

# Quality of Life in Slums of Nabadwip Town: A Comparative Study

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**Abstract:** Though urbanisation is an indicator of development, but it is also bitter fact that poverty is growing faster in urban areas than in rural areas. Around the world, approximately one billion people live in urban slums, which are typically overcrowded, polluted and lack basic services. The situation is worst in developing countries like India. The slums of Nabadwip town portray a pathetic picture of life in slums. Social problems, disparities, well being and quality of life are the new domains of geographic study in this post-modern era. Quality of life studies form part of human geography, radical geography, and welfare geography and of philosophical geography. The quality of life studies are becoming more relevant for inclusive development of society and country. This paper is an attempt to determine the quality of life statistically in slums of Nabadwip town. In general, Quality of Life (QOL) reflects the hopes and expectations of a person. Population and spaces both are important variables in the urban development of any region. The study is made to highlight the upgrading situation of slum dwellers rather than social problems of the slums in the Nabadwip town of the district of Nadia. The approach for the measurement of the QOL is derived by composite index and standard deviation etc.

**Keywords:** urbanisation, slum, Quality of life, composite index, standard deviation.

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## 1. INTRODUCTION

Slums world- over share some common characteristics including a higher incidence of violent crime due to lack of attention from local law enforcement, a higher incidence of disease due to poor sanitation and access to healthcare facilities, the dominance of the informal economy and political bosses, and a higher incidence of child labour, prostitution, and substance abuse. Clearly, the culture of a nation or region plays a large role in determining the degree to which these factors shape the slum. The development of slums appears to be an entirely organic phenomenon which occurs when poorer countries that have under-developed urban management, governance structures and poor infrastructure undergo rapid industrialisation and urbanisation and fail to minimise the disparity of prosperity between the urban and rural population. In history, this was evident in the experience of the 'great' global cities such as London, Paris and New York. Each of these cities faced issues during its industrialisation phase in the growth of informal housing, workhouses, exploitation of the poor and disenfranchisement of migrant workers. Over time, however, these cities found ways to expand and make room for the increasing numbers of migrants flowing in and became great cities in part because of their ability to not only gainfully employ these migrants but also to attract and accommodate even more highly skilled immigrants. In this post modern globalised era where economic growth and disparities co-exist, the study of human well being and quality of life is more significant. This paper is an attempt to determine quality of life statistically in slums of Nabadwip municipality and suggest some measures to improve quality of life in slums.

## 2. STUDY AREA

Nabadwip Municipality is located in the western part of Nadia district and river Bhagirathi bound from north to east. Nabadwip Municipality lies between 88°21'E.-88°23'E and 23°23'N.-23°23'N and the town has a total area of 11.66 sq. km. consisting of 24 wards with a population of 125543(2011 Census). The location of the study area is shown

in Figure no.1. Ras Yatra is one of the important festivals to city dwellers. Not only from Nadia but from its surrounding districts, people came here to experience the occasion. Due to such gathering a huge amount of solid waste generate in the city which make the life heal to the city dwellers of Nabadwip. Nabadwip ,an old municipal town.It was constituted as municipality in 1869.The nabadwip police station extended over an area of 2.8 percent of Nadia district which now contains an area of 3927 sq km. It has an average elevation of 14m.

The town originally stood on an island which was called Nabadwip (new island). Nava-dwip a group of nine island which is given by Narahari Das in his “Naabadwip parikrama paddhati”. One of the Sen king of Bengal is induced to transfer his capital there from gaur for sanctity on the sacred Bhagirathi, which gave it impetus for its urban growth. In th “Ain-I-Akbari” it is noted that in the time of Lakshman Sen Nadia (Nabadwip ) was the capital of Bengal and abounded with wisdom. With the passage of time, Nabadwip municipality was established in the year 1869 A.D.(Garrett 1910)with 12 commissioners of whom 8 were elected and the remainder nominated. Through-out the 150 years of its urban career, the town has grown in an unplanned manner especially during and after the partition of Bengal in 1947 A.D. Although the proportion of land for industrial use and commercial use are comparatively less than residential use, but as the degree of urbanization increases gradually with time, the land use pattern has been changed. The low income group of people prefer slum areas due to inadequacy of housing space, the high price of inner town land. Thus urban fabrics of Nabadwip town predominantly attract the rural migrants as well as urban poor in search of work opportunities and other social facilities. The town received the slum dwellers with the rapid growth of urbanization. The town has a long tradition of movement of migrants. The large influx of rural population is the primary ingredient for the development of the town as well as slum in the district.

