

# Industrial Development of Port Towns in India

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## Abstract

Ports have played an important role in the historical study of colonial trade and urbanisation of India. They had always been the poles of international trade and commerce since earlier times. Hence, they were the active agents in the development of the port towns since colonial times. But, the situation had changed in the post-independence period with the gradual changing importance of the ports and port towns in international trade. Not only that, apart from ports, several other factors such as the growing importance of land-based transport system, growth of regional infrastructure, industries within the interior of the country, several push and pull factors of the area such as the higher education, banks, business, job opportunities, recreational facilities etc., population pressure, regional linkages, socio-economic conditions have influenced the growth and development of these port towns. Together with these, the shifts and changes have also occurred in the “functions” of these ports and port towns, in response to the national policy changes during the planning decades in the spheres of industry and trade in favour of ‘inward looking strategy’ of industrialisation through import substitution and export promotion strategies. All these have changed the occupational structure of these port towns from primary sector of occupations to that of secondary and tertiary sectors, thereby, causing drastically a change in the economic activities of these port towns. This paper also attempts a comparative study between port towns of the western and eastern coasts of India in this respect.

**Keywords:** Port Towns, Industrial Development, India

## Introduction

Ports have played an important role in the historical study of colonial trade and urbanisation of India. They had always been the poles of international trade and commerce since earlier times. Hence, they were the active agents in the development of the port towns since colonial times (Banga, 1992; Sau, 1997). Ports and port towns were initially the supplier of finished goods to many

European countries in the pre-industrial period during colonial times (Sen, 1993). But, because of the colonial trade advantage, they had turned out to be mere supplier of raw materials to those industrialised nations during late colonial period and even continued to remain the same in the initial years of post-independence period (Mukherjee, 1968; Sen, 1993; Rao & Satyamurthy, 1997).

The situation changed in the post-independence period with the gradual changing importance of the ports and port towns in international trade. Not only that, apart from ports, several other factors such as the growing importance of land-based transport system, growth of regional infrastructure and industries within the interior of the country, several push and pull factors of the area such as the higher education, banks, business, job opportunities, recreational facilities etc., population pressure, regional linkages, socio-economic conditions have also come to influence the growth and development of these port towns (Rao and Satyamurthy, 1997; Tan, 2007). Together with these, the shifts and changes have also occurred in the “functions” of these ports and port towns, in response to the national policy changes during the planning decades in the spheres of industry and trade in favour of ‘inward looking strategy’ of industrialisation through import substitution and export promotion strategies. All these have changed the occupational structure of the economy of these port towns from primary sector of occupations to that of secondary and tertiary sectors, thereby, causing drastically a change in the economic activities of these port towns.

## Literature Survey

Literature studies available on port towns reveals that it has been a relatively neglected branch of Indian economic literature till mid-60s. The first major attempt to write the history of Calcutta Port (CP) was made by Mukherjee (1968). Other important studies on CPT and Haldia Port

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include those done by Banerjee (1975), Ray (1986, 1993), Chakravorty (1995) (ed.), Sau (1997) and Bose (2001). All of them had focused on the history and developmental issues involved in cargo handling of major ports of India concerning CPT. Besides them, various discussion papers such as those of Giri (1992) and Sen (1993) had emphasized on the different aspects of the CPT and Haldia Port responsible for the decline of the CPT and the need of Haldia Port. The former had particularly analysed various factors including the trend and pattern of the goods flow to and from Calcutta, change in transportation technology and network, consequent weakening of linkages with the hinterlands as responsible for the decline on the basis of commodity-wise analysis.

Regarding other ports of India, Chittar (1973) however, had made a brief historical study on the port of Bombay starting from its evolution, era of its construction (1873-1914) and even focused on the progress and performance of the port since independence. Besides these, he also further mentioned proposals for some of the developmental works to be approved in the perspective planning of the port development such as the construction of a satellite port at Nava Sheva. Murthy and Rao (1993) also had considered the same Vishakhapatnam city as a case study for the analysis of its cargo handling system and productive efficiency. Rao and Satyamurthy (1997) however, had depicted the profile of the Vishakhapatnam port and studied the evolution of this city from history till 1980s. In doing so, they had mainly focused on the growth pattern of this city in view of rapid population growth, urbanisation and industrialisation as these different influencing factors was responsible for the rapid growth process of this city as well as its transport system.

