4.1.1 Background

The socio-economic component intends to portray the social and economic structures and incorporate information on basic services, growth and socio-economic environments of the population that exists in locality. Planning for harmonious urban development, whether traffic and transportation, housing, roads, drains, market, open space/parks, health & education etc., a basic assessment of existing socio-economic situation is pre-requisite.

As planned development of Mymensingh Town is very much desirable now, therefore socio-economic study is needed to identify policies for possible interventions. On that ground, a sample socio-economic survey was carried out in 1399 households (HH) during last quarter of 2013 within the municipality (940 nos.) and rural (459 nos.)community. The following descriptions and finding are developed based on that survey and their responses. We here acknowledge that the findings of this survey may not portray the actual scenario properly due to very poor sample size. However, it definitely owns a glimpse of Mymensingh.

4.1.2 Mymensingh: A Brief

The Mymensingh, located at 24°45′14″N and 90°24′11″E (see figure 1), was established and awarded city status in 1787. Its total area is 82 km^2 with an average 19 m (62 ft) elevation from sea level. In 2012, total population was 407,798 persons having a 5,000/km^2 population density. Since 1980s, fast urbanization has expanded the city area. The city is clearly marked by the old Brahmaputra River flowing along its north. Shambhuganj is situated on the other side of the Brahmaputra, connected by the Shambhuganj Bridge (Wikipedia, 2013). The climate of Mymensingh is moderate, much cooler than Dhaka, as it is closer to the Himalayas. The monsoon brings heavy rainfall sometimes for days and weeks. During the monsoon, the temperature varies 15 ~ 20 °C. The temperature falls below 15 °C in winter (December and January). The highest temperature (40 °C) is felt during April–May period.
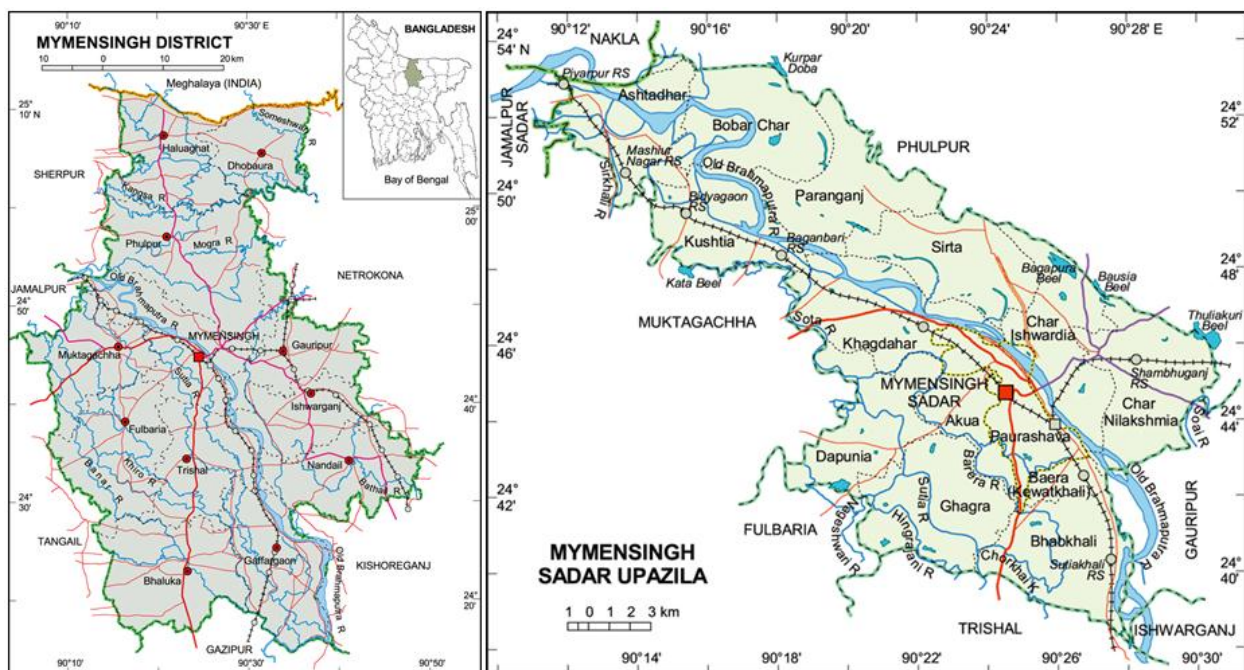

Figure 1: Location and administrative map of Mymensingh city (Banglapedia, 2006)

4.1.3 Social Information

The average family sizes in urban and rural areas are 4.48 and 4.25 respectively. The most common size of families in both areasare 4 having a range around 17.the following table 1 portrays the family size related information for both urban and rural areas.

Table 1: Household size in urban and rural area

Type of area	Total family member			
	Maximum	Minimum	Mode	Mean
Urban	17.00	1.00	4.00	4.48
Rural	18.00	1.00	4.00	4.25

Single family was found mostly in both urban and rural areas with a percentage of 84% and 95.2% of total households respectively (figure 1). Rest of the households is found joint family.
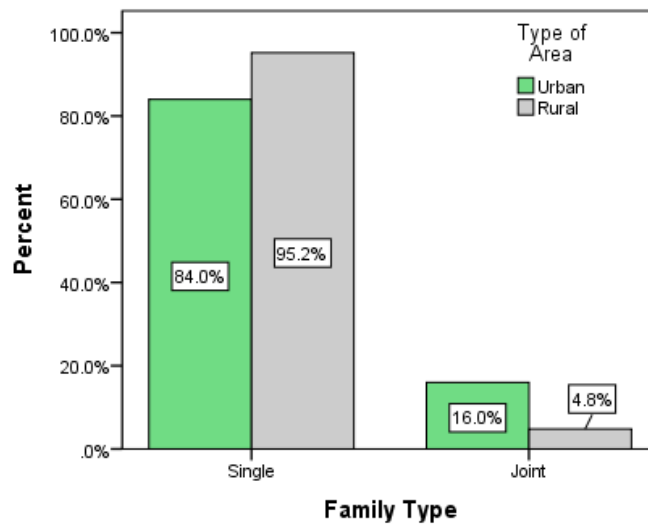

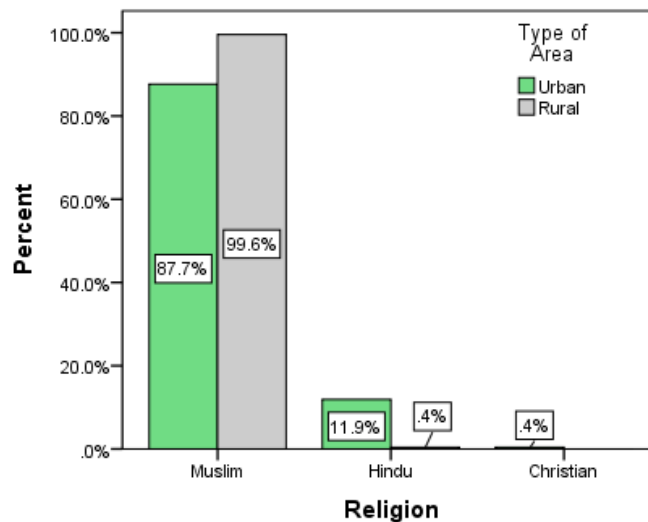Figure 1: Family type in urban and rural area

Figure 2: Religion in urban and rural community

Three types of religions have been found among surveyed households. Muslim households found mostly in both urban and rural area. Percentage of Muslim family is higher in rural area.

99.6% of total Muslim households found in rural area whereas 87.7 % of total Muslim households live in urban area as depicted in figure 2. Only 0.4% of total Christian households are found in urban area.
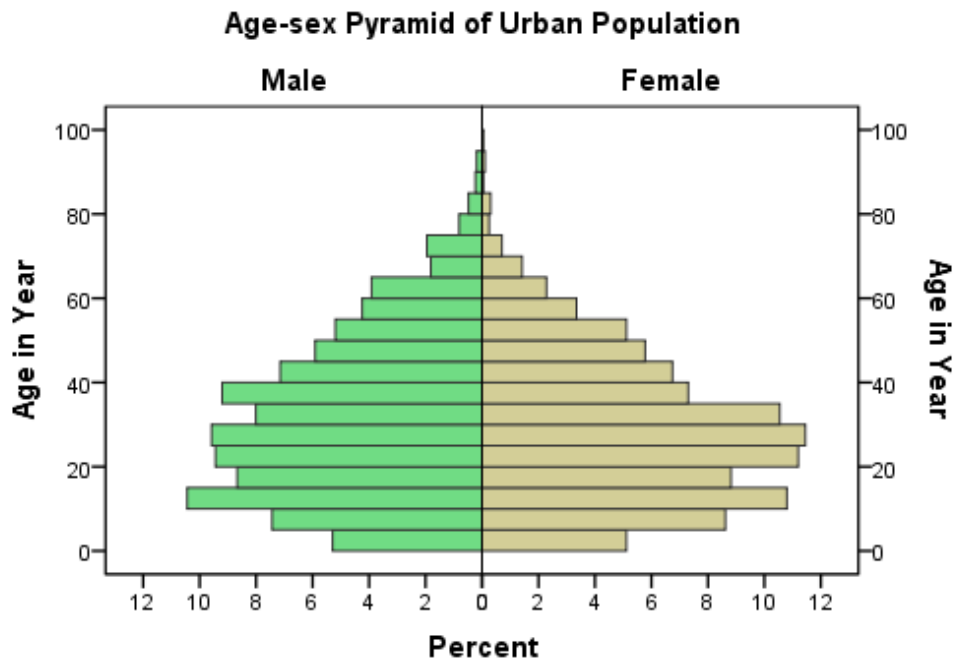

Figure 3: Age-sex pyramid of urban population

In urban area, male population is found mostly of age from 10 to 20 years old. Percentage of people of 70 above age is a few of total surveyed households. On the other hand, female of 20 to 40 years old are higher in percentage among surveyed households (Figure 3).
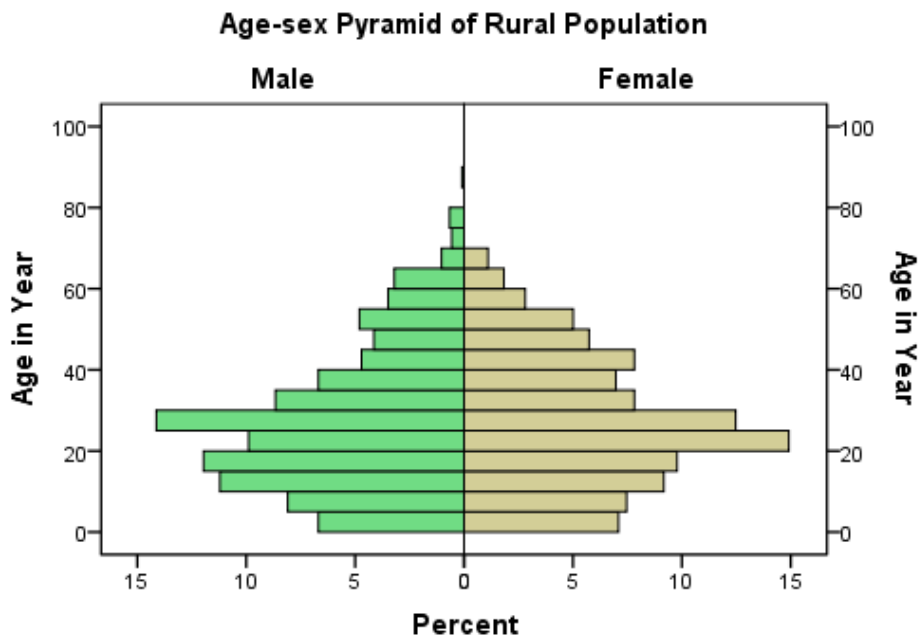

Figure 4: Age-sex pyramid of rural population

In rural area, male population is found mostly of age from 20 to 30 years old. Percentage of people of 65 above age is a few of total surveyed households. On the other hand, female of 20

to 30 years old are higher in percentage among surveyed households (Figure 4).

There is found significant difference in percentage of using freeze, iron, dish connection, gas cylinder, pressure cooker, rice cooker, computer, etc. electric materials between urban and rural population. Urban people use these things comparatively in high percentage whereas charger fan and light is used by both populations at comparatively less difference of percentage.
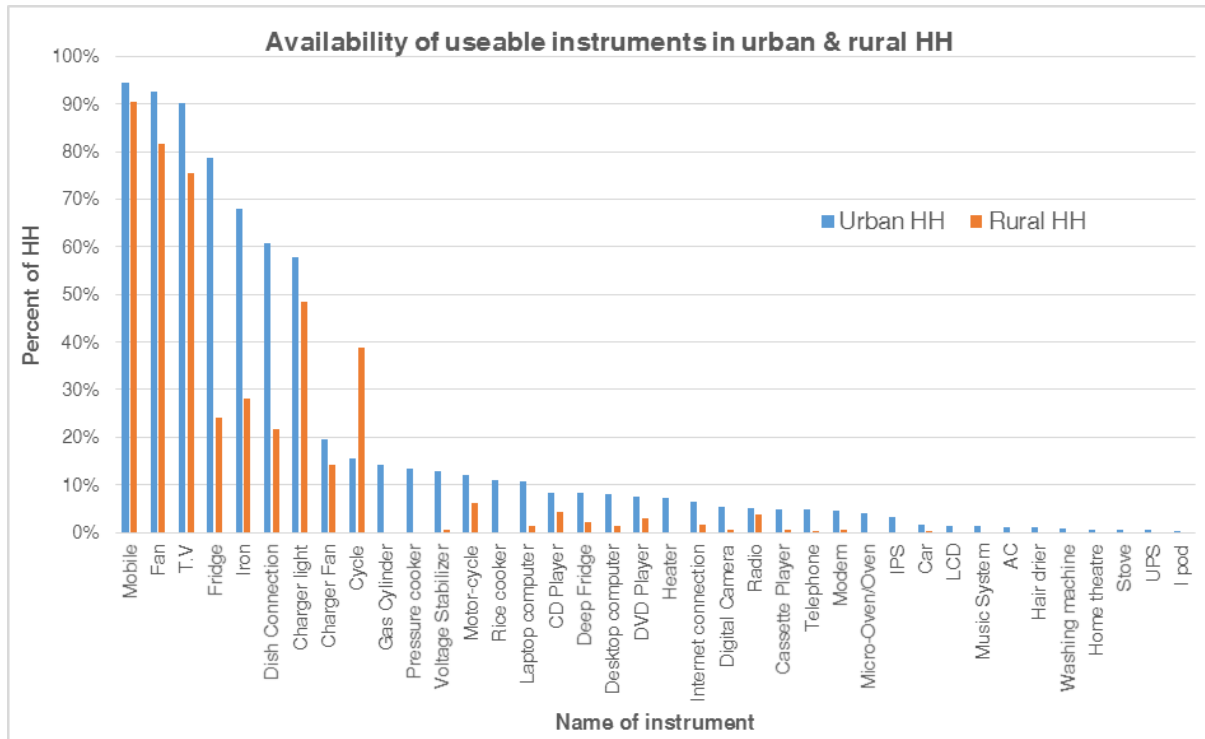

Figure 5: Usable instruments in urban and rural HH

In figure 5, about 90% of total population uses mobile phone in both urban and rural areas. Above 80% of total urban population uses fan and television whereas 80% and 70% of total surveyed rural population uses fan and television respectively.

4.1.4 Information on Household Head

It has been found that most of the household head are involved in business activity in both urban and rural areas. Percentage of unskilled labor is lowest in urban area. In rural area scenario is almost same here. Unskilled labor occupation is found at lowest percentage. There is huge difference in case of agricultural occupation of household head's percentage between urban and rural. 26.9% of total rural HH head are involved in agriculture sector whereas 1.1% of total urban HH head are involved in this sector (see Figure 6).

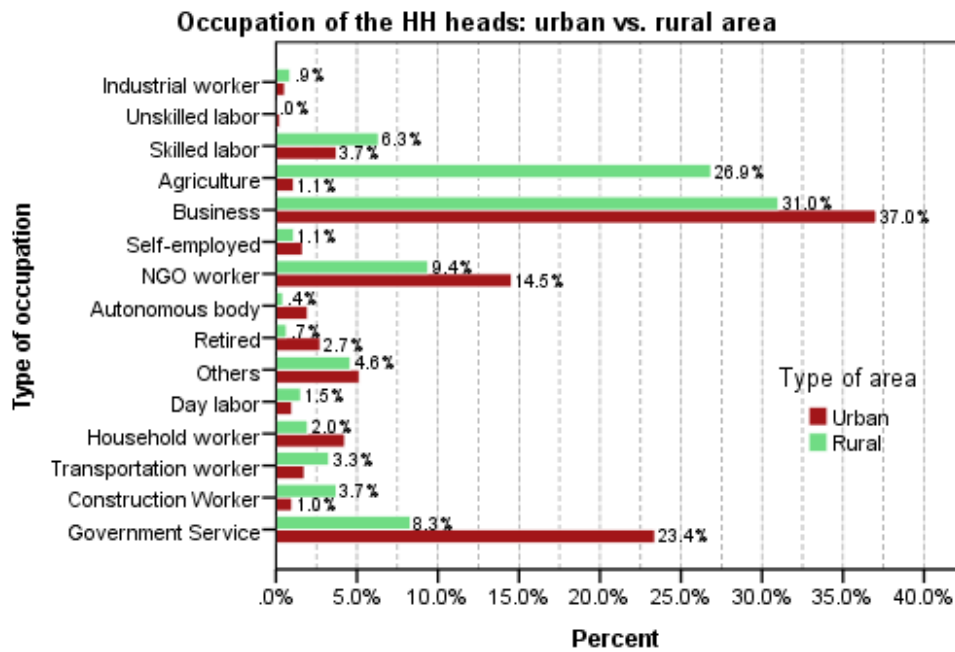### Occupation of the HH heads: urban vs. rural area

Figure 6: Occupation information of HH head in urban and rural area

In figure 7 it is shown that, most of the urban HH head educational qualification is secondary while in rural area most of the HH headsare educated up to primary level.
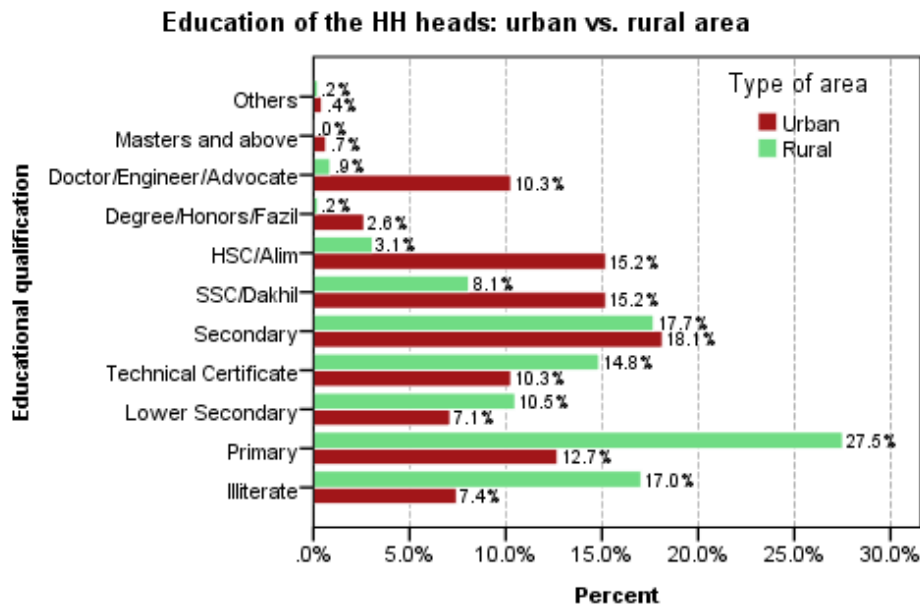
Education of the HH heads: urban vs. rural area