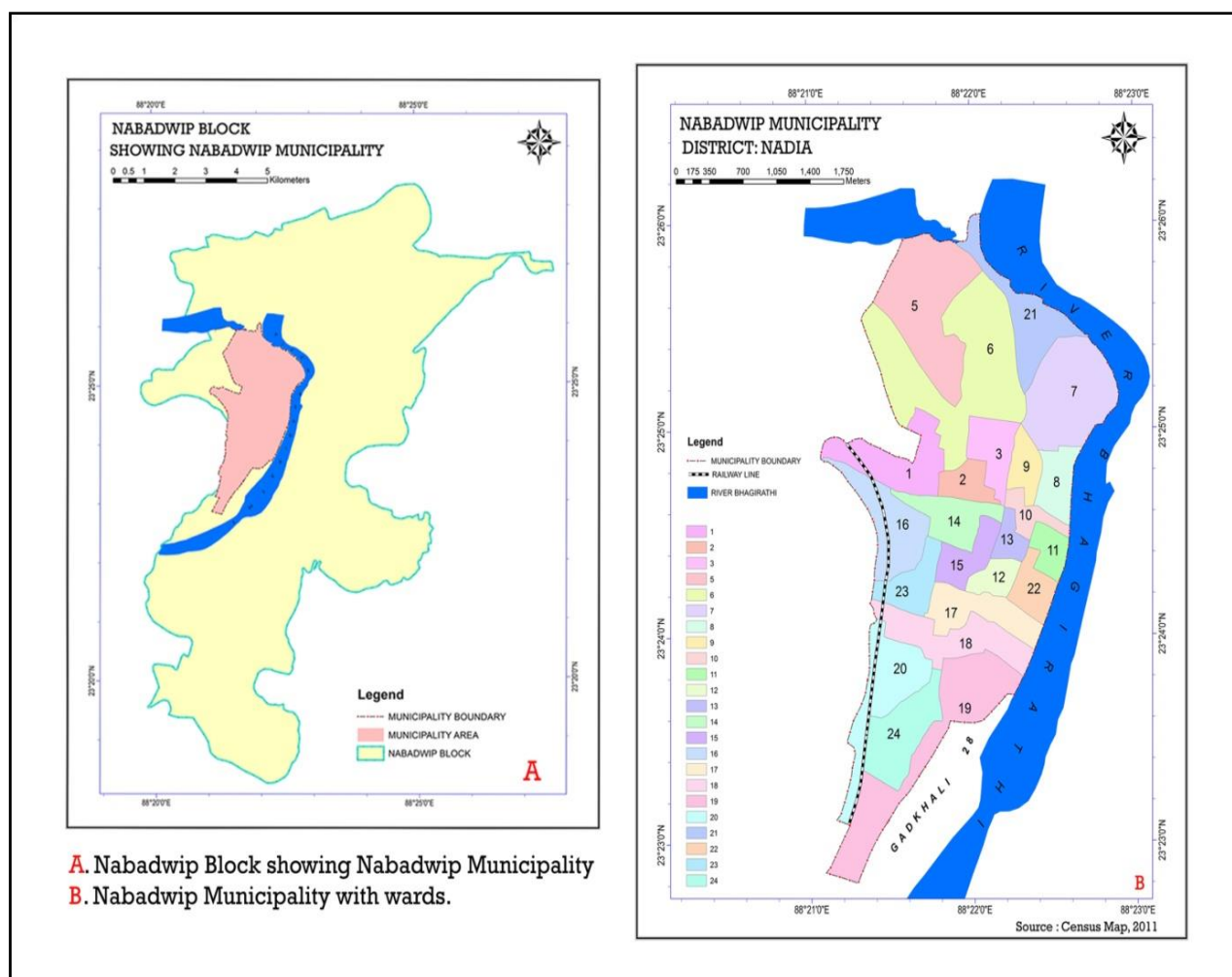


Figure No 1- Location map of Nabadwip municipality

**Objectives:**

The study was undertaken with following objectives:

1. To identify slum pockets of Nabadwip municipality.
2. To identify the factor responsible for growth of slum pocket.
3. To determine and examine the Quality Of Life (QOL) of different slums of Nabadwip municipality.
4. To compare the Quality Of Life (QOL) of different slums of Nabadwip town with the various parameters.
5. To assess the physical and social pathology of the slum pockets.
6. To suggest inclusive measures to urban planning for improve the Quality Of Life (QOL) in slums.

**3. DATABASE AND METHODOLOGY**

Methodology is very much important upon which nature and quality of the result of the study area depends. According to the topic, the data have been collected from intensive study involving the measurement of the quality of the slum dweller by interviewing method. The simple random sample technique has been conducted during the field work. All the data have been arranged systemically by statistical techniques. Thus, the present study is based on qualitative and quantitative data. To focus on the measurement of quality of life of slum dweller, intensive information has been collected also from the Bureau of Applied Economics, Health Departments, Settlement Office, Nabadwip Municipality and so on. For determining the quality of life in slums Composite index and Standard Deviation techniques have been used. To calculate the composite index 10 variables were chosen to determine QOL (Quality of Slum). Statistically each variable was powered with X1, X2 etc. Reasonable weightages was assigned to each variable. Composite Scores of all variable are taken as X value and Mean value is calculated. After that SD (Standard deviation) value is calculated. The quality of life under deviation is grouped and finally comparative analysis is done to show quality of life in different slums. The study based on primary survey of 125 households of 5 different slums of Nabadwip municipality.

**Factors responsible for growth of the slum pockets:**

Although Nabadwip town experienced phases of unplanned development as it grew from an agricultural based economic activity, but the dramatic transformation of land use pattern of Nabadwip town has taken place during the year of 1971. The growth of the town is directly associated with the gradual growth of slum settlements. Slums have emerged within last 35 years due to several favourable factors. This town is well connected with water route through Bhagirathi-Hooghly river and Eastern Railway track which is an ingredient that accounts for its speedy urban growth as well as slum growth. Factors responsible for the development of higher concentration of poor in the slum are mentioned below.

i) Rural immigration for opportunities of job. ii) Deficiency in agricultural production iii) Drought and famine conditions iv) Increasing prices of land and building materials v) Establishment of industrial and other manufacturing units vi) Establishment of Govt. and non-Govt. Institutions vii) Trade and Commerce activities and viii) Shortage of houses. The population of Nabadwip town has been increasing quickly in every year, but the number of houses has not increased at the same pace.

