



ENCOMEC FINDINGS

Enquête de Consommation Auprès des Ménages à Conakry

CORNELL FOOD AND NUTRITION POLICY PROGRAM

Living Conditions in Conakry: Housing, Water Quality, and Assets

Carlo del Ninno

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**LIVING CONDITIONS IN CONAKRY:
HOUSING, WATER QUALITY, AND ASSETS**

Conakry is a large city of approximately one million people, situated on a very thin peninsula. The center of town is at the very tip of the peninsula and can be reached by only two roads. One road stops at the periphery and the other continues to the interior of the country. The large inflow of migrants into Conakry in the last decade caused the town to expand into areas increasingly more difficult and expensive to access. This expansion has stressed the city's ability to provide adequate facilities. In this bulletin we analyze the living conditions of Guinean households in Conakry, focusing on housing, water quality, and household assets.

For the purpose of the survey and of the interpretation of the results, a household has been defined as a collection of individuals that have lived in the same place for at least three months, and who also eat together.

1. HOUSING

The types of housing available in Conakry are shown in Figure 1. A small number of households (10.1 percent) live in individual houses, 21.9 percent in *concessions*, and most of them (67.7 percent) in apartments. A

concession is a well defined, small housing complex sometimes enclosed by walls. Apartments in Conakry are comprised of a few rooms rented in a small building or *concession*. There are very few high-rise buildings in Conakry.

The age distribution of the dwellings shown in Figure 2 gives some indication of the general housing quality. Less than 20 percent of houses are less than 10 years old. More than 50 percent of the buildings in Conakry are 20 years old or older.

The data in Figure 3 show the number of years spent in the same dwelling. These data partially confirm the impression of a household's generally stable population. In fact, 40.8 percent of households have been in the same dwelling for 10 years or more, while only 15.4 percent of households have lived in the same place for one year or less. The latter are most likely households that are not yet well established and live in rented apartments.

Figure 4 shows the distribution of number of rooms. More than a third of all houses have two rooms. In fact, the typical apartment in Conakry is made of two rooms — one bedroom and one other room. There is no kitchen — the cooking is done outside — and almost always no bathroom.

The data on the number of household members per room, i.e., the occupancy rate, is plotted in Figure 5. Only 16.0 percent of households have on the average less than one person per room, while 24.9 percent have more than 3 people per room on the average. Houses appear to be very crowded. Occupancy rates are presented in Table 1, according to

household size. More than half of the households with less than 1 person per room are single-person households.

Water and electricity services are very sporadic at best. The problem lies with both capacity and infrastructure. The hydro-electric plant outside the city, for one reason or another, is not always operational. The system of transformers is not adequate. The water conduits, where they exist at all, are in bad condition and cannot meet the demand. As can be seen in Figure 6, 15.1 percent of all households have no electricity at all, and only 17.8 percent of households have 13 or more hours of electricity a day.

Even fewer people have access to water from the city (Figure 7). In fact, 45.9 percent of households do not have any access to water, but those that do have it for longer periods of time during the day. Over one-third have water for more than 13 hours a day.

In analyzing water use and availability, we distinguished between water for drinking and for other purposes. Water source and the distance from this source are shown in Table 2. Less than 5 percent of households have water piped inside their houses. Most households (43.3 percent) have drinking water available in the courtyard. Almost everybody else obtains drinking water from another source: 36.9 percent from another faucet at an average distance of 109 meters away, and 13.2 percent from wells at an average distance of 52 meters away.

Water used for other purposes is more accessible and usually closer. Well water is used frequently (36.5 percent of the time).

General sanitation is a problem in Conakry. Few households have toilet facilities, and those that do must share them with many other households. Only 20 percent of households have exclusive access to a sanitary facility. Figures in Table 3 show that 11.7 percent of households have an inside toilet that is used mainly by the household. Outside toilets and latrines are more common and are used by an average number of 6 to 7 households.

As expected, only 55 percent of the households receive garbage collection service from the city (Figure 8); 25.7 percent throw their garbage outside; the remainder dispose of it in other ways, such as by throwing it into the sea or burning it.

2. WATER QUALITY

To determine the quality of drinking water, we asked all households some general questions concerning the availability and treatment of their drinking water. As can be seen from Table 4, 90.0 percent of households do not treat drinking water at all. The only treatment method is filtering, which is used by only 4.9 percent of households.

The drinking water of about one-half of the households was scientifically analyzed. A small amount of their drinking water was collected and tested with a Millipore testing kit for coliform bacteria. In general, less than 10 colis per 100 milliliter of water diluted tenfold is considered acceptable. In our test we counted the number of colonies in one milliliter of undiluted water. We classified water quality in four categories: (1) up to 10 colis, (2) from 11 to 50, (3) from 51 to 100, and (4) over 100 colis. Since almost 90 percent of the households included in the test have more than 10 colis per milliliter (or 10 milliliters) of drinking water, as shown in Figure 9, the quality of most of the drinking water is substandard. We cannot conclude, however, that the water is dangerous to health, because it is the number of faecal colis that are known to cause possible diseases.

As expected, the quality of drinking water, measured by distribution of the percentages of households in the different categories at different points in time, appears to worsen between May and August, as shown in Figure 10.

We tried to test the hypothesis that there is a difference in the quality of water in different parts of the city. The results were inconclusive.

3. ASSETS

The values and types of assets owned vary greatly between households. In fact, as shown in Table 5, 11.4 percent of households own less than 25,000 GF worth of assets per capita and 36.4 percent own less than 100,000 GF. On the other hand, 25.8 percent own more than 1,000,000 GF worth of assets per capita.

The distribution and value of assets by gender of household head are reported in Table 6. Female-headed households have, on average, a larger value of assets. In particular, a higher percentage of them own buildings (46.8 percent versus 33.2 of males), while they are less likely to own vehicles (6.4 percent versus 14.9 percent for males), businesses or financial assets. The difference in patterns suggests that the husbands of female household heads left them or died, leaving them with a house or other real estate.

The assumption made in other bulletins that the accumulation process and household size are related to the age of household heads is confirmed here by the pattern of ownership of assets reported in Tables 7 and 8. Households in which the head is younger than 30 years own very few assets. In households in which the head is age between 30 and 45 years old, total household assets increase from 2.8 million GF to 12 million GF. In households in which the head is over 45 years old, assets remain stable (Table 7).

About one-third of households own real estate, which accounts for 74.4 percent of all assets. The percentage of households which owns buildings increases faster across age groups than the percentage of those that own land (Table 8). Similarly, the share of asset values of land decreases with age while that of buildings increases with age (Table 7). Indeed, it takes several years for a household to be able to build on a piece of land.

Vehicles represent 8.3 percent of the total value of assets, while durable consumer goods account for 13.0 percent of all assets (Table 7). Among them, 42.4 percent of households own appliances, 51.4 ventilators, 62.7 radiocassettes, and 28.5 percent televisions (Table 8). Percentages of ownership of some assets vary across the age group of household heads. While 14.3 percent of the households in all age groups own vehicles, 18.4 percent of households in the 35 to 40 age group own them. Likewise, the highest percentage of households that own radiocassettes, stereos, and VCRs have heads in the 30 to 34 age group (Table 8).

Agricultural or business assets, which account for only 5.2 percent of the total, are owned by about 10 percent of households. Food stocks are owned by 16.9 percent of households, and account for less than 1 percent of the total value of assets. Financial assets are owned by 24.6 percent of households, but account for only 2.6 percent of the total.

Table 1 — Occupancy Rate - Number of Persons Per Room

Family Size	1 or less	1 to 2	2 to 3	3 to 4	More than 4
	Percentage				
Single	55.43	0.00	0.00	0.00	0.00
2 to 4	35.51	42.25	15.08	23.27	0.00
5 to 7	6.52	25.88	42.35	20.82	41.08
8 to 10	2.17	14.79	17.96	27.76	33.51
11 to 15	0.00	11.27	15.52	14.69	18.38
16 and more	0.36	5.81	9.09	13.47	7.03
All	100.00	100.00	100.00	100.00	100.00
N	276	568	451	245	185

Source: CFNPP/ENCOMEC 1990 Survey data.

