

TABLE 4.5
MEAN EXPENDITURE ON HEALTH CARE BY SOURCE OF CARE AND BY QUINTILE, AREA, SEX AND AGE

	Mean total costs for visits excluding drugs and insurance reimbursements		Mean costs for drugs, by source		Percent with Health Insurance
	Public (\$)	Private (\$)	Public (\$)	Private (\$)	
Quintile					
Poorest	14.5	50.0	2.0	38.1	1.6
2	13.9	62.3	0.2	36.9	2.6
3	5.7	53.9	4.0	33.1	9.8
4	11.0	77.3	5.1	47.4	10.3
5	10.3	88.6	5.7	50.5	18.8
Area					
KMA	5.8	79.9	5.4	44.0	15.3
Other Towns	15.2	93.1	2.3	42.7	12.3
Rural	15.5	51.2	3.0	41.4	4.5
Sex					
Male	10.5	58.7	3.2	41.5	8.5
Female	11.1	82.6	4.6	43.9	9.5
Age (years)					
Less than one	5.0	55.5	1.3	43.0	14.7
1-4	12.9	85.3	1.5	32.2	10.6
5-13	6.6	44.9	2.3	32.9	7.0
14-39	13.8	63.7	7.5	42.0	10.2
40-59	11.1	97.2	2.5	67.7	8.5
60+	11.7	79.4	4.9	54.4	8.4
All Jamaica	10.9	72.1	4.0	42.8	9.0

per cent). Almost 58.8 per cent of children less than one year compared with 38.4 per cent of those aged 14-39 years sought medical intervention when ill. There were no gender differences.

This pattern whereby older persons experienced longer periods of illnesses that resulted in longer disability periods may be due to chronic diseases, and this may explain why the higher proportion of ill health among adults was not paralleled by increased use of health services. Those with chronic illnesses are more likely to know the reason for their ill health, probably had sought medical care in the past and would only seek care for prescription renewal. On the other

hand, children with acute illnesses were more likely to seek medical intervention.

The pattern of usage of health facilities and the level of care is displayed in Table 4.3. The majority of persons attended private health facilities (60.6 per cent). Preference for private medical services was noted particularly among the wealthier quintiles and among females. An interesting pattern emerged among the various age categories. Children, and to a lesser extent the elderly, were the main users of public health facilities. Thus it appears that the age-dependent groups were the main users of public facilities, those groups being least able to pay for private health services.

Secular trends in the use of health care are shown in Table 4.4. A downward trend in the percentage of the ill seeking medical care is observed over the three-year period. Also, fewer persons sought care in the primary facilities in 1990 compared with previous years. Increased demand on hospital services is undesirable as it increases the strain on these services that are already stretched. The reasons for this trend need to be ascertained. The level of hospitalization showed no significant change over the period. There was a small decrease in the percentage of those using public facilities between the first and second round in 1989, but this did not continue in 1990.

TABLE 4.6
MEAN EXPENDITURE ON HEALTH CARE BY SOURCE OF CARE (1989,1990)

	Mean Total Cost		Mean Cost of Drugs		With health Insurance %
	Public J\$	Private J\$	Public J\$	Private J\$	
1989 (July)	6	48	4	30	8.2
1989 (Nov.)	11	57	5	48	8.1
1990	11	72	4	43	9.0

TABLE 4.7
VACCINATION COVERAGE BY AREA AND QUINTILE

Quintile	Persons receiving 3 or more doses of OPV	Persons receiving 3 or more doses of DPT	Persons receiving BCG	Persons vaccinated against Measles
Poorest	80.0	80.3	95.3	79.3
2	74.2	74.7	93.2	77.7
3	82.4	84.9	94.2	84.6
4	80.0	80.0	91.4	77.4
5	80.2	84.8	96.7	88.0
Area				
KMA	80.9	84.2	95.5	77.7
Other Towns	75.0	75.0	90.3	79.0
Rural	79.4	80.2	94.8	82.5
All Jamaica	79.1	80.3	94.2	80.9

Health Care Expenditures

The average cost of visits made for medical services during the reference period was \$72.10 and \$10.90 for private and public health care, respectively (Table 4.5). Thus the cost of

private services were substantially higher than that of public services. While there were no sharp differences in the cost of visits to public facilities in any of the factors under consideration, distinct sizeable differences in costs were reported for private consultations. The cost of private medical service in rural Jamaica (\$51.20) was substantially less than that provided in Other Towns (\$93.10) and the KMA (\$79.90). Wealthier groups (i.e. the two highest quintiles), females, and adults in general, paid higher costs for private health care in 1990.