**Distribution of slum settlement in nabadwip municipality:**

It is true that the presence of slums along with the acute housing shortage is serious problem in any municipality. According to census 2011 of India, slum areas are recognized as a compact area of 300 persons or roughly 60-70 households of poorly built congested tenements, unhealthy surroundings with poor sanitary and drinking water facilities. In the municipality of the study area, it is surveyed that the total number of slum is 103 and these are distributed in 24 wards (Fig.2). These all are situated in different corners and pockets of different wards. It is found slum settlements are distributed in haphazard manner mostly on free lands. Some settlements are linearly located along the riverside, road margins as well as lowland areas. The biggest slum in surveying area is Netaji Nagar having 816 slum. Other colony having more than 300 households are Netaji nagar, Ganganagar slum, Chatirmath matahapur slum and Vivekananda slum etc.

Table No-1Ward wise slum population

Ward No	No Of The Slum	Name Of The Slum	No Of The Household	Slum Population	Total Population	Percent Of Slum Population To Total Population
1	6	CHANDI COLONY SLUM	696	2612	6117	90.68
	9	MALANCHAPARA DAS ROAD SLUM	536	2935		
4	5	CHATIRMATH MATHAPUR SLUM	535	1310	6728	95.33
	3	BANIK NAGAR SLUM	390	918		
	3	MATHAPUR ROAD SLUM	366	960		
	1	SAHANAGAR SLUM	131	350		
	4	GANGANAGAR SLUM	566	940		
	2	GOUR NAGAR SLUM	536	815		
	1	NOAKHALIPARA SLUM	326	709		
	1	VIVEKANANDA COLONY SLUM	276	412		
5	5	DEBRAJPUR SLUM	326	2490	7973	61.77
	6	NETAJI COLONY	366	2435		
6	4	ARABINDA NAGAR SLUM	376	1420	5896	79.49
	6	JANMASTHAN PARA SLUM	446	1630		
	3	NIMTALA LANE SLUM	196	772		
	3	ADYANAGAR SLUM	286	865		
11	2	PURAS CHARAN PURBA CHARA SLUM	193	1115	4311	49.76
	4	HATAT COLONY SLUM	125	1030		
18	7	PHUL BAGAN SLUM	371	2915	7485	87.97
	5	RAM KRISHNA COLONY	285	1920		
	4	VIVEKANANDA COLONY	181	1750		
19	1	CHAITANYAPALLY SLUM	532	2702	7474	89.73
	4	NETAJI NAGAR SLUM	816	1755		
	2	GOURANGAPARA COLONY SLUM	116	1120		
	2	2NO GOURANGA COLONY SLUM	416	1130		
21	1	NIMTALA LANE SLUM	145	830	3995	88.41
	3	RABINDRA NAGAR SLUM	161	930		
	1	JANMASTHAN PARA SLUM	95	432		
	2	CHAITNYA COLONY SLUM	153	1340		
22	1	PURAS CHARAN MATH SLUM	190	3512	4356	80.62
24	2	BHARAT COLONY SLUM	582	5267	7504	70.19
	<b>103</b>		<b>10715</b>	<b>49321</b>		

