

The Importance of River Transport in Agra Region in the Early Modern Period and the Present Need for its Revival- Challenges and Suggestions

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ABSTRACT

Transportation has been fundamental to the development and progress of civilisations all over the world. Conquests and expansion have been achieved through the sea, as well as through inland movement over the rivers. The mode of water transport afforded a swift alternative to the movement over roads, wherever feasible. With the advent of the Mughals, the Yamuna riverfront at Agra soon developed as the prime residential area of the nobility in the vicinity of the Fort. The relevance of the Yamuna River as an important mode of transport continued well till the first quarter of the twentieth century. The paper emphasises the relevance of water transport in the Agra region as an important mode of freight movement in the early modern period, and establishes the importance of the Yamuna as a lifeline of the city. The paper encompasses the various districts that served as hotspots in the riverine travel and trade to and from Agra. Further, the present study also follows the trajectory of the rise of river transport in Agra, documenting the volume of travel and trade on the riverine route, and its significance, in the early modern period, which can be described as a golden age for river transport in Agra. It also notes the subsequent decline of river transport in the region, owing to the introduction of the railway system. Finally, the paper attempts to present the future challenges to a revival of river transport in this region, and also offers certain suggestions to re-invigorate the river transport system in Agra.

Keywords- Agra, Yamuna, River transport, maunds, Railways.

I. INTRODUCTION

Agra has been the essential terminal point in navigation up the Yamuna River, for boats of larger size, however, with the noted absence of commercial navigation on a scale as noticed at Delhi.¹ It is evident in this regard that Agra was a significant riverine destination for inland trade and public transport, before the second half of the nineteenth century, a period marked by the introduction and establishment of the railways in India. In spite of the same, the traffic on the Yamuna continued well up to the first quarter of the twentieth century. However, it subsequently diminished, albeit gradually, following the massive expansion of the railroad network, aided by the shrinking of the river

channel, when the river water was diverted to newly built canals.

II. FEATURES OF RIVERINE NAVIGATION IN AGRA AFTER THE MID-NINETEENTH CENTURY

At the beginning of the last quarter of the nineteenth century, there were 65 boats at Agra and 28 boats at Pinahat (Agra division), with the total number of boats numbering around 100.² Out of these, about half were employed in long distance trade and transport, with the rest being used for facilitating bridge of boats and at the ferries. The Yamuna also served as the major source of water for the Delhi- Agra canal that was opened in 1874 A.D.³ The significance and value of the water transport for the government at that time is clearly brought about in the report the Executive Engineer for the year 1877-78, in charge of navigation. He clearly emphasised the means of enhancing the revenue by way of exercising monopoly of boating operations and exclusion of all private boats from the canal.⁴ This highlights the mood of the government, which still favoured the incoming revenue from the river traffic, which still served as an important alternative transport, as the railway network was still in its nascent stages.

At this time, the number of boats passing annually through the pontoon bridge at Kalpi, situated some 140 miles below the district of Agra was 228, of which 120 passed upstream.⁵ The vessels moving upstream generally carried a weight of about 400 maunds (unit of weight equivalent to about 37 kilograms) and those going down the river of about 700 maunds. Thus, on an annual basis, the total freight on the river Yamuna, north of Kalpi (including Agra, Mathura and Etawah districts as well as Delhi) amounted to 1,23,600 maunds of which 75,600 maunds went downstream. The traffic on the Delhi canal was not of much significance, even though it was connected with the cities of Mathura and Agra because of the extra charges levied.

About 29,017 maunds were received from Agra district within Mathura and 3,765 maunds from Delhi. A total of 21,028 maunds were also despatched to Delhi.⁶ Raw cotton, jute, drugs and chemicals continued to be imported via canal routes to Agra division through other regions of the country in 1895-97 A.D.⁷ In the

district of Farukhhabad, the Bewar and Fatehgarh branches of the lower Ganges canal which were under construction were finally opened in 1880-81 for inland navigation.⁸

Even though the railway networks had been established, the riverine routes did not immediately lose their significance. They served as an important mode of transportation and trade, where the operation of boats was continued even throughout the rainy season, only suspended during peak flooding. Some fifty boats in total were going upstream and downstream between Agra and Delhi till 1904.⁹ The volume of river-borne trade between Agra division and Calcutta (now Kolkata) equalled around 1,10,444 maunds in imports and 21,901 maunds in exports in 1914-15 A.D.¹⁰ In the year 1905 A.D. in the district of Etawah, the boats plying on the canal route were of a medium range, 75 feet in length by 18 feet broad carrying agricultural stock from 400 to 1000 maunds in weight.¹¹ The frequency of navigation decreased considerably during the rainy season, persisting at its highest from September to January. The total value of imports of river borne trade in the United Provinces of Agra and Oudh declined equalling 79,790 maunds and exports being 33,152 maunds in 1917-18 A.D.¹²