9'

Table 2 — Water Source and Average Distance from Source

	Drinking		Other Uses	
	Percentage	Average Distance	Percentage	Average Distance
		Meters		Meters
House/Courtyard	48.26	—	39.09	—
Other Faucet	37.03	109	21.00	91
Well	13.20	52	36.65	39
Other	1.51	238	3.26	168
Total	100		100	
N	1,720		1,719	

Source: CFNPP/ENCOMEC 1990 Survey data.

Table 3 — Type and Use of Sanitary Facilities

Type	Freq	Percentage	Number of Families Using it			Total
			One	1 to 9	10 +	
Inside toilet	201	11.65	92.04	7.96	0.00	201
Outside toilet	291	16.87	14.19	62.28	23.53	289
Outside latrine	1,186	68.75	9.05	60.41	30.54	1,182
Other	12	0.70	25.00	25.00	50.00	4
None	35	2.03	—	—	—	0
Total	1,690	100	19.93	54.36	25.72	1,676

Source: CFNPP/ENCOMEC 1990 Survey data.

Table 4 — Treatment of Drinking Water

Type of Treatment	Percentage
Boiled	1.40
Filtered	4.89
Chlorinated	0.76
Boiled and filtered	0.41
Other	2.27
Not treated	90.29
Total	100

Source: CFNPP/ENCOMEC 1990 Survey data.

Table 5 — Total Per Capita Asset Values

Total Asset Values in Thousand GF	Percentage
Less than 25	11.36
25 and 50	12.70
50 and 100	12.35
100 and 250	14.72
250 and 500	10.72
500 and 1,000	12.41
1,000 and 2,500	13.68
2,500 and 5,000	7.59
5,000 and more	4.46
Total	100
N	1,725

Source: CFNPP/ENCOMEC 1990 Survey data.

Table 6 — Percentage and Share of Asset Values by Gender

	MALES		FEMALES	
	Percentage	Share	Percentage	Share
Land	29.33	9.65	31.45	6.60
Building	33.21	64.10	46.77	78.59
Furniture	99.94	4.58	100.00	4.54
Appliances	41.84	1.91	46.77	3.06
Ventilator	51.59	0.24	49.19	0.24
Radiocassette	63.10	0.47	57.26	0.47
Radio	35.71	0.09	21.77	0.03
TV	28.64	0.74	26.61	0.57
Stereo/VCR	11.76	0.75	10.48	0.48
Bike/Moped/Moto	5.88	0.36	2.42	0.05
Car/Truck	14.95	8.65	6.45	1.68
Other Durables	3.50	0.18	4.03	0.34
Agricultural Assets	10.13	2.66	6.45	0.82
Business Assets	10.69	2.86	5.65	1.01
Food Stock	16.89	0.06	16.13	0.04
Financial Assets	25.02	2.70	18.55	1.49
Total		100		100
Total Value		7,744,288		8,381,197
N		1,599		124

Source: CFNPP/ENCOMEC 1990 Survey data.

Table 7 — Share of Total Average Asset Values by Age of Household Head

Categories	29 and Under	30 to 34	35 to 39	40 to 44	44 to 49	50 to 59	60 and over	All
Land	30.25	8.83	14.26	8.33	9.09	10.38	7.44	9.52
Building	3.97	43.11	50.50	63.49	62.91	67.49	76.87	64.84
Furniture	20.46	9.33	7.63	5.76	3.66	3.50	3.41	4.62
Appliances	2.06	3.38	4.31	2.91	2.22	1.37	0.77	2.02
Ventilator	2.13	0.57	0.52	0.34	0.16	0.16	0.11	0.24
Radiocassette	6.79	1.40	0.95	0.59	0.29	0.30	0.22	0.47
Radio	0.39	0.20	0.15	0.12	0.05	0.07	0.06	0.09
TV	1.40	1.97	1.62	1.04	0.56	0.48	0.31	0.73
Stereo/VCR	0.66	2.24	1.91	1.09	0.54	0.48	0.18	0.74
Bike/Moped/Moto	0.74	1.06	1.06	0.37	0.20	0.14	0.18	0.34
Car/Truck	11.45	14.52	9.22	7.37	9.09	9.25	4.71	8.21
Other durables	0.06	0.11	0.16	0.47	0.10	0.25	0.12	0.20
Agricultural assets	6.69	3.49	1.73	2.77	1.65	3.42	2.27	2.53
Business assets	7.47	5.95	1.27	2.53	5.95	0.50	2.16	2.76
Food stock	0.18	0.07	0.05	0.04	0.07	0.03	0.09	0.06
Financial assets	5.28	3.78	4.67	2.79	3.47	2.18	1.11	2.64
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Average Value	544,321	2,803,578	4,159,466	6,535,005	12,477,177	11,048,284	14,266,532	7,742,045
No. of Households	111	261	308	272	232	308	215	1,707

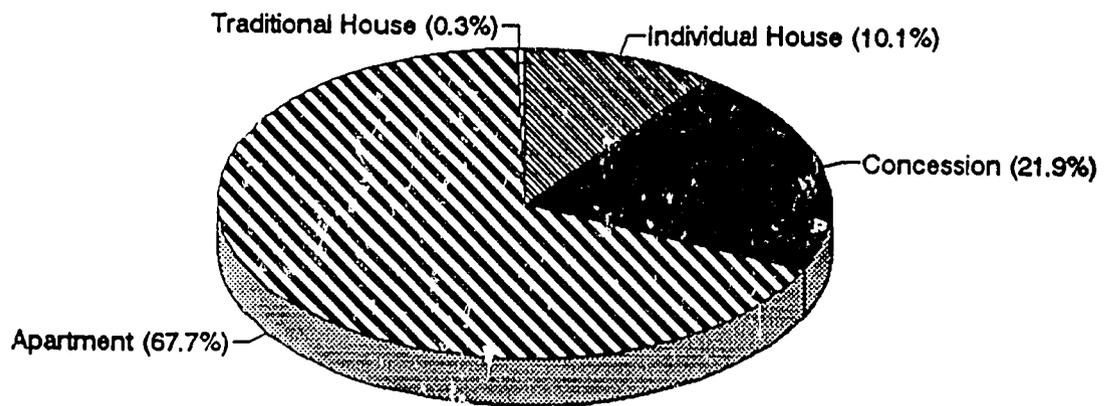
Source: CFNPP/ENCOMEC 1990 Survey data.

Table 8 — Percentage of Households Owning A Particular Asset by Age of Household Head

Categories	29 and Under	30 to 34	35 to 39	40 to 44	44 to 49	50 to 59	60 and over	All
	Percentage							
Land	7.21	18.01	25.00	34.93	35.78	37.66	36.74	29.58
Building	1.80	14.56	19.48	27.57	44.83	52.27	65.12	33.98
Furniture	100.00	99.62	100.00	100.00	100.00	100.00	100.00	99.94
Appliances	26.13	42.53	50.32	48.90	42.67	37.66	37.21	42.36
Ventilator	42.34	58.24	61.69	59.56	46.98	42.86	40.00	51.44
Radiocassette	69.37	68.58	73.38	64.71	62.93	54.55	46.05	62.74
Radio	17.12	30.27	29.55	39.71	32.33	41.56	41.40	34.50
TV	6.31	24.52	36.69	32.72	32.76	27.27	24.65	28.47
Stereo/VCR	0.90	13.79	16.56	14.71	12.50	9.42	6.51	11.72
Bike/Moped/Moto	1.80	5.36	4.87	6.99	7.33	5.52	5.58	5.62
Car/Truck	5.41	12.26	15.26	18.38	14.66	16.88	11.16	14.35
Other durables	3.60	2.30	2.92	4.04	4.31	4.87	2.79	3.57
Agricultural assets	3.60	8.81	7.47	8.46	10.34	12.01	15.81	9.84
Business assets	19.82	8.81	8.44	8.82	11.21	11.36	9.30	10.31
Food stock	7.21	16.09	18.18	16.91	21.55	18.83	13.02	16.87
Financial assets	37.84	26.82	25.32	24.26	23.71	22.08	19.07	24.60
Number	111	261	308	272	232	308	215	1,707

