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**Draft Final Report
Discussion Note # 2
Socio Economic and Gender Analysis**

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Draft Final Report

Discussion Note # 2

Socio Economic and Gender Analysis

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1 Introduction

1.1 Objectives

1. This Discussion Note presents municipality related data and the findings of the socio-economic household survey conducted in the four municipalities over March to May 2015.
2. The objectives of the survey were to:
 - a) produce a socio-economic report for the project municipalities based on the data collection;
 - b) identify ongoing work of civil society organizations in the project municipalities; and
 - c) develop recommendations for the project to increase its impact for poor, marginalized, and vulnerable groups.

1.2 Methodology/Process

3. The household survey covered 5% of the total households of the four municipalities. The total number of households was 63,484 in the four municipalities (**Table 1.1**). 5% of this total was 3174. In Attariya the number of households (HHs) to cover was 687, in Bheemdatt 1034, in Dhangadhi 1052 and in Jhalari-Pipaladi, 401.
4. The caste/ethnic mapping of the four municipalities, based on census data, showed that Hill Dalit, Hill Brahmin/Chhetri and Terai Janajati were the dominant social groups in these municipalities. For the household survey the percent of the three caste/ethnic group in the municipality population was calculated. According to their percent in the population, out of the total sample HHs in each municipality, the number of households to be surveyed for that particular social group was calculated.

Table 1-1: Municipality Population and Sample Size

Municipality	Pop	Sample 5% by popn.	HH	Sample 5% by HH	Hill Dalit		Hill B/C		Terai Janajati	
					HH No.	%	HH No.	%	HH No.	%
Attariya	72,521	3,626	13,745	687	117	17%	351	51%	219	32%
Bheemdatt	104,599	5,230	20,684	1,034	192	19%	751	73%	91	9%
Dhangadhi	101,970	5,099	21,030	1,052	106	10%	597	57%	349	33%
Jhalari-Pipaladi	42,026	2,101	8,025	401	55	14%	258	64%	88	22%
Total	321,116	16,056	63,484	3,174	470	15%	1,957	62%	747	24%

Source: CBS 2011, MoFALD 2014

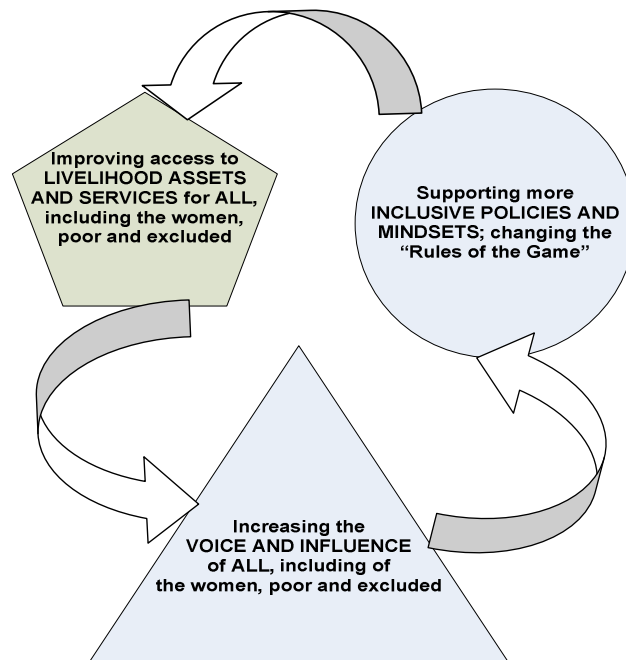
5. To ensure income poor groups were also covered in the sample, an effort was made to collect information about the population in different income quintiles. Apart from Dhangadhi, none of the municipalities were able to provide the information based on data. District level indicators of people below poverty line was used as a proxy.
6. Four to five focus group discussions (FGDs) with community women and men in each municipality (with women, Dalits, Janajatis, Brahman/Chhetris and squatters), meetings with local leaders, meetings with municipal office staff, a workshop with civil society and other stakeholders were implemented along with the administering of the household survey, completion of the municipal data sheet and the activity mapping matrix. Meetings with

specific groups like Badis, Kamlaris and Muslims were also conducted. Each municipality had a survey team of two Research Enumerators/Assistant and four research volunteers (two volunteers with each research enumerator/assistant). The Senior Social and Gender Specialist of the PPTA team supported by a survey coordinator conducted the survey.

1.3 Conceptual and Operational Frameworks

7. The socio-economic survey focused on identifying the existing situation of the four project municipalities in terms of three domains of change (**Figure 1-1**): a) access of women, poor and the excluded¹ to assets, opportunities and services (i.e. what municipal services are used by whom (which women, which men, third gender; what is the existing level of income, health and education); b) ability of women, poor and the excluded to claim their rights and influence decisions that affect their lives (i.e. their capacities to claim services from municipal authorities and other stakeholders); and, c) changing the “rules of the game” (as manifested in informal and formal policies, values, beliefs, behavior, and social practices (i.e. how formal and informal policies, norms and practices, mindsets regarding women, poor and the excluded have been addressed in the municipality).

Figure 1-1: Domains of Change



Source: Adapted from Sectoral Monographs, ADB/WB/DFID 2010

8. The gender equality and social inclusion (GESI) analytical framework was applied to analyse policies impacting the municipality, the institutional arrangements of the municipality and the monitoring and evaluation analysis. Information regarding the functions of these organizations, the location of responsibility for addressing GESI within them, the GESI related skills and competencies and social diversity of the personnel and their ability to address GESI issues within their core mandates were analyzed.

¹ Excluded Groups refer to women, Dalit, Indigenous Ethnic Groups, Madhesi, Muslim, persons with disabilities, elderly people and people living in remote areas. who have been systematically excluded over a long time due to economic, caste, ethnic, gender, disability, and geographic reasons and include sexual and gender minorities. Source: 1.3 Definitions, Operational Guidelines for Mainstreaming GESI in MoUD, MOUD/GoN 2013

9. The existing gender and power relations impacting access to municipal services, revealed by who uses the municipal services and for what, who does the work (labour), who has access to what resources and who has decision making power; who experiences violence and caste/ethnicity based discrimination which constrain women and the excluded, was mapped to identify the existing gender and power relations in the municipality.

2 Municipality Level Data

10. Information in this section is from Census 2011 and data provided by the 4 municipalities.

2.1 Demographic Features

2.1.1 Date of Municipality Formation and Area of the Municipality

Table 2-1: Date of formation and area of the municipalities

Municipality	Date of Formation	Area
Attariya	2071 Baishak 25 (8 May 2014)	152.4 sq. km
Dhangadhi	2033 (1976)	107.73 sq. km
Bheemdatt	2034 (1977)	171.01 sq. km
Jhalari Pipaladi	2071 Mansir 16 (2 December 2014)	516.57sq. km

Source: Municipality Data, 2015

2.1.2 Population by Caste/Ethnicity and Gender

11. In Attariya, more than half the households (HHs) were Hill Brahman/Chhetri (53.36%), followed by Terai Janajati (22.19%) and Hill Dalit (19.74%). Remaining 10% households were composed of other caste/ethnic groups like hill Janajatis and Madhesi Dalits.

12. In Bheemdatt, 74.07% of the households were of Hill Brahman/Chhetri, 14.06% of Hill Dalits and 6.41% of TeraiJanajati and less than 1% each of other caste/ ethnic groups.

13. In Dhangadhi, majority (47.72%) of the households were of Hill Brahman/Chhetri followed by TeraiJanajati (28.67%), with Hill Dalits being the least.

14. Majority (67.04 %) of the households in Jhalari Pipaladi was of Hill Brahman/Chhetri, followed by Terai Janajati (18.68%), Hill Dalit (11.86%) and 2.01% Hill Janajati (excluding Newars). Terai Brahman/Chhetri, Muslims and Others, each less than 1% of the total HHs (**Table 2-2**).

Table 2-2: Number of HHs as per Caste / Ethnicity

Caste/ Ethnicity	Attariya		Dhangadhi		Bheemdatt		Jhalari Pipaladi	
	No.	%	No.	%	No.	%	No.	%
Hill Dalit	2642	19.74%	1701	8.09%	2909	14.06%	952	11.86%
Terai Dalit	6	0.04%	38	0.18%	41	0.20%	-	0.00%
Hill Janajati (Excl. Newars)	473	3.53%	732	3.48%	703	3.40%	161	2.01%
Janajati (Newars)	83	0.62%	317	1.51%	77	0.37%	-	0.00%
Terai Janajati	2969	22.19%	6030	28.67%	1325	6.41%	1499	18.68%
Hill B/C	7140	53.36%	10035	47.72%	15320	74.07%	5380	67.04%
Terai B/C	0	0.00%	219	1.04%	45	0.22%	3	0.04%
OBC	7	0.05%	1312	6.24%	201	0.97%	-	0.00%
Muslim	17	0.13%	441	2.10%	30	0.15%	8	0.10%
Others	44	0.33%	205	0.97%	33	0.16%	22	0.27%

Source: Municipality Data, 2015

15. In Attariya, about half of the population was Hill Brahman/Chhetri (49.21%), followed by Terai Janajati (22.87%), Hill Dalit (22.61%), and Hill Janajati excluding Newars (4.05%). Other caste/ ethnic groups were below 1%.

16. In Bheemdatt, 67.30% of the population was Hill Brahman/Chhetri, 18.08% was Hill Dalit, 8.23% was Terai Janajati, 1.15% was OBC and less than 1% each of other caste / ethnic groups.

17. In Dhangadhi, about half of the population was Hill Brahman/Chhetri followed by Terai Janajati (29.83%), Hill Dalit (6.49%), Hill Janajati excluding Newars (5.11%), and Janajati Newars (1.55%) with less than 1% each composing of other caste/ ethnic groups, with no presence of Madhesi Brahman/Chhetri.

18. More than half (62.21%) of the population in JhalariPipaladi was Hill Brahman/Chhetri, followed by Terai Janajati (21.41%), Hill Dalit (13.59%) and 2.31% Hill Janajati (excluding Newars). Terai Brahman/Chhetri, Muslims and Others, each composing less than 1% of the total population. (see **Table 2-3**).

Table 2-3: Population as per Caste/ Ethnicity (%)

Caste/Ethnicity	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Hill Dalit	22.61%	18.08%	6.49%	13.59%
Terai Dalit	0.05%	0.24%	0.14%	0.00%
Hill Janajati (Excluding Newars)	4.05%	4.04%	5.11%	2.31%
Janajati (Newars)	0.59%	0.37%	1.55%	0.00%
Terai Janajati	22.87%	8.23%	29.83%	21.41%
Hill B/C	49.21%	67.30%	50.28%	62.21%
Terai B/C	0.00%	0.22%	0.85%	0.05%
OBC	0.06%	1.15%	2.68%	0.00%
Muslim	0.22%	0.20%	2.16%	0.11%
Others	0.34%	0.18%	0.89%	0.31%

Source: Municipality Data, 2015

19. In Attariya, the gender (sex) ratio was 0.90. Only among Muslims the number of men was higher than women. Among Madhesi Dalit the women-men figure was equal.

20. The gender ratio in Bheemdatt was 0.95. Amongst Hill Dalit, Hill Janajati (excluding Newars), Janajati (Newars), Hill Brahman/Chhetri number of women was higher than men.

21. In Dhangadhi, the overall gender ratio was 1.02. The women population in Hill Dalit, Madhesi Dalit, Hill Janajati (excluding Newars) and Janajati (Newars) groups was higher than their men population.

22. In Jhalari Pipaladi, the gender ratio was 0.87. Only amongst Muslims, the population of men was higher than those of women. Among other groups, women population was higher than that of men (**Table 2-4**).

Table 2-4: Gender (Sex) Ratio

Municipality	Ratio
Attariya	0.90
Bheemdatt	0.95
Dhangadhi	1.02
Jhalari Pipaladi	0.87

Source: Municipality Data, 2015

2.1.3 Population by Disability and Illness

23. In Attariya, 3% of the population had some sort of disability with 39% of the people with disability having physical disability, followed by visual (20%), hearing (15%), speech (11%), various (7%), mental (6%) and others types were each 1%.

24. In Bheemdatt, 1.3% of the population had some sort of disability with about 40% of the people with disability having physical disability, 21% visual, 11% hearing, 10% speech and less than 10% each with other forms of disability. Higher number of women had visual and both hearing and visual disability compared to men. (**Table 2-5**)

Table 2-5: Population by Types of Disability and Gender

Disability	Attariya		Dhangadhi		Bheemdatt		Jhalari Pipaladi	
	Women	Men	Women	Men	Women	Men	Women	Men
Physical	415	506	154	219	206	323	204	233
Visual	251	225	17	24	144	137	106	88
Hearing	176	176	39	55	69	84	103	99
Hearing and Visual	15	10	-	-	17	9	4	9
Speech	112	143	10	15	61	73	36	56
Mental	67	70	13	18	53	69	36	36
Intellectual	17	18	15	22	4	11	7	16
Various	84	90	27	38	42	59	29	36

Source: Municipality Data, 2015

25. In Dhangadhi, less than 1% of the population had some sort of disability with more than half of the people with disability having physical disability. Higher percent of men had disabilities than women.

26. In Jhalari Pipaladi, about 3% of the population had some sort of disability with about 40% of the people with disability having physical disability and 18% each with visual and Hearing and less than 10% each with other forms of disability. Higher number of women has visual and hearing disability compared to men, while higher number of men has remaining forms of disability compared to women.

2.1.4 Status of Illness

27. In Attariya, the population who have illness are primarily suffering from respiratory problem (45%), skin disease (35%), others (20%) and blood pressure (1%).

28. In Bheemdatt, out of the total population suffering from illness, higher percent is suffering from respiratory problem (32%), followed by skin disease (28%) and others (28%) with less than 10% each suffering from other types of illness. Higher number of females has respiratory problem, skin disease and other illness than men.

29. In Dhangadhi, the population has respiratory problem, heart attack, cancer and other types of illness; with higher percentage suffering from respiratory problem.

30. In Jhalari Pipaladi, people have illness such as blood pressure (0.3%), skin disease (14.9%), respiratory problem (19.1%), and others (65.7%). Higher number of males has blood pressure compared to women, while higher number of women has other types of illness (Table 2-6).

Table 2-6: Population by Types of Illness and Gender

Illness	Attariya		Dhangadhi		Bheemdatt		Jhalari Pipaladi	
	Women	Men	Women	Men	Women	Men	Women	Men
Blood Pressure	11	15	-	-	200	228	5	11
Diabetes	-	5	-	-	35	67	-	-
Respiratory Problem	1326	688	15146		2952	2366	628	457
Heart Attack	-	-	20	26	699	718	-	-
Skin Disease	883	688	-	-	2660	2055	509	337
Cancer	-	-	33	27	3	4	-	-
Others	533	349	12558		2774	1882	2300	1429

Source: Municipality Data, 2015. From Shrawn till Phagun of FY 2071/72.

2.1.5 Population by Religion

31. In Attariya, about 84.64% of the population was Hindu, 14.45% were Christians and less than 1% each Buddhist, Muslim and Others.

32. In Bheemdatt, majority i.e. 97.7% of the population was Hindu, 1.7% was Christian and 0.3% each were Buddhist and others.

33. In Dhangadhi, about 89% of the population was Hindu, 10% were others and the rest were Buddhist, Sikh, Kirat, Christian and Muslim.

34. In Jhalari Pipaladi, majority i.e. 99.6% of the population was Hindu, 0.3% was Christian and 0.1% was Muslim.

2.2 Education, Health and Vital Registration Data

2.2.1 Literacy Rate

35. The overall literacy rate of Attariya is 66.85, Bheemdatt is 77.34, Dhangadhi is 78.86 and Jhalari Pipaladi is 69.3. The gender disaggregated literacy rate of all four municipalities is given in **Table 2-7**.

Table 2-7: Literacy Rate of the Municipalities

Municipality	Women	Men
Attariya	57.64	77.15
Dhangadhi	70.52	87.11
Bheemdatt	67.69	87.62
Jhalari Pipaladi	59.42	80.87

Source: National Population and Housing Census 2011

2.2.2 Average Life Expectancy

36. The average life expectancy of women in Attariya, Bheemdatt and Jhalari Pipaladi is higher than that of men in these municipalities; while in Dhangadhi the life expectancy of men is higher than that of women.

Table 2-8: Average Life Expectancy of the Municipalities

Municipality	Women	Men
Attariya	65	64
Bheemdatt	64	60
Dhangadhi	64	70
Jhalari Pipaladi	64	60

Source: Municipality Data, 2015

2.2.3 Number of Institutional Deliveries

37. Number of institutional deliveries in Attariya is 218, Bheemdatt is 192, Dhangadhi is 11193 and Jhalari Pipaladi is 204.

2.2.4 Mortality Rate

38. Information about mortality rates was not available of Attariya and Jhalari Pipaladi. Data of other districts is presented in **Table 2-9**.

Table 2-9: Mortality Rate in the Municipalities

Municipality	Maternal Mortality Rate	Child Mortality Rate	Infant Mortality Rate
Attariya	-	-	-
Bheemdatt	229	54	33
Dhangadhi	14 / 12430	10/ 84763	160/ 12430
Jhalari Pipaladi	-	-	-

Source: Municipality Data, 2015

2.2.5 Details of Vital Registration

39. Information about different vital registration was not consistently available of all four municipalities. The available data is presented in **Table 2-10**.

Table 2-10: Details of personal affairs of the municipalities

Personal Affairs	Attariya			Dhangadhi			Bheemdatt			Jhalari Pipaladi		
	FY 2068/69	FY 2069/70	FY 2070/71	FY 2068/69	FY 2069/70	FY 2070/71	FY 2068/69	FY 2069/70	FY 2070/71	FY 2068/69	FY 2069/70	FY 2070/71
Birth Registration (Girls)	-	-	887	423	1071	1217	-	-	-	-	-	94
Birth Registration (Boys)	-	-	1231	743	1715	1672	-	-	-	-	-	123
Death Registration	-	-	241	352	331	362	-	-	-	-	-	32
Marriage Registration	-	-	662	701	969	949	-	-	-	-	-	162
Divorce Registration	-	-	0	2	0	5	-	-	-	-	-	0
Immigration No.	-	-	6151	1716	2174	1786	-	-	-	-	-	216
Migration No.	-	-	588	451	567	366	-	-	-	-	-	238

Source: Municipality Data, 2015

2.2.6 People Below Poverty Rate

40. Information about people below poverty rate was available only for Dhangadhi. Of the 21,030 households, in the lowest income quintile are 8,412 households, second 6,309, middle 3,365, fourth 1,893, and highest 1,051 households.

2.2.7 Household Size

Table 2-11: Details of Household Size in the Municipalities

Description	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Household	8,025	21,030	13,745	20,684
Population (Male)	19,604	51,439	34,630	51,087
Population (Female)	22,422	50,531	37,891	53,512
Total	42,026	101,970	72,521	104,599
Avg. household size	5.24	4.85	5.28	5.06

Source: National Population and Housing Census 2011

2.3 Municipal Data on Access to Basic Municipal Services

2.3.1 Access to Drinking Water and Source of Drinking Water

41. In Attariya majority of the HHs access drinking water through tube well (65%), followed by pipeline (24%), natural source (10%) and others (1%).

42. In Bheemdatt, HHs get access to drinking water is through various sources including tube well (73%), pipeline (22%), others (3%), well (1%) and natural source (1%).

43. About 80% of the HHs in Dhangadhi access drinking water through tube well and the remaining 20% through pipeline.

44. In Jhalari Pipaladi, most of the HHs have access to drinking water through tube well (95%), with 2% each using pipeline and others and 1% using natural source.

Table 2-12: No. of HHs' Access to Drinking Water

Source of Drinking Water	Attariya		Bheemdatt		Dhangadhi		Jhalari Pipaladi	
	No.	%	No.	%	No.	%	No.	%
Tap/piped water	1946	14%	4531	22%	5543	26%	148	2%
Tubewell/handpump	11315	82%	15184	73%	15252	73%	7636	95%
Covered well / kuwa	137	1%	59	0%	33	0%	34	0%
Uncovered well / kuwa	73	1%	63	0%	8	0%	5	0%
Spout water	16	0%	155	1%	50	0%	6	0%
River/stream	63	0%	77	0%	1	0%	21	0%
Others	76	1%	402	2%	47	0%	148	2%
Not Stated	119	1%	213	1%	96	0%	27	0%
Total	13745	100%	20684	100%	21030	100%	8025	100%

Source: National Population and Housing Census 2011

2.3.2 Access to Sanitation and Type of Toilet

45. In Attariya 0.1% HHs do not have access to toilet and out of the 99.9% who has access, 42% use open pit latrines, 35% use private improved toilet, 22% private ordinary toilet, and 1% public toilet.

46. Similarly, in Dhangadhi out of the 99.7% HHs who has access to toilet, most of them use private improved toilet (88%), with 7% using open pit latrines and 5% using private ordinary toilet.

47. In Bheemdatt and Jhalari Pipaladi 100% HHs has access to toilet. In Bheemdatt, more than half of the HHs use private improved toilet (59%), 32% use open pit, 8% private ordinary toilet and 1% others. Similarly, more than half of the HHs use open pit latrines (55%) in Jhalari Pipaladi with 28% using private improved toilet and 17% using private ordinary toilet.

Table 2-13: No. of HHs using Various Types of Toilet

Type of Toilet	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Open pit	5667	1413	6697	4434
Private ordinary toilet	2948	1064	1640	1381
Private improved toilet	4665	18484	12129	2210
Flush toilet	-	-	-	-
Public toilet	91	-	-	-
Others	-	-	218	-

Source: Municipality Data, 2015

2.3.3 Waste Management

48. In Dhangadhi, the waste collection and management is done in open space. Information is not available of other municipalities regarding waste collection and there is no information about treatment plants.

2.3.4 Source of Light and Cooking Fuel***Source of Cooking Fuel***

49. Fuel wood is the primary source of cooking fuel for the households in all four municipalities (Attariya 86.5%, Dhangadhi 60.5%, Bheemdatt 60%, Jhalari Pipaladi 60.7%). The second most important source is LPG in Attariya (6.7%), Dhangadhi (32.6%) and Bheemdatt (24.8%) followed by Biogas, 5.3% HHs use it for cooking in Attariya, 4.3% in Dhangadhi and 14.3% in Bheemdatt. In Jhalari Pipaladi, the second most important source is Biogas (31.3%) followed by LPG (7.9%).

Table 2-14: No. of HHs using various sources of cooking fuel

Source of Cooking Fuel	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Fuel wood	11578	12238	12719	4879
Biogas	711	2920	900	2518
LPG	894	5059	6859	637
Cow Dung	11	33	81	-
Kerosene	87	148	158	-
Husk stove (bhusechulo)	91	-	94	-
Others	9	11	219	-

Source: Municipality Data, 2015

Source of Light

50. In all four municipalities, electricity is the major source of light, followed by kerosene. Biogas is used the least (**Table 2-15**).

Table 2-15: No. of HHs using various Sources of Light

Source of Light	Attariya		Dhangadhi		Bheemdatt		Jhalari Pipaladi	
	No.	%	No.	%	No.	%	No.	%
Kerosene	2079	15.5%	1872	8.9%	2326	11.2%	991	12.3%
Biogas	32	0.2%	38	0.2%	59	0.3%	16	0.2%
Electricity	10495	78.4%	18948	90.1%	17737	85.8%	6831	85.1%
Solar energy	136	1.0%	30	0.1%	115	0.6%	42	0.5%
Others	639	4.8%	142	0.7%	447	2.2%	145	1.8%

Source: Municipality Data, 2015

2.3.5 Housing

51. The CBS data shows that majority of the HHs in all the four municipalities live in houses owned by them, followed by rented houses.

Table 2-16: House Ownership in the Municipalities

Ownership of house	Attariya		Bheemdatt		Dhangadhi		Jhalari-Pipaladi	
	No.	%	No.	%	No.	%	No.	%
Owned	12777	93%	15978	76%	17338	84%	7755	97%
Rented	782	6%	4652	22%	2647	13%	192	2%
Institutional	53	0%	256	1%	218	1%	9	0%
Others	133	1%	144	1%	481	2%	69	1%
Total	13745		21030		20684		8025	

Source: National Population and Housing Census 2011

2.3.6 Electricity

52. In Attariya, 95% of the HHs are connected to national grid and 1% to solar power, while 4% do not have access to electricity. Out of those HHs who do not have access to electricity, 49% are Hill Dalit, 23% Hill B/C, 16% OBC, 9% Terai Janajati and 3% and Hill Janajati (excluding Newars).

53. In Bheemdatt, 95% HHs have access to national grid, 1% to solar power but 5% do not have access to electricity.

54. In Dhangadhi, while 96% HHs are connected to the national grid, the remaining 4% do not have access to electricity.

55. In Jhalari Pipaladi, 85% HHs have access to national grid, 1% to solar power but 14% do not have access to electricity.

Table 2-17: No. of HHs connected to various sources of electricity

Municipality	National grid	Hydro-power	Solar Power	No Electricity
Attariya	12759	0	136	486
Bheemdatt	19737	0	115	947
Dhangadhi	20204	0	0	826
Jhalari Pipaladi	6831	0	42	1154

Source: Municipality Data, 2015

2.3.7 Telecommunications

Table 2-18: No. of HHs' Access to Telecommunications

Municipality	Mobile Phone	Land Line	Television	Internet
Attariya	n/a	848	5668	84
Bheemdatt	n/a	-	11796	4000
Dhangadhi	n/a	7100	-	ADSL: 1400 YMAX: 115
Jhalari Pipaladi	10650	199	3217	-

Source: Municipality Data, 2015

2.3.8 Municipal Social Development Budget Allocation and Expenditure

Table 2-19: Attariya Municipality Social Development Budget

Activities	FY 2069/70		FY 2070/71	
	Allocation	Expenditure	Allocation	Expenditure
Women	-	-	2970	2570
Children	-	-	4435000	1525000
Disadvantaged	-	-	2900000	595000
Total	-	-	7337970	2122570

Source: Municipality Data, 2015

Table 2-20: Dhangadhi Municipality Social Development Budget

Activities	FY 2069/70		FY 2070/71	
	Allocation	Expenditure	Allocation	Expenditure
Women	1100000	1100000	10980000	10980000
Children	6300924	6300924	10980000	10980000
Disadvantaged	10301386	10301386	16470000	16470000
Total	17702310	17702310	38430000	38430000

Source: Municipality Data, 2015

Table 2-21: Jhalari Pipaladi Municipality Social Development Budget

Activities	FY 2069/70		FY 2070/71	
	Allocation	Expenditure	Allocation	Expenditure
Women	-	-	758000	-
Children	-	-	758000	-
Disadvantaged	-	-	1137500	-
Total	-	-	2653500	-

Source: Municipality Data, 2015

2.3.9 Diversity in Municipality Staff

56. There are a total of 224 staff in the four municipalities. Of them 87% are men and 13% women. Jhalari Pipaladi has no women staff. Dhangadi has the highest number of women staff at 17%, Bheemdatt has 12% and Attariya 6%.

57. 61% of the staff are of Brahman/Chhetri caste group, 25% Janajati Terai, 12% Dalit Hill, remaining of other caste groups. The highest percentage of Brahman/Chhetris is in

Jhalari Pipaladi (79%) and lowest in Dhangadi (51%). Attariya and Bheemdatt both have about 71% of Brahman/Chhetris. The highest percent of Terai Janajatis is in Dhangadi (27%) and the least in Jhalari Pipaladi (11%). There are no Dalits in Jhalari Pipaladi municipality amongst the staff though it has 11% OBCs. The highest percentage of Dalits are in Dhangadi (22%). Attariya has 6% and Bheemdatt 5% Dalits. 66% women are Brahman/Chhetris and 17% each Dalits and Janajatis. The staff profile data indicates that there is over-representation of Brahman/Chhetris and under-representation of the other caste/ethnic groups, especially of Dalits compared to the population profile of the municipalities.

58. There are 9% staff at management level. There are no women at the management level in any of the municipalities. 18% women staff are at assistant level and 12% are at support level.

59. Table 2-22: Staff Data of Four Municipalities by Gender and Grade

Level	Men	Women	Total
Management	100.00	0.00	100.00
Assistant	82.61	17.39	100.00
Support	88.50	11.50	100.00
Total	87.05	12.95	100.00

60. Source: Municipality data

61. Brahman/Chhetris are 84% at management level, 89% at assistant level and 37% at support level. Janajatis are 11% at management level, 5% at assistant level and 43% at support level. Dalits are almost 20% at support level, 4% at assistant level and 5% at management level. Bheemdatt has Dalits at the management level while none of the others have so.

62. Table 2-23: Staff Data of Four Municipalities by Caste / Ethnicity and Grade

Level	BC Hill	Dalit Hill	Janajati Terai	Madhesi OBC	Total
Management	84.21	5.26	10.53	0.00	100.00
Assistant	89.13	4.35	5.43	1.09	100.00
Support	37.17	19.47	43.36	0.00	100.00
Total	62.50	12.05	25.00	0.45	100.00

Source: Municipality Data, 2015. Refer **Annex 2-A** for details by municipality.

2.3.10 Institutional Analysis of Municipalities

63. Specific directives to address GESI issues are not developed by the municipalities (e.g. GESI policy for the municipality based on national directives but addressing municipality level issues have not been prepared).

64. Specific support for women are limited to maternity leave as per government regulations. Support for child care, breast feeding time, flexible timing are not provided. Security and safety issues are also not specifically addressed.

2.3.11 GESI Budget Analysis of Municipalities

65. The annual workplan and budget of Attariya municipality FY 2072/73 (2015/16) was reviewed from a GESI perspective.² The total budget is for NRs.57 million. Of this the targeted budget (targeted to women, Dalits and other excluded groups) is 28% with activities such as leadership development of women and targeted health outreach programs. GESI supportive measures especially for children such as street drama and advocacy is 15%. 57% of the budget is neutral, assuming that all citizens would benefit from the programs that the municipality would implement.

66. 26% of the budget is targeted to women, 36% to children, 38% to a combined group of Janajati, Dalits, Elderly citizen, Disabled, Poor, Backward Class and almost zero for Dalits and the poor specifically.

67. Almost 90% of the municipal budget is for activities which would address access to services. About 8% of the budget is for strengthening voice and capacity to influence of women and the excluded. Only 1% of the budget is for activities which would contribute to changing existing discriminatory GESI norms, practices, values and mind sets. Refer **Annex 2-B** for details.

2.3.12 Activities of Civil Society Organisations in the Municipalities

68. Information from 16 NGOs/CBOs/projects in Bheemdatt, 4 in Attariya, 3 in Dhangadi and 1 in Jhalari Pipaladi was provided to the PPTA team. All the municipalities have civil society organisations working on community infrastructure, water and sanitation and solid waste management. Only in Dhangadi were there some initiatives regarding works on drainage / sewerage, greening of municipality and planning use of urban space.

