

Changing Pattern of Rural-Urban Fringe Life of Tamluk Town, W.B., India (A Case Study of Ward No. 20)

S.B.Maity¹, A. Sahoo², Dr. R. Dhara De³

^{1&3}Part-time Teacher, Department of Geography, Tamralipta Mahavidyalaya, Tamluk, W.B., India

²Assistant Professor, Department of Geography, Tamralipta Mahavidyalaya, Tamluk, W.B., India

ABSTRACT: Before the formation of the peripheral Ward No.- 20 in Tamluk Municipality, most of the land use was-agricultural land, fallow land, water bodies etc. But now the picture of the land use is changing rapidly. Ward no.-20 lies between 22°17'07''N to 22°16'28''N and 87°54'15''E to 87°55'21''E latitude and longitude respectively. Objectives: i) To study migration and occupation of Ward No.-20. ii) To study decadal change of urban life of Ward No.-20. Primary data have been collected by schedule survey of households. Out of 771 households 10% (i.e. 78) households of Ward No.-20 have been randomly selected for the study. Secondary data have been collected from Tamluk Municipality office. Cadastral map is collected from DLRO. Urban life is measured with some indicators. Findings: i) At present 73.08% of the total sample houses are CCC in nature. ii) Public Transport and market facility are poor. iii) 98.72% of family depends upon water supply as a source of drinking water. 87.18% of family depends upon water supply as a source of bathing water. 73.08% of family depends upon water supply as a source of washing water. Suggestion: Water Supply will create crisis in future. Pond may be used for bathing and washing. Attention should be given to provide tertiary economic activities (market and public transport).

Keywords: Municipality, Land use, Migration, Urban life, Transport, Tertiary economy.

I. INTRODUCTION

Tamluk town experiences migration largely from several decades. There are several pull factors which attract people from different peripheral areas. Maximum people migrate from rural areas for their better education, better medical facilities, better livelihood etc. Before the formation of the peripheral Ward No.- 20 in Tamluk Municipality, most of the land use was -agricultural land, fallow land, water bodies etc. But now the picture of the land use is changing rapidly.

II. REVIEW OF LITERATURE

- 1) **Wehrwein** (1942) American economist defined rural-urban fringe in his research paper 'The Rural-urban Fringe'. He described "the area of transition between well recognized urban landuse and the area devoted to agriculture."¹
- 2) **Blizzard and Anderson** (1952) defined 'the rural-urban fringe is that area of mixed urban and rural landuses between the point where full city services cease to available and the point where agricultural landuses predominate.'²
- 3) **Singh** (1994) discussed 'Rural Dwellings' in a chapter in his book 'Geography of Settlement'. He discussed about rural buildings and several types of houses in rural settlement.³
- 4) **Maity** (2013) discussed about 'Evolution of Slum Huts in Tamluk Town, W.B., India (A Case Study of Iswar Colony)'. He discussed decade wise change of housing condition of the slum by using alphabetical codes (Three letter index).⁴
- 5) **Maity** (2015) studied Public Transporting system of Tamluk Town entitled 'State of Rickshaw Pullers in Public Transport System in Tamluk Town (W.B.)'. He discussed about width of the roads of the Town and ignorance of public transport services are present in fringe area.⁵

III. A BRIEF GEOGRAPHICAL STUDY OF TAMLUK TOWN

The town has 20 wards. The area of the town is 17.86 sq. kilometers⁶. Tamluk is the district head quarter of Purba Medinipur district, created as a separate district on 1st January, 2002⁷. The latitudinal and longitudinal extensions of the town are 22°14'30''N to 22°19'30''N and 87°54'10''E to 87°56'45''E respectively. The altitude is 5.86 meter from MSL⁸. Tamluk town is situated on the right bank of Rupnarayan river. The average annual temperature is 26.5°C to 27.0°C⁹ and average annual rainfall is 1400 mm to 1600 mm¹⁰. Young alluvial (Entisols) soil is present all over the study area¹¹. As of the 2001 census of India, Tamluk had 45,830 population¹². But in the case of 2011 census of India, Tamluk has 65,306population¹³.

OBJECTIVES:

- i) To study migration and occupation of Ward No.-20.
- ii) To study decadal change of urban life of Ward No.-20.