III. ADVENT OF RAIL TRANSPORT AND GRADUAL DECLINE OF RIVERINE NAVIGATION

The city of Agra had been of prime strategic importance, due to which it had always been accessible by major roads built through the region, in earlier years. Even now, the main rail routes were built in and around the region, making Agra one of the hubs of rail transport, and connected the north, south and the eastern parts of the country. With the gradual extension of the rail network, all the other modes of trade and transport fell into gradual decay. The trade and transport via the river route also declined. The traffic in Agra Canal was closed way back in 1904, in the absence of adequate number of users and the cost of working expenses being higher than the receipts. This was exactly the time when the rail network was expanding at a quick pace, with the diversion of freight traffic to the quick and cost-effective mode of transport. The commodities, earlier traded through the riverine route, also moved along new trajectories and to new areas. Sugar and tobacco passed to Rajputana and central India, while salt was received from erstwhile Rajputana, cotton and ghee from adjacent regions and stones from quarries in the west to Agra district.¹³

The speed and logistics offered by rail transport also introduced a new dimension to the trade in this region- the development of a market for perishable and agricultural goods. Subsequently, the transit speed and large carrying capacity of the railways, soon outshone

and overpowered the comparatively economical river transport system.

IV. REVIVAL OF THE YAMUNA: NEED, CHALLENGES AND INITIATIVES

There is much pressure on the river now with the tremendous increase in population and growth of industry which utilise much of the river water resources, along with the water required for irrigation. As a result, the river shrinks to a narrow stream on several parts of its stretch from Delhi to Agra, except in the normal monsoon, getting reduced considerably in the post Gokul barrage stretch to Agra.

Furthermore, the rapid development of industries on the banks of the river, owing to the easy connectivity offered by rail transport, has further polluted the river with the discharge of toxic effluents. The River Yamuna, once famous as the lifeline of the region, is now unrecognisable.

The river is not only an invaluable natural resource that sustains the surrounding region, but has also served as an important riverine route for trade and transport. Furthermore, its historical and cultural value, cannot be undermined. It is essential to revive the river, for its potential as a reservoir of biodiversity, as well as its economic and tourism potential.

The Government of India has taken certain welcome initiatives in this regard. Yamuna has been notified as National Waterway 110¹⁴ in Haryana, Delhi and Uttar Pradesh, with the scheme to launch steam boat operations from Delhi to Faridabad and Delhi to Agra.¹⁵ This would restore a long forgotten natural, eco-friendly and economic mode of transport in Agra region. It would also bring about employment, creating a new workforce, and will go a long way in reducing the menace of pollution. The scheme would bring to priority the maintenance of optimum water levels in the Yamuna which is so essential to preserve the ecological wealth of the entire Agra region. As a chain effect, the government schemes of developing the Yamuna riverfront along the heritage monuments of the area, a part of the original design of these, would be tremendously facilitated with the policy of restoring water transport in the region. Water transport would enhance tourism alongside the river banks in the heritage rich zones of Agra and Mathura as well.

Yamuna Action Plan (YAP)¹⁶ for abatement of pollution of river Yamuna, was started by the Government of India in 1993, and is being implemented in a phased manner, for restoration and conservation of the river. Another innovative project is the Water Taxi project¹⁷ for the Yamuna, conceptualised by the Inland Waterways Authority of India, to boost the tourism potential of the river.

V. CONCLUSION

While the government has conceptualised various schemes for the rejuvenation of the river, any plans to initiate river traffic on the entire stretch would require maintenance of optimum water level and cleanliness in the river throughout the year, which is an extremely challenging task, given the present conditions. Measures such as regulating the excessive usage of river water resource for industrial purposes. At the same time maintaining ground water levels in the vicinity of the river by adopting large scale rain water harvesting need to be implemented. The unchecked and untreated sewage and industrial effluents discharge in the river also needs to be controlled on a strict basis. Further, a community-based approach would also be required, for any effective changes to take place. Such policies will ensure the return of the Yamuna to its earlier glory as a major means of trade and transport, as it was in the early modern period of Indian history.

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