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SOCIETY FOR PUBLIC WELFARE AND INITIATIVES

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CIVIC SERVICES ADMINISTRATION – A STUDY OF NIZAMABAD MUNICIPALITY, TELANGANA



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Abstract: Nowadays in Indian cities are scenes of physical deterioration of housing, sanitation, and health, and a marked decline in effective communication traffic congestion, water, air and noise pollution and their hazardous effects on the health of human beings and the urban ecosystem is too serious in terms of scale and intensity. The prospects of housing, employment, water supply, transport, sanitation and the supply of other urban goods and services and the presently living urban environment, triggers the alarm of crises. Equity, fairness in the allocation of resources is almost missing in the urban areas. This study raptors about the implementation of various schemes and plans about solving the urban problems with special reference to Nizamabad Municipal Corporation of Telangana State.

Keywords: Nizamabad Municipal Corporation, Civic Amenities, Wastage Management

Introduction

Today, our cities are scenes of physical deterioration of housing, sanitation, and health, and a marked decline in effective communication traffic congestion, water, air and noise pollution and their hazardous effects on the health of human beings and the urban ecosystem is too serious in terms of scale and intensity. The prospects of housing, employment, water supply, transport, sanitation and the supply of other urban goods and services and the presently living urban environment, triggers the alarm of crises. Equity, fairness in the allocation of resources is almost missing in the urban areas.

Local government is conceived as an instrument for the widest possible participation of the people in grassroots governments. The creation of a decentralised organisational structure is one of the important social inventions of this century. With

ethical roots in democracy, decentralisation has become an idealistic concept, a way of life, and an end in itself. It suggests a system in which people will allow performing their individual goals to the maximum. Local autonomy, beginning with the individual, is an important credo of decentralisation. Decentralisation is a corollary when it penetrates, provides a philosophy for the exercise of authority in a democratic way in an organisation.

India has witnessed unprecedented momentum around sanitation since 2014. The country was declared Open Defecation Free, in 2019, due to sustained political will, coordinated action, and public participation at all levels. Universal access to toilets was achieved in Urban India with the construction of 66 lakh household toilets and more than 6 lakh community and public toilets.¹ Consequently, India has emerged as an exemplar for the rest of the world.

India is faced with two problems – lack of infrastructure and an increasing share of the urban population. The urban population in India has grown from 285 million in 2001 to 377 million in 2011 – about 31 per cent – while the number of urban centres has increased from 5161 to 7935 during the same period (Census 2001, 2011)

Providing universal access to toilets is a key milestone in India's sanitation journey. However, with only 40% of urban India connected to sewer networks and about 1,200² operational/under construction Sewage Treatment Plants (STPs), a majority of the toilets (60%)³ rely on on-site sanitation systems (OSS).

Curiously, the story of local self-government in India, in the years since independence, illuminates one more on how the nurseries of democracy ought not to be treated than on how they may function. Starved of funds, deprived of powers and having been subjected to repeated, long spells of supersession. The essence of Urban Local Bodies lies in the idea of self-governance, that is, the freedom to decide the course of development, its planning, its funding, and terms of its staff. Towards this end, the "Seventy-Fourth" Amendment of the Indian Constitution is a landmark as it is expected to initiate a new era in the evolution of democratic institutions and decentralisation. However, whatever the statutory framework, the depth of political commitment to democratic decentralisation will determine whether or not urban local bodies can become effective levels of governance with enlarged participation of the local committees.

Nizamabad Municipal Corporation is having a geographical area of 40 Sq.Kms with a population of 3,11,152 as per the 2011 Census which consists of 66,670 Households.

There is no denying that some aspects of Municipal Corporation, Nizamabad have received sufficient attention from researchers, which includes organisation, financial, personnel, etc. The area of decentralisation of urban local bodies especially in the contest of Municipal Corporation, Nizamabad through import has so far not been taken up for study. The present study will fill the vacuum as such study has not been

conducted earlier and discuss the vital issues for the governance of Municipal Corporation, Shimla after the implementation of new Act under 74th Amendment, hence this is going to be an important study.

The study will be helpful to administrators' raptors, planners, politicians and students in the implementation of various schemes and plans about solving the urban problems.

There is a great relationship between growth in urbanisation and consequent aggravation of urban problems. The system of elective urban local government which was established in India during the middle of the last century has remained largely static, although it stands badly in need of repair and renovation. Even the most optimistic observer would express concern about the system's performance and call for a thorough examination and suitable reforms.