Figure 7: Education of HH head in urban and rural area

4.1.5 Education and Occupation of HH

Figure 8 displays, for both urban and rural population percentage of household worker is higher compared to other occupation followed by student and is equal to the percentage of 28.8% and 31.7% and; 26.8% and 26.7% of total surveyed households in urban area 0.5|% of total population is found with agriculture activity whereas 9.7% of total surveyed population are involved in agricultural activity in rural area.
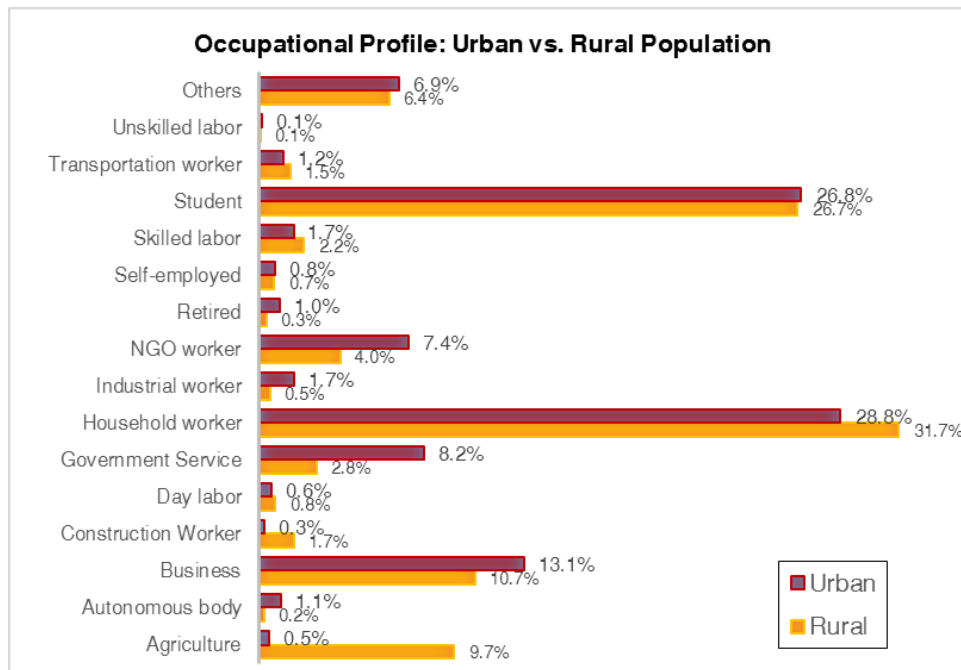
Figure 8: Occupation of urban and rural population

Figure 9 displays, higher percentage of rural population studies primary, lower secondary and technical level in compared that with urban population. Illiteracy is also higher in rural area regarding urban area. Primary level student is higher in percentage of total surveyed population in both urban and rural area.
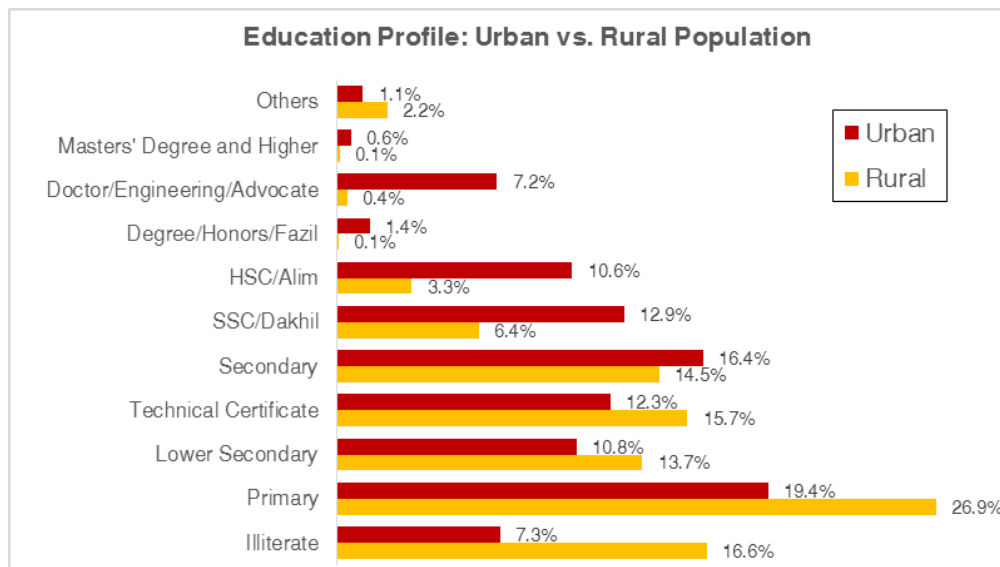

Figure9: Education level of urban and rural population

Table 2 shows percentage of illiterate people is higher in rural area and 54% of total illiterate people are involved in agriculture occupation. Most of the urban people is highly educated such as honors, masters, doctors and engineering and working under different government organization. Percentage of urban population involved in business is higher who are have educational background equal or below HSC level. Same situation is there in rural area in case of business activity.

Table 2: Education and occupation pattern in urban and rural area

| Area | Education | Occupation |
		Government Service	Autonomous body	NGO worker	Self-employed	Business	Agriculture	Skilled labor	Unskilled labor	Industrial worker	Construction Worker	Transportation worker	Household worker	Day labor	Others	Retired
Urban	Illiterate	2%	3%	6%	4%	32%	3%	12%	2%	3%		6%	4%	7%	16%	
	Primary	3%	1%	11%	5%	42%	2%	14%	1%	2%	2%	3%	8%	2%	3%	2%
	Lower Secondary	9%	2%	12%		49%		2%		2%	2%	3%	6%	3%	6%	5%
	Technical Certificate	16%	2%	16%	1%	40%	2%	4%			2%	4%	6%		4%	1%
	Secondary	24%	1%	8%	1%	56%	1%	2%			1%	1%	5%		1%	1%
	SSC/Dakhil	36%	1%	11%	1%	36%		1%					5%		5%	4%
	HSC/Alim	32%	5%	21%	1%	25%	1%					1%	1%	1%	7%	6%
	Degree/Honors/Fazil	58%		21%		4%									4%	13%
	Doctor/Engineer/Advocate	38%	3%	31%		19%	1%					1%			5%	1%
	Masters and Higher	33%		33%		17%										17%
	Others	50%			25%								25%			
Rural	Illiterate				1%	15%	54%	10%			5%	1%	4%	3%	6%	
	Primary			1%	2%	28%	34%	12%		1%	7%	5%	3%	4%	3%	1%
	Lower Secondary	6%		6%	4%	40%	21%			2%	2%	6%			13%	
	Technical Certificate	9%	2%	7%		49%	21%	4%		3%	2%	2%	2%		2%	
	Secondary	19%		20%		37%	10%	4%			3%	5%	1%		3%	
	SSC/Dakhil	22%		30%		30%	11%								3%	5%
	HSC/Alim	36%	7%	21%		14%	7%								14%	
	Degree/Honors/Fazil			100%												
	Doctor/Engineer/Advocate	25%		50%			25%									
	Masters and Higher															
	Others			100%												

4.1.6 Occupation and Income Structure

Figure 10 shows in urban area mostly households earn money from other sources. Other occupations which are sector of higher monthly income for urban population of Mymensingh are agriculture, businesses, NGO, autonomous body, government service etc. in rural area autonomous body sector person earn highest monthly income rather than agriculture sector.
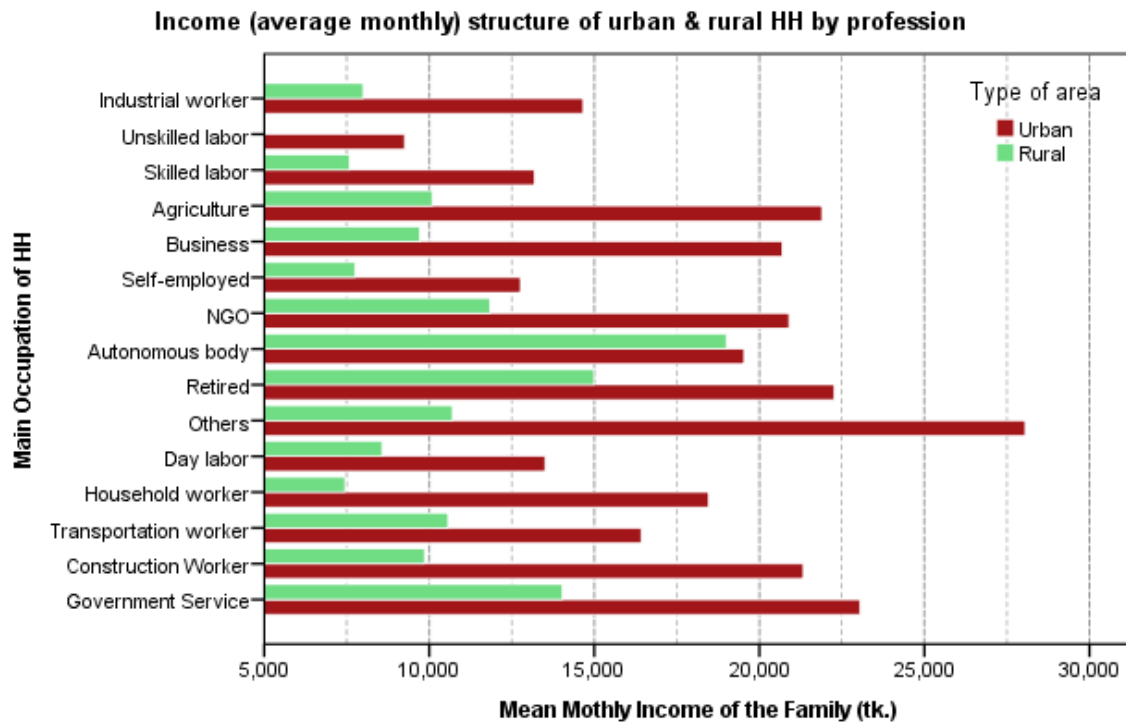
Income (average monthly) structure of urban & rural HH by profession

Figure 10: Mean monthly income of HH by profession

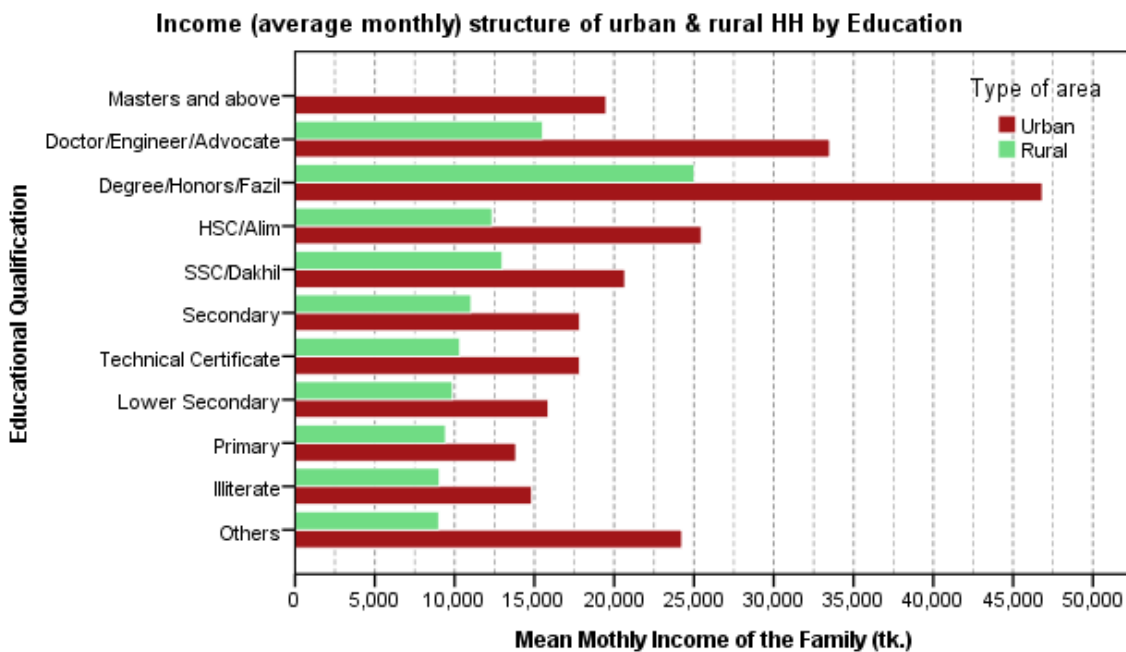**Income (average monthly) structure of urban & rural HH by Education**

Figure 11: Mean monthly income of HH by education

Degree, honors and fazil passed people are the top in the list of earning money as shown in figure 11. People occupied these degree has a mean monthly income of about 46000 taka. Doctors, engineers and advocated passed people has a mean monthly income of around 34000 taka. Scenario is same in both urban and rural areas in these cases. Scenario is different in other type education. Urban people from other educational background have higher mean monthly income other than rural people.

4.1.7 Households'Expenditure Pattern

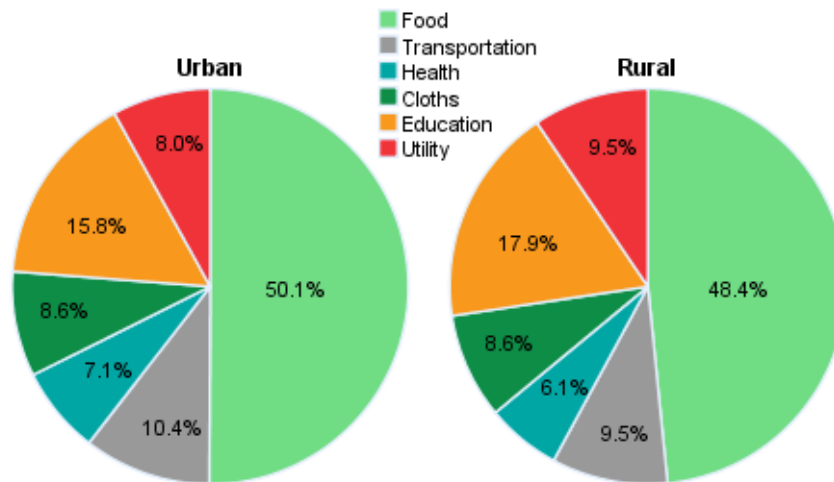**Purpose of HH common expenditure (except house rent)**

Figure 12: HH's common expenditure pattern in urban & rural area

In figure 12, it is shown that food expenditure covers most of the percentage of total expenditure in both urban and rural area with percentage of 50.1% and 48.4% of total expenditure respectively followed by expenditure in education purpose for both urban and rural. Urban and rural people spend 15.8% and 17.9% of total expenditure for education purpose respectively.

Mean monthly income, expenditure & savings comparison
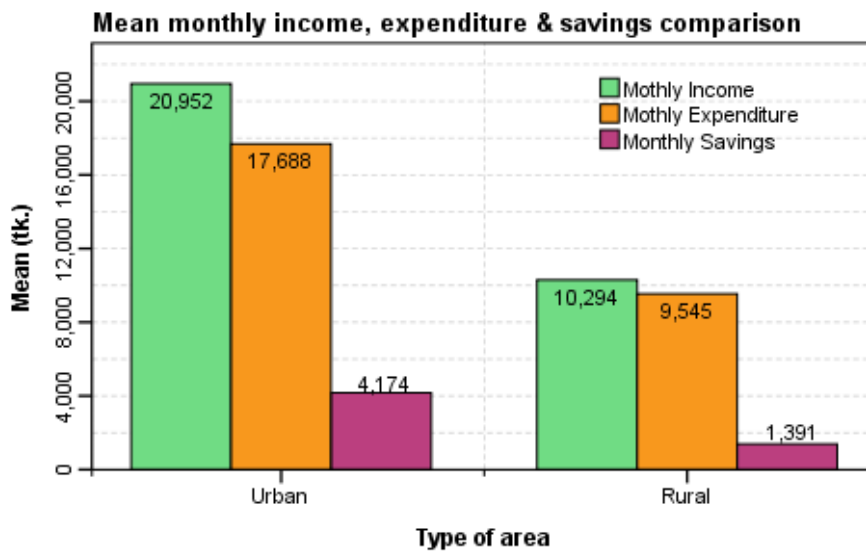
Figure 13: Mean monthly income, expenditure and savings pattern

Figure 13 delineates in urban area mean income, expenditure and saving is higher than that of rural area. Mean income is higher than mean expenditure for both urban and rural population.
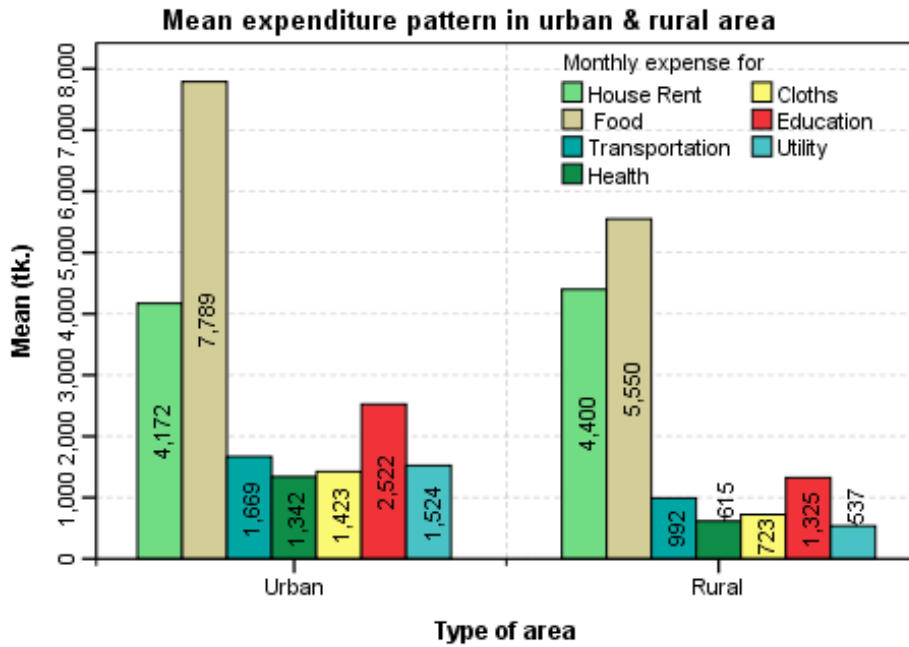
Figure 14: Mean expenditure pattern in urban and rural area

Mean food expenditure is highest regarding expenditure for other purposes in both areas. For urban area transportation cost of households is lowest and for rural area utility cost is lowest and mean value is 1342 and 537 respectively (Figure 14).