Source- Nabadwip Municipality, 2016

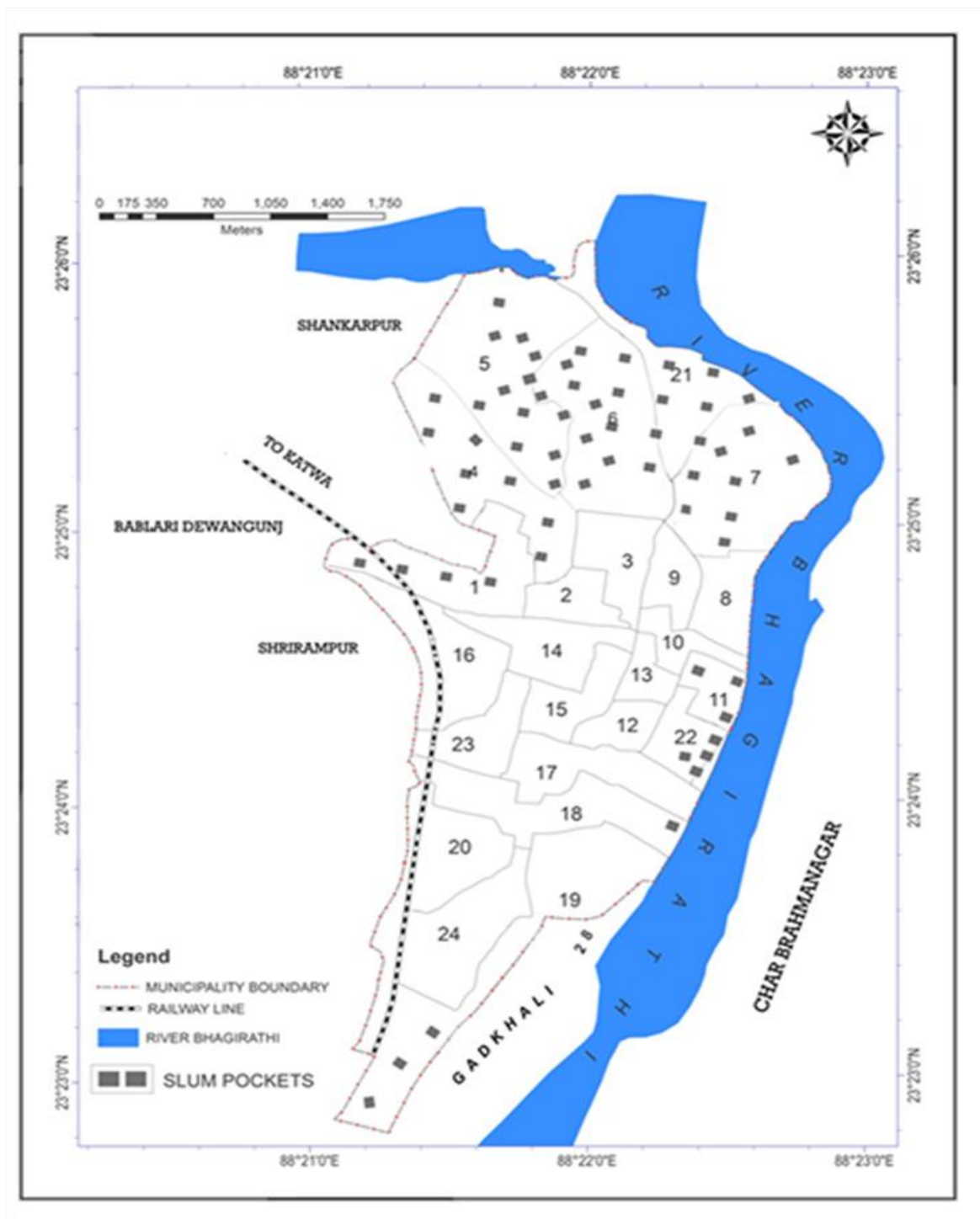


Figure No-2 SLUM POCKETS OF NABADWIP MUNICIPALITY, SOURCE- Compiled by researcher

#### Nature of demographic identity in the stude area:

It is well known that the socio-cultural aspects of any region play vital role in the qualitative development of people. To determine the demographic structure and its socio-cultural identity, present discussion about slum dweller has been given below. According to the record of the Municipality, the total slum population in Nabadwip town is 49321 persons. It is approximately 42.87% of the total urban population. The size of slum population varies from one slum to another.

According to the surveyed data, male population is 53 percent of the total population whereas 47 percent female population is found in the study area .It is evident that religious composition is based on different community in the

region. Here, it is found that the most population is of Hindu community. Age-sex composition of the slums is very important from economic point of view. The difference between active and inactive population sex wise is very much significant here. The age sex composition is in pyramidal shape, found in the study area. It is very clear that persons under 1- 15 years and above 60 years termed as dependent population is less in both male and female population in the area. It reveals that 52 percent of slum people are literate and rest 48 percent are illiterate. Therefore, it may be treated as an issue if compared to other urban people of that town.

There are many schools and colleges in Nabadwip town. Slum dwellers especially children, boys and girls prefer to attend their most near institutes for their educational purpose. It is evident that 60 percent male population out of total male population are literates. On the other hand 40 percent female population to total female population are literates. Although it is ensured that higher level of education is less significant due to unavoidable circumstances in slum settlements, but the picture of education status reflects women's importance also as well as a man's priority in slum area.

#### **Economic condition:**

Generally, a slum population is principally employed in informal economic activities. On the basis of a field survey, it is found that 34% of slum people are engaged in primary activities. They work as agricultural labourers in its surrounding areas. In slum, only 7% people engaged in secondary activities which include different construction and industrial labourers. Again 59% of total slum workers engaged in tertiary economic activities. It is found that people are engaged in a different type of footpath business, sweets industry, tom tom and cymbals making, pottery, bus drivers, tailoring, deity idol making, painting and other services. Out of 100 sampled families, 79% of total having monthly income less than Rupees 10000 .Again it is seen that 21% families having monthly income more than Rupees 10000 in that area.

#### **Nature of houses:**

The nature of houses in terms of building materials used generally reflects the status of socio economic way of life of slum dwellers. Nearly 71% of slum houses are made of tinned and tiled roofs with bricked and mud walls. Besides, 29% of slum houses are made of cemented wall and roofs. Most of them are made by the Municipality authority in slum areas.

#### **Civic amenities:**

It is obvious from the field's survey that 69 percent of sampled slum families have electricity connection. More than 31 percent households are facilitated with the sanitary system although, sewage and draining system are not so good here. Most of the families are supplied with drinking water from Municipality services. Time taps, tube wells are quite remarkable in each slum area. In general, slum dweller suffers from availability of drinking water. But it is clear that the availability of pure drinking water is another striking feature in slum of Nabadwip town.

#### **Water supply:**

The existing water supply facilities in the slum pocket are inadequate. Although the slums have sufficient source of water in the form of either tube wells or existing municipal water sources, they lack a proper distribution system for efficient use of the water, In order to solve this problem, a network of distribution lines in some slum pockets have been proposed under IHSDP (Integrated Housing and Slum Development Programme) but still there is gap. This will reduce their inconvenience for procurement of water from a distant place as well as improve their personal health and hygiene.

