Possible integration of monumental heritage with proposed transportation hub under the scheme of vision 2041: Opportunities reconsidered in World's only Juteopolis and **Dundee of the East, Narayanganj**

Ahmed Ar. Sayed¹, Shampa Ar. Farzana Nazrul²

Bangladesh University

Abstract

Narayanganj was a very important port from ancient times in the history of Bangladesh. Over the course of time, it is losing its originality because of technical advancement of contemporary life style. From the wounds of unplanned rapid urbanization, this largest river port of the country is now facing a great challenge to maintain its functionality due to lack of public awareness. An investigative social survey and historical literature evidence were adopted as method. Tentative recommendations based on social view analysis, might demonstrate the possible links for further maintainable remodeling by the custody of multipurpose communication hub. Such analysis will also reveal the various potentials introducing cutting age transportation techniques for implementing and securing Bangladesh's developing quest to achieve one of the top 20 economies status in 2041. By potential rehabilitation of neglected suburban areas, this port city can also be an income generating hub by adjusting bus, train and ships along with the historic site.

Keywords: Narayanganj, Jute, Communication, Multipurpose Port, Transportation Hub.

1

1



Figure 1: The selected urban district on the bank of Sitalakhsya

Introduction

As a hub for business, the ancient city has always been a one-stop city that embraces its history while retaining its inherited traditions and business since the Colonial era. Better roads, markets, well water and water drainage system and better work opportunities attracted traders, thousands of inhabitants and migrants from other districts particularly from neighboring southern and northern districts of

Bangladesh for years. [1] It is said that one prominent Hindu religious leader named Bicon Lal Pandy acquired the ownership of this region from East India Company in 1760's. He declared the markets located on the bank of the river Shitalakshya as endowed property by a will in order to meet the expenses of the worship of God Narayan. Consequently the name Ganj was turned into Narayanganj after the name of God Narayan. Lakhsmi Narayan Thakur, the first known landlord of Narayanganj had leased the area from the British East India Company in 1766 following the Battle of Plassey on 23rd June in 1757.

The town was named Narayanganj after the name of this person, Narayan. As He also donated the markets and the land on the banks of the river Shitalakshya for the maintenance expenses for the worship of the god Narayan (Hindu God). Glorious history of Narayanganj depicts it as the oldest and most prominent river port of whole eastern India. Narayanganj, the oldest and the most prominent river port of Bangladesh, grew into a prominent place of trade and commerce in the long past for which it was previously known as a Ganj.

The Portuguese and the English traders during the early part of the seventeenth and eighteenth centuries used this port. The Rally Brothers was the first foreign company who started trading jute in the area and with the help of an Assamese company it started to export the fiber from the port to the western countries in 1830. In 1907-08 there were 20 firms at Narayanganj engaged in the purchase, bailing and supply of raw jute to the mills of Calcutta. It was the first industrialized 'Juteopolis' in the world, it means the polis (city) based on jute. [1] Narayanganj town is located some 20 kilometers southeast from Dhaka. It is a former subdivisional town of Dhaka district and became a district headquarter in February 1984.

The prominent river port of Bangladesh is on The Shitalakshya River which divides the town into two parts, namely the Narayanganj Municipal Area and Kadam Rasul Municipal Area. The city is a center of business and industry, especially the jute trade and processing plants and the textile sector of the country. The total area of the district is 684.37 sq. km. It lies between 23o 33′ and 23 o 57′north latitudes and between 90°26′ and 90°45′ east longitudes. The area of the town is 18.7 sq. km with a population of 230294. At present, it is one of the densest cities of the country with a population of 7 million and density of 9,444 people/ sq.km. [2] Among them male are 53.51%, female 46.49%.

The density of population in town is 12315 per sq. km and the literacy rate among the town people is 60.2%. Main sources of income depend on 10 significant sectors. These are: Agriculture 14.38%, non-agricultural laborers 3.91%, industry 7.33%, commerce 23.87%, transport and communication 6.34%, service 23.13%, construction 2.52%, religious service 0.19%, rent and remittance 3.77% and others comprises 14.56% of the total scenario. Educational institutions are also increasing year to year.