IV. METHODOLOGY

Primary data has been collected by schedule survey of households. Out of 771 households 10% (i.e. 78) households of Ward No.-20 has been randomly selected for the study. Secondary data have been collected from Tamluk Municipality office. Cadastral map is collected from DLRO, Tamluk, Purba Medinipur. Google Image also considered for the map making of the town. Statistical hand book and Municipal Hand book are also studied. Urban life is measured by some indicators (10). [Decade wise change of House building materials, drinking, bathing, washing water and electrification has been shown. Including Public transport facility, Market facility, Number of working women, Clothes for more than 30 years married woman and education of less than 16 years children].

V. STUDY AREA

Ward no.-20 lies between 22°17'07''N to 22°16'28''N and 87°54'15''E to 87°55'21''E latitude and longitude respectively. There are 771 households are present in the ward¹⁴. Total population of the ward is 3540¹⁵. The population density of the ward is 2099.64/sq km.¹⁶ In the east there is ward no.-17. In the west, Pairachail village is present in northern part of ward no.-16. In the south, Uttar Sonamui village is present. Tamluk Railway station is situated in this ward and the SE Railway divides the ward into eastern and western parts.

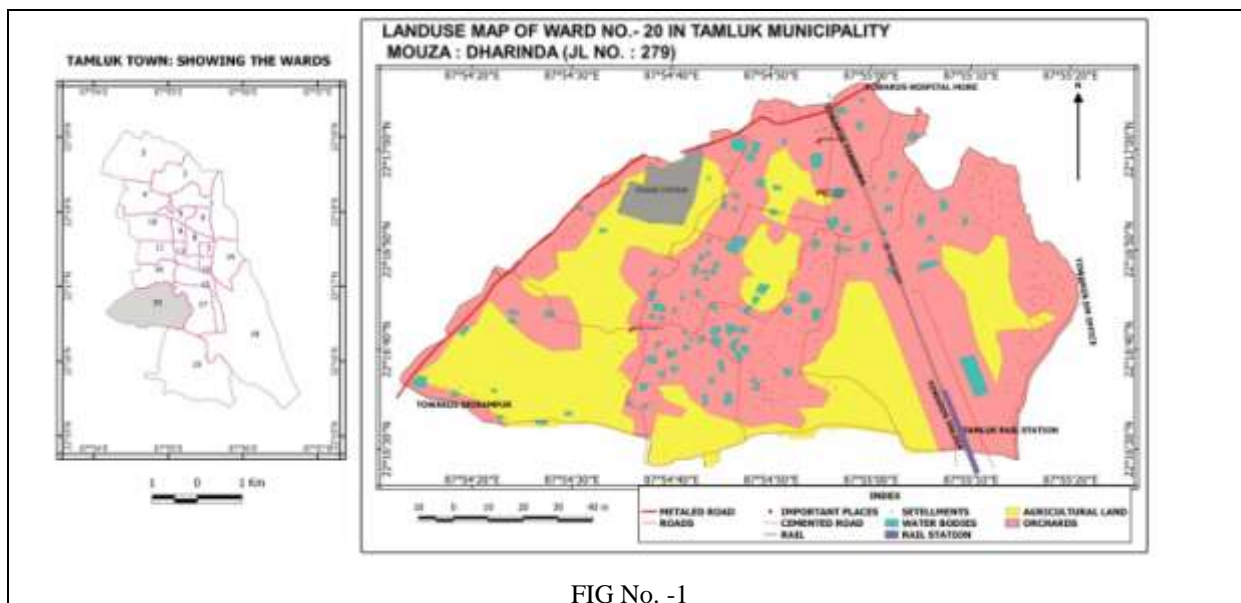


FIG No. -1

i) Religion, Caste and Family Types:

In the ward no.-20, there is only one type of Religious community (Hindu). In the ward 87.18% families belongs in General Caste category. 12.82% belongs to Scheduled Caste community. The field survey shows 60.26% families are joint families. Rest 39.74% families are nuclear.

ii) Age-Sex Structure:

Age-sex composition comprises an important role in demography. In the surveyed ward male and female percentage is 50.12% and 49.88% respectively. The ward has almost equal in male- female ratio.

Table No. – 1 Age-sex Structure

Age Group	Male	Percentage	Female	Percentage	Total
<10	25	12.08	29	14.08	54
10-20	26	12.56	26	12.62	52
20-30	34	16.43	46	22.33	80
30-40	43	20.77	36	17.48	79
40-50	26	12.56	24	11.65	50
50-60	27	13.04	25	12.14	52
60-70	15	7.25	11	5.34	26
>70	11	5.31	09	4.37	20
Total	207	100.00	206	100.00	413

Source: Field Survey, Feb, 2016

iii) Educational Status:

Out of the total sampled population, 9.93% is illiterate. 38.01% got the primary education. 22.28% completed the secondary education, 13.08% higher secondary, 10.41% graduation and 5.57% PG.