#### **Sanitation:**

The individual houses in the slum pockets are in general temporary in nature, without having a permanent roof structure. Proper sanitary facilities are absent which not only endangers the individual health, but also the environmental conditions of the slum and consequently the town area is general.

A large number of pour flush latrines have been constructed over the past few years in the houses of the slums through the central government aided ILCS (Integrated Low Cost Sanitation) programme. There are also community toilets with bathing facilities within and around the slums. But still there is a need to look into the matter with utmost importance. In the slums the sanitation condition is extremely poor in Nabadwip Municipality. 15% to 20% people today even defecate in the open fields. This is adversely affecting on the local atmosphere. In case of women during lactation period and any stomach infection like dysentery, diarrhoea etc people had to suffer a lot.

**Table No-2, Distribution of sanitary latrine**

Holding in Slum	Holding having Sanitary Latrine	Holding Not having Sanitary Latrine
10715	2979	7736

Source: Nabadwip municipality, 2016.

### Internal passage and approach roads:

In the slums of Nabadwip paved across for pedestrians and vehicles is worse. There is congestion and in order to remove congestion there must be strong political will. Unless the congestion is removed the vehicular movement and movement of two wheelers and the pedestrian is impossible. Besides repairing the existing metal roads need to be taken up, the earthen roads need to be converted into concrete roads. In Nabadwip there are 4500 meters Kutcha Roads, Brick Paved Road in poor condition is 600 meters, good conditions are 1000 meters, Concrete road in poor condition is 1000 meters and good condition is 1000 meters. Therefore, there is total road length of 8100 meters in the 103 slums in Nabadwip Municipality. People have been using those roads for their daily communication.

**TableNo-3, Condition of road**

Sr.No	Condition of Road	Length in Meters
1	Kutcha Roads	4500
2	Brick Paved Road in poor condition	600
3	Brick Paved Road good condition	1000
4	Concrete road in poor condition	1000
5	Concrete road in good condition	1000
	Total	8100

Source- Nabadwip Municipality, 2016

### Storm water drains:

The Nabadwip is a town surrounded by the river Ganges and other rivulets. Therefore there are problems like water logging and storm water drainage is not in existence. Had to suffer during the monsoon in general but specifically the slum dwellers have been suffering a lot during the monsoon. Normal drain is also in worst conditions. There is 8500 meters of drains of which Kutcha drain is 7000 meters, pucca drains in dilapidated conditions is 1000 meters and pucca drains in good conditions is 500 meters.

**TableNo- 4, Condition of drains**

Sr No	Nature/Condition of Drains	Length in Meters
1	Kutcha drain	7000
2	Pucca drains in dilapidated conditions	1000
3	Pucca drains in good conditions	500
	Total	8500

Source –Nabadwip municipality, 2016.

### Solid waste collection:

Waste is not collected door to door and there is no question of segregated collection. The following pie chart would give a vivid picture about the garbage collection and the condition of solid waste management. In the slums of Nabadwip the situation is much bad.

The survey shown that the solid waste management is managed in an improper manner. 15204, 59% citizens expressed their opinion that the waste is thrown anywhere, 3945, 16% opined that waste are kept in the vats, 3% have opined those are thrown into drains and 5723, 22% citizens viewed that the waste are collected by the municipal personnel.

**Street lighting:**

Street light is insufficient in the slum areas. The slum dwellers has little access over the electric house connections therefore the slum dwellers are much in need of street lights as roads are poor in condition ,drainage is worst and during night it has become acute difficulties before the slum dwellers if there is no street light.

**Sample slums:**

For sample survey 5 wards were selected from the different parts of Nabadwip Municipality The Gouranga para colony slum, ward no- 19 which is located on the southern part of the Nabadwip is adjacent to the western side of Eastern railway and Ganga River. In this ward 25 households were surveyed. Malancha para Das road slum ,ward no-1 is situated in the middle part of the city. It is mainly situated on the front of Bishnupriya Halt station. In this ward 25 households were surveyed. Due to location on main road the position of dwellings is better than other slums. The slum of Hotat colony slum, ward no-22 is situated along the river bank. Here the dwellers belong to a specific community of sweeper and labourer. The living standard and economic status is comparatively lower than the dwellers of Malachapara Das road slum. Here the total of 25 households was surveyed. The Ram Krishna colony slum is situated along the river bank and railway line. Here 25 households were surveyed. The Ganganagar slum is situated on the northern part of municipality. Here 25 households were surveyed.

**Parameters of quality of life:**

In the present study altogether 10 variables have been carefully chosen to determine the existing quality of life in slums of Nabadwip municipality.

**Source of lighting (X1):**

Electricity is considered as a parameter of measurement of development and quality of life. Regarding this parameter it is seen that 70 percent of sample households in slums used electricity, while 30 percent household used kerosene as a source of lighting. But it is notable that majority of household had no legal connection.

**Fuel used for cooking (X2):**

Regarding this as a parameter of the measurement of quality of life, it is seen that for the cooking LPG 19 percent is used by household. Though much of them have not got LPG connection, they use the small cylinders of 2 kg and 4 kg. The other residents of slums use illegal electric connection for illuminating their heaters. Kerosene, coal and cow-dug-cakes are others fuels which are used for cooking.