Recently the city has 16 colleges, 2 technical colleges, 1 marine technology centre, 2 vocational schools, 127 secondary schools, 458 primary schools, 76 kindergartens, 1 collegiate school, 56 madrasas. [3] Narayanganj is among the busiest trade markets in the country; it is a terminal market for jute and historically has been a collection center for hides and skins. Together with Dhaka, it also forms a large industrial region, with many jute presses and jute and cotton mills. Other industries include ship repair and various manufactures, such as processed food and beverages, machinery and metal products, chemicals, and pulp and wood products. [4] The district is pioneer in merchandising and manufacturing of jute, yarn and dying items. Cottage industry like weaving abounds in this district. International trading, import and export business, garments industries, knitwear garments, shipyard, brickfield etc., create employment opportunities to the people facilitating additional income to the household population.

The rural economy of Narayanganj is agricultural. Out of total 532,415 holdings of the district 22.44 % holdings are farms that HYV paddy, vegetables, spices, cash crops, pulses and others. Various fruits like banana, guava are grown and fish of different varieties abound in this district. Varieties of fishes are caught from rivers, channels, creeks and from paddy fields during rainy season. The major income generating activities of the people in this district is business and working in factories.[5] Narayanganj has become one of the important centers of the wholesale trading of all types of commodities, especially, the textile products, yarn, dyes, chemicals, hosiery items, flour, edible oil, salt, cement, rod etc.

With improvement of the communication system, especially road transportation system, volume of trade has substantially been reduced as newer wholesale marts around the country have emerged. Bengal Institute is now working for the development of transportation sector of Narayanganj with good connectivity with the whole country.

Multi-modal hubs of multipurpose transport system can be planned and designed as the main port of Narayanganj. There is a chance to use road, rail or waterways together from the same place, which is the case for this study. [6]

Tomb of Sultan Giasuddin Azam Shah (1389-1411 AD), Baba Saleh Mosque (1481 AD), Goaldi Mosque (1519 AD), three domed mosque of Sultan Jalaluddin Fateh Shah (1484 AD), Hajiganj Fort, Sunakanda Fort, Pagla Bridge, Kadam Rasul Dargah, Bandar Shahi Mosque etc. are notable archaeological heritage and relics of this district. Historical Events: Sonargaon of the district was an important historical place from the ancient time. It was the capital of Bengal during the reign of Isa Khan. Jute and litchi is the main agricultural product here. But this district is pioneer in merchandising and manufacturing of jute, yarn and dying items. Cottage industry like Jamdani weaving in this district is world famous. Festival of Durga puja is also most gorgeous then whole country.

Objective of the Study

The study would present the practical scenario of land use pattern in unplanned commercial and transition area in the present context of Narayanganj city, the largest river port of Bangladesh. The effect of spatial configuration on the multilayered transport pattern has also been analyzed. Extensive study can be done based on this study which can eventually guide to generate some principles of urban transportation planning in the context of Narayanganj.

This context depends on the traditional value, food culture and 'Genious Loci' of historical fabric. (Figure 2) First, this study will explore the existing urban transportation hub development pattern of the study area. This will also examine the effect of spatial configuration of the river port area and future development pattern.



Figure 2: food culture of Bose cabin

Limitations of the study

The retail type was identified under broad category, detailing of individual transportation type was ignored in the study due to limitation of time. Only the planned segment of public transportation was taken into consideration, old districts of the city were excluded from the study.

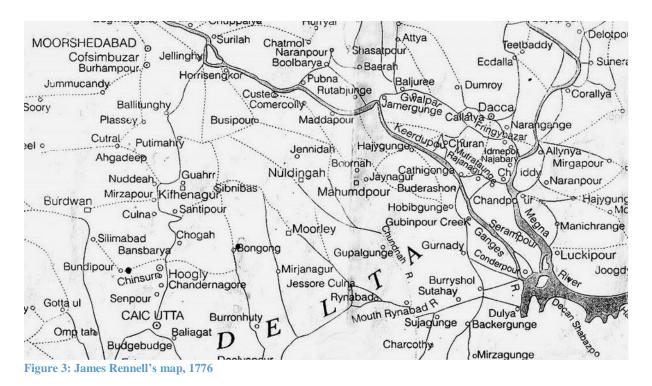
Research methodology

This study might pledge a number of contributions to the existing body of knowledge. From a theoretical/ academic standpoint, this paper will establish a hypothetical framework that brings urban redevelopment, economic benefit for community engagement, opportunities in food tourism and supplement for archaeological site which will benefit from urban transformation. Perceptions of over urbanization and their negative impacts will also meticulously be investigated with their possible links. Exploratory research technique will suggest designed communication hub of future need of the city.