Others have focused on the role of ports in economic development. For instance, Takel (1974) however, had emphasized on the innovative role of ports in industrial development. Faust (1978) had mainly focused on the causes of the existence of the ports and its effect on the prospects for economic development. According to him, ports are not the only determinant but a decisive factor too as ports not only influence economic development but are also influenced by the economic development. Whereas, Stuchtey (1978) had dealt with various indicators of the port performance to judge the performance of the ports. Hilling and Hoyle (1984) had considered the role of ports on a different paradigm/approach. They had emphasized upon the symbiotic relationship between

the port and its home region on the perspective of time dimension. According to them, initially the regional economy develops which then provides for adequate port facilities in the short run. But in the longer term, it is the changing character and the health of the hinterland trade which determines the port's fortunes. Such a two way relationship between the port-city systems and regional economic development provides a wider framework to ensure that the port-region relationship remains highly dynamic. Apart from these books, the Transport Research Division in the Ministry of Shipping and Transport, some important research reports of the Official Committees had surveyed different aspects of the traffic development and traffic prospects of major ports of India of various years of the planning periods. They had also examined the aspects of the costs and benefits of the various port projects after examining their financial performance during the said period. Thomas (1995), however, had mainly focused on the features of the different kinds of policy reforms which may be organisational/management, institutional or any other in the transport sector, to be undertaken by the governments and international leading agencies and also had emphasized their impact on the functioning, management and structural change of the Indian Ports.

However, it has been found that major attention has been given only to the study of the ports and their developmental issues with little importance to the study of the port towns in the existing port literature. The first major attempt in this respect to identify the port towns of India of post-independence period had been done by Mitra, Sherry, Surendra, and Dutt (1981) on the definitional basis. According to them, because of their geographical location and function, this category of cities and towns should deserve to be recognised as ports and hence are classified as port towns. Champakalakshmi (1996) however, had concentrated on the port towns of South India during the period 300 BC - 1300 AD and considered the development of trade and commerce together with the spread of the religion to be the major factor of the urbanisation of such port towns during the contemporary period. Apart from economics, transport being an urban issue and ports being an important wing of transport also had been studied in other disciplines to some extent particularly in geography. Banga (1992) edited a book containing several papers which highlighted the relationship between hinterlands and the growth of the ports and port towns of India during the pre-independence period of (1757- 1957). Regarding the sources, this book had relied more on European records

rather than on indigenous sources like Indian language sources or regional sources etc. This is because large corpus of records on port cities and port towns of the period from 16<sup>th</sup> to 18<sup>th</sup> century available to them was European records. According to this book, the colonial ports were the symbols as well as the immediate instruments of the colonial Asia. It shows how the ports of India had carved out their hinterlands where the characteristic feature of the dominance-dependence relationship of colonialism was effectuated which had led to the urbanisation of such port towns. But, this book had failed to study the dynamics of the urbanisation of those port towns during the said period. Tan (2007) in his paper had made a comparative study on the evolution of the port towns of Singapore and Calcutta from colonial port cities to a post-colonial city state and a city within a state. In doing so, he had critically examined the comparative trajectories of these port cities with focus on their historical development, functioning of these cities and the spatial consequences of those political and economic changes on these two cities.

This paper is divided into following sections. Besides the introduction and literature review in first two sections, third section will focus on the objectives, fourth section will discuss the data sources and methodology, fifth section will give a detailed overview of the economic role of port towns focusing on the occupational structure of port towns in India, sixth section will make a summary analysis of the above study, focusing on the performances of each coast, while seventh section will conclude, focusing on the role of coast in India.

## Objectives

The main objective of this paper is to study the economic role of port towns of India, focusing on their occupational structure of the port towns as a whole, with a view to make a comparative study between port towns of the western and eastern coasts of India. Underlying the main objective, this paper attempts to study

the change in the distributional share of port towns in the total number of port towns among different occupations namely, manufacturing, service and trade and commerce during 1961-1991.

the change in the percentage share of workforce (total, males and females) to the non-agricultural workforce of port towns in trade and commerce sectors during 1961-1991.