4.1.8 Migration RelatedInformation

Figure 15 show that 64.6% of total household head's belongs to Mymensingh district in case of urban population. Rest percentage of urban population came from other areas outside Mymensingh district. On other hand, 97.8% of total population belongs to Mymensingh district. In rural area there is a few people come outside Mymensingh.
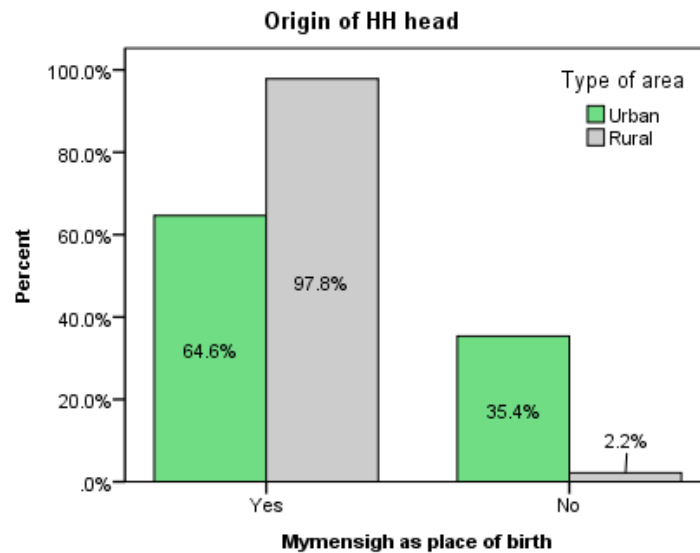

Figure 15: Origin of HH head

Migrant household heads came to live Mymensingh in different period of times. In case of

urban area 45.3% of total migrant population came to Mymensingh in the year of 2002-2011 followed by 20.1 % in the year of 1992-2001. Most of the urban migrants came to Mymensingh within this time.
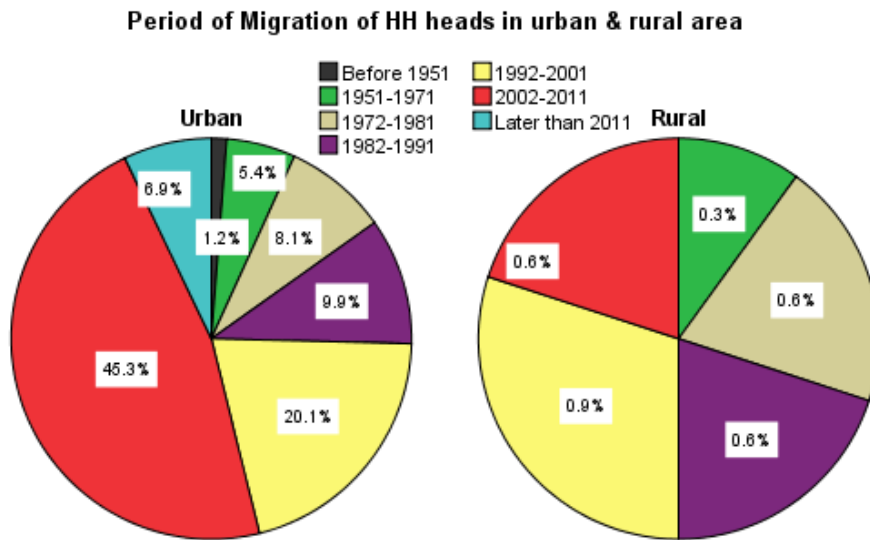

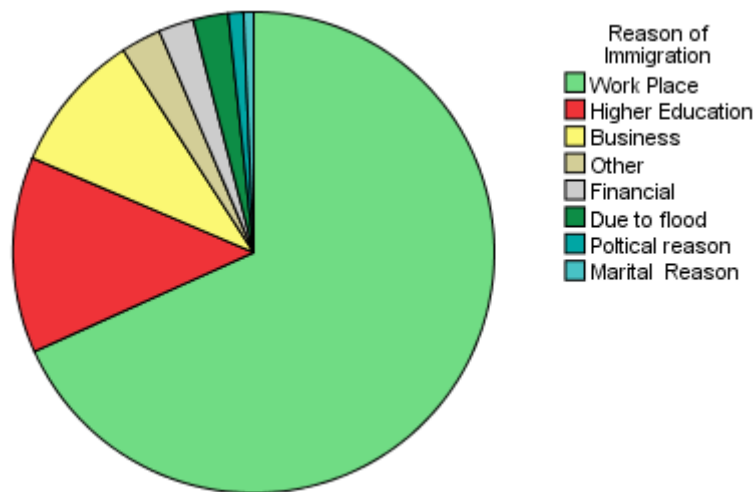Figure 16: Period of migration of HH head
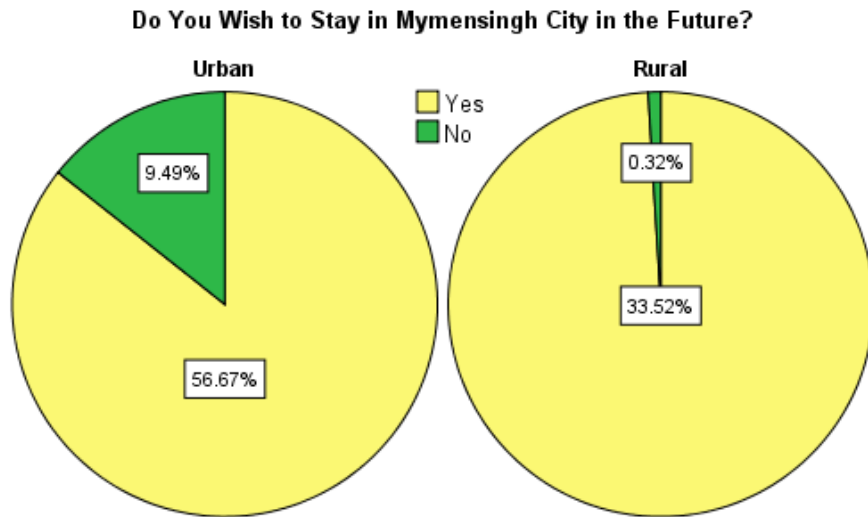

Figure 17: Reasons of migration

Do You Wish to Stay in Mymensingh City in the Future?

Urban   Rural

☐ Yes
☐ No

9.49%

0.32%

33.52%

56.67%

Figure 18: Percentage of Population willing to stay in Mymensingh

Do anybody of the Family live outside Mymensingh?

Urban   ☐ No   Rural
     ■ Within BD
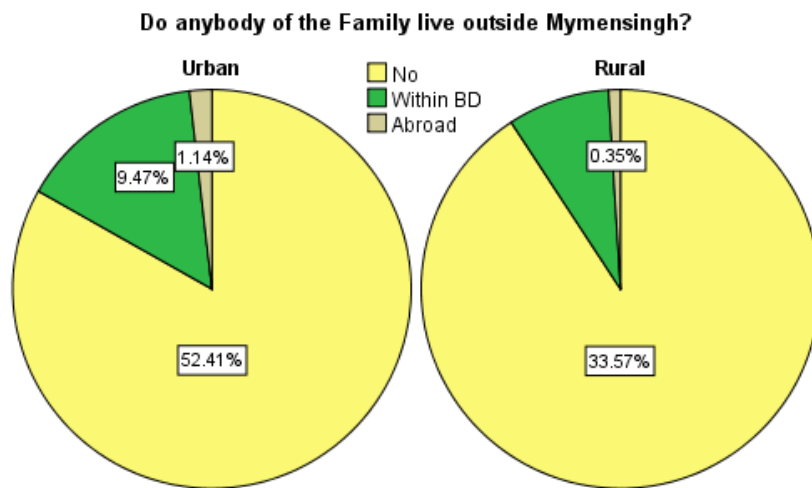   ☐ Abroad

1.14%

9.47%

0.35%

52.41%

33.57%

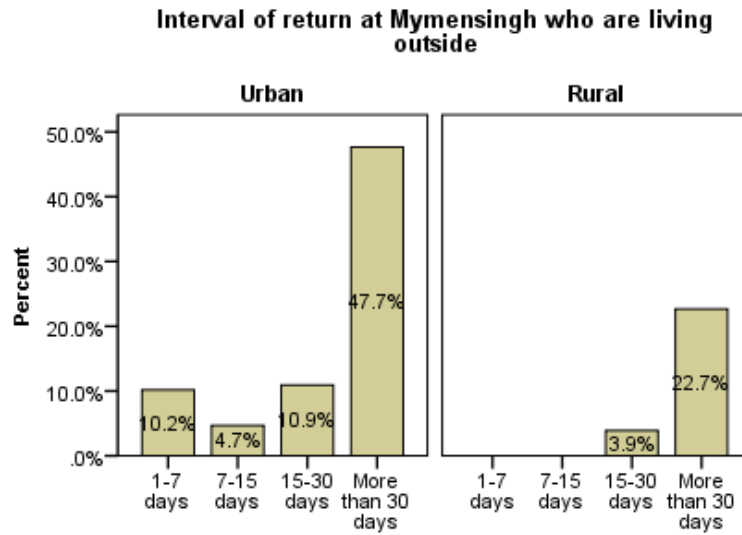Figure 19: Percentage of family member living outside Mymensingh

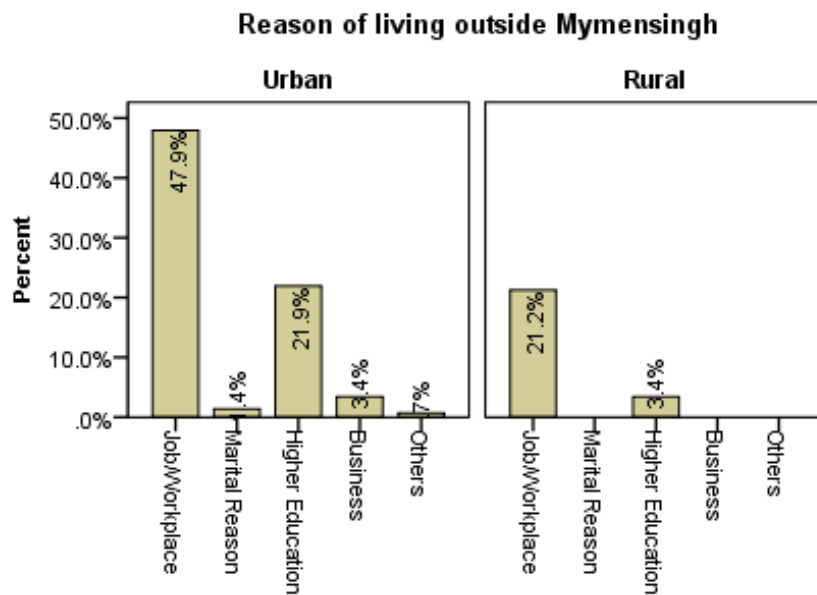Figure 20: Interval of immigrants'in returningMymensingh

Figure 21: Percentage of population for reason of living outside Mymensingh

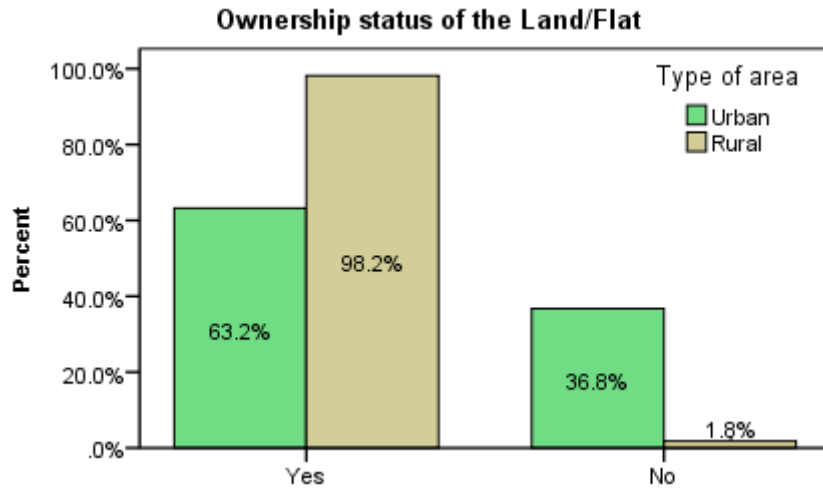## 4.1.9 Land Ownership and Housing Pattern

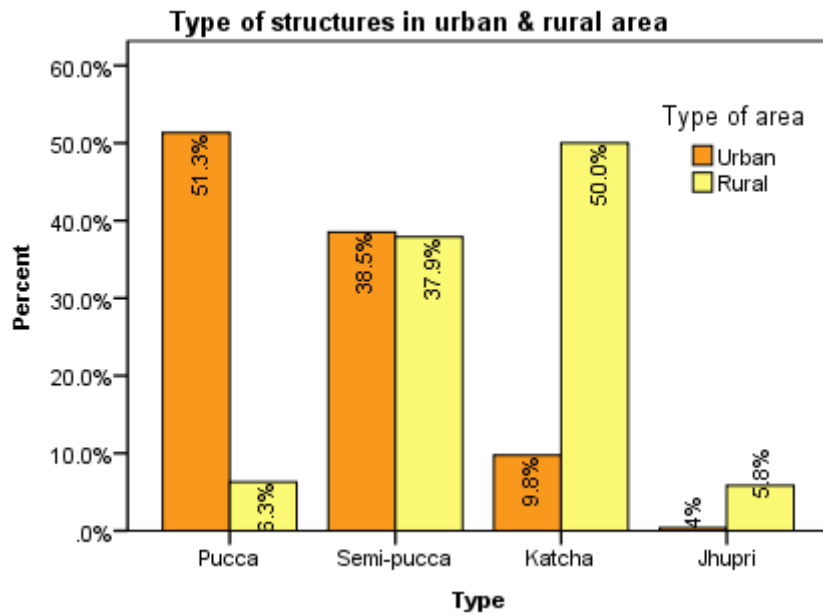Figure 22: Land/Flat ownership pattern in urban & rural area

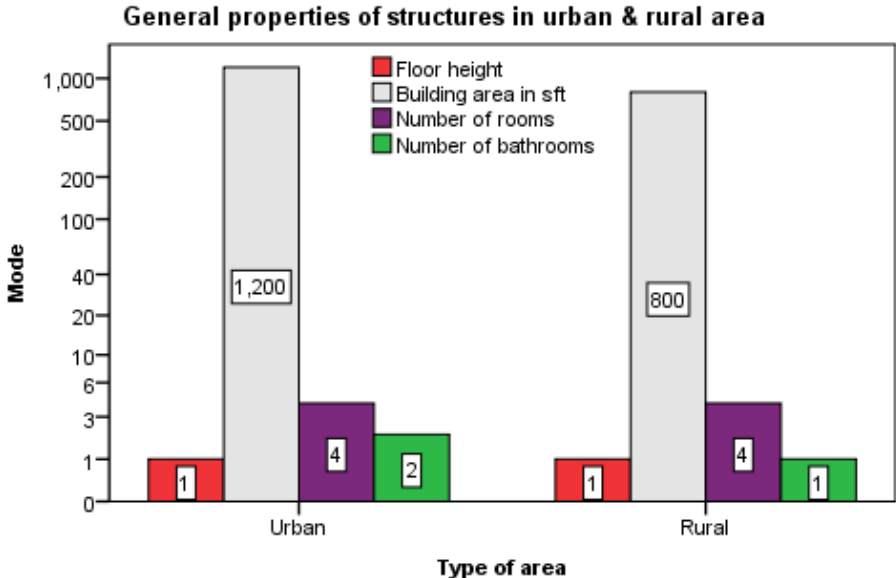Figure 23: Building/structure type in both areas

Figure 24: Usual height, floor area, room and bathroom statistics of both areas
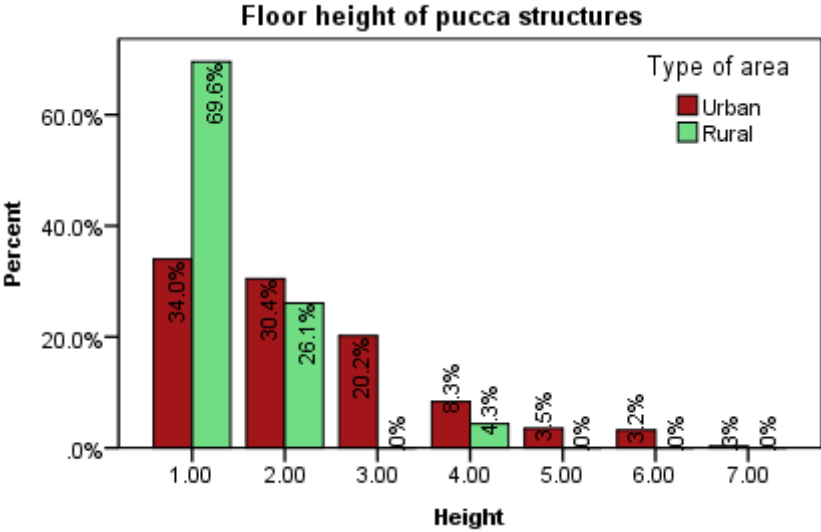
Figure 25: Height of residential buildings in urban and rural area

Comperative average land value of urban & rural area
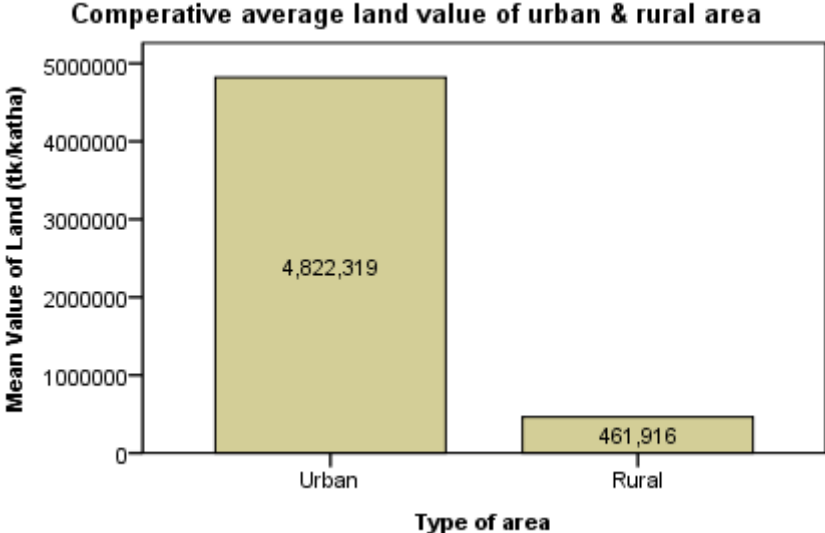
Figure 26:Average land value per Katha in urban and rural area

