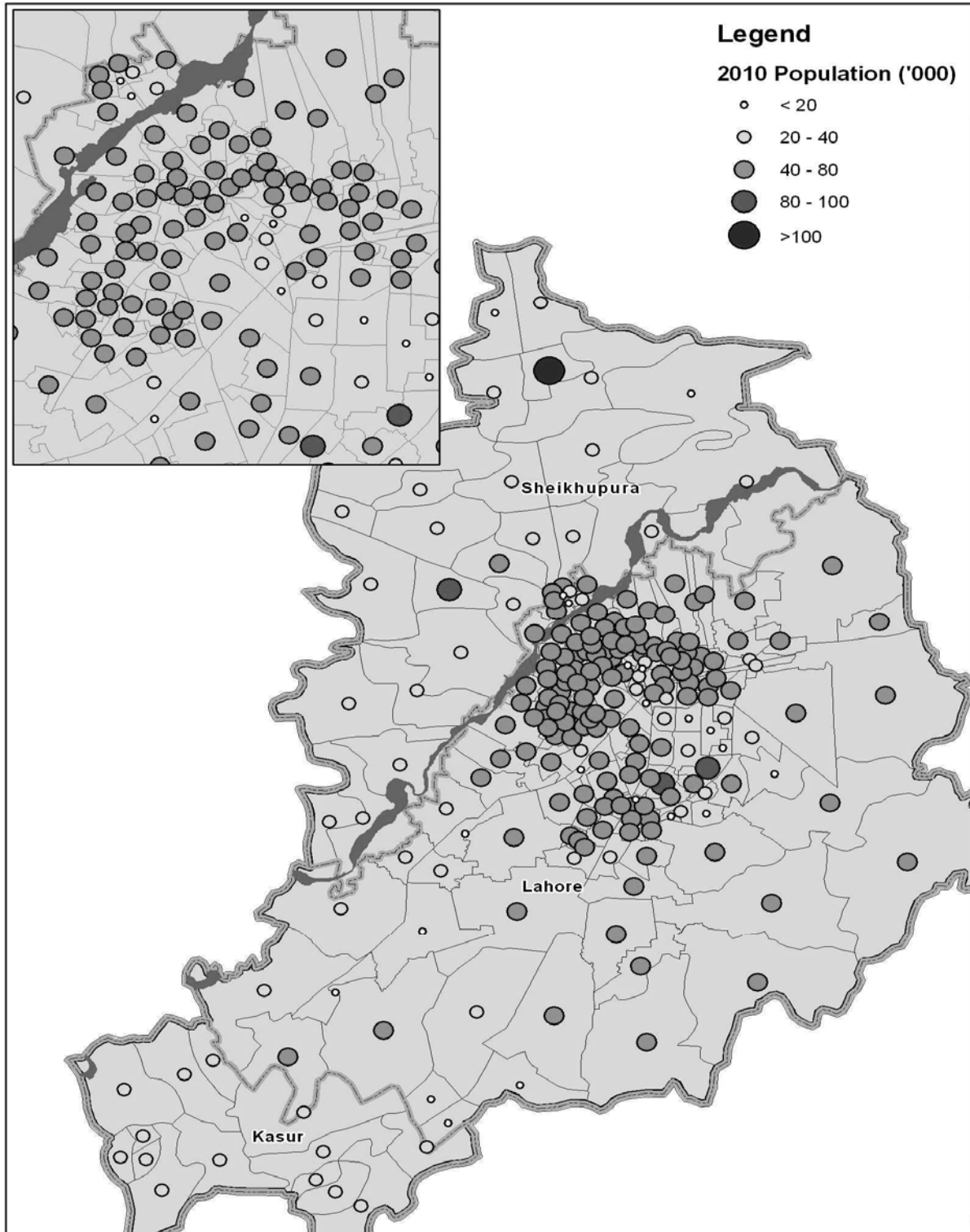


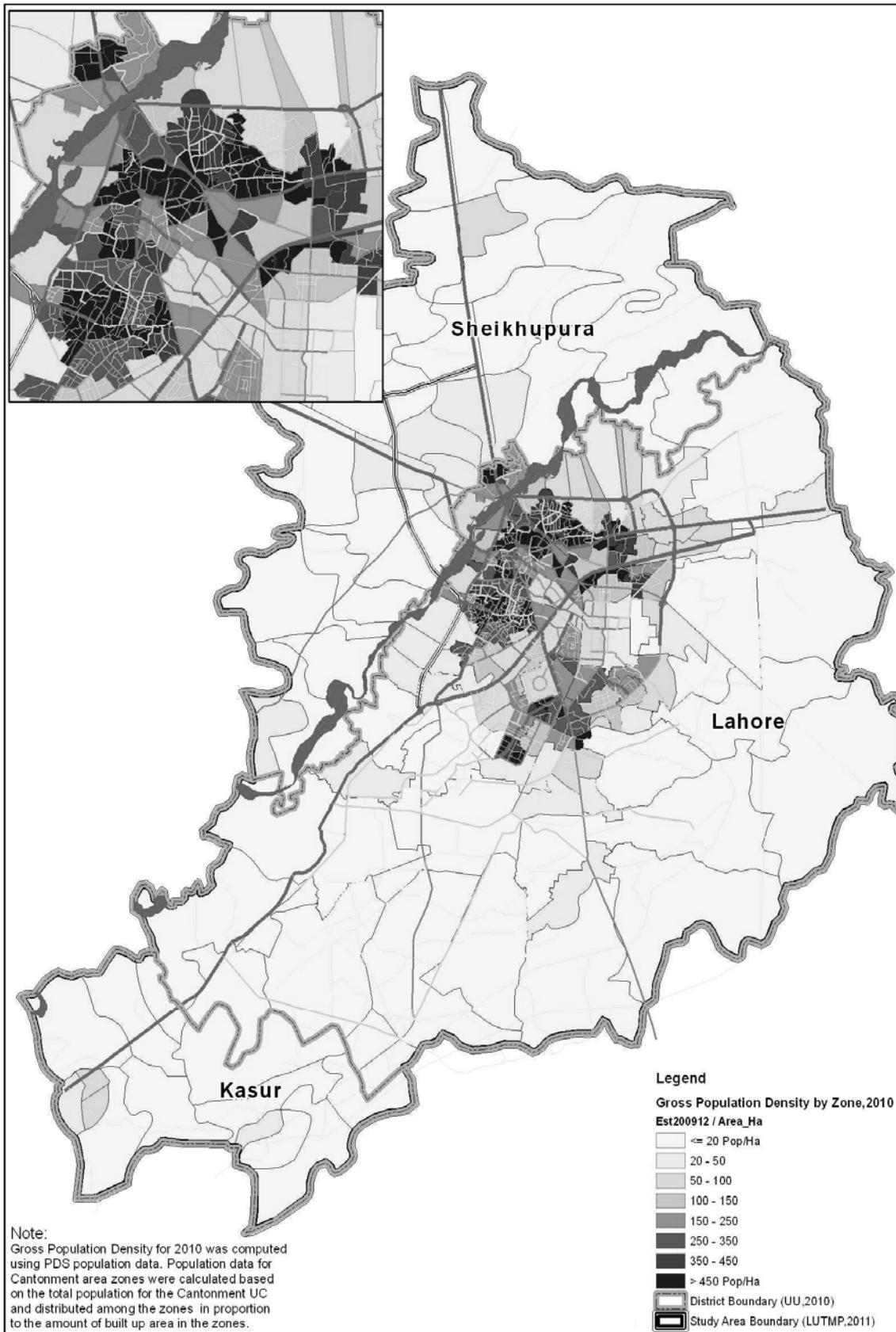
Figure 2.3.10 The Study Area 2010 Populations by Zone