## Data Sources and Methodology

For this study, data is mainly collected primarily from secondary sources such as various census publications, official website of Census of India, and other secondary sources such as Mitra, Sachdev, Pant, Soam, and Gaihlaut (1980), Mitra *et al.* (1981) etc.

No specific economic methodology as such has been followed regarding the study of the port towns. However, Mitra *et al.* (1981) had followed a special methodology on the functional classification of the port towns of India as they had applied it to the other towns as well, during 1960s and 1970s. They were followed by Giri and Chatterjee (2001), regarding the same functional classification of the urban areas of India for the years 1961, 1971, and 1991 including cities and towns using the same methodology. So, using their methodology, this study also have tried to compare the shifts in functions of the port towns classifying them into specialised functional categories, namely, manufacturing (M), trade & commerce (T), and services (S) for the years 1961, 1971, & 1991.

As a methodology, only simple statistical tools such as charts and diagrams are used for the study. No specific econometric analysis could be done in this study because of the lack of continuity in the data sources. However, this could be cited as one of the major limitations of the study that the same data findings on those similar aspects could not be found for the following decades or earlier decade (1981), owing to the lack of compatibility of the data due to non-availability of the necessary data or due to lack of the data break up for those decades mentioned either from the above sources such as census publications or elsewhere.

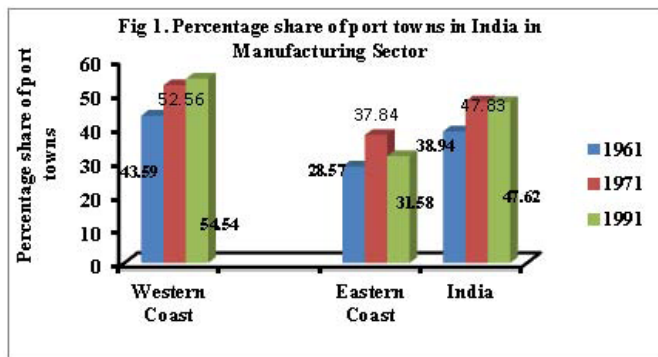
## Change in the Occupational Structure of the Port Towns

Occupational structure of the port towns have changed with the change in the sectoral composition of the overall economy with the growing importance of secondary sector (industrial sector) and to some extent, tertiary sector (service sector) over primary one in the economy of the port towns. This impact however have been discussed in terms of the (i) change in the share of port towns in total number of towns in secondary sector (manufacturing sector) and tertiary sector, particularly trade and commerce and service sectors and (ii) change in the work force share

of port towns in trade and commerce sectors for western coast, eastern coast and India as a whole during the said period.

## Results

### Distributional Share of Port Towns in Total Number of Port Towns in Secondary Sector (Manufacturing Sector)



**Fig. 1: Percentage Share of Port Towns in India in Manufacturing Sector**

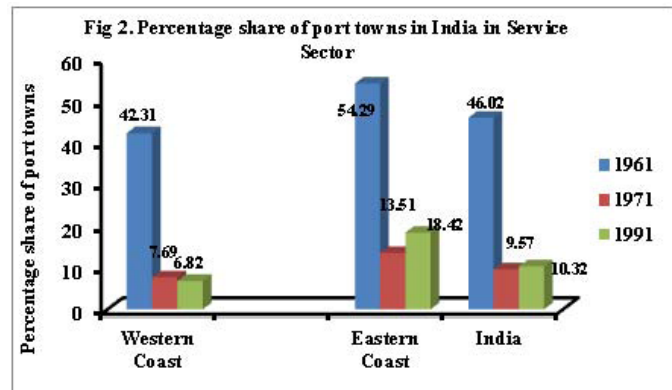
Source: Census of India, 1961, 1971, 1991

It has been found from Fig. 1 that in case of western coast, the percentage share of port towns had sharply increased in case of manufacturing (M) sector during 1961-1991. But eastern coast had maintained a sharp rising trend in their share of port towns in manufacturing (M) sector only during 1961-1971, with a sharp falling trend in their share of port towns in manufacturing (M) sector thereafter. As a result, manufacturing sector (M) had maintained a sharp rising trend in their percentage share of port towns in overall India till during 1961-1971; but thereafter the latter had very slightly fallen in this sector (M) in India, as an impact of Eastern coast.