Land filling status for constructing houses
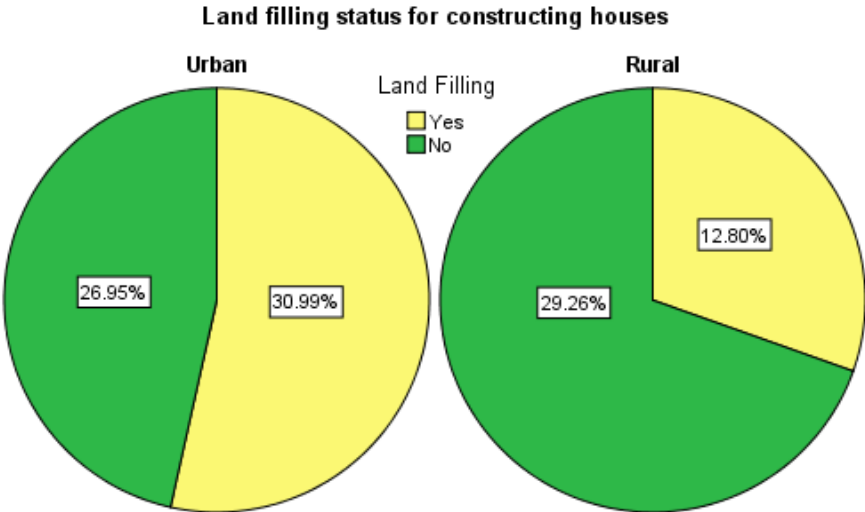
Figure 27: Land filling as necessitated in construction works

Types of foundation of the houses
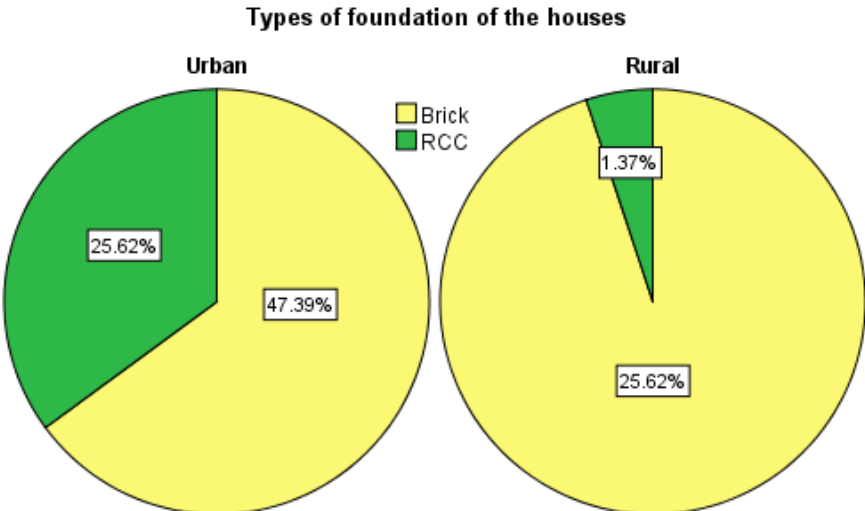
Figure 28: Foundation types of the existing structures
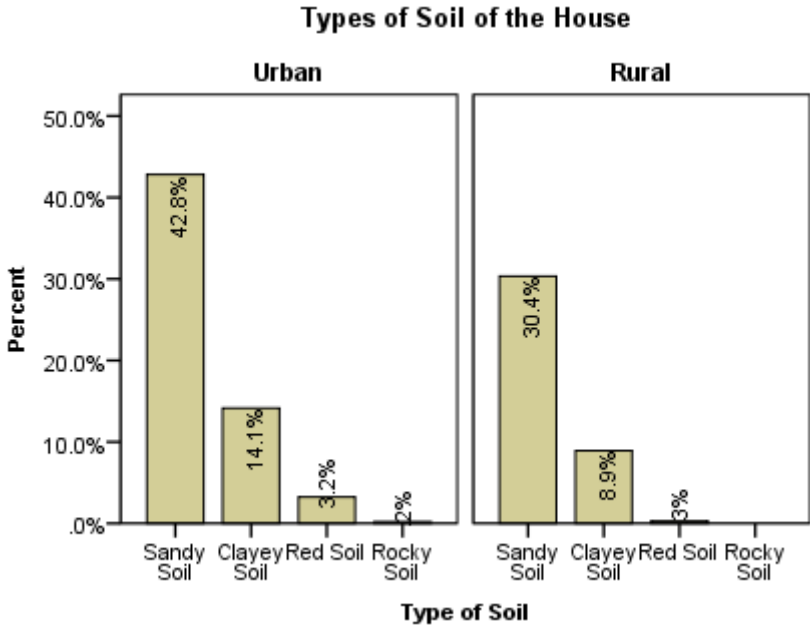
Figure 29: Soil type beneath the constructed houses
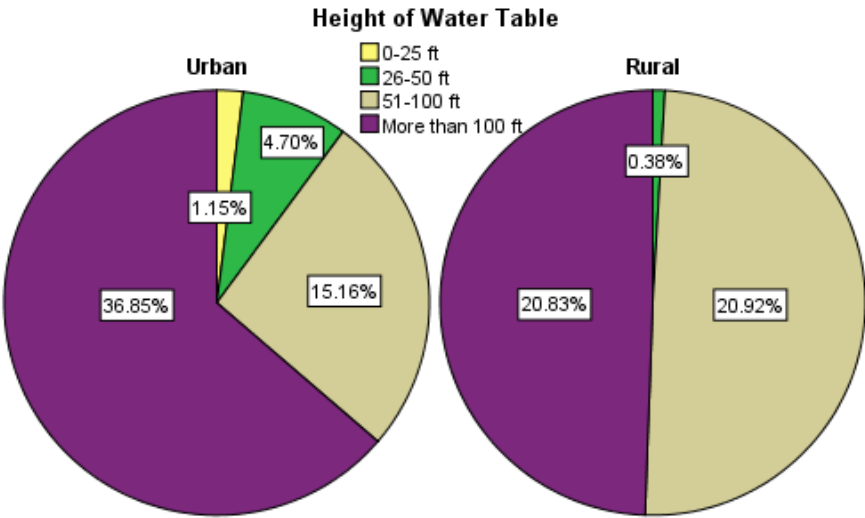
Figure 30: Depth of water-table in urban and rural area

Building Designed by a Designer?

Urban	Rural

Yes
No

30.67%   27.42%   0.74%   41.08%
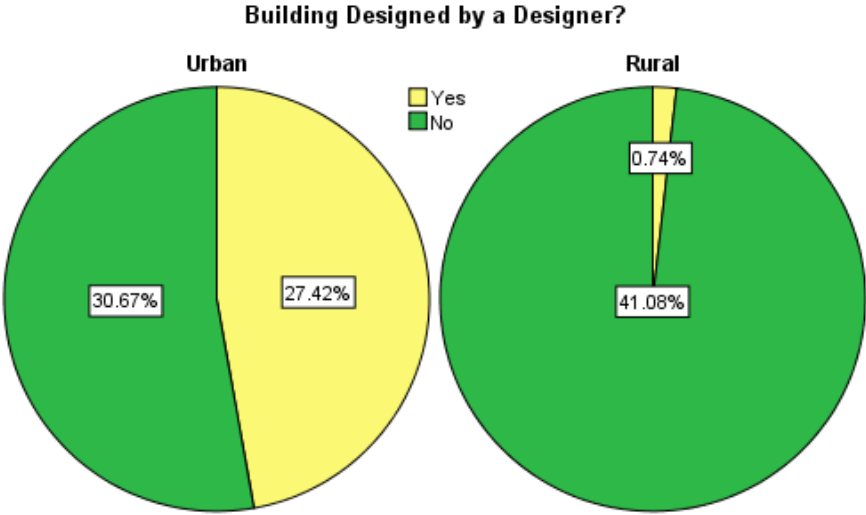
Figure 31: Practice in structure design work

Building Plan Approved by paurashava?

Urban	Rural

Yes
No

13.48%   45.06%   4.80%   36.66%
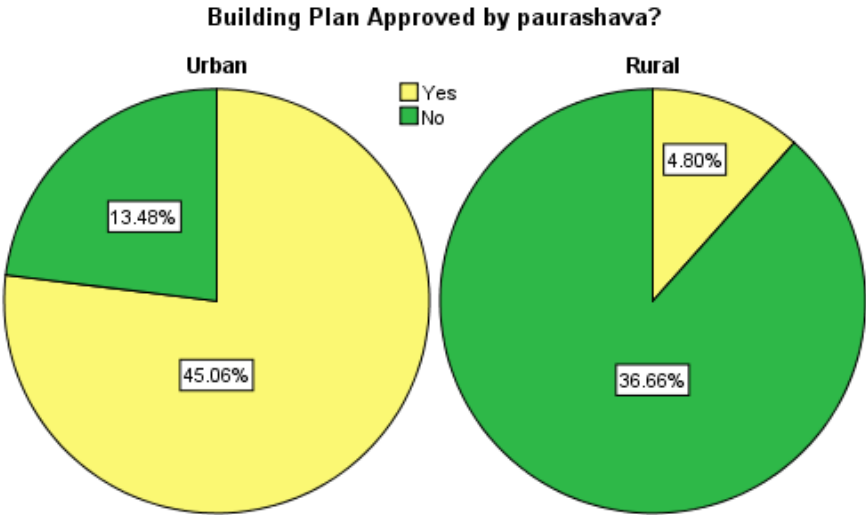
Figure 32:Practice of maintaining compliance, plan approval, in construction

Building maintained all Construction Rules

Urban · Rural

Yes
No

14.21%

44.10%

11.14%

30.55%
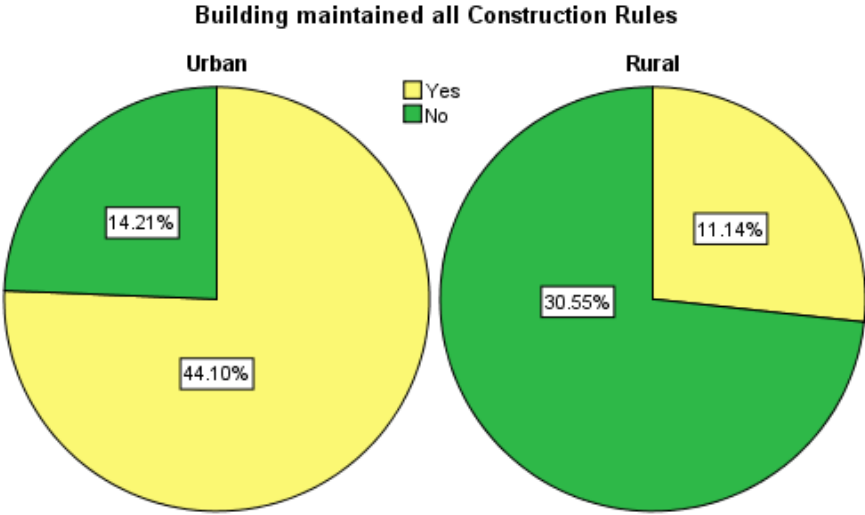
Figure 33: Practice of following building construction rules

Reasons for not following the Construction Rules

Type of area

Urban
Rural

58.0%
55.7%

26.5%
36.9%

1.9%
2.5%

7.4%
2.5%

5.6%
1.6%

Not Conscious about this · No Real Compulsion · Takes it as a Trouble · Less Land · Others
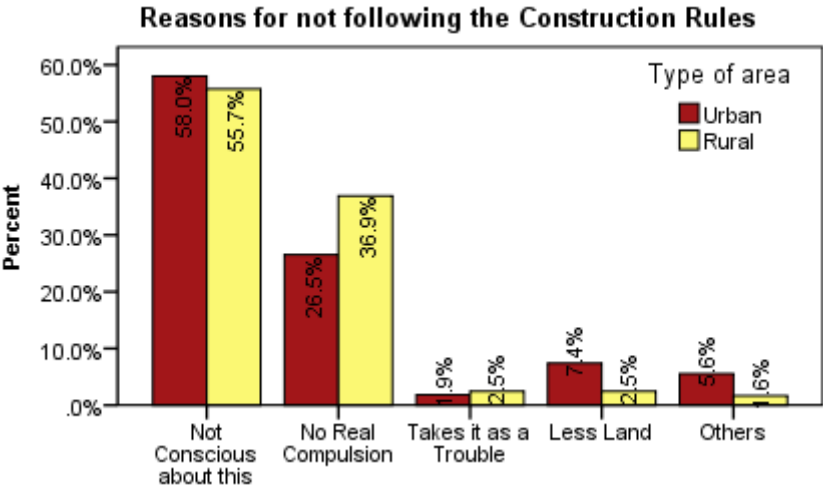
Figure 34: Reasons for ignoring rules while constructing

Residential arrangement of non land/flat owners
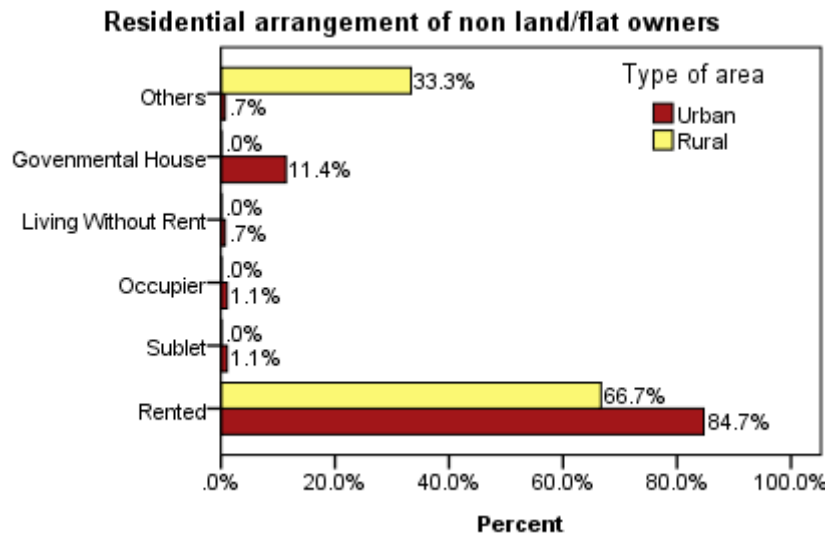
Figure 35: Residence of non-land/-flat owners in urban and rural area

Developer working on building construction
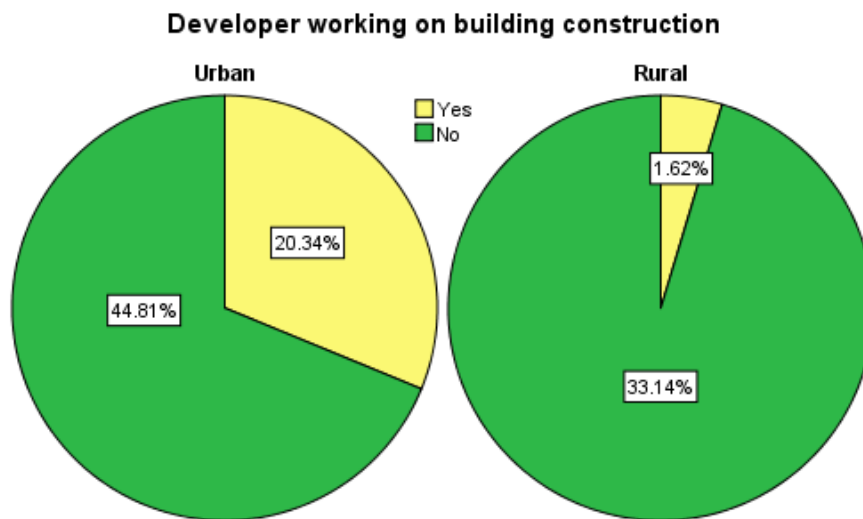
Figure 36: Availability of land/building developers in both areas
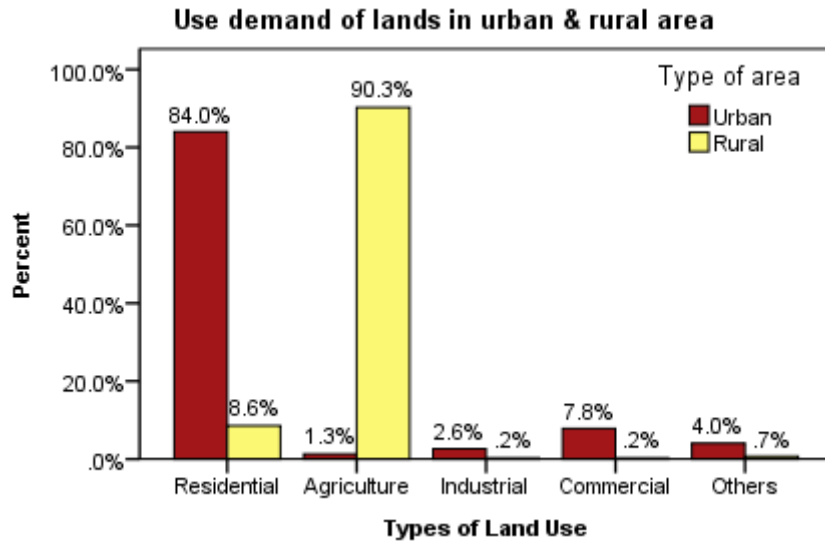
Figure 37: Comparative demand of different types of land
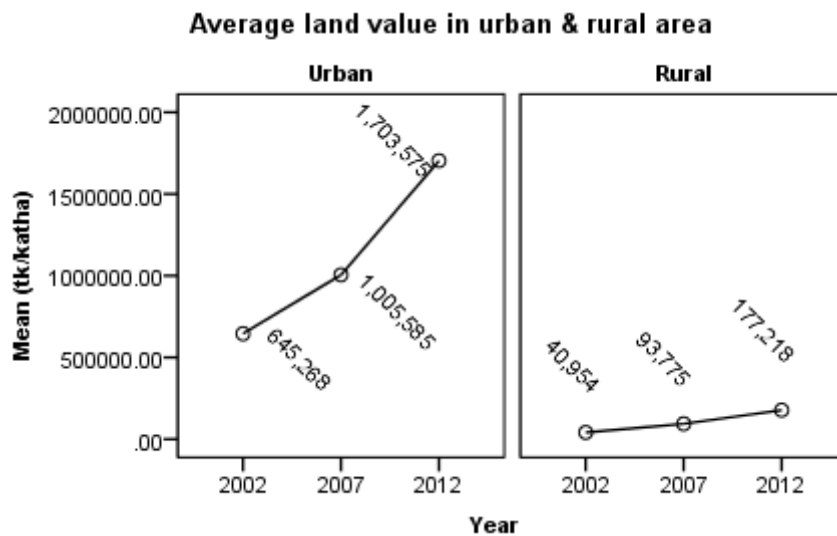
Figure 38: Average land value and progression curve forboth areas

Table 3: Construction period of residential structures in both areas

Type of area	Type of Structure	Year of construction						
		Before 1950	1951-1970	1971-1980	1981-1990	1991-2000	2001-2010	After 2011
Urban	Pucca	2%	8%	11%	13%	26%	36%	5%
	Semi-pucca	2%	3%	9%	16%	41%	26%	3%
	Katcha	3%	5%	15%	16%	26%	28%	7%
	Jhupri						100%	
Rural	Pucca			4%	4%	8%	79%	4%
	Semi-pucca	1%	3%	3%	4%	31%	52%	7%
	Katcha	1%	1%	4%	5%	48%	39%	3%
	Jhupri		8%	4%	4%	39%	46%	