Literature review

Survey of Bengal

Warren Hastings worked in Bengal and elsewhere for a period of 13 years, during which he



surveyed an area of about 300,000 square miles, stretching from the eastern boundaries of Lower Bengal. The mapping project was originally a general survey of newly acquired lands, but the job soon gained a wider scope under Warren Hastings, who was appointed as Governor-General in 1773. One of Hastings' first projects was to begin a detailed reckoning of property, land, people, and culture for taxation of revenue. As for Rennell's part in this, his project was carried out much like a military survey, searching for safe passage through territory, with information gathering a secondary object. [7]

Railway Station

Bengal was the sixth earliest region in the world to have a railway network in 1854, after Britain, the United States, Italy, France and Spain. The Dacca State Railway opened the 144-kilometre (89 mi) long meter gauge railway from Narayanganj to Dhaka to Mymensingh in 1884–1885.

This line was meant primarily for the collection of jute and its onward dispatch to Kolkata. It was also used by passengers to and from Kolkata, from Narayanganj to Goalundo which connected to Kolkata by rail in 1871. The launch from Goalundo Ghat to Narayanganj, across the Ganges took seven hours. It is nicknamed as the 'Dundee of the East' due to the presence of its many jute mills. Just like Dundee's knitwear industry contribution to British economy, this river port provided 80% of the world's jute supply. As British colony in India and it is situated in the East as well as Asia, this is how such comparison between two industrial cities have evolved. However, Narayanganj to Dhaka train stations are, Chashara, Futulla, Pagla, Gendaria and Kamlapur. Narayanganj was then known more as the port of Dhaka. It constituted the great mart east of Shirajgonj on the Jamuna River, and had regular steam communication with Calcutta, Syhlet Assam, and Kachar. The port had international trade with Chittagong.

The British government declared Narayanganj as a tax free port in 1879, a move which attracted many English people to come and start businesses in Narayanganj. [8] It was the famous railway station in the British and Pakistan period also still now. This is oldest railway station in the region. The station was most important terminal specially jute trading meant Adamjee Jute Mills and other communication routes abreast ferry terminal along with bus terminal. Now, more than thirty thousand passengers travel daily to the capital from Narayanganj by train. Everyday, except Friday there are sixteen trains departure from Narayanganj and sixteen trains arrival from Dhaka in this Junction and they run from early morning at 6.25 AM to 11.15 PM. At Friday six trains up and down between Narayanganj and Dhaka from morning to evening.

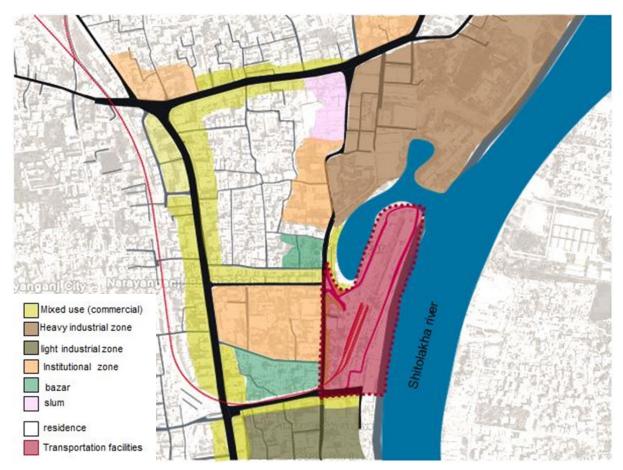


Figure 4: Land use pattern of Narayanganj, 2016

Food, Tagore and intangible culture



Figure 5: Narayanganj railway station, functioning since 1885.

"I shall never forget one such occasion. It was 14th April 1913, that I was going from Goalondoghat to Narayanganj in the river steamer Candor..... I had just read about Turner's paintings in a book...... the glow of his paintings,

visualized by imagination, seemed to lie on the

wide landscape all around me." Rabindranath Tagore. [9]

Narayanganj river port

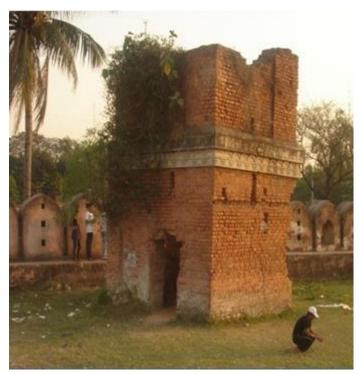
Steamer services from Narayanganj started in 1862. At that time, steamer and rail routes via Goalanda and Narayanganj connected Dhaka with Calcutta. Narayanganj was then known more as the port of Dhaka. It constituted the route of great market of raw jute from western district of Shirajgonj on the bank of Jamuna, and had regular steamer communication with Calcutta. In the east this was the connecting point through Syhlet and Kachar to Assam.

