

Study on Inter-state Trade to Identify and Estimate Value of Commodities being Imported/Exported to/from Uttar Pradesh

Submitted to



**Directorate of Economics and Statistics, Department of Planning,
Government of Uttar Pradesh
Lucknow**

Submitted by

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Preface& Acknowledgement

This study was assigned by the Directorate of Economics and Statistics (DES), Department of Planning, Government of Uttar Pradesh with a view to 1) identify the commodities and 2) estimating the value of commodities — being imported/ exported to and from Uttar Pradesh. The task was complex and intricate as the data on trade was not readily available with the commercial tax department, government of U.P. and it took us long time to access road data set due to administrative complexities and poor response. Subsequently the lockdown due to the outbreak of COVID-19 Pandemic has made further delay. We succeeded in getting data with our sincere efforts and finally got road data on 8th June 2020. Data was made available in a raw form spreading over 130363 on road by Commercial department of U.P government. As far as Railway, Air and River data was concerned, it was not adequate and it was classified in quantity terms without price. The DGCIS data of Rail, Air, River and Water was in the form of 38 chapters with 700 entries were availed from (Directorate of General of Commercial Intelligence and Statistics) DGCI&S, Kolkata. In view of severe limitation of availability of data on time and data being unprocessed and un-cleaned, untiring efforts have gone in to it for cleaning and removing outliers and make them compatible and according to NIC 2 (NIC 2008 section) digit level classification. The analysis has been done within these constraints. However, the analysis has clearly brought out the estimation of total trade in terms of state wise as well as commodity wise during the year of 2015-16 to 2018-19.

We sincerely thank Department of Planning and DES Government of Uttar Pradesh for assigning and facilitating in different times during the study. We hope findings of this study will be useful to the Planning department. We are also thankful to Commercial Tax Department, Government U.P, Lucknow and DGCI&S, Kolkata.

We express our sincere gratitude to our Director Professor B.K. Bajpai for his support throughout in the conduct of the study. We also extend our sincere thanks to Mr. A.K Pandey Director, DES, and Government of Uttar Pradesh for collaborating studies with our Institute. We express our deep sense of gratitude to expert group at initial workshop Prof. M.R Saluja, Ret. Prof. Indian statistical Institute, Delhi; Prof. Yashvir Tyagi, Ret. Professor Lucknow University; Dr. Arvind Kumar Pandey, Director, DES, Government of, Uttar Pradesh; Dr. Anand Mishra, Director Perspective Planning Division, government of Uttar Pradesh; Mr. Mohit Tekariwal, Chartered Accountant and Expert on GST ; Mr. Ramesh Chandra Dwivedi, additional Commissioner Commercial tax department, Govt. of U.P.; Mr. Vipin Tewari Assistant Commissioner Commercial tax department, Govt. of UP; Professor B.K Bajpai, Director of Institute for his expert guidance.

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Chapter -1

“As often as not, it is trade that gives birth to the urge to develop, the knowledge and experience that make development possible, and the means to accomplish it.”

–A.C. Cairn Cross

Introduction

Trade is the basis of all economic activities. The barter of goods or services among different people is an age-old practice, probably as old as human history. Trade is a basic economic concept involving buying and selling of goods and services, where the compensation is paid by a buyer to a seller in exchange of goods or services between them. Trade is divided into two categories (i) internal trade (ii) external trade. Trade can take place within an economy between producers and consumers. That is called internal trade on the other hand, External or international trade allows countries to expand markets for both goods and services that otherwise may not have been available to it. Trade is an integral part of the lives of people as one cannot fulfil all of one's needs by being in isolation.

Trade has to be seen as an engine of growth for the economy that can help create employment and opportunities for income. It has played a central role in lifting millions of people out of poverty in recent years. Trade, undoubtedly, has several benefits. It promotes growth and enhances economic welfare by stimulating more efficient utilisation of factor endowments of different regions and by enabling people to obtain goods from efficient sources of supply. Trade also makes available to people goods which cannot be produced in their country or regions due to various reasons. The role of trade in enhancing consumer's choice is tremendous. The government needs to start thinking about priorities for inclusive development of all the regions and states of our country and the role of trade in achieving them.

Trade Development in India

Trade promotion and industrialisation has remained at the centre of our public policies; however, trade development is very closely linked to the free flow of goods. Specialisation is the fundamental principle associated with trade, and results from the division of labour.

Given that each worker, or each producer, is given a specialist role, they are likely to become efficient contributors to the overall process of production, and to the finished product. Hence, specialisation can generate further benefits in terms of efficiency and productivity. Mass production allows a surplus of good to be produced, which can then be exported. If specialisation is the positive aspect of trade then the threat to local produce is its negative which can marginalise the local industries. Local producers, who may supply a unique product tailored to meet the needs of the domestic market, may suffer because cheaper imports may destroy their market. Over time, the diversity of output in an economy may diminish as local producers leave the market. Specialisation can be applied to individuals, firms, machinery and technology, and to whole countries.

The simplest explanation of foreign trade is based upon differences in production functions between countries. The classical approach “absolute advantage of trade argument” focuses on the unavailability of various goods in different countries.

Advantages of trade

The advantage of trade for economy of a country or region is tremendous as given below-

1. Trade encourages a country/Region/sub-national state to specialise in producing only those goods and services which it can produce more effectively and efficiently, and at the lowest cost.
2. Producing a narrow range of goods and services means it can produce higher volumes, which provides further cost benefits in terms of economies of scale.
3. Trade increases competition and lowers prices, which provides benefits to consumers by raising the purchasing power of their own income, and leads a rise in consumer surplus.
4. Trade also breaks down monopolies, which face competition from more efficient foreign firms.
5. The quality and supply of goods and services is likely to increase as competition encourages innovation, design and the application of new technologies. Trade also encourages the transfer of technology between regions.

6. Trade is also likely to increase employment, given that employment is closely related to production, more jobs will be created across the whole economy.

Internal Trade

Internal and intra-state trade is the emphasis of this point & time according to the requirements of this project. The buying and selling of either goods or services done within a country is the internal trade. These are goods domestically produced for domestic consumption only. Now there are two broad categories of internal trade, they are wholesale trade and retail trade. India has the highest density of retail stores in the world. Due to our immense population, internal trade in India is actually quite robust. Retailers, wholesalers, and other such middlemen are the lifelines of India's trade sector. As Uttar Pradesh is concerned the huge population and its bigger size has also creates tremendous demand of the goods and commodities in retail as well as wholesale terms.

Contrary to the general perception India is highly integrated internally, with considerable flows of both people and goods. According to the results presented in the Economic Survey of India 2016-17, the estimates for interstate trade flows indicate that cross-border exchanges between and within firms amount to at least 54 per cent of GDP, implying that interstate trade is 1.7 times larger than international trade (FICCI, 2017).

The data and trend of internal trade in other countries is shown here (Table 1.1) in a comparative perspective. The table shows that India is somewhere in lower range as comparing to U.S.A. & China. Why it is so in case of India may be the domestic demand of the quality & price of goods in India. Some other causes is un-contextual here.

Table-1.1: Comparison of Inter-state and International Trade in world

<i>Country</i>	<i>Year</i>	<i>Interstate/ GDP</i>	<i>International /GDP</i>	<i>Ratio of Interstate to International</i>
<i>Brazil</i>	1999	76%	14%	5.4
<i>USA</i>	2015	78%	31%	2.5
<i>India (C+F form)</i>	2015	54%	32%	1.7
<i>India (C Form)</i>	2015	32%	32%	1.0
<i>China</i>	2009	74%	45%	1.6
<i>Canada</i>	2012	20%	62%	0.3
<i>European Union</i>	2015	20%	84%	0.2
<i>Indonesia</i>	2005	12%	63%	0.2

Source: FICCI, Economic Survey and research division (Page-8); Note: C+F form, C Form

According to this table though the interstate trade is 54 per cent of GDP is not as high as United States in 2015 or China in 2009 it is also showing that, India's trade profile is more similar to that of China, whose internal trade is 1.6 times its international trade but less than the United States whose internal trade is 2.5 times than its international trade. In 1999 the ratio of internal trade of Brazil is 5.4 times than its external trade.

The Economic Survey states that the new estimates of labour migration in India have revealed that inter-state labour mobility is significantly higher than previous estimates. As per the new study, annually inter-state labour mobility averaged 5-6 million people between 2001 and 2011, yielding an inter-state migrant population of about 60 million and an inter-district migration as high as 80 million. Less affluent states see more out migration while the most affluent states are the largest recipients of migrants. Further with regard to trade, smaller states like Uttarakhand, Himachal Pradesh and Goa have a higher ratio of trade as a percentage of GSDP. The net exporters are the manufacturing powerhouses of Tamil Nadu and Gujarat. The agriculturally rich states like Haryana and Uttar Pradesh also have a strong manufacturing base because of Gurugram and Noida. Therefore, it is necessary to examine the nature of the trade barriers and their costs while trading between Indian states. It is also equally important to understand what factors drives trade between those states in various countries are the higher ratio or internal trade supported by the gravity models of trade.

The intuition from standard gravity models of trade tells that large countries trade more within their own borders than beyond them. It is because of the size of their domestic markets. The gravity model has been one of the most successful empirical models in the international economics. One of the earliest advocates of the model was Ravenstein (1885) who explained that migration between places is driven by sizes of the economies of centres of commerce and industry but "grows less with the distance proportionately" (as cited in Bergeijk and Brakman, 2010). The model empirically estimating trade to be a simple function of distance between the sizes of the economies and inverse of the distance between them, and by today the use of the gravity model has grown beyond imagination. The traditional gravity model expects that "interaction between large economic clusters is stronger than between smaller ones, and nearby clusters attract each other more than far-off ones"

The model drew analogy from Newtonian Law of Gravitation to estimate trade (X_{ij}) between two regions i and j : (UNESCAP, 2015.)

$$X_{ij} = \frac{GDP_i^\alpha GDP_j^\beta}{d_{ij}^\theta}$$

Where GDP_i and GDP_j are the respective sizes of the two economies, d is the distance between them and parameters α , β , and θ are the coefficients estimated during the log-linear reformulation of the model. In the latter applications, explanatory power of the model was further enhanced by considering other variables as proxies for trade friction. The gravity model is now seen at the workhorse of trade theory, and especially in terms of forecasting the impact of changes in trade policy on trade costs.

Trade development in Uttar Pradesh

Trade has been referred most of the time as an act of exchange of goods and services between countries, whereas the trade of commodities taking place between states and within state comprises a huge share of trade. In case of Uttar Pradesh Inter-state trade is mainly carried out through Rail, Road and Air, but road as a medium of trade remains as main mode of interstate trade.

The rise of India's giant state Uttar Pradesh is inevitable through interstate trade. In this study through trade we will put forward the rationale and modalities of making India's most populous state Uttar Pradesh as India's emerging economic powerhouse by leveraging the new emerging technologies/futuristic trends to spearhead the broad spectrum of growth all across the state (Gigoo, and Mourya, 2017).

Uttar Pradesh is strategically located sharing an international boundary with Nepal and is bordered by states of Uttarakhand, Himachal Pradesh, Haryana, Delhi, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Bihar. Uttar Pradesh has abundant natural resources (limestone, dolomite, glass-sand, marble, bauxite, non-plastic fireclay, and Uranium), fertile land and river basins, water resources, extensive canal system and conducive agro-climatic conditions.

Potential Sectors of Uttar Pradesh economy

Although the state has made sustained efforts, based on its industrial potential, to develop industry and elevate its economic standard, it has still to go a long way to find a place in the industrial map of the country. Therefore, it is imperative to identify and exploit the

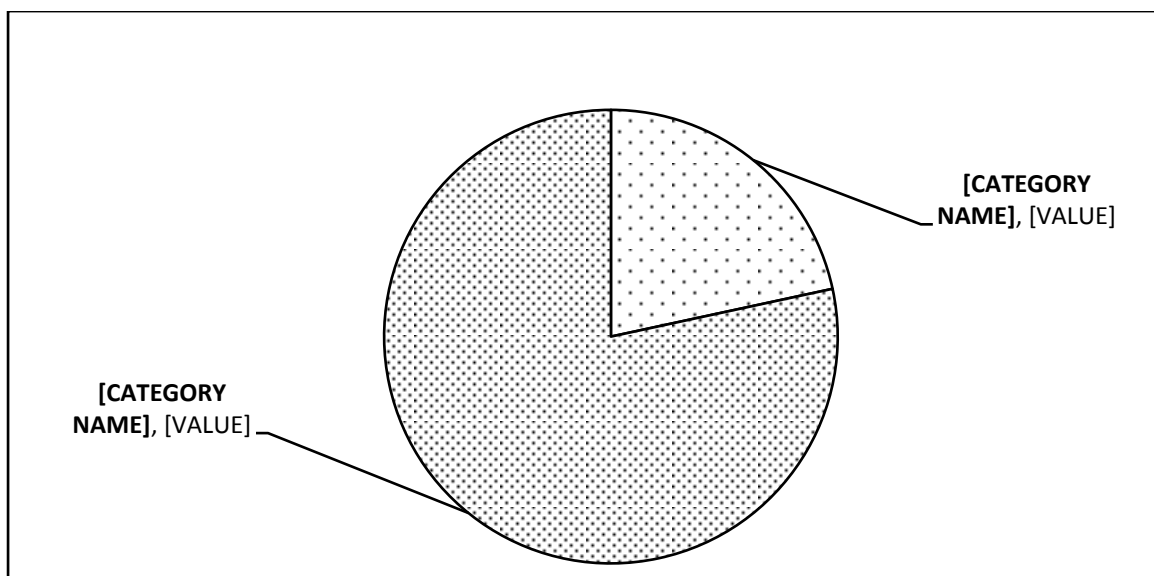
productive capabilities of the different regions of the state to trigger off the growth impulses, thereby facilitating the process of economic take-off. For promoting prosperity and ensuring equitable economic development throughout the state, the state government has been encouraging the flow of investments in areas with high employment potential and helping in utilizing local skills and raw materials to advantage. The state government has identified certain thrust areas in the matter of industrial growth. The projects in these areas shall receive priority in respect of allotment of land, sanction of power and other clearance from high-level empowered committees also in the matter of grant of incentives.

- 1) Agriculture based industries
- 2) Handicraft and handloom
- 3) Tourism
- 4) Information technology

Uttar Pradesh is known as the food basket of India as it is the leading producer of sugarcane, pointed gourd, peas, potato, muskmelon, watermelon, pumpkin, milk and milk products in the country (U.P. State, 2017). The state has the highest number of Micro, Medium and Small enterprises (MSMEs) in India. The state has a number of locally specialised business clusters such as sports items in Meerut, brassware in Moradabad, perfumes in Kannauj, leather in Kanpur, shoes in Agra, embroidered sarees in Varanasi, carpet in Bhadohi, chikan work in Lucknow etc. Uttar Pradesh is also amongst the top manufacturing destinations in India contributing more than 8 percent of national manufacturing output (Udyogbandhu, 2017). The state is a leading electronic hardware exporter in the country and has also emerged as a key hub for IT/ITeS and service sector including software, captive business process outsourcing (BPO) and R&D services. The tertiary sector has been driven by trade, hotels, real estate, finance, insurance, transport, communications and other services.

The figure 1.1 shows that out of total industries in Uttar Pradesh, non-agricultural industries consists of 78.38 percent and agricultural industries are 21.62 percent.

Figure 1.1: Percentages share of agricultural and non-agricultural industries in Uttar Pradesh as per sixth economic census 2012-13 Uttar Pradesh



Source: Economic census 2013(Chapter-2 page-18) Government of Uttar Pradesh, updes.up.nic.in

Uttar Pradesh is holder of 9 Golden status certificates issued to export/trading houses in 1999-2000 whereas whole India is having 169. On the other hand U.P. is securing 5.32% more than Indian's average. Similarly U.P. has enhanced its capacity to secure 11 golden status certificates out of total 88 in India (Loksabha 2001).

Methodology

The methodology of this study explorative, descriptive and analytical in nature. From the beginning of this project we have explored new avenues how to identify and estimate the data coming from different sources in different format. We have tried to give description of data by putting larger economic category of commodities traded in Uttar Pradesh. The data have been analysed to provide a trend of export and import for four years from 2015-16 to 2018-19. We have tried to quantify both export and import for Uttar Pradesh. The study is based on all secondary data.

To achieve the objective of this Research, the Researchers of our Institute collected the requisite information from various departments, Developmental Agencies, Financial Institutions. Secondary Data has been procured from DGCI&S (Kolkata) and Commercial tax department of Government of U.P (Lucknow). A workshop was also organised with a view of exploring and understanding the scenario of interstate trade in Uttar Pradesh, discussions were held with knowledgeable persons, taxation and trade experts, and commercial tax

department officers about the potentialities of the State. Their suggestions were also considered while conducting the study. We have also understood the modality and changes of VAT and GST regime through this workshop. This workshop have helped us a lot for not to go for the primary survey, because inter-state trade data is saved in server through E-way bill introduced under GST regime in July 2017.

There are basically five modes through which inter-state movement of goods takes place. They are road, rail, air, river and sea. Inter-state trade is mainly dominated by road and rail. River and sea are yet to develop as they are very much dependent upon the geographical condition of the trading states.

As we are interested in identifying and estimating the value of commodities being imported/exported to/from Uttar Pradesh only which is a land locked state thus possibility of sea trade is automatically eliminated. Inter-state trade by river is still in its infant stage. Therefore, in the case of Uttar Pradesh, inter-state trade is mainly carried out through road ways and railways and airways.

Data-base/ data Sources

The inter-state trade between the various states of India is commonly known as Inland Trade, which involves movement of goods by five modes namely, (a) sea. (b) air. (c) rail, (d) river, and (e) road. Information on entry of goods, which add to the stock of material resources, and exit thereof, which depletes the stock of the State, forms the basis of Inland Trade Statistics. The entry and exit of goods from a State are commonly known as inward and outward movements. But the movements of goods within the boundaries of any State do not come under the purview of inland trade. Inter-State Trade Statistics provides an idea about the demand of commodities produced in a State along with flow- thereof to other States. There has been a substantial growth in the Inter-State Trade.

Air-borne Trade

Air-borne Trade data is published by the DGCI & S in its annual publication. *Inter-State Movements Flows of Goods by Rail. River and Air* which shows gross weight of cargo moved by air from airport to airport within the country. Besides this, the State-wise total movements of air cargo are also indicated. Only the quantities expressed in gross weight (kgs.) as figuring in the invoices submitted to the Indian Airlines are compiled in respect of the cargo moved. No information is furnished on the values of air cargo moved since the

value figures do not find place in the invoice. Compilation of Air-borne Trade is done on an outward consignment basis, i.e. the consignment from a block airport as reported by the reporting agency along with the destination. The source of air cargo data is the Indian Airlines who collects the airway bills from the consignor or consignee and compiles airport-wise cargo movements and supplies data to the DGCI&S in the standard format on financial-year basis for publication. Commodity-wise details of the cargo moved are not furnished by the Indian Airlines to the DGCI&S. Further, the information on cargo moved by private airlines are also not made available to the DGCI&S. Amongst all the modes of transport, air transport has the advantage of taking the least time for carnage and handling high valued and perishable goods. The disadvantages are comparatively high transportation cost and unsuitability for transportation of bulk commodities. The carriage of goods in Inter-state Trade by air *vis-a-vis* other modes of transport is primarily governed by factors such as unit value of commodities, need or adherence to delivery schedule, perishability of the commodity, location of destination with respect to the point of origin, etc. The data collected from DGCI&S under this head is in year 2015-18. Since price is not available and it is in aggregate to find out price of commodities under air and river is near to impossible.

Rail-borne Trade

Rail-borne Trade is published by the DGCI&S in its annual publication, *Inter-State Movements Flows of Goods by Rail, River and Air*. In case of Rail-borne Trade also, only quantity figures are available from railway authorities, as railway invoices do not contain the provision for showing the value figures of the goods to be transported. This is primarily because the freight of the goods to be transported by rail is directly related to the quantum of goods to be carried and not on the value of the goods. This is also confirmed with DGCI & S.

For convenience of presentation of Inland Trade Statistics by rail, India has been divided into 38 trade blocks. Each block or a selected group thereof normally corresponds to a State of the Union of India. Thus, all railway stations in a particular State are included in the same trade block even if some of them may belong to different administrative zones according to the railway authorities. In the presentation of Inland Trade data in respect of commodities only important ones are given a separate identity and the rest are classified into several homogeneous groups. The DGCI&S is receiving data on inter-State movement for about 1000 commodities, which are for convenience of presentation, classified into 70 commodity

groups. Besides State-wise total movements, inter block movement for each commodity or commodity group in a matrix form is also published. This matrix gives an idea about the inter-State movement of each commodity or commodity group within India. As per the existing arrangement, the basic information is entered by the zonal railways and a hard copy of the information is provided to DGCI&S on a quarterly basis. The DGCI&S, however, compiles manually the required format for presentation of these data from the computer printouts furnished by the railway authorities. We have calculated by value of commodities by getting price from different sources of product trading industries. Although it is herculean task to estimate price of commodities, however we have made approximate estimation to see the trend of trade for Uttar Pradesh by Railways.

Road-borne Trade

Railways and road transport dominate the multi-mode transportation system in the country. These two modes together account for a significant portion of the passenger and freight movement. The share of the remaining modes, namely, inland water transport, shipping, air transport, pipelines, ropeways, etc. is insignificant. Several studies conducted so far show that the share of passenger and freight between road transport and rail transport has changed, in fact reversed, in favour of the former over the period since India attained independence. Thus indicating the emergence of road transport as the prime mode of transport and the trend in favour of the road is rising unabatedly. While the railways, air transport, shipping, etc. due to their centralised ownership and administrative set-up have a statistical system for data generation, the goods carried by road transport are characterised by a poor database. This is because the goods road transport is mainly in the private sector, dominated by lakhs of micro-truck operators. These operators mostly do not maintain road transport operational statistics partly due to limited resources, a poor understanding of the provisions of the Motor Vehicles Act. Income-tax phobia, etc. and also do not like to part with whatever information they have. But since 2017 July in advent of GST the road data is somehow organised under E-way bill¹, where both inter-state import and export data is available since March 2018. Before GST in VAT system the deficiency of data persistently observed. The commercial tax department of U.P government provided import data, from 2015 to 2019 for our research

¹**E-way Bill**-E-way bill is an electronic waybill generated on the GST portal for the movement of goods. Any supplier/agent is transporting goods where the consignment value greater than Rs. 50,000 is required to generate and produce this e-way bill.

purpose. But as export data is concerned deficiency of data during the period of study. Only one year data is availed to us of the year 2018-19.

Deficiencies and Suggestion

While international barriers to trade have been studied extensively, less attention has been devoted to studying the impact of trading networks and other barriers (political and cultural) to trade within countries. The estimation of these barriers to intra-national trade for India has hitherto been challenging due to the absence of a comprehensive interstate trade dataset.

One of the principal shortcomings in respect of availability of inter-State goods transport data is on account of incomplete coverage of modes of transport. Apart from deficiency in coverage, another area, which needs attention, is that available data from the different modes is not comparable. Unfortunately in the system of classification of commodities for presentation of inland Trade Statistics is not followed at present.

A complete picture on the Inter-State Trade will not be available unless data on movements of all the commodities and commodity groups by all modes of transport are available. It is not possible, at present, to get such comprehensive information because of the inherent difficulties in the data collection mechanism. Presently, some important characteristics like value figures of goods carried by rail, river or air are not reported in the source documents. Further, the basic units of area like trade block, maritime block, etc. for which data are captured or presented and also the unit of quantity of goods moved by the various modes of transport are not the same.

There is a need to enlarge the coverage of commodities. The data from the railways are received quarterly and there is a time lag of about two months in furnishing such data to the DGCI&S. The basic information is entered into the computer media by the railway offices and the data are made available to DGCI&S in the form of computer printouts by nine zonal railway offices. These data are consolidated and tabulated manually for publishing in DGCI&S's annual publication *Inter-State Movements/Flows of Goods by Rail, River and Air*. As River-borne Trade Statistics are available only in respect of three States namely. Assam, Bihar and West Bengal, this necessitates the enhancement of the geographical coverage. Further, both for Rail and River-borne Statistics only quantity figures are available. No separate data for river-borne cargo is available. The information on cargo in gross weight moving by air from airport to airport and also from State to State within the country is

available. However, the available information relates to the total movement of air cargo and does not give commodity-wise detail. Further, the goods moved by the private airlines are not being considered at present. The available information on movement of goods by road is also grossly inadequate.

However the study is going to divide into following chapters.

