Industrial Revitalization: A Case Study on Pabna Bscic Industrial Area

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Abstract

Industrialization has played an important role in improving the economic conditions of developing country like as Bangladesh. Industrial Revitalization means improvement or to give a new life as well as essential for sustained economic development and social progress .Industrial sector is important improving parameter developed and developing countries as Bangladesh. Bangladesh is a developing country. It has many industrial sector but those sector are formed improper way. There are many small and cottage industry as Pabna is one of them. Pabna is a district in north-western Bangladesh and southernmost district of Rajshahi division. Its administrative capital is eponymous Pabna town. We are surveyed on Pabna Biscic (Small & Cottage) industrial area and collection data sources are primary data and secondary data. Pabna Biscic areas are facing various kinds of problems including that drainage system, water logging, waste management, unskilled manpower, financial crisis, power crisis, disabled water supply and road network as well as improper planning system. Drainage and water logging are major problem kinds of them. Industrial development especially expansion of small and Cottage industries is very much essential for the socio economic development of the country. This paper results on proper planning develop and adaption of machinery technology as well as improving skilled labor enough supply of raw material and power. This paper conceptualization are environmental consideration sustainable development as well as economic growth in our country.
Key words: Importance, Deficiencies, Problems, Proposal, Sustainable Development.

Introduction

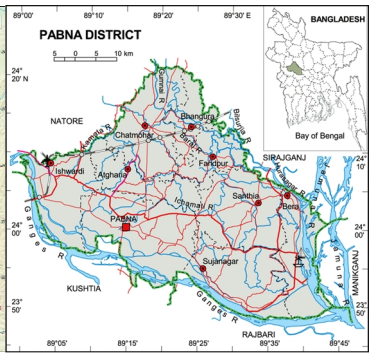
As a developing country, Bangladesh is facing a big problem to ensure an elite industrial activity, while the world community from both the western and eastern era is concerning too much awareness for the development of their industrial perspective. This country has a huge population, but this population is not being used purposively because of proper planning. Moreover, the government's policies are often debating and confusing. Due to the lack of sustainable economic development program a lot of unplanned and undeveloped industrial areas have grown in our country. (Khanam,2004)

Pabna, the industrial city of Bangladesh, has been experiencing rapid urbanization and tremendous rise of population. Countries second largest industrial area situated in Pabna, named BISCIC Industrial Area. The BISCIC industrial area was established in 1962 under Pabna sadar area named Chatiani .This industrial area include 109.68 acres land and expenses 3000 million taka to establish this area. In this industrial area have 169 industrial unit in total and 8 industry are closed and 4 industry are under construction.

Study Area

The study area is BISCIC Industrial Area, Pabna city. This is a prominent area of the Pabna city and famous for it. The location of the BISCIC Industrial area in Pabna city is shown in the map.

Map:Map of Bangladesh



Map:District Map of Pabna

Source: http://www.mapsofworld.com/bangladesh/

The geographical location of BISCIC Industrial Area is latitude $24^0$00'35.46"N and longitude $89^0$13'09.06"E. The selected industry of this study is Prince Chemical Co. Ltd which is located at the North East corner of BISCIC Industrial Area. It is situated by the side of Mental hospital road. The distance of the industry from the Pabna Dhaka highway is 3 kilometers.

Methodology

Both primary and secondary data have been used in conducting the study. Primary data have been collected by applying qualitative technique like depth interview labor, staff and urban dwellers approach. Data have been collected purposively from different industries officers. Their opinion has been collected to get an insight into existing drainage management system. Their suggestion has also been considered in the study. Secondary data have been collected through pursuing different reports of Pabna pourashava's, web materials, various articles and AGM of Pabna Biscic industry.

Existing Drainage Problem

Drainage System

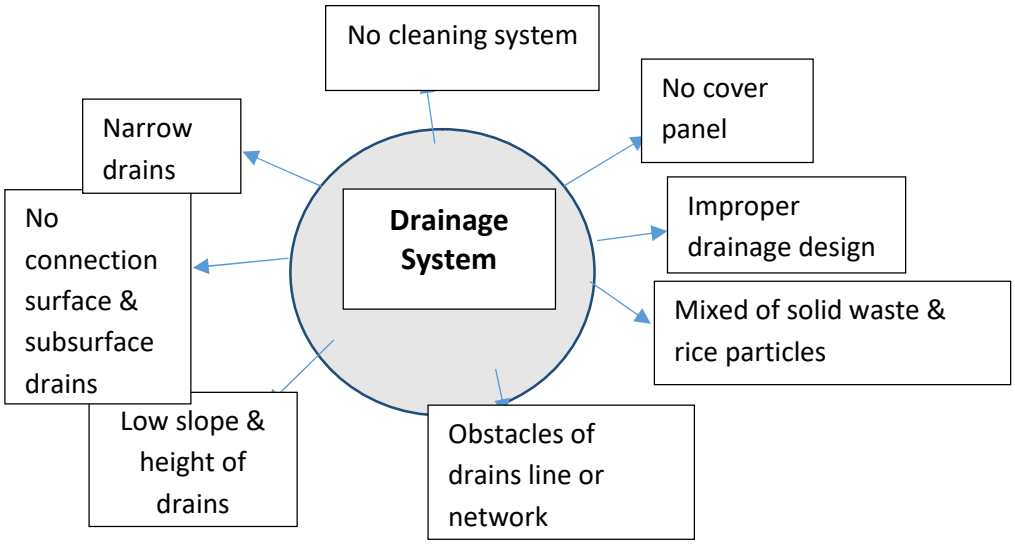


Figure: Scenario of Drainage System

- Narrow Drains

Biscic industrial areas are existing two types of drains such as primary drains and secondary drains. Primary drains are such beggar than secondary drains. Secondary drains are creating the industries own self sector in these case these drains are made by improper planning and narrow size.