69. Bheemdatt and Dhangadi have specific initiatives for women, including single women. Bheemdatt has 4 specific projects related with women's empowerment and reducing gender based violence. Refer **Annex 2-C** for details

² The PPTA team did not receive the detailed AWPB from the other municipalities

3 Findings of the Social Economic Household Survey

3.1 Background Information of Survey Respondents

3.1.1 General Background of the Respondents

70. A total of 3,174 respondents (5% of the municipality population) were interviewed for the household survey, 687 were interviewed in Attariya, 1,034 in Bheemdatt, 1,052 in Dhangadhi and 401 in Jhalari Pipaladi³. Out of the total respondents, 68% were from rural areas and 32% from urban. 53% were women and 47% men. Social profile wise, 62% were Brahmin/Chhetri Hill, 15% Dalit Hill and 24% Janajati Terai.⁴ 99% respondents were Hindus and the rest Buddhist and Christian. Majority of the respondents were 18-49 years old (79%) followed by 50 and more than 50 years (21%). The respondents profile is provided in **Table 3-1**.

Table 3-1: Percent of Respondents as per Municipality, Caste/ Ethnicity and Sex

Sex	Municipality				Caste/ Ethnicity		
	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi	Brahmin/ Chhetri Hill	Dalit Hill	Janajati Terai
Women	56.33	56.77	45.06	56.86	51.30	57.87	53.55
Men	43.67	43.23	54.94	43.14	48.70	42.13	46.45

Source: TA 8817-NEP. HH survey, 2015

71. Out of a total of 413 women headed households, majority (53%) had migrant husbands, 41% were widows, 2% separated, less than 1% divorced and 4% households had other causes for being women headed.

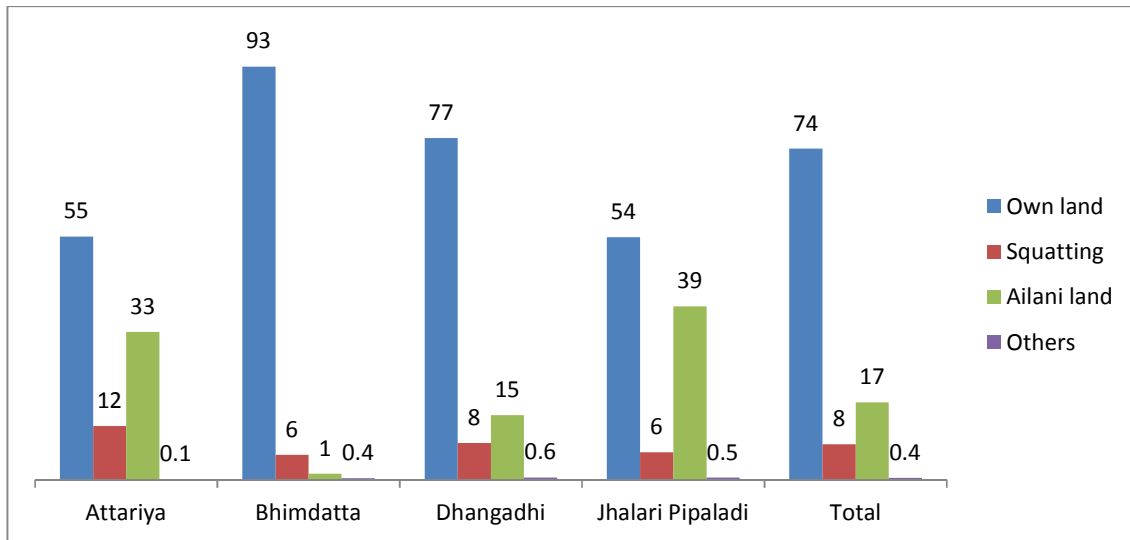
3.1.2 Land Status

72. Among the 3,174 respondents, 74% had their own land, 17% were on ailani land and 8% were squatters. In Attariya 55% had own land, 33% ailani land and 12% were squatters. In Bheemdatt 93% had own land, 6% were squatting and 1% were on ailani land. In Dhangadhi, 7 had own land, 15% ailani land and 8% were squatters. In Jhalari Pipaladi, 54% had own land, 39% were on ailani land and 6% were squatters. Among different caste/ethnicity groups, 81% of Brahmin/Chhetri Hill, 59% of Dalit Hill and 65% of Janajati Terai owned land. Among Dalit Hill, higher percent (23%) had ailani land and 18% were squatters. Among Brahmin/ Chhetri Hill and Janajati Terai, higher percent (15% and 23% respectively) had ailani land and remaining were squatters. In urban areas 93% had own land, 4% were on Ailani land and 3% were squatters. In rural areas 66% had own land, 24% had ailani land and 10% were squatters (**Figure 3-1**)

³ The total population of Attariya is 70,115, Bheemdatt - 104,599, Dhangadhi - 101,971, Jhalari Pipaladi - 42025.

⁴ The other social groups were minimal in the municipalities (refer above) and hence the household survey had focused on these three caste/ethnic groups. The sampling was proportionate to the population in the municipalities e.g. Brahman/Chhetri population was high in Bheemdatt and hence the sample size has higher number of Brahman/Chhetri households

Figure 3-1: Land Status



Source: Socio-economic Household Survey, April-May 2015

3.1.3 Number of years in municipality and in house

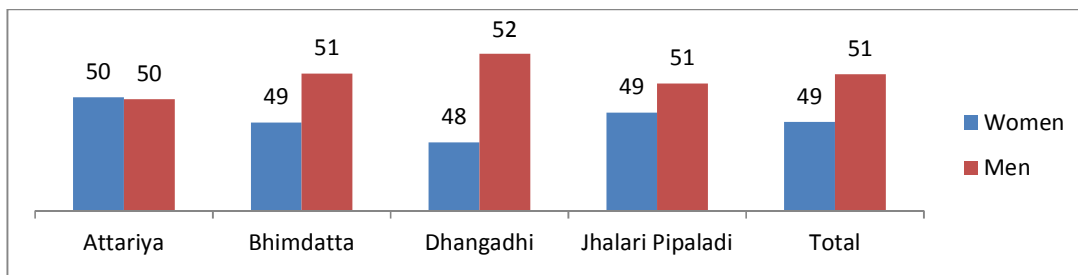
73. About 29% respondents had been living in the municipality for 30 years or more, 28% 10-19 years, 25% 20-29 years and 18% less than 10 years. So above 50% respondents were in the municipality area for more than 25 years.

74. Almost 40% were living in the house they were in for more than 15 years. 24% had been living for 20 years and above in the house, 22% for 5-9 years, 21% 10-14 years, 18% less than 5 years, and 14% 15-19 years.

3.1.4 Family Size, Composition, Marital Status, Occupation and Education Level

75. The average number of members in a family in Attariya was 6.6, Bheemdatt was 6.2, Dhangadhi, 6.1 and Jhalari Pipaladi 6.7. In Bheemdatt, Dhangadhi and Jhalari Pipaladi number of men was higher than of women while in Attariya women and men numbers were almost equal. More than 50% of respondents in all the four Municipalities were married and about 1% in Bheemdatt and Dhangadhi were widows (Figure 3-2).

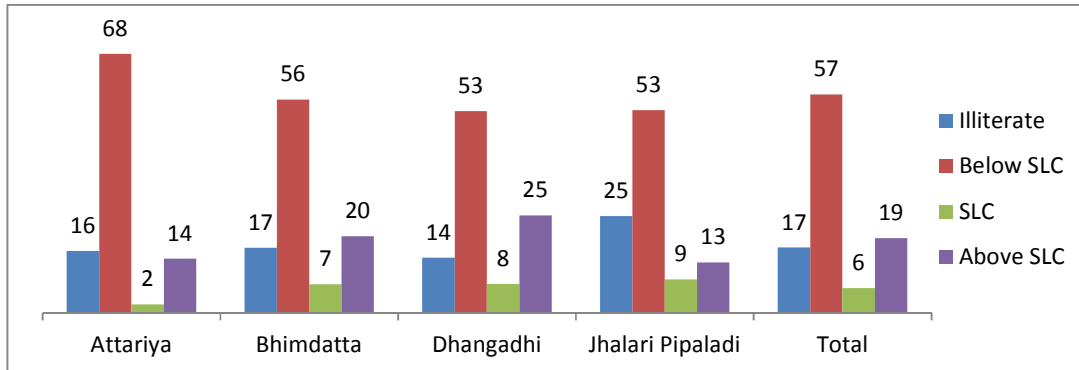
Figure 3-2: Percent of family members of respondent households by sex



Source: Socio-economic Household Survey, April-May 2015

76. In the four Municipalities, about 32% to 39% were literate (upto primary level education). The second highest percent of illiterate family members was in Jhalari Pipaladi.

Figure 3-3: Percent of family members of respondent households by education level

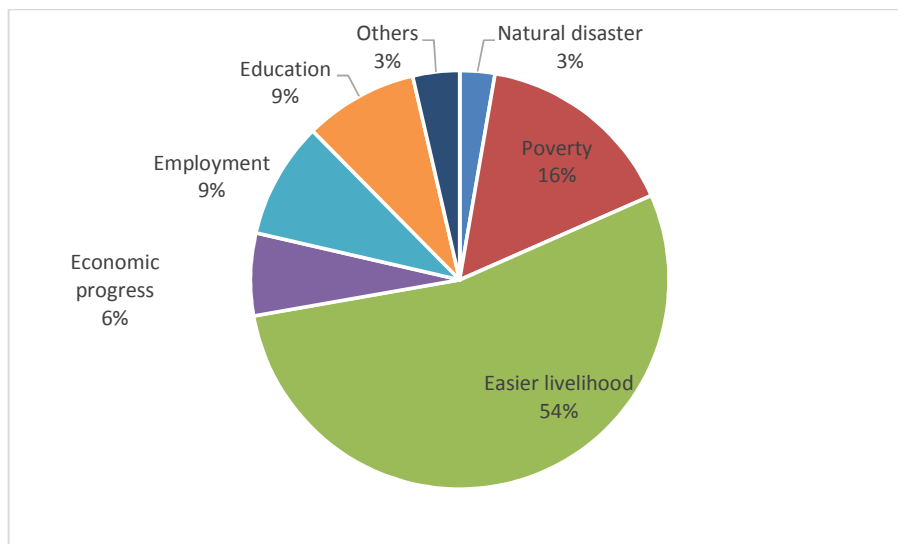


Source: Socio-economic Household Survey, April-May 2015

3.1.5 Migration

77. Out of the total respondents, about 38% have migrated to the municipality from other places. From among those who migrated, majority of them migrated for easier livelihood in each municipality, followed by poverty, except in Dhangadhi where the second highest percent responded that they have migrated to Dhangadhi for education. Among the caste/ethnic groups, while 62% of Brahman/Chhetri Hill migrated for easier livelihood and 11% for education, 41% of Dalit Hill and 35% of Janajati Terai migrated for easier livelihood and second highest percent of respondents (38% Dalit Hill and 24% Janajati Terai) migrated due to poverty. 12% Janajati Terai, 9% B/C Hill and 6% Dalit Hill migrated for employment.

Figure 3-4: Reasons for migration to the municipality from other places

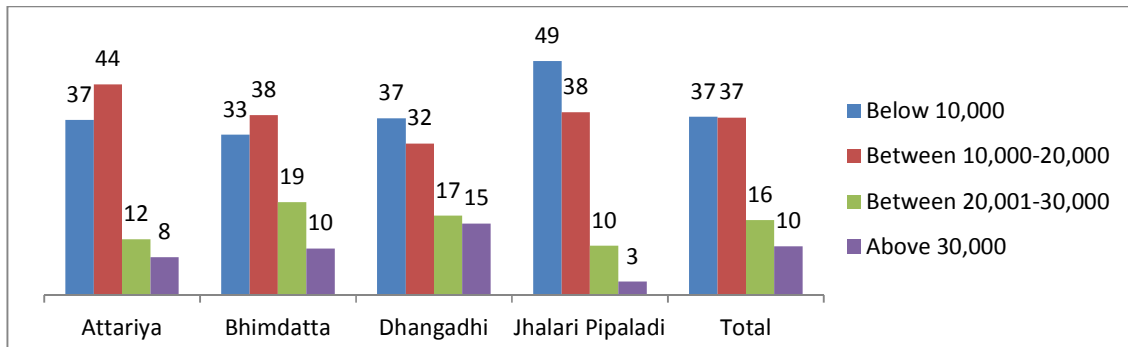


Source: Socio-economic Household Survey, April-May 2015

3.1.6 Income level and source of income

78. In Attariya and Bheemdatt, the income level of the majority of respondents' was between NRs 10,000 to 20,000 while in Dhangadhi and Jhalari Pipaladi, the income level of the majority of the respondents was below NRs 10,000. The highest number of people with income above NRs 30,000 was in Dhangadhi and lowest in Jhalari-Pipaladi. Among Brahman/Chhetri Hill, majority had income level between NRs. 10,000 to 20,000 while the income level of majority of Dalit Hill and Janajati Terai was below NRs 10,000.

Figure 3-5: Percent of Respondents by income level



Source: Socio-economic Household Survey, April-May 2015

79. Among the caste/ethnic groups the main contribution to income was of remittance, job/salary, business income and wage labour. In Attariya the main contribution to income was from remittance, job/salary and income from business. In Bheemdatt the main contribution to income was from job/salary, remittance, income from business, wage labour and pension. In Dhangadhi it was remittance, job, income from business, wage labour and agriculture. In Jhalari Pipaladi it was remittance, income from business, job and wage salary.

3.1.7 Child delivery without skilled birth attendant and under 5 child mortality

80. About 6% respondents in Attariya, 2% in Bheemdatt, 3% in Dhangadhi and 4% in Jhalari Pipaladi said that children were delivered in the absence of skilled birth attendant in the last two years. About 6% of Dalit Hill, 5% Janajati Terai and 2% B/C Hill and 4% respondents in rural areas and 2% in urban areas had child delivery without skilled birth attendants.

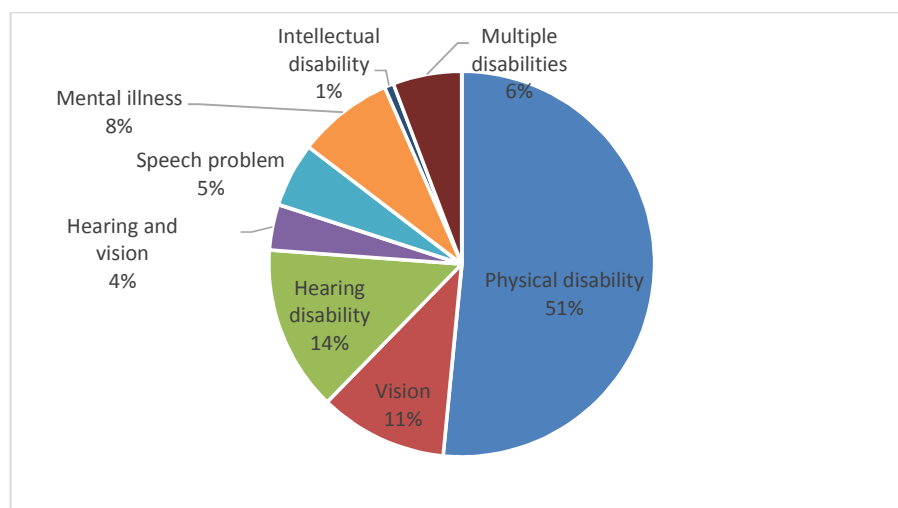
81. Only 1% in each municipality, in rural area, and Brahman/Chhetri Hill and Janajati Terai; about 2% of Dalit Hill and less than 1% in urban areas shared that there was under 5 child mortality in the last two years.

3.1.8 Disability among family members

82. About 9% in Jhalari Pipaladi, 8% in Attariya and 7% each in Bheemdatt and Dhangadhi shared that their family members had some sort of disability. The percent of respondents with family members living with disabilities was highest among Dalit Hill (9%) followed by Janajati Terai (7.4%) and B/C Hill (6.6%). Out of those who were living with disabilities, majority of them had physical disability (51%), followed by hearing disability (14%) and visual impairment (11%). The remaining were suffering from mental illness, multiple disabilities, speech problem, hearing and vision disability and intellectual disability.

Compared to men, more women had hearing disability, visual impairment, hearing and vision disability; and more men had physical disability, speech problem, mental illness, intellectual disability and multiple disabilities.

Figure 3-6: Types of Disability of Family Members of Respondents



Source: Socio-economic Household Survey, April-May 2015

3.1.9 Family members suffering from disease, HIV and AIDS

83. About 14% of respondents in total and 11% in Attariya, 19% in Bheemdatt, 12% in Dhangadhi and 11% in Jhalari Pipaladi shared that their family members were suffering from some serious disease. Among the caste/ethnic groups, 15% B/C Hill, 18% Dalit Hill and 10% Janajati Terai shared that their family members were suffering from some disease. Majority of the respondents shared that their family members were suffering from blood pressure followed by asthma/respiratory problems, diabetes, skin related illnesses, heart attack and cancer. Comparatively, men suffered more from blood pressure, diabetes, heart attack and cancer than women.

Table 3-2: Percent of respondents' family suffering from disease by sex

Disease	Women	Men	Girls	Boys
Blood Pressure	47	51	1	
Diabetes	40	60		
Asthma/respiratory problems	51	47	2	
Heart attack	41	53		6
Skin related	64	32	4	
Cancer	29	71		
Others	53	37	4	7

Source: Socio-economic Household Survey, April-May 2015

84. Less than 1% of respondents in Bheemdatt, Dhangadhi, Jhalari Pipaladi shared that their family members were suffering from HIV and AIDS. None of the respondents in Attariya shared that there was any case of HIV and AIDS in their families.

85. About 1% respondents in Attariya, 5% in Bheemdatt, 4% in Dhangadhi, and 15% in Jhalari Pipaladi shared that their family members were suffering from Malaria/Kala Azar/Dengue. Similarly, 7% of Dalit Hill, 5% Brahman/Chhetri Hill and 4% Janajati Terai said that their family members were suffering from Malaria/Kala Azar/Dengue.

3.1.10 Maternal Mortality

86. Around 1% of Dalit respondents of rural Bheemdatt shared that there had been death of women during delivery. None of the other households had experienced this.

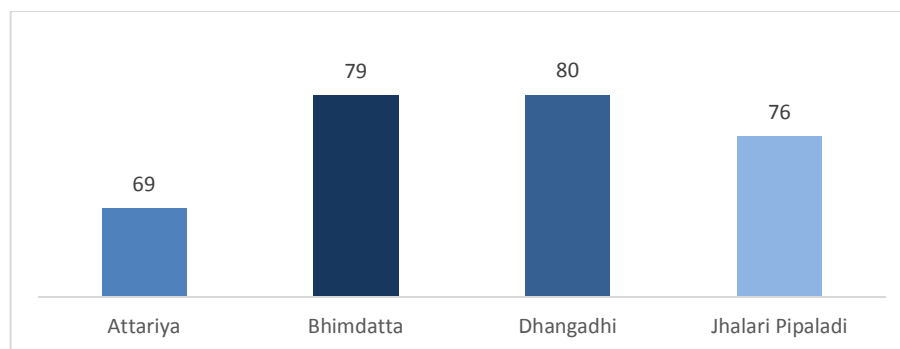
3.1.11 Child Labour

87. About 3% of respondents in Attariya, 2% in Dhangadhi, 1.5% in Jhalari Pipaladi and less than 1% in Bheemdatt shared that children below 16 years worked as wage labourers. More than 1% of respondents shared that boys and both boys and girls under 16 years worked as labourers and less than 1% shared that girls under 16 years worked as labourers.

3.1.12 Unemployment

88. On an average about 77% of respondents in all the four municipalities shared that family members of 18 to 60 years remained unemployed for more than 4 months. About 66% of rural respondents and 34% of urban respondents shared that family members of 18 to 60 years had remained unemployed for more than 4 months.

Figure 3-7: Percent of respondents with unemployed family members



Source: Socio-economic Household Survey, April-May 2015

89. In Attariya 822, Bheemdatt 1,612, Dhangadhi 1,616 and Jhalari Pipaladi 596 people of 18-60 years had been unemployed for more than 4 months per year. On an average about 67% of those who remained unemployed in all the four Municipalities were women.

Table 3-3: People unemployed for more than 4 months per year (18-60 years)

Sex	Attariya	%	Bheemdatt	%	Dhangadhi	%	Jhalari Pipaladi	%	Total	%
Women	506	61.56	1,098	68.11	1,138	70.40	365	61.24	3,107	66.87
Men	316	38.44	514	31.89	478	29.60	231	38.76	1,539	33.13
Total	822	100.00	1,612	100.00	1,616	100.00	596	100.00	4,646	100.00

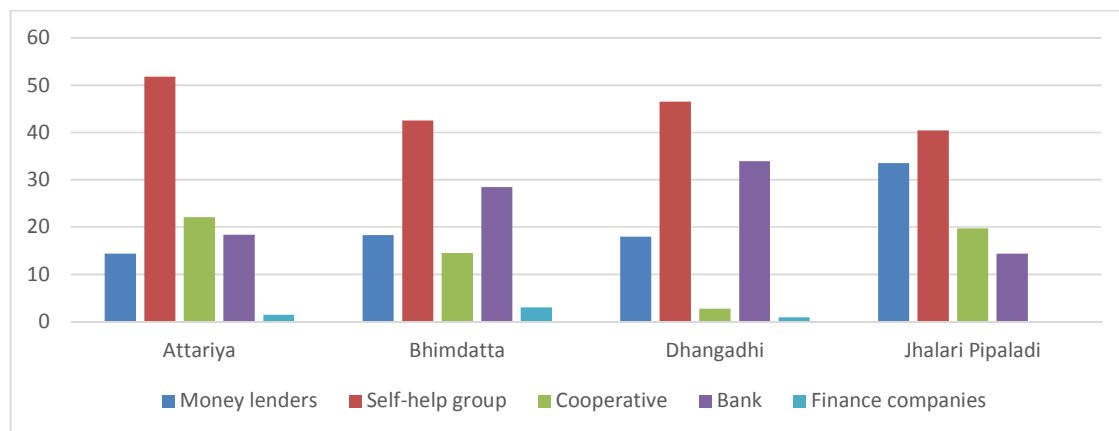
Source: Socio-economic Household Survey, April-May 2015

3.1.13 Credit for household expenses and sources

90. 32% of respondents shared that they took credit for household expenses. About 41% of Dalit Hill respondents, 36% Janajati Terai and 29% Brahman/Chhetri Hill and 37% rural and 23% urban area respondents had taken such credit.

91. In all the four Municipalities, the major source of credit was self-help group, followed by banks in Bheemdatt and Dhangadhi, cooperatives in Attariya and money-lenders in Jhalari Pipaladi. Finance companies seem to have least penetration in these municipality as credit source. Among the different caste/ ethnic groups the top three sources for Brahman Chhetri Hill were self-help groups (36%), bank (35%) and money lenders (20%); for Dalit Hill self-help groups (55%), money lenders (28%) and bank and cooperatives (21%); and for Janajati Terai self-help groups (61%), money lenders (14%) and bank (14%) were the main credit sources.

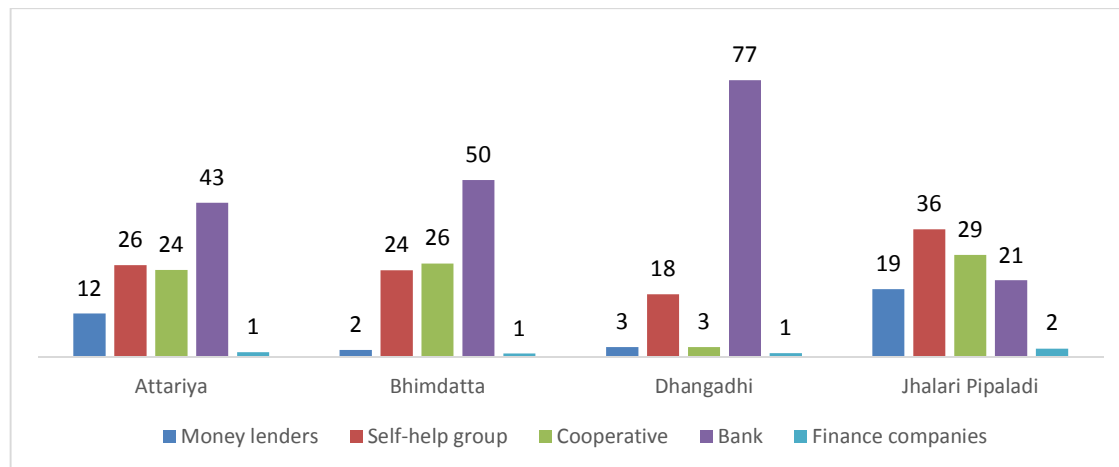
Figure 3-8: Sources of credit for household expenses by municipality (%)



source: Socio-economic Household Survey, April-May 2015

92. 13% of respondents shared that they had taken credit for business purpose, 17% in Dhangadhi, 11% Attariya and 10% each in Bheemdatt and Jhalari Pipaladi. household expenses. About 13% of Brahman/Chhetri Hill, 12% Janajati Terai and 11% Dalit Hill have taken credit for business purpose. In urban areas 18% of the respondents and only 10% of respondents of rural area have taken credit for business purposes.

93. In Attariya, Bheemdatt and Dhangadhi, the major source of credit for business were banks, followed by self help group in Bheemdatt and Dhangadhi, and cooperatives in Attariya. In Jhalari Pipaladi the major source was self-help group followed by cooperatives. Finance companies seem to have least penetration in these municipalities as credit source for business purposes as well. Among the different caste/ ethnic groups the top three sources for Brahman/Chhetri Hill were banks (68%), self-help groups (18%) and cooperatives (11%); for Dalit Hill self-help groups (34%), bank (28%) and cooperatives (24%); and for Janajati Terai banks (47%), self-help group (31%) and cooperatives (24%).

Figure 3-9: Source of credit for business purposes by municipality (%)

Source: Socio-economic Household Survey, April-May 2015

3.1.14 Arrangement of warm clothes for winter and mosquito nets for summer

94. About 93% in Bheemdatt, 89% in Attariya, 88% in Dhangadhi and 82% in Jhalari Pipaladi; 94% Brahman/Chhetri Hill, 84% Janajati Terai, 78% Dalit Hill; 93% urban area respondents and 87% rural area respondents had warm clothes for winter.

95. Similarly, about 87% in Attariya, 73% in Jhalari Pipaladi, 67% in Dhangadhi and 56% in Bheemdatt; 74% Brahman/Chhetri Hill, 63% Janajati Terai, 51% Dalit Hill; 78% urban area respondents and 63% rural area respondents had mosquito nets for summer.

3.2 Access to Assets

3.2.1 Status of house ownership

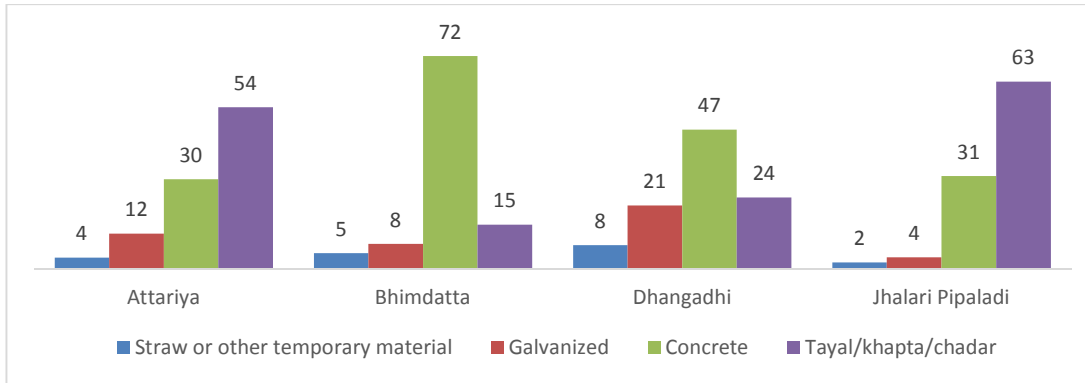
96. In Attariya 89%, Bheemdatt 94%, Dhangadhi 94% and Jhalari Pipaladi 97% of the respondents lived in their own homes. Less than 1% lived in rented house and remaining were living as squatters.

97. Among the caste/ ethnic groups, higher percent of Brahman/Chhetri Hill (97%) lived in own house, followed by Janajati Terai (90%) and Dalit Hill (85%). Thus, higher percent of Dalit Hill lived as squatters, followed by Janajati Terai and Brahman/Chhetri Hill.

3.2.2 Type of roof of the house

98. In Bheemdatt and Dhangadhi, higher percent of respondents had concrete roof followed by tile, galvanized and straw roofs. In Attariya and Jhalari Pipaladi, higher percent had tile roof, followed by concrete, galvanized and straw.

Figure 3-10: Type of roof of respondents' house (%)



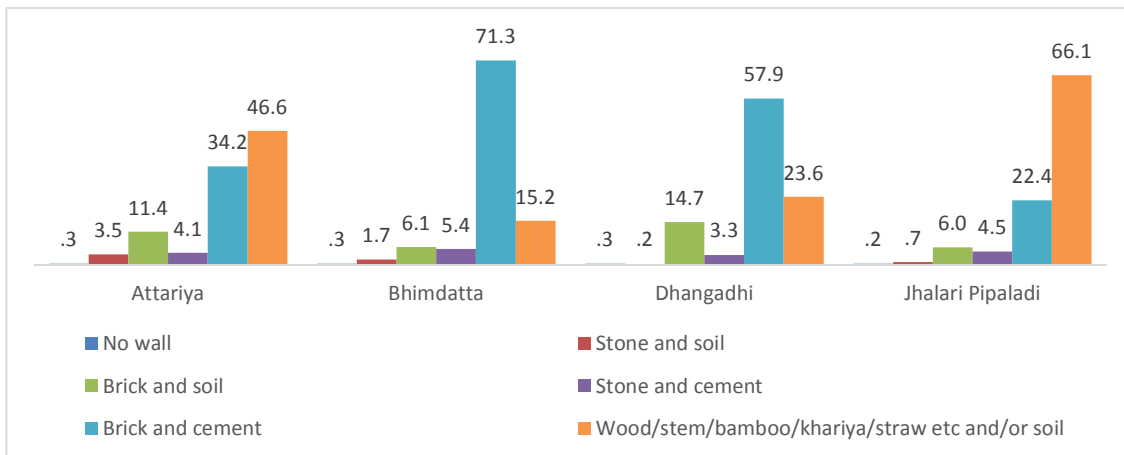
Source: Socio-economic Household Survey, April-May 2015

99. Majority of Brahman/Chhetri Hill had concrete roof, while Dalit Hill and Janajati Terai had tile/ khapta/chadar roof. About 67% of urban respondents had concrete roofs while only 40.9% rural respondents had concrete roofs. Higher percent of rural respondents (41%) had tile roof.

3.2.3 Type of wall of the house

100. In Bheemdatt and Dhangadhi higher percent of respondents had wall made of brick and cement, followed by wood/stem/bamboo wall, brick and soil, stone and cement. In Attariya and Jhalari Pipaladi higher percent have wood/stem/bamboo wall, followed by brick and cement, brick and soil, stone and cement and stone and soil. In all Municipalities, less than 1% respondents did not have a wall in their house.