Source: Punjab Development Statistics 2010 and JICA Study Team

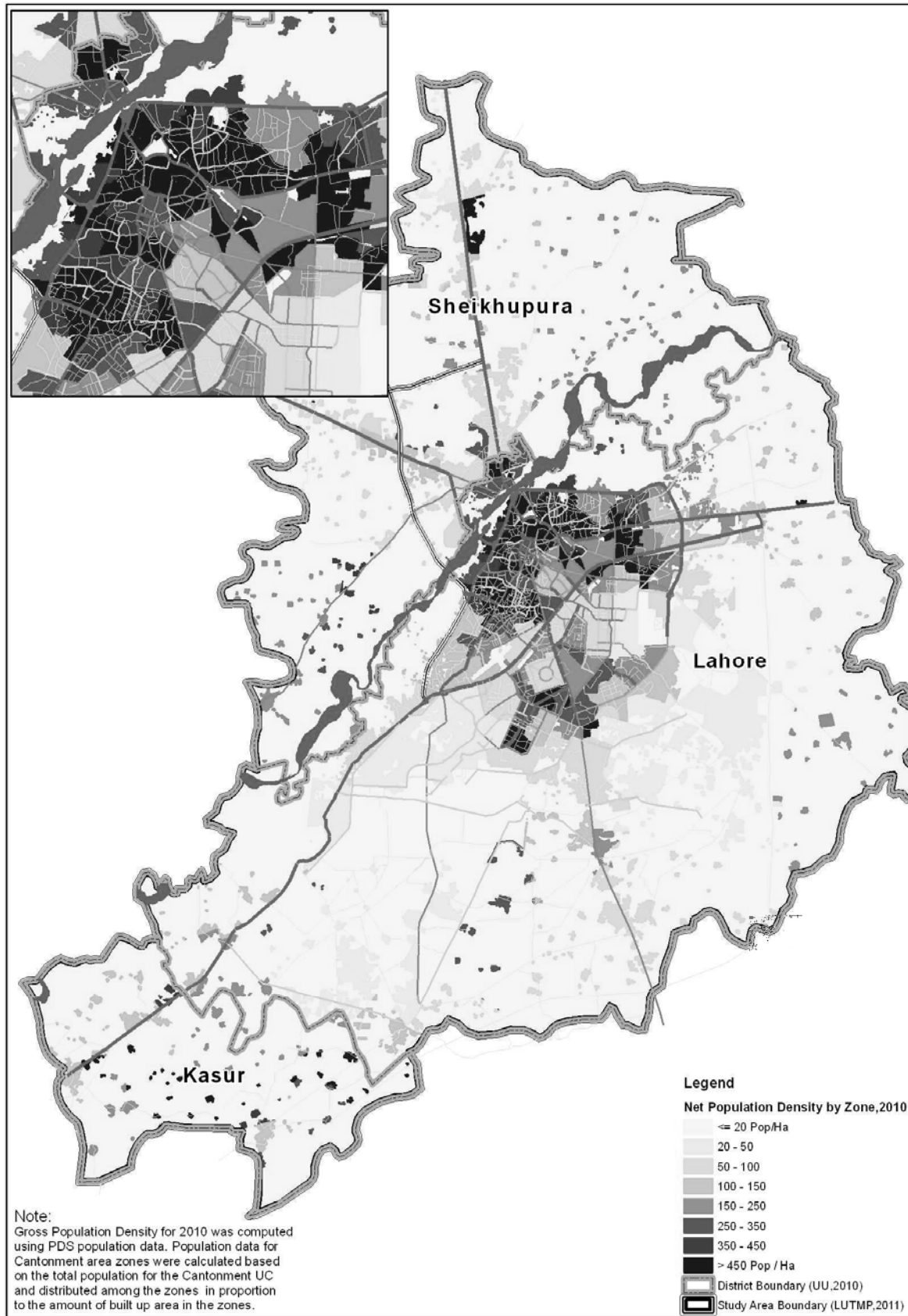
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Figure 2.3.11 The Study Area 2010 Gross Population Density by Zone