The port had trade with Chittagong, the largest sea port of south-east Asia. The British government declared Narayanganj as a tax free river port in 1879, a move which attracted many English people to come and start businesses in Narayanganj. Today, there are only eight waterway routes for running the river routs. These routes are like the following: Munshigonj, Matlob, Chadpur, Madaripur, Sariyatpur, Boirob, Norsingdi, & Bisnondi. There are a few rivers and rivulets flowing through the district. Among those the Shitalakshya, the Dhaleshwari, the Buriganga, the Balu and the Meghna are important. Those are non-tidal and navigable throughout the year. They have been playing a vital role in the economy of the district as they facilitate irrigation, drainage, and water supply of the area. The riverine area is about 111.46 sq. [10].

Waterway trade

It is also evident in the writings of explorer Tome Pires, who was in India around 1510 AD described that people of Bengal who were very efficacious wholesalers and a large number of Middle Eastern wholesalers like Persians, Turks and Arabs established trade in the entire region. Among them, merchants from Armenia lived in Dhaka region for clothing trade and were very powerful landlords. This European business made the prestigious muslin craft vanished, as their cruelty is still evident in this region.

For information, Dhaka municipality's almanac export of cotton goods and chattels during the 18th century through the British East India Company alone amounted nearly 30, 00,000 Indian Rupees. Again, Great Exhibition displayed Jamdani Scarfs in London in 1862; which means the value of this craft already reached to the rest of the world by greater waterway navigation. First of all, it is understood that these production centers were located in the middle of production sites of cotton specifically suited to weave Jamdani. Secondly, the river system greatly facilitated the supply of raw cotton, and distribution and marketing of finished products. All the markets (Aarongs) were, therefore, on the river banks. [11]



Two Mughal Heritages

Hajiganj fort

Also called Khizrpur Fort, it is situated at Hajiganj of Narayanganj on the western bank of the Shitalakshya. As water-way based fort, it was originally built just at the point where the old Buriganga discharged into the Shitalakshya. It may have been built

soon after Islam Khan established the Mughal capital at Dhaka in 1609AD, and was intended Figure 6: Hajiganj fort, west bank of river Shitalakshya to countercoup the raids of the Magh

and Portuguese pirates. The fort, quadrangular in size, consists of a pentagonal curtain wall machicolated for muskets with rounded corner bastions. On the inner side of the curtain wall there is 1.22m high rampart walkway from the base of that curtain wall which is itself pierced by several musketry holes.

Each of the corner bastions has a staircase inside up to the rampart level and its marlins have wider holes in between meant for gun firing. In a corner of the fort quadrangle there is a free tall square column of brickwork which seems to be a guard tower.

The existence of the elevated platform for the setting of cannons is an important feature of the fort. The existing brick column links the fort with other two water forts of Idrakpur and Sonakanda, during the onset of Mughal time. There is historical evidence that the Mughals didn't occupy Bengal for the strong naval defenses of the twelve sovereign landlords lead by Esha khan of Sonargaon. Even the greatest warrior ManShing was defeated by him and Akbar the great gave him the allegation of 'Mashnad-e-Ala', means throne ambassador of the emperor in Bengal province.

The defeat made the Mughals to realize the importance of river forts and there is a paradoxical conception in history that whether they have mounded the conquered forts of these independent rulers, or erected them as a victory mark of their bloodshed cost which later became the frontiers to save the capital Dhaka from Arakanese pirates. The second one is more acceptable proof. Surprisingly, we do not find any river fort in Sonargaon, the capital from 5th AD in regular intervals. Why have the rulers from Delhi erected a group of river forts to guard the water routes to Dhaka and other places of strategic importance? This is because of the Mughal's interest to establish an Islamic city within a fortified belt.