The importance of the present study can hardly be emphasised in view of the scope, aim and objectives, and the field of study undertaken by the present research will be discussing issues vital for the governance of the country, hence going to be an important study.

Objectives: The main objective of the study is to find out the civic services administration in Nizamabad Municipal Corporation. The other objectives are (i) facilities provided by the municipality and use of toilets by citizens, (ii) wastewater disposal, (iii) solid waste management and (iv) segregation of waste.

Hypotheses: (i) No sufficient facilities provided by Nizamabad municipality to their citizens, (ii) There is no proper wastewater disposal facility for households, (iii) No monitor on solid waste management and (v) there are no adequate waste segregation techniques.

Scope of the study: The present study is restricted to Nizamabad Municipality of Telangana state, India. The study is limited to a small sample of 39 respondents. The study covers sanitation facilities like toilet facilities, (ii) wastewater disposal, (iii) solid waste management and (iv) segregation of waste.

Review of Literature

Despite the efforts of successive governments, sanitation coverage remains low in India. While several studies have explored the impact of user financing on the improvement of sanitation facilities, Indranil De (2020)⁴ discussed the conditions of housing, infrastructure and the surroundings of slums, under which different sanitation arrangements are made. The sanitation arrangements considered are of various types of ownership and cost-sharing arrangements. The findings provide useful insights that challenge one of the basic motivations for user financing: increased accountability in service delivery.

Vinayakam Jothiprakash, Marcus Joseph Tobias and KE Seetha Ram (2020)⁵ presented the socioeconomic spill over effects and technical evaluation of the sanitation program at the Navi Mumbai Municipal Corporation (NMMC) area in Navi Mumbai, Maharashtra, India. The NMMC area has seven STPs which treats around 454 MLD using the sequencing batch reactor technology. The collected data about sewage characteristics such as pH, temperature, biological oxygen demand (BOD), chemical oxygen demand (COD), total suspended solids (TSS), and dissolved oxygen (DO) through the SCADA program to analyse the STPs' technical efficiency. The time-series data analysis reveals that the efficiency of the STPs is at 100%. To study the STPs' spill over effects, collected from various departments of the NMMC office data about population statistics, public health by studying the number of people affected by waterborne diseases, land values, number of settlements, air quality, and other parameters. Our study revealed positive effects such as improvements in public health, hygiene conditions, and air quality; monetary benefits in the sale of treated sewage; and an increase in the number of settlements near the STP areas. Overall, the socioeconomic spill over effects of the NMMC's sanitation program are quantifiable and visible in the area. The NMMC experience offers useful lessons for policymakers to adopt in designing and implementing similar large-scale sanitation projects not only in other parts of the state but also in the country as a whole.

The study of sanitation conditions is very important from the perspective of hygiene and health of the human being. In this regard, the conditions of sanitation in households and surrounding micro-environment in certain states like Sikkim, Mizoram, and Gujarat is very good and its effect is that disease prevalence is these low in these states. The availability of improved latrine facilities to the households has a very significant relationship with diseases prevalence in urban areas of India because it is directly related to the hygiene and health of humans. In the absence of a latrine, facility person has to go for open defecation and there is always a chance to get contact with the disease's vector i.e., flies, mosquitoes etc. So, the association between water, sanitation and micro-environmental conditions is very significantly related to diseases prevalence. The results of the study of Mayur Ambarlal Humane and Arif Khan (2020)⁶ indicate that improvement of water and sanitation conditions can substantially reduce the rates of diseases prevalence and it can be expected to affect other aspects of human hygiene and health.

Despite the fact of being the largest economy in Latin America, piped water service coverage and sewage collection is not universal in Brazil. The relationship between access to water/sanitation and health was the objective of many studies recently. The majority of the existing work focuses on the impact of access to water and sewage, not investigating the effects of water quality and treatment. Moreover, the existing literature usually focuses on infant mortality and life expectancy indicators. Although these measures are important, they may not capture all the relevant public costs associated

with health and related to hospitalizations. In this paper the authors (Enlison Mattos, Cristine Pinto, Lucas Teixeira and Luís Meloni, 2019)⁷ aimed at filling this gap by identifying the effects of sanitation policies on children morbidity rates by certain diseases in Brazilian municipalities.

Ramakrishna Nallathiga and Kala S Sridhar (2018)⁸ assessed urban service delivery in two large Indian cities i.e., Pune and Hyderabad. The preliminary findings suggest the need for improving quantitative as well as qualitative dimensions of urban civic services in these two cities especially in sewerage/sanitation, waste management, roads and drainage when the norms for these services are taken into account. The study strongly suggested improvements are necessary not only in the levels of urban services but also in the setting of norms itself. Therefore, institutions and governance are as important as the delivery of urban services themselves in the context of megacities to ensure the access of urban services to the citizens in a legitimate, transparent and accountable manner with public participation.