Table 4: Land area used for residential purpose in both areas

Type of area	Type of Structure	Land area in Katha							
		Below 1	1.01-2	2.01-3	3.01-4	4.01-5	5.01-7	7.01-10	10.1+
Urban	Pucca	28%	23%	15%	18%	6%	3%	4%	2%
	Semi-pucca	25%	35%	14%	15%	3%	3%	1%	5%
	Katcha	22%	48%	17%	4%				9%
	Jhupri		100%						
Rural	Pucca	38%	13%				13%	25%	13%
	Semi-pucca	19%	15%	5%	7%	12%	10%	14%	18%
	Katcha	37%	11%	10%	14%	6%	4%	11%	8%
	Jhupri	6%	11%		28%	11%	22%	11%	11%

4.1.10 AvailableInfrastructures andFacilities

Figure 39:Access road types in urban and rural community

Figure 40:Condition of main roads available in both areas
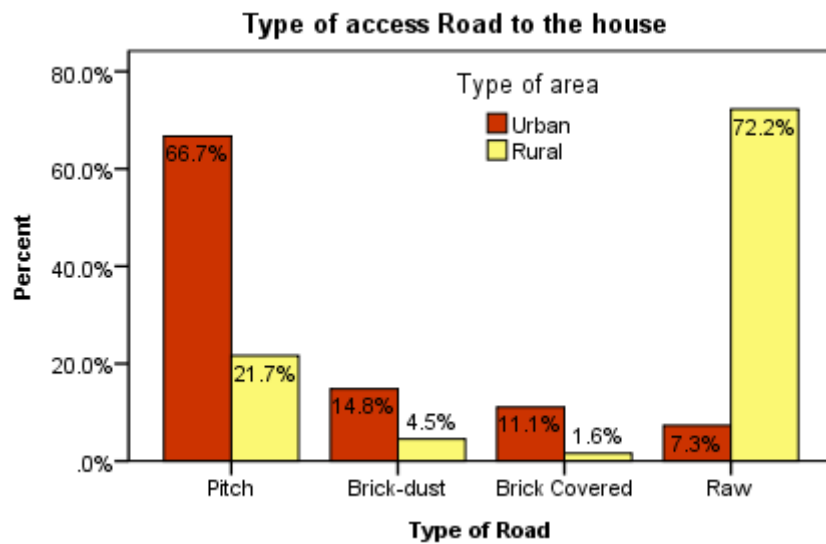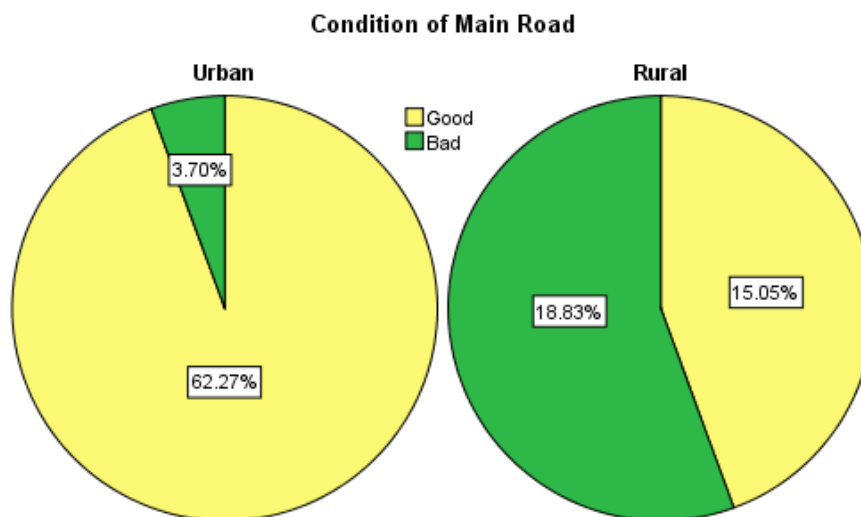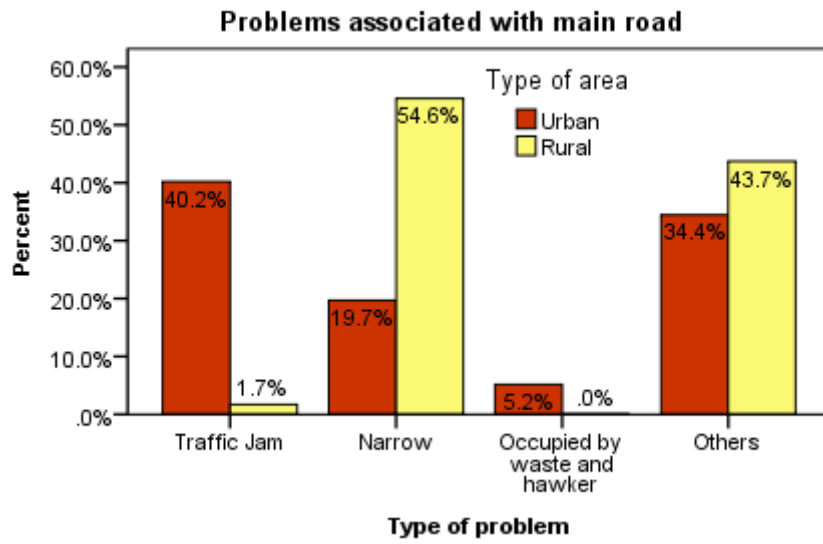
4-1-23

Problems associated with main road

Figure 41: Typical problems with main roads in both areas
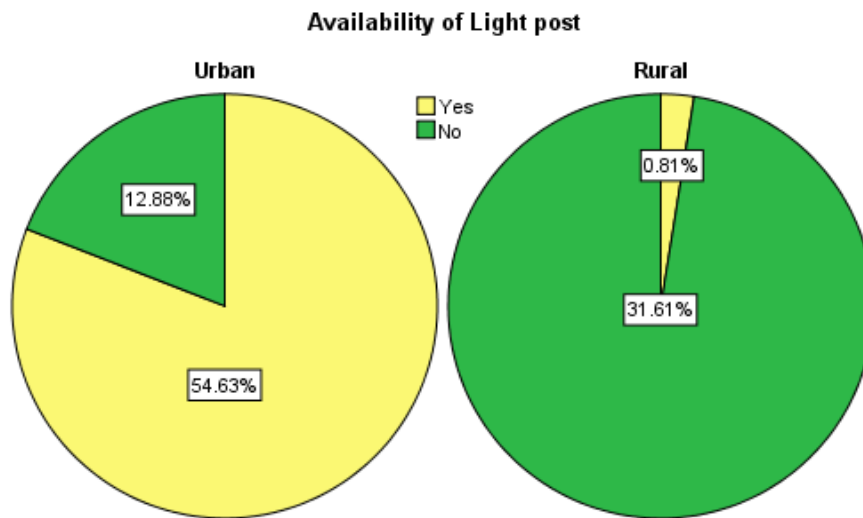
Availability of Light post

Figure 42: Presence of street lights in urban and rural area
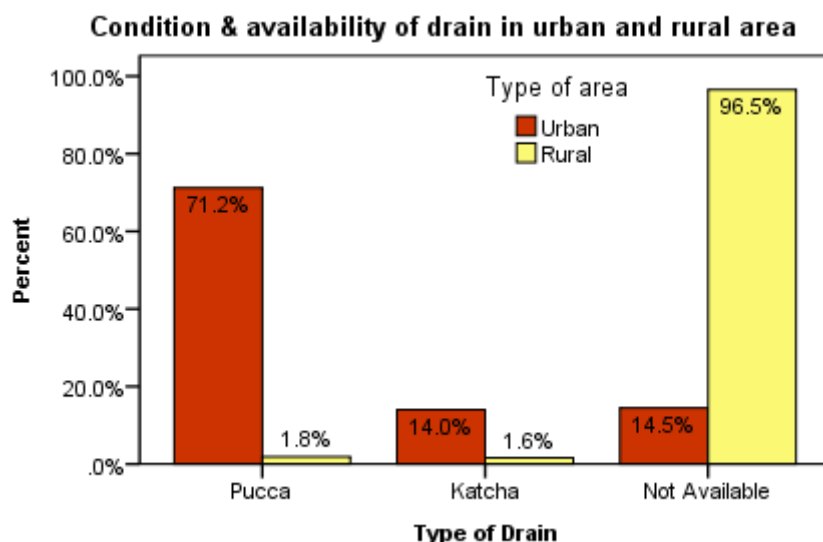
Figure 43: Availability and condition of roadside drains

4.1.11 Community Services and Status

Table 5 is describing the percentage of households in urban and rural areas by sources of water they use. In urban area 50% of total surveyed households use pipe line supply as their source of water. Common tube well is also used by urban people which are 39% of total households. In rural area 96% of total households use common tube well to use water.

Table 5: Source of water (collection) in urban and rural areas

Name of sources	Urban HH	Rural HH
Pipe Line Supply	50%	3%
Common Tube-well	39%	96%
Khal/ River	9%	0%
Others	1%	1%
Total	100%	100%

Table 6: Sufficiency status ofwater supply and its quality matrix

Type of area	supply sufficiency	Quality of Water Supply					Total
		Drinkable	Undrinkable	Arsenic	Odor	Others	
Urban	Yes	96%	3%		1%	0%	100%
	No	93%	5%			2%	100%
Rural	Yes	99%	1%		1%		100%
	No	100%					100%

Figure 44 shows most of the people in both urban and rural area faces other type of problems in taking water with percentage of 42.18% and 16.74 of total surveyed households (figure 44). Long time to collect water is another significant problem associated with water collection in urban and rural with percentage of 12.53 and 9.15 respectively (figure 44).
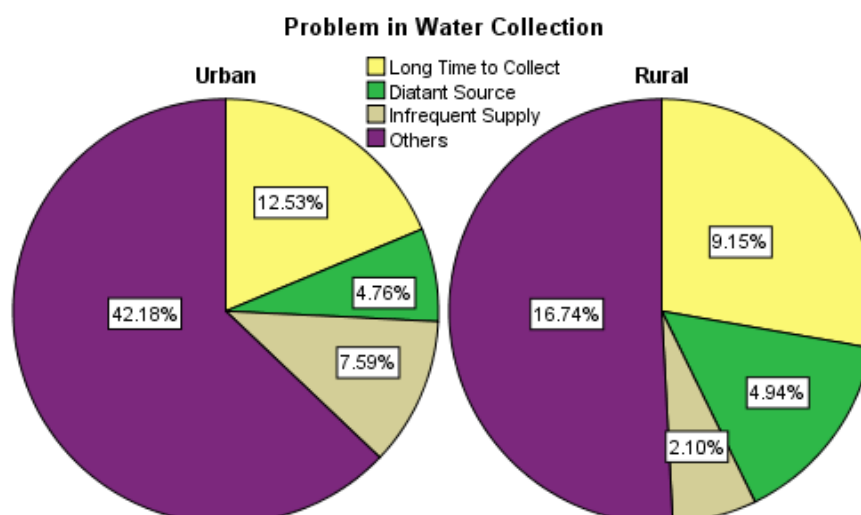
Figure 44: Problems associated with water collection

According to table 7, 71% of total urban households use Cylinder gas as their sources of fuel followed by Lakri which is used by 21% of total urban households. On the other hand in rural area most of the households use Lakri as fuel which is equal to the percentage of 95% of total rural households.

Table 7: Sources of fuel in urban and rural area

Source of Fuel	Urban HH	Rural HH
Cylinder Gas	3%	0%
Gas	71%	2%
Kerosene	0%	1%
Lakri	21%	95%
Electric Heater	4%	1%
Biogas	0%	0%
Others	0%	0%
Total	100%	100%

In table 8 percentages of households has been shown by their source of light. 99% of total urban households use electricity as source of light. Rest of the households uses kerosene for lighting. In rural area 89% of total households use electricity followed by hurricane, kerosene and solar power with percentage of 5, 4 and 2 respectively.

Table 8: Sources of light in urban and rural area

Source of Light	Urban HH	Rural HH
Electricity	99%	89%
Hurricane Lamp	0%	5%
Kerosene	1%	4%
Candle Light	0%	0%
Solar Power	0%	2%
Others	0%	0%
Total	100%	100%

Percentage of katcha latrine (59.3% of total households) is highest in rural whereas pucca latrine is found in highest percentage (59% of total households) in urban area (figure 45). Number of katcha latrine in urban is a few as in rural pucca latrine is rare.
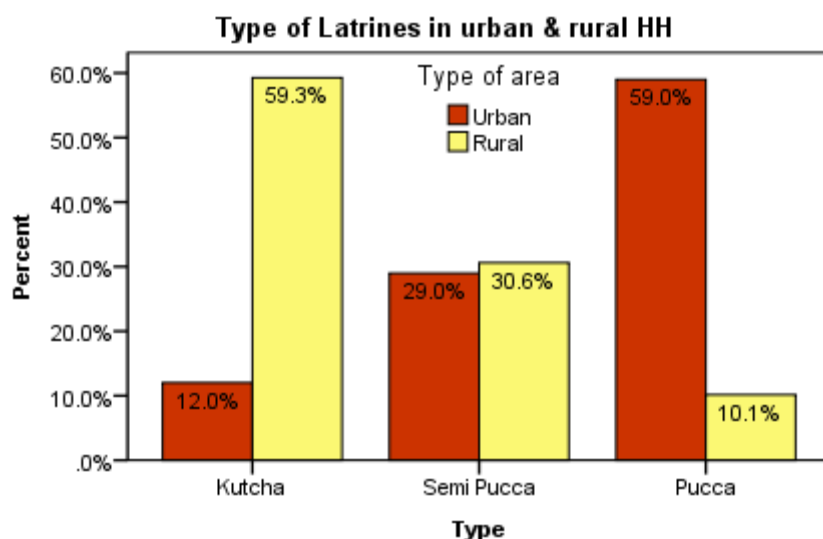

Figure 45: Sanitation system in urban and rural area

Table 9 displays percentage of hygienic latrine by their structure type. In urban most of the katcha latrin is not hygienic and in this case, semi pucca and pucca hygienic sanitation percentage is 75% and 96% of total surveyed households.

Table 9: Sanitation system and hygiene status in urban and rural area

Type of area	Type of Latrine	Hygienic Sanitation Facility		Total
		Yes	No	
Urban	Kutcha	33%	67%	100%
	Semi Pucca	75%	25%	100%
	Pucca	96%	4%	100%
Rural	Kutcha	39%	61%	100%
	Semi Pucca	96%	4%	100%
	Pucca	96%	4%	100%

In urban most of the households use dustbin (40% out of total households) for waste disposal followed by collection from households association which is 26% of total surveyed households (table 10). 82% of total rural households dispose waste outside their house (table 10).

Table 10: Waste dumping and disposal system in urban and rural area

Waste disposal/dumping place	Urban HH	Rural HH
Khal/ River	4%	5%
Outside the House	24%	82%
Dustbin	40%	1%
Collect from HH by association	26%	1%
Hole of Soil (pit)	3%	12%
Others	3%	
Total	100%	100%

Table 11 describes mean distance of households from their place of disposal. Collect by association is found the highest distance in urban area which is mean of 1307 m far away from household in urban. In rural farthest place is disposal association which is mean of 12000 m away from households.

Table 11: Average distance of dustbin from HH vs. their current means of disposal

Type of area	Present dumping Place of Waste	Average distance in meter
Urban	Khal/River	388
	Outside the House	418
	Dustbin	498
	Collect from HH by association	1307
	Hole of Soil	382
	Others	400
Rural	Khal/River	100
	Outside the House	4269
	Dustbin	3
	Collect from HH by association	12000
	Hole of Soil	9016
	Others	.

Most of the households in both urban and rural do not face problem with odor from dustbin. 63.27% and 29.04% of total surveyed households in urban and rural replied that they do not face problem with odor from dustbin (figure 46).
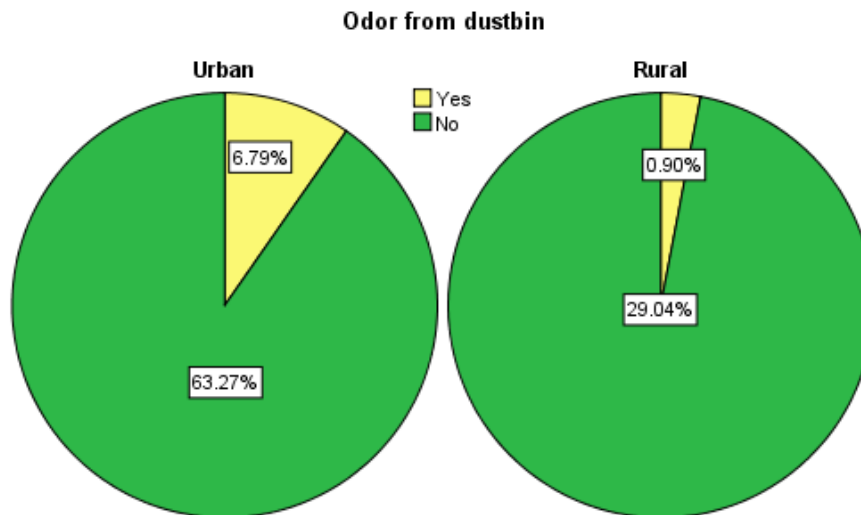
Odor from dustbin

Figure 46: Presence of odor in available dustbins

Figure 47 displays time interval of waste cleaning of households. Figure shows percentage of daily waste collection is higher among other types in both urban and rural which are 47.4% and 51.6% of total surveyed households. Another significant percent of households relied about irregular collection in both areas.
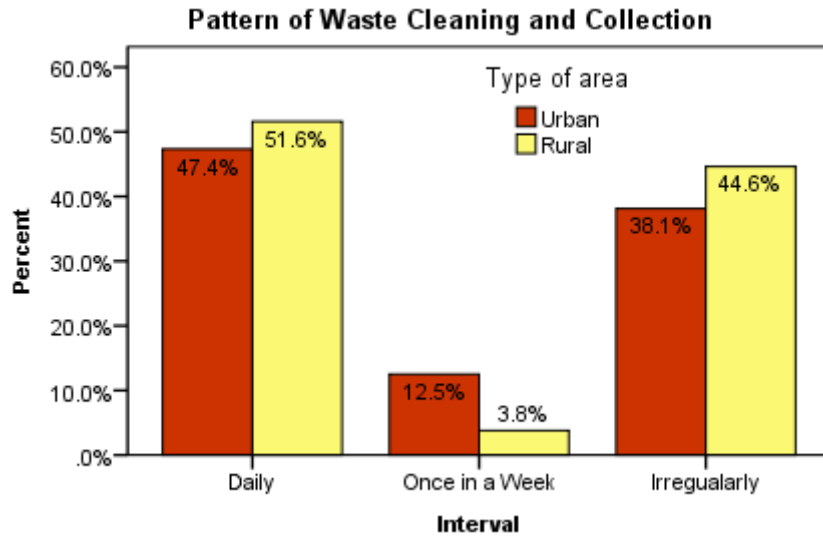
Figure 47: Solid waste collection pattern in both areas