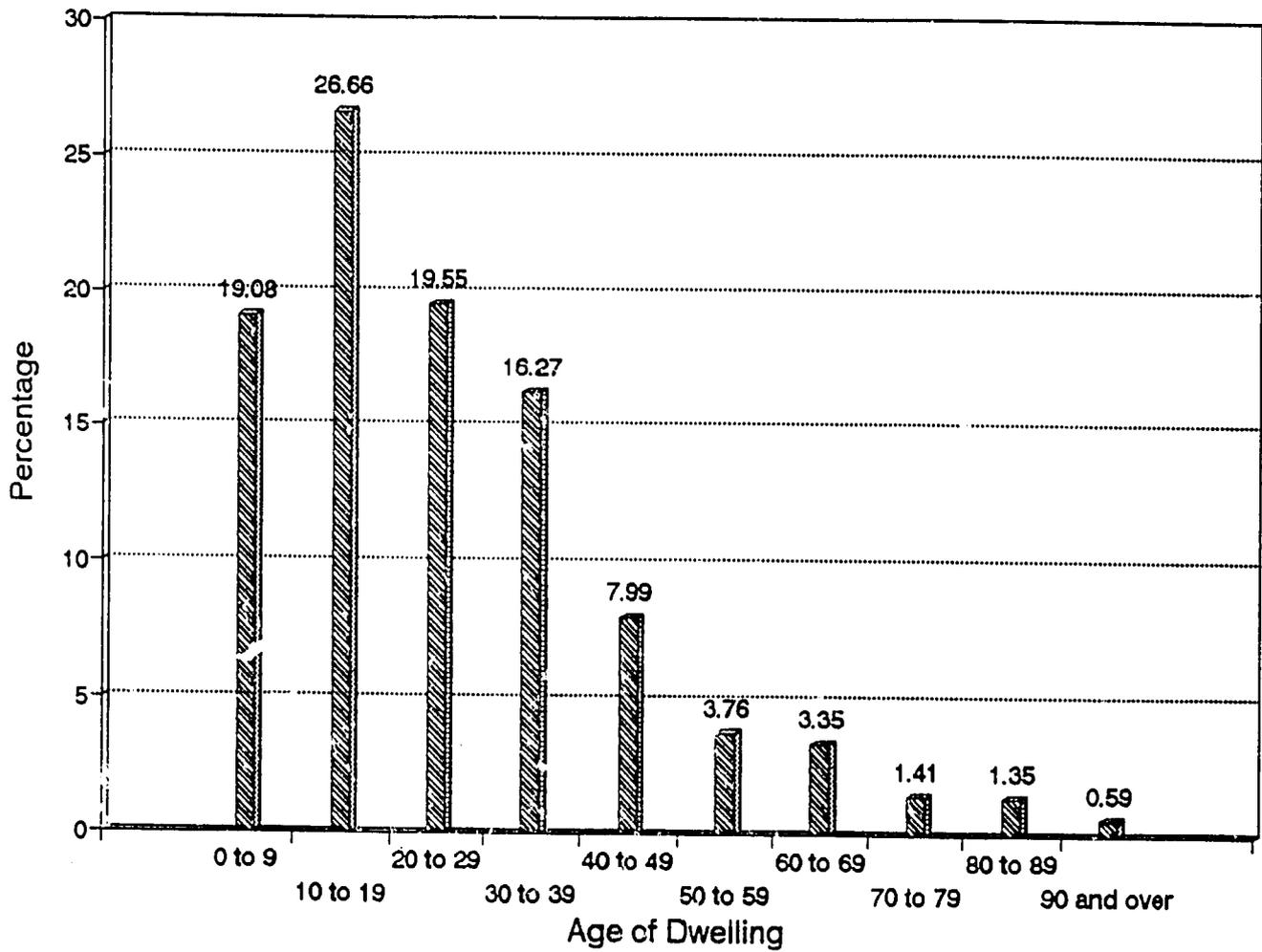
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 1: Housing Type



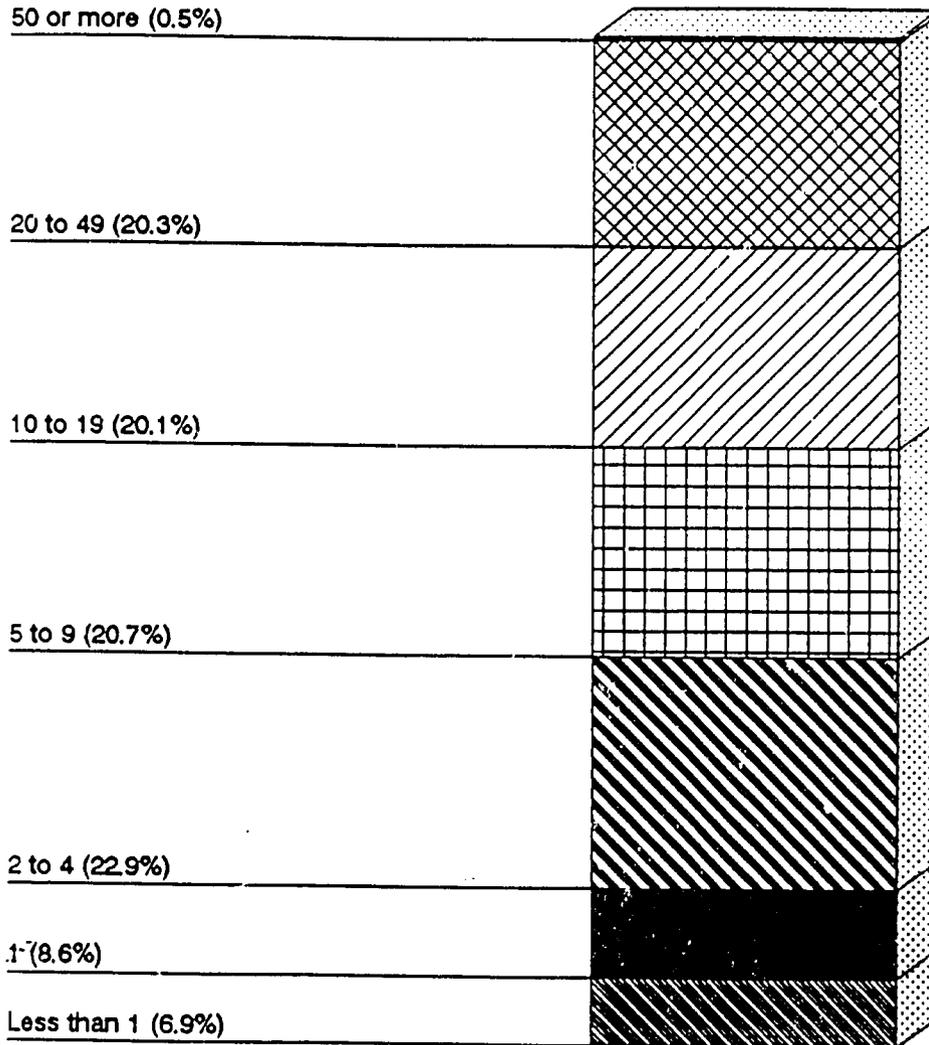
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 2: Age of Buildings



