



सत्यमेव जयते

NITI Aayog

EXPORT PREPAREDNESS INDEX 2020



EXPORT PREPAREDNESS INDEX 2020

डॉ. राजीव कुमार

उपाध्यक्ष

DR. RAJIV KUMAR

VICE-CHAIRMAN

Phones : 23096677, 23096688

Fax : 23096699

E-mail : vch-niti@gov.in



भारत सरकार
नीति आयोग, संसद मार्ग
नई दिल्ली-110001

Government of India
NATIONAL INSTITUTION FOR TRANSFORMING INDIA
NITI Aayog, Parliament Street
New Delhi-110 001

MESSAGE

Rising exports must be an integral component of India's development strategy, especially since exports constitute one of the four pillars—the other three being human resources, investments, and governance—upon which the country has traditionally relied on to accelerate its growth since the economic reforms of the 1990s.

India's merchandise exports have witnessed growth from USD275.9 billion in 2016–17 to USD303.5 billion in 2017–18, to USD331.0 billion in 2018–19. However, the Covid-19 crisis dealt a major blow to the current fiscal. This will alter not just the national but the entire global economic landscape. Consequently, India's exports shrank by 60 per cent in April 2020. Further, the pandemic resulted in large-scale disruption in global supply chains and demand, resulting in the cancellation of orders. Amidst this setback, it is imperative for India's trade and exports to recoup and rediscover the path to recovery and growth.

Keeping in mind the concept of Aatmanirbhar Bharat or self-reliant India, it is time for our country to play a vital role in the present-day dynamic economic landscape. Attaining self-reliance implies becoming globally competitive by removing bottlenecks at various steps in the export process. India's exports sector holds immense potential to become a viable alternative supplier for some of the major economies. To realize this potential, it is crucial that India turns to its states and union territories and makes them active participants in the country's export efforts. This would be achieved by creating an enabling framework, establishing the required institutions, removing bottlenecks, and incentivizing exports. Even in difficult times, when the world has been struggling with Covid-19, Indian states have responded by ramping up the production of essential products through successful national-level cooperation. This is evident from the large-scale production of products such as personal protective equipment (PPE) kits and hydroxychloroquine (HCQ).

In an attempt to realize this new vision, the Export Preparedness Index 2020 evaluates states' potentials and capacities. The presence of basic facilities, a conducive environment, and the reach of the exports' footprint are some of the key factors that will be used for their assessment. It is hoped that the detailed insights from this Index will guide all stakeholders towards strengthening the export ecosystem at both the national and sub-national levels. This will help India increase its share in global trade from the present 1.7% in 2018 to at least 5% in this decade.

I would like to take this opportunity to congratulate the entire team of NITI Aayog for their unique and laudable effort. I would also like to extend my compliments to the Central ministries, nodal officers from the state departments, and our knowledge partner, Institute for Competitiveness, for their contribution towards preparing the Index.

(Dr. Rajiv Kumar)

अमिताभ कांत

Amitabh Kant

मुख्य कार्यकारी अधिकारी

Chief Executive Officer



भारत सरकार
नीति आयोग, संसद मार्ग
नई दिल्ली-110001

Government of India
NATIONAL INSTITUTION FOR TRANSFORMING INDIA
NITI Aayog, Parliament Street
New Delhi-110 001

Tel. : 23096576, 23096574 Fax : 23096575
E-mail : ceo-niti@gov.in, amitabh.kant@nic.in

MESSAGE

India's vision of becoming a USD5 trillion economy by 2024 is intricately linked with an export-oriented approach. With most of the world's production concentrated in global value chains, a focused policy shift towards integration with major global supply chains could lead to increased efficiency and growth for India. In this globalized world, India's effective strategy on exports could be the key towards achieving the required double-digit growth and to surge the country ahead.

In this present crisis-hit world, while most countries are looking inward, India should use this opportune time to build its manufacturing capabilities to meet future global demand requirements. India's exports would need to be boosted through several policy mechanisms, including the improvement of Ease-of-Doing-Business (EoDB), promoting size and scale as well as adapting to global standards. This export-led growth strategy has been sought to be implemented through the Hon'ble Prime Minister's vision of converting each district into an export hub. The necessary policy changes would need strong engagement with the states and union territories to identify export opportunities and develop their institutional structures.

In line with this new orientation, NITI Aayog has taken a significant step by developing the first-ever Export Preparedness Index for Indian states. The Index ranks states and union territories on critical parameters required for promoting the country's exports. The Export Preparedness Index would be useful to states and union territories to benchmark their performance against their peers and analyse the potential challenges and prospects to develop better policy mechanisms to foster export-led growth.

NITI Aayog will continue in its endeavour to develop insights and strategies to promote competitive federalism to aid India's mission of achieving robust economic growth. I am sure that the Export Preparedness Index will provide analytical insights and policy actions to states and union territories, which will significantly assist their understanding of future export opportunities, challenges ahead and best practices that can be emulated.

(Amitabh Kant)

इशतियाक अहमद
सलाहकार
ISHTIYAQUE AHMED
ADVISER
Tel : 011-23096584
E-mail : ahmed.i@nic.in



भारत सरकार
नीति आयोग, संसद मार्ग
नई दिल्ली-110001

Government of India
NATIONAL INSTITUTION FOR TRANSFORMING INDIA
NITI Aayog, Parliament Street
New Delhi-110 001

MESSAGE

The idea of developing an index to measure the export preparedness of Indian states germinated in 2019 at NITI Aayog. Keeping in line with the spirit of competitive federalism, the Export Preparedness Index evaluates various factors that play a crucial role in determining the export performance of all states and union territories. Hon'ble Prime Minister Shri Narendra Modi has also stressed that there is a huge potential for Indian exports, which can be exploited at the disaggregated levels by converting each district into an exporting hub.

In the wake of the ongoing Covid-19 pandemic, the Export Preparedness Index is a crucial document to guide our fellow policymakers to make the most of the dynamic nature of global manufacturing and trade. India has already taken major steps by initiating a Continuity Plan that would kickstart the growth of Indian exports. The plan also aims to increase the scale of Indian manufacturing and trade, which would further expand Indian products' footprint at a global level.

To facilitate such a detailed, potential expansion of Indian exports, the Export Preparedness Index can provide major insights into state-level performance and growth. Based on its coherent structure, which includes four pillars, eleven sub-pillars and multiple indicators, the Index can pinpoint the strengths and weaknesses across all states and union territories. This would enable all relevant stakeholders to take prompt action in improving the existing export ecosystem at a sub-national level.

The development of the Export Preparedness Index was an inclusive process. It contains extensive engagement with the states in the process of data collection. The timely completion of the first-ever Export Preparedness Index could not have been possible without the support and cooperation of all the partners.

We are grateful to the Vice Chairman and CEO of NITI Aayog, who took up this crucial initiative and led it to fruition. We thank everyone who provided their insights to help create the right structure for evaluating export preparedness across the sub-national level.


(Ishtiyaque Ahmed)

Amit Kapoor | Honorary Chairman

MESSAGE

In the post-Independence era, export was not the most favoured economic pillar. This is evident in the first two Five Year Plans, which had no provisions for export. This combined with strong import-substitution industrialization further dwindled the attention on Indian exports. However, in the post-Liberalization world, it is impossible to sustain as a fast-developing economy without a strong push for domestic exports. And India has already reaped massive economic benefits by turning to exports in the last 30 years.

However, it was noted recently that the current economic slowdown has adversely impacted the progress of Indian merchandise exports. India needs to create a sustainable path for maintaining a steady outflow of goods to various economic destinations across the globe. In a world that has been severely hurt by Covid-19, this task poses a great challenge.

To address the above problems, India has turned to its states to establish “export hubs”. These hubs will be responsible for meeting global requirements while improving safety compliance and quality goods to expand their global market share. In order to achieve such a mammoth feat, Indian states and union territories must be evaluated to assess their preparedness to meet long-term demand for domestic exports.

The Export Preparedness Index is a data-driven effort to identify the core areas crucial for export promotion at the sub-national level. All the states and union territories have been assessed on crucial parameters that are critical for any typical economic unit to achieve sustainable export growth. The Index would be a helpful guide for the state governments to benchmark regional performance with respect to export promotion and thus deliver key policy insights on how to improve and enhance the same. The Export Preparedness Index is the first of its kind; hence, it is expected to be refined over time, and improvements made to the methodology and evaluation process in the coming years.

The Institute for Competitiveness is pleased to deliver NITI Aayog with knowledge support in this endeavor and help the country towards a stronger export promotion at a sub-national level. I would like to thank Shri Ishtiyaque Ahmed, Senior Adviser, NITI Aayog, for his tireless support throughout the evaluation process of the Export Preparedness Index 2020. I would also like to thank Dr Rajiv Kumar, Vice Chairman, NITI Aayog, and Shri Amitabh Kant, CEO, NITI Aayog, for their invaluable feedback during the process.

Finally, I would like to acknowledge the support of my team at the Institute for Competitiveness, including Aniruddh Duttaa, Chirag Yadav, Jatin Nair, Manisha Kapoor, Sampriti Mukherjee, Souma Sekhar Gangopadhyay and Suprerana Chakraborty in preparing this report. I am certain that the study outlined here will enable a transformational shift in the Indian export landscape.


(Amit Kapoor)

Executive Summary

For a country as vast and geographically diverse as India, the state of preparation to strengthen exports needs to be understood at the regional level; a policy measure at the national level will not suffice. Each state needs to have its own policy measure, and understand its unique strength and valuable resources, so that exports get a shot in the arm at the regional level.

With the objective to provide an empirical tool to policymakers at the sub-national level, the Export Preparedness Index examines the export ecosystem of Indian states and union territories. It is the first index that has been developed to study export preparedness and competitiveness at the sub-national level.

The study and the methodology utilized for the preparation of the index have been developed keeping in mind the complexities and challenges in light of spatial segregation. Therefore, the study takes into consideration that policy implications will largely vary across states. The approaches for measuring export preparedness look at parameters, such as an existing policy measure, business ecosystem, export infrastructure, and the export performance of the states. Overall, there are 55 indicators that have been

distributed across these crucial four pillars, and export performance remains the only output-based indicator to study the export footprint of the states and union territories.

The report consists of three thematic areas. The first (chapters 1–5) delineates the importance of exports as one of the key indicators for promoting economic growth, and how they have shaped the Indian economy. It discusses the reasons for an increasing focus on boosting export competitiveness at the regional level, why it is important, and the need to do so at the state level. Apart from this, there is a chapter on different global approaches to measure trade indices, and a comparison between the Indian economy and a few select countries to provide an idea of how these economies fare in terms of their export footprint in the global landscape.

The second (chapters 6–8) lays out the methodology employed to construct the index, followed by key findings at the state level and a further analysis of each sub-pillar. Gujarat emerged as the top-performing state in the 'Coastal States' category, followed by Maharashtra and Tamil Nadu.

In the category of 'Landlocked States', Rajasthan was the best-performing state. Among 'Himalayan States' and 'City-States', Uttarakhand and Delhi are the top performing states respectively. This section makes in-depth analyses of the multitudes of factors that have developed the export ecosystems at the state and sub-pillar levels. It is hoped that these analyses will ignite the spirit of competitive federalism among the states to boost their export preparedness.

The third and final portion (chapters 9–11) provides learnings and the way forward in the form of recommendations for sub-national policymakers to ponder over. Several learnings emerged during the

course of the preparation of the report, and it is hoped that the learnings derived from the report will help policymakers to give them direction in terms of enhancing the export competitiveness in their respective states. Furthermore, the detailed state profiles and scorecards are also attached in this portion, which provide a comprehensive snapshot of the current export landscape of each state and union territory.

Finally, Appendix I provides the list of 55 indicators in detail, a brief explanation of the same, and the sources; Appendix II delineates the calculation of the Market Performance Index, one of the key indicators in export performance.

Content

Introduction	02
Focus on Indian States	
The Importance of Exports	06
India's Trends in the Global Market	08
Export Trends in Pre-Reform Period	
Export Trends in the Post-Reform Period	
Present-Day Trends	
Missed Opportunities	
Global Approaches to Measure Trade Indices	14
India's Position	17
Methodology	20
State Categorization	
Geographic Coverage	
Index Calculation Steps	
Indicator Selection and Data Collection	
Dealing with Missing Values	
Data Transformation	
Aggregation	
Export Preparedness Index: Key Findings	26
Country-Level Analysis	27
State-Level Analysis	29
Pillar Wise Scores across States	
Policy Pillar	
Business Ecosystem Pillar	
Export Ecosystem Pillar	
Export Performance Pillar	

Sub-Pillar Analysis

35

Pillar 1: Policy

Sub-Pillars

Export Promotion Policy

Institutional Framework

Pillar 2: Business Ecosystem

Sub-pillars

Business Environment

Infrastructure

Transport Connectivity

Access to Finance

Pillar 3: Export Ecosystem

Sub-pillars

Export Infrastructure

Trade Support

R&D Infrastructure

Pillar 4: Export Performance

Sub- Pillars

Growth and Orientation

Export Diversification

Learnings and Strategies

57

Key Learnings

Strategies

The Way Forward

64

State Profiles

66

Appendix I

140

Appendix II

148

Introduction

The global trade scenario recently saw massive changes due to the ongoing Covid-19 pandemic. With major economies of the world completely shutting down operations, the export of goods and services has been adversely affected.

A UNCTAD study estimates a \$50 billion decrease in exports across global value chains.

Manufacturing slowdown in China due to the pandemic and protracted trade wars have created ripple effects in economic activity across the globe¹.

India's exports have been badly hit as well, especially since the domestic manufacturing base is heavily dependent on Chinese imports². Over the years, India has sought to decrease this reliance with a greater focus on in-house assembling of products and by boosting the local manufacturing ecosystem³.



¹ UNCTAD. (2020, March 4). Coronavirus outbreak has cost global value chains \$50 billion in exports. Retrieved from <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2297>

² PRS Legislative Research. (2020). Impact of Chinese goods on Indian industry. Retrieved from <https://www.prsindia.org/report-summaries/impact-chinese-goods-indian-industry>

³ Fensom, A. (2020, February 18). Coronavirus deepens India's economic chill. Retrieved from <https://thediplomat.com/2020/02/coronavirus-deepens-indias-economic-chill/>

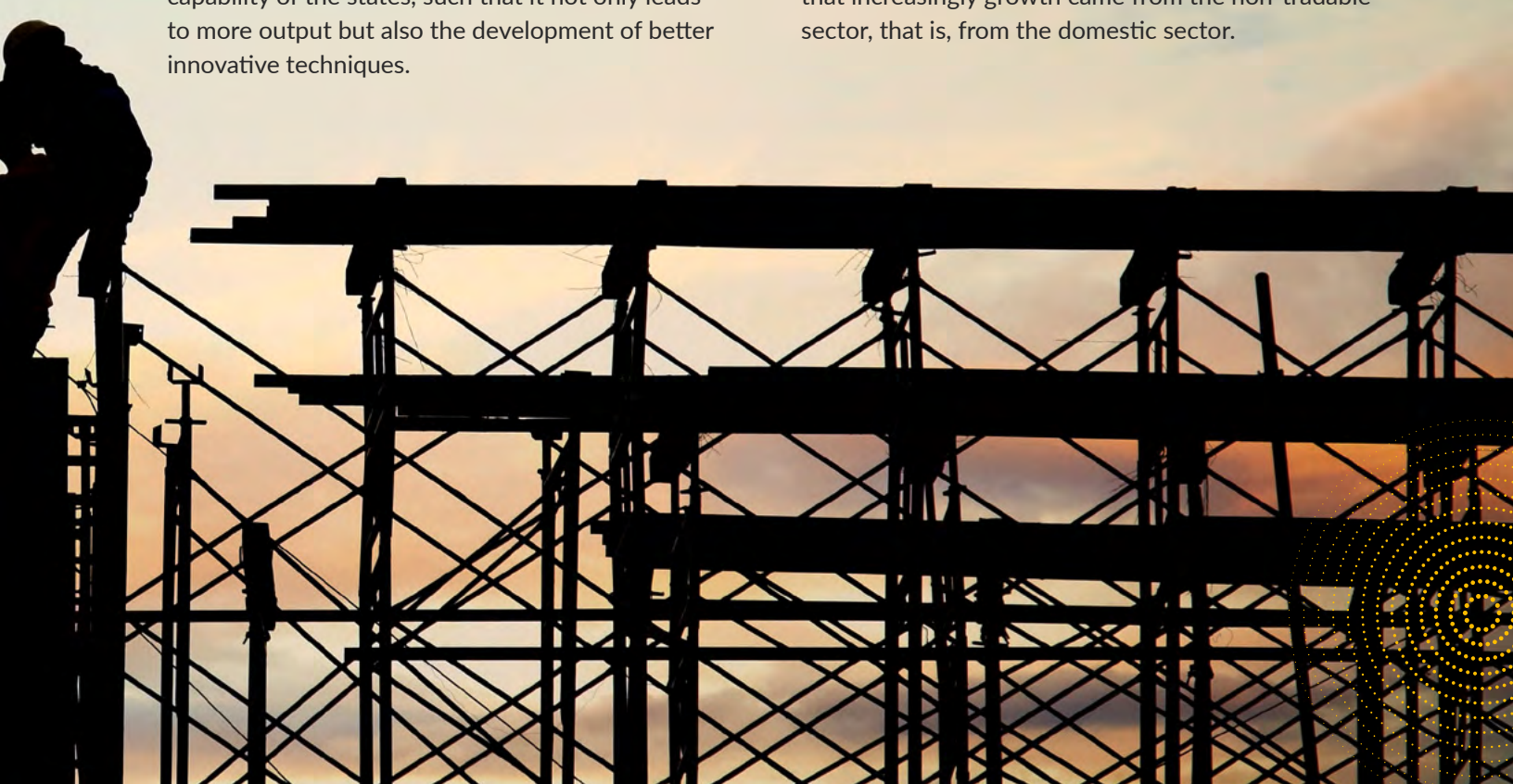
However, this shift has only been marginal with Chinese inputs being primarily used within the Indian sectors of pharmaceuticals, electronics, power, furniture, cars, apparel and other related products. The disruption in the supply chain could potentially lead to a shortage of consumer products, increased prices and decreased job opportunities⁴.

Nonetheless, The Hon'ble Prime Minister has sought to rectify this situation by exhorting Indians to become "Aatmanirbhar" or Self-reliant – one of the main components being to strengthen domestic demand and supply chains.

Additionally, with other market leaders and countries seeking to diversify beyond China, the Indian exports sector has the potential to become a viable alternative supplier to several major economies. To achieve this goal, it is important to strengthen the manufacturing capability of the states, such that it not only leads to more output but also the development of better innovative techniques.

A superior domestic capability would allow India to compete with its Asian peers, especially Vietnam, Bangladesh and Taiwan, who have been able to attract more investors through a better cost-competitiveness strategy. India has also not been able to move up the value chain since the domestically produced final products are mostly low value added thereby reducing the overall export competitiveness of the country vis a vis its peers. This is reflected in a decline of India's integration and value addition within global production chains.⁵

India's reduced level of integration within global value chains is especially worrying when juxtaposed with its current account deficit. The current account deficit measures the difference between the value of the goods and services a country imports and the value of its exports. The deficit widened to 2.1 per cent of GDP in the first quarter of 2019 from 1.8 per cent in the first quarter of 2018^{6,7}. The widening of the deficit signifies that increasingly growth came from the non-tradable sector, that is, from the domestic sector.



⁴ Singh, S. (2020, February 16). Coronavirus crisis: It's time for India Inc to create opportunities. Retrieved from <https://economictimes.indiatimes.com/news/economy/foreign-trade/coronavirus-crisis-its-time-for-india-inc-to-create-opportunities/articleshow/74153826.cms?from=mdr>

⁵ Kwatra, N. (2020, March 15). Coronavirus supply chain disruptions: is there a silver lining for India? Retrieved from <https://www.livemint.com/news/india/coronavirus-supply-chain-disruptions-is-there-a-silver-lining-for-india-11584086922001.html>

⁶ Ray, S. & Miglani, S. (2020). India's GVC integration: An analysis of upgrading efforts and facilitation of lead firms. ICRIER, Working Paper 386. Retrieved from http://icrier.org/pdf/Working_Paper_386.pdf

⁷ Nayak, G. (2019, June 28). CAD widens to 2.1 per cent of GDP, highest in six years. Retrieved from <https://economictimes.indiatimes.com/news/economy/indicators/fy19-cad-inches-up-to-2-1-but-more-than-halves-in-q4/articleshow/69992114.cms>

Furthermore, an in-depth analysis of India's growth drivers highlights that its economic growth has been primarily propelled by domestic demand. As the numbers suggest, the domestic demand constituted of 59.1 per cent of the Gross Domestic Product (GDP) during the period of 2017-18⁸. During the same period, exports stood at 19 per cent of the GDP, which was significantly lower than that of the contribution of domestic demand. While it is imperative to accelerate domestic demand to promote higher consumption and investment, it should also be recognised that an economy with only \$2,000 per capita income will not be able to expand simply based on domestic demand.

Moreover, too much focus on domestic demand might strengthen imports faster than exports, which could potentially lead to a widening deficit. Consequently, it is

essential for India to not merely rely on domestic demand, but also boost its export potential in the meanwhile to enhance its growth.

Hence, the advancement of Indian exports becomes crucial to reduce the current account deficit and attract investments within the domestic manufacturing and services sectors. The benefits of focusing on increasing exports are multi-fold with the most critical being, its contribution to the Gross Domestic Product (GDP). Even during the severe global recession of 2008, India's exports contributed to 24.1% of its GDP. As globalisation peaked, India's exports grew at an unprecedented rate, contributing between 21 and 25 per cent to the Gross Domestic Product (GDP). Even with the global growth experiencing sluggishness, India's exports grew at around 19.74 per cent as of 2018⁹.

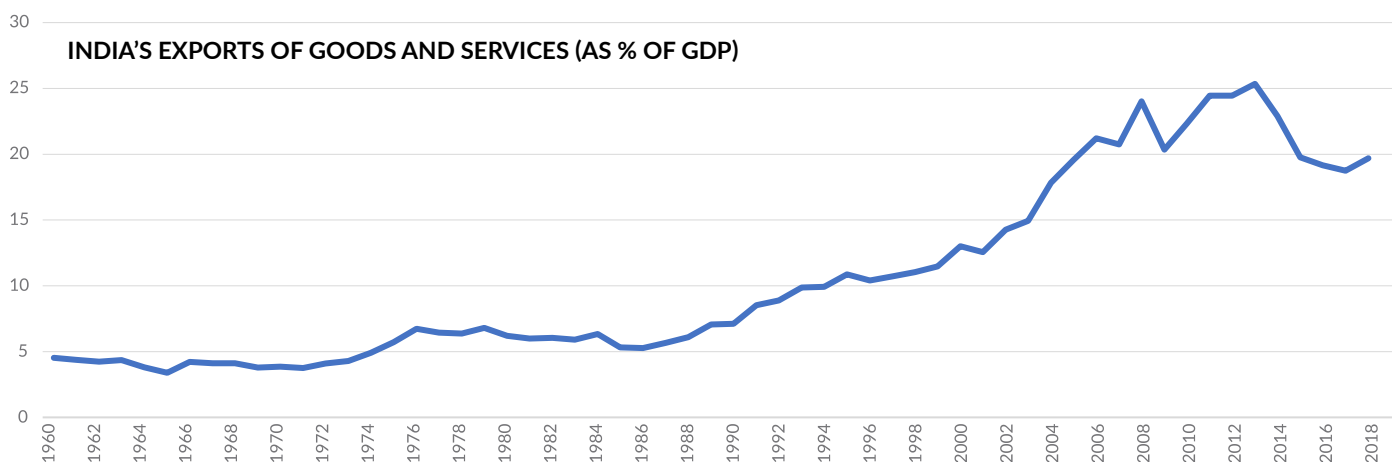


Figure A : India's exports of goods and services (as a percentage of GDP) – 1988 – 2018¹⁰.

In fact, the positive outcome of exports is not merely restricted to its contribution to the GDP. Among other advantages of increasing exports are a rise in wages for high-skilled workers as well as an increase in formality levels within the country, as highlighted by a World Bank–ILO collaborative study. Furthermore, exports have the potential to bring in an increased number of job opportunities by opening new markets and entrepreneurial prospects¹¹. This is notable, since most of the employment generation within the manufacturing sector, post-1991 has been concentrated within export-oriented industries such as garments and textiles¹². Hence, improving exports could also be a potential

solution towards minimising job-less economic growth within India.

Realizing this, the Indian government sought to improve exports through trade policies and reforms—such as the Goods and Services Tax—and by incentive creation—through the Merchandise Exports Scheme, Service Exports from India Scheme and Trade Infrastructure for Export Scheme. While the Central government has sought to advance exports through several policy mechanisms, the sub-national governments have an equally important role in boosting the overall export ecosystem in the country.

⁸ Country Profiles | United Nations Conference on Trade and Development

^{9,10} World Bank. (2019). Exports of goods and services (% of GDP)- India. Retrieved from <https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=IN>

¹¹ Artuc, E, Lopez, A, Gladys, C, Robertson, R, & Samaan, D. (2019). Exports to Jobs : Boosting the Gains from Trade in South Asia (English). South Asia Development Forum. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/255821551109391137/Exports-to-Jobs-Boosting-the-Gains-from-Trade-in-South-Asia>

¹² Thomas, J.J. (2013). Explaining the “jobless” growth in Indian manufacturing. *Journal of the Asia Pacific Economy*, 18(4), 673-692. <https://doi.org/10.1080/13547860.2013.827462>

Focus on Indian States

As India seeks to improve its share of global trade, states become relevant stakeholders by forming the manufacturing backbone of the country. Furthermore, as highlighted in the Economic Survey 2017-18, improving the export competitiveness of states could also improve their wealth and standard of living, thereby minimising regional disparity.

As of present, 70 per cent of India's export has been dominated by five states – Maharashtra, Gujarat, Karnataka, Tamil Nadu and Telangana¹³.

The Survey established that the states that trade the most are the most competitive and run the largest trade surpluses. It also mentioned that states which engage with the world markets as well as with the other states within the country are richer¹⁴. The findings ascertained the conventional wisdom: a state's GSDP per capita is highly correlated with its export share in GSDP. This implies that the participation of the states in the global economy, therefore, becomes vitally important for the economic growth and the standard of living for the states. This would contribute to the overall economic growth of the country

An increasing number of Indian states have made sincere attempts towards creating an enabling framework that would facilitate and promote exports. This happened particularly after India made notable progress in terms of expansion of exports as well as the geographic outreach after the economic reforms. Hence, some of their best practices could be replicated by the states which have not been able to boost their export ecosystem yet. While some states have done exceptionally well, there needs to be a more focused analysis of how other states could develop their export markets. This is because a one-size-fit-all policy will not work for all states owing to their different inherent strengths and competitive advantages. Improving the competitiveness of exports cannot be wholly driven from the top level. It requires active participation from the state level authorities and identification of export focus areas based on the state's core growth drivers.

The Hon'ble Prime Minister, Narendra Modi, in his address

to the nation (2019), had stressed on the need to boost exports at a disaggregated level. He suggested that each district of India can be made into an export hub, considering that locally made products hold huge potential.

Strengthening export competitiveness at a disaggregated level will thus play a crucial role in boosting the overall export ecosystem in the country.

Lately, there has been a concerted effort from the Central Government to encourage the subnational actors to 'think locally and act globally'. This has also been reflected in Honourable Prime Minister Modi's statement on "Vocal for Local" to develop India to become a key player in the global supply chain. Of course, it is important to take into account that the states across India are not only at different stages of development, but they also differ in terms of their geographical reach as well as production capacities. Hence, export preparedness and export competitiveness would vary widely among the states.

Considering this, the Indian states need to be assessed on various parameters required for an export-led growth strategy, in order to account the variations in performance. This will enable them to harness their export potential, productivity and improve their manufacturing base so that the overall economy of the country can benefit from the same.

Under this background, this report is an attempt to initiate competition among states such that they carry out measures to improve their export markets in the long-term. This report brings about the Export Preparedness Index which aims to rank states based on their export readiness through an analysis of their export promotion policies, regulatory framework, available infrastructure, access to finance and output.

This would allow the states to track their performances over time and would enable them to track their export drivers over time. The chapters ahead give a glimpse as to why there is a need to focus on exports, how the Indian states fare in terms of their ability to export, and the road ahead.

¹³ Ministry of Finance. (2018). Economic Survey 2017-18. Retrieved from <http://mofapp.nic.in:8080/economicsurvey/#>

¹⁴ The survey analysed twenty of the major states, and their export share in their Gross Domestic State Product (GSDP).

01

The Importance of Exports



Exports are one of the engines of economic growth¹⁵. In most cases, it has been observed that high and sustained economic growth is preceded by shifts from traditional import substitution to more export-oriented and outward-looking policies, resulting in export growth rates reaching 20 per cent per year (or more) over extended periods of time¹⁶.

For instance, it was the Japanese economy that effectively followed the export-led strategy, - in the 1960s, their merchandise exports grew at an average annual rate of 16.9 per cent in the 1960s and in the 1970s, 21 per cent (World Bank estimates). A similar economic trajectory was adopted by the East Asian economies like South Korea and Singapore in the 1980s as well as the 1990s. These economies have, in fact, recorded the most impressive economic performances over the past few decades.

The impressive economic performances of the East Asian countries led economists to emphasise on the vital role played by exports driving growth. The learnings that emerged from the export-led hypothesis are:¹⁷

- Exporters must engage with competitive world markets so that they become more competitive and are able to innovate new technology more rapidly.
- The export-led growth trajectory would also fuel domestic competition, in turn encouraging even non-exporters to try to become more competitive. They would be driven to adopt or innovate new technology more rapidly, leading to faster productivity gains throughout the economy and faster economic growth.
- Market access to larger world markets would allow successful exporters to increase their output and employment more swiftly.

These parameters are pertinent, especially in the context of developing nations. This is because an export-led growth strategy, through various governmental and economic policies, aims to increase the capability of the producers who are then able to compete in the world market, utilise advanced technology, as well as provide foreign exchange needed to finance imports. For instance, among developing nations, Vietnam has been able to successfully follow the export-led policy and attract foreign direct investment.

This strategy allowed led to capital intensity, productivity growth, improved prosperity and dramatically reduced poverty levels in Vietnam.¹⁸

However, the financial crisis of 1997 in the East Asian economies, and the recent global economic slowdown have led to some scepticism regarding exports playing a role in sustaining economic growth. Although the export-oriented approach is vital in terms of achieving growth, but it is incomplete and does not necessarily provide with clear guidance to avoid policies that could be potentially harmful over time. This approach requires some necessary factors to enable any economy to be competitive. Some of these factors include a well-defined export policy, a conducive business environment etc.

Nonetheless, the relevance of export-led growth is far from over. Despite the scepticism, it has been found that export-led growth has provided countries with short-term effectiveness and relative ease of export-oriented strategies. In fact, export-drives can push growth rates up, at least for a short while.

However, in consideration of the changing times, traditional export-led growth policy orientations need to move beyond and incorporate competitiveness within their strategies.

Competitiveness, in this context, essentially implies productivity¹⁹. Productivity, here, is viewed as the critical driver of long-term sustainable prosperity, which is the aim of any economic policy. Exports have a dual role in this context: acting as enablers of competitiveness. They also act as a signaling tool to represent the signs of underlying competitiveness.

Not only this, exports are also contributes to growing innovation. In a sense, the more a country exports, the more it is exposed to foreign competition and ideas which in turn will improve its capabilities to innovate further.²⁰

Although import substitution provides a protectionist regime, export policies provide a potential of competition, innovation and future growth possibilities.

¹⁵ Bhagwati, J, "The "Miracle that did Happen: Understanding East Asia in Comparative Perspective", 2000, MIT Press

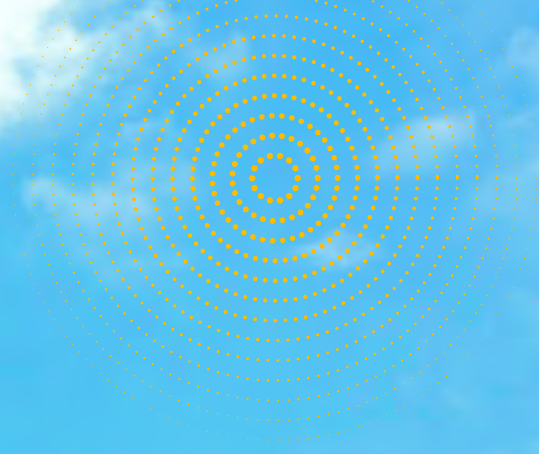
¹⁶ Kokko, A., Kravtsova, V. (2012). Regional characteristics and effects of inward FDI: The case of Ukraine. *Organizations and Markets in Emerging Economies*, 3(2(6)): 91-118

¹⁷ Bhagwati J., "Export-Promoting Trade Strategy: Issues and Evidence", 1988, The World Bank Research Observer

¹⁸ Kettels, C, "Export Competitiveness - Reversing the Logic", 2010, Harvard Business Review

¹⁹ Porter, M. E. (1998). *On Competition*. Boston: Harvard Business School Press.

²⁰ Kettels, C, "Export Competitiveness - Reversing the Logic", 2010, Harvard Business Review



02

India's Trends in the Global Market



Export Trends in Pre-Reform Period

In the post-independence era, Central Planning could not emphasize on promoting Indian exports, which was evident from the First and Second Five Year Plans where exports were largely neglected. This decision was justified on the ground that demand for Indian exports was inelastic; due to limited production capacities and overvalued currency exchange rate with other economies.²¹ During 1970s India's export share picked up vis-à-vis global levels. The buoyancy experienced by world demand in the same period was complemented by favourable domestic policies such as the depreciation of the real effective exchange rate (REER), the establishment of export subsidy and a comparatively

liberal import policy for export production.²²

However, the same buoyancy could not be carried forward into the 1980s as world exports were severely affected by the second oil price hike. The global export rate turned negative and adversely affected India's export growth rate as well which came down from 17.97 during 1970-79 to 2.39 during 1980-85.²³ However India made a strong recovery in the second half of the 1980s by further depreciating REER and increasing export subsidies. This was supported by industrial deregulation and liberalisation of capital goods imports.

Export Trends in the Post-Reform Period

With the liberalisation of the Indian economy in 1991, it was hoped that strategic policy would boost export growth rates through efficient resource distribution, better specialisation, dissemination of international

knowledge and heightened competition²⁴. The immediate impact of economic reforms gave Indian exports a massive lift with several commodity groups registering double-digit growth

Commodity Groups	1993-97
Food and live animals	14.42
Beverages and tobacco	23.44
Crude materials, inedible, except fuels	12.56
Mineral fuels, lubricants and related materials	-4.14
Animal and vegetable oils and fats	14.49
Chemicals	20.41
Manufactured goods classified chiefly by material	9.7
Machinery and transport equipment	17.1
Miscellaneous manufactured articles	9.82
Commodities and transactions not classified according to kind	17.58

Table A: India's Average Merchandise Export Growth Rates for Selected Commodity Groups
(Source: COMTRADE-WITS, Veeramani, 2007)

²¹ Veeramani, C. (2007). Sources of India's export growth in pre-and post-reform periods. *Economic and Political Weekly*, 2419-2427.

²² Joshi, V and M D Little. (1994). *India: Macroeconomics and Politics* al Economy, 1964-1991, World Bank and Oxford University Press, Washington DC and New Delhi

²³ Merchandise Export Data (1950-2020), WTO database.

²⁴ See (1)

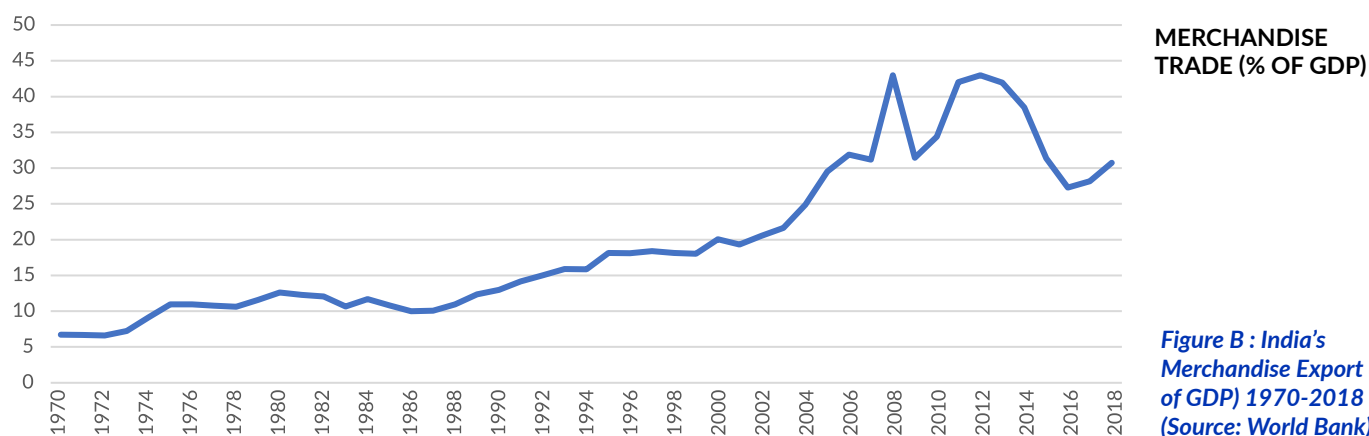
In the latter stages of the 1990s, merchandise exports took a hit due to the East-Asian crisis and the previously tried depreciation of REER could not prevent the decline of exports. Indian markets were closely associated with the East-Asian markets and the fall in demand from the latter's side, affected Indian exports.²⁵

Export growth started recovering around 2001-02. From 2002 through 2005, India recorded a remarkable growth as merchandise exports displayed a high growth rate of about 25 per cent per annum. This success was attributed to the recovering global economy post-East Asian crisis and also India completely opening its market in 2001. The latter meant increased inclusion of imported goods as a part of the production process. This eventually translated into improved export values.

The above momentum was strong enough and lasted for the next few years. India's economy was growing close to 9% between 2005-08; thus, boosting global exports as well. However financial crisis of 2008-09 brought this momentum to a halt. Export growth was brought down to a single-digit of 5.4%. The financial crisis validated the fact that there is a high-income demand elasticity for Indian exports which makes it extremely sensitive to GDP movements.²⁶

In the post-crisis period, it was found that a mixture of key factors affected export growth. Stagnant real rural wage growth, limited investment in infrastructure and a stronger rupee combined with falling global demand constrained Indian exports.²⁷

Present-Day Trends



India, when analysed from a longitudinal perspective, has steadily managed to increase its overall share in global merchandise exports. From 0.6% in 1993 to 0.8% in 2003 to 1.7% in 2018; India possesses the immense potential to climb the manufacturing export ladder in the future.^{28,29}

However, the trajectory observed for Indian merchandise exports in the last 5 years has been relatively inconsistent when compared to the last few decades. Since late 2014-15, India's merchandise export growth has been falling continuously, reflecting the slowdown of world growth and trade.³⁰

Years	Export (Value in US\$Billion)	Change
2013	336.61	-
2014	317.54	-5.66432
2015	264.38	-16.7421
2016	260.33	-1.53343
2017	294.36	13.07494
2018	322.29	9.487244

Table B : India's merchandise export value 2013-2018 (Source: WITS)

²⁵ Dua, P., & Sinha, A. (2007). East Asian crisis and currency pressure: The case of India (No. 158).

²⁶ Kumar, R. & Alex, D. (2009). The Great Recession and India's trade collapse. VOX CEPR Policy Portal.

²⁷ Kumar, R. & Krishna, G. (2015). Indian Exports Loss of Global Competitiveness. EPW august 22, 2015 vol I no 34

²⁸ WTO data, 2017

²⁹ PIB. (2019). Indian Global Trade Share.

³⁰ Prasad, H.A.C et al. (2017). Reviving and Accelerating India's Exports: Policy Issues and Suggestions. Department of Economic Affairs; Ministry of Finance-Government of India

A combination of factors adversely affected India's merchandise exports during of 2014-16. Weaker global trade, combined with faltering major economies hurt India's exports as demand fell that period. Problems from India's side such as restricted Rupee overvaluation as compared to other developing economies didn't help in attracting foreign demand as Indian exports would be relatively more expensive for the importers³¹. Also, CRISIL pointed out that lack of export diversification in terms of destinations also negatively affected the overall exports. Around 50% of total goods were exported to Asia which was more than the combined share of Europe and the US at 31.8%³². Export diversification often plays a key role in stabilizing any external shocks thus ensuring consistent levels of merchandise exports for a nation.

It was only from late 2016-17, that Indian merchandise exports picked up the pace and finally showed positive growth.

And in 2019-20, India achieved a record high of USD 330.07 billion of merchandise exports, registering positive growth of 8.75%.³³

Missed Opportunities

Weakened global trade during 2014-2016, severely affected the exporting capacities of some of the top contributing nations such as China. China is the biggest contributor to merchandise exports³⁵ and thus its decline in exports during the same period created a window of opportunities for other nations to take over.

China's poor performance could be attributed to a number of factors. The country is known to import raw materials

This consistent positive growth has been a result of key measures adopted by the government post-2016 for the promotion of merchandise exports³⁴.

- A mid-term review of the Foreign Trade Policy 2015-20 was conducted in 2017 to assess the policy interventions required to boost the export levels. For labour-intensive/ MSME sectors, incentive rates were revised by 2% and also interest equalization at 3% (both pre and post-shipment) was introduced.
- A new Logistics Division was established in the Department of Commerce to organize the integrated development of the logistics sector.
- Trade Infrastructure for Export Scheme (TIES) was launched in April 2017 to address the existing export infrastructure gaps.
- Other sector-specific policies such as Agriculture Export Policy were rolled out to target export contribution at a micro-level.
- Transport and Marketing Assistance (TMA) scheme was also introduced for the export of specified agriculture products to mitigate the disadvantage of the higher cost of transportation.

and other intermediate goods from other developing nations in Asia. Thus, soft trade performance observed across emerging economies in Asia hurt the chain of the production and consequently translated into poor exports.³⁶ Inconsistent and unpredictable valuation of the Yuan subject to global market also hurt the prospects of Chinese exports³⁷. Finally, falling global demand and the declining prices of bulk commodities were also cited as another key reason for falling exports during 2014-2016.³⁸

³¹ Nayyar, D. (2016). Great fall of India's exports. liveMint 22 Jan 2016.

³² Hindustan Times. (2015). Exports hit India's growth story in 2015, fall to be steeper in 2016.

³³ Press Information Bureau. (2019). Merchandise Export.

³⁴ Rajya Sabha Unstarred Question No. 54. (2019). Growth Rate Of Exports.

³⁵ World Bank. (2019). Merchandise exports (current US\$). data.worldbank.org/indicator/TX.VAL.MRCH.CD.WT

³⁶ Guardian. (2016). Chinese economy: exports fall by 2% and imports by 11% in April. www.theguardian.com/world/2016/may/08/chinese-economy-exports-fall-by-2-and-imports-by-11-in-april

³⁷ CNBC. (2017). China exports slump more than expected in December, imports growth cools. www.cnbc.com/2017/01/12/china-2016-exports-fall-while-imports-rise-slightly.html

CHINA'S EXPORTS TO WORLD

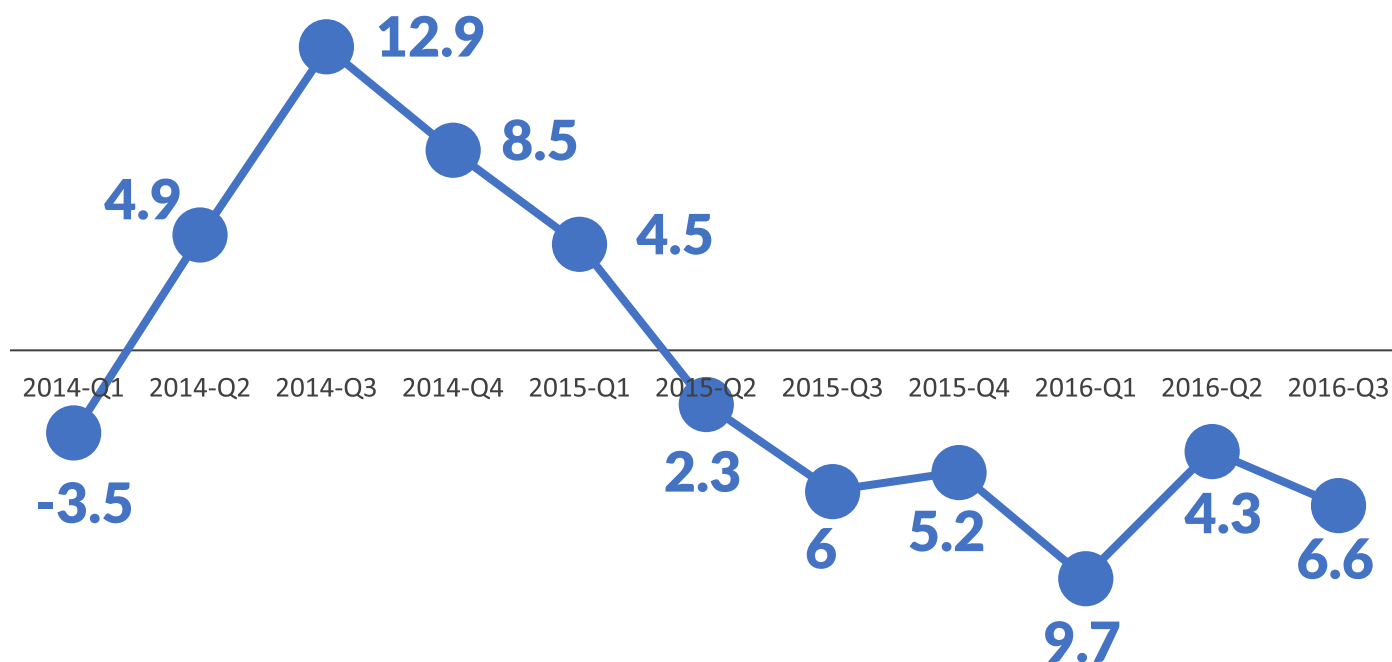


Figure C : China's Growth Rate of Exports to the World (Source: World Trade Atlas (WTA) Database; Prasad et al. 2017)

China has also rapidly moved up the Global Value Chains (GVC) in the same period. According to the Global Value Chain Development Report 2017; "GVCs break up the production process so different steps can be carried out in different countries." Thus, China is going through a transition where the production process shifted away from labour-intensive manufacturing towards automated routes. Plus, labour wages have been increasing rapidly. Thus, its export basket for both products and destinations have seen some drastic changes.³⁸

During this vital period, there was an opening for other developing economies to enter and subsume those lines of production from where China had been either weakened or its influence toned down.

Bangladesh and Vietnam successfully managed to integrate the above GVCs, which were previously

dominated by China. Vietnam introduced few policy initiatives such as opening up new trading avenues for producers, establishing a favourable investment climate, entering into mega-regional and bilateral agreements with the US and Europe.

All these factors combined with the presence of a large pool of low-cost labour, Vietnam positioned itself as an attractive destination for investment by MNCs. As a result, Vietnam has emerged as an Asian manufacturing powerhouse thanks to its specialization in assembly function in sectors such as automotive, electronics, agribusiness, textiles and apparels. It also cemented itself as the second-largest global smartphone exporter. Similarly, Bangladesh is now the third-largest exporter of apparels and footwear after China and Vietnam on the back of low-cost labour

³⁸ China Daily. (2016). China sees total export and import volume fall 7% in 2015. www.chinadaily.com.cn/business/2016-01/13/content_23064441.htm

MERCHANDISE EXPORTS (USD BILLION) INDIA VS VIETNAM

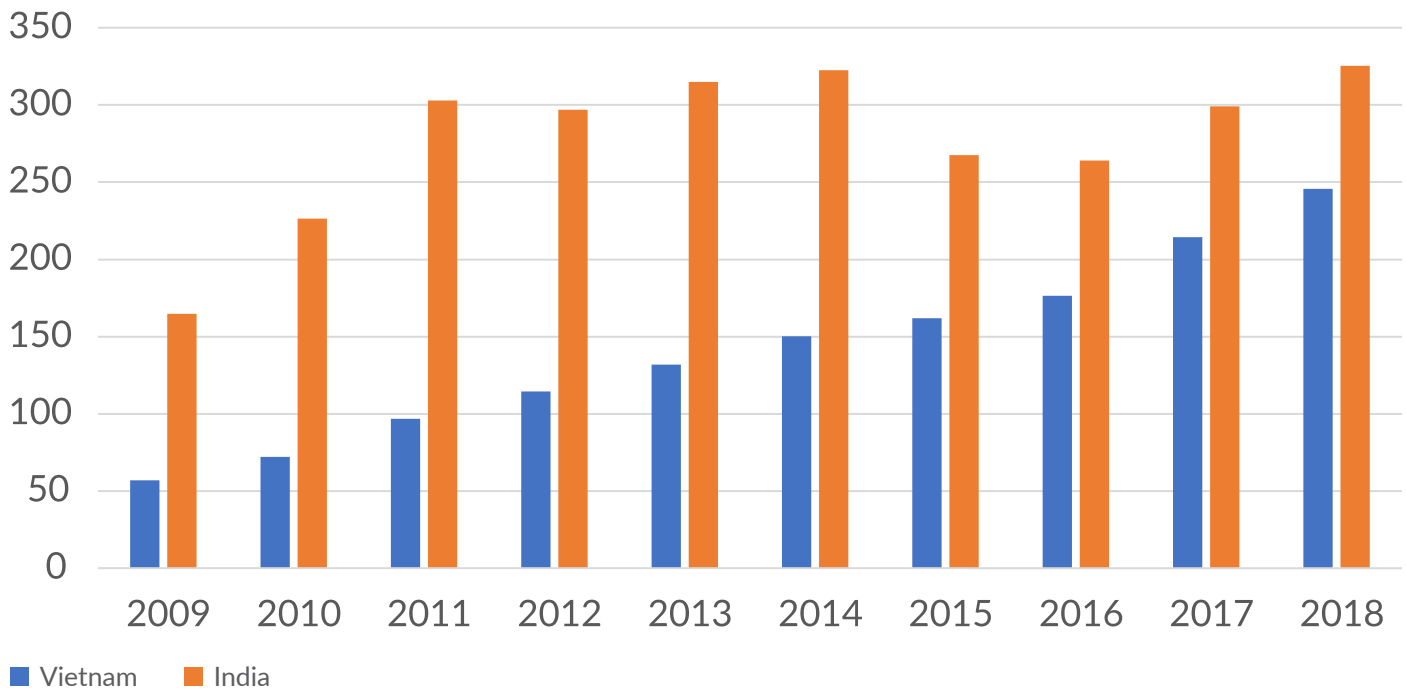


Figure D : A comparison of Merchandise Exports between India and Vietnam
(Source: World Bank Data 2009-2018)

Vietnam's rise as an exporting nation has been meteoric, to say the least. This is evident from the diminishing gap between the merchandise exports between India and Vietnam. While, the fall in exports during 2014-2016 turned out to be detrimental for India, on the other hand Vietnam through the aforementioned reforms managed to close the gap.

India missed an opportunity to gain an advantage in those areas where China faltered. India did bring in reforms in late 2017 to ensure that the export sector remained competitive and attracts potential investors. However, Bangladesh and Vietnam had made the most of the situation before India and enhanced their export competitiveness by targeting their strengths. These strengths include cheaper labour supply and emphasizing on core sectors that could produce large-scale exporting products at competitive rates³⁹. While India already possesses these strengths, there is an urgent need to

efficiently utilize them and move towards the next step, i.e. product specialization, which would further boost the export levels.

Nevertheless, new avenues have emerged for India to boost its overall exports

The recent trade wars between the US and China was one such instance that benefited Indian exports. According to a UN report, India grew about \$755 million in additional exports, largely from chemicals, metals and ore, to the US in the first half of 2019 due to the latter's trade diversion from China⁴⁰. India must seize these limited opportunities to expand its export footprint. And of the most key opportunities is to focus and improve exports at a more disaggregated level, i.e. to focus on state-level contribution to overall exports.

³⁹ Bloomberg. (2020). Countries Can Still Get Rich From Manufacturing- Keep an eye on Vietnam and Bangladesh.

⁴⁰ Economic Times. (2019). India gained \$755 million in additional exports to US due to US-China trade war: UNCTAD.



03

Global Approaches to Measure Trade Indices

The most important development that the global economic system has gone through in the last few decades is the integration of national economies. It has resulted in remarkable growth in trade which in turn has facilitated efficient use of resources. The biggest virtue of unconstrained trade is that it allows individuals and

institutions to successfully exchange ideas, goods and services which further spurs innovation. The influence of trade has been so strong in the last few decades that today, about one-fourth of the global production is exported⁴¹.

EXPORT VOLUME IN BILLION U.S. DOLLARS (1985-2018)

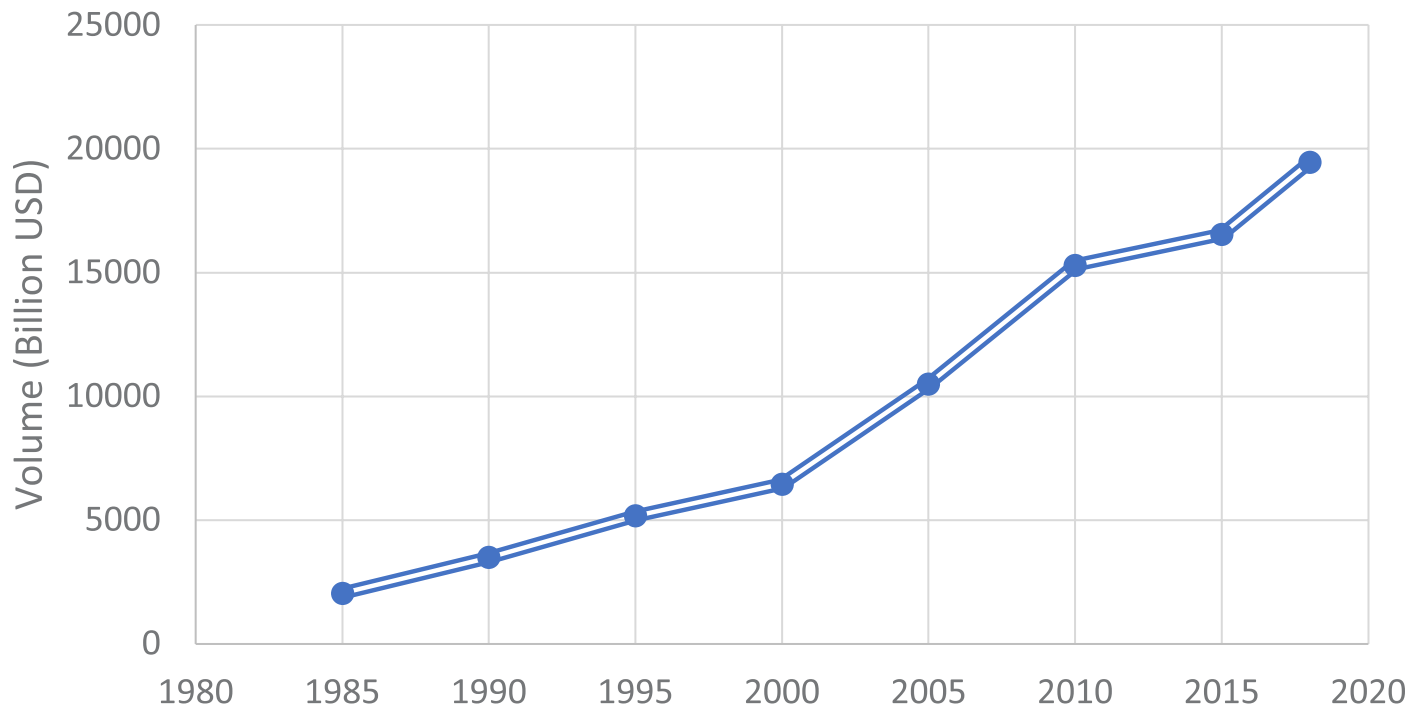


Figure E: Global Export Volume in USD Billion (Source: World Bank, OECD Data)

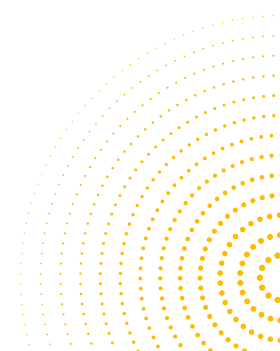
With the growing influence of exports, it was deemed essential that global trade must be measured to assess nation-wide contribution. This has been carried out through data-driven indices that use a relevant set of indicators to analyse the trading capacity of nations and policy recommendations that could be used to further respective trade volumes.

Multilateral organizations such as the World Bank, World Economic Forum and OECD have released some key indices that have given strong analytical findings. The main objective of such indices is to create a comprehensive source of information on publicly available cross-country databases which would guide policymakers across the world.

⁴¹ Ospina, E. & Beltekian, D. (2018). 'Trade and Globalization'. Our World in Data.

Index	Logistics Performance Index (LPI)	Trading Across Borders -Doing Business	Trade Facilitation Index	Enabling Trade Index
Publishing Agency	World Bank	World Bank	OECD	World Economic Forum
What it measures	Logistics Friendliness of countries	Time and cost of the logistical process of countries	Assessment of trade facilitation policies, areas for action and impact of reforms	Factors, policies and services that facilitate trade across borders and to destination.
India's Rank	44/160 (2018)	68/190 (2019)	1.52/2 (2018)	102/136 (As per 2016)
Best performing states/ countries	Top 5: Germany, Sweden, Belgium, Austria, Japan	Austria, Belgium, Denmark, France, Hungary, Italy, Netherlands, Spain all tied for Rank 1	1.86/2- Netherlands	Top 5: Singapore, Netherlands, Hong Kong, Luxembourg, Sweden

Table C: Global Indices, India's performance and top performers





04

India's Position



All these indices suggest that while India may not be a top exporting nation, it has been improving its position constantly. India’s performance in OECD’s Trade Facilitation Index has improved from 2015 to 2017⁴² which reflects the constant strive made by the Indian Government to facilitate smooth trade of goods and services across global borders.

The above improvement can be corroborated with successful policy interventions taken in the last few years. The Foreign Trade Policy (2015-2020) was introduced to improve the share of India’s foreign trade. It established a strong ground to provide rewards to exporters to offset infrastructural inefficiencies and associated costs.⁴³ Similarly, according to the Ease of Doing Business 2018/19; India has made major improvements in “Trading Across Borders”. This was achieved by integrating trade stakeholders under a single electronic platform and by enhancing the electronic submission of documents⁴⁴.

COUNTRY TRENDS 2015 - 17

Based on components covered in both years

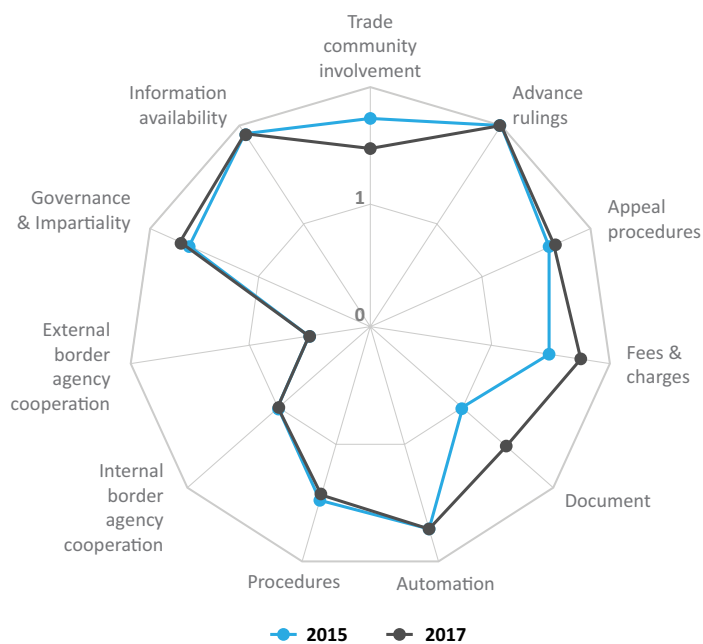


Figure F: India's performance in OECD's Trade Facilitation Index 2015-2017.

