

Restoration of a polluted canal with its natural beauty and make an attractive public place in Singra

Context

Similar to the cooling impacts of parks, water bodies are likely to offer downwind cooling effects. Open water bodies offer a source for moisture in order to back up the oasis effect over day duration, specifically when the region is invaded by drier, larger-scale warmer surroundings of urban environment. Within an urban region water features can have a positive influence on the microclimate of the surrounding regions when the natural cooling coming from the evaporation will be required in the hot sunny days. However, the number of water bodies is becoming increasingly polluted in Bangladesh because of lack of care, dumping of waste, limited awareness and illegal encroachment. Currently, the Government of Bangladesh (GoB) is taking many appreciable initiatives to regenerate the water bodies.

Singra Municipality, a secondary city of Bangladesh located in the north-western part of Rajshahi Division, and surrounded by 3 rivers (Atrai, Gur and Barnoi) and a part of historic Chalan Beel (largest wetland in the country). A 30-years old and 1.5km long canal, which is nearly dead, intersects from the middle of the city. The canal was used as a place of waste dumping rather than to get its natural benefits. Drains and outlets of latrines were connected to the canal which is creating harmful causes for the waterbody inhabitants and as well as health issues for the citizens. The illegal encroachment and filling up of lands by a group of people turned the canal into a dead place in recent times..

Commitment

In 2014, the honorable State Minister of Information and Communication Technology Division, Mr. Advocate Zunaid Ahmed Palak (MP) has looked over the canal and planned to restore the canal with its natural beauty and solutions to make it an attractive public place. In this continuation, Singra Municipality started to work on it in 2016. It was planned to restore the full area of the canal with a nature based-solution i.e. creating microclimate for local species, promoting walkways and beautifications. However, with the limited funds e.g. BDT 100,000.00 from the Ministry of Local Governments, the Municipality started the works in 2016.



1. Before implementation



2. After implementation

Interventions

In 2021, significant improvements have been made from Madrasa morh to Model Primary School. This part has been opened for the people as an open public space which is turned into a best place for the women, children and elderly, to breath, walk and recreation. Hundreds of trees have been planted inside the area; solar street lights and

CCTV cameras are installed. About 11 people are being employed in which most of them are doing business of fast foods. A bicycle stand has also been promoted inside the area in order to encourage cycling. People were going to the main roads for morning walks & exercise, which was risky for them because every road doesn't have footpaths. People, who were used to walking in the morning on the main roads, are now able to use this new place without risk.

ACHIEVEMENTS

Best example of nature based solution		
Recreation especially for women children & elder person		
Raising awareness on environment		
Upgrading the quality of Street Foods		
Attract Business Investment and Employment		
Attract Tourism that supports local economy		
Cultural Opportunities		
Reduce Crime		
Accessibility of Pedestrians		
Improvement of public health		
		
Walk way	Fast Food Café	Cycling space for childrens



Few years ago, this was a safe zone for the drug addicted people. Now it's a most attractive place for taking fresh breath. Children are learning how we can think differently, why we should take care of the environment. Pedestrians are feeling safe that no vehicles will come to hit them. The city people are so happy now to have this nice place.



The Honorable State Minister for ICT division of Bangladesh Advocate Zunaid Ahmed Palak MP inaugurated this project on March 24, 2022 and he gave the name "Suborno Shorobor" (Golden Lake) for the place. The project is designed & consulted by Urban Core, Dhaka.



Hundreds of trees are planted for improving its eco-system as well as for building awareness to the new generations on how we can save our planet through planting. Also, the atmosphere will be more nice & cool when the trees will be bigger in size.



An important benefit of a public place is, it improves mental & physical health of people, especially for children & women. After opening this place, it is found that, 65% visitors are women & children.



The place looks more beautiful at night which attracts the city people and the tourists. LED lights have been installed instead of normal electric bulbs to ensure energy efficiency. Ceramic bricks have been used instead of traditional bricks. Also, plastic materials were avoided as it's not environment-friendly.



12 waste bins were installed for throwing wastes as well as raising awareness. All the bins are made by metal. Plastic bins were avoided as they are not environment-friendly.

Conclusion

The dead canal has been restored as well as water pollution has been reduced, which is addressed the target of 6.3 of SDG-6. SDG-7 is addressed as there solar street lights have been installed instead of electrical street lights. As per SDG-8, 10-12 people are earning through small entrepreneur & employee. As this is a safe, inclusive, integrated and accessible urban infrastructure for the city people, most of the targets of SDG-11 are addressed through this initiative. The air-quality has been cleaned, pollution is reduced, Trees are planted and all these outcomes address climate adaptation of SDG-13. This is a great example of nature-based solution by which environmental eco-system and the biodiversity conservation are ensured, which is highly relevant with SDG-15. Despite this type of initiative praised by all, there are so many challenges to implement. The major challenge is to manage a fund. Singra struggled a lot for managing a good fund for implementing this project and the struggling is still continuing. This is a partial work which has been done through the fund of annual development budget of Singra. More than 100 Lakh BDT will be needed for completing the full length of work. The Government and/or the funding agencies should enhance the cooperation so that the nice work will be fulfilled by its all the outcomes. And off course, we believe that many cities in Bangladesh will be inspired to replicate this initiative as well.