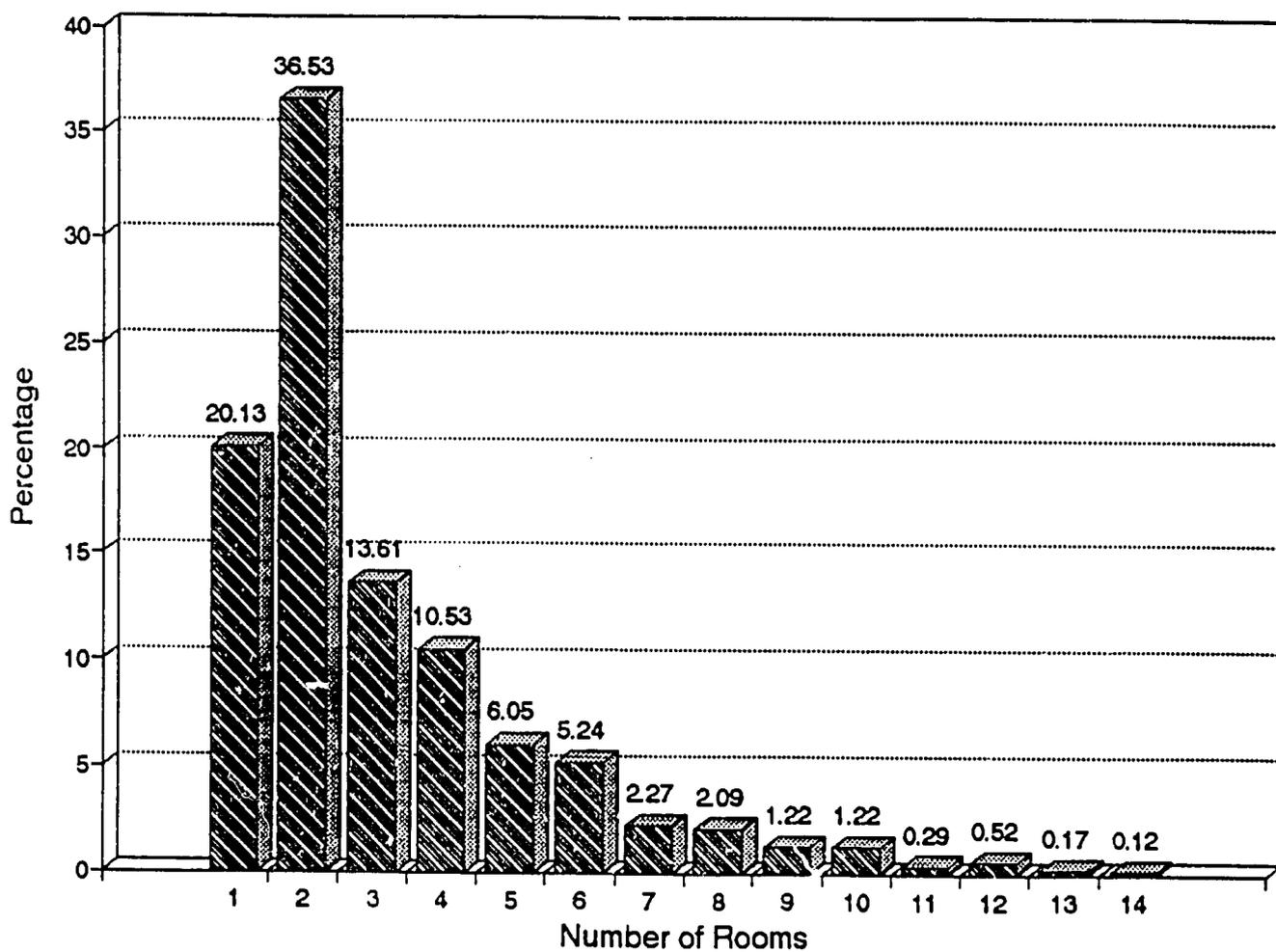
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 3: Years Living in the House



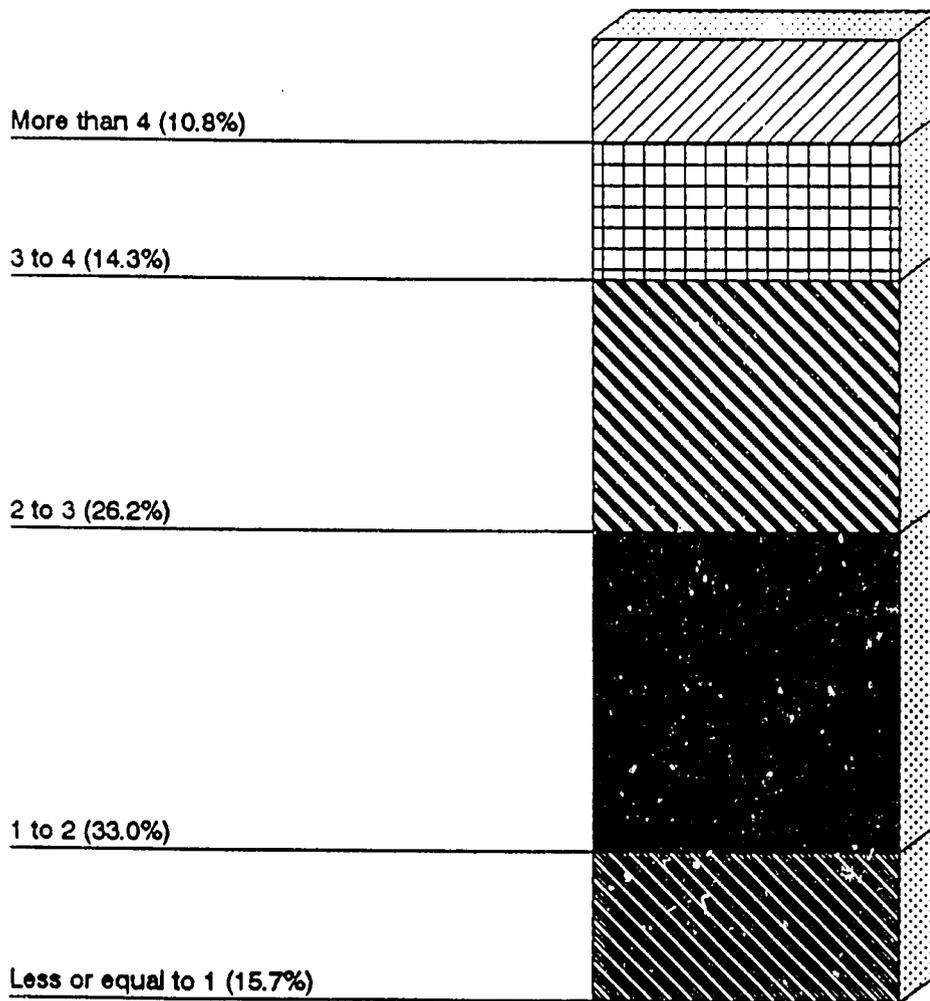
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 4: Number of Rooms



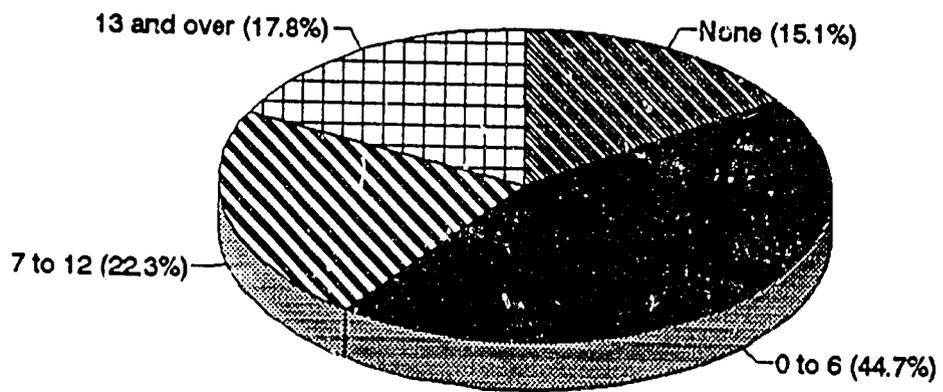
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 5: Occupancy Rate
Number of Persons per Room



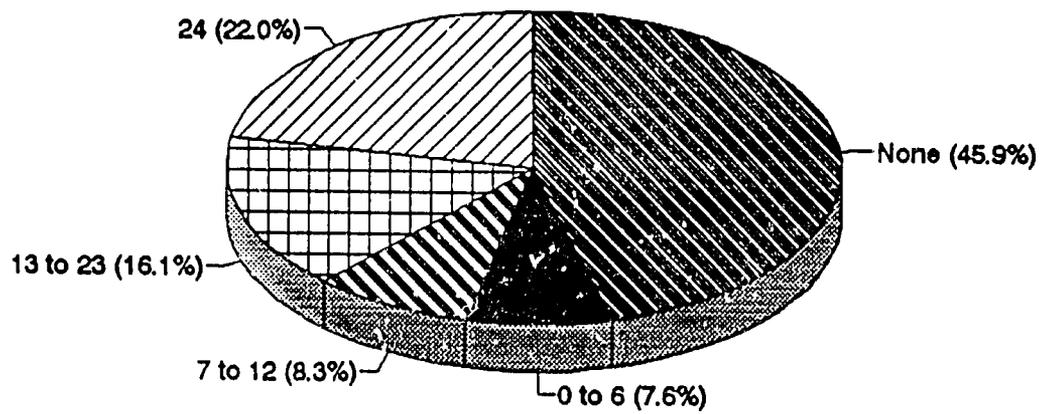
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 6: Daily Hours of Electricity