### Distributional Share of Port Towns in Total Number of Port Towns in Tertiary Sector (Service Sector)

It has been found from Fig. 2 that in case of western coast, the percentage share of port towns had sharply decreased in case of service (S) sector during 1961-1991. But eastern coast had maintained a sharp declining trend in their share of port towns in service (S) sector only during 1961-1971, with a sharp rising trend in their share of port towns in

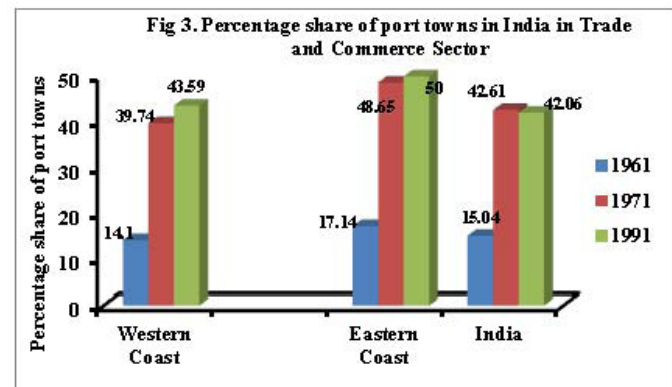
service (S) sector thereafter. As an impact of eastern coast, service sector (S) had maintained a sharp decreasing trend in their percentage share of port towns in overall India till during 1961-1971; but thereafter the latter had very slightly increased in this sector (S) in India.



**Fig. 2: Percentage Share of Port Towns in India in Service Sector**

Source: Census of India, 1961, 1971, 1991

### Distributional Share of Port Towns in Total Number of Port Towns in Tertiary Sector (Trade and Commerce Sector)



**Fig. 3: Percentage Share of Port Towns in India in Trade and Commerce Sector**

Source: Census of India, 1961, 1971, 1991

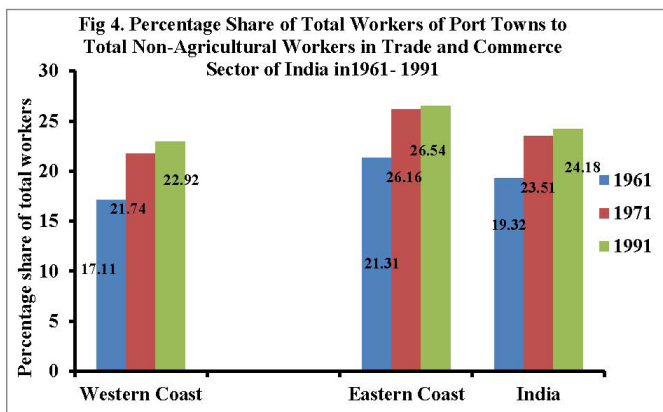
It has been found from Fig. 3 that in case of western coast, the percentage share of port towns had sharply increased in case of Trade and Commerce Sector (T) during 1961-1991. But eastern coast had maintained a sharp rising trend in their share of port towns in Trade and Commerce

Sector (T) only during 1961-1971, with a slightly rising trend in their share of port towns in Trade and Commerce Sector (T) thereafter. As an impact of eastern coast, Trade and Commerce Sector (T) had maintained a sharp rising trend in their percentage share of port towns overall India till during 1961-1971, but thereafter the latter had slightly fallen in this sector (T) in India, because of the slowdown in the growth of such percentage share of port towns in case of eastern coast.

### Change in the Percentage Share of the Work Force (Total, Males and Females) to the Non-Agricultural Work Force of Port Towns in Trade and Commerce Sectors

It is found from the above section that there had been a sharp rising in the percentage share of port towns in Trade and Commerce Sector (T) sector in both the coasts as well as in India during the said period. Hence this section attempts to study the trend in the growth of the percentage share of the work force (total, males and females) to the non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991.