Source: Punjab Development Statistics 2010 and JICA Study Team

Figure 2.3.12 The Study Area 2010 Net Population Density by Zone



Source: Punjab Development Statistics 2010 and JICA Study Team

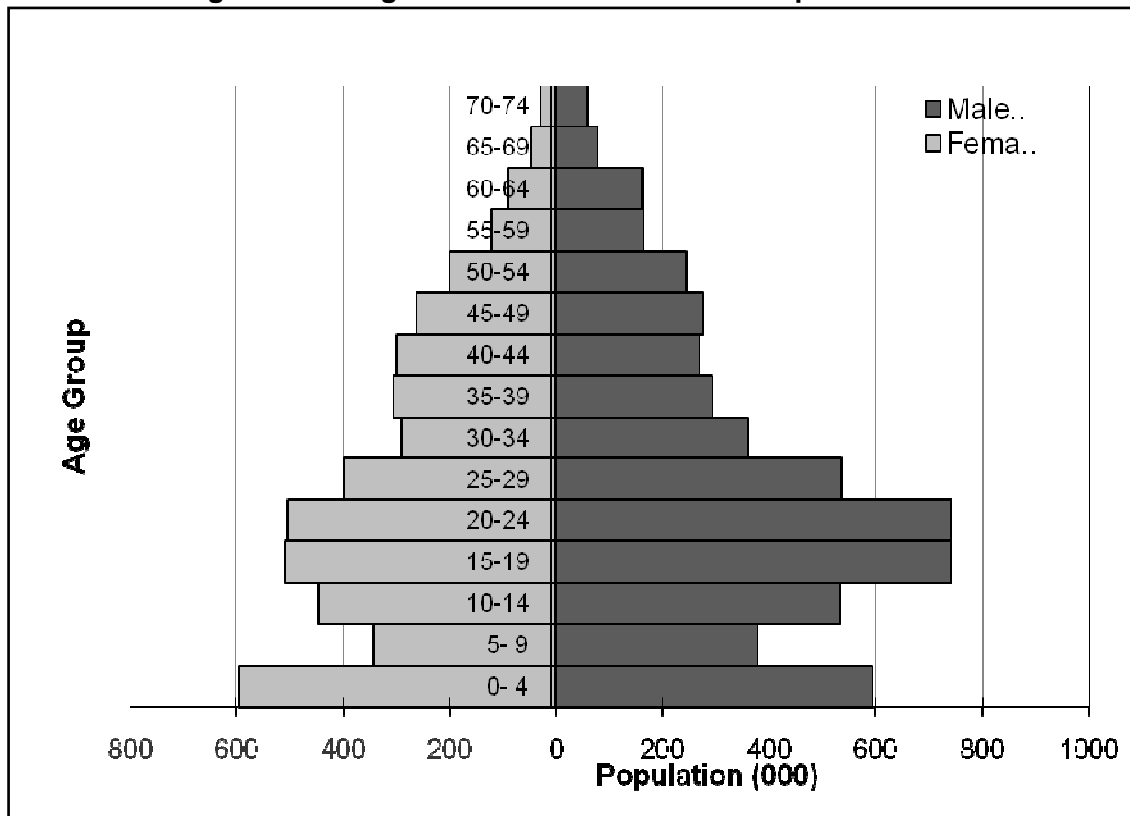
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The net density plot clearly demonstrates that the population is mostly concentrated around the old city area in a concentric fashion, with the exception of linear developments along major arterial roads in the Study Area. The population in the mostly built up area around the city centre accounts for over 66 % of the Study Area population in approximately 10 % of the Study Area. This signifies that the population density in Lahore is still considerably lower than similar conurbation/ metropolis around the Asia region.

Figure 2.3.13 shows the age structure of the people living in the Study Area. Age groups 15-19 and 20-24 form the peak for both male and female due to the inflow of young students and workers into Lahore.

Figure 2.3.14 illustrates the distribution of household size in the Study Area. The average household size as of 2010 has been anticipated to be 5.62 persons per hundred.

Figure 2.3.13 Age Structure of Lahore 2010 Population



Source: JICA Study Team

Figure 2.3.14 Household Size Distribution of 2010 Population of Lahore



Source: JICA Study Team

2.3.5 Employment Distribution

The Punjab or city statistics do not provide data on employed residents (level of employment) in the Study Area. The analysis below is based on the Household Interview Surveys (HIS) conducted for the Study. The data relates to the residence of the employed persons. Table 2.3.8 summarises the employed residents by zone in the Study Area.

Table 2.3.8 The Study Area 2010 Employment by Zone of Residence ('000)

Town/ Tehsil	Primary	Secondary	Tertiary	Total
1 Ravi	5	40	248	293
2 Data Gunj Baksh	3	31	227	262
3 Samanabad	4	40	232	275
4 Shalamar	3	36	197	237
5 Gulberg	3	23	191	217
6 AzizB	5	24	145	174
7 Wagah	27	29	111	167
8 Nishter	27	52	171	251
9 Iqbal	19	39	194	252
10 Cantt	8	29	185	221
11 Ferozewala	27	33	86	146
12 Muridke	12	13	44	70
13 Sharaqpur	16	5	18	39
14 Kasur	8	5	26	40
15 Patoki	13	6	27	47
1-10 Lahore District	103	343	1,902	2,348
11-13 LUTMP_SHK	54	51	149	254
14-15 LUTMP-Kasur	22	11	54	87
1-15 LUTMP Total	179	405	2,105	2,689

Source: JICA Study Team

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The employment participation rate (Number of employed persons/ Total population) in Lahore is estimated to be around 27 %. This figure is rather low, and the main reason being that most of the population is young, and is below the employment age group of 0 ~ 16 years. As anticipated, majority of the population is employed in tertiary sector, almost five times more than those employed in the industrial or manufacturing sector. This is significant to note that most of the Punjab provincial government offices are in Lahore, along with the banking, and other service sector employment. Distribution of employed residents by zone and employment sector is shown in Figure 2.3.15.