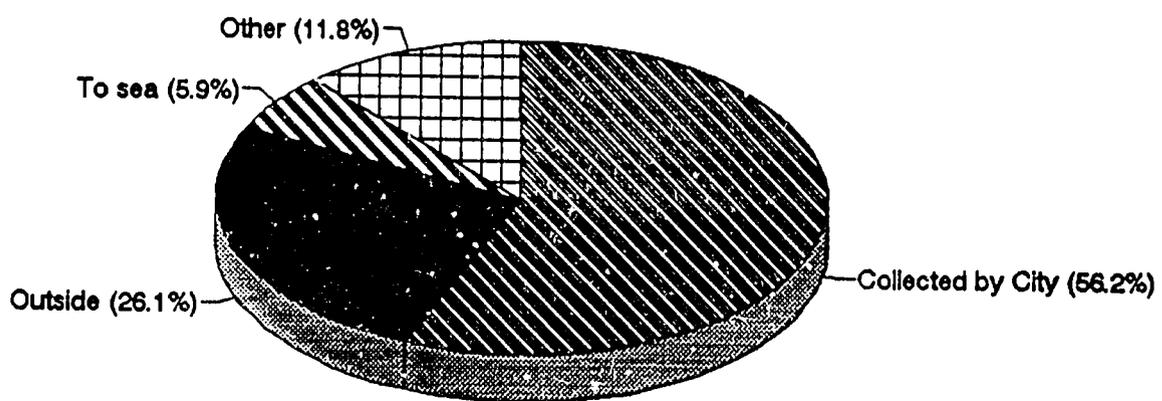
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 7: Daily Hours of Water



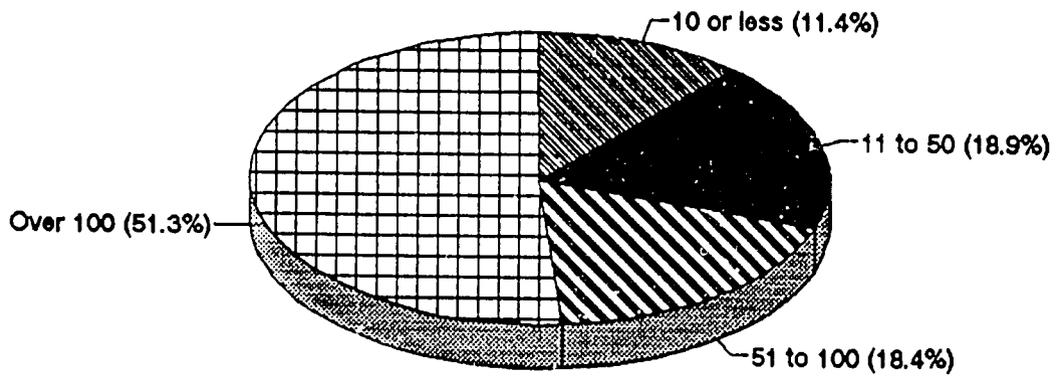
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 8: Garbage Collection



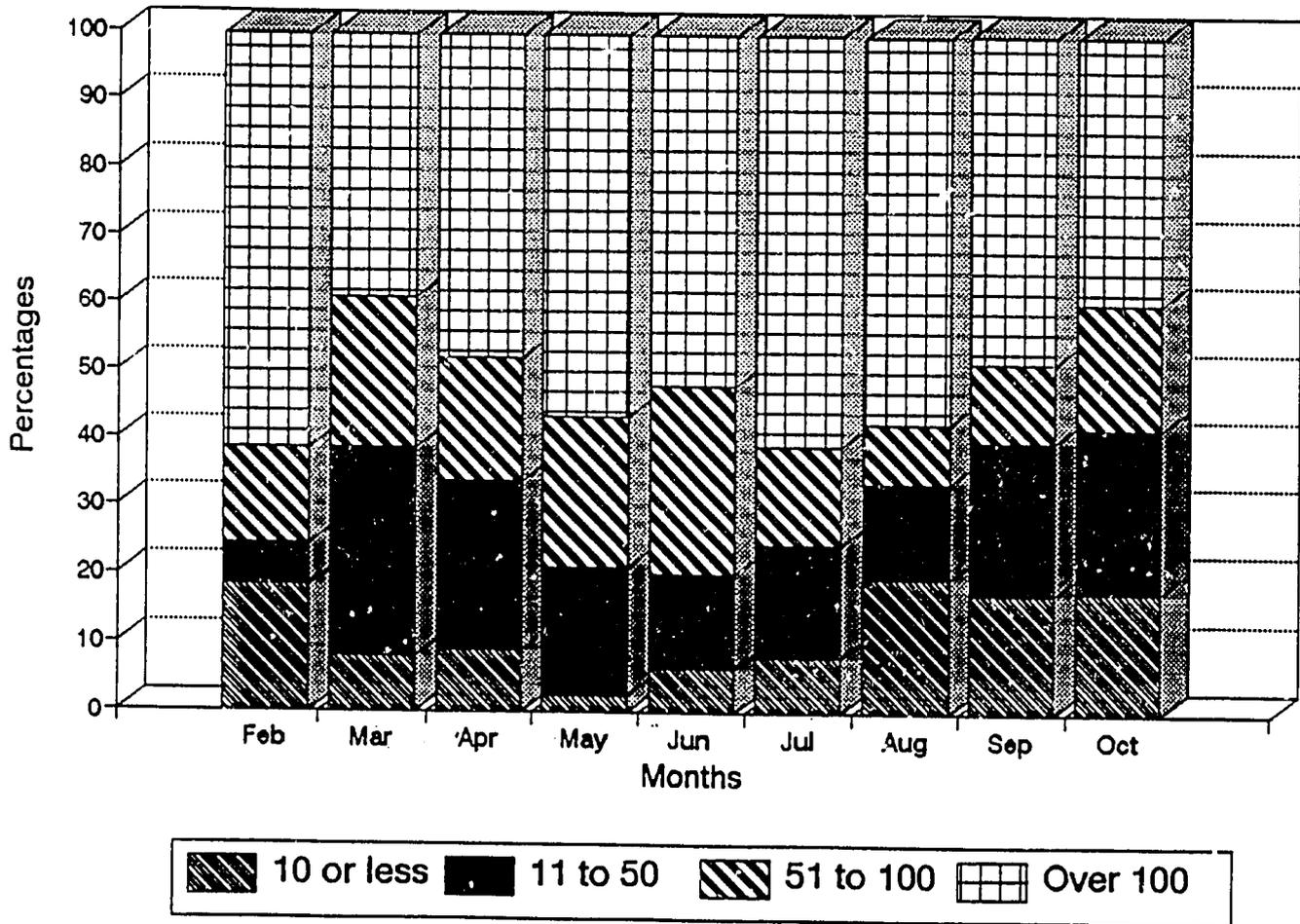
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 9: Quality of Drinking Water
Count of Colibacteria



Source: CFNPP/ENCOMEC 1990 Survey data.

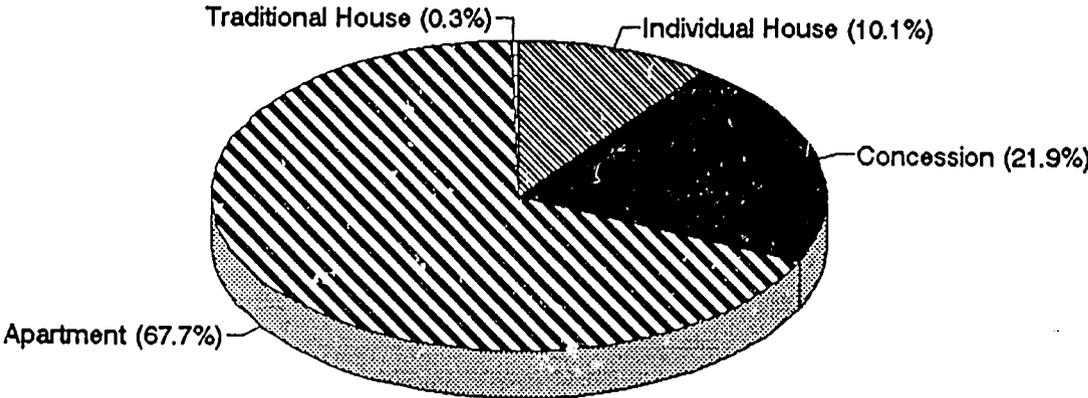
Figure 10: Water Quality by Month
Count of Colibacteria



Source: CFNPP/ENCOMEC 1990 Survey data.