Great disparities were noted in the cost of drugs in the private (\$42.80) and the public sector (\$4.00). The cost of drugs appeared not to vary significantly by area of residence or sex, but differed by age-group and consumption pattern, with older persons and the two wealthiest groups spending more on drugs.

The higher expenditure on drugs among the older age groups is due to the lower coverage of health insurance coupled with the greater need for an armamentarium of drugs owing the chronic nature of their illness. Among the wealthier groups, the higher costs of drugs may be related to a selective preference for non-generic, expensive drugs.

TABLE 4.8
PREVALENCE OF MALNUTRITION AMONG CHILDREN AGE 0-59 MONTHS BY QUINTILE

	LOW WEIGHT FOR AGE					
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Poorest (n=180)	22	12.2	0	0.0	22	12.2
2 (n=186)	6	3.2	1	0.5	7	3.7
3 (n=135)	15	11.1	0	0.0	15	11.1
4 (n=112)	10	8.9	1	0.9	11	9.8
5 (n=88)	3	3.4	1	1.1	4	4.5
All (n=70)	56	8.0	3	0.4	59	8.4
	STUNTING					
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Poorest (n=183)	7	3.8	3	1.6	10	5.4
2 (n=185)	1	0.5	0	0.0	1	0.5
3 (n=135)	4	0.3	2	1.5	6	4.5
4 (n=112)	1	0.9	4	3.6	5	4.5
5 (n=89)	2	2.2	0	0.0	2	2.2
All (n=704)	15	2.1	9	1.3	24	3.4
	WASTING					
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Poorest (n=187)	8	4.3	0	0.0	8	4.3
2 (n=186)	3	1.6	2	1.1	5	2.7
3 (n=135)	5	3.7	0	0.0	5	3.7
4 (n=111)	4	3.6	0	0.0	4	3.6
5 (n=89)	3	3.4	1	1.1	4	4.5
All (n=708)	23	3.2	3	0.4	26	3.6

TABLE 4.9
PREVALENCE OF MALNUTRITION AMONG CHILDREN AGED 0-59 MONTHS BY AREA

LOW WEIGHT FOR AGE						
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
KMA (n=191)	19	9.9	0	0.0	19	19.9
Other Towns (n=119)	12	10.1	0	0.0	12	10.1
Rural (n=387)	24	6.2	3	0.8	27	7.0
All Jamaica (n=697)	55	7.9	3	0.4	58	8.3
STUNTING						
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
KMA (n=192)	5	2.6	2	1.0	7	3.6
Other Towns (n=118)	2	1.7	2	1.7	4	3.4
Rural (n=390)	8	2.1	5	1.3	13	3.5
All Jamaica (n=700)	15	2.1	9	1.3	24	3.4
WASTING						
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
KMA (n=191)	12	6.3	0	0.0	12	6.3
Other Towns (n=118)	1	0.8	0	0.0	1	0.8
Rural (n=394)	9	2.3	3	0.8	12	3.1
All Jamaica (n=704)	22	3.2	3	0.4	25	3.6

Overall, less than 10 per cent of persons who sought medical attention had health insurance. The proportion with insurance increased with wealth and urbanization. The cost of health care between 1989 and 1990 is shown in Table 4.6. The total cost of health care, especially private sector care, showed dramatic increases between SLC 89-1 and SLC 90 but a similar increase was not seen in expenditure on drugs. The reason for this is unclear but may be due to the fact that persons arbitrarily cut their prescriptions. However, the pharmaceutical mix based on Jamaica Commodity Trading Company (JCTC) procured goods may have favourably influenced prices at that time. It should be noted that up to 1991 the JCTC procured most of the first line products for chronic diseases. There was a slight increase in the percentage with health insurance, and if this is real (no standard errors were calculated) then this would contribute to lower costs for drugs.