The number of mosques in today's old portion of Dhaka city indicates the significance of this statement. Again, the tyranny after the decline of landlords' reign and as the pirates invaded so recurrently to test the strength of new settlers; the then circumstances compelled the Mughals to build a threshold on the mouth of entrance horn of river Buriganga. These river forts are witness of the quest for defensive shelter of world's most prosperous dynasty in a far distant and troublesome province, indeed.



Sonakanda Fort

A Mughal river-fort located on the eastern bank of river Shitalakshya, at almost opposite to the Hajiganj fort. The fort is not dated by any inscription as there is no evidence for this.

Figure 7: Sonakanda Fort, Narayanganj

Though the construction of this fort is attributed to Mir Jumla. On stylistic similarities with other Mughal river-forts in and around Dhaka it is datable to the mid-17th century.

The defensive walls and the massive artillery platform are still in existence. It is quadrangular in plan, measuring 86.56mD757.0m and surrounded by a 1.06m thick brick-wall, 3.05m in height, with inner and intermediate bastions. The wall is built solid at the bottom. There is a circular artillery platform with a staircase on the west side, which leads up to the raised artillery platform to be entered by a five-foil arched gateway. The artillery platform, meant for a big caliber cannon aiming at the attackers coming up the river, was a new feature of the Mughal river forts in Bengal. The platform has two circles of which the inner is 15.70m and the outer is 19.35m in diameter respectively. It is 6.09m in height and surrounded by walls. The corner bastions on both sides of the western wing are wider than those of the eastern wing, which are 4.26m, while the two on the western wing are 6.85m in diameter.

The fort has two main parts; one is a fortified rampart wall of enormous dimension, which has numerous wide and narrow loopholes. And the other part, the most important one, is a raised outwork on the western face. Excepting the artillery platform, there is no trace of any permanent structure within the fortification walls. All round, the walls are crowned by machicolated merlons, which are on average one meter high.

The fort is provided with a single entrance gate on the north. The arched gateway is placed within a rectangular frame and both the sides are decorated with several plastered panels. The lofty arch of the entrance gateway is of the four-centered variety. There are four corner bastions. Unlike the bastions of the forts at Hajiganj and Idrakpur, the bastions of this fort are octagonal in plan. [12].

Change during the years of World Wars

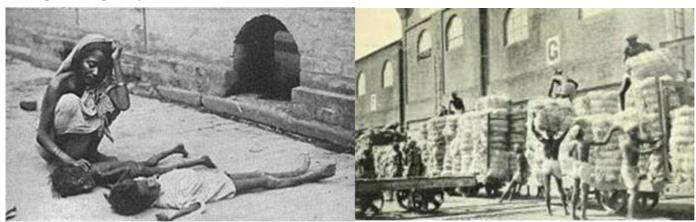


Figure 7: Bengal famine, 1943.

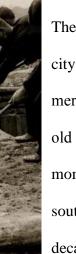


Figure 9: Trench made from jute sacks in WWI

Figure 8: The jute transportation in 1905

The pattern of land use of Narayanganj city rapidly changed, as the city tends to merge with the characteristics of Dhaka's old town, today's Mega city. Facing a momentum of economic growth on the south side from 17th century to the first decade of 19th century, this old river port changed its direction.

This momentum has altered the land use pattern of the area for the urgency of jute overproduction and controlling the activities during the years of war The process of industrial urbanization leads to the alteration of existing land use pattern of a historic city The present

research is an attempt to explore the link between the changing land use and the environmental degradation of the particular study of city portion over the bank of river Shitalakhsya by the combination of physical and human parameters of both administrative and productive aspects. The study found that a significant change has been occurred in land use pattern of the city is the conversion of agricultural land into 'mixed use' settlements based on jute and craft. Finally, it is discovered that the intensive land use of the city is mainly responsible for gradual degradation of physical environment during the first half of previous century, shifting toward the north, mainly based on jute factories. Especially it has a direct connection with the capital city Dhaka. The connectivity between the central place of the city and its fringe area has been developed because of the availability of interurban transport system.

More expanded administrative set up and other activities around the Hajigonj fort promoted its growth from a small administrative town to a commercial city and finally as a multifunctional urban center. It got a better transport network with different districts of Bangla in this time. As a result, many employment facilities are created. A large number of populations from different areas of Bangladesh have migrated here for several pull factors including employment facilities of the city. These migrated people build permanent settlements in the city, were of labor class, uneducated Muslims.