4.1.12 Health and Diseases

In urban area people suffer from diarrhea mostly which is 30% of total households in urban whereas percentage of dysentery is higher in rural with percentage of 37 of total rural surveyed households (figure 48).
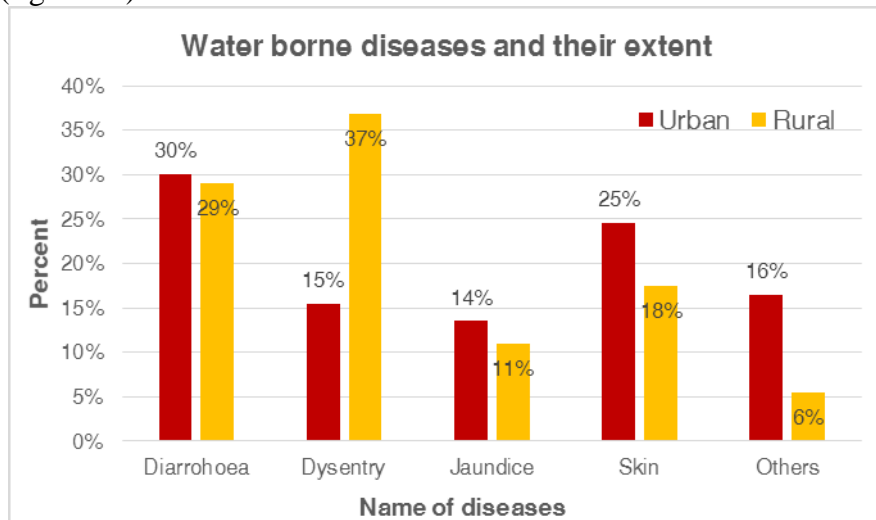
Figure 48: Presence of water-borne diseases in both areas

Figure 49 displays cold and cough are most familiar air borne diseases suffered by most of the population in both urban and rural with percentage of 95 and 93.
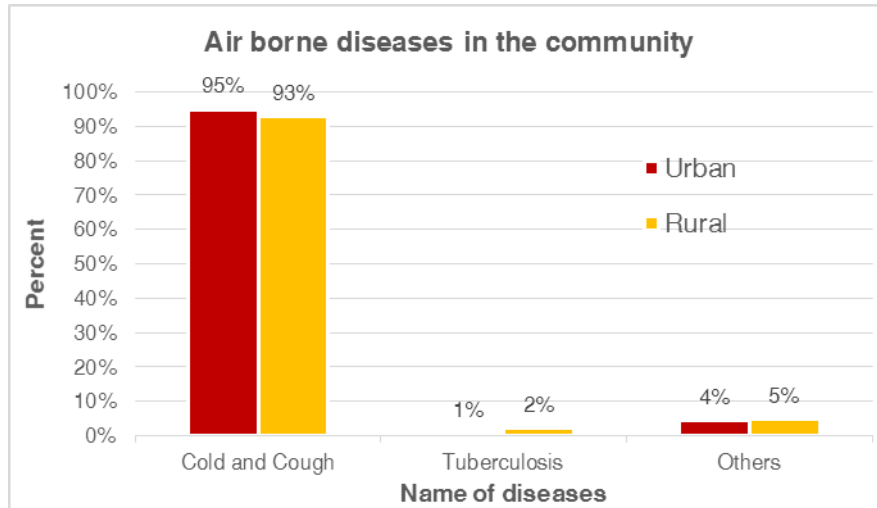
Figure 49: Presence of air-borne diseases in both areas

Mosquito borne diseases are found mostly found in rural among other diseases. In urban other diseases are found mostly with percentage of 32% of total urban surveyed households followed by diabetes of 30% of total rural surveyed households (figure 50).
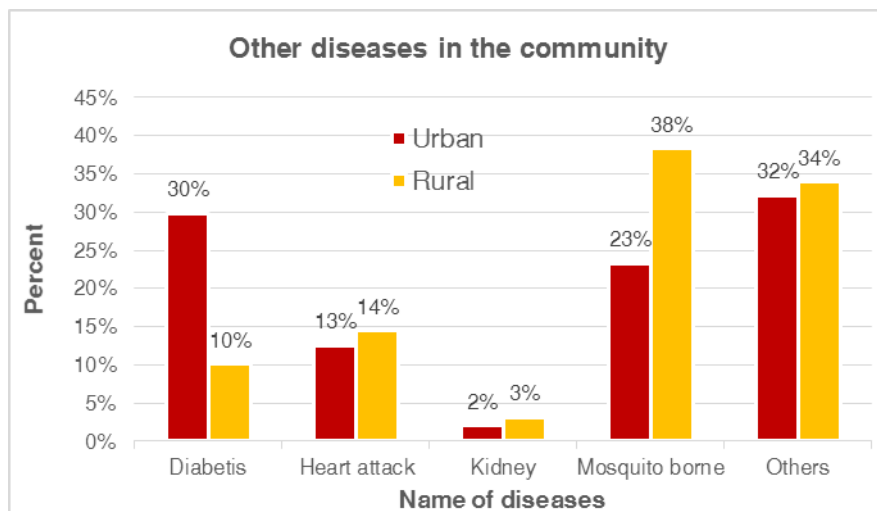
Figure 50: Presence of other diseases in both areas

Mostly people both in urban and rural areas suffer from sickness last year. In figure 51 this percentage stands for 59.11 and 32.5 of total surveyed households.

Sickness status during last year

Urban — Rural

Yes / No

6.88% — 1.51%

59.11% — 32.50%
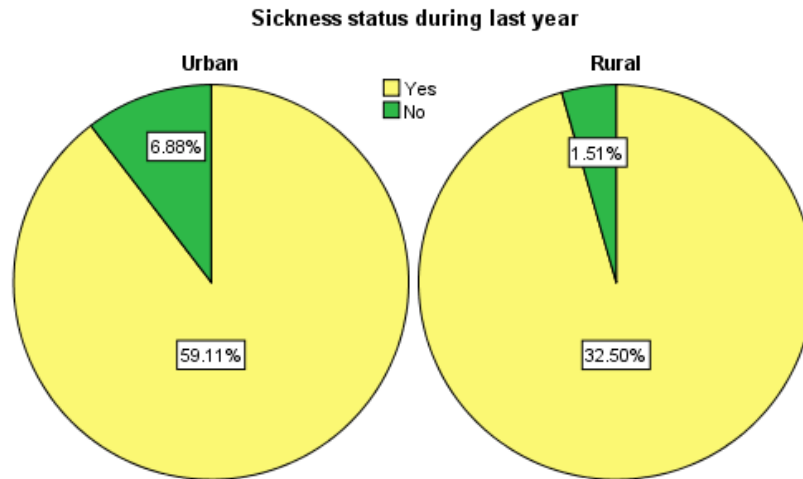
Figure 51: Percentage of population fallen into sickness during last year

Govt. hospital is found most accepted medical care service in case of both urban and rural community. In urban and rural 78% of total urban households and 70% of total rural households are facilitated by the service of Govt. hospital respectively (figure 52).

**Medical Care in the community**

Type of service provider

Village Doctor — 9%
Private Clinic — 6% / 12%
Pharmacy (Practitioner) — 2% / 1%
Homeo Doctor — 1%
Hakiim/Kabiraz —
Govt. Hospital — 70% / 78%
Degree Holder Doctor — 5% / 8%
Community Clinic — 7%

Rural ■ Urban

Percent

Figure 52: Acceptance of medical services in both communities

Medical facilities are farther in rural area than that of urban area described in figure 53. In urban average distance of medical institute from households is 1,773 meter and mean distance of pharmacy is 566 meter. In rural average distance of medical institute from households is 6,721 meter and mean distance of pharmacy is 1,506 meter.

Figure 53: Average distance of medical facilities for both communities

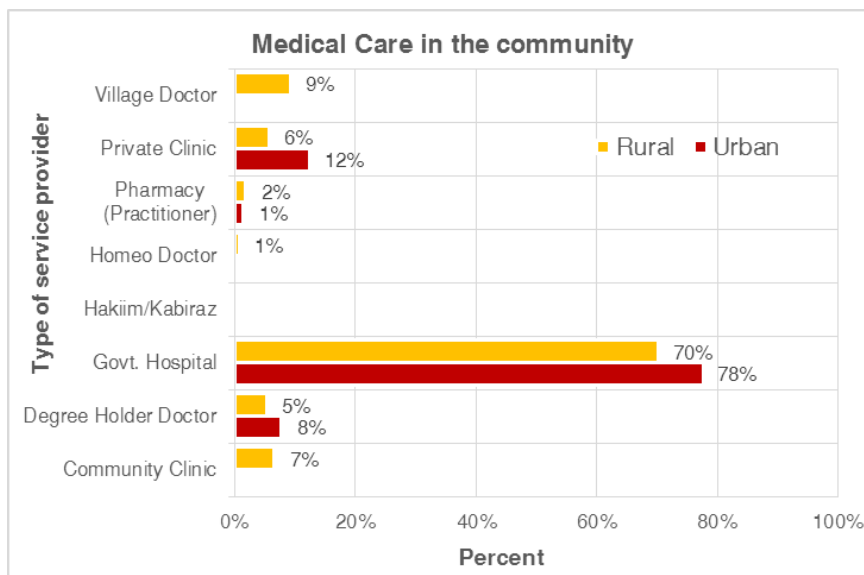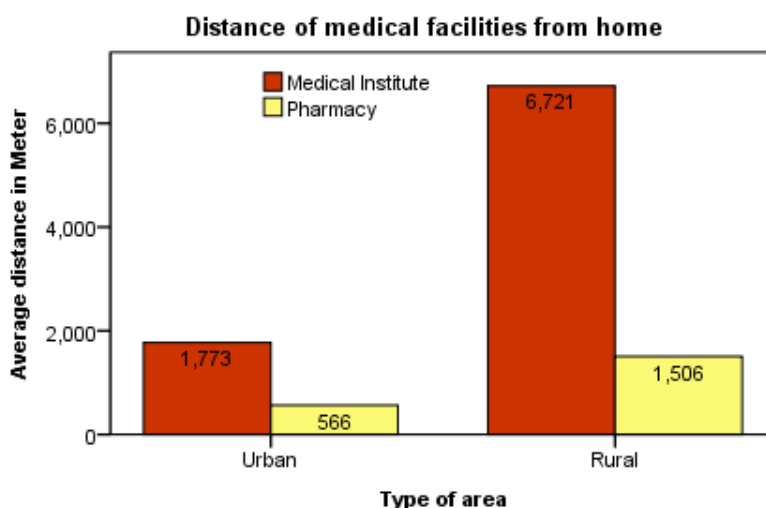Most of the medical institutes are located within the distance of 1001 to 2000 meter from urban households which is 32% of total urban households (table 12). In case of rural area this distance becomes farther and increases at the range of 6001 to 10000 meter with percentage of 27 of total rural households (table 12).

Table 12: Range of distances of medical institutes from both communities

Distance in meter	Urban HH	Rural HH
Lowest thru 500	22%	5%
501 - 1000	27%	8%
1001 thru 2000	32%	10%
2001 thru 4000	15%	18%
4001 thru 6000	3%	15%
6001 thru 10000	2%	27%
10001 thru Highest	0%	16%
Total	100%	100%

Most of the pharmacies are located within the distance of 251 to 500 meter from urban households which is 32% of total urban households (table 13). In case of rural area this distance becomes farther and increases at the range of 501 to 1000 meter with percentage of 31 of total rural households (table 13).

Table 13: Distance range of pharmacy from urban and rural community

Distance in meter	Urban HH	Rural HH
Lowest thru 100	29%	6%
101 thru 250	14%	4%
251 thru 500	31%	21%
501 thru 1000	18%	31%
1001 thru 1500	3%	6%
1501 thru 2000	3%	12%
2001 thru Highest	2%	20%
Total	100%	100%

Rickshaw is the mode of transport mostly used by urban people to attain medical facility with percentage of 79.6% of total households and in case of rural area higher percentage goes for eaay bike (25.1% of total rural households) shown in figure 54.
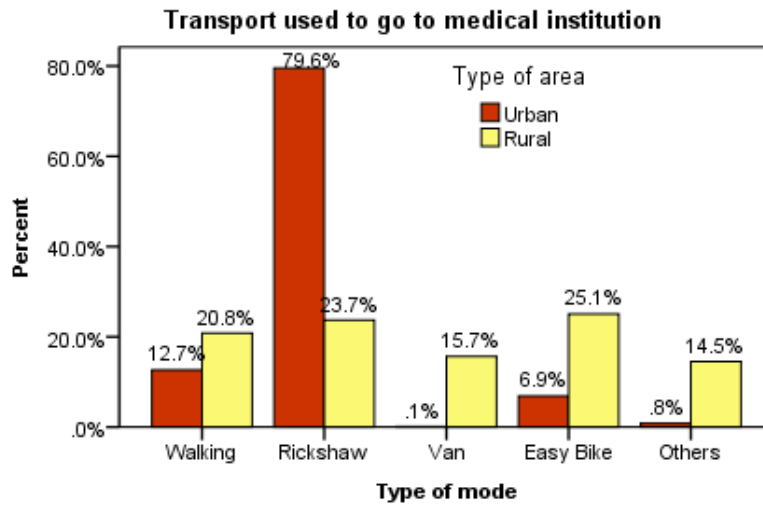

Figure 54: Modal choices of both communities in attaining medical facilities

4.1.13 Leisure and Recreational Facility

Most of the people in Mymensingh both in urban and rural enjoy recreation facilities irregularly. In figure 55, out of total surveyed households 53.55% households in urban enjoy recreational facilities irregularly while in rural this percentage stands for 31.30% of total surveyed households.
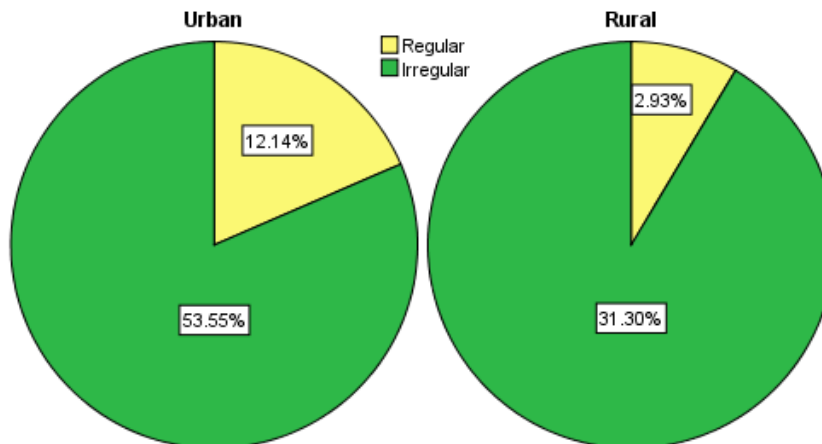

Figure 55: Habit of enjoying leisure facilities

Figure 56 describes park is the main source of leisure in urban as 37% of total urban households go there which is most in percentage. In rural area, play ground, Brahmaputra River and park are significant source of leisure facility as 24%, 23% and 17% of total rural households choose to go their.
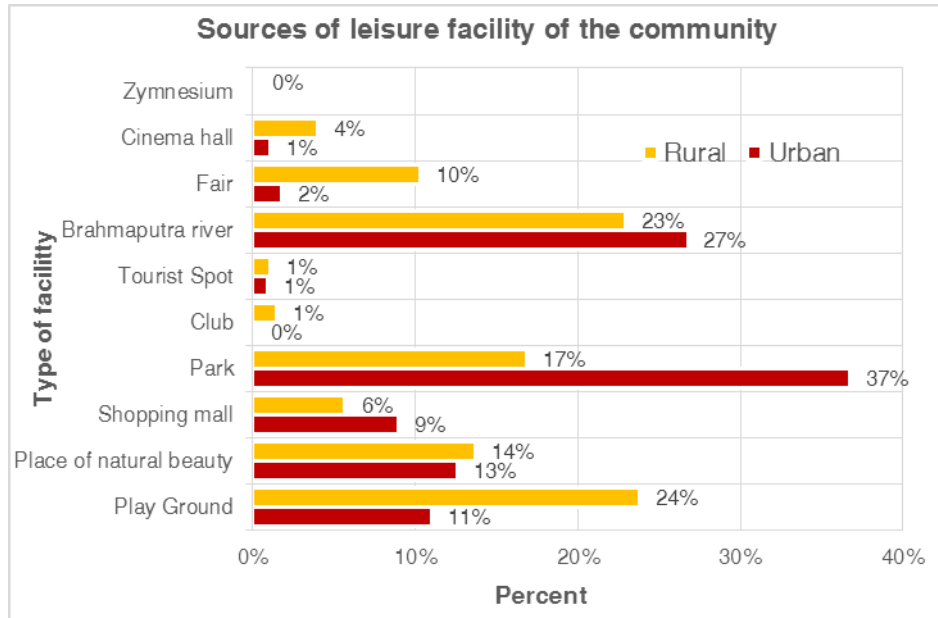
Figure 56: Types of leisure facilities being enjoyed by both communities

Watching television is familiar in passing leisure time for both urban and rural people of Mymensingh which stands for 68% and 60% of total urban and rural households respectively (figure 57).

Figure 57: Types of activities for spending leisure time

Mostly people use van and rickshaw in attaining leisure facility by community in almost every distance. Table 14 describes percentage of transport mode by distance in attaining leisure facilities.

Table 14: Modal choice by distance in attaining leisure facilities by the community

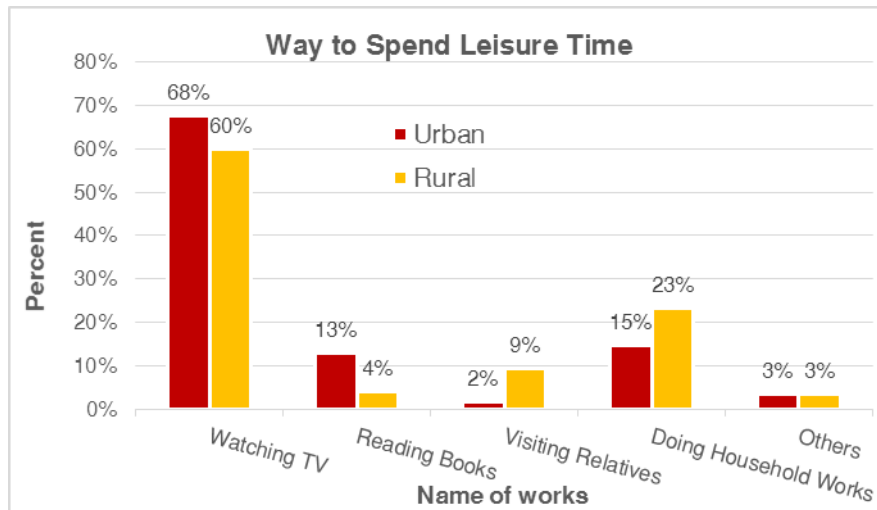| Transport type | Distance of leisure Facility from house in meter | | | | | | | | | | | |
| | Urban | | | | | | Rural | | | | | |
	Below 250	251-500	501-1000	1001-1500	1501-3000	Above 3001	Below 250	251-500	501-1000	1001-1500	1501-3000	Above 3001
Rickshaw	66%	48%	15%	10%	9%	6%	94%	93%	90%	53%	46%	12%
Van	33%	51%	83%	86%	88%	85%	3%	5%	6%	29%	31%	16%
Cycle										6%	5%	22%
Motor Cycle				1%							3%	1%
Car	1%		1%		1%						7%	6%
Micro bus						4%				6%	4%	9%
Bus							3%					10%
Walking		2%	1%	4%	1%	4%		3%	4%	6%	3%	25%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

4.1.14 Access to Community Facilities

Figure 58 displays that, people living in urban of Mymensingh cross highest distance among other educational institutions for going to university which equals to the mean distance of 5,381 meter followed by Madrasa (3,794 meter).