Figure 3-11: Type of Wall of Respondents' House (%)



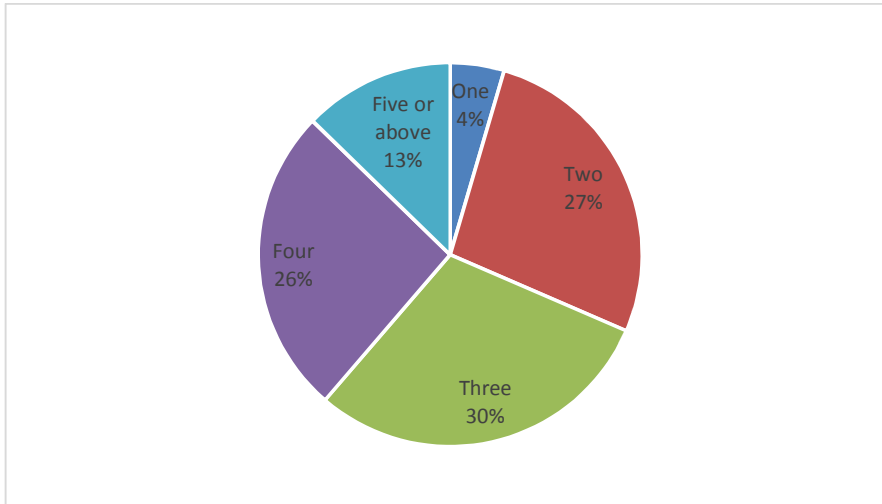
Source: Socio-economic Household Survey, April-May 2015

101. Majority of Brahman/Chhetri Hill had roof made of brick and cement, while Dalit Hill and Janajati Terai had wall made of wood/stem/bamboo. Higher percent of both urban respondents (73%) and rural respondents (43%) had wall made of brick and cement.

3.2.4 Number of Rooms

102. Out of total respondents, 30% of them had three rooms, 27% two rooms, 26% four rooms, 13% five or above rooms and 4% one room. In Dhangadhi higher percent of respondents had four rooms (28.14%) followed by three rooms (28.04%). Similarly, in Bheemdatt, higher percent had three rooms (31%), followed by four rooms (26%). In Attariya and Jhalari Pipaladi, higher percent have two rooms followed by three rooms.

Figure 3-12: Number of Rooms in Respondents' House



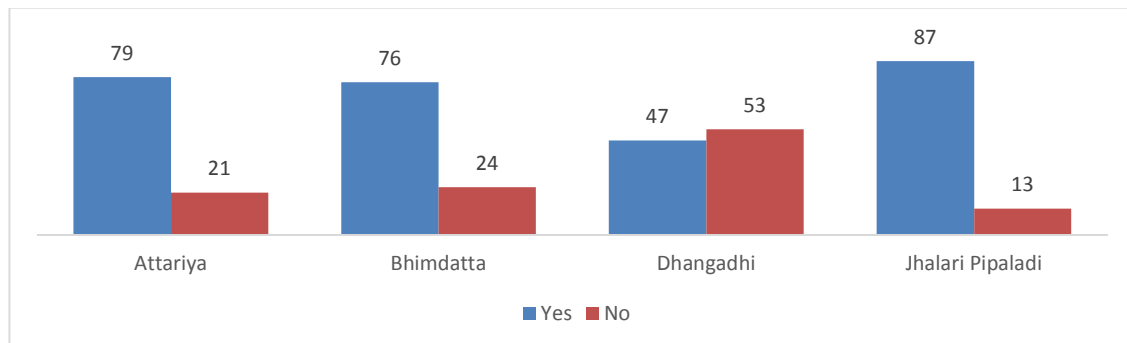
Source: Socio-economic Household Survey, April-May 2015

103. Majority of Brahman/Chhetri Hill respondents had three rooms, while Dalit Hill and Janajati Terai had two rooms. In rural areas while majority of the respondents had two rooms, majority of urban respondents had four rooms.

3.2.5 Availability and Location of Livestock Shed

104. In Attariya, Bheemdatt and Jhalari Pipaladi, more than 75% respondents had livestock shed while in Dhangadhi less than 50% had this. Majority of all caste/ethnic groups shared that they had livestock shed. More than 79% rural respondents said they had livestock shed. Of those who had a shed, more than 95% shared they had the shed separate from the house, only about 5% had it inside the house.

Figure 3-13: Availability of Livestock Shed (%)



Source: Socio-economic Household Survey, April-May 2015

3.2.6 Type of Toilet

105. In Attariya, Bheemdatt and Dhangadhi about 60% to 72% used water sealed toilet, less than 50% in Jhalari Pipaladi used the same, while about 49% used open space. About 1% in Dhangadhi and less than 1% in other Municipalities used public toilet. About 74% Brahman/Chhetri Hill, 55% Janajati Terai and 42% Dalit Hill used water sealed toilet. About 41% Dalit hill still used open space and none of them used flush toilet. While 62% rural respondents used water sealed toilet, 71% of the urban population used the same. Still 8% of urban respondents used open space.

Table 3-4: Type of Toilet (%)

Type of Toilet	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Flush toilet	0.73	2.61	11.41	1.00
Water sealed toilet	72.20	69.73	60.65	49.63
Pit latrine	10.77	9.19	10.27	8.98
Open space	16.16	18.28	16.44	40.15
Public toilet	0.15	0.19	1.24	0.25

Source: Socio-economic Household Survey, April-May 2015

3.2.7 Source of Energy

106. The main source of energy was fuel wood/jhinjha/karchi (used by 85% across the four municipalities), followed by LP Gas (41%) and bio gas (18%); only 1% were using electricity. 9% were using "Bhuse" stove and only around 0.5% were using kerosene. For all caste/ ethnic groups, fuel wood/jhinjha/karchi, bio-gas and LP Gas (Cooking gas) were the main sources of energy. Almost 80% Brahman/Chhetri used fuel wood, 53% LPG and 21% bio-gas. 2% used electricity. 95% Dalits used fuel wood, 21% LPG and only 5% bio-gas. No Dalit household used electricity for this purpose. 94% of Janajati used fuelwood, 22% LPG, 18% bio-gas and 13% bhuse stove. 1.4% used electricity. The highest source of energy in Attariya and Jhalari Pipaladi was fuel wood / jhinjha / karchi while it was bio-gas in Bheemdatt and Dhangadhi.

3.2.8 Source of Light

107. For more than 93% of respondents in all four Municipalities, the main source light was electricity. Less than 1% used solar and no one in Bheemdatt used bio gas.

Table 3-5: Source of Household Light (%)

Source	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Electrification	93.3	95.2	94.5	95.3
Kerosene	6.1	3.8	4.8	4.0
Bio gas	0.1	0.0	0.1	0.2
Solar	0.1	0.2	0.1	0.2
Others	0.3	0.9	0.6	0.2

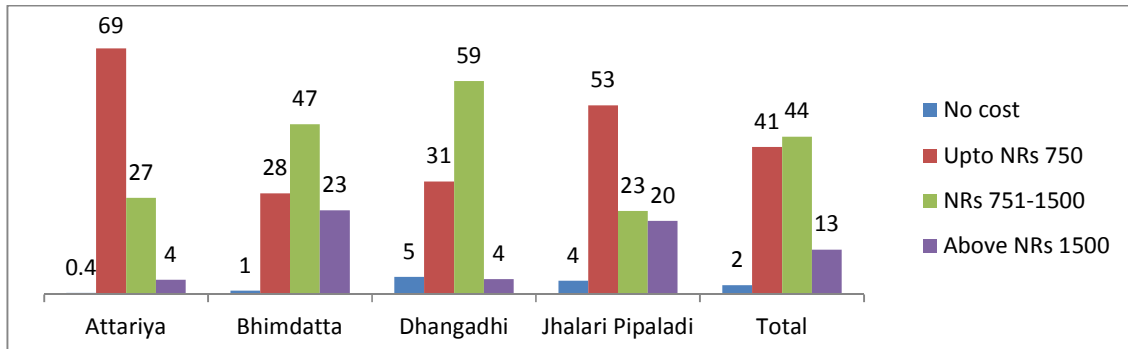
108. Among the caste/ethnic groups, while electricity remained the major source of light, none of the Dalit Hill and Janajati Terai respondents used bio-gas. More than 93% of both

urban and rural respondents used electricity as a major source of energy. None of the urban respondents used bio-gas or solar.

3.2.9 Cost of Household Cooking

109. Majority of the respondents in Attariya (69%) and Jhalari Pipaladi (53%) spent upto NRs. 750 per month (equivalent to upto half LPG cylinder) for cooking; while in Bheemdatt (48%) and Dhangadhi (59%) majority of them spent NRs. 751-1500 (equivalent to one LPG cylinder). Majority of Dalit and Janajati spent upto NRs. 750 and Brahman/Chhetri spent NRs. 751-1500. Majority of rural respondents spent upto NRs. 750 and urban population spent NRs. 751-1500. On the whole about 2.5% of the respondents shared that there was no direct cost involved in cooking.

Figure 3-14: Cost of Household Cooking (%)



3.2.10 Availability and Functioning of Street Lighting

110. More than 90% of respondents in Attariya, Bheemdatt and Jhalari Pipaladi shared that the street lights were not available. In Dhangadhi, 55% of the respondents shared that street light was available. Majority of respondents in Attariya, Bheemdatt and Dhangadhi said that the street-lights worked most of the time or all the time, while in Jhalari Pipaladi majority shared that the street lights rarely or ever worked. About 42% of the urban respondents shared that there was availability of street light (which worked most or all the time and 90% of rural population shared they did not have street lights (which were available rarely or ever worked).

3.2.11 Electricity

111. Out of the total respondents, about 94% were directly connected to electricity, 5% were not connected and 1% were connected through neighbor or relatives' house. Out of those who did not have electricity connection, 81% shared that they had the electricity pole within 50 meters. On the whole, the average availability of electricity per day was 17.85 hours, with about 99% respondents facing power cuts for more than three times a week. Among the four Municipalities Jhalari Pipaladi (95%) had highest percent of respondents directly connected to electricity followed by Dhangadhi (94.4%), Bheemdatt (94.2%) and Attariya (93%). About 7% in Attariya, 5.5% in Dhangadhi, 4.8% in Bheemdatt and 4.5% in Jhalari Pipaladi were not connected to electricity. In Jhalari Pipaladi 100% respondents shared they had power cuts for more than three times a week.

Table 3-6: Electricity Connectivity in Municipality (%)

Status	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Yes (Connected directly)	93.0	94.2	94.4	95.3
Not connected	6.6	4.8	5.4	4.5
Yes (Connected from neighbour/relative house)	0.4	1.0	0.2	0.2

112. Among the caste/ ethnic groups, Brahman/Chhetri (98%) had highest connectivity, followed by Janajati (90%) and Dalit (83%). About 16% Dalit, 9% Janajati and 2% Brahman/Chhetri were not connected to the grid. While 97% of urban respondents and 93% or rural respondents were connected to electricity directly, 7% rural respondents and 3% urban respondents were not connected.

113. A higher percent of respondents shared they were not connected to electricity because they could not afford to pay for new connection (71%).

Table 3-7: Reason for no Electricity Connection

Reasons	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
In waiting list for connections	6		3	11
Cannot afford to pay for a new connection	69	82	64	63
Cannot afford to pay monthly bills for electricity	2	3	8	21
Power line is too far	21	3	10	5
No land ownership	2	12	12	
Older house			2	

114. Other reasons included power line was too far (10%), there was no land ownership (8%), could not afford to pay monthly bills for electricity (6%), in queue/waiting list for getting the connection (4%) and old house condition (1%). 77% Dalits stated they could not afford to pay for a new connection, 72% Janajati group said so and 55% Brahman/Chhetri respondents shared so; 72% in rural areas and 67% in urban areas could not afford to pay for a new connection.

115. About 92% of the respondents paid the bill to Nepal Electricity Authority, with about 5% to cooperatives/organizations/groups/service providers and rest to other places.

Table 3-8: Location of Electricity Bill Payment (%)

Place	%
Pay to Nepal Electricity Authority (NEA)	92.3
Cooperative/Organizations/Groups/Service Providers	4.5
Community pays one person to take everyone's payment	1.2
Provide it to neighbour or relatives	1.5
Pay to landlord (separate from rent)	0.3
NEA staff collects at doorstep	0.2

116. About 61% of the respondents paid electricity tariff of NRs. 100 – 499, 22% paid NRs 500 to 999; 9% paid less than NRs. 100 and 8% paid NRs. 1000 and above.

Table 3-9: Average Household Electricity Tariff per Month (%)

Tariff	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
NRs 100 to 499	70	57	55	69
NRS 500 to 999	16	24	26	14
Less than NRs 100	10	6	10	13
NRs 1000 and above	3	13	9	4

3.2.12 Land Ownership

117. About 93% of respondents in Bheemdatt, 79% in Dhangadhi, 57% in Jhalari Pipaladi and 56% in Attariya owned land. Among the caste/ ethnic groups, land ownership was highest amongst Brahman/Chhetri respondents (83%), followed by Janajati (68%) and Dalit (60%). Among urban respondents 94% owned land, and only 68% of rural respondents owned land.

118. The major reason of own land in Attariya (47%), Bheemdatt (70%) and Jhalari Pipaladi (65%) was ancestral property, followed by land bought from own savings, while in Dhangadhi, the major source was land bought from own savings (61%) followed by ancestral property. While majority of Brahman/Chhetri (51%) bought land from own savings, Dalit (66%) and Janajati Terai (70%) have land because they received ancestral property. Similarly, while 57% of urban respondents bought from own saving, 63% of rural respondents own ancestral land. Majority of the land was owned by men within and outside the municipal area. Only 14% and 11% women owned land within and outside the municipal area respectively and only 1% women and men owned land jointly within the municipalities.

Table 3-10: Land Ownership WITHIN Municipal Area (sq.m.)

Gender	Residential plot (Ghaderi)	Agricultural land (irrigated)	Agricultural land (not irrigated)	Total
Women's name	206,694.67	996,029.35	22,772.87	1,225,496.89
Men's name	1045999.29	6,039,151.68	269,193.92	7354344.89
Both	6,061.48	94,816.40		100,877.88
Total	1,258,755.44	7,129,997.43	291,966.79	8,680,719.66

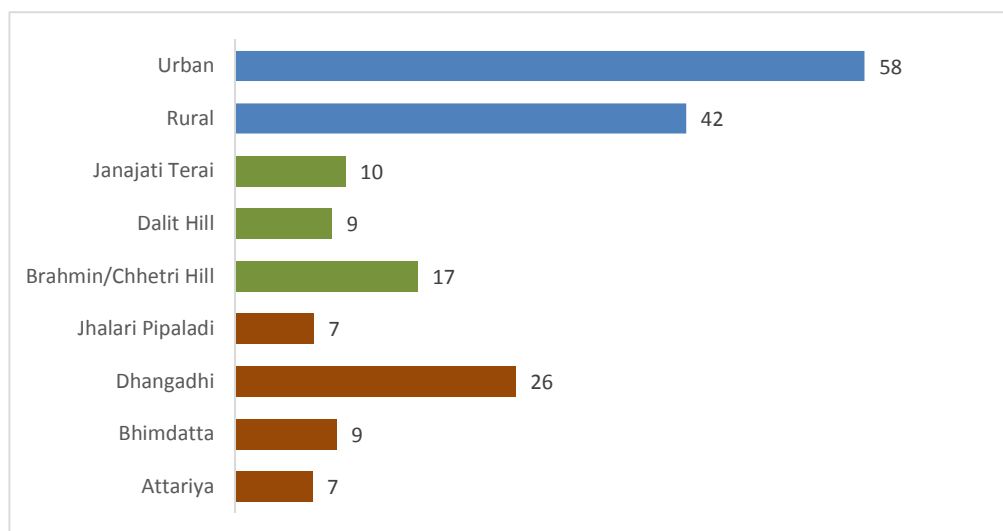
Table 3-11: Land Ownership OUTSIDE Municipal Area (sq.m.)

Gender	Residential plot (Ghaderi)	Agricultural land (irrigated)	Agricultural land (not irrigated)	Total
Women's name	6,298.52	159,494.73	2,539.73	168,332.97
Men's name	45,218.33	1,202,893.63	39,462.80	1,287,574.76
Both	406.36			406.36
Total	51,923.20	1,362,388.36	42,002.52	1,456,314.08

119. Overall, 83% respondents shared that there was no change in land ownership over the last 10 years, 14% said the change in landownership had increased and 3% shared there was a decrease. The highest increase in land ownership was seen in Dhangadhi municipality; among Brahman/Chhetri hill groups and among urban respondents. The main

reason for change in Attariya and Dhangadhi was to take advantage of tax subsidies and in Bheemdatt and Jhalari Pipaldi due to purchase/sale of land. Among Brahman/Chhetri and Janajati respondents the major reason included purchase/sale of land followed by tax incentives, while among Dalit respondents, tax incentives followed by purchase/ sale of land were the key reasons.

Figure 3-15: Increased Change in Ownership (%)



3.3 Municipal and Other Services

3.3.1 Water Supply

120. The main source of water typically used over the past year was the borehole or well (private, owned by the household (Nalka, tubewell, handpump) as stated by 93% of the households. Private connection to piped water in house was used by 13%. Amongst municipalities, private connection to piped water was the highest in Dhangadhi (20%). Bhimdatta had 13% HH while Attariya had about 8%. In Jhalari Pipaladi it was minimal. 18.5% Brahman/Chhetris, only 5% Dalits and 3% Janajtis had private connection to piped water in their house. The primary source of water in the municipalities for the past year is given in **Table 3-12**.

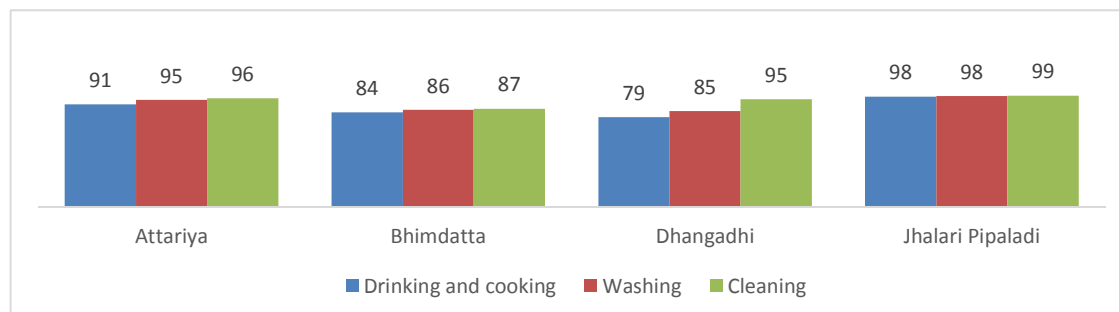
Table 3-12: Primary Source of Household Water over Past Year (%)

Source of water	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Borehole or well –private, owned by your household (Nalka, tubewell, handpump)	91.1	84.3	79.8	97.5
Private connection to piped water in house	8.4	13.0	19.7	1.7
Neighbors	0.0	1.5	0.0	0.7
Borehole or well – shared (with a group of households or settlement)	0.1	1.3	0.6	0.0
Other natural sources outside house (lake, river, spring)	0.3	0.0	0.0	0.0

Source: Socio-economic Household Survey, April-May 2015

121. In all the municipalities, among the caste/ethnic groups and urban and rural respondents the use of private borehole/well water was the primary source for cleaning. It was also the primary source for washing and drinking and cooking purposes.

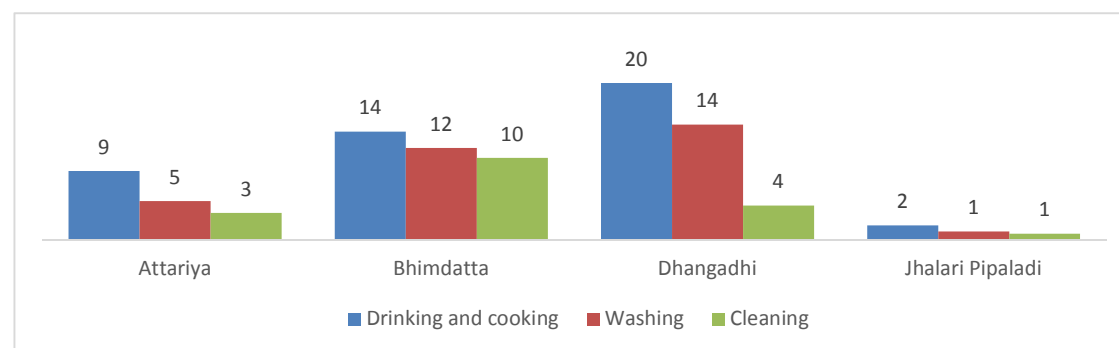
Figure 3-16 Use of Private Borehole / Well Water for Various Purposes (%)



Source: Socio-economic Household Survey, April-May 2015

122. The use of private connection to piped water (for the 13% who had access to piped water in the 4 municipalities) was used most for drinking and cooking, followed by washing. Among the four municipalities, respondents of Jhalari Pipaladi, among the caste/ ethnic group the Janajati Terai and rural respondents had the least access to private piped water connection and Dhangadhi, Brahman/Chhetri, urban respondents had the highest.

Figure 3-17 Use of Private Piped Water Connection for Different Purposes (%)



Source: Socio-economic Household Survey, April-May 2015

123. About 89% of respondents said that they had water availability 24 hours a day and 9% stated they had adequate water but that the supply was for certain hours only. Among the municipalities, almost 100% respondents in Jhalari Pipaladi, 93% in Attariya, 88% in Bheemdatt and 84% in Dhangadhi stated that they had 24 hours water availability.

124. The overall average cost of water was NRs. 193.64 and the average cost in each municipality is given in below (Table 3-13)

Table 3-13: Average Cost of Household Piped Water

Municipality	NRs
Attariya	183.98
Bheemdatt	182.03
Dhangadhi	275.90
Jhalari Pipaladi	132.63

125. In Bheemdatt water was mostly collected by women, while in other municipalities it was by children and other family members. Among the caste/ ethnic groups and both in urban and rural areas, water was mostly collected by children, followed by women. Men hardly did this household job.

126. Majority of the respondents shared that the water was either good or average. A higher percent of respondents in Attariya (47%) and Jhalari Pipaladi (53%) shared that the water quality was average and in Bheemdatt (67%) and Dhangadhi (42%) shared it was good. About 7% in Jhalari Pipaladi, 4% in Dhangadhi, 3% in Bheemdatt and less than 1% in Attariya shared that the water was contaminated. Similarly, a higher percent of Brahman/Chhetri respondents shared that the water quality was good, and a higher percent of Dalit and Janajati shared that the water quality was average. Among the caste/ethnic groups, higher percent of Janajati (5%) groups were exposed to contaminated water, followed by Dalits (4%) and Brahman/Chhetris (2%).

127. About 97% of the respondents shared that they do not treat the supply water. Out of the 3% who do water treatment, the most common method was boiling and filtering (35%), followed by letting it stand and settle (28%), using water filter (27%), adding bleach/chlorine (7%), and sieving through a cloth (3%).

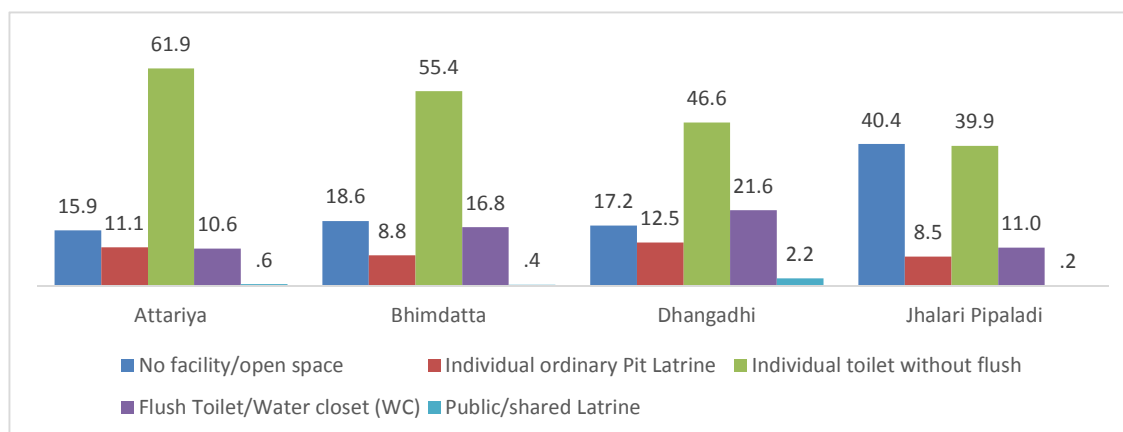
FGD responses

128. Regarding the status of drinking water, 25% focus group discussion (FGD) respondents expressed that there was no pure water, while 24% shared handpumps/tubewells were used for all purposes and 21% shared that there was no supply from the municipality. Among the municipalities, majority of the FGD participants in Attariya (26% each) expressed unavailability of pure water, handpumps/ tubewells being used for all purposes and about lack of supply of drinking water from the municipality. In Bheemdatt, 25% shared there was no pure water and 20% shared there was no supply from the municipality. In Dhangadhi, 28% shared that hand pumps/tubewells were used for all purposes and 22% each shared there was no pure water and no supply from municipality. In JhalariPipaladai, 27% each shared that there was no pure water and that hand pumps/tubewells were used for all purposes, and 20% shared they lacked financial resources to install tap water.

3.3.2 Sanitation

129. Out of the total survey respondents, 80% shared they had access to toilet. The different kinds of toilets used, included individual toilet without flush (52%), flush toilet/WC (16%), individual ordinary pit latrine (10%), and public latrine (1%). 53% of those using public latrine, said that groups of households were responsible for repairing while 47% stated that the landlord was responsible. Similarly, 50% shared that the landlord was responsible for cleaning, 47% said the group of HH was and 3% said the individual respondent was responsible.

130. Overall, 20% of the respondents shared that they did not have access to toilet. A very high percent (40%) in Jhalari Pipaladi did not have access to toilet. In Bheemdatt 19%, in Dhangadhi 17% and in Attariya 16% did not have access to this facility.

Figure 3-18 Type of Sanitation (%)

131. While majority of Brahman/Chhetri (59%) and Janajati (47%) used individual toilet without flush, 42% Dalits shared they did not have access to toilet. 21% Brahman/Chhetris had access to flush toilet while only 8% Dalits and Janajatis had this facility.

Table 3-14: Type of Sanitation used by different Caste/ Ethnic Groups

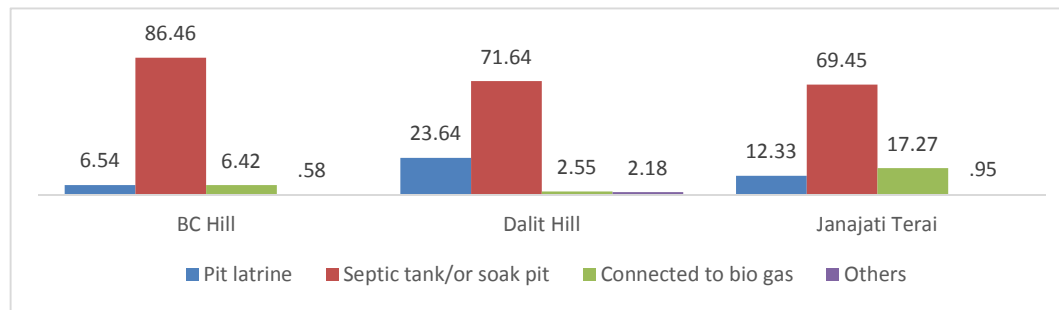
Type	BC Hill	Dalit Hill	Janajati Terai
Individual toilet without flush	58.5	33.4	46.5
No facility/open space	11.7	41.5	29.5
Individual ordinary Pit Latrine	8.4	16.2	12.3
Flush Toilet/Water closet (WC)	21.4	7.7	8.6
Public/shared Latrine	0.1	1.3	3.2

132. 81% of the respondents who had access to toilet, used septic tank/soak pit for disposal of excreta, 10% used pit latrine, 8% connected their toilets to bio gas and 1% used other methods of disposal.

Table 3-15: Methods of Toilet Waste Disposal (%)

Type	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Septic tank/or soak pit	73.2	87.9	86.3	59.4
Connected to bio gas	13.7	1.9	5.2	28.9
Pit latrine	11.8	9.4	7.9	11.3
Others	1.4	.8	.6	.4

133. The highest use of pit latrine was among Dalits, septic tank was among Brahman/Chhetris, and connection to bio-gas was among Janajatis. Pit latrine and connection to bio gas was used more in the rural areas and septic tank more in urban areas.

Figure 3-19 Type of Toilet Waste Disposal among Caste/ Ethnic Groups (%)

134. About 94% dig a new pit when the pit latrine gets full, the rest had it emptied or used other methods or let it overflow.

135. 58% respondents stated that their soak pits/septic tanks had not become full till now, (above 80% in Jhalari Pipaldi, 66% in Bheemdatt and around 50% in the other municipalities said so). It was emptied manually in about 35% households (50% in Attariya and only 14% in Jhalari Pipaladi, around 32/33% in the other two municipalities).

136. 60% of Brahman/Chhetri, 56% of Dalits and 50% of Janajtis households had not had septic tanks/soak pits full till now. 41% Dalits, 47% Janajtis and 31 Brahman/Chhetris had got the soak pits/septic tanks cleaned manually. Urban and rural areas also followed the same pattern. A high percent of households had not yet had full soak pits/septic tanks (60% in rural areas and 55% in urban areas) while 35% (almost 40% in rural areas and 28% in urban areas) had them cleaned manually. 16% households also used trucks in urban areas.

137. The cleaning of such pits was done in two or more years by 25% of the households. 10% emptied it every year and about 5% in less than a year.

138. About 47% of the respondents said that they drained kitchen/bathroom water into the garden, 20% into the drain, 17% in pits, 7% in the field, 6% on the road or pavement and remaining either in pit latrine, river or others.

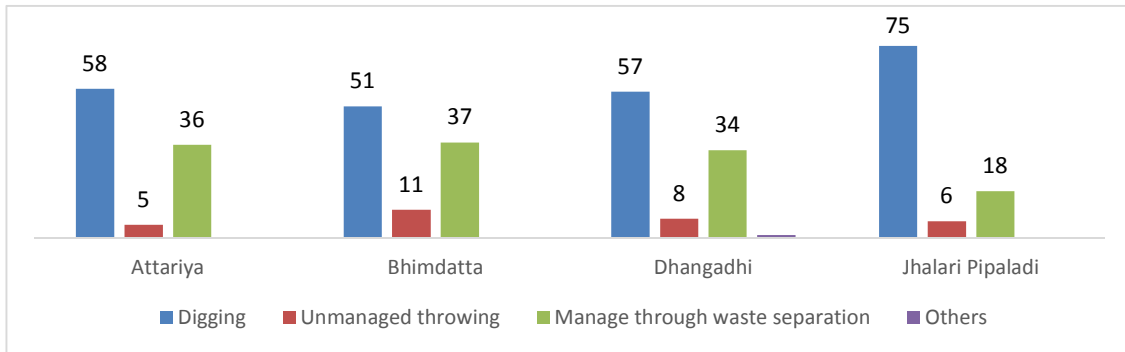
FGD responses

139. In Bheemdatt majority of the FGD participants stated that all/most households had toilets. In Attariya and Dhangadhi about half stated all/most have toilet and another half said all/most have no toilet. In Jhalari Pipaladi while about 50% of the responses stated that people used open space/ river bank/ jungle, another 50% said there were toilets connected to septic tanks.