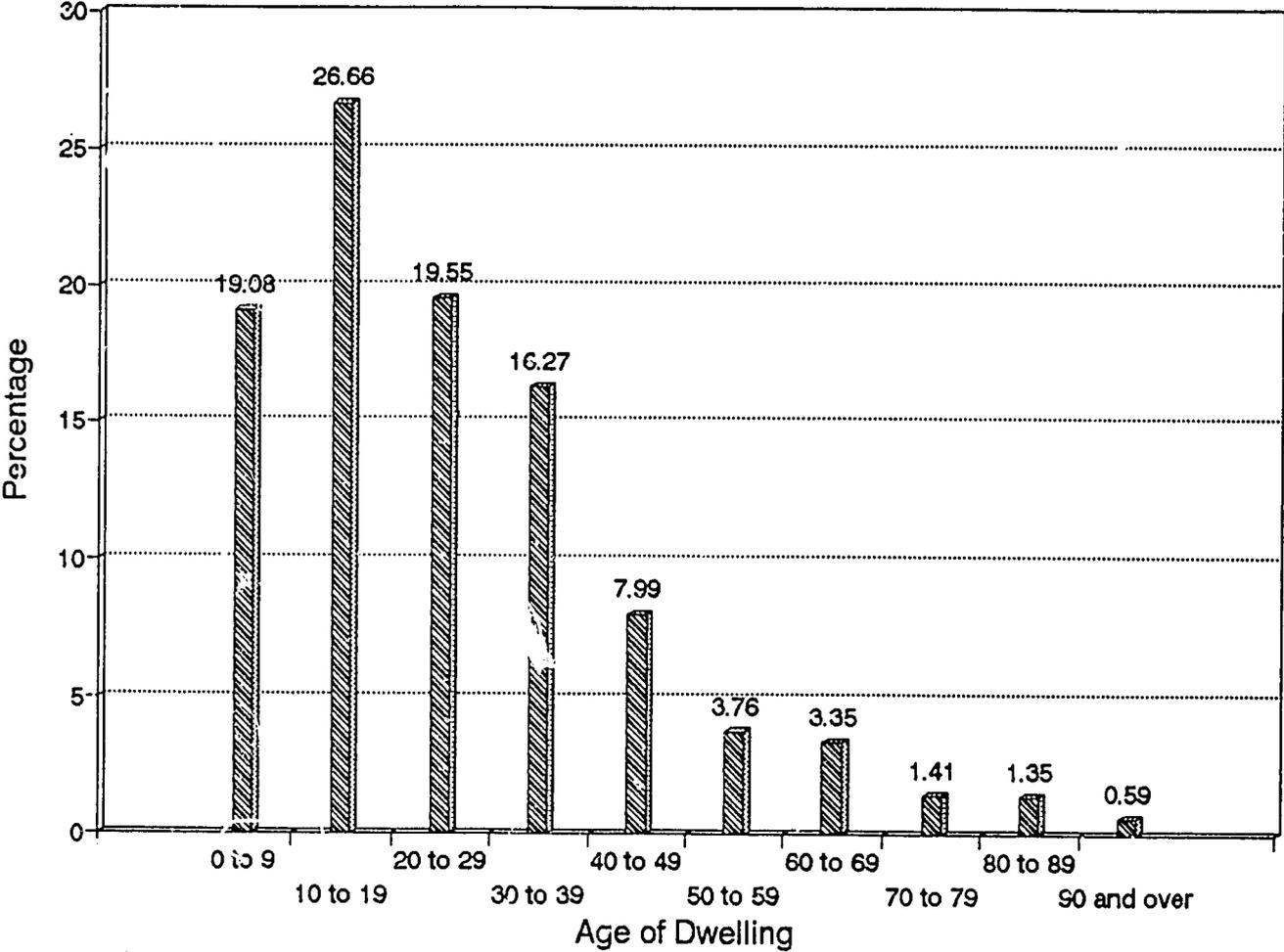
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Figure 1: Housing Type



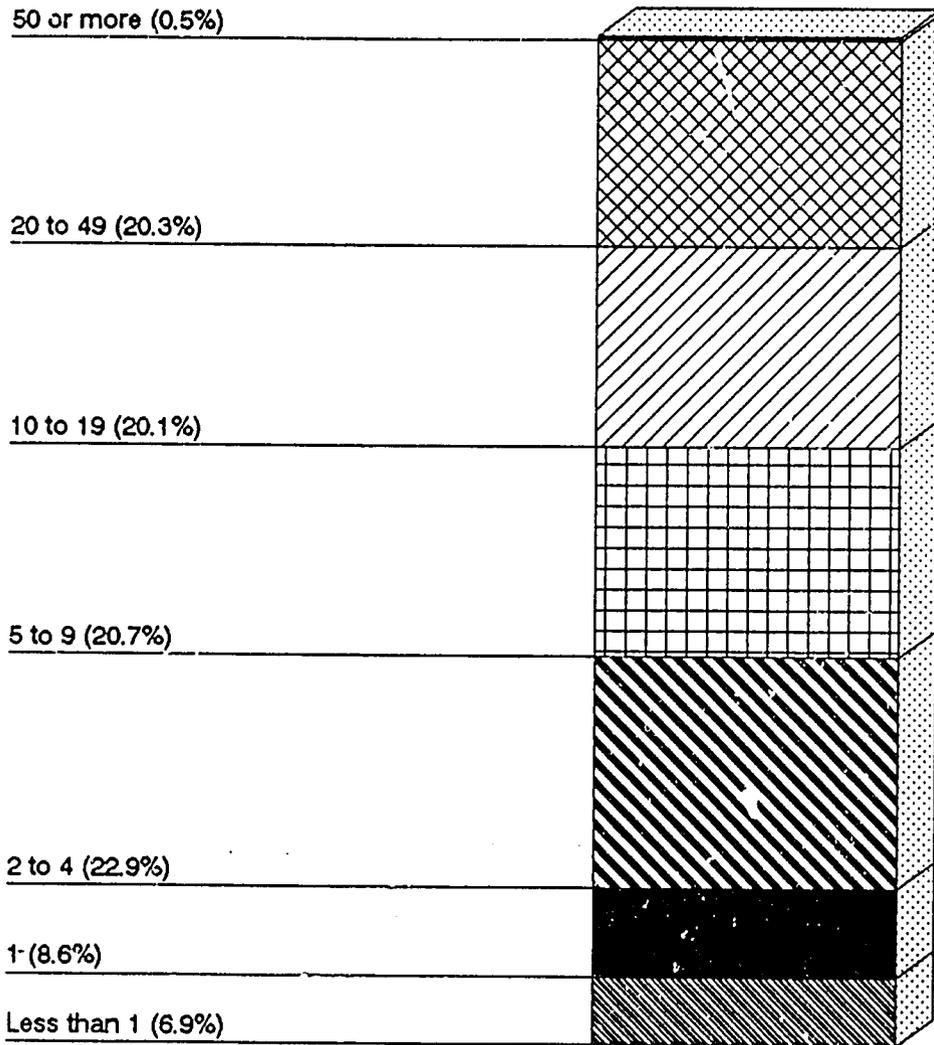
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 2: Age of Buildings