VI. OCCUPATION AND MIGRATION

Formal Sector gives family security because it has stable monthly income. But informal sector has not any security to safe income. 34.93% (51) of working population is engaged in Formal sector. A major percentage i.e. 65.07% (95) working population is engaged in Informal sector.

i) Occupation in Informal Sector¹⁷:

This sector is very insubstantial; they have to change their jobs very frequently as they depend mainly on season. At present, 23.16 % (22) of working population is engaged in primary sector (agricultural labour). 9.47 % (9) of working population is engaged in secondary sector (industrial labour). 67.37 % (64) of occupation in informal sector worked in tertiary sector of economy. They are serving as Shop Worker, Truck, Taxi, Toto Driver or helper etc. Major portion of it shifts to primary sector in agricultural seasons.

ii) Occupation in Formal Sector:

1.16 % (1) of working population is engaged in primary sector (Large Farmer). 3.92 % (2) of working population is engaged in secondary sector. 94.12 % (48) of occupation in formal sector is working in tertiary sector of economy. They are serving as School Teachers, Doctors, Bank employees etc.

iii) Migrated from Native Places:

10.55 % of families migrated from their native place in 10 years before. 57.85 % of families migrated from their native place in 10 to 20 years before. 21.05 % of families migrated in 20 to 30 years before. Rest 10.55% of families migrated to the ward more than 30 years ago.

Table No. – 2 Migrated year before

Year Before	No. of family	Percentage
<10	2	10.55
10-20	11	57.85
20-30	4	21.05
>30	2	10.55
Total	19	100.00

Source: Field Survey, Feb,2016

iv) Migrated from Distance:

Major migration (42.11%) happened from more than 30 kilometers. 21.05% of families migrated from within 10 kilometers. 21.05% of families got their migration from 10 to 20 kilometers. 20 to 30 kilometers migration was occurred by 15.79% of families.

Table No. – 3 Migrated from distance

Distance in Km.	No. of family	Percentage
<10	4	21.05
10-20	4	21.05
20-30	3	15.79
>30	8	42.11
Total	19	100.00

Source: Field Survey, Feb, 2016

VII. URBAN LIFE OF WARD NO.-20

i) Decadal Change of Building Materials¹⁸:

The following table treated as three letter indexed table. First letter treated for wall, second for roof and third for floor. At present 73.08% of the total sample houses are CCC in nature. 12.82% houses are CTC. MTM and CTM are 6.41% and 5.13% respectively. But in the case of MSM, MTiM, CCM, MTC, MSC are neglected. In 1980 CCC, MTM are only 28.33% and 38.33%. MSM, MTiM, CTM, CAM, MTC, MSC, CTC and CAC are also present. CCC making is the present tendency of the dwellers. Decadal data of CCC and CTC reflects that are increased. MTM and CTM are decreased in number.

Table No. – 4 Decadal Change of Building Materials

Time	MTM	%	MSM	%	MTiM	%	CCM	%	CTM	%	CAM	%
AT PRESENT	5	6.41	0	0	0	0	0	0	4	5.13	1	1.28
IN 2010	6	7.89	0	0	0	0	0	0	5	6.58	1	1.32
IN 2000	10	15.38	0	0	1	1.54	1	1.54	7	10.77	2	3.08
IN 1990	19	31.15	2	3.28	2	3.28	0	0	8	13.11	1	1.64

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IN 1980	23	38.98	1	1.69	2	3.39		0	7	11.86	1	1.69
Time	MTC	%	MSC	%	CCC	%	CTC	%	CAC	%	TOTAL	
AT PRESENT		0		0	57	73.08	10	12.82	1	1.28	78	
IN 2010		0		0	53	69.74	10	13.16	1	1.32	76	
IN 2000		0		0	37	56.92	5	7.69		0.00	65	
IN 1990		0	2	3.28	19	31.15	6	9.84	1	1.64	61	
IN 1980	2	3.39	2	3.39	15	25.42	5	8.47		0.00	59	