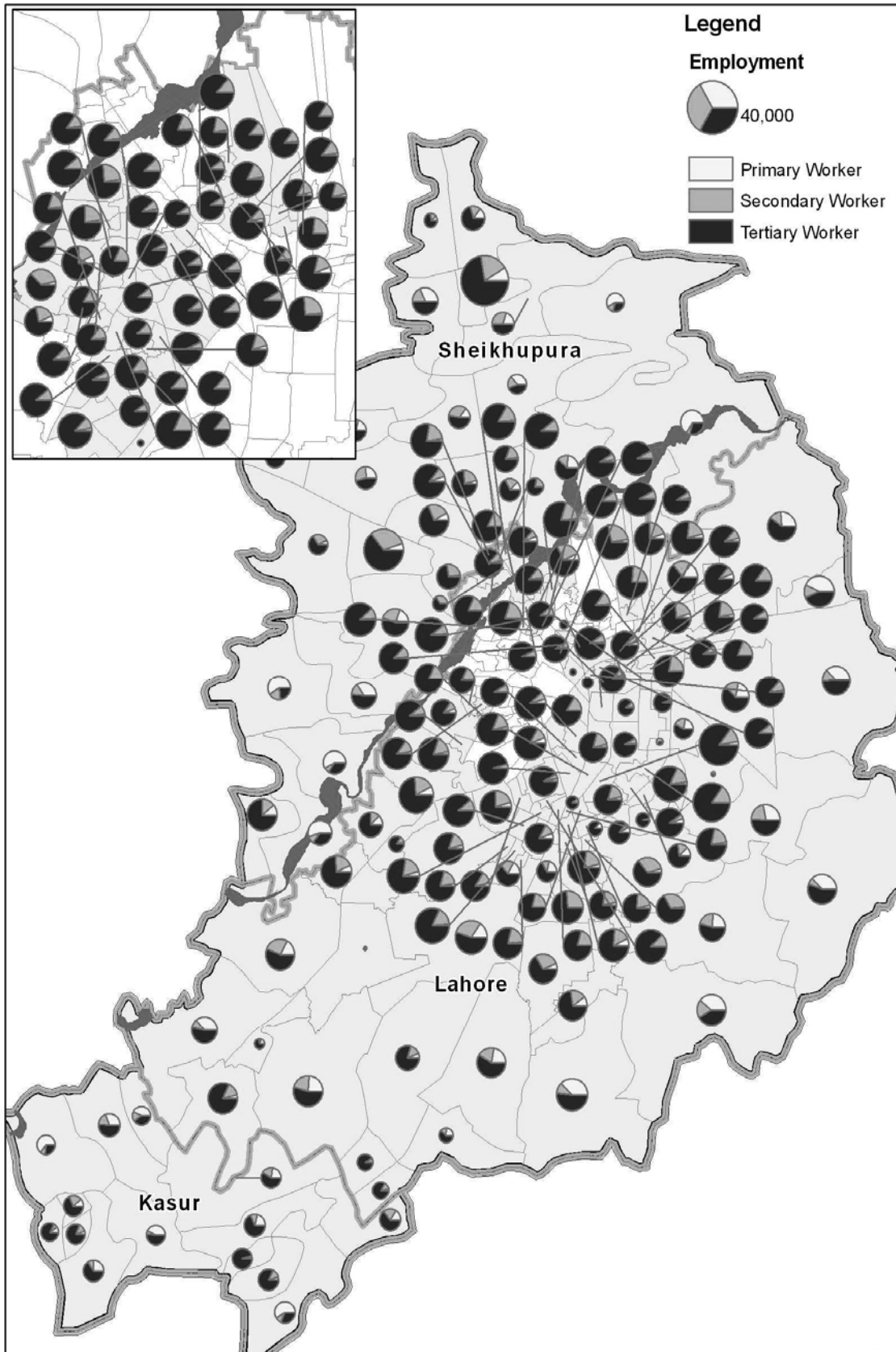
The unemployment level in the city remains very high, and exceeds those employed by about 27 %. The main conclusion to be drawn is that unemployment is almost 99 % among female residents. This is illustrated in Figure 2.3.16 for each zone in the Study Area and is summarised in Table 2.3.9.

Table 2.3.9 LUTMP 2010 Unemployed Residents by Zone of Residence ('000)

District	Town / Tehsil	Unemployed
Lahore	Ravi Town	339.4
	Data Gunj Bakhsh Town	346.7
	Samanabad Town	353.5
	Shalamar Town	281.2
	Gulberg Town	262.4
	Aziz Bhatti Town	229.1
	Wagah Town	224.1
	Nishter Town	318.2
	Iqbal Town	328.0
	Cantonment	277.2
Sheikhupura	Ferozwala Tehsil	194.4
	Muridke Tehsil	91.0
	Sharaqpur Tehsil	27.5
Kasur	Kasur Tehsil	58.5
	Pattoki Tehsil	73.7
	Lahore	2,959.8
	Sheikhupura	312.9
	Kasur	132.2
LUTMP	The Study Area Total	3,404.9

Source: JICA Study Team

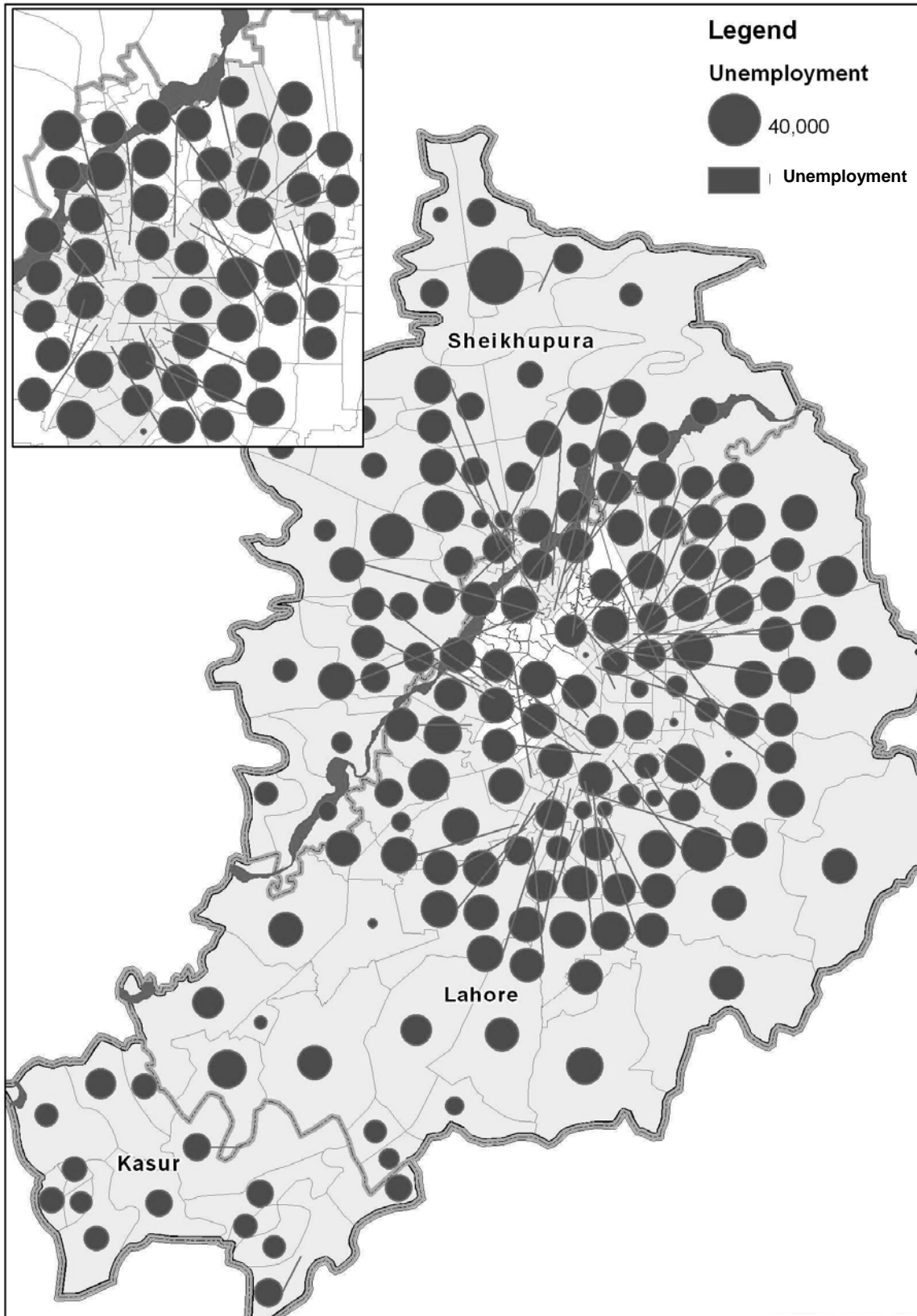
Figure 2.3.15 LUTMP 2010 Zonal Employed Residents by Employment Sector