Bhasker Vijaykumar Bhatt, Fenil R. Gandhi and Rajesh J. Pandya (2018)⁹ discussed a study undertaken for auditing and assessing pay and use of public toilets and urinal blocks located within the central zone of Surat Municipal Corporation administrative limits. All the pay and use toilet blocks and urinals were visited for a study that was focusing on assessment for criteria concerning – Cleanliness, housekeeping, safety and maintenance. Inventories were prepared, and a quality assessment was performed. All the locations were geotagged by obtaining coordinates. Based on the study, the facilities were assessed for their components and provided with ranking through analysis of four factors and 74 sub-parameters. The qualitative issues were identified for the service delivery. Suggestions and recommendations are discussed to improve the service delivery.

Saravanan V.S., Marissa Ayesha Ideal, Shahin Saiyed, Deepak Saxena and Solvay Gerke (2016)¹⁰ analyzed the role of institutions as crosscutting entities among a myriad of factors that breed water-borne diseases in the city of Ahmedabad, India. It applies ‘path dependency’ and a ‘rational choice’ perspective to understand the factors facilitating the breeding of diseases. This study is based on household surveys of approximately 327 households in two case study wards and intermittent interviews with key informants over 2 years. Principle component analysis is applied to reduce the data and convert a set of observations, which potentially correlate with each other, into components. Institutional analyses behind these components reveal the role of social actors in exploiting the deeply rooted inefficiencies affecting urban health. This has led to a vicious cycle; breaking this cycle requires understanding the political dynamics that underlie the exposure and prevalence of diseases to improve urban health.

The governments at all levels are involved in the production of goods and delivery of various services to the public at concessional rates or for free. Like any government

body, local governments have also a role in the production of goods and services that can satisfy the local public needs. As a result, local authorities perform different functions to satisfy public demand. Promoting economic, ecological and social development places greater pressure in executing these functions such as health, education, sanitation, etc. Another area of interest for local government is the duty to improve the well-being of residents and attain the maximum level of public satisfaction. Therefore, local governments do this by providing services, encourage community improvement and protect people from harm. The practice of administering public or civic services has changed its pattern from exclusive government provision to more decentralized approaches. More of the trend is to engage the community and the private sector in the provision and administration of civic serves. In this direction, an attempt was made by Narayana E.A. and Mohammednur Ahmed (2014)¹¹ to examine the civic services administered by the Greater Visakhapatnam Municipal Corporation (GVMC) in the city of Visakhapatnam.

Methodology

Primary Sources: The primary data in the form of responses and opinions of the residents of Nizamabad Municipality. The data was gathered through the interviews conducted through schedule/questionnaire by the researcher personally from different categories of the respondents. Observations were also using the collection of data.

Secondary Sources: The secondary sources of the study include the various encyclopaedia, gazetteers, census reports, hands books, reports of various commissions, books, journals, and official files of Municipal Corporation, Nizamabad, Telangana state.

Sampling Design: The design of the sample for the present research study is based on demographic variables of the respondents. The researcher interviewed about 50 citizens and it consists of employees, daily wage earners, retired employees, pensioners, general public availing government schemes, business people, traders, agriculturists and others of the corporation of Nizamabad City).

Table 1: Reliability Statistics on Sanitation Facilities of Nizamabad Municipality

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.717	.599	18

The above table gives the output of Reliability Statistics factors responsible for sanitation facilities provided by Nizamabad Municipality. This gives Cronbach's alpha coefficient 0.717. The score is more than 0.7 and it can be understood that there is high internal consistency. In this case, it is $\alpha = 0.717$, which shows the questionnaire is reliable as the value falls between the acceptable range i.e., $0.7 < \alpha < 0.8$.

Data Interpretation

Toilet facilities

In this section, the researcher presented a detailed overview of the status of the operational toilets during the study period in the Nizamabad district. This study finds the gaps in toilet facilities and their service. The study suggests plans to improve the level of services at the existing toilet facilities.