### Percentage Share of the Total Work Force to the Non-Agricultural Work Force of Port Towns in Trade and Commerce Sector



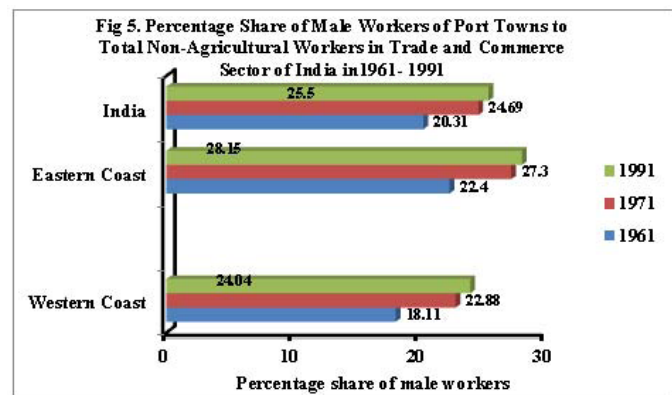
**Fig. 4: Percentage Share of Total Workers of Port Towns to Total Non-Agricultural Workers in India in Trade and Commerce Sector**

Source: Census of India, 1961, 1971, 1991

It is found from Fig. 4 that western coast had maintained a sharp rising trend in the growth of the percentage share of

the total work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991. But eastern coast had maintained a sharp rising trend in their corresponding percentage share only during 1961-1971, with a very slightly rising trend in their percentage share thereafter. As a result, similar trend is found in the growth of the percentage share of the total work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991, as that of eastern coast.

### Percentage Share of the Male Work Force to the Non-Agricultural Work Force of Port Towns in Trade and Commerce Sector

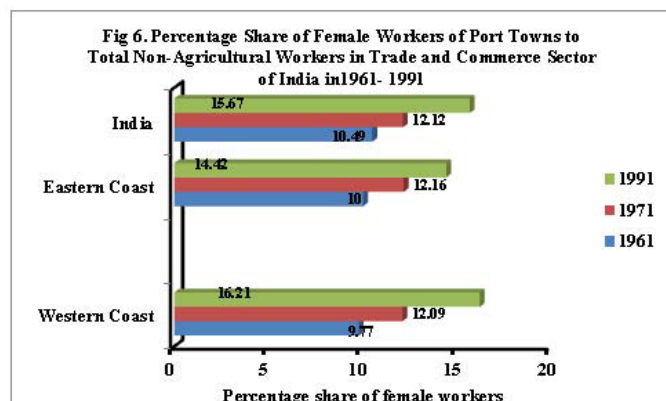


**Fig. 5: Percentage Share of Male Workers of Port Towns to Total Non-Agricultural Workers in India in Trade and Commerce Sector**

Source: Census of India, 1961, 1971, 1991

It is found from Fig. 5 that western coast had also maintained a sharp rising trend in the growth of the percentage share of the male work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991. But eastern coast had maintained a sharp rising trend in their corresponding percentage share only during 1961-1971, with a slightly rising trend in their percentage share thereafter. As a result, similar trend is also found in the growth of the percentage share of the male work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991, as that of eastern coast.

## Percentage Share of the Female Work Force to the Non-Agricultural Work Force of Port Towns in Trade and Commerce Sector



**Fig. 6:** Percentage share of female workers of port towns to Total Non-Agricultural Workers in India in Trade and Commerce Sector

Source: Census of India, 1961, 1971, 1991

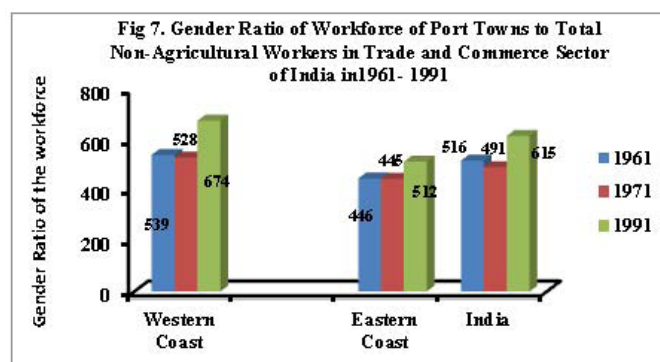
It is found from Fig. 6 that western coast had also maintained a very sharp rising trend in the growth of the percentage share of the female work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991. But eastern coast had maintained a slightly sharp rising trend in their corresponding percentage share of the female work force during 1961-1991. As a result, similar trend is also found in the growth of the percentage share of the female work force to the total non-agricultural work force of port towns in trade and commerce sectors during the said period 1961-1991, as that of eastern coast.

Similar trends are also found in case of the study of the gender ratio of the workforce to the total non-agricultural work force of the port towns in trade and commerce sectors during 1961-1991.