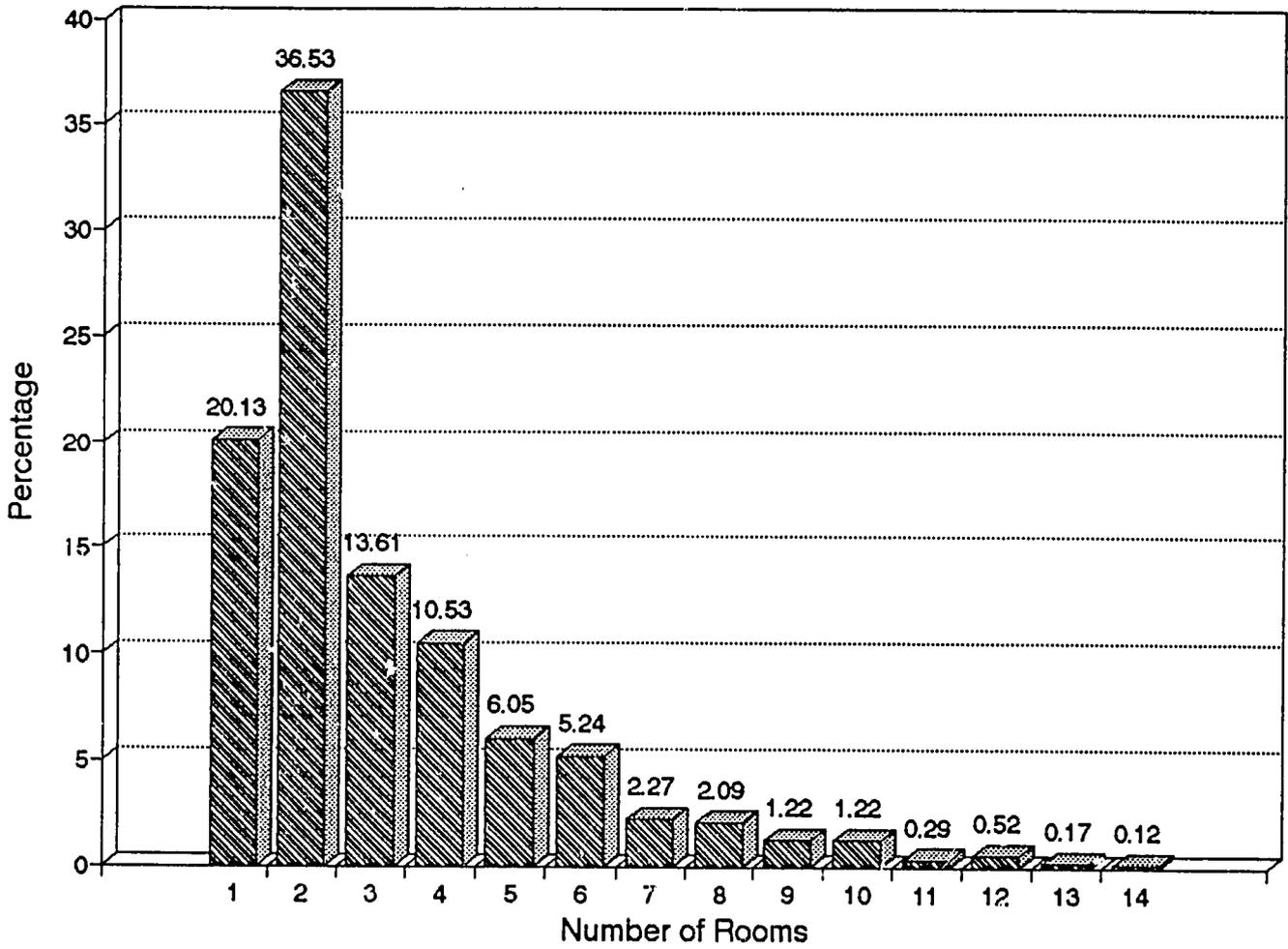
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 3: Years Living in the House



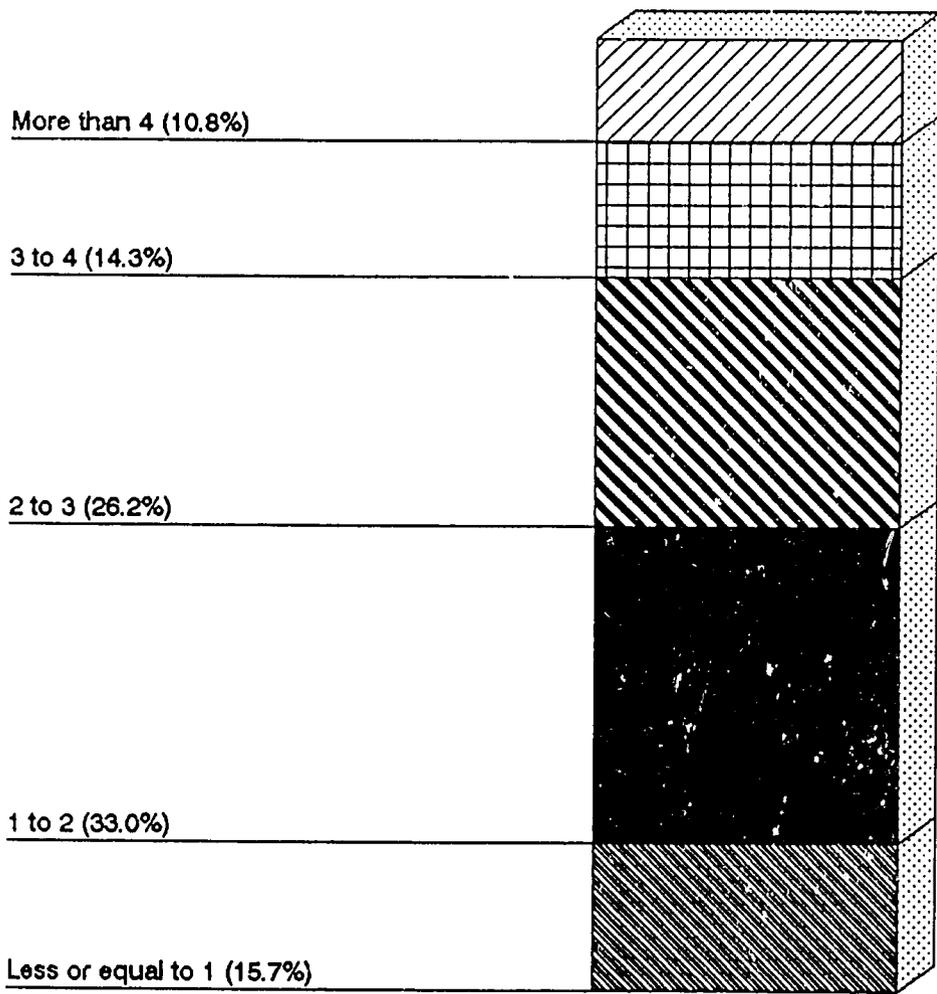
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 4: Number of Rooms



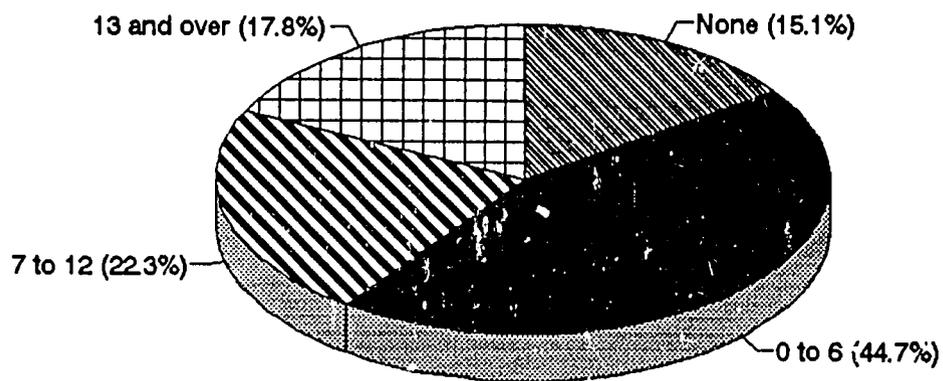
Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 5: Occupancy Rate
Number of Peisons per Room



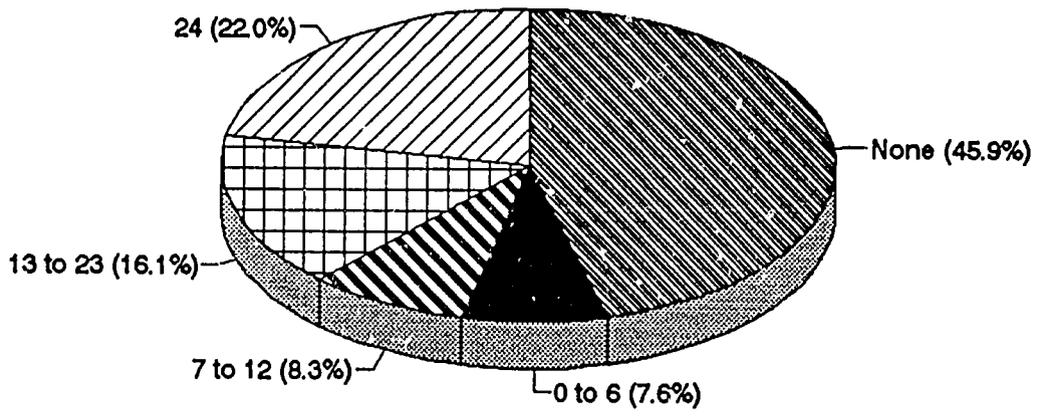
Source: CFNPP/ENCOMECE 1990 Survey data.