Table 2: Toilet facility

Sl. No.	Item	Variable	Frequency	Percentage
1.	Do you have a toilet facility?	Yes	36	92.3%
		No	3	7.7%
2.	Type of toilet	The bucket system of the toilet	7	17.9
		Pit type of latrine toilet	6	15.4
		Chemical toilet	17	43.6
		Flushing toilet	9	23.1
		Public toilet	7	17.9
3.	Location of toilet	Outside of the premises	3	7.7
		Within the premises	13	33.3
		Inside the house	23	59.0
		Others	0	0.0
4.	Toilet sharing with others/neighbours	Yes	25	64.1
		No	14	35.9
5.	Facility for final disposal of faeces	Septic tank	6	15.4
		Underground pit	3	7.7
		Open drain/nallah system	6	15.4
		Release into open space	7	17.9
		The municipal sewer pipe system	17	43.6
		Other type	0	0.0
6.	Duration of time to empty	Every year	5	12.8
		Once two/three years	5	12.8
		More than three years	22	56.4
		Never emptied	7	17.9
7.	De-slug	Municipal staff	8	20.5
		Private staff	31	79.5
8.	Level of satisfaction with the present condition	Very much satisfied	7	17.9
		Somewhat satisfied	12	30.8
		Less than satisfied	12	30.8
		Completely satisfied	8	20.5

Source: *Primary data*

During the survey, it is noticed that most (92.3%) of the respondents have toilet facilities. Among 39 respondents participated in this study stated that they have 17 (43.6%) chemical toilets, 23.1% have a flushing toilet, 17.9% are public toilets and bucket system of toilets and 15.4% are of pit type of latrine toilet. Nearly sixty per cent of the toilets are inside the house and 1/3rd is within the premises. The respondents also stated that nearly two-thirds of them share the toilets with others/neighbours. They have facilities of final disposal faces through a municipal sewer pipe system (43.6%), release into open space (17.9%) and pen drain (15.4%). A majority (56.4%) of the respondents expressed that they emptied the septic tanks for more than three years. 12.8% of them stated it will be emptied every year or once in 2/3 years. 17.9% of them stated as they never emptied. Eighty per cent of them stated that de-slug by private staff and 20.5% of them stated they de-slug by municipal staff. More than sixty per cent of the respondents were satisfied with the present condition of the toilet system.

Waste Water Disposal

Municipal wastewater collection, treatment and disposal are still not awarded a priority status by the municipalities/state governments as compared to the supply of water. In the absence of sewer lines, untreated wastewater flows into the stormwater drains and poses a health hazard to citizens. Despite various governmental schemes, the gap between generation and treatment remains large.

Table 3: Wastewater disposal

Sl. No.	Item	Variable	Frequency	Percentage
1.	Type of disposal	Connected to the underground public sewer system	5	12.8
		Open channel	6	15.4
		Soap away pit	14	35.9
		Surface seepage	8	20.5
		Water course pond	6	15.4
2.	Duration Household is connected to the sewer system or service	0-3 years	6	15.4
		3-5 years	16	41.0
		5-10 years	12	30.8
		>10 years	5	12.8
		More than 10 years	0	0.0
		Don't know	0	0.0
3.	Level of satisfaction with wastewater disposal	Very much satisfied	7	17.9
		Somewhat satisfied	19	48.7
		Less than satisfied	12	30.8
		Completely satisfied	1	2.6

Source: *Primary data*

The results affirm that the majority (56.4%) opinions for the type of disposal of wastewater is soap away pit or surface and 30.8% of them opined open channel/watercourse pond. 71.8% of the respondents stated that the household is connected to a sewer system 3-10 years of duration. 50.0% of respondents were satisfied with wastewater disposal.

Solid Waste Management

Rapid urbanization has resulted in the over-stressing of urban infrastructure services including Municipal Solid Waste Services due to poor resources and inadequate capacity of the Urban Local Bodies (ULBs).

Table 3: Solid Waste Management

Sl. No.	Item	Variable	Frequency	Percentage
1.	Solid waste disposal	Door to door collection by the municipality	10	25.6
		Door to door collection by private	5	12.8
		Store and throw in community dustbins	3	7.7
		Store and throw at an identified place	4	10.3
		Thrown in roadside drains/on roads	6	15.4
		Throw outside the house in open spaces	9	23.1
		Store in the pit for composting	2	5.1
		Store and burn	0	0.0
2.	Duration of the garbage collection service	0-3 years	20	51.3
		3-5 years	10	25.6
		>5 years	9	23.1
3.	Garbage administration	City or municipality government	11	28.2
		Community or neighbour-hood	11	28.2
		building management committee	14	35.9
		Private operator	3	7.7
4.	Frequency of garbage collection	Daily	12	30.8
		Once a week	4	10.3
		Twice a week	7	17.9
		Thrice in a week	10	25.6
		Four-time a week	5	12.8
		Never collect	1	2.6
		Don't know	0	0.0
5.	Expenses for solid waste disposal	Rs.50 p.m.	24	61.5
		Rs.100 p.m.	11	28.2
		>Rs.100 pm	4	10.3

Source: *Primary data*

To ensure better human health and safety, there is a need for the effective management of solid waste materials. It should safeguard public health and should be safe for the workers. Also, it should be both environmentally and economically sustainable.