The Bengal famine of 1943, consequence of rice stocking and jute production instead of rice in British colonial rule.

This site has an evil root in history. The Mughal forts were converted to river police station. As Narayanganj was main river port in whole eastern India, it was essentially important to control jute trade for trench sacks in the European battle fields and also store rice for British troops.

'Speculation was corn of greed and panic produced an "artificial" shortage of rice' — Amartya Sen, Bengali Nobel winner at economics in 1999 found it in his research. Actually by 1895, jute industries in Bengal overtook the Scottish jute trade. Many Dundee Jute Barons immigrated to Bengal to set up jute factories. More than a billion jute sandbags were exported from Bengal to the trenches during World War I and even more during WWII in the arms industry. During World War II, following the Japanese invasion of Burma British government tried to store rice for its multicultural colonial troops. Again, European battle fields need more sacks to fortify its trenches.

As a consequence, Jute was cultivated in rice fields to cope with the demand. Again, rice was exported for the British Empire soldiers. Approximately 4 million people died due to famine; it was one third of the united Bengal's population.

An estimated 2.1–3 million, out of a population of 60.3 million, died of starvation, malaria, or other diseases aggravated by malnutrition, population displacement, unsanitary conditions and lack of health care. Millions were impoverished as the crisis overwhelmed. [13] In May 1943, six districts—Rangpur, Mymensingh, Bakarganj,(Barisal) Chittagong, Noakhali and Tripura—were the first to report deaths by starvation. Chittagong and Noakhali, faced the hardest hit. Controversy about the causes of the famine has continued in the decades since.



Attempting to determine culpability, research and analysis has covered complex issues such as the impacts of natural forces, market failures, failed policies or even malfeasance by governmental institutions and war profiteering or other unscrupulous acts by private business. The questionable

accuracy of much of the available contemporary statistical and anecdotal data is a complicating factor, as is the fact that the analyses and their conclusions are political and politicized. [14] thus these forts should be integrated in urban design as conservation project for their value.

Vision 2041

"By providing the necessary services to the citizens, to create an environmentally clean, health-conscious, safe and poverty free planned city"- is the motto of Narayanganj city corporation to achieve within 2041 and they are approaching it in their master planning too. In view of this, the city corporation has adopted various periodic urban development plans considering the time limit for the next 20 years, which has initiated a new initiative by emphasizing the importance of public transport, public and housing. Narayanganj is now

Figure 10: Student exhibition in 2012, student courtesy: Md. ready for renovation. On the basis of proper planning, Mirazul Islam. Bangladesh University

the city may become one of the most decorated cities in Bangladesh.

Eastern Bypass: It is high priority of the development of Eastern By-pass to become the national network of arterial roads and to relief the existing traffic in urban area. It provides an arterial road connecting Chittagong Highway and north- west of the country via Tangail and the new Shitalakshya Bridge.

Commuter Rail Network: The DMDP promoted the development of a long-term commuter rail network to serve the high density sections of the main urbanized area. Mass transit system would be essential to ease the traffic flow and proposed to operate by 2015, and Narayanganj is going to be a bus-steamer-rail transition hub.

Satellite Town Development: The DMDP proposed development of new satellite communities in the northern parts of the metropolitan area to absorb population growth. The priority location for the development of satellite communities would be in Gazipur, Savar, Dhamosona, Kaliganj, Narayanganj and Purbachal., The DAP are, however, not finalized yet and still under process of approval and notification by Gazette. [15] The southern area including Narayanganj, Bandar, Munshiganj and Sonargaon would be developed by using inland water shipping services to send goods to the north. Within Dhaka



city, it is encouraged to build self-sufficient communities. [16]

Outcome of study

Inadequate housing, water pollution due to industrialization, lack of transportation and absence of a consolidated vision of the city are also being observed. The urban area of Narayanganj city is dotted with many industrial units mostly located on the two banks of the Shitalakshya River and the eastern bank of the Buriganga River.

These industries create a lot of employment opportunities in the city. Many people come here for employment and business purposes from different parts of the country.

At least 50% to 60% of the people currently living in Narayanganj City Corporation have come from the rural portion of the country. The population growth rate of Narayanganj is 4.48%. This rise in migrated population increases the demand of housing in Narayanaganj. [17] City expansion is a rising issue especially in this case, the city that containing a large population being a small city.