TRADING ACROSS BORDERS SCORES: INDIA

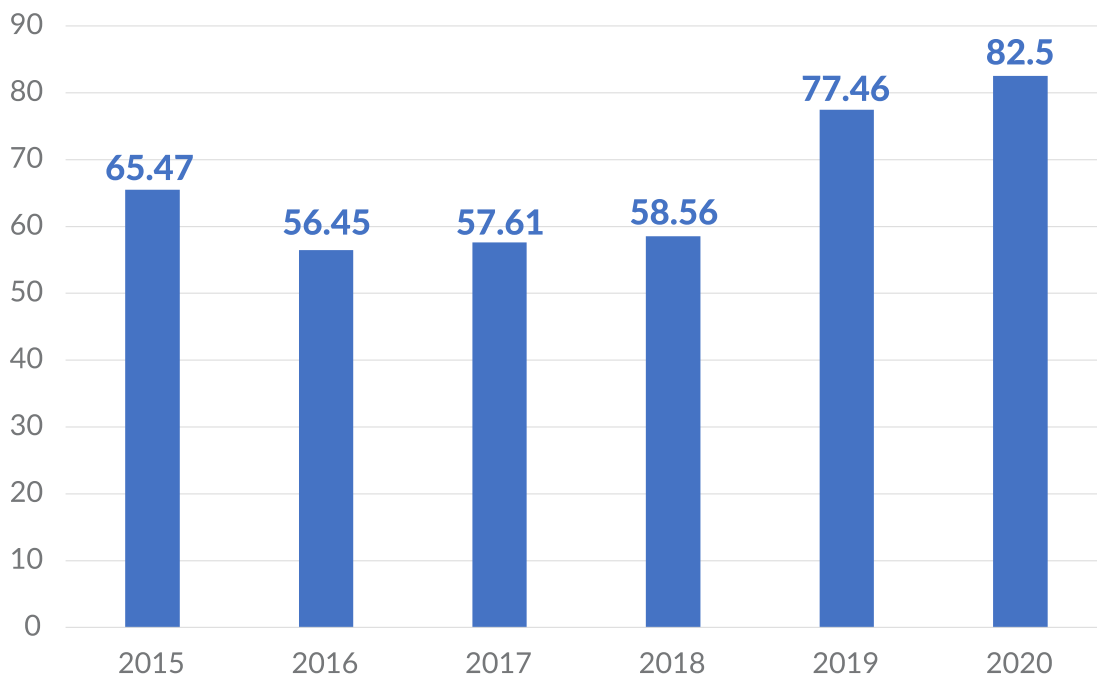


Figure G: India's performance in Trading across Borders 2015-2020 (Source: World Bank Data 2015-2020)

⁴² India Summary 2018. <https://www.oecd.org/trade/topics/trade-facilitation/>

⁴³ Directorate General of Foreign Trade. Foreign Trade Policy (2015-2020). Chapter 3- Exports from India Schemes.

⁴⁴ World Bank Group. 2020. Doing Business 2020; Comparing Business Regulation in 190 Economies.

However, there are areas where India, can certainly improve and make itself an export-friendly nation. One such area has been highlighted under the Logistics Performance Index; India has not scored well in the “infrastructure pillar” that analyses the quality of trade and transport-related infrastructure (e.g. rails, ports and information technology)⁴⁵.

Scrutinizing and addressing such issues at a subnational level would provide better introspection of local export policies and how they cumulatively impact the National trade volumes. Thus, the Export Preparedness Index would guide our policymakers in pinpointing the underlying gaps present in the export policies at a disaggregated level.

⁴⁵ ipi.worldbank.org/international/scorecard/line/254/C/IND/2018#chartarea



05

Methodology

The Export Preparedness Index (EPI) aims to assess the readiness of the states, in terms of their export potential and their performance. The primary goals of the Index are to inculcate competition among all states in India in order to:

- bring favorable export promotion policies,
- ease regulatory framework to prompt subnational promotion of exports
- create necessary infrastructure for exports, and
- help in identifying strategic recommendations for improving export competitiveness.

Establishing Framework for EPI

The framework has been created post extensive discussions with officials from Central Ministries, State Departments as well as experts in the field of trade. The consensus was to include some of the key parameters such as business environment, infrastructure, transport connectivity, access to finance, export infrastructure and trade support. It is hoped that this will give a direction to the states and the Union Territories to work on their policies as well as infrastructure to create an enabling environment for exports.

Structure

As a result, the new framework was introduced to include all the broader aspects pertaining to export promotion. The new framework also ensured that more emphasis is laid on the Business Ecosystem which is crucial to assess

Furthermore, the Index attempts to provide with an extensive framework for the continual assessment of export readiness of Indian States and the Union Territories and intends to serve the following purposes:

- Ranking of states and UTs based on their index score
- Examining export preparedness and performance of Indian States
- Identification of challenges and opportunities
- Enhancing effectiveness of government policies

the growth of local businesses that could add to the export basket of a particular state.

Furthermore, the framework of the index was refined by incorporating essential feedback from key organizations such as EXIM Bank, Indian Institute of Foreign Trade (IIFT) and DGCIS. This helped in retention and repositioning of key indicators across various pillars and sub-pillars to accurately assess the preparedness of Indian States with respect to export promotion.

The final structure of Export Preparedness Index includes four Pillars and eleven Sub-pillars⁴⁶ which will enable precise and fair assessment of all the Indian States and Union Territories. The rationale behind the selection of each of the four pillars are listed as below:

⁴⁶ List of Indicators under each sub-pillar available in the Appendix section.

- 1. Policy:** A comprehensive trade policy provides a strategic direction for exports and imports. Primarily, this pillar has been incorporated to evaluate whether a state has introduced enabling policy measures to steer export-led growth. Further, it looks into dimensions that will shed light on the exact measures and policy mechanisms that states have adopted to enable exporters to be competitive.
- 2. Business Ecosystem:** An efficient business ecosystem can help states attract investments and create an enabling infrastructure for individuals to initiate start-ups. This particular pillar sheds light on the core infrastructure facilities, and how states fare in terms of creating such an ecosystem. Availability of such essential facilitating factors enable production units to enhance their production capacities and foster future growth of their existing exporting capacities. The pillar manages to cover multidimensional aspects
- 3. Export Ecosystem:** This pillar aims to assess the business environment, which is specific to exports. An enabling export ecosystem can support different firms in all the states and Union Territories to increase productivity and boost competition. This pillar takes into consideration indicators that underline the research and development infrastructure, and the trade support available to the businesses in the states.
- 4. Export Performance:** This pillar examines the export performance of states and Union Territories to identify focus areas and track improvements. This pillar focuses on two sub-pillars: Growth of Exports and Export Diversification

Weightage

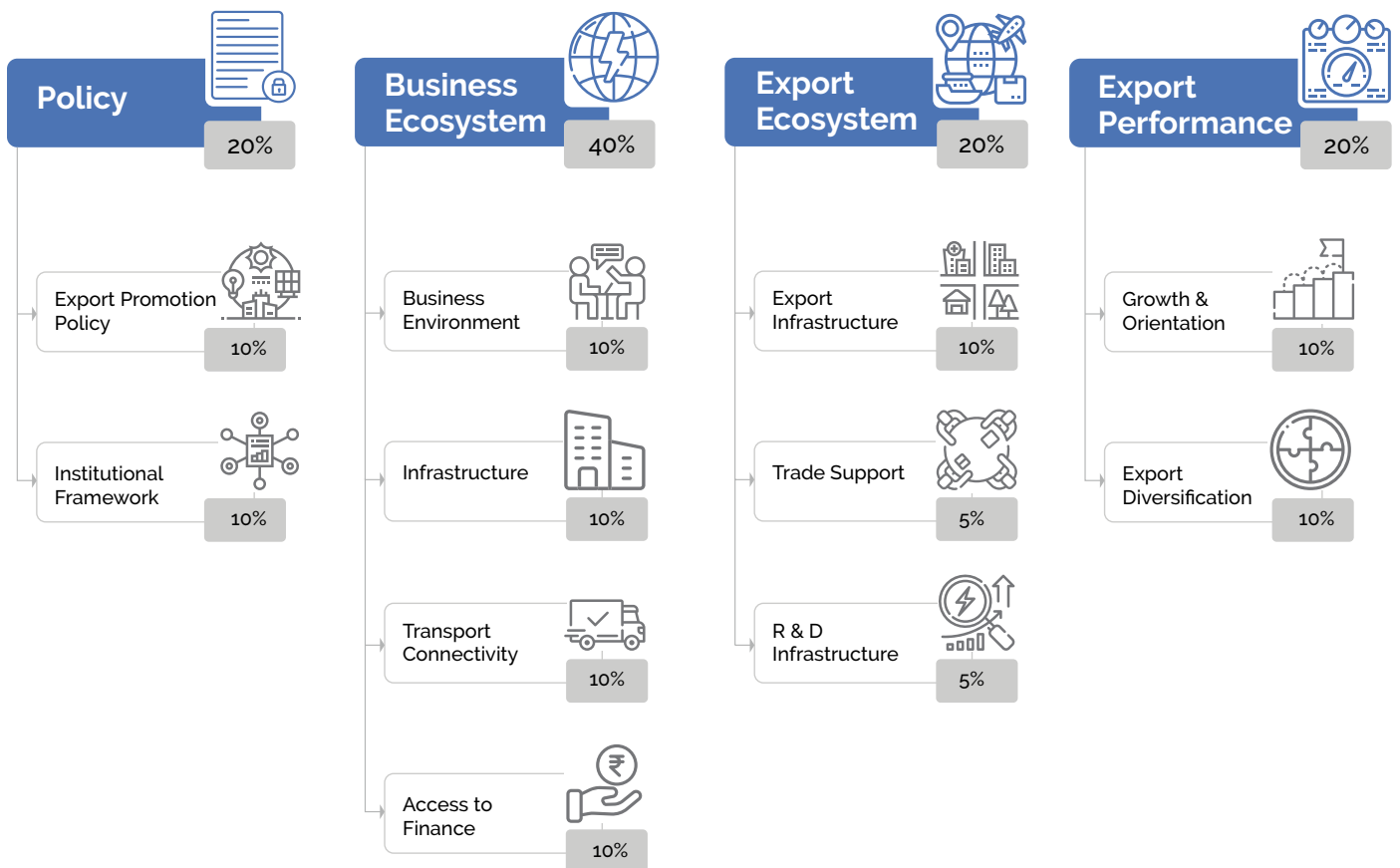


Figure H: Weightage structures of the pillars and sub-pillars

The sub-pillars have been assigned carefully to group relevant indicators to assess all the dimensions related to exports. After due consideration and detailed deliberation with DGCIS, EXIM Bank and State Representatives, weightages were assigned to each Pillar and Sub-pillar. Business Ecosystem has been allocated the highest weightage out of all the pillars. This pillar involves the basic necessary criteria, required for any thriving production unit with a strong exporting capacity. It also includes 17 distinct and important indicators that are vital to assess any business environment.

Export performance is the only output-based pillar and examines the reach of export footprint for each State and Union Territory. The other three pillar have a major role in influencing the final scores for this pillar and as a result have been allocated 20% weightage. However, given the dynamic nature of India's economic progress and subject

State Categorization

For a country as vast and as diverse as India is, the states had to be categorized in accordance to a host of factors: their sizes and most importantly their geographical outreach. There are two steps that have been taken to classify the states. The first step has been to identify them according to their sizes. The size of Uttar Pradesh,

to new developments regarding export promotion at the sub-national levels; the weightages could see modifications in the coming few years.

Data Limitations and Constraints

Creating a framework and computing scores for a sub-national level index requires extensive list of carefully picked indicators. However, there were certain constraints that were faced during the preparation of index due to paucity of data. One of the major constraints was the absence of service export across major trade databases. Service export form a major crux of total exports and in 2018 Indian services export accounted 204, 955, 578, 850 (Current USD) in BoP⁴⁷. However, it is expected that with growing efforts to promote data-driven governance, in future the Export Preparedness Index will be able to successfully capture both merchandise and service exports.

for instance, matches the approximate size of the United Kingdom. On the other hand, there is Sikkim which measures 65 kms by 115 kms in size; or the approximate size of the country Switzerland. Union Territories, which were formed for the purpose of ease in administrative support, are even smaller in size.

Major States	Major States	Himalayan States	UT/City States
Group A - Coastal	Group B - Landlocked	Group C	Group D
Andhra Pradesh	Assam	Arunachal Pradesh	Andaman and Nicobar
Gujarat	Bihar	Himachal Pradesh	Chandigarh
Karnataka	Chhattisgarh	Manipur	Dadra and Nagar Haveli
Kerala	Haryana	Meghalaya	Daman and Diu
Maharashtra	Jharkhand	Mizoram	Delhi
Odisha	Madhya Pradesh	Nagaland	Goa
Tamil Nadu	Punjab	Sikkim	Lakshadweep
West Bengal	Rajasthan	Tripura	Puducherry
	Uttar Pradesh	Uttarakhand	
	Telangana		
	Jammu and Kashmir ^{48*}		

Figure 1: Export Preparedness Index: State Classification

⁴⁷ <https://wits.worldbank.org/CountryProfile/en/IND>

^{48*} Jammu & Kashmir has been categorized as 'Landlocked' despite having been declared as a Union Territory in 2019. The reason is that the report considers the data available for the period from 2016-17 up to 2018-19. Since Ladakh had not been constituted as a Union Territory at that point of time, it has not been included in the list of City States/UTs. However, subsequent iterations of the Export Preparedness Index will classify Ladakh and Jammu and Kashmir as Union Territories, using updated information.

Geographic Coverage

The Index is applicable to Indian States. India comprises of twenty-eight states and eight Union Territories. The scope of this project extends to all the states and the Union Territories.

Now, comparing the states without acknowledging the spatial segregation would introduce complexities within the calculation. This is because the states will vary in terms of their export potential, ability to create business ecosystem, and their overall capacity to engage in export-related activities. This implies they vary in terms of their productivity as well as competitiveness. Therefore, the policy implications will largely vary across states. They are thus segregated into three categories: Major States (Coastal and Landlocked), North-Eastern and Hilly States, and Union Territories/City States/Small States, categorized based on the area in order to account for the spatial variations across states. This will make for a fair comparison to assess export readiness.

It must be noted, that due to the aforementioned reasons, Goa has been incorporated under the category of “Union Territory/City States/Small States”, despite being a state as per the Indian Constitution. The North-Eastern and Hill States from North India have been clubbed under the same category due to their geographical similarities. In the second step, the states have been classified in accordance with their geographical outreach. Under the category of Major States, there was a need to further categorize them into coastal and landlocked states. There are eight major states in India that lie on the coastal belt, and enjoy access to maritime export facilities and have ports. Freedom of transit is restricted in landlocked states, considering they do not have access to and from the seas. Hence, nine major states have been incorporated under the sub-category of “Landlocked”.

Index Calculation Steps



Indicator Selection
and Data Collection



Dealing with
Missing Values



Data
Transformation



Aggregation

Indicator Selection and Data Collection

The process flow of the Export Preparedness Index calculation started with indicators being finalized after discussions regarding the same were held with experts. Furthermore, the credibility of sources, expert feedback, and data availability were also taken into consideration. An iterative method was followed to reach the final set of indicators with follow-up meetings held with experts. The data was primarily provided by the state governments. For some of the indicators, the data was provided by the RBI, the DGCIS, and some of the Central Ministries. Certain indicators were filled in from publicly available data. The index consists of four pillars, eleven sub-pillars, and fifty-five indicators.

Dealing with Missing Values

The problem of missing values was addressed by assigning the worst possible value to the indicator for the states in question. This implies that the indicators were given a value of 0, given the condition that the data was not available from any of the reliable public sources. For instance, in case of an indicator that highlights the functioning of an empowered export committee within a state, for which the data was not available from any reliable public sources, the worst scenario was taken into consideration. Adequate information was not provided by seven states and Union Territories, consequently, either data has been used from publicly available reliable sources, or the worst possible value has been assigned. In

certain indicators such as for internet facilities available in the north-eastern hilly states, a proxy average value pulled out from the total number was assigned to each of these

states. The following table further highlights the exact number of missing values, and how the final scores have been attached on the premise of that.

Indicator Number	Indicator	Missing Value	Final Value
1.2.5	Establishment and Functioning of an Empowered Committee	14 missing values: This indicator was broken up into two parts. For the first component that includes Establishment of an Empowered Committee, almost all the states provided a response. For the second component which is Functioning of the Committee, majority of the state values are missing for Arunachal Pradesh, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Jharkhand, Karnataka, Kerala, Mizoram, Puducherry, Tamil Nadu, Telangana, and Tripura.	In this scenario, the worst possible value has been assigned.
2.1.3.1	Power Cost	The value is missing for Mizoram.	The highest value has been assigned in this case to impute the missing value.
3.1.4	Trade Guide	There is only one missing value for Kerala.	The worst possible value has been assigned.
3.2.1	Projects Approved under Trade Infrastructure for Export Scheme (TIES)	There are six missing values for the following states: Chandigarh, Goa, Jharkhand, Karnataka, Kerala, and Meghalaya.	In this case as well, the worst possible value has been assigned.
3.2.3	Capacity Building/ Orientation Workshops	There are 17 missing values in this: Andaman and Nicobar Islands, Chandigarh, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Meghalaya, Mizoram, Nagaland, Puducherry, Punjab, Sikkim, and Telangana	The worst possible value has been assigned.
3.2.4	Membership of Exporters in trade promotion council	There are 7 missing values: Himachal Pradesh, Kerala, Meghalaya, Nagaland, Punjab, Tamil Nadu, and Telangana.	The worst possible value has been assigned.

Data Transformation

The measurability of the indicators was varied: while for some of the indicators, scores were used, for others ratios and values were given. In the sense, all the indicators had measurements in different units. Most of the indicators had binary scoring, and the indicators that did not, had to be standardized to make them comparable. Otherwise, a variable that has less variation relatively but is measured

on a larger scale compared to other variables may appear to have much greater variation than it does. For instance, if an indicator related to the measurement of an area was calculated, the unit was taken as square kms to make them comparable for ease in calculation.

In case of Memorandums of Understanding, signed by the states within a period of 3 years (between 2016-19) under the pillar of Business Ecosystem, the data points

sent in by the state have been scaled down for calculation purposes with a State having held a summit every year scoring 1. A similar process has been adopted for the Labor Reforms Index under the same pillar, scaling it down to a score between 0 and 1 for ease in calculation.

In case of Export to GDP ratio under the pillar of Export Performance, the indicator is composed of two components: Value of exports of States and the GDP of the State. In order to arrive at the ratio for the same, the

data for value of exports of the states has been provided by DGCIS, while the GDP of the state is publicly available. Here, the DGCIS data include the export value originating from the states. After procuring the data, the ratio has been computed to standardize it for further analysis. Thus, standardization has been utilized to solve the problem by making the indicators ultimately unitless so that they are rescaled with a mean of zero and standard deviation of one.

Aggregation

The Export Preparedness Index uses the Principal Component Analysis (PCA) for calculating the weights of indicators within a component.

The following steps have been adopted for the calculation :

01 The indicator values transformed on a 0 to 1 scale using the following formula:

$$\frac{X_j - \text{Worst Case}}{\text{Best Case} - \text{Worst Case}} \times 100$$

(where, X_j represents the raw component values.)

02 The component values are calculated by summing up the weighted scores using the following formula:

$$\text{Sub-Pillar Scores} = \sum (w_i * \text{indicator})$$

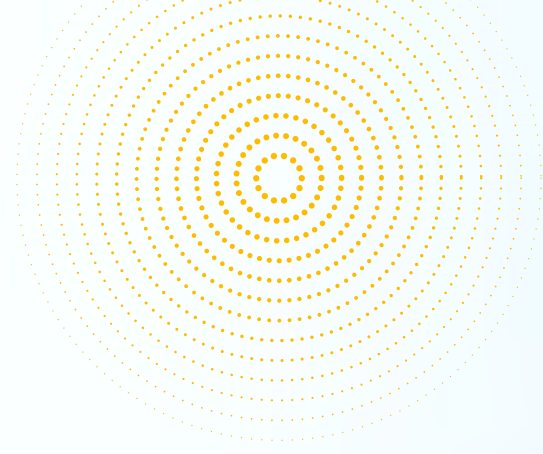
03 The component scores are averaged out for getting the pillar score:

$$\text{Pillars} = 1/x \sum \text{Sub-Pillars},$$

(where x is the number of components in each) pillar

04 The score on “Export Preparedness” is the average of the four pillars:

$$\begin{aligned} \text{Export Preparedness Index}_s &= 0.20(\text{Policy}_s) \\ &+ 0.40(\text{Business Ecosystem}_s) \\ &+ 0.20(\text{Export Ecosystem}_s) \\ &+ 0.20(\text{Export Performance}_s) \end{aligned}$$



06

Export Preparedness Index: Key Findings

The Export Preparedness Index is the outcome of extensive research to assess the readiness of the states in terms of their export potential. The framework is an aggregation of four pillars, eleven sub-pillars, and fifty-five indicators, which capture the export landscape of the sub-national governments in the country.



Country-Level Analysis

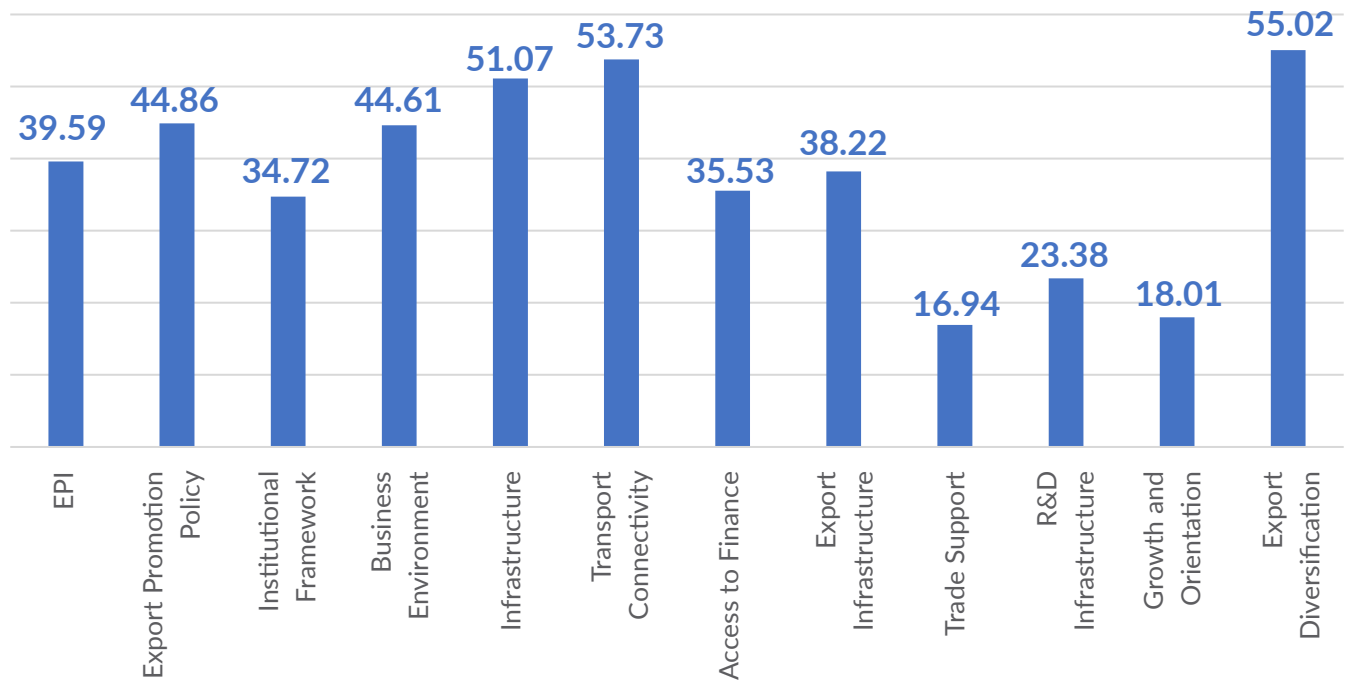


Figure J: Country-Level Analysis of Export Preparedness Index

Before heading towards the state-level analysis, a macroscopic view of the framework must be presented to understand the export readiness for India. A country-level analysis would provide a comprehensive outline of India's strengths and weaknesses regarding export preparedness, which would be extremely helpful in formulating efficient nation-wide policies and strategies.

On the whole, India has scored an average of 39 on the index. This shows the tremendous potential that India holds towards transforming into an export-based super-economy. When the average is broken down into Pillars and Sub-pillars, a much clearer picture emerges. Both Policy and Business Ecosystem are the two highest-scoring pillars, with the Export Ecosystem being the least scoring pillar.

This suggests that while India may possess a conducive business environment and export policies may be in place; it is not necessarily translating into a stronger export ecosystem.

A strong trade support system enhances the capacity of exporters which in turn results in stronger export performance. This is lacking in most states, as captured in the sub-pillar analysis.

Some of the major reasons why India has a weaker export ecosystem range from poor trade support to the inability of the states to build export hubs. Only 9 states have projects approved under TIES, which is supposed to act as an inducement to the states to channelize funds from the centre towards the creation of export infrastructure. It is an important scheme because it is the only scheme in the country where the Central Government is working in close coordination with the State Government to equally share the cost of projects. The scheme is supposed to enhance setting up of and up-gradation of infrastructure projects with overwhelming export linkages like the Border Haats, Land customs stations, quality testing and certification labs, cold chains, trade promotion centres, dry ports, export warehousing and packaging, SEZs and ports/airports cargo terminuses and improve export logistics. It is the only scheme in the country that aims to bridge the gap in export infrastructure among all the states.

The idea is that this would enhance the export competitiveness of the states if the gaps in export infrastructure are plugged in. Export Infrastructure remains a low-scoring sub-pillar, and one of the reasons is that not enough states have projects approved under TIES. This makes it difficult for states to seek financial assistance to upgrade their export ecosystem.

However, the states are also largely lacking in terms of providing basic trade support, such as a trade guide. There are only 10 states in the country that provide a trade guide, while only 15 states have ensured an online portal for dissemination of information to exporters. Accessibility of information to exporters is a primary support that the states must extend, and if even that is absent then there is a serious need to focus on strengthening the export infrastructure right from ensuring the very basics.

Finally, the low average for the export growth and orientation is a worrying sign as it shows limited annual growth of exports in the country. It further implies most of the states have not been able to gain access to a larger share of the world market. It is only due to a recent rise in export diversification (by country) that there has been a better average for the Export Performance pillar.

The Business Ecosystem has performed relatively better than the pillar of the Export Ecosystem. However, it is a worrying sign that one of the major challenges that emerge from this pillar is the lack of access to financial facilities. This is particularly because most of the states don't have any form of loan facilities to be provided to the exporters. Only 12 states have the same provision in place. It is encouraging to find that smaller states such as Tripura and Chandigarh provide loan facilities to its exporters as a form of incentives.

The low export credit also remains a challenge. Delhi and Chandigarh are the only two states that provide high credit of around 5.31 percent and 3.36 percent respectively, in comparison to the country average of 0.6 percent.

The bigger states, such as Maharashtra, Gujarat and Tamil Nadu lag in this particular parameter. The smaller states such as Sikkim, Tripura and Nagaland do not provide any export credit. Resultantly, access to financial facilities remains a challenge in the majority of states.



State-Level Analysis

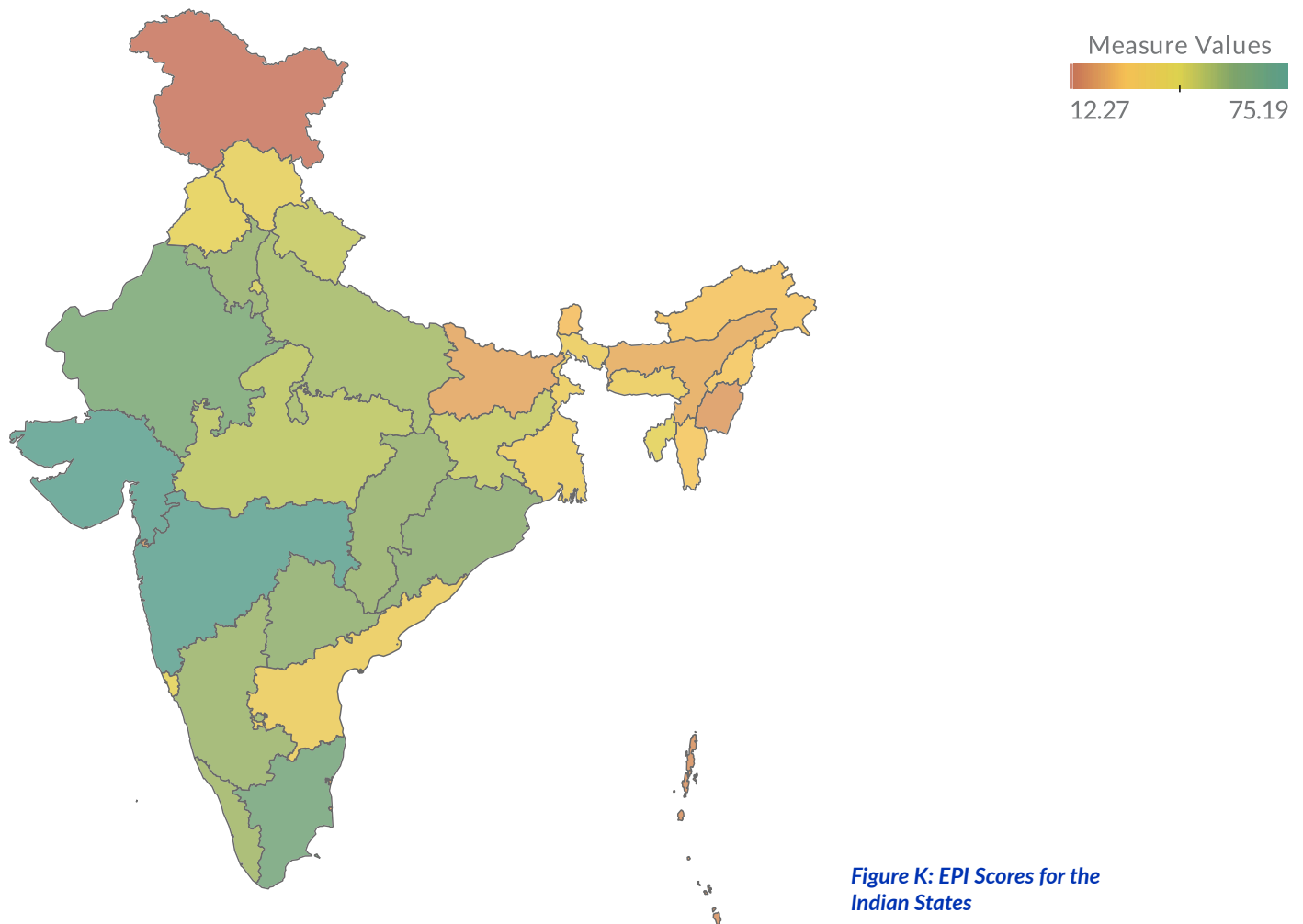


Figure K: EPI Scores for the Indian States

There is a high scoring range amongst Indian states on the EPI where Gujarat has the highest score of 75.14 and Jammu & Kashmir with the lowest score of 12.27.

Gujarat has topped the index with a strong display in various sub-pillars such as Export promotion policy, Business Environment and Infrastructure. Notably, other coastal states such as Maharashtra and Tamil Nadu occupy the second and the third positions in the index. All the three states have performed consistently across all the pillars, thus consolidating strong scores. The results are supported by the findings from the Economic Survey of 2018, which ranked the aforementioned three states amongst the top five exporting states in the country.

Previous literature strongly suggests that Innovation plays a key role in boosting the overall export growth⁴⁹. This could be achieved by directing strategic investment towards R&D infrastructure and through successful collaboration between the Government, Academia and Industries. The best performing states in EPI have also been some of the top scorers in the Innovation Index. Gujarat, Maharashtra and Tamil Nadu have managed to score high in India Innovation Index with a dedicated emphasis on crucial factors such as business ecosystem, investment on R&D etc⁵⁰. These states have struck a balance by attaining relative competitiveness by driving innovation and thus boosting their overall export figures. An additional advantage that these states

⁴⁹ Sahu, S. K., Ramaswamy, S., & Choutagunta, A. (2017). Export Performance, Innovation, and Productivity in Indian Manufacturing Firms (No. 2017-159).

enjoy is the strong presence of industrial clusters that ensure producers remain competitive which further enhances their innovative tendencies⁵¹. This balance between competitiveness, innovation and strong export performance needs to be replicated across the nation.

On the other spectrum, Andhra Pradesh leaves room for major improvements. Andhra Pradesh might have an enabling business infrastructure, but the state does not have a proper export ecosystem in the place. It is yet to have a policy mechanism in place and hence has scored below par overall.

From landlocked states, it is Rajasthan that emerges as a top performer. Except for export growth and orientation, the state has performed tremendously well across all pillars and sub-pillars. Bihar and Jammu and Kashmir are some of the weaker states in this category. They need to improve their performance under the Policy and the Export Ecosystem pillars, considering that they indicate a glaring paucity in both enabling and facilitating factors that could drive the states towards export-oriented growth. Bihar not only lacks a policy measure in place but also does not have adequate infrastructure to facilitate an enabling export environment. One of the outliers in this category is Jharkhand which has performed exceptionally well in the first pillar. However, barring a policy measure, the state has not been able to foster any business growth. As a result, their export potential remains low.

Amongst Himalayan states and City-states, Uttarakhand, and Delhi are the top-performing states.

Delhi is an anomaly because it does not provide enough trade-related support, such as a trade guide or an online portal for easy accessibility of information. Despite these shortcomings, Delhi has been able to perform at par with high-performing states. This is because Delhi has been able to attract businesses and investments, thereby creating an enabling business infrastructure. The state has tremendous potential to translate this into an ideal export ecosystem, once has the prerequisite basic infrastructure in place.

On the other hand, Uttarakhand faces some of the inherent challenges of being a hilly state in terms of attracting businesses, such as transport connectivity. However, it has shown strength in terms of creating an enabling export ecosystem, by providing easy accessibility of information to exporters. The state also has organised a significant number of capacity building workshops and trade fairs for exporters, and efforts such as these have ensured that Uttarakhand has a high score.

Both Uttarakhand and Delhi have scored above the national average, thus highlighting the urgency for the rest of the states in these categories to step up and take necessary actions to drive their respective export growth. However, some promising signs suggest that positive anomalies are emerging at sub-pillar levels. For instance, Mizoram has scored a perfect 100 in the Export Growth and Orientation sub-pillar while Puducherry has the strongest score for R&D infrastructure.

⁵⁰ NITI Aayog. 2019. India Innovation Index Report, 2019

⁵¹ Institute for Competitiveness. (2018). Clusters: The Drivers of Competitiveness.

Category Wise Rankings

Coastal

Rank	State	Export Preparedness
1	Gujarat	75.19
2	Maharashtra	75.14
3	Tamil Nadu	64.93
4	Odisha	58.23
5	Karnataka	55.17
6	Kerala	54.11
7	Andhra Pradesh	35.58
8	West Bengal	34.05

Himalayan

Rank	State	Export Preparedness
1	Uttarakhand	48.11
2	Tripura	40.79
3	Himachal Pradesh	38.85
4	Meghalaya	34.66
5	Mizoram	29.53
6	Nagaland	29.00
7	Arunachal Pradesh	28.28
8	Sikkim	26.75
9	Manipur	19.40

Landlocked

Rank	State	Export Preparedness
1	Rajasthan	62.59
2	Telangana	57.43
3	Haryana	56.03
4	Chhattisgarh	55.95
5	Uttar Pradesh	53.63
6	Madhya Pradesh	49.47
7	Jharkhand	48.00
8	Punjab	39.63
9	Assam	22.81
10	Bihar	21.55
11	Jammu and Kashmir	12.27

Union Territories / City States

Rank	UT/City States	Export Preparedness
1	Delhi	45.80
2	Goa	40.94
3	Chandigarh	26.07
4	Puducherry	21.86
5	Dadra and Nagar Haveli	20.77
6	Andaman and Nicobar Islands	17.65
7	Daman and Diu	12.76
8	Lakshadweep	12.40

Overall Rankings

Rank	State	Export Preparedness	State Category
1	Gujarat	75.19	Coastal
2	Maharashtra	75.14	Coastal
3	Tamil Nadu	64.93	Coastal
4	Rajasthan	62.59	Landlocked
5	Odisha	58.23	Coastal
6	Telangana	57.43	Landlocked
7	Haryana	56.03	Landlocked
8	Chhattisgarh	55.95	Landlocked
9	Karnataka	55.17	Coastal
10	Kerala	54.11	Coastal
11	Uttar Pradesh	53.63	Landlocked
12	Madhya Pradesh	49.47	Landlocked
13	Uttarakhand	48.11	Himalayan
14	Jharkhand	48.00	Landlocked
15	Delhi	45.80	UT/City States
16	Goa	40.94	UT/City States
17	Tripura	40.79	Himalayan
18	Punjab	39.63	Landlocked
19	Himachal Pradesh	38.85	Himalayan
20	Andhra Pradesh	35.58	Coastal
21	Meghalaya	34.66	Himalayan
22	West Bengal	34.05	Coastal
23	Mizoram	29.53	Himalayan
24	Nagaland	29.00	Himalayan
25	Arunachal Pradesh	28.28	Himalayan
26	Sikkim	26.75	Himalayan
27	Chandigarh	26.07	UT/City States
28	Assam	22.81	Landlocked
29	Puducherry	21.86	UT/City States
30	Bihar	21.55	Landlocked
31	Dadra Nagar and Haveli	20.77	UT/City States
32	Manipur	19.40	Himalayan
33	Andaman and Nicobar Islands	17.65	UT/City States
34	Daman and Diu	12.76	UT/City States
35	Lakshadweep	12.40	UT/City States
36	Jammu and Kashmir	12.27	Landlocked

Pillar Wise Scores across States**Policy Pillar**

State	Scores
Maharashtra	94.93
Gujarat	85.70
Jharkhand	79.16
Karnataka	79.16
Rajasthan	78.28
Tamil Nadu	77.57
Uttar Pradesh	76.34
Chhattisgarh	76.24
Telangana	75.28
Kerala	74.77
Odisha	71.29
Uttarakhand	69.52
Madhya Pradesh	66.10
Haryana	59.62
Goa	51.13
Punjab	51.05
Himachal Pradesh	41.98
Meghalaya	38.74
Tripura	35.01
Nagaland	34.38
Andhra Pradesh	27.25
Sikkim	22.00
Assam	18.24
Mizoram	14.74
Andaman and Nicobar Islands	10.10
Manipur	9.19
Delhi	9.05
Arunachal Pradesh	5.69
Bihar	0.00
Chandigarh	0.00
Dadra and Nagar Haveli	0.00
Daman and Diu	0.00
Jammu and Kashmir	0.00
Lakshadweep	0.00
Puducherry	0.00
West Bengal	0.00

Business Ecosystem Pillar

State	Scores
Gujarat	90.61
Delhi	83.80
Tamil Nadu	80.63
Maharashtra	71.17
Karnataka	68.09
Uttar Pradesh	65.02
Rajasthan	64.70
Chhattisgarh	62.91
Haryana	56.82
Kerala	56.23
Odisha	55.81
Chandigarh	53.83
West Bengal	53.65
Tripura	52.85
Telangana	52.27
Andhra Pradesh	50.46
Himachal Pradesh	47.68
Goa	46.69
Madhya Pradesh	45.89
Jharkhand	45.14
Punjab	43.86
Arunachal Pradesh	42.50
Uttarakhand	39.28
Nagaland	35.14
Sikkim	35.13
Dadra and Nagar Haveli	33.52
Bihar	31.18
Andaman and Nicobar Islands	29.04
Assam	26.31
Mizoram	25.77
Meghalaya	24.99
Puducherry	24.63
Daman and Diu	24.13
Manipur	17.02
Jammu and Kashmir	14.92
Lakshadweep	12.88

Export Ecosystem Pillar

State	Scores
Maharashtra	81.19
Odisha	65.94
Rajasthan	65.00
Uttarakhand	62.67
Telangana	60.88
Haryana	60.30
Tamil Nadu	57.83
Madhya Pradesh	48.41
Gujarat	47.35
Tripura	44.73
West Bengal	44.24
Karnataka	43.93
Meghalaya	43.39
Jharkhand	40.70
Chhattisgarh	38.80
Uttar Pradesh	36.92
Puducherry	27.46
Kerala	26.99
Andhra Pradesh	21.46
Delhi	18.78
Himachal Pradesh	16.14
Punjab	15.61
Chandigarh	13.78
Arunachal Pradesh	8.16
Goa	8.03
Dadra Nagar and Haveli	7.43
Bihar	6.97
Jammu and Kashmir	5.63
Daman and Diu	5.56
Sikkim	5.18
Manipur	5.16
Assam	3.85
Andaman and Nicobar Islands	3.40
Mizoram	3.33
Nagaland	3.17
Lakshadweep	2.46

Export Performance Pillar

State	Scores
Mizoram	78.07
Gujarat	61.71
Maharashtra	57.26
Kerala	56.30
Goa	52.16
Manipur	48.63
Haryana	46.60
Telangana	46.45
Punjab	43.74
Arunachal Pradesh	42.57
Odisha	42.29
Meghalaya	41.22
Madhya Pradesh	41.04
Himachal Pradesh	40.75
Rajasthan	40.27
Assam	39.33
Chattisgarh	38.91
Bihar	38.41
Nagaland	37.18
Sikkim	36.35
Lakshadweep	33.77
Delhi	33.57
Puducherry	32.56
Jharkhand	29.89
Uttarakhand	29.82
Dadra and Nagar Haveli	29.36
Andhra Pradesh	28.27
Tamil Nadu	28.00
Jammu and Kashmir	25.87
Uttar Pradesh	24.88
West Bengal	18.69
Tripura	18.50
Andaman and Nicobar Islands	16.67
Karnataka	16.61
Daman and Diu	9.99
Chandigarh	8.91

Sub-Pillar Analysis

PILLAR 1: POLICY

Category	Average Score
Coastal	63.83
Himalayan	30.13
Landlocked	52.75
UT / City-States	8.78

Landlocked states are not far behind with Jharkhand and Rajasthan receiving decent scores. However, states such as Bihar have performed poorly in this particular pillar, primarily because Bihar has no policy mechanism in place. Amongst Himalayan states, Uttarakhand is the only outlier.

The Policy Pillar comprises two sub-pillars: Export Promotion Policy and Institutional Framework. Coastal category scores the biggest average due to strong performance shown by Gujarat and Maharashtra. Andhra Pradesh's performance remains poor in this particular pillar due to lack of policy measures.

Amongst UT/City-states, Goa is the clear outlier. Most of the City-states have scored zero in this pillar, as a result bringing down the category average drastically. Union Territories such as Delhi and Puducherry have no policy in place and hence have performed poorly in this pillar.

Sub-pillars

Export Promotion Policy

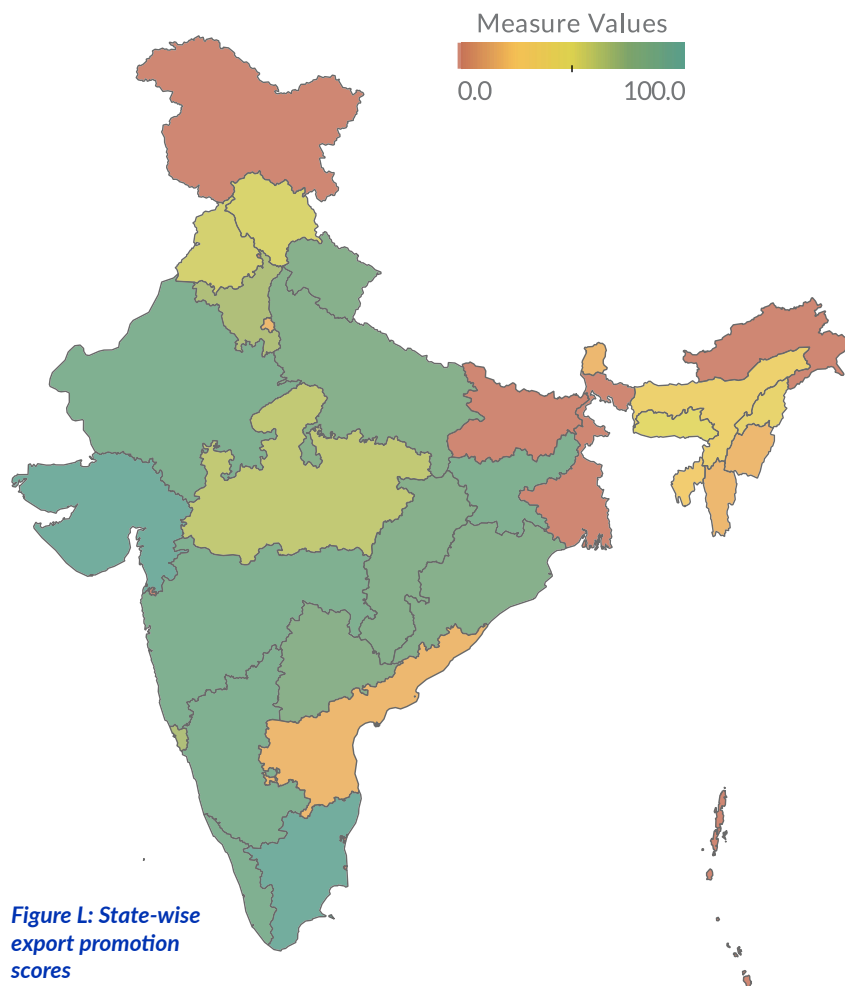


Figure L: State-wise export promotion scores

Category	Average Score
Sub-Pillar Average	44.85
Landlocked	58.79
Coastal	71.53
UT/City-States	10.53
Himalayan/Hilly States	34.64

As the average above suggests, this sub-pillar is dominated by Coastal and Landlocked states as top performers. Coastal states have the highest average as with Gujarat and Tamil Nadu scoring a perfect 100.

ANDHRA PRADESH, despite being a coastal state has not performed well in this sub-pillar, having only identified thrust sectors for exports, with no definitive export policy in place. The Himalayan states and UT/City-states, have also fared poorly in this sub-pillar. Most of the states under these categories have scored below the sub-pillar average of 44.85. Lack of sector-specific export policies, marketing support or financial incentives to boost exports has dragged the Himalayan states and Union Territories down in the sub-pillar rankings.

Identifying the policy focus areas are not enough for an effective export policy; there is a need to improve other allied policy measures such as financial incentives to boost exporters, an award for excellence, creating a performance measurement system, providing marketing support and laying better emphasis on product quality and standards.

Only 14 out of 36 states and UTs that do not have a defined export policy. However, there are about 13 states that have policies emphasizing on product quality and standards. Product quality and standard checks are

necessary to instil confidence amongst importers and thus make exports reliable in the international market. Also, it has been found that there is a strong correlation between frequent quality checks and the volume of exports⁵².

TAMIL NADU is a perfect example that proves the above point of thanks to its strong of export promotion policies. The state also provides land allotment for companies with a clear roadmap for Export based business⁵³. Along with this, there are sector-specific export plans for industries such as Automobiles, IT and Marine products. Finally, the state government provides financial aid to deserving exporters on the recommendation of Export Promotion Councils, to meet legal costs and other associated expenses⁵⁴.

JHARKHAND has performed extremely well in this sub-pillar because it has a policy measure in place. It has mechanisms in place, such as financial incentives, award systems, allotment of land to create an encouraging infrastructure. This is why its performance is at par with the coastal states of Gujarat and Tamil Nadu. On the other hand, Bihar, a state out of which Jharkhand was carved out, has performed poorly in this pillar because it has no policy measure in place.

⁵² International Trade Centre. (2011). Export Quality Management A Guide for Small And Medium Sized Exporters Second Edition.

⁵³ t.n.gov.in/en/ELCOSEZ/Madurai-Vadapalanji

⁵⁴ The Federation of Indian Micro and Small & Medium Enterprises- Tamil Nadu Export Schemes



Institutional Framework

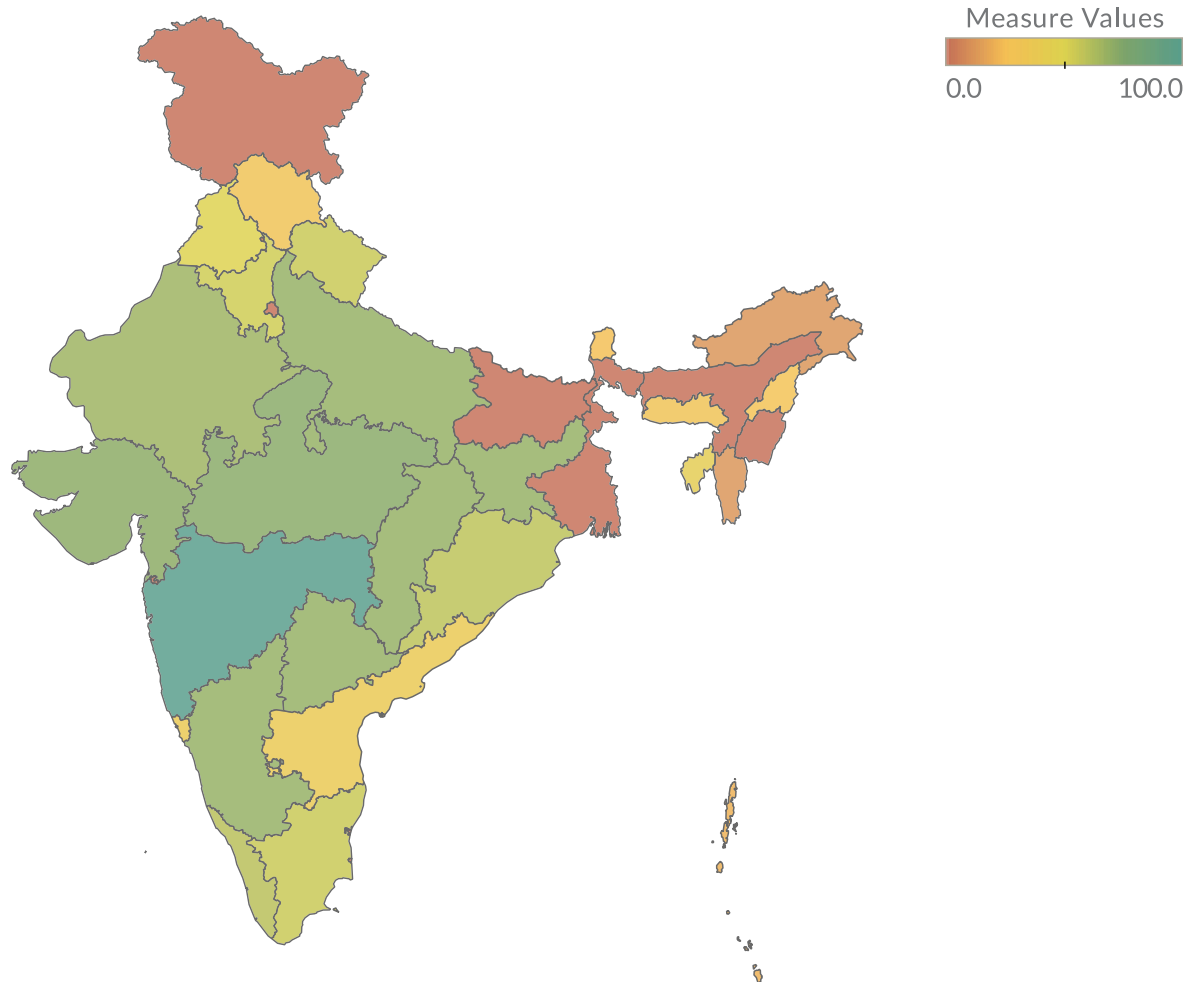


Figure M: State-wise institutional framework scores

Category	Average Score
Sub-Pillar Average	34.72
Landlocked	46.72
Coastal	56.14
UT/City-States	7.04
Himalayan/Hilly States	25.64

Institutional Framework is one of the sub-pillars with the lowest average. There are 11 states/UTs (7 of which could not share the complete data) with a zero score which adversely affects the sub-pillar average. However, there is one positive outlier in Maharashtra that has a perfect score of 100. Unlike the 'Export Promotion Policy' sub-pillar; Institutional Framework consists of state scores that are closely distributed. Thus, the difference between the category averages is lower as compared to the previous sub-pillar.

Tamil Nadu, which has performed well in the previous sub-pillar, has performed relatively poorly in this sub-pillar, primarily since it does not have an empowered export committee in place.

This implies that while states have identified specific export promotion measures, they have not focused equally on building policy infrastructure that is required to implement the policy vision.

For instance, there are only 15 States with a State-Centre coordination cell. Absence of such cells prevents the States/UTs from efficiently harnessing the benefits of central schemes. Similarly, only half of the states/UTs have a grievance redressal office that could help exporters and eliminate any existing information asymmetry.

On average, UT/City-States and Himalayan states have been the worst performers.

The hilly states such as Arunachal Pradesh and Mizoram have performed poorly, due to absence of a state-centre coordination cell, formulation of definitive measures to gain access to international markets and lack of knowledge among stakeholders regarding the export promotion measures taken by the state government. Moreover, these states do not have any policy focus oriented towards export promotion, as observed in the first sub-pillar. The same problem exists for Union Territories such as Delhi and Chandigarh. Consequently, these states have heavily underperformed.

AMONG THE HILLY STATES, the only encouraging performance has been displayed by Uttarakhand. The state has access to international markets, an existing empowered export committee, as well as a state-centre coordination cell. It has even appointed a full-time export commissioner. The efforts reflect in their performance, wherein Uttarakhand is at par with much bigger coastal states such as Tamil Nadu.

Thus, to promote the export policy pillar of the relatively smaller states, there needs to be a concerted effort to develop the policy vision as well as enabling infrastructure.

MAHARASHTRA'S success can be used as a best-practice measure for other states. It has 18 Sectoral Export Promotion Councils that focuses on key exporting industries such as Pharmaceuticals, Gems and Jewellery, Processed food products etc. The State Government also has a grievance redressal office for exporters to approach the Government for any information or resolution of problems⁵⁵. Maharashtra is one of the few states to have an export newsletter which updates exporters about the latest policy changes within the State and the current export scenario.

PILLAR 2: BUSINESS ECOSYSTEM

Category	Average Scores
Coastal	65.83
Himalayan	35.59
Landlocked	46.27
UT / City-States	38.56

It is essential to nurture a business environment that attracts investment and fosters growth through good governance and balances between the levels of protection and incentives⁵⁶.

The Business Ecosystem pillar consists of four components: Business Environment, Infrastructure, Transport Connectivity, and Access to Finance.

If we take into consideration the average scores of all the pillars, then this pillar has the highest average.

This implies that a considerable number of states have taken significant steps to create an enabling environment to facilitate the business ecosystem.

The coastal regions have performed exceedingly well in this particular pillar, due to the strong performances registered by Gujarat, Tamil Nadu, and Maharashtra. Landlocked states such as Uttar Pradesh, Rajasthan, Haryana and Chhattisgarh are not far behind either. Unsurprisingly, Gujarat has topped the list of states across all the categories, not to forget it had also topped the ranking of World Bank's 'Ease of Doing Business' with a score of 71.14 percent. The same is true for Maharashtra. Both of these states offer investor-friendly services for obtaining infrastructure-related utilities like electricity, water and sewage, in a time-bound manner⁵⁷.

⁵⁵ dgftcom.nic.in/dgftmumbai/html/efc.htm

⁵⁶ India Innovation Index Report, 2019

⁵⁷ World Bank, Ease of Doing Business Report, 2016

The overall average score of the landlocked states suggests that there is scope for improvement in comparison with the coastal states. It is, however, important to reflect on the noteworthy reforms that these states are trying to bring in to be more competitive. For instance, Haryana, in 2016, had decided to offer private companies village council land on a 33-year lease⁵⁸. This is due to the fact that the state faces a shortage of industrial land. A move such as this would benefit the villages from increased employment and revenue generation while retaining ownership rights over the land. Initiatives such as these despite natural shortcomings, for example, lack of adequate land, could help other states to boost their business ecosystem.

Under the category of UT/City-States, Delhi has expectedly performed almost at par with Gujarat, leaving the other top performers such as Tamil Nadu, Maharashtra, and Uttar Pradesh behind.

Delhi performs well on this front mainly due to higher investments attracted

owing to the fact that it is the national capital. Delhi has displayed strength in terms of its performance logistics sector. This is reflected by its score of 3.57 in Leads Index⁵⁹. The India Innovation Index Report also noted that Delhi's business environment is conducive for innovation. Hence, Delhi's high performance in this pillar is not surprising.

The Himalayan states grapple with issues such as poor transport connectivity, especially in comparison with all the other categories of states, which particularly reflect in their scores. This could be daunting in terms of attracting significant investment to these states. However, there is room for improvement by providing higher access to finance to businesses, better internet connectivity, and better access to banking facilities. Himachal Pradesh, Arunachal Pradesh, and Uttarakhand emerge as the top performers in this category.

⁵⁸ CSIS Wadhvani Chair in US-India Policy, 2016

⁵⁹ Leads Index Report, 2019



ON THE OTHER HAND, RAJASTHAN, which is a landlocked state, follows Gujarat closely with a score of 92.18, leaving Maharashtra, Karnataka and Tamil Nadu behind. This is primarily because the investments attracted between 2016 and 2017 and 2018-19 were proportionately higher.

Some of the significant steps Rajasthan has taken are: simplified the process of filing applications by implementing a system that allows online application submission, payment, tracking and monitoring without the need for a physical touchpoint for document submission⁶⁰. The state has further established specialized commercial courts (in major towns/clusters of districts to cover the whole state) to hear and resolve commercial disputes. In terms of ensuring smooth electricity connections, the state has ensured that distribution companies use automated tools to monitor outages in all industrial areas. The efforts have brought in significant transparency in the business ecosystem in the state.

On the other hand, Jharkhand, which has performed significantly well in the Policy pillar, has failed to maintain its performance in this pillar. It's not enough for a state to have a policy mechanism in place, it must also have the an ability to foster an environment that will attract businesses and investments. Jharkhand's innovative capacity remains low, with a score of 6.2. The state needs to focus on creating a better business infrastructure to expand its export capacities.

One of the surprising top-performances was Odisha among the coastal states. Although Odisha, unlike its other high-performing coastal and landlocked counterparts, has not been able to attract significant investments within the assigned period. However, it has taken other measures to create an enabling environment to attract businesses. For instance, Odisha has been rated as the most cost-competitive state judged by the criteria of the cost of setting up and running a business⁶¹. It has been observed that the state has dwelt on ensuring the lowest costs for key parameters: wage rate of skilled labour, industrial power tariff and land costs. This is reflected in their score of 92.08 in Ease of Doing Business⁶².

Cost-competitiveness is a practice that can be emulated by other states across all the categories to boost their business environment.

Himalayan states such as Nagaland, Arunachal Pradesh and Mizoram that have performed poorly, need to take concrete measures for example introducing single-window clearances, for attracting more investments in order to better their business environment.

The top performances among the Himalayan states were again displayed by Uttarakhand and Himachal Pradesh. These two states have been able to attract significant investments, bring in initiatives such as single-window clearances to ease the process of setting up businesses, as well as lower power to around Rs.5 per unit. Their power costs are significantly lower than that of the other Himalayan states which are Rs.6 per unit or higher.

⁶⁰ State Business Reform Assessment, 2018, Ministry of Commerce and Industry, Government of India

⁶¹ Asian Development Bank, "Investment Climate Improvement in East Coast Economic Corridor of India: Regulatory, Institutional, and Policy Reforms Support to Tamil Nadu", 2018

⁶² State Business Reform Assessment, 2018, Ministry of Commerce and Industry, Government of India

Infrastructure

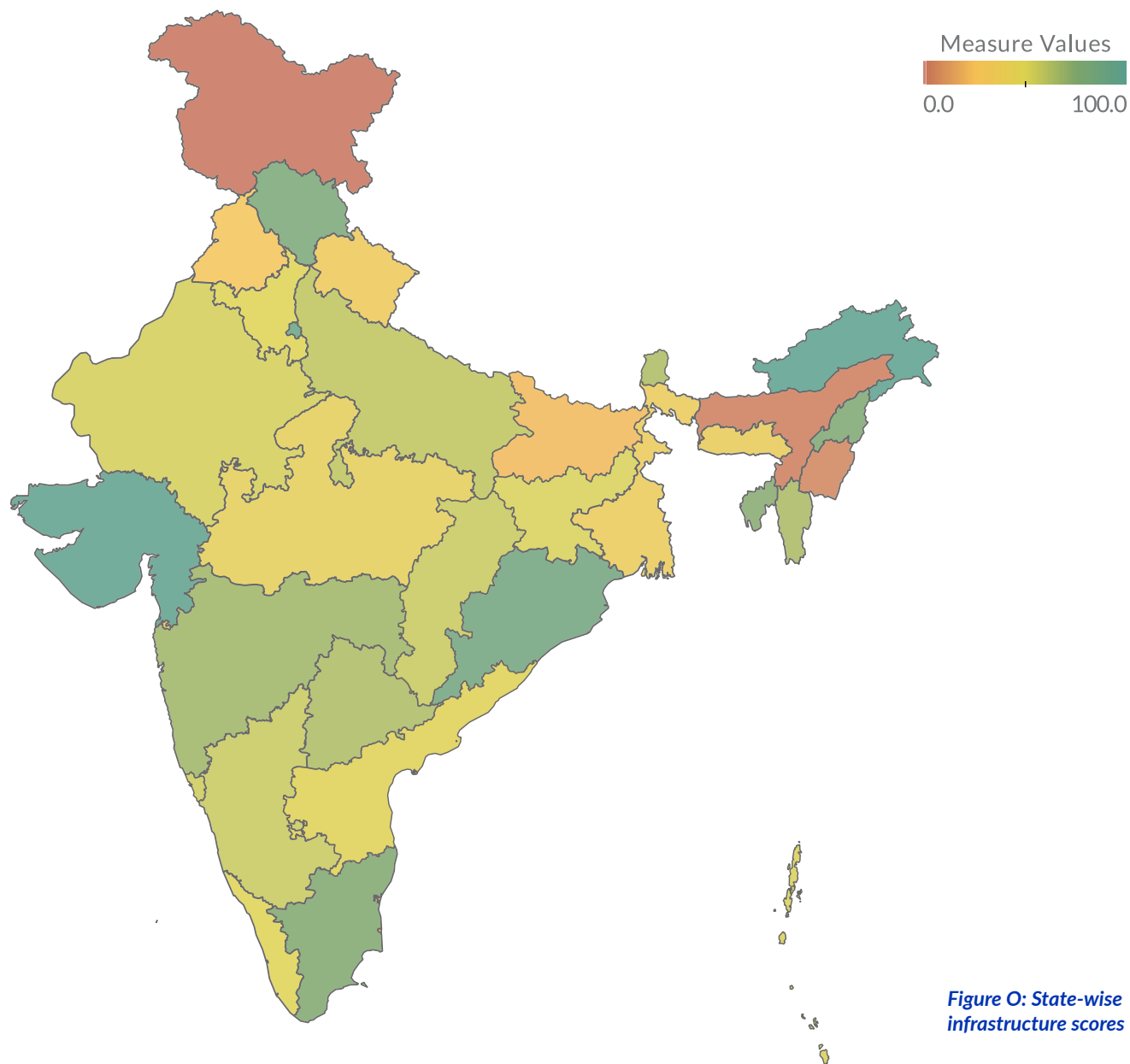


Figure O: State-wise infrastructure scores

Category	Average Scores
Sub-Pillar Average	51.07
Coastal	64.52
Himalayan	59.63
Landlocked	38.73
UT/City-States	44.97

Himalayan states that have performed below average in most of the other sub-pillars, have displayed strength in this sub-pillar. Hilly states such as Arunachal Pradesh, Nagaland Tripura, and Himachal Pradesh have performed as well as Gujarat, Odisha, Tamil Nadu, and Maharashtra among the major coastal states. This has to be, however, read with caution.

It is important to denote here that some of the indicators, such as the number of existing industrial corridors, did not apply to all the states. The Himalayan states (except Uttarakhand) do not have an industrial corridor. Hence, these states did not get assessed on such parameters, as a result of which their scores were proportionately high. Furthermore, Arunachal Pradesh has three designated Food Parks within the state, Maharashtra has five-hundred and seventy software technology and food parks. However, the registered number of exporters in Maharashtra is also significantly higher than that of Arunachal Pradesh, which leads to Maharashtra's average in this particular indicator being smaller than that of Arunachal Pradesh.

This is also the primary reason why landlocked states have performed poorly in comparison to the Himalayan states.

One of the main reasons why **HIMACHAL PRADESH** has also performed well in this sub-pillar is because it is a power surplus state, and provides the highest number of internet connections in comparison to not only the hilly states but also states in other categories. The state has 69488 subscribers per lakh population, which is higher than the country average of 50960. On the other hand, a comparable state such as Uttarakhand has only 20960 subscribers.

The hilly states might be at a disadvantage due to not having adequate infrastructure to steer business growth.

However, initiatives such as providing adequate power and bringing in steps to ensure internet connectivity throughout the states have helped them to perform well under this sub-pillar.

On the other hand, among the Union Territories, Delhi is at par with Gujarat in this sub-pillar. Among the landlocked states, Telangana, Uttar Pradesh and Chhattisgarh have emerged as the better performing states.

The components within this sub-pillar highlight that the landlocked states have performed differently across the various indicators. Uttar Pradesh is, for instance, the top-performer in terms of displaying cluster strength. Its score in terms of cluster strength stands at 123, while the country average stands at 40. This provides the state with an opportunity to promote these clusters and accelerate their exports. However, in terms of internet facilities, the most populous state in the country provides internet to only 31703 subscribers per lakh population, while the country average hovers around 50960. This leaves scope for the state to improve on this key parameter to create an enabling infrastructure.

The high score of Delhi is particularly driven by the fact that it provides the highest internet connections in the country. The number of wireless data subscribers per lakh population for Delhi is 146430 while the country average stands at 50960⁶³.

⁶³ TRAI data report, 2019



Transport Connectivity

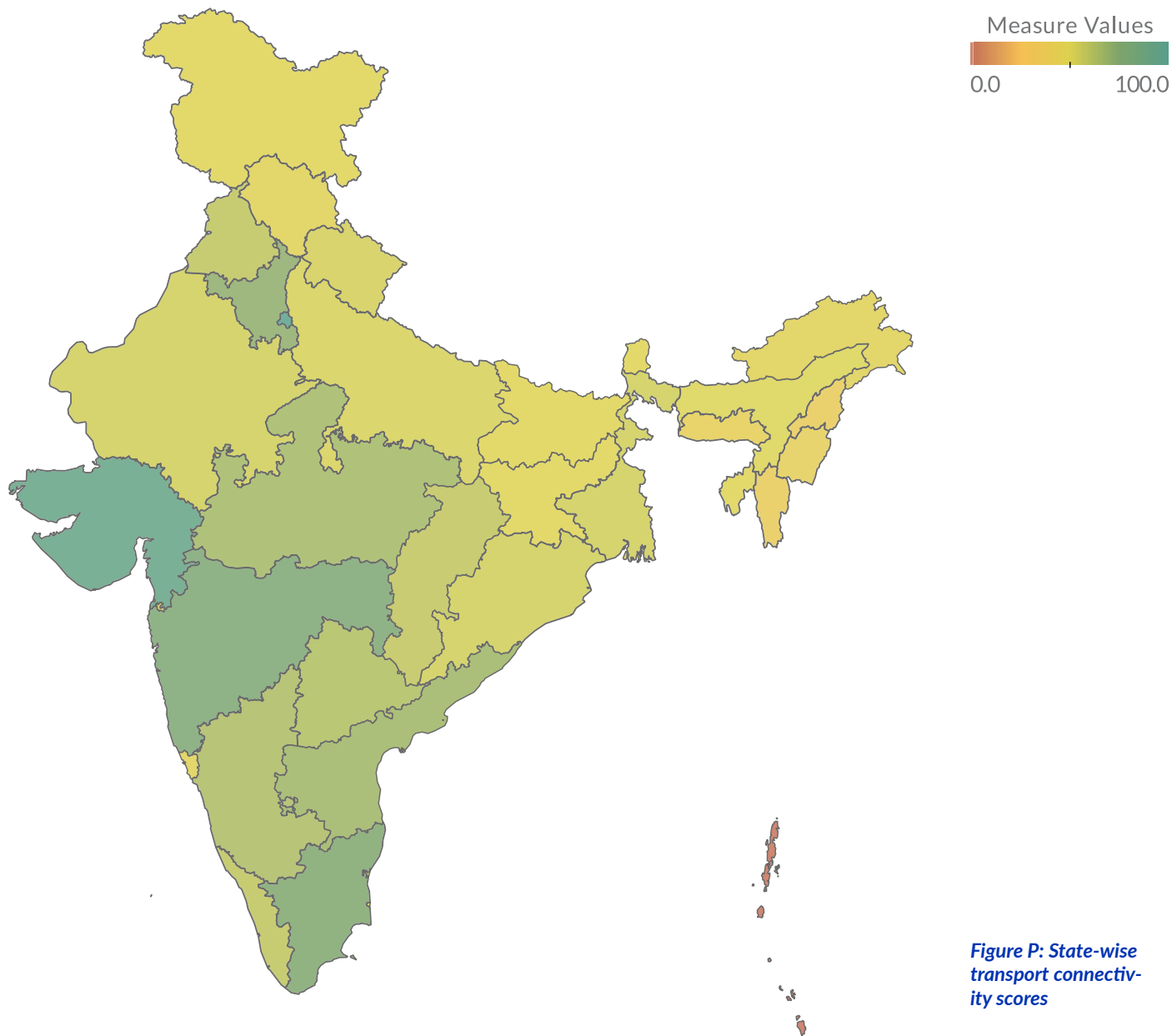


Figure P: State-wise transport connectivity scores

Category	Average Scores
Sub-Pillar Average	53.73
Coastal	67.95
Himalayan	45.20
Landlocked	55.99
UT/City-States	46.00

Gujarat, Maharashtra and Tamil Nadu have emerged as the top-performing states under this sub-pillar. Delhi, is at par with the top-performing states. The common factor is that all of them have well-established air-cargo facilities, multi-modal logistic hubs, as well as inland container depots. This enables them to ensure smooth transport of goods, as well as attract major investments for the states. Delhi has the record of handling the second highest freight management in the country, primarily because it is the nation’s capital.

Conventional wisdom says the coastal regions would outperform the landlocked states in this parameter.

While it holds overall, landlocked states such as Haryana, Madhya Pradesh and Telangana have performed at par with the coastal states.

Haryana and Telangana each have a score of 3.4 and 3.37 respectively in the LEADS Index, which measures performance in the logistics sector. Their scores are comparable with coastal states such as Tamil Nadu and Maharashtra.

TELANGANA, for instance, has reduced problems of congestions and delays of exports through various transport modes. They have done so through their single-window clearance system that allows international traders

to submit clearance forms at a single window. They can complete all the formalities at the same location. This also eases the process of customs clearance. Because 24 states now have single-window clearances available, this step can be emulated by other states to ease the transport of goods.

On the other hand, Odisha, despite being a coastal state, is an underperformer in this sub-pillar owing to lack of multi-modal hubs and lesser freight capacity in terms of air-cargo facilities in comparison to other coastal states.

Expectantly, the hilly states have performed poorly in this category. Barring Uttarakhand and Himachal Pradesh, the other six Himalayan states lack freight management, multi-modal hubs, as well as inland container depots.

Access to Finance

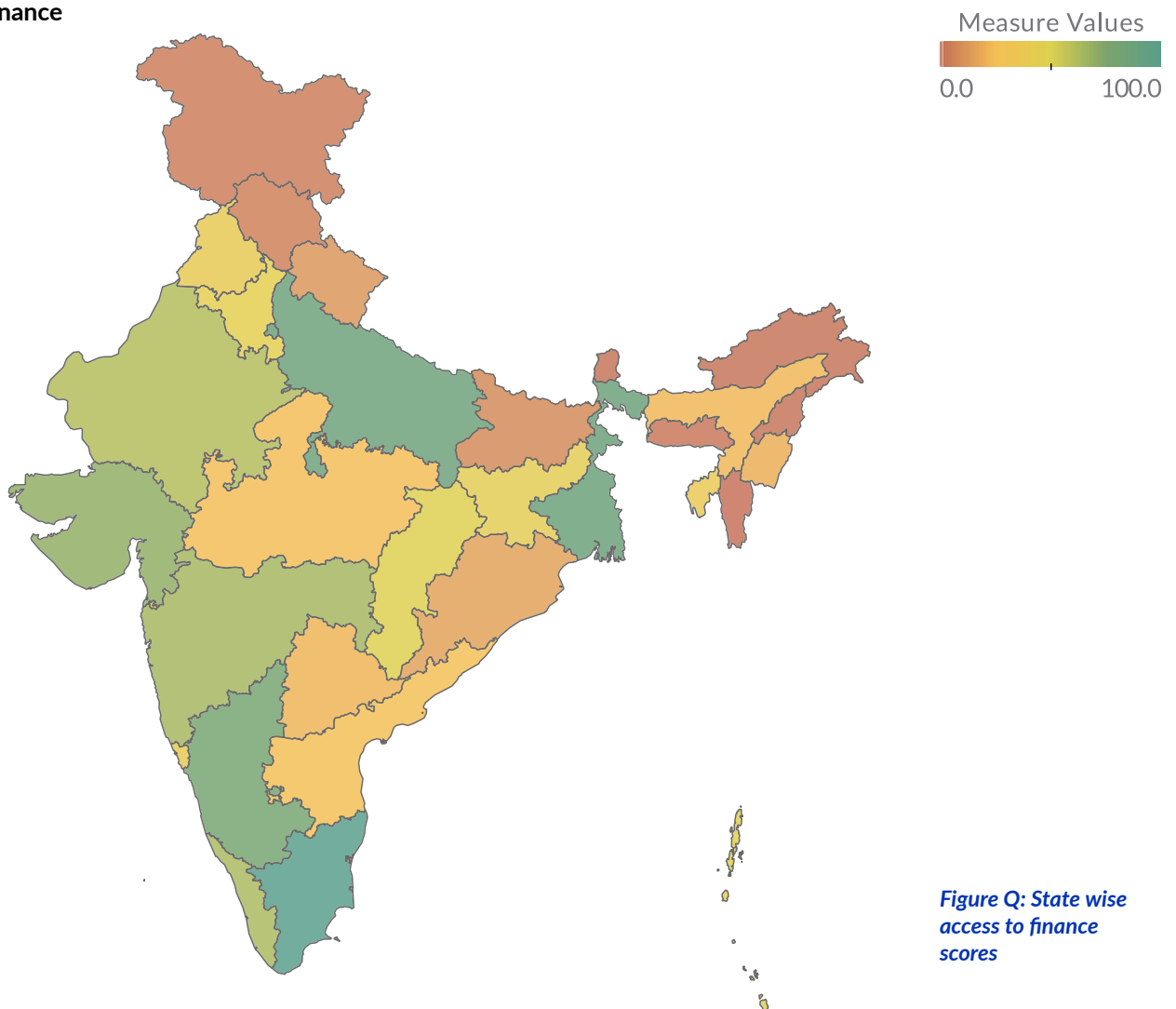


Figure Q: State wise access to finance scores

Category	Average Scores
Sub-Pillar Average	35.52
Coastal	63.24
Himalayan	8.21
Landlocked	36.09
UT/City-States	37.77

Tamil Nadu, Delhi and West Bengal have emerged as the top-performing states under this sub-pillar.

The most encouraging factor which has emerged from this sub-pillar that among Union Territories, Delhi and Chandigarh have performed at par with the major states.

This is primarily driven by the fact that Delhi and Chandigarh respectively provide export credit of 5.31 and 3.36 percent when the country average for the same stands at 0.6 percent. This practice can be adopted by states across categories to enhance the accessibility of finance for the exporters.

Among the coastal states, Tamil Nadu and West Bengal provide export credit of 2 and 1.08 percent respectively which is significantly higher than the national average.

In contrast, Maharashtra and Gujarat, which are comparable to Tamil Nadu and West Bengal in terms of providing banking facilities, have lagged because of providing relatively low export credit.

Majority of the Himalayan states do not even have the provision of a scheme to provide loans to their exporters. Their poor performance is reflective of the same. For instance, even though Tripura has a scheme in place the state does not provide any export credit. On the other hand, even if Uttarakhand provides 0.43 per cent of its GDP as export credit, the state has no provision in place to provide any form of loans to the exporters.

PILLAR 3: EXPORT ECOSYSTEM

Category	Average Scores
Coastal	48.61
Himalayan	21.32
Landlocked	34.82
UT / City-States	10.86

This is the worst-performing pillar with an average score of only 29.19. This is primarily because of the absence of special economic zones, export zones for agricultural products as well as trade centres in most states. This exempted many states from being compared to others. Furthermore, most states do not have an enabling trade support system in place which brought down the average scores of this pillar significantly.

In contrast, Business Ecosystem was the best performing pillar, which implies that the states have made significant progress in creating an enabling business environment.

But, majority of them are yet to achieve the same in terms of creating an export environment.

The coastal states of Maharashtra, Odisha and Rajasthan have occupied the top three ranks. For instance, Odisha has performed well in terms of providing trade support. The state has conducted 24 capacity building workshops to provide exposure to traders which guides the latter into adopting best practices in exports. Furthermore, it's one of the top five states in terms of strengthening its research and development infrastructure. This has put the state at an advantage among others in this pillar.

Among the landlocked states, Rajasthan, Telangana, and Haryana emerged as the top-performing states in this pillar.

The hilly states have performed poorly primarily because there is inadequate support for trade. Except for Tripura and Uttarakhand, the other hilly states do not have an informational portal for the exporters. These two states also conduct trade fairs and capacity building workshops

as part of trade support. Uttarakhand, however lacks an informative trade guide. The steps undertaken by the states have been clearly inadequate and there is scope for improvement in terms of creating an enabling export infrastructure.

**Sub-pillars:
Export Infrastructure**

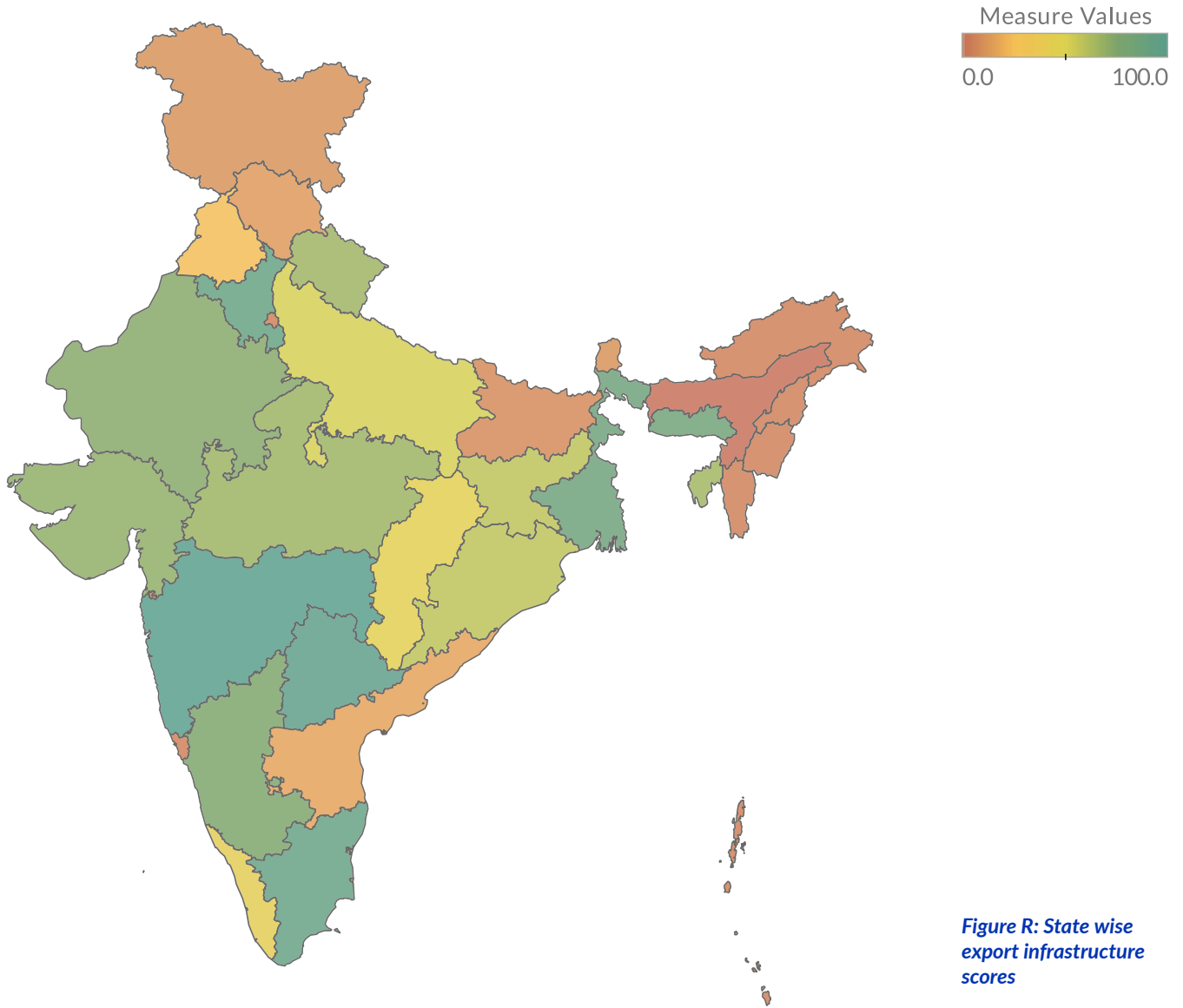


Figure R: State wise export infrastructure scores

Category	Average Scores
Sub-Pillar Average	38.22
Coastal	67.87
Himalayan	28.76
Landlocked	47.85
UT/City-States	5.97

The states can enhance their export competitiveness by plugging the infrastructural gaps. This can be achieved by introducing export promotion hubs and by making relevant export information more transparent as well as accessible.

In this sub-pillar, Maharashtra, Telangana and Tamil Nadu have performed exceedingly well, in terms of providing designated areas for trade centres, a trade guide, as well as an online portal for exporters.

MAHARASHTRA boasts of the largest number of special export promotion zones. The state has promoted the development of several export promotion hubs for sectors such as IT/ITeS, pharmaceuticals, biotechnology, textile, automotive & auto components, gems & jewellery and food processing. Their export promotion hubs are diverse and spread across the state⁶⁴. Maharashtra can serve as a role model for its peer states, in terms of strengthening export promotion parks and hubs.

Only 10 states provide a trade guide, and 15 states provide an online portal for exporters.

All those which under the category of Union Territories, do not have any trade guide or online portal.

This reflects in their extremely poor average score within the sub-pillar.

FOR INSTANCE, DELHI which has displayed strength in the sub-pillars of the Business Ecosystem has performed poorly in this particular sub-pillar. Delhi does not provide a trade guide or an online portal where relevant information about exporters is made accessible.

Accessibility of information, thus, remains a major challenge for the majority of the states.

⁶⁴ Indian Maharashtra Industry Report (December, 2019), IBEF



Trade Support

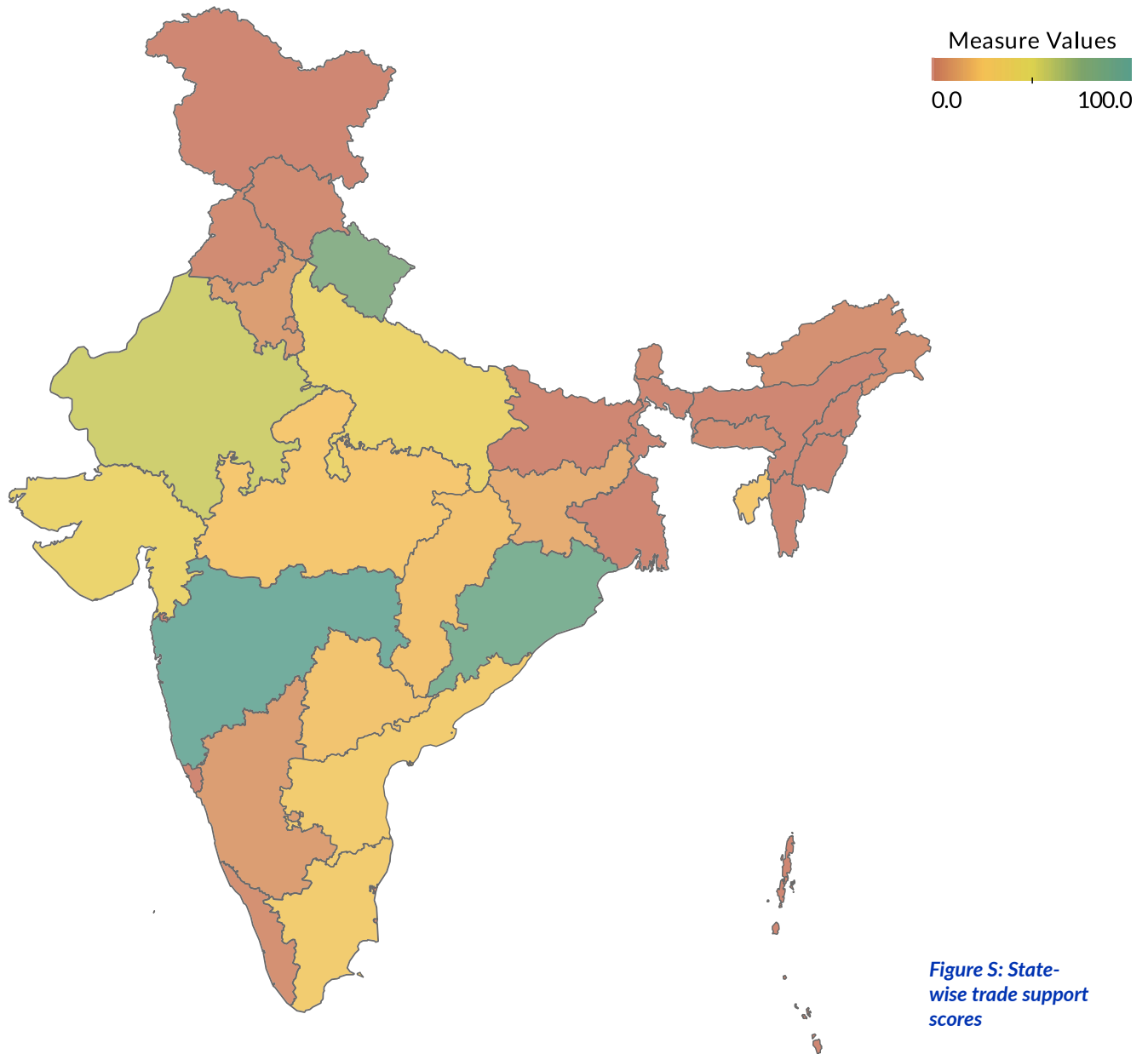


Figure S: State-wise trade support scores

Category	Average Scores
Sub-Pillar Average	16.94
Coastal	37.64
Himalayan	12.76
Landlocked	17.15
UT/City-States	0.65

States need to have in place strategic policy interventions to guide the states into improving their export quality and quantity. **Such policies include a platform for exporters to showcase their products and interact with new partners; and capacity building workshops to train and disseminate knowledge amongst exporters.**

Maharashtra, Odisha and Uttarakhand are the top performers under this sub-pillar.

UTTARAKHAND'S performance serves as an encouraging example for other states, particularly the hilly states and the Union Territories. Uttarakhand has held 21 trade fairs and conducted 10 workshop training for capacity building of exporters⁶⁵. Furthermore, they have 11 projects approved under TIES, which is the highest across all the states. The enrolment of members in the export promotion council stands at 13.56 percent, which stands

at zero for all the other comparable states. Uttarakhand's efforts in these parameters have helped the state to perform as well as the other states.

The Union Territories have performed extremely poorly in this sub-pillar. Except for Delhi, the others do not have any project approved under TIES. This limits their financial assistance to upgrade export infrastructure. Furthermore, none of the Union territories conducts training workshops for exporters, which have put them at a disadvantage.

R&D Infrastructure

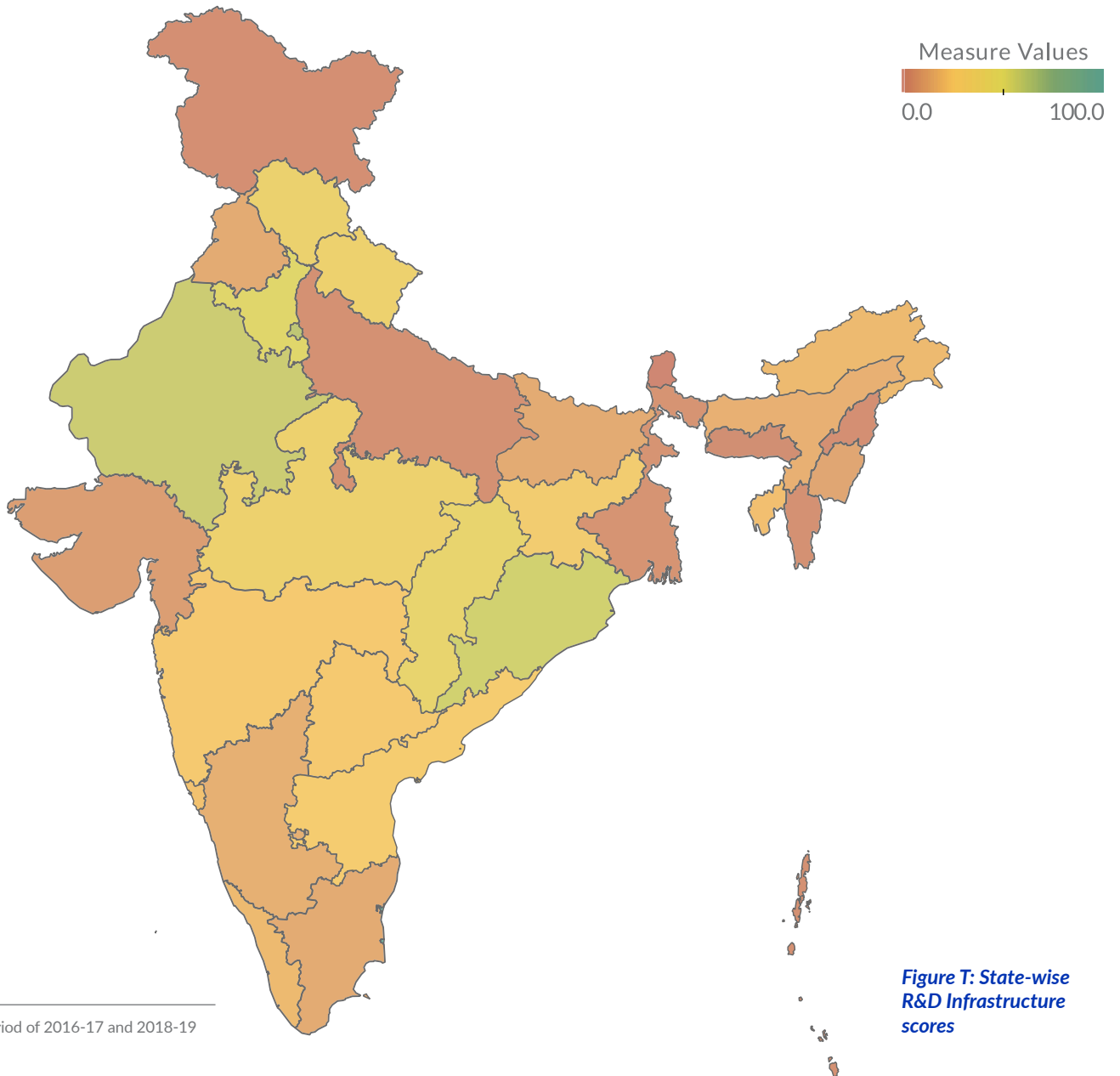


Figure T: State-wise R&D Infrastructure scores

⁶⁵ In the period of 2016-17 and 2018-19

Category	Average Scores
Sub-Pillar Average	23.38
Coastal	21.09
Himalayan	15.02
Landlocked	26.43
UT/City-States	30.87

A higher frequency of research and quality checks accelerates the innovation; Therefore, research institutes and NABL accredited laboratories play a vital role in pushing exporters to enhance the quality of products in tune with international standards.

Overall, the Union Territories have performed exceedingly well as displayed by their average scores. Puducherry is the top performer in this sub-pillar with a perfect score of 100.

However, this sub-pillar includes indicators that are measured in proportion to the state population. Thus, it may affect the positions of states with large populations and as a result, states such as Gujarat and Tamil Nadu both lie below the average score. The smaller states such as Uttarakhand and Himachal Pradesh have also performed well owing to the same reason. Their over-performance has to be read with caution.

There is a serious paucity in terms of Research Institutes, thus curbing the innovative tendencies of the subnational economy. Furthermore, inspection agencies which are accredited by NABCB are only available in 14 states.

There is a disparity in terms of availability of NABL accredited research labs across states. While Maharashtra has 895 accredited labs, Uttar Pradesh has only 83 labs at an internationally acceptable level of competence. Smaller states such as Sikkim have no such labs. The states therefore perform differently in terms of scaling R&D infrastructure in the country, which in turn, affecting their productivity.

On the other hand, professional colleges are abundant, which indicates the states are producing substantial numbers of graduates. However, on an average, India has a dearth of R&D workers per million.⁶⁶ Indian states need to address these gaps to increase their productivity.

Furthermore, government expenditure, almost entirely borne by the Centre, is the driving force of R&D in India in contrast to advanced countries where the private sector is the dominant and driving force of R&D spend.⁶⁷ There is a need for greater participation of state governments and the private sector in overall R&D spending. This would also provide greater employment opportunities, leading to greater innovation and a higher volume of exports.

Gujarat, which has performed exceedingly well in majority of the sub-pillars, has severely underperformed in this particular scenario. The state's ratio of professional colleges stands at 0.7 percent, which is poorer even in comparison with other well-performing states such as Maharashtra, Tamil Nadu, and Karnataka. Maharashtra's figure stands at 2 percent.

On the other hand, Gujarat's ratio of research institutes stands at 0.04 percent, while that of a state such as Rajasthan stands almost close to 1.49 percent. This leaves scope for Gujarat to boost its R&D infrastructure, which could complement and sustain the high business growth in the state. This will further accelerate the innovation process in the state and better their quality of exports.

It is to be noted that the landlocked states, especially Rajasthan have performed better than the coastal states in R&D infrastructure Rajasthan, in comparison to Gujarat, has no inspection agency but has a significantly greater ratio of NABL labs as well as research institutions. Their ratio of research institutes stands at 1.5 percent, much higher than Gujarat's 0.04 percent.

⁶⁶ India Innovation Index Report, 2019

⁶⁷ R&D expenditure Eco-System Report, Ministry of Heavy Industries & Public Enterprises, 2018

PILLAR 4: EXPORT PERFORMANCE

Category	Average Scores
Coastal	38.64
Himalayan	41.45
Landlocked	37.76
UT / City-States	27.12

Strong performances from the Himalayan states of Mizoram and Manipur have put the average score higher than other states. Mizoram is a distant topper of this pillar after delivering strong results in Export Orientation and Market penetration. The state's success can be credited to remarkable average export growth. It offers immense potential for commercial utilization of the natural resources for export-oriented industries. Even if Mizoram's export base is relatively low, this growth sets the right precedence and will further promote state intervention to ensure the sustainability of the said growth rate.

Mizoram specialises in the production of bamboo in India, with more than 30 species found in the state. It caters to 14 percent of India's bamboo needs. Apart from this, Mizoram also specialises in the production of spices such as turmeric and ginger, as well as fruits.

It is no surprise that India recorded an exceptionally high export growth of spices in 2017-18⁶⁸. The country exported a record 10,28,060 tonnes of spices and spice products

valued at Rs 17,929.55 crore in 2017-18, if we take a closer look at Mizoram's export basket, it can be found that spices constitute almost 20 per cent of their overall exports.

It is encouraging to observe that smaller states which have displayed little to no strength in other pillars are performing well in this one. A strong export performance should encourage states such as Mizoram to improve their performance in other pillars as well.

While Gujarat and Maharashtra occupy the second and third position respectively; states such as Tamil Nadu and Karnataka which have fared better in other pillars feature in the bottom half of the rankings. This could be attributed to negative average export growth and weaker export concentration.

However, the encouraging performances by the smaller states have to be viewed with caution. In the case of Tamil Nadu, for instance, the volume of exports has been large throughout the years, and hence the average growth is not as significant for the state. But Mizoram has been able to increase its volumes from a relatively smaller share to a larger share within the same period, and hence its average growth is higher. Thus, in absolute terms, Tamil Nadu will outperform Mizoram, but in average terms of growth, it will not.

⁶⁸ www.business-standard.com/article/pti-stories/record-export-growth-of-indian-spices-in-2017-18



Sub- Pillars
Growth and Orientation

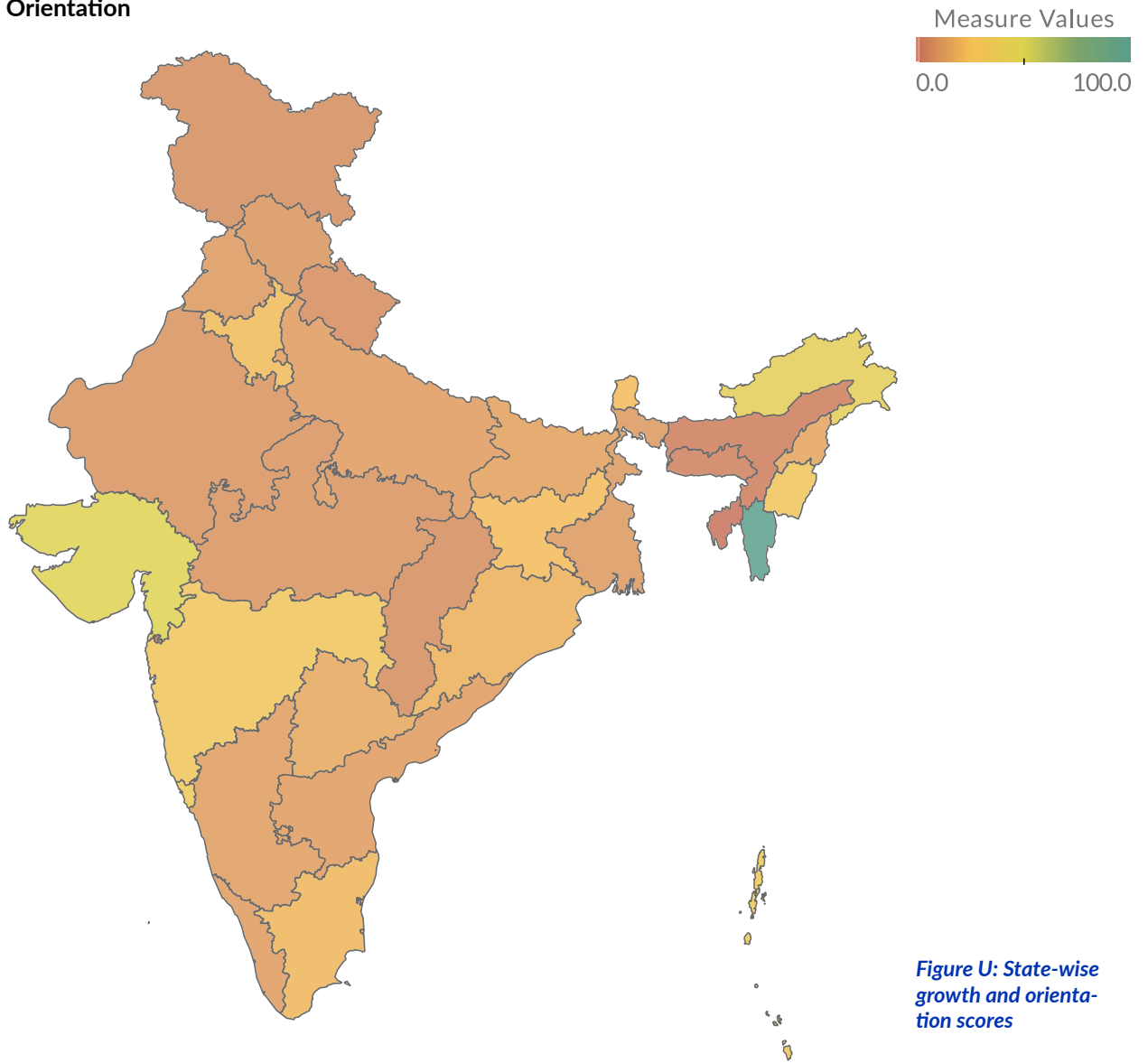


Figure U: State-wise growth and orientation scores

Category	Average Scores
Sub-Pillar Average	18.01
Coastal	20.83
Himalayan	25.84
Landlocked	12.30
UT/City-States	14.25

Mizoram’s impressive average export growth and percentage of increase in exporters could be down to a low base for the same indicators in the previous year. Other Himalayan states, such as Manipur and Sikkim are some of the other strong performers, thus highlighting the influence of a growing export footprint in the hilly regions.

This sub-pillar measures the relative and absolute growth in the state-level exports. Through export-GDP ratio, the states will be able to assess the contribution of exports and similarly, the number of exporters present in the state will indicate the conducive environment.

MANIPUR, like Mizoram, benefits from conducive climatic conditions and specialises in the production of agricultural products such as bamboo and spices. Apart from that, it is home to many medicinal plants, which also reflects on its export basket. Medicines constitute 17 percent of Manipur’s export. In recent years, India’s exports of drugs and pharmaceutical products have significantly grown⁶⁹. This could be one of the reasons for Manipur’s export growth.

AMONG THE UNION TERRITORIES, GOA AND ANDAMAN & NICOBAR ISLANDS have registered the best performance. For Andaman and Nicobar Islands, this is primarily because of its significantly high export growth of over 280 percent over the last three years. For Goa, its mainly due to the high Export to GDP ratio and increase in number of exporters. Andaman specialises in exports related to textiles. The textile industry is one of the biggest export

industries in the country, and hence the island benefits from it. If they can boost their infrastructure, it would further help them to expand their exports.

On the other hand, states that have performed relatively well in other sub-pillars, have not been able to perform up to the mark in this particular sub-pillar. For instance, Rajasthan’s average export growth over three years stands at a meagre 5 percent. Maharashtra’s is as low as 0.12 percent. The larger states must take initiatives to expand their export growth. Because they already have the prerequisite infrastructure in place, their volume of exports should not be restricted to lower valuations.

Export Diversification

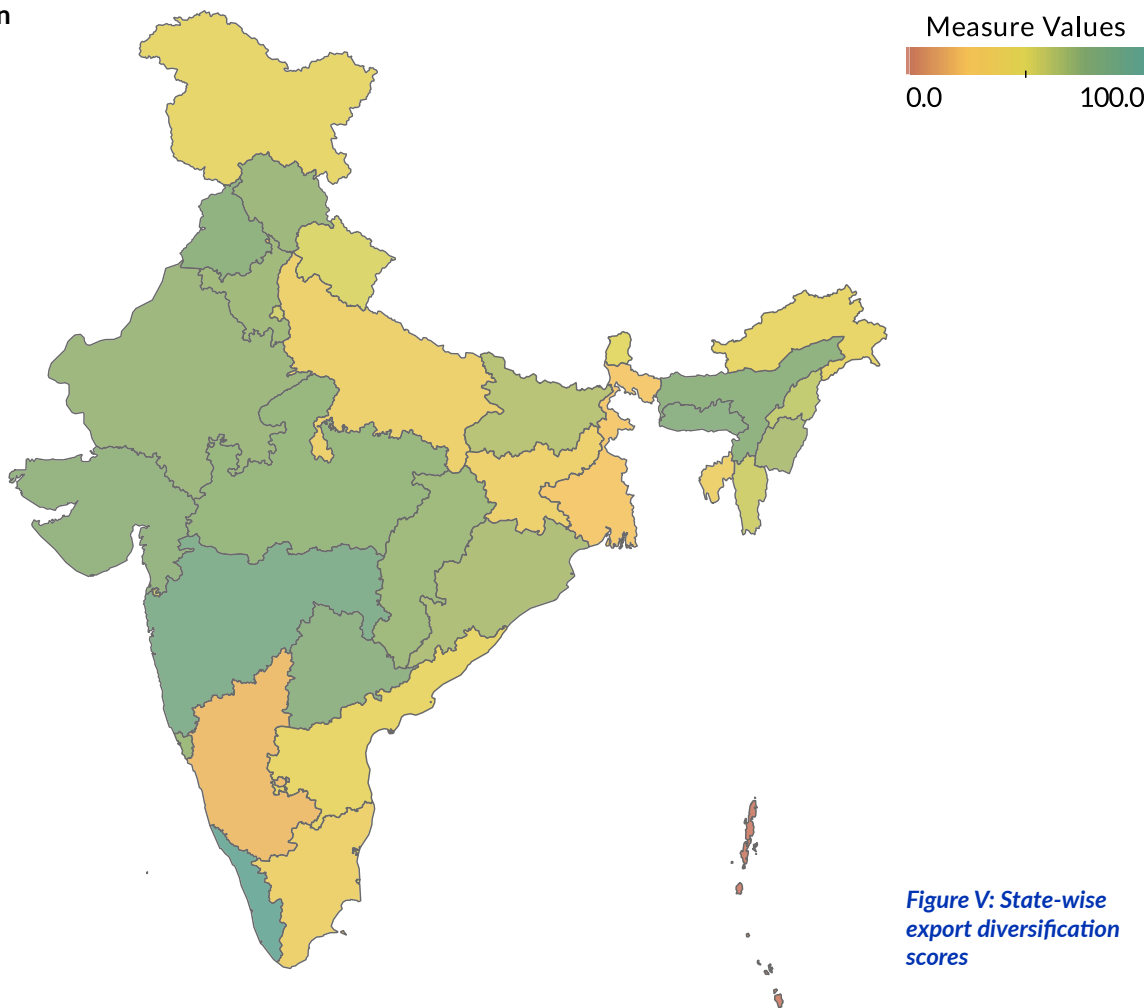


Figure V: State-wise export diversification scores

⁶⁹ Annual Report 2018-19, Ministry of Commerce and Industries

Category	Average Scores
Sub-Pillar Average	55.02
Coastal	56.45
Himalayan	57.07
Landlocked	63.23
UT/City-States	40.00

Export diversification measures both the dispersion of export value across an exporter's products and the extent to which exports from a state reach already proven markets. Better trade value concentration and market diversification protect the exporting unit from external shocks.

It has emerged from the findings, that the states are yet to strike a balance between trade value concentration and market diversification. Except for Kerala, none of the states features in the top 12 for any indicator. Kerala is the only state that has performed exceedingly well in this sub-pillar.

Export Concentration Top 12	Market Penetration Index Top 12
Meghalaya	Rajasthan
Manipur	Maharashtra
Assam	Punjab
Nagaland	Telangana
Bihar	Gujarat
Mizoram	Tamil Nadu
Lakshadweep	Haryana
Chhattisgarh	Delhi
Sikkim	Madhya Pradesh
Arunachal Pradesh	Uttar Pradesh
Kerala	Dadra Nagar and Haveli
Tripura	Kerala

For states scoring low on Market Penetration Index there is a further need to assess why they are not being able to reach potential markets, find out how competitive their products are, and find newer possible markets for better geographic outreach.

The states must adopt a balanced approach to export growth and diversification. Export concentration is just one half of the said approach which would protect

the states them from internal economic shocks while emphasizing on comparative advantage. However, the focus must also be on expanding export diversification both in terms of products and destinations. Proven literature suggests that export diversification is one of the key drivers of economic growth^{70,71}.

The graph below depicts the average reach of the top 10 products across the world of the states. The states with higher average reach have an advantage in avoiding potential global economic shocks while also establishing new trading partnerships.



⁷⁰ Hesse, H. (2009). Export diversification and economic growth. Breaking into new markets: emerging lessons for export diversification, 55-80.

⁷¹ Al-Marhubi, F. (2000). Export diversification and growth: an empirical investigation. Applied economics letters, 7(9), 559-562.

AVERAGE NUMBER OF EXPORT DESTINATIONS

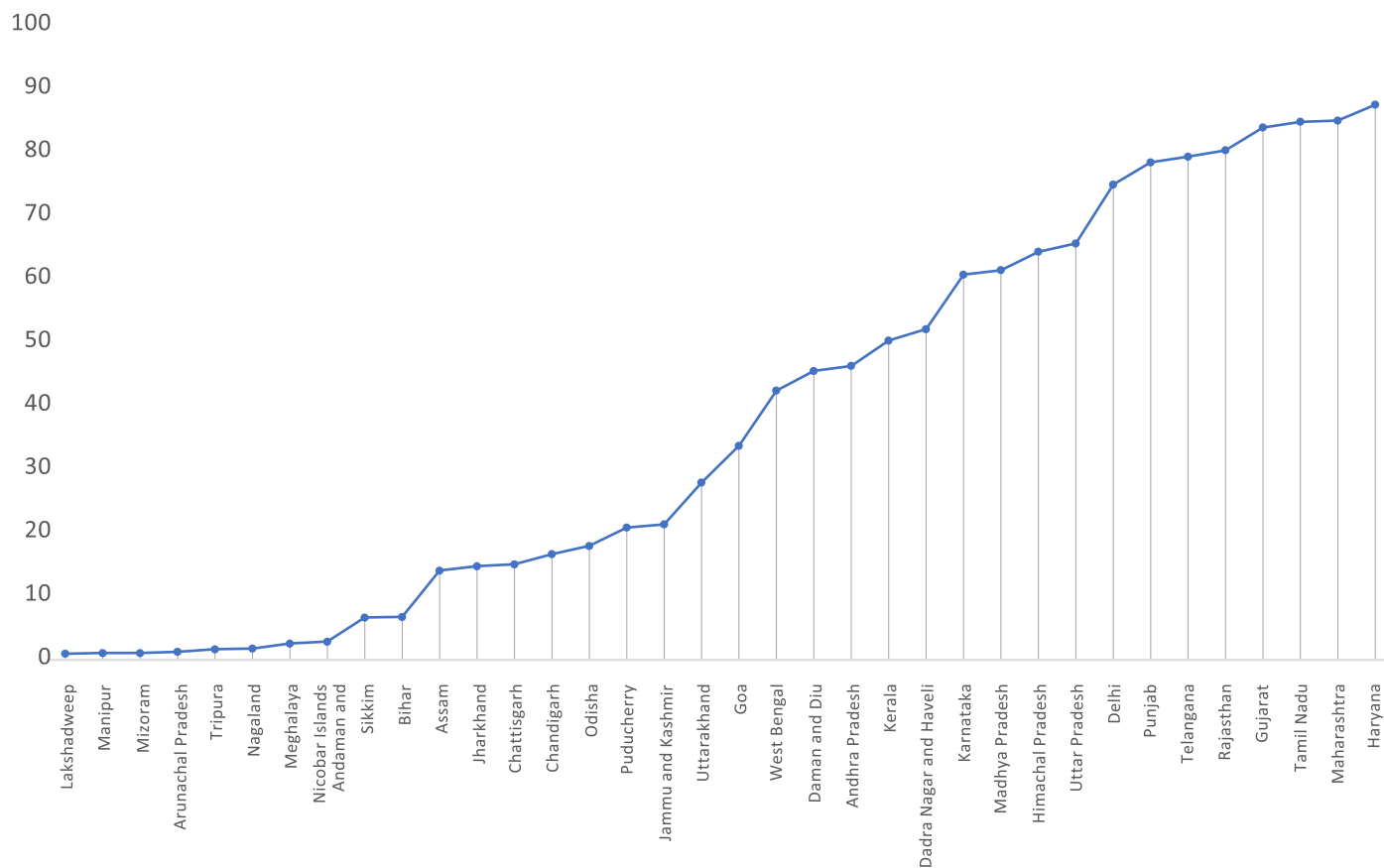


Figure W: State-wise average number of export destinations (Source: DGCIS, Author's Calculations)

It is mostly the top-performing states that have successfully diversified their export basket in terms of destinations. Most of the small and hilly states are heavily reliant on natural resources. This makes it difficult to diversify their baskets in comparison to other categories of states.

Himachal Pradesh, primarily exports medicines, to 152 of 226⁷² countries that export this product. However, the performance is not consistent across all the ten products that the state exports. This remains a problem for most of the smaller states.

⁷² Number of countries listed by International Trade Centre

07

Learnings and Strategies



Key Learnings

The key learning that emerged from this edition of EPI has been that India scored well on average across the sub-pillars of exports diversification, transport connectivity, and infrastructure for most of its states. The average score of Indian states in these three sub-pillars was above 50%. Amongst these three sub-pillars, export diversification and transport connectivity show low standard deviation (21.99 and 18.91 respectively) vis a vis other sub-pillars, which signifies that in these two components, the averages are not being skewed to the higher side by a few over-achievers. Besides these strengths, Indian states should also focus on other key components in order to improve the overall export competitiveness.

To stimulate a favourable orientation towards exports, states should incentivize the initiation of several internal policy reforms. The findings of the Economic Survey 2017-18 corroborate this: it indicated a strong correlation between exports and prosperity in Indian states.

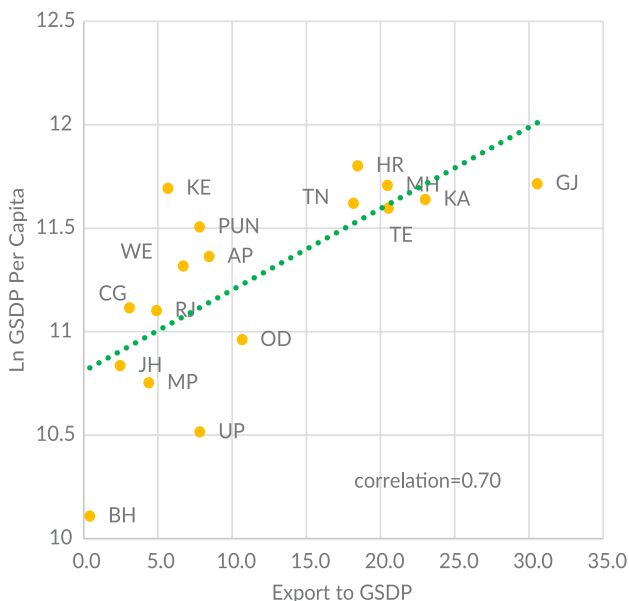
It perhaps stands out that the impetus to improve export orientation is not only restricted to the usual suspects who have higher exports to GSDP ratio but also to several emerging champions of exports, which face unique socio-economic and geographic challenges.

Two of these champions are the landlocked states of Chhattisgarh and Jharkhand, which have a cumulative EPI ranking of 8 and 14 respectively. Despite their unique challenges, which range from a lack of traditional export orientation enjoyed by some coastal states to historic regional underdevelopment stemming from a possible resource curse, the impetus to promote exports as shown by these two states is not only commendable but also inspirational.

Steps such as ensuring the participation of exporters in important trade fairs and buyer-seller meets, and dissemination of information like market studies, design trends, export trends, standards and specifications, and trade enquires across exporter networks have facilitated these states to achieve better export preparedness.

Other Empowered Action Group (EAG) states, which face similar socio-economic challenges can take a page out of Chhattisgarh and Jharkhand’s performances. It may help them to not only achieve more prosperity but also escape their “resource curse” by boosting the manufacturing base in their regions.

INTERNATIONAL EXPORTS AND STATES’ PROSPERITY



STATES’ INTER-STATE GROSS TRADE AND PROSPERITY

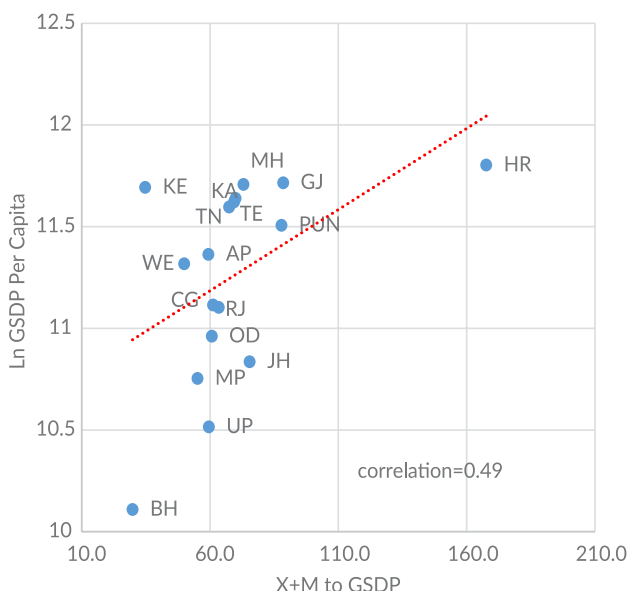


Figure X: Correlation between exports and GSDP. (Economic Survey, 2017-18)

⁷³ <https://pib.gov.in/newsite/PrintRelease.aspx?relid=186255>
https://commerce.gov.in/writereaddata/uploadedfile/MOC_636626711232248483_Annual%20Report%20%202017-18%20English.pdf
<https://mofpi.nic.in/sites/default/files/2-ftpstatement2015.pdf>
<https://dgft.gov.in/sites/default/files/ftpst17-051217%20%283%29.pdf>

Export orientation and preparedness are not just the domains of prosperous or legacy states. Dynamic export policy measures, functioning promotional councils, and synchronization with national logistical plans can

provide opportunities even for emerging states to embark on a path of prosperity backed by regional export competitiveness.

Sub-Pillar	Average Score	Median Score	Difference
Export Promotion Policy	44.86	44.96	-0.10
Institutional Framework	34.72	33.48	1.25
Business Environment	44.61	49.34	-4.72
Infrastructure	51.07	51.50	-0.42
Transport Connectivity	53.73	53.31	0.41
Access to Finance	35.53	30.31	5.22
Export Infrastructure	38.22	19.49	18.73
Trade Support	16.94	2.09	14.85
R&D Infrastructure	23.38	19.53	3.85
Growth and Orientation	18.01	12.71	5.30
Export Diversification	55.02	56.75	-1.73

However, regional divergences are not absent when it comes to export preparedness in India. The challenge is perhaps the same across the sub-pillars of trade support, growth and orientation, and R&D infrastructure, where the average score was barely able to touch 20 per cent in only one out of the three indicators.

This shows that there is a need to establish coordinated handholding in these three domains as the states have been unable to cater to these requirements by themselves.

Additionally, the divergence between mean and median scores of the export infrastructure sub-pillar are among the highest across all the sub-pillars - 18.73. This indicates that almost half of the states and union territories are far behind Telangana, Tamil Nadu and the sub-pillar leader Maharashtra which has scored a perfect 100. Thus, across states, the development of export infrastructure remains skewed. The states will have to identify their key areas of concern in this domain from the full scorecards and bridge this gap individually or by convergence with Central schemes.

Sub-Pillar	Key Learning
Export Promotion Policy	Most states are mainly identifying their thrust areas/sectors for exports. This is not enough. Export promotion policy needs to focus on incentives like providing market support, financial and non-financial incentives to MSMEs, and an increased emphasis on product and process standards and quality certifications.
Institutional Framework	Institutional channels for operationalizing export promotion policy within states is leaving a lot to be desired. There is a need to increase the number of grievance redressal cells, Centre-State coordination cells, and outreach forum for exporters within states.
Business Environment	Simplified processes of e-filing applications through online submission, payment, tracking and monitoring have given significant benefits to exporters in many states. Furthermore, the establishment of commercial courts in major cities to expedite conflict resolution and reduce associated legal costs have added to the improvement of business environment in most leading states. The reduction in the cost of establishing and running a business has been the key enabler for an improved business environment across states.
Infrastructure	Along with creating infrastructure for co-locating industries in a region, states would also need to emphasise the need for infrastructure that allows firms to collaborate with each other. Only when co-locating agglomerations can effectively collaborate with each other, will they become a cluster. There is a lot of potential for clusters, especially in land-locked states, to drive exports in many states.
Transport Connectivity	Congestions and delays have been reduced across leading states by increasing the number of modes (multi-modal) in a transport network. Moving forward, instead of increasing capacity of major modes of transport, diversification of transportation across various modes would enable states to achieve lower congestion and higher efficiency.
Access to Finance	There is a crucial need to provide export focussed credit, especially for MSMEs, across most states in India. The leading states in this sub-pillar offer almost X5 to X9 times the average percentage of export credits in India to their exporters. State backed credits must to be explored in the short to medium term to boost MSMEs potential for exports under the current global economic slowdown where private investment will be tough to achieve.
Export Infrastructure	The lack of soft-infrastructure such as an online portal and a trade-guide across states was alarming. Only 10 states had trade guides, and only 15 had an online portal for their exporters. Maharashtra can serve as a model for its peers in terms of strengthening export promotion parks and hubs in operational terms.
Trade Support	A platform for exporters to showcase products and interact with new partners and workshops to build capacity for potential exporters to navigate international trade are two fundamental elements lacking across states. Uttarakhand, and landlocked state, has done significantly well in this domain as it has been able to mobilize 21 trade fairs and conduct over 10 workshops between 2017 and 2019. This was able to support the highest enrolment of exporters within the export promotion council of the state when compared to its peers in the same category.
R&D Infrastructure	The inter-regional disparity in terms of availability of NABL accredited research labs is another concern. While Maharashtra has 895 accredited labs, UP has only 83. Furthermore, state specific and state driven R&D to boost local clusters emerged as a key area of focus in the analysis.
Growth Orientation	This sub-pillar records the recent achievements of many North Eastern states that were able to export more focussing on their indigenous product baskets. This shows that a focussed development of such baskets – for example spices – can drive exports on one hand and also improve farmer incomes on the other.
Export Diversification	In the years to come, a balance needs to be struck between export value concentration and export diversification as many conventional markets for Indian exports are expected to experience lower demands owing to the economic slow-down. To tide over this situation states will have to individually come up with market diversification strategies, with respect to their export baskets, to find new opportunities.

The situation is even more grim in the case of the trade support sub-pillar, which although has an average score of 16.9, half the states have only scored 2.1 or below. To put this into context, the leader in this sub-pillar is Maharashtra, which has a perfect score of 100. So, half the Indian states are 97.9 points behind Maharashtra when it comes to supporting trade. This is a cause of concern. The trade support sub-pillar comprises indicators that gauge the support that a state/UT provides to its firms to be able to export. Since most firms in India are heavily fragmented, collective action in export promotion by firms is only possible through the facilitation of the states. The large-cap organizations are mostly immune to the lack of trade support as they can replicate the necessary infrastructure in-house or successfully influence trade confederations at the state and national levels to gain support. The SMEs suffer from the lack of trade support. If the vision of promoting exports by SMEs have to be realized, then the trade support ecosystem will have

to be strengthened across the states. Merely creating a common infrastructure for SME agglomerations will perhaps not cut ice in the medium to long-term.

Furthermore, during this term states that are geographically similar must be able to converge in terms of their export potential, which is not the case now. The gap between the best-performing coastal state and the lowest score in the Export Preparedness Index is a significant 41.15. Same in the case of landlocked states, wherein the gap is even higher at 50.32.

One significant learning from this exercise was to understand how favourable policy ecosystems and facilitating regulations can harness not only geographic advantages but also overcome geographic challenges. The best-performing coastal states, for instance, perform significantly better than most landlocked states due to better policy ecosystems.

Category	Highest EPI Score	Lowest EPI Score	Gap
Coastal	75.19	34.05	41.15
Landlocked	62.59	12.26	50.33
UT/City-States	45.8	12.4	33.4
Himalayan/Hilly States	48.11	19.4	28.7

Strategies

Based on the learnings, it is evident that export promotion in India faces three fundamental challenges:

1. Intra- and inter-regional disparities in export infrastructure
2. Poor trade support and growth orientation among states
3. Poor R&D infrastructure to promote complex and unique exports

However, these are not the only problems faced by the states. In fact, the whole purpose of this Index is to counter the one-size-fits-all approach that focuses on macro-trends. The foundational principle of this Index is to promote competitive federalism wherein

each state can identify their critical challenges from the detailed scorecards in the previous section and then establish context-specific strategies to address the same. However, the learnings do show that most states in the country have failed to address these three main issues. The inability of most states to come up with relevant strategies for these three domains raises the question if the states do not have the capacity to address these issues. This has to be explored outside the context of this study as it requires a much-detailed analysis. However, in the short run, these three significant bottlenecks could be addressed by undertaking the following strategies:

1. Convergence: The creation of export infrastructure is indeed a capital-intensive process, which may

emerge as a challenge for many states even if they have been able to perform better in other domains. By convergence with various national infrastructure development plans and coordinating the joint development of export infrastructure, the Central government can reward states that have taken significant steps towards export promotion. It would act as an incentive for others to undertake effective policy reforms and not fall into policy inertia arising from their inability to address the brick-and-mortar issues.

2. **Robust government–industry–academia linkages:** With over 20 IIMs and several other institutes for management excellence spread across the country, creating good academia, industry, and government linkages to support trade should be a reasonably straightforward exercise. Yet, these linkages do not always organically develop in an emerging economy. Often capacity-building programmes in premier institutes of management tend to be expensive, with little support for vernacular speakers. Furthermore, there is a broader incentive problem to promote the operationalization of research on the ground by academia. Every state must actively create channels for government–industry–academia linkages by facilitating and encouraging the capacity building of SMEs and the establishment of general export councils. Industry–academia linkages should not just be restricted to the level of policy consultation but should also percolate down to regular capacity building exercises for SMEs in states that have done significantly well in exports. By identifying and educating such SMEs about inventory and cash-flow management, design and standard, and export operations, the government–industry–academia linkage will be able to address several legacy management issues that restrict the export competitiveness of the SMEs in Indian states.
3. **Creating state-level engagements for economic diplomacy:** India has several international chambers of commerce and trade facilitation centres. However, Indian states seldom engage directly with them. Under the newly christened ‘Economic Diplomacy and States’ vertical of the Ministry of External Affairs, NITI Aayog should create capacity within states and build frameworks to facilitate direct engagements with

such transnational trade bodies. It would allow states to leverage their unique socio-cultural, economic, and historic trade linkages to open new market channels. State-level engagement can align with the foreign policy of many of India’s partners, such as Singapore that is actively seeking to promote trade and investment engagements with Indian states. However, engaging with international forums may have national repercussions, and therefore the capacity for the same will have to be initially facilitated by the Centre. It would also have the potential to strengthen India’s para-diplomatic channels for economic and trade negotiations in the years to come.

4. **Focus on designs and standards to make products export-ready:** Focus must be placed on such aspects to tap into our export potential. Let us understand the importance of designs and standards with the help of an analogy. There are several unique and environmentally friendly handicrafts produced in India that have the potential to be exported abroad as items for interior decoration and upholstery. However, often these products have basic designs and do not meet export standards. The Central and state governments will have to coordinate and engage with design institutions within the country to create a national discourse on the importance of designs and standards needed for exports.
5. **New use cases for products:** Moreover, new use cases for conventional products, such as coconut coir, woven textiles, and bamboo, will have to be identified with design thinking so that the vast export potential of the Indian micro-enterprises gets adequately harnessed. The same is also true for the case of the industrial design of products. Several contract manufacturers in the electronics sector can be upgraded to original equipment manufacturers with proper design support. Designs and standards would undoubtedly emerge as a crucial pillar to promote India’s exports.

Though states would ideally develop the strategies for export preparedness based on their scorecards, the five procedures of intervention identified above cannot happen without the Centre’s facilitation. It is therefore imperative that moving forward the Centre continues to support the states that have been able to create

functional policy ecosystems despite their unique socio-economic challenges.

By creating convergence for building export infrastructure, facilitating robust industry-academia-government linkages to build trade-support networks, promoting state-level engagements for economic diplomacy, and an emphasized focus on designs and standards, India would be able to develop some of the key learnings of this analysis. The states will not only have to focus on

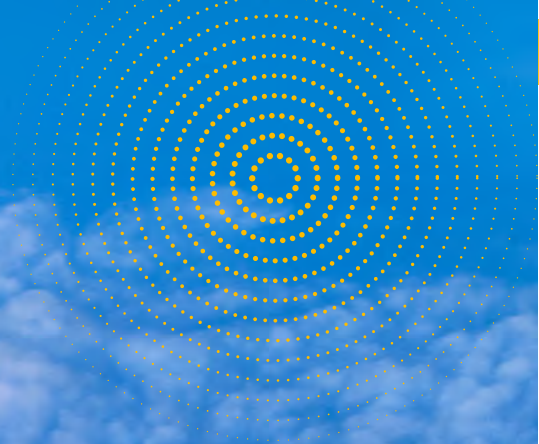
increasing and diversifying exports but also need to focus on ensuring forward and backward integration to global value chains, which would allow the states to export higher value-added goods and services. In addition to these, the appended table below identifies some key indicators of concern across sub-pillars that show low scores across most Indian states. While the states should ideally develop context-driven actions for the same, some recommended strategy for these indicators are listed in the table below.

Sub-pillar	Key Areas of Concern	Recommended Strategies
Trade Support	Number of projects approved under TIES; Membership of Exporters in State Export Council; Capacity Building and Orientation Workshops.	States need to encourage more exporters to be a part of state export councils by undertaking active membership drives. Furthermore, due to the fragmented nature of firms in India, they often lack the necessary capacity to navigate complex export deals in international markets. They may also lack adequate knowledge about necessary risk mitigation or risk management strategies associated with exports. In this regard, states should create capacity workshops, perhaps in partnership with institutes of foreign trade and management, to help exporters actively benefit from potential export market opportunities.
Growth and Orientation	Low Export to GSDP ratio; Increase in number of Exporters.	Export to GSDP ratio is an outcome variable and cannot be impacted by specific strategies. It is expected that when states would re-orient their economic policy to engage better in export markets, the share of exports in GSDP would gradually increase. However, states should actively encourage more firms, especially MSMEs, to participate in exports by improving their trade support policies.
R&D Infrastructure	Low number of NABL accredited labs and inspection agencies.	The regional disparities in the R&D infrastructure has been dealt with in great detail throughout this section. In fact, as globalization evolves ⁷⁴ , increased R&D in products and operational processes would be of key importance in being competitive in the export markets. One low hanging fruit is to get accreditation for existing testing facilities in a state by retrofitting them to the national standard. Another step could be to encourage more research in state government universities on relevant issues that can influence the export potential of the state.
Export Infrastructure	Absence of online trade portal; Absence of Trade Guides for potential exporters; Low number of Agri-export Zones.	While the creation of new agri-export zones will depend on the overall export policy of individual states, all states are strongly encouraged to create an online trade portal providing exporters a single window for accessing all trade related information. Exporters, especially agri-exporters and MSMEs should be able to access market intelligence to truly compete with firms globally. They are often unable to undertake such exercise by themselves owing to their fragmented nature and lack of knowledge resources.

⁷⁴ <https://www.weforum.org/agenda/2019/02/5-hidden-ways-that-globalization-is-changing/>

08

The Way Forward



The new world order is one in which production systems are more consolidated, and supply chains significantly reduced in size to increase efficiency. Given this new paradigm of global production, India will face intense competition in exports from other regions that compete on cost-advantages, such as Vietnam, Cambodia, Laos, and the Philippines. As mentioned in the previous chapters, the key moving forward will not only be the long-term productivity of Indian exporters but also their ability to produce complex, unique, and hard-to-replace commodities.

With three decades of economic growth witnessed after the economic liberalization, India's cost competitiveness would soon wear out as the standard of living increases in the country. This exercise, to assess the preparedness of Indian states to export, was not only to identify the major exporting regions of India but was also to determine the level of future preparation in the years to come. For instance, the analysis section of this report encourages states to emulate the dynamic policy mechanisms of Jharkhand over many other states that have higher share in the total exports. It is because legacy exports, such as large-scale exports of shrimps to East Asia and Western markets, would be unsustainable in the long run. This will happen as regions with comparatively lower standards of living produce the same commodity at a lower labour cost. It means buyers would be able to switch suppliers rendering legacy exports vulnerable quickly unless these legacy-exporting regions incorporate higher value added production processes. It is achievable by creating the necessary policy and export support ecosystems advocated within the scope of this report.

Furthermore, design, research, and development are incredibly high value-adding activities, which need to be supported if India is to export complex and unique economic goods in the global market. The focus on design

and research is difficult to achieve organically as the firm structure in India is highly fragmented. It means there should be active facilitation of the state and academia to promote the importance of design and research vis-à-vis export. If administered well, this would not only be able to boost exports but also strengthen the overall manufacturing base of the country—one state at a time.

Finally, moving forward, the best practices of the states should be regularly documented and disseminated to promote peer-to-peer learning under cooperative federalism. For instance, depending on the unique challenges identified in the state scorecards, each state can choose to emulate some of the best practices. For example, conducting targeted capacity-building workshops like Tamil Nadu did or creating a targeted retail platform like West Bengal's Biswa Bangla, which had over US\$4.5 million in revenues over 2019. Again, nothing specific is being specified here as a silver bullet solution, as that is not the purpose of this report. Silver bullet solutions often lead to agencies mimicking practices without considering their unique economic and policy contexts. The focus here is to identify the drivers and the bottlenecks for each state in their scorecard and to then create the capacity to address them using the four strategies identified in the previous section. Further, with states now engaging more directly with international forums of business, it would be necessary to create capacity across the board to ensure regional disparities do not continue to exist in the country.

Celebrating innovative policymakers, facilitating linkages, building capacity, and transitioning to more complex and unique products depending on the inherent competitive advantages of the states would be the way forward for export promotion in the years to come.

09

State Profile⁷⁵



⁷⁵ The Destination to Frontier and Comparative Analysis Graphs have sought to show the difference between the state's and best performer's score at the pillar-level



Andaman & Nicobar Islands

17.65
Export Preparedness

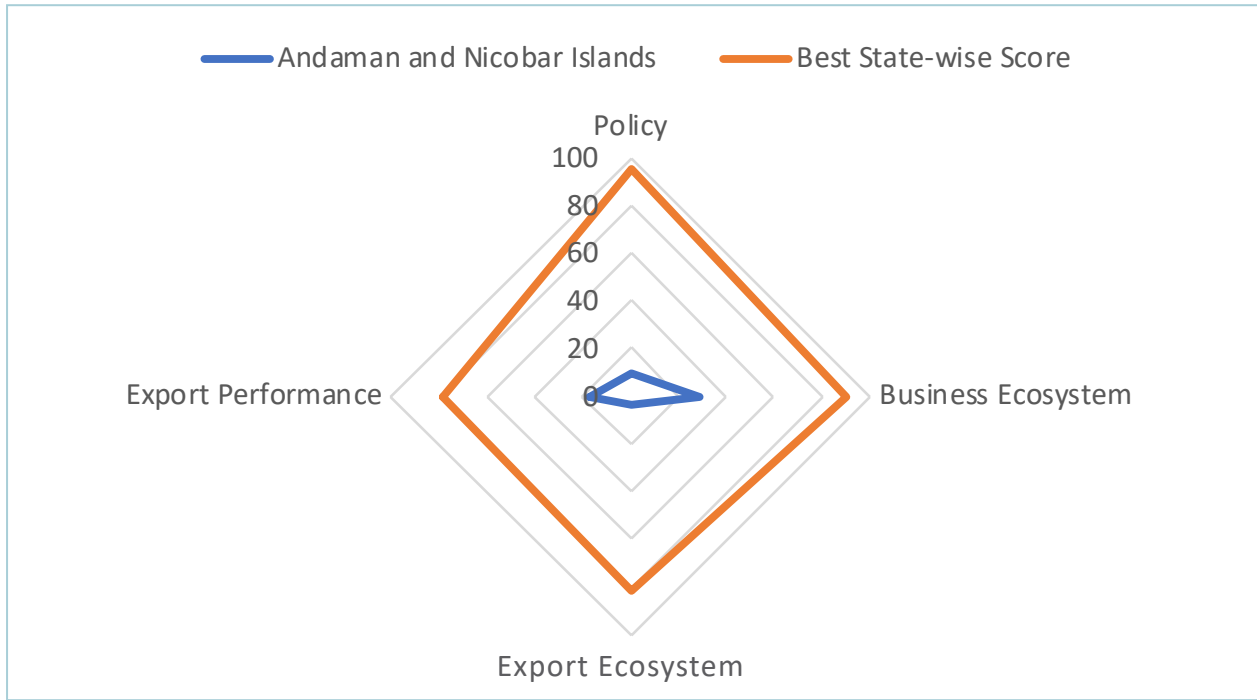
Rank: 33

Category : UT/ City-States

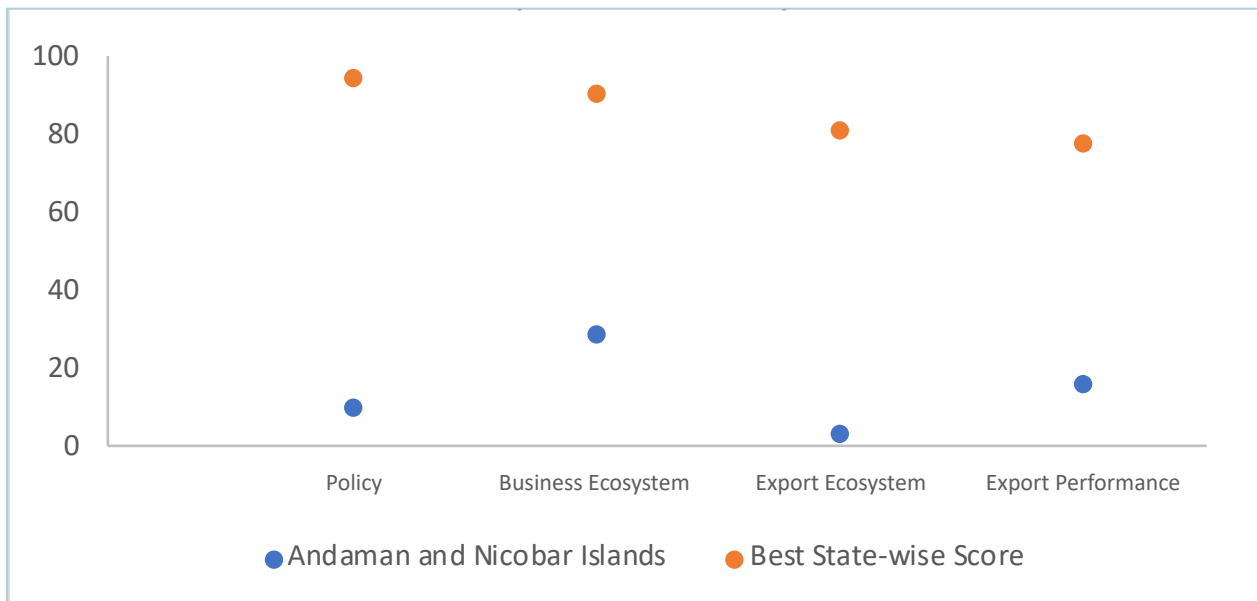
Scorecard



Distance to Frontier



Comparative Analysis



Andhra Pradesh

35.58

Export Preparedness

Rank: 20

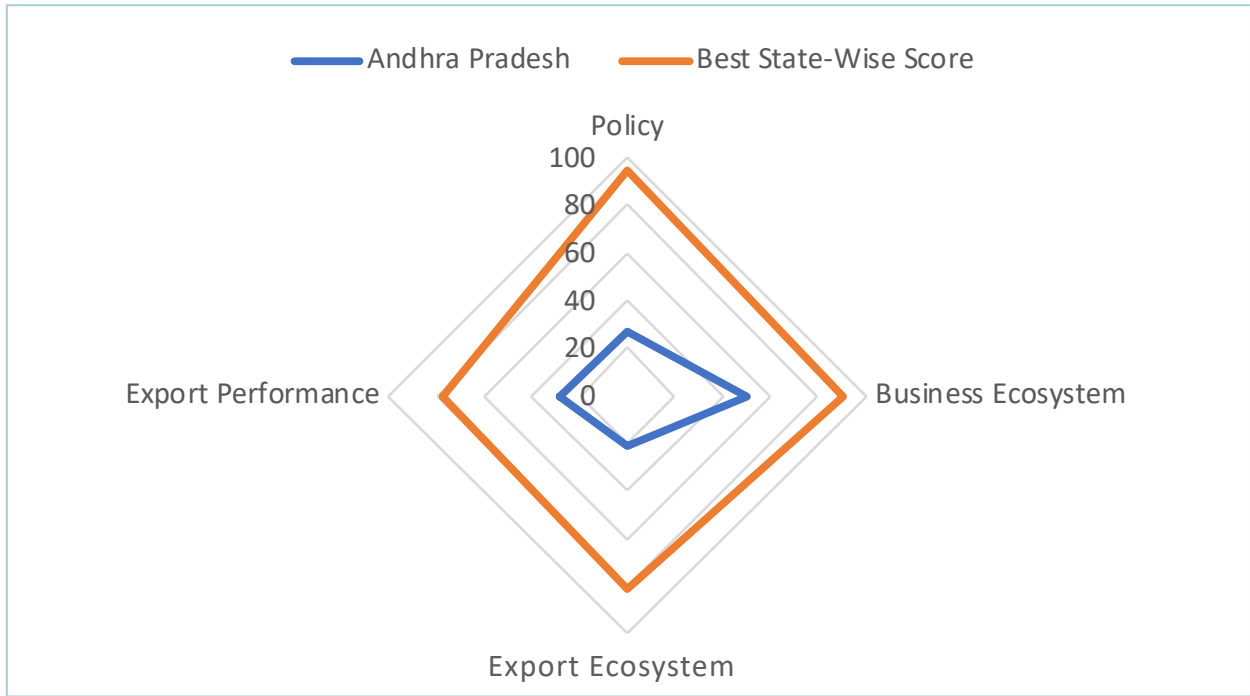
Category : Coastal

Scorecard

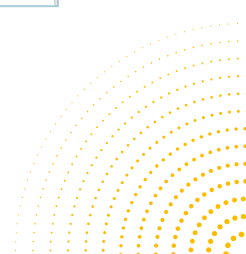


How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Distance to Frontier



Comparative Analysis



Arunachal Pradesh

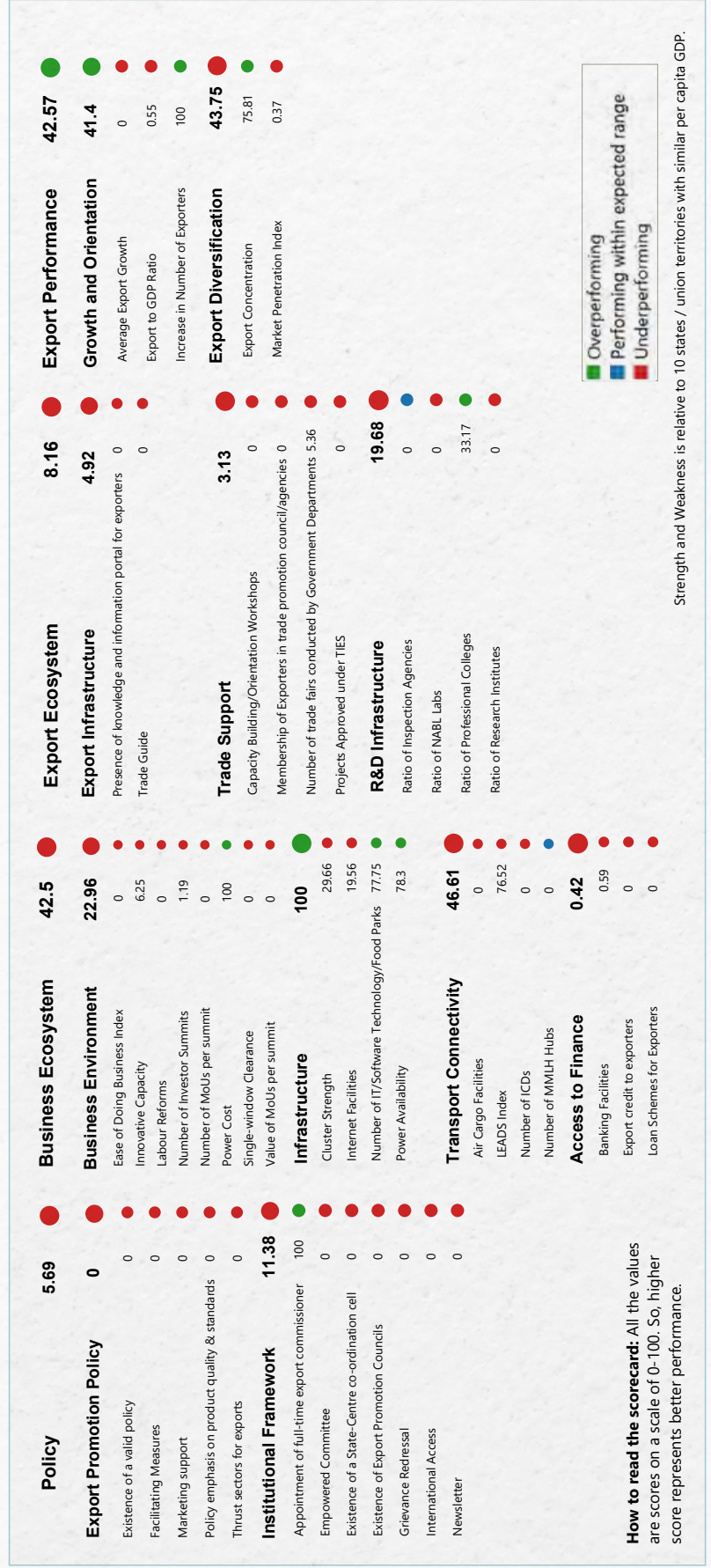
28.28

Export Preparedness

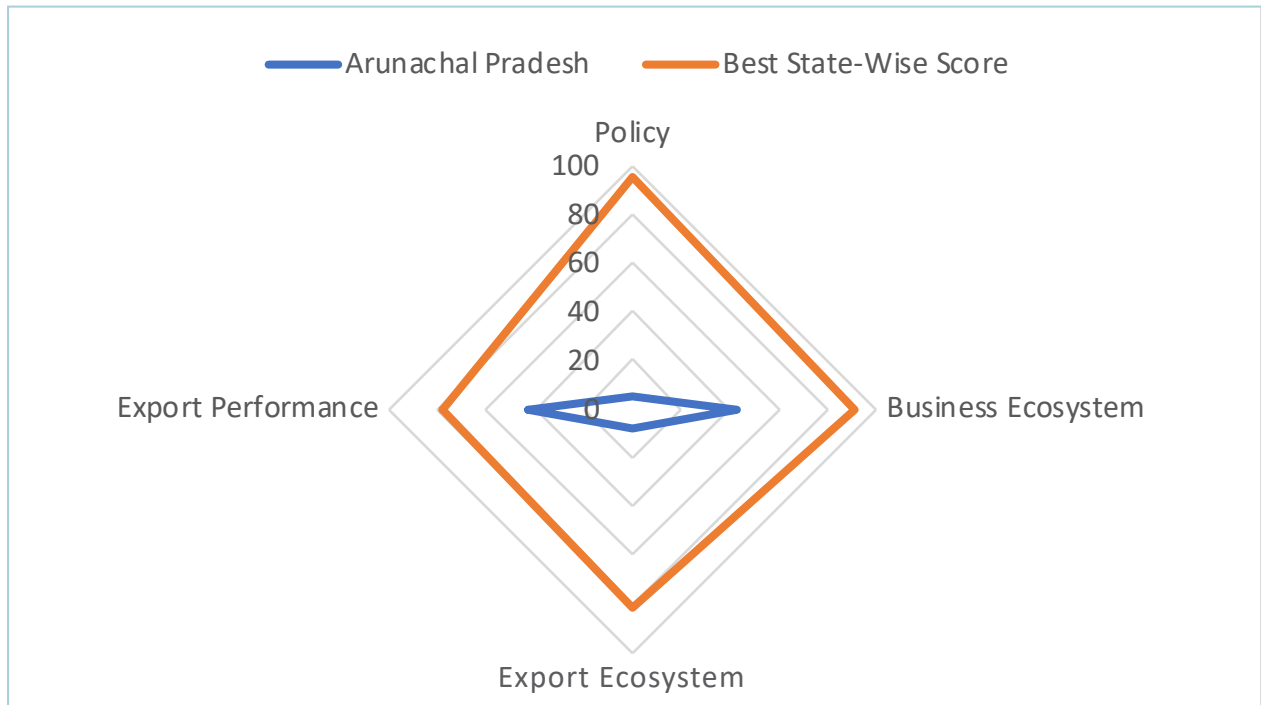
Rank: 25

Category : Himalayan

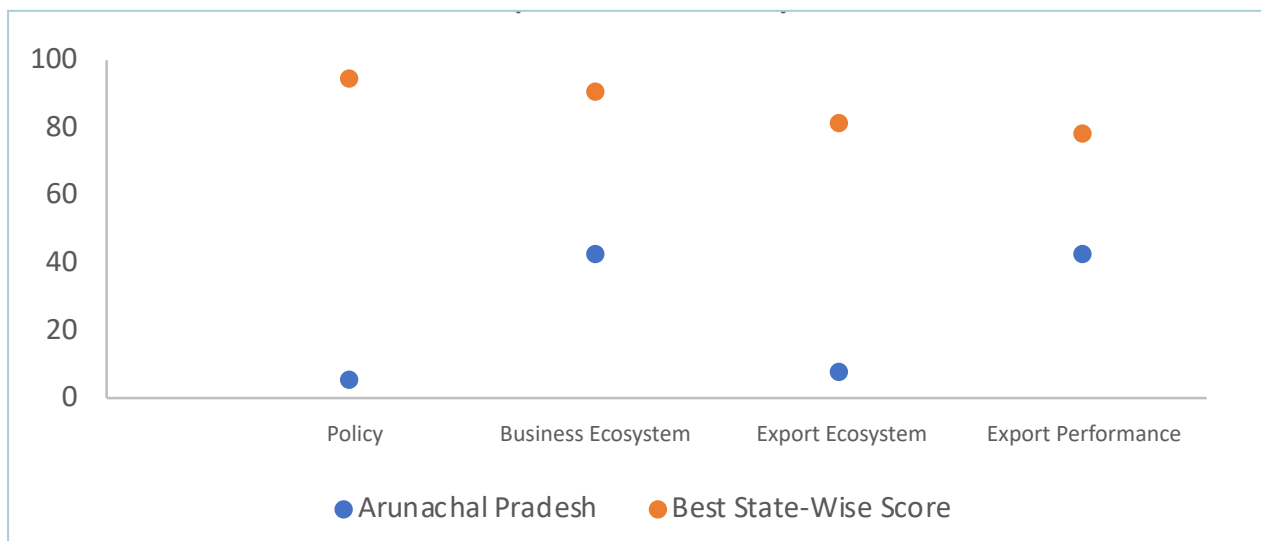
Scorecard



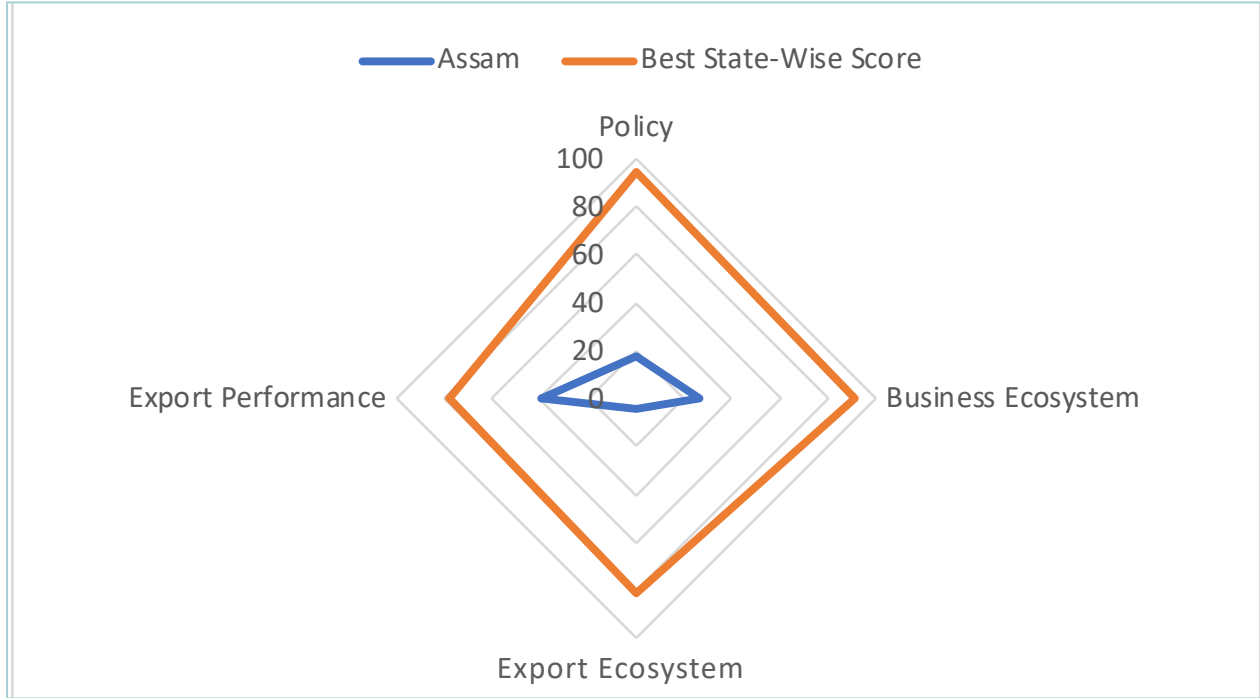
Distance to Frontier



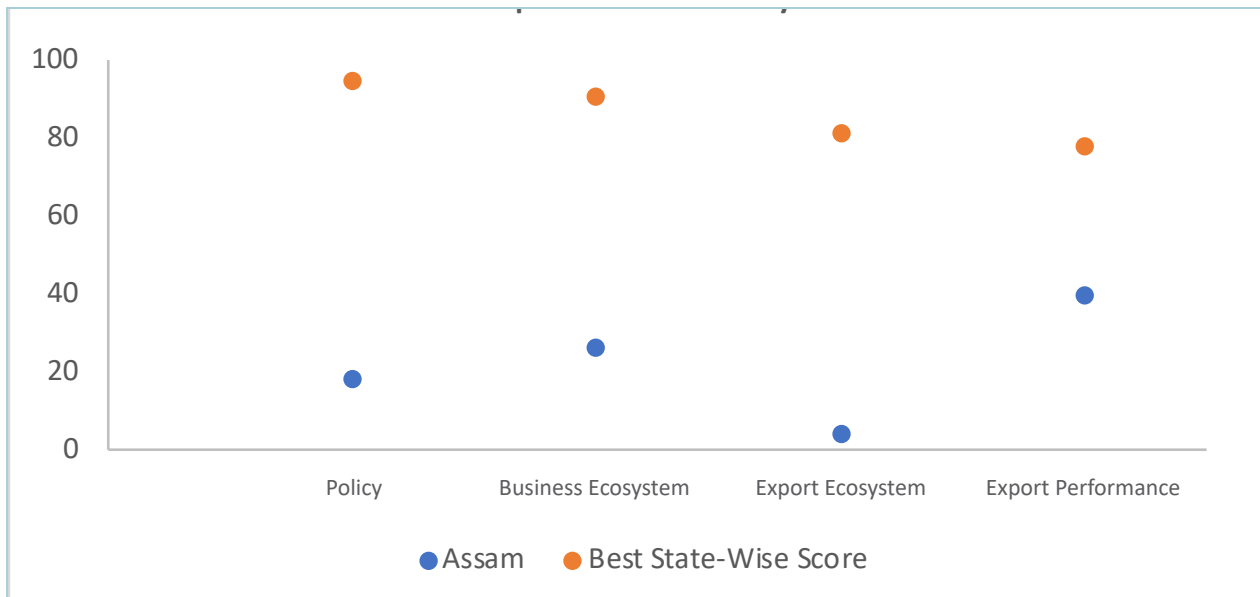
Comparative Analysis



Distance to Frontier



Comparative Analysis





21.55

Export Preparedness

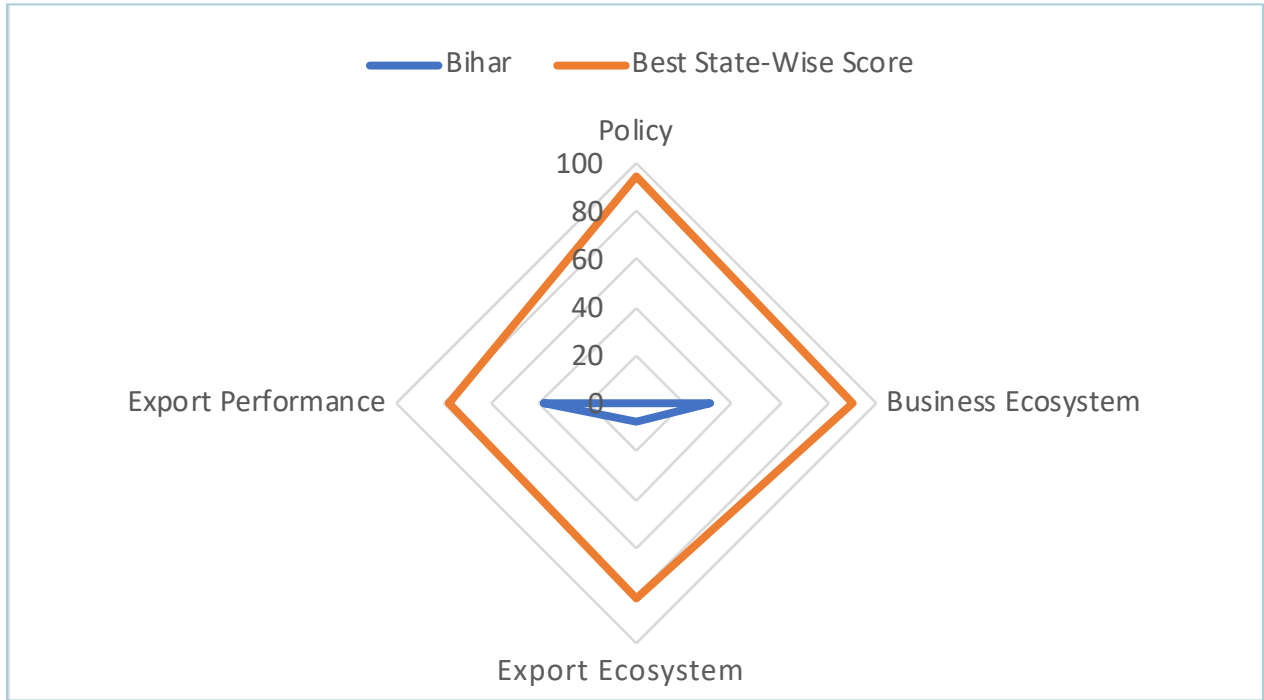
Rank: 30

Category : Landlocked

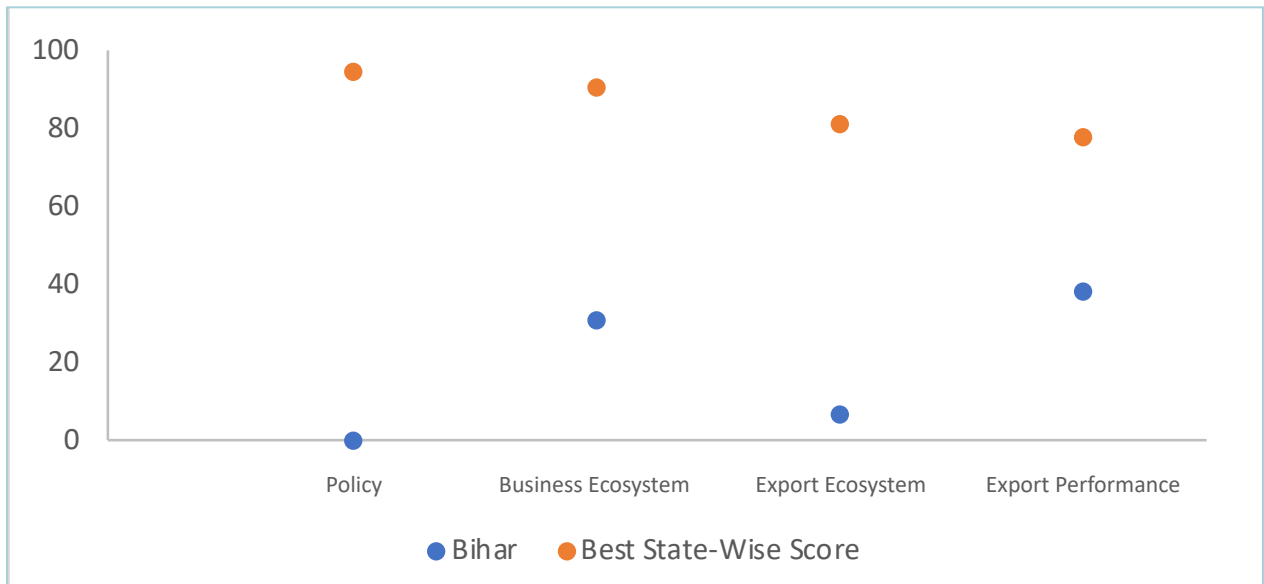
Scorecard



Distance to Frontier



Comparative Analysis



Chandigarh

Rank: 27

Category : UT/ City-States

26.07

Export Preparedness

Scorecard

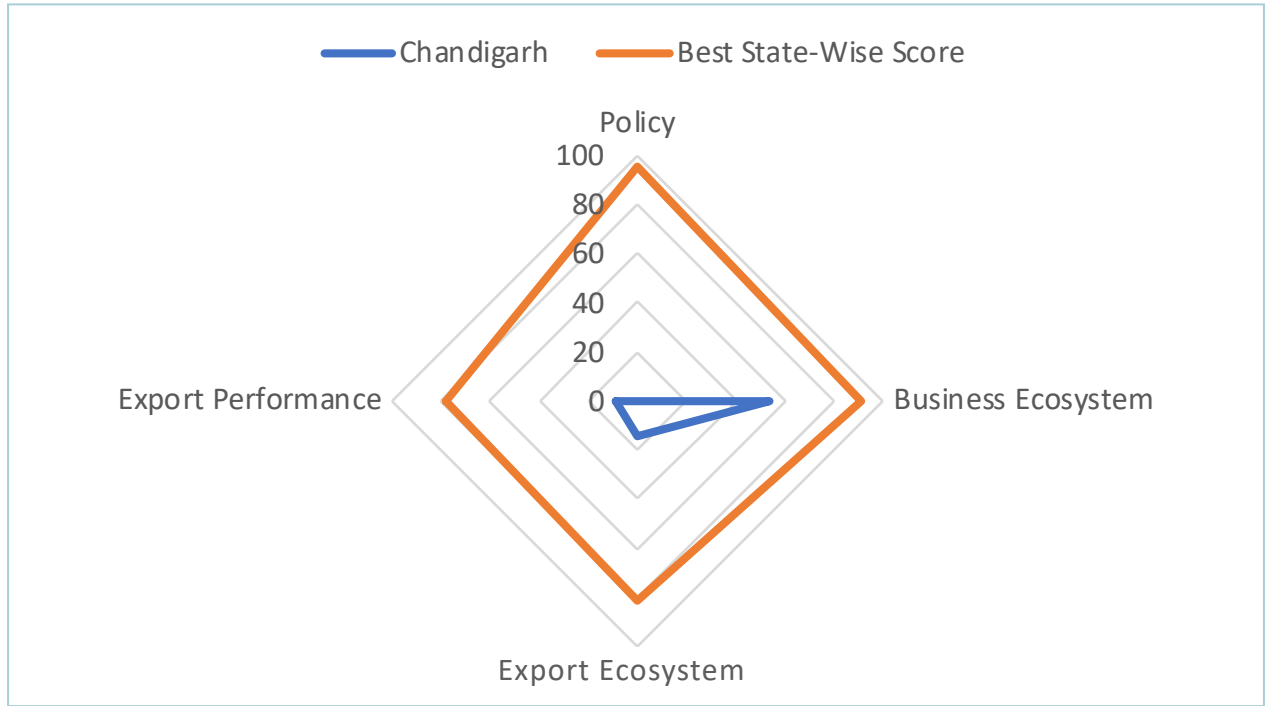
Policy	0	●	53.83	Export Ecosystem	13.78	●	8.91
Export Promotion Policy	0	●	39.04	Export Infrastructure	13.32	●	0.76
Existence of a valid policy	0	●	11.74	Presence of knowledge and information portal for exporters	0	●	1.09
Facilitating Measures	0	●	58.7	Total area under trade exhibition centers (% of total area)	0	●	3.74
Marketing support	0	●	0	Trade Guide	0	●	7.02
Policy emphasis on product quality & standards	0	●	0	Trade Support	1.04	●	17.07
Thrust sectors for exports	0	●	31.52	Capacity Building/Orientation Workshops	0	●	41.35
Institutional Framework	0	●	100	Membership of Exporters in trade promotion council/agencies	0	●	17.75
Appointment of full-time export commissioner	0	●	0	Number of trade fairs conducted by Government Departments	1.79	●	
Empowered Committee	0	●	11.86	Projects Approved under TIES	0	●	
Existence of a State-Centre co-ordination cell	0	●	20.54	R&D Infrastructure	27.42	●	
Existence of Export Promotion Councils	0	●	7.98	Ratio of Inspection Agencies	0	●	
Grievance Redressal	0	●	48	Ratio of NABL Labs	3.15	●	
International Access	0	●	58.05	Ratio of Professional Colleges	7.26	●	
Newsletter	0	●	0	Ratio of Research Institutes	44.32	●	
				Transport Connectivity			
				Air Cargo Facilities			
				LEADS Index			
				Number of ICDS			
				Number of MMLH Hubs			
				Access to Finance			
				Banking Facilities			
				Export credit to exporters			
				Loan Schemes for Exporters			



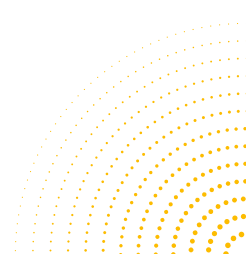
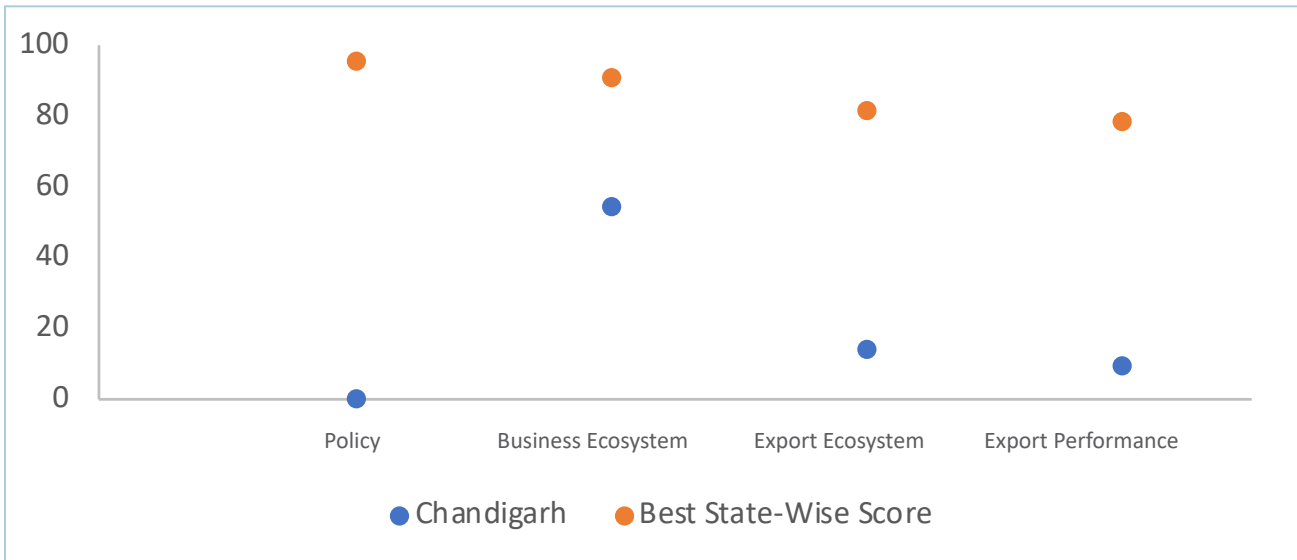
How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

Distance to Frontier



Comparative Analysis



Chhattisgarh

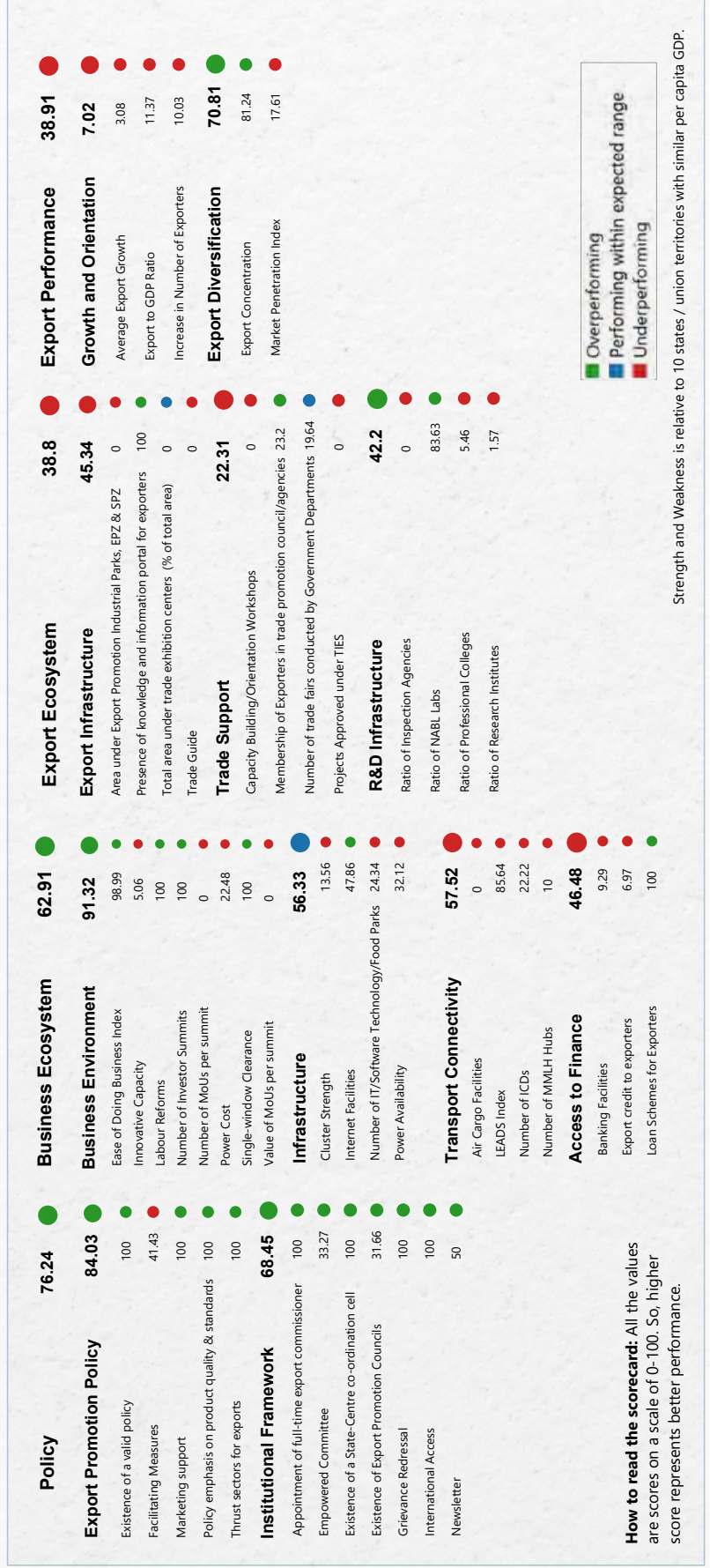
55.95

Export Preparedness

Rank: 8

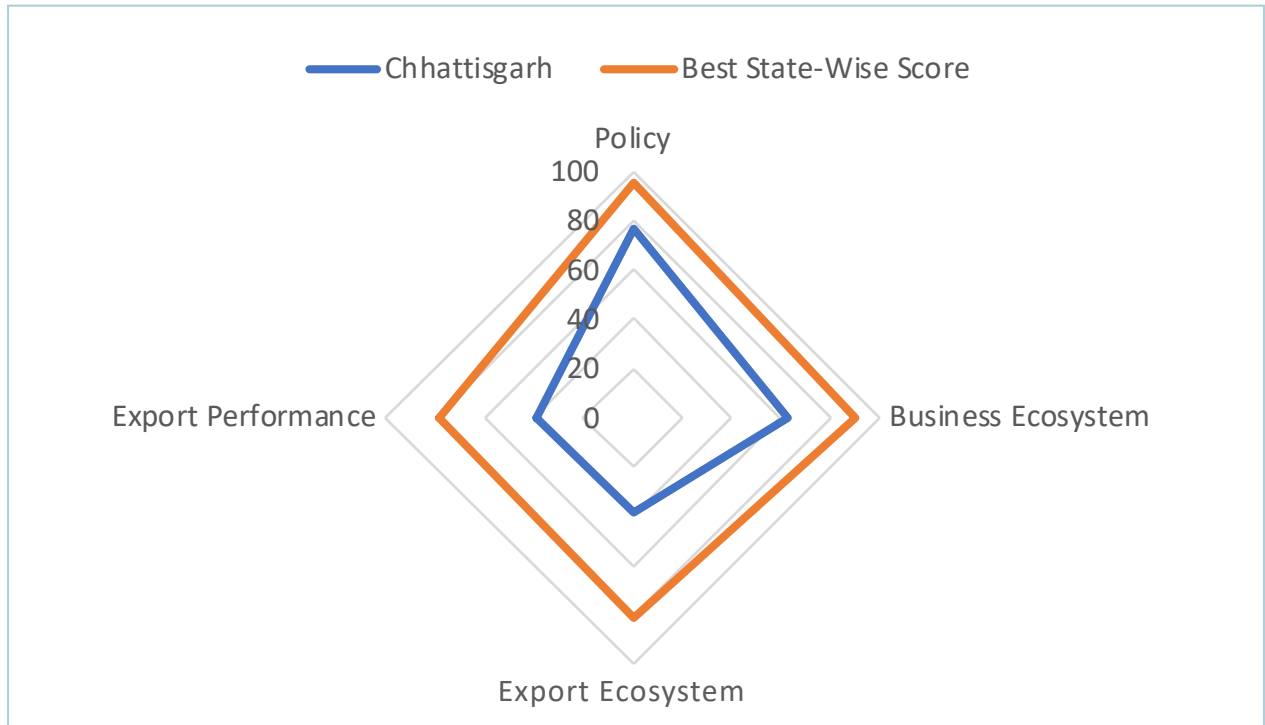
Category : Landlocked

Scorecard

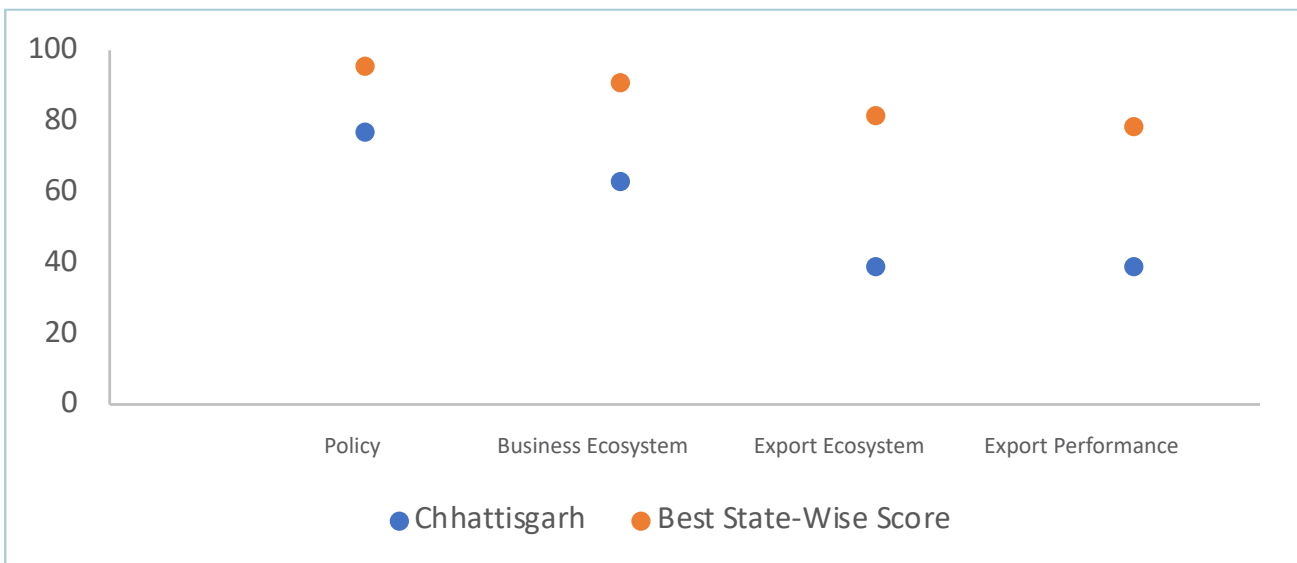


How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Distance to Frontier



Comparative Analysis



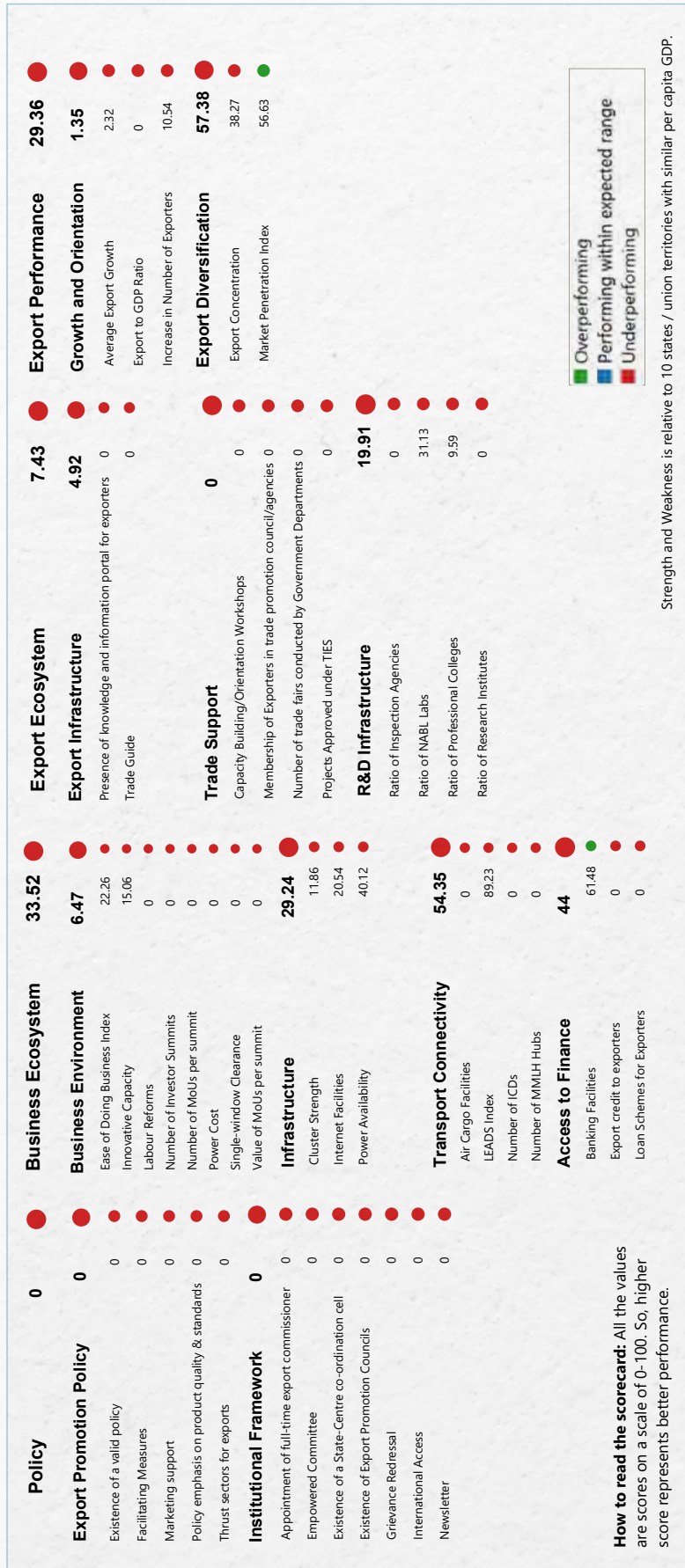
Dadra and Nagar Haveli

20.77
Export Preparedness

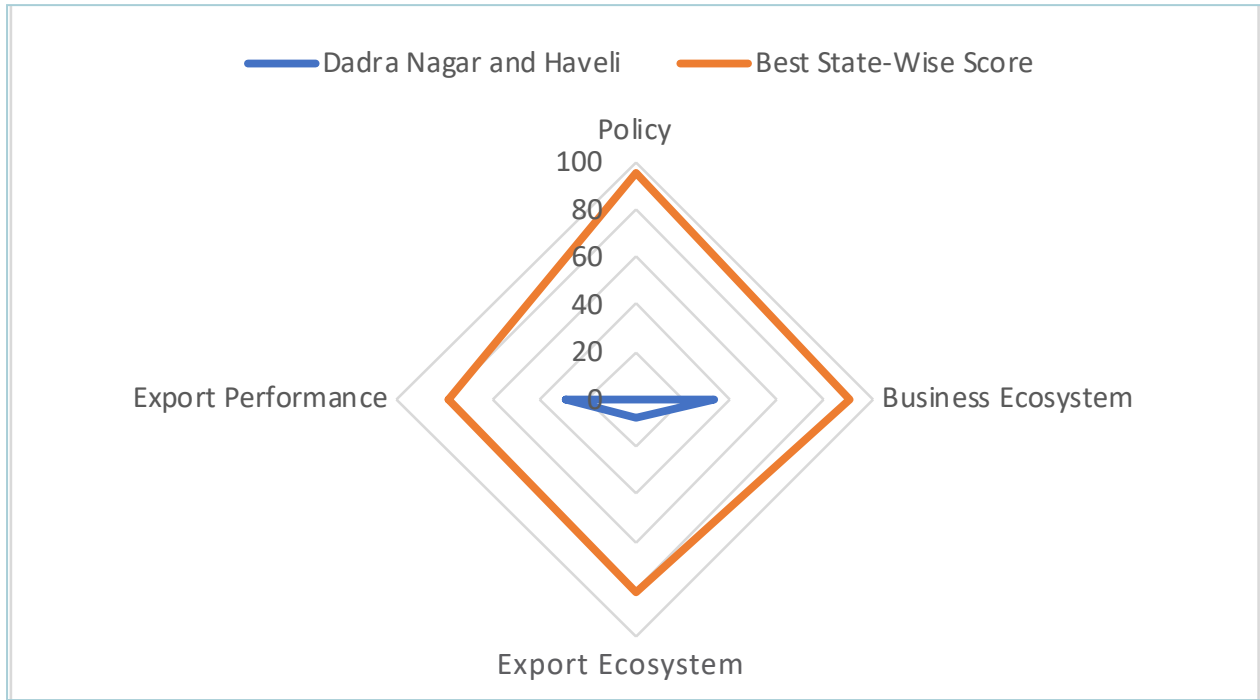
Rank: 31

Category : UT/ City-States

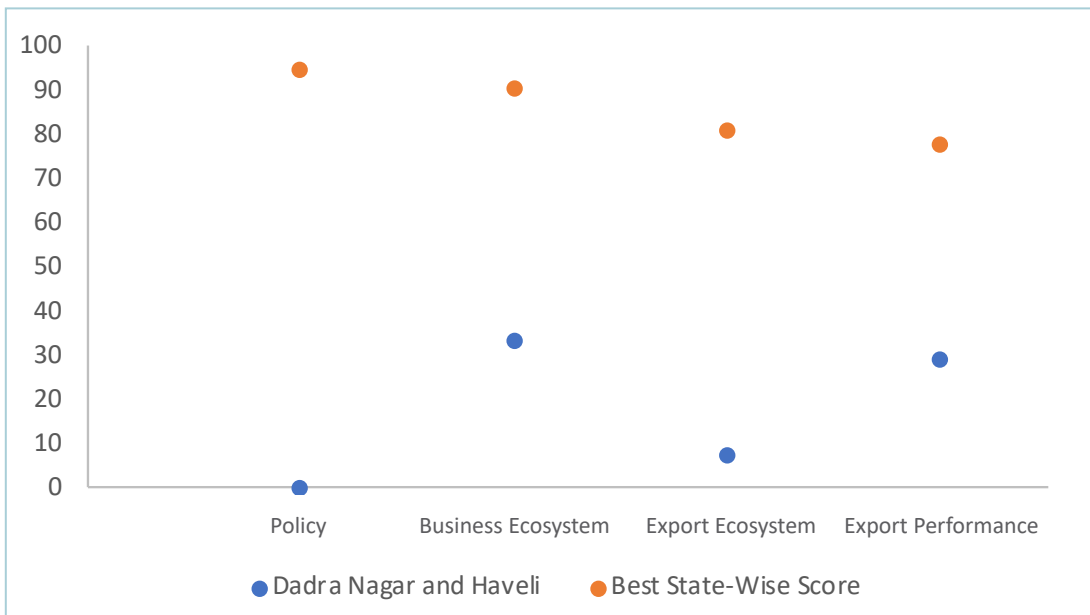
Scorecard



Distance to Frontier



Comparative Analysis



Daman & Diu

Rank: 34

Category : UT/ City-States

12.76

Export Preparedness

Scorecard

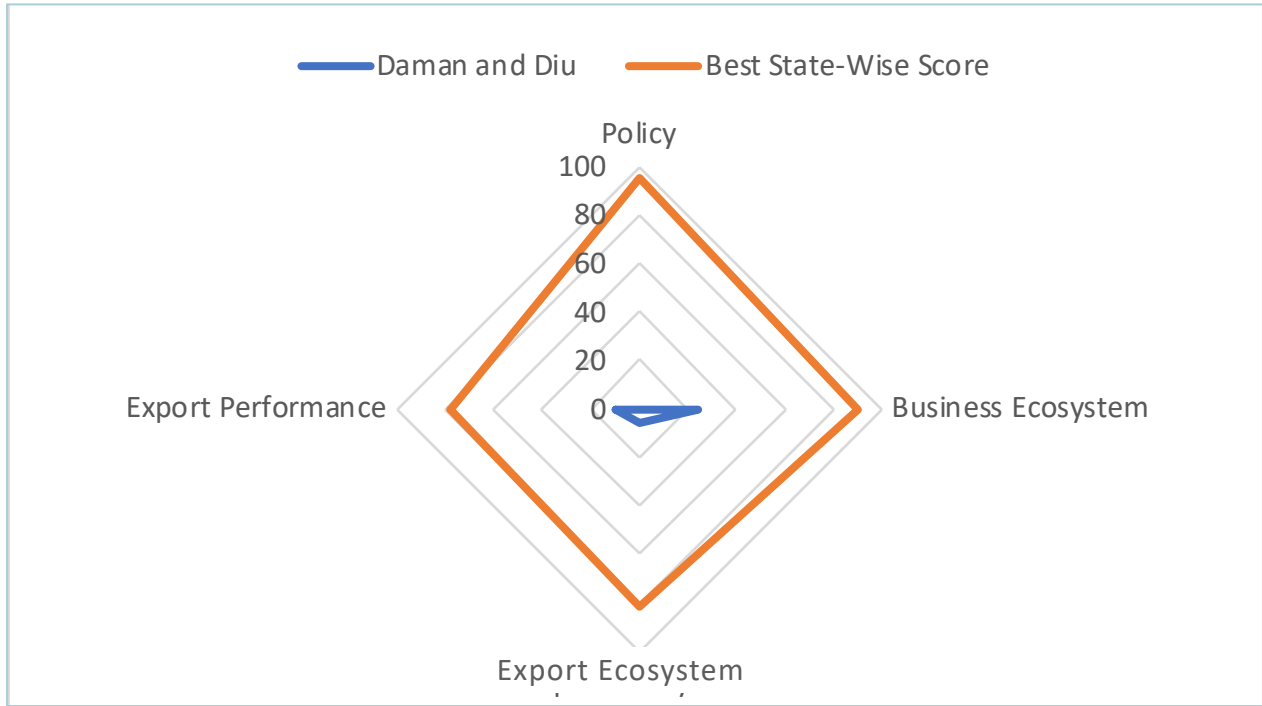
Policy	0	Business Ecosystem	24.13	Export Ecosystem	5.56	Export Performance	9.99
Export Promotion Policy	0	Business Environment	7.93	Export Infrastructure	4.92	Growth and Orientation	0.56
Existence of a valid policy	0	Ease of Doing Business Index	29.19	Presence of knowledge and information portal for exporters	0	Average Export Growth	3.03
Facilitating Measures	0	Innovative Capacity	16.04	Trade Guide	0	Export to GDP Ratio	0
Marketing support	0	Labour Reforms	0			Increase in Number of Exporters	7.86
Policy emphasis on product quality & standards	0	Number of Investor Summits	0	Trade Support	0	Export Diversification	19.43
Thrust sectors for exports	0	Number of MoUs per summit	0	Capacity Building/Orientation Workshops	0	Export Concentration	21.26
	0	Power Cost	0	Membership of Exporters in trade promotion council/agencies	0	Market Penetration Index	43.54
	0	Single-window Clearance	0	Number of trade fairs conducted by Government Departments	0		
Institutional Framework	0	Value of MoUs per summit	0	Projects Approved under TIES	0		
Appointment of full-time export commissioner	0	Infrastructure	35.4	R&D Infrastructure	12.42		
Empowered Committee	0	Cluster Strength	11.02	Ratio of Inspection Agencies	0		
Existence of a State-Centre co-ordination cell	0	Internet Facilities	20.54	Ratio of NABL Labs	9.55		
Existence of Export Promotion Councils	0	Power Availability	48.12	Ratio of Professional Colleges	13.58		
Grievance Redressal	0	Transport Connectivity	53.17	Ratio of Research Institutes	0		
International Access	0	Air Cargo Facilities	0				
Newsletter	0	LEADS Index	87.29				
		Number of ICDs	0				
		Number of MIMLH Hubs	0				
		Access to Finance	0				
		Banking Facilities	0				
		Export credit to exporters	0				
		Loan Schemes for Exporters	0				



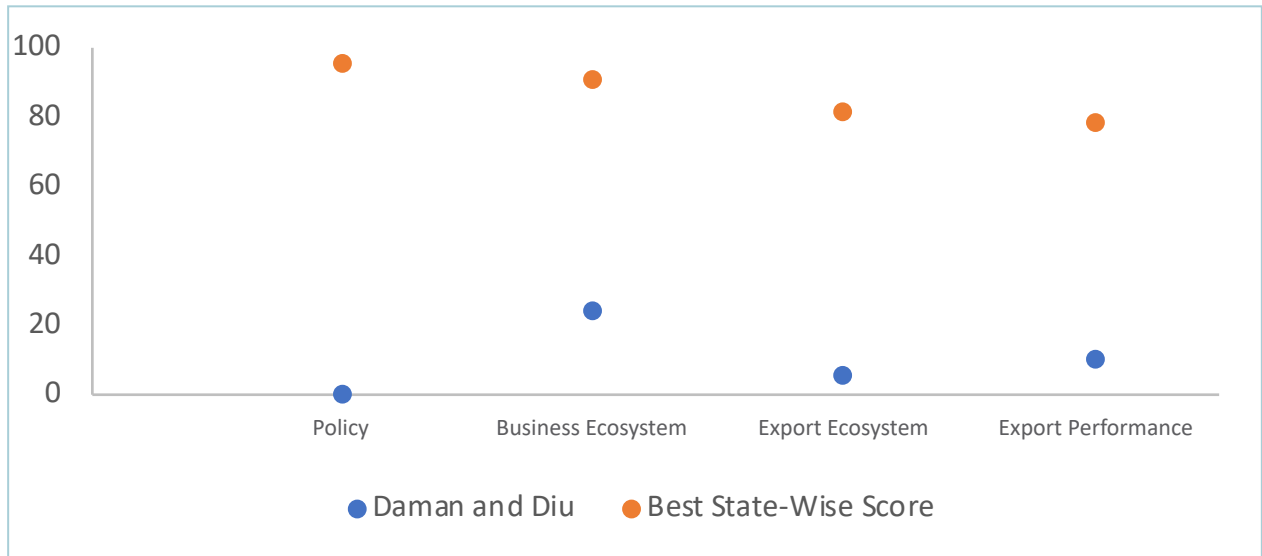
Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Distance to Frontier



Comparative Analysis



Delhi
Export Preparedness
45.8

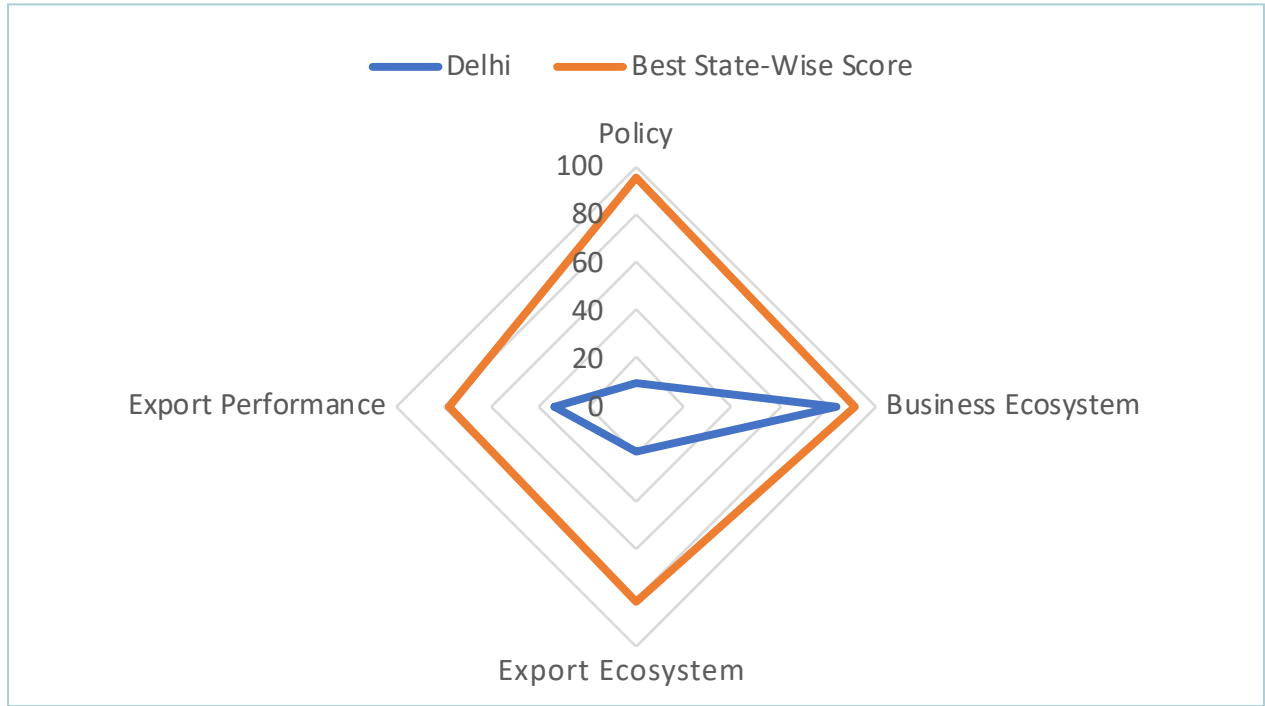
Rank: 15

Category : UT/ City-States

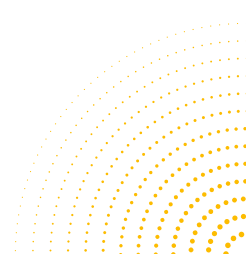
Scorecard



Distance to Frontier



Comparative Analysis



Goa

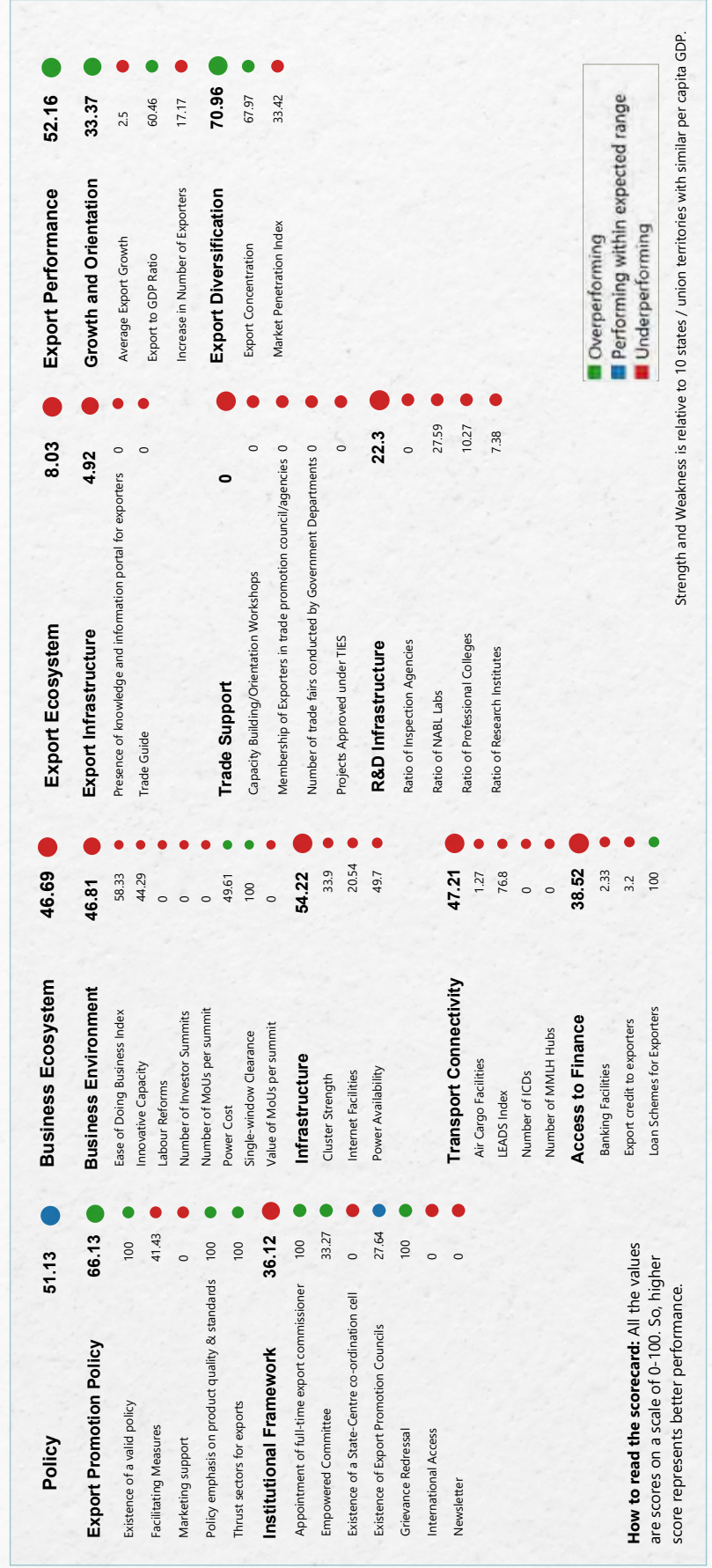
40.94

Export Preparedness

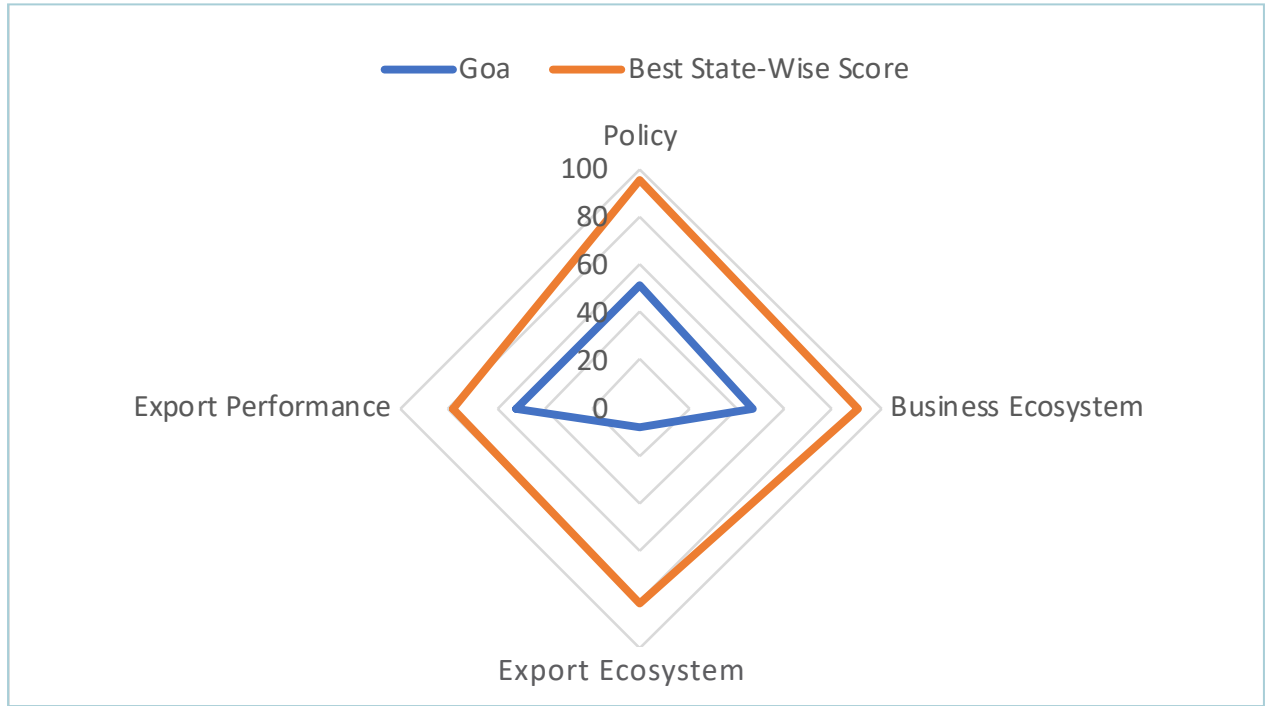
Rank: 16

Category : UT/ City-States

Scorecard



Distance to Frontier



Comparative Analysis



Gujarat

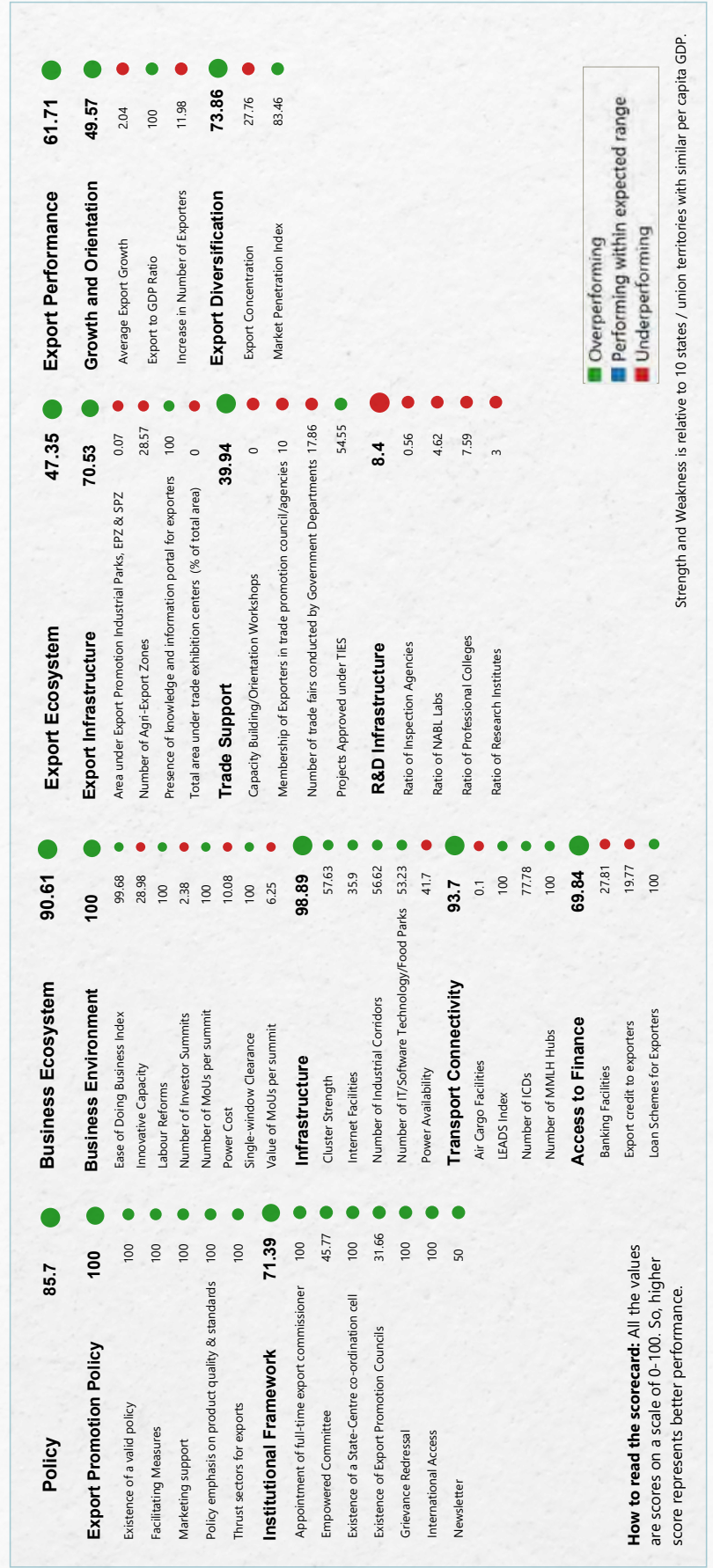
75.19

Export Preparedness

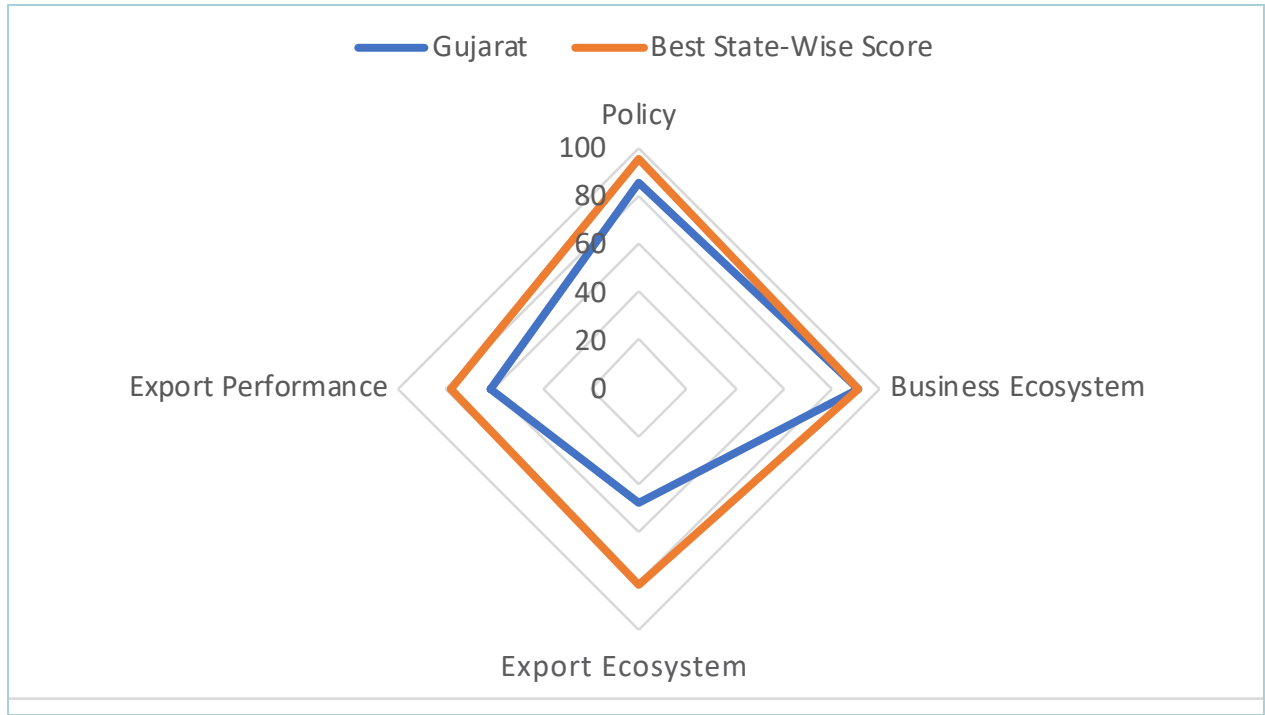
Rank: 1

Category : Coastal

Scorecard



Distance to Frontier



Comparative Analysis



Haryana

56.03

Export Preparedness

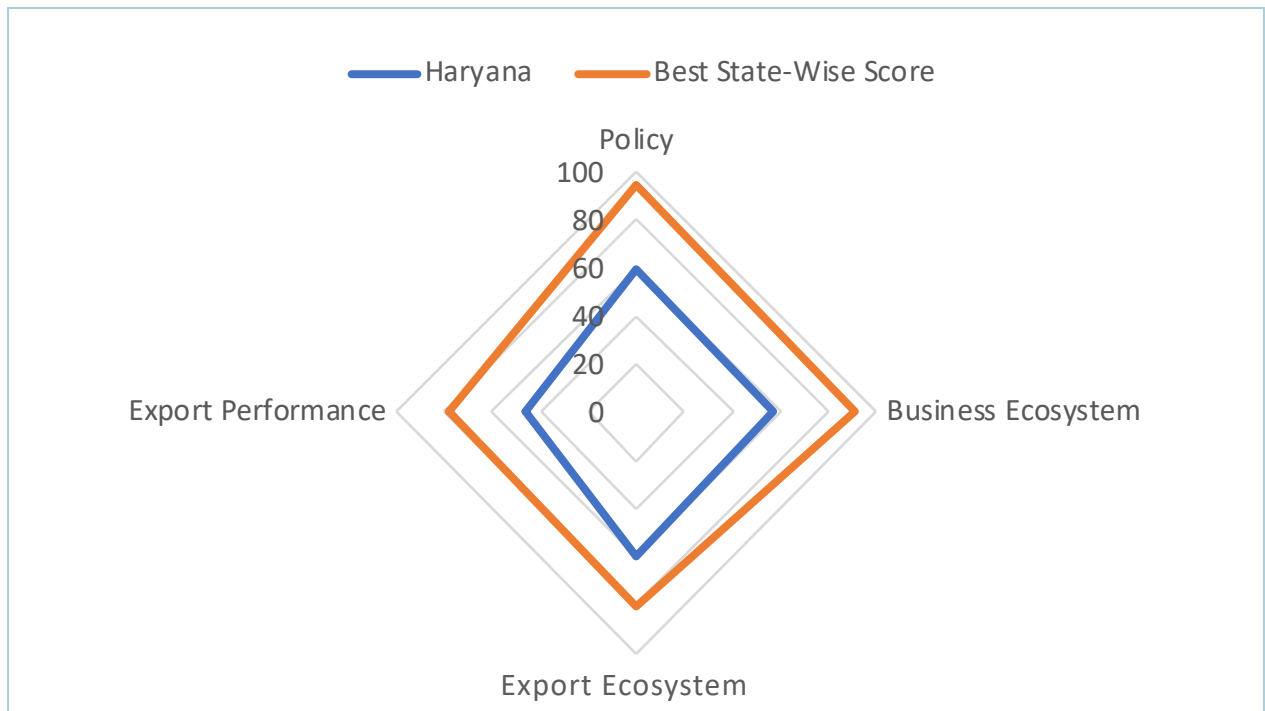
Rank: 7

Category : Landlocked

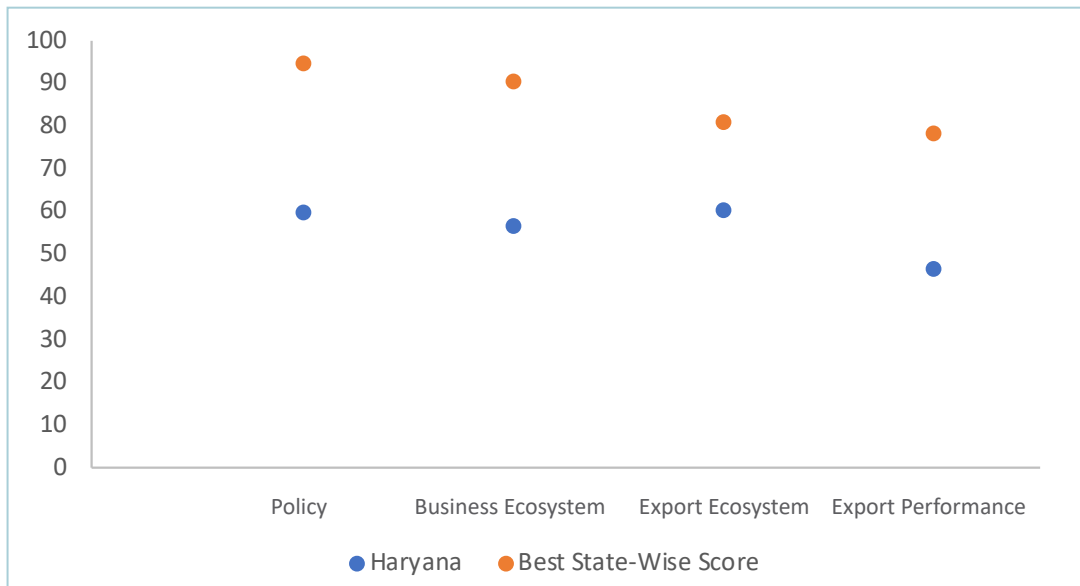
Scorecard



Distance to Frontier



Comparative Analysis



Himachal Pradesh

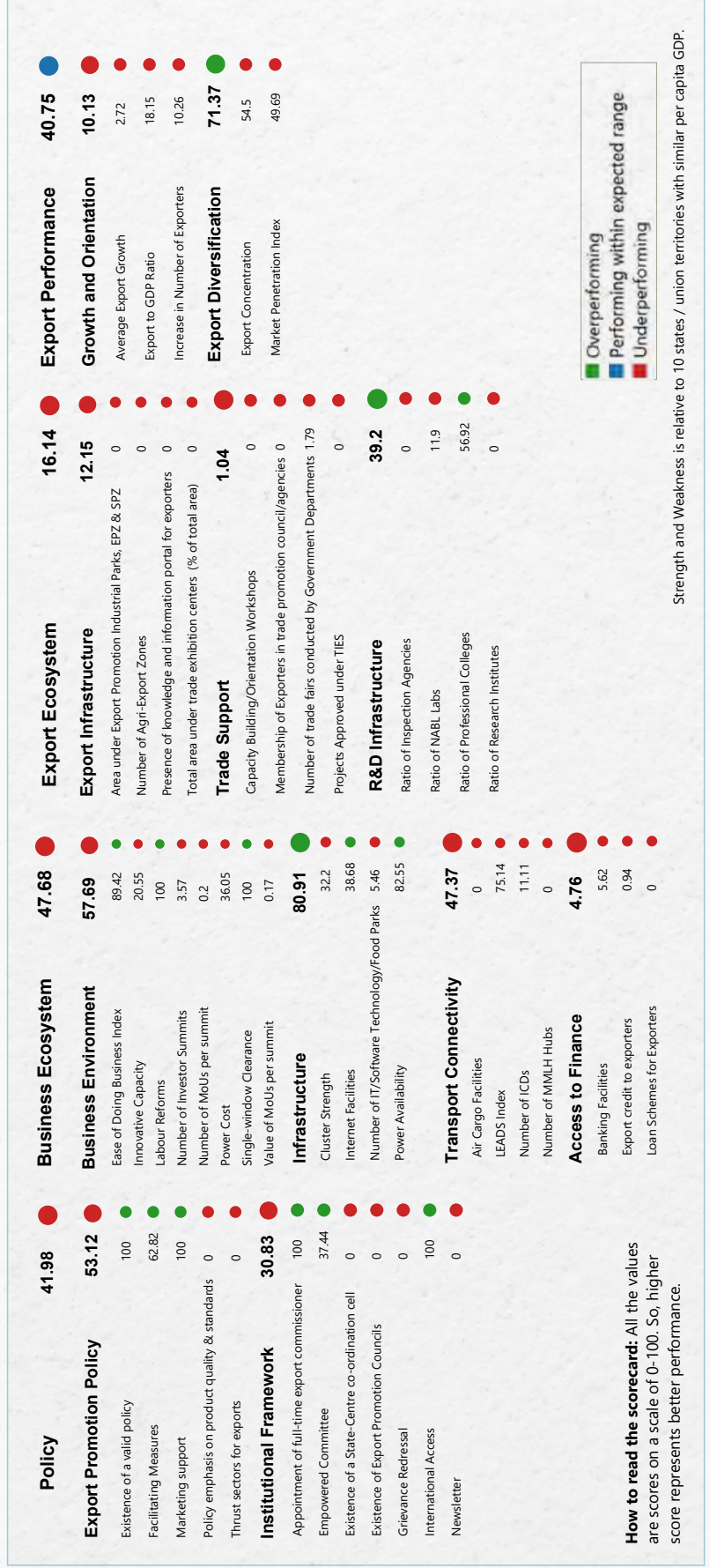
38.85

Export Preparedness

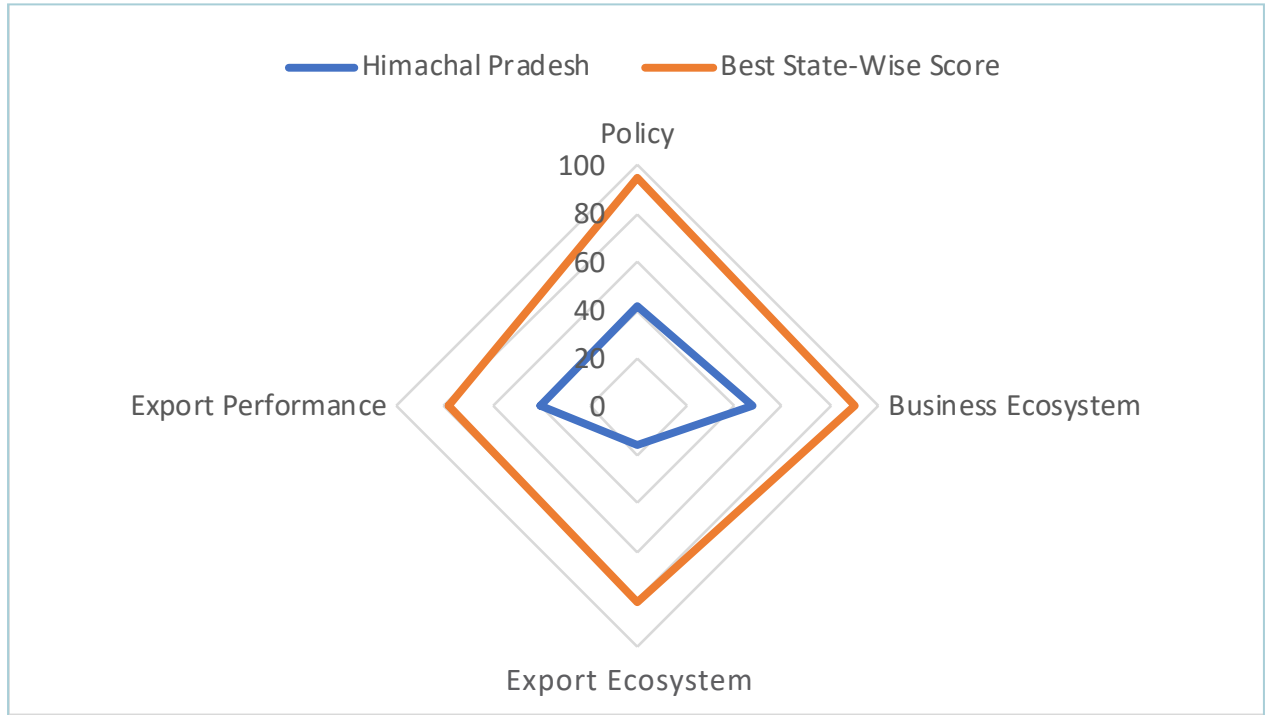
Rank: 19

Category : Himalayan

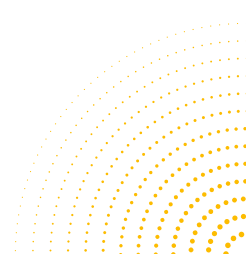
Scorecard



Distance to Frontier



Comparative Analysis



Jammu & Kashmir

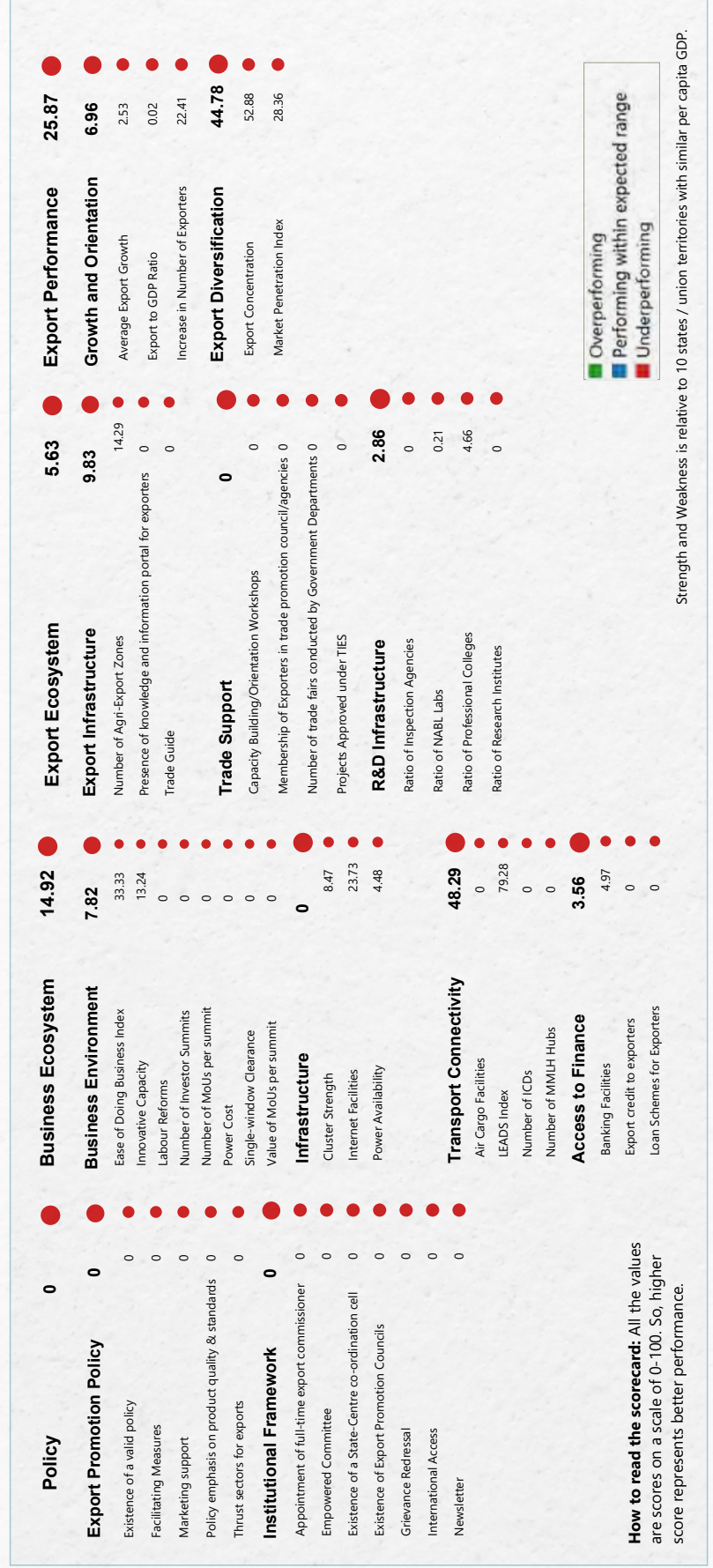
12.27

Export Preparedness

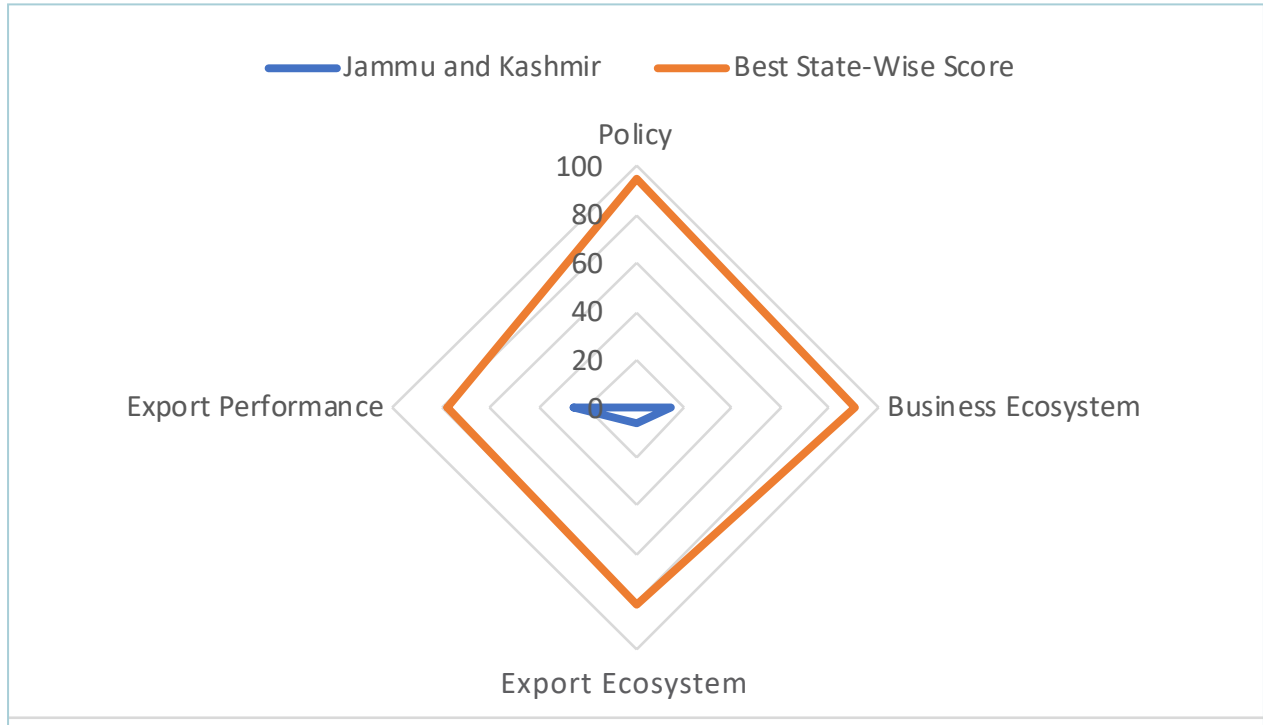
Rank: 36

Category : Landlocked

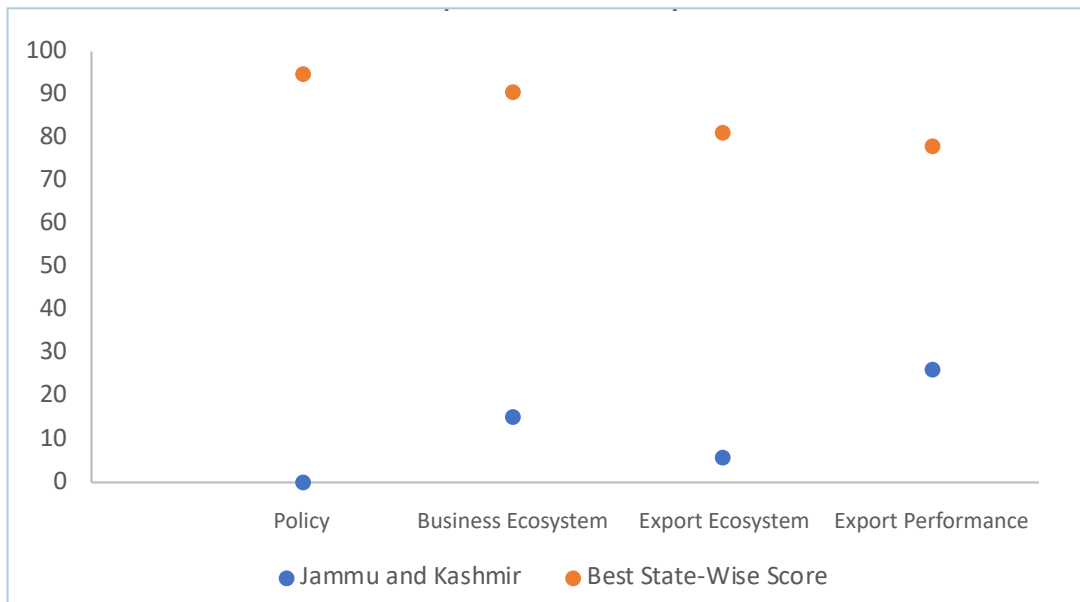
Scorecard



Distance to Frontier



Comparative Analysis



Jharkhand



48

Export
Preparedness

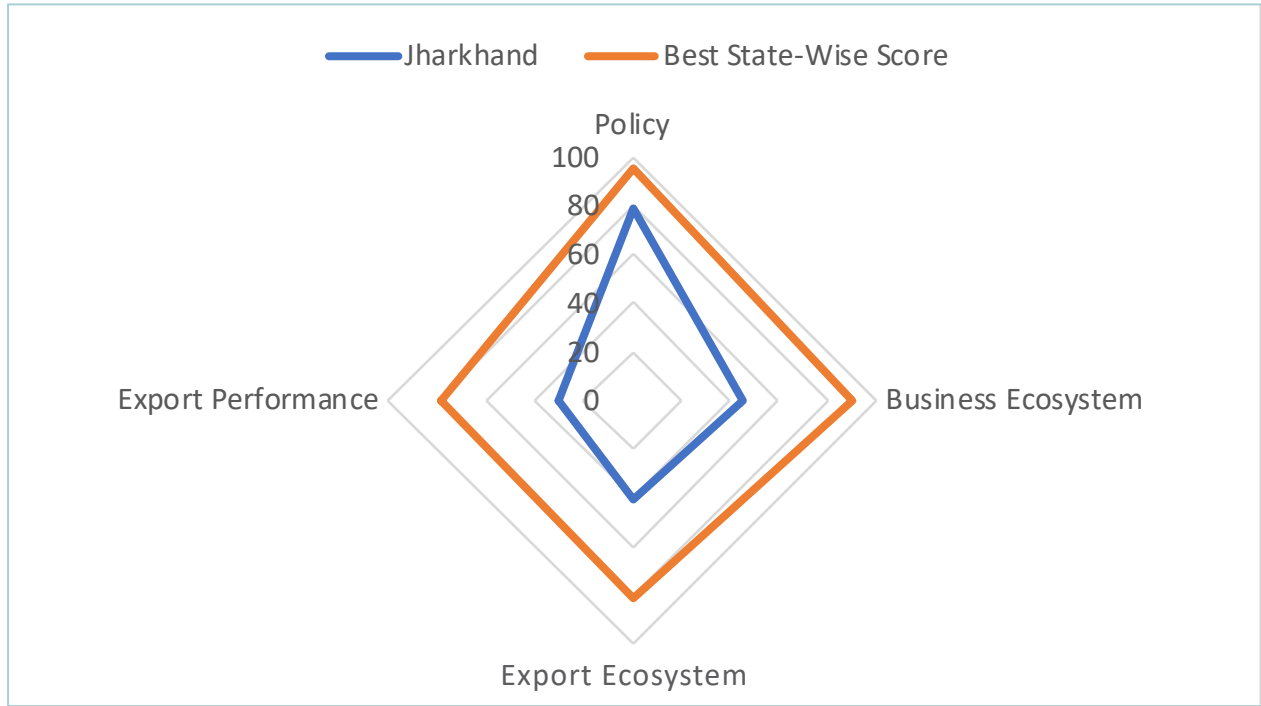
Rank: 14

Category : Landlocked

Scorecard



Distance to Frontier



Comparative Analysis



Karnataka

55.17

Export Preparedness

Rank: 9

Category : Coastal

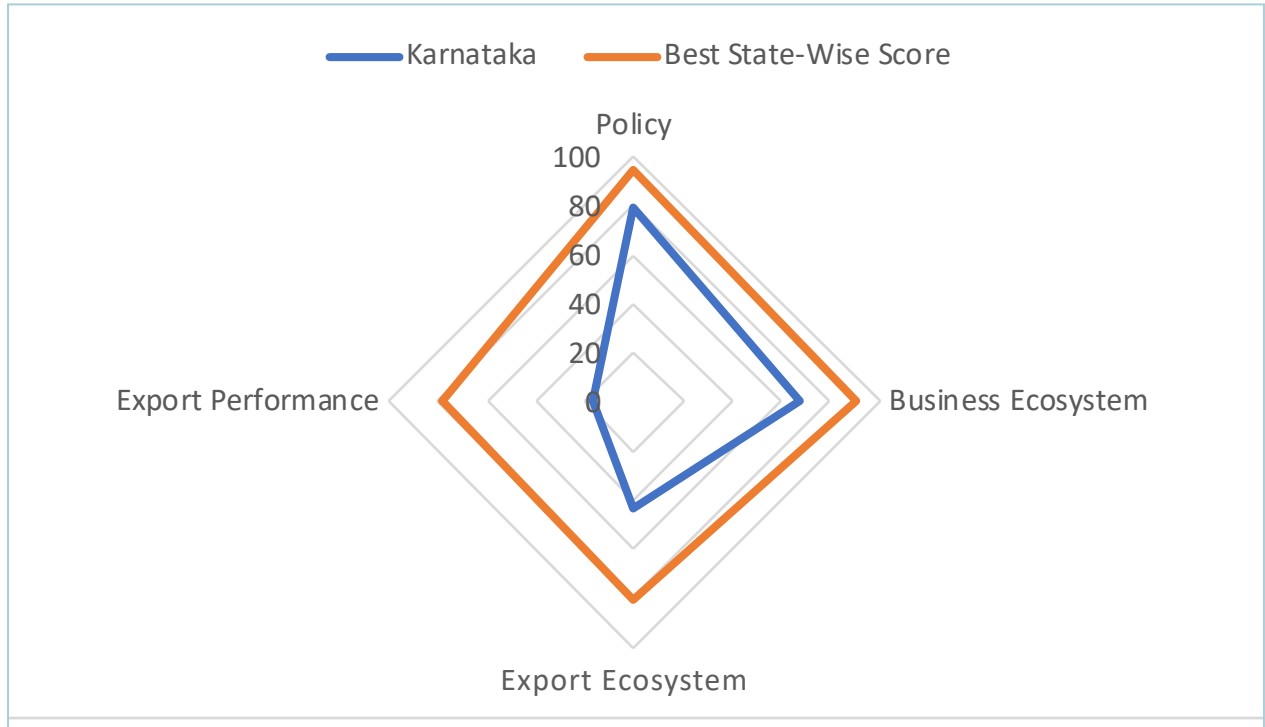
Scorecard



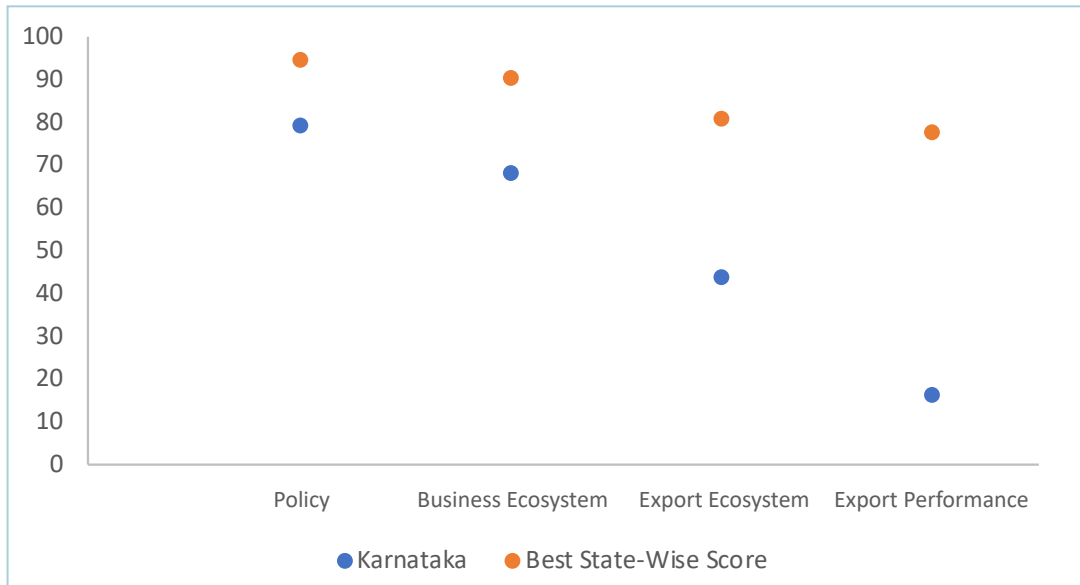
How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

Distance to Frontier



Comparative Analysis



Kerala



54.11

Export Preparedness

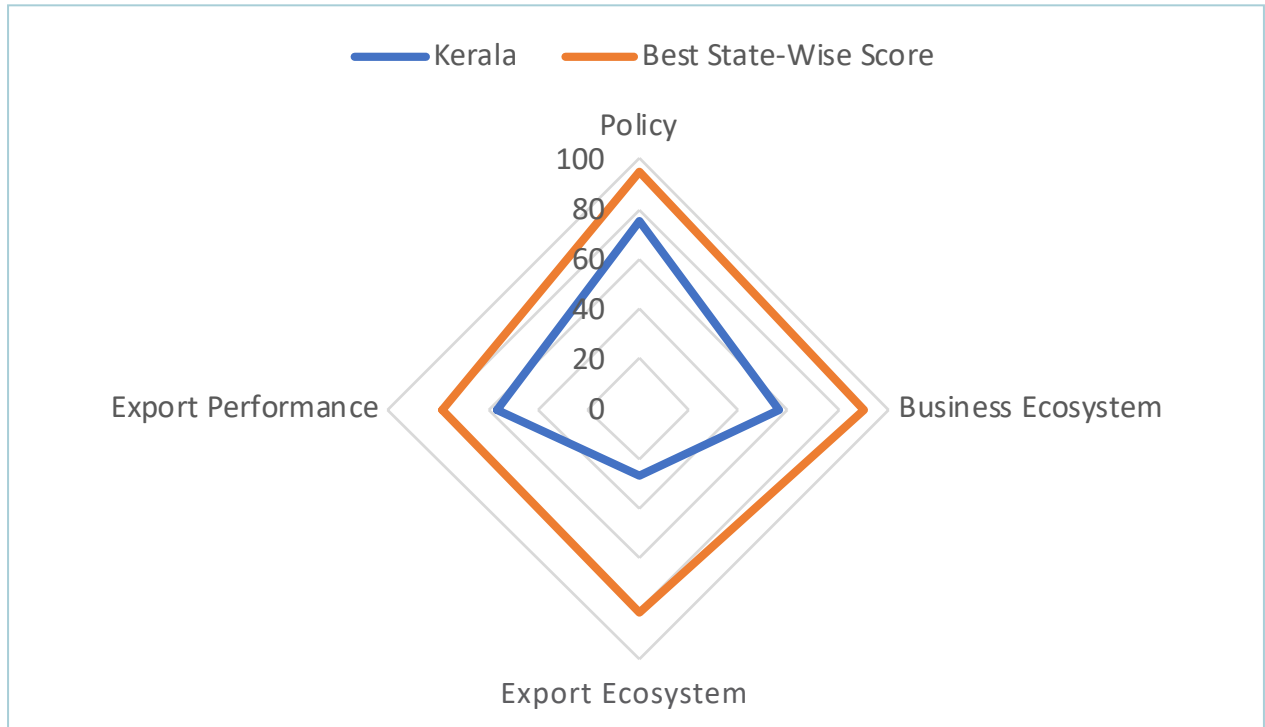
Rank: 10

Category : Coastal

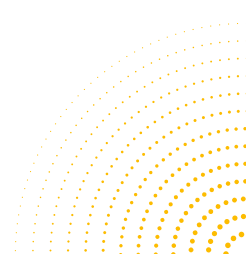
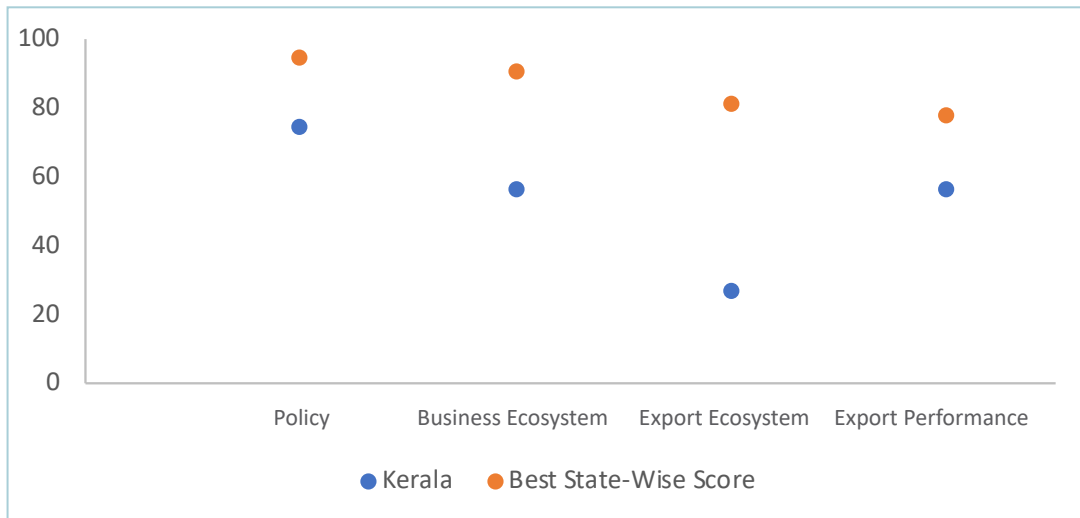
Scorecard



Distance to Frontier



Comparative Analysis



Lakshadweep

Rank: 35

Category : UT/City States

12.4
Export Preparedness

Scorecard

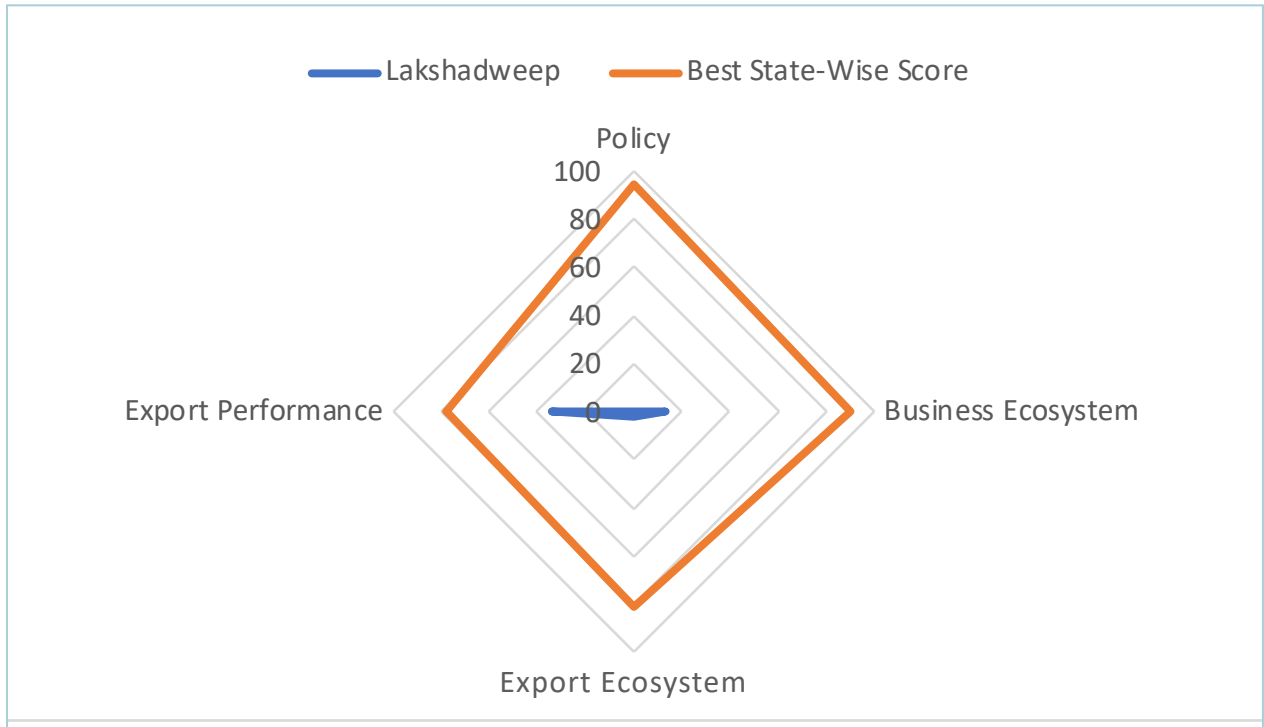
Policy	0	12.88	Export Ecosystem	2.46	Export Performance	33.77
Export Promotion Policy	0	0.01	Export Infrastructure	4.92	Growth and Orientation	11.89
Existence of a valid policy	0	0	Presence of knowledge and information portal for exporters	0	Average Export Growth	1.88
Facilitating Measures	0	5.85	Trade Guide	0	Export to GDP Ratio	0
Marketing support	0	0			Increase in Number of Exporters	34
Policy emphasis on product quality & standards	0	0	Trade Support	0	Export Diversification	55.65
Thrust sectors for exports	0	0	Capacity Building/Orientation Workshops	0	Export Concentration	84.93
Institutional Framework	0	0	Membership of Exporters in trade promotion council/agencies	0	Market Penetration Index	0
Appointment of full-time export commissioner	0	51.5	Number of trade fairs conducted by Government Departments	0		
Empowered Committee	0	29.66	Projects Approved under TIES	0		
Existence of a State-Centre co-ordination cell	0	20.54	R&D Infrastructure	0		
Existence of Export Promotion Councils	0	50.3	Ratio of Inspection Agencies	0		
Grievance Redressal	0	0	Ratio of NABL Labs	0		
International Access	0	0	Ratio of Professional Colleges	0		
Newsletter	0	0	Ratio of Research Institutes	0		
			Transport Connectivity			
			Air Cargo Facilities			
			LEADS Index			
			Number of ICDS			
			Number of MMLH Hubs			
			Access to Finance			
			Banking Facilities			
			Export credit to exporters			
			Loan Schemes for Exporters			

How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

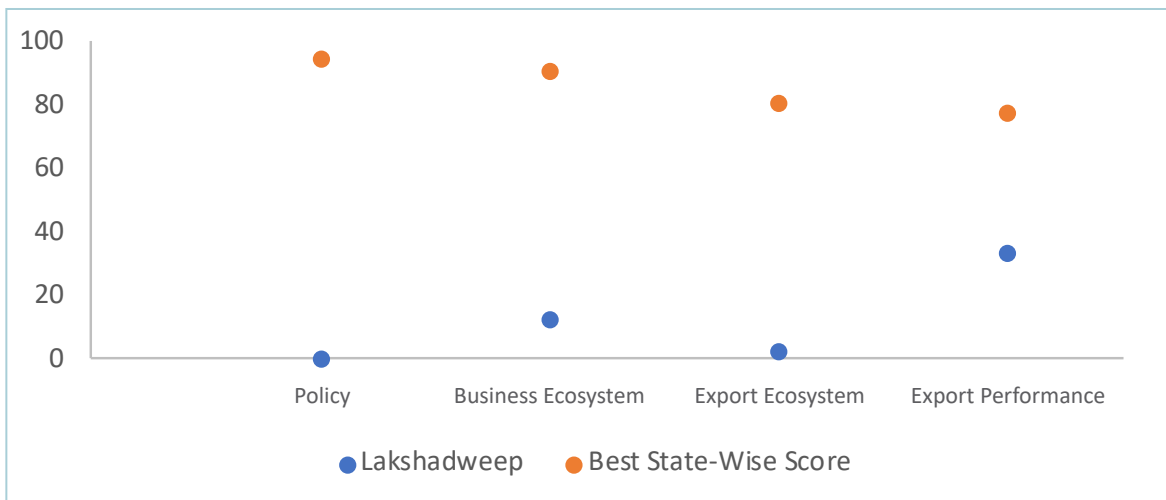
Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

■ Overperforming
■ Performing within expected range
■ Underperforming

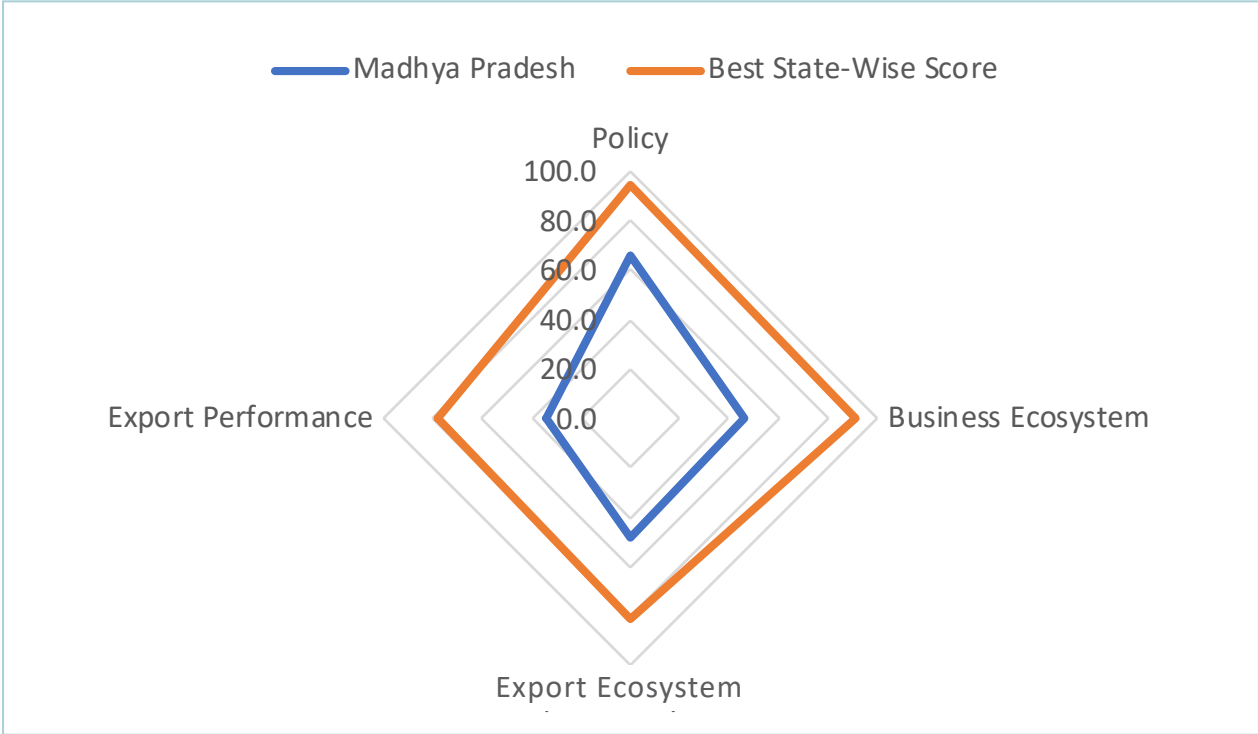
Distance to Frontier



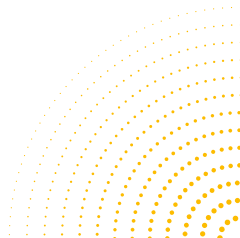
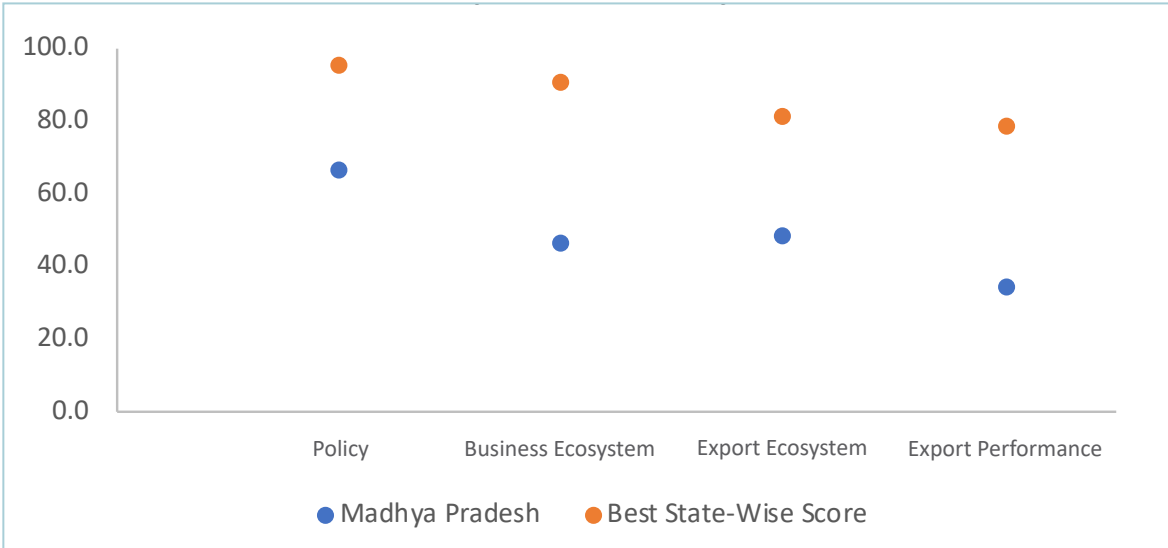
Comparative Analysis



Distance to Frontier



Comparative Analysis



Maharashtra

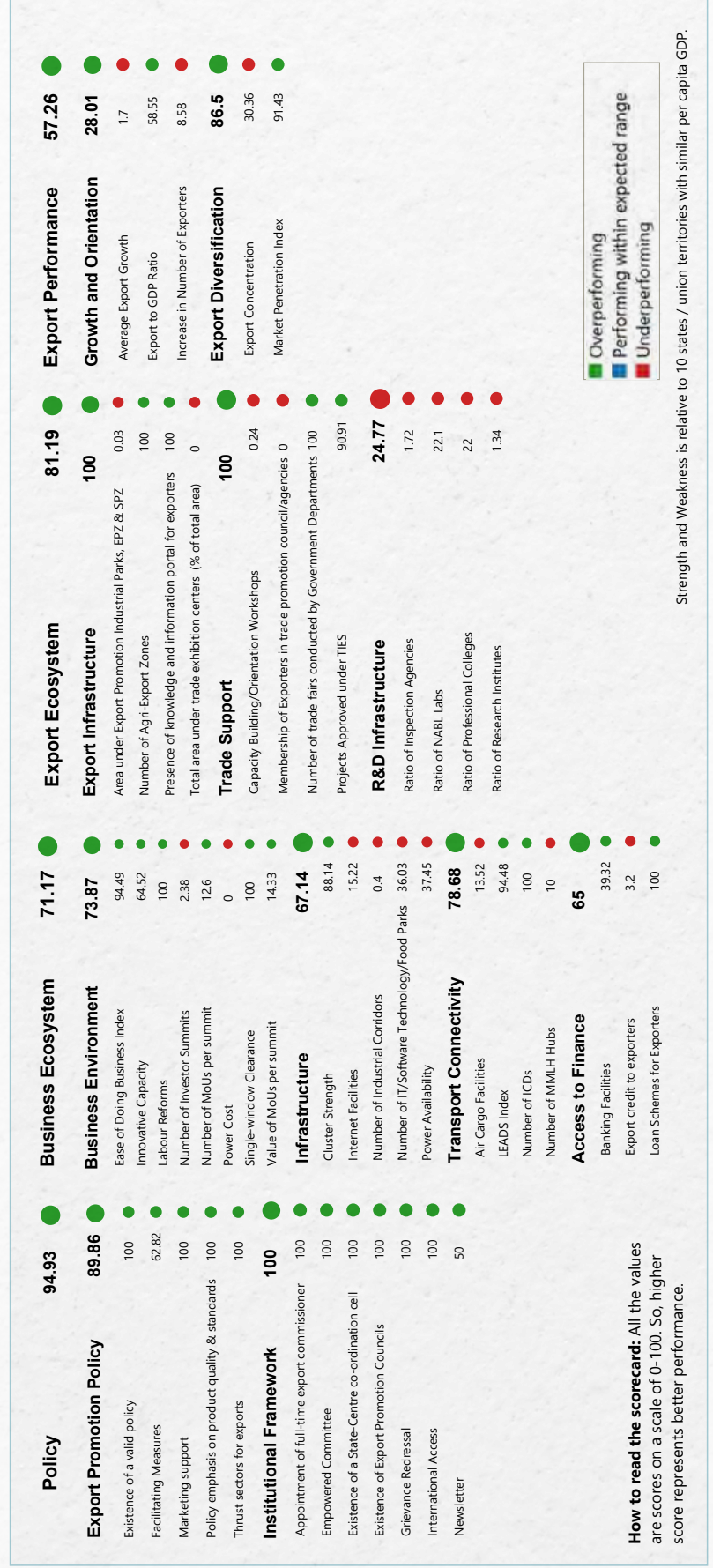
75.14

Export Preparedness

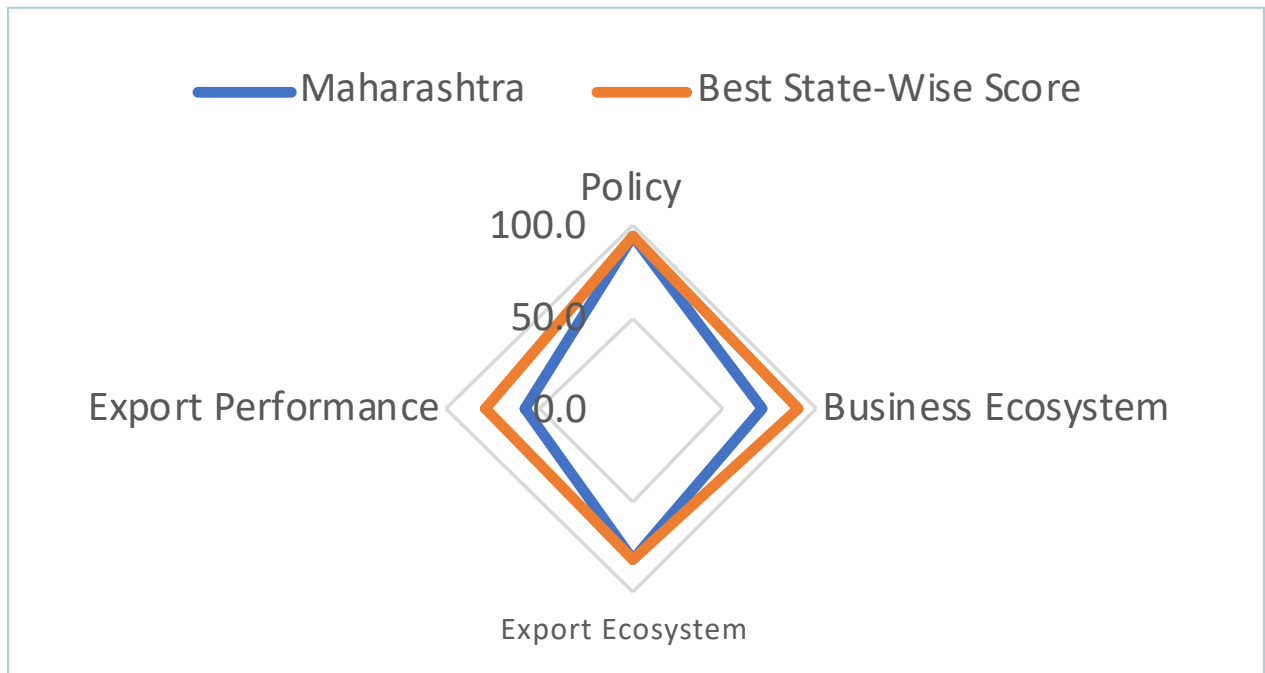
Rank: 2

Category : Coastal

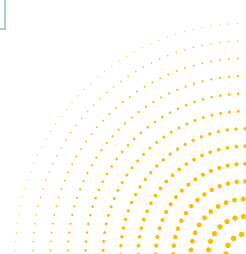
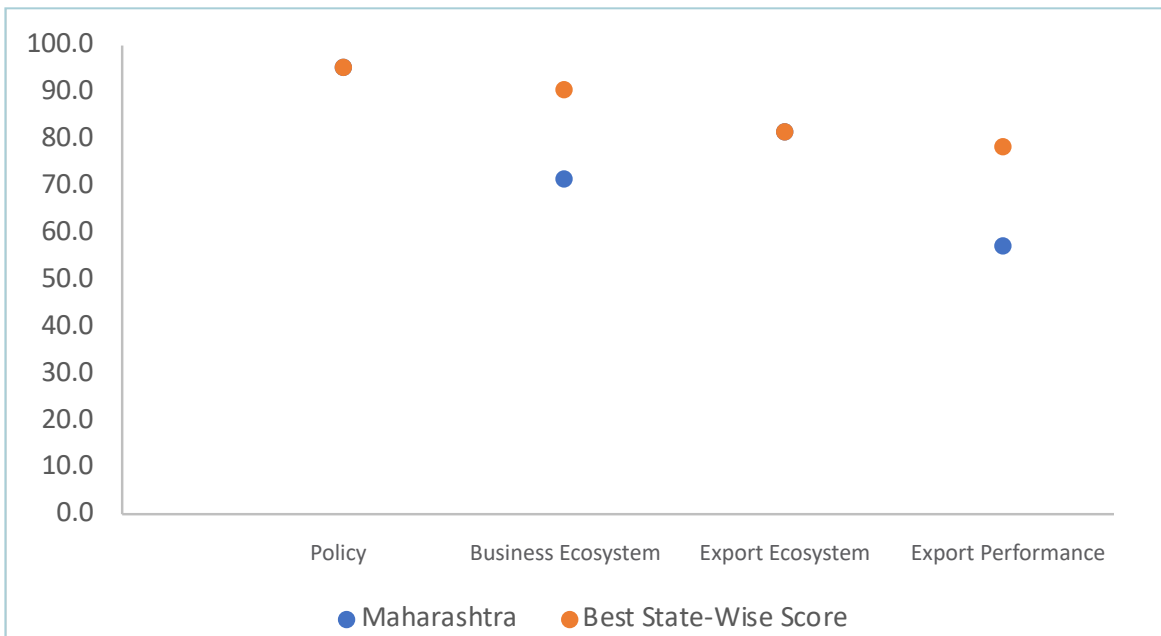
Scorecard



Distance to Frontier



Comparative Analysis



Manipur

Rank: 32

Category : Himalayan



19.4

Export Preparedness

Scorecard

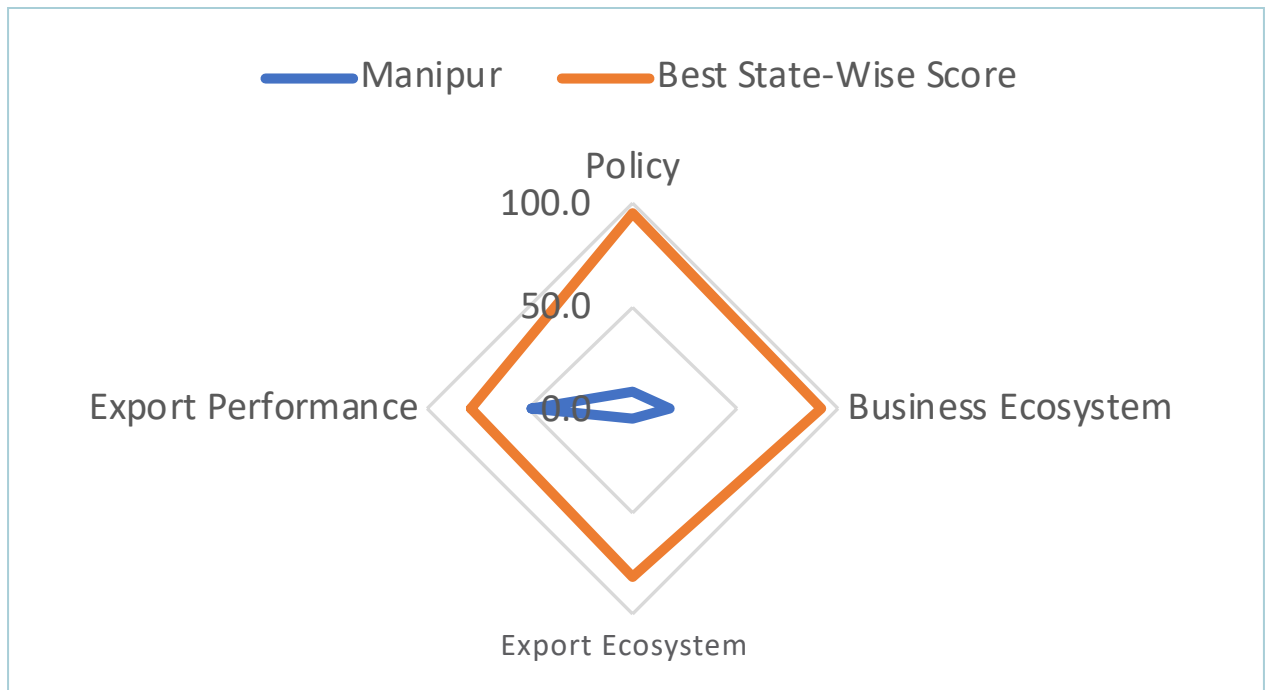
Policy	9.19	Business Ecosystem	17.02	Export Ecosystem	5.16	Export Performance	48.63
Export Promotion Policy	18.37	Business Environment	2.69	Export Infrastructure	4.92	Growth and Orientation	31.13
Existence of a valid policy	0	Ease of Doing Business Index	0.27	Presence of knowledge and information portal for exporters	0	Average Export Growth	18.4
Facilitating Measures	0	Innovative Capacity	14.93	Trade Guide	0	Export to GDP Ratio	0.12
Marketing support	0	Labour Reforms	0			Increase in Number of Exporters	53.51
Policy emphasis on product quality & standards	0	Number of Investor Summits	0				
Thrust sectors for exports	100	Number of MOUs per summit	0	Trade Support	0	Export Diversification	66.13
		Power Cost	0	Capacity Building/Orientation Workshops		Export Concentration	92.65
		Single-window Clearance	0	Membership of Exporters in trade promotion council/agencies	0	Market Penetration Index	0.05
		Value of MOUs per summit	0	Number of trade fairs conducted by Government Departments	0		
Institutional Framework	0			Projects Approved under TIES			
Appointment of full-time export commissioner	0	Infrastructure	4.97	R&D Infrastructure	10.8		
Empowered Committee	0	Cluster Strength	4.24	Ratio of Inspection Agencies	0		
Existence of a State-Centre co-ordination cell	0	Internet Facilities	19.56	Ratio of NABL Labs	21.56		
Existence of Export Promotion Councils	0	Power Availability	19.76	Ratio of Professional Colleges	1.62		
Grievance Redressal	0			Ratio of Research Institutes	0		
International Access	0	Transport Connectivity	40.72				
Newsletter	0	Air Cargo Facilities	0				
		LEADS Index	66.85				
		Number of ICDS	0				
		Number of MMLH Hubs	0				
		Access to Finance	19.68				
		Banking Facilities	26.25				
		Export credit to exporters	1.13				
		Loan Schemes for Exporters	0				



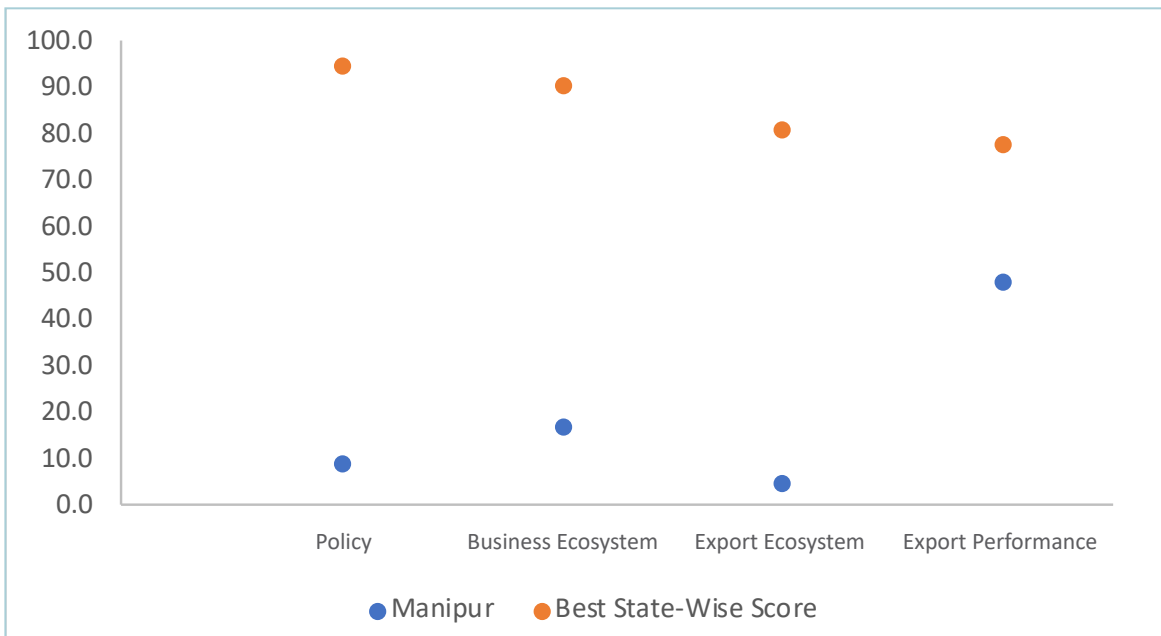
How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

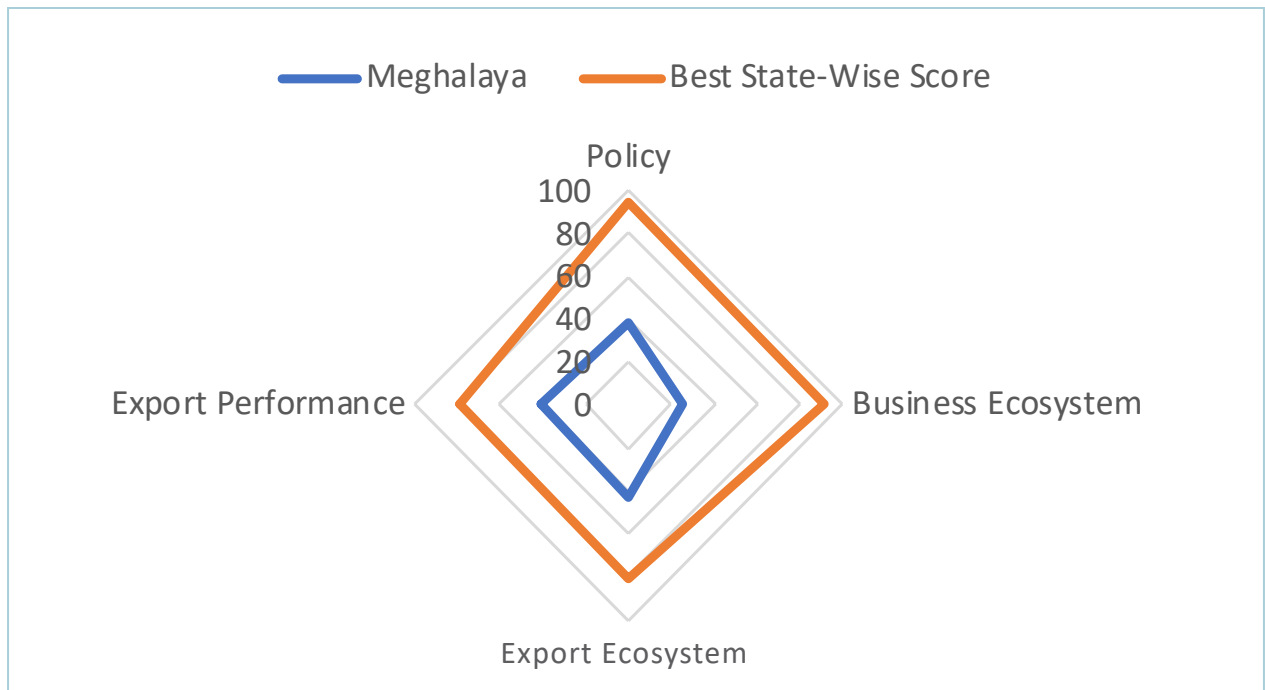
Distance to Frontier



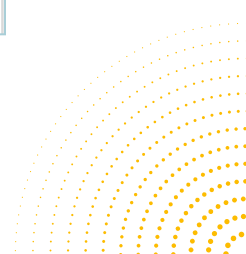
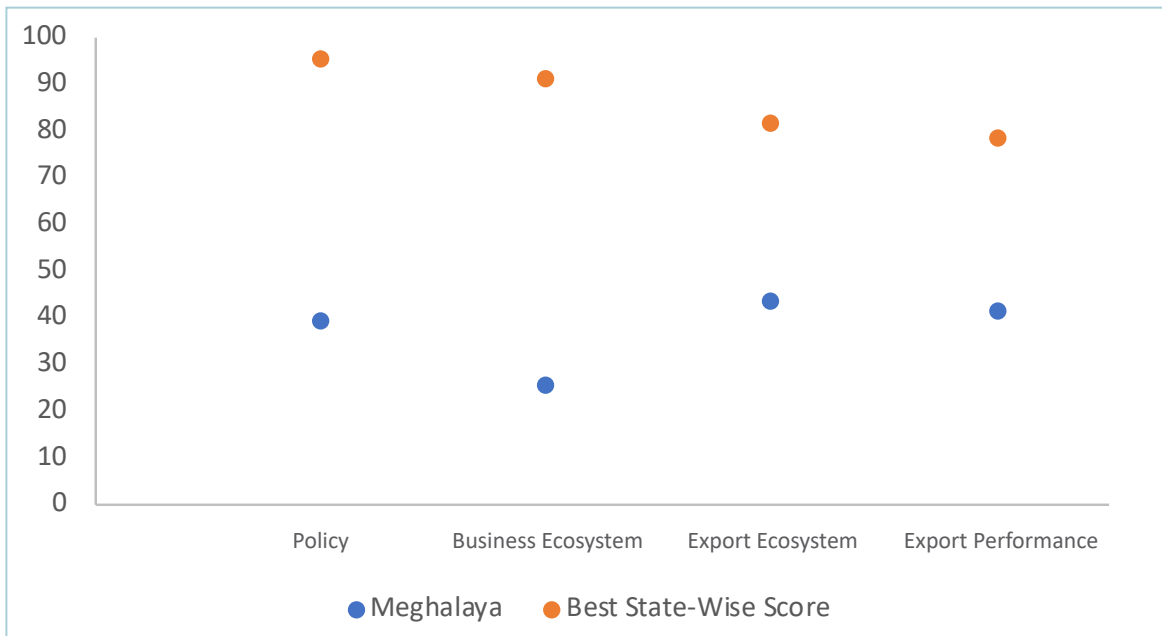
Comparative Analysis



Distance to Frontier



Comparative Analysis



Mizoram

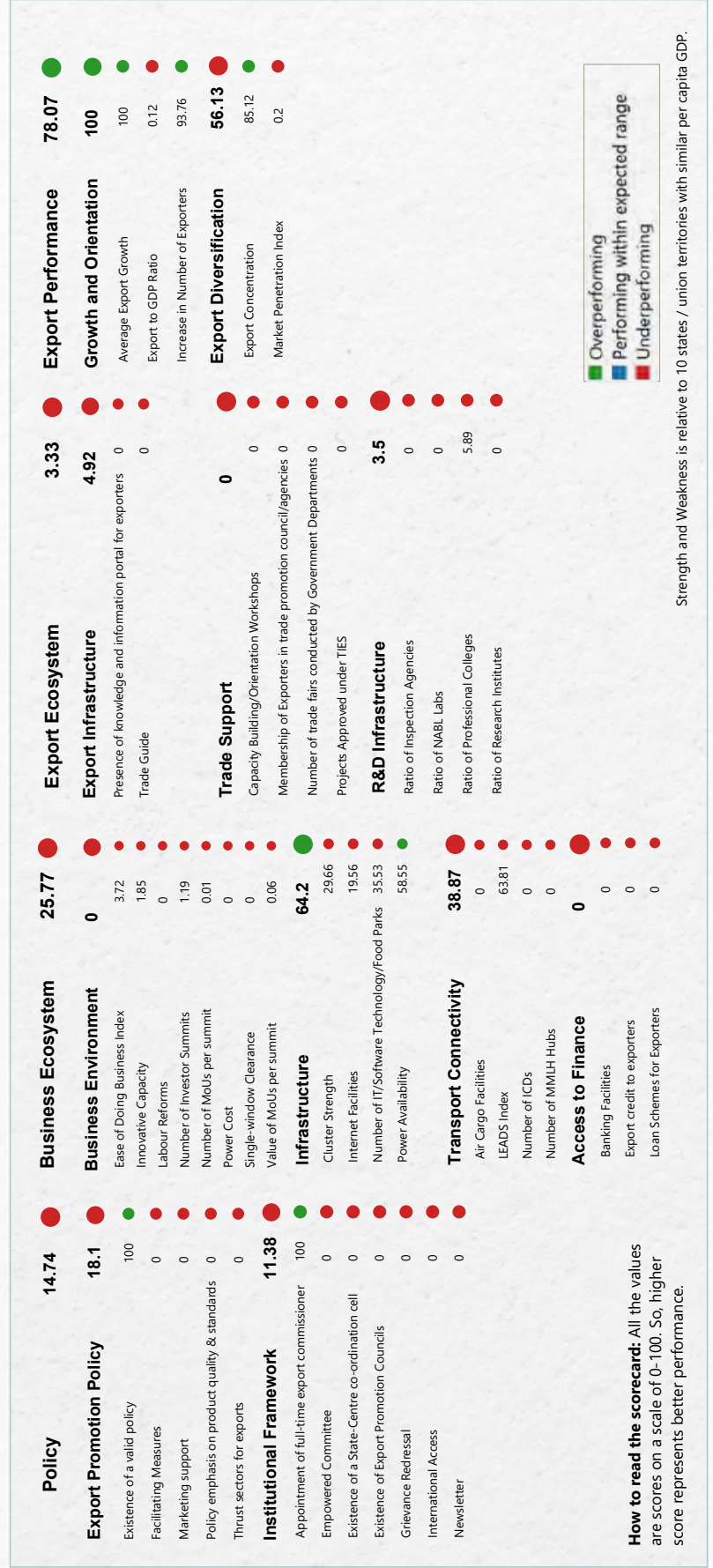
29.53

Export Preparedness

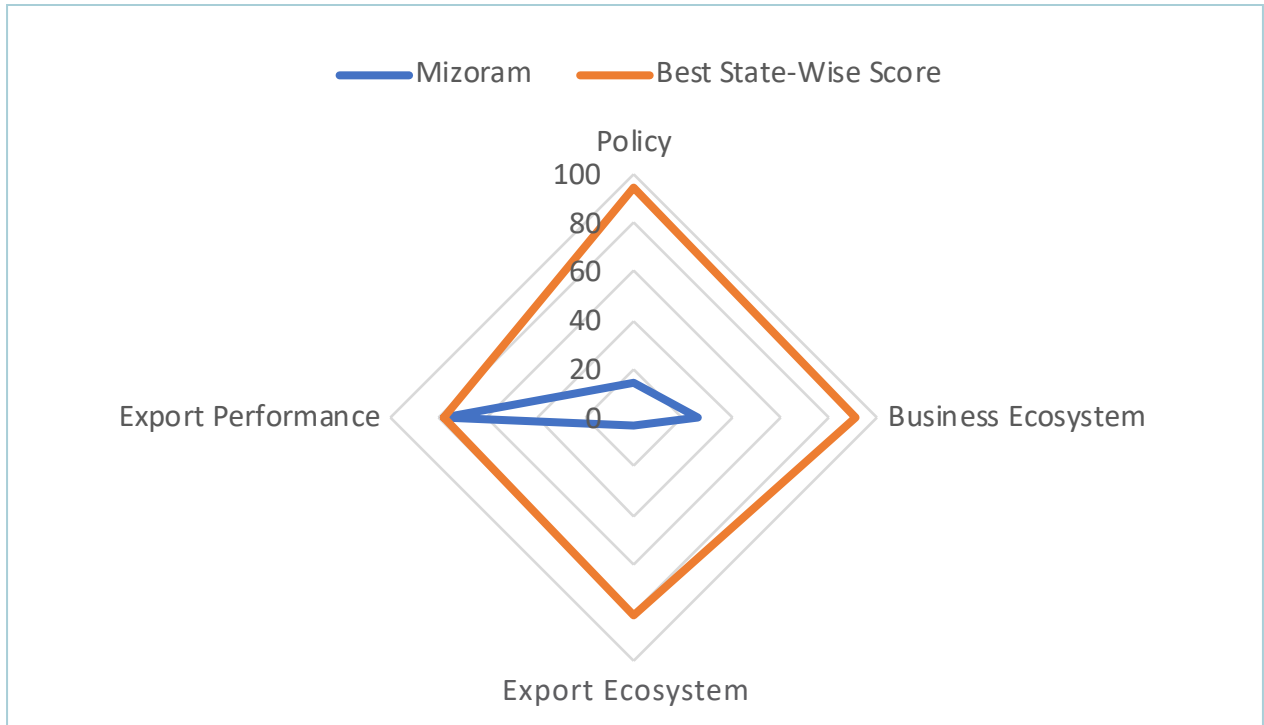
Rank: 23

Category : Himalayan

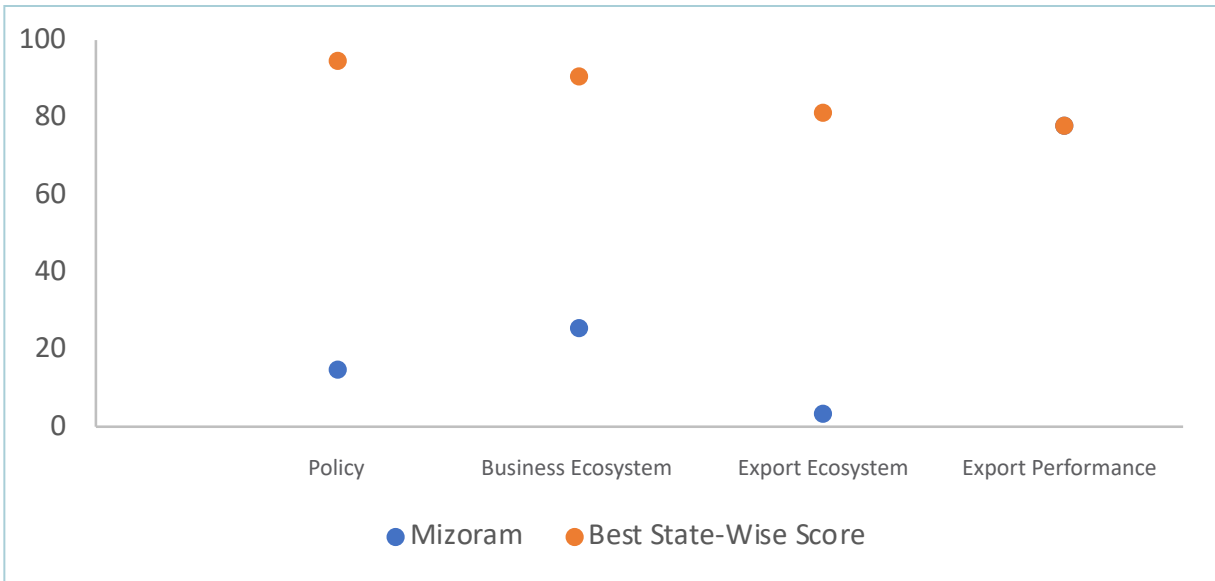
Scorecard



Distance to Frontier



Comparative Analysis



Nagaland



29

Export
Preparedness

Rank: 24

Category : Himalayan

Scorecard

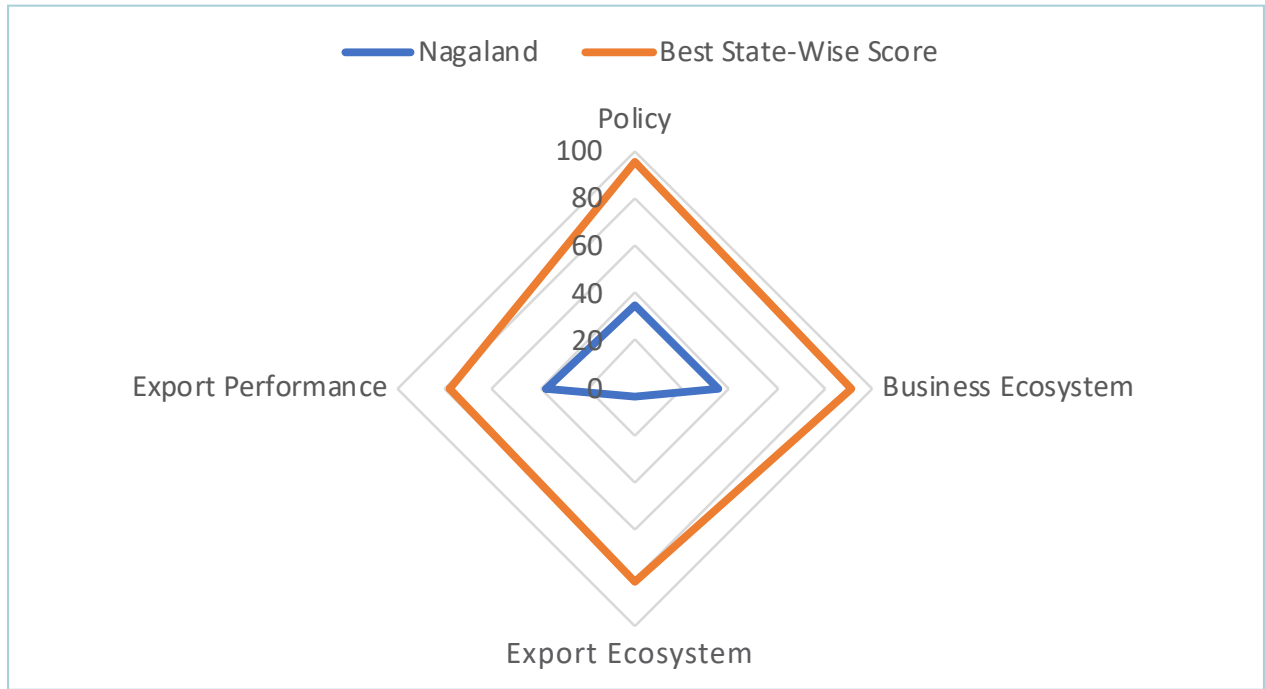
Policy	34.38	Business Ecosystem	35.14	Export Ecosystem	3.17	Export Performance	37.18
Export Promotion Policy	42.15	Business Environment	24.12	Export Infrastructure	4.92	Growth and Orientation	15.28
Existence of a valid policy	100	Ease of Doing Business Index	14.4	Presence of knowledge and information portal for exporters	0	Average Export Growth	13.73
Facilitating Measures	20.84	Innovative Capacity	3.51	Trade Guide	0	Export to GDP Ratio	0.4
Marketing support	0	Labour Reforms	0			Increase in Number of Exporters	25.08
Policy emphasis on product quality & standards	0	Number of Investor Summits	0	Trade Support	0	Export Diversification	59.08
Thrust sectors for exports	100	Number of MoUs per summit	0	Capacity Building/Orientation Workshops	0	Export Concentration	86.81
		Power Cost	100	Membership of Exporters in trade promotion council/agencies	0	Market Penetration Index	0.79
		Single-window Clearance	0	Number of trade fairs conducted by Government Departments	0		
Institutional Framework	26.6	Value of MoUs per summit	0	Projects Approved under TIES	0		
Appointment of full-time export commissioner	100	Infrastructure	77.66	R&D Infrastructure	2.86		
Empowered Committee	37.44	Cluster Strength	2.54	Ratio of Inspection Agencies	0		
Existence of a State-Centre co-ordination cell	0	Internet Facilities	19.56	Ratio of NABL Labs	0		
Existence of Export Promotion Councils	27.64	Number of IT/Software Technology/Food Parks	100	Ratio of Professional Colleges	4.82		
Grievance Redressal	0	Power Availability	48.48	Ratio of Research Institutes	0		
International Access	0	Transport Connectivity	38.37				
Newsletter	0	Air Cargo Facilities	0				
		LEADS Index	62.98				
		Number of ICDS	0				
		Number of MMLH Hubs	0				
		Access to Finance	0.42				
		Banking Facilities	0.59				
		Export credit to exporters	0				
		Loan Schemes for Exporters	0				

- Overperforming
- Performing within expected range
- Underperforming

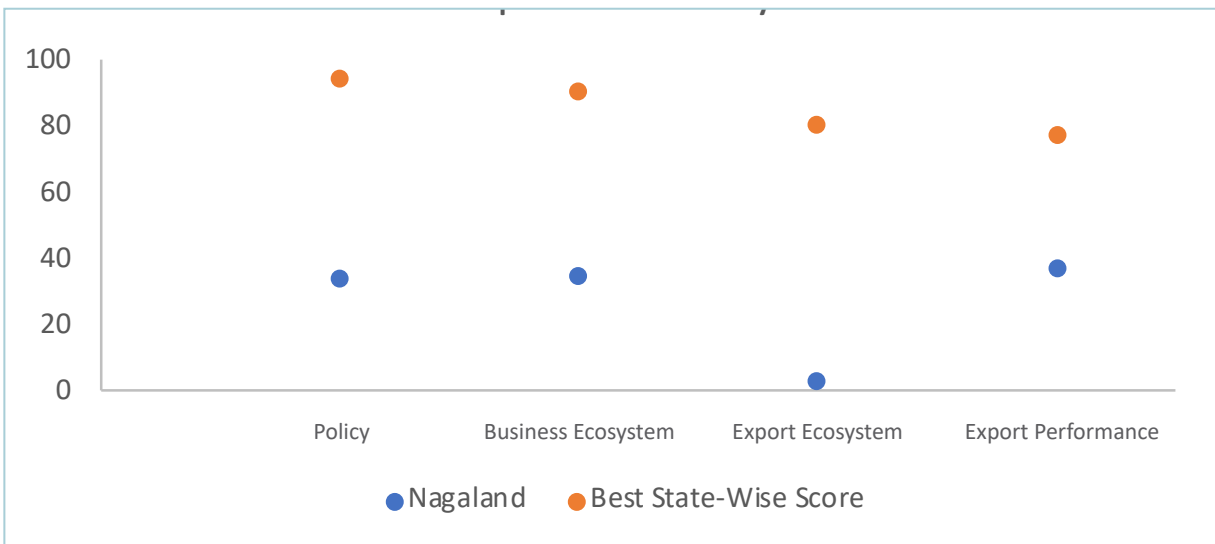
Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Distance to Frontier



Comparative Analysis



Odisha

58.23

Export Preparedness

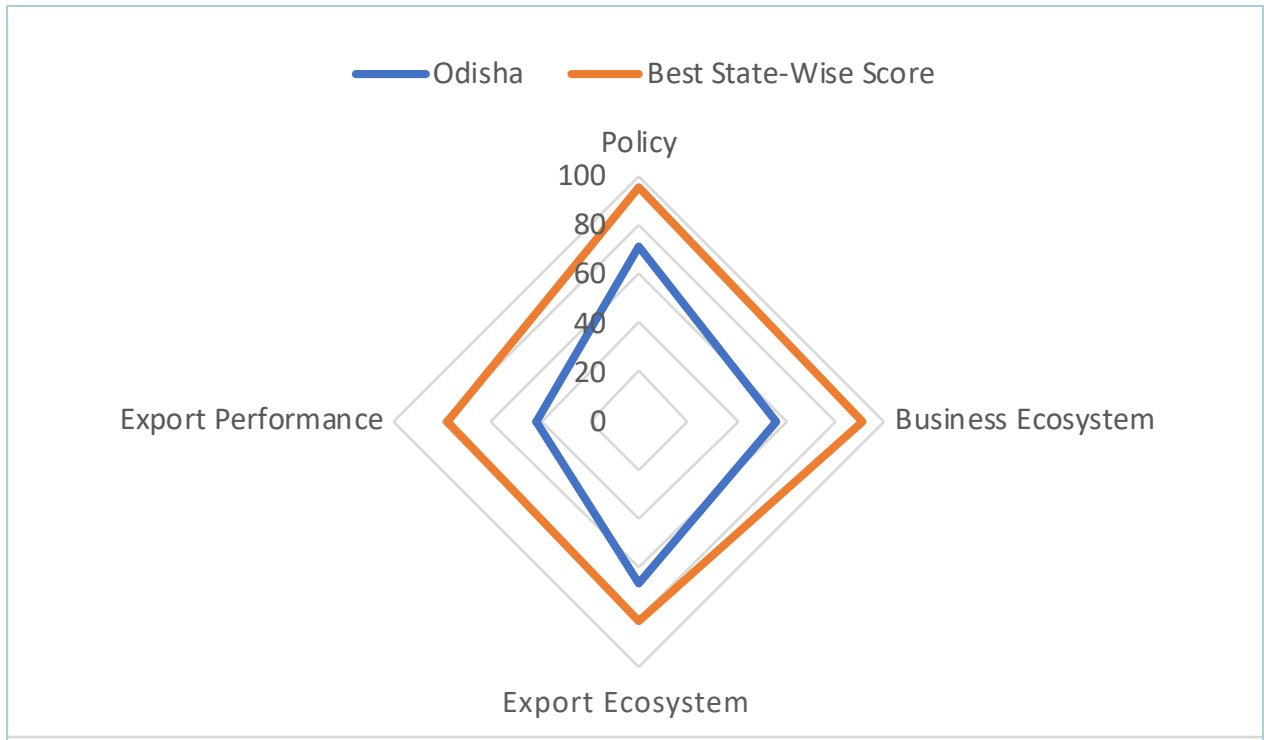
Rank: 5

Category : Coastal

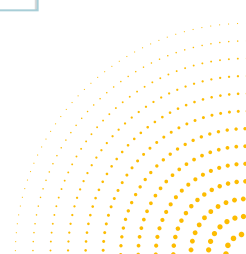
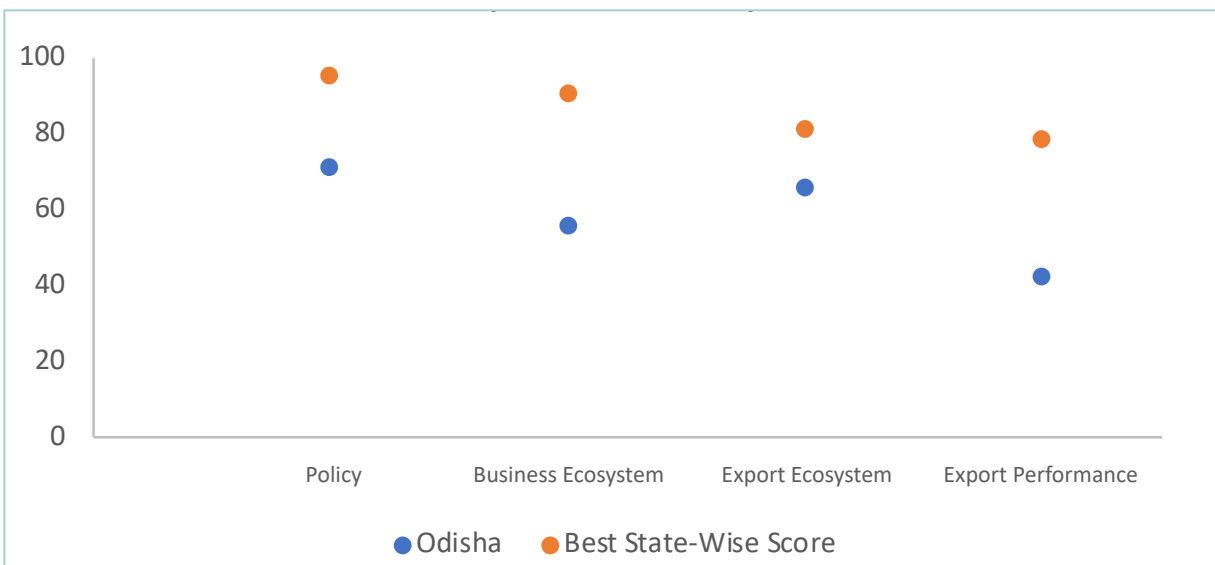
Scorecard



Distance to Frontier



Comparative Analysis



Puducherry

Rank: 29

Category : UT/City-States

21.86

Export Preparedness

Scorecard

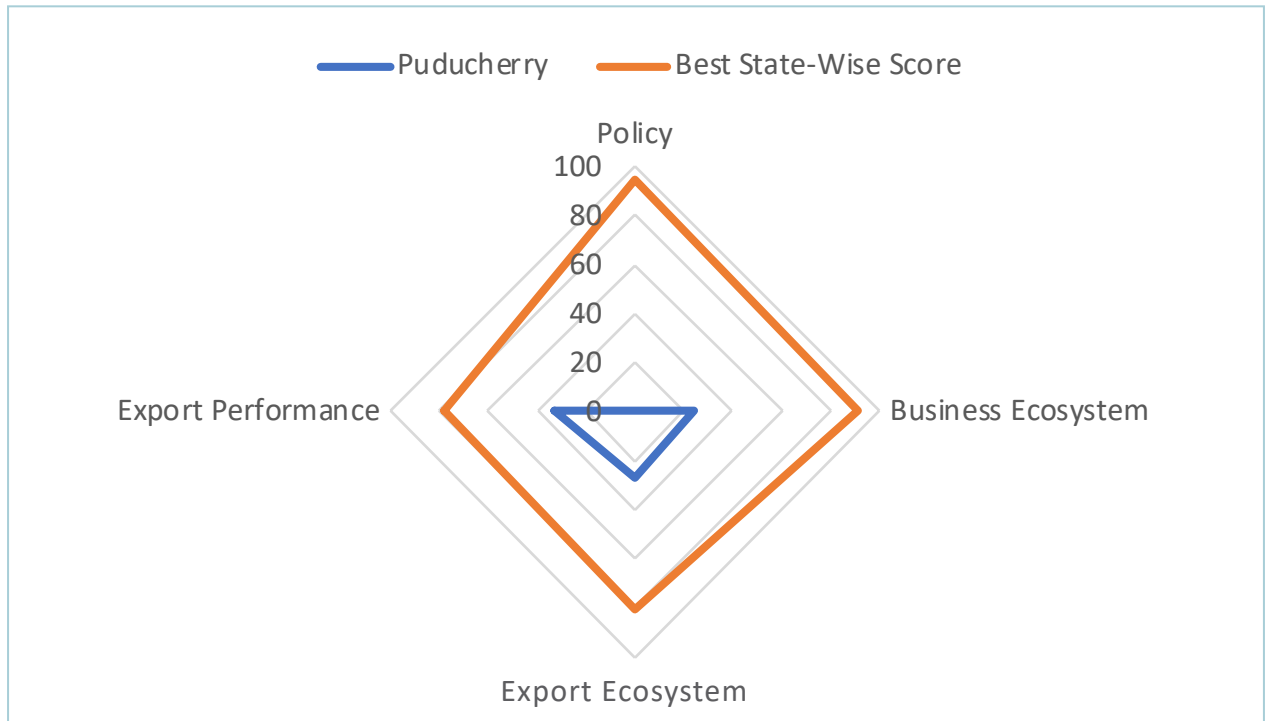
Policy	0	●	Business Ecosystem	24.63	●	Export Ecosystem	27.46	●	Export Performance	32.56	●
Export Promotion Policy											
Existence of a valid policy	0	●	Business Environment	28.99	●	Export Infrastructure	4.92	●	Growth and Orientation	19.91	●
Facilitating Measures	0	●	Ease of Doing Business Index	15.92	●	Presence of knowledge and information portal for exporters	0	●	Average Export Growth	2.2	●
Marketing support	0	●	Innovative Capacity	21.04	●	Trade Guide	0	●	Export to GDP Ratio	30.11	●
Policy emphasis on product quality & standards	0	●	Labour Reforms	0	●	Trade Support	0	●	Increase in Number of Exporters	19.79	●
Thrust sectors for exports	0	●	Number of Investor Summits	1.19	●	Capacity Building/Orientation Workshops	0	●	Export Diversification	45.2	●
Institutional Framework											
Appointment of full-time export commissioner	0	●	Number of MoUs per summit	0	●	Membership of Exporters in trade promotion council/agencies	0	●	Export Concentration	59.9	●
Empowered Committee	0	●	Power Cost	30.1	●	Number of trade fairs conducted by Government Departments	0	●	Market Penetration Index	20.43	●
Existence of a State-Centre co-ordination cell	0	●	Single-window Clearance	100	●	Projects Approved under TIES	0	●			
Existence of Export Promotion Councils	0	●	Value of MoUs per summit	0	●	R&D Infrastructure	100	●			
Grievance Redressal	0	●	Infrastructure	12.67	●	Ratio of Inspection Agencies	0	●			
International Access	0	●	Cluster Strength	11.02	●	Ratio of NABL Labs	0	●			
Newsletter	0	●	Internet Facilities	20.54	●	Ratio of Professional Colleges	100	●			
			Number of IT/Software Technology/Food Parks	5.53	●	Ratio of Research Institutes	83.2	●			
			Power Availability	19.03	●						
Transport Connectivity											
			Access to Finance	1.69	●						
			Air Cargo Facilities	0	●						
			LEADS Index	90.61	●						
			Number of ICDS	0	●						
			Number of MMLH Hubs	0	●						
			Banking Facilities	0.69	●						
			Export credit to exporters	1.51	●						
			Loan Schemes for Exporters	0	●						

● Overperforming
 ■ Performing within expected range
 ■ Underperforming

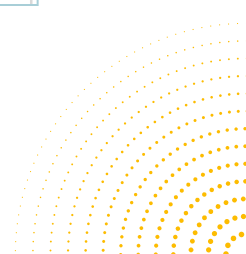
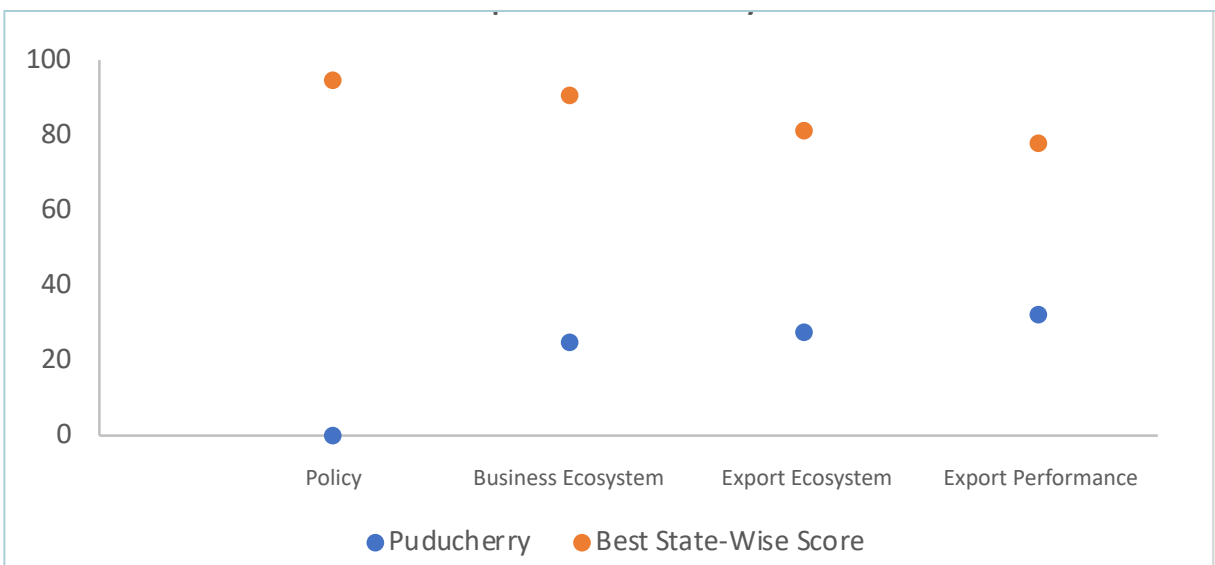
Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Distance to Frontier



Comparative Analysis



Punjab

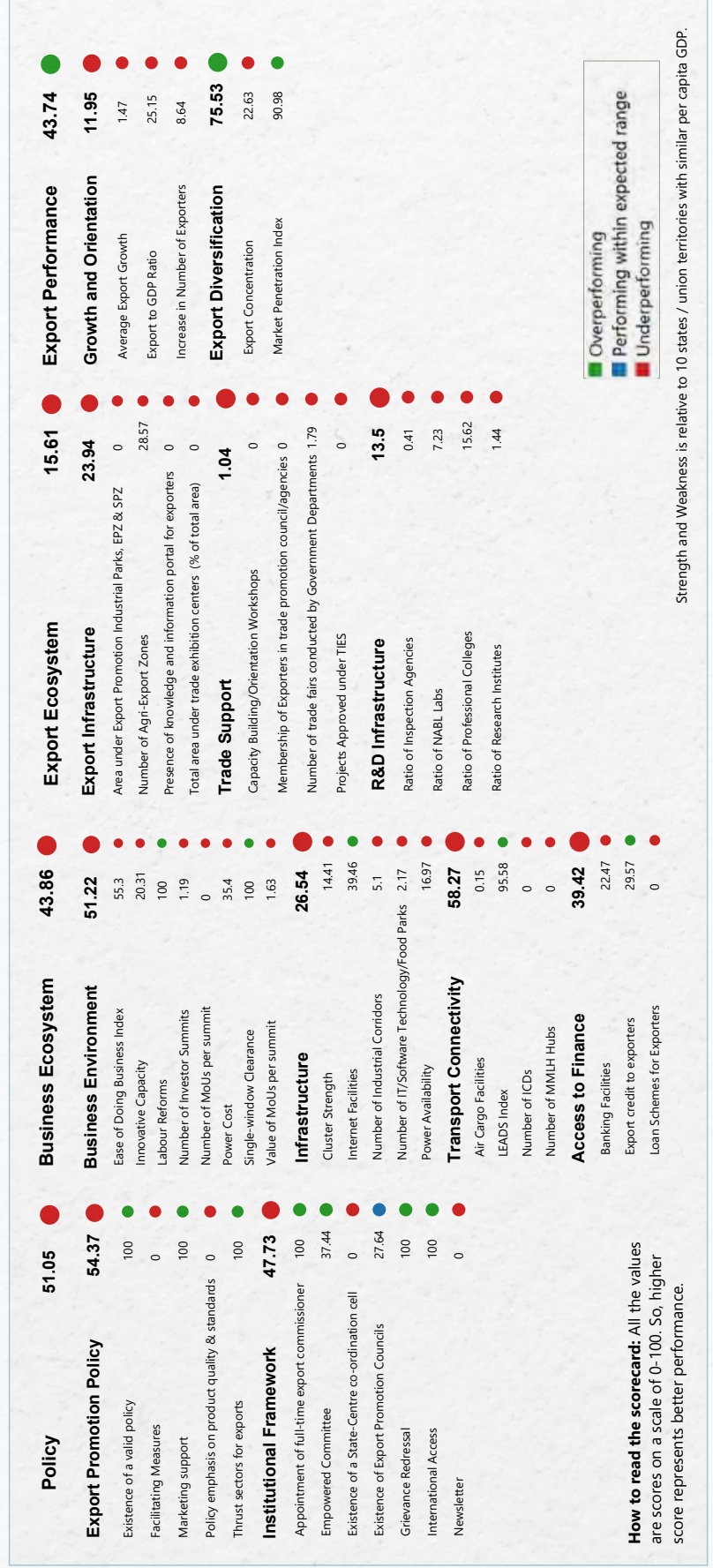
Rank: 18

Category : Landlocked

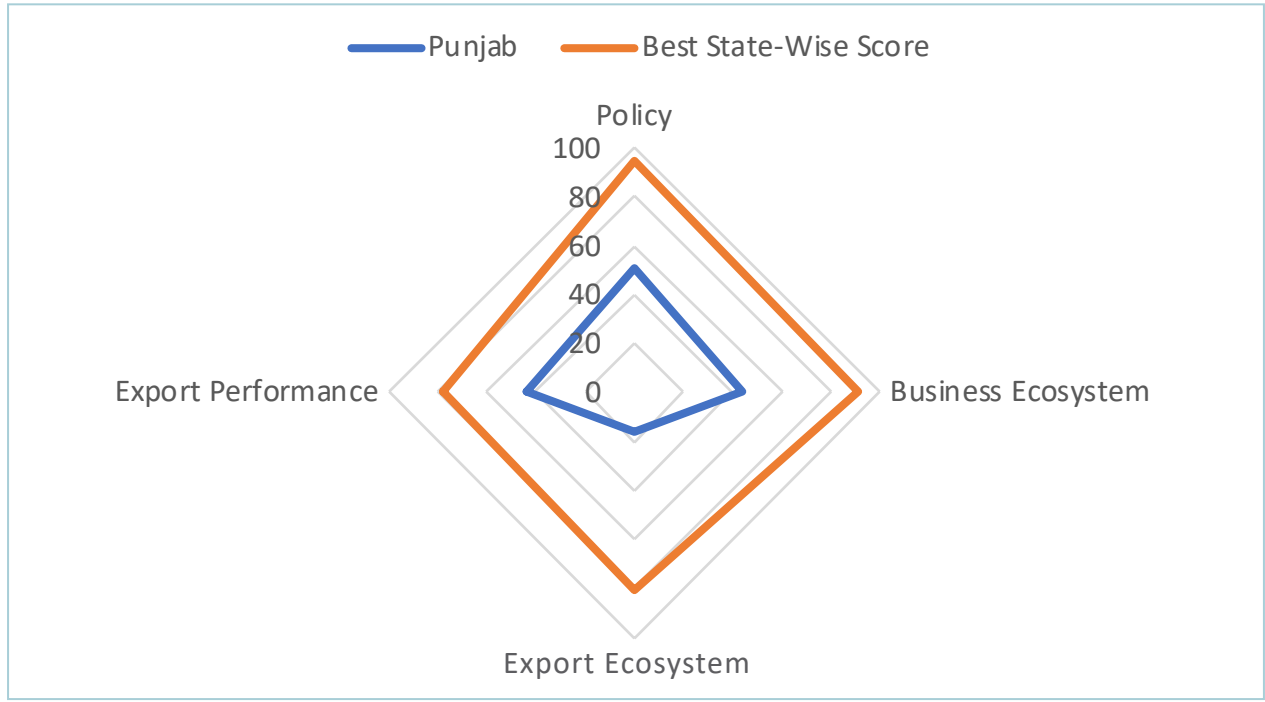
39.63

Export Preparedness

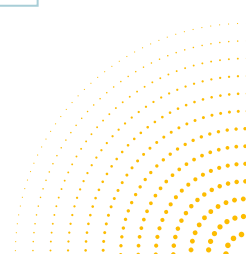
Scorecard



Distance to Frontier



Comparative Analysis



Rajasthan

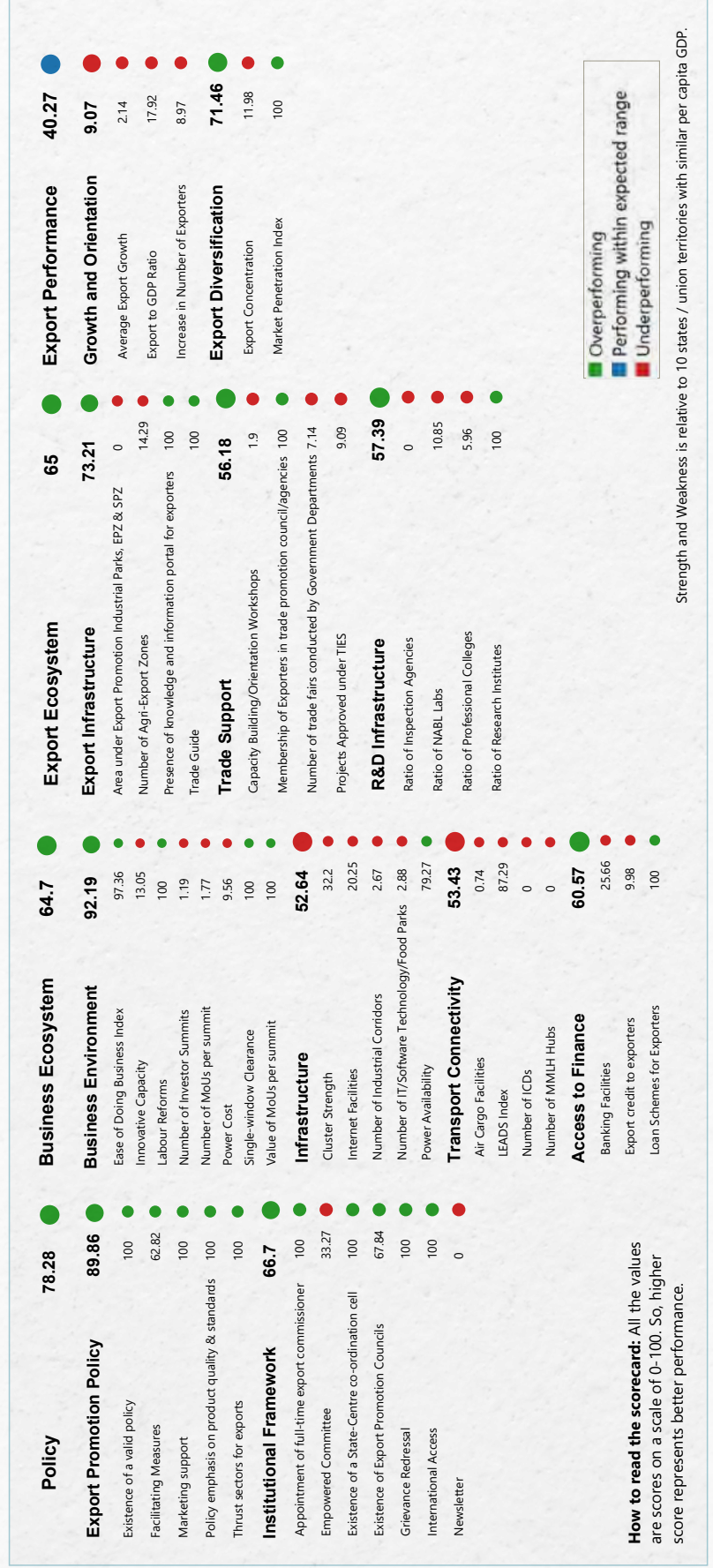
62.59

Export Preparedness

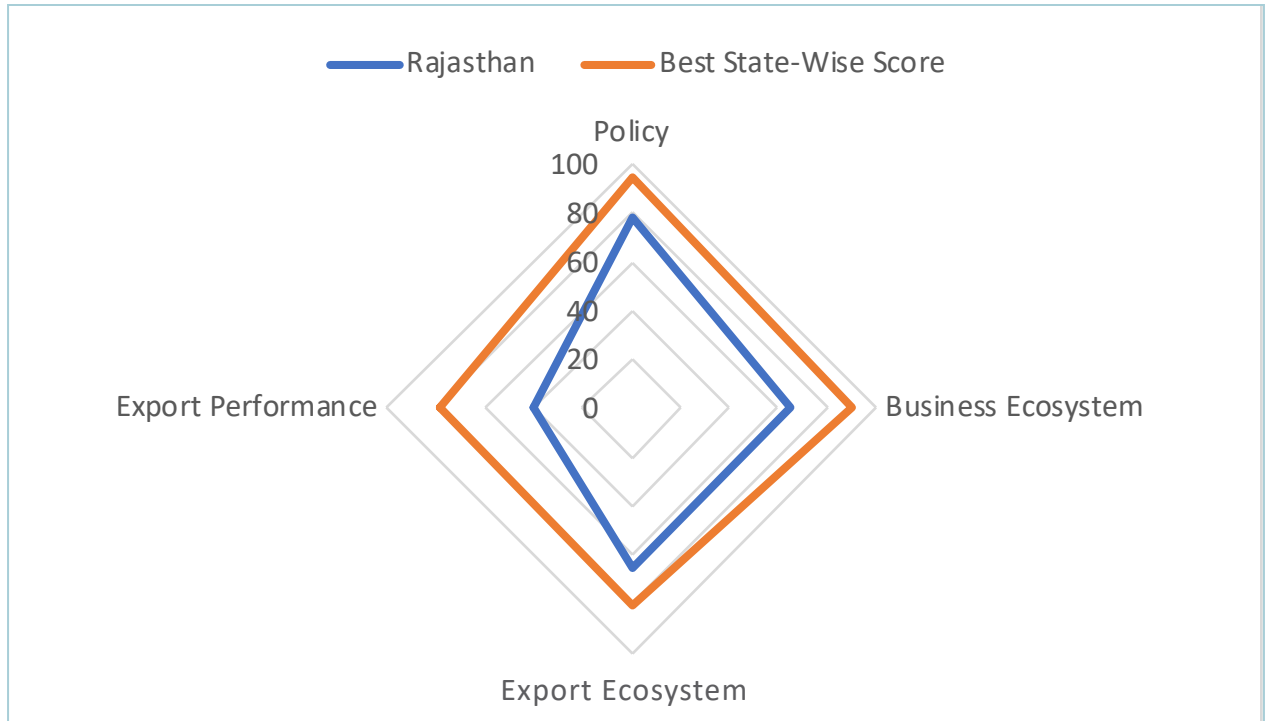
Rank: 4

Category : Landlocked

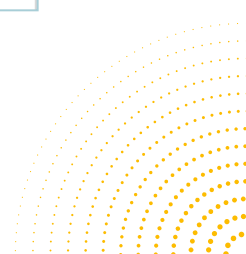
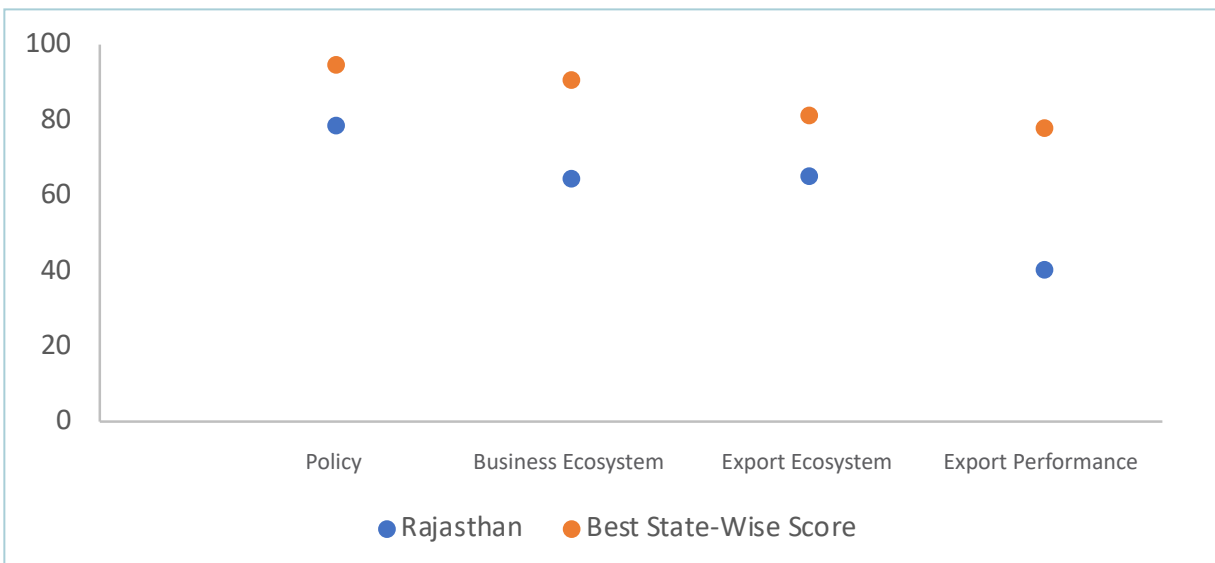
Scorecard



Distance to Frontier



Comparative Analysis



Sikkim

Rank: 26

Category : Himalayan

26.75

Export Preparedness

Scorecard

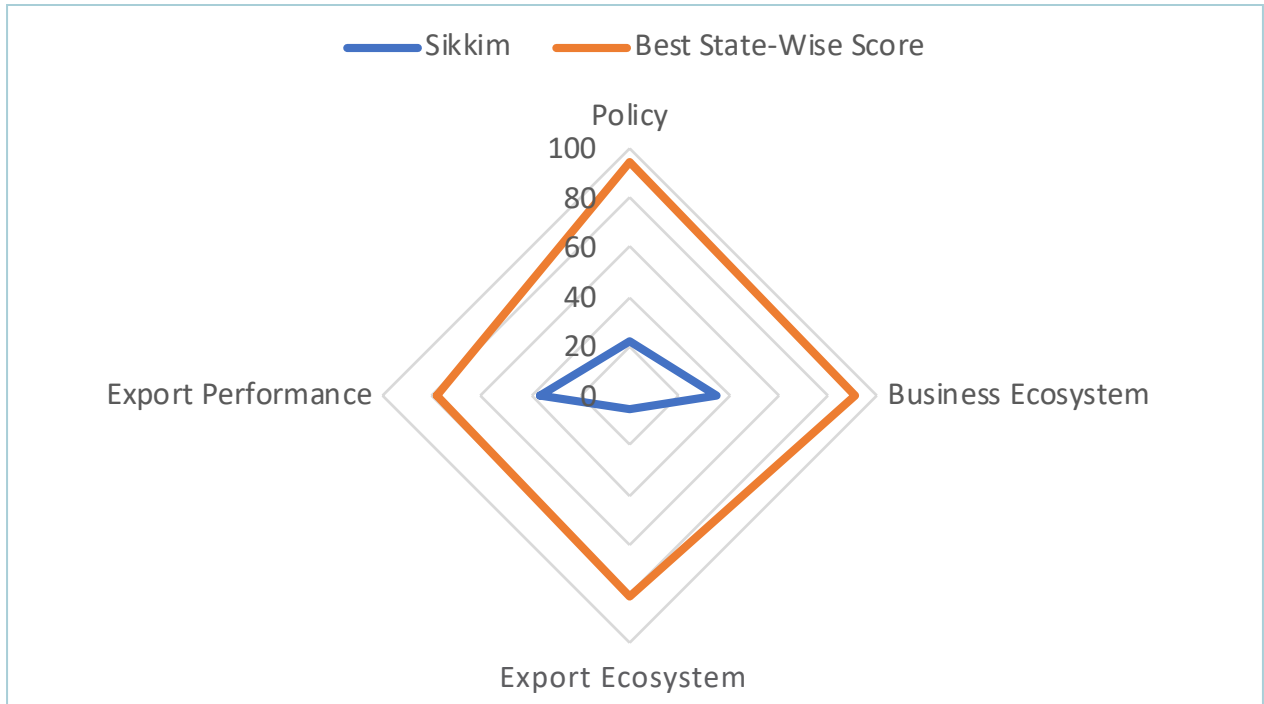
Policy	22	Business Ecosystem	35.13	Export Ecosystem	5.18	Export Performance	36.35
Export Promotion Policy	18.37	Business Environment	28.01	Export Infrastructure	9.83	Growth and Orientation	23.24
Existence of a valid policy	0	Ease of Doing Business Index	0.14	Number of Agri-Export Zones	14.29	Average Export Growth	6.22
Facilitating Measures	0	Innovative Capacity	25.26	Presence of knowledge and information portal for exporters	0	Export to GDP Ratio	1.38
Marketing support	0	Labour Reforms	0	Trade Guide	0	Increase in Number of Exporters	51.39
Policy emphasis on product quality & standards	0	Number of Investor Summits	0	Trade Support	1.04	Export Diversification	49.46
Thrust sectors for exports	100	Number of MoUs per summit	0	Capacity Building/Orientation Workshops	0	Export Concentration	75.88
Institutional Framework	25.62	Power Cost	100	Membership of Exporters in trade promotion council/agencies	0	Market Penetration Index	5.28
Appointment of full-time export commissioner	100	Single-window Clearance	0	Number of trade fairs conducted by Government Departments	1.79		
Empowered Committee	33.27	Value of MoUs per summit	0	Projects Approved under TIES	0		
Existence of a State-Centre co-ordination cell	0	Infrastructure	63.33	R&D Infrastructure	0		
Existence of Export Promotion Councils	27.64	Cluster Strength	0	Ratio of Inspection Agencies	0		
Grievance Redressal	0	Internet Facilities	19.56	Ratio of NABL Labs	0		
International Access	0	Number of IT/Software Technology/Food Parks	16.71	Ratio of Professional Colleges	0		
Newsletter	0	Power Availability	100	Ratio of Research Institutes	0		
		Transport Connectivity	48.8				
		Air Cargo Facilities	0				
		LEADS Index	80.11				
		Number of ICDS	0				
		Number of MMLH Hubs	0				
		Access to Finance	0.37				
		Banking Facilities	0.52				
		Export credit to exporters	0				
		Loan Schemes for Exporters	0				



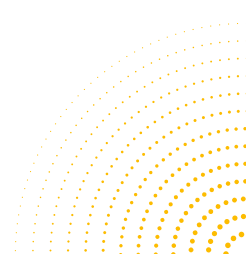
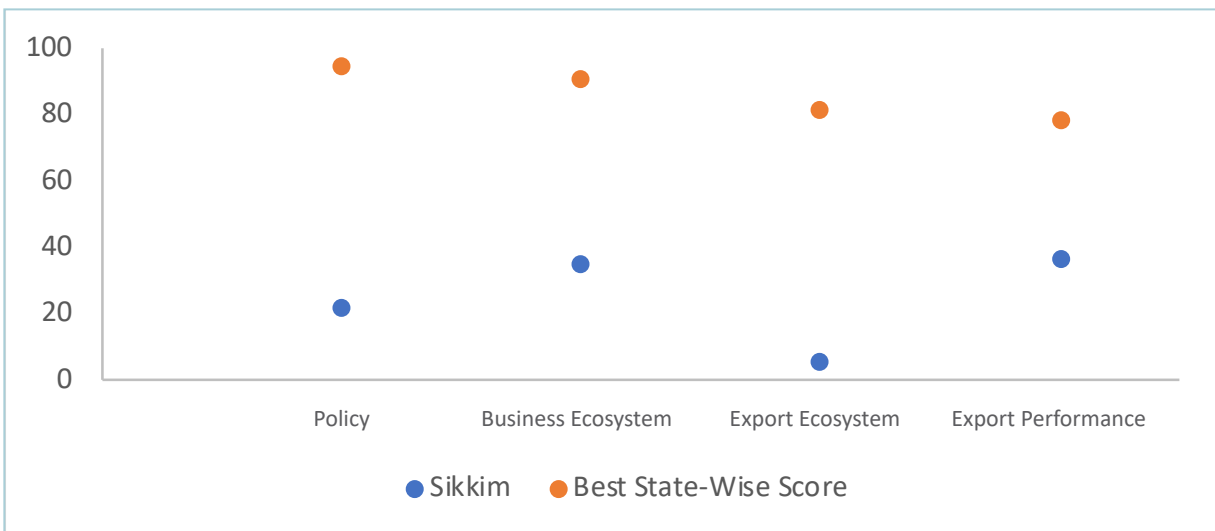
How to read the scorecard: All the values are scores on a scale of 0-100. So, higher score represents better performance.

Strength and Weakness is relative to 10 states / union territories with similar per capita GDP.

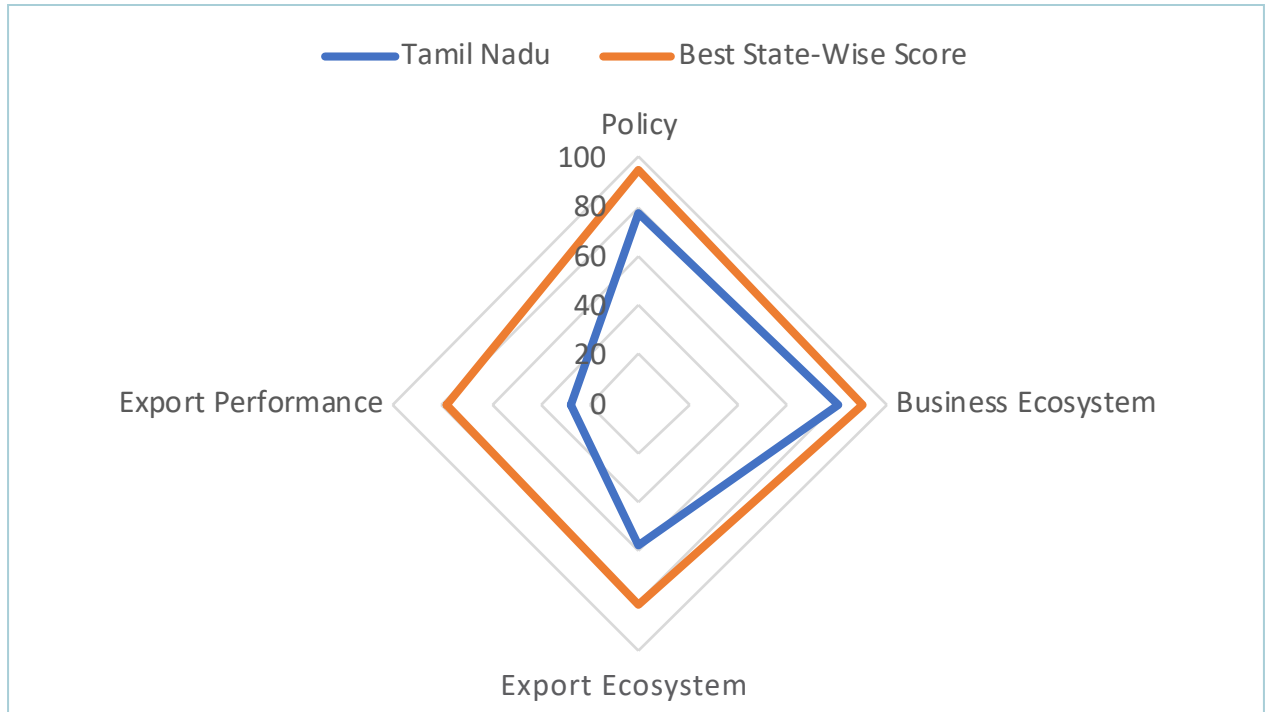
Distance to Frontier



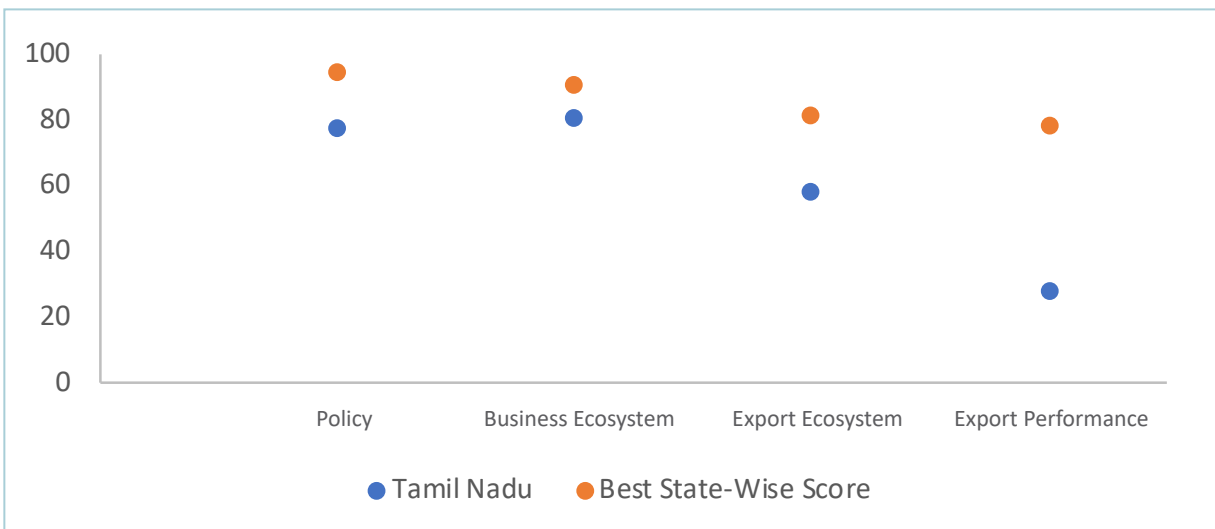
Comparative Analysis



Distance to Frontier



Comparative Analysis



Telangana

57.43

Export Preparedness

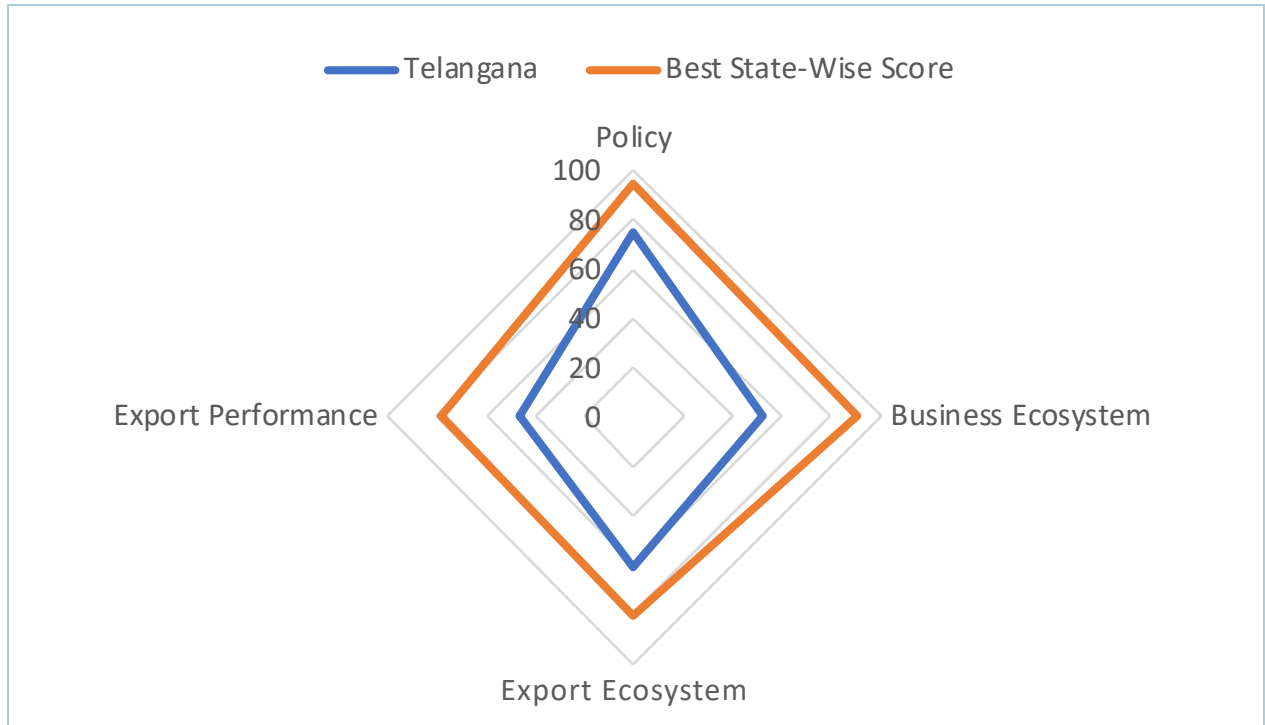
Rank: 6

Category : Landlocked

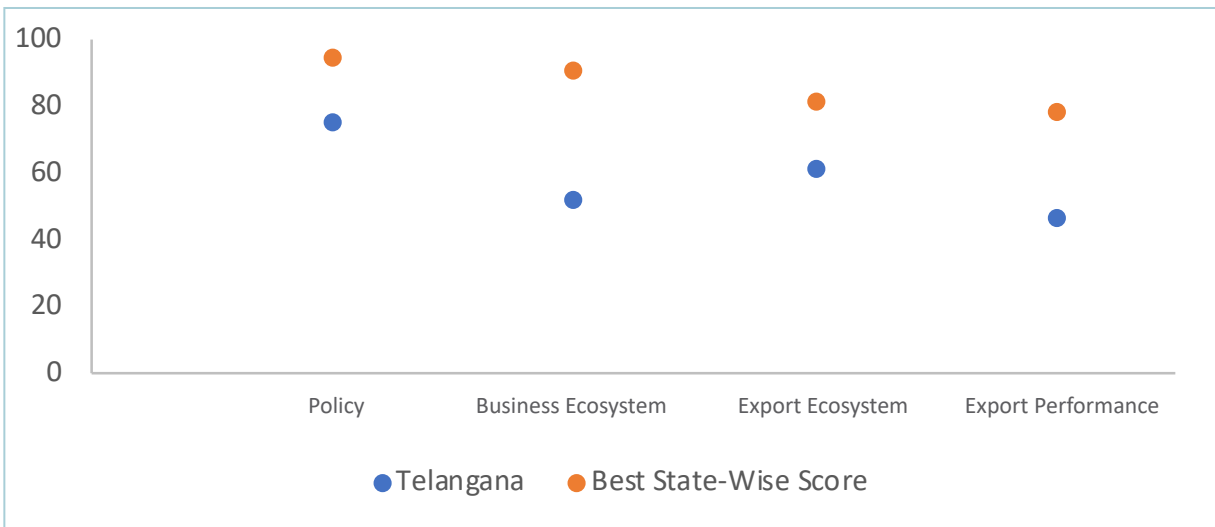
Scorecard



Distance to Frontier



Comparative Analysis



Tripura

40.79

Export
Preparedness

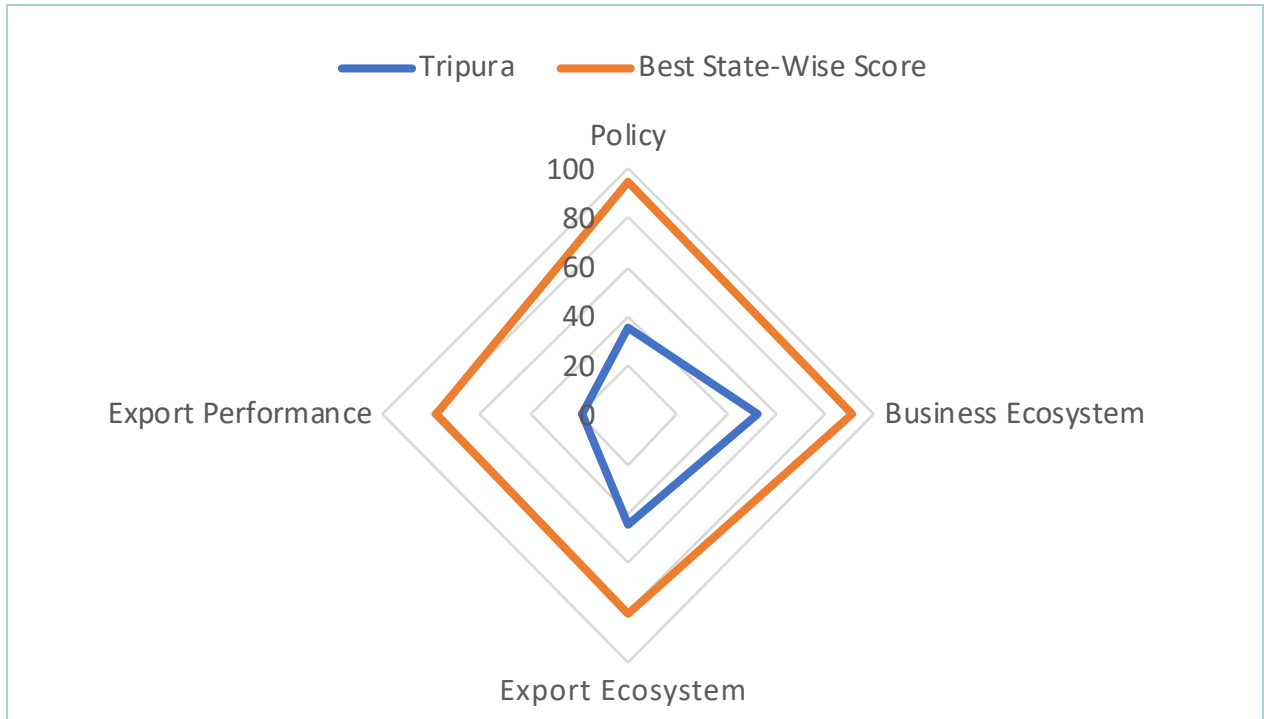
Rank: 17

Category : Himalaya

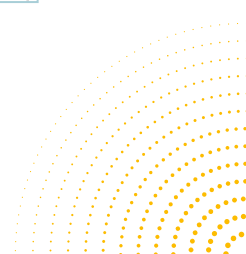
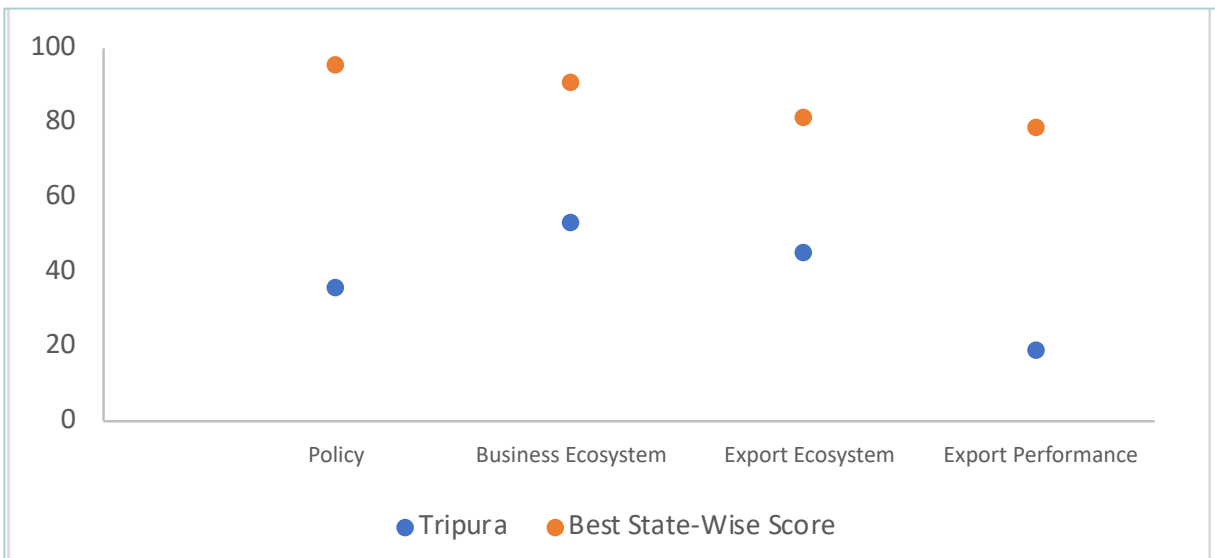
Scorecard



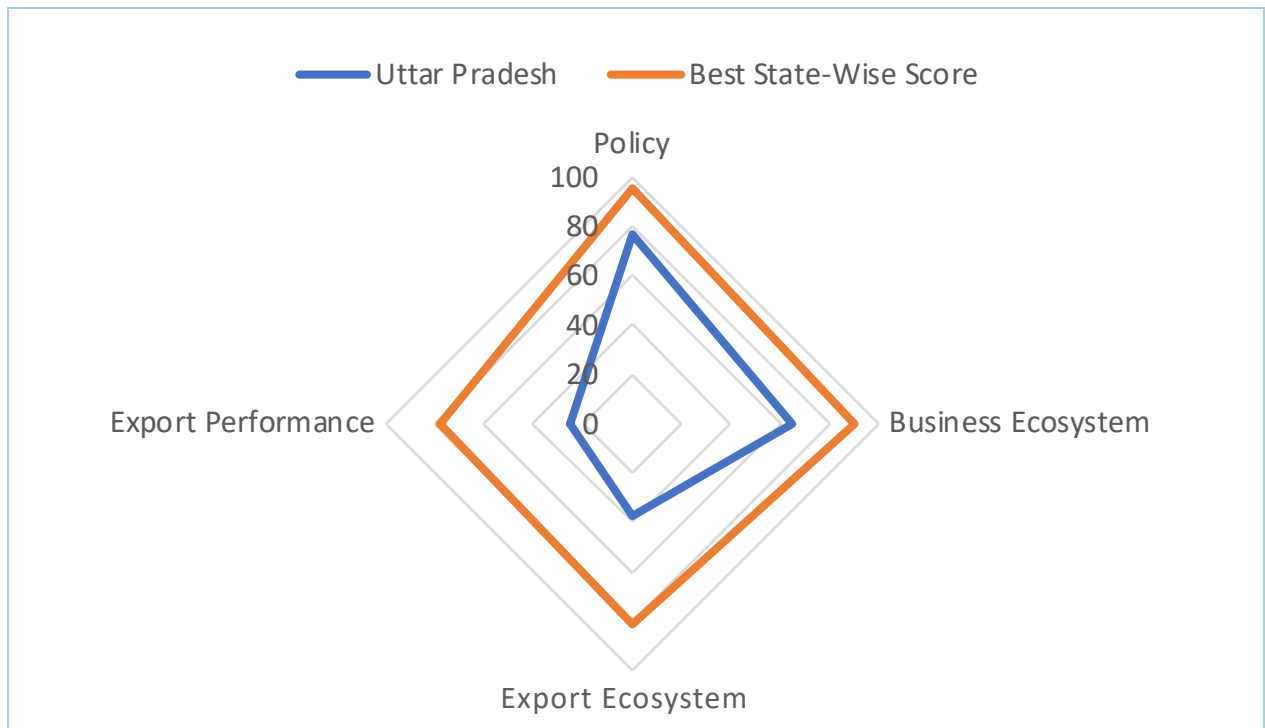
Distance to Frontier



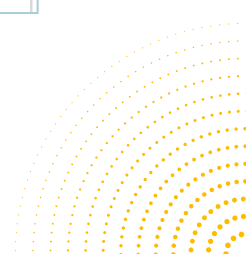
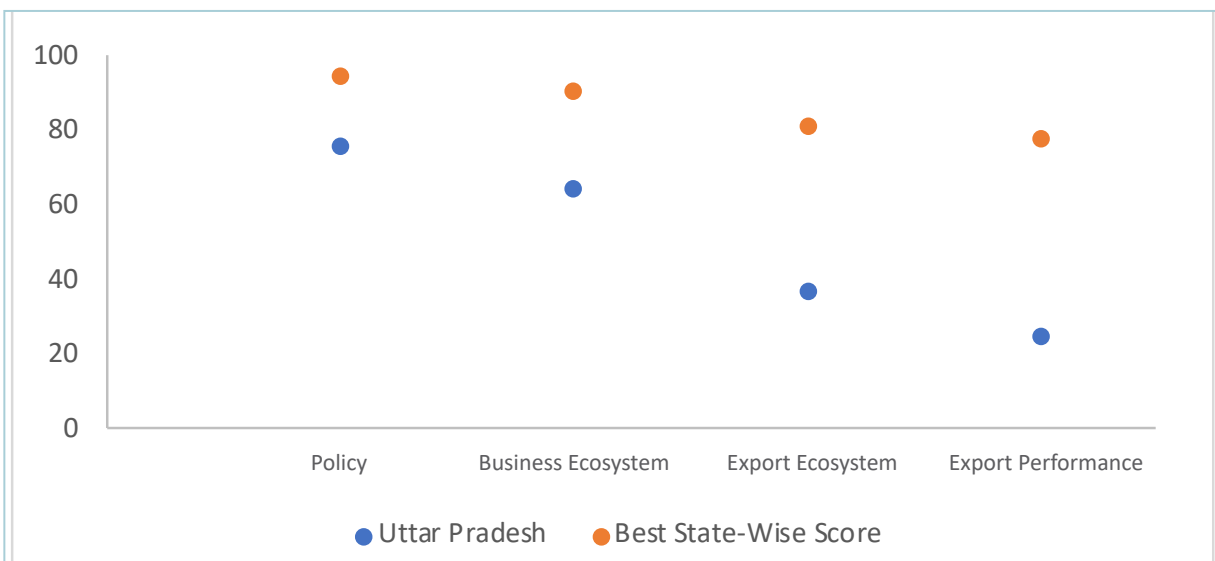
Comparative Analysis



Distance to Frontier



Comparative Analysis



Uttarakhand

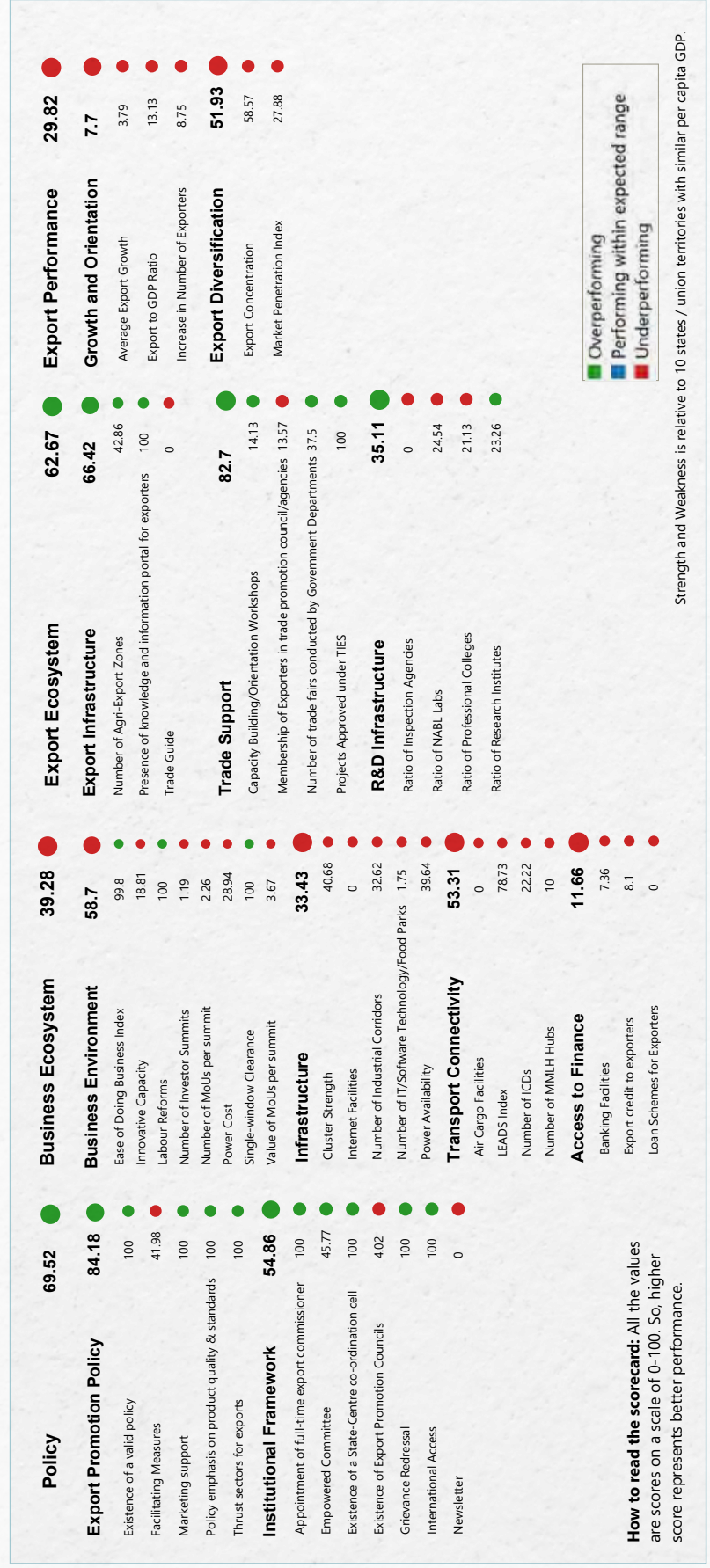
48.11

Export Preparedness

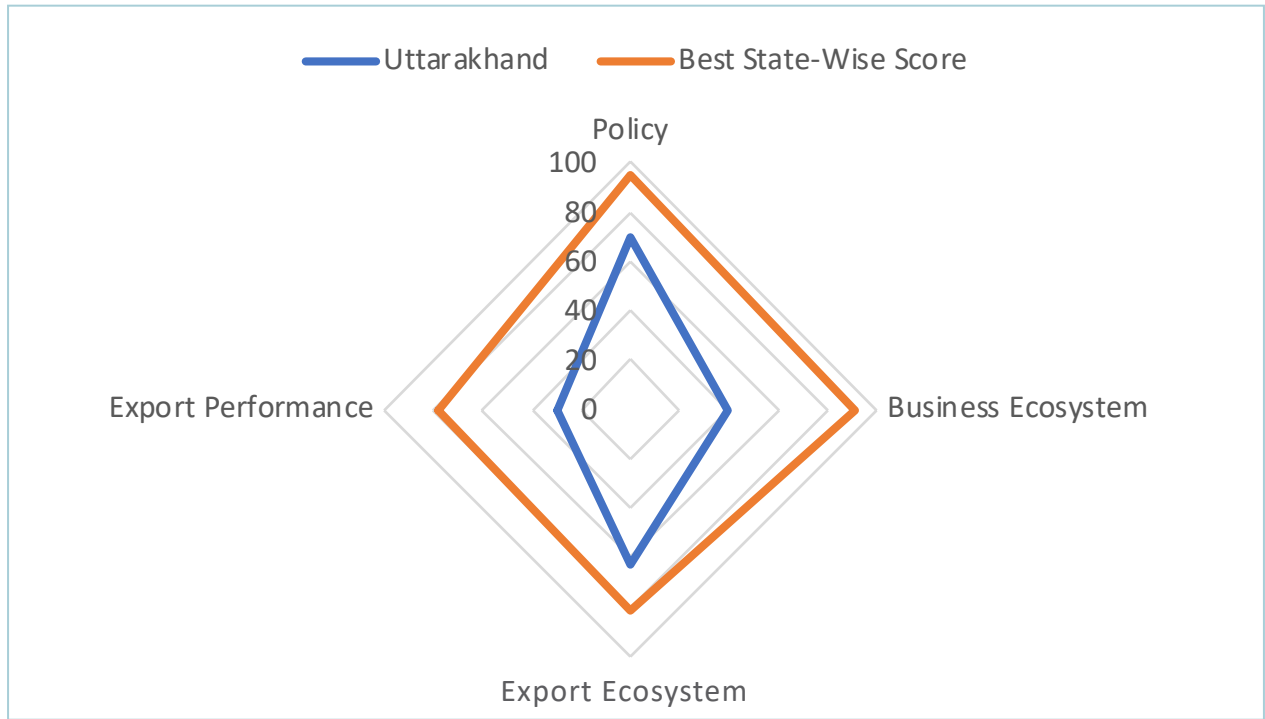
Rank: 13

Category : Himalayan

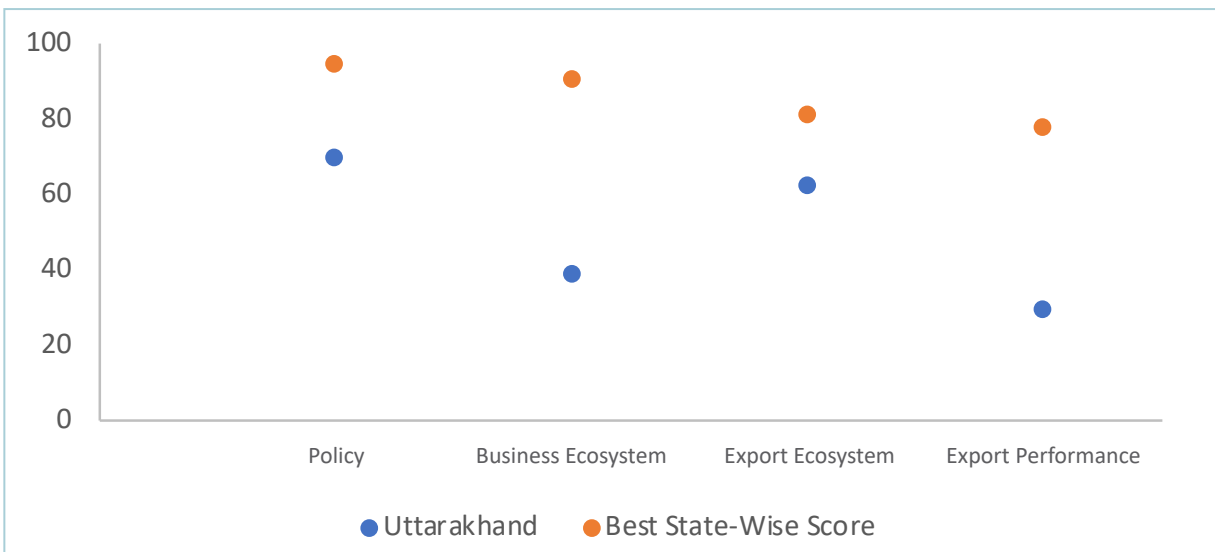
Scorecard



Distance to Frontier



Comparative Analysis



West Bengal

Rank: 22

Category : Coastal

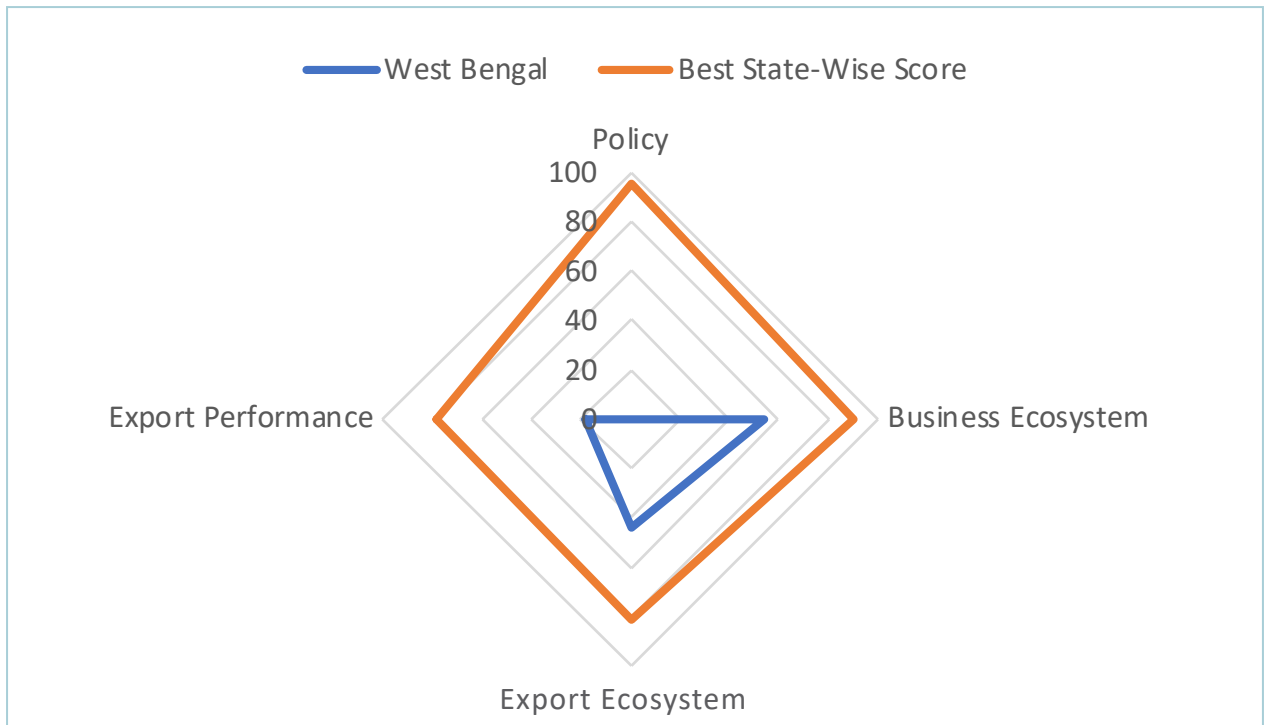
34.05

Export Preparedness

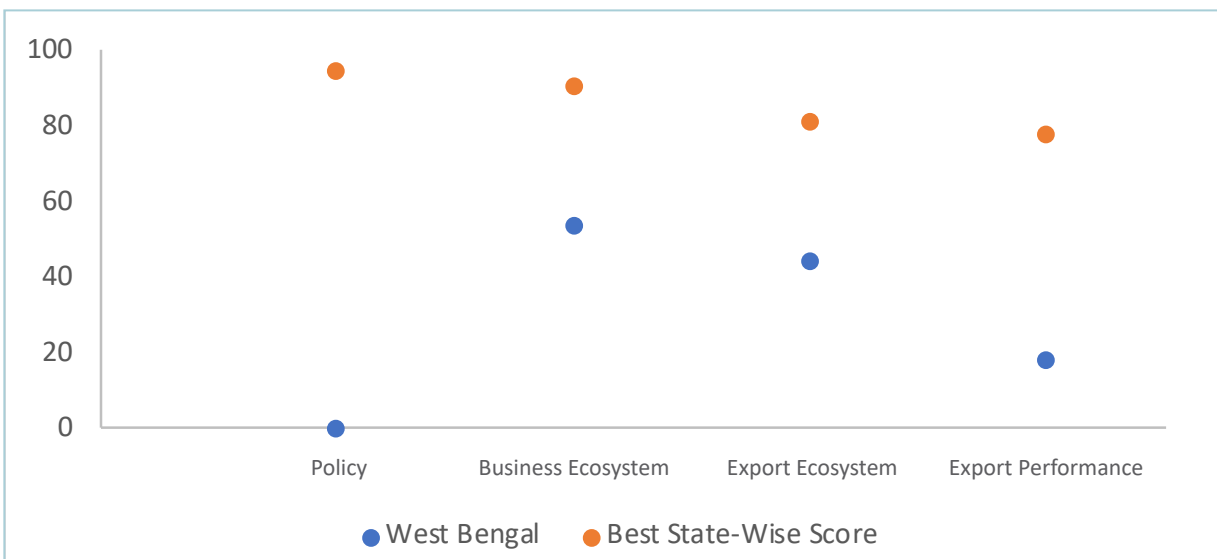
Scorecard



Distance to Frontier



Comparative Analysis



Appendix I

Weightages & Indicator Profiles

PILLAR: POLICY

S. No.	Sub-Pillar	Indicators	Weights (%)
1.1.1a	Export Promotion Policy (10%)	Existence of a valid Export Promotion Policy	2
1.1.1b		Existence of valid sector-specific policy for exports	
1.1.2		Thrust sectors for exports	2
1.1.3		Policy emphasis on product quality and standards	2
1.1.4		Marketing Support	2
1.1.5		Performance Measurement System (Sub-indicator under Facilitating measures around export promotion)	2
		Award for Excellence in exports (Sub-indicator under Facilitating measures around export promotion)	
		Financial incentives to boost exports (Sub-indicator under Facilitating measures around export promotion)	
		Land Allotment for exporters (Sub-indicator under Facilitating measures around export promotion)	
1.2.1		Institutional Framework (10%)	Appointment of full time Export Commissioner
1.2.2	Existence of a State-Centre coordination cell		1.4
1.2.3	International Access		1.4
1.2.4	Export Promotion Councils (Sub-indicator under Existence of Export Promotion Councils)		1.4
	Sectoral Export Promotion Councils (EPCs) (as a percentage of total exporters) (Sub-indicator under Existence of Export Promotion Councils)		
1.2.5	Establishment and functioning of an Empowered Committee		1.4
1.2.6	Newsletters		1.4
1.2.7	Grievance Redressal		1.4

PILLAR: BUSINESS ECOSYSTEM

S. No.	Sub-Pillar	Indicators	Weights (%)
2.1.1	Business Environment (10%)	Ease of Doing Business Index	2
2.1.2		Number of Investor Summits (Sub-indicator under Investor Summits)	
		MOUs/Lols signed per summit (Sub-indicator under Investor Summits)	
		Value of MOUs/Lols signed (Sub-indicator under Investor Summits)	
2.1.3		Power Cost (Sub-indicator under Cost of Doing Business)	2
		Single-window Clearance (Sub-indicator under Cost of Doing Business)	
2.1.4		Labour Reforms	2
2.1.5		Innovative Capacity	2

2.2.1	Infrastructure (10%)	Power Availability	2
2.2.2		Internet Facilities	2
2.2.3		Number of Industrial Corridors	2
2.2.4		Number of Clusters	2
2.2.5		Number of IT Parks/Software Technology Parks/Food Parks	2
2.3.1	Transport Connectivity (10%)	LEADS Index	2.5
2.3.2		Multi-Model Logistic Hubs	2.5
2.3.3		Area covered by Air Cargo Facilities	2.5
2.3.4		Area covered by ICDs	2.5
2.4.1	Access to Finance (10%)	Banking Facilities	3.33
2.4.2		Loan Schemes for exporters	3.33
2.4.3		Export Credit to exporters	3.33

PILLAR: EXPORT ECOSYSTEM

S. No.	Sub-Pillar	Indicators	Weights (%)
3.1.1	Export Infrastructure (10%)	Presence of knowledge and information portal for exporters	2
3.1.2		Area under Export Promotion Industrial Parks, Export Promotion Zones and Special Economic Zones (as percentage of State area)	2
3.1.3		Total area under trade exhibition centres (as percentage of State area)	2
3.1.4		Trade Guide	2
3.1.5		Number of Agri-Export Zones	2
3.2.1	Trade Support (5%)	Projects Approved under Trade Infrastructure for Export Scheme (TIES)	1.25
3.2.2		Number of trade fairs conducted by government departments	1.25
3.2.3		Capacity Building/Orientation Workshops	1.25
3.2.4		Membership of exporters in Trade Promotion Council / Agencies	1.25
3.3.1	R&D Infrastructure (5%)	Number of NABL accredited labs (per exporter)	1.25
3.3.2		Number of Inspection agencies - NABCB certification (per exporter)	1.25
3.3.3		Research institutes dedicated to Industry/Export Specific Products (per exporter)	1.25
3.3.4		Number of professional colleges (per lakh of population)	1.25

PILLAR: EXPORT PERFORMANCE

S. No.	Sub-Pillar	Indicators	Weights (%)
4.1.1	Growth and Orientation (10%)	Import Export Code (IEC) (As a percentage of total businesses)	2.5
4.1.2		Average Export Growth	2.5
4.1.3		Export to GDP ratio	2.5
4.1.4		Increase in number of exporters	2.5
4.2.1	Export Diversification (10%)	Export Concentration	5
4.2.2		Market Penetration Index	5

Indicator Profiles

PILLAR: POLICY

SUB PILLAR: EXPORT PROMOTION POLICY

Indicator Name	Explanation	Source
Existence of a valid Export Promotion Policy/Strategy	The Export Promotion Policy is a public policy measure aimed at enhancing export activity at the national or State level.	State Government
Existence of a valid sector-specific policy for exports	Every State has an edge in some sectors either due to the presence of natural resources or due to human capital. Some States focus on these sectors specific export policy rather than a common one.	State Government
Thrust sectors for exports	Each State has a competitive advantage in specific sectors. It is, therefore, necessary that the States identify these thrust sectors and focus on developing their export strategy around them.	DGCIS
Policy emphasis on product quality and standards	To become a part of the global value chain, it is important to adhere to international standards and quality for exports as defined by WTO's Agreement on Technical Barrier to Trade (TBT Agreement), Sanitary and Phytosanitary Measures (SPS Agreements), Pre-shipment Inspection (PSI Agreement), USDA Certification, Conformity European or any other certification.	State Government
Marketing Support	It is crucial for the State Government to work towards enhancing the visibility of State level products in international markets.	State Government
Facilitating measures around export promotion	The Time Release Study (TRS) is an internationally recognized tool advocated by World Customs Organization to measure the efficiency and effectiveness of international trade flows. The results of the TRS allow govt. agencies to diagnose existing bottlenecks that act as a barrier to the free flow of trade.	State Government

SUB PILLAR: INSTITUTIONAL FRAMEWORK

Indicator Name	Explanation	Source
Appointment of full-time export commissioner	In 2015, the Centre had asked States to appoint Export Commissioners and prepare export strategies as a step to promote exports.	State Government
Existence of a State-Centre co-ordination cell	In order to facilitate a continuity with respect to trade policy at the level of the Centre and the States, a coordination cell is required to review and act upon new developments that are important to State exports	State Government
International Access	It is crucial for the State Government to work towards enhancing the visibility of State level products in international markets.	State Government
Export Promotion Councils	State level Export Promotion Councils are constituted for various sectors to direct, promote and ensure monitoring of the export related activities in the State.	State Government Department of Industries and Commerce
Establishment and Functioning of an Empowered Committee	An Empowered Committee is necessary for export related inter-departmental co-ordination and policy formulation. It will act as an advisory body of the State Government for export promotion. The Committee will also review the progress of different export infrastructural projects, export performance of the State, banking, discussing sectoral issues and other taxation issues faced by exporters.	State Government
Newsletter	Publication of newsletter by the Government would help in updating exporters about the latest policy changes within the State and the current export scenario. Such a publication would address the issues of information asymmetry between exporters and the State Government.	State Government Department of Industries and Commerce Export Promotion Council
Grievance Redressal	Exporters need to have access to grievance redressal mechanism to approach the Government for any information or resolution of problems.	State Government Department of Industries and Commerce

PILLAR: BUSINESS ECOSYSTEM**SUB-PILLAR: BUSINESS ENVIRONMENT**

Indicator Name	Explanation	Source
Ease of Doing Business Index	Ease of Doing Business Index is a measure of regulations that enhance business. It includes: Starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, etc.	DPIIT
Investor Summits	Investment Summits are organized by State Governments to attract investment. However, it is important to focus on the end results of these summits as well.	State Government
Cost of Doing Business	States compete among themselves on the cost of products and services essential for running a business.	State Government
Labour Reforms	Labour regulation is important to assess the optimal balance between adequate worker protection and labour market efficiency. To attract foreign investment to the country, firms consider the strength of worker bargaining power when making sourcing decisions. Various legislative, administrative and e-governance initiatives have been taken by the Governments to generate employment and facilitate ease of doing business. This indicator will capture those reforms.	Ministry of Labour
Innovative Capacity	The innovative capacity of states shows the extent to which a state can diversify its products and compete in different markets.	NITI Aayog
Power Availability	Availability of quality power in States is a basic requirement for production of goods and services.	National Power Portal, Central Electricity Authority

SUB-PILLAR: INFRASTRUCTURE

Indicator Name	Explanation	Source
Internet Facilities	The availability of information and communication technologies (ICTs) in a State is crucial for the ease of doing business operations.	TRAI
Number of Industrial Corridors	To accelerate growth in manufacturing, ensure systematic, planned urbanization, provide employment opportunities and promote sustainable development.	DPIIT
Number of Clusters	Several towns have emerged as dynamic industrial clusters contributing handsomely to India's exports. These industrial clusters maximize the States' potential and enable them to move up the value chain and to tap new markets. (Towns of Export Excellence - TEE).	Cluster Mapping, EAC-PM
Number of IT Parks/Software Technology Parks/Food Parks	The objective of STPI - Software Technology Parks in India is to encourage, promote and boost software exports from India	Ministry of Electronics & Information Technology and Ministry of Food Processing Industries

SUB-PILLAR: TRANSPORT CONNECTIVITY

Indicator Name	Explanation	Source
LEADS Index	LEADS makes a perception-based assessment of international trade logistics across Indian states and UTs – focusing on users and stakeholders. It also provides indicator-level assessments of performance on specific dimensions.	Department of Commerce, Ministry of Commerce and Industry
Multi-Model Logistics Hubs (MMLH)	The indicator will capture total area under MMLH catering to exporters (as a percentage of state area)	Department of Commerce, Ministry of Commerce and Industry
Area covered by Air Cargo Facilities (as a percentage of total State area)	The indicator will identify the proportion of area within a State catered by air cargo facilities to assess the connectivity of businesses to air cargo facilities.	Ministry of Civil Aviation
Area covered by ICDS (as a percentage of total State area)	The last leg of the supply chain, denoting the transportation of goods from a transportation hub to its final destination. This final destination could be the location of an end customer or inland container depots (ICDs)	Department of Commerce, Ministry of Commerce and Industry

SUB-PILLAR: ACCESS TO FINANCE

Indicator Name	Explanation	Source
Banking Facilities	Banks serve as one of the main pillars of economic empowerment by taking care of the financial needs. They are critical for the industry to grow by ensuring credit availability.	RBI
Loan Schemes for Exporters	To provide better terms of credit including rates of interest to all eligible exporters, including those under small and medium sector, compared to those extended to other exporters by the State government.	State Government
Export credit to exporters	Export credit intends to make short-term working capital finance available (both in Rupee & foreign currency) to exporters at internationally comparable interest rates.	RBI

PILLAR: EXPORT ECOSYSTEM**SUB-PILLAR: EXPORT INFRASTRUCTURE**

Indicator Name	Explanation	Source
Area under Export Promotion Industrial Parks, Export Promotion Zones and Special Economic Zones (as percentage of State area)	The establishment of EPIPs, EPZs and SEZs by states provide exporters with attractive investment opportunities through incentives like tax benefits.	State Department of Industry and Commerce, SEZ India
Total area under trade exhibition centers (as percentage of State area)	The extent of trade exhibition centres (as a percentage of state area) will provide more opportunities to exporters to highlight their commodities.	State Department of Industries and Commerce
Trade Guide	Publication of trade guide with geography -based information on process, commodity, buyers/market intelligence etc. by state.	State Department of Industries and Commerce
Number of Agri-Export Zones	An Agri Export Zone or AEZ is a specific geographic region in a country demarcated for setting up agriculture-based processing industries, mainly for export.	Ministry of Food Processing Industries

SUB-PILLAR: ACCESS TO SUB-PILLAR: TRADE SUPPORT

Indicator Name	Explanation	Source
Projects Approved under Trade Infrastructure for Export Scheme (TIES)	The Government of India has launched TIES with the objective to assist Central and State Government Agencies for creation of appropriate infrastructure for growth of exports from the States. The Scheme provides financial assistance in the form of grant-in-aid to Central/ State Government owned agencies for setting up or for up-gradation of export infrastructure as per the guidelines of the Scheme.	Ministry of Commerce and Industry
Number of trade fairs conducted by Government Departments	The number of trade fairs and exhibitions conducted by the State Governments help the exporters by providing them a platform to showcase their products, meet with industry partners and examine recent market activities and trends.	State Government
Capacity Building/ Orientation Workshops	The capacity building schemes help by providing exposure to exporters.	State Department of Industries and Commerce
Membership of Exporters in trade promotion council / agencies	Total membership of exporters (% of total exporters) in trade promotion council / agencies	State Department of Industries and Commerce

SUB-PILLAR: R&D INFRASTRUCTURE

Indicator Name	Explanation	Source
Number of NABL accredited labs (per lakh of business)	Laboratory accreditation: an authoritative body gives formal recognition of technical competence for specific tests/ measurements, based on third party assessment and following international standards.	Directory of Accredited Testing Laboratories, NABL
Number of Inspection agencies - National Accreditation Board for Certification Bodies (NABCB) (per lakh of business)	NABCB accreditation: to provide international equivalence and acceptance of certificates and reports so that Government and Industry can take advantage and facilitate domestic trade, regulatory compliance and export competitiveness	Export Inspection Council
Research institutes (per lakh of population)	Research Programmes mainly on Crop Improvement, Biotechnological interventions, Soil testing based Nutrient Management Studies, Pest and Disease Management, Farm mechanisation feasibility etc. in States can boost their export readiness competitiveness in the global markets.	State Department for Industries and Commerce
Number of professional colleges (per lakh of population)	Professional colleges and universities that are All India Council of Technical Education (AICTE) accredited will be considered to promote a culture of research and development.	AICTE

PILLAR: EXPORT PERFORMANCE**SUB-PILLAR: GROWTH & ORIENTATION**

Indicator Name	Explanation	Source
Import Export Code (IEC) (as a percentage of total businesses)	IEC is a registration code required by companies for importing and exporting from India, making them eligible for recognition as a status holder.	DGCIS
Average Export Growth	This indicator is used to calculate the year on year growth in a States' exports	DGCIS
Export to GDP Ratio	This indicator gives the contribution of the exports of a State to its GDP	DGCIS
Increase in Number of Exporters	Increase in number of exporters in a State will indicate whether the business environment in States promotes exports.	DGCIS

SUB-PILLAR: EXPORT DIVERSIFICATION

Indicator Name	Explanation	Source
Export Concentration	Product Concentration Index is used to measure the dispersion of trade value across an exporter's products. It is also an indicator of an exporter's vulnerability to trade shocks.	DGCIS
Market Penetration Index	Market Penetration Index measures the extent to which exports from a State reach already proven markets. It is calculated as the number of countries to which a State exports a particular product divided by the number of total countries that import that product in a year.	DGCIS

Appendix II*

* The following section has been taken from DGCS – the information has not been modified in any manner.

State	Rank	HS Code	DESCRIPTION	Val In Mil. USD	% Share In State's Total Export	No. Of Countries To Which Exported
Andaman & Nicobar	1	61091000	T-SHIRTS ETC OF COTTON	0.60	15.0	3
	2	41079900	OTHER/HIDES/SKINS INCLUDING SIDES	0.42	10.6	2
	3	03035400	MACKEREL FROZEN	0.36	8.9	1
	4	39219094	OTHR PLTS, SHTS, FILM FOIL, STRIP ETC NES FLEXIBLE, METALLISED	0.16	4.0	3
	5	72230091	WIRE OF STAINLS STL THICKER THAN 1.5 MM	0.15	3.8	2
	6	23064900	OTHER RESIDUES OF RAPE OR COLZA SEEDS	0.14	3.4	2
	7	61142000	OTHER GARMENTS OF COTTON	0.08	2.1	1
	8	74199940	COPPER WORKED ARTICLES	0.08	2.0	1
	9	38089290	OTHERS FUNGICIDE NES	0.07	1.8	1
	10	76020010	ALUMINIUM SCRAP COVERD BY ISRI CODE TABLET TABLOID, TABOO, TAIN/TABOR, TAKE, TALAP, TALCRED, TALDACK, TALDON, TA	0.07	1.7	1
Andhra Pradesh	1	03061790	OTHER SHRIMPS AND PRAWNS	2187.06	15.5	61
	2	89059090	OTHER UNDER HDNG 8905	1288.11	9.1	2
	3	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	476.08	3.4	137
	4	72023000	FERRO-SILICO-MANGANESE	419.72	3.0	69
	5	10063010	RICE PARBOILED	413.15	2.9	45
	6	09042110	OF GENUS CAPSICUM	385.39	2.7	26
	7	89051000	DREDGERS	320.79	2.3	5
	8	24012010	FLUE CURED VIRGINIA TOBACCO PARTLY/ WHOLLYSTMD/STRIPPED	272.31	1.9	53
	9	16052900	OTHER SHRIMPS AND PRAWNS	197.80	1.4	27
	10	89052000	FLOATNG/SUBMERSIBLE DRLLNG/PRDCTN PLATFORMS	195.60	1.4	2
Arunachal Pradesh	1	72022100	FERRO-SILICON CONTNG>55% OF SILICON	0.99	43.1	4
	2	08051000	ORANGES FRESH OR DRIED	0.24	10.3	1
	3	09011141	COFFEE ROB CHERRY AB	0.21	9.3	1
	4	25231000	CEMENT CLINKERS	0.08	3.6	1
	5	27101930	HIGH SPEED DIESEL (HSD)	0.07	3.1	1
	6	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.07	3.0	1
	7	72023000	FERRO-SILICO-MANGANESE	0.07	2.8	1
	8	84743110	CONCRETE MIXERS	0.06	2.5	1
	9	12024210	KERNELS, H.P.S	0.04	1.8	1
	10	53031010	JUTE, RAW OR RETTED	0.04	1.6	1

Assam	1	09024020	TEA BLACK, LEAF IN BULK	176.27	47.7	50
	2	09024010	TEA BLACK IN PCKT>3KG BUT<= 20 KG	72.32	19.6	41
	3	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	19.10	5.2	3
	4	09024040	TEA BAGS	13.80	3.7	28
	5	27040020	COKE AND SEMI-COKE OF LIGNITE OR OF PEAT	10.94	3.0	1
	6	09024090	OTHER BLACK TEA	8.82	2.4	23
	7	84118100	OTHR GAS TURBINES OF POWER <=5000 KW	6.77	1.8	2
	8	27101930	HIGH SPEED DIESEL (HSD)	5.99	1.6	4
	9	44029090	OTHER	4.13	1.1	1
	10	27131200	PETROLEUM COKE CALCINED	3.80	1.0	1
Bihar	1	27101930	HIGH SPEED DIESEL (HSD)	654.18	39.9	16
	2	27101219	OTHER	204.45	12.5	1
	3	27101920	AVIATION TURBINE FUEL (ATF)	138.83	8.5	16
	4	02023000	BONELESS MEAT OF BOVINE ANIMALS, FROZEN	115.24	7.0	26
	5	27111900	OTHR LQFD PETRLM GASES AND GASEOUS HYDRCRBN	99.03	6.0	1
	6	10059000	OTHER MAIZE (CORN)	68.91	4.2	5
	7	10061090	OTHR RICE IN HUSK	50.30	3.1	2
	8	10063090	RICE EXCPTG PARBOILED (EXCL BASMATI RICE)	27.22	1.7	3
	9	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	25.60	1.6	1
	10	10019910	WHEAT	18.92	1.2	1
Chandigarh	1	84485190	SNKRS, NEDL ETC. OF OTHER TXTL MACHINERY	11.47	16.0	5
	2	84523090	NEEDLES FR OTHER TYPE SEWNG MCHNS	8.06	11.2	3
	3	90079100	PRTS AND ACCESSORS FR CINAMATOGPHC CAMERAS	4.31	6.0	100
	4	90181990	OTHR ELCTRO-DIAGNOSTC APPRTS	4.16	5.8	3
	5	90229090	OTHERS	2.84	3.9	8
	6	04059020	MELTED BUTTER (GHEE)	1.82	2.5	7
	7	63101010	WOOLLEN RAGS	1.60	2.2	1
	8	84594130	FINE BORING MACHINES, VERTICAL	1.58	2.2	8
	9	21069099	OTHER FOOD PREPARATION NES	1.52	2.1	10
	10	76169990	OTHERS ARTICLES OF ALUMINIUM N.E.S.	1.51	2.1	10
Chattisgarh	1	76011010	ALUMINIUM INGOTS-NOT ALLOYED	450.22	36.2	14
	2	10064000	BROKEN RICE	143.39	11.5	20
	3	10063010	RICE PARBOILED	143.27	11.5	34
	4	26011210	AGGLOMERATED IRON ORE PELLETS	75.48	6.1	4
	5	72023000	FERRO-SILICO-MANGANESE	45.30	3.6	40
	6	10063090	RICE EXCPTG PARBOILED (EXCL BASMATI RICE)	31.71	2.5	18
	7	72071920	MILD STEEL (M.S.) BILLETS	31.45	2.5	1
	8	26011119	65% FE AND ABOVE	28.86	2.3	1
	9	26011139	65% FE AND ABOVE	26.02	2.1	2
	10	72021900	OTHER FERRO-MANGANESE	23.87	1.9	24

Dadra & Nagar Haveli	1	54023300	TEXTURED YARN OF POLYESTERS	455.85	21.3	79
	2	76141000	STRANDED WIRE, CBLS ETC WTH STEEL CORE	144.88	6.8	46
	3	76149000	OTHR STRNDED WIRE, CBLS PLAITD BNDS ETC	138.27	6.5	47
	4	90011000	OPTCL FIBRS, OPTICAL FIBRE BUNDLES AND CABLES	107.95	5.0	43
	5	39269099	OTHR ARTICLE OF PLASTIC NES	74.43	3.5	52
	6	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	52.12	2.4	46
	7	39219099	OTHR PLTS, SHTS, FILM FOIL, STRIP ETC NES OTHER	43.44	2.0	8
	8	27101990	OTHER PETROLEUM OILS AND OILS OBTAINIE FROMBITUMINOUS MINERALS NES	31.92	1.5	72
	9	63053200	FLEXIBLE INTERMEDIATE BULK CONTAINERS OF MAN MADE TEXTILE MATERIALS	29.64	1.4	44
	10	71129990	OTHR WST AND SCRPF OF OTHR PRCS MTLN N.E.S.	28.69	1.3	1
Daman & Diu	1	54023300	TEXTURED YARN OF POLYESTERS	103.75	9.8	44
	2	39232100	SACKS AND BAGS OF POLYETHYLENE (INCL CONES)	59.73	5.7	36
	3	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	54.45	5.2	62
	4	63053200	FLEXIBLE INTERMEDIATE BULK CONTAINERS OF MAN MADE TEXTILE MATERIALS	41.98	4.0	37
	5	96081019	OTHER BALL-POINT PENS WITH LIQUID INK (FOR ROLLING BALL PEN)	34.37	3.3	87
	6	23040010	OIL-CAKE AND OIL-CAKE MEAL OF SOYA BEAN EXPELLER VARIETY	27.02	2.6	8
	7	39232990	SACK AND BAG (INCL CONES)OF OTHR PLASTIC NES	26.65	2.5	67
	8	39241090	OTHER TABLEWARE AND KITCHENWARE OF PLASTICS	25.59	2.4	84
	9	30049081	PHENOBARBITONE, MEPHOBARBITONE, PRIMIDONE, PHENYTOIN, CARBAMAZPIN, ETHOSUCIMID, VALPORICACID, DIAZEP, LAMOTRIGIN, GAB	23.90	2.3	4
	10	39191000	SELF-ADHSV PLTS ETC IN RLS, WIDTH < = 20CM	23.65	2.2	27
Delhi	1	84111200	TURBO-JETS OF A THRUST>25 KN	1564.69	16.5	17
	2	71189000	OTHER COIN	494.00	5.2	1
	3	10063020	BASMATI RICE	397.67	4.2	97
	4	71131910	JEWELLERY OF GOLD UNSET	242.78	2.6	14
	5	88033000	OTHR PRTS OF AEROPLANES/HELICOPTERS	229.18	2.4	50
	6	61091000	T-SHIRTS ETC OF COTTON	181.42	1.9	113
	7	62044390	OTHR DRESSES OF SYNTH FIBRES	129.08	1.4	112
	8	62114300	OTHER GARMENTS OF MAN-MADE FIBRES	120.45	1.3	125
	9	85171290	OTHER	113.55	1.2	22
	10	62044400	DRESSES OF ARTIFICIAL FIBRES	92.76	1.0	90

Goa	1	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	644.87	31.2	135
	2	30049069	OTHER NONSTEROIDAL ANTIINFLAMATORY, ANALGESTICS AND ANTIPYRATIC DRUGS	72.16	3.5	43
	3	38089199	OTHER INSECTICIDE NES	71.82	3.5	16
	4	85176290	OTHER	70.03	3.4	36
	5	30049081	PHENOBARBITONE, MEPHOBARBITONE, PRIMIDONE, PHENYTOIN, CARBAMAZPIN, ETHOSUCIMID, VALPORICACID, DIAZEP, LAMOTRIGIN, GAB	69.78	3.4	19
	6	30049079	OTHER ANTIHYPERTENSIVE DRUGS	60.75	2.9	47
	7	03035900	OTHER FISH INCL INDIAN MACKERELS, CREVALLES, SILVER POMFRETS, SCADS, CAPELIN, KAWAKAWA FROZEN	41.86	2.0	3
	8	26011141	BELOW 55% FE	38.04	1.8	2
	9	30049039	OTHER ANTINISTANINICS, ANTACIDS, ANTIULCER, ANTIEMITICS AND OTHER GASTOINTESTINAL DRUGS	34.95	1.7	37
	10	30049071	CAPTOPRIL, ENALAPRIL, LISINOPRIL, PERINDOPRIL AND RAMIPRIL	32.52	1.6	22
Gujarat	1	27101930	HIGH SPEED DIESEL (HSD)	10449.34	15.5	48
	2	27101920	AVIATION TURBINE FUEL (ATF)	5076.47	7.5	21
	3	27101219	OTHER	3583.45	5.3	20
	4	29024300	P-XYLENE	1887.27	2.8	10
	5	27101290	OTHER	1536.26	2.3	11
	6	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	1016.33	1.5	179
	7	52010015	INDIAN COTTON OF STAPLE LENGTH 28.5MM (1.4/32) AND ABOVE BUT BELOW 34.5MM	920.03	1.4	30
	8	10063020	BASMATI RICE	893.97	1.3	85
	9	15153090	CASTOR OILANDITS FRCTNS OTHR THN EDBLE GRADE	770.08	1.1	86
	10	87032291	MOTOR CAR WTH CYLNDR CPCTY>=1000CC BUT< 1500CC WTH SPRK-IGNTN	694.52	1.0	59
Haryana	1	10063020	BASMATI RICE	2222.04	16.1	121
	2	84111200	TURBO-JETS OF A THRUST>25 KN	1171.78	8.5	13
	3	87032291	MOTOR CAR WTH CYLNDR CPCTY>=1000CC BUT< 1500CC WTH SPRK-IGNTN	458.73	3.3	86
	4	87089900	OTR PRTSANDACSSRS OF VHCLS OF HDG 8701-8705	321.57	2.3	145
	5	87083000	MOUNTED BRAKE LININGS	197.00	1.4	99
	6	87112029	MOTR CYCLWTH CYLNDR CPCTY >75 BT<=250 CC	190.46	1.4	58
	7	62064000	BLOUSES,SHIRTS ETC OF MAN-MADE FIBRES	175.14	1.3	83
	8	87032191	MOTOR CAR WTH CYLNDR CPCTY<=1000 WTH SPRK-IGNTN	169.90	1.2	63
	9	62114300	OTHER GARMENTS OF MAN-MADE FIBRES	157.02	1.1	86
	10	61091000	T-SHIRTS ETC OF COTTON	152.22	1.1	94

Himachal Pradesh	1	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	289.79	21.9	137
	2	30042099	OTHR MEDICAMENT CONTAINING OTHR ANTIBIOTICAND PUT UP FOR RETAIL SALE	45.58	3.4	75
	3	30049079	OTHER ANTIHYPERTENSIVE DRUGS	45.31	3.4	65
	4	29420090	OTHER DILOXANIDE FUROATE, CIMETIDINE, FAMOTIDINE NES	42.43	3.2	76
	5	30049039	OTHER ANTINISTANINICS, ANTACIDS, ANTIULCER, ANTIEMITICS AND OTHER GASTOINTESTINAL DRUGS	41.28	3.1	54
	6	48239019	DECORATIVE LAMINATES	39.16	3.0	57
	7	30049081	PHENOBARBITONE, MEPHOBARBITONE, PRIMIDONE, PHENYTOIN, CARBAMAZPIN, ETHOSUCIMID, VALPORICACID, DIAZEP, LAMOTRIGIN, GAB	28.24	2.1	16
	8	30042019	OTHER CEPHALOSPORINS AND THEIR DERIVATIVES	26.04	2.0	67
	9	30049049	OTHER ANTICANCER DRUGS	25.82	2.0	63
	10	30049069	OTHER NONSTEROIDAL ANTIINFLAMATORY, ANALGESTICS AND ANTIPYRATIC DRUGS	23.33	1.8	60
Jammu & Kashmir	1	62142010	SHAWLS OF WOOL	34.96	17.8	44
	2	57019090	CRPTS AND FLR CVRNGS KNOTTD OTHR THAN COTTON	17.11	8.7	33
	3	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	14.79	7.5	43
	4	08023200	SHELLED WALNUTS FRSH OR DRIED	8.86	4.5	20
	5	10063020	BASMATI RICE	7.47	3.8	12
	6	55095100	OTHR YARN OF POLYSTR STPL FIBRS MIXED MAINLY/SOLELY WITH ARTIFICIAL STAPLE FIBRS	7.12	3.6	14
	7	29333919	OTHER DERIVATIVES OF PYRADINE	5.31	2.7	18
	8	55095300	OTHER YARN OF POLYSTER STAPLE FIBRS MIXED MAINLY/SOLELY WITH COTTON	4.51	2.3	13
	9	52052390	OTHERS	4.41	2.2	8
	10	07123900	OTHERS (E.G.TRUFFLES ETC.) DRIED.	4.21	2.1	9
Jharkhand	1	72083930	SHEETS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS< 3 MM HOT-RLD, EXCL. PICKL	185.88	14.8	11
	2	87042219	3-WHEELER GOODS VHCLS,WITH CMPRSN IGNTN INTRNL CMBSTN PSTN ENGN WTH G.V.W.>5 TONS BT<=20 TONS: LORRY AN	117.07	9.3	11
	3	72083830	SHEETS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS>=3 BUT< 4.75MM HOT-RLD, EXCL. PICKL	110.02	8.8	10
	4	87042319	3-WHEELER GOODS VHCLS, WTH CMPRSN IGNTN INTRNL CMBSTN PSTN ENGN WTH G.V.W.>20 TONS: LORRY AND TRUCK	75.33	6.0	10
	5	72031000	FERS PRDCT OBTND BY DRCT RDCTN OF IRON ORE	61.37	4.9	2
	6	87089900	OTR PRTSANDACCSSRS OF VHCLS OF HDG 8701-8705	60.01	4.8	17
	7	72101290	OTHER PLATES, SHEETS, STRIPS	46.64	3.7	25
	8	72139110	OTHER BARS AND RODS OF FREE CUTING STEEL ELECTRODE QUALITY	38.29	3.1	3

	9	84829900	OTHER BALL/RLR BEARNG PARTS	36.67	2.9	13
	10	72083940	STRIPS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS<3 MM HOT-RLD, EXCL. PICKL	34.73	2.8	1
Karnataka	1	27101930	HIGH SPEED DIESEL (HSD)	1386.95	8.0	12
	2	27101920	AVIATION TURBINE FUEL (ATF)	996.40	5.7	9
	3	27101990	OTHER PETROLEUM OILS AND OILS OBTAIN E FROMBITUMINOUS MINERALS NES	588.27	3.4	33
	4	62052000	MENS OR BOYS SHIRTS OF COTTON	423.70	2.4	97
	5	88033000	OTHR PRTS OF AEROPLANES/HELICOPTERS	361.20	2.1	48
	6	27101950	FUEL OIL	357.16	2.1	4
	7	72083940	STRIPS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS< 3 MM HOT-RLD, EXCL. PICKL	279.34	1.6	11
	8	62034200	TROUSERS BIB AND BRACE OVERALLS BREECHES AND SHORTS OF COTTON FOR MENS AND BOYS	254.06	1.5	80
	9	85044090	OTHERS	209.59	1.2	83
	10	27101219	OTHER	199.96	1.2	5
Kerala	1	71131910	JEWELLERY OF GOLD UNSET	5842.41	59.4	8
	2	27101990	OTHER PETROLEUM OILS AND OILS OBTAIN E FROMBITUMINOUS MINERALS NES	362.74	3.7	10
	3	08013220	CASHEW KARNEL, WHOLE	291.89	3.0	47
	4	03061790	OTHER SHRIMPS AND PRAWNS	287.61	2.9	45
	5	27101920	AVIATION TURBINE FUEL (ATF)	132.38	1.3	22
	6	03074320	WHOLE SQUIDS FROZEN	130.00	1.3	37
	7	03074310	CUTTLE FISH FROZEN	125.97	1.3	26
	8	61112000	BABIES GARMENTS ETC OF COTTON	93.18	0.9	48
	9	57039090	OTHR FLR CVRNGS OF OTHR TXTL MATRL	61.32	0.6	80
	10	33019029	OLEORESINES OF SPICES N.E.S.,	58.14	0.6	84
Lakshadweep	1	03061790	OTHER SHRIMPS AND PRAWNS	0.13	31.3	1
	2	16052900	OTHER SHRIMPS AND PRAWNS	0.08	18.6	1
	3	63049250	TERRY TOWEL OF COTN, NTKNTD/CRCHTD	0.06	15.0	1
	4	27101930	HIGH SPEED DIESEL (HSD)	0.02	5.0	1
	5	70109000	OTHR ARTCLES FOR CNVYNCE/PACKING OF GOODS	0.02	3.9	1
	6	87089900	OTR PRTSANDACCSSRS OF VHCLS OF HDG 8701-8705	0.01	3.5	1
	7	20079910	JAMS JELLIES MRMLDS ETC. OF MANGOE	0.01	2.9	1
	8	10061090	OTHR RICE IN HUSK	0.01	2.8	1
	9	27101219	OTHER	0.01	2.7	1
	10	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.01	2.6	1
Madhya Pradesh	1	85451100	ELECTRODES OF A KIND USED FOR FURNACES	665.64	10.4	35
	2	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	628.83	9.9	140
	3	76011010	ALUMINIUM INGOTS-NOT ALLOYED	371.45	5.8	19
	4	23040030	MEAL OF SOYABEAN, SOLVENT EXTRACTED (DEFATTED) VARIETY	325.12	5.1	46

	5	63053200	FLEXIBLE INTERMEDIATE BULK CONTAINERS OF MAN MADE TEXTILE MATERIALS	191.93	3.0	71
	6	23040010	OIL-CAKE AND OIL-CAKE MEAL OF SOYA BEAN EXPELLER VARIETY	140.00	2.2	14
	7	63026090	TOILET LINEN AND KITCHEN LINEN, OF TERRY TOWELLING OR SIMILAR TERRY FABRICS, OF COTTON, OTHER THAN HANDLOOM	126.46	2.0	33
	8	52052410	GREY2401	110.55	1.7	38
	9	10063020	BASMATI RICE	108.67	1.7	38
	10	39206220	PLTES SHTS ETC OF PLYETHYLN TEREPHTHALTE FLEXIBLE, PLAIN	105.69	1.7	66
Maharashtra	1	71023910	DIAMOND (OTHR THN INDSTR L DIAMOND) CUT OR OTHERWISE WORKED BUT NOT MOUNTED OR SET	23066.39	31.7	77
	2	71131930	JEWELLERY OF GOLD SET WITH DIAMOND	2295.00	3.2	75
	3	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	1158.29	1.6	198
	4	71023100	NON-INDUSTRIAL DIAMONDS UNWORKED/ SIMPLY SAWN CLEAVED OR BRUTED	1108.13	1.5	18
	5	87112029	MOTR CYCLWTH CYLNDR CPCTY >75 BT<=250 CC	960.89	1.3	84
	6	89059090	OTHER UNDER HDNG 8905	824.61	1.1	6
	7	87032391	MOTOR CAR WTH CYLNDR CPCTY>=1500CC BUT <3000CC WTH SPRK-IGNTN	722.22	1.0	22
	8	87089900	OTR PRSANDACSSRS OF VHCLS OF HDG 8701-8705	667.49	0.9	155
	9	02023000	BONELESS MEAT OF BOVINE ANIMALS , FROZEN	622.31	0.9	52
	10	71131910	JEWELLERY OF GOLD UNSET	607.25	0.8	47
Manipur	1	90183990	OTHERS	1.27	47.8	2
	2	90189099	OTHR SRGCL INSTRMNTS AND APPLNCS (INCL VTRNRY)	0.43	16.2	1
	3	27101930	HIGH SPEED DIESEL (HSD)	0.28	10.6	1
	4	85078000	OTHER ACCUMULATORS	0.15	5.7	1
	5	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.11	4.0	1
	6	27101219	OTHER	0.10	3.7	1
	7	17049020	BOILED SWEETS W/N FILLED	0.05	1.9	1
	8	25231000	CEMENT CLINKERS	0.04	1.5	1
	9	30049057	OTHER ANTITUBERCULAR DRUGS	0.03	1.2	1
	10	53031010	JUTE, RAW OR RETTED	0.03	1.1	1
Meghalaya	1	25210010	LIMESTONE FLUX (L.D BELOW 1% SIO2)	28.26	52.5	1
	2	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	11.92	22.1	2
	3	25210090	LIMESTONE OTHR THN LIMESTONE FLUX	6.74	12.5	1
	4	25232910	ORDINARY PORTLAND CEMENT, DRY	1.94	3.6	2
	5	25061010	QUARTZ, LUMPS	1.44	2.7	1
	6	72022100	FERRO-SILICON CONTNG>55% OF SILICON	0.76	1.4	8

	7	12119080	AGARWOOD (INCLDNG CHIPS AND DUST)	0.71	1.3	4
	8	25231000	CEMENT CLINKERS	0.67	1.3	2
	9	71023910	DIAMOND (OTHR THN INDSTRL DIAMOND) CUT OR OTHERWISE WORKED BUT NOT MOUNTED OR SET	0.47	0.9	4
	10	09101110	FRESH	0.18	0.3	1
Mizoram	1	08051000	ORANGES FRESH OR DRIED	0.38	26.8	1
	2	09101110	FRESH	0.26	18.5	1
	3	71023910	DIAMOND (OTHR THN INDSTRL DIAMOND) CUT OR OTHERWISE WORKED BUT NOT MOUNTED OR SET	0.15	10.7	2
	4	14011000	BAMBOOS	0.12	8.7	1
	5	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.11	8.1	1
	6	84282011	CONVEYORS,BELT	0.05	3.3	1
	7	62079110	DRESSING GOWNS AND BATHROBES OF COTTON	0.04	3.0	1
	8	73079190	NON-GALVANISED	0.04	2.8	1
	9	25231000	CEMENT CLINKERS	0.04	2.8	1
	10	27101219	OTHER	0.03	2.4	1
Nagaland	1	67030010	HUMAN HAIR DRESSED OR OTHERWISE WORKED	1.67	60.0	1
	2	02062900	OTHR EDIBLE OFFAL OF BOVINE ANIMALS, FROZEN	0.18	6.5	2
	3	02023000	BONELESS MEAT OF BOVINE ANIMALS, FROZEN	0.14	5.0	2
	4	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.10	3.6	1
	5	84244900	OTHER	0.09	3.1	1
	6	85447010	LEAD ALLOY SHEATHD CBLs FR LGHTNG PURPOSES	0.08	2.7	1
	7	84137010	OTHERS CENTRIFUGAL PUMPS PRIMARILY DESIGNED TO HANDLE WATER	0.07	2.4	1
	8	63049281	CUSHION COVERS OF HANDLOOM	0.06	2.0	6
	9	27101930	HIGH SPEED DIESEL (HSD)	0.05	1.6	1
	10	25231000	CEMENT CLINKERS	0.04	1.3	1
Odisha	1	76011010	ALUMINIUM INGOTS-NOT ALLOYED	1233.87	19.6	25
	2	72024100	FERRO-CHROMIUM CARBON CONTNG>4% BY WT	670.64	10.6	36
	3	28182010	ALUMINA CALCINED	626.01	9.9	12
	4	26011210	AGGLOMERATED IRON ORE PELLETS	573.07	9.1	11
	5	03061790	OTHER SHRIMPS AND PRAWNS	392.75	6.2	34
	6	76012020	ALUMINIUM BILLETS-ALLOYED	256.99	4.1	27
	7	72083930	SHEETS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS< 3 MM HOT-RLD, EXCL. PICKL	248.42	3.9	9
	8	27101219	OTHER	223.68	3.5	6
	9	27101930	HIGH SPEED DIESEL (HSD)	202.58	3.2	3
	10	72083830	SHEETS OF FLAT-ROLD PRDCTS IN COILS OF A THCKNS>=3 BUT< 4.75MM HOT-RLD, EXCL. PICKL	123.88	2.0	9

Pondicherry	1	29420012	IBUPROFANE	43.96	11.2	48
	2	30049082	OTHER ANTIPILEPTIC DRUGS	28.62	7.3	1
	3	84128090	OTHERS	22.89	5.8	4
	4	73082011	TOWERS FOR TRANSMISSION LINE W/N ASSEMBLED	22.41	5.7	17
	5	85361040	HIGH RUPTURING CAPACITY FUSES	19.12	4.9	28
	6	30049033	CIMETIDINE, RANTIDINE, NIZATIDINE AND R ROXATIDINE	16.70	4.3	9
	7	30049063	IBUPROFEN WITH OR WITHOUT PARACETAMOL OR OTHER COMPOUNDS	13.04	3.3	14
	8	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	10.59	2.7	36
	9	29420090	OTHER DILOXANIDE FUROATE, CIMETIDINE, FAMOTIDINE NES	10.42	2.7	19
	10	87089400	STERNG WHEELS, STERNG COLUMNS AND STERNG BOXS	10.16	2.6	8
Punjab	1	10063020	BASMATI RICE	912.95	15.1	91
	2	02023000	BONELESS MEAT OF BOVINE ANIMALS, FROZEN	221.35	3.7	27
	3	87089900	OTR PRTSANDACCSSRS OF VHCLS OF HDG 8701-8705	215.52	3.6	135
	4	52052310	GREY	196.67	3.3	55
	5	63026090	TOILET LINEN AND KITCHEN LINEN, OF TERRY TOWELLING OR SIMILAR TERRY FABRICS, OF COTTON, OTHER THAN HANDLOOM	186.50	3.1	75
	6	52052410	GREY2401	172.66	2.9	35
	7	73084000	PROPS AND SMLR EQUIPMENT FOR SCAFFOLDING, SHUTTERING OR PIT-PROPPING	139.42	2.3	74
	8	82041110	HND-OPRTED SPANERS NON ADJUSTABLE	111.70	1.8	115
	9	29419090	OTHER ANTIBIOTICS	97.25	1.6	67
	10	87019300	OTHER TRACTORS, OF AN ENGINE POWEREXCEEDING 37 KW BUT NOT EXCEEDING 75 KW	93.67	1.6	90
Rajasthan	1	94036000	OTHER WOODEN FURNITURE	441.05	6.2	111
	2	79011100	ZINC, NOT ALLOYD, CONTNG BY WT>=99.99% ZINC	319.22	4.5	28
	3	13023230	GUARGUM TREATED AND PULVERISED	270.44	3.8	63
	4	71039100	OTHERWISE WRKD RUBIES SAPPHIRES AND EMERALS	217.21	3.1	61
	5	40117000	OF A KIND USED ON AGRICULTURAL OR FORESTRY VEHICLES AND MACHINES	178.97	2.5	82
	6	71131120	SILVER JEWELLERY SET WITH GEMS	159.62	2.3	99
	7	71039990	OTHER STONE CUT (TOPAZ AQUAMARINE ETC)	143.16	2.0	76
	8	25162000	SANDSTONE	136.15	1.9	70
	9	68022390	OTHERS	129.76	1.8	119
	10	55095100	OTHR YARN OF POLYSTR STPL FIBRS MIXED MAINLY/SOLELY WITH ARTIFICIAL STAPLE FIBRS	108.29	1.5	45

Sikkim	1	19022010	COOKED STUFFED PASTA	1.49	18.7	1
	2	90278090	OTHERS	0.83	10.4	22
	3	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	0.59	7.4	17
	4	21069091	OTHER DIABETIC FOODS	0.54	6.8	9
	5	30045036	VITAMIN D IN TABLETS, CAPSULES, SYRUP ET	0.44	5.6	1
	6	25231000	CEMENT CLINKERS	0.39	4.9	1
	7	27101930	HIGH SPEED DIESEL (HSD)	0.34	4.3	1
	8	33049990	OTHERS	0.26	3.3	6
	9	30042096	VANCOMYCIN	0.23	2.9	2
	10	30049039	OTHER ANTINISTANINICS, ANTACIDS, ANTIULCER, ANTIEMITICS AND OTHER GASTOINTESTINAL DRUGS	0.22	2.8	1
Tamil Nadu	1	87032391	MOTOR CAR WTH CYLNR CPCTY>=1500CC BUT <3000CC WTH SPRK-IGNTN	1186.90	3.9	93
	2	87032291	MOTOR CAR WTH CYLNR CPCTY>=1000CC BUT < 1500CC WTH SPRK-IGNTN	1148.73	3.8	96
	3	61091000	T-SHIRTS ETC OF COTTON	1087.36	3.6	161
	4	87089900	OTR PRSANDACSSRS OF VHCLS OF HDG 8701-8705	939.20	3.1	138
	5	87032191	MOTOR CAR WTH CYLNR CPCTY<=1000 WTH SPRK-IGNTN	657.16	2.2	53
	6	87041010	DUMPERS DESIGNED FR OFF-HIGHWAY USE WTH NET WT >8 TONS AND MAXM PAY-LOAD >=10 TONS	460.98	1.5	24
	7	61112000	BABIES GARMENTS ETC OF COTTON	447.57	1.5	105
	8	85176290	OTHER	384.22	1.3	58
	9	71131910	JEWELLERY OF GOLD UNSET	365.58	1.2	13
	10	27101219	OTHER	347.39	1.1	4
Telangana	1	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	849.72	11.9	168
	2	29339900	OTHER HETERDCYCLIC CMPNDS WITH NITROGEN HETRO ATOM (S) ONLY	292.02	4.1	99
	3	25161100	GRANITE CRUDE OR ROUGHLY TRIMMED	157.77	2.2	26
	4	02023000	BONELESS MEAT OF BOVINE ANIMALS, FROZEN	136.52	1.9	29
	5	29349900	OTHER HETEROCYCLIC COMPOUNDS	131.57	1.8	87
	6	29333990	OTHER CMPNDS CNTNG AN UNFUSED PYRDN RING (W/N HYDRGNTD) IN STRUCTURE	123.76	1.7	90
	7	29419090	OTHER ANTIBIOTICS	122.04	1.7	70
	8	30049034	OMEPRAZOLE AND LANSOPRAZOLE	110.02	1.5	42
	9	29335990	OTHER CMPNDS CNTNG A PYRIMIDINE RING (W/N HYDRGNTD) OR PIPERAZINE RING IN STRUCTURE	100.97	1.4	74
	10	71131940	JEWELLERY OF GOLD SET WITH PRECIOUS AND SEMI PRECIOUS STONES OTHER THAN DIAMONDS	87.62	1.2	10
Tripura	1	07031010	ONIONS FRESH OR CHILLED	0.40	23.2	1
	2	03055990	OTHER DRIED N.E.S.NT SMKD	0.20	11.9	1

	3	27011990	OTHER COAL W/N PULVRSD BUT NTAGLDMRTD	0.15	8.7	1
	4	27101930	HIGH SPEED DIESEL (HSD)	0.12	6.9	1
	5	25231000	CEMENT CLINKERS	0.11	6.4	1
	6	84119900	PARTS OF OTHER GAS TURBINES	0.08	4.8	1
	7	61083100	NIGHTDRESSES AND PYJAMAS OF COTTON	0.06	3.5	3
	8	61044200	DRESSES OF COTTON	0.05	2.7	1
	9	61091000	T-SHIRTS ETC OF COTTON	0.05	2.7	3
	10	10063090	RICE EXCPTG PARBOILED (EXCL BASMATI RICE)	0.04	2.5	1
Uttar Pradesh	1	02023000	BONELESS MEAT OF BOVINE ANIMALS, FROZE	2012.51	12.4	49
	2	85171290	OTHER	1117.53	6.9	29
	3	71131910	JEWELLERY OF GOLD UNSET	424.06	2.6	15
	4	73269099	ALL OTHER ARTICLES OF IRON/STEEL NES OTHER STEERING OR RUDDER EQUIPMENT FOR SHIPS AND BOATS, N.E.S.	336.58	2.1	132
	5	76011010	ALUMINIUM INGOTS-NOT ALLOYED	306.95	1.9	14
	6	29061100	MENTHOL	287.86	1.8	48
	7	64039190	LTHR FTWEAR OF OTHR SOLE	245.08	1.5	81
	8	62114300	OTHER GARMENTS OF MAN-MADE FIBRES	207.60	1.3	91
	9	76169990	OTHERS ARTICLES OF ALUMINIUM N.E.S.	201.67	1.2	116
	10	27101930	HIGH SPEED DIESEL (HSD)	200.69	1.2	1
Uttaranchal	1	71189000	OTHER COIN	504.15	21.4	5
	2	89069000	OTHER UNDER HDNG 8906	355.76	15.1	2
	3	79011100	ZINC, NOT ALLOYD, CONTNG BY WT>=99.99% ZINC	241.38	10.3	25
	4	78011000	REFINED LEAD	91.82	3.9	7
	5	30049099	OTHER MEDCNE PUT UP FOR RETAIL SALE N.E.S	85.36	3.6	128
	6	71131910	JEWELLERY OF GOLD UNSET	70.41	3.0	3
	7	29053100	ETHYLENE GLYCOL (ETHANEDIOL)	62.91	2.7	13
	8	87089200	SILENCERS AND EXHAUST PIPES	55.36	2.4	23
	9	87042190	OTHER GOODS VHCLS, WTH CMPRSN IGNTN INTRNL CMBSTN PSTN ENGNWTH G.V.W. <= 5 TON	39.79	1.7	13
	10	39206220	PLTES SHTS ETC OF PLYETHYLN TEREPHTHALTE FLEXIBLE, PLAIN	36.39	1.5	47
West Bengal	1	71131910	JEWELLERY OF GOLD UNSET	749.07	7.4	12
	2	72071920	MILD STEEL (M.S.) BILLETS	507.53	5.0	9
	3	03061790	OTHER SHRIMPS AND PRAWNS	491.73	4.9	40
	4	85451100	ELECTRODES OF A KIND USED FOR FURNACES	375.16	3.7	29
	5	39076100	POLY(ETHYLENE TEREPHTHALATE): HAVING A VISCOSITY NUMBER OF 78 ML/G OR HIGHER	305.00	3.0	56
	6	27101930	HIGH SPEED DIESEL (HSD)	211.18	2.1	3
	7	42023120	WALLETS AND PURSES OF LEATHER	206.00	2.0	87
	8	42032910	GLOVES FOR USE IN INDUSTRY	194.88	1.9	102
	9	72023000	FERRO-SILICO-MANGANESE	191.52	1.9	63
	10	27101920	AVIATION TURBINE FUEL (ATF)	172.67	1.7	24



Institute for Competitiveness, India is the Indian knot in the global network of the Institute for Strategy and Competitiveness at Harvard Business School. Institute for Competitiveness, India is an international initiative centered in India, dedicated to enlarging and purposeful disseminating of the body of research and knowledge on competition and strategy, as pioneered over the last 25 years by Professor Michael Porter of the Institute for Strategy and Competitiveness at Harvard Business School. Institute for Competitiveness, India conducts & supports indigenous research; offers academic & executive courses; provides advisory services to the Corporate & the Governments and organises events. The institute studies competition and its implications for company strategy; the competitiveness of nations, regions & cities and thus generate guidelines for businesses and those in governance; and suggests & provides solutions for socio-economic problems.



The Institute for Competitiveness

U24/8, U-24 Road, U Block, DLF Phase 3, Sector 24, Gurugram, Haryana 122022
info@competitiveness.in | www.competitiveness.in



NITI Aayog

Sansad Marg, New Delhi, India

www.niti.gov.in