**Source of drinking water (X3):**

Safe and pure drinking water is basic need for life. The sample survey reveals that 44 percent residents of slum areas use water of hand pump, while 56 percent use water of municipal tap for drinking. The quality of water of hand pump is not up to mark.

**Housing condition (X4):**

One billion people of the world live in inadequate housing, mostly in slums and squatter settlements. The situation is worst in urban areas of developing country, where one quarter of housing units are temporary structure.

The type of houses basically depends upon the geographical environment as well as economic and social structure of the people (Sahay, 2006). A deplorable scenario exist in sample region, where all of the sample slums dominated by *kachha* and *semi-pucca* housing structure. Out of 125 houses, 54 houses had only one room. Malancha para Das road slum had more *pucca* houses than any other slum.

**Sewage disposal facility (X5):**

Sanitation is not only important for healthy living but also ensuring a non polluted environment. The majority of sample households had poor sewage disposal facility. The condition of Hatat colony slum, Ganganagar slum is worst where more than half of sample household had poor sewage facility.

**Place of waste dumping (X6):**

The risk to human health are compounded in these slums, where garbage collection is nonexistent in most cases and drainage tends to be poor, promoting the growth of insects and other diseases . There is no adequate arrangement for the dumping of domestic wastes. Only one third households used the place fixed by municipality for the dumping of domestic wastes.



**Medical facilities (X7):**

Around half the urban population in developing countries is suffering from one or more of the diseases associated with inadequate provision of water and sanitation. Therefore medical facility is a significant parameter of measurement of quality of life. The 32 percent slum dwellers used private clinic and 55 percent government hospital, while 7 percent used traditional medical practitioner. The condition of Malanchapara das road slum is better than other slums.

**Literacy (X8):**

Due to wide spread poverty in the slum areas, illiteracy prevails and even it can be said that poverty exists because illiteracy exists (Tripathi, 2010). The literacy is most significant indicator of socio-economic condition and quality of life. Though literacy is very poor in slums of Nabadwip municipality, comparatively Ramkrishna colony slum and Gouranga para colony slum are better literacy than other slum.

**Female Literacy (X9):**

Female literacy is not only indicator of education but also status of women in society. The sample area had very poor female literacy. The sample survey shows very poor female literacy which indicates bad condition of women in slums of Nabadwip municipality.

**Ration card type (X10):**

Ration card is a significant indicator of poverty in India. Red ration card holders are people below poverty line while yellow card holders are people above poverty line. Some people reside in slums don't have any kind of ration card. The reason for not getting any card is non awareness and lengthy procedure.

**Table 5: Selected Variables for Quality of Life of slum dwellers of Nabadwip Municipality and their X value**

Variables	Parameters	Indicators	Weight age value	Hatat colony slum		Gourangapra colony slum		Ramkrishna colony slum		Malanchapara das road slum		Ganganagar slum	
				% of HH	X value	% of HH	X value	% of HH	X value	% of HH	X value	% of HH	X value
X1	Source of lighting	electricity	2	52	1.04	70	1.40	82	1.64	75	1.50	54	1.08
		kerosene	1	48	0.48	30	0.30	18	0.18	25	0.25	46	0.46
X2	Fuel used for cooking	LPG	5	22	1.10	25	1.25	25	1.25	28	1.40	25	1.25
		electricity	4	23	0.92	15	0.60	19	0.76	20	0.80	30	1.20
		kerosene	3	16	0.48	18	0.54	20	0.60	16	0.48	20	0.60
		coal	2	10	0.20	12	0.24	13	0.26	16	0.32	5	0.10
		cow-dug- cakes	1	29	0.29	30	0.30	22	0.22	20	0.20	20	0.20
X3	Source of drinking water	municipal tap	2	25	0.50	55	1.10	60	1.20	35	0.70	30	0.60
		hand pump	1	75	0.75	45	0.45	40	0.40	65	0.65	70	0.70
X4	Housing condition	pucca	3	15	0.45	16	0.48	30	0.90	20	0.60	25	0.75
		semi pucca	2	55	1.10	60	1.20	55	1.10	55	1.10	50	1.00
		kaccha	1	30	0.30	24	0.24	15	0.15	25	0.25	25	0.25

X5	Sewage disposal facility	average	2	20	0.40	35	0.70	42	0.84	39	0.78	32	0.64
		poor	1	80	0.80	65	0.65	58	0.58	61	0.61	68	0.68
X6	Place of waste dumping	area fixed by municipality	3	28	0.84	40	1.20	65	1.95	17	0.51	35	1.05
		on roads	2	60	1.20	50	1.00	20	0.40	65	1.30	50	1.00
		near water bodies	1	12	0.12	10	0.10	15	0.15	18	0.18	15	0.15
X7	Medical facilities	govt hospital	3	30	0.90	24	0.72	25	0.75	15	0.45	20	0.60
		private clinic	2	55	1.10	48	0.96	40	0.80	55	1.10	60	1.20
		traditional practitioner	1	15	0.15	28	0.28	35	0.35	30	0.30	20	0.20
X8	Literacy (% pop.)	literate	2	20	0.40	35	0.70	40	0.80	35	0.70	15	0.30
		illiterate	1	80	0.80	65	0.65	60	0.60	65	0.65	85	0.85
X9	Female literacy (% pop.)	literate	2	15	0.30	20	0.40	25	0.50	20	0.40	18	0.36
		illiterate	1	85	0.85	80	0.80	75	0.75	80	0.80	82	0.82
X10	Ration card type	yellow card(APL)	3	30	0.90	35	1.05	40	1.20	35	1.05	25	0.75
		red card(BPL)	2	55	1.10	55	1.10	45	0.90	45	0.90	60	1.20
		without card	1	15	0.15	10	0.10	15	0.15	20	0.20	15	0.15