The results on solid waste management elucidate that 25.6% of solid waste disposal is the door-to-door collection by the municipality and 23.1% of them throw outside the house in open spaces. 51.3% of respondents stated that the duration of garbage collection is 0-3 years. A high percentage (35.9%) of respondents expressed that the building management committee looks after the garbage administration. The respondents' opinion on the frequency of garbage collection is daily (30.8%) and 25.6% respondents' opinion thrice in a week. The municipality is charging Rs.50/- per month for solid waste disposal.

Segregation of Waste

Waste management comprises a collective activity of segregation, collection, transportation, recycling and disposal of waste. Improper waste management is one of the main causes of environmental pollution. The biggest problem in the country is the lack of awareness among people regarding the segregation of household waste. In this section, it is presented that whether the citizens segregating the waste, segregation of food materials and frequency of segregation is discussed in the following.

Table 4: Segregation of waste

Sl. No.	Item	Variable	Frequency	Percentage
1.	Household segregate waste at home before disposal	Yes	20	51.3
		No	19	48.7
2.	Segregation of materials	Vegetables	19	48.7
		Food stuff	20	51.3
3.	Frequency of segregation	Always	13	33.3
		Sometimes	11	28.2
		Rarely	15	38.5

Source: *Primary data*

According to the opinions of the respondents, there is a fifty-fifty chance to segregate waste at home before disposal. The same results are also presented in the study on the segregation of materials like vegetables and foodstuff. A higher percentage (38.5%) of the household stated they rarely segregate, 33.3% of segregate waste always and 28.2% of them segregate sometimes.

Findings And Conclusion

- The findings show that more than 90% have toilet facilities.
- It is found that the majority (66.7%) of households using the chemical toilet or flushing toilet.
- Most (92.3%) of them stated the location of the toilet is within the premises or inside of the house and 66% are sharing the toilet with neighbours.
- A high percentage (43.6%) of respondents using municipal sewer pipe systems in Nizamabad municipality.
- More than 50% of respondents are taking more than three years to empty the system.
- Ninety per cent of them de-slug the faeces through private organizations.
- The finds show that more than 50% are satisfied with toilet facilities.
- Findings show that the type of disposal of wastewater is disposed of through soap away pit (35.9%) and surface seepage (20.5%).
- It is found that the majority 71.8% of the household stated the duration is connected to sewer system 3-10 years.
- Nearly fifty per cent of households are satisfied with wastewater disposal.
- It is found that the solid waste disposal is the door-to-door collection by municipality (25.6%) or throws outside the house into open space (23.1%).
- It is perceived that the duration of the garbage collection service is 0-3 years with 51.3%.
- Considerable (35.3%) percentage respondents stated that the building management committee looks after garbage administration.
- The majority (56.4%) regarded the frequency of garbage collection as daily/ thrice in a week.
- It is found that the majority (61.5%) of them stated that the municipality collecting Rs.50/- p.m. towards solid waste.
- The findings show that the respondents' chances are fifty-fifty to segregate waste and segregate vegetables and foodstuff. 38.5% of them segregate the waste materials rarely

Conclusions

Toilet use is influenced by several structural and sociocultural determinants. The mission needs to shift its emphasis from toilet construction to sustainable functioning and the use of toilets. Exposure to government propaganda promoting safe sanitation practices was associated with toilet use. Planned, strategic, safe and sustainable use of wastewaters there seems to be a need for policy decisions and lucid programs

encompassing low-cost decentralized wastewater treatment technologies, bio-filters, efficient microbial strains, and organic/inorganic amendments, development of cropping systems, cultivation of remunerative non-edible crops and modern sewage water application methods. For better management of solid waste, periodic review of every step involved in waste management like generation, collection, disposal etc. should be conducted. Best practices for waste management can be achieved by well known '3Rs' principle (Reduce, Reuse and Recycle). The Government should announce incentives to motivate the citizens. This way the problem of household segregation of the waste can be solved. GPS tracking of the garbage collection could be done.

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