Source: JICA Study Team

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Figure 2.3.16 LUTMP 2010 Zonal Un-employed Residents by Residence Zone



Source: JICA Study Team

2.3.6 2010 Vehicle Ownership in the Study Area

In the Study Area there are 1.77 million household, with an average household size of 5.62. The car ownership is highest in Cantonment (more than double of the Study Area) and stand at about 40 %. Gulberg and Iqbal towns have car ownership close to 30 % where as in the remainder of the Study Area it is lowest in the inner-city area towns, compared to larger towns on the outskirts. The car ownership in the areas of other two districts included in the Study Area is just over 10 %. The significant conclusion is that there are about 350,000 cars in the Study Area. Vehicle (cars and motorcycles) ownership in the Study Area is summarised in Table 2.3.10. The car owning households by the Study Area zones are shown in Figure 2.3.17.

Table 2.3.10 LUTMP 2010 Vehicle (Car and Motorcycle) Owing Households

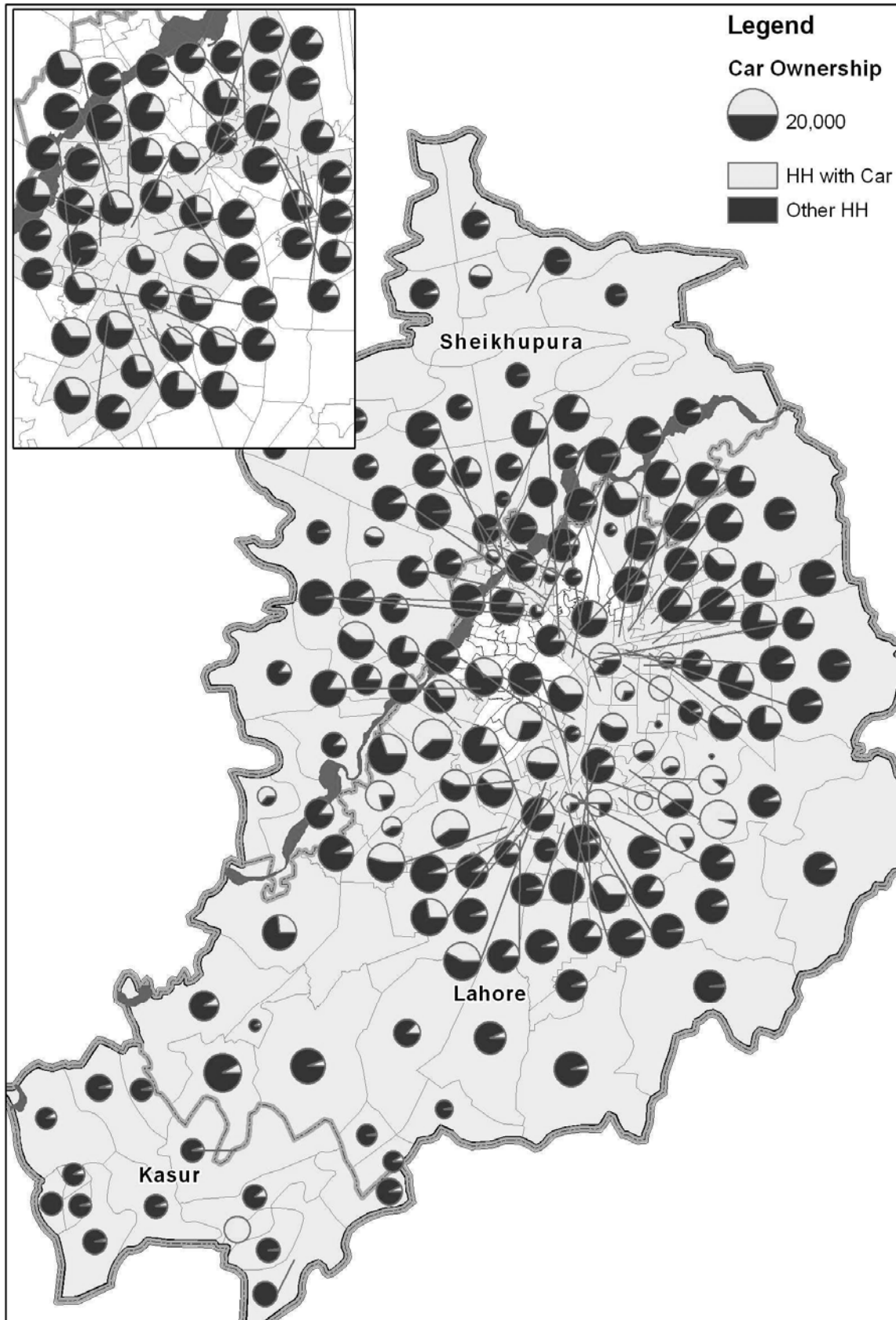
District	Town/ Tehsil	2010 Household (HH)					
		Total 2010 HH (000)	Car Owing HH (000)	% Car Owing HH	M/ Cycle Owing HH	% M/Cycle Owing HH	% Car and M/ Cycle Owing HH
Lahore	Ravi Town	172.8	13.1	7.6	80.9	46.8	54.4
	Data Gunj Bakhsh	173.4	30.9	17.8	90.1	52.0	69.8
	Samanabad Town	175.5	39.9	22.7	88.2	50.3	73.0
	Shalamar Town	144.7	18.3	12.6	75.1	51.9	64.5
	Gulberg Town	138.5	40.6	29.3	64.5	46.6	75.9
	Aziz Bhatti Town	121.6	20.2	16.6	60.5	49.8	66.4
	Wagah Town	106.8	7.4	6.9	46.2	43.3	50.2
	Nishter Town	161.9	14.4	8.9	66.2	40.9	49.8
	Iqbal Town	177.1	49.6	28.0	60.9	34.4	62.4
Cantonment	161.3	64.2	39.8	54.4	33.7	73.5	
Sheikhupura	Ferozwala Tehsil	98.4	8.8	8.9	34.7	35.3	44.2
	Muridke Tehsil	44.8	3.0	6.7	12.6	28.1	34.8
	Sharaqpur Tehsil	27.9	4.0	14.3	9.4	33.7	73.5
Kasur	Kasur Tehsil	28.1	6.4	22.8	5.8	20.6	43.4
	Pattoki Tehsil	33.2	1.8	5.4	8.2	24.7	30.1
Lahore		1,533.6	298.6	19.5	687.0	44.8	64.3
Sheikhupura		171.1	15.8	9.2	56.7	33.1	42.4
Kasur		61.3	8.2	13.4	14.0	22.8	36.2
The Study Area Total		1,766.0	322.6	18.3	757.7	42.9	61.2