Source: Field Survey, Feb, 2016

INDEX			
Type of house	Wall	Roof	Floor
MTM	Mud	Tiles	Mud
MSM	Mud	Straw	Mud
MTiM	Mud	Tin	Mud
CCM	Cemented	Cemented	Mud
CTM	Cemented	Tiles	Mud
CAM	Cemented	Asbestos	Mud
MTC	Mud	Tiles	Cemented
MSC	Mud	Straw	Cemented
CCC	Cemented	Cemented	Cemented
CTC	Cemented	Tiles	Cemented
CAC	Cemented	Asbestos	Cemented

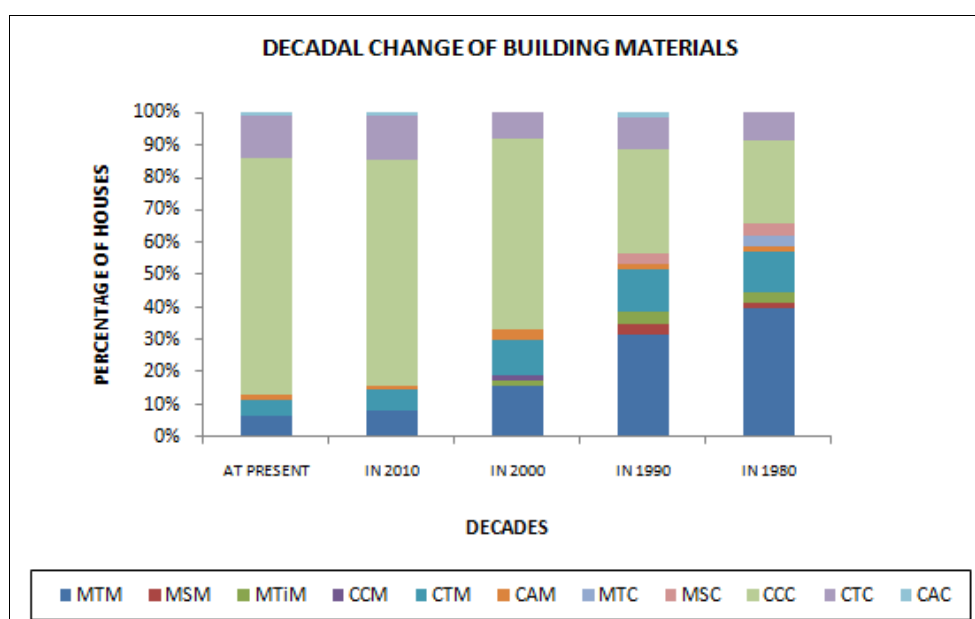


FIG NO. 2

ii) Decadal Change of Source of Drinking Water:

In the case of 1980 source of drinking water of dwellers was tube well. But now it is municipal water supply.

Table No. – 5 Decadal Change of Source of Drinking Water

Time	Well	%	Tube well	%	Water Supply	%	Total
AT PRESENT		0.00	1	1.28	77	98.72	78
IN 2010		0.00	4	5.26	72	94.74	76
IN 2000		0.00	26	35.14	48	64.86	74
IN 1990	3	4.69	48	75.00	13	20.31	64
IN 1980	3	5.00	57	95.00	-	0.00	60

Source: Field Survey, Feb, 2016

iii) Decadal Change of Source of Bathing Water:

In the case of 1980 pond was the major source of bathing water. But now it is municipal water supply. Fresh water is abused by them. Tube well never impacts over the dwellers. Several ponds are unused.

Table No. – 6 Decadal Change of Source of Bathing Water

Time	Pond	%	Tube well	%	Water Supply	%	Total
AT PRESENT	10	12.82		0.00	68	87.18	78
IN 2010	15	19.74	2	0.26	59	77.63	76
IN 2000	33	44.59	2	0.27	39	52.70	74
IN 1990	54	84.38	4	0.63	6	9.38	64
IN 1980	56	93.33	4	0.67	-	0.00	60

Source: Field Survey, Feb, 2016

iv) Decadal Change of Source of Washing Water:

In the case of 1980 source of washing water was pond. But now it is municipal water supply.