Table 6: Composite Score for Slums of Nabadwip municipality

SLUM	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X	X-X	(X-X) <sup>2</sup>
Hatat colony slum	1.52	2.99	1.25	1.85	1.20	2.16	2.15	1.20	1.15	2.15	17.62	-0.652	0.425
Gourangapara colony slum	1.70	2.93	1.55	1.92	1.35	2.30	1.96	1.35	1.20	2.25	18.51	0.238	0.056
Ramkrishna colony slum	1.82	3.09	1.60	2.15	1.42	2.50	1.90	1.40	1.25	2.25	19.38	1.108	1.227
Malanchapara das road slum	1.75	3.20	1.48	1.35	1.39	1.99	1.85	1.35	1.20	2.15	17.71	-0.562	0.316
Ganganagar slum	1.54	3.35	1.30	2.00	1.32	2.20	2.00	1.15	1.18	2.1	18.14	-0.132	0.017
Total											91.36		2.041

The mean value of composite score is 18.272 with standard deviation = 0.639. The levels of quality of life under deviation are grouped (Table-5).

**Table 7: Levels of Quality of Life in Slums of Nabadwip municipality**

Levels of Quality of Life	Statistical Value	Composite Score	Name of Slum
Good	to +2	18.911-19.550	Ramkrishna Colony Slum.
Medium	to +	18.272-18.911	Gourangapara Colony Slum,
Poor	to -	17.633-18.272	Malanchapara das road Slum, Ganganagar Slum
Very Poor	to -2	16.994-17.633	Hatat Colony Slum.

Source:- Computed By Researcher

The qualitative and quantitative processing is fully justified and four level of quality of life have emerged. The Ramkrishna colony slum enjoys good quality of life and the condition of slum dwellers of Ram Krishna colony is better than other slums of Nabadwip town. The Malanchapara das road , Gourangapara colony slums have medium quality of life and the conditions of these slums are better than Ganganagar and Hatat colony slums. Some basic facilities such as drinking water facility, housing conditions are better than other slums. The Hatat colony slum has low quality of life. The basic facilities are very poor in this slum. The situation is worst in Hatat colony slum. The Hatat colony slum has very poor quality of life. The medical facility and drinking water facility are inadequate in this slum. Though four levels of quality of life have been achieved, the condition of slums is very poor.

#### 4. PROBLEMS

##### Physical problems:

Majority of the drains are clogged due to irregular cleaning. It disrupts the flow of water through drains. Flooding usually occurs during monsoon season and creates poor hazards of Environment and health. The quality of water is not good. Many areas are not connected with water supply network. In most of the wards roads are damaged. There is heavy plying of mixed types of vehicles with very low mobility. In many areas the intensity of light is very low due to use of ordinary tube lights. Many areas even do not have electricity connection for streetlights. Improper collection of solid waste considering the health hazardous, environment preservation and in order to keep the city clean. Overcrowding and unplanned, haphazard growth.

##### Social problems:

In slum areas of Nabadwip municipality, lower standard of education, lack of awareness, poor economic condition create different social problems which affect day to day life of the women. Dowry systems, alcohol consumption, torture on women are the common matters in the area under study. Dowry system is a primitive practice of our society. As the economic condition is very poor and level of education is also very low in these slums, most of the women have to face dowry system. Women who get arranged marriage, dowry is a common phenomenon. But in case of love marriage the same is not found. Here, almost 62 percent women agree that their families have to pay money to their husband at the time of their marriage. Another problem of the study area is consumption of alcohol and anti social activity. In slums of this area a large number of males are alcoholic, which creates different problems in female's life. 45 percent women agree that their husbands consume alcohol at a regular interval. Some males also put pressure on their wives to provide money so that they can consume alcohol. As some of the males are alcoholic, domestic violence on women is a regular event in these slums. When males become drunk, most of them torture their wife due create domestic violence. Though it becomes really tough to quantify the actual number, because most of the women do not agree to disclose this for fear or shyness but it is realized that approximately 45 percent women are tortured in this regard.

#### 5. SUGGESTIONS

Construction of pucca drains, repair and regular cleaning of drains is required to undertake. Drainage system must be well maintained so that health and environmental situation can be good for people. Extension of water supply network to provide safe drinking water to all the household. Construction of new roads, mainly converting all brick paved and kutcha

roads to Black Top/concrete road. As road communication is one of the most important means of local economic development. Extension and full coverage with street lights. Door to Door collection of waste is required to be arranged by the municipality therefore the solid waste management is to be properly undertaken. Disposal and recycling of wastes and control over water logging by construction of high drains. Booster pumping station is required for releasing water during water logging period. Upgrading the slums is not merely shifting the slum dwellers into multi-storeyed houses, it needs much more concerted efforts to be worked upon both with body and the soul. We need to learn from the countries like Israel, which addressed the Urban Poor issues by introducing favourable policies and innovative approaches. In Israel, although they do not have slums as we have in India, they framed their policies for addressing the needs of the urban poor and cater those needs by involving private players in a more flexible and effective manner. They created a conducive environment for the private investors without compromising in the statutory plan of the country.