3.3.3 Solid Waste Management

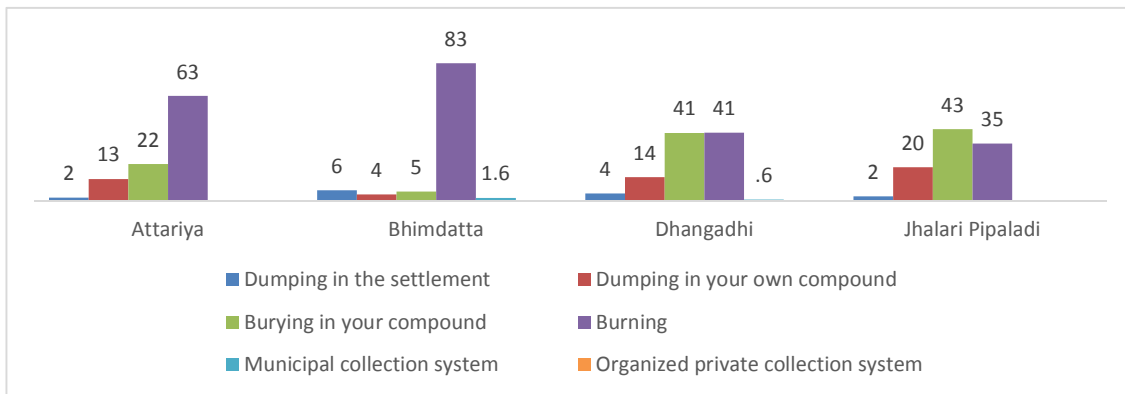
140. 58% respondent households used digging to manage solid waste and 34% waste separation, 8% did unmanaged throwing. Similar pattern was seen across municipalities.

Figure 3-20 Household Methods of Managing Solid Waste



141. Among the caste/ethnic groups, the highest percent of respondent using digging was Janajati, Brahman/Chhetri did waste separation and Dalits threw waste without managing it.

Figure 3-21 Household Methods of Waste Disposal



142. For disposing waste, burning was the most common method in Attariya, Bheemdatt and Dhangadhi. In Jhalari Pipaladi, the most common method was burying the waste in own compound. Organized private collection was hardly available in any of the municipalities and only respondents of Bheemdatt (1.6%) and Dhangadhi (0.6%) spoke about the use of the municipal system for collection of solid waste.

FGD responses

143. The most common methods for sewerage management in the four municipalities were burning and dumping in the settlement. Most households in Dhangadhi buried the waste in their own compound. This method was also followed by most of the households. Municipal collection system was reported by only one FGD participant in Dhangadhi.

144. Majority of the FGD participants said that there was no sewerage and/or drainage, so they let it onto the road or pavement. Only in Bheemdatt, municipality has been requested to manage the sewerage.

3.3.4 Surface Water Drainage

145. About 52% of respondents of Bheemdatt, 47% in Dhangadhi, 36% in Attariya and 26% in Jhalari Pipaladi; 46% Brahman/Chhetri, 40% Janajati and 38% Dalit respondents; and 42% rural and 47% urban respondents stated that there were drains outside their homes for the collection and drainage of rainwater.

3.3.5 Flooding and Water Logging

146. The respondents in Bheemdatt suffered the most from flooding (32% respondents stated so). In Dhangadhi it was 16%, in Jhalari Pipaladi, 13% and in Attariya 8% respondent households which had suffered from flooding. 2% respondents in Attariya, Bheemdatt and Dhangadhi and 4% in Jhalari Pipaladi shared that their households had flooded more than three times in the last rainy season.

Table 3-16: Number of Households Flooded in Last Rainy Season (%)

Response	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
No	92	68	84	87
Once	3	19	9	3
Two-three times	3	11	5	6
More than three times	2	2	2	4

147. About 27% of Dalit, 18% of Brahman/Chhetri and 16% of Janajati respondents stated they suffered some flooding. Surprisingly, more respondents in urban (23.5%) locations suffered flooding than rural respondents (17%). Water logging on the road near houses was more common in Dhangadhi (49%), followed by Jhalari Pipaladi (43%) and Attariya (28%). Bheemdatt had the least at 15%. 67% did not suffer water logging near their houses. 60% respondents shared that there was water logging near their houses during the rainy season for less than 10 days, 30% had experienced it for more than 10 days and 10% for about 10 days. Almost 40% of Janajatis had experienced water logging for more than 10 days. Also 70% of the respondents in rural areas had experienced water logging for more than 10 days while in urban areas it was only 30%.

Table 3-17: Water Logging per Year (%)

Response	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
Less than 10 days	64.77	75.00	56.93	50.57
10 days	11.92	2.50	9.11	20.69
More than 10 days	23.32	22.50	33.97	28.74

148. Majority (31.19%) of the respondents stated that the maximum water logging during flooding was less than 25cm, followed by 25-49cm (31.02%), 50-99 cm (30%) and 100 cm or more (8%).

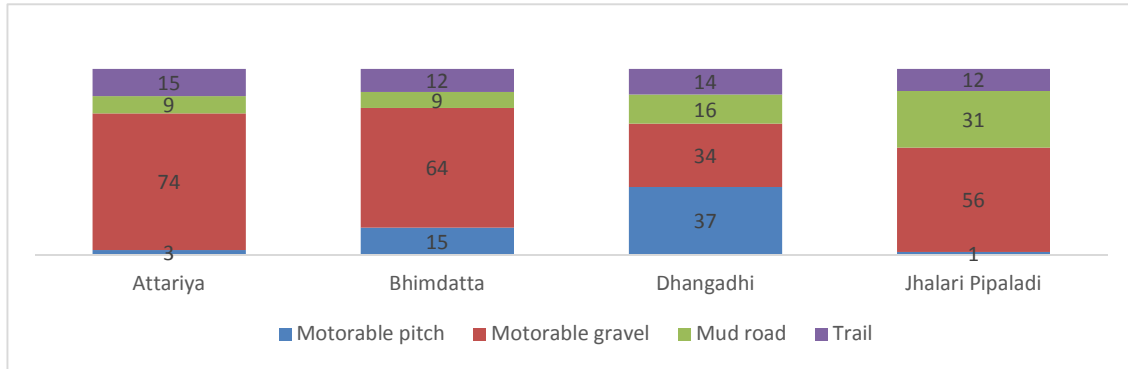
3.3.6 Roads and Access

149. 55% households had access to motorable gravel roads, 18% to motorable pitch road, 14% mud road and 13% to trails in the four municipalities.

150. 79% respondents of Bheemdatt had access to motorable road (including both pitch and gravel), followed by Attariya (76%), Dhangadhi (71%), and Jhalari Pipaladi (57%). Highest percent of respondents with access to motorable pitch was in Dhangadhi (37%),

with lowest in Attariya (3%). Similarly, motorable gravel was highest in Attariya (75%) with lowest in Dhangadhi (34%).

Figure 3-22: Municipal Roads Construction



151. Among the caste/ethnic groups, 77% Brahman/Chhetri and 67% Dalit and Janajati respondents had access to motorable road (pitch and gravel). In the urban area 42% respondents had access to motorable pitch and 39% to motorable gravel, and in rural area 63% had access to motorable gravel and 6% to motorable pitch.

152. Majority of the respondents had access to gravel road from their households in Attariya, Bheemdatt and Jhalari Pipaladi, and in Dhangadhi its black-topped roads. In rural area, it's mostly gravel and in urban areas it's black-topped.

153. Majority (70% to 85%) of the respondents in Attariya, Bheemdatt and Dhangadhi were happy with the condition of the road. In Jhalari Pipaladi, 57% said roads were in good condition but 43% stated that they were in poor condition. In urban areas, while 90% said roads were in good condition, in rural areas only 72% said they were in good condition, rest said they were poorly maintained.

154. The road was stated as usable most of the time/all the time by the respondents during the rainy season. But in Jhalari Pipaladi, 11% had to experience unusable roads during the rainy season. There was a huge difference in the responses from urban or rural areas. 85% in rural areas and 15% in urban areas experienced unusable roads during the rainy season.

155. More than half of the respondents in Attariya, Bheemdatt and Dhangadhi said that the condition of the road to public school was good, but in Jhalari Pipaladi, only 46% said so. About 43% in Bheemdatt, 34% in Jhalari Pipaladi, 27% in Attariya and 19% in Dhangadhi said the condition of the road was poor. In Jhalari Pipaladi 20% and in Dhangadhi 18% said that the road was mostly logged with water. About 38% of rural respondents and 16% of urban respondents shared that the road condition was poor.

156. More than half of the respondents in Attariya, Bheemdatt and Dhangadhi said that the condition of the road to public health services was good, but in Jhalari Pipaladi, only 42% said so. About 43.5% in Bheemdatt, 42% in Jhalari Pipaladi, 30% in Attariya and 19% in Dhangadhi said the condition of the road was poor. In Jhalari Pipaladi 34% and in Dhangadhi 17% said that the road was mostly logged with water. About 40% of rural respondents and 16% of urban respondents shared that the condition was poor.

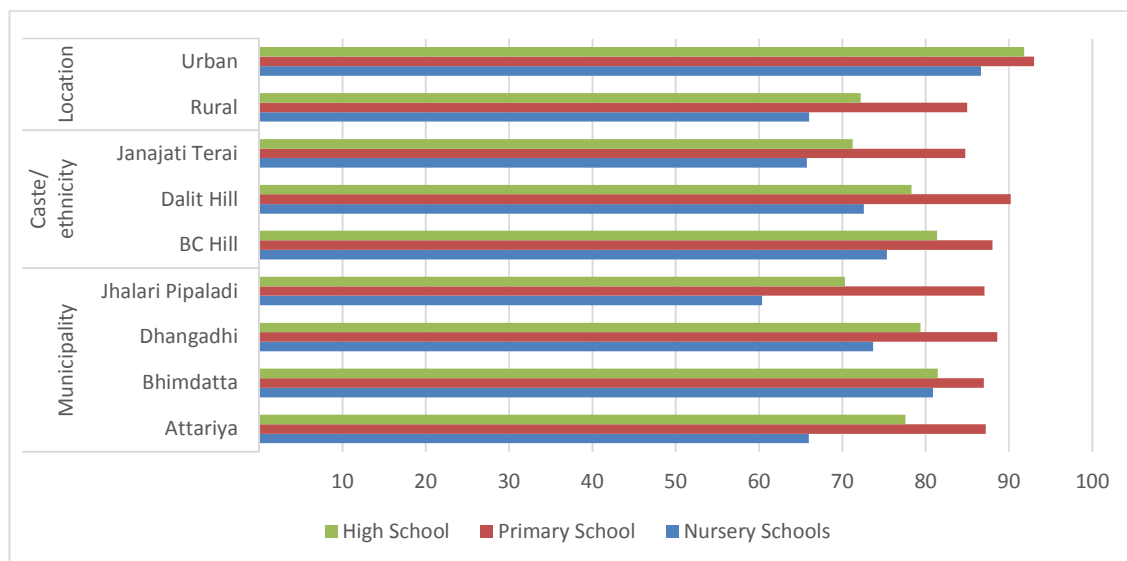
FGD responses

157. Except for Jhalari Pipaladi, in other three municipalities, majority of the FGD participants expressed that the road to their houses was muddy. In Jhalari Pipaladi majority of them shared that the road was in a bad condition but another group also mentioned that there was a gravel road.

3.3.7 Services Available and Used

158. In terms of educational services, highest percent of respondents said they had access to primary school within 20 minutes of walk, followed by high school and nursery school. Bheemdatt had highest percent of respondents among the municipalities who could reach nursery schools as well as high school in 20 minutes. Similarly, Dhangadhi had the highest percent of respondents who could reach primary school in 20 minutes. Among caste/ ethnic groups, Brahman/Chhetris had the highest percent of respondents who could reach nursery schools and high schools. A high percent of Dalits could also reach primary schools within 20 minutes. Janajatis had the lowest percent of respondents among the caste/ethnic groups who could reach the educational services within 30 minutes. Urban respondents were better positioned than rural respondents.

Figure 3-23 Educational Services Available within a 20 Minute Walk



159. Compared to the percent of respondents who said they had access to education services, less than 50% said they used these nursery schools and more than 50% said they used primary and high school services.

160. Regarding other services, more than 60% had access to health clinic, 15% to hospital, 92% to food shop, 52% to shops for other goods, 9% to parks, and 43% to transportation to city center. Comparatively, Dhangadhi, Brahman/Chhetri and urban respondents had better access to health clinic, hospital, shops for other goods and parks.

Table 3-18: Services Available within 20 Minutes Walking

Services	Municipality				Caste/ ethnicity			Location	
	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi	BC Hill	Dalit Hill	Janajati Terai	Rural	Urban
Health Clinic	41	61	78	46	62	61	55	49	85
Hospital	18	13	19	11	19	11	11	10	28
Food shop or kiosk	80	98	97	87	93	93	90	89	99
Shops for other goods	43	45	66	50	56	45	47	39	79
Parks	0.9	8.2	17.6	0.5	10	7	6	2	23
Transportation in city center	35	25	77	15	43	39	46	28	75

161. While 60% had access to health clinic, about 68% used the service. Higher percent of Dhangadhi, Janajati and urban respondents used the health clinic services. While 16% said they had access, 51% shared that they used hospital services. Higher percent of Attariya, Janajati and rural respondents used hospital services. Similarly, 92% had access and 98% used the food shop services. Higher percent of Jhalari Pipaladi, Brahman/Chhetri and urban respondents used the services. 43% had access and 78% used the transportation services.

FGD responses

162. Across the municipalities majority of the FGD participants shared that both men and women of different social groups had access to limited municipal services. In Bheemdatt and Dhangadhi, majority stated that roads were frequently used by men and that it was less used by women.

3.3.8 Environmental Issues

Flooding after rains

163. Overall 45% households stated that flooding after rains was not a problem. But in Jhalari Pipaladi 41% households experienced severe flooding after heavy rains. In Dhangadhi almost 40% experienced it as a mild problem. Almost 60% Dalits experienced this as a mild or a severe problem. Above 50% Janajati Terai and Brahman/Chhetri groups too experienced this.

Landslides

164. Landslides were not considered an issue in three municipalities but in Jhalari Pipaladi, almost 40% stated that this was a mild or severe problem.

Location near a Garbage Dump

165. In Dhangadhi location near a garbage dump was a severe problem for 32% respondents. It was a mild problem for 23% in Bheemdatt. 24% Brahman/Chhetri, 22% Dalits and 18% Janajatis experienced this as a severe or mild problem. Almost 40% experienced it in urban areas while in rural areas it was less than 15% who suffered this problem.

Location near Polluting Factory

166. Being close to a polluting factory was considered a mild problem by 16% respondents in Dhangadhi and by 6% in Bheemdatt. It was not a problem in the other two municipalities. Again it was an urban issue and Brahman/Chhetri group affected more as a higher percentage lived in urban areas.

3.3.9 Condition of Public Schools

167. All the respondents in Bheemdatt said that the condition of room space in the public school is sufficient, 100% of Dhangadhi respondents said it was manageable, while 100% of Jhalari Pipaladi respondents said it was insufficient. While 70% respondents in Attariya said it was manageable, 27% said it was sufficient and 3% insufficient. Majority of caste/ ethnic groups and both rural and urban respondents said it was manageable and sufficient. Only very few said it was insufficient.

168. Majority (90%) of the respondents said that the condition of school building in the public school is good, with less than 1% stating that it was poor.

169. Majority of respondents in Attariya and Bheemdatt said that the condition of furniture in public school was adequate, while majority in Dhangadhi and Jhalari Pipaladi said it was somewhat adequate.

170. About 80% of the respondents shared that the condition of playground in public school was good. Condition of play ground was considered poor by 17% in Dhangadhi and 13% in Jhalari Pipaladi. About 93% said that there was a separate toilet for girl children in the school. 12% in Jhalari Pipaladi and 10% in Dhangadhi stated that there were no separate toilets for girls in schools. Highest affected were Janajati groups and rural areas.

3.3.10 Maternity Services

171. Overall 81% of the respondents shared that there were provisions for privacy for women in the local health facility. Almost 30% in Dhangadhi, 20% in Jhalari Pipaladi and 14% in Bheemdatt stated that there were no such provisions. In Attariya it was the least (only 8%). About 25% of Janajati, 18% of Dalits and 17% of Brahman/Chhetri respondents stated that there was no provision for privacy of women.

172. In Dhangadhi while 91% respondents shared that they took less than one hour to reach the nearest birthing center, about 75% of Attariya and Bheemdatt respondents and 68.5% of Jhalari Pipaladi respondents expressed the same. Higher percent of Janajati, followed by Brahman/Chhetri and then Dalit respondents shared the same. While 97% of urban respondents said they take less than an hour, only 71% of rural respondents said so.

173. Majority of the respondents (Attariya-57%, Bheemdatt-57%, Dhangadhi-55%, Jhalari Pipaladi-39%), said that the expenses of the birthing centre was affordable. Less than 10% said it was very expensive.

3.3.11 Disasters

Floods

174. Majority of the respondents in Jhalari Pipaladi shared that the occurrence of flood was most frequent, majority in Dhangadhi shared it was less frequent and in Attariya and Bheemdatt majority said flood had not occurred.

Earthquakes

175. While more than 90% in Attariya, Bheemdatt and Dhangadhi shared it had not occurred, about 80% in Jhalari Pipaladi shared it had not occurred. Similarly, more than 95% in Attariya, Bheemdatt and Dhangadhi shared landslides had not occurred but only 60% in Jhalari Pipaladi said so, with 27% said it was less frequent and remaining said it was most frequent. More than 90% shared famine had not occurred.

176. More than 90% respondents in Attariya, Bheemdatt and Jhalari Pipaladi said there was no response at all from municipalities in the event of a disaster. 66% of Dhangadhi respondents said so while 33% stated that there was a good response from the municipality.

3.4 Infrastructure Priorities

3.4.1 Physical and Social Infrastructure Priorities

177. Majority of the respondents in Attariya, Bheemdatt and Jhalari Pipaladi identified road has the highest physical infrastructure priority, while in Dhangadhi it was water supply (though in FGDs the priorities defined were slightly different - see **Table 3-19**).

Table 3-19: Physical Infrastructure Priorities (%)

Service	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi	Total
Road	86.17	73.69	15.11	87.78	58.76
Water supply	9.75	15.57	80.23	9.73	35.00
Street Lights	2.77	6.67	1.90	.25	3.43
Storm water Drainage	1.16	1.93	1.81	1.50	1.67
Solid waste management	0.00	1.35	0.48	0.00	.60
Sanitation	0.15	0.10	0.38	0.75	.28
Public Transport Service (Intra City)	0.00	0.68	0.10	0.00	0.25
Total	100.00	100.00	100.00	100.00	100.00

178. Selection of different social groups followed the same pattern with roads and water supply being the top priorities. A higher percent of Janajati Terai groups (45%) identified water supply as a second priority. Women and men too have identified roads and water supply as priorities with not much difference between their choices.

179. In rural areas 71% respondents identified roads as a first priority while only 23% in urban areas did so. 58% urban respondents identified water supply as the first priority.

Table 3-20: Physical Infrastructure Priorities by Location (%)

Service	Rural	Urban	Total
Road	71.24	32.59	58.76
Water supply	23.83	58.44	35.00

180. A market center was identified as key priority across municipalities (though highest response was in Dhangadhi and Attariya) followed by birthing center. Agriculture collection centres were the third choice.

Table 3-21: Social Infrastructure Priorities (%)

Service	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi	Total
Market centre (with different provisions)	66.52	54.26	70.63	54.36	62.35
Birthing centre	28.38	28.82	17.68	32.17	25.46
Agriculture products collection centres	3.64	11.12	7.41	8.98	8.00
All municipal services being provided in wards	1.02	3.77	1.90	1.75	2.30
Children's play ground	0.00	1.64	1.71	2.00	1.35
Slum/squatter management	0.44	0.19	0.29	0.50	0.32
Child care	0.00	0.19	0.38	0.25	0.22
Total	100.00	100.00	100.00	100.00	100.00

FGD responses

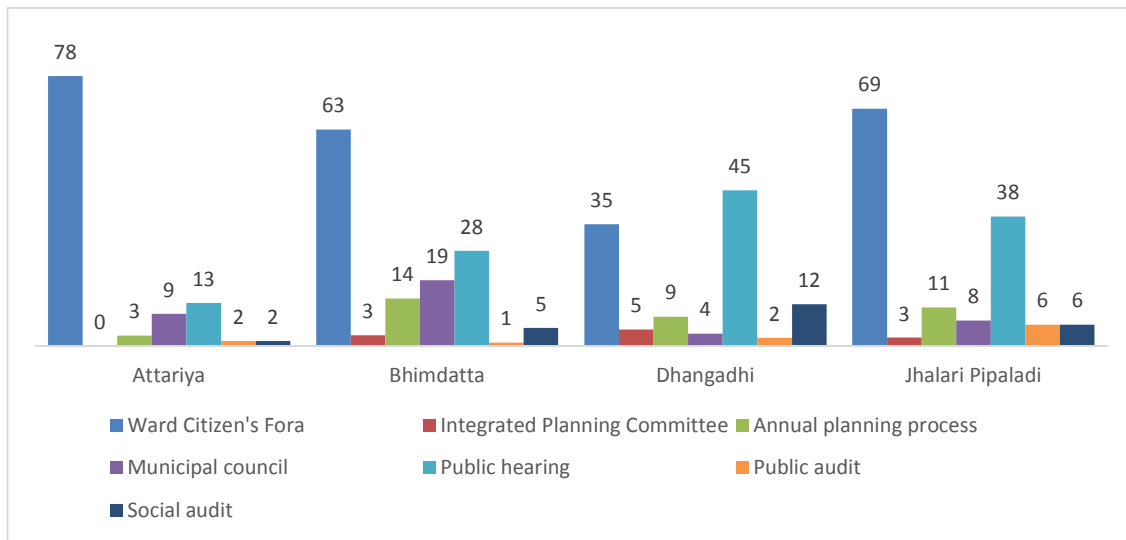
181. In Attariya, the top three infrastructure priorities included drinking water, road, and toilet and river control. In Bheemdatt it was drinking water, sewerage, and toilet. In Dhangadhi it was road, sewerage and drinking water. In Jhalari Pipaladi it was drinking water, toilet and sewerage and river control.

3.5 Capacity Building and Empowerment**3.5.1 Participation in Municipal Process**

182. Only 10% of the respondents said that they participate in the municipal processes. In Jhalari Pipaladi, 20% said that they had previously participated (since Jhalari Pipaladi had recently become a municipality). In the rest of the municipality the percent of respondents participating in municipal processes was less than 10%. Similarly, 11% Brahman/Chhetri, 8% each Dalit and Janajati respondents shared they had participated in municipal processes. It is interesting to note that about 12% rural respondents participated in municipal processes while the participation of urban respondents was only 7%.

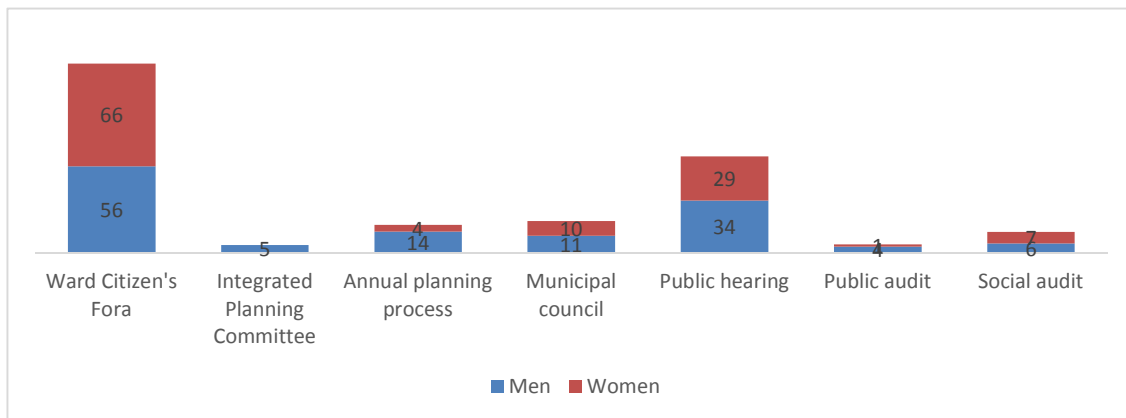
183. The participation of the respondents was maximum in Ward Citizen's Fora followed by public hearing. Ward Citizen's Fora had the maximum participation of citizens in Attariya, Bheemdatt and Jhalari Pipaladi, while in Dhangadhi majority of the respondents participated primarily in public hearing events. There was no participation of people in the Integrated Planning Committee meeting in Attariya. All caste/ethnic groups participated in the Ward Citizen's Fora and the public hearing events but the participation of Dalit respondents in public and social audit events was low. The participation of Janajati respondents in public audits was zero.

Figure 3-24: Respondent Participation in Municipal Processes (%)



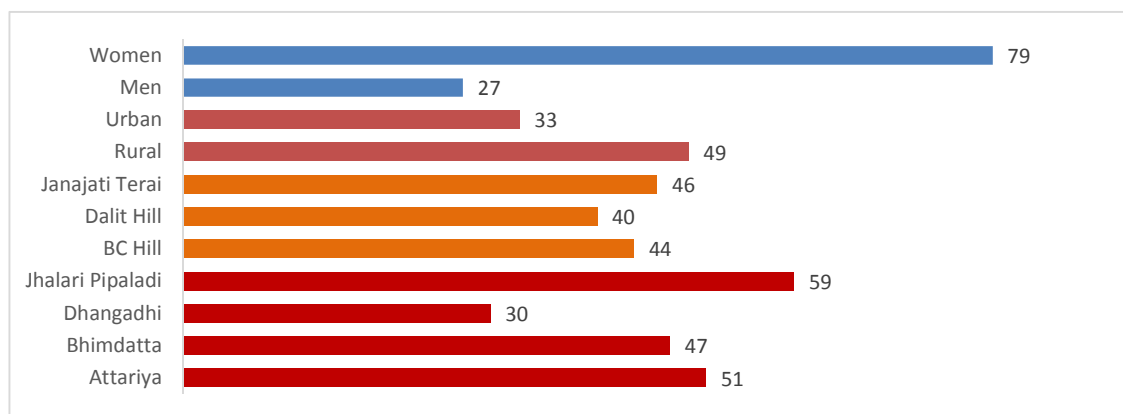
184. Rural respondents' participation was highest in Ward Citizen's Fora and that of urban respondents' in public hearing. Similarly, both men and women respondents' participation was high in the Ward Citizen's Fora. But participation of women respondents' was minimal in the Integrated Planning Committees.

Figure 3-25 Participation of Men and Women in Municipal Processes (%)



3.5.2 Membership in Groups/Committees

185. In the four municipalities, Jhalari Pilpaldi has the highest percent of respondents (59%) who have membership in a groups/committees, followed by Bheemdatt, Attariya and Dhangadhi. Janajati groups had the highest membership, followed by Brahman/Chhetri and then Dalits. Rural respondents had more membership than urban respondents and while 79% women respondents had membership, only 27% men were members of groups/committees, reflecting the focus of self-help groups which are usually women specific.

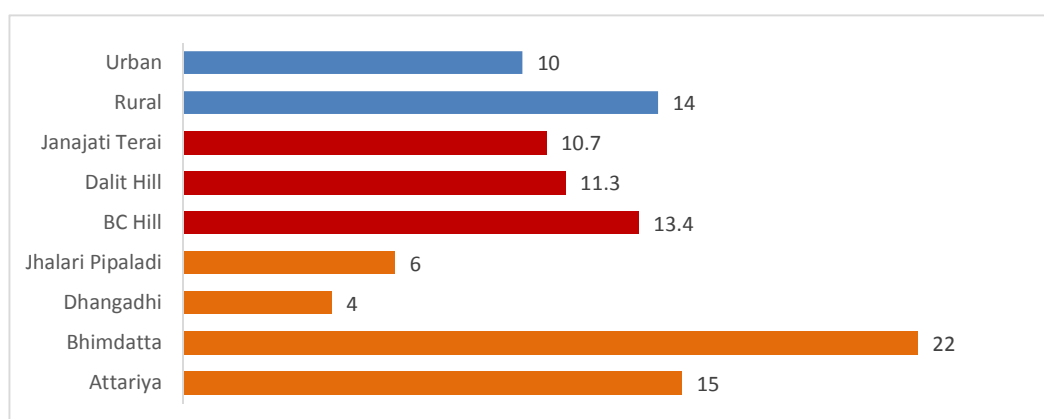
Figure 3-26 Respondents Membership to Group/ Committee (%)

186. In all four municipalities, among the caste/ethnic groups, and as per location the highest percent of respondents shared that they were members of self help groups/ Community Based Organisations (CBOs), followed by Community Forestry Users Group (CFUGs).

Table 3-22: Respondent Memberships (%)

Type	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipaladi
CFUG	59	15	16	52
Self help group/CBO	76	87	81	63
Rights based committees	2	7	7	3
NGO	3	2	6	7
Others	2	0	0	18

187. In Bheemdatt 22%, Attariya 15%, Jhalari Pipaladi 6% and Dhangadhi 4% respondents had contested for any position in the groups / committees they were members of in the past 5 years. Among the caste/ ethnic groups, highest percent of Brahman/Chhetri respondents had contested for a position, followed by Dalit and Janajati. About 14% of rural respondents and 10% of urban respondents have contested for a position in the past five years.

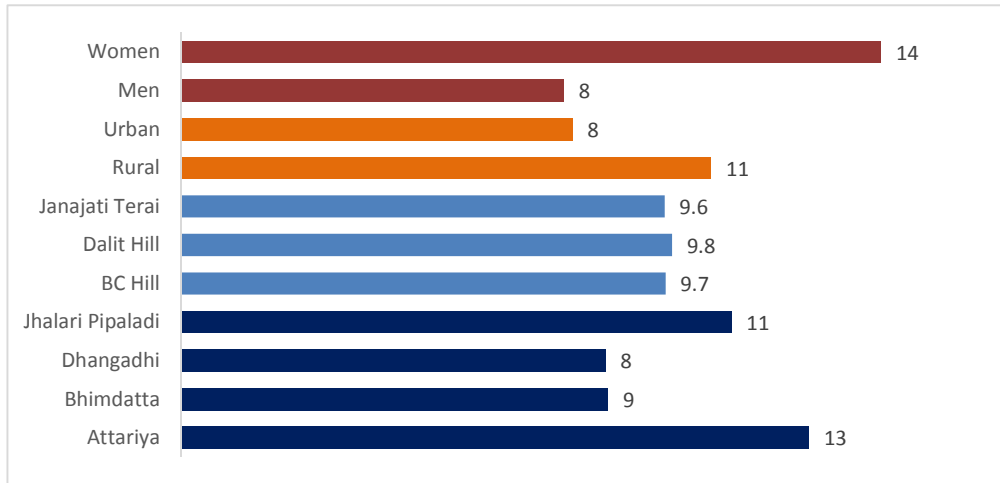
Figure 3-27 Respondents who Contested for Positions in the past 5 years (%)

3.5.3 Respondent’s Participation in Groups

188. The highest percent of respondents in Attariya, the Janajati respondents, and rural respondents were actively involved in the meetings of the organisations. The highest percent of respondents in Dhangadhi, Janajati respondents and urban respondents were inactive.