Source: JICA Study Team

Motorcycle ownership in the Study Area exceeds 42 % of all households. The motorcycle ownership is more dominant in the inner city towns of Data Gunj Baksh, Samanabad and Shalamar towns, where it exceeds 50%. The motorcycle ownership is also dominant in the rural areas, as it is the only means of transport for the isolated villager and farmer. In Lahore around 45 % households are owning one or more motorcycles on average, and it is about 30% lower in Sheikhupura and about half in the district of Kasur. It is estimated that there are about 850,000 motorcycles in the Study Area. In total there are about 1.2 million vehicles in the Study Area. Figure 2.3.18 illustrates the motorcycle owning households by the Study Area zones.

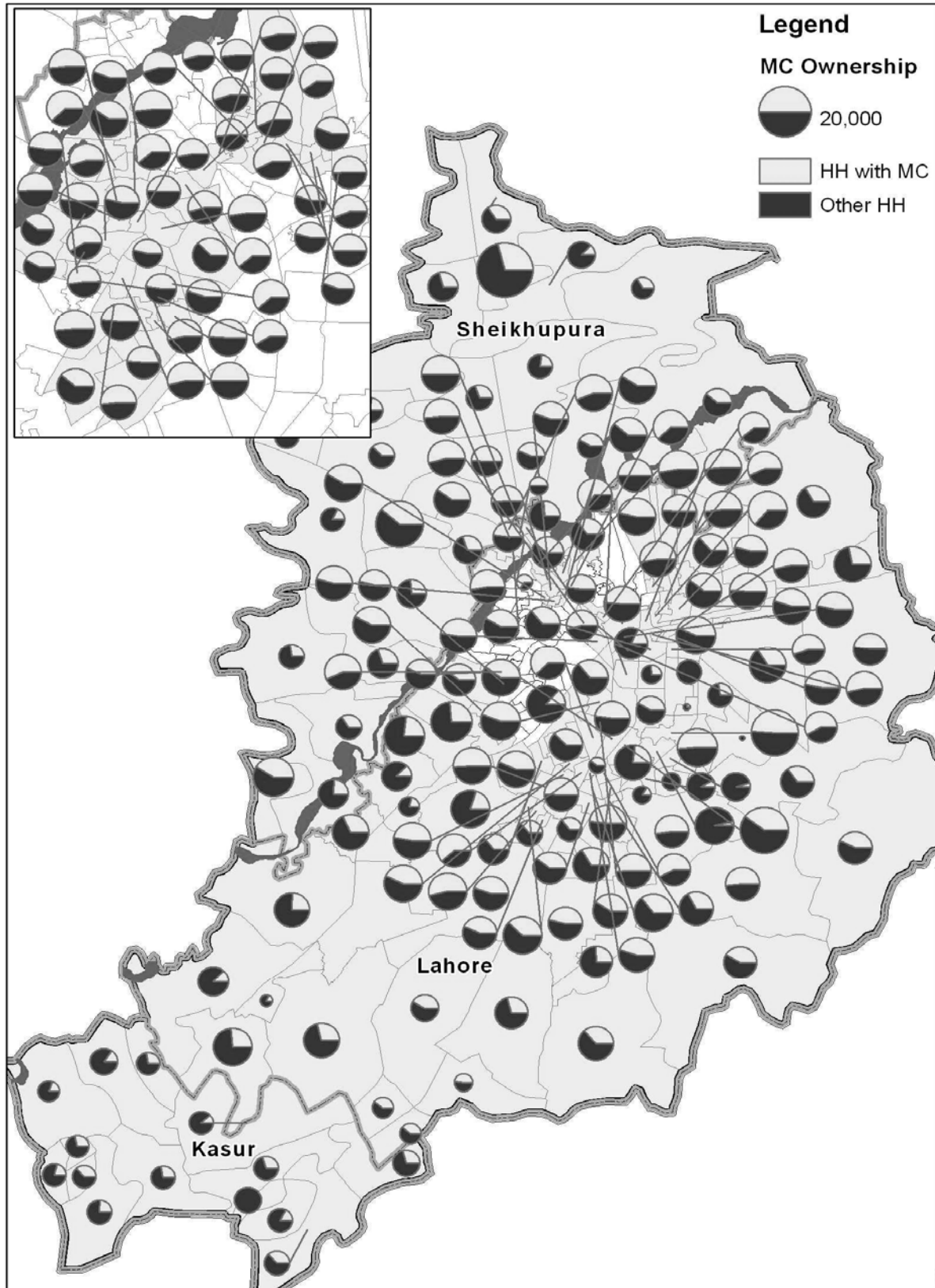
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Figure 2.3.17 LUTMP 2010 Car Owning Households by Zone