Vaccination Coverage

Immunization coverage of children under five years was fairly good, with 80.3 per cent receiving DPT, 80.9 per cent being immunized against measles, 79.1 per cent against polio and 94.2 per cent receiving BCG. No significant differences by consumption quintile and area were noted (See Table 4.7).

Nutrition

The nutritional status of young children as measured by anthropometric indices has been used as a proxy indicator of the general level of living and welfare. Nutritional status as reflected by stature and growth patterns have been found to be consistently related to social and economic indicators of welfare. Thus, the extent of malnutrition can be regarded as a means of setting priorities for policies and interventions aimed at improving aspects of living conditions.

Three basic measurements – age, weight and height – were used to assess the nutritional status of children with a view to determining the prevalence of malnutrition by weight/age, wasting and stunting. The section that follows describes nutritional status during the review period by correlating anthropometric indicators with consumption pattern, area of residence, sex and age.

Table 4.8 displays the prevalence of malnutrition by population quintile and shows that malnutrition was predominantly of a moderate degree: very few children were severely malnourished. An inverse relationship existed between malnutrition and income: malnutrition as indicated by low weight/age ratio declined with increasing income. There

TABLE 4.10
PREVALENCE OF MALNUTRITION AMONG CHILDREN AGED 0-59 MONTHS BY SEX

	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Male (n=351)	31	8.8	1	0.3	34	9.1
Female (n=350)	25	7.1	2	0.6	27	7.7
All (n=701)	56	8.0	3	0.4	59	8.4
STUNTING						
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Male (n=355)	11	3.1	1	0.3	12	3.4
Female (n=349)	4	1.1	8	2.3	12	3.4
All (n=704)	15	2.1	9	1.3	24	3.4
WASTING						
	Moderate		Severe		Total	
	No.	%	No.	%	No.	%
Male (n=356)	13	3.7	1	0.3	14	4.0
Female (n=352)	10	2.2	2	0.6	12	3.4
All (n=708)	23	3.2	3	0.4	25	3.6

were no distinct patterns of wasting or stunting among income groups.

Malnutrition was marginally higher in urban areas, i.e. KMA and Other Towns (10 per cent) than Rural Areas (7 per cent) (See Table 4.9). The prevalence of stunting was similar among areas. However, unlike the geographic distribution of stunting, twice the proportion of children in the KMA were wasted when compared with rural children. There were no sex differences in the prevalence of malnutrition by any of the indices (See Table 4.10). The prevalence of stunting was low during the first year of life but increased through the second and third years, suggesting either progressive effect of social deprivation or genetics. Wasting and low weight for age were variable among age groups (See Table 4.11).

Changes over time in height and weight of children in a country run parallel to improvements in other measures of economic and social change. Table 4.12, which displays the prevalence of malnutrition over the last two decades, suggests that malnutrition (low weight for age) declined from 15.0 to 7.3 per cent during the period 1978 to 1989, but increased to 8.3 per cent in 1990.

Disaggregation of the data into stunting and wasting revealed that the prevalence of both conditions declined during the period 1978 to 1989, but showed slight increases in 1990.

In the SLC 90, the prevalence of stunting and wasting was low with approximately 3.0 per cent of the under-five population exhibiting either condition.

This round of data suggests that while the prevalence of malnutrition in Jamaica is low (i.e. below 10 per cent), the upswing in 1990 points to the need to analyze the dynamics underlying the deterioration in young child nutritional status. Tentative evidence suggests erosion in living standards.

CONCLUSION

Indirect measures of health suggest that overall the quality of health is good in the Jamaican population. Health was associated with social and economic indicators of welfare. Hence, the majority of children suffering from malnutrition and adults experiencing prolonged ill health were from poorer households.