Table No. – 7 Decadal Change of Source of Washing Water

Time	Pond	%	Tube well	%	Water Supply	%	Total
AT PRESENT	21	26.92		0.00	57	73.08	78
IN 2010	24	31.58	2	2.63	50	65.79	76
IN 2000	39	52.70	1	1.35	34	45.95	74
IN 1990	56	87.50	2	3.13	6	9.38	64
IN 1980	55	91.67	5	8.33	-	0.00	60

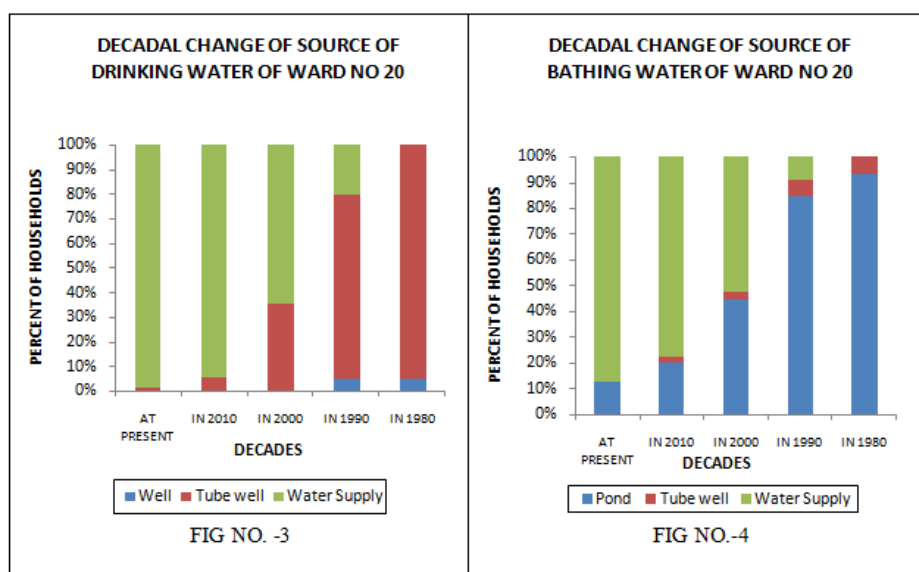
Source: Field Survey, Feb, 2016

v) Electrification of the Ward: All the houses are not electrified in 1980. But now, all households are electrified.

Table No. – 8 Electrification of Ward No.-20

	Yes	%	No	%	Total
AT PRESENT	78	100.00	0	0.00	78
IN 2010	74	97.37	2	2.63	76
IN 2000	60	81.08	14	18.92	74
IN 1990	9	14.06	55	85.94	64
IN 1980		0.00	60	100.00	60

Source : Field Survey, Feb,2016



vi) Public Transport facility of the Ward:

Eastern part of the ward gets every transport facility due to economic development. But the western part of the ward has not any Rickshaw or Totos though roads are motorable. Totos or Rickshaws are often seen to enter in the area. Bicycles and Motorcycles are the main mode of public transport to link with urban core. 'All roads are (except fringe of the town) dominated by rickshaw pullers.'¹⁹

vii) Market facility of the Ward: Eastern part of the ward is influenced by the tertiary sectors of economy. But western part is still dominated by primary activity. It needs for tertiary activity (Grocery, vegetable and stationary shops).

viii) Clothes of more than 30 years (married) women: 6.15% women of more than 30 years of age (married) have changed their traditional clothes (Sharee). Now they wear Salwar, Jeans or others.

ix) Working Woman: Out of 130 women above 30 years (married), 9 (6.92%) women are earning members of their family.

x) Educational Institution, Medium and Computer Education for less than 16 years: There are 20 % of children (less than 16 years old) studying in private schools. 15.6% of children are learning in English medium schools. 48.89% of children get computer education from their institutions.

IX. Findings

- i) 34.93% (51) of working population is engaged in Formal sector. A major percentage i.e. 65.07% (95) working population is engaged in Informal sector.
- ii) 57.85 % of families migrated from their native place in 10 to 20 years before. 21.05 % of families migrated in 20 to 30 years before. Major migration (42.11%) happened from more than 30 kilometers.
- iii) At present 73.08% of the total sample houses are CCC in nature.
- iv) 98.72% of family depends upon water supply as a source of drinking water. 87.18% of family depends upon water supply as a source of bathing water. 73.08% of family depends upon water supply as a source of washing water. All the houses are electrified at present.
- v) Public Transport and market facility are poor.
- vi) 6.15% women of more than 30 years of age (married) have changed their traditional clothes (Sharee). Now they wear Salwar, Jeans or others. Out of 130 women above 30 years (married), 9 (6.92%) women are earning members of their family. There are 20 % of children (less than 16 years old) studying in private schools. 15.6% of children are learning in English medium schools. 48.89% of children get computer education from their institutions.

X. Suggestion

Dependence upon municipal water supply will bring in the crisis of drinking water. Pond may be used for washing and bathing. The ward is developing, till it requires some economic influence for a healthy development. Authority should pay attention to provide tertiary economic influence especially regarding market and public transport.

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