Source: JICA Study Team

Figure 2.3.18 LUTMP 2010 Motorcycle Owning Households by Zone



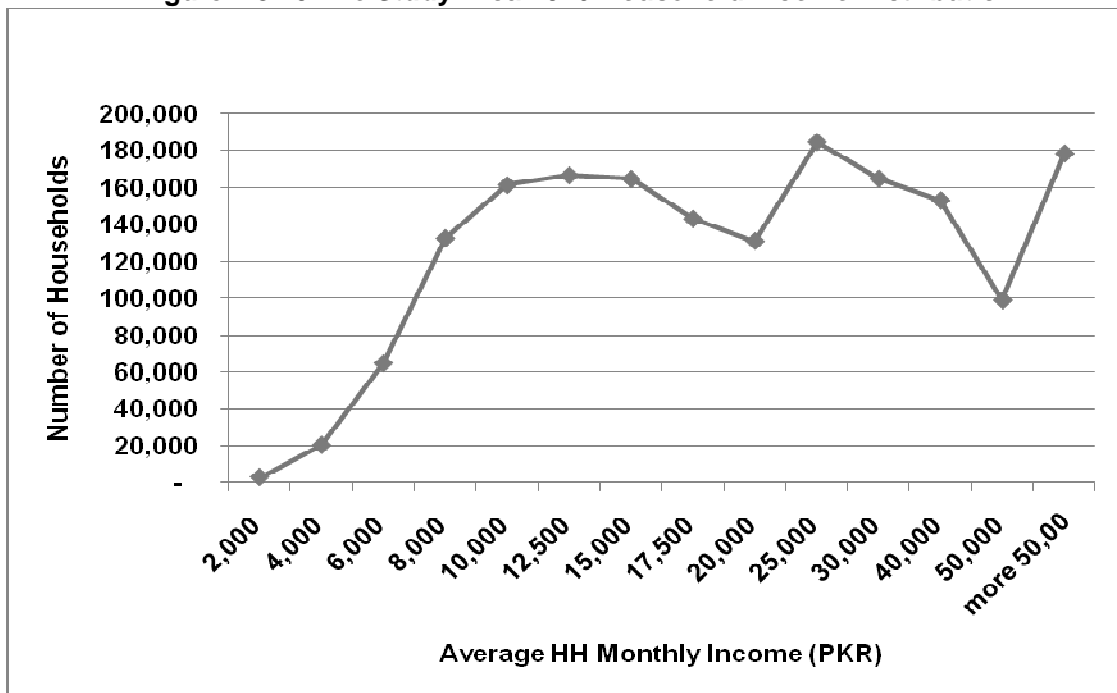
Source: JICA Study Team

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2.3.7 Household Income

One of the key factors in trip making is the household income. The HIS recorded income in a number of ranges from less than PKR 2,000 per month to those earning more than PKR 50,000 per month. The income distribution of the Study Area is shown in Figure 2.3.19.

Figure 2.3.19 The Study Area 2010 Household Income Distribution



Source: JICA Study Team

Table 2.3.11 presents the household income results of HIS. The data has been aggregated into three income groups: low, medium and high. It is interesting to note that there are similar number of households in low and high income groups (381,000 ~ 22 %) and 430,000 ~ 24 %).

The middle income group accounts for just over 54 % of all households, with an average income of around PKR 20,000 (USD 250) per month. When converted to income per capita, it amounts to just over PKR 3,500 per month or USD 1.4 per day per person, rather low income on per capita basis by international standards. However, when compared with Pakistan GDP per capita, it shows that the survey results are quite consistent.

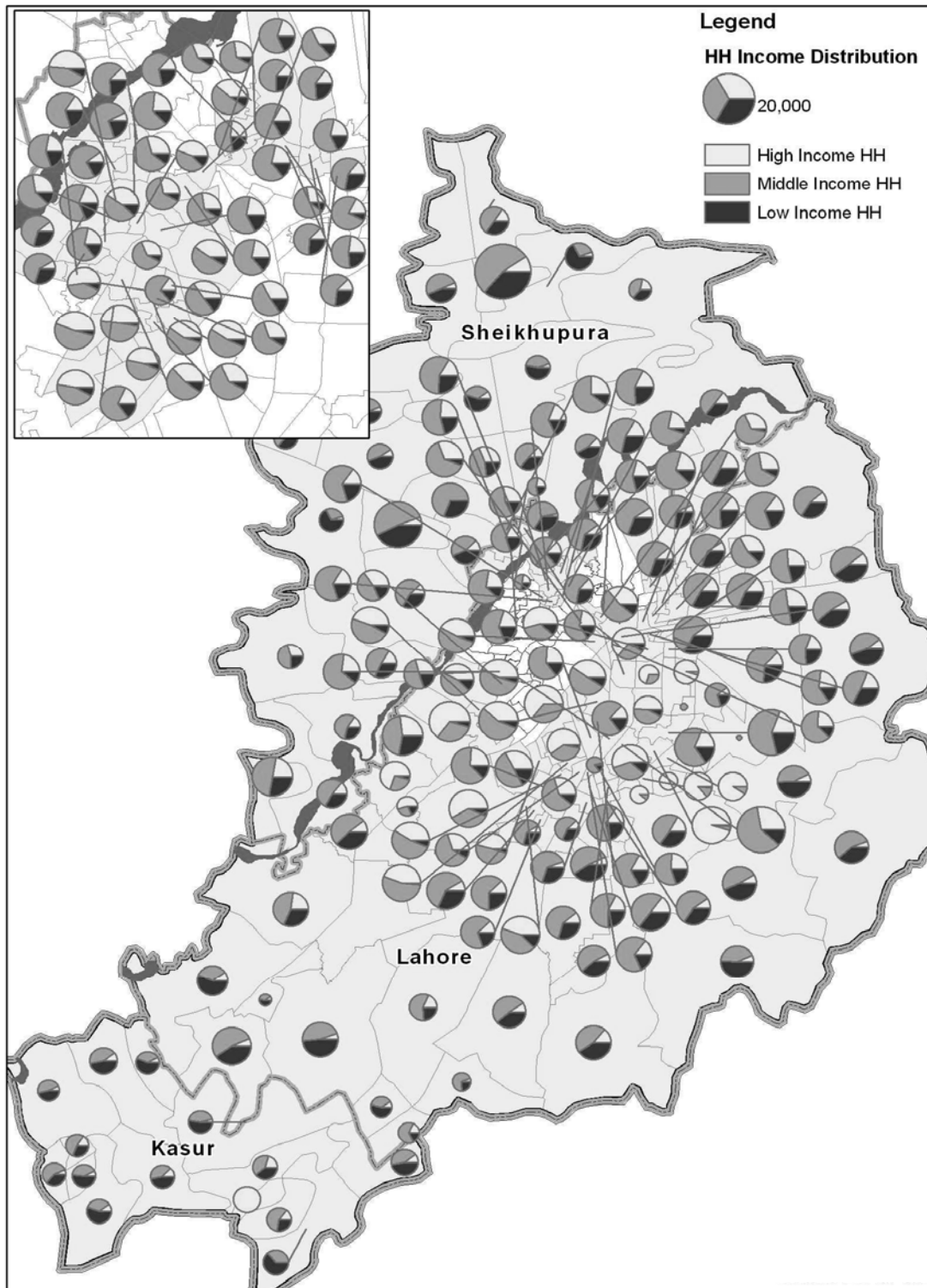
Household income varies considerably between areas of Lahore. Highest income group lives in Cantonment, where high income group amounts to 44 % of households. The other richer areas are Gulberg and Samanabad. As anticipated, the outskirts areas (mostly rural Wagah and Nishtar towns) have lowest proportion of high income household.