Focusing on the expansion of neighboring Dhaka city and the different policies adapted at different time to control the city expansion the author tries to give a detail description about the policies and has tried to find out the problems of the city due to unplanned expansion and tendency of not maintaining the policy. Master plan, integrated urban development plan, metropolitan development plan and other planning laws and regulation to control overall urban developments are mentioned here. Infrastructure policy has also given due consideration with urban sprawl. Problems due to spreading of real estate development and weak regulation and less control are also identified below:-

Challenges

- 1. No pedestrian on road near by terminal Ghat (deck).
- 2. Polluted river water.
- 3. Air is polluted by industrial waste.
- 4. Unplanned buildings all around and their character is highly mixed use.
- 5. Industrial and proper maintaining & perfect time schedule need to be followed for accessibility from Dhaka regarding Tourism and mobility.
- 6. Lack of recreational, open or green space and public Commercial area near residence.
- 7. Old and almost inactive sewerage system and in many areas those are connected with open drains.

- 8. Several areas are crime ridden, and full of anti-social activity.
- 9. Ghats are not properly used and dirty.
- 10. No parking area neither for vehicles nor Less transportation facilities
- 11. Once, the steamers were running between Narayangonj to Dhaka. But now they are extinct because people need long time duration and expensive rent that increased Transport Maintenance cost
- 12. Filled River bed is not dredged over time. Thus River bed is not deep & flow less.

Opportunities

The future urban development of capital Dhaka will emanate from a dominant urban center and envelopes adjacent cities and settlements, such as towns like Narayanganj. These cities and settlements will constitute a multi-core mega urban region centering DCC. There are at least four key issues in the development of multi-core urban region. The future urban structure making multi- core mega urban region in Greater Dhaka Area is Existing North-South Development Corridor, i.e., Tongi — Mirpur — Dhaka City's Central district — Narayanganj. [18] These are:

- 1. Strategic urban development of satellite communities.
- 2. Effective transport network to connect existing urban cores with surrounding growth poles.
- 3. Proper urban governance for model transportation center and take effective measurement regarding this.
- 4. Creating adequate employment for sub urban communities.
- 5. Easy and faster water communication by Shitalaksya river, Brahmmapotra River, Burigonga River, Padma River, Meghna River and Dholeswaori River.
- 6. Large launch terminal, which is largest in the country. Functional use of all Ghats & terminal which are still vivid.
- 7. Road transportation, communication by all modes of Transport.

Recommendations

- 1. Possibility to get connected with international water way facilities with Chittagong sea port as goal network.
- 2. To increase Government policy & exertion for railway as to keep it like an industrial museum.
- 3. Less rent, more facility.
- 4. Dragging of the river.
- 5. Give opportunity to Private companies to conserve the food culture and a railway which is not present in the city right now.
- 6. Remove the illegal occupancy of historical places, especially the Hajigonj fort.
- 7. The vision 2041 development program and proposed bridge connection should be amended to according to conserve railway station and Mughal fort and open space for civic gathering purpose by the riverside. This will strengthen historic value of port city.

Analysis

Heritage-linked creative economies and effective transportation hubs can prove to be a strategic asset for national culture policy and strengthen local distinctiveness. They can, together, play a catalytic role in giving a progressive and inclusive identity to a nation. Through a strategy for creative economies, culture industries can contribute towards local economy as well as global competitiveness. This would facilitate a robust economy founded on value-adding and local pride jobs. A well planned and creative economy strategy can create a diverse portfolio of job profiles thus supporting employment for the next generation. Proposed transportation hub will accelerate the scenario. This will contribute to national GDP and also help in transforming economic landscape through easy and fast communication system in specific places.

Increasing demand abroad through Good diplomatic relations with neighboring countries might also ease exports from this river port. For export, Development of the internal road network and business communication system needs to be upgraded anyway. More importantly, increasing investment from private sector will be effective as government solutions are not sufficient to handle all the transportation problems in multipurpose and multilayered communication hub.

Conclusion

The remaining plinth of police station adjacent to 17th century Mughal river fort shows the scare on the urban fabric and the demolishment of the then jute transportation hub is now replaced with garments industry; now Bangladesh's first source of export and gain foreign currencies. By continuing its tradition, Narayanganj city is located within the sphere of supportive influence of the capital city Dhaka. Such favorable location of the city plays a vital role in the economic changes of the city from jute, the golden fiber to knitwear, the cheapest labor of the world. To accomplish its future need, the transportation hub is just a burning need for Narayanganj with rest of the country.