In case of rural scenario is similar of urban. University and madrasa are the educational institutions people have to cross farthest distance.

Table 15 describes mean, maximum and mode of distances of educational institutions from urban and rural households.
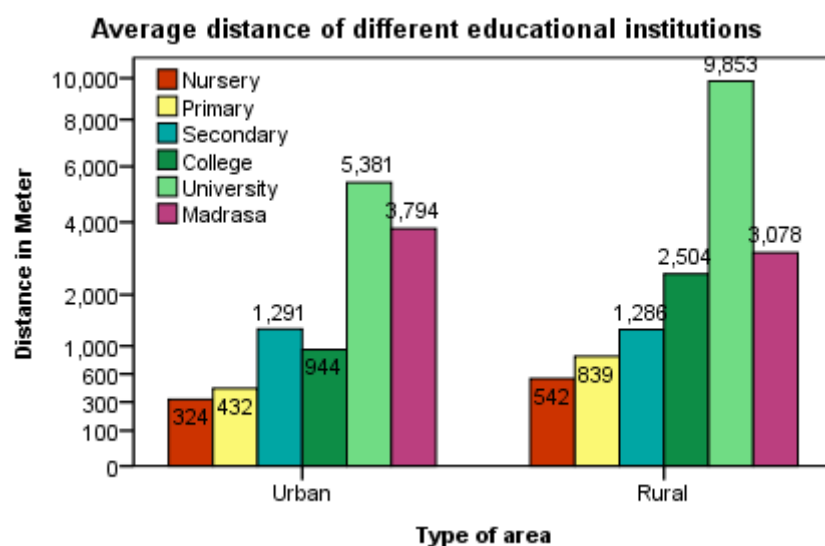

Figure 58: Average distances of different educational institutions

Table 15: Distances of different educational facilities from HH in meter

Type of educational facility	Distance from urban HH			Distance from rural HH		
	Mean	Maximum	Mode	Mean	Maximum	Mode
Nursery school	693	4000	500	1004	3000	500
Primary school	696	4000	500	917	5000	500
Secondary school	1050	5000	1000	1865	8000	2000
College	1446	8000	1000	3767	9000	1000
University	14864	300000	1000	12592	170000	15000
Madrasa	1849	10000	500	24077	150000	1000

For urban area fire station is found the farthest facility from households. For rural area mean distance of is highest in case of auditorium while maximum distance goes for shopping mall described in table 16.

Table 16: Distances of other facilities from HH in meter

Facility type	Distance from urban HH		Distance from rural HH	
	Mean	Maximum	Mean	Maximum
Bazaar	652	5000	1136	5000
Shopping Mall	1261	30000	5579	30000
Phone/Fax/E-mail Shop	240.99	6000	672	3000
Bus/ Tempo Stand	977.7	8000	2498	9000
Post Office	1447.7	8050	2067	9000
Fire Station	1939	15000	7727	18000
Religious Center	343.57	5000	272	3000
Graveyard	755.89	6440	311	7000
Auditorium	1331.6	50000	6632	15000

There is found a few difference of time to reach at different services in urban while variation seems in rural. Average time is higher in case of reaching Fire station auditorium and shopping mall with mean time of 53 and 34 respectively shown in figure 59.
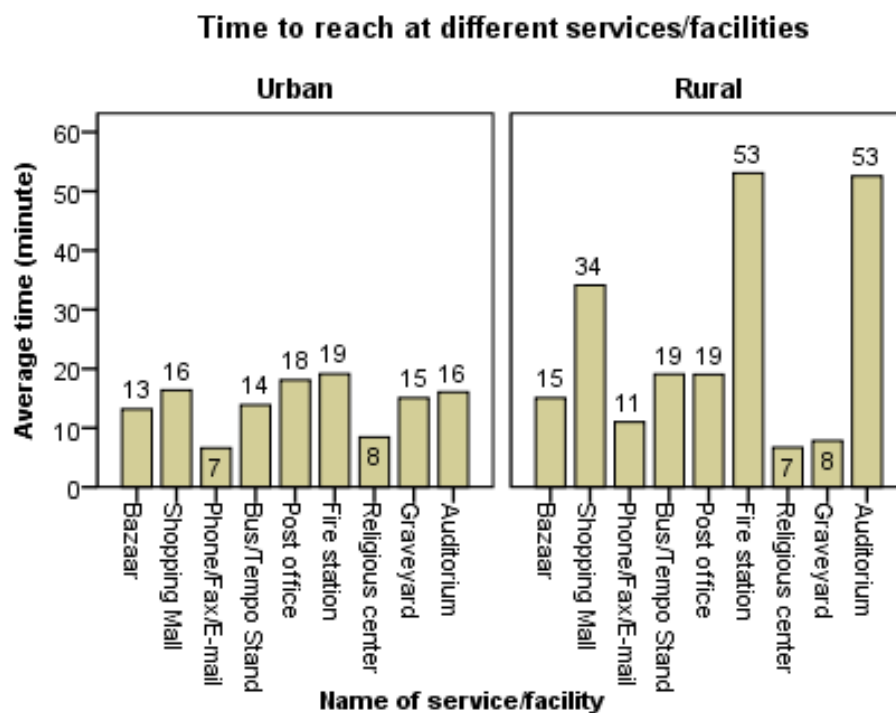
Figure 59: Average time requirement to attain survives/facilities

Table 17 displays percentage of transport mode used by urban population for attaining different services and facilities. Rickshaw is used mostly for bazar, phone/fax/email, religious center and graveyard. Van is another important mode to attain in mostly to shopping mall, bus stand post office, fire station and auditorium.

Table 17: Modal choice in urban area to attain different facilities

Transport used in urban area	Name of the services/facilities								
	Bazaar	Shopping Mall	Phone/Fax/ E-mail	Bus/Tempo Stand	Post Office	Fire Station	Religious Center	Graveyard	Auditorium
Rickshaw	59%	40%	95%	35%	17%	9%	88%	77%	24%
Van	39%	57%	4%	63%	81%	75%	10%	19%	72%
Motor Cycle		0%				1%	0%		
Cycle	0%	0%		0%	0%	0%	0%	0%	0%
Car	0%	0%	0%	0%	1%	1%	0%	0%	1%
Micro bus	0%	1%		1%	0%	4%	1%	1%	1%
Bus						0%			1%
Walking	1%	0%	1%	0%	0%	6%	1%	0%	0%
Others	0%	1%			0%	5%		1%	1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 18 describes quality of services in urban area in percentage. Most of the urban people have good quality perception of different services as good quality row of table 18 shows higher percentage in all cases.

Table 18: Quality of services/facilities in urban area

Quality in urban area	Name of the services/facilities								
	Bazaar	Shopping Mall	Phone/Fax /E-mail	Bus Tempo Stand	Post Office	Fire Station	Religious Center	Graveyard	Auditorium
Good	79%	80%	87%	74%	77%	81%	95%	92%	81%
Average	20%	19%	13%	22%	23%	19%	5%	8%	19%
Bad	1%	1%	0%	4%	0%	0%		0%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 19 displays percentage of transport mode used by rural population for attaining different services and facilities. Rickshaw is used mostly for bazar, shopping mall, phone/fax/email, bus stand, post office and religious center. Van is another important mode to attain in mostly to shopping mall, bus stand post office, fire station. In case of auditorium moat of the households use other type of modes.

Table 19: Modal choice in rural area to attain different facilities

Transport used in rural area	Name of the services/facilities								
	Bazaar	Shopping Mall	Phone/Fax/ E-mail	Bus/Tempo Stand	Post Office	Fire Station	Religious Center	Graveyard	Auditorium
Rickshaw	75%	25%	92%	37%	47%	7%	98%	98%	12%
Van	6%	20%	2%	21%	21%	18%	1%	1%	19%
Motor Cycle	14%	11%	4%	25%	20%	3%			4%
Cycle	2%	1%	1%	0%	1%	7%			
Car	0%	4%		2%	2%	15%	1%	1%	2%
Micro bus		12%		1%	2%	11%	0%		15%
Bus		8%		0%	1%				11%
Walking				0%	0%	2%		0%	1%
Others	3%	20%	0%	13%	6%	37%			35%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 20 describes quality of services in rural area in percentage. Most of the rural people have good quality perception of different services as good quality row of table 20 shows higher percentage in all cases.

Table 20: Quality of survives/facilities in rural area

Quality in	Name of the survives/facilities

rural area	Bazaar	Shopping Mall	Phone/Fax/ E-mail Shop	Bus Tempo Stand	Post Office	Fire Station	Religious Center	Graveyard	Auditorium
Good	90%	77%	86%	82%	84%	84%	96%	95%	74%
Average	9%	23%	13%	14%	15%	16%	4%	4%	25%
Bad	1%	0%	1%	4%	2%	0%		1%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Figure 59 displays that, 83% of total urban households and 98% of total rural households use phone as means of communication to fire service. Besides, 13% of total urban people use rickshaw in this situation.
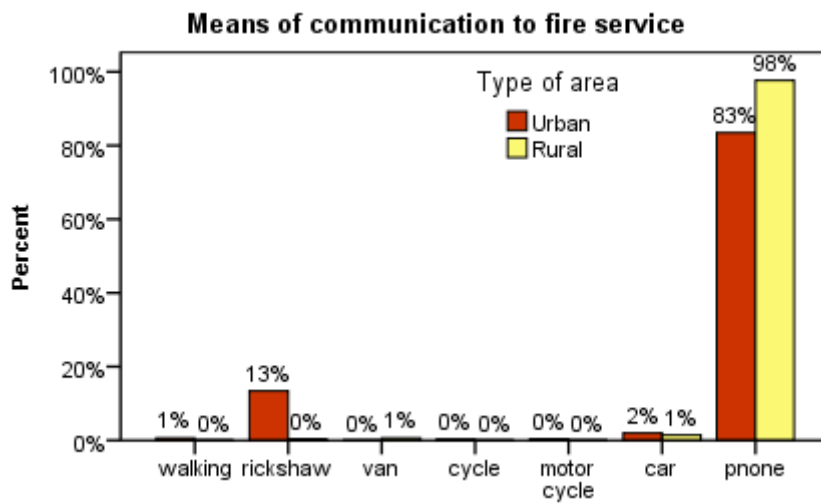
Figure 60: Means of communication for attaining fire service

Daily average trips of household data show that, there are a few differences between daily trips of households of urban and rural areas. Mean total daily trip is 7 in urban while 6 is there in case of rural (figure 61).
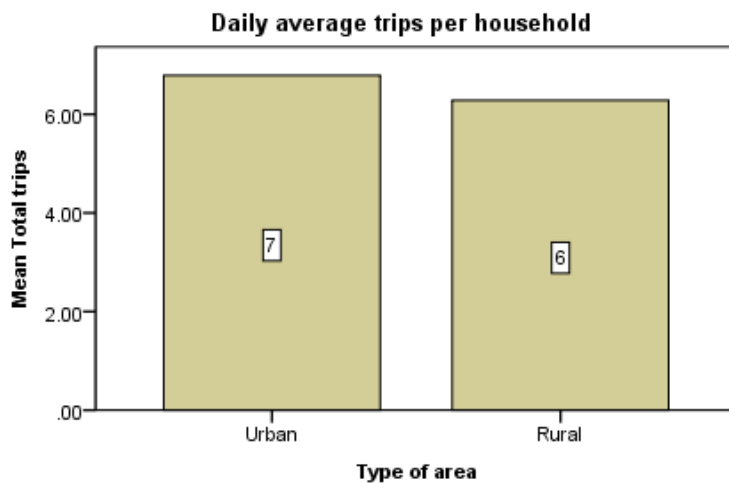

Figure 61: Average trips per day per HH in urban and rural area

4.1.15 Disaster Occurrence & Loss

In figure 62, Household survey result displays that, most of the households are not affected by occurrence of flood in both urban and rural and such percentage is 65.85% and 32.70% of total surveyed households.
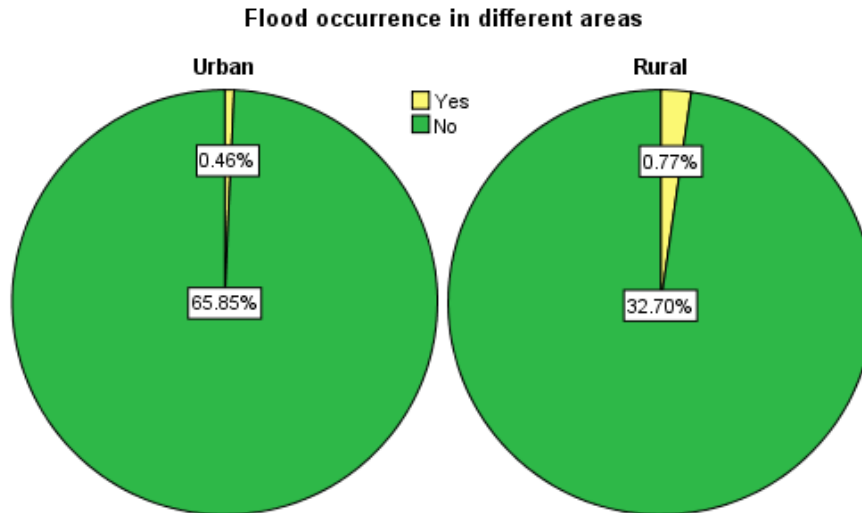

Figure 62: Response on flood occurrence

Water logging is familiar especially in urban areas compared to flood as shown in figure 63. 24.15& of total surveyed households suffers from water logging problem while in rural this percentage is 2.08.
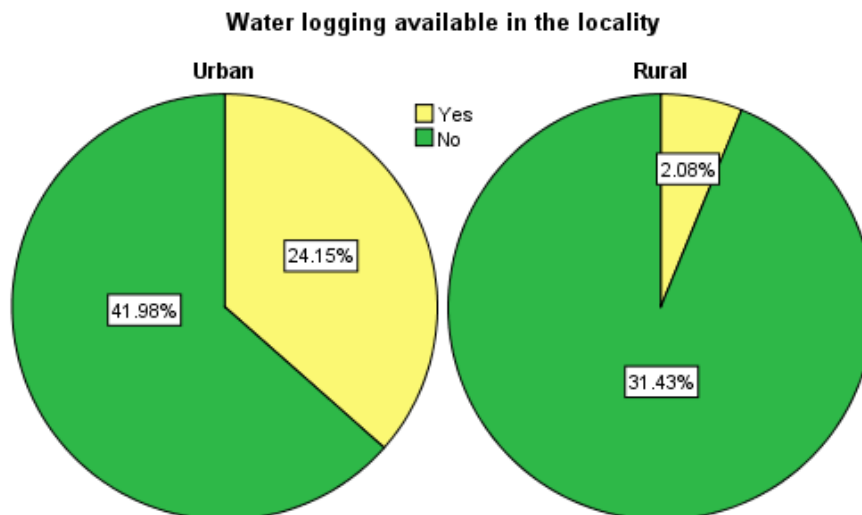

Figure 63: Availability of waterlogging problem in both communities

In most of the cases water logging exists for one hour or less than one hour for urban households which resulted as 34.6% of total urban households (figure 64). In rural this time extends to more than five hours which is said by 39.7% of total rural households (figure 64).
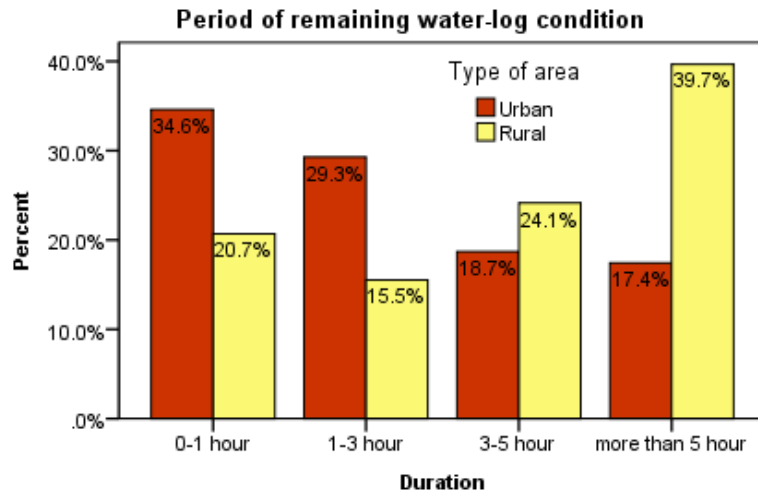
Figure 64: Duration of waterlogged situation

A few people is affected by cyclone occurred in their locality in both urban and rural and such percentage is 0.59 and 1.77 of total surveyed households as shown in figure 65.
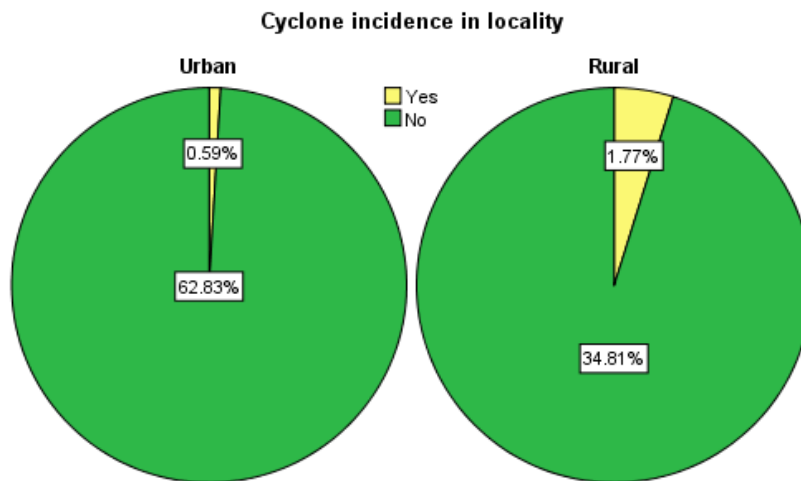

Figure 65: Response on cyclone incidence in the community

Incidence of earthquake is acute in urban than in rural as survey result shows that, 15.59% of total households are affected by incidence of earthquake while 0.27% of total households in rural are affected by this incidence (figure 66).