- Mixed of solid waste

There are different solid wastes and rice particles are mixed the drains line and obstacles the water flowing, in these case during rainy season are creating water logging. Besides industries different rice particles and husk are mixing drainage line and it's restriction from water throwing system.

- No cover and connection of surface drains

There are no cover and connection system of drainage system in these industries. Besides surface and sub-surface drainage are not connected proper way system. These drains are not digging proper well. So above these case industries are facing different problems such as water logging, water congested, muddy areas, collection problems, transportation problems etc.

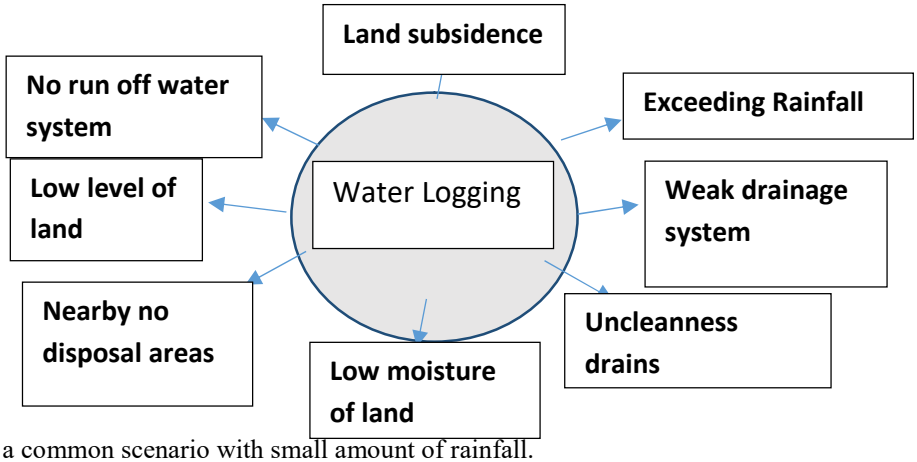
- Low slope & height of drains

These industrial areas road and drains are not making sloping consider. In these case, flooding season creating water logging and road infrastructure are exceeding damaged.

Besides some problems are facing in these industrial areas such as no cleaning system, no cover panel, improper drainage design, Obstacles of drains line or network, No connection surface & subsurface drains etc.

Drainage problems main scenario is water logging

Water Logging



Waterlogging is a common scenario with small amount of rainfall.

Flooding, pollution of water and bad spell from the open gutters, for lack of inefficient drainage network, lack of continuity in drain construction.

Open dumping of solid waste and improper management and blockage due to lack of maintenance.

Maintenance of the drains hasnot been carried out regularly.

There is not enough dump sites of waste as a result people dumped waste indiscriminately between buildings, road side etc.

Recommendation for Improving Drainage System

Drains line are cleaning regularly as if water were moving or running freely.

Widen the drainage line system because exceeding rainfall time, water flowing proper well and easily.

Sitting the cover panel of drainage system as if solid waste were not mixed on drains.

Properly connecting the surface drains, sub-surface drains, industrial areas drains, and pourashava's drain as well as disposal areas drains etc.

Disposalareas are fitting the Water Treatment Plant and some uses recycling processes system.

All drain pipes, including soil pipes, waste pipes, ventilating pipes and underground drain pipes should be maintained in good working order without defects.

All such pipes should be inspected regularly, and where leakage, blockage or defects are detected, they should be rectified immediately.

Minor blockage of drains can usually be cleared by high pressure water jet or rodding.

In case of serious blockage by materials such as cement, the defective portion may have to be exposed and replaced.

Manholes should be readily accessible for regular maintenance. Access to them should not be obstructed by floor finishes, planters or furniture items.

Foul air leaking from manholes can be stopped by using double seal type manhole covers, or repairing the edges of the manhole openings or cracks in the manhole covers.

In order to detect cracks or defects in those parts of the drain pipes which are not carrying water, e.g. ventilating pipes, it would be necessary to conduct a detailed examination by making close inspections of the pipes. Such inspections should cover each part in particular the branch pipes of the drainage system.

All parts of the vertical drain pipes, including soil pipes, waste pipes, ventilating pipes and branch pipes are to be checked thoroughly to ensure that there are no cracks or leaks are found in any section of the pipes, they should be replaced.

Specific Aims & Targets Aims

The developed model is able to synthesize the sustainable process pathways for an Integrated, Resource Efficient (IRE) rice mill by maximizing its profitability while minimizing the environmental impact of its by product utilization. Using the fuzzy programming system, it can eliminate the biases of human decision makers by assigning different weight factors to each objective function, as required in the weighted averaging objective system.

Specific Aims	Targets Aims
Increasing production level	Resource material balance
Quality based production	Mass Balances for technology
Technology based production	Environmental performance
Sufficient supply of production	Objective function
Improving transportation system	Environmental sustainability
Ensure power supply	Quality product supply all over the world
Available raw material collection system	

Conclusion

The project reflects the present situation of the BISCIC Industrial Area, Pabna. Among those situations, a specific problem is identified and tried to solve. Though it has some limitation in data collection, it could be good and short term methodology for creating a drainage path. It could be a part of the revitalization of the site. At present the other conditions i.e. management, skill, labor unrest etc. are comparatively good. That's why this scenario has been selected to improve the system with drainage and road camber to prevent water logging. The method could be very helpful for the drainage network design and it could minimize the surveying cost. The implementation scheme and sustainability could also help. In short, by implementing this project concept, other industries of Bangladesh which have this water logging problem, can revitalize themselves. If drainage network work properly the utility service also run properly. There should have coordination with different organization and monitoring work should be emphasized for the better management of the natural drainage system, which will be helpful to remove different unanticipated problems.

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