Government without compromising on the country's security. These are:

Land Immigration points: Have visa issuing office and FRO in Tamu/Akhaura/Sylhet

Medical e-Visa facility for Bangladesh nationals

Passengers with Medical e-Visa be allowed to enter through land routes in NER - ICP at Manipur, Tripura and Meghalaya

vi. Schemes for developing marketing infrastructure

There are several schemes implemented and promoted by central and state governments for the benefits of MSMEs. Also, there are various schemes of central government which can be availed by state governments for the development of marketing infrastructure and pass those benefits on to entrepreneurs/ MSMEs in their state.

As part of study, EY team has identified various central government and state government schemes along with schemes announce by GoI as a response to COVID-19. The schemes related to scope of study were studied in detail and gist of all the relevant schemes has been provided.

However, based on primary interactions with MSMEs and from the field survey undertaken it was evident that most MSMEs were not aware of schemes available from the state and central government.

Through the primary survey data was captured from 2,051 MSME respondents. On an average, 75% of businesses/entrepreneurs were not aware of government schemes, while only 25% had knowledge of schemes. Further, MSMEs in the agriculture and horticulture sector had the most knowledge of schemes with 36% of respondents answering 'yes', while the NTFP sector had the

least number of respondents answering 'yes'.

In order to increase the uptake of schemes, the State and Central Government should carry out a number of initiatives to ensure MSMEs have access to benefits provided. The list of key recommendations is provided below:

- **Improve delivery of schemes:** Increase last mile delivery of schemes through door to door programs and DICs to reach remote and rural areas
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- **Develop an integrated single window:** Implement a single window system at the state level to provide information on all state and central schemes, application procedures, integrated with department websites
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- **Implement sector specific policies:** State governments can implement policies in focus sector such as a dedicated Handloom Policy, Export Policy etc.

vii. Use of e-commerce

The Indian E-commerce industry has been on an upward growth trajectory and is expected to surpass the US to become the second largest e-commerce market in the world by 2034 supported by rising incomes and surge in internet users. MSMEs in India can raise their productivity and deliver products and services to millions of their customers through B2B, B2C and B2G at competitive prices using e-commerce technologies and digital economy. International business opportunities can also be created by leveraging e-commerce platforms.

In North East, the growth of e-commerce sector is hampered by poor logistics and internet connectivity; though, in last few years, lot of initiatives have been undertaken by both state and central governments to improve the connectivity within the region and of the region with rest of India. Further, the second most crucial factor is the internet penetration and connectivity. Apart from the urban towns, most of the region faces low internet speed and poor connection. The internet download speed is the poorest in North east region (5.7 mbps in Assam and 4.7 mbps in other NER states), when compared to all other Indian states⁵.

Apart from internet connectivity, digital literacy is also crucial and hence there is a need to improve digital literacy capabilities among the prospective entrepreneurs/MSMEs through aggressive trainings and awareness programs.

MSME Survey Analysis: E-commerce was used by 13% of the respondents using different platforms. On an average 50% of the respondents used their own websites, 23% used other online platforms and 16% used popular platforms like Amazon/ Flipkart etc.

Among the respondents who did not use e-commerce platforms, on average 38% of them did not know how to get themselves listed, 19% stated that the service was not available in their area, 16% complained of the high costs involved and 9% were unable to do so due to poor internet connectivity. The respondents of service providing tourism industry were well aware of the platforms but 14% had low effectiveness in services whereas 5% had a negative experience. Additionally, 43% of the goods producing industries were not aware of the e-commerce platforms at all and 5% responded that there were no transport facilities available.

Recommendations: As revealed through the survey analysis, except for MSMEs in tourism sector, there are very few MSMEs in the region who are using e-commerce for wider reach of their products or services. Since the sector is in its nascent stage in the region, government can facilitate the MSMEs by undertaking a number of initiatives and interventions like tie ups with e-commerce players, trainings etc. Some of the measures which the Government Agencies can undertake are:

a. Tie up with established e-commerce players

Several state governments have tied up with established e-commerce giants like Amazon Flipkart, Snapdeal etc. for online listing and selling of local products. These initiatives have been mostly led by State handloom and handicraft emporiums such as Jharcraft, Boynika etc. who have signed MoUs with these players for online listing and selling of indigenous products from the state. In a similar way, it is recommended that state emporiums from North East such as Pragjotika (Assam), Purbhasha (Tripura), Panthoibi (Manipur) etc. can utilise the existing infrastructure and supply chain of these players for selling the products online. Various collaboration methods such as sample collaboration model, fee-based arrangements have been discussed which can be adopted by the State Government to facilitate local MSMEs in listing their products on e-commerce websites to boost their sales.

b. Actively engage with public and private e-commerce platform service providers for promoting e-commerce among MSMEs

Various e-commerce platform service providers such as Amazon, Flipkart, Government e-Marketplace (GeM) undertake workshops and seminars free of cost for onboarding artisans and MSMEs onto their platform. State governments, especially industries, handloom and handicraft state department, State bamboo Mission, Honey mission and even food processing departments which have the reach and mandates for providing handholding support to producers and MSMEs, should pro-actively reach out to these e-commerce players and organise workshops in the state on war footing. The workshops will be integral for creating the awareness among MSMEs about e-commerce platforms and thus helping them in reaching out to wide markets.

The State Governments should make a body which can take care of the different cooperatives catering to this industry. This body should also be able to list all the local artisans and producers along with the scale of their business and help them connect to e-commerce platforms. Government should appoint SPOCs to better manage and connect with the private players for expansion. This will help the e-commerce players connect to the scattered MSMEs as well as the rural producers across remote villages.

c. Incentivize MSMEs to adopt e-commerce

One of the biggest problem that prevents the MSMEs to enter and explore e-commerce platform is the cost. A relatively large capital is required by the MSMEs to set up their own e-commerce platform, logistics, inventory management and hire Subject Matter Experts to help them do so. Even when they wish to use other well-established platforms to market their products, they have to pay heavy fee just for registration, listing and placement of the product.

Government of Haryana has formulated an MSME policy that provides reimbursement to MSMEs who wish to establish their own e-commerce platform or register on already existing e-commerce companies. The One District One Product scheme introduced by the government of Uttar Pradesh also provides such reimbursements to MSMEs, artisans and craftsmen.

A similar scheme/policy can be replicated by the states government in the NER by providing the artisans and manufacturers the incentives, reimbursement of percentage of the expenses which MSMEs incur for listing the products on the E-commerce portals.

viii. Export potential of NER products

The North East region is endowed with rich bamboo forests, optimal conditions for agriculture and horticulture crops and numerous handloom and handicraft products-based units. However, the region's contributions are negligible in the current export from India. Hence, in order to increase

the export from the region it is important to identify potential products and commodities from the region which is available in surplus along with international markets where these products can be exported.

Accordingly, as part of this study, products/commodities have been identified from the region based on field visits and as-is assessment of state. Further, international markets for these products have been identified on the basis of different technical analysis methodologies and indices which are mentioned below:

- **Shift share analysis:** - To identifying the markets with high demand
- **The Export Intensity Index (EII):** - To identify the markets where India can penetrate a market better vis-à-vis rest of the world
- **The Export Specialization Index (ESI):** - To identify the markets where India can penetrate a market better vis-à-vis that particular trade partner's export to India
- **Tariff barriers:** - To identify countries who protect its domestic players through direct measures
- **Non-Tariff barriers:** - To identify countries who protect its domestic players through indirect measures

Further, stakeholder interactions and FGDs organized in different state capitals with the involvement of different MSME entrepreneurs (existing exporters and potential exporters) of North East revealed several hurdles in exporting products from North East. These have been categorised under five broadheadings as under:

a) Export marketing barriers

- Understanding not clear about how to find foreign buyers and prices in the export market
- Very little idea about money transfer mechanism of Letter of credit
- No handholding support for export-oriented entrepreneurship

b) Logistics barriers

- High transport cost to nearest seaport at Kolkata
- Guwahati is the only dry port in the region handling basically bulk commodity like tea exports while wet ports such as Kolkata are far away

c) Export related infrastructural barriers

- Lack of pack houses in the region for agri commodity exporting.
- Distance between agri horticulture produce centre and international airport i.e. Guwahati or Agartala is quite long and hiring refer vans is not feasible as it eats up all profits
- The land customs stations are not well equipped with cold storage, pack houses etc.
- The quality testing and certification labs are not well equipped to provide services as per the export norms of different countries. The MSMEs have to visit facilities in Kolkata or Delhi for such certifications

d) Knowledge and information barriers

- Training activities for exporters on the documentation requirement, compliances and other procedural requirement are insufficient
- No knowledge about the demand even in bordering countries like Bangladesh and Myanmar
- Not clear idea of requirements of testing and certification requirements for exporting food products to different countries

e) Production barriers

- Low scale of operation does not allow to compete with large scale established manufacturing processes of countries like Thailand (for pineapple), New Zealand and Iran (for Kiwi), China and Vietnam (for Bamboo) etc., who offer products at a much lower rate in international market
- Fruit processing plants difficult to operate in the region due to either seasonal production of raw material on irregular supply due to lack of professionalism in cultivation

Recommendations:

Based on field visits, discussions with various stakeholders, secondary research and FGDs, following recommendations have been provided:

i. Institutional support measures to increase export from the region

a. Export Facilitation Cell in each State

During stakeholder interactions, the key reason for lack of exports from the region was found to be low awareness among MSMEs related to export procedures and markets for export. To mitigate this challenge, it is recommended that an “Export Facilitation Cell” shall be setup in state under the respective Industries and Commerce departments. The proposed “Export Facilitation Cell” should address all the information/ analysis/ documentation related gaps that hinder MSME exports. While large industries have a team of Business and Risk analysts along with competent Sales & Marketing department etc.; MSMEs generally cannot afford to hire quality consultants individually. Thus, this cell will act as a centralised consulting desk for MSMEs; assisting them with exports related information, decision-making & sales execution. Additionally, detailed list of activities which can be taken up by the Export Facilitation Cell has also been provided.

b. Border Trade Division in each State

Out of the total northeast regional export worth US\$509.59 million during the year 2019, about 32 percent (US\$164.17 million) of the export went to the neighbouring countries like Nepal, Bhutan, Bangladesh, and Myanmar. However, 70% of the export (by value) is through Assam. This indicates that all the states have not been able to enter into cross border trade relationship with entrepreneurs across the bordering countries. To enhance cross border trade, it is recommended to setup a ‘Border Trade Division’ under the industrial directorate of the state governments with the mandated work of liaising with border countries like Myanmar, strategizing ways and means for barter trade, communicating cross border trade opportunities to the local entrepreneurs. The ‘Border Trade Division’ can be set up as part of Export Facilitation Cell discussed above.

c. Capacity building of exporters and traders from the region

The stakeholder interaction revealed that the existing exporters are unaware and are not updated with the changing market scenario-market opportunities, trade barriers, documentation required, quality standards applicable in different target countries etc. To fill up the void, the North-eastern Council (NEC) has recently supported IIFT Kolkata in setting up an exclusive Centre of North Eastern Studies (CeNest) for catering the need of capacity building of export-oriented entrepreneurs through research, training, and dissemination. The respective state government, therefore, can involve CeNest more to sort out the issues with export-oriented entrepreneurs of

the state. Some of the areas in which state governments can take help of CeNest are as follows:

- Training on export marketing, technology up-gradation, export finance, export documentation
- Training on processed food safety standards and certification

ii. Infrastructure development to enhance export from the region

- a. Dry port at Dimapur, Nagaland
- b. Honey testing laboratory in the region
- c. Integrated pack house facility for fresh fruits and vegetables

iii. Other areas of intervention

- a. Focused study on supply chain and logistics of identified products
- b. Mission 100 plus exporters from NE region
Further, the final export destinations on the basis of trade indices and trade barriers for identified products has also been provided in the report.