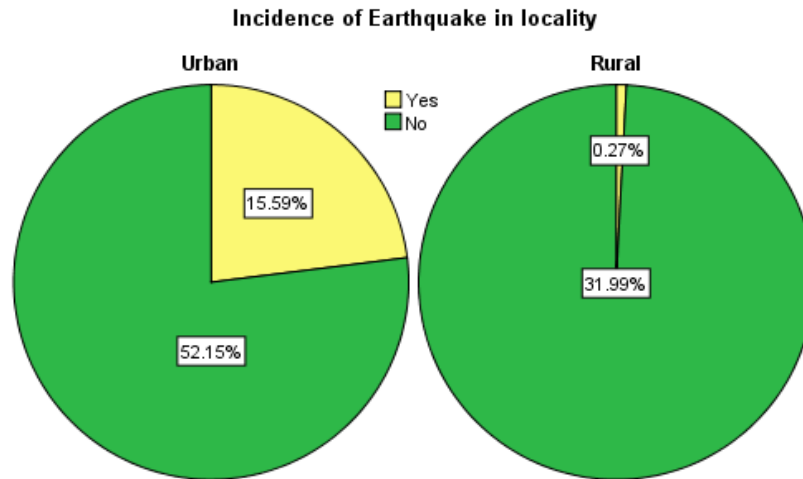**Incidence of Earthquake in locality**

Figure 66: Response on earthquake incidence in the community

Figure 67 describes that, mean loss of households in rural is highest due to flood and is equal to the mean of 108,333 taka followed by 55,000 taka caused by cyclone. In urban mostly loss happened due to cyclone which equals to the mean of 25,833 taka.
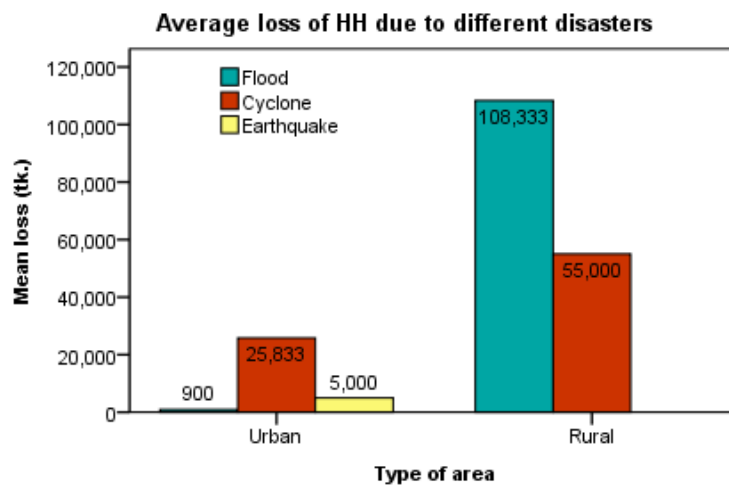

Figure 67: Average loss accounts for both areas due to natural disasters

4.1.16 Problems in the Community

In the question of identify problems within the locality, the respondents have prioritized load shedding, road and transportation related problems, load shedding, waterlogging etc. mainly. Roads are narrow in terms of their requirement which has been addressed as one of the main problems by the respondents. Regular traffic jam is a consequence of such narrow road and appeared as second main problem. Besides these, the city experiences frequent waterlogging. The Figure 70 illustrates the identified problems in the locality and their overall priorities.

In figure 68, most of the households in urban and rural replies that, railway station is not severe problem to both urban and rural people. 3.62% of total households in urban said railway station causes problem whereas in rural this percentage decreases at 0.25.

Problem because of Rail Station in the middle of city
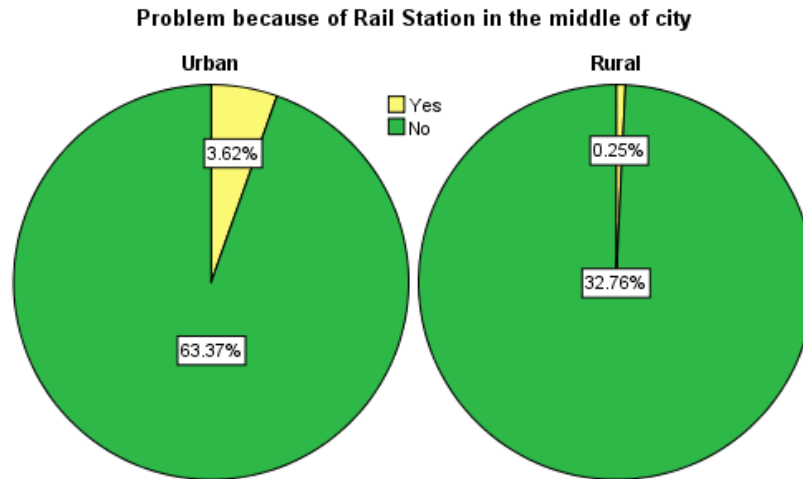
| Urban | Rail | Rural |

Figure 68: Response on presence of rail station in city center as a problem

Most of the people of Mymensingh commented that, land use is not being changing in both urban and rural areas. 21.47% of total households in urban said land use is not being changing in their locality while in rural this percentage decreased at 4.89 (figure 69).
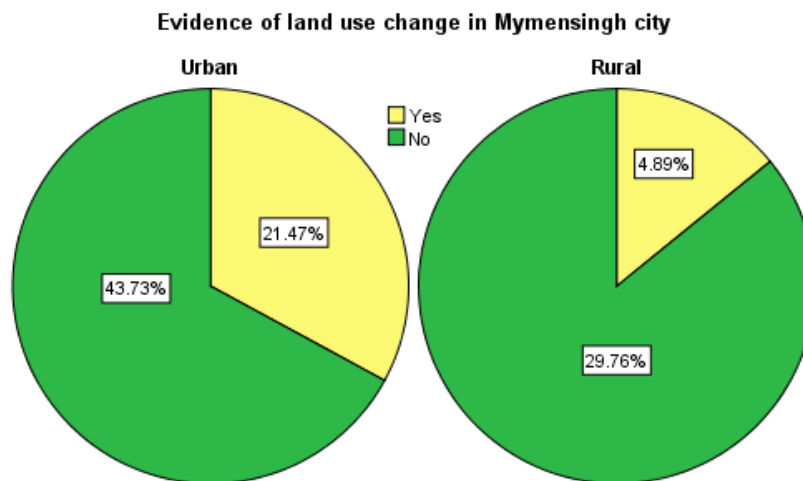

Figure 69: Status of land-use change in Mymensingh

According to figure 70, household survey resulted that, in both urban and rural most percentage goes for load shedding in case of facing general problems associated with Mymensingh as described in figure 70. 21% of total urban households commented load shedding as acute problem while 17% of total rural households said load shedding as acute problem. Other problems associated with urban area are found traffic jam, transport, road, waste dumping, deterioration of law and order and water logging which is equal to the percentage of 13, 9, 10, 7 and 9 out of total surveyed households.

In rural most of the households face load shedding problem which resulted 17% of total rural households followed by transport, road, deterioration of law and order and others with percentage of 12, 15, 10 and 14 of total rural households.
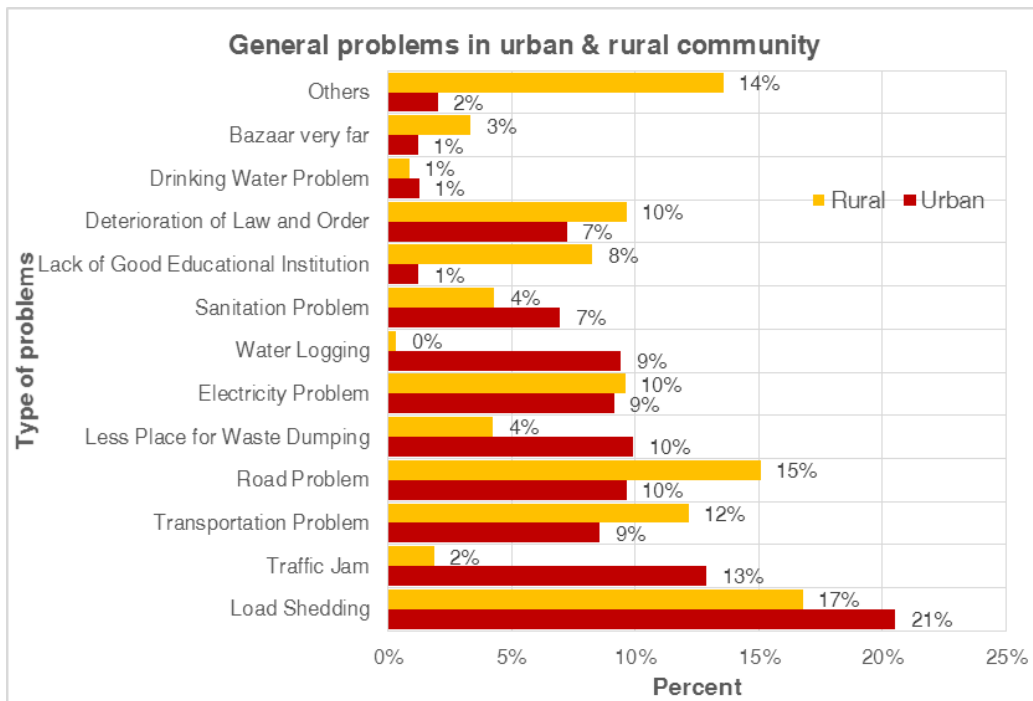
Figure 70: Other existing problems in the urban and rural community

Survey resulted that, in both urban and rural economic reason is responsible for land use change which equals to the percentage of 52.8 and 38.7 of total urban and rural surveyed households respectively (figure 71). Social reason is also perceived as reason of land use change in urban as 23.4% of total urban households replied for this (figure 71). In rural 37.7% of total rural households causes other problems for land use change (figure 71).
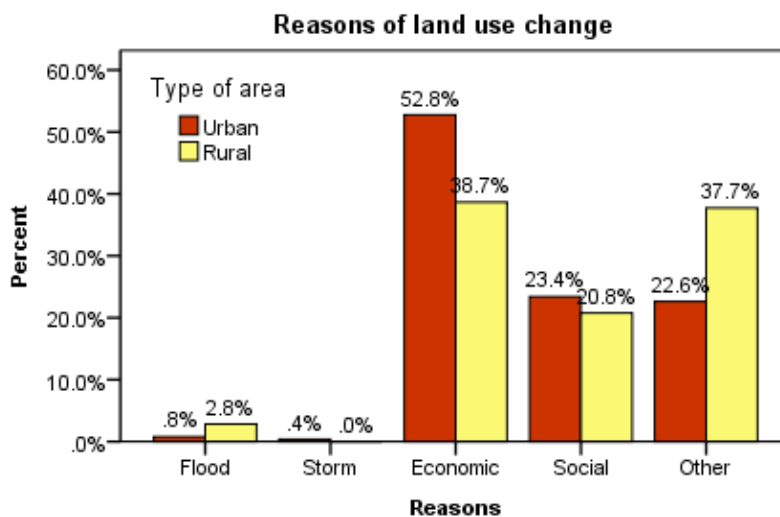

Figure 71: Response on reasons of land-use change

Most of the households in both urban and rural of Mymensingh are not interested to change their current use of land. 50.50% of total households are not willing to change current land use. In rural 26.63% of total surveyed households do not wish to change their current land use.
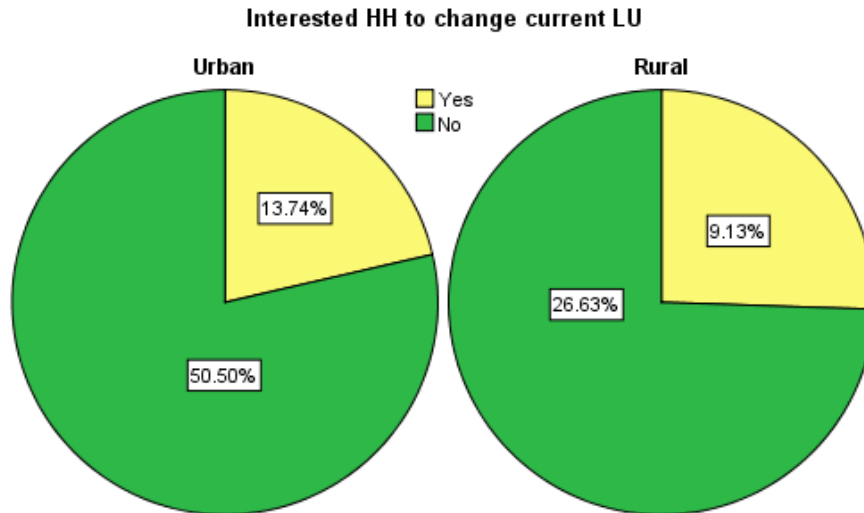
Interested HH to change current LU

Figure 72: Interest of the HH in changing their current land-use

4.1.17 General Perception &Remarks

The City of Education – that 95% of the people perceive about Mymensingh (see figure 73). A little portion of the community also argued it as a city of politics and city of traffic jam which are very much insignificant in comparison to the dominant one.
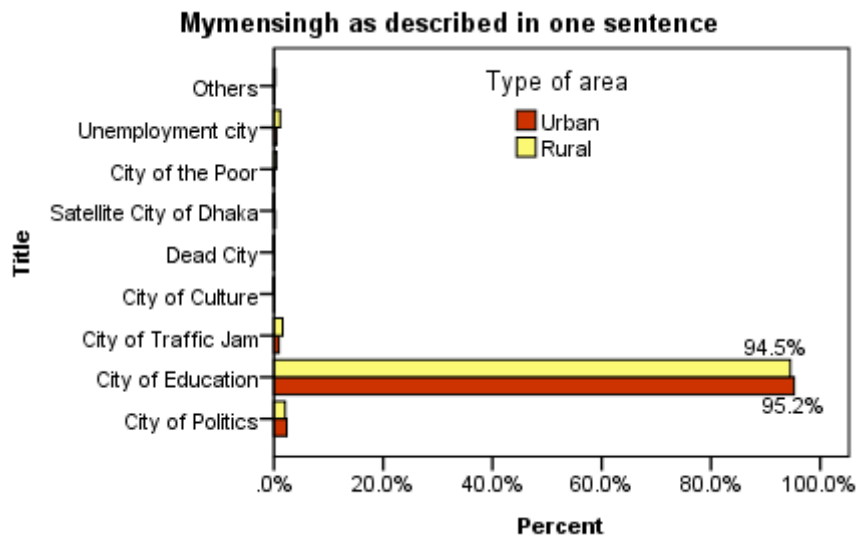

Figure 73:General attribute of Mymensingh to describe in a sentence

The economy of Mymensingh is very much dependent on agricultural sector. Agricultural crops production and trade is the main (averagely 66% claims) economic sector of Mymensingh (see figure 74). However, a significant part is also being contributed by the service sector (20% in urban and 15% in rural). The industrial sector is relatively weak in contributing to the regional economy.
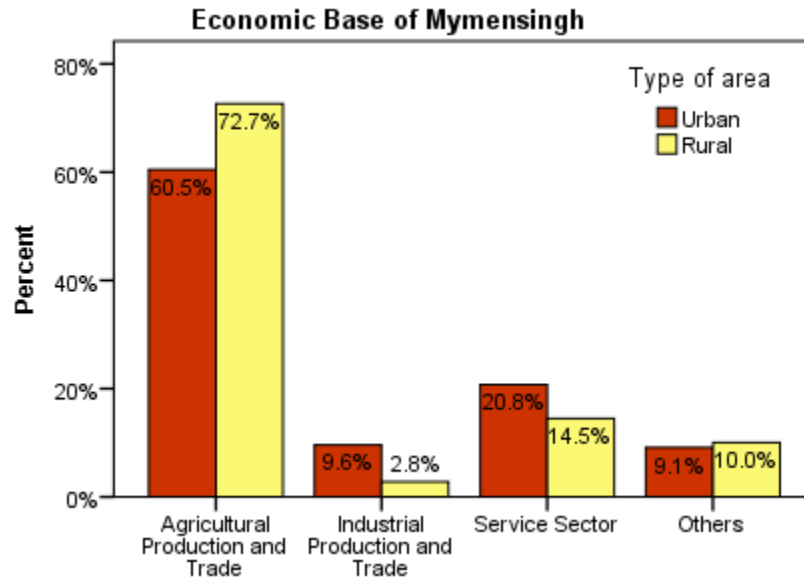
Economic Base of Mymensingh

Figure 74: Economy of Mymensingh as perceived from HH responses

The city stands on the southern bank of Brahmaputra River, whereas the northern bank is rural in character. The people have described the reasons behind this disparity as disaster consequences mainly (54% averagely) followed by economic, political and other reasons (see figure 75).
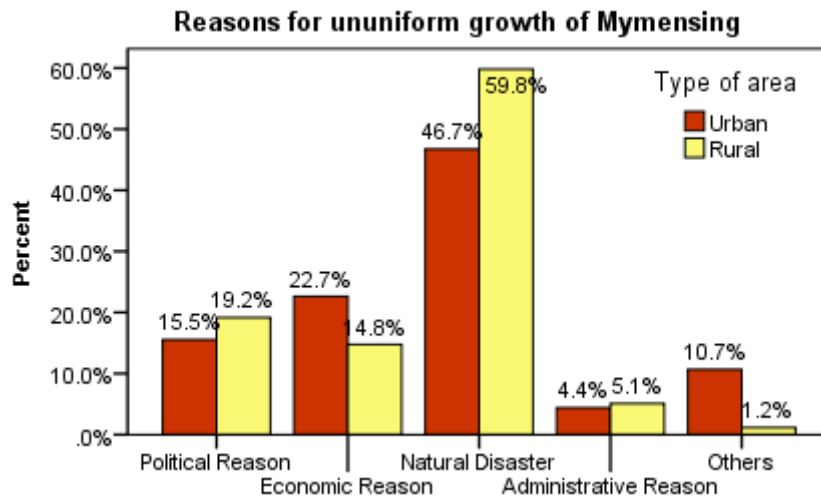
Reasons for ununiform growth of Mymensing

Figure 75: Reasons for ununiformed growth on the both river-banks

4.1.18 Conclusion

Socio economic condition of urban and rural households of Mymensingh varies with education, occupation, income, living condition, access to services and facilities etc. single type households are found mostly in Mymensingh. Most of the people are involved in business activity. Students are found in comparatively large quantity. Income and expenditure is higher in urban than that of rural. Number of dependent age people is found higher and thus there is opportunity to involve this population in development activity maximizing utilization of

resources. Land ownership is found higher in rural than urban. Most of the households are found permanent residence of Mymensingh. Migrated people are a few in numbers. Mostly people migrate to Mymensingh because of economic, social condition and disaster impact. Among buildings residential use is found in most cases followed by commercial use. In rural area agricultural land is occupied mostly. Basic services are present in almost every area but not at satisfactory level. There are a few options for recreation for the dwellers. Rickshaw and easy bike are the first choice for travelling within town. Water logging is the most frequent disaster occurred in Mymensingh. People of Mymensingh suffer badly from load shedding. They found commercial activity increasing day by and thus changing in use of land without proper planning.