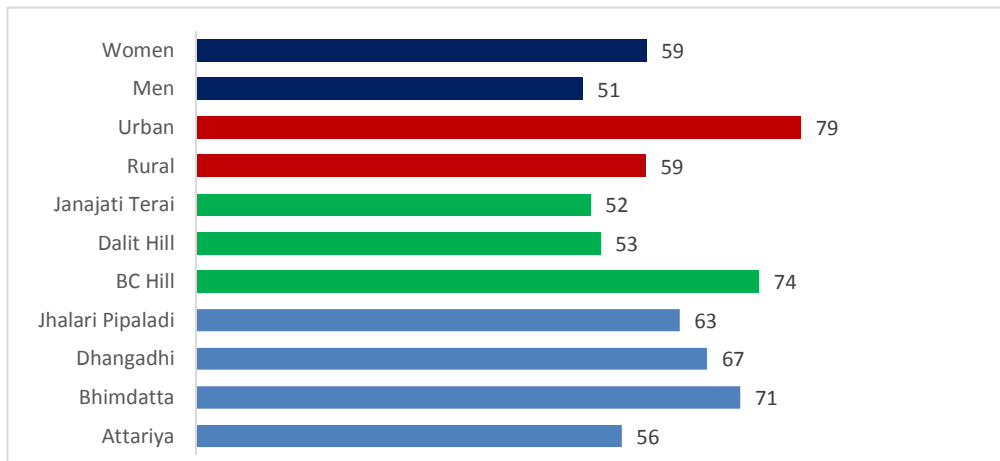
189. Higher percent of women, rural and Attariya respondents were involved in municipality level committees for some urban services.

Figure 3-28 Involvement in Municipal Level Urban Services Committees



190. Overall more than half the respondents had knowledge on where they had to go for different urban services. The respondents in Bheemdatt had better knowledge followed by those of Dhangadhi, Jhalari Pipaladi and Attariya. Brahman/Chhetris had better knowledge, followed by Dalit and Janajati. A slightly higher percent of women respondents had better information about urban services than men respondents.

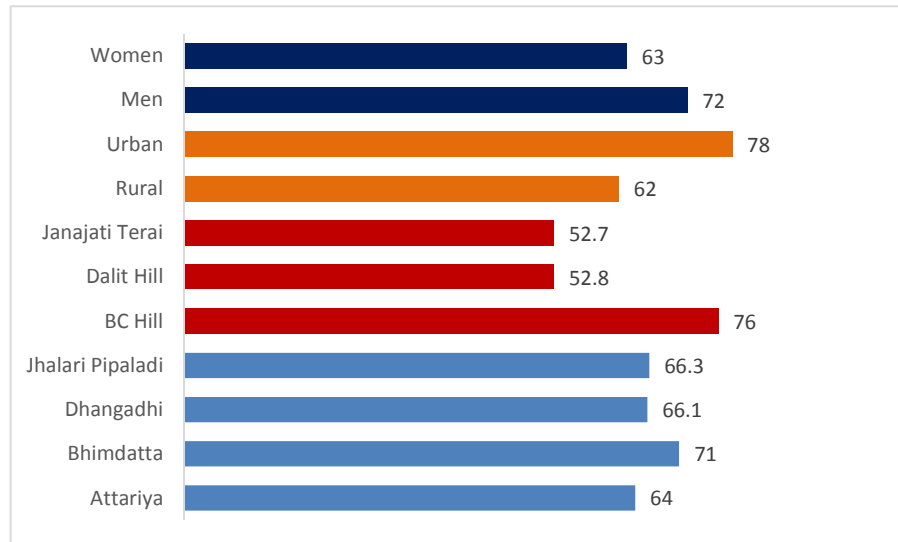
Figure 3-29 Involvement in Municipal Level Urban Service Committees



191. Overall more than half the respondents were aware of their legal rights. The respondents in Bheemdatt had better awareness followed by those of Jhalari Pipaladi,

Dhangadhi and Attariya. Brahman/Chhetris had better awareness, followed by Dalits and Janajatis. Men respondents had better legal awareness than women respondents.

Figure 3-30 Respondents Aware of their Legal Rights (%)



3.5.4 Municipality's Engagement with Citizens

192. More than 65% respondents shared that the municipality did not at all consult with local community women and men before making decisions impacting people like fixing tariffs or before deciding how to use urban land for roads and parks.

193. Majority of the Brahman/Chhetri respondents in all four municipalities shared that they protested with the government offices when they did not get essential services they were entitled to. Dalit and Janajati respondents did not protest at all. About 50% men and 41% women protested sometimes.

194. In Attariya, Dhangadhi and Jhalari Pipaladi, majority of the respondents stated that women did not get wages equal to men for the same work they did in the municipality. 35% respondents in Bheemdatt said women sometimes did get equal pay while about 32% said they did not get it. About 64% men and 58% women respondents stated that women did not get equal pay as men.

3.6 Shifts in GESI Norms and Policies

3.6.1 Status of Women and Girl children in Families

195. About 99% of the respondent in Jhalari Pipaladi, 95% in Bheemdatt, 89% in Dhangadhi and 86% in Attariya stated that women were responsible for all household works, cooking, cleaning and taking care of children and elderly family members. Among caste/ethnic groups, more than 90% of Dalit and Brahman/Chhetri and about 86% of Janajatis said so. A higher percent of urban respondents (95%) than rural respondents (90%) said women were responsible for all household work.

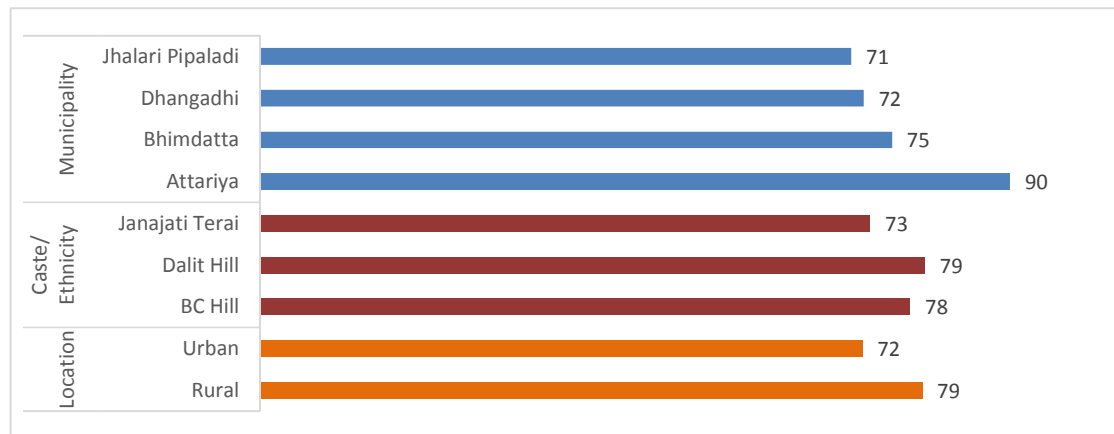
196. Overall 92% of the respondents said that women in families eat together with other family members. But a higher percent of respondents in Jhalari Pipaladi (12%), Dalit

respondents (10%) and rural respondents (10%) stated that women get to eat only after serving food to men of the family.

197. A higher majority of the respondents (74%-90%) shared that girl children were provided the same food (vegetables, fruits, milk, balanced diet) as boys.. Among the caste/ethnic groups more respondents in B/C family, followed by Dalit and then Janajati shared that there is no discrimination in terms of food that is given to girl and boy children.

198. Overall about 77% respondents stated that both daughters and sons study upto the same level of school/college.

Figure 3-31 Both Daughters and Sons Study to Same Level (%)

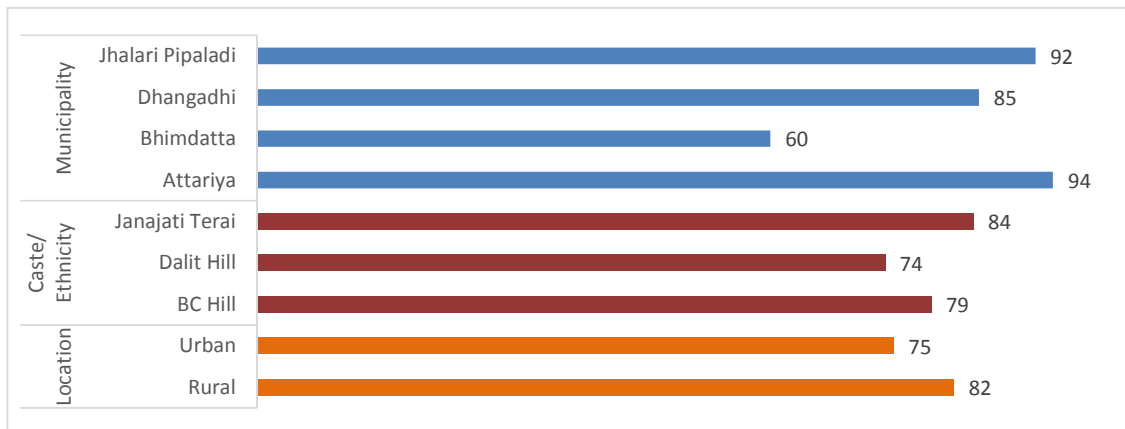


199. 57% rural and 43% respondents in urban areas stated that daughters were married but sons continued their studies.

200. About 88% respondents shared that their family members encouraged women to participate in community activities. 65% stated that women were allowed to move around freely to different areas. The restriction on women's mobility was highest in Dhangadhi, followed by Attariya, Jhalari Pipaladi and Bheemdatt. Constraints on mobility of women was lowest among Janajatis. In rural areas these kinds of constraints were higher than in urban areas.

201. About 88% of respondents expressed that control on mobility of women had decreased. 97% respondents in Bheemdatt and around 60% in Jhalari Pipaladi stated so. About 9% reported increase in mobility control with highest in Dhangadhi (11%) and lowest in Bheemdatt. 92% of the respondents stated that women had to get husband/elder family members' permission for joining any group or deciding about major decisions of family/life.

202. 73% respondents in Attariya, 60% in Jhalari Pipladi, 57% in Bheemdatt and 49% in Dhangadhi expressed that women had to follow what the husband decided about use of money/income. 65% Dalits, 57% Brahman/Chhetri and 56% Janajatis had the same response. Almost 70% in rural areas and 31% in urban areas also stated the same.

Figure 3-32 Women Who Earn and Decide How to Spend the Income (%)

203. About 93% respondents shared that women had adequate time to rest and enjoy their leisure time.

3.6.2 Safety of Women in Different Places

204. About 71% and 25% respondents expressed that it was safe and very safe respectively for women to travel to different areas during the day. A higher percent of men than women stated that it was safe for women in the day time to move around.

205. Above 98% respondents in Attariya and Jhalari Pipaladi felt it was not safe for women to move around during the night. A high percent felt the same in Bheemdatt (90%) and Dhangadhi (86%). Across social groups all felt that it was unsafe for women to move around at night (from 90% Brahman/Chhetris to 95% Dalits). 91% in rural areas and 86% in urban areas felt the same. A lower percent women respondents (6%) than men respondents (10%) felt that it was safe for women to move at night.

206. About 84% expressed that it was safe for women to go to municipal offices. Almost 10% in Jhalari Pipaladi and 7% in Attariya felt that it was unsafe for women to go to municipal offices. More women expressed that it was safe while more men stated that it was unsafe for women to go to municipal offices. 18% men felt it was not safe at all for women to visit municipality offices.

207. Above 90% stated that it was safe for women to go to the market. 13% in Jhalari Pipaladi and around 10% in Attariya and Dhangadhi each stated that it was less safe for women to go to municipal offices.

Specific responses of women respondents

208. Majority of women feel safe to go to office. This was highest in Dhangadhi, followed by Attariya, Jhalari Pipaladi and Bheemdatt. Janajati felt the safest followed by Brahman/Chhetri and then Dalits. Urban respondents felt safer than rural people. Majority of women felt safe to go to market with respondents in Attariya and Bheemdatt feeling safer than those in Dhangadhi and Jhalari Pipaladi. While 80% in Bheemdatt, 71% in Jhalari Pipaladi and 65% in Attariya felt safe to go to fairs, 45% in Dhangadhi said that women felt unsafe to go to fairs. More than 90% felt safe to go to temples. In other situations (e.g. going

to schools), most expressed that women were either less safe or safe, very few felt it was not at all safe or that it was very safe. 100% felt forests were unsafe for women.

Table 3-23: Feelings of Being Unsafe by Location (%)

Place	Attariya	Bheemdatt	Dhangadhi	Jhalari Pipladi
Office	6.48	15.60	4.05	10.09
Market	5.94	8.69	17.30	16.67
Fairs	35.14	20.27	45.36	29.39
Temples	2.58	4.26	7.38	7.02
Others (Forest)	N/A	100.00	100.00	N/A

Table 3-24: Feelings of Being Unsafe by Location and Caste/Ethnicity (%)

Place	BC Hill	Dalit Hill	Janajati Terai
Office	8.77	13.31	8.01
Market	11.95	11.40	10.75
Fairs	32.17	26.84	35.25
Temples	4.28	9.93	4.00
Others (Forest)	100.00	100.00	100.00

3.6.3 Gender Differentiated Movement of Women and Men

209. Overall 76% respondents (Attariya-79%, Bheemdatt-83%, Dhangadhi -61%, Jhalari Pipaladi-92%) said that women do not go to workplaces. On the other hand majority of the respondents (Attariya-56%, Bheemdatt-64%, Dhangadhi-75%, Jhalari Pipaladi-48%) said that most of the men go to workplaces.

210. More than 50% respondents in Attariya, Bheemdatt and Jhalari Pipaladi with income less than Rs. 30,000 said that women mostly go for agriculture works, while majority in Dhangadhi with income level more than 30,000 shared women do not go for agriculture works. More than 50% respondents in Dhangadhi said that men do not go for agriculture works while in other municipalities it was stated that men sometimes go for agriculture works.

211. About 44% said women go for fuel collection, 31% said they do not go while 25% said women go mostly for this task. Majority of Dalit respondents said women mostly go, while Brahman/Chhetri and Janajati said women sometimes go. In Bheemdatt and Jhalari Pipaladi, majority said men do not at all go for fuel collection but majority in Attariya and Dhangadhi said men sometimes go.

212. In Dhangadhi, majority said women do not at all go for fodder collection, while in other municipalities, majority said women mostly go. Majority (79%) said men do not at all go for fodder collection.

Table 3-25: Movement to Different Places by Gender

Municipality	Workplace (not at all)		For agri works (mostly and sometimes)		For fuel collection (mostly and sometimes)		For fodder collection (mostly and sometimes)	
	Women	Men	Women	Men	Women	Men	Women	Men
Attariya	80	37	92	82	95	56	87	27
Bheemdatt	83	30	84	76	63	33	79	16
Dhangadhi	61	19	44	40	58	52	49	19
Jhalari Pipladi	92	40	93	84	68	50	95	27
Average	79	32	78	71	71	48	78	22

213. Almost 80% women do not go to the workplace while 32% don not. In agriculture related works 78% women and 71% men go. 71% women go or fuel collection while 48% men do so. For fodder collection 78% women and only 22% men go.

214. Hence the needs of women for travel and movement in the municipality are different to those of men. For going for agriculture, fuel and fodder collection they do not need to travel on roads or take buses especially as a large majority do not go to workplaces for work.

215. The most common means of transportation for all purposes for women was walking and for men cycling was the most common for workplace. For other purposes it was walking. In case of women, cycling was used primarily to go to workplaces (which very few women go to). Some examples of women cycling to collect fuel were also shared.

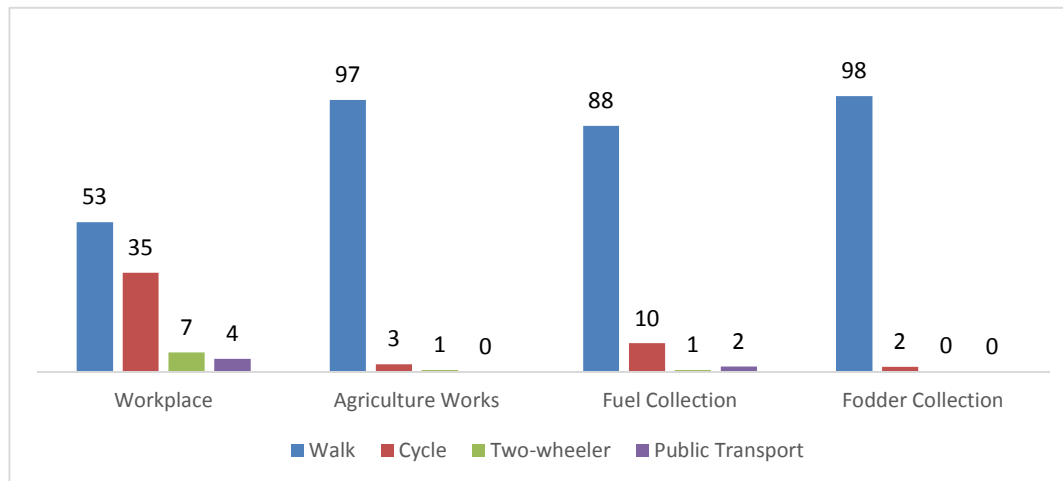
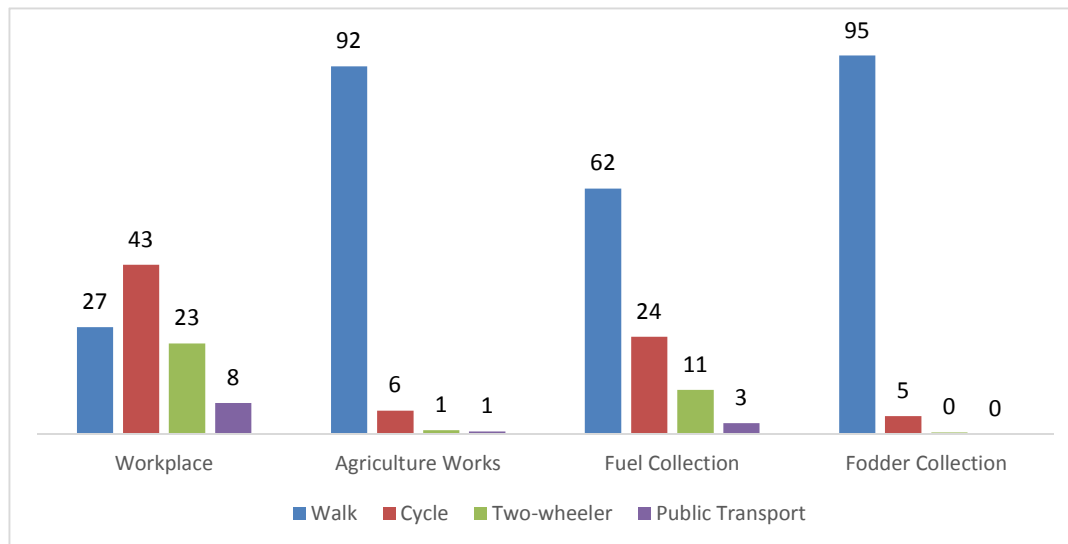
Figure 3-33: Means of Transportation Used by Women for Different Purpose (%)

Figure 3-34: Means of Transportation Used by Men for Different Purpose (%)

216. More than 90% respondents said that only few women go to land office, utility office, other government offices, municipality offices. About 46% respondents said that most women go to self-help group meetings and health post, and 66% said most women go to schools. Similarly, majority of respondents said that only few men go to land office, other government office, municipality office, self-help group meetings, and health post; while majority stated that most men go to utility offices and schools.

3.6.4 Status of Violence Against Women and Girls

Physical beating

217. Almost 95% respondents believed that physical beating of women had decreased with 98% in Attariya and 90% in Jhalari Pipaladi expressing so. Almost 10% in Jhalari Pipaladi felt there had been no change while 5% in Dhangadhi expressed that it had increased. Around five and 6% Dalits felt it had increased and that there had been no change respectively. 96% Brahman/Chhetris and 92% Janajati expressed that physical beating had decreased.

Verbal abuse

218. About 94% respondents shared that verbal abuse had decreased with 90% in Jhalari Pipaladi and 98% in Attariya reporting the decrease. About 3% said it had increased. 96% Brahman/Chhetris expressed that it had decreased while 90% Dalits stated so.

Polygamy

219. About 96% respondents shared that polygamy had decreased with 89% respondents in Jhalari Pipaladi and 98% in Dhangadhi stating so. Among the caste/ ethnic groups, highest percent of Brahman/Chhetris expressed and lowest percent of Janajati reported the decrease.

Chhaupadi (Menstrual exclusion)

220. About 80% respondents shared that the chhaupadi practice had decreased. Among the caste/ ethnic groups, highest percent of Janajati and lowest of Dalit reported decrease.

63% in Jhalari Pipaldi and 88% in Dhangadhi stated that this practice had decreased. 70% Dalits and 92% Janajatis stated that it had decreased.

Child marriage

221. About 97% respondents across the four municipalities shared that the child marriage system had decreased. 98% Brahman/Chhetri and 95% Dalit and Janajatis reported decrease.

Dowry

222. 60% respondents of the four municipalities shared that the dowry system had decreased. But almost 60% respondents in Jhalari Pipaladi and 51% in Dhangadhi reported increase in dowry system. 35% Janajtis, 24% Brahman/Chhetris and 24% Dalits expressed that the practice of dowry had increased.

Violence and neglect due to addiction/alcoholism of husband

223. 93% respondents shared that this practice had decreased. Above 90% respondents stated this across the four municipalities. Across caste/ethnic groups too the response was the same.

Sexual violence (harassment, rape, attempt to rape)

224. 91% of respondents in the four municipalities stated that sexual violence had decreased, in Dhangadhi only 80% said so. 20% felt that either there was an increase or the situation remained the same. 93% Dalits, 89% Janajati and 91% Brahman/Chhetri. 82% in urban areas stated that there had been an increase.

3.6.5 Status of Behavior towards Dalits

Dalits entry into non-Dalit homes

225. 70% respondents in Dhangadhi, 59% each in Attariya and Bheemdatt and 55% in Jhalari Pipaldi expressed that there has been an increase in the practice of Dalits entering non-Dalit homes. But while 50% Dalits themselves expressed that there has been an increase, 50% stated that there has been no change in this discriminatory practice. 82% Janajatis felt there has been an increase and 58% Brahman Chhetris too felt the same. 87% rural respondents felt there had been no change.

Dalits allowed to enter temples

226. Around 80% respondents expressed that there had been an increase in the practice of Dalits entering temples. In Bheemdatt almost 33% and in Jhalari Pipaldi 25% felt there was no change while in the other two municipalities only three to 6% believed so. 34% Dalits and 16% Brahman/Chhetris expressed that there had been no change. In rural areas too 83% believed there had been no changes in this discriminatory practice.

Dalits allowed to take water together with non-Dalits

227. On an average about 76% respondents, with 90% in Dhangadhi 80% in Attariya and 65% in Bheemdatt stated that Dalits can take water with non-Dalits. 33% in Bheemdatt felt there was no change. 33% Dalits themselves believed that there had been no change. 21% Brahman/Chhetris also believed that same. In Bheemdatt almost 34% and in Jhalari Pipaldi 23% felt there was no change.

Dalits not allowed to marry non-Dalits

228. Around 92% in Attariya and Bheemdatt, 86% in Attariya and 81% in Dhangadhi stated that there was no change in the practice of Dalits being allowed to marry. Across social groups, 80% believed the same. More than 85% Dalits believed that there was no change in such practices. Almost 75% in rural areas stated that there was no change.

Verbal abuse because of being Dalit

229. About 97% respondents, with highest in Bheemdatt (98%), and lowest in Attariya (94%) shared that verbal abuse because of being Dalit had decreased. 94% Dalit respondents believed this practice had decreased, though about 97% Janajati and Brahman/Chhetri respondents felt the same.

3.6.6 Language and Cultural Practices

230. Across municipalities and social groups, above 90- 95% respondents stated that they had encountered no problems in social and official interactions due to language. But in rural areas it was only 75% respondents who shared that they had experienced no problems, the other 25% had.

231. 85% respondents expressed that there were no issues regarding following their own cultural practices. 15% did experience difficulties, amongst them the highest respondents were the Janajatis.

232. There were not many responses regarding behaviour by municipality/community towards transgender, people of different sexual orientation or towards persons because of being HIV and AIDS affected.

4 Key Findings**4.1 Existing Situation in the Municipalities****4.1.1 Demographics**

233. The population in Bheemdatt and Dhangadhi was more than 100,000 each while Attariya had 72,000 and Jhalari Pipaldi had the lowest with around 42,000 people. On an average, the population of the four municipalities had 61% Brahman Chhetri, about 20% Terai Janajati and 14% Hill Dalits.

4.1.2 Land Ownership

234. 78% respondents had their own land, 14% were on ailani land and 8% were squatters. Attariya had highest percentage of squatters (12%). In urban areas 93% had own land, 4% were on Ailani land and 3% were squatters. In rural areas 66% had own land, 24% had ailani land and 10% were squatters. 16% Dalits were squatters.

235. Among the caste/ ethnic groups, land ownership was highest amongst Brahman/Chhetri respondents (83%), followed by Janajati (68%) and Dalit (60%).

4.1.3 Income Levels and Economic Indicators

236. There was high unemployment with 77% unemployed for more than 4 months across the four municipalities. It was almost double in rural areas. The highest number of people with income above NRs 30,000 was in Dhangadhi and lowest in Jhalari-Pipaladi.

Among Brahman/Chhetri Hill, majority had income level between NRs. 10,000 to 20,000 while the income level of majority of Dalit Hill and Janajati Terai was below NRs 10,000.

237. 41% Dalits and 39% in rural areas had to take credit for managing regular household expenses.

4.1.4 Energy Related Aspects

238. The main source of energy was fuel wood/jhinjha/karchi (used by 85% across the four municipalities), followed by LP Gas (41%) and bio gas (18%). 95% Dalits and Janajatis and 80% Brahman/Chhetris used fuel wood. About 5% were without electricity connection: About 16% Dalit, 9% Janajati and 2% Brahman/Chhetri were not connected to the grid. 90% of respondents in Attariya, Bheemdatt and Jhalari Pipaladi shared that the street lights were not available. 55% in Dhangadhi said street lights were available.

4.1.5 Municipal Services

Water supply

239. The main source of water was the borehole or well (private, owned by the household (Nalka, tubewell, handpump) (93% households) which was the primary source for cleaning, washing and drinking and cooking Private connection to piped water in house was used by 13%. Amongst municipalities, private connection to piped water was the highest in Dhangadhi (20%). Bheemdatt had 13% HH while Attariya had about 8%. In Jhalari Pipaladi it was minimal. 18.5% Brahman/Chhetris, only 5% Dalits and 3% Janajtis had private connection to piped water in their house. About 7% in Jhalari Pipaladi, 4% in Dhangadhi, 3% in Bheemdatt and less than 1% in Attariya shared that the water was contaminated

Sanitation

240. 80% shared they had access to toilet. 20% of the respondents shared that they did not have access to toilet. A very high percent (40%) in Jhalari Pipaladi did not have access to toilet. In Bheemdatt 19%, in Dhangadhi 17% and in Attariya 16% did not have access to this facility. 42% Dalits shared they did not have access to toilet. 21% Brahman/Chhetris had access to flush toilet while only 8% Dalits and Janajatis had this facility. 81% of the respondents who had access to toilet, used septic tank/soak pit for disposal of excreta, 10% used pit latrine. Pit latrine and connection to bio gas was used more in the rural areas and septic tank more in urban areas

Drainage and SWM

241. 47% of the respondents said that they drained kitchen/bathroom water into the garden, 20% into the drain, 17% in pits. 58% respondent households used digging to manage solid waste and 34% waste separation, 8% did unmanaged throwing.

242. Highest percent of respondent using digging was Janajati. Brahman/Chhetri did waste separation and Dalits threw waste without managing it. There was no municipal system for collection of solid waste.

243. Bheemdatt suffered the most from flooding (32% respondents stated so). In Dhangadhi it was 16%, in Jhalari Pipaladi, 13% and in Attariya 8%. Higher percent of respondents in urban (23.5%) locations suffered flooding than rural respondents (17%).

Water logging on the road near houses was more common in Dhangadhi (49%), followed by Jhalari Pipaladi (43%) and Attariya (28%). Bheemdatt had the least at 15%

244. 60% respondents shared that there was water logging near their houses during the rainy season for less than 10 days, 30% had experienced it for more than 10 days and 10% for about 10 days. Almost 40% of Janajatis had experienced water logging for more than 10 days. Also 70% of the respondents in rural areas had experienced water logging for more than 10 days while in urban areas it was only 30%.

Roads and Access

245. 55% households had access to motorable gravel roads, 18% to motorable pitch road, 14% mud road and 13% to trails in the four municipalities. Highest percent of respondents with access to motorable pitch was in Dhangadhi (37%), with lowest in Attariya (3%). Similarly, motorable gravel was highest in Attariya (75%) with lowest in Dhangadhi (34%). In the urban area 42% respondents had access to motorable pitch and 39% to motorable gravel, and in rural area 63% had access to motorable gravel and 6% to motorable pitch.

4.1.6 Environment Issues

246. In Jhalari Pipladi, 41% households experienced severe flooding after heavy rains. in Jhalari Pipaladi, almost 40% stated that landslides was a mild or severe problem.

247. Almost 40% experienced location near garbage dump in urban areas while in rural areas it was less than 15% who suffered this problem. Living near a sewerage plant was an issue in Bheemdatt and Dhangadhi. Floods were an issue in Jhalari Pipaladi

248. More than 90% respondents in Attariya, Bheemdatt and Jhalari Pipaladi said there was no response at all from municipalities in the event of a disaster; 30% in Dhangadhi expressed there was a response.

4.2 Gender Analysis

4.2.1 Issues

Safety of women

249. Women were very safe during the day but unsafe at night. Above 20% in Jhalari Pipaldi expressed that visiting municipal offices was unsafe for women. 100% felt forests were unsafe for women.

Mobility, division of labour

250. Majority of respondents stated that women did not go to workplaces while men did. Almost 80% women did not go to the workplace while 32% men did not. In agriculture, 78% women and 71% men worked. 71% women collected fuel wood while 48% men did so. For fodder collection 78% women and only 22% men went. The most common means of transportation for all purposes for women was walking and for men cycling for work, walking otherwise

Status of Women and Girls

251. About 99% of the respondent in Jhalari Pipaladi, 95% in Bheemdatt, 89% in Dhangadhi and 86% in Attariya stated that women were responsible for all household works,

cooking, cleaning and taking care of children and elderly family members. Among caste/ethnic groups, more than 90% of Dalit and Brahman/Chhetri and about 86% of Janajatis said so. A higher percent of urban respondents (95%) than rural respondents (90%) said women were responsible for all household work.