With respect to the pattern of usage of health facilities, the majority of the population sought private medical care although costs were significantly lower for public services. This behaviour was pronounced across consumption quintiles and areas of residence. ■

TABLE 4.11
PREVALENCE OF MALNUTRITION AMONG CHILDREN AGE 0-59 MONTHS BY AGE

LOW WEIGHT FOR AGE							
	Moderate		Severe		Total		
	No.	%	No.	%	No.	%	
0-5 (n= 68)	2	2.9	0	0.0	2	2.9	
6-11 (n=52)	3	5.8	0	0.0	3	5.8	
12-23 (n=163)	17	10.4	0	0.0	17	10.4	
24-25 (n=142)	10	7.0	0	0.0	10	7.0	
36-47 (n=115)	11	7.3	2	1.3	13	8.6	
48-59 (n=126)	13	10.3	1	0.8	14	11.1	
0-59 (n=701)	56	8.0	3	0.4	59	8.4	
STUNTING							
	Moderate		Severe		Total		
	No.	%	No.	%	No.	%	
0-5 (n=75)	0	0.0	0	0.0	0	0.0	
6-11 (n=50)	0	0.0	1	2.0	1	2.0	
12-23 (n=161)	3	1.9	4	2.5	7	4.4	
24-25 (n=140)	3	2.1	1	0.7	4	2.8	
36-47 (n=150)	7	4.7	1	0.7	8	5.4	
48-59 (n=128)	2	1.6	2	1.6	4	3.6	
0-59 (n=704)	15	2.1	9	1.3	24	3.4	
WASTING							
	Moderate		Severe		Total		
	No.	%	No.	%	No.	%	
0-5 (n=75)	4	5.3	1	1.3	5	6.6	
6-11 (n=50)	3	6.1	0	0.0	3	6.1	
12-23 (n=161)	3	1.9	0	0.0	3	1.9	
24-25 (n=140)	3	2.1	0	0.0	3	2.1	
36-47 (n=150)	4	2.7	2	1.3	6	4.0	
48-59 (n=128)	6	4.7	0	0.0	6	6.6	
0-59 (n=704)	23	3.3	3	0.4	26	3.7	

TABLE 4.12
PREVALENCE OF MALNUTRITION — SURVEY DATA 1978-1990

Survey	Wasting			Stunting			Low Weight for Age		
	Moderate	Severe	Total	Moderate	Severe	Total	Moderate	Severe	Total
SLC 1990	3.2	0.4	3.6	2.1	1.3	3.4	7.9	0.4	8.3
SLC-II 1989	1.5	0.6	2.2	1.7	1.2	2.9	6.5	0.8	7.3
SLC-1 1989	1.3	0.1	1.4	4.5	0.4	4.9	8.5	0.7	9.2
MOH 1985	3.8	1.3	5.1	4.8	2.3	7.1	13.6	1.0	14.6
MOH 1978	-	-	5.1	-	-	5.0	-	-	15.0

Food Stamp Programme

INTRODUCTION

The objective of the Food Stamp Programme (FSP) is to raise the level of dietary adequacy of poor households facing rising food prices.

Under the programme, two main categories of recipients are targetted: (1) those who qualify on the basis of nutritional vulnerability, namely pregnant women, lactating mothers, and children under five years of age who use government health clinics; (2) those who qualify on the basis of low income, determined by means testing, i.e. the indigent, the elderly, and poor households. Persons receiving poor relief and public assistance are automatically included in the latter group.

In September 1990, just prior to the administration of the SLC in the field, the FSP underwent major reorganization that reduced the administrative ceiling of 400,000 beneficiaries to 300,000: 150,000 children under five years old, 15,000 pregnant women, 15,000 lactating mothers - (a total of 180,000 or 60 per cent in these three categories); 120,000 or 40 per cent were those in the income-related and automatic beneficiary categories. In addition, a new beneficiary category was introduced under a Family Plan aimed at providing increased benefits to family households of two or more persons with total incomes of less than \$7,200 per year. A single-person household with annual income of less than \$3,000 would also qualify for benefits. According to the *Economic and Social Survey of Jamaica, 1990*:

The introduction of the new category made it possible to qualify for stamps twice, in the individual categories (children under 5, pregnant women, lactating mothers, the elderly and indigent) and also as members of low income households. Pregnant and lactating women who are members of low income households would be awarded benefits only on the basis of the Family or Household category (p. 23.3).

The single-person household was entitled to stamps at the same value as the other categories, i.e. \$30 monthly - up from \$20 monthly. The larger households, on the other hand, received \$60 monthly. The range of items to be purchased was expanded to include dark sugar, flour, meats and agricultural products.

In this analysis of the November 1990 round of the survey, SLC data on welfare status and geographic location are integrated with food stamp data in order to examine the factors affecting distribution of benefits and the degree of coverage and leakage.