## Gender Ratio of the Workforce to the Non-Agricultural Work Force of Port Towns in Trade and Commerce Sector

It is found from Fig. 7 that the port towns of India including those of both of the western as well as eastern coasts had maintained a declining trend in the growth of the gender ratio of the work force to the total non-agricultural work force of port towns in trade and commerce sectors during

the period 1961-1971 but a sharp rising trend in 1991. However, both the above trends were found to much higher in case of western coast than those in eastern coast; hence similar trends like that of western coast was found in case of overall port towns of India. This also implies much greater participation of both the male and female workforce in those port towns of western coast as compared to male counter parts in eastern port towns during



**Fig. 7:** Gender ratio of the workforce of port towns to Total Non-Agricultural Workers in India in Trade and Commerce Sector

Source: Census of India, 1961, 1971, 1991

1961-1971. But greater participation of female workforce in those port towns in overall India was also found thereafter, as evident from higher gender ratios in the workforce, in 1991. This may be possible either due to i) migration of male workforce, in general, to the formal sectors of non-port towns, ii) social awareness and consciousness of the women folk about their economic necessities and dependencies, because of widespread literacy campaigns by governments as well as NGOs etc., and iii) too much development of informal sectors in the economy of India during the said period 1961-1991, as an impact of globalisation.

## Summary

It is found, that finally, both the western and eastern coasts as well as overall India have shown a gradual increasing percentage share of port towns in trade and commerce sectors during the said period (1961-1991). This have also been revealed from the dominance of trade and commercial activities in the port towns of both the coasts as is evident from the rising trend in percentage share of all types of work force (total, male and female)

in trade and commerce sectors of port towns to their non-agricultural workers during the said period (1961-1991) in both the coasts and also in India.

But it is found that western coast had shown a steady growth in the overall percentage share of port towns in the above mentioned occupations in India as compared to those of eastern coast in India during the said period (1961-1991). Manufacturing, and trade and commerce sectors dominate the port towns of western coast, with the decreasing percentage share of port towns in service sector throughout the said period (1961-1991). Again, service sector has gained significance in eastern coastal port towns in the post globalisation period (1991) as opposed to that in pre-liberalisation period (1961-1971), together with the slowdown in the growth of trade and commerce sector, too, in this coast in 1991. This may be possible because of the heavy growth of service sector, in India as an impact of globalisation of the Indian economy, together with the growth of informal sectors in this coast. But the growth of manufacturing sector has shown a reverse trend. This sector has lost its significance in eastern coastal port towns in the post globalisation period (1991) as opposed to that in pre-liberalisation period (1961-1971); this may be due to the poor and sluggish growth of industrial sectors in this coast. As a result, the same fluctuating trend of the eastern coast is also reflected in overall India, regarding the percentage share of port towns in total number of port towns in the above economic sectors of the country.

Again, it has been found that both the western and eastern coasts have contributed to the significant rise in the percentage shares of total, male and female work force in trade and commerce sectors in India during the said period. But western coast had shown a steady increasing trend in the percentage shares of total, male and female work force of port towns to that of non-agricultural work force as compared to slighter slowdown in the growth of corresponding percentage shares of total, male and female work force in trade and commerce sectors in eastern coast; the latter has also reflected the similar trend in case of port towns of overall India during the said period (1961-1991).

## Conclusion

Regarding the occupational structure of the port towns, both eastern and western coasts during the said period have shown the similar trend of the growing importance of secondary sector (industrial sector) and to some extent,

tertiary sector (service sector) over primary one in the economy of their port towns with the rising percentage share of the port towns in manufacturing and trade and commerce sectors and a decreasing percentage share of port towns in service sector together with the rising trend in percentage share of all types of work force (total, male and female) in trade and commerce sectors to their non-agricultural workers of port towns during the said period in case of India as a whole. This may also be possible because of the growing importance of trade in the occupational structure of the port towns since colonial period which also further have gained greater significance as international trade because of globalisation in the country. However western coast had played a steady role in the growth of economic activities of their port towns in post-independence period as compared to sluggish growth of the performance in the growth of economic sector of the eastern coastal port towns and also that of India; it may be because of the better growth of rich natural resource-based and mineral based hinterland of the western coastal port towns as compared to that of eastern coastal port towns in post-independence period as compared to that of the colonial period.

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