252. 73% respondents in Attariya, 60% in Jhalari Pipladi, 57% in Bheemdatt and 49% in Dhangadhi expressed that women had to follow what the husband decided about use of money/income. 65% Dalits, 57% Brahman/Chhetri and 56% Janajatis had the same response. Almost 70% in rural areas and 31% in urban areas also stated the same.

253. Different forms of violence against women and girls have decreased but in Attariya, Dhangadhi and Jhalari Pipaladi, majority of the respondents stated that women did not get wages equal to men for the same work they did in the municipality.

4.2.2 Caste / Ethnic / Cultural Practices

254. Behaviour towards Dalits has become more liberal but inter-caste marriages are still not socially acceptable. Own cultural practices and use of own language had not created too many issues though Janajatis expressed that they had experienced some problems.

4.2.3 Capacity and Empowerment

255. Only 10% of the respondents said that they participate in the municipal processes. Participation of Dalit respondents in public and social audit events was low. Participation of women respondent's was minimal in the Integrated Planning Committees. Women were members of self help groups/ Community Based Organisations (CBOs), followed by Community Forestry Users Group (CFUGs).

256. More than half the respondents had knowledge on where they had to go for different urban services. The respondents in Bheemdatt had better knowledge followed by those of Dhangadhi, Jhalari Pipaladi and Attariya. Brahman/Chhetris had better knowledge, followed by Dalit and Janajati. More than half the respondents were aware of their legal rights. The respondents in Bheemdatt had better awareness followed by those of Jhalari Pipaladi, Dhangadhi and Attariya. Brahman/Chhetris had better awareness, followed by Dalits and Janajatis. Men respondents had better legal awareness than women respondents

257. More than 65% respondents shared that the municipality did not at all consult with local community.

4.3 Physical and Social Infrastructure Priorities

Physical infrastructure priority:

- Roads (Bheemdatt, Attariya and Jhalari Pipaladi), and
- Water Supply (Dhangadhi).

Social infrastructure priority:

- market center,
- birthing center, and
- agriculture collection centres

258. In FGDs, the top three infrastructure priorities identified in Attariya included drinking water, road, and toilet and river control. In Bheemdatt it was drinking water, sewerage, and toilet. In Dhangadhi it was road, sewerage and drinking water. In Jhalari Pipaladi it was drinking water, toilet and sewerage and river control.

5 Conclusions

259. Availability of municipal services varies in different municipalities. Only a few municipal services are available in all municipalities.

260. Location, gender and caste/ ethnicity based differences exist in the access to municipal services e.g. the needs of women for travel and movement in the municipality are different to those of men. When doing agriculture, fuel and fodder collection they do not need to travel on roads or take buses. The large majority of women do not go to workplaces for work.

261. Citizens' participation in municipality decisions is minimal. Ward Citizens' Fora and Public hearings were forums where citizens had participated in municipal processes but municipalities do little citizen consultation before making decisions which impact peoples' lives; e.g. for tariff settings, use of urban land for parks.

262. Situation of Dalits, of people in rural areas and Jhalari-Pipaladi are worse compared to the others municipalities. Across all indicators these social groups came out worse indicating the need for specific interventions in order to address their specific problems.

263. Prevalent social practices and gender relations constrain women's development and participation and require interventions with men and advantaged group for shifts in women's empowerment and for gender equality.

6 Recommendations

264. Recommendations for addressing gender equality and social inclusion in project activities are presented below, grouped under different sub-themes (Refer Annex 2E for the GESI framework).

Economic Development and Sustainable Urbanization

- Ensure consultation with women, poor and the excluded using appropriate methodology, language, timing and location so that they are able to contribute their ideas and requirements for the regional vision.
- Assess using participatory methods, gender/ caste/ ethnicity/ income and location-differentiated needs and access to bus parks, public park, roads, public toilets, public taps, public hall, other municipal services land use.
- Ensure land use plan incorporates identified priorities of women, poor and the excluded.
- Identify possibilities of land pooling to support the landless and poorer families of the area.
- Assess the positive and negative impact of land pooling on women, poor and the excluded (e.g. impact on the right to traditional land and natural resources, access to public services, indigenous knowledge and skills, cultural heritage sites and traditional institutions, traditional forms of livelihood of Adibasi Janajatis and Dalits).

- Assess potential for allocation of a certain percent of land in land pooling projects for poor and excluded people and for provision for grant and soft loan to single poor women, poor and excluded for housing.
- Work closely with those preparing land pooling documents to ensure that requirements of women, poor and the excluded are integrated into the land pooling plans.
- Identify public market related priorities and needs of women, poor and the excluded.
- Inform site selection for public markets based on mobility, convenience and financial contexts of women, poor and the excluded.
- Identify gender and disabled friendly construction requirements of public markets.
- Assess how child care centers can be included in public market complexes.
- Develop and establish systems for GESI sensitive management of municipal finance and infrastructure.

Water Supply

- Collect disaggregated data about who has access to safe piped drinking water supply and the reasons for not having it; what distribution systems will ensure women, poor and the excluded receive the benefit from water supply improvements.

Wastewater Management

- Collect disaggregated data about sanitation and wastewater disposal. Determine what will ensure women, poor and the excluded receive the benefit of improved wastewater management services.

Solid Waste Management

- Collect disaggregated data about waste management and what will ensure women, poor and the excluded receive the benefit of waste management services.
- Identify site selection for landfill sites based on criteria that does not negatively impact poor and excluded HHs.

Municipal Roads and Drainage

- Include women, poor and excluded groups as stakeholders during consultations for project component identification to collect their needs and their voice.
- Assess secondary data from a GESI point of view and identify improvements to link roads, trails, tracks that would benefit women, poor and the excluded directly.

Municipal Facilities

- Identify suitable sites for municipal building construction where relevant and identify gender and disabled friendly construction requirements (toilets, child care room, ramps, proper lighting, no dark passages etc)

Community Infrastructure

- Assess the requirements of community infrastructure of women, poor and the excluded, using also the findings of the household survey.
- Ensure that women, poor and the excluded participate and influence decisions regarding the community infrastructures to be provided.

- The criteria for selection of community infrastructure to be built should include issues of how these will support women, poor and the excluded, how will their participation in decision making be ensured, how will the process of construction support empowerment of the disadvantaged and contribute to changes in existing discriminatory practices.
- The design should be gender and disabled friendly.
- Women contractors should be promoted for implementing construction work.
- During the construction phase ensure that wages are equal for women and men for work of equal value; that support for gender specific responsibilities like child care, breast feeding is provided; that safety and security issues are addressed.
- Post construction maintenance and repair should be planned in an inclusive manner.

GESI mainstreaming in municipality policies

- Review, revise and develop policy mandates as relevant for municipalities to function in a GESI responsive way.
- Prepare operational (including procedural formats, checklists etc) manual of GESI mainstreaming in Municipalities based on MOFALD guidelines.

GESI institutional arrangements

- Form a GESI technical working group (including section chiefs) and make functional with ToRs, office logistics and work-plans.
- Conduct GESI capacity need assessment and develop capacity building plan to institutionalize GESI in municipalities and strengthen skills of all relevant municipality staff.
- Build capacity of GESI technical working group and enhance their skills for providing technical support for mainstreaming GESI in municipality functions.
- Develop recruitment and selection processes which promote staff diversity and follow affirmative action principles.

GESI sensitive budgeting and financial allocation and expenditure

- Establish a system of financial allocation and expenditure analysis from a GESI perspective. Identify which activities are providing direct benefit to women, poor and the excluded, which are supporting mainstreaming gender and inclusion in the project activities and which are neutral, assuming that all citizens will benefit.
- Identify which activities are improving access to assets and services of women, poor and the excluded, which are strengthening their voice and improving their ability to make service providers accountable and which are contributing to changing discriminatory rules, mind-sets and social practices.

GESI sensitive M&E and reporting systems

- Develop and implement GESI sensitive monitoring and reporting guidelines, including data and evidence collection formats with income, sex, caste/ethnicity and location disaggregation.
- Identify measures and mechanisms for community engagement in supervision and monitoring, especially that of women, poor and the excluded.

- Support the relevant units to prepare a disaggregated computer based database regarding existing facilities and services in different wards of the municipalities, including the poverty pockets and access of women, poor and excluded to such services; disaggregated household ranking database and existing pattern of gender-differentiated labour, access and control relevant for municipal services.
- Integrate GESI reporting in the regular reporting requirements of the municipalities. Prepare annual reports on performance and impact of project activities with disaggregated data and analysis regarding shifts in the lives of women, poor and the excluded.

ANNEX 2A
Staff Details of Municipalities

Annex 2A: Staff Details of Municipalities*Attariya*

By sex and caste/ethnicity

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women			1	1
Men	12	1	3	16
Total	12	1	4	17

(in %)

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women	0.00	0.00	100.00	100.00
Men	75.00	6.25	18.75	100.00
Total	70.59	5.88	23.53	100.00

By caste/ethnicity and sex

Caste/ethnicity	Men	Women	Total
Dalit Hill	1		1
Janajati Terai	3	1	4
BC Hill	12		12
Total	16	1	17

(in %)

Caste/ethnicity	Men	Women	Total
Dalit Hill	100.00	0.00	100.00
Janajati Terai	75.00	25.00	100.00
BC Hill	100.00	0.00	100.00
Total	94.12	5.88	100.00

By level and sex

Level*	Men	Women	Total
Management	1		1
Assistant	10		10
Support	5	1	6
Total	16	1	17

***Note:** *MANAGEMENT:* Executive Officer. *ASSISTANT:* Accountant, Sub-engineer, Assistant, Assistant sub-engineer, *SUPPORT:* Office Assistant

(in %)

Level	Men	Women	Total
Management	100.00	0.00	100.00
Assistant	100.00	0.00	100.00
Support	83.33	16.67	100.00
Total	94.12	5.88	100.00

By level and caste/ethnicity

Level	BC Hill	Dalit Hill	Janajati Terai	Total
Management	1			1
Assistant	8		2	10
Support	3	1	2	6
Total	12	1	4	17

(in %)

Level	BC Hill	Dalit Hill	Janajati Terai	Total
Management	100.00	0.00	0.00	100.00
Assistant	80.00	0.00	20.00	100.00
Support	50.00	16.67	33.33	100.00
Total	70.59	5.88	23.53	100.00

Dhangadhi

By sex and caste/ethnicity

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women	9	5	2	16
Men	39	16	24	79
Total	48	21	26	95

(in %)

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women	56.25	31.25	12.50	100.00
Men	49.37	20.25	30.38	100.00
Total	50.53	22.11	27.37	100.00

By caste/ethnicity and sex

Caste/ethnicity	Men	Women	Total
Dalit Hill	16	5	21
Janajati Terai	24	2	26
BC Hill	39	9	48
Total	79	16	95

(in %)

Caste/ethnicity	Men	Women	Total
Dalit Hill	76.19	23.81	100.00
Janajati Terai	92.31	7.69	100.00
BC Hill	81.25	18.75	100.00
Total	83.16	16.84	100.00

By level and sex

Level*	Men	Women	Total
Management	9		9
Assistant	29	7	36
Support	41	9	50
Total	79	16	95

***Note:** *MANAGEMENT:* Executive Officer, Engineer, Account Officer, Internal Audit Officer, Administrative Officer, Engineer, Urban Governance Expert, ICT Volunteer. *ASSISTANT:* Accountant, Internal Audit Assistant, Nayab Subba, Enterprise Development Motivator, Financial Manager (Assistant level-fifth), Computer Operator, Kharidar, Assistant Computer Operator, Sub-overseer, Amin, Community Mobilizer, Assistant Health Worker, A.Na.Mi., Rural Health Worker, Electrician, Assistant City Inspector, Hawaldar, City Police. *SUPPORT:* Driver, Gardener, Chaukidar, Office Assistant, Electricity helper, Fire brigade helper, Sweeper helper, Firemen, Kuchikar.

(in %)

Level	Men	Women	Total
Management	100.00	0.00	100.00
Assistant	80.56	19.44	100.00
Support	82.00	18.00	100.00
Total	83.16	16.84	100.00

By level and caste/ethnicity

Level	BC Hill	Dalit Hill	Janajati Terai	Total
Management	7		2	9
Assistant	32	2	2	36
Support	9	19	22	50
Total	48	21	26	95

(in %)

Level	BC Hill	Dalit Hill	Janajati Terai	Total
Management	77.78	0.00	22.22	100.00
Assistant	88.89	5.56	5.56	100.00
Support	18.00	38.00	44.00	100.00
Total	50.53	22.11	27.37	100.00

Bheemdatt

By sex and caste/ethnicity

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women	10		2	12
Men	63	5	23	91
Total	73	5	25	103

(in %)

Sex	BC Hill	Dalit Hill	Janajati Terai	Total
Women	83.33	0.00	16.67	100.00
Men	69.23	5.49	25.27	100.00
Total	70.87	4.85	24.27	100.00

By caste/ethnicity and sex

Caste/ethnicity	Men	Women	Total
Dalit Hill	5		5
Janajati Terai	23	2	25
BC Hill	63	10	73
Total	91	12	103

(in %)

Caste/ethnicity	Men	Women	Total
Dalit Hill	100.00	0.00	100.00
Janajati Terai	92.00	8.00	100.00
BC Hill	86.30	13.70	100.00
Total	88.35	11.65	100.00

By level and sex

Level	Men	Women	Total
Management	8		8
Assistant	31	9	40
Support	52	3	55
Total	91	12	103

(in %)

Level	Men	Women	Total
Management	100.00	0.00	100.00
Assistant	77.50	22.50	100.00
Support	94.55	5.45	100.00
Total	88.35	11.65	100.00

By level and caste/ethnicity

Level*	BC Hill	Dalit Hill	Janajati Terai	Total
Management	7	1		8
Assistant	37	2	1	40
Support	29	2	24	55
Total	73	5	25	103

*Note: *MANAGEMENT*: Executive Officer, Administrative Officer, Engineer, Account Officer, Section Officer. *ASSISTANT*: City Planning Assistant, Community Mobilizer, Computer Assistant, Sub-Engineer, Kharidar, Mechanic, Ward Secretary, Amin, Sub-overseer, Linemen, Hawladar, A.Na.Mi. *SUPPORT*: Driver, Office Assistant, Supervisor, City Police, Office Assistant, Firemen, Kuchikar.

(in %)

Level	BC Hill	Dalit Hill	Janajati Terai	Total
Management	87.50	12.50	0.00	100.00
Assistant	92.50	5.00	2.50	100.00
Support	52.73	3.64	43.64	100.00
Total	70.87	4.85	24.27	100.00

Jhalari Pipaladi

By sex and caste/ethnicity

Sex	BC Hill	Janajati Terai	Madhesi OBC	Total
Men	7	1	1	9
Total	7	1	1	9

(in %)

Sex	BC Hill	Janajati Terai	Madhesi OBC	Total
Women	77.78	11.11	11.11	100.00
Total	77.78	11.11	11.11	100.00

By caste/ethnicity and sex

Caste/ethnicity	Men	Total
Janajati Terai	1	1
BC Hill	7	7
Madhesi OBC	1	1
Total	9	9

(in %)

Caste/ethnicity	Men	Total
Dalit Hill	100.00	100.00
Janajati Terai	100.00	100.00
BC Hill	100.00	100.00
Total	100.00	100.00

By level and sex

Level*	Men	Women	Total
Management	1		1
Assistant	6		6
Support	2		2
Total	9	0	9

*Note: *MANAGEMENT*: Executive Officer. *ASSISTANT*: Accountant, Nayab Subba, Assistant Sub-Engineer, Kharidar, Social Mobilizer. *SUPPORT*: Office Assistant.

(in %)

Level	Men	Women	Total
Management	100.00	0.00	100.00
Assistant	100.00	0.00	100.00
Support	100.00	0.00	100.00
Total	100.00	0.00	100.00

By level and caste/ethnicity

Level	BC Hill	Janajati Terai	Madhesi OBC	Total
Management	1			1
Assistant	5		1	6
Support	1	1		2
Total	7	1	1	9

(in %)

Level	BC Hill	Janajati Terai	Madhesi OBC	Total
Management	100.00	0.00	0.00	100.00
Assistant	83.33	0.00	16.67	100.00
Support	50.00	50.00	0.00	100.00
Total	77.78	11.11	11.11	100.00

ANNEX 2B
GESI Budget Analysis of Attariya Municipality

Annex 2B: GESI Budget Analysis of Attariya Municipality, FY 2072/73 (2015/16)***Budget by GESI category***

GESI specific	16,210,000	27.95%
GESI responsive	8,984,000	15.49%
GESI Neutral	32,800,000	56.56%
Total	57,994,000	

Budget by target group (except Neutral)

Women	6,484,000	25.74%
Children	8,984,000	35.66%
Dalit	45,000	0.18%
Poor	40,000	0.16%
Janajati, Dalit, Elderly citizen, Disabled, Poor, Backward Class	9,641,000	38.27%
Total	25,194,000	

Budget by Domains of Change

Access to services	22,430,000	89.03%
Voice	1,884,000	7.48%
Rules of Game	340,000	1.35%
Not Applicable	540,000	2.14%
Total	25,194,000	

ANNEX 2C
Activity Mapping of Civil Society Organisations by Municipality

Annex 2C: Activity Mapping of Civil Society Organisations by Municipality*Coverage in number of wards*

S.N.	Activities	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
	<i>Municipal Services related</i>				
1	Roads			11	10
2	Community infrastructure (water supply, sanitation, etc.)	10	4	15	10
3	Sanitation related	13	4	15	10
4	Solid Waste Management	13	4	6	
5	Water supply related	9	4	15	10
6	Sewerage/Drainage		4	1	
7	Urban space use		4		
8	Greening		4	6	
	<i>GESI related</i>				
9	Activities to address GBV	10	14	19	
10	Shelter home/safe house for GBV survivors	9		19	
	<i>Livelihood related</i>				
11	Other livelihood support (credit, skills, agri inputs etc.)	10	14	19	
	<i>Awareness and advocacy</i>				
12	Awareness-raising of Laws and Services (using different mediums)		14	19	
13	Awareness, Advocacy and Lobbying			19	
14	Awareness-raising			1	
15	Advocacy			10	
16	Financial literacy			19	
	<i>Others</i>				
17	Safe settlement	9			
18	Youth Leadership			19	
19	Public hearing			4	
20	Others			19	

ANNEX 2D
Household Survey Findings by Municipality

Annex 2D: Household Survey Findings by Municipality

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
<i>Section 1: Background</i>				
Women Headed HH	64 (9%)	153 (15%)	115 (11%)	81 (20%)
Ownership of Land [Own (Govt.) Land]	404 (59%)	835 (79%)	968 (94%)	256 (64%)
Income level (in '000)	<10: 251 (36%) >10 and <=20: 302 (44%) >20 and <=30: 80 (12%) >30: 54 (8%)	<10: 388 (37%) >10 and <=20: 333 (32%) >20 and <=30: 174 (16%) >30: 157 (15%)	<10: 346 (33%) >10 and <=20: 388 (38%) >20 and <=30: 200 (19%) >30: 100 (10%)	<10: 196 (49%) >10 and <=20: 153 (38%) >20 and <=30: 41 (10%) >30: 11 (3%)
Major Income source	Remittance (200 i.e. 29%)	Job/salary (291 i.e. 28%)	Job/salary (251 i.e. 24%)	Agriculture (152 i.e. 38%)
Under 5 child mortality	5 (0.73%)	3 (0.29%)	7 (0.68%)	3 (0.75%)
Maternal mortality	-	-	1 (0.03%)	-
Child <16 years as a wage labour	23 (3%)	17 (2%)	3 (0.29%)	6 (2%)
Unemployment > 4 months	471 (69%)	838 (80%)	822 (79%)	303 (76%)
Credit taken for household expenses	272 (40%)	333 (32%)	235 (23%)	188 (47%)
Credit taken for business expenses	74 (11%)	181 (17%)	103 (10%)	42 (10%)
<i>Section 2: Assets</i>				
Living in own house	613 (89%)	987 (94%)	977 (94%)	397 (97%)
House with toilet	577 (84%)	859 (82%)	840 (81%)	238 (59%)
Main source of energy	Fuel wood/ Jhinja/Karchi: 513 (75%)	LPG: 476 (45%)	Fuel wood/ Jhinja/Karchi: 459 (44%)	Fuel wood/ Jhinja/Karchi: 337 (84%)
Electricity as a major source of light	641 (93%)	994 (94%)	984 (95%)	382 (95%)
Cost of cooking (NRs.) (1 cylinder LPG costs Rs. 1500)	<=750: 471 (69%) 751-1500: 185 (27%)	<=750: 331 (31%) 751-1500: 625 (59%)	<=750: 291 (28%) 751-1500: 491 (47%)	<=750: 211 (53%) 751-1500: 93 (23%)
Street light (SL)	14 (2%)	574 (55%)	46 (4%)	6 (1%)
SL rarely/never works	4 (29%)	158 (28%)	1 (2%)	4 (67%)
Household not directly connected with electricity	48 (7%)	59 (6%)	60 (6%)	19 (5%)
Main reason for no connection: <i>Cannot afford to pay for a new connection</i>	33 (69%)	38 (64%)	49 (82%)	12 (63%)
No land ownership	300 (44%)	218 (21%)	71 (7%)	174 (43%)
Major source of land ownership	Ancestral property: 181 (47%)	Bought from own savings: 508 (61%)	Ancestral property: 672 (70%)	Ancestral property: 175 (65%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
No change in land ownership since last 10 years	637 (93%)	765 (73%)	884 (85%)	344 (86%)
Main reason for change in land ownership	Take tax advantage: 26 (52%)	Take tax advantage: 93 (32%)	Buy and sell: 51 (34%)	Buy and sell: 29 (51%)
<i>Section 3</i>				
Main sources of water typically used over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 661 (96%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 999 (95%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 900 (87%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 395 (99%)
Primary source of drinking water over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 625 (91%) Private connection to piped water: 59 (9%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 835 (79%) Private connection to piped water: 208 (20%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 866 (84%) Private connection to piped water: 139 (13%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 391 (98%) Private connection to piped water: 7 (2%)
HH with certain hours supply of water from primary source	44 (6%)	126 (12%)	122 (12%)	1 (0.25%)
Primary source of water for cooking over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 625 (91%) Private connection to piped water: 59 (9%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 835 (79%) Private connection to piped water: 207 (20%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 866 (84%) Private connection to piped water: 140 (14%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 391 (98%) Private connection to piped water: 7 (2%)
Primary source of water for washing over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 651 (91%) Private connection to piped water: 33 (5%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 893 (85%) Private connection to piped water: 152 (14%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 887 (86%) Private connection to piped water: 119 (12%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 394 (98%) Private connection to piped water: 4 (1%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Primary source of water for cleaning over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 661 (96%) Private connection to piped water: 23 (3%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 1,000 (95%) Private connection to piped water: 45 (4%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 900 (87%) Private connection to piped water: 106 (10%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 395 (99%) Private connection to piped water: 3 (1%)
Primary source of water over the past year	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 626 (91%) Private connection to piped water: 58 (8%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 839 (80%) Private connection to piped water: 207 (20%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 872 (84%) Private connection to piped water: 134 (13%)	Borehole or well – private, owned by HH (Nalka, tubewell, handpump): 391 (98%) Private connection to piped water: 7 (2%)
Average cost for tap water per month	184	276	182	133
Water collected most of the time from the primary source	As per need: 461 (67%) Women: 188 (27%)	As per need: 933 (89%) Women: 108 (10%)	As per need: 293 (28%) Women: 680 (66%)	As per need: 209 (52%) Women: 192 (48%)
GOOD quality of water from primary source	322 (47%)	443 (42%)	690 (67%)	108 (27%)
Used treated water	13 (2%)	31 (3%)	47 (5%)	18 (5%)
Methods of treating water mostly used	Boiling: 5 (38%) Adding bleach/ chlorine: 5 (38%)	Boiling: 11 (36%) Using a water filter: 11 (36%)	Standing and settling: 16 (34%) Boiling: 15 (32%)	Boiling: 7 (39%) Using a water filter: 5 (28%) Standing and settling: 5 (28%)
Toilet mainly used	Individual toilet without flush: 425 (62%) No facility/open space: 109 (16%)	Individual toilet without flush: 490 (47%) Flush Toilet/ Water closet (WC): 227 (22%)	Individual toilet without flush: 573 (55%) No facility/open space: 192 (19%)	No facility/open space: 162 (40%) Individual toilet without flush: 160 (40%)
Disposal system (those who use toilet)	Septic tank/or soak pit: 423 (73%) Connected to bio gas: 79 (14%)	Septic tank/or soak pit: 752 (86%) Pit latrine: 69 (8%)	Septic tank/or soak pit: 740 (88%) Pit latrine: 79 (9%)	Septic tank/or soak pit: 142 (59%) Connected to bio gas: 69 (29%)
Methods to empty safety tank/soak pit	Has never been full: 213 (50%) Manually: 209 (49%)	Has never been full: 371 (49%) Manually: 243 (32%)	Has never been full: 490 (66%) Manually: 249 (34%)	Has never been full: 120 (84%) Manually: 21 (15%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Timing of septic tank/ soak pit emptied	Not yet emptied: 210 (50%) Every one year: 98 (23%)	Not yet emptied: 404 (54%) Every two or more than two years: 224 (30%)	Not yet emptied: 498 (67%) Every two or more than two years: 196 (26%)	Not yet emptied: 117 (82%) Every two or more than two years: 15 (10%)
Kitchen/bathroom water drain to	Pour it into garden (Baari): 312 (45%) Pour it into the drain: 199 (29%)	Pour it into garden (Baari): 485 (46%) Pour it into the drain: 234 (22%)	Pour it into garden (Baari): 573 (55%) Pour it into the pit (Khaldo): 199 (19%)	Pour it into garden (Baari): 117 (29%) Pour it into the drain: 104 (26%)
Methods of managing solid waste	Digging: 401 (58%) Manage through waste separation: 250 (36%)	Digging: 601 (57%) Manage through waste separation: 360 (34%)	Digging: 532 (51%) Manage through waste separation: 386 (37%)	Digging: 301 (75%) Manage through waste separation: 73 (18%)
Methods of garbage disposal	Burning: 435 (63%) Burying in own compound: 152 (22%)	Burning: 433 (41%) Burying in own compound: 431 (41%)	Burning: 860 (83%) Dumping in the settlement: 65 (6%)	Burying in own compound: 173 (43%) Burning: 139 (35%)
Drain outside house for rainwater	247 (36%)	499 (47%)	534 (52%)	105 (26%)
HH flooded in recently ended rainy season	56 (8%)	171 (16%)	327 (32%)	52 (13%)
Maximum water logged during flooding (>= 50 cm)	25 of 56: 45%	22 of 171: 13%	175 of 327: 54%	7 of 52 (13%)
Water logging on the road near house	193 (28%)	527 (50%)	160 (15%)	174 (43%)
Water logging per year (More than 10 days)	45 (23%)	179 (34%)	36 (23%)	50 (29%)
Type of road connected to HH	Motorable gravel: 505 (74%) Trail: 100 (15%)	Motorable pitch: 385 (37%) Motorable gravel: 357 (35%)	Motorable gravel: 665 (64%) Motorable pitch: 151 (15%)	Motorable gravel: 225 (56%) Mud road: 123 (31%)
Type of main road to HH	Gravel: 564 (82%) Not paved/ earth road: 88 (13%)	Black-topped: 504 (48%) Gravel: 376 (36%)	Gravel: 650 (63%) Black-topped: 257 (25%)	Gravel: 306 (76%) Not paved/ earth road: 71 (18%)
GOOD condition of main road during last dry season	532 (77%)	894 (85%)	830 (80%)	228 (57%)
Main road usable most of the time in the rainy season	231 (34%)	710 (67%)	499 (48%)	131 (33%)
GOOD condition of road access to the public school	454 (66%)	668 (63%)	578 (56%)	183 (46%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
GOOD condition of road access to the public health facility	444 (65%)	673 (64%)	575 (56%)	96 (24%)
<i>Services available and used in last 3 months</i>				
Nursery schools	453 (66%) Used by 28%	775 (74%) Used by 23%	836 (81%) Used by 22%	242 (60%) Used by 30%
Primary schools	599 (87%) Used by 58%	932 (89%) Used by 45%	899 (87%) Used by 45%	349 (87%) Used by 52%
High schools	533 (78%) Used by 59%	835 (79%) Used by 44%	842 (81%) Used by 46%	282 (70%) Used by 47%
Health clinic	279 (41%) Used by 72%	824 (78%) Used by 75%	627 (61%) Used by 55%	183 (46%) Used by 80%
Hospital	123 (18%) Used by 78%	202 (19%) Used by 40%	134 (13%) Used by 37%	46 (11%) Used by 70%
Food shop	549 (80%) Used by 96%	1,019 (97%) Used by 99%	1,013 (98%) Used by 98%	350 (87%) Used by 99%
Shop for other goods	296 (43%) Used by 89%	694 (66%) Used by 88%	469 (45%) Used by 64%	202 (50%) Used by 95%
Parks	6 (1%) Used by 83%	185 (18%) Used by 15%	85 (8%) Used by 18%	2 (0.5%) Used by 50%
Transportation service	240 (36%) Used by 85%	815 (77%) Used by 84%	256 (25%) Used by 51%	62 (15%) Used by 87%
<i>Environmental conditions exist in settlement: Case of severe problem</i>				
The area floods when there are heavy rains	158 (23%)	204 (19%)	330 (32%)	163 (41%)
Are located on a hillside that is subject to landslides	6 (1%)	6 (1%)	14 (1%)	75 (19%)
Located near a garbage dump (formal or informal)	3 (0.4%)	339 (32%)	26 (3%)	16 (4%)
Located near a sewerage plant	5 (1%)	319 (30%)	38 (4%)	9 (2%)
Close to a polluting factory (air, water, noise)	9 (1%)	10 (1%)	2 (0.2%)	2 (0.5%)
Condition of room space in the public school: <i>Insufficient</i>	15 (2%)	58 (6%)	8 (1%)	4 (1%)
Condition of school building in the public school: <i>Poor/very poor</i>	19 (3%)	207 (20%)	47 (5%)	46 (11%)
Condition of furniture in the public school: <i>Inadequate</i>	6 (1%)	81 (8%)	5 (0.5%)	14 (3%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Condition of playground in the public school: <i>Poor</i>	14 (2%)	181 (17%)	79 (8%)	53 (13%)
Separate toilet for girl children in the public school: <i>No</i>	12 (2%)	109 (10%)	58 (6%)	48 (12%)
Special provisions for privacy for women in Public Health Facility: <i>No</i>	54 (8%)	314 (30%)	145 (14%)	77 (19%)
Travel time to reach nearest birthing centre: <i><=two hours</i>	171 (25%)	94 (9%)	257 (25%)	126 (31%)
Expenses of the birthing centre: <i>Affordable</i>	391 (57%)	574 (55%)	589 (60%)	159 (40%)
<i>Disaster: No case of occurrence</i>				
Flood	432 (63%)	402 (38%)	457 (44%)	149 (37%)
Earthquake	653 (95%)	974 (93%)	1,004 (97%)	325 (81%)
Famine	680 (99%)	1,034 (98%)	1,027 (99%)	366 (91%)
Landslide	676 (98%)	1,040 (99%)	1,005 (97%)	245 (61%)
Response of municipality in the event of a disaster: <i>No response at all</i>	650 (95%)	699 (66%)	948 (92%)	376 (94%)
Situation of municipality for safety of women from GBV: <i>Less or not safe at all</i>				
Travelling to different areas during the day	34 (5%)	16 (2%)	20 (2%)	31 (8%)
Travelling to different areas during night time	673 (98%)	908 (86%)	935 (90%)	391 (98%)
Going to municipal offices	69 (10%)	15 (1%)	57 (6%)	42 (10%)
Going to market	75 (11%)	112 (11%)	57 (6%)	53 (13%)
Places women do not feel safe about going to in the city				
Offices	25 (6%)	17 (4%)	78 (16%)	23 (10%)
Market	23 (6%)	82 (17%)	51 (9%)	38 (17%)
Fairs	136 (35%)	215 (45%)	119 (20%)	67 (29%)
Temples	10 (3%)	35 (7%)	25 (4%)	16 (7%)
Places women go daily (<i>mostly or sometimes</i>) and means of travel				
Workplace	141 (21%) Walk: 67%, Cycle: 25%	412 (39%) Walk: 46%, Cycle: 41%	172 (17%) Walk: 56%, Cycle: 33%	34 (8%) Walk: 76%, Cycle: 18%