Figure 6: Daily Hours of Electricity



Source: CFNPP/ENCOMEC 1990 Survey data.

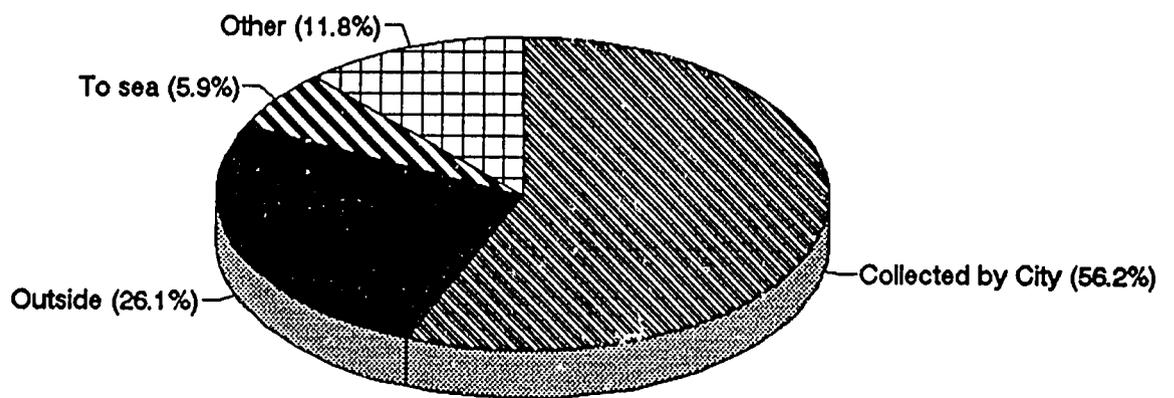
Figure 7: Daily Hours of Water



Source: CFNPP/ENCOMEC 1990 Survey data.

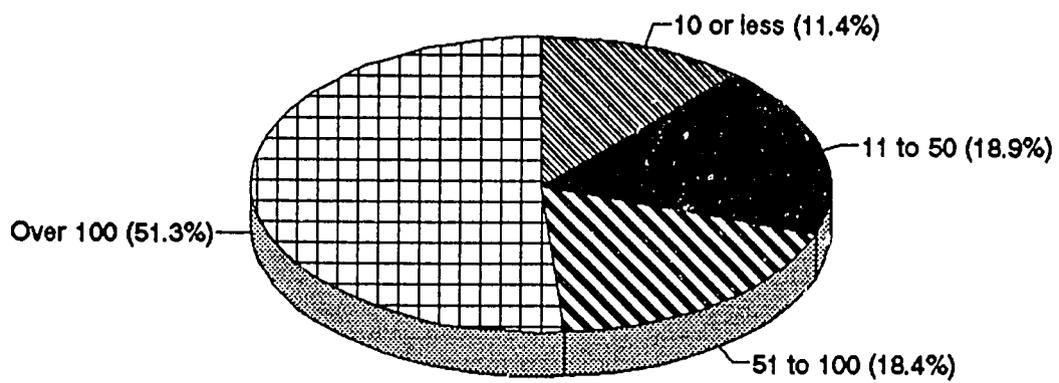
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Figure 8: Garbage Collection



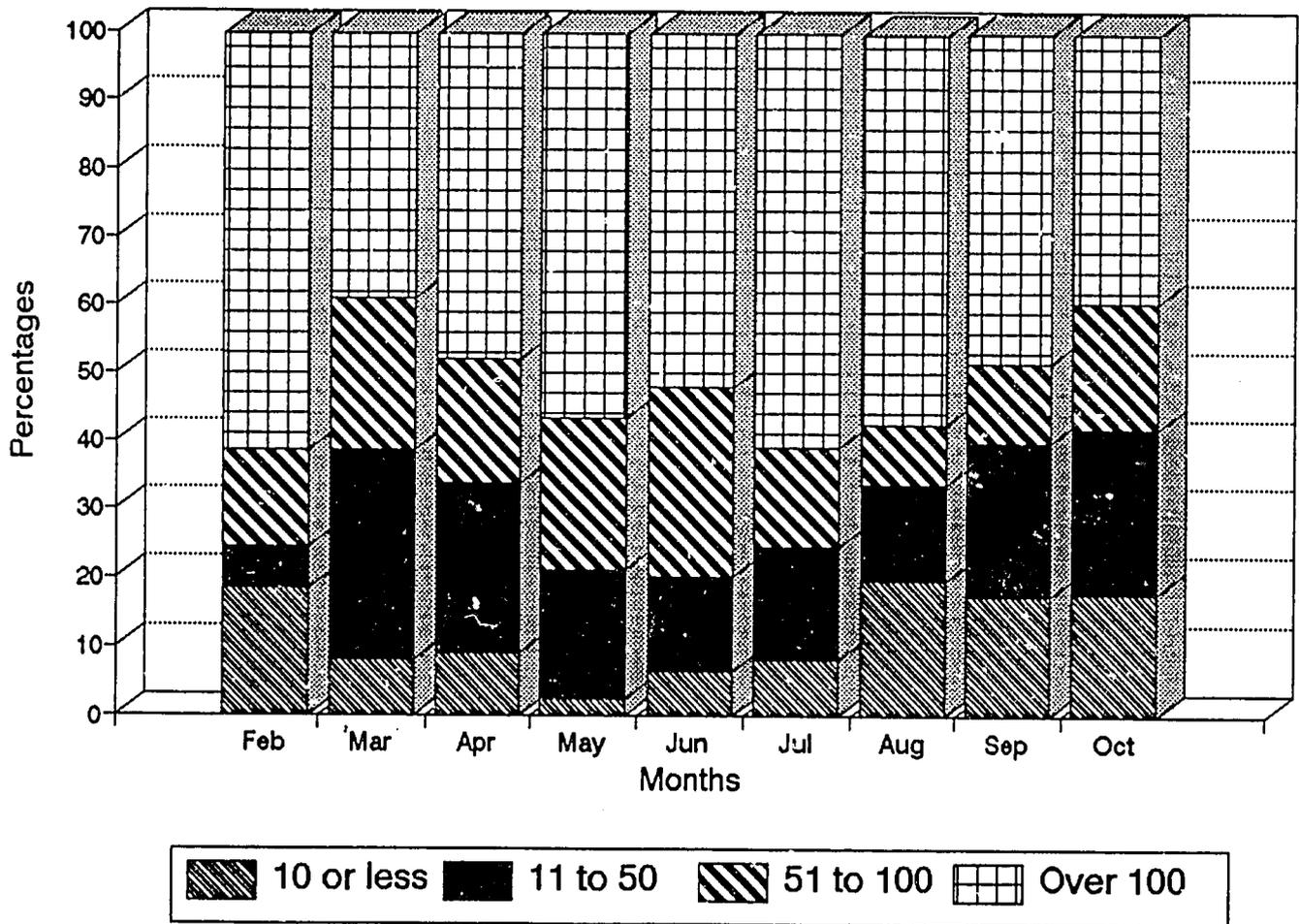
Source: CFNPP/ENCOMECC 1990 Survey data.

Figure 9: Quality of Drinking Water
Count of Colibacteria



Source: CFNPP/ENCOMEC 1990 Survey data.

Figure 10: Water Quality by Month
Count of Colibacteria



Source: CFNPP/ENCOME C 1990 Survey data.