Therefore, it is high time to think out of the box and need to introduce multi-dimensional, multi-focused and holistic approach. We have to work not only with the physical aspects i.e. houses, roads, sewerage, health clinics, school buildings, shops for business and playgrounds /parks etc. of the slums and slum dwellers but also address the functional aspects i.e. psychological, social, economical, domestic and community aspects. Innovative approach i.e. inviting private players with specific Terms of Reference, addressing both, physical and functional aspects carefully and efficiently, need to be introduced. This approach will have three main players – Municipality, Private Players, & Non Government Organisations (NGOs) and will have three major components – (i) NGO intervention for addressing functional aspects; (ii) low cost houses for slum dwellers and (iii) modern high rise residential apartments and commercial mall for higher classes on sale. Besides, municipality and government will be in the monitoring and supporting role and at the end of the day will get taxes and other collections. To begin with, the government should initiate the slum up-gradation under the practical leadership of municipality (local government) so that trust can be build up with the slum dwellers and address the functional issues of slum dwellers i.e. skill up-gradation for actual income generation; improve functional literacy by identifying illiterates/neo literates/ semi literates; providing better health care services particularly maternal & Child health care and emergency services; ensure quality in primary & secondary education; work upon reduction of alcoholism; drug consumption; domestic violence and general crime and developing the cooperative culture and team spirit among slum dwellers. All these should be done by involving NGOs, who have the credibility in behaviour change communication and community mobilisation. The municipality should be in the close contact with the NGOs and slum dwellers on a regular basis.

#### **INDIA Vision 2020 and QOL in Slums:**

The goals and targets for various quality of life (QOL) indicators are set at global and national level. Their communality is a case for policy integration at different levels. In the field of education UN-MDG/ United Nations Millennium Development Goals as well as India Vision 2020 advocates the universalization of primary education but the study reveals that about 70 percent of population and 80 percent of females are illiterate in study area which is far from the above mentioned goals. In the health sector, UN-MDGs and India Vision 2020 has the goal of expansion of the infrastructure for public health, improve maternal health, medical care to ensure health for all and also to combat HIV/AIDS, malaria and other diseases.

. The major cause of poor quality and non-availability of resources is poverty. The UN-MDGs and India Vision 2020 advocate food and nutritional security to eradicate extreme poverty and hunger. The UN-MDG and India Vision 2020 document advocates continuous expansion of the physical infrastructure and reversal of loss of environmental resources to achieve social equity and environmental sustainability. This comparison of the status of slum dwellers with global and national goals portrays a pathetic picture. Thus we can say if we have to achieve these goals, we have to understand the significance of problems related to slums. The Slums and their problems need special attention not only for improving QOL in slums but also to achieve the targets of UN Millennium Development Goals and India Vision 2020. The Government also induced Public Private Partnership model (PPP) to improve the quality of life of slum .

## **6. CONCLUSION**

The situation in the slums in Nbadwip municipality is very bad in terms of drainage, road communication, street lighting and collection of waste, sanitation, and housing and out let of storm water. Nabadwip is holy place and therefore during Rush Utsav the town has become overcrowded. Then the situation become beyond control. Besides, there is lot of water

logging in municipality, heavy rush during the festivals, waste collection is poor, no arrangements for their accommodation, flood control and the measures for disaster management is not in existence. If the shortage of adequacy of drinking water supply, proper electricity supply, good sewage and sanitary facilities, opportunities of more formal services and other developmental schemes of slum people are arranged by Nabadwip municipality, then the improvement of quality of living of slum people will occur truly. The Municipal Corporation has already constructed local housing under the different urban development plan but the Government should initiate more rehabilitation in potential areas in the future urban development plans through public private partnership model.. The Government must encourage more private entrepreneurs to create more economic activities that can provide better improvement of their socio economic life. So, it is obviously good desire that can only improve the condition of slum people as well as their surroundings in the planned development of Nabadwip municipality.

#### REFERENCES

- [1] Banerjee, A., (2012). Status of Health among Slum Dwelling Women - A Case study on Dankuni
- [2] Municipality, Hooghly, International Journal of Current Research, vol. 4, Issue 11, pp 180-184.
- [3] Jha, Darshan Kumar and Tripathi, V.K (2014) : Quality of Life in Slum of Varanasi City: A Comparative Study, Transaction, IIG, pp14-16
- [4] Mandal, R.B (2000). Urban Geography A Text Book. Concept Publishing Company, New Delhi, Pp. 459-461.
- [5] Sahay, Anuradha (2006) Quality of life of slum dwellers A case study of Bindtoli, Patna west, Annals of the National Association of geographers, India, Vol. XXVI (No.2).
- [6] Tripathi (2010), Socio Economic Status of Urban poor Living in Slums of Varanasi City, Bhootal Digdarshan( Earth Science Review), Vol.1, No.2, Bhaugolik Vikash Sodh Sansthan, Gorakhpur.