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Agricultural works	629 (92%) Walk: 96%, Cycle: 2%	464 (44%) Walk: 97%, Cycle: 3%	870 (84%) Walk: 98%, Cycle: 2%	371 (93%) Walk: 96%, Cycle: 4%
Fuel collection	653 (95%) Walk: 94%, Cycle: 5%	606 (58%) Walk: 70%, Cycle: 26%	652 (63%) Walk: 92%, Cycle: 5%	273 (68%) Walk: 100%
Fodder collection	600 (87%) Walk: 99%, Cycle: 1%	514 (49%) Walk: 97%, Cycle: 3%	813 (79%) Walk: 98%, Cycle: 2%	379 (95%) Walk: 100%
Places women go to sometimes/ occasionally: <i>Few</i>				
Land office	666 (97%)	999 (98%)	892 (87%)	369 (98%)
Utility office (e.g. to pay telephone, electricity, water and sanitation bills)	413 (60%)	790 (76%)	771 (75%)	263 (67%)
Other government offices	659 (97%)	948 (92%)	917 (89%)	379 (97%)
Municipality office	644 (94%)	948 (92%)	909 (88%)	374 (95%)
Self help group meeting	197 (29%)	706 (69%)	636 (62%)	158 (40%)
Health post	327 (48%)	529 (51%)	663 (62%)	224 (57%)
School	237 (35%)	249 (25%)	383 (38%)	173 (44%)
Places men go daily (<i>mostly or sometimes</i>) and means of travel				
Workplace	433 (63%) Cycle: 37%, Walk: 31%	854 (81%) Cycle: 48%, Two-wheeler: 32%	719 (70%) Cycle: 41%, Walk: 31%	242 (60%) Walk: 46%, Cycle: 39%
Agricultural works	629 (92%) Walk: 96%, Cycle: 2%	464 (44%) Walk: 97%, Cycle: 3%	870 (84%) Walk: 98%, Cycle: 2%	371 (93%) Walk: 96%, Cycle: 4%
Fuel collection	653 (95%) Walk: 94%, Cycle: 5%	606 (58%) Walk: 70%, Cycle: 26%	652 (63%) Walk: 92%, Cycle: 5%	273 (68%) Walk: 100%
Fodder collection	600 (87%) Walk: 99%, Cycle: 1%	514 (49%) Walk: 97%, Cycle: 3%	813 (79%) Walk: 98%, Cycle: 2%	379 (95%) Walk: 100%
Places men go to sometimes/ occasionally: <i>Few</i>				
Land office	666 (97%)	999 (98%)	892 (87%)	369 (98%)
Utility office (e.g. to pay telephone, electricity, water and sanitation bills)	413 (60%)	790 (76%)	771 (75%)	263 (67%)
Other government offices	659 (97%)	948 (92%)	917 (89%)	379 (97%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Municipality office	644 (94%)	948 (92%)	909 (88%)	374 (95%)
Self help group meeting	197 (29%)	706 (69%)	636 (62%)	158 (40%)
Health post	327 (48%)	529 (51%)	663 (62%)	224 (57%)
School	237 (35%)	249 (25%)	383 (38%)	173 (44%)
Physical infrastructure priorities	Road: 592 (86%) Water supply: 67 (10%)	Water supply: 844 (80%) Road: 159 (15%)	Road: 762 (74%) Water supply: 161 (16%)	Road: 352 (88%) Water supply: 39 (10%)
Social infrastructure priorities	Market centre (with different provisions): 457 (67%) Birthing centre: 195 (28%)	Market centre (with different provisions): 743 (71%) Birthing centre: 186 (18%)	Market centre (with different provisions): 561 (54%) Birthing centre: 298 (29%)	Market centre (with different provisions): 218 (54%) Birthing centre: 129 (32%)
<i>Section 4</i>				
Participation in municipal process	64 (9%) Of this, Ward Citizen Fora: 50 (78%) Public hearing: 8 (13%)	82 (8%) Of this, Public hearing: 37 (45%) Ward Citizen Fora: 29 (35%)	94 (9%) Of this, Ward Citizen Fora: 59 (63%) Public hearing: 26 (28%)	80 (20%) Of this, Ward Citizen Fora: 55 (69%) Public hearing: 30 (38%)
Membership in any group/committee	349 (51%) Of this, Self help group/CBO: 266 (76%) CFUG: 206 (59%)	314 (30%) Of this, Self help group/CBO: 255 (81%) CFUG: 51 (16%)	489 (47%) Of this, Self help group/CBO: 427 (87%) CFUG: 75 (15%)	238 (59%) Of this, Self help group/CBO: 150 (63%) CFUG: 124 (52%)
Contested for any position in the past 5 years	101 (15%)	46 (4%)	224 (22%)	25 (6%)
ACTIVE involvement in the meetings of organisations	149 (22%)	119 (11%)	63 (6%)	65 (16%)
<i>Evaluation: Yes</i>				
I am involved in municipality level committees for some urban services.	86 (13%)	89 (8%)	88 (9%)	44 (11%)
I have knowledge of where to go for what urban services.	383 (56%)	704 (67%)	737 (71%)	254 (63%)
I am aware of the legal rights.	442 (64%)	695 (66%)	730 (71%)	266 (66%)
<i>Evaluation: Not AT ALL Ranking</i>				
Municipality consults with local community women and men before fixing tariffs and...	340 (49%)	701 (67%)	929 (90%)	153 (38%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Municipality consults with us before deciding how to use urban land for roads, parks etc.	309 (45%)	654 (62%)	880 (85%)	155 (39%)
I protest with the government office when I do not get essential services.	194 (28%)	301 (29%)	328 (32%)	113 (28%)
Women get equal pay as men for the same work they do in the municipality.	441 (64%)	925 (88%)	336 (32%)	220 (55%)
<i>Section 5</i>				
Women are responsible for all cooking, cleaning, HH work, caring of children and elderly	593 (86%)	938 (89%)	980 (95%)	398 (99%)
In my home, female get to eat only after serving the food to male members of the family	87 (13%)	56 (5%)	46 (4%)	47 (12%)
In my home, girl children get the same food (vegetables, fruits, milk, balanced diet) as boys	615 (90%)	778 (74%)	822 (79%)	319 (80%)
In my home, both daughters and sons study in the same level of school/college (govt, private)	615 (90%)	758 (72%)	780 (75%)	283 (71%)
In my home, daughters get married but sons continue higher level of studies	52 (8%)	156 (15%)	52 (5%)	53 (13%)
My family members encourage women to participate in community activities	660 (96%)	844 (80%)	935 (90%)	341 (85%)
Women earn money and can decide how to spend my income	643 (94%)	893 (85%)	624 (60%)	367 (92%)
Physical beating/ verbal abuse of women occurs in the families of my tole	63 (9%)	373 (35%)	86 (8%)	100 (25%)
Women are not allowed to move around freely to different areas	264 (38%)	412 (39%)	302 (29%)	119 (30%)

Item	Attariya	Dhangadhi	Bheemdatt	Jhalari Pipaladi
Women have to get husband/elder family members' permission for joining	655 (95%)	947 (90%)	943 (91%)	363 (91%)
In ... women have to follow what the husband decides about use of money/income	502 (73%)	515 (49%)	589 (57%)	238 (59%)
Women have adequate time to rest and enjoy their leisure time	639 (93%)	1,002 (95%)	935 (90%)	375 (94%)
Physical beating	Inc: 4 (1%) Dec: 671 (98%)	Inc: 48 (5%) Dec: 974 (93%)	Inc: 16 (2%) Dec: 982 (95%)	Inc: 7 (2%) Dec: 358 (89%)
Verbal abuse	Inc: 6 (1%) Dec: 672 (98%)	Inc: 62 (6%) Dec: 966 (92%)	Inc: 15 (1%) Dec: 982 (95%)	Inc: 7 (2%) Dec: 359 (90%)
Polygamy	Inc: 6 (1%) Dec: 673 (98%)	Inc: 39 (4%) Dec: 990 (94%)	Inc: 5 (0.5%) Dec: 1,017 (98%)	Inc: 23 (6%) Dec: 357 (89%)
Chhaupadi (Menstrual exclusion)	Inc: 8 (1%) Dec: 477 (69%)	Inc: - Dec: 925 (88%)	Inc: 1 (0.1%) Dec: 878 (85%)	Inc: 74 (18%) Dec: 253 (63%)
Child marriage	Inc: 2 (0.3%) Dec: 678 (99%)	Inc: 39 (4%) Dec: 996 (95%)	Inc: 2 (0.2%) Dec: 1,009 (98%)	Inc: 8 (2%) Dec: 388 (97%)
Daijo/Dowry	Inc: 54 (8%) Dec: 530 (77%)	Inc: 537 (51%) Dec: 357 (34%)	Inc: 30 (3%) Dec: 948 (92%)	Inc: 238 (59%) Dec: 66 (16%)
No/limited right to decide on use of income	Inc: 169 (25%) Dec: 453 (66%)	Inc: 236 (22%) Dec: 744 (71%)	Inc: 8 (1%) Dec: 988 (96%)	Inc: 191 (48%) Dec: 187 (47%)
Mobility control	Inc: 10 (1%) Dec: 657 (96%)	Inc: 120 (11%) Dec: 888 (84%)	Inc: 4 (0.4%) Dec: 1,007 (97%)	Inc: 141 (35%) Dec: 238 (59%)
Violence and neglect due to addiction/ alcoholism of husband	Inc: 5 (1%) Dec: 664 (97%)	Inc: 37 (4%) Dec: 967 (92%)	Inc: 17 (2%) Dec: 961 (93%)	Inc: 9 (2%) Dec: 370 (93%)
Sexual violence (harassment, rape, attempt to rape)	Inc: 1 (0.1%) Dec: 666 (97%)	Inc: 116 (11%) Dec: 839 (80%)	Inc: 4 (0.4%) Dec: 1,002 (97%)	Inc: 4 (1%) Dec: 381 (95%)
Dalits allowed to enter non-Dalit homes	Inc: 406 (59%) Dec: 18 (3%)	Inc: 739 (70%) Dec: 85 (8%)	Inc: 613 (59%) Dec: 3 (0.3%)	Inc: 219 (55%) Dec: 37 (9%)
Dalits allowed to enter temples	Inc: 585 (85%) Dec: 57 (8%)	Inc: 1,007 (96%) Dec: 6 (1%)	Inc: 682 (66%) Dec: 13 (1%)	Inc: 248 (62%) Dec: 54 (13%)
Dalits allowed to take water together with non-Dalits	Inc: 549 (80%) Dec: 54 (8%)	Inc: 949 (90%) Dec: 13 (1%)	Inc: 671 (65%) Dec: 14 (1%)	Inc: 270 (67%) Dec: 40 (10%)
Dalits allowed to marry non-Dalits	Inc: 11 (2%) Dec: 37 (5%)	Inc: 377 (36%) Dec: 88 (8%)	Inc: 66 (6%) Dec: 10 (1%)	Inc: 29 (7%) Dec: 27 (7%)
Verbal abuse because of being Dalit	Inc: 11 (2%) Dec: 644 (94%)	Inc: 14 (1%) Dec: 1,027 (98%)	Inc: 8 (1%) Dec: 1,015 (98%)	Inc: 9 (2%) Dec: 387 (97%)

ANNEX 2E
Gender Equality and Social Inclusion Action Framework

Annex 2-E: Gender Equality and Social Inclusion Action Framework

265. This Gender Equality and Social Inclusion Action Framework (GESI AF) has been developed for the IUDP2 with the objective to implement all components of the proposed project in a GESI responsive manner. The Framework will in particular guide the development of GESI Action Plan during project preparation of IUDP2. The Framework encompasses both the Asian Development Bank (ADB) and Government of Nepal's broader principles on GESI as it relates to urban services of municipalities. It is informed by the "Gender Equality and Social Inclusion (GESI) Operational Guidelines", 2013 of MoUD.

266. The design and implementation of ensuing projects under IUDP2 will ensure that all interventions will consciously assess and address GESI issues, that all user's association and committees formed will have at least 33% women's representation and proportionate number from socially excluded groups; employment generation through the construction and rehabilitation of infrastructure will ensure equal pay for equal value of work for both men and women and promote women contractors/consultants and gender specific facilities like child care, flexible timing etc; special attention will be given to seek views and feedback from women, poor, and excluded including community based organizations/nongovernment organizations in the consultation process so that the design features have the potential to maximize the benefits reaching women, poor and excluded.

267. Further, prioritization of projects will consider the needs and demands of women, poor and excluded and those that are located in geographically remote and excluded pockets. All cost estimates will include for disabled friendly infrastructure, child care centre, separate toilets for women and for proper lighting to increase safety. All interventions will ensure that the access of women, poor and the excluded to assets and services are improved, that their voice and capacity to influence is strengthened and that discriminatory social practices, mind-sets and policies are revised.

Gender Equality and Social Inclusion Framework

Sector, Proposed Project Intervention	GESI related Tasks	Indicators	Responsibilities*
<i>Economic Development & Sustainable Urbanization</i>			
Participatory vision	Ensure consultation with women, poor and the excluded using appropriate methodology, language, timing and location so that they are able to contribute their ideas and requirements for the regional vision	GESI sensitive regional vision statement	Design and Supervision Consultant (DSC)
Land Use Plans	Assess using participatory methods, gender/caste/ethnicity/income and location-differentiated needs and access to bus parks, public park, roads, public toilets, public taps, public hall, other municipal services using land	GESI study of land use priorities of women, poor and the excluded	DSC
	Ensure land use plan incorporates identified priorities of women, poor and the excluded	GESI sensitive land use plan	

Sector, Proposed Project Intervention	GESI related Tasks	Indicators	Responsibilities*
Land pooling	<p>Identify possibilities of land pooling to support the landless and poorer families of the area</p> <p>Assess the positive and negative impact of land pooling on women, poor and the excluded (e.g. impact on the right to traditional land and natural resources, access to public services, indigenous knowledge and skills, cultural heritage sites and traditional institutions, traditional forms of livelihood of Adibasi Janajatis and Dalits);</p> <p>Assess potential for allocation of certain percent of land in land pooling projects for poor and excluded people and for provision for grant and soft loan to single poor women, poor and excluded for housing.</p> <p>Work closely with team preparing land pooling documents to ensure that requirements of women, poor and the excluded are integrated into the land pooling plans</p>	<p>Assessment study for need and impact of land pooling projects on women, poor and the excluded</p> <p>Land pooling plans</p>	DSC, PIU
Public markets	<p>Identify public market related priorities and needs of women, poor and the excluded</p> <p>Inform site selection for public markets based on mobility, convenience and financial contexts of women, poor and the excluded</p> <p>Identify gender and disabled friendly construction requirements of public markets</p> <p>Assess how child care centers can be included in public market complexes</p>	<p>Assessment study covering needs of women, poor and the excluded regarding public markets</p> <p>GESI sensitive site selection criteria</p>	DSC, PIU
Improved municipal finance and infrastructure management	Develop and establish systems for GESI sensitive management of municipal finance and infrastructure	Municipal finance and infrastructure management plan	DSC, PIU
Water Supply			
Deep tube wells and distribution	Collect disaggregated data about who has tube wells and who hasn't and the reasons for not having it; what distribution systems will ensure women, poor and the excluded receive the benefit of tube wells	<p>Deep tube wells and distribution plan for women, poor and the excluded</p> <p>xx number of HHs of women headed, of poor and of Dalits, of Janajatis with deep tube wells</p>	DSC, PIU

Sector, Proposed Project Intervention	GESI related Tasks	Indicators	Responsibilities*
Wastewater Management			
Small bore sewerage	Collect disaggregated data about small bore sewerage and what will ensure women, poor and the excluded receive the benefit of sewerage services	Xx number of HHS (disaggregated) accessing small bore sewerage services	DSC, PIU
Solid Waste Management			
Integrated waste management system with landfill site	Collect disaggregated data about waste management and what will ensure women, poor and the excluded receive the benefit of waste management services Identify site selection for landfill sites based on criteria that does not negatively impact poor and excluded HHS.	Xx number of HHS (disaggregated) following integrated waste management system Landfill site with appropriate arrangements for affected communities/ persons/Hhs	DSC, PIU
Municipal Roads and Drainage			
Seal and develop municipal roads	Include women, poor and excluded groups as stakeholders during consultations by project identification team to collect their needs and their voice. Analyze available secondary data from a GESI point of view and identify link roads, trails, tracks that would benefit women, poor and the excluded directly	xx kms of link roads, trails, tracks supporting women in the conduct of their daily work xx kms of link roads, trails, tracks supporting poor pockets and settlements of excluded social groups to access roads	DSC, PIU
Municipal Facilities			
Municipal building	Identify suitable sites for municipal building construction where relevant Provide gender and disabled friendly designs (toilets, child care room, ramps, proper lighting, no dark passages etc)	Gender and disabled friendly constructions on sites with easy access for women, poor and the excluded	DSC, PIU
Regional bus park	As above		
Vehicle/Bus park	As above		
Development of Jakhor Lake Area (Dhangadi)	As above		
Tourist Information Centre (Bheemdatt)	As above		
Crematorium (Bheemdatt)	As above		

Sector, Proposed Project Intervention	GESI related Tasks	Indicators	Responsibilities*
Community Infrastructure			
To be identified during design			
GESI mainstreaming in municipalities			
GESI in policy directives	Review, revise and develop policy mandates as relevant for municipalities to function in a GESI responsive way	GESI integrated directives and guidelines	PMC, Institutional Development consultant
	Prepare operational (including procedural formats, checklists etc) manual of GESI mainstreaming in Municipalities based on MOFALD guidelines	Operational Manual for GESI mainstreaming in municipalities	
GESI institutional arrangements	Form a GESI technical working group (including section chiefs) and make functional with ToRs, office logistics and work-plans	GESI unit	PMC, Institutional Development consultant
	Conduct GESI capacity need assessment and develop capacity building plan to institutionalize GESI in municipalities and strengthen skills of all relevant municipality staff	GESI capacity strengthening plan	
	Build capacity of GESI technical working group and enhance their skills for providing technical support for mainstreaming GESI in municipality functions	GESI mainstreaming capacity strengthening events	
	Develop recruitment and selection processes which promote staff diversity and follow affirmative action principles	Diversity in staff profile of municipalities	
GESI sensitive budgeting and financial allocation and expenditure	Establish a system of financial allocation and expenditure analysis from a GESI perspective. Identify which activities are providing direct benefit to women, poor and the excluded, which are supporting mainstreaming gender and inclusion in the project activities and which are neutral, assuming that all citizens will benefit. Identify which activities are improving access to assets and services of women, poor and the excluded, which strengthen their voice and improve their ability to make service providers accountable and which contribute to changing discriminatory rules, mind-sets and social practices.	Progress and annual report on GESI analysis of financial allocation and expenditure	PMC, Institutional Development consultant, Finance Section

Sector, Proposed Project Intervention	GESI related Tasks	Indicators	Responsibilities*
GESI sensitive M&E and reporting systems	Develop and implement GESI sensitive monitoring and reporting guidelines, including data and evidence collection formats with income, sex, caste/ethnicity and location disaggregation	GESI sensitive M&E and reporting systems	PMC, Institutional Development consultant,
	Identify measures and mechanisms for community engagement in supervision and monitoring, especially that of women, poor and the excluded.		
	Support the relevant units to prepare a disaggregated computer based database regarding existing facilities and services in different wards of the municipalities, including the poverty pockets and access of women, poor and excluded to such services; disaggregated household ranking database and existing pattern of gender-differentiated labour, access and control relevant for municipal services		
	Integrate GESI reporting in the regular reporting requirements of the municipalities. Prepare annual reports on performance and impact of project activities with disaggregated data and analysis regarding shifts in the lives of women, poor and the excluded.		

* Oversight responsibility of GESI activities will be of Project Management Office (PMO) and Project Management Consultants (PMC) along with the Project Implementation Unit (PIU).

**Government of Nepal
Ministry of Urban Development**

**Second Integrated Urban Development Project
(IUDP2)**

(PPTA 8817–NEP)

**Draft Final Report
Discussion Note #3 -
Project Rationale and Component Selection Process**

August 2015

Draft Final Report

Discussion Note #3 – Project Rationale and Component Selection Process

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1 Project Rationale – Need and Demand

1.1 Country Strategy

1.1.1 Nepal Government National Strategy

1. The government's strategic Three-Year Plan (FY2014–FY2016) targets high and inclusive economic growth. This growth is to be achieved through higher capital investment, mostly in energy and transport infrastructure, urban services, agriculture, and tourism. These investments are to emphasize connectivity, energy security, the productivity and transformation of agriculture, and environmental sustainability. Water management is accorded high importance. Access and inclusion are to be pursued through investments in health, education, and skills. Support for gender equality and reducing regional disparities are very high priorities. Electrification and connectivity in rural areas are to be improved, and so is access to water supply and sanitation (WSS). The strategic plan also calls for structural reforms to encourage private sector investment. Governance, public financial management (PFM), and environmental sustainability are given prominence under the plan.

2. The Three Year Plan provides guidance on water, sanitation, and urban development, highlighting the need to address the effects of rapid urbanization on basic urban services, water quality, sanitation, environment, and system maintenance. It proposes the full integration of sewerage, on-site sanitation, and solid waste management in all urban schemes and specifically endorses cost recovery from consumers. The plan reinforces the government's commitment to achieving the Millennium Development Goals and aims to have 96.25% of the population using an improved drinking-water source and 90.50% of the population using an improved sanitation facility by FY2016.

1.1.2 ADB Country Strategy

3. Under the CPS¹, ADB will support the government's development objective of accelerated, sustainable, inclusive economic growth. In line with its inclusive growth framework, ADB will pursue faster growth in economic opportunities through investments in infrastructure. It will seek to deliver access to economic opportunities through projects and programs in education, including skills development; WSS; and rural infrastructure. Mainstreaming GESI and supporting GESI reforms will also improve access to basic services. ADB will promote social protection through work on disaster risk management, skills development, and knowledge partnerships. Regional cooperation and integration (RCI) work will be emphasized through investments anchored on the South Asia Subregional Economic Cooperation (SASEC) program.

4. During the CPS (2013–2017), ADB will continue to support (i) improving inclusive urban infrastructure development, including water supply, sanitation, and wastewater treatment; (ii) improving gender and socially inclusive access to and service levels of water supply and sanitation in secondary and small towns; and (iii) institutional strengthening and capacity building of local governments, service providers, public agencies, and the Town Development Fund. The principles of cost recovery and rational tariffs, asset management,

¹ ADB. 2013 Country Partnership Strategy: Nepal (2013-2017)

effective decentralization, and devolution will be followed to ensure operational and financial sustainability of these institutions.

5. Urban development will be supported in a more strategic and focused manner by prioritizing projects that are in towns that have the greatest potential for economic growth and impact on peripheral semi-urban areas. To ensure quality service delivery and sustainability, ADB will continue to support and pursue improving the water tariff structure; asset management, including operation and maintenance; and post-project support mechanisms. ADB will promote projects to incorporate adequate adaptation and mitigation measures for risks related to earthquakes, landslides, floods, and climate change.

1.1.3 Consistency with ADB's Country Partnership Strategy

6. The Project, in line with ADB's water and urban operational plans, will (a) improve urban services in the 4 project municipalities through investments and institutional strengthening; and (b) boost economic development through integrated planning, institutional support and strategic investments in economic infrastructure with wider economic benefits for the FWRN. **Table 1-1** illustrates the focus of the CPS in relation to the improvement of urban infrastructure and services.

Table 1-1: CPS Plans in relation to Urban Infrastructure and Services

CPS Area of support	How the project supports CPS
<p>Primary focus</p> <p>(i) Inclusive and sustainable economic growth.</p> <p>(ii) Catalyzing private investment and enhancing the effectiveness of public investment.</p> <p>(iii) Human resource and knowledge development.</p> <p>The crosscutting themes</p> <p>(i) environment and climate change</p> <p>(ii) gender</p> <p>(iii) governance</p> <p>(iv) regional cooperation</p>	<p>(i) Includes poor urban communities as well a strategic recommendations for economic development.</p> <p>(ii) Proposes PPP for waste management and private sector to invest in tourism and urban development schemes.</p> <p>(iii) Capacity building and skills training in urban service provision and management.</p> <p>(i) Improving solid and liquid waste management. Application of CDM. Reducing risks of urban flooding.</p> <p>(ii) Promotion of gender equality and social inclusion (GESI)</p> <p>(iii) Management capacity building for local government</p> <p>(iv) Promotion of FWRN trade and tourism with India.</p>

1.1.4 Consistency with National Urban Policies

7. National Urban Development Strategy (NUDS) 2014 prepared by MoUD has adopted a 15 year national vision on Balance and Prosperous National Urban Centres. By this it means to incorporate i) achievement of set milestones regarding physical and institutional development; and ii) enhancement in the quality of urban living through the improvement of urban environment, provision and quality of infrastructural, economic and social services. It also aims to develop coordinated and integrated efforts with other key agencies of the government dealing with transport infrastructure, environment, health, education, commerce and industries, agriculture and biodiversity resources and energy.

8. The project will facilitate economic and urban development in FWRN in line with government's strategic Three-Year Plan and the NUDS. **Table 1-2** presents how the project outputs will meet the Government's National Strategy and NUDS.

Table 1-2: How the Project Supports National Urban Strategies

Three Year Plan (2013-2017)	How the project supports National Urban Strategies
<p>Primary focus</p> <p>(i) Infrastructure: Energy, Transport and Urban Services</p> <p>(ii) Tourism</p> <p>(iii) Social Services and Social Protection</p> <p>(iv) Governance and Public Financial Management</p>	<p>The project will improve water supply, wastewater management, and urban transport facilities in urban centers.</p> <p>The project aims to improve municipal road networks to increase connectivity, provide greater access to basic services and markets, and promote tourism and trade. The project supports cross-border connectivity.</p> <p>The project will include strategic recommendations for economic development plus capacity building and skills training in urban service provision and management.</p> <p>The project vision seeks to create conditions for private sector investment. It will provide opportunities for the young entering the labor market.</p> <p>The project includes gender actions to improve equality. Other activities will focus on improving the indicators in areas under the Millennium Development Goals.</p> <p>The project will include improvements in public finance management (PFM) related to public procurement, results-based management, and corruption prevention and control. The project will encourage private sector investment and public-private partnerships.</p>
<p>The crosscutting themes</p> <p>(i) Environment</p> <p>(ii) Gender</p>	<p>The project addresses climate change adaptation and mitigation and overall environmental protection. Specifically, improving solid and liquid waste management, application of clean development mechanism and reducing risks of urban flooding.</p> <p>The project attaches high priority to pursuing gender equality and social inclusion (GESI).</p>

1.2 Urban Governance – Asian Perspective

1.2.1 ADB Initiatives

9. Cities are the engines of national economic development. The ability of cities to bring together knowledge, assets and global opportunities guide the people towards innovation and investments that propel the long term economic prosperity. Thus it is evident that the countries having higher share of the urban population have recorded high levels of economic status. Japan, Hong Kong, Taiwan and Korea are good examples in Asia. Thus many countries have made deliberate attempts to urbanize their countries.

10. ADB under its Urban Operation Plan (2012-2020)² emphasizes the application of an urban framework to support the sustainable development of Asian cities. The plan fosters Competitive, Inclusive, and Green Cities to improve the performance of cities on the Economic, Equity, and Environment (3Es) fronts. A major gap identified by several ADB studies affecting the competitiveness of Asian cities is urban governance. There are three

² Draft Instruction Manual for consultants preparing Collaborative Governance Index (CGI) studies for City-Regions, ADB Project 7918.

areas of weakness in urban governance that have proved particularly problematic in enhancing the competitiveness and sustainability of cities across the region: (i) planning, (ii) resource management, and (iii) institutional and regulatory arrangements. The strengthening of these foundations of urban management in Asian cities, especially in South Asia, is important and challenging.

11. Considering the above, ADB introduced a new planning process – "City Cluster Economic Development" (CCED). "The goals of CCED are to create an enabling business environment in urban regions and stimulate industrial growth and thus ultimately increase jobs and income opportunities for poverty reduction."

12. The rationale for cluster city development is based on establishing "urban-led" development strategy, meaning building an engine of growth. Thus it expects a high level of spillover effects in the region so that the economy of the entire urban region will benefit.

13. However it needs to be understood that city economic development strategies cannot be worked out by only considering a city within its local authority boundary but considering the whole urban region as a cluster. Such planned urbanization can establish a strong foundation for national economic growth.

14. Thus in order to make our cities competitive to play its role of engine efficiently it has become necessary to strengthen these three foundations – (i) Planning (ii) Resource Management and (iii) Institutional and Regulatory Arrangements within its urban region. The four municipalities under the Project due to their proximity to each other and of similar characteristics are therefore considered suitable for City Cluster Economic Development.

1.2.2 Competitiveness of the Far Western Region Project Area

15. Undoubtedly, Nepal is a gifted country and the Terai plains in which the project towns are located represent the Bread Basket of Nepal. The Far Western region, while among the most backward regions of Nepal, is also one of the most virgin and unexplored territories of Nepal. The challenge and opportunity for this region is to get on a path to accelerated human development whilst retaining its beautiful and un-spoilt nature; whilst retaining its pristine rivers, water bodies, wild life and tribal culture.