Household income in the areas of two adjoining districts is lower than those of Lahore. In both of these districts the high income group is less than 20 % of the total households,

with Kasur being the poorer of the two districts.

The complete household distribution by income groups, by Towns/ Tehsils is summarised in Table 2.3.11 and illustrated by zone in Figure 2.3.20.

Figure 2.3.20 LUTMP 2010 Household Income Distribution by the Study Area Zone



Source: JICA Study Team

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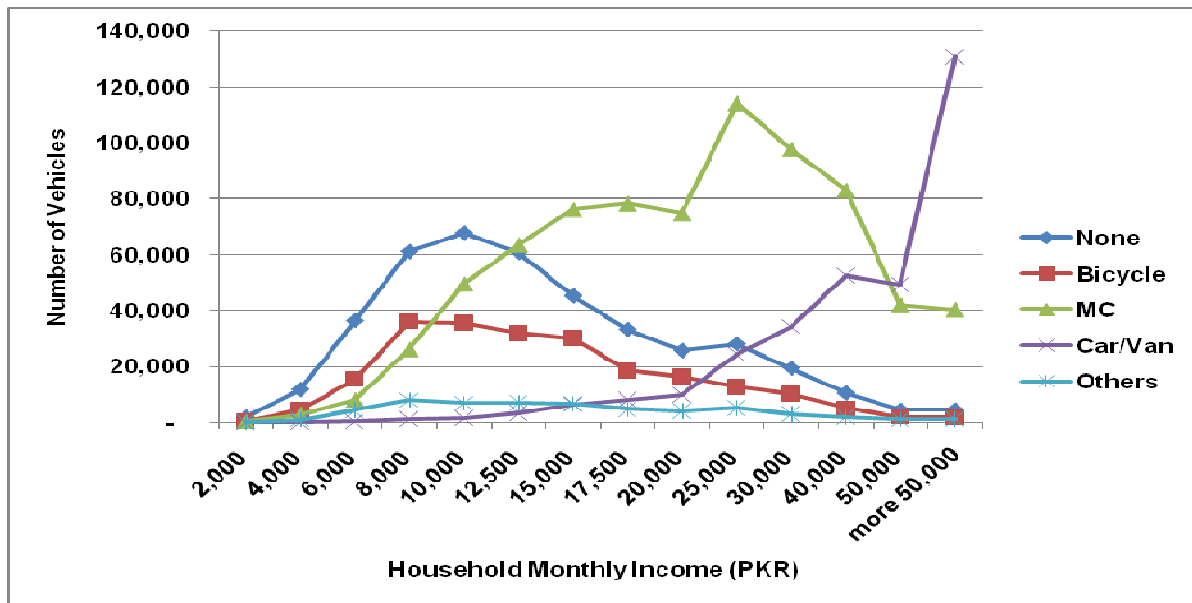
Table 2.3.11 LUTMP 2010 Household Income Distribution by Town/ Tehsil

District	Town / Tehsil	Low Income (<=PKR 10,000/m)		Middle Income (> PKR10,000 & <=30,000/m)		High Income (>PKR 30,000/m)		Total Household (000)
		HH (000)	% in Area	HH (000)	% in Area	HH (000)	% in Area	
Lahore	Ravi Town	34.4	20	106.6	62	31.8	18	172.8
	Data Gunj Bakhsh	25.1	14	105.4	61	43.0	25	173.4
	Samanabad	20.0	11	96.6	55	59.0	34	175.5
	Shalamar Town	25.6	18	87.9	61	31.3	22	144.7
	Gulberg Town	10.6	8	74.9	54	53.1	38	138.5
	Aziz Bhatti Town	29.9	25	69.0	57	22.6	19	121.6
	Wagah Town	35.4	33	58.9	55	12.5	12	106.8
	Nishter Town	50.9	31	89.5	55	21.5	13	161.9
	Iqbal Town	39.1	22	84.4	48	53.5	30	177.1
Cantonment	18.6	12	71.8	45	70.3	44	161.3	
Sheikhupura	Ferozwala Tehsil	39.3	40	48.8	50	10.3	10	98.4
	Muridke Tehsil	18.4	41	21.8	49	4.6	10	44.8
	Sharaqpur Tehsil	7.9	28	14.3	51	5.7	20	27.9
Kasur	Kasur Tehsil	10.6	38	10.1	36	7.5	27	28.1
	Pattoki Tehsil	15.5	47	14.5	44	3.3	10	33.2
Lahore		289.6	19	845.0	55	399.1	26	1,533.6
Sheikhupura		65.6	38	84.9	50	20.6	12	171.1
Kasur		26.1	43	24.6	40	10.8	18	61.3
The Study Area Total		381.3	22	954.5	54	430.5	24	1,766.0

Source: JICA Study Team

Household income has a strong relationship with household vehicle ownership as revealed by Figure 2.3.21. Car is owned more as income level goes up. Motorcycle seems to be suitable for middle- to high-income households with a monthly income of PKR 20 to 50 thousand.

Figure 2.3.21 Household Income Distribution by Vehicle Ownership, 2010



Source: JICA Study Team