Targetting is the degree to which benefits are restricted to the target group and prevented from leaking to non-target

group members. Coverage refers to the proportion of each target group (individuals or households) reached by the programme. Leakage is measured as the proportion of non-target group members receiving benefits.

HOUSEHOLD COVERAGE

Table 5.1 shows the distribution of food stamp benefits for households of various characteristics for November 1989 and November 1990.

In November 1990, 12.8 per cent or a total of 235 from a sample of 1,828 households benefited from food stamp distribution in the two months prior to the survey. This represents a 2.1 per cent decline in coverage of households since November 1989.

Generally, a slight decline was reflected across all quintiles except the second wealthiest, which recorded a slight increase in households receiving food stamps since November 1989. This continues the trend of a decline in coverage of households overall since August 1988 (the first round of the SLC) when 23.4 per cent coverage overall was achieved. This situation no doubt reflects government's decision to trim the list of beneficiaries in 1989, followed by a major reorganization of the programme in 1990 which negatively affected the distribution of benefits.

Coverage by beneficiary type indicates that 16.6 per cent of households with children under the age of five received food stamps at the time of the survey. This is proportionately less than half of the households who received food stamps in this category in August 1988 (37.6 per cent), and 3.4 per cent less than in November 1989. Of households with pregnant women and lactating mothers 0.5 per cent received food stamps, while for households with elderly members, this figure was 22.3 per cent - up from 19.0 per cent over the period since November 1989. The number of households in the sample with handicapped persons was not ascertained and therefore the proportion of beneficiaries cannot be calculated. However, there was a slight improvement in the proportion of households with handicapped persons who received benefits, as they represented 7.6 per cent of the beneficiaries in the SLC sample for November 1990 compared to 5.2 per cent in November 1989.

Data are not available for the newly introduced 'Family/Household' category, as the changeover involving identification and recertification of beneficiaries was not effected in time for the survey.

Efforts to reduce leakage to ineligible beneficiaries continued to show progress, as these households represented only 1.7 per cent of the beneficiaries in the SLC sample, down from 2.9 per cent in November 1989. In relation to leakage

TABLE 5.1
HOUSEHOLDS RECEIVING FOOD STAMPS BY CATEGORY AND QUINTILE 1989, 1990

<u>NOVEMBER 1990</u>	No. Receiving Stamps	Percentage of Quintile					
		All	Poorest	2	3	4	5
Category							
Children < 5 yrs (n=585)	97	16.6	22.3	22.2	17.9	9.9	6.3
Pregnant/Lactating Women (n=195)	1	0.5	2.0	0.0	0.0	0.0	0.0
Elderly (n=548)	122	22.3	36.6	25.7	21.4	20.0	6.8
Handicapped (n.a.)	18	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
None of the above (n.a.)	4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total (n=1828)	235 ^a	12.8	29.3	20.4	14.2	9.2	2.7
No. households receiving stamps		235	79	61	45	35	15
Distribution (%)		100	33.6	26.0	19.1	14.9	6.4
 <u>NOVEMBER 1989</u>							
Category							
Children < 5 yrs (n=1218)	242	20.0	24.7	27.4	19.2	12.6	10.2
Pregnant/Lactating Women (n.a.)	25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Elderly (n=1164)	216	18.6	32.5	22.8	21.3	10.8	6.7
Handicapped (n.a.)	30	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Consumption < \$2600 (n=61)	20 ^b	32.8	34.7	25.0	-	-	-
None of the above (n.a.)	17	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total (n=3885)	580 ^a	14.9	33.7	26.0	17.0	8.7	4.0
No. households receiving stamps		568	174	158	116	74	46
Distribution (%)		100	30.6	27.8	20.4	13.0	8.1

as reflected in the proportion of benefits going to higher income groups, there was a slight reduction in relation to the wealthiest quintile and a similarly modest increase in regard to the poorest quintile, suggesting, in some small measure, a more progressive distribution. This was reversed, however, in relation to the share going to the fourth quintile and the second and third quintiles, thus presenting only very minimal variations for the wealthier and poorer beneficiaries, respectively, since November 1989.

There has been no change, therefore, in the pattern of distribution where at least 