16. A couple of important pre-requisites need to fall in place before the region can hope to achieve transformational growth:

- Enactment of the Constitution & Implementation of Decentralisation of Governance: All strategies that one can come up with will require leadership, both at an institutional level and at an individual level, for it to materialise in reality.
- Developing a strong transportation linkage with India: There is no gainsaying that the economic prosperity of Nepal and particularly the FWR is heavily tied to its relations with India and more specifically with the quality of the transportation access between the two countries.

17. In the near term, two sectors naturally present themselves as focus areas for economic development of the region: A - Tourism; and B - Agriculture and forestry related – agro forestry, commercial forestry, etc.

18. Both these sectors will have to be supported by a strong infrastructure sector investment program viz., Power, Roads, Urban Infrastructure, etc., all of which would also contribute to additional economic activity in their own right.

1.3 Local Needs and Demands for Urban Infrastructure

1.3.1 Municipal Priorities

19. During meetings and site visits with senior officers and staff of the 4 project municipalities, a number of problem issues were identified and discussed. The priority varied slightly between municipalities but generally is as indicated in **Table 1-3**.

Table 1-3: Municipal Priorities for Urban Infrastructure

Priority	Description	Issues / Scope
1	Municipal Roads	Many roads in the municipal areas require developing or rehabilitation to improve access for public transport and solid waste collection.
2	Solid Waste Management	Development of proper scientific waste disposal sites to include a) site access road; b) compost plant; c) equipment for spreading and compacting reject waste; d) staff training; and e) collection equipment and public awareness for 3R's (reduce, re-cycle and re-use).
3	Surface Water Drainage	Improvement of drainage channels and river training to reduce risk of flooding and damage to property.
4	Wastewater Management	Prevention of wastewater entering the open environment. Options include improved use of existing on-site disposal including the development of septage (septic tank sludge) treatment facilities and community awareness for better maintenance and/or introduction of sewerage (small-bore or conventional)
5	Public / Municipal Facilities	Improved and additional public facilities (i.e. toilets / washrooms), bus/vehicle parking and municipal offices (2 municipalities).
6	Water Supply	Some municipal areas are deficient in a supply of safe drinking water. Requires the development of local / community water supply schemes.

1.3.2 Business Priorities

20. A business survey was undertaken in the four project towns. These included questions about how municipal infrastructure affected their business and what they considered were the priority for improvement. The responses are shown in **Table 1-4**.

Table 1-4: Business Priorities for Urban Infrastructure

Business/ Priority	1	2	3	4
1. Hotel (33)	Roads & Drains	Sewerage	Street lighting	SWM
2. Industry (41)	Sewerage	Roads & Drains	Street lighting	SWM
3. Markets (220)	Roads & Drains	Sewerage	Street lighting	SWM
4. Restaurants (79)	Roads & Drains	Sewerage	SWM	Water supply

Note: Parenthesis indicates number of businesses interviewed. Source: TA 8817-NEP Business survey.

1.3.3 Community Needs

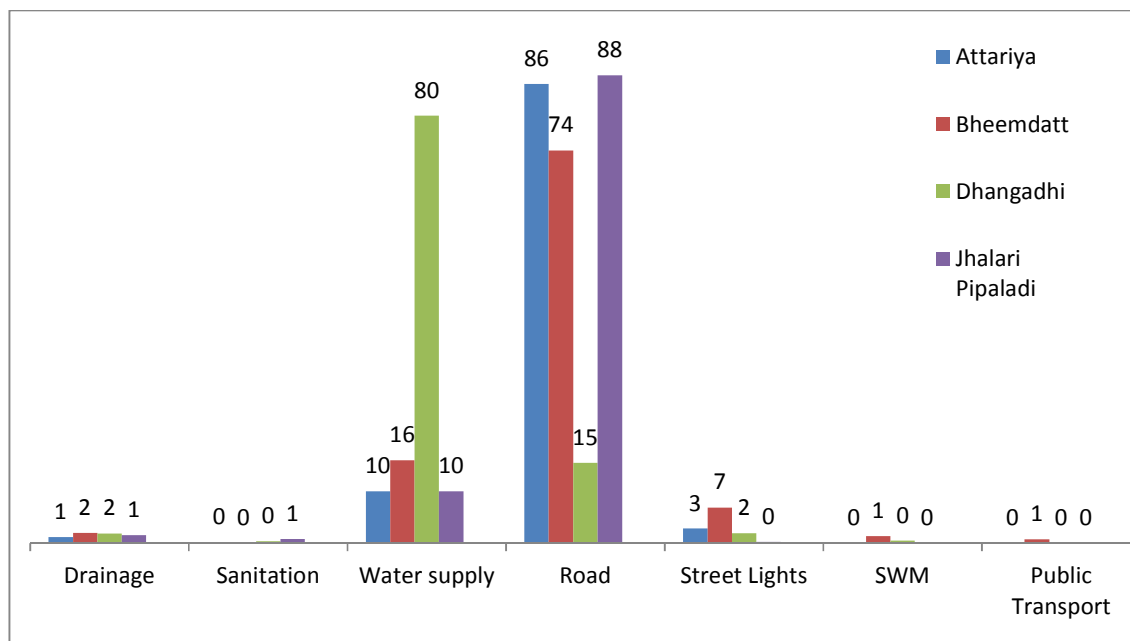
21. A socio-economic household survey covering 5% of the total population of the municipalities was undertaken as part of the project preparation. Households were asked, out of a list of 12 different municipal services, which they thought was the most important sector of urban infrastructure in need of improvement. The results are indicated in **Table 1-5** and **Figure 1-1**. More information on the household survey is provided in **DN#2: Socio-Economic and Gender Analysis**.

Table 1-5: Community Priorities for Urban Infrastructure

Rank	All Municipalities	Attariya	Bheemdatt	Dhangadhi	Jhalari-Pipaladi
1 st	Road	Road	Road	Water Supply	Roads
2 nd	Water Supply	Water Supply	Water Supply	Roads	Water Supply
3 rd	Street Lighting	Street Lights	Street Lights	Drainage	Drainage
4 th	Drainage	Drainage	Drainage	Street Lights	Street Lights
5 th	SWM	Sanitation	SWM	SWM	Sanitation

Source: TA 8817-NEP. HH survey, 2015

Figure 1-1: Community Priority Demand for Municipal Infrastructure (%)



Source: TA 8817-NEP. HH survey, 2015

22. The results clearly demonstrate that the priority municipal infrastructure identified by local communities was for roads in 3 of the municipalities and water supply in Dhangadhi. It is interesting that street lighting was generally considered more important than drainage, solid waste management or sanitation. Also, there was little difference in priority demands between urban and rural communities of the municipalities.

23. The reasoning behind these results is probably because households presently consider roads, water supply and street lighting as public services while issues of SWM and sanitation are still largely the responsibility of the individual householder.

2 Development Coordination and Lessons Learned

2.1 Development Coordination

2.1.1 Major Development Partners: Strategic Foci and Key Activities

24. Nepal receives significant assistance from various development partners to achieve its goals of broad-based and inclusive economic growth. In both the urban sector development and water supply and sanitation subsectors, the Asian Development Bank (ADB) has been the largest development partner since 2000. Other major development partners in the sector include German development cooperation through GIZ and KfW, the Government of Finland, Japan International Corporation Agency (JICA), the United Nations Development Program (UNDP), and the World Bank. **Table 2-1** lists relevant urban development projects in Nepal and corresponding development partners since 2001.

25. ADB has supported the urban sector development including water supply and sanitation sector since 1985. This starting with the Rural Water Supply and Sanitation Sector Project, and has worked closely with the Ministry of Physical Planning and Works, now called the Ministry of Urban Development. Realizing the significant positive impact, the Rural Water Supply and Sanitation Sector Project was continued for four consecutive projects. This was followed by the Community-Based Water Supply and Sanitation Project, the Small Towns Water Supply and Sanitation Sector Project, the Second Small Towns Water Supply and Sanitation Sector Project, the Urban Environment Improvement Project, the Secondary Towns Integrated Urban Environment Improvement Project, and the Integrated Urban Development Project. ADB's support to urban water supply in the Kathmandu Valley started with the Melamchi Water Supply Project and continued with the Kathmandu Valley Water Services Sector Development Project, the Kathmandu Valley Water Supply Improvement Project, and the Kathmandu Valley Wastewater Management Project.

26. Although the World Bank had not been extensively engaged in the urban sector for the last one decade, it re-engaged with the Emerging Towns Project under the Urban Governance and Development Program in 2011. Moreover, it has supported water supply projects in rural areas through the Rural Water Supply and Sanitation Fund Development Board.

27. GTZ's efforts in Nepal have been anchored on the four pillars of the Poverty Reduction Strategy (PRS) of the Government of Nepal: (a) broad-based economic growth, (b) human development, (c) social inclusion, and (d) governance. The projects in the area of local self-governance and civil society include urban development. Since 1987, the Urban Development through Local Efforts Program of the GTZ, in close collaboration with the Ministry of Local Development, has provided support to the institutional development of the municipalities particularly on urban development planning, urban governance, implementation of poverty reduction strategies, and strengthening of the Urban Development Fund financed by KfW Entwicklungsbank. The Urban Development Fund is now offered to towns and cities to finance municipal infrastructure, such as bus stations, schools and clinics. The World Bank and the ADB also act as partners in the financing of the Urban Development Fund.

Table 2-1: Major Development Partners

Development Partner	Project Name	Duration	Amount (million)
Urban Sector Development			
ADB	Urban and Environmental Improvement Project	2003–2011	\$30.00
	Local Governance and Community Development Program ^a	2008–2013	\$106.30
	Energy Access and Efficiency Improvement Project (including Solar Powered Street Lamp Installation Project)	2010–2012	\$4.20
	Kathmandu Sustainable Urban Transport Project	2010–2014	\$20.00
	Secondary Towns Integrated Urban Environmental Improvement Project ^b	2010–2016	\$60.00
	Integrated Urban Development Project	2012–2017	\$ 83.90
JICA	Kathmandu Valley Urban Road Development—Improvement of the Kathmandu Bhaktapur Road	2008–2011	\$26.00
KfW	Town Development Program II	2001–2009	€8.00
	Town Development Program III	2009–2012	€7.50
GTZ	Community Infrastructure in Municipalities	2000–2005	DM14.00
	Urban Development through Local Efforts Program	2008–2010	€5.50
Government of Finland	Strengthening of Environmental Administration and Management at the Local Level in Nepal (Phase I)	2001–2007	€5.20
	Strengthening of Environmental Administration and Management at the Local Level in Nepal (Phase II)	2008–2011	€3.50
UNDP	Public–Private Partnership for Urban Environment	2002–2012	\$1.40
UN HSP	Urban Water Supply and Sanitation and Pro-poor Governance and Capacity Building	2007–2011	\$0.80
World Bank	Urban Governance and Development Program: Emerging Towns	2011–2016	\$25.00
Waste Management			
Government of Finland	Regional Waste Management Project	2010–2014	€4.40
Water Supply and Sanitation			
ADB	Small Towns Water Supply and Sanitation Sector Project	2001–2008	\$34.00
	Second Small Towns Water Supply and Sanitation Sector Project	2009–2015	\$45.10
	Melamchi Water Supply Project ^c	2009–2016	\$ 235.3
	Kathmandu Valley Water Service Sector Development Program	2003–2014	\$10.64
	Kathmandu Valley Water Supply Improvement Project	2011–2016	\$80.00
JICA	Improvement of Water Supply Facilities in Urban and Semi Urban Center	2005–2006	\$9.80

ADB = Asian Development Bank, DM = deutsche mark, GTZ = Deutsche Gesellschaft für Technische Zusammenarbeit, UN = United Nations, UNDP = United Nations Development Program, JICA = Japan International Cooperation Agency

^a Led by the Government of Nepal. Development partners besides ADB include the Danish International Development Agency; Canadian International Development Agency; Department for International Development of the United Kingdom; United Nations Joint Programme (United Nations Development Programme, United Nations Children's Fund, United Nations Capital Development Fund, United Nations Population Fund, and United Nations Volunteers); World Bank; Government of Norway; Swiss Agency for Development and Cooperation, German development cooperation through GIZ, and Japan International Cooperation Agency.

^b Cofinanced by the OPEC Fund for International Development.

^c Cofinanced by JICA, the Nordic Development Fund, and the OPEC Fund for International Development.

Source: Asian Development Bank

28. Since 1963, UNDP has worked at building linkages that address effective design and implementation of poverty alleviation programs in Nepal. In 2002, the UNDP and the Government of Nepal launched the Public-Private Partnership (PPP) for Urban Environment Program. The program prepared the tool kit to develop municipal capacity for PPP for urban service delivery (i.e. communal toilets, solid waste management, etc.) in various

municipalities. In 2008, UNDP approved its Country Program Document for 2008-2010 in support of the Interim Development Plan of the Government of Nepal, which identified capacity development as the overarching objective of UNDP assistance. Also, UN-HABITAT is part of the Kathmandu Valley Small Towns Water and Sanitation Initiative, a community-based low cost sanitation and water supply project involving an investment of US\$1 million for a small town of 46,000 inhabitants. This project is being implemented under the Water for Asian Cities (WAC) Program, in collaboration with Government of the Netherlands and the ADB, as partners.

29. JICA has been operating in Nepal since 1978 with other development partners in implementing various urban projects particularly on water supply and transportation sectors, and in improving the capacities of the municipal governments in managing basic infrastructure and services. Ongoing projects include Melamchi Water Supply Project (loan aid), and the Project for Capacity Development on Water Supply in Semi-Urban Areas in Nepal (technical cooperation project). Other major previous grant aid projects included Kathmandu Water Supply Facility Improvement Project, and the Improvement of Water Supply Facilities in Urban and Semi-Urban Centers.

30. The Government of Finland's bilateral development support to Nepal in 2010 alone is approximately EUR 12.5 million, and the amount of aid is planned to be increased, with particular focus on environmental management for urban areas. The Strengthening of Environmental Administration and Management Project (2008-2011) in Dharanin-Biratnagar aims to strengthen the local governments' and industries' capacity to plan and manage environmental issues and pay attention to poverty related issues, gender, social status, etc. The Government of Finland also funds Regional Solid Waste Management Project in Morang-Sunsar area in East Nepal, which was under implementation until 2014.

2.1.2 Institutional Arrangements and Processes for Development Coordination

31. ADB is a key partner supporting the Government of Nepal's Local Governance and Community Development Program in close coordination with other development partners such as CIDA, Danish International Development Agency (DANIDA), Department for International Development (DFID) of United Kingdom, Norwegian Agency for Development Cooperation (Norad), Swiss Development Cooperation (SDC), and several UN agencies. ADB has assumed the lead role among the participating donor partners by actively facilitating and coordinating support and providing upfront assistance under the Local Governance Support Program.

32. ADB has been the largest development partner in the urban water supply and sanitation sector, and also been informally chairing the development partners' group for urban development. The Government of Nepal, through its Department of Urban Development and Building Construction, has taken the lead in formally establishing the Urban Development Forum in December 2009, which has invited external development partners to convene and coordinate their respective programs and projects in various sectors of urban development. Through this forum, the ADB and other development partners can ensure synergy and a coordinated effort in implementing urban development initiatives in Nepal.

2.1.3 Achievements and Issues

33. There has been an initial impetus to ensure a concerted effort among external development partners towards improving Nepal's local governance, decentralization, and community/rural development, as shown by the support given by a number of bilateral and multilateral agencies to the Local Governance and Community Development Program. However, only a few external assistance programs, with particular focus on the urban sector, has been initiated over the past decade, so as the efforts in collaborating and sharing opportunities and experience among development partners and the government agencies have been limited.

2.2 Lessons Learned

2.2.1 ADB Past Investments in Nepal

34. In an ADB review of its past investment portfolio for Nepal in preparing the Country Partnership Strategy (2013-2017) the following lessons identified are pertinent to the proposed project:

- i. Reliable funding for maintenance of infrastructure projects;
- ii. partnerships with the government and development partners as key to effective implementation;
- iii. recognizing institutional capacity limitations.
- iv. policy dialogue should be conducted in a phased manner with broad stakeholder consultation;
- v. capacity building requires more focused intervention, better preparatory work for technical assistance (TA), and stakeholder consultation; and
- vi. for ensuring sustainability, policy-level commitment for enhanced funding is required.

35. To improve the overall program effectiveness, efficiency, and sustainability:

- i. Pursue policy dialogue and reforms through a detailed pragmatic, consensus-driven approach, involving rigor, candidness, and transparency;
- ii. strive to improve the quality of life by empowering local bodies through decentralization;
- iii. encourage public-private partnerships in infrastructure development by creating an incentive structure and an enabling environment;
- iv. engage the major stakeholders and beneficiaries in capacity building initiatives;
- v. give more emphasis to secondary and technical and vocational education;
- vi. provide more effective technical support for managing for development results across government ministries; and
- vii. ensure cost recovery mechanisms are in place, backed by political commitment.

2.2.2 Lessons from Similar Projects

36. The proposed project design will consider lessons learnt from past and on-going urban sector projects, in particular the Integrated Urban Development Project (IUDP), in Nepal. Some of the key lessons to be taken into account during the preparation of the proposed loan are highlighted below:

- It is critically important to have a senior level champion in the Government who can lead the project effectively. The project needs early and visible real gains in order to satisfy high political expectations.
- There is need for clarity on all key decisions and their early finalization to avoid leaving issues open to interpretation later.
- Greater efficiency in project design and implementation can be gained by having the project based on a single large city or a cluster or corridor of towns rather than scattered settlements.
- Land acquisition, the primary cause of delay in implementing urban sector infrastructure projects, is of particular concern.
- Delays at various levels of government approval, lack of timely and adequate releases of counterpart funds, and delays in selection of consultants, have been serious factors for inadequate progress.
- Integrated urban sector development projects are inherently complex, given that the projects typically include multiple sub-sector investments for more than one urban area, along with policy reform, capacity building, and community participation components.
- Such projects must be well defined in scope and scale. Care should be taken to avoid inclusion of too many or unnecessary sub-projects and implementing agencies in the final investment program. Experience elsewhere shows that these complicate decision-making and the management process, and thus delay implementation.
- Developing urban sector projects needs the involvement and true participation of a broad stakeholder groups in relevant government agencies and civil society, to achieve understanding and political support during implementation.
- The capacity of the implementing agencies to implement the project plus operate and maintain the expanded infrastructure must be given proper consideration.
- There is a need for a realistic time frame for implementation of sector reforms, especially where restructuring regional or local bodies are concerned. Few dramatic improvements, except perhaps in revenue enhancements and financial management, might be possible in the short term.
- Regional authorities and municipalities can be highly political sensitive entities. Any change in their responsibilities needs to be steered with great sensitivity.
- Community participation, capacity building and institutional strengthening processes must be adequately planned. Ideally, they must be operational before project implementation. They must be given continued support throughout the implementation stage.
- Associated with this, is the need to ensure broad based policy support across the multiple regional, district and local government areas. This is especially true at the initial stages of project implementation. The policy measures adopted must reflect the commitment of all relevant authorities.
- Reform of finances, particularly municipal property tax and water tariffs, and urban sector reform are crucially linked. Introducing appropriate regulatory and

pricing framework at an early stage will greatly facilitate the implementation process.

- Benefits should be optimized by bringing together ongoing initiatives, thus mainstreaming a multi-dimensional project such as the Second Integrated Urban Development Project.

37. To summarize, an integrated approach is essential. For example, flooding appears to be the biggest problem, but it could be a waste of investment if commercial and household waste was not prevented from being dumped in the drains. Solid waste has to be properly collected, treated and disposed. Equally, the economy of the municipalities is sure to expand because of their unique location and setting. Consequently, the urban areas are bound to expand resulting in a greater demand for drinking water with a resultant increase in wastewater.

38. The topography and population density of the municipalities indicates that sewerage might initially be too expensive to install and operate. Thus, it is essential that septic tanks should be properly maintained and emptied regularly with the septage sludge being properly collected and treated to prevent pollution and blockage of the drainage system. But to ensure that the domestic solid waste and septic tank sludge can be efficiently collected for treatment and disposal, many of the municipal roads and lanes need to be improved.

3 Selection Process of Physical Components

3.1 Methodology and Approach

3.1.1 Objective

39. The objective of the following sections is to present the approach adopted for the identification and selection of project components for the Project urban areas. It then includes technical choices, in the selection of standards and alternative technology options – and a weighing-up of what is affordable. In addition - and possibly more importantly - it covers policy choices on the type and level of urban services and the management of such services.

40. The central strategic development objective of urban infrastructure projects is to provide adequate environmental and institutional conditions that will permit and encourage sustainable economic growth and targeted development in the urban areas, and thereby contribute to the reduction of urban poverty.

41. One element of this is the structural improvement to the urban living environment: water, air and soil. The project should bring physical improvements to the present situation, to the living conditions of the entire urban population, including of women, poor and excluded. It will also introduce institutional and legal changes that can protect the urban environment and its population in the future.

42. The choice between types of urban infrastructure to be financed under the Project are largely dictated by the priorities expressed by the different stakeholders in the urban areas and maximizing the resultant beneficiaries, ensuring that vulnerable groups also benefit from the project. To increase access of basic services to women, poor and excluded, targeted programs may need to be designed.

3.1.2 Underlying Principles

43. Bearing in mind the present state of development of the project municipal areas, and the available government agency and/or municipal finances, the project focuses on providing at least the basic minimum expectations for essential services. Particular attention is also given to increasing access to basic services to women, poor and excluded in poverty pockets of the municipal wards. In all cases, this provision will require a combination of civil works – to put things in place – and a sequence of procedural and organizational change to finance, plan, manage and sustain such services.

44. In outline, the minimum targets are:

- A reliable water supply of adequate quantity and acceptable quality, ideally for 24 hours per day, throughout the urban areas either by extending the piped water distribution network in a phased manner or by ensuring adequate community hand pumps;
- For densely populated urban core areas when there is adequate water supply: a networked system (such as a sewerage system) to collect and transport waste water, with treatment of the collected sewage; or on-site sanitation of acceptable quality in lower population density areas;

- A drainage system designed to avoid damage caused by stagnant water and flooding that will also allow municipal roads to be improved and maintained; and
- The removal of domestic and commercial solid waste from the urban area, through an effective and safe system of collection, transportation and disposal.

45. Based on the current conditions, these guiding principles have led to the identification of a set of project components. The cost implications of these concept designs will be reviewed against what government and households can afford, according to a range of financing options. In addition, the capability of the municipality (or the community) to operate and maintain the infrastructure is an essential issue for consideration. In some cases, this assessment might result in a need to scale down investments, or consider other output targets or financing and management options.

46. For example, the target for water supply should ideally be 24 hours daily and a 24x7 supply; but load shedding in grid power will affect tube well operation and pumping which could restrict supply. Also, where population densities in the urban areas are relatively low this results in piped sewerage system being very costly to develop and equally to operate and maintain.

47. Corresponding staffing structure and capacity building activities will be determined based on the agreed investment program.

3.2 Component Selection Criteria

3.2.1 Basis of Component Selection

48. The total investment depends on stakeholder priorities (both community and municipal) and needs, the affordability, and the assessed implementation capacity of the municipality or other development agencies. Overall, project component selection is influenced by need, affordability and implementation capacity, rather than total estimated cost.

49. In the interests of integrated development, a consideration in component selection is to ensure inter-sector linkages and optimization. For instance, improvements in drainage, roads and solid waste management are essential to complement each other and cannot be considered in isolation from each other.

50. The following sections summarize the factors considered in selecting project components. Each selected component has been technically scrutinized but their financial, economic, social and environmental impacts and benefits will be further assessed to verify acceptability and that they could be justified for funding under the ADB loan.

Social and Poverty Considerations

51. The social and poverty indicators applicable in the urban context are key criteria in the initial component selection for investment. A conscious effort has been made to reach out to target communities, which are socio-economically deprived and to women who are

most affected by lack of municipal services. The key criteria for final selection is the aspect of human poverty focusing on limited or no access to basic urban services, which include:

52. Overall Social Considerations

- Project meets GON/ADB social policy objectives;
- Project is affordable/accessible by the poor;
- Project meets expressed needs of community with women and the vulnerable groups consulted; and
- Project provides services in comparatively poorer wards/settlements and with less access to urban services.

53. Maximizing Social Benefits

- Project maximizes numbers of below poverty line beneficiaries;
- Project extends or improves service delivery to previously un-served or under-served areas, particularly for poor settlements;
- Project leads to sustained poverty reduction through demonstrable health, livelihood benefits to women, poor and the excluded;
- Project empowers and leads to demonstrable improvement in Quality of Life for women; and
- Project enables participation of community (especially poor communities) in planning, construction and Operation and Maintenance (O&M).

54. Minimizing Negative Social Impacts

- Project requires minimum resettlement (or loss of productive / non-productive assets);
- Resources are available to compensate for loss of housing, land, productive assets, cultural sites, social networks etc, especially for the most poor and vulnerable; and
- Project minimizes other negative impacts on poor men and women, e.g. increased costs for services (time and money), unemployment, misuse of compensation money, increased gender based violence and health risks.

Financial Considerations

55. For maximum financial benefits investments will be on the following considerations:

- Measurable services (e.g. water supply) should ideally produce direct revenue. Non or indirect revenue generating projects should demonstrate absolute need – social or otherwise – and augment indirect revenue resources of the municipality (i.e. increase the tax base of the municipality on account of the better service provided);
- Capital costs are based on least per capita cost option considering the area, population and benefits, and designed for 15-20 years;
- Components should demonstrate best possible maintenance and management option;
- As far as possible the projects generate revenues sufficient to meet O&M costs and debt service without government subsidy;
- Cross-subsidy options for the ultra-poor groups who cannot pay for services;
- Components should result in no (or minimal) resettlement/relocation; and

- Land acquisition only considered where it is absolutely necessary/unavoidable.

Economic Considerations

56. For economic viability the investment should:

- Demonstrate significant improvement over the “without project” situation;
- Demonstrate demand and supply management as an integral part of design;
- Be the most cost effective solution where viable options exist; and
- Demonstrate low risk from technical, social, environmental, financial and institutional perspectives.

57. For economic development the capital investment plan should have potential to:

- Maximize the removal of constraints on economic activity - sectors ranked as negatively affecting business performance will be preferred;
- Maximize economic growth - components ranked as contributing to improving business performance and prospects will be preferred;
- Act as a catalyst for increasing economic opportunities for women – which have possibilities for economic activities where women can lead and manage and have control over income earned;
- Act as a catalyst to economic growth - components which will affect industrial sectors identified as having growth potential will be preferred; and
- Act as a catalyst for pro-poor economic growth - which has high local employment and income generating effects, will be preferred (e.g. tourism).

Environmental Screening Considerations

58. The overall environmental goal is that the project components should maximize improvements to the urban environment and living conditions for urban population while, at the same time, minimizing the environmental impact of their implementation.

59. For maximizing environmental benefits, project components should:

- Improve access to reliable urban services, in particular poor beneficiaries;
- Reduce direct exposure by population to the risks of polluted wastewater;
- Reduce property damage due to flooding and dirty storm water;
- Reduce flooding of neighborhoods; and
- Improve urban environment by the more effective removal and disposal of (solid) waste from the urban area.

60. For minimizing environmental negative impacts:

- Developments should avoid or minimize damage to valuable ecology and natural heritage areas;
- Developments should avoid or minimize disturbance to the extent, depth, or hydrological balance of groundwater and wetlands;
- Developments should avoid disruption and dislocation to communities;
- No resettlement or relocation should be required; and
- Avoid destruction/disturbance to historical/cultural items or values.

61. Investments should avoid causing or exacerbating environmental hazards. In particular:

- Components should not result in new or intensified drainage problems in other areas;
- Development on flood-prone land or floodplain of any river should be avoided. Flood mitigation/drainage improvement works need to take account of downstream effects.

62. Developments should be undertaken in an environmentally sound fashion to:

- Ensure full environmental benefits will be achieved through adequate maintenance and operation of the components;
- Ensure that any environmental issues do not have higher impact on women, the poor and the excluded;
- Ensure developments on alluvial soils do not produce effluent/leachate that enters groundwater or aquifer; and
- Ensure any effluent produced or diverted by component investments do not increase pollutant loading on rivers and water bodies.

Institutional Considerations

63. The institutional considerations for the capital investment include:

- Sufficient management, technical and financial resources available within the implementing agency (DUDBC / municipalities) to execute the project;
- The implementing agency is of the right size, with the right skills and with the appropriate organizational structure to execute the project;
- The implementing arrangements of the project meet the objectives of decentralizing authority to as low a level of government as possible, without compromising quality or implementation effectiveness and efficiency;
- Financial management systems are adequate to accommodate requirement of project financial flows, accounting and reporting;
- Training facilities are available to upgrade the skills needed to run the project;
- There is sufficient flexibility to allow for skill enhancement and appropriate job allocation;
- Sufficient mechanisms are in place to provide accountability to users for the operation of the project;
- Commitment, skills and competencies exist to integrate gender and inclusion aspects in all work undertaken;
- Management information systems are in place to enable the implementing agency (DUDBC / municipalities) to manage a decentralized project effectively; and
- Legal and managerial enablement is available to the implementing agency (DUDBC / municipalities) for private sector partnerships, if appropriate.

3.2.2 Least Cost Solutions

64. In formulating project components, the preferred options are based on Least Cost Solutions. This will take into account service delivery targets and whole-life costs, including

achievable operation and maintenance arrangements, and available resources in terms of skills and facilities. **Table 3-1** summarizes the main considerations.

Table 3-1: Least Cost Solutions

Water	Sanitation / Wastewater	Solid Waste
<p><u>Source</u> Source close to supply area Gravity where possible</p> <p><u>Treatment</u> For surface water, rapid sand filtration preferred to slow sand filtration: higher energy but lower land needs For groundwater, chlorination</p> <p><u>Transmission and distribution</u> Pipe material selected on cost, durability and pressure resistance Metered house connections, to enable demand management</p>	<p><u>Sanitation Choice</u> Low population density. Space on-plot for twin-pit latrine or septic tanks with soak-pit. Small pockets of high population density, high water table no space for on-plot sanitation consider small-bore sewers with decentralized wastewater treatment systems. Conventional sewerage to be avoided unless maintenance skills and power supply can be guaranteed (24/7).</p> <p><u>Transportation / Sewer network</u> Gravity systems to avoid pumping. Small-bore sewers for settled sewage to reduce excavation and need for pumping. Pipe materials selected on construction quality, durability and cost.</p> <p><u>Treatment</u> Improve cleaning and sludge management of septic tanks Compromise between land requirements, power needs and O&M: usually leads to choice of waste stabilization ponds (WSP), Upflow Anaerobic Sludge Blanket reactor (UASB) with facultative ponds or Fluidized Aerobic Bio reactor (FAB) systems.</p>	<p><u>Collection</u> Hybrid door-to-door segregated collection (bio and non-bio degradable) using two types of local containers. Household and community container systems.</p> <p><u>Transportation</u> Vehicles specified to collect waste from containers, or lift containers, direct to disposal site No double handling No transfer stations if small distance to disposal site Road surfacing improvements to reduce travel times.</p> <p><u>Disposal and treatment</u> Maximize segregation and recycling Waste too wet and inorganic for incineration Composting potential if waste segregated at source Sanitary landfill required for inorganic non-recyclable waste and composting rejects.</p>