References

- 1. Narayanganj Townscape: A comprehensive development plan for Narayanganj [https://bengal.institute/research/narayanganj-city-development/]
- 2. Narayanganj Townscape: A comprehensive development plan for Narayanganj. [https://bengal.institute/research/narayanganj-city-development/]
- 3. Narayanganj District: Banglapeadia [http://en.banglapedia.org/index.php?title=Narayanganj_District]
- 4. Britannica: Bangladesh [https://www.britannica.com/place/Bangladesh]
- 5. Narayanganj district report: government of Bangladesh [http://203.112.218.65:8008/WebTestApplication/userfiles/Image/District%20Statistics/Naray anganj.pdf]
- 6. Narayanganj Townscape: A comprehensive development plan for Narayanganj [https://bengal.institute/research/narayanganj-city-development/]
- 7. MohiuddinGulam (2008) "Geo-correcting Rennell's Map Frames and Exploring and Analyzing The Key Components: A Methodological Approach", Unpublished BSc research report, Department of Geography and Environment, Jahangirnagar University, Savar, Dhaka.
- 8. Mukherjee, Hena (2012). "Eastern Bengal Railway". In Islam, Sirajul; Jamal, Ahmed A. Banglapedia: National Encyclopedia of Bangladesh (Second ed.). Asiatic Society of Bangladesh.
- 9. Habitations of Modernity: Essays in the Wake of Subaltern Studies, Dipesh Chakrabarty, 2002, university of Chicago press, USA
- 10. Bangladesh Population Census 2001, Bangladesh Bureau of Statistics; Cultural survey report of Narayanganj District 2007. Cultural survey report of upazilas of Narayanganj District 2007
- 11. Taylor, J. (1851) 'A Descriptive and Historical Account of the Cotton Manufacture of Dacca, in Bengal.' John Mortimer publications, London. Page 48

- 12. Khan, Muazzam Hussain and Bhuiyan, Mokammal H. (2012). "Narayanganj District" In Islam, Sirajul; Jamal, Ahmed A. Banglapedia: National Encyclopedia of Bangladesh (Second ed.). Asiatic Society of Bangladesh.
- 13. Dyson, Tim; Maharatna, Arup (September1991). "Excess mortality during the Great Bengal Famine: A Re-evaluation". The Indian Economic and Social History Review. SAGE. 28 (3): page 281–297. Doi: 10.1177/001946469102800303
- 14. Tauger, Mark B. (March 2009). "The Indian Famine Crises of World War II". British Scholar. 1 (2): pp.166–196. doi:10.3366/brs.2009.0004.
- 15. PROJECT OF NARAYANGANJ CITY CORPORATION, BANGLADESH,

http://resilientcities.iclei.org/fileadmin/sites/resilientcities/files/Resilient_Cities_2014/PPTs/E/E3_Hossai n.pdf

- 16. A geographic information system-based logical urban growth model for predicting spatial growth of an urban area, Ripan Debnath, ATM Nurul Amin. [http://journals.sagepub.com/doi/abs/10.1177/0265813515618565]
- 17. Narayanganj Townscape: A comprehensive development plan for Narayanganj [https://bengal.institute/research/narayanganj-city-development/]
- 18. DHUTS Dhaka Urban Transport Network Development Study Final Report, page 11, Main Volume, [http://open_jicareport.jica.go.jp/pdf/11996774_06.pdf]

References of illustrations

- 1. Google Earth Satellite views image
- 2. [http://umami-kaniska.blogspot.de/2015/05/bose- cabin.html]
- 3. [https://en.wikipedia.org/wiki/Bengal_Presidency]
- 4, 5, 6. Picture taken by Sayed Ahmed, 2013
- 7.[https://www.revolvy.com/main/index.php?s=Beng al%20famine%20of%201943]
- 8. Rare photos of Bangladesh [https://www.facebook.com/BangladeshOnRecord/?ref=br_rs]
- 9. [http://www.historyextra.com/feature/first-world-war/10-golden-rules-fitness-first-world-war-soldiers]

10, 11. Student exhibition in 2014, courtesy: Mirazul Islam, student of Bangladesh University, Mohammadpur. Dhaka 1207.