11. Revitalisation Of Dudhiya Talao

Category: Infrastructure

Safe Water Provision

11.1. Situation before the Initiative

- Navsari city depends mainly on bore wells for drinking water.
- The city draws water from 28 bore wells located in different parts of the city with depths ranging up to 200 feet.
- Due to proximity to the Arabian Ocean, the city is faced with an acute problem of salinity ingress. Salinity in water here was as high as 2600 to 4000 TDS.
- People faced problems due to this saline water and the municipality also had problems with operation and maintenance of the bore wells.
- The municipality had to pay a huge amount of electricity bill amounting to almost Rs.
 1.25 crore per annum towards operating the tube wells, the pumping machinery and three water works.
- Around 350 slum dwellers lived around the Dudhia Talao.
- The presence of slums on the lakebed and on the periphery lead to pollution of the water.
- The drainage lines of the buildings along the lake also discharged sewage into the lake.

11.2. The Initiative/Innovation

- Dudhiya Talao, situated in the middle of the city, was developed into raw water storage place for the water to be obtained from the Kakrapar canal. The municipality took a series of actions to revitalize the lake into a raw water storage and to construct a filtration plant.
- To ensure the success and sustainability of the project, the need for successful relocation and rehabilitation of the slum dwellers residing on the periphery of the lake was realised. This aspect of the project was implemented successfully.





11.3. Strategies Adopted

- Talao redevelopment Cleaning, dredging, lining the Talao
- Relocation and Rehabilitation of slum dwellers living on the periphery of the Talao
- Filtration plant
- Lake periphery development, greening of the areas
- Involvement of civic society.

11.3.1 <u>Process</u>

- The municipality reviewed the situation and concluded that it was possible to bring water from the Kakrapar Canal, situated 3 kms from the city, by gravity and store in the existing Dudhiya Talao.
- Navsari Municipality sent a proposal to the Irrigation Department for obtaining necessary permissions. The Narmada Water Resources and Supply Board approved this proposal.
- The Municipality prepared detailed project reports for the water supply scheme. The main components of the project were as follows:
- Gravity main from Kakrapar Branch canal to Dudhia Talao (3250 meter long)
- Development of Dudhia Talao as a raw water storage tank (Cap. 8.40 Lacs cubic meter)
- Construction of Filtration Plant and other related works
- Construction of Intake Well (6.00 mt dia & 10 mt. Depth)
- Raw water rising main (450 mm dia. C.I. 'LA' class)
- Raw water pumping Machinery (75 HP Turbine Pump set 4 Nos)
- Filtration Plant (36 MLD capacity)
- Underground storage sump (32.50 Lacs It. Capacity)
- Pure water Pumping Machinery (40 HP Turbine Pump set 2 Nos)
- Pure water rising main from Dudhia Talo Main water works to Luncikui water works (1250 mt. Long)
- Over head Water Tank (18,00,000 Itrs. Cap.)
- The project was executed through three different agencies on 'Turn-key' basis by inviting tenders. The entire project cost was estimated at Rs. 708.90 Lacs.
- Funds sourced for the project are as shown below: -

Particular	Rs.
L.I.C. Loan	2,80,60,000/-
Grant obtained by Gujarat Water Supply and Sewerage Board-Gandhinagar	1,53,50,000/-
Revolving fund Loan by GMFB, Ahmedabad	1,75,00,000/-
Total	6,09,10,000/-

- All project work has been completed except the construction of under ground sump, pure water rising main and R.C.C. water tank from the aboveallocated fund.
- The Talao was cleaned. Dredging was carried out in the Talao bed to remove silt and to increase the capacity of the Talao. The capacity of the Talao has been designed to support population till 2020. The Talao bed has been lined with LDP and brick pitching.



- 11.3.2 <u>Relocation and Rehabilitation of slum dwellers living on the periphery of the</u> <u>Talao.</u>
 - Navsari Municipality obtained a financial sanction from the Gujarat Slum Clearance Board worth Rs. 3 crores.
 - The 350 slum dwellers around the Dudhia *Talao* were shifted to Tighra, a site on the fringes of the city which was reserved for economically backward sections.
 - The slum dwellers were given plots as per the Sites and Services scheme. They were given plots on ownership basis and also given Rs. 2000 as shifting charges.
 - The new site is connected to the main city by a bus service, though not very frequent. The settlement has facility of roads, light & water.

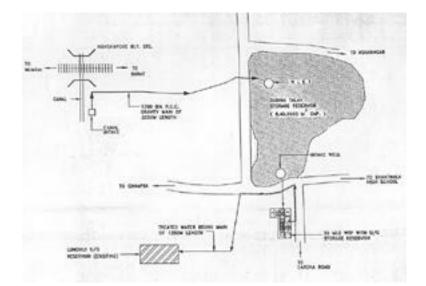
11.3.3 Filtration Plant

- The new Filtration Plant has been installed at the Navsari Nagarpalika Water Works. This is based on latest technology, which includes Sludge Blanket Lamella Clarifiers and High Rate Rapid Gravity Sand Filters. The filtration plant was awarded to a consultancy after tendering process.
- This system is of 36 MLD capacity and has been designed to cater to a population till the year 2020. It requires less area and consumes less chemicals and power as compared to conventional water treatment plant.



- 11.3.4 <u>Talao periphery development, greening of the areas and involvement of civic</u> <u>society.</u>
 - To green up the periphery of the *Talao*, the civic society was engaged. The saplings were provided by the Gujarat State Forestry Department and school children and NSS workers were mobilized to plant saplings. The NSS division of Navsari regularly maintains the parks and trees.





11.4. Results Achieved

- The problem of non-potable water, which had persisted since the last 40 years, has been solved by this project and the citizens of Navsari City now get pure and potable water.
- Dependence on ground water has been reduced and hence problems of salinity ingress has also been controlled.
- Slum dwellers have been successfully relocated to land reserved for economically weaker sections of the society.
- This project has also helped the Municipality financially by reducing energy bills because of operation of only one turbine pump of 75 H.P. instead of running 10 bore wells of 25 HP to 75 HP. One estimate suggests that the municipality will save about Rs. 40 lacs in capital costs.
- Many citizens have closed their private borewells and have applied for new water connections to the Navsari Municipality. This has further resulted in increase in the revenue from water tax.
- The municipality could also increase the water tax that will bring an additional income of Rs. 45 lacs to the municipality.

11.5. Lessons Learnt

- Urban local bodies can augment drinking water supply through innovative, scientific means.
- It is possible to motivate slum-dwellers for relocation in view of planned public utility for the common good.
- Once lake-cleansing project begins, no sewage/sullage/solid waste should be discharged/disposed into the lakes as these are responsible for increasing the organic loading in the lake.
- If any service is ensured by a ULB to the satisfaction of the citizens, it is possible to raise taxes easily, and without much resistance.



11.6. Sustainability

- Shifting of slums, development of lake periphery, cleaning of Dudhiya Talao and other pollution abatement measures prior to using the same as a storehouse for raw water is an environmentally sustainable process.
- The same is also a financially viable project, having used multiple sources for funding and including cost recovery thro' increased water taxes.
- Cost-recovery strategies (for loan and interest payments) by Navsari municipality has made the project that much more viable.

11.7. Transferability

• The municipality has also initiated the task of developing the area around Sharbatiya Talao near Lunsi Kui. Thus, the practice is replicable and transferable.





12. Efficient redeployment of Octroi Staff

Category: Urban Governance

Human Resource Development

12.1. Situation Before the Initiative

- Gujarat State abolished octroi for municipalities in May 2000.
- The Navsari Municipality had a staff of 80 for collection of octroi which became surplus.
- Post-abolition, the municipality wanted to efficiently redeploy this staff either to sectors which had deficient manpower or to undertake a few new tasks for streamlining the administration and improving financial recovery.

12.2. The Initiative/Innovation

• The Navsari municipality made a welcome effort in effectively redeploying this staff to sanitary department, tax recovery department, records department, billing department and all other departments which had a human resource shortfall.

12.3. Strategies Adopted

- In each of the 14 wards, one person has been appointed as a sanitary officer for monitoring and surveying.
- Navsari's tax recovery has been very high, ranging from 92 to 97%. To further increase the recovery, four persons have been employed for solving grievances related to property tax. These officials personally meet the citizens who have problems or who have not been paying property tax and try to solve the problem.
- Four officials have been employed for categorizing and maintaining the record room. The municipality has categorized the documents year wise and disposed off the outdated records.
- Earlier, each concerned department received their own litigation files, and in the process, many court dates got missed or delayed due to which the municipality incurred heavy losses. Four officials have been delegated for streamlining and centralizing all legal hearings of the municipality.
- The municipality has recently initiated a paid-parking system at the railway station. Four officials have been appointed to manage the newly constructed parking plot.
- The municipality has also taken the advantage of a scheme of privatizing billing counters by the Gujarat Electricity Board. A few main octroi posts have been converted as billing counters. GEB pays a commission of Rs. 2.00 per bill. The municipality is also thinking of approaching the telecom department for the same. In this manner, the municipality has managed to utilize effectively both the properties and the staff from the abolished octroi department.

12.4. Results Achieved

- As a result of the drive to increase tax recovery, the backlog has been reduced.
- Rent recovery from the 11,000 shops owned by the municipality also has increased substantially.



- Initiation by additional staff of categorizing the records of the municipality and disposing off the old and unwanted records, retrieval of documents has become easier.
- More storage space is now available and at the same time, the municipality has also earned about Rs. 60,000-70,000 on sale of the old records.
- With the introduction of the centralized system for managing court hearings, case dates are reminded to the concerned departments in time, which has reduced a lot of heavy losses that the municipality incurred earlier.
- The new parking place outside the station has become better managed and also fetches a monthly income of about Rs. 20,000/-.

12.5. Lessons Learnt

- Proper redeployment of staff can lead to improved service delivery and optimizing human resource within the ULB.
- Independent and innovative initiatives by urban local bodies can provide and develop further into better service delivery to the local populace.
- Involvement of various departments within the local body itself can lead to effective resource allocation as well as resource management, leading to improved efficiency and boosted morale of the staff.

12.6. Sustainability

 Proper redeployment of surplus staff and efficient human resource management has lead to improved, sustainable service delivery and optimizing human resource within the Navsari Municipality.

12.7. Transferability

 Octroi staff has been rendered surplus in all municipalities of Gujarat. A planned need based redeployment of the kind Navsari municipality has undertaken can be replicated in all such municipalities.