Chapter 1 - Introduction. Analytical Framework and Methodology: The first chapter included background, a detailed methodology.

Chapter 2- is literature review related to this report.

Chapter 3- This chapter is the state of Uttar Pradesh Economy, which is studied in macro perspective.

Chapter 4 -Inter-state trade by Rail, Air and River: This chapter focus on identifying goods and commodities being traded through rail, air and river mode of transport and their valuation. The data is very small by Air and River which are not needed to make separate chapter. Therefore this portion is clubbed in this chapter no 2.

Chapter 5– Inter-state trade by Road: The chapter emphasised on identifying goods and commodities being traded through road mode of transport and their valuation.

Chapter 6 - Conclusion and main finding of the study

Chapter-2

Literature Review

Trade and its effects on the Indian economy has remained a popular topic in the Indian economic literature however determinants of trade among various Indian states have been poorly studied in the literature. Why certain states trade more than others, and what governs trade among these Indian states? India is a conglomeration of States that exhibit a variety of climatic, socio-economic, and ethno-cultural diversity. Due to the diversity of the local economies and to its immense size, understanding the determinants of trade between the States in India therefore requires detailed understanding. Most of the trade related studies have been done with reference to the international trade or trade tariffs. This Chapter is devoted to the review of literature related to the topic.

Leemput Eva Van (2016) “A Passage to India: Quantifying Internal and External Barriers to Trade”: The Paper explains the recent shift of focus from international trade barriers to internal trade barriers. This paper quantifies the size of intra-country versus inter-country trade barriers and assesses the impact on patterns of trade and welfare. This paper quantitatively addresses two main questions: (1) How large are within country trade barriers versus international trade barriers? (2) What are the welfare implications of regional integration compared to international integration? This setting allows for different types of regional integration: rural-urban integration and connecting states within a country.

International barriers to trade, and the benefits from reducing them, have been a focus of policy and research for decades, but recently policy has focused more on internal trade barriers and their role in improving the economy. For example, in 2014, the World Bank Group announced that its financing commitments in roads, bridges, energy, clean water, and other critical infrastructure projects increased. These projects are intended to increase regional integration; they also have an impact on international trade.

The study found out that: (1) state-wise price data predict internal trade flows well; (2) internal trade barriers make up 30 percent of the total trade cost on average, but vary substantially by state depending on the distance to the closest port (3) the welfare impacts of

domestic integration are substantial. Study suggests that the largest barrier within India is not the rural-urban trade barrier, but is driven by Indian states not being well connected.

Behera, T (2005), "India's Internal Trade: A Review of Interstate movement of major commodities": The major problem faced in Internal Trade are the diversity of control exercised by multiple authorities at different level, restrictions on Interstate movement of goods, lack of uniformity in standards adopted by different authorities and in taxing structure imposed. This has led to breaking up the vast Indian market into large number of smaller regional markets. Carrying out compliance with various controls, regulations, licenses lead to a drag on efficiency of trading operations in the country. To facilitate the emergence of a common domestic market there should be equalisation of prices of goods, including taxes.

As pointed out in the paper the infrastructure requirements of internal trade depend on enhanced transportation speed. Moreover, internal trade is hardly provided with any form of financing by the banking sector unlike the foreign trade. If adequate support is given to internal trade its share in GDP can go up. Data on interstate movement of goods is primarily collected from four sources- Rail, River, Air and Road. The study recommends that a regulatory authority to oversee and facilitate free trade between states could be constituted by the way of a suitable legislation.

It can be concluded that internal trade in India is plagued by assortment of restrictions related to diversity in controls, and lack of uniformity in standards and taxing structures, and therefore, considerable room for improvement exists to improve facilitation of trade among various States in India itself.

Lahiri, Ashok (2000) "Report on reform on interstate taxation in India" National Institute of Public Finance and Policy (NIPFP): This report is on the "Reform on Interstate Taxation in India" States in India collect taxes on sales to other states in the form of Central Sales Tax or CST. CST acts as a barrier to trade within the country. It creates an anomalous situation where an Indian in Bhagalpur can bring in goods from Brussels or Bikrampur without paying any taxes to the Belgian or Bangladesh Government, but has to pay taxes to for example, the Maharashtra Government if it brings the same goods from Belgaum. Furthermore, CST violates the principle of 'no taxation without representation'. In view of the problems faced by the dealers in different states and the uncertainty about which state

should tax a given transaction, the matter was referred to the Taxation Enquiry Commission (TEC). The TEC (1953-54) suggested amendment of the Constitution to enable the Union government to impose sales tax on inter-state trade. It recommended that the proposed central legislation should specify a (maximum) rate at which tax on inter-state sales should be levied. The intention of the TEC was to ensure that some revenue accrues to the exporting states. At the same time it should not undue burden on the consumers in the importing state. TEC. Therefore, suggested a maximum rate of one percent tax on inter-state sales.

The main objectives in introducing the tax on inter-state sales were two: first was to regulate the flow of inter-state sales in order to minimise tax evasion through which both the exporting and importing states might lose, and the second was to enable the exporting state to gain a small share of the total tax that would be/could be levied on a commodity. In the absence of a law regulating the flow of goods across state borders, it was feared that cross-border sales to consumers and unregistered dealers might take place without any check.

Some of the visible disadvantages of high rate of CST pointed out in the report are-

- 1) The high rate of CST acts as a significant obstacle to the formation of a common market within the Indian federation because, as is well known, any such tax on the movement of goods across state borders within the federation is a barrier to trade.
- 2) The effect of CST is cumulated as a commodity in the course of production and distribution moves from state to state. The total effect is to significantly affect the size of the market which means less economies of scale being attained by individual enterprises. The high rate of inter-state sales tax could also lead to distortions in the location of production of different commodities.
- 3) The CST levied on the total price including the cost of inputs and the taxes on inputs, if any, leads to cascading. This leads to increasing competitive disadvantage in export markets as well as against imported goods.
- 4) The fourth major adverse effect produced by the CST is that it leads to distortion in the allocation of resources. Such distortion takes the form of vertical integration of the process of production: either concentrating the entire production process in one state instead of in more than one state.

This report also examines various international Experiences in the Tax Treatment such as Canadian Model, Clearing House Mechanism of European Union, Brazilian system, The Varsano Model. With the inauguration of comprehensive economic reforms in July, 1991, it was decided by the Government of India that along with other aspects of the existing system, the tax system should also be reformed and made economically more rational so that cost of production will come down.

Khanal, Shaneel(2016) “Determinants of Inter State Agricultural Trade in India”: In this paper the nature of agricultural trade has been examined among Indian states and identifies why certain states export more than others, and what governs trade among these Indian states. This analysis has been done using data provided by the Directorate General of Commercial Intelligence and Statistics (DGCIS) for years 2005, 2008, 2011 and 2014. Contrary to traditional findings, it was observed that exporter’s size does not significantly affect exports to other Indian states. After the liberalization of its economy in 1991, the country has undergone massive structural changes with increased focus on principles of privatization and liberalization. Consequently, at present, international trade accounts for almost 38 per cent of India’s GDP (World Bank, 2014)¹ and the country ranks among the 12th largest traders in the world with total trade rising at more than 20 per cent per annum (World Bank, 2014).

Owing to the immense sizes and diversity of the local economies and considerable potential for trade, understanding the drivers of trade between the States in India therefore, constitutes an important exercise. The Planning Commission estimated that in 2001-2002, share of internal trade in GDP was less than 13 per cent. Federalism and ensuing decentralization mean’s that local governments and consumers have better information and therefore, make better decisions, and competition among States leads to more efficient resource allocation.

Against the backdrop of rising importance of international trade in the Indian economy, the potential offered by internal trade in India remains untapped. Supported by incidences of high subsidies and protectionist measures, traders within India find commerce within India expensive and prohibitive. In this light, it becomes an important exercise to identify the determinants of internal trade in India and to identify factors that are prohibitive to internal trade. Conclusion driven by the study shows that traditional factors like physical or cultural

proximities like sharing borders or common languages do not seem to significantly affect trade between two Indian states. Similarly, size of the exporter's market is less of a determinant in exports compared to the size of the importer States' GDP so in a sense, trade within India are demand driven rather than supply driven.

Sarkar, Pinak and Patrick, Martin (2015)“India’s trade barriers: an analysis with reference to tariffs and customs procedures” (Centre for Public Policy Research):India’s trade policy is formulated and implemented mainly by the Ministry of Commerce and Industry, along with other ministries and agencies including the Ministry of Finance, the Ministry of Agriculture, and the Reserve Bank of India.India is the seventh largest economy in the world, but it has managed to position itself only as the 16th largest exporter in value terms which accounts for around USD 336.6 billion and the 12th largest importer demanding USD 477.3 billion in 2013. Although it is claimed that the liberalisation of the Indian economy in 1991 has greatly transformed it by removing many trade barriers and de-licensing of the industrial sector, its value or trade flow has remained very ordinary for a country with a population size of 1.26 billion (Census, 2011).India still has significant tariff and non-tariff barriers that limit its trade with the world. Most of the agreements offer only partial access to markets limited to specific goods. India imposes and maintains an average applied tariff of 12.4 per cent, which is among the highest in the world.Not only that, imposition of high tariffs are also posing as burden for the importers and major stakeholders such as domestic consumers, traders and manufacturers, as witnessed in the case of gold.

Gupta,L.C., “Inter- state Problems of Sales Tax in India”

From the point of view of industry, the main problem arises from the need to produce and sell at competitive prices. To the extent that the rates vary much between different States if raw material, for instance, is not taxed at all in one State, but is taxed high in another this competition may be materially affected.

The Immunity of inter-state trade and commerce from state sales taxes, however, gives rise to another problem. It opens the door to avoidance of tax if consumers and unregistered dealers residing in one. States are permitted to enter into direct dealings with out-of-state sellers. The possibilities of such avoidance are greater in the case of persons residing in border towns and in the case of mail-order-business.

Differences in the treatment of raw materials in different states are especially open to objection. If rates of tax on raw materials are not uniform and some of the state's exempt them altogether, the competitive capacity of manufacturers in different states is affected materially. This may create an artificial advantage for industries in some states, and hence, cause diversion of industry from the most economical locations.

Finally, there is also the problem of bringing about co-ordination in the sales tax laws and administrations of different states. This is necessary so that there is no in-consistency in the sales tax laws of different states. Sales tax should be altogether abolished or replaced by other taxes such as excises, customs and octroi. In the USA, some states levy a 'use-tax' on out-of-state purchases of goods on which a sales tax is not payable in the state. Through proper policy amendments we can work out on one of such kind of solution which can solve this problem of interstate taxation to some extent.

Gigoo, S Kumar and Maurya, Dileep (2017) "Uttar Pradesh is India's China: An Economic Giant": The state is famous for huge population, great monuments, crowded cities and heritage. Till now, the Economic potential of UP has been unrealized to full level, even though, it sends the maximum number of parliamentarians to Indian Parliament. This paper attempts to give out the possible growth delivered for the state. UP Diaspora in Indian cities of Mumbai, Bangalore and Delhi are playing a leading role in accelerating the Economy of these cities. UP has recently shown the potential of its deep commitment to modernization. The Agra – Lucknow Expressway is indeed world class. The model needs to be replicated across length and breadth of the state. This will act as a growth engine for the state and provide numerous employment opportunities

New Technologies are getting mature and acceptable day by day. Electric cars, Fuel cell cars, solar powered equipment, LED Lamps usage are creating newer opportunities of manufacturing. It helps that UP is located in a good solar sunshine zone.

Trade Centre Auctions- Assuming a sufficient boom in the economy in UP with abovementioned new growth drivers there will be substantial capacity of goods/services available. These can be exported to neighbouring Nepal, Tibet (China) and Myanmar. For this it is envisaged to set up trade hubs in various cities of UP. These can be constructed on various models/BOT type models. The same can be auctioned and huge revenue will be

collected by Government. As a result of increased awareness and switch to digital technologies and “cashless system” (though behind the cashless there is a plethora of requirements of various hardware and software), numerous types of equipment are now necessary. These include card readers, NFC sensors, RFID servers, computers, other equipment etc. The Small and Medium Enterprises can be set up to cater for increasing demand expected for these equipment. It will create great boost to Govt. revenues. UP can leverage its position of being Hindi language heartland and develop Hindi oriented digital Apps for pan Northern India markets. So, this Paper tries to explore the possible potential of Uttar Pradesh as an Economic power through trade.

PurohitMahesh C. (May 2002)“Harmonizing Taxation of Interstate Trade under a Sub-National VAT Lessons from International Experience”: As we know VAT was introduced in a large number of countries. The key difference in introducing VAT in a unitary form of government and in a federal country lies in designing a destination-based sub-national VAT. Therefore, the important issue that was needed to be addressed in designing a sub-national VAT relates to treatment of interstate trade. This article presents case studies of the structure of VAT in a few select federal countries, such as Brazil, Canada and India. India’s indirect tax system is unique in that under the constitution, the union government has the authority to impose a broad spectrum of union excise duties (UEDs) on production or manufacture while the state governments are assigned the power to levy tax on sale of goods. In addition, states are empowered to levy tax on many other goods and services in the form of entertainment tax, electricity duty, motor vehicles tax, passengers and goods tax, entry tax, octroi, and so on. Due to this dichotomy of authority under the constitution, India had been rather slow to adopt a unified value added tax (VAT).

Tendulkar, Suresh D (2000),” Indian Export and Economic Growth performance in Asian Perspective”: This paper by Suresh Tendulkar analyses India’s export and economic growth performance in a comparative perspective of 5 South East Asian economies, China, and two of India’s South Asian neighbours, i.e. Pakistan and Bangladesh. Tendulkar finds that the crucial difference between India and the rapidly growing economies lay in the persistently restricted industrial and trade policies that motivated Indian industrialization in contrast with the shift to unilateral trade liberalization that the other economies undertook during the fairly early stages of their development. The latter successfully exploited the

powerful instrumental role of international trade in stepping up their rate of economic growth and thereby improving living standards. Tendulkar's empirical analysis leads him to conclude that international trading opportunities can act as a powerful instrument in stepping up the rate of economic growth provided the internal mainsprings of the growth process are maintained and continually strengthened. Author has also emphasised on adequate social safety nets are essential for minimizing the transitory adverse effects of adjustment

The rapidly growing East and South-East Asian neighbours of India have clearly established that economies, whether small or large, (in terms of population) have improved their living standards by aggressively participating in the global division of labour and interacting with the global economy under expanding as well as fluctuating and volatile conditions of the world trading environment. The critical factor has been not the state of the international trading environment but the functioning of the domestic mainsprings of the growth process (such as competent governance, incentive structure for technological and organisational innovations, improvements in the quality of human resources, reliable and cost effective transport and communication facilities and stable and responsible macroeconomic management) which requires proactive approach on the part of the society, polity and economy.

K. Anusha (2017) "Interstate Trade and Commerce under Indian Constitution": The Concept of Inter State Trade, Commerce and Intercourse have occupied an important position for the free movement of trade between two states and within the States. Under Part 13th of the Articles 301 to 307 of the Indian constitution deals with interstate trade, commerce and trade intercourse. The Seventh Schedule which consists of three Lists deals with tax provisions under central List, state list and concurrent List which confers power to levy tax on centre and state. To reconcile the freedom of trade and commerce and the power of taxation, the Supreme Court has evolved the concept of regulatory and compensatory tax. The concept of Compensatory and Regulatory tax imposed by the State is to provide various facilities for the transport of the goods in the form of maintenance of roads, lighting, water, traffic signals, construction of bridges and other infrastructural facilities which lead to the free movement of goods. Imposition of tax on goods from other states is also said to be a Regulatory and compensatory measure which is upheld by the Supreme Court, thereby clearing the constitutional deadlock on Entry Tax.

In conclusion the problems concerning trade and commerce are more economic in content than legal. Article 307 authorises parliament to appoint by law such authority for carrying out the purposes of Arts 301 – 304. Thus, the Inter State sale will be governed by IGST (Integrated Goods and Services Tax) Act, 2017. Integrated Goods and Service Tax (IGST) is the sum of CGST and SGST which will get imposed on the goods and services in Inter State supply. It is destination based and will accrue to the importing state.

Das Gupta, Arindam (2006) “Internal Trade Barriers in India: Fiscal Check-posts”:

The Constitution of India under Section 304(b) provides that the State legislature is permitted to “impose such reasonable restrictions on freedom of trade, commerce or intercourse with or within that State as may be required in the public interest”

As a result, there has been a proliferation of distortionary policies that have been prohibitive towards internal trade in India. The intra-jurisdictional autonomy provided to States in India where financing of sub-national public services is to a certain extent of the prerogative of the States who subsequently have to raise their own public revenue to finance such services. Incidences of duties like sales tax/VAT, State excise duties, motor vehicle taxes, checks and stops, taxes on forest-based products and mines and minerals, as well as other procedural barriers including documentation are all discretionary and change as per States.

Bagchi, Amaresh (2002),” Enforcing the Constitution’s Common Market Mandate: Time to invoke article 307”: Economic efficiency is promoted not only through decentralisation of governmental functions to levels of government closest to the beneficiaries. The Constitution makers of independent

India was well aware of the vital importance of assuring freedom of trade and factor mobility across the country. In our constitution Part XIII, Subject to the other provisions of this Part trade, commerce and intercourse throughout the territory of India shall be free (Article 301).

Conclusion

Despite its importance, not much attention has been paid in the area of internal trade in the literature. Most of the studies in this regard have been done on differences in inter-national trades and exploring border barriers to trade. The idea of federalism and its economic importance are old. Since It is argued that federalism and decentralization means that local

governments and consumers have better information and therefore, and competition among States leads to more efficient resource allocation.

Up till now in India, very limited such type of exercise on interstate trade has taken place. Most notable studies trying to identify determinants of trade in India have focused on the international market identifying costs and benefits of bilateral trade potential. Directorate General of Commercial Intelligence and Statistics (DGCIS) Publications provide the quantitative information on internal trade in India but that is also limited to the trade via Railways, Waterways and Air. They do not have any record on interstate trade through Roadways.

Chapter -3

The State of Uttar Pradesh Economy: A Macro Perspective

3.1. Introduction

Uttar Pradesh is a land locked state of India lying between 23°52' N to 30°25' N latitudes and 77°3' E to 84°39' E longitudes. Its stretch from north to south is 370.6 kilometres whereas from east to west it is 650 kilometres. It occupies a central position in the great Gangetic plain of the country. In fact, it is in close proximity to the central meridian (85 ° 54 'E longitude) which roughly divides UP into two equal parts. Lucknow is the administrative and legislative capital and Kanpur is the financial and industrial capital. The geographical area of UP is 2,40,928 square kilometres (sq. kms) which constitute 7.33 percent of the total area of the country. It is the fourth largest state in the country after Rajasthan (10.4 percent), Madhya Pradesh (9.4 percent), and Maharashtra (9.4 percent). Urban areas of the state are 6,588.19 sq. km while rural areas are 2,34,369.81 sq. km. The state shares the international border with Nepal and is surrounded by Uttarakhand, Himachal Pradesh, Haryana, Delhi, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Bihar states. Uttar Pradesh is a state in North India. With around 200 million inhabitants, it is the most populous state in India as well as the most populous region in the world.²

3.2 Demographic Profile

According to Census 2011, the total population of the state was 1998.12 lakh with a density of 829 persons per sq.km of the area as against density of 382 persons per sq. km in India. The decennial growth rate was 20.10 percent as against of 17.68 percent of India during 2001-2011. The sex ratio of 912 females per thousand males of Uttar Pradesh as compared to the national figure was not up to the mark as compared to the national average i.e. 943. Rural and urban population of the state 77.73 percent and 22.27 percent, respectively.³ There is a decrease of 1.49 percent population in the rural population whereas the same percent point (1.49) is added to urban

² National Institute of Disaster Management "India Disaster Report 2012" *Government of India*, <https://nidm.gov.in/PDF/pubs/India%20Disaster%20Report%202012.pdf> accessed on 25, June 2019.

³ <https://data.gov.in/search/site?query=census/> accessed on 10, July 2019.

population. The state has the largest share of rural population, i.e., 18.64 percent of the country's rural population. Nearly One –Sixth of India's population Resides in the states.Had it been an independent country, it would have been the fifth most populous country of the world after China, India, the USA and Indonesia. The population of UP is almost equal to the total population of Brazil (195.4 Mn in 2010). The Eastern region is the most populous with 39.95 percent while the Bundelkhand region is the least populous with only 4.84 percent of the total population. The western and central regions consist of 37.20 and 18.01 percent of population respectively. The most populous districts are Allahabad, Moradabad, Ghaziabad, Azamgarh and Lucknow While the least populous districts are Mahoba, Chitrakoot, Hamirpur and Sravasti.

Table 3.2 Important Demographic Indicators for Uttar Pradesh and India

Sl. No.	Indicators	Year	Uttar Pradesh	India
1	Population (in millions)	2001	16.6	1029
		2011	20	1211
2	Decadal rate of population growth (Percentage)	1991-2001	25.74	21.54
		2001-2011	20.1	17.68
3	Population density (per sq. km.)	2001	690	325
		2011	829	382
4	Sex Ratio (Female per 1000 males)	2001	898	933
		2011	912	940
5	Percentage of scheduled castes and scheduled tribes' population in the total population (2011)			
	a- Scheduled Castes	2011	20.7	16.2
	b- Scheduled Tribes		57	8.2
6	Percentage of Rural Population in total population	2001	79.21	72.2
		2011	77.73	68.84
7	Birth rate (per 1,000 population) *		25.9	21
8	Death Rate 2017*	2017	6.7	6.7
9	Natural Growth Rate,2017*	2017	19.2	14.3
10	Infant mortality rate 2017*	2017	41	39
11	Life Expectancy during Birth (2011-15)			
	Male	2011-15	63.4	66.4
	Female		65.6	69.6

Sources: Census of India, 2011. *SRS Bulletin, May 2019.

3.3 Special Economic Zone

Special Economic Zone are divided in to two parts one is area wise operational Economic Zone

and other is notified SEZs in Uttar Pradesh according to NRI Department of Government of Uttar Pradesh. Which are listed below one by one and table is having information regarding area and industries wise information under which sector comes.

Table 3.3: Area wise operational Special Economic Zone in Uttar Pradesh

Particular	Area	Primary Industry
Noida Special Economic Zone	Noida	Multi-product
HCL Technologies	Noida	IT/IteS
Moser Baer SEZ	Greater Noida	Non-conventional energy
Wipro Limited	Greater Noida	IT/IteS
Moradabad Special Economic Zone	Moradabad	Handicrafts
Seaview Developers Limited	Noida	IT/IteS
NIIT Technologies Limited SEZ	Greater Noida	IT/IteS
Aachvis Softech Pvt Ltd	Noida	IT/IteS
Arshiya Northern FTWZ Limited	Khurja, Bulandshahr	FTWZ

Source: NRI Department Government of Uttar Pradesh 2019

Table 3.4: Some of the Popular SEZs in Uttar Pradesh as well as in INDIA

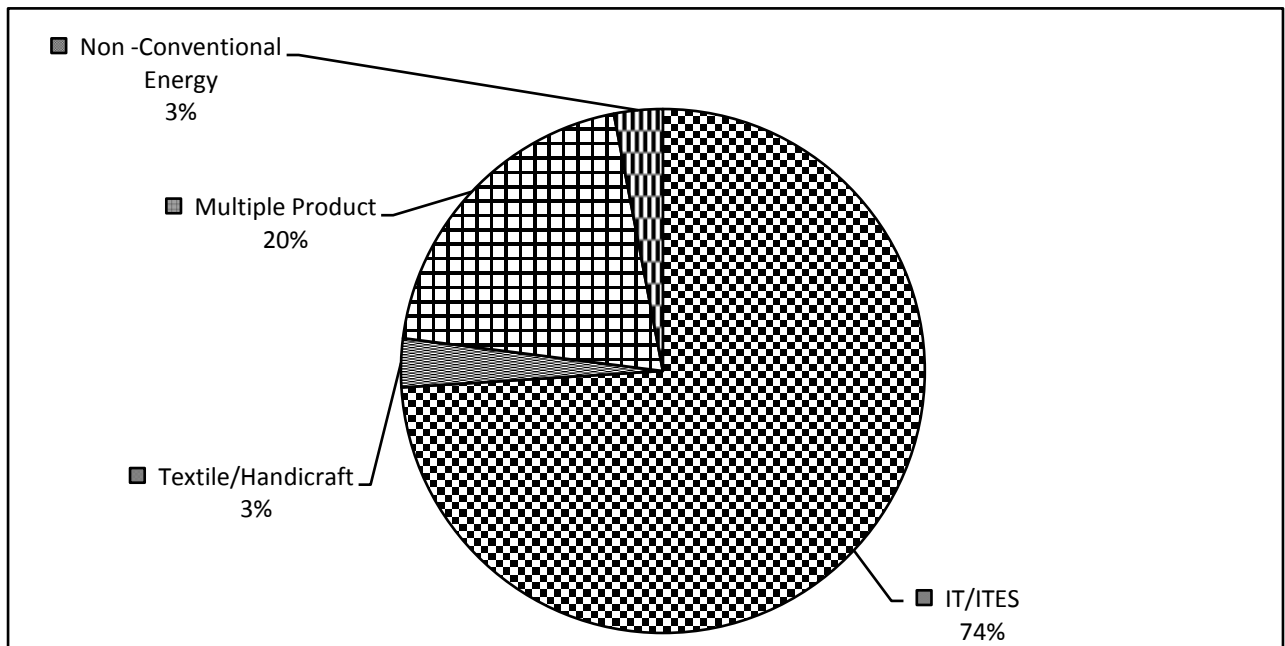
Particular	Area	Primary Industry
Ansal IT City and Parks	Greater Noida	IT/IteS
OSE Infrastructure Limited	Noida	IT/IteS
NIIT Technologies Limited SEZ	Greater Noida	IT/IteS
UnitechInfracon Limited	Greater Noida	IT/IteS
Aachvis Softech Private Limited	Noida	IT/IteS
Perfect IT SEZ Private Limited	Noida	IT/IteS
Unitech Hi-Tech Projects Private Limited	Noida	IT/IteS
Gallant Infrastructure Private Limited	Greater Noida	IT/IteS
Jubilant Infracon Private Limited	Noida	IT/IteS
SarvMangalRealtech Private Limited	Noida	Electronic hardware and software
IVR Prime IT SEZ Private Limited	Noida	IT/IteS
Golden Tower Infratech Private Limited	Noida	IT/IteS
Pavitratham Constructions Private Limited	Noida	IT/IteS
Uttar Pradesh State Industrial Development Corporation	Kanpur	Textile, leather, engineering goods

Source: NRI Department, Government of Uttar Pradesh, 2019-20

Thirty-one Special Economic Zones are approved by the state which are providing to various sectors such as IT/IteS, textiles and handicrafts. Infrastructure of Uttar Pradesh is developing day by day and connectivity is also improving in these days due to National Highways in India. Government of Uttar Pradesh offers a wide range of better policies to the investor

under infrastructure & industrial investment policies of the State. The State has drafted a sound policy for selected sectors like IT and biotechnology. It is having some of the advantages which are hub of IT /ITES services and semiconductor industry and skilled human resources, so that investors can be utilized their Cheap labour force to get better return on investment.

Figure 3.1: Sector-wise break up of approved SEZs in Uttar Pradesh



Source: NRI Department, Government of Uttar Pradesh, 2019-20

The above graph represents that IT/ ITES accounts for nearly 74 per cent of the 31 SEZs, followed by multiple products (20 per cent), textile/handicrafts (3 per cent), and non-conventional energy (3 per cent).

3.4 Budget Analysis of Uttar Pradesh 2018-19

Budget Highlights:

1. Size of the budget is Rs 4 lakh 79 thousand 701 crore 10 lakh rupees (4,79,70110crore) which is 12 percent higher than the budget of 2018-2019.
2. New schemes of 21 thousand 212 million 95 lakh rupees (Rs. 21,212.95 crore) have been included in this budget. There is a provision of Rs 482 crore for the new Industrial Policy 'Industrial Investment.

3. An investment of Rs. 180 crores for industrial investment promotion scheme, 2012 is proposed in the budget.
4. The total expenditure for 2019-20 is estimated to be Rs 4, 79,701 crores, an increase of 6.7 percent on revised estimated 2018-19. In 2018-19, according to the revised estimates, the increase of rupees is estimated 21,189 crores (4.9 percent) of expenditure on budget estimates.
5. Total receipts for 2019-20 (excluding borrowings) are estimated to be Rs 3, 97,416 crore an increase 3.2 percent compared to the revised estimate of 2018-19. In 2018-19, the total receipts (excluding lending) are estimated to be more than the estimated budget of 31,402 crores (8.9 percent).
6. For the next financial year, revenue surplus is targeted at Rs 27,777 crore or 1.76 percent of GSDP.
7. Fiscal deficit is targeted at Rs 46,911 crore (2.97 percent of GSDP).

Policy Highlights

1. The Finance minister of Uttar Pradesh, Mr Rajesh Agrawal said that its biggest earnings for 2019-20 to come from GST at Rs 77,000 crore followed by Rs 31,000 crore from excise and Rs 78,000 crore from MOTOR Vehicle Tax.
2. Budget has been allocated for National Rural Employment Guarantee Scheme of Rs 3488 crore.
3. Budget has been allocated for development of roads under PWD, Rs 2,100 crore for construction of bridges.
4. Uttar Pradesh Government will spend Rs3194 crore for expressways. A Budget of 1094 earmarked for Purvanchal Expressway .1, 000 crore for Bundelkhand expressway and Rs.1000 crore for Gorakhpur link expressway.
5. Budget has been embarked for scholarship for minority community students of Rs 910 crore.
6. 150 lacs for power loom weavers to provide electricity at concessional rates Uttar Pradesh Handloom, Power loom, Silk, Textiles and Garment Policy, 507 million for 2017.
7. 5 crore rupees for Chief Minister's Village Industries Scheme and Rs10 crore for Micro, Small and Medium Enterprises Promotion Policy 2017.

Table 3.5: Budget at a glance 2019-20**(value in Rs. Crore)**

Items	Actuals (2017-18)	Budgeted (2018-19)	Revised (2018-19)	%change from BE 2018-19 to RE 2018-19	Budgeted (2019-20)	% change from RE 2018-19 to BE
Total Expenditure	3,21,823	4,28,385	4,49,573	4.90%	4,79,701	6.70%
A. Receipts (except borrowings)	2,79,011	3,53,784	3,85,187	8.90%	3,97,416	3.20%
B. Borrowings	47417	67115	54338	-19.00%	73,268	34.80%
Total Receipts(A+B)	3,26,4284	4,20,899	4,39,525	4.40%	4,70,684	7.10%
Revenue Surplus	12552	27099	47248	74.40%	27,777	41.20%
As % of GSDP	0.91%	1.82%	3.20%		1.76%	
Fiscal Deficit	27,810	44,053	43,840	-0.50%	46,911	7.00%
As % of GSDP	2.02%	2.96%	2.97%		2.97%	
Primary Surplus	-1,326	11,620	11,969	3.00%	11,537	-3.60%
As % of GSDP	-0.10%	0.78%	0.81%		0.73%	

Sources: Uttar Pradesh Budget Documents 2019-20

Notes: minus (-) sign against primary surplus indicates primary deficit. BE is Budget Estimate; RE is Budget Estimates.

GSDP for 2019-20 is Rs 15, 79,807crores. GSDP for 2018-19 FY and 2018-19 RE is taken to be Rs 14, 88,934 crores, and Rs 14, 76,455crores respectively.

Receipts from tax and non-tax revenue in 2019-20

Seize of the total revenue receipts for 2019-20 are estimated at Rs 3, 91,734crore, an increase of 3.1 percent over the revised estimate of 2018-19. Of this, the state will raise Rs 1, 70,809crore (44 percent of revenue receipts) through its own resources. Rs 2, 20,925crore (56 percent of revenue receipts) to be developed as a grant from the central government and the state's share in central taxes. In 2019-20, state revenue and central transfers are expected to be 5 percent and 2 percent higher than the revised estimates of 2018-19 respectively.

In 2019-20, contribution of state's share in central taxes is projected to increase by 8 percent from the revised estimate of 2018-19. However, the revenue in the form of grant is estimated to decrease by 9.78 percent, up from the revised estimate of 2018-19 to Rs 68,062 crore.

Uttar Pradesh government is estimated to generate Rs 30,633 crore in 2019-20 through non-tax revenue. This is 6.3 percent higher than the 2018-19 revised estimates. Non-tax sources in 2019-20 are 7 percent of total estimated revenue; Non-tax sources include interest receipts, dividends, fees and royalties with other people.

Table 3.6: State government receipts from various sources in 2019-20 (in Rs crore)

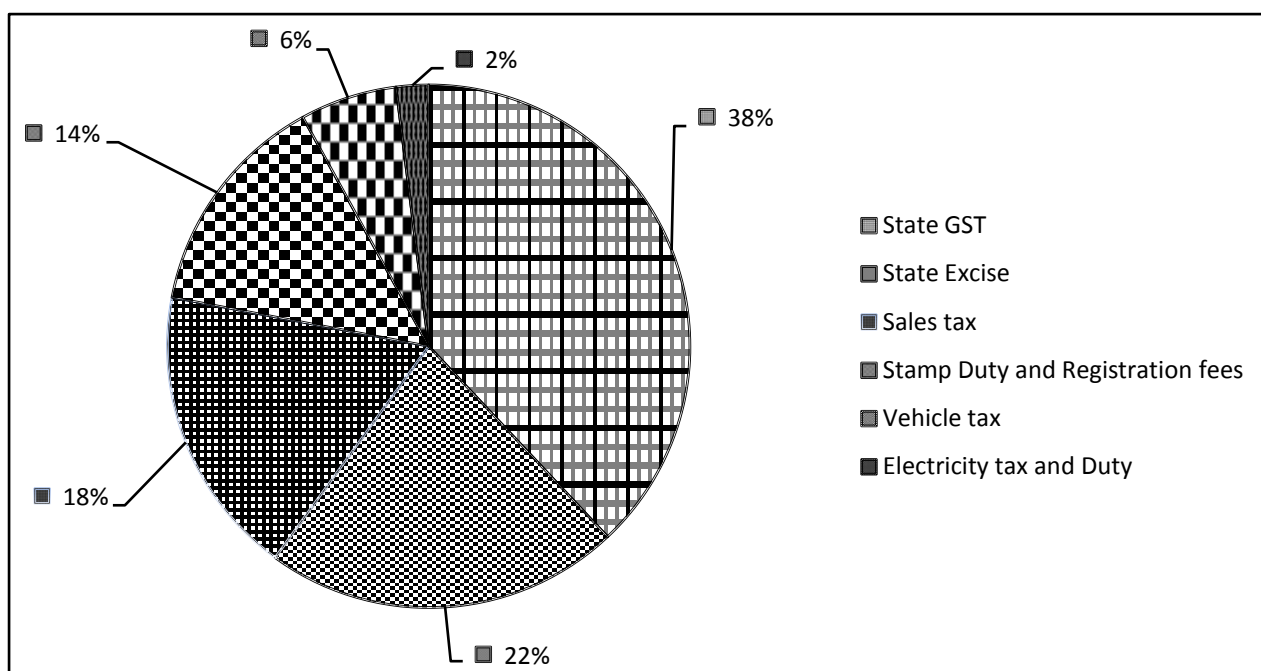
Items	2017-18 Actuals	2018-19 Budgeted	2018-19 Revised	% change from BE 2018-19 to RE 2018-19	2019-20 Budgeted	% change from RE 2018-19 to BE 2019-20
State's Own Tax	97,393	122700	134300	9.50%	140176	4.40%
State's Own Nontax	19,795	28,822			0.00%	306336.30%
Share in Central Taxes	1,20,939	1,33,548	1,41,540	6.00%	1,52,863	8.00%
Grants -in-aid from Centre	40,648	63,549	75,360	18.60%	68,062	
Total Revenue Receipts	2,78,775	3,48,619	3,80,022	9.00%	3,91,734	3.10%
Borrowings	47,417			54,338	-19.00%	7326834.80%
Other receipts	236	5,165	5,165	0.00%	5,682	10.00%
Total Capital Receipts	47,652	72,280	59,504	-17.70%	78,950	32.70%
Total Receipts	326,428	420899	4,39,525	4.40%	4,70,684	7.10%

Sources: Uttar Pradesh Annual Financial Statement 2019-20; Uttar Pradesh Detailed Receipts Estimates 2019-20.

GST revenue

State's total GST revenue (including central transfers) is estimated to be Rs 1, 10,072 crore in 2019-20, 3 percent higher than the revised estimate of 2018-19. It is estimated to make up 28 percent of the state's revenue receipts revenue also includes integrated GST, which is estimated at Rs 4,703 crore in 2019-20. The State's total tax revenue is estimated at Rs 1, 40,176 crore in 2019-20 (36 percent of its revenue receipts). This is 4.4 percent higher than the revised estimates of 2018-19. Its tax to GSDP ratio is targeted at 9 percent in 2019-20, which is similar to the revised estimate in 2018-19. This implies that the state's own tax collection growth is projected to exceed the growth in the economy (GSDP growth is estimated at 7 percent).

Figure 3.2: State's tax revenue from various sources in 2019-20 (budgeted estimates)



Source: Uttar Pradesh Annual Financial Statement 2019-20

Table 3.7: Receipts from Non-Tax revenue in U. P.

(Value in Rs. Lakh)

Serial No	Items	2016-17 Actual	2017-18 Revised Estimates	2018- 19 Budget Estimates
1	Forestry and Forest Life	25297	45000	47500
2	Large, Medium & Minor Irrigation	78180	90000	167000
3	Civil works roads and Bridges	99047	82000	102500
4	Education Games and Culture	1409231	53201	52000
5	Medical, Public Health & Family welfare	18593	19086	19673
6	Other Rural Programmes	7028	5990	6174
7	Miscellaneous	1257031	1454935	2487319
8	Grants-in-aid	3253687	7116132	6354931
9	Total	6148094	8866344	9237097

Source: U.P Budget in Brief (2018-19), Department of Finance, Government of Uttar Pradesh

3.5. Start –ups India

Start-up India is a major initiative of the Government of India to create employment and strong foundation for nourishment of youth entrepreneurial skills which will sustain

sustainable economic development and generate employment opportunities on a large scale. The prime minister of India had announced the start-ups India programme on August 15, 2015. Today's young Indians have a firm belief in walking on their own and they have a favourable ecosystem. His thoughts come into his life. In today's environment we have more start-ups and entrepreneurs more than ever before, movement is at the peak of a revolution. However, many start-ups do not their full potential was achieved due to limited guidance and reach. Government of India has taken several measures to ease and improve business. The main reason is behind that Start-ups to create a platform that beneficial the growth of industries. Plan of 19 Action points was implemented on January 16, 2016. Two lakh thirty-seven thousand nine hundred two users are using free start-ups Indian online programme to help them in building a sound infrastructure to their business. Maharashtra followed by Karnataka and Delhi, are among the top ten performers in terms of State-wise distribution of recognized Start-ups in India. Performance of Uttar Pradesh is moderate among top-ten major states.

Table 3.8: State –Wise Distribution of recognized Start-ups in India by major state (in percent)

Sl. No.	State/Union Territory	Percentage of recognized Start-ups
1	Maharashtra	18.91
2	Karnataka	14.67
3	Delhi	13.38
4	Uttar Pradesh	8.23
5	Telangana	5.59
6	Haryana	5.33
7	Tamil Nadu	5.18
8	Gujarat	5.17
9	Kerala	4.00
10	West Bengal	3.03

Source: DPIIT

Table 3.9: At constant Prices of 2011-12**(Value in Rs Crore)**

Year	GDP		UP's GDP % of INDIA
	India	Uttar Pradesh	
2011-12	2749167	32002	1.16
2012-13	2800356	32908	1.18
2013-14	2908585	34044	1.17
2014-15	3086174	34583	1.12
2015-16	3316143	36923	1.11
2016-17	3472229	38934	1.12
2017-18	1989347	40815	2.05

Source: Reserve Bank of India, Government of India

3.5. Tourism, Agriculture and Industries in Uttar Pradesh

Above table represents that India's and Uttar Pradesh GDP at constant prices 2011-12. Last column represents that percentage of UP's GDP of India from 2011-12 to 2017-18. Percentage of UP's GDP of India is increased in 2017-18. The Gross State Domestic Product (GSDP) of the state increased by 15.42 trillion (US \$ 213.78 billion) at a rate of about 11.41 percent between 2011-12 and 2018-19. TajMahal, one of Agra's eight wonders of the world, Uttar Pradesh is a favourite tourist spot in India. In 2017, domestic tourist arrivals in the state stood at 234 million and ranked second. Foreign tourist arrivals were more than 3.56 million and in third place. Under the state budget 2018-19, for the promotion of religious tourism, Rs. 1,240 crores (192.4 million US dollars) has been allocated.

Uttar Pradesh is the largest producer of food grains in India and has a share of 17.83 percent in total food grain production in 2016-17. Food grains production in the state was 49,903.1 thousand tonnes in 2016-17 and 51,252.7 thousand tonnes in 2017-18. Major food grains produced in the state include rice, wheat, maize, millet (millet), gram, peas and lentils. The production of pulses in the state was 2,208.0 thousand tonnes in 2017-18 and the production of vegetables was 28.23 thousand tonnes in 2017-18, the state is the largest producer of vegetables in India.

Due to the large base of skilled workers in the state, it has emerged as a major centre for IT and ITES industries, including software, captive business process outsourcing (BPO) and electronics. The state has become a centre for the semiconductor industry, in which many prominent players are their offices and research and development centre in Noida.

Chapter-4

Interstate Trade by Rail, Air and River

Transport, communication and trade establishes link between producing centres and consuming centres. Transport is a service or facility for the carriage of persons and goods from one place to the other using humans, animals and different kinds of vehicles. Such movements take place over land, water and air.

The inter-state trade between the various States of India is commonly known as Inland Trade, which involves movement of goods by five modes namely, (a) Sea, (b) air, (c) rail, (d) river, and road. The entry and exit of goods from a State are commonly known as inward and outward movements.⁴ Inter-State Trade Statistics provides an idea about the demand of commodities produced in a State along with flow thereof to other States.

Rail Transport

Table 4.1: Extent of Railways in Uttar Pradesh (2015-16)

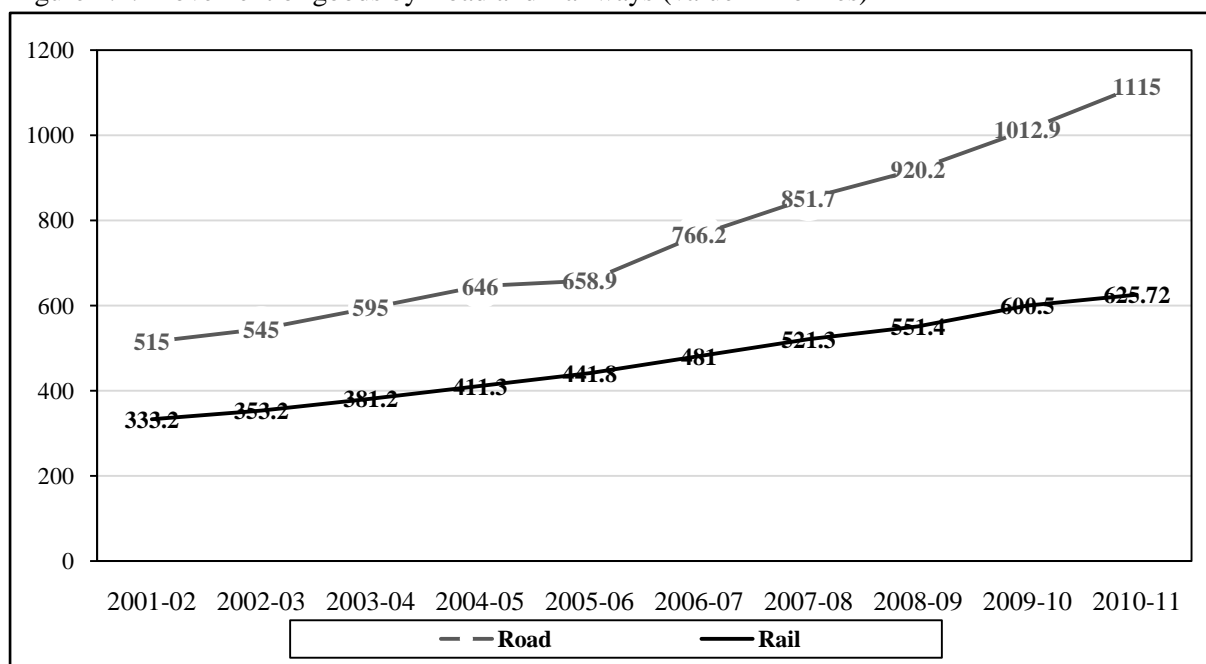
Total Railway lines in Uttar Pradesh (2015-16)	Length (In Kms)
Broad Gauge	8297
Meter Gauge	778

Source: Sixth Economic census 2012-13, Economics and statistic division, Planning Department Uttar Pradesh, Lucknow (http://updes.up.nic.in/esd/Economic_Census/Final_Report_of_6th_EC-2012-13_UP/08_Lesson_08.pdf) accessed on 3, July 2019

Most of the movement of goods and services take place over land. Railways serve as the most reliable mode of land transport for bulky goods over long distances. Railway is developing freight corridors which will connect the agriculture and manufacturing hubs of the country to the port cities. As these corridors are being built away from the already existing railway tracksmaking them congestion free and allowing choosing them shorter route which will reduce the transportation cost and time both.

⁴ 6.3 Inter-State Movement/Flows of Goods, Ministry of statistics and programme implementation (MOSPI) (<http://mospi.nic.in/63-inter-state-movementflows-goods>) accessed on Oct 31,2019

Figure 4.1: Movement of goods by Road and Railways (value in Tonnes)



Source: Transport Research Wing, Road Transport and Highway Ministry, GoI

Western Dedicated Freight Corridor (WDFC)

The upcoming WDFC stretches from Dadri in Ghaziabad to Jawaharlal Nehru Port at Mumbai via Vadodara – Ahmedabad – Palanpur – Phulera – Rewari and covers an overall length of 1504 Km. The freight corridor will be a double line electric track with world class and state-of-the-art technology. The WDFC is of immense significance to the economy of Uttar Pradesh as it has a potential of reducing the travel time of goods from the state to around 14 hours. Government of UP intends to reap its benefit through increased economic activity and safe & quick transportation of the state's industrial goods as well as its agro-products benefitting the farmers of this agrarian state.

Eastern dedicated Freight Corridor (EDFC)

The Eastern Dedicated Freight Corridor with a route length of 1856 km consists of two distinct segments: an electrified double-track segment of 1409 km between Dankuni in West Bengal & Khurja in Uttar Pradesh & an electrified single-track segment of 447 km between Ludhiana – Khurja – Dadri. Out of the 1856 km total length of rail track in the EDFC project, 1049 km (57 per cent) passes through 18 districts of Uttar Pradesh. The government intends to benefit from the existing freight traffic being diverted to the corridor and thereby enable faster

transportation of goods to nearby ports. Government of UP will also strive for achieving integration, transformation and inclusion through the project by improving transport connectivity and market integration for freight consigning industries in the state.

Delhi Mumbai Industrial Corridor (DMIC)

Uttar Pradesh has a vast area of 36,000 sq. km, extended across 12 districts along Delhi Mumbai Industrial Corridor. The Government of UP intends to derive maximum value out of DMIC towards which implementation of early bird projects like Integrated Industrial Township at Greater Noida, Multi-Modal Logistics hub at Dadri and Multi-Modal Transport Hub at Boraki are already underway. Meerut Muzaffarnagar Industrial Area and other new industrial regions will also be established to benefit from the corridor.

Commodities Trade in Uttar Pradesh by Railway-2015-2018

Table 4.2 shows the import and export of commodities that have taken place in Uttar Pradesh for the year 2015-16 via rail. As we all know that industries especially heavy industries rely on rail as a medium of transportation. The table here represents the value of commodities traded and mineral oil hold a major proportion i.e. 48.85 percent of total trade in 2015-16. If we look at coal and coke the total import value is 24294.02 whereas export value of same is 203.52. It shows that the coal imported is being consumed here and a very little proportion is being traded out. As we know that coal is being used in thermal power plants and thermal power accounts for almost 70 percent of the electricity generation capacity (Energy statistics 2019)⁵. The import of fertilizers and manures is also among the top traded commodities because according to the economic survey of 2014-15, approximately 165.98 lac hectare (68.7%) land is used for cultivation (Upagripardarshi (2020))⁶.

The import value of wheat is 7909.85 Cr and export value is 2252.17 so Uttar Pradesh is doing a net wheat import of 5657.68 (Cr) from other states. The import value of rice not in the husk is 4946.80 Cr and export value for the same time period (2015-16) is 66.88 Cr which makes Uttar Pradesh the net importer of rice not in husk. Uttar Pradesh is net exporter of Marble, kerosene, other forest products, oil seeds, oil cakes and sugar. As total trade is concerned, the share of Mineral Oils and Products (Excluding Kerosene) is highest of 48.86%

⁵ Energy statistics 2019 (page 22)

http://www.mospi.gov.in/sites/default/files/publication_reports/Energy%20Statistics%202019-final.pdf

⁶ Upagripardarshi (2020) Home page <http://upagripardarshi.gov.in/staticpages/UttarPradesh.aspx> accessed June 2020

of total trade in year 2015-16.

Table 4.2: Top Ten Commodity-wise trade in the FY 2015-16 (value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2015-16)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	31314.78	24.325	91564.11	74.578	122878.89	48.857
2	Coal and Coke	24294.02	18.872	203.52	0.166	24497.54	9.740
3	Iron and Steel	16622.61	12.912	1298.23	1.057	17920.84	7.125
4	Fertilizer & Chemical manure	10417.52	8.092	3243.12	2.642	13660.63	5.431
5	Cement	10424.21	8.098	2250.32	1.833	12674.53	5.039
6	Wheat	7909.85	6.144	2252.17	1.834	10162.02	4.040
7	Metal Products	9913.67	7.701	0.00	0.000	9913.67	3.942
8	Other sorts of Grain	14.21	0.011	6330.76	5.156	6344.96	2.523
9	Rice not in the husk (inc Rice Flower)	4946.80	3.843	66.88	0.054	5013.68	1.993
10	Transport Equipment	766.60	0.595	3895.38	3.173	4661.98	1.854
	All commodities	128733.32	100	122775.49	100	251508.81	100

Source: DGCI&S, Kolkata and authors calculation

Note: Details of data for all Commodities (see Appendix Table-4.2 A)

Table 4.3: Top Ten Commodity-wise trade in the FY 2016-17 (value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2016-17)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	31166.19	24.272	122656.38	80.830	153822.57	54.907
2	Coal and Coke	26929.92	20.973	179.43	0.118	27109.35	9.677
3	Iron and Steel	18402.60	14.332	954.59	0.629	19357.19	6.910
4	Fertilizer & Chemical manure	10841.03	8.443	3339.51	2.201	14180.54	5.062
5	Wheat	9765.92	7.606	1986.45	1.309	11752.37	4.195
6	Cement	10659.28	8.301	492.21	0.324	11151.49	3.981
7	Other sorts of Grain	42.58	0.033	5290.53	3.486	5333.11	1.904
8	Rice not in the husk (inc Rice Flower)	4390.64	3.419	102.15	0.067	4492.79	1.604
9	Spices	4136.95	3.222	0.00	0.000	4136.95	1.477
10	Other Forest Products	2.85	0.002	4040.02	2.662	4042.87	1.443
	All commodities	128403.65	100	151745.59	100	280149.24	100

Source: DGCI&S, Kolkata and authors calculation

Note: Details of data for all Commodities (see Appendix Table-4.3A)

Table 4.3 shows the value and share of import and export for 2016-17 the top four traded commodities are same as of previous years. The export share of mineral oils and products increased from 74.578 percent (2015-16) to 80.830 percent in 2016-17. The import of coal and coke has increased by 2635.9Cr when compared to previous year whereas the import and

export both fell down for iron and steel making the total trade share of iron and steel also falling down from 7.12 percent (2015-16) to 6.91percent in 2016-17. The import and export values of fertilizers and other manures have remained almost same. The value of cement exported in 2015-16 was 2250.32 Cr but it got reduced to 492.21 Cr in 2016-17, making the total trade share of cement to decline from 5.03percent to 3.98 percent in 2016-17.

Table 4.4: Commodity-wise trade in the FY 2017-18 (value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2017-18)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	36127.22	24.58	158996.81	82.09	195124.03	57.28
2	Coal and Coke	22154.77	15.07	124.96	0.06	22279.73	6.54
3	Iron and Steel	17173.35	11.68	827.70	0.43	18001.06	5.28
4	Fertilizer & Chemical manure	11926.54	8.11	3252.42	1.68	15178.96	4.46
5	Cement	12600.33	8.57	884.15	0.46	13484.48	3.96
6	Rice not in the husk (inc. Rice Flower)	8820.24	6.00	1624.25	0.84	10444.49	3.07
7	Other edible oil	8771.01	5.97	2.98	0.00	8773.99	2.58
8	Wheat	3389.69	2.31	4442.26	2.29	7831.95	2.30
9	Metal Products	7656.44	5.21	0.00	0.00	7656.44	2.25
10	Transport Equipment	6268.90	4.27	1290.81	0.67	7559.71	2.22
	All commodities	146981.43	100	193681.28	100	340662.71	100

Source: DGCI&S, Kolkata and authors calculation

Note: Details of data for all Commodities (see Appendix Table-4.4A)

Table 4.4 There is a drastic increase in the import of other edible oil from 2893.68Cr in 2016-17 to 8771.01 Cr in 2017-18. The import of Metal products also increased from 1357.54Cr value in 2016-17 to 7656.44 cr in 2017-18, whereas there is no export of same in both the years via rail. Uttar Pradesh is a net exporter of sugar and there has been an increase in the value of net exports (export value-import value) 102.77 Cr in 2015-16, 1378.30 Cr in 2016-17 and 3637.38 Cr in 2017-18. Uttar Pradesh has been importer of spices, it has imported spices worth 495.57 Cr in 2015-16 and 4136.95 Cr in 2016-17, and however in 2017-18 there was some export also of 8.01 Cr which made net import value for the year at 2761.01Cr.

Table 4.5: Commodity-wise trade in the FY 2018-19 (value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2018-19)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	2028.56	39.07	3647.59	20.68	5676.15	24.86
2	Coal and Coke	1272.34	24.51	3863.79	21.90	5136.13	22.49
3	Metal Products	0.00	0.00	3801.78	21.55	3801.78	16.65
4	Iron and Steel	22.45	0.43	1844.13	10.45	1866.59	8.17
5	Cement	33.13	0.64	1368.09	7.76	1401.23	6.14
6	Fertilizer & Chemical manure	971.64	18.72	316.34	1.79	1287.98	5.64
7	Marble and stones	18.69	0.36	707.63	4.01	726.32	3.18
8	Other Ores	0.00	0.00	665.72	3.77	665.72	2.92
9	Sugar	479.06	9.23	5.27	0.03	484.33	2.12
10	Wheat	166.37	3.20	129.18	0.73	295.54	1.29
	All commodities	5191.58	100	17641.34	100	22832.91	100

Source: DGCI&S, Kolkata and authors calculation

Note: Details of data for all Commodities (see Appendix Table-4.5A)

According to table 4.5, in the financial year 2018-19 the total value of trade was 22832.91 which took place through railways, it is important to mention here that this value of trade is much lesser than the trade that took place in the previous year which is 340662.71Cr. The decline in the trade in the year 2018-19 is approximately 93.4 percent. This drastic decline to some extent can be seen as an outcome of recent economic changes that took place such as demonetization and implementation of new tax regime in the form of Goods and services tax (GST). From the year wise analysis of the commodities traded we can clearly see that commodities such as Mineral oil and products, Coal & Coke, Fertilizer and chemical manure, cement, Iron & steel, wheat and rice not in the husk are the commodities which comprise more than 70 percent of the trade that is taking place through railways.

Table 4.6: Trade performance in the last four years by Rail (value in Rs Cr.)

Particulars	By Rail			
	2015-16	2016-17	2017-18	2018-19
Import	128733.32	128403.65	146981.43	5191.58
Export	121965.57	151745.59	193681.28	17641.34
Total Trade	250698.89	280149.24	340662.71	22832.91
Year-over-Year change (in percent)				
Import		-0.26	14.47	-96.47
Export		24.42	27.64	-90.89
Total Trade		11.75	21.60	-93.30

Source: DGCI&S, Kolkata and authors calculation

Note: minus (-) sign represents the decline in trade

The value of total trade was showing an increase in the total value till 2017-18, however this

trend discontinued in year 2018-19 with a huge decline of 96.47 percent in imports and 90.89 percent in exports resulting in an overall decline of 93.30 percent. These values represent trade through railways and in our further analysis it would be interesting to see whether this decline is being compensated by trade through roadways Table 4.6.

Sum up: On the basis of table 6 and 7 we can sum up some of the commodities which contribute heavily in the trade flow either in the form of export or in the form of import. There are certain commodities which are exclusively imported and no export of the same goes from UttarPradesh, similarly there are some export exclusive commodities which are only exported and no import of the same is done. It is found that exclusively import goods by rail are: electrical goods, caustic soda and potash, other ores, gram and gram products, iron ore, jute, manganese ore, paint and varnishes, salt, other edible oil, soap, and rice in the husk and rubber products. On the other hand exported goods are: Oil seeds, maize and millets, bamboo, jawar and bajar, oil cakes and other fodder & husk.

State-wise Imports of Uttar Pradesh by Railway-2015-2019

Table 4.7: Top ten State-wise import for U.P in the FY 2015-16

Import (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	20629.37	16.02
2	Haryana	19991.52	15.53
3	Orissa	19694.58	15.30
4	Madhya Pradesh	19347.65	15.03
5	West Bengal	14776.52	11.48
6	Jharkhand	8843.13	6.87
7	Punjab	8249.99	6.41
8	Rajasthan	4335.85	3.37
9	Maharashtra	3242.47	2.52
10	Chhattisgarh	3232.90	2.51
	All States	128733.32	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix Table-4.7A)

For the year 2015-16 the table 4.7 represents the states from where Uttar Pradesh imported various commodities, figures here represent the total value of import from that state and its percentage share (column four) in the total import of Uttar Pradesh. Gujarat (16.02), Madhya Pradesh (15.03), Haryana (15.53), West Bengal (11.48) and Orissa (15.30) together hold almost 72 percent share of imports to Uttar Pradesh. In the year 2015-16 maximum import has come from Gujarat 20629.37 Cr followed by Haryana, Odisha and Madhya Pradesh.

Table 4.8: Top ten State-wise import for U.P in the FY 2016-17

Import (in Rs Cr.)			
Sl.No.	State/UTs	2016-17	Share (%)
1	Gujarat	20227.56	15.75
2	Madhya Pradesh	19374.46	15.09
3	Haryana	18800.93	14.64
4	West Bengal	15929.44	12.41
5	Orissa	12323.15	9.60
6	Jharkhand	12053.81	9.39
7	Punjab	9709.20	7.56
8	Chhattisgarh	7416.20	5.78
9	Rajasthan	4281.48	3.33
10	Maharashtra	3238.56	2.52
	All States	128403.65	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix Table-4.8A)

Table 4.8 represents the import for the year 2016-17 in Uttar Pradesh and just like the previous year Gujarat (15.75), Madhya Pradesh (15.09), Haryana (14.64), West Bengal (12.41) and Orissa (9.60) emerge as the major states from where Uttar Pradesh has done more than 65 percent of its import. Import from Jharkhand has increased when compared to previous year which was at 8843.13 Cr in value terms and as a percentage share it was 6.87 and in 2016-17 has gone up to 12053.81 Cr which is 9.39 percent of total imports for the year. Trade share of Chhattisgarh has also increased from 2.51 percent in 2015-16 to 5.78 percent in 2016-17.

Table 4.9: Top ten State-wise import for U.P in the FY 2017-18

Import (in Rs Cr.)			
Sl.No.	State/UTs	2017-18	Share (%)
1	Gujarat	23333.72	15.88
2	Madhya Pradesh	23181.01	15.77
3	Haryana	21825.10	14.85
4	Orissa	16429.38	11.18
5	Jharkhand	14837.78	10.10
6	West Bengal	13898.15	9.46
7	Punjab	8764.15	5.96
8	Rajasthan	6388.12	4.35
9	Chhattisgarh	6282.48	4.27
10	Maharashtra	3956.08	2.69
	All States	146981.43	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix Table 4.9A)

As we have already discussed that heavy industry rely more on rail as a medium of

transportation for their raw materials as well as finished goods. The Gujarat, Madhya Pradesh and Haryana are having approximately 50 percent share of Uttar Pradesh's import in year 2017-2018 (table 4.9). This is also evident in the state specific import data of all the years via rail. The states like west Bengal, Jharkhand, Orissa and Madhya Pradesh have rich mineral resources such as coal and coke, iron and steel thus they become the major states from where Uttar Pradesh has been doing import of goods through rail route.

Table 4.10: Top ten State-wise import for U.P in the FY 2018-19

Import (in Rs Cr.)			
Sl.No.	State/UTs	2018-19	Share (%)
1	Haryana	660.86	12.73
2	Bihar	618.77	11.92
3	Madhya Pradesh	615.63	11.86
4	Gujarat	558.58	10.76
5	Maharashtra	542.84	10.46
6	West Bengal	441.79	8.51
7	Rajasthan	361.42	6.96
8	Jharkhand	283.98	5.47
9	Chhattisgarh	274.76	5.29
10	Assam	179.70	3.46
	All States	5191.58	100

Source: DGC&S, Kolkata and author's calculation

Note: See for all states(Appendix Table-4.10 A)

Table 4.10 shows that 2018-19 witnessed a decline in the overall imports, this year total value of imports via rail remained at 5191.58 Cr which was in the previous year at 146981.43 Cr this is a decline of more than 96 percent. This reduction is evident in the figures of individual state wise data as well. In this year Haryana, Bihar, Gujarat and Maharashtra played dominant role in U.P's import.

Table 4.11: Total Import from of Uttar Pradesh from other top four states 2015-16 to 2018-19

Sl.No.	State/UTs	2015-16	2016-17	2017-18	2018-19	CAGR (%)
1	Gujarat	20629.37	20227.56	23333.72	558.58	30.03
2	Haryana	19991.52	18800.93	21825.10	660.86	32.09
3	Odisha	19694.58	12323.15	16429.38	90.71	16.64
4	Madhya Pradesh	19347.65	19374.46	23181.01	615.63	31.69
5	West Bengal	14776.52	15929.44	13898.15	441.79	31.04
	All the states	128733.32	128403.65	146981.43	5191.58	34.29

Source: DGCIS, Kolkata and author's calculation

Details of data for all Commodities (see Appendix Table-4.11 A)

It is evident from the composite table (See appendix 4.11A) of all the years representing import to Uttar Pradesh from other states that in 2018-19 there was a decline in the import from all states. As we all know that in 2017 GST was implemented all across India and the year 2018-19 witnessed its immediate impact. The import in terms of total value from all states remained restricted in hundreds (crore) figures. Imports from Andhra Pradesh dipped from 3337.45 Cr in 2017-18 to 39.94Cr in 2018-19 which is a massive decline of 98.8 percent (see Appendix Table-4.11 A).

The trend also represents a shift from the routine import partner states, for example till 2017-18 there was no import from Bihar but in the year 2018-19 the import worth 618.77 Cr took place. Similar is the case with Jammu and Kashmir and Tripura where there was no import in the previous years but in 2018-19 it was at 59.09 Cr and 11.44 Cr respectively.

If we analyse the of (table 4.7, 4.8,4.9,4.10) imports of Uttar Pradesh by rail in year 2015-16 to 2017-2018,it imported heavily goods from four top states of Gujarat, Madhya Pradesh, Haryana and Odisha. But in year 2018-19 there was an exception where West Bengal has come in at the place of Odisha with other top states i.e Gujarat, Madhya Pradesh, Haryana.

Sate wise Export of Uttar Pradesh 2015-2019

Table 4.12: Top Ten State-wise export from U.P in the FY 2015-16

Export (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	38328.06	31.43
2	Madhya Pradesh	12059.95	9.89
3	Rajasthan	11886.19	9.75
4	Bihar	10069.25	8.26
5	Maharashtra	9480.62	7.77
6	Jammu & Kashmir	9284.91	7.61
7	Andhra Pradesh	4500.92	3.69
8	Chhattisgarh	4400.07	3.61
9	Tamil Nadu	3624.92	2.97
10	West Bengal	2889.72	2.37
	All States	121965.57	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix 4.12A)

Table 4.12 shows the value and percentage share of exports of Uttar Pradesh to other states, the value of total exports in year 2015-16 was 121965.57 Cr. Gujarat emerges as the top export destination for Uttar Pradesh through Railways worth 38328.06 Cr with percentage share of 31.43 percent. Madhya Pradesh (9.89), Rajasthan (9.75) and Bihar (8.26) are some of the top destination of exports from Uttar Pradesh.

The value of trade in terms of exports to Jammu Kashmir was 9284.91 Cr and for Maharashtra it was 9480.62 Cr. From the previous tables studied we can find out that Gujarat is one of the major importing state and exporting state to Uttar Pradesh.

Table4.13: Top Ten State-wise export from U.P in the FY 2016-17

Export (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	40598.94	26.75
2	Madhya Pradesh	32662.93	21.52
3	Bihar	21946.53	14.46
4	Maharashtra	12372.97	8.15
5	Jharkhand	9683.63	6.38
6	Chhattisgarh	5592.67	3.69
7	Rajasthan	5387.46	3.55
8	Jammu & Kashmir	4373.71	2.88
9	Andhra Pradesh	3263.55	2.15
10	West Bengal	2683.38	1.77
	All States	151745.59	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix 4.13A)

Table 4.13 represents the export for the year 2016-17 and the total value of export is 151745.59 which has increased by 29780.02 Cr from the previous year. Gujarat with a total value 40598.94 Cr of export has maximum share. The share of export to Madhya Pradesh has gone up from 9.89 percent to 21.52 percent which means that exports to Madhya Pradesh has increased more than two times. The export share to Bihar has also been increased to 14.46 percent which is a rise of 6.2 percent however the export to Rajasthan in the year 2016-17 has gone down from 11886.19Cr to 5387.46Cr making the percentage share of Rajasthan in total export from 9.75 percent to 3.55 percent. The export share to Jammu and Kashmir has also gone down from 9284.91Cr in 2015-16 to 4373.71Cr in 2016-17 whereas in 2015-16 the export share to Jammu and Kashmir was almost equal to that of Maharashtra. There has been a substantial rise in the share of export to Jharkhand from 379.52Cr in 2015-16 to 9683.63Cr in 2016-17.

Table 4.14 Top Ten State-wise export in the FY 2017-18

Export (in Rs Cr.)			
Sl.No.	State/UTs	2017-18	Share (%)
1	Gujarat	49459.77	25.54
2	Madhya Pradesh	36974.78	19.09
3	Bihar	26512.41	13.69
4	Jharkhand	17528.58	9.05
5	Chhattisgarh	17229.24	8.90
6	Maharashtra	16058.00	8.29
7	West Bengal	5838.03	3.01
8	Rajasthan	4616.93	2.38
9	Assam	3758.50	1.94
10	Kerala	2947.28	1.52
	Total	193681.28	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix 4.14A)

Table 4.14 represents the total value of imports in 2017-18 and the percentage share of various states. The total value worth 193681.28 Cr of export took place in 2017-18 from Uttar Pradesh. The share of export to Gujarat (25.54), Madhya Pradesh (19.09) and Bihar (13.69) together constitute 58.32 percent of the total export from Uttar Pradesh. Apart from these three the other states which have imported considerable from Uttar Pradesh are Jharkhand, Chhattisgarh and Maharashtra in the year 2017-18.

Table4.15: State-wise export in the FY 2018-19

Export (in Rs Cr.)			
Sl.No.	State/UTs	2018-19	Share (%)
1	Madhya Pradesh	2379.70	13.49
2	Haryana	1772.29	10.05
3	Andhra Pradesh	1690.71	9.58
4	Gujarat	1267.29	7.18
5	Odisha	1082.08	6.13
6	Rajasthan	792.37	4.49
7	Punjab	437.67	2.48
8	Karnataka	419.39	2.38
9	Bihar	92.04	0.52
10	Assam	81.62	0.46
	All States	17641.34	100

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix 4.15A)

Table4.15 shows the export for 2018-19 to different states from Uttar Pradesh and it can be seen clearly that there is a decline in the total value of trade in this year when compared to previous year. The value of total trade fell by approximately 90 percent and in the state wise composition of trade this year saw an increase in the export to Jharkhand which went up from 9.05 percent to 26.96 percent. Jharkhand is being followed by Madhya Pradesh (13.49, Haryana (10.05) and Andhra Pradesh (9.58) in terms of trade share.

Table 4.16: State-wise export performance of Uttar Pradesh from 2015-16 to 2018-19

Sl.No.	State/UTs	2015-16	2016-17	2017-18	2018-19	CAGR (%)
	All states	121965.57	151745.59	193681.28	17641.34	52.49

Source: DGCI&S, Kolkata and author's calculation

Note: See for all states (Appendix 4.16A)

Table4.16 shows a compound annual growth rate of export from 2015-16 to 2018-19 Chandigarh ,Delhi and Jharkhand are states where this compound growth of export has been more than hundred percent. The growth of total export from all states across four years is 52.49 percent; this compound annual growth would have been much higher if it had faced the sudden decline in trade in the year 2018-19 (Appendix 4.16A).

If we analyse (table 4.12, 4.13, 4.14 and 4.15), we can find that the important export three destinations of Uttar Pradesh in year of 2015-16, 2016-17 and 2017-18 were Gujarat, Madhya Pradesh and Bihar. But in Year 2018-19 along with common Gujarat and Madhya Pradesh, two other states are coming in are Haryana and Andhra Pradesh.

Table 4.17: State-wise total trade (Import + Export) performance of Uttar Pradesh from 2015-16 to 2018-19

Sl.No.	State/UTs	2015-16	2016-17	2017-18	2018-19	CAGR (%)
1	Andhra Pradesh	6803.18	5520.74	5277.82	1730.64	63.36
2	Assam	3482.95	2834.50	4432.19	261.31	42.18
3	Bihar	10069.25	21946.53	26512.41	710.81	41.33
4	Chandigarh	17.86	179.08	1301.38	34.61	124.66
5	Chhattisgarh	7632.97	13008.87	23511.73	1281.07	55.16
6	Delhi	5.01	0.56	101.52	29.01	179.53
7	Goa	27.63	0.00	0.00	2.96	47.51
8	Gujarat	58957.43	60826.50	72793.49	1825.86	31.40
9	Haryana	22662.17	20271.12	24619.97	2433.15	47.53
10	Himachal Pradesh	0.00	0.00	0.00	5.01	0.00
11	Jammu & Kashmir	9284.91	4373.71	733.92	60.31	18.66
12	Jharkhand	9222.65	21737.44	32366.36	5040.84	81.76
13	Karnataka	4849.71	3168.35	2298.11	483.16	46.36
14	Kerala	2134.61	1837.20	2947.28	29.58	24.02
15	Madhya Pradesh	31407.59	52037.40	60155.79	2995.33	45.69
16	Maharashtra	12723.09	15611.53	20014.08	702.15	38.07
17	Nagaland	14.87	38.98	335.48	15.53	101.46
18	Odisha	22256.17	14863.10	18827.94	1172.78	37.49
19	Punjab	10901.97	10812.54	9260.79	603.07	38.10
20	Rajasthan	16222.04	9668.94	11005.05	1153.79	41.43
21	Tamil Nadu	3638.13	2363.94	3391.47	37.35	21.73
22	Telangana	0.00	0.00	0.00	10.64	0.00
23	Tripura	40.05	9.75	213.30	11.44	65.86
24	Uttarakhand	678.42	425.64	826.47	192.25	65.68
25	West Bengal	17666.24	18612.82	19736.18	2010.27	48.46
	Total	250698.89	280149.24	340662.71	22832.91	44.99

Source: DGCIS&S, Kolkata and author's calculation

Table 4.17 shows the total trade in value terms from 2015-16 to 2018-19 as well as the compound annual growth (CAGR) of trade from all states. Nagaland, Delhi and Chandigarh

have compound annual growth of more than hundred percent. The total CAGR of all states is 44.99 percent this is lesser than the compound growth of exports which was 52.49 percent

Table 4.18: Target and achievement of production of wheat in Uttar Pradesh (2015-16 to 2017-18)

State	2015-16		2016-17		2017-18	
	Target	Achievement	Target	Achievement	Target	Achievement
Uttar Pradesh	30,300	25,425.2	30,050	30,056	30,350	31,879.1
India	94750	92287.6	96500	98510.2	97500	99699.6

Source: Lok Sabha Un-starred Question No 4560, dated on 08-01-2019 (www.Indiastat.com)

If we look at the production target achievement of wheat, we will find out that in the year 2015-16 target could not be achieved which is also reflected in the outward flow of wheat from Uttar Pradesh at 2.78 percent which is much below the level of previous year. The year 2016-17 marked with the achievement of target production saw a marginal decline in the domestic outward flow of wheat which has been taken care by the excess production in the year 2017-18 thus marking an improvement in the export (domestic trade) of wheat to other states at 4.09 percent.

Inland Waterways

Rivers, canals, lakes and coastal areas have been important waterways. The Government of UP also intends to take all necessary action for developing the Ganga Waterways connecting Allahabad, Varanasi and Haldia Sea Port at Kolkata. This will enable the state to derive benefit out of the reliable and cheaper movement of freight through Ganga Waterways.

Table 4.19: Trade byRiver 2017-18 (Figures in Quintals)

Sr. No.	Articles	Bihar			Jharkhand			West Bengal		
		Import	Export	Trade Balance	Import	Export	Trade Balance	Import	Export	Trade Balance
1	Cement	4800	..	-4800	..	2400	2400		2400	2400
2	Crawler Crane	750	..	-750	0		750	750
3	Fly-ash		6000	6000	3000		-3000	3000		-3000
4	Stone Chips	2851000		-2851000		28,51,000	2851000	0
	Total	2856550	6000	-2850550	3000	2853400	2850400	3000	3150	150

Source: DGCI&S, Kolkata October 2019

The trading partner of Uttar Pradesh by River is Bihar, Jharkhand and West Bengal through the river Ganga. Uttar Pradesh in year 2017-18 imported cement, crawler Crane and Stone Chips from Bihar, and exported Fly-ash to it. From Jharkhand Uttar Pradesh imported Fly-ash and in exchange exported cement and stone chips in same year. As partner of West Bengal is concerned, Uttar Pradesh imported Fly-ash and exported cement and crawler Crane in year 2017-18 (table 4.19).

Trade by Airways

Data on air-borne Trade is published by the DGCI&S in its annual publication, Inter-State Movements/Flows of Goods by Rail, River and Air which shows gross weight of cargo moved by air from airport to airport within the country. Only the quantities expressed in gross weight (kgs.) are compiled in respect of the cargo moved. Airlines that collect the airway bills from the consignor or consignee and compile airport-wise cargo movements and supplies data to the DGCI&S in the standard format on financial-year basis⁷.

Amongst all the modes of transport, the biggest advantage that air transport has is that it takes the least time in transporting goods. Therefore it is highly recommended for handling high valued and perishable goods. The major disadvantage which is attached to this mode of transport is that it is very expensive and is unsuitable for transportation of bulk commodities. The carriage of goods in Inter-state Trade by air is primarily governed by factors such as unit value of commodities, need of urgency to deliver on time, perish ability of the commodity, emergency need items etc.

Air transport is the fastest means of transportation, but it is very costly. Air transport has brought about a connectivity revolution in the world. The frictions created by mountainous snow fields or inhospitable desert terrains have been overcome.

⁷<http://mospi.nic.in/63-inter-state-movementflows-goods>

Table 4.20 Export and Import of Uttar Pradesh with other states 2016-17 (Figures in Kg)

Sr. No	States	Import	% Share	Export	% Share
1	MAHARASHTRA	864806	28.87	2196675	31.45
2	DELHI	773148	25.81	3179705	45.52
3	WEST BENGAL	496485	16.58	258015	3.69
4	KARNATAKA	386566	12.91	713611	10.22
5	TELANGANA	297184	9.92	329852	4.72
6	BIHAR	80238	2.68	3731	0.05
7	TAMIL NADU	66310	2.21	192264	2.75
8	GUJARAT	15709	0.52	104972	1.50
9	ASSAM	7756	0.26	223	0.00
10	ORISSA	5845	0.20	1971	0.03
11	GOA	761	0.03	443	0.01
12	MADHYA PRADESH	197	0.01	339	0.00
13	UTTARAKHAND	98	0.00	2593	0.04
14	JHARKHAND	0	0.00	1310	0.02
15	KERALA	0	0.00	12	0.00
	Total	2995103	100.00	6985716	100

Source: DGCI&S, Kolkata

However the 75 percent share of Uttar Pradesh's total export by Air was going to the destination of Maharashtra and Delhi, whereas the import is more than 54 percent of total import from same destination in year 2016-17 (table 4.20).

Table 4.21 Export and Import of Uttar Pradesh with other states 2017-18 (Figures in Kg)

	States	Import	% Share	Export	% Share
1	DELHI	3319241	42.70	13,11,603	37.48
2	MAHARASHTRA	2049642	26.37	8,28,606	23.68
3	KARNATAKA	940534	12.10	3,65,235	10.44
4	ANDHRA PRADESH	451144	5.80	2,63,878	7.54
5	WEST BENGAL	411773	5.30	3,14,588	8.99
6	TAMIL NADU	322128	4.14	1,83,076	5.23
7	GUJARAT	239357	3.08	76,162	2.18
8	MADHYA PRADESH	11020	0.14	5,115	0.15
9	BIHAR	5568	0.07	66,467	1.90
10	GOA	4889	0.06	3,578	0.10
11	ASSAM	4096	0.05	46,487	1.33
12	UTTARAKHAND	3607	0.05	873	0.02
13	KERALA	3028	0.04	3,531	0.10
14	CHANDIGARH	1870	0.02	418	0.01
15	RAJASTHAN	1614	0.02	2,934	0.08
16	CHATTISGARH	1036	0.01	978	0.03
17	JHARKHAND	1035	0.01	15,344	0.44
18	ODISHA	909	0.01	7,101	0.20
19	JAMMU & KASHMIR	487	0.01	1,276	0.04
20	TRIPURA	158	0.00	77	0.00
21	PUNJAB	134	0.00	0	0.00
22	MANIPUR	11	0.00	2,086	0.06
23	ANDAMAN & NICOBAR		0.00	243	0.01
	Total	7773328	100.00	34,99,703	100.00

Source: DGCI&S, Kolkata

As the year 2017-18 is concerned, the more than 68% of total import is coming from Delhi and Maharashtra and more than 61% export is going to the same destination from Uttar Pradesh table 4.21.

Table 4.22: State-wise Trade by Air in 2018-19

Sl.No.	States/UTs	Trade by Air in 2018-19 (figures in Kgs)					
		Import	Share (%)	Export	Share (%)	Total Trade	Share (%)
1	Delhi	975495.22	30.07	3406562.79	42.81	4382058.01	39.12
2	Maharashtra	732247.44	22.57	1871237.21	23.51	2603484.65	23.24
3	Karnataka	731845.80	22.56	1255802.23	15.78	1987648.03	17.74
4	Telangana	208434.49	6.43	406463.86	5.11	614898.35	5.49
5	Tamil Nadu	203564.87	6.28	389859.59	4.90	593424.46	5.30
6	West Bengal	226019.24	6.97	306161.69	3.85	532180.94	4.75
7	Gujarat	75572.99	2.33	260488.42	3.27	336061.42	3.00
8	Bihar	32473.48	1.00	6373.09	0.08	38846.57	0.35
9	Rajasthan	14922.24	0.46	7924.04	0.10	22846.27	0.20
10	Jammu & Kashmir	17250.94	0.53	2109.00	0.03	19359.94	0.17
11	Goa	2610.40	0.08	15960.47	0.20	18570.87	0.17
12	Assam	12272.00	0.38	5840.00	0.07	18112.00	0.16
13	Uttarakhand	3259.00	0.10	8004.00	0.10	11263.00	0.10
14	Madhya Pradesh	2632.50	0.08	5554.80	0.07	8187.30	0.07
15	Kerala	2125.45	0.07	5584.88	0.07	7710.33	0.07
16	Jharkhand	2245.10	0.07	1145.00	0.01	3390.10	0.03
17	Chandigarh	193.00	0.01	2080.00	0.03	2273.00	0.02
18	Chhattisgarh	369.00	0.01	1013.00	0.01	1382.00	0.01
19	Odisha	159.00	0.00	0.00	0.00	159.00	0.00
20	Andhra Pradesh	125.00	0.00	0.00	0.00	125.00	0.00
	Total	3243817.15	100.00	7958164.08	100.00	11201981.24	100.00

Source: DGCIS, Kolkata and author's calculation

It is very obvious that trade through airways will be high with states which have good airports and other support infrastructure to support the air cargo. The total trade through airways for 2018-19 is 11201981.24k.g. From the table 4.22 it is evident that total trade with Delhi is highest with 4382058.01 with a percentage share of 39.12 percent. Maharashtra and Karnataka hold the second and third position respectively with a share of 23.24 and 17.74 percent. Delhi, Maharashtra, Karnataka, Telangana, Tamil Nadu and west Bengal together comprise approximately 95.64 percent of total trade of Uttar Pradesh through airways.

Chapter 5

Interstate Trade by Road

Introduction

Railways and road transport dominate the transportation system in our country. From the time of independence railways has dominated as a mode of transport for both passenger and freight but in the recent past we have been witnessing a change in this trend. Now roadways has come up as a favourite choice for transporters this is because of the centralised ownership and administrative set-up of railways and waterways. One of the characteristic of the goods carried by road transport is poor database maintenance. As we know that road transport is mainly is in the hands of private operators with lakhs of mini-truck operators. These operators most of the time do not maintain road transport statistics partly due to limited resources, and partly to avoid tax.

Inter-State Trade Statistics provides an idea about the demand of commodities produced in a State along with flow thereof to other States. Internal trade in India accounts to less than 15% of GDP, which is one of the lowest in the world⁸. As per ministry of statistics and programme implementation “there has been a substantial growth in the Inter-State Trade but the system of data collection in this field has not developed to get the comprehensive coverage⁹.”

Though India has the second largest road network in the world, however the growth rate of road development is slow compared to the growth of freight traffic on road. A joint study report by Transport Corporation of India and Indian Institute of Management Calcutta released estimates that India incurs costs of \$14.7 billion and \$6.6 billion annually due to additional fuel consumption costs and transportation delays, respectively¹⁰.

Trade through Roadways

Owing to the immense sizes and diversity of the local economies and considerable potential for trade, understanding the drivers of trade between the States in India therefore, constitutes an important exercise. However, attention in this regard (even by the State governments) has

⁸Manuranupam (2015). “ Problem with movement of goods within India”, *TheTakshashila community blog*, <http://logos.nationalinterest.in/2015/07/movement-goods-within-india/>

⁹ Interstate movement flow of goods/ home page <http://mospi.nic.in/63-inter-state-movementflows-goods>

¹⁰<https://www.livemint.com/Opinion/4AedXUs70XVpGd3nO1nN6J/On-the-highway-to-a-better-trade-regime.html>

been sparse highlighted by the fact that as of yet, Government of India does not even collect inter-state trade data on road transported goods¹¹.

Table 5.1 Import of Uttar Pradesh 2015-16 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount in Crore	Share
1	NAGALAND	233042.39	40.9
2	MANIPUR	65950.70	11.6
3	MAHARASHTRA	37455.82	6.6
4	HARYANA	34064.55	6.0
5	DELHI	22308.46	3.9
6	GUJARAT	19387.78	3.4
7	UTTARAKHAND	17245.52	3.0
8	MADHYA PRADESH	14881.65	2.6
9	RAJASTHAN	14547.82	2.6
10	TAMIL NADU	13407.48	2.4
	Total	569236.05	100.0

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Table 5.1 shows the import of goods through road in Uttar Pradesh in year 2015-16, The total amount of import that took place was of 5,69,236.05 Cr. The states from where more than half of imports came to Uttar Pradesh were Nagaland (233042.39), and Manipur (65950.70) these two together hold 52.5 percent share of imports. This table only shows the top ten states from where imports had come, thus the total value of trade is not the sum total of just these ten states.

Table 5.2 Import of Uttar Pradesh 2016-17 by Road (in Rs. Crore)

Sr.no	State wise/others	Amount	Share
1	HARYANA	77782.55	18.6
2	MAHARASHTRA	63168.63	15.1
3	GUJARAT	29325.37	7.0
4	DELHI	25339.43	6.1
5	GOA	25339.43	6.1
6	UTTARAKHAND	20045.86	4.8
7	MADHYA PRADESH	17816.95	4.3
8	RAJASTHAN	16897.48	4.0
9	TAMIL NADU	14765.51	3.5
10	WEST BENGAL	12669.55	3.0
	Total	417359.91	100.0

¹¹ Reported in the Economic Times of March 13 2013 where the Director General of Directorate General of Commercial Intelligence and Statistics quotes, "we presently compile data on interstate trade through railways, river, air and sea. Statistics of interstate movement of goods by road is not collected by any agency and has never been done before".

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

According to table 5.2 total amount of Import in 2016-17 was 417359.91 Cr and unlike the previous year this year the north eastern states of Nagaland and Manipur do not hold fall in top ten exporter to Uttar Pradesh, This year from Haryana import worth 77782.55 Cr are imported through road. Import from Maharastra was second highest with a share of 15.1 percent.

Table 5.3 Import of Uttar Pradesh 2017-18 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	CHATTISGARH	795036.45	79.7
2	HARYANA	73953.42	7.4
3	KARNATAKA	22192.41	2.2
4	HIMACHAL PRADESH	19766.79	2.0
5	MAHARASHTRA	13311.27	1.3
6	GUJARAT	7763.20	0.8
7	DELHI	6849.31	0.7
8	UTTARAKHAND	6766.74	0.7
9	PUDUCHERRY	6573.37	0.7
10	MADHYA PRADESH	4521.18	0.5
	Total	99722.82	100

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

It is evident from Table 5.3 that Chhattisgarh holds the maximum share of imports to Uttar Pradesh with total amount of 795036.45 Cr with import share of 79.7 percent in 2017-18. In the year imports from Haryana have declined in terms of value by 3829.13 Cr and its share in total import has dipped from 18.6 percent to 7.4 percent.

Table 5.4 Import of Uttar Pradesh 2018-19 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	Andhra Pradesh (New)	947938.75	31.7
2	Maharashtra	913564.39	30.5
3	Assam	889067.64	29.7
4	Delhi	94846.55	3.2
5	Bihar	73235.83	2.4
6	Chhattisgarh	17348.78	0.6
7	Chandigarh	13014.69	0.4
8	Gujarat	11592.59	0.4
9	Dadra and Nagar Haveli	8758.06	0.3
10	Haryana	6609.05	0.2
	Total	2994526.07	100.0

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Table 5.4 shows the top ten states from where the Uttar Pradesh imported various goods through road ways in 2018-19. The total import worth 2994526.07Cr was imported by Uttar Pradesh and in this import approximately 90 percent came from these three states namely Andhra Pradesh (31.7), Maharashtra (30.5) and Assam (29.7).

It is important to mention here that in our analysis of trade through railways the import via rail in 2018-19 had declined massively it was only 5191.58 Cr which had declined close to 90 percent in comparison of previous years.

Table 5.5 Export of Uttar Pradesh 2018-19 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	Andhra Pradesh (New)	345558962.20	99.948
2	Andaman and Nicobar Islands	50840.47	0.015
3	Assam	41769.00	0.012
4	Delhi	33612.25	0.010
5	Bihar	32285.83	0.009
6	Chandigarh	4769.84	0.001
7	Chhattisgarh	4088.00	0.001
8	Gujarat	2212.99	0.001
9	Arunachal Pradesh	2210.33	0.001
10	Haryana	2086.28	0.001
	Total	345739309.04	100.000

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Note: See for all states (Appendix Table-5.5A)

Table 5.5 shows the Export from Uttar Pradesh to other states in through road ways, and a considerably very high share of total export goes to Andhra Pradesh. In terms of value it is 345558962.20 Cr and when analysed in terms of share of total export it is 99.94 percent. Andman& Nicobar (50840.47), Assam (41769.00), Delhi (33612.25) and Bihar (32285.83) are the other top four export destinations of Uttar Pradesh through road route. While doing the analyses of import of Uttar Pradesh via road for 2018-19 we found out that Andhra Pradesh was the top destination of import for Uttar Pradesh, the share of import from Andhra Pradesh was 31.7 percent (table 5.4), and Assam, Delhi and Bihar were among the other top five states in import of Uttar Pradesh.

By adding the total value of import and export from the respective tables we can sum up the total trade of Uttar Pradesh through road ways ,the total value of import was 2994526.07 Cr and of export it is 34,57,39,309.04 Cr which makes the total value of trade **34,87,33,835** Cr for financial year 2018-19.

After looking at the imports of Uttar Pradesh from 2015-16 to 2018-19 we can see that Haryana Maharastra and Gujarat are some of the major states from where Uttar Pradesh has been consistently importing and in the year 2018-19 Andhra Pradesh has emerged as a major trading partner both in terms of import (31.7 percent) and export(99.94).

Table 5.6: State-wise trade performance of Uttar Pradesh in 2018-19

Sl. No.	States/UTs	Trade by Road 2018-19 (value in Rs. Cr)					
		Import	Share (%)	Export	Share (%)	Total Trade	Share (%)
1	Andhra Pradesh*	3279.46	0.00	50840.47	99.95	345559539.66	99.09
2	Telangana	0.00	31.69	345559539.66	0.00	948138.09	0.27
3	Assam	2147.38	29.72	2210.33	0.01	930836.64	0.27
4	Maharashtra	889067.64	30.54	41769.00	0.00	915354.09	0.26
5	Delhi	73235.83	3.17	32285.83	0.01	128469.14	0.04
6	Bihar	13014.69	2.45	4769.84	0.01	105521.66	0.03
7	Andaman and Nicobar Islands	17348.78	0.11	4088.00	0.01	54119.92	0.02
8	Chhattisgarh	8758.06	0.58	1028.85	0.00	21436.77	0.01
9	Chandigarh	5056.15	0.44	362.88	0.00	17784.53	0.01
10	Gujarat	94856.88	0.39	33612.25	0.00	13805.57	0.00
11	Dadra and Nagar Haveli	136.71	0.29	34.18	0.00	9786.91	0.00
12	Haryana	11592.59	0.22	2212.99	0.00	8695.33	0.00
13	Daman and Diu	6609.05	0.17	2086.28	0.00	5419.03	0.00
14	Arunachal Pradesh	167.97	0.07	282.54	0.00	4357.71	0.00
15	Karnataka	40.75	0.04	55.90	0.00	1951.26	0.00
16	Madhya Pradesh	887.86	0.04	84.40	0.00	1586.86	0.00
17	Jharkhand	1216.81	0.03	734.45	0.00	972.27	0.00
18	Punjab	85.02	0.02	70.10	0.00	755.06	0.00
19	Rajasthan	1161.72	0.02	425.14	0.00	725.35	0.00
20	Himachal Pradesh	913564.39	0.01	1789.69	0.00	450.51	0.00
21	Odisha	0.00	0.01	0.29	0.00	316.67	0.00
22	Uttarakhand	0.81	0.00	10.00	0.00	230.60	0.00
23	Goa	0.00	0.00	0.68	0.00	170.89	0.00
24	Kerala	0.15	0.00	0.24	0.00	155.11	0.00
25	West Bengal	266.60	0.00	50.07	0.00	125.16	0.00
26	Jammu and Kashmir	16.83	0.00	2.63	0.00	96.65	0.00
27	Tamil Nadu	614.77	0.00	140.30	0.00	88.20	0.00
28	Pondicherry	557.29	0.00	168.06	0.00	19.46	0.00
29	Meghalaya	0.00	0.00	0.91	0.00	10.81	0.00

Sl. No.	States/UTs	Trade by Road 2018-19 (value in Rs. Cr)					
		Import	Share (%)	Export	Share (%)	Total Trade	Share (%)
30	Sikkim	0.00	0.00	88.20	0.00	0.91	0.00
31	Mizoram	947938.75	0.00	199.35	0.00	0.68	0.00
32	Tripura	0.00	0.00	0.46	0.00	0.46	0.00
33	Nagaland	0.00	0.00	230.60	0.00	0.39	0.00
34	Manipur	0.00	0.00	125.16	0.00	0.29	0.00
	Total	2991622.93	100.00	345739299.72	100.00	348730922.65	100.00

Source: DGCIS, Kolkata and author's calculation

Note: a-Value of Andhra Pradesh (New) and Andhra Pradesh have been merged under Andhra Pradesh State for Exports 2018-19

Table 5.6 shows a combined analysis of import and export to and from Uttar Pradesh through roadways for the year 2018-19. Andhra Pradesh alone accounts for a total share of 99.09 percent of the total trade which includes both imports and exports. The value of total trade in 2018-19 was 348730922.65 Cr.

Table 5.7 Combined wise of Uttar Pradesh in Year 2016-17

Sl.No.	Commodities wise	Import Value (2016-17)	
		Value	Share (%)
1	Motor Vehicle (2 & 4 wheelers) and their parts	74355.24	19.58
2	All types of electronic goods	62199.47	16.38
3	All types of electrical goods	38540.98	10.15
4	All types of Chemicals	35683.81	9.40
5	Iron and Steel defined under CST, 1956 (article 14)	33727.99	8.88
6	Medicines	33644.19	8.86
7	Machinery and Machinery parts	26065.05	6.86
8	Cement	14134.40	3.72
9	Refined oil, Vanaspati, Palm oil and other edible oil	13623.14	3.59
10	All types of Cosmetics	7533.52	1.98
11	Cereal, oilseeds and pulses	6366.41	1.68
12	All types of Fertilizers	6328.58	1.67
13	All types of Tyre Tubes	4156.65	1.09
14	Paper	3720.82	0.98
15	Lubricants	3628.17	0.96
16	Coal	3533.61	0.93
17	All types of Soaps and Detergents	3049.53	0.80

Sl.No.	Commodities wise	Import Value (2016-17)	
		Value	Share (%)
18	Paint and Varnish	2707.34	0.71
19	Biscuits and Confectionaries	2031.54	0.53
20	Kirana, Katha and Supari	1567.63	0.41
21	Paan Masala	1035.07	0.27
22	Wood and Timber	992.79	0.26
23	Rodi Gitti	305.81	0.08
24	Soda water, Cold drinks and Soft drinks	287.33	0.08
25	Balu/Reta	239.91	0.06
26	Cycle and Cycle parts	213.54	0.06
27	Mentha oil and Menthol	60.78	0.02
28	Mourang	6.91	0.00
29	Patia Paththar	0.06	0.00
30	Khanda Paththar(Emaarti paththar ko chhod k)	0.01	0.00
	Toal	379740.28	100.00

Table 5.8 Combined wise of Uttar Pradesh in Year 2016-17

Sl.No.	Commodities wise	Import Value (2015-16)	
		Value	Share (%)
1	Motor Vehicle (2 & 4 wheelers) and their parts	57445.39	20.50
2	All types of electronic goods	49708.09	17.74
3	Iron and Steel defined under CST, 1956 (article 14)	30572.19	10.91
4	All types of electrical goods	23710.78	8.46
5	Medicines	23409.64	8.36
6	Machinery and Machinery parts	18997.70	6.78
7	All types of chemicals	15469.73	5.52
8	cement	10788.47	3.85
9	Refined oil, Vanaspati, Palm oil and other edible oil	10167.94	3.63
1	All types of Cosmetics	6222.06	2.22
11	All types of Fertilizers	5199.33	1.86
12	Cereal, oilseeds and pulses	4898.07	1.75
13	All types of Tyre Tubes	3724.91	1.33
14	Lubricants	3112.56	1.11
15	Paper	2945.84	1.05
16	Paint and Varnish	2709.76	0.97

Sl.No.	Commodities wise	Import Value (2015-16)	
		Value	Share (%)
17	coal	2697.82	0.96
18	All types of Soaps and Detergents	2519.64	0.90
19	Biscuits and Confectionaries	2381.97	0.85
20	Kirana, Katha and Supari	1242.93	0.44
21	Wood and Timber	767.83	0.27
22	Paan Masala	755.16	0.27
23	Cycle and Cycle parts	248.76	0.09
24	Rodi Gitti	181.34	0.06
25	Soda water, Cold drinks and Soft drinks	179.27	0.06
26	Mentha oil and Menthol	56.13	0.02
27	Balu/Reta	43.46	0.02
28	Mourang	2.92	0.00
	Total value	280159.69	100.00

Chapter 6

Findings and Conclusion

The value of total trade of Uttar Pradesh has increased both in international as well as inter-state trade (domestic trade) .

International Trade from Uttar Pradesh

Now (2018-19) top 12 commodities exported from Uttar Pradesh are comprise more than 50% value of total export of U.P (Table6.1). They are Buffalo Meat, Telecom Instruments, Gold and Other Precious Metal, Jewellery, Products of Iron and Steel, Iron and Steel, Including Machinery for Dairy etc., Footwear of Leather, Petroleum Products, Auto Components/Parts, Rmg Cotton Incl. Accessories, Aluminium, and Products of Aluminium.

Table 6.1: International Export of Principal Commodities from Uttar Pradesh (2018-19)

(Rs. in Crore)

1	Commodities	Uttar Pradesh	India	UP %	India %
2	Buffalo Meat	12830.37	25091.43	16.00	1.09
3	Telecom Instruments	7848.1	19038.94	9.79	0.83
4	Gold and Other Precious Metal Jewellery	3375.86	90313.39	4.21	3.92
5	Products of Iron and Steel	3181.71	50774.4	3.97	2.20
6	Iron and Steel	2382.42	68067.06	2.97	2.95
7	Incl. Machinery For Dairy etc.	2352.42	41151.35	2.93	1.79
8	Footwear of Leather	2240.79	15351.34	2.80	0.67
9	Petroleum Products	2207.9	324822.2	2.75	14.10
10	Auto Components/Parts	1657.12	40464.8	2.07	1.76
11	Rmg Cotton Incl. Accessories	1558.69	60721.45	1.94	2.64
12	Aluminium, Products of Aluminium	1551.11	40069.16	1.93	1.74

Source: Indiatat.com

Internal Trade of Uttar Pradesh (2018-19)

Table 6.2: Combined trade performance of Uttar Pradesh in 2018-19 (Rail+Road)

SL.No.	States/UTs	Road (2018-19)				Rail (2018-19)				U.P. Total Trade (2018-19)	
		Import	Share (%)	Export	Share (%)	Import	Share (%)	Export	Share (%)	Total	Share (%)
1	Andhra Pradesh ⁴	0.00	0.00	345559539.66	99.95	39.94	0.77	1690.71	9.58	345561270.31	99.08
2	Telangana	947938.75	31.69	199.35	0.00	9.30	0.18	1.34	0.01	948148.73	0.27
3	Assam	889067.64	29.72	41769.00	0.01	179.70	3.46	81.62	0.46	931097.96	0.27
4	Maharashtra	913564.39	30.54	1789.69	0.00	542.84	10.46	159.31	0.90	916056.24	0.26
5	Delhi	94856.88	3.17	33612.25	0.01	4.18	0.08	24.83	0.14	128498.15	0.04
6	Bihar	73235.83	2.45	32285.83	0.01	618.77	11.92	92.04	0.52	106232.47	0.03
7	Andaman and Nicobar Islands	3279.46	0.11	50840.47	0.01	0.00	0.00	0.00	0.00	54119.92	0.02
8	Chhattisgarh	17348.78	0.58	4088.00	0.00	274.76	5.29	1006.31	5.70	22717.84	0.01
9	Chandigarh	13014.69	0.44	4769.84	0.00	2.38	0.05	32.22	0.18	17819.13	0.01
10	Gujarat	11592.59	0.39	2212.99	0.00	558.58	10.76	1267.29	7.18	15631.44	0.00
11	Haryana	6609.05	0.22	2086.28	0.00	660.86	12.73	1772.29	10.05	11128.48	0.00
12	Dadra and Nagar Haveli	8758.06	0.29	1028.85	0.00	0.00	0.00	0.00	0.00	9786.91	0.00
13	Jharkhand	887.86	0.03	84.40	0.00	283.98	5.47	4756.86	26.96	6013.10	0.00
14	Daman and Diu	5056.15	0.17	362.88	0.00	0.00	0.00	0.00	0.00	5419.03	0.00
15	Madhya Pradesh	1161.72	0.04	425.14	0.00	615.63	11.86	2379.70	13.49	4582.19	0.00
16	Arunachal Pradesh	2147.38	0.07	2210.33	0.00	0.00	0.00	0.00	0.00	4357.71	0.00
17	Karnataka	1216.81	0.04	734.45	0.00	63.77	1.23	419.39	2.38	2434.42	0.00
18	West Bengal	0.00	0.00	125.16	0.00	441.79	8.51	1568.48	8.89	2135.43	0.00
19	Rajasthan	557.29	0.02	168.06	0.00	361.42	6.96	792.37	4.49	1879.14	0.00
20	Odisha	266.60	0.01	50.07	0.00	90.71	1.75	1082.08	6.13	1489.45	0.00
21	Punjab	614.77	0.02	140.30	0.00	165.40	3.19	437.67	2.48	1358.14	0.00
22	Himachal Pradesh	167.97	0.01	282.54	0.00	0.06	0.00	4.95	0.03	455.51	0.00
23	Uttarakhand	0.00	0.00	230.60	0.00	124.54	2.40	67.71	0.38	422.85	0.00
24	Kerala	85.02	0.00	70.10	0.00	29.58	0.57	0.00	0.00	184.69	0.00
25	Goa	136.71	0.00	34.18	0.00	0.00	0.00	2.96	0.02	173.85	0.00
26	Jammu and Kashmir	40.75	0.00	55.90	0.00	59.09	1.14	1.23	0.01	156.96	0.00
27	Tamil Nadu	0.00	0.00	88.20	0.00	37.35	0.72	0.00	0.00	125.55	0.00
28	Pondicherry	16.83	0.00	2.63	0.00	0.00	0.00	0.00	0.00	19.46	0.00
29	Nagaland	0.15	0.00	0.24	0.00	15.53	0.30	0.00	0.00	15.91	0.00
30	Tripura	0.00	0.00	0.46	0.00	11.44	0.22	0.00	0.00	11.90	0.00
31	Meghalaya	0.81	0.00	10.00	0.00	0.00	0.00	0.00	0.00	10.81	0.00
32	Sikkim	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.91	0.00
33	Mizoram	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.68	0.00
34	Manipur	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.29	0.00
	Total	2991622.93	100.00	345739299.72	100.00	5191.58	100.00	17641.34	100.00	348753755.56	100.00

As per the existing literature, the top commodities which are traded among states covering around 90 percent of total inter-state trade are rice not in the husk, rice in the husk, wheat, iron and steel, cement, lime and lime stone, fertilizers and organic manure, iron ore, coal and coke. Uttar Pradesh comprises a significant portion in total inland trade of the country. For instance, the total interstate movement of rice not in husk was 19.53 crore quintals in 2004-05 out of which 1.94 quintals (10%) was flown from Uttar Pradesh. Similarly, Uttar Pradesh contribution in total outward movement of wheat was 17.1 percent during the same year.

The most populous state of India will be the driver of economic growth for the subcontinent in a big way in emerging years. The arguments bring out lucidly that the basic ecosystem of growth is already in place. There is necessity to have determination, focus and commitment to make UP a huge economic powerhouse to become Indian subcontinent's next growth engine. Besides the International open border of U.P. with Nepal can be an opportunity to trade with Nepal. The population of Nepal can be a potential opportunity for Uttar Pradesh due to its historicity, culture and tourism.

Recommendation of Suggestions

- (1) Uttar Pradesh should increase its capacity of higher ratio of trade as a percentage of GSDP as like Uttarakhand, Himachal Pradesh and Goa. The potential of factors of production (land, labour capital & organization) is huge and substantive in case of Uttar Pradesh. The study suggests that to meet the trillion economy it is inevitable to
- (2) Make reverse migration of Uttar Pradesh labour these working in other states.
- (3) Utilise and give employment to those who already got training under Skill Development of Programme of NSDC, PMKVY and DDU-GKY
- (4) Utilisation of capital and foreign direct investment (FDI) can be enhanced by initiating sub-national diplomacy with other countries under Government of India guidelines. The current era is favourable in part of Uttar Pradesh where similar government is ruling in centre and state under the banner of BJP (Bharatiya Janta Party).
- (5) It is also required to meet the guidelines of investors — whether the FDI, portfolio investment or domestic investors— by keeping interests of state as well as people.
- (6) The Geographical location of Uttar Pradesh and its proximity with Delhi,

bordering with Nepal and other nine states is a very good advantage that will create tremendous domestic demand. The natural flow of Ganga River is also helpful not only to industrial products but also can be used to navigation and transporting commodities to those states which have proximity to the River. Uttar Pradesh is the biggest land mass with abundant natural resources (limestone, dolomite, glass-sand, marble, bauxite, non-plastic fireclay, and Uranium), fertile land and river basins, water resources, extensive canal system and conducive agro-climatic conditions in India which is plenty to establish industries.

- (7) After all the positive, consistent political 'will' can make success of long cherished dream of the people of the state. The time is favourable for Uttar Pradesh locally, nationally and in international arena in this outbreak of COVID-19 pandemic.
- (8) It is wise to understand the trade barriers and the cost when we are making domestic trade. Taking favourable steps and making good relations with destination state is the good strategy of a Government at rule.
- (9) It is also equally important to understand what factors influence higher ratio of internal trade? The answer is given by the 'standard gravity model' of trade, which tells that bigger countries trade more within their own borders than beyond them. So Uttar Pradesh is a large state having biggest size of its market. Largest population means largest demand of goods & commodities.

To fulfil the demand and aspiration of people is prudent and wise duty of state to make progress in production and trade to provide freedom of development to its people.

Competitive federalism is a key element of India's future growth for that designing a system that foster trade within our country is important. Interstate trade can reduce our reliance on international trade and hence will make us less volatile to international market fluctuations. If enough priority is given to Interstate trade by our policy makers then it has the potential of reducing unemployment and making a self reliant nation.

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Appendix

Chapter-4

Table 4.15A: Performance of Uttar Pradesh among other states in India in 2016-17

Sl. No.	Trade Blocks	2016-17					
		Inward		Outward		Total Trade	
		Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share
1	ODISHA	280.49	3.64	1446.21	18.76	1726.70	11.20
2	ANDHRA PRADESH	660.13	8.56	894.34	11.60	1554.47	10.08
3	CHATTISGARH	429.36	5.57	1120.30	14.53	1549.66	10.05
4	MAHARASHTRA	938.97	12.18	433.07	5.62	1372.04	8.90
5	WEST BENGAL	862.75	11.19	369.61	4.79	1232.35	7.99
6	UTTAR PRADESH	606.14	7.86	545.89	7.08	1152.02	7.47
7	GUJARAT	528.72	6.86	613.10	7.95	1141.82	7.41
8	JHARKHAND	560.19	7.27	538.43	6.98	1098.62	7.12
9	KARNATAKA	635.12	8.24	320.44	4.16	955.56	6.20
10	MADHYA PRADESH	327.19	4.24	437.43	5.67	764.62	4.96
11	RAJASTHAN	360.06	4.67	213.74	2.77	573.80	3.72
12	PUNJAB	257.93	3.35	245.07	3.18	503.00	3.26
13	BIHAR	477.93	6.20	22.43	0.29	500.36	3.25
14	HARYANA	230.11	2.98	200.07	2.60	430.18	2.79
15	TAMIL NADU	182.95	2.37	92.03	1.19	274.98	1.78
16	ASSAM	106.45	1.38	36.40	0.47	142.85	0.93
17	GOA	20.93	0.27	97.43	1.26	118.36	0.77
18	DELHI	76.43	0.99	27.47	0.36	103.89	0.67
19	KERALA	55.75	0.72	25.99	0.34	81.74	0.53
20	UTTARAKHAND	39.30	0.51	11.23	0.15	50.53	0.33
21	JAMMU & KASHMIR	36.02	0.47	1.11	0.01	37.13	0.24
22	TRIPURA	17.85	0.23	14.17	0.18	32.02	0.21
23	CHANDIGARH	7.19	0.09	1.21	0.02	8.40	0.05
24	NAGALAND	6.48	0.08	0.04	0.00	6.52	0.04
25	MIZORAM	1.41	0.02	1.15	0.01	2.56	0.02
26	MANIPUR	1.11	0.01	1.18	0.02	2.30	0.01
27	HIMACHAL PRADESH	1.60	0.02	0.15	0.00	1.74	0.01

Sl. No.	Trade Blocks	2016-17					
		Inward		Outward		Total Trade	
		Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share
28	MEGHALAYA	1.09	0.01	0.03	0.00	1.11	0.01
29	ARUNACHAL PRADESH	0.05	0.00	0.00	0.00	0.05	0.00
30	ANDAMAN & NICOBAR	0.00	0.00	0.00	0.00	0.00	0.00
31	DAMAN & DIU	0.00	0.00	0.00	0.00	0.00	0.00
32	DADRA & NAGAR HAVELI	0.00	0.00	0.00	0.00	0.00	0.00
33	LAKSHADWEEP	0.00	0.00	0.00	0.00	0.00	0.00
34	PUDUCHERRY	0.00	0.00	0.00	0.00	0.00	0.00
35	SIKKIM	0.00	0.00	0.00	0.00	0.00	0.00
36	TELENGANA	0.00	0.00	0.00	0.00	0.00	0.00
Total		7709.70	100	7709.70	100	15419.40	100

Source: DGCI&S, Kolkata

Table 4.16A: Performance of Uttar Pradesh among other states in India in 2018-19

Sl. No.	Trade Blocks	2018-19					
		Inward		Outward		Total Trade	
		Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share
1	JHARKHAND	12635.62	16.11	4789.27	6.11	17424.90	11.11
2	ODISHA	12660.34	16.14	4068.41	5.19	16728.75	10.66
3	CHATTISGARH	10531.99	13.43	3842.28	4.90	14374.27	9.16
4	ANDHRA PRADESH	7365.06	9.39	5515.99	7.03	12881.04	8.21
5	WEST BENGAL	3750.00	4.78	9065.42	11.56	12815.43	8.17
6	UTTAR PRADESH	1927.75	2.46	8494.43	10.83	10422.18	6.64
7	MAHARASHTRA	2377.40	3.03	6903.04	8.80	9280.44	5.92
8	MADHYA PRADESH	4874.07	6.21	3752.90	4.78	8626.97	5.50
9	GUJARAT	5415.93	6.90	2954.39	3.77	8370.31	5.33
10	KARNATAKA	2249.74	2.87	6062.38	7.73	8312.12	5.30
11	RAJASTHAN	3283.02	4.18	4029.06	5.14	7312.07	4.66
12	BIHAR	313.25	0.40	5300.98	6.76	5614.22	3.58
13	HARYANA	1736.86	2.21	3863.82	4.93	5600.69	3.57
14	PUNJAB	2287.93	2.92	2955.83	3.77	5243.75	3.34
15	TELENGANA	3585.87	4.57	970.55	1.24	4556.42	2.90
16	TAMIL NADU	827.98	1.06	2336.23	2.98	3164.21	2.02
17	ASSAM	270.43	0.34	1121.69	1.43	1392.12	0.89
18	GOA	1030.94	1.31	199.26	0.25	1230.20	0.78
19	DELHI	272.68	0.35	715.68	0.91	988.36	0.63

Sl. No.	Trade Blocks	2018-19					
		Inward		Outward		Total Trade	
		Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share	Qty. (in 000' quintals)	% share
20	KERALA	331.20	0.42	462.09	0.59	793.28	0.51
21	PUDUCHERRY	588.91	0.75	0.00	0.00	588.91	0.38
22	UTTARAKHAND	65.54	0.08	441.28	0.56	506.82	0.32
23	JAMMU & KASHMIR	22.68	0.03	287.62	0.37	310.31	0.20
24	TRIPURA	0.98	0.00	173.71	0.22	174.69	0.11
25	CHANDIGARH	13.67	0.02	60.64	0.08	74.31	0.05
26	NAGALAND	13.32	0.02	53.48	0.07	66.81	0.04
27	MANIPUR	7.05	0.01	11.22	0.01	18.27	0.01
28	MIZORAM	1.65	0.00	11.80	0.02	13.45	0.01
29	HIMACHAL PRADESH	6.28	0.01	2.22	0.00	8.50	0.01
30	ARUNACHAL PRADESH	0.07	0.00	2.54	0.00	2.60	0.00
31	ANDAMAN & NICOBAR	0.00	0.00	0.00	0.00	0.00	0.00
32	DAMAN & DIU	0.00	0.00	0.00	0.00	0.00	0.00
33	DADRA & NAGAR HAVELI	0.00	0.00	0.00	0.00	0.00	0.00
34	LAKSHADWEEP	0.00	0.00	0.00	0.00	0.00	0.00
35	MEGHALAYA	0.00	0.00	0.00	0.00	0.00	0.00
36	SIKKIM	0.00	0.00	0.00	0.00	0.00	0.00
Total		78448.21	100	78448.21	100	156896.41	100

Source: DGCI&S, Kolkata

Table 4.17A: Comparative position of Uttar Pradesh in inward movement of goods in both periods

Inward							
Sl. No.	Trade Blocks	2018-19		Sl. No.	Trade Blocks	2016-17	
		Qty. (in 000' quintals)	% share			Qty. (in 000' quintals)	% share
1	ODISHA	12660.34	16.14	1	MAHARASHTRA	938.97	12.18
2	JHARKHAND	12635.62	16.11	2	WEST BENGAL	862.75	11.19
3	CHATTISGARH	10531.99	13.43	3	ANDHRA PRADESH	660.13	8.56
4	ANDHRA PRADESH	7365.06	9.39	4	KARNATAKA	635.12	8.24
5	GUJARAT	5415.93	6.90	5	UTTAR PRADESH	606.14	7.86
6	MADHYA PRADESH	4874.07	6.21	6	JHARKHAND	560.19	7.27
7	WEST BENGAL	3750.00	4.78	7	GUJARAT	528.72	6.86
8	TELENGANA	3585.87	4.57	8	BIHAR	477.93	6.20
9	RAJASTHAN	3283.02	4.18	9	CHATTISGARH	429.36	5.57
10	MAHARASHTRA	2377.40	3.03	10	RAJASTHAN	360.06	4.67
11	PUNJAB	2287.93	2.92	11	MADHYA	327.19	4.24

Inward							
Sl. No.	Trade Blocks	2018-19		Sl. No.	Trade Blocks	2016-17	
		Qty. (in 000' quintals)	% share			Qty. (in 000' quintals)	% share
					PRADESH		
12	KARNATAKA	2249.74	2.87	12	ODISHA	280.49	3.64
13	UTTAR PRADESH	1927.75	2.46	13	PUNJAB	257.93	3.35
14	HARYANA	1736.86	2.21	14	HARYANA	230.11	2.98
15	GOA	1030.94	1.31	15	TAMIL NADU	182.95	2.37
16	TAMIL NADU	827.98	1.06	16	ASSAM	106.45	1.38
17	PUDUCHERRY	588.91	0.75	17	DELHI	76.43	0.99
18	KERALA	331.20	0.42	18	KERALA	55.75	0.72
19	BIHAR	313.25	0.40	19	UTTARAKHAND	39.30	0.51
20	DELHI	272.68	0.35	20	JAMMU & KASHMIR	36.02	0.47
21	ASSAM	270.43	0.34	21	GOA	20.93	0.27
22	UTTARAKHAND	65.54	0.08	22	TRIPURA	17.85	0.23
23	JAMMU & KASHMIR	22.68	0.03	23	CHANDIGARH	7.19	0.09
24	CHANDIGARH	13.67	0.02	24	NAGALAND	6.48	0.08
25	NAGALAND	13.32	0.02	25	HIMACHAL PRADESH	1.60	0.02
26	MANIPUR	7.05	0.01	26	MIZORAM	1.41	0.02
27	HIMACHAL PRADESH	6.28	0.01	27	MANIPUR	1.11	0.01
28	MIZORAM	1.65	0.00	28	MEGHALAYA	1.09	0.01
29	TRIPURA	0.98	0.00	29	ARUNACHAL PRADESH	0.05	0.00
30	ARUNACHAL PRADESH	0.07	0.00	30	ANDAMAN & NICOBAR	0.00	0.00
31	ANDAMAN & NICOBAR	0.00	0.00	31	DAMAN & DIU	0.00	0.00
32	DAMAN & DIU	0.00	0.00	32	DADRA & NAGAR HAVELI	0.00	0.00
33	DADRA & NAGAR HAVELI	0.00	0.00	33	LAKSHADWEEP	0.00	0.00
34	LAKSHADWEEP	0.00	0.00	34	PUDUCHERRY	0.00	0.00
35	MEGHALAYA	0.00	0.00	35	SIKKIM	0.00	0.00
36	SIKKIM	0.00	0.00	36	TELENGANA	0.00	0.00
Total		78448.21	100	Total		7709.70	100

Source: DGCI&S, Kolkata

Table 4.18A: Comparative position of Uttar Pradesh in outward movement of goods in both periods

Outward							
Sl. No.	Trade Blocks	2018-19		Sl. No.	Trade Blocks	2016-17	
		Qty. (in 000' quintals)	% share			Qty. (in 000' quintals)	% share
1	WEST BENGAL	9065.42	11.56	1	ODISHA	1446.21	18.76
2	UTTAR PRADESH	8494.43	10.83	2	CHATTISGARH	1120.30	14.53
3	MAHARASHTRA	6903.04	8.80	3	ANDHRA PRADESH	894.34	11.60
4	KARNATAKA	6062.38	7.73	4	GUJARAT	613.10	7.95
5	ANDHRA PRADESH	5515.99	7.03	5	UTTAR PRADESH	545.89	7.08
6	BIHAR	5300.98	6.76	6	JHARKHAND	538.43	6.98
7	JHARKHAND	4789.27	6.11	7	MADHYA PRADESH	437.43	5.67
8	ODISHA	4068.41	5.19	8	MAHARASHTRA	433.07	5.62
9	RAJASTHAN	4029.06	5.14	9	WEST BENGAL	369.61	4.79
10	HARYANA	3863.82	4.93	10	KARNATAKA	320.44	4.16
11	CHATTISGARH	3842.28	4.90	11	PUNJAB	245.07	3.18
12	MADHYA PRADESH	3752.90	4.78	12	RAJASTHAN	213.74	2.77
13	PUNJAB	2955.83	3.77	13	HARYANA	200.07	2.60
14	GUJARAT	2954.39	3.77	14	GOA	97.43	1.26
15	TAMIL NADU	2336.23	2.98	15	TAMIL NADU	92.03	1.19
16	ASSAM	1121.69	1.43	16	ASSAM	36.40	0.47
17	TELENGANA	970.55	1.24	17	DELHI	27.47	0.36
18	DELHI	715.68	0.91	18	KERALA	25.99	0.34
19	KERALA	462.09	0.59	19	BIHAR	22.43	0.29
20	UTTARAKHAND	441.28	0.56	20	TRIPURA	14.17	0.18
21	JAMMU & KASHMIR	287.62	0.37	21	UTTARAKHAND	11.23	0.15
22	GOA	199.26	0.25	22	CHANDIGARH	1.21	0.02
23	TRIPURA	173.71	0.22	23	MANIPUR	1.18	0.02
24	CHANDIGARH	60.64	0.08	24	MIZORAM	1.15	0.01
25	NAGALAND	53.48	0.07	25	JAMMU & KASHMIR	1.11	0.01
26	MIZORAM	11.80	0.02	26	HIMACHAL PRADESH	0.15	0.00
27	MANIPUR	11.22	0.01	27	NAGALAND	0.04	0.00
28	ARUNACHAL PRADESH	2.54	0.00	28	MEGHALAYA	0.03	0.00
29	HIMACHAL PRADESH	2.22	0.00	29	ARUNACHAL PRADESH	0.00	0.00
30	PUDUCHERRY	0.00	0.00	30	ANDAMAN & NICOBAR	0.00	0.00
31	ANDAMAN & NICOBAR	0.00	0.00	31	DAMAN & DIU	0.00	0.00
32	DAMAN & DIU	0.00	0.00	32	DADRA & NAGAR HAVELI	0.00	0.00
33	DADRA & NAGAR HAVELI	0.00	0.00	33	LAKSHADWEEP	0.00	0.00
34	LAKSHADWEEP	0.00	0.00	34	PUDUCHERRY	0.00	0.00
35	MEGHALAYA	0.00	0.00	35	SIKKIM	0.00	0.00
36	SIKKIM	0.00	0.00	36	TELENGANA	0.00	0.00
Total		78448.21	100	Total		7709.70	100

Source: DGCI&S, Kolkata

Appendix: Chapter-4

4A. Commodity wise and state wise Import and Export by Railway-2015-2018

1. Commodity wise Import

Table 4.2A: Commodity-wise trade in the FY 2015-16

(value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2015-16)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	31314.78	24.325	91564.11	74.578	122878.89	48.857
2	Coal and Coke	24294.02	18.872	203.52	0.166	24497.54	9.740
3	Iron and Steel	16622.61	12.912	1298.23	1.057	17920.84	7.125
4	Fertilizer & Chemical manure	10417.52	8.092	3243.12	2.642	13660.63	5.431
5	Cement	10424.21	8.098	2250.32	1.833	12674.53	5.039
6	Wheat	7909.85	6.144	2252.17	1.834	10162.02	4.040
7	Metal Products	9913.67	7.701	0.00	0.000	9913.67	3.942
8	Other sorts of Grain	14.21	0.011	6330.76	5.156	6344.96	2.523
9	Rice not in the husk (inc Rice Flower)	4946.80	3.843	66.88	0.054	5013.68	1.993
10	Transport Equipment	766.60	0.595	3895.38	3.173	4661.98	1.854
11	Other edible oil	3974.85	3.088	0.00	0.000	3974.85	1.580
12	Marble and stones	11.49	0.009	3848.96	3.135	3860.44	1.535
13	Kerosene	2126.80	1.652	1314.56	1.071	3441.36	1.368
14	Other Forest Products	0.60	0.000	3230.53	2.631	3231.14	1.285
15	Oil seeds (other than cotton)	0.00	0.000	2128.30	1.733	2128.30	0.846
16	Electrical Goods	1292.22	1.004	0.00	0.000	1292.22	0.514
17	Caustic Potash & Soda	1266.24	0.984	0.00	0.000	1266.24	0.503
18	Pulses other than Gram and Gram products	849.19	0.660	101.71	0.083	950.90	0.378
19	Other Ores	560.32	0.435	0.00	0.000	560.32	0.223
20	Spices	495.57	0.385	0.00	0.000	495.57	0.197
21	Oil Cakes	0.00	0.000	490.94	0.400	490.94	0.195
22	Cement Manufactures	327.17	0.254	114.46	0.093	441.63	0.176
23	Sugar	109.22	0.085	211.99	0.173	321.20	0.128
24	Fruits & Vegetables - fresh	97.46	0.076	192.83	0.157	290.29	0.115
25	Gram and Gram products	268.75	0.209	0.00	0.000	268.75	0.107
26	Salt	147.81	0.115	0.00	0.000	147.81	0.059
27	Iron Ore	145.06	0.113	0.00	0.000	145.06	0.058
28	Paints & Varnishes	143.70	0.112	0.00	0.000	143.70	0.057
29	Lime stone, Dolomite and Gypsum	85.42	0.066	18.68	0.015	104.10	0.041
30	Jute Manufactures	73.84	0.057	0.00	0.000	73.84	0.029
31	Machinery and Machine Tools	53.23	0.041	0.00	0.000	53.23	0.021
32	Mustard Oil	44.47	0.035	0.00	0.000	44.47	0.018
33	Maize and Millets	8.72	0.007	12.38	0.010	21.09	0.008
34	Rice in the husk	14.67	0.011	0.00	0.000	14.67	0.006
35	Soap	11.06	0.009	0.00	0.000	11.06	0.004
36	Bamboo	0.00	0.000	5.27	0.004	5.27	0.002
37	Manganese Ore	1.18	0.001	0.00	0.000	1.18	0.000
38	Other Fodder and Husk	0.00	0.000	0.41	0.000	0.41	0.000
	All commodities	128733.32	100	122775.49	100	251508.81	100

Source: DGCI&S, Kolkata and authors calculation

Table 4.3A: Commodity-wise trade in the FY 2016-17

(value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2016-17)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	31166.19	24.272	122656.38	80.830	153822.57	54.907
2	Coal and Coke	26929.92	20.973	179.43	0.118	27109.35	9.677
3	Iron and Steel	18402.60	14.332	954.59	0.629	19357.19	6.910
4	Fertilizer & Chemical manure	10841.03	8.443	3339.51	2.201	14180.54	5.062
5	Wheat	9765.92	7.606	1986.45	1.309	11752.37	4.195
6	Cement	10659.28	8.301	492.21	0.324	11151.49	3.981
7	Other sorts of Grain	42.58	0.033	5290.53	3.486	5333.11	1.904
8	Rice not in the husk (inc Rice Flower)	4390.64	3.419	102.15	0.067	4492.79	1.604
9	Spices	4136.95	3.222	0.00	0.000	4136.95	1.477
10	Other Forest Products	2.85	0.002	4040.02	2.662	4042.87	1.443
11	Transport Equipment	600.56	0.468	3369.33	2.220	3969.88	1.417
12	Marble and stones	9.23	0.007	3323.50	2.190	3332.73	1.190
13	Kerosene	1436.72	1.119	1687.31	1.112	3124.02	1.115
14	Other edible oil	2893.68	2.254	0.00	0.000	2893.68	1.033
15	Oil seeds (other than cotton)	0.00	0.000	1757.43	1.158	1757.43	0.627
16	Electrical Goods	1487.89	1.159	0.00	0.000	1487.89	0.531
17	Sugar	18.93	0.015	1397.23	0.921	1416.16	0.506
18	Metal Products	1357.54	1.057	0.00	0.000	1357.54	0.485
19	Caustic Potash & Soda	1047.37	0.816	0.00	0.000	1047.37	0.374
20	Fruits & Vegetables - fresh	703.50	0.548	114.14	0.075	817.64	0.292
21	Oil Cakes	0.00	0.000	773.47	0.510	773.47	0.276
22	Other Metal	589.80	0.459	0.00	0.000	589.80	0.211
23	Jute Manufactures	538.30	0.419	0.00	0.000	538.30	0.192
24	Other Ores	483.24	0.376	0.00	0.000	483.24	0.172
25	Rubber and Rubber Products	254.57	0.198	0.00	0.000	254.57	0.091

26	Iron Ore	186.99	0.146	0.00	0.000	186.99	0.067
27	Salt	170.15	0.133	0.02	0.000	170.17	0.061
28	Jowar and Bajra	0.00	0.000	108.19	0.071	108.19	0.039
29	Machinery and Machine Tools	11.69	0.009	79.47	0.052	91.16	0.033
30	Paints & Varnishes	73.50	0.057	0.00	0.000	73.50	0.026
31	Rice in the husk	3.84	0.003	69.07	0.046	72.90	0.026
32	Lime stone, Dolomite and Gypsum	57.63	0.045	7.26	0.005	64.88	0.023
33	Cement Manufactures	56.17	0.044	0.00	0.000	56.17	0.020
34	Wheat Products	37.44	0.029	0.00	0.000	37.44	0.013
35	Gram and Gram products	33.13	0.026	0.00	0.000	33.13	0.012
36	Pulses other than Gram and Gram products	13.84	0.011	0.00	0.000	13.84	0.005
37	Maize and Millets	0.00	0.000	12.52	0.008	12.52	0.004
38	Other Fodder and Husk	0.00	0.000	2.76	0.002	2.76	0.001
39	Bamboo	0.00	0.000	2.62	0.002	2.62	0.001
	All commodities	128403.65	100	151745.59	100	280149.24	100

Source: DGCI&S, Kolkata and authors calculation

Table 4.4A: Commodity-wise trade in the FY 2017-18

(value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2017-18)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	36127.22	24.58	158996.81	82.09	195124.03	57.28
2	Coal and Coke	22154.77	15.07	124.96	0.06	22279.73	6.54
3	Iron and Steel	17173.35	11.68	827.70	0.43	18001.06	5.28
4	Fertilizer & Chemical manure	11926.54	8.11	3252.42	1.68	15178.96	4.46
5	Cement	12600.33	8.57	884.15	0.46	13484.48	3.96
6	Rice not in the husk (inc. Rice Flower)	8820.24	6.00	1624.25	0.84	10444.49	3.07
7	Other edible oil	8771.01	5.97	2.98	0.00	8773.99	2.58
8	Wheat	3389.69	2.31	4442.26	2.29	7831.95	2.30
9	Metal Products	7656.44	5.21	0.00	0.00	7656.44	2.25
10	Transport Equipment	6268.90	4.27	1290.81	0.67	7559.71	2.22
11	Marble and stones	775.69	0.53	3452.65	1.78	4228.34	1.24
12	Other sorts of Grain	24.71	0.02	4141.64	2.14	4166.36	1.22
13	Sugar	107.89	0.07	3745.27	1.93	3853.16	1.13
14	Other Forest Products	0.06	0.00	3757.50	1.94	3757.56	1.10
15	Kerosene	982.90	0.67	2019.87	1.04	3002.78	0.88
16	Spices	2769.02	1.88	8.01	0.00	2777.03	0.82
17	Other Minerals	2277.54	1.55	0.00	0.00	2277.54	0.67
18	Oil seeds (other than cotton)	0.00	0.00	2210.27	1.14	2210.27	0.65
19	Oil Cakes	5.45	0.00	1720.83	0.89	1726.28	0.51
20	Electrical Goods	1224.37	0.83	0.00	0.00	1224.37	0.36
21	Fruits & Vegetables - fresh	330.45	0.22	649.93	0.34	980.38	0.29
22	Jute Manufactures	942.49	0.64	0.00	0.00	942.49	0.28
23	Paints & Varnishes	703.71	0.48	0.00	0.00	703.71	0.21
24	Caustic Potash & Soda	665.50	0.45	0.00	0.00	665.50	0.20
25	Other Ores	611.70	0.42	0.00	0.00	611.70	0.18
26	Maize and Millets	4.82	0.00	391.56	0.20	396.38	0.12
27	Iron Ore	274.55	0.19	0.00	0.00	274.55	0.08
28	Salt	171.80	0.12	0.00	0.00	171.80	0.05
29	Jowar and Bajra	0.00	0.00	117.51	0.06	117.51	0.03
30	Lime stone, Dolomite and Gypsum	86.20	0.06	2.45	0.00	88.64	0.03
31	Pulses other than Gram and Gram products	78.23	0.05	0.67	0.00	78.89	0.02
32	Cement Manufactures	52.64	0.04	0.00	0.00	52.64	0.02
33	Molasses	0.00	0.00	14.86	0.01	14.86	0.00
34	Rice in the husk	3.20	0.00	0.00	0.00	3.20	0.00
35	Bamboo	0.00	0.00	1.28	0.00	1.28	0.00
36	Other Fodder and Husk	0.00	0.00	0.64	0.00	0.64	0.00
	All commodities	146981.43	100	193681.28	100	340662.71	100

Source: DGCIS&S, Kolkata and authors calculation

Table 4.5A: Commodity-wise trade in the FY 2018-19

(value in Rs Cr.)

Sl.No.	Commodity Name	Trade (2018-19)					
		Import		Export		Total Trade	
		Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Mineral Oils and Products (Excl. Kerosene)	2028.56	39.07	3647.59	20.68	5676.15	24.86
2	Coal and Coke	1272.34	24.51	3863.79	21.90	5136.13	22.49
3	Metal Products	0.00	0.00	3801.78	21.55	3801.78	16.65
4	Iron and Steel	22.45	0.43	1844.13	10.45	1866.59	8.17
5	Cement	33.13	0.64	1368.09	7.76	1401.23	6.14
6	Fertilizer & Chemical manure	971.64	18.72	316.34	1.79	1287.98	5.64
7	Marble and stones	18.69	0.36	707.63	4.01	726.32	3.18
8	Other Ores	0.00	0.00	665.72	3.77	665.72	2.92
9	Sugar	479.06	9.23	5.27	0.03	484.33	2.12
10	Wheat	166.37	3.20	129.18	0.73	295.54	1.29
11	Rice not in the husk (inc. Rice Flower)	62.20	1.20	187.58	1.06	249.78	1.09
12	Transport Equipment	19.20	0.37	222.51	1.26	241.71	1.06
13	Salt	0.00	0.00	194.65	1.10	194.65	0.85
14	Spices	0.00	0.00	170.35	0.97	170.35	0.75
15	Kerosene	24.54	0.47	102.91	0.58	127.44	0.56
16	Other Minerals	0.00	0.00	117.47	0.67	117.47	0.51
17	Other edible oil	1.60	0.03	113.52	0.64	115.13	0.50
18	Jute Manufactures	0.00	0.00	66.03	0.37	66.03	0.29
19	Other Chemicals	0.00	0.00	63.17	0.36	63.17	0.28
20	Other sorts of Grain	35.94	0.69	0.00	0.00	35.94	0.16
21	Oil Cakes	34.33	0.66	0.03	0.00	34.36	0.15
22	Lime stone, Dolomite and Gypsum	0.00	0.00	24.18	0.14	24.18	0.11
23	Iron Ore	0.00	0.00	10.82	0.06	10.82	0.05
24	Caustic Potash & Soda	0.99	0.02	8.79	0.05	9.78	0.04
25	Molasses	8.85	0.17	0.00	0.00	8.85	0.04
26	Fruits & Vegetables – fresh	1.94	0.04	6.11	0.03	8.05	0.04
27	Maize and Millets	1.63	0.03	1.67	0.01	3.30	0.01
28	Pulses other than Gram and Gram products	2.55	0.05	0.00	0.00	2.55	0.01
29	Other Forest Products	2.53	0.05	0.00	0.00	2.53	0.01
30	Mustard Oil	2.27	0.04	0.00	0.00	2.27	0.01
31	Rice in the husk	0.00	0.00	1.87	0.01	1.87	0.01
32	Soap	0.74	0.01	0.00	0.00	0.74	0.00
33	Bricks	0.00	0.00	0.17	0.00	0.17	0.00
34	Wheat Products	0.01	0.00	0.00	0.00	0.01	0.00
35	Bamboo	0.01	0.00	0.00	0.00	0.01	0.00
	All commodities	5191.58	100	17641.34	100	22832.91	100

Source: DGCI&S, Kolkata and authors calculation

2. State wise Import for U.P

Table 4.7A: State-wise import in the FY 2015-16

Import (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	20629.37	16.02
2	Haryana	19991.52	15.53
3	Orissa	19694.58	15.30
4	Madhya Pradesh	19347.65	15.03
5	West Bengal	14776.52	11.48
6	Jharkhand	8843.13	6.87
7	Punjab	8249.99	6.41
8	Rajasthan	4335.85	3.37
9	Maharashtra	3242.47	2.52
10	Chhattisgarh	3232.90	2.51
11	Karnataka	3004.87	2.33
12	Andhra Pradesh	2302.26	1.79
13	Assam	1003.30	0.78
14	Uttaranchal	45.14	0.04
15	Tamil Nadu	13.21	0.01
16	Goa	10.59	0.01
17	Chandigarh	9.10	0.01
18	Delhi	0.88	0.00
	Total	128733.32	100

Source: DGCI&S, Kolkata and author's calculation

Table 4.8A: State-wise import in the FY 2016-17

Import (in Rs Cr.)			
Sl.No.	State/UTs	2016-17	Share (%)
1	Gujarat	20227.56	15.75
2	Madhya Pradesh	19374.46	15.09
3	Haryana	18800.93	14.64
4	West Bengal	15929.44	12.41
5	Orissa	12323.15	9.60
6	Jharkhand	12053.81	9.39
7	Punjab	9709.20	7.56
8	Chhattisgarh	7416.20	5.78
9	Rajasthan	4281.48	3.33
10	Maharashtra	3238.56	2.52
11	Andhra Pradesh	2257.19	1.76
12	Assam	1316.69	1.03
13	Karnataka	1269.21	0.99
14	Chandigarh	160.86	0.13
15	Uttarakhand	43.90	0.03
16	Delhi	0.56	0.00
17	Tamil Nadu	0.43	0.00
	Total	128403.65	100

Source: DGCI&S, Kolkata and author's calculation

Table 4.9A: State-wise import in the FY 2017-18

Import (in Rs Cr.)			
Sl.No.	State/UTs	2017-18	Share (%)
1	Gujarat	23333.72	15.88
2	Madhya Pradesh	23181.01	15.77
3	Haryana	21825.10	14.85
4	Orissa	16429.38	11.18
5	Jharkhand	14837.78	10.10
6	West Bengal	13898.15	9.46
7	Punjab	8764.15	5.96
8	Rajasthan	6388.12	4.35
9	Chhattisgarh	6282.48	4.27
10	Maharashtra	3956.08	2.69
11	Andhra Pradesh	3337.45	2.27
12	Karnataka	1791.52	1.22
13	Chandigarh	1294.53	0.88
14	Assam	673.69	0.46
15	Tamil Nadu	450.75	0.31
16	Uttarakhand	435.07	0.30
17	Delhi	101.52	0.07
18	Jammu & Kashmir	0.87	0.00
19	Nagaland	0.06	0.00
	Total	146981.43	100

Source: DGCIS, Kolkata and author's calculation

Table 4.10A: State-wise import in the FY 2018-19

Import (in Rs Cr.)			
Sl.No.	State/UTs	2018-19	Share (%)
1	Haryana	660.86	12.73
2	Bihar	618.77	11.92
3	Madhya Pradesh	615.63	11.86
4	Gujarat	558.58	10.76
5	Maharashtra	542.84	10.46
6	West Bengal	441.79	8.51
7	Rajasthan	361.42	6.96
8	Jharkhand	283.98	5.47
9	Chhattisgarh	274.76	5.29
10	Assam	179.70	3.46
11	Punjab	165.40	3.19
12	Uttarakhand	124.54	2.40
13	Odisha	90.71	1.75
14	Karnataka	63.77	1.23
15	Jammu & Kashmir	59.09	1.14
16	Andhra Pradesh	39.94	0.77
17	Tamil Nadu	37.35	0.72
18	Kerala	29.58	0.57
19	Nagaland	15.53	0.30

20	Tripura	11.44	0.22
21	Telangana	9.30	0.18
22	Delhi	4.18	0.08
23	Chandigarh	2.38	0.05
24	Himachal Pradesh	0.06	0.00
	Total	5191.58	100

Table 4.11A: State-wise import performance of Uttar Pradesh from 2015-16 to 2018-19

Sl.No.	State/UTs	2015-16	2016-17	2017-18	2018-19	CAGR (%)
1	Gujarat	<u>20629.37</u>	<u>20227.56</u>	<u>23333.72</u>	<u>558.58</u>	30.03
2	Haryana	<u>19991.52</u>	<u>18800.93</u>	<u>21825.10</u>	<u>660.86</u>	32.09
3	Odisha	<u>19694.58</u>	<u>12323.15</u>	<u>16429.38</u>	90.71	16.64
4	Madhya Pradesh	<u>19347.65</u>	<u>19374.46</u>	<u>23181.01</u>	<u>615.63</u>	31.69
5	West Bengal	<u>14776.52</u>	<u>15929.44</u>	13898.15	<u>441.79</u>	31.04
6	Jharkhand	8843.13	12053.81	<u>14837.78</u>	283.98	31.79
7	Punjab	8249.99	9709.20	8764.15	165.40	27.17
8	Rajasthan	4335.85	4281.48	6388.12	361.42	43.68
9	Maharashtra	3242.47	3238.56	3956.08	<u>542.84</u>	55.11
10	Chhattisgarh	3232.90	7416.20	6282.48	274.76	43.97
11	Karnataka	3004.87	1269.21	1791.52	63.77	27.69
12	Andhra Pradesh	2302.26	2257.19	3337.45	39.94	25.89
13	Assam	1003.30	1316.69	673.69	179.70	56.37
14	Uttarakhand	45.14	43.90	435.07	124.54	140.25
15	Tamil Nadu	13.21	0.43	450.75	37.35	141.40
16	Chandigarh	9.10	160.86	1294.53	2.38	63.95
17	Delhi	0.88	0.56	101.52	4.18	168.44
	Total	128733.32	128403.65	146981.43	5191.58	34.29

Source: DGCI&S, Kolkata and author's calculation

3. State wise Export for U.P

Table 4.12A: State-wise export in the FY 2015-16

Export (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	38328.06	31.43
2	Madhya Pradesh	12059.95	9.89
3	Rajasthan	11886.19	9.75
4	Bihar	10069.25	8.26
5	Maharashtra	9480.62	7.77
6	Jammu & Kashmir	9284.91	7.61
7	Andhra Pradesh	4500.92	3.69
8	Chhattisgarh	4400.07	3.61
9	Tamil Nadu	3624.92	2.97

10	West Bengal	2889.72	2.37
11	Haryana	2670.65	2.19
12	Punjab	2651.98	2.17
13	Orissa	2561.59	2.10
14	Assam	2479.65	2.03
15	Kerala	2134.61	1.75
16	Karnataka	1844.84	1.51
17	Uttarakhand	633.27	0.52
18	Jharkhand	379.52	0.31
19	Tripura	40.05	0.03
20	Goa	17.04	0.01
21	Nagaland	14.87	0.01
22	Chandigarh	8.76	0.01
23	Delhi	4.14	0.00
	Total	121965.57	100

Source: DGCI&S, Kolkata and author's calculation

Table 4.13A: State-wise export in the FY 2016-17

Export (in Rs Cr.)			
Sl.No.	State/UTs	2015-16	Share (%)
1	Gujarat	40598.94	26.75
2	Madhya Pradesh	32662.93	21.52
3	Bihar	21946.53	14.46
4	Maharashtra	12372.97	8.15
5	Jharkhand	9683.63	6.38
6	Chhattisgarh	5592.67	3.69
7	Rajasthan	5387.46	3.55
8	Jammu & Kashmir	4373.71	2.88
9	Andhra Pradesh	3263.55	2.15
10	West Bengal	2683.38	1.77
11	Orissa	2539.95	1.67
12	Tamil Nadu	2363.51	1.56
13	Karnataka	1899.14	1.25
14	Kerala	1837.20	1.21
15	Assam	1517.81	1.00
16	Haryana	1470.18	0.97
17	Punjab	1103.34	0.73
18	Uttarakhand	381.74	0.25
19	Nagaland	38.98	0.03
20	Chandigarh	18.22	0.01
21	Tripura	9.75	0.01
	Total	151745.59	100

Source: DGCI&S, Kolkata and author's calculation

Table 4.14A State-wise export in the FY 2017-18

Export (in Rs Cr.)			
Sl.No.	State/UTs	2017-18	Share (%)
1	Gujarat	49459.77	25.54
2	Madhya Pradesh	36974.78	19.09
3	Bihar	26512.41	13.69
4	Jharkhand	17528.58	9.05
5	Chhattisgarh	17229.24	8.90
6	Maharashtra	16058.00	8.29
7	West Bengal	5838.03	3.01
8	Rajasthan	4616.93	2.38
9	Assam	3758.50	1.94
10	Kerala	2947.28	1.52
11	Tamil Nadu	2940.72	1.52
12	Haryana	2794.87	1.44
13	Odisha	2398.57	1.24
14	Andhra Pradesh	1940.36	1.00
15	Jammu & Kashmir	733.05	0.38
16	Karnataka	506.59	0.26
17	Punjab	496.63	0.26
18	Uttarakhand	391.39	0.20
19	Nagaland	335.42	0.17
20	Tripura	213.30	0.11
21	Chandigarh	6.85	0.00
	Total	193681.28	100

Source: DGCI&S, Kolkata and author's calculation

Table4.15A: State-wise export in the FY 2018-19

Export (in Rs Cr.)			
Sl.No.	State/UTs	2018-19	Share (%)
1	Madhya Pradesh	2379.70	13.49
2	Haryana	1772.29	10.05
3	Andhra Pradesh	1690.71	9.58
4	Gujarat	1267.29	7.18
5	Odisha	1082.08	6.13
6	Rajasthan	792.37	4.49
7	Punjab	437.67	2.48
8	Karnataka	419.39	2.38
9	Bihar	92.04	0.52
10	Assam	81.62	0.46
11	Uttarakhand	67.71	0.38
12	Chandigarh	32.22	0.18
13	Delhi	24.83	0.14
14	Himachal Pradesh	4.95	0.03

15	Goa	2.96	0.02
16	Jammu & Kashmir	1.23	0.01
17	Telangana	1.34	0.01
18	West Bengal	1568.48	8.89
19	Chhattisgarh	1006.31	5.70
20	Jharkhand	4756.86	26.96
21	Maharashtra	159.31	0.90
	Total	17641.34	100

Source: DGCI&S, Kolkata and author's calculation

Table 4.16A: State-wise export performance of Uttar Pradesh from 2015-16 to 2018-19

Sl.No.	State/UTs	2015-16	2016-17	2017-18	2018-19	CAGR (%)
1	Andhra Pradesh	4500.92	3263.55	1940.36	1690.71	72.15
2	Assam	2479.65	1517.81	3758.50	81.62	32.05
3	Bihar	10069.25	21946.53	26512.41	92.04	20.91
4	Chandigarh	8.76	18.22	6.85	32.22	154.36
5	Chhattisgarh	4400.07	5592.67	17229.24	1006.31	61.15
6	Delhi	4.14	0.00	0.00	24.83	181.71
7	Goa	17.04	0.00	0.00	2.96	55.81
8	Gujarat	38328.06	40598.94	49459.77	1267.29	32.10
9	Haryana	2670.65	1470.18	2794.87	1772.29	87.22
10	Himachal Pradesh	0.00	0.00	0.00	4.95	0.00
11	Jammu & Kashmir	9284.91	4373.71	733.05	1.23	5.09
12	Jharkhand	379.52	9683.63	17528.58	4756.86	232.29
13	Karnataka	1844.84	1899.14	506.59	419.39	61.03
14	Kerala	2134.61	1837.20	2947.28	0.00	0.00
15	Madhya Pradesh	12059.95	32662.93	36974.78	2379.70	58.22
16	Maharashtra	9480.62	12372.97	16058.00	159.31	25.61
17	Nagaland	14.87	38.98	335.42	0.00	0.00
18	Odisha	2561.59	2539.95	2398.57	1082.08	75.03
19	Punjab	2651.98	1103.34	496.63	437.67	54.85
20	Rajasthan	11886.19	5387.46	4616.93	792.37	40.55
21	Tamil Nadu	3624.92	2363.51	2940.72	0.00	0.00
22	Telangana	0.00	0.00	0.00	1.34	0.00
23	Tripura	40.05	9.75	213.30	0.00	0.00
24	Uttarakhand	633.27	381.74	391.39	67.71	47.46
25	West Bengal	2889.72	2683.38	5838.03	1568.48	81.57
	Total	121965.57	151745.59	193681.28	17641.34	52.49

Source: DGCI&S, Kolkata and author's calculation

Appendix Chapter-5_Road

Table 5.1 Import of Uttar Pradesh 2015-16 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount in Crore	Share
1	NAGALAND	233042.39	40.9
2	MANIPUR	65950.70	11.6
3	MAHARASHTRA	37455.82	6.6
4	HARYANA	34064.55	6.0
5	DELHI	22308.46	3.9
6	GUJARAT	19387.78	3.4
7	UTTARAKHAND	17245.52	3.0
8	MADHYA PRADESH	14881.65	2.6
9	RAJASTHAN	14547.82	2.6
10	TAMIL NADU	13407.48	2.4
11	KARNATAKA	12172.06	2.1
12	JHARKHAND	9379.08	1.6
13	PUNJAB	8553.61	1.5
14	HIMACHAL PRADESH	8162.00	1.4
15	ORISSA	7601.87	1.3
16	CHATTISGARH	3920.76	0.7
17	ANDHRA PRADESH	3100.12	0.5
18	TELANGANA	2404.63	0.4
19	BIHAR	2304.94	0.4
20	Inland Container Depot	1036.90	0.2
21	ASSAM	1028.87	0.2
22	DADRA AND NAGAR HAVELI	932.47	0.2
23	PUDUCHERRY	744.30	0.1
24	KERALA	720.58	0.1
25	LAKSHADWEEP	720.58	0.1
26	GOA	716.26	0.1
27	JAMMU AND KASHMIR	654.20	0.1
28	DAMAN AND DIU	369.28	0.1
29	UTTAR PRADESH	261.67	0.0
30	CHANDIGARH	208.34	0.0
31	SIKKIM	58.67	0.0
32	ARUNACHAL PRADESH	9.08	0.0
33	TRIPURA	1.26	0.0
34	MEGHALAYA	0.80	0.0
35	ANDAMAN AND NICOBAR	0.68	0.0
36	MIZORAM	0.10	0.0
37	ANY OTHER*	31880.75	5.6
	All states	569236.05	100.0

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Note:* Not defined

Table 5.2 Import of Uttar Pradesh 2016-17 by Road (in Rs. Crore)

Sr.no	State wise/others	Amount	Share
1	HARYANA	77782.55	18.6
2	MAHARASHTRA	63168.63	15.1
3	GUJARAT	29325.37	7.0
4	DELHI	25339.43	6.1
5	GOA	25339.43	6.1
6	UTTARAKHAND	20045.86	4.8
7	MADHYA PRADESH	17816.95	4.3
8	RAJASTHAN	16897.48	4.0
9	TAMIL NADU	14765.51	3.5
10	WEST BENGAL	12669.55	3.0
11	HIMACHAL PRADESH	11095.31	2.7
12	KARNATAKA	10954.09	2.6
13	JHARKHAND	10418.34	2.5
14	ORISSA	8643.32	2.1
15	PUNJAB	7742.12	1.9
16	CHATTISGARH	5178.56	1.2
17	ANDHRA PRADESH	5129.60	1.2
18	BIHAR	1845.05	0.4
19	DADRA AND NAGAR HAVELI	1165.92	0.3
20	ASSAM	1094.19	0.3
21	JAMMU AND KASHMIR	889.72	0.2
22	PUDUCHERRY	578.39	0.1
23	UTTAR PRADESH	488.52	0.1
24	KERALA	419.56	0.1
25	DAMAN AND DIU	411.16	0.1
26	CHANDIGARH	324.37	0.1
27	SIKKIM	96.81	0.0
28	MANIPUR	13.07	0.0
29	MIZORAM	5.29	0.0
30	NAGALAND	3.68	0.0
31	ARUNACHAL PRADESH	2.88	0.0
32	ANDAMAN AND NICOBAR	2.39	0.0
33	MEGHALAYA	1.14	0.0
34	TELANGANA	1.12	0.0
35	TRIPURA	1.12	0.0
36	Inland Container Depot*	885.40	0.2
37	ANY OTHER*	46818.04	11.2
	All states	417359.91	100.0

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Note:* Not defined

Table 5.3 Import of Uttar Pradesh 2017-18 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	CHATTISGARH	795036.45	79.7
2	HARYANA	73953.42	7.4
3	KARNATAKA	22192.41	2.2
4	HIMACHAL PRADESH	19766.79	2.0
5	MAHARASHTRA	13311.27	1.3
6	GUJARAT	7763.20	0.8
7	DELHI	6849.31	0.7
8	UTTARAKHAND	6766.74	0.7
9	PUDUCHERRY	6573.37	0.7
10	MADHYA PRADESH	4521.18	0.5
11	RAJASTHAN	4286.70	0.4
12	TAMIL NADU	3468.89	0.3
13	JHARKHAND	3344.40	0.3
14	ORISSA	3240.78	0.3
15	WEST BENGAL	3052.41	0.3
16	PUNJAB	2259.87	0.2
17	TELANGANA	1629.29	0.2
18	ANDHRA PRADESH	1051.63	0.1
19	Inland Container Depot	310.84	0.0
20	ASSAM	297.69	0.0
21	JAMMU AND KASHMIR	290.18	0.0
22	BIHAR	285.76	0.0
23	DADRA AND NAGAR HAVELI	254.09	0.0
24	GOA	242.59	0.0
25	UTTAR PRADESH	208.02	0.0
26	KERALA	121.25	0.0
27	DAMAN AND DIU	99.84	0.0
28	CHANDIGARH	87.01	0.0
29	SIKKIM	28.60	0.0
30	MIZORAM	2.42	0.0
31	MEGHALAYA	1.07	0.0
32	NAGALAND	0.82	0.0
33	MANIPUR	0.75	0.0
34	ANDAMAN AND NICOBAR	0.25	0.0
35	TRIPURA	0.22	0.0
36	LAKSHADWEEP	0.15	0.0
37	ARUNACHAL PRADESH	0.10	0.0
38	ANY OTHER*	15928.42	1.6
	All states	997228.17	100

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Note:* Not defined

Table 5.4 Import of Uttar Pradesh 2018-19 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	Andhra Pradesh (New)	947938.75	31.7
2	Maharashtra	913564.39	30.5
3	Assam	889067.64	29.7
4	Delhi	94846.55	3.2
5	Bihar	73235.83	2.4
6	Chhattisgarh	17348.78	0.6
7	Chandigarh	13014.69	0.4
8	Gujarat	11592.59	0.4
9	Dadra and Nagar Haveli	8758.06	0.3
10	Haryana	6609.05	0.2
11	Daman and Diu	5056.15	0.2
12	Andaman and Nicobar Islands	3279.46	0.1
13	Arunachal Pradesh	2147.38	0.1
14	Karnataka	1216.81	0.0
15	Madhya Pradesh	1161.72	0.0
16	Uttarakhand	1048.90	0.0
17	Rajasthan	949.94	0.0
18	Jharkhand	887.86	0.0
19	West Bengal	674.23	0.0
20	Punjab	614.77	0.0
21	Tamil Nadu	578.34	0.0
22	Odisha	266.60	0.0
23	Telangana	219.30	0.0
24	Himachal Pradesh	167.97	0.0
25	Goa	136.71	0.0
26	Kerala	85.02	0.0
27	Jammu and Kashmir	40.75	0.0
28	Pondicherry	16.83	0.0
29	Meghalaya	0.81	0.0
30	Nagaland	0.15	0.0
31	Sikkim	0.06	0.0
	All states	2994526.07	100.0

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Note:* Not defined

Table 5.5 Export of Uttar Pradesh 2018-19 by Road (in Rs. Crore)

Sr.no	state wise/others	Amount	Share
1	Andhra Pradesh (New)	345558962.20	99.948
2	Andaman and Nicobar Islands	50840.47	0.015
3	Assam	41769.00	0.012
4	Delhi	33612.25	0.010
5	Bihar	32285.83	0.009
6	Chandigarh	4769.84	0.001
7	Chhattisgarh	4088.00	0.001
8	Gujarat	2212.99	0.001
9	Arunachal Pradesh	2210.33	0.001
10	Haryana	2086.28	0.001
11	Maharashtra	1789.69	0.001
12	Dadra and Nagar Haveli	1028.85	0.000
13	Karnataka	734.45	0.000
14	Andhra Pradesh	577.46	0.000
15	Madhya Pradesh	425.14	0.000
16	Daman and Diu	362.88	0.000
17	Himachal Pradesh	282.54	0.000
18	Uttarakhand	230.60	0.000
19	Telangana	199.35	0.000
20	Rajasthan	168.06	0.000
21	Punjab	140.30	0.000
22	West Bengal	125.16	0.000
23	Tamil Nadu	88.20	0.000
24	Jharkhand	84.40	0.000
25	Kerala	70.10	0.000
26	Jammu and Kashmir	55.90	0.000
27	Odisha	50.07	0.000
28	Goa	34.18	0.000
29	Meghalaya	10.00	0.000
30	Mizoram	10.00	0.000
31	Pondicherry	2.63	0.000
32	Sikkim	0.91	0.000
33	Tripura	0.46	0.000
34	Manipur	0.29	0.000
35	Nagaland	0.24	0.000
	All states	345739309.04	100.000

Source: Author's Calculation Data from Commercial Tax Department, Government of Uttar Pradesh

Table 6.1A: State-wise trade performance of Uttar Pradesh in 2018-19

Sl.No	States/UTs	Trade by Road 2018-19 (value in Rs. Cr)					
		Import	Share (%)	Export	Share (%)	Total Trade	Share (%)
1	Andhra Pradesh ^a	3279.46	0.00	50840.47	99.95	345559539.66	99.09
2	Telangana	0.00	31.69	345559539.66	0.00	948138.09	0.27
3	Assam	2147.38	29.72	2210.33	0.01	930836.64	0.27
4	Maharashtra	889067.64	30.54	41769.00	0.00	915354.09	0.26
5	Delhi	73235.83	3.17	32285.83	0.01	128469.14	0.04
6	Bihar	13014.69	2.45	4769.84	0.01	105521.66	0.03
7	Andaman and Nicobar Islands	17348.78	0.11	4088.00	0.01	54119.92	0.02
8	Chhattisgarh	8758.06	0.58	1028.85	0.00	21436.77	0.01
9	Chandigarh	5056.15	0.44	362.88	0.00	17784.53	0.01
10	Gujarat	94856.88	0.39	33612.25	0.00	13805.57	0.00
11	Dadra and Nagar Haveli	136.71	0.29	34.18	0.00	9786.91	0.00
12	Haryana	11592.59	0.22	2212.99	0.00	8695.33	0.00
13	Daman and Diu	6609.05	0.17	2086.28	0.00	5419.03	0.00
14	Arunachal Pradesh	167.97	0.07	282.54	0.00	4357.71	0.00
15	Karnataka	40.75	0.04	55.90	0.00	1951.26	0.00
16	Madhya Pradesh	887.86	0.04	84.40	0.00	1586.86	0.00
17	Jharkhand	1216.81	0.03	734.45	0.00	972.27	0.00
18	Punjab	85.02	0.02	70.10	0.00	755.06	0.00
19	Rajasthan	1161.72	0.02	425.14	0.00	725.35	0.00
20	Himachal Pradesh	913564.39	0.01	1789.69	0.00	450.51	0.00
21	Odisha	0.00	0.01	0.29	0.00	316.67	0.00
22	Uttarakhand	0.81	0.00	10.00	0.00	230.60	0.00
23	Goa	0.00	0.00	0.68	0.00	170.89	0.00
24	Kerala	0.15	0.00	0.24	0.00	155.11	0.00
25	West Bengal	266.60	0.00	50.07	0.00	125.16	0.00
26	Jammu and Kashmir	16.83	0.00	2.63	0.00	96.65	0.00
27	Tamil Nadu	614.77	0.00	140.30	0.00	88.20	0.00
28	Pondicherry	557.29	0.00	168.06	0.00	19.46	0.00
29	Meghalaya	0.00	0.00	0.91	0.00	10.81	0.00
30	Sikkim	0.00	0.00	88.20	0.00	0.91	0.00
31	Mizoram	947938.75	0.00	199.35	0.00	0.68	0.00
32	Tripura	0.00	0.00	0.46	0.00	0.46	0.00
33	Nagaland	0.00	0.00	230.60	0.00	0.39	0.00
34	Manipur	0.00	0.00	125.16	0.00	0.29	0.00
	Total	2991622.93	100.00	345739299.72	100.00	348730922.65	100.00

Source: DGCI&S, Kolkata and author's calculation

Note: a-Value of Andhra Pradesh (New) and Andhra Pradesh have been merged under Andhra Pradesh State for Exports 2018-19

Table 6.2A: Combined trade performance of Uttar Pradesh in 2018-19 (Rail+Road)

Sl. No.	States/UTs	Road (2018-19)				Rail (2018-19)				U.P. Total Trade (2018-19)	
		Import	Share (%)	Export	Share (%)	Import	Share (%)	Export	Share (%)	Total	Share (%)
1	Andhra Pradesh ^a	0.00	0.00	3455595 39.66	99.95	39.94	0.77	1690. 71	9.58	3455612 70.31	99.08
2	Telangana	947938. 75	31.69	199.35	0.00	9.30	0.18	1.34	0.01	948148.7 3	0.27
3	Assam	889067. 64	29.72	41769.00	0.01	179.7 0	3.46	81.62	0.46	931097.9 6	0.27
4	Maharashtra	913564. 39	30.54	1789.69	0.00	542.8 4	10.46	159.3 1	0.90	916056.2 4	0.26
5	Delhi	94856.8 8	3.17	33612.25	0.01	4.18	0.08	24.83	0.14	128498.1 5	0.04
6	Bihar	73235.8 3	2.45	32285.83	0.01	618.7 7	11.92	92.04	0.52	106232.4 7	0.03
7	Andaman and Nicobar Islands	3279.46	0.11	50840.47	0.01	0.00	0.00	0.00	0.00	54119.92	0.02
8	Chhattisgarh	17348.7 8	0.58	4088.00	0.00	274.7 6	5.29	1006. 31	5.70	22717.84	0.01
9	Chandigarh	13014.6 9	0.44	4769.84	0.00	2.38	0.05	32.22	0.18	17819.13	0.01
10	Gujarat	11592.5 9	0.39	2212.99	0.00	558.5 8	10.76	1267. 29	7.18	15631.44	0.00
11	Haryana	6609.05	0.22	2086.28	0.00	660.8 6	12.73	1772. 29	10.05	11128.48	0.00
12	Dadra and Nagar Haveli	8758.06	0.29	1028.85	0.00	0.00	0.00	0.00	0.00	9786.91	0.00
13	Jharkhand	887.86	0.03	84.40	0.00	283.9 8	5.47	4756. 86	26.96	6013.10	0.00
14	Daman and Diu	5056.15	0.17	362.88	0.00	0.00	0.00	0.00	0.00	5419.03	0.00
15	Madhya Pradesh	1161.72	0.04	425.14	0.00	615.6 3	11.86	2379. 70	13.49	4582.19	0.00
16	Arunachal Pradesh	2147.38	0.07	2210.33	0.00	0.00	0.00	0.00	0.00	4357.71	0.00
17	Karnataka	1216.81	0.04	734.45	0.00	63.77	1.23	419.3 9	2.38	2434.42	0.00
18	West Bengal	0.00	0.00	125.16	0.00	441.7 9	8.51	1568. 48	8.89	2135.43	0.00
19	Rajasthan	557.29	0.02	168.06	0.00	361.4 2	6.96	792.3 7	4.49	1879.14	0.00
20	Odisha	266.60	0.01	50.07	0.00	90.71	1.75	1082. 08	6.13	1489.45	0.00
21	Punjab	614.77	0.02	140.30	0.00	165.4 0	3.19	437.6 7	2.48	1358.14	0.00
22	Himachal Pradesh	167.97	0.01	282.54	0.00	0.06	0.00	4.95	0.03	455.51	0.00
23	Uttarakhand	0.00	0.00	230.60	0.00	124.5 4	2.40	67.71	0.38	422.85	0.00
24	Kerala	85.02	0.00	70.10	0.00	29.58	0.57	0.00	0.00	184.69	0.00
25	Goa	136.71	0.00	34.18	0.00	0.00	0.00	2.96	0.02	173.85	0.00
26	Jammu and Kashmir	40.75	0.00	55.90	0.00	59.09	1.14	1.23	0.01	156.96	0.00
27	Tamil Nadu	0.00	0.00	88.20	0.00	37.35	0.72	0.00	0.00	125.55	0.00
28	Pondicherry	16.83	0.00	2.63	0.00	0.00	0.00	0.00	0.00	19.46	0.00
29	Nagaland	0.15	0.00	0.24	0.00	15.53	0.30	0.00	0.00	15.91	0.00
30	Tripura	0.00	0.00	0.46	0.00	11.44	0.22	0.00	0.00	11.90	0.00
31	Meghalaya	0.81	0.00	10.00	0.00	0.00	0.00	0.00	0.00	10.81	0.00
32	Sikkim	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.91	0.00
33	Mizoram	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.68	0.00
34	Manipur	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.29	0.00
	Total	299162 2.93	100.00	3457392 99.72	100.00	5191. 58	100.00	17641 .34	100.00	3487537 55.56	100.00

Source: DGCI&S, Kolkata and author's calculation

Note: a-Value of Andhra Pradesh (New) and Andhra Pradesh have been merged under Andhra Pradesh State for

Exports 2018-19

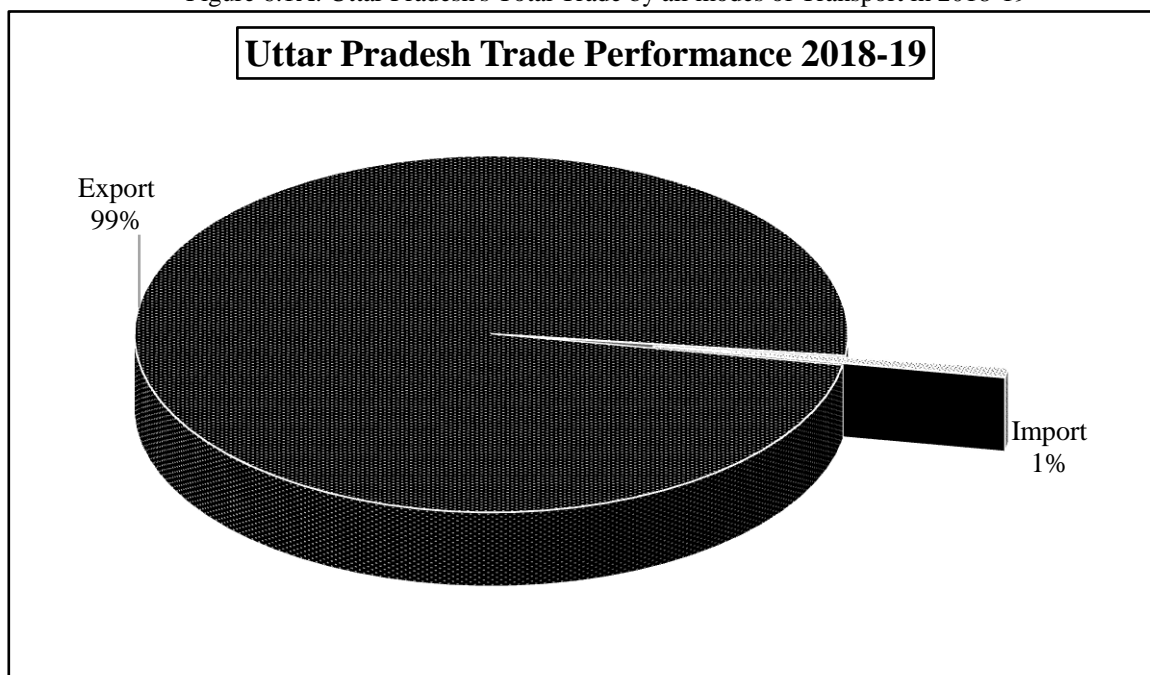
Table 6.3A: Uttar Pradesh's Total Trade by all modes of Transport in 2018-19 (value in Rs. Cr)

Sl.No	States/UTs	Uttar Pradesh's Total Trade in 2018-19 (value in Rs. Cr)					
		Import	Share (%)	Export	Share (%)	Total	Share (%)
1	Andhra Pradesh ^a	39.94	0.00	345561230.37	99.94	345561270.31	99.08
2	Telangana	947948.05	31.63	200.69	0.00	948148.73	0.27
3	Assam	889247.34	29.67	41850.62	0.01	931097.96	0.27
4	Maharashtra	914107.23	30.50	1949.00	0.00	916056.24	0.26
5	Delhi	94861.07	3.17	33637.08	0.01	128498.15	0.04
6	Bihar	73854.60	2.46	32377.87	0.01	106232.47	0.03
7	Andaman and Nicobar Islands	3279.46	0.11	50840.47	0.01	54119.92	0.02
8	Chhattisgarh	17623.54	0.59	5094.30	0.00	22717.84	0.01
9	Chandigarh	13017.07	0.43	4802.07	0.00	17819.13	0.01
10	Gujarat	12151.16	0.41	3480.27	0.00	15631.44	0.00
11	Haryana	7269.91	0.24	3858.57	0.00	11128.48	0.00
12	Dadra and Nagar Haveli	8758.06	0.29	1028.85	0.00	9786.91	0.00
13	Jharkhand	1171.84	0.04	4841.26	0.00	6013.10	0.00
14	Daman and Diu	5056.15	0.17	362.88	0.00	5419.03	0.00
15	Madhya Pradesh	1777.35	0.06	2804.84	0.00	4582.19	0.00
16	Arunachal Pradesh	2147.38	0.07	2210.33	0.00	4357.71	0.00
17	Karnataka	1280.58	0.04	1153.84	0.00	2434.42	0.00
18	West Bengal	441.79	0.01	1693.64	0.00	2135.43	0.00
19	Rajasthan	918.71	0.03	960.43	0.00	1879.14	0.00
20	Odisha	357.30	0.01	1132.15	0.00	1489.45	0.00
21	Punjab	780.17	0.03	577.97	0.00	1358.14	0.00
22	Himachal Pradesh	168.03	0.01	287.49	0.00	455.51	0.00
23	Uttarakhand	124.54	0.00	298.31	0.00	422.85	0.00
24	Kerala	114.59	0.00	70.10	0.00	184.69	0.00
25	Goa	136.71	0.00	37.14	0.00	173.85	0.00
26	Jammu and Kashmir	99.83	0.00	57.13	0.00	156.96	0.00
27	Tamil Nadu	37.35	0.00	88.20	0.00	125.55	0.00
28	Pondicherry	16.83	0.00	2.63	0.00	19.46	0.00
29	Nagaland	15.67	0.00	0.24	0.00	15.91	0.00
30	Tripura	11.44	0.00	0.46	0.00	11.90	0.00
31	Meghalaya	0.81	0.00	10.00	0.00	10.81	0.00
32	Sikkim	0.00	0.00	0.91	0.00	0.91	0.00
33	Mizoram	0.00	0.00	0.68	0.00	0.68	0.00
34	Manipur	0.00	0.00	0.29	0.00	0.29	0.00
	Total	2996814.51	100.00	345756941.06	100.00	348753755.56	100.00

Source: DGCI&S, Kolkata and author's calculation

Note: a-Value of Andhra Pradesh (New) and Andhra Pradesh have been merged under Andhra Pradesh State for Exports 2018-19

Figure 6.1A: Uttar Pradesh's Total Trade by all modes of Transport in 2018-19



Source: DGCI&S, Kolkata

Table 4: Performance of Road and Rail in Uttar Pradesh's overall Trade in 2018-19 (value in Rs. Cr)

State	Rail	Road	Total
Uttar Pradesh	22832.91	348730922.65	348753755.56
Value as % of Total	0.006547002	99.993453	100.00

Source: DGCI&S, Kolkata and author's calculation