

Preface

This district export plan for Firozabad District is being prepared as a part of Developing District as Export Hub under the District Export Hub Scheme initiated by the Ministry of Commerce & Industry, Govt of India, and state Government of Uttar Pradesh. Hon'ble Prime Minister in his Independence Day Speech on 15th August 2019, had, inter- alia observed that each of our district has a diverse identity and potential for targeting global markets and there is a need for converting each district into potential export hubs. In order to implement Hon'ble PM's vision for each district, Department of Commerce has mandated the Directorate General of Foreign Trade to work with State Government and District Level authorities to promote the Firozabad district as an export hub. In view of above, a District Level Export Promotion Committee has been formed by the office of DIC, Firozabad under the chairmanship of District Magistrate. With the said objective, 'District Export Action Plan' has been prepared and being presented to concerned stakeholders.

The report encompasses in-depth information on Firozabad district's geographic, and demographic, along with key statistics of prominent exporting products of district, gaps identified basis diagnostic survey, recommendations proposed to mitigate the gaps and action plans required to implement those recommendations.

The report provides insights into exports from the cluster, via analysing exports over the last five years from India and UP for the respective product. The report also shares insights on availability of raw material, technology upgradation, infrastructure, designing, packaging, access to finance, skill development etc. Besides the detailed action plans, the timeline and responsibility matrix has also been defined with implementation schedule to give implementation roadmap of the product.

For this desired purpose, an extensive primary and secondary research was conducted. The report has been prepared in coordination with the Office of DGFT, Kanpur and Uttar Pradesh Export promotion Bureau (UPEPB). The data has been sourced from multiple avenues, including but not limited to data provided by office of DGFT, Kanpur, UAM data (2021), DICs, 2011 Census of India, Diagnostic Study Reports, stakeholder consultation and several other secondary resources.

Abbreviations

| CAD | Computer-Aided Design | |
|------------|---|--|
| САМ | Computer Aided Manufacturing | |
| CDGI | Centre for the Development of Glass Industry | |
| CFC | Common Facility Center | |
| CGCRI | Central glass and ceramic Research Institute | |
| CONCOR | Container Corporation of India | |
| СРС | Common Production Center | |
| DGFT | Director General of Foreign Trade | |
| DIC | District Industries Center | |
| DIEPC | District Industry and Enterprise Promotion Center | |
| DPR | Detailed Project Report | |
| EPC | Export Promotion Council | |
| EPCG | Export Promotion Capital Goods | |
| FIEO | Federation of India Export Organization | |
| FTA | Free Trade Agreement | |
| GCC | Gulf Cooperation Council | |
| GI | Geographical Indication | |
| HS | Harmonized System | |
| IC | International Cooperation | |
| IC Engines | Internal Combustion Engines | |
| IEC | Import Export Code | |
| IIP | Indian Institute of Packaging | |
| ISW | Industrial Solid Waste | |
| m | Industrial Training Institute | |
| MAS | Market Assistance Scheme | |
| MSE CDP | Micro & Small Enterprises - Cluster Development Programme | |
| MSME | Micro, Small and Medium Enterprises | |
| NHB | National Horticulture Board | |

| NIC Code | National Industrial Classification Code | |
|----------|--|--|
| NIC | National Informatics Center | |
| NID | National Institute of Design | |
| NIFT | National Institute of Fashion Technology | |
| NSDC | National Skill Development Cooperation | |
| ODOP | One District One Product | |
| PMU | Project Monitoring Unit | |
| QCI | Quality Council of India | |
| R&D | Research & Development | |
| RMB | Raw Material Bank | |
| SGPGI | Sanjay Gandhi Post Graduate Institute of Medical Science | |
| SIDBI | Small Industries Development Bank of India | |
| SPV | Special Purpose Vehicle | |
| SWOT | Strength, Weakness, Opportunities, Threats | |
| ТВТ | Technical Barriers to Trade | |
| UAE | United Arab Emirates | |
| UK | United Kingdom | |
| UP | Uttar Pradesh | |
| UPEPB | Uttar Pradesh Export Promotion Bureau | |
| UPICO | UP Industrial Consultancy Organisation | |
| UPSDM | Uttar Pradesh Skill Development Mission | |
| USA | United States of America | |

Contents

| 1. | Vision of Districts as Export Hubs | 8 |
|-------|---|----|
| 2. | District Profile | 8 |
| 2.1 | Geography | g |
| 2.2 | Connectivity | g |
| 2.3 | Topography & Agriculture | 10 |
| 2.4 | Tourism | 10 |
| 3. | Industrial profile of the district | 11 |
| 3.1 | Major Exportable Product from Firozabad | 13 |
| 4. | Product 1: Glass and Glassware products | 13 |
| 4.1 | Cluster Overview | 13 |
| 4.2 | Product profile | 14 |
| 4.2.1 | Product Portfolio | 14 |
| 4.2.2 | Status of GI Tag | 15 |
| 4.3 | Cluster Stakeholders | 15 |
| 4.4 | Export Scenario | 16 |
| 4.4.1 | HS code | 16 |
| 4.5 | Export Potential | 16 |
| 4.6 | Potential Areas for Value Added Product | 20 |
| 4.7 | SWOT analysis | 21 |
| 4.8 | Challenges and interventions | 21 |
| 4.9 | Future Outcomes | 26 |
| 5. | Various Schemes being run by Export Promotion Bureau, Uttar Pradesh | 26 |
| 6. | Action Plan | 28 |

List of Tables

| Table 1: Industries details in FY -2020-21 | 11 |
|--|----|
| Table 2: Occupational Distribution of Main Workers | 12 |
| Table 3: Major exportable product | 13 |
| Table 4: Key pockets of Glass and glassware products | 14 |
| Table 5: HS codes for Glass and glassware products | 16 |
| Table 6: SWOT Analysis | 21 |
| Table 7: Challenges and Interventions | 21 |

List of Figures

| Figure 1: Google Map Image of Firozabad District | 8 |
|---|----|
| Figure 2: MSME landscape of the district | 12 |
| Figure 3: Occupational distribution of Firozabad | 12 |
| Figure 4: GI registration certificate of "Firozabad Glass" | 15 |
| Figure 5: Cluster Stakeholders | 15 |
| Figure 7: Exported value of India for HSN-702000 | 17 |
| Figure 7: Exported value of UP for HSN-702000 | 17 |
| Figure 8: The top importers for this product in the world for HSN-702000 | 17 |
| Figure 9: Prominent Import Countries to whom India export of HSN- 702000 | 18 |
| Figure 10: Markets for export potential for HSN- 702000 | |
| Figure 12: Exported value of UP for HSN-701090 | 18 |
| Figure 12: Exported value of India for HSN-701090 | 18 |
| Figure 13: The top importers for this product in the world for HSN-701090 | 19 |
| Figure 14: Prominent Import Countries to whom India export of HSN- 701090 | 19 |
| Figure 15:Markets for export notential for HSN-701090 | 20 |

1. Vision of Districts as Export Hubs

"Each district of our country has a potential equal to that of one country, each of our districts has the capacity equal to a small country in the world. why should each district not think of becoming an export hub? Each of our districts has a diverse identity and potential for global market"

Honourable Prime Minister of India, Shri Narendra Modi

Foreign trade from India constitutes of 45% of its GDP. Until 2019, only the central government was engaged in the decision making of foreign trade, without any participation or involvement of state and/or district stakeholders. However, now, understanding that there are diverse elements that contribute towards an enabling and conducive foreign trade environment; the central government has identified that with policy & strategy, active support of the state governments and district administration are also equally required.

Thus, to decentralize the existing activities, to boost local production & its exports and to ensure active participation of state & district stakeholders, vision of district as export hubs was put to action. Department of Commerce, through Directorate General of Foreign Trade (DGFT) is working with the State / UT Governments to achieve this objective.

DGFT and UPEPB have aimed at synergising their efforts to identify the key products, export trends and challenges. Further in order to minimize the challenges, quantify the exports and outline export strategy; a detailed district-wise Export Action Pan has been made for all 75 districts of UP.

2. District Profile

The city of Firozabad in Uttar Pradesh is an ancient one and you must have heard of it being referred to as the "Glass City of India" or "The Bangle City". This unique name of the city comes from its beautiful bangles, crafts, tableware and other exquisite items made of glass, which are popular throughout India. Firozabad is also known as "Suhag Nagar" as it is famous for producing varieties of items used for ornamentation by the brides or suhagins. Firozabad is also known as "World Capital of beads" because of huge production of glass beads that get used in jewellery items, cloths, Dinner sets, chandeliers, toys, showpieces and other accessories and different other glassware. 1Even tourists from abroad appreciate the painstakingly designed and crafted



Figure 1: Google Map Image of Firozabad District

¹ https://www.firozabadonline.in/city-guide/firozabad-tourism

glass works created in this city. Firozabad is 47km away from the historical city Agra and having area of 2361 sq. km.

It is the centre of India's glassmaking industry and is known for the quality of the bangles produced there. Firozabad with the changing time has entered into new era of glass manufacturing, it has become a major hub of manufacturing different glass-based items and has registered its global presence, diversifying its industrial base and encouraging ancillary industries including Chemicals, Packaging and more of service sector-based industries have flourished in a short span of time.

Different type of glass articles such as jars, candle stands, glasses, flower vases, and electric wares like decorative lights, bulbs and few other sorts of glass article are also manufactured in the city. These articles are painted with vivid colours and innovative patterns. Etching is done on some products to enhance their beauty and marketability. Some decorative articles are also manufactured in the cluster in combination with other materials.

The district has around **9,236 functional units that employs around 1,94,151 individuals.**² The key enterprises of the district include Glass & glassware, Repairing and Servicing, Agro based, Mineral based, Hospitality & tourism, Wood and wood products, Meat Processing, and Food processing.3

2.1 Geography

Firozabad lies on the south west end of Uttar Pradesh at the northern edge of the Deccan Plateau, at 27°09'N 78°24'E / 27.15°N 78.4°E / 27.15; 78.4. 4 To the north lies the district Etah, in the east lies Etawah and Mainpuri. In the south there is river Yamuna and boundaries of Agra district and in the west, it touches the boundaries of Agra district. The whole district is a vast level plain. Yamuna, Sirsa & Sengar rivers are flowing in the south of the district. The district is situated in the "Doab" of the rivers Ganga and Yamuna which covers an area of 2407.0 Sq. km.

2.2 Connectivity



The city is 47 km east from Agra on National Highway 19 which makes it an important stopover for the transport vehicles on this highway. Firozabad hence is connected to several bus services to the Western and Eastern parts of Uttar Pradesh state. Due to proximity to Agra and hence the borders of Uttar Pradesh with Rajasthan, Madhya Pradesh states several inter-state bus services also serve the city. Intra-city transport typically consists of Rickshaws and 3-wheelers. The city is well connected with Yamuna Expressway and Taj Expressway to national capital New Delhi and state capital Lucknow respectively.



Railways:

Firozabad railway station served by the Delhi-Howrah trunk route of the Indian Railways. Several trains serve the city connecting it to long and short distanced destinations including Delhi, Howrah, Mumbai, Kanpur, Lucknow, Jaipur, Jammu Tawi, Amritsar, Jamshedpur, Patna, Aligarh, agra, Hathras, Puri, Ajmer, Ambala, Bareilly, Mathura, Etawah, Gorakhpur and Tundla.

² Information populated based on stakeholder consultations and MSME Industrial Report

³ DIC, Firozabad

⁴ https://firozabad.kvk4.in/district-profile.html

Tundla Junction railway station in the Tundla town (20 km west of Firozabad city on National Highway- 2) of the Firozabad District is a major railway station of North Central Railways. Due to its proximity to Agra several trains on the Delhi Howrah route which don't stop at Firozabad station make a stop at Tundla Junction hence serving Firozabad as well as Agra cities.

Airport:



The nearest airport to Firozabad is Agra Airport which is around 51.7 km from the district head quarter. The other airport accessible form the district is Indira Gandhi National Airport, New Delhi 204 km from the district head quarter followed by Chaudhary Charan Singh Airport, Lucknow which is around 249 km.

2.3 Topography & Agriculture

The climate of Firozabad is extremely dry, due to its proximity to the state of Rajasthan. The summer season starts very early here and residents experience extremes of temperature. During the summer months, the temperature of Firozabad district reaches to around 47 degree Celsius. In winter the temperature can go down to as low as 2 degree Celsius. Monsoon usually begins in the beginning of July and the average rainfall is 751 mm. The winter months are almost dry, with virtually no rainfall. The highest recorded temperature in the district was 48°C and the lowest was -1°C. 5

The geographical area of the district is 2361 Sq. Km. (about 257837 hectares). The cultivated area of the district is about 180954 hectares. The major cropping patterns followed in the district are bajra, paddy, arhar, til, urd, moong in kharif and wheat, mustard, barley, potato, garlic etc. in rabi. The soils are loam, sandy loam, loamy sand, silty clay loam, ravines and waste land. The fertility status of soil is poor to very poor. The average annual rainfall of the district is 665.40 mm. temperatures varies from 4°C (during December-January) to 48°C (during May-June). The district has 237 state tube-wells and 32295 private tube-wells which contributes assured irrigation to almost 80.49% of the cultivable area. Uppar Ganga canal and lower Ganga canal are two major canals of the district. There are 94 cold storages in the district.

About 70% of the cultivated area is covered under Bajra and wheat crops and the rest of the area under potato, vegetables, fodder, oilseeds and pulses etc. in the year 2014-15 district Firozabad became first (area) in potato cultivation.⁶

2.4 Tourism

Like any other city of Uttar Pradesh, Firozabad has long association with Indian history, and it was ruled by different dynasties. Each ruler has left some architectural marvel in the city of Firozabad and all of them have become important tourist places of the city. They are Ashokan Pillars, Kali Masjid, Begumpur Mosque, Bijai Mandal, Bara Khamba, Khikri Masjid and others. Most of these were built during the reign of Firoz Shah Tuglaq.

Firozabad has many temples, mosques and tombs that attract visitors. There are some famous markets as well. Raj Rajeswari Jai Kela Devi Temple, Gopal Ashram, Mata Wala Bagh Temple, Vishal Jain Mandir, Mahavir Jain Mandir, etc are some important places in Firozabad.⁷

⁵ https://www.firozabadonline.in/city-guide/geography-of-firozabad

⁶ https://firozabad.kvk4.in/district-profile.html

⁷ https://www.firozabadonline.in/city-guide/firozabad-tourism

3. Industrial profile of the district

The district has around 9236 functional units that employs around 1,94,151 individuals. 8 The key enterprises of the district include Glass & glassware, Repairing and Servicing, Agro industries Mineral based, Hospitality & tourism, Wood and wood products, Meat Processing, and Food processing.

The glass and glassware industry has about 5,621 units of production in Firozabad. Turnover of these units sum up to an annual turnover of Rs. 1680crores, out of which, the export turnover is around Rs. 515 crores and domestic market is to the tune of 1165 crores.

Since old times, the glass industry has been the major source of revenue in Firozabad. Glass & glassware handicrafts, and Agriculture are two other important revenue generators in this city. Service sector-based industries have also come up in and around Firozabad, generating more employment opportunities for local people as well as those from other cities.

The Glass and glassware product contribute most in terms of employment and revenue, which is approximately 80.71% and 95.40% respectively. Agro industries contributes $\sim 0.5.7\%$ to revenue, and $\sim 5.51\%$ of work force is employed. Repairing and Servicing contributes $\sim 0.6\%$ to revenue, and $\sim 2.47\%$ of work force is employed in this vertical.

The following table depicts the MSME units with their turnover and employment:9

Table 1: Industries details in FY -2020-21

| Industry | No. of functional units | Employment (No's) | Turnover (INR Cr) | Export value (in INR. Cr) |
|-------------------------|-------------------------|----------------------|-------------------|---------------------------|
| Glass & glassware | 5,621 | 156,700 | 1680 | 515 |
| Repairing and Servicing | 800 | 4,800 | 4.1 | 0 |
| Mineral based | 150 | 7,500 | 3.2 | 0 |
| Hospitality & tourism | 150 | 2,750 | 4.15 | 0 |
| Wood and wood products | 15 | 118 | 1.2 | 0 |
| Meat Processing | 150 | 684 | 1.05 | 0 |
| Food processing | 5 | 78 | 3.18 | 1.5 |
| Agro Industries | 190 | 11,096 | 10.14 | 0 |
| Misc. Manufacturing | 2,155 | 10,425 | 53.875 | 0 |
| Total | 9,236 | 1,94,151 | 1,761 | 517 |

11

⁸ Information populated based on stakeholder consultations and MSME Industrial Report

⁹ DIC, Firozabad

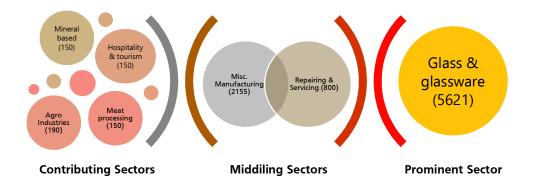


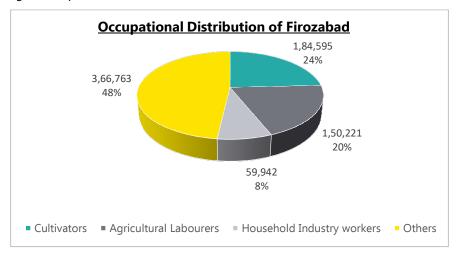
Figure 2: MSME landscape of the district

Out of total population of 2,498,156 (2011 census), 761,521 are working population. Out of total working population, 48% are working in other industries, 44% are cultivators and agricultural labourers and only 8% are household industry workers. This indicates that agriculture is the main source of income in the district.

Table 2: Occupational Distribution of Main Workers¹⁰

| S. No. | Particulars | Firozabad | % |
|--------|----------------------------|-----------|-----|
| 1 | Cultivators | 184,595 | 24% |
| 2 | Agriculture Labourers | 150,221 | 20% |
| 3 | Household Industry Workers | 59,942 | 8% |
| 4 | Other workers | 366,763 | 48% |

Figure 3: Occupational distribution of Firozabad



^

¹⁰ District census handbook 2011 - Firozabad

3.1 Major Exportable Product from Firozabad

The total export from Firozabad is approximately INR 630.99 Crore for the period September 2020 to November 2021.

The following table depicts the value of export of seven major products from Firozabad:

Table 3: Major exportable product

| S. No | Product | Export value (in INR) ¹¹ from September 2020 to November, 2021 |
|-------|-------------------|---|
| 1 | Glass & glassware | 630.99 Cr |

4. Product 1: Glass and Glassware products

4.1 Cluster Overview

Firozabad is the centre of India's glass making industry and is known for the quality of the bangles produced there. Firozabad with the changing time has entered into new era of Glass Manufacturing, it has become a major hub of manufacturing different Glass based items and has registered its global presence, diversifying its industrial base and encouraging ancillary industries including Chemicals, Packaging and more of service sector-based industries have flourished in a short span of time.

Key Facts 12

5,821 Manufacturers

NR. 1,680 Grores Approximate turnover of the cluster

NR. 830.99 Crores Export Turnover

1,56,701 employment directly or indirectly associated

All sorts of glass articles, including jars, candle stands,

glasses, flower vases, and electric wares such as decorative lights, bulbs and every other sort of glass article are prepared in this city. These articles are painted with vivid colours and innovative patterns. Etching is done on some products to enhance their beauty. Decoration work is also done on some products by fixing other material on them.

Glass & glassware products cluster of Firozabad covers **Firozabad city and surrounding areas.** There are $\sim 5,621$ operational units in the cluster employing around 1,56,700 and with a turnover of about INR 1,680 crore. Errorl Bookmark not defined. Firozabad city is considered as the hub of the cluster as it has the maximum no. of units & artisans and it is well connected to neighbouring cities through road, rail and air ways.

The city is the central hub for many glass manufacturing industries and also many small-scale glass related industries which employs quite a lot of the local and surrounding population. The city is also one of the leading manufactures and exporter of glass products.

The glass and glassware production unit in Firozabad are highly concentrated in 20 localities spread all over the city. Apart from these concentrated areas, the production units are also spread in different areas of the city with less concentration. The localities having the concentration of production units in Firozabad city are shown as follows: -

¹¹ DGFT

¹² Basis Stakeholder Consultation

Table 4: Key pockets of Glass and glassware products

| S. No | Name of Major Area | Name of Mohalla's |
|-------|------------------------|---|
| 1 | Firozabad Station Road | Joshiyan Mohalla, S.N. Road, Girdhar Ganj, Nai Basti, Kotla Road, Adarash Nagar, Gandhi Nagar, |
| 2 | Agra Road | Industrial state, Dholpura, Raja ka tal, Lalau road |
| 3 | Makkhanpur | Makkhanpur |
| 4 | Jaleshar Road | Industrial Area, |
| 5 | Mondha | Nalkoop Colony, Asfabad |
| 6 | NH2 | Shital khan road, Jatavpuri, Nagala vari |

4.2 Product profile

The historic evidence say that the glass was in use in India since ancient time. Hastinapur (Uttar Pradesh) site is the earliest from where glass in the form of glass bangles from 1100-800 B.C. reported in the review done by D. P. Agarwal and Manikant Shah for Ancient Glass and India written by S.N. Sen and Mamta Chaudhary published by Indian National Science Academy, 1985. In 800 B.C., during the time of Yajur Veda, glass was one of the articles of which female omaments were made. It is evident from the archaeological findings at Basti (Uttar Pradesh) that glassware found is about 2000 years old. Alan Macfarlane and Gerry Martin in a research article Glass in India (2002l write that during the Mughal period, glass articles, like chandeliers, tumbler, bowls and bottles for perfumes, became popular. It is regularly developing since 15th century AD¹³. Utilizing the various pieces of broken glasses all sort of decorative items including beautiful perfume bottles, tumblers, birds' bangles, etc. are manufactured here which are popular all over the world. ¹⁴ Initially this traditional industry being small scale industry was deprived of dear advance techniques and solutions for its development. Out of the total production of glass goods, 50 per cent is of glass bangles here in Firozabad. Now a days this developing glass bangles industry is being aided and supported by the government of Uttar Pradesh and as well as by the Central Government.

Firozabad is the largest cluster of glassware manufacturing in india.it is popularly known as the glass city of India. The glass products of different sizes, characteristics and utilities. Glass products are fast upcoming segments in the handicrafts from India. The age-old production process of mouth-blowing the glass instils a nostalgic feeling. The varied shapes of ceramic and glass in a number of colours, would appeal to western appeal to western aesthetics while retaining the Indian touch. The major product of glass.

The glass & glassware industry in Firozabad exists mainly in the form of cottage units. Some units have developed themselves into semi-mechanized ones and undertaken exports.

4.2.1 Product Portfolio

The following are the key products manufactured in the cluster:

| ▶ Glass Bangle | Bangle Baking |
|----------------|---|
| ▶ Glass Rods | Building glass products- Float glass, Casted glass, |

¹³ https://search.ipindia.gov.in/GIRPublic/Application/ViewDocument

¹⁴ District census handbook 2011 - Firozabad

| | Fused glass, Laminated glass |
|------------------|---|
| ▶ Glass Beads | Handicraft hardware- Knobs, Hook |
| Decorative items | Home decorative- Votive, Vases, Christmas hanging Lamp & Lighting |
| ► Bulb, Tube | ► Glass Sculptures |
| Container glass | Laboratory glassware- Thermal shock and thermal shock endurance |
| Tableware | ► Glass-to-glass sealings- Determination of stresses |
| Bottles | |

4.2.2 Status of GI Tag

Firozabad glass has been awarded Geographical Indication (G.I.) status in 2009 and is valid up to 2029 There are falling in class-21 in respect of Household or kitchen utensils and containers; un-worked or semi-work glass (except glass used in buildings); Kitchen ware, Table ware, Chandeliers, Double walled glass refills; Glass Bangles; Bead; Tumblers and decorative items .15

Figure 4: GI registration certificate of "Firozabad Glass"

4.3 Cluster Stakeholders

| Artisans | ► MSME DI |
|----------------------------------|---|
| Raw material suppliers | Uttar Pradesh Export Promotion Council |
| Machinery suppliers | Export Promotion Bureau, Uttar Pradesh |
| Entrepreneurs | Central Glass and Ceramic Institute |
| Manufactures | ▶ Glass Industries Syndicate |
| Exporters | Industry and Exporter Associations |
| Banks and Financial Institutions | Centre for Development of Glass Industry (CDGI) |
| ▶ DIEPC | |

Figure 5: Cluster Stakeholders

¹⁵ https://search.ipindia.gov.in/GIRPublic/Application/Details/155

4.4 Export Scenario

4.4.1 HS code

The following table lists the HS codes under which the products are exported from the district:

Table 5: HS codes for Glass and glassware products

| HS codes | Description | |
|----------|---|--|
| 702000 | Articles of glass, n.e.s. | |
| 701090 | Carboys, bottles, flasks, jars, pots, phials and other containers, of glass, of a kind used for the commercial conveyance or packing of goods, and preserving jars, of glass (excluding ampoules, glass inners for containers, with vacuum insulation, perfume atomizers, flasks, bottles etc. for atomizers) | |

Current Scenario

The export scenario of India and Uttar Pradesh have been analysed basis the export statistics of HS codes mentioned above under which Glass and Glassware products are exported. Alongside are the key facts¹⁶ pertaining to the analysed product codes.

Based on our analysis, we have identified key synergies that should be developed to expand our current reach and potential; These synergies are divided into immediate and long term. The immediate synergies include countries with Signed FTA's, high growth potential, and ones catered by India and not UP. Whereas the long-term synergies include countries with untapped market potential which can only be fulfilled if UP's exporters comply and raise the quality of the product to the highest standards, freight

Key Facts of Export

15049077 (USD Thousand
Value of world exports in 2020

369487 (USD Thousand)
Total Exports from India in 2020

157240 (USD Thousand)
Total Export from UP in 2020-21

~ 42.56%
Share of UP in India's Exports

rates are more subsidized and major efforts is required in marketing which will require time to accommodate the same.

4.5 Export Potential

As various products are manufactured and sold under the Glass and glassware products category of Firozabad¹⁷, in order to gauge our understanding of where India stands relative to the world on the trade of these products,

¹⁶ https://www.trademap.org/

¹⁷ Basis stakeholder discussions

each product has been delved into as a separate unit defined by its exports and imports in comparison to its competition and potential markets to target in the future. 18

The consolidated list of countries that India can target, respective to the analysis carried out in each chapter are USA, Germany, UAE, UK, Brazil, Netherlands, Malaysia, Denmark, Canada, Australia, Sweden as mapped below.

Product 1: 702000_ Articles of glass, n.e.s.

India's exports represent 3.8% of world exports for this product, ranking it number 8, behind China, Viet Nam, Germany, Japan, Korea Republic of, Thailand, and USA. The value of India's exports over the last 5 years have decreased by CAGR 3% with a sharp increase in 2019 and then a subsequent dip post that. As per data FY 2018-19 to 2020-21 for exports from the state of UP, it is observed that there has been decreased by CAGR 4.32%, with a similarly sharp increase in 2019-20 which fell in the year post that.



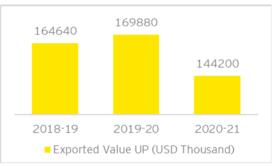


Figure 7: Exported value of India for HSN-702000

Figure 7: Exported value of UP for HSN-702000

The top importers for this product in the world are given below, alongside the value of the product imported in 2020.

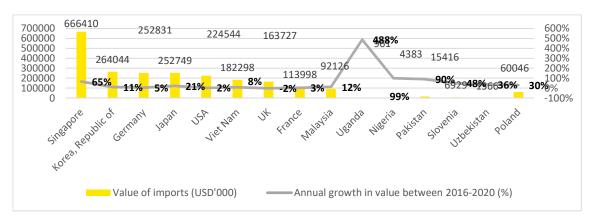


Figure 8: The top importers for this product in the world for HSN-702000

 $^{^{18}}$ Since district-wise data is not available, the analysis has been performed on import and export data of India

Prominent Import Countries to whom India export this product are:-

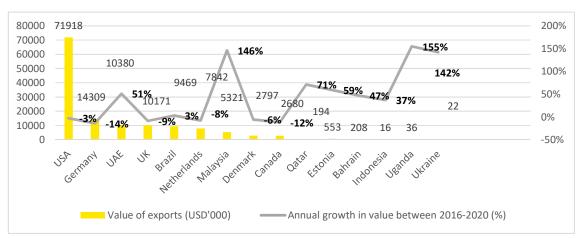


Figure 9: Prominent Import Countries to whom India export of HSN- 702000



Figure 10: Markets for export potential for HSN- 702000

Countries to whom UP exports this product in HSN code -702000 are USA, Germany, Brazil, UK, Netherland, Malaysia, UAE, Denmark, Canada, China P RP, Sweden, Saudi Arab, Belgium, Spain, and Australia¹⁹.

Product 2: 701090- Carboys, bottles, flasks, jars, pots, phials and other containers, of glass, of a kind used for the commercial conveyance or packing of goods, and preserving jars, of glass (excluding ampoules, glass inners for containers, with vacuum insulation, perfume atomizers, flasks, bottles etc. for atomizers)

India's exports represent 1.9% of world exports for this product, ranking it number 13, behind China, Germany,



Italy, France, Mexico, Spain, Portugal, Poland, USA, Netherlands, Bulgaria and Belgium. The value of India's exports over the last 5 years have increased by CAGR 3% with a sharp increase in 2018 and then a subsequent dip post that. As per data FY 2018-19 to 2020-21 for exports from the state of UP, it is observed that there has been decreased by CAGR 2.82%, with a similarly sharp increase in 2018-19 which fell in the year post that.

The top importers for this product in the world are given below, alongside the value of the product imported in 2020.

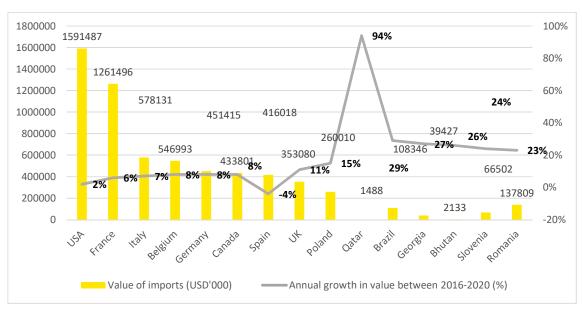


Figure 13: The top importers for this product in the world for HSN-701090

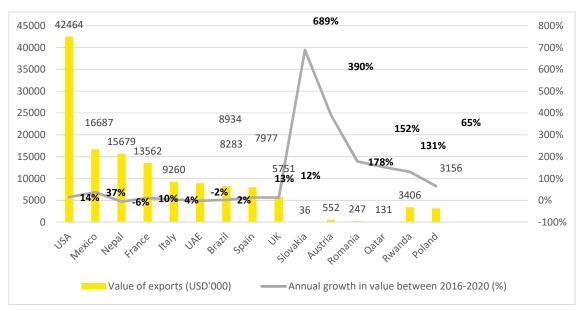


Figure 14: Prominent Import Countries to whom India export of HSN-701090

Prominent Import Countries to whom India export this product are:-

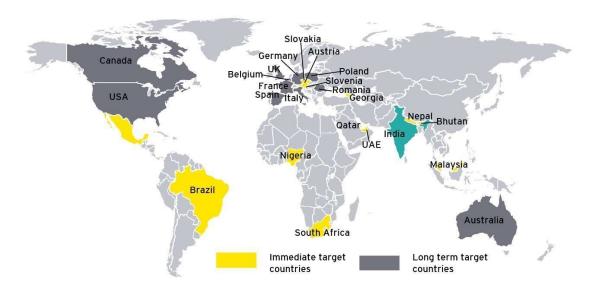


Figure 15:Markets for export potential for HSN-701090

Countries to whom UP exports this product in HSN code -701090 are **Nepal, Rwanda, UAE, Bhutan, USA, Congo D Rep, South Africa, Nigeria, Mauritius, Malaysia, Peru, Egypt, Liberia, Brazil, and Malawi²⁰.**

4.6 Potential Areas for Value Added Product

This plays a vital role in any products exports as it is a product uplifting strategy. Most artisans aren't bothered about changing their product range and they fail to understand that it is an integral part of comprehensive marketing. Diversification can be brought in the cluster by:

- Development of a new products: The units of the cluster should be encouraged to diversify the product categories and must be provided with enough resources to create innovative products without losing the ancestral essence of the craft. The artisans going forward should focus on creating newer glass and glassware products.
- Modifications of Existing Products: It has also been found that most of the units use no strategy for making modifications to the existing products in the light of design and market demand. The artisans/ unit's owners can make more value products by blending traditional with contemporary designs.

^

²⁰ www.dgcisanalytics.in

4.7 SWOT analysis

Table 6: SWOT Analysis

| Strengths | Weakness |
|--|---|
| Availability of skilled manpower Wide product range Relatively lower credit required | Traditional manufacturing methods Lack of awareness among artisans about compliances and safety issues Improper logistic facilities Lack of designing facilities and up gradation of technology Environmental pollution Unorganized nature of sector |
| Opportunities | Threats |
| Government initiative to promote the craft Rising tourism resulting in higher demand Improving the product quality Export potential | Consistent quality of product by competing countries Provision of better packaging facilities by competing countries Economic slowdown / recession in global market |

4.8 Challenges and interventions

Table 7: Challenges and Interventions

| Table 1. Challenges and interventions | | |
|---------------------------------------|--|--|
| Parameter | Challenges | Intervention |
| Raw Material | High price fluctuations in basic raw material like soda, silica and other chemicals. Gas is another crucial raw material for glass industry whereas the units in Firozabad get the same with a regular high price in comparison to other cluster Absence of high-quality raw materials like Silicon, Cobalt, Cadmium coper dioxide and Selenium and Arsenic Tri Oxide those are essential for making high quality glass High dependency on informal source of raw material procumbent Absence Technical Institutes and embedded service providers to ensure the fare composition of raw material for making quality products | Hard Interventions Establishment of a Raw Material Bank within the CFC ensuring easy availability of all types of quality raw materials. Soft Interventions Training support should be provided to the primary producers / artisans in effective use of different composition of raw materials. The local industry associations should be connected to the national and global raw material supplier to bridge the gap areas |

| Parameter | Challenges | Intervention |
|---------------------------|--|--|
| Technological upgradation | Techno awareness and adaptability among the primary stakeholder is very low Limited use of technology like Thermal imaging camera, Endoscope, Glass melting pot by sip casting, Mold design and others contemporary tools and techniques Lack of proper working space and investment capacity to scale up the existing units Absence of adequate techno park and dedicated industrial space for setting up technically quipped units | Hard Interventions: Establishment of Common Production Center with modern machines including CAD technology, 3D model designing, Crystal Glass Making Machine, glass molding machine etc., Soft Interventions: Exposure visits to benchmark clusters for cross learning of the exiting units Tie up with IITs, Central Glass and Ceramic Institute for a consistent R& D in the area of technology and transfer of technical know-how. Local engineering and technical institutes may be tied up with global and national level for running a sector specific course for the youth and exiting entrepreneurs Facilitating technology demonstration at cluster level by the domestic and global machine suppliers |
| Design | Lack of innovative design inputs/design centre, which leads to imitation of designs from large showroom and repetitive manufacturing of same design products. Very little effort is made to create indigenous and innovative designs. Absence of adaptability among the principal firms Absence of adequate number of BDSPs in the cluster There is a huge gap in the connect between cluster and local/ regional/ national level Tls and Service Providers Lack of contemporary and market-oriented product designs Absence of value added and diversified products | Hard Interventions: It is proposed that a Design and Innovation center be set up in the cluster. The centre will include following components: Design Lab Research development in product development Design Bank and Product Library Database of various vendors/suppliers Database of designing facilities Sample Development Training Centre IT Lab and Resource Centre Soft Intervention: Design training and certificate courses for local aspirants in collaboration with institutes like Central glass and ceramic Research Institute (CGCRI)/ Centre for the Development of Glass Industry (CDGI) / NID, etc. Capacity building of the cluster firms/artisans on product development, design development, product diversification and value addition Market exposure to the cluster firms to know the contemporary market demand Exposure visits to bench marking cluster to understand the use of new technology in |

| Parameter | Challenges | Intervention |
|----------------------|--|---|
| | | product development and production line Connecting the cluster with institute like for an effective engagement Creation and nurturing of private and public business service providers at the cluster level |
| Marketing & branding | Dependency of cottage units upon the middlemen/commission agents for sales of their products. Need for infrastructure for marketing and trading for marketing the product Absence of usage of information and communication facilities Lack of the participation in International Trade fairs / events Limited Market diversification Lack of knowledge of existing schemes and govt. initiatives | Hard Intervention: Establishment of a Marketing centre within the CFC to facilitate marketing events. Soft Intervention: Awareness and outreach for participating in international fairs and exhibitions. Encourage to leverage ODOP MDA scheme for financial assistance. Encourage to leverage Marketing Assistance Scheme and International Cooperation Scheme for marketing and branding, marketing promotion Organize state and national level exhibitions Collaboration with E-commerce companies-Amon, Flipkart, eBay etc. Training among the master artisans and manufactures on how to brand their products using the Company logo, Company brand etc. and how to get their brand registered, cataloguing of product by collaborating the SPV/ artisans with Uttar Pradesh Development and Marketing Corporations Ltd Emporium Business development services (BDS) may be setup in the CFC or providing direct exposure of market to the artisan |

| Parameter | Challenges | Intervention |
|------------------------|---|--|
| Quality Improvement | Unawareness of global standards and quality ratings. Only exporters of the cluster try to maintain the quality standard of global market A very few manufactures in the cluster follow ISO standards and other required standards for export | Hard interventions: Establishment of testing laboratory for glass and glassware testing and mandatory certification Soft intervention: Collaboration with National institutes / Central glass and ceramic Research Institute (CGCRI)/Centre for the Development of Glass Industry (CDGI) to support artisans in improving quality of Glass and glassware and helping them understand the importance of maintaining these standards. Special focus should be given on creating Brand labels with uniform quality standards. Collaboration with Quality Council of India (QCI) will help in setting the quality standard of these Glass and glassware products, to increase the sales in international markets, and they can be exported across the globe with brand logo which ensures its authenticity. |
| Access to finance | Lack of awareness about existing Financial institutions and their schemes & policies Blockage of working capital owing to extended payment timelines The linkages with banks and financial institution in the cluster are not established properly. The lack of providing financial assistance by creditors like banks and financial institution to interested artisans/manufacturers/ exporters is pending due to lack of proper documentation and sometimes lack of funds. | Awareness and outreach program for raising consciousness about existing central and state government schemes that can be leveraged Indian government shall consider establishment of manufacturing focused banking system which can allow the manufacturers to avail loans at lower rates. Collaboration with SIDBI Handholding in listing of units on NSE/BSE. MSME department is partnering with banks to ease up the sanctioning process, for e.g. Bank of Baroda. Collaboration with nationalized banks/ financial institutions for easy lending to manufacturers through digital platforms to ease out paperwork. Sensitization of banks/financial institutions to understand the product value chain while fixing WC/CC limits. |

| Parameter | Challenges | Intervention |
|-------------------|--|---|
| Packaging | Lacks any formal standards for packing and branding of their products. The final product does not get the proper shape, packaging, labelling etc. Lack of innovative packaging No skilled manpower used for packaging | Hard Intervention Innovative and modern packaging and Labelling unit is required to overcome this challenge in cluster. Soft Intervention Collaboration with Indian Institute of Packaging (IIP) for conducting workshops/seminars or training program for Glass and glassware manufacturers to upgrade their packaging techniques. |
| Skill Development | Majority of the artisans learn their skills from their family or on the job as the cluster Lack of recognition for formally trained artisans Lack of encouragement to setup/ expand their business Limited knowledge of artisans in business operations | Cluster centric skill development programme shall be introduced and Government may allow the students to have apprentices from the age of 16 to 18 years. ODOP Skill Development Scheme could be leveraged to provide training/skill-upgradation to the artisans and toolkit distribution. Entrepreneurship and Skill Development Programme (ESDP) scheme may be leveraged. Collaboration with Central glass and ceramic Research Institute (CGCRI)/ Centre for the Development of Glass Industry (CDGI) / NSDC/UPSDM for undertaking skilling and upskilling under design, marketing, accounting, production process etc. |
| Exporter's issue | No focal point to address exporters ongoing issues. | DIEPC to act as a focal point for all exporters issues. Deputy Commissioner Industries may be given this responsibility to monitor the cell in consultation with DGFT. |

| Parameter | Challenges | Intervention |
|----------------|--|--|
| Cost Structure | U.P. is a land-locked state hence this increases the transportation cost which in turn adds to the overall production expenses Since the start of Covid 19 Pandemic, the availability of containers and the Freight Charges by the Shipping lines has been main concern of the industry | The DIC office should organize workshops for exporters to apprise them about Foreign Trade Policy benefits viz. Duty Exemption Scheme / Advance Authorization Scheme / Duty Free Import Authorization Scheme. The CONCOR rates are to be made available at regular intervals to the DIC office for updating the same at the district website. The formation of the sub-committee comprising the representative of CONCOR and Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this portal. |

4.9 Future Outcomes

| Annual Turnover | Cluster exports |
|--|---|
| Increase in annual turnover from existing INR 1680 Cr. To INR 2042 Cr. by 2025 | Increase in exports from INR 515 Cr to INR 625 Cr over the period of 5 years |

5. Various Schemes being run by Export Promotion Bureau, Uttar Pradesh

A) Marketing Development Scheme (MDA)

| S. No | Incentives offered | Amount of incentive against total expenditure |
|-------|--|---|
| 1 | Participation in foreign fairs/exhibitions | a. 60% of stall charges (max 01 lac /fair) |

| | (total three fairs / annum) | b. 50% (max 0.5lac for one person / fair) |
|---|--|---|
| | a. Stall chargesb. Air fare (economy class) | |
| 2 | Publicity, advertisement, development of website | 60 % (max 0.60 lac/annum) |
| 3 | Sending of samples to foreign buyers | 75 % (max 0.50 lac/annum) |
| 4 | ISO /BSO certification | 50 % (max 0.75 lac/annum) |

B) Gateway Port Scheme

| Particulars | Details |
|---|---|
| Brief Description | Assistance is given to all manufacturing exporting units on expenses incurred on the rail transport of their goods from ICD/CFS to Gateway ports. |
| Eligible units | Micro, small & medium enterprises. |
| Incentives Offered against actual expenditure | 25% of the total expenditure or Rs 6000 (20 ft' container) & Rs 12000 (40 ft' container) (whichever is less) |
| Maximum limit | Rs 12 lacs /unit /year |
| Empowered committee | District Users Committee under the chairmanship of district magistrate. |

C) Air Freight Rationalization Scheme

| Particulars | Details |
|----------------------------|---|
| Incentive offered | 20% of the actual expenditure or Rs 50 / kg (whichever is less) |
| Eligible Units | Manufacturer & merchant exporter |
| Maximum limit | Rs 2 lacs / unit / year |
| Recognized Cargo Complexes | Varanasi & Lucknow |

6. Action Plan

| Quantifiable activity/ intervention | Responsible authority | Timeline for implementation ²¹ |
|--|------------------------|---|
| Increasing the overall exports from the state | | |
| Sensitization and facilitation in availing Import/ export documents: Majority of the cluster actors though interested and sensitized on exports are unaware of Import-Export Code which is crucial for participating in global trade. While some of them are aware, they face challenges in applying. Thus, at district level, a camp should be set in every three months to help the individuals interested in trade to understand about the requisite documents required for undertaking import/ export and provide support in availing them | ODOP cell, DIEPC UPEPB | Continuous initiative |
| Creation of an event calendar comprising of events to be conducted in a Financial Year with a focus on international marketing events. Further, DGFT and FIEO can finalize a target to participate in at least 3 international events in a year per product category/industry of glass and glassware products by utilizing schemes like IC and MAS | ODOP cell, DIEPC UPEPB | Continuous initiative |
| Sensitization of cluster actors: a. The individuals of a cluster should be sensitized on the plethora of schemes ²² available for them for maximizing the potential of exports. Merchandise Exports from India Scheme, Service Export from India Scheme etc. provides various exemptions for facilitating exports. Further, schemes like Advance Authorization Scheme (AAS), Duty Free Import Authorization (DFIA Scheme) ensure procurement of imported duty-free raw materials | ODOP cell, DIEPC UPEPB | Continuous initiative |

 $^{^{21}}$ Short term: Should be initiated within 6 months, Intermediate: to be initiated between 6- 12 months, long terms after 12 months 22 List of available schemes facilitating exports: https://cdn.s3waas.gov.in/s3555d6702c950ecb729a966504af0a635/uploads/2020/12/2020120965.pdf and https://www.ibef.org/blogs/indian-exportincentive-schemes:

| b. Currently, majority of the exporters and traders focus on selling their goods to USA, UK and European countries without correctly analyzing the demand market. Thus, these cluster actors should be sensitized on target countries identified through export analysis mentioned in DAPs and EAP | | |
|--|-----------------------|------------------|
| DIC and FIEO can play a pro-active role in this regard. 10% increase in every year in the number of units taking part in the trade fairs organized by FIEO and other organizations may be proposed as a target under this segment | DIC, UPEBP and FIEO | Intermediate |
| Other Interventions | | |
| Collaboration with e-commerce companies like Amazon, ebay, Flipkart etc. and Onboarding workshops to be conducted for handholding to artisans and entrepreneurs | UPEPB/DIEPC | Short term |
| Creation of video for branding of the products by highlighting its quality benefits and historical background. | UPEPB/DIEPC | Short term |
| Promotion of products by DIEPC across the State through branding within their premises and through events like 'Udhyam Samagam' | DIEPC | Ongoing activity |
| Increase the usage of the portal as this portal facilitates the weavers and artisans to provide information about their products for easy understanding of exporters. | UPEPB/ODOP Cell | Ongoing activity |
| MoU with QCI for defining quality standards of the products | UPEPB/DIEPC | Short term |
| Collaboration with IIP to define cluster-wise packing standards | UPEPB/DIEPC | Short term |
| Sensitization of banks and bankers to help them understand the niche sectors of MSME and their specific requirements which shall help banks evaluate projects better while lending credit | UPEPB/DIEPC and banks | Short term |
| Introduction of revolving working capital within the cluster to help MSMEs procure raw materials and undertake production without hinderances | UPEPB/DIEPC and banks | Intermediate |
| Tie up with the banks/financial institutions (SIDBI, BoB etc.) for better interest rates, enhanced working capital limits etc. | UPEPB/DIEPC and banks | Intermediate |

District Action Plan - Firozabad 29

| DIEPC/DGFT/UPEPB Long term DIEPC/UPEPB Long term DIEPC/UPEPB DIEPC/UPEPB Long term DIEPC/UPEPB DIEPC/UPEPB DIEPC/UPEPB DIEPC/UPEPB Long term DIEPC/UPEPB DIEPC/UPEPB/FIEO Short term DIEPC/UPEPB/FIEO DIEPC/UPEPB | Handholding of MSMEs for increasing their awareness on schemes of state & centre and the procedure to apply to avail financial assistance | UPEPB/DIEPC | Intermediate |
|--|---|------------------|--------------|
| a. The DIC office should organize workshops for exporters to apprise them about Foreign Trade Policy benefits viz. Duty Exemption Scheme / Advance Authorization Scheme / Duty Free Import Authorization Scheme. b. The CONCOR rates are to be made available at regular intervals to the DIC office for updating the same at the district website. c. The formation of the Sub-committee comprising the representative of CONCOR and Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this | | DIEPC/DGFT/UPEPB | Long term |
| Trade Policy benefits viz. Duty Exemption Scheme / Advance Authorization Scheme / Duty Free Import Authorization Scheme. b. The CONCOR rates are to be made available at regular intervals to the DIC office for updating the same at the district website. c. The formation of the Sub-committee comprising the representative of CONCOR and Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this | Cost Structure: | | |
| updating the same at the district website. c. The formation of the Sub-committee comprising the representative of CONCOR and Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this | Trade Policy benefits viz. Duty Exemption Scheme / Advance Authorization Scheme / | DIEPC/UPEPB | Long term |
| Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this | _ | DIEPC/UPEPB | Long term |
| | Deputy Commissioner Industries to understand the issue and suggest ways to help Industry. Ease of Logistics portal of FIEO has been developed to provide information about container availability and issues relating to it. The industry may be informed of this | DIEPC/UPEPB/FIEO | Short term |

| Establishment of Common Facility Centre with: | | |
|---|---------------------------|--|
| a. Raw Material Bank b. Common Production Center with modern machines including CAD technology, 3D model designing, Crystal Glass Making Machine, glass molding machine etc., c. Design, display and Innovation center with CAD/CAM facilities and space to showcase products to undertake sale d. Testing laboratory e. Innovative and modern packaging and Labelling unit f. Marketing centre for undertaking marketing events | DIEPC, DGFT and ODOP Cell | Long term |
| Technology Upgradation and Infrastructure Development Infrastructure development for micro units through establishment of CFC. Technology upgraded Machine, low wastage Common Usage on rental base | MSME UP/DI/SPV | Ongoing as per Implementation schedule |
| Follow up of post GI initiative: DIC to identify 100 authorized users to become IEC holder in a year Organize one seminar within two months to apprise the stakeholders about the importance of Geographical Indication (GI) and for increasing the authorized users | DIEPC/UPEPB/ODOP Cell | Intermediate term |

District Action Plan - Firozabad

Department of MSME & Export Promotion, Govt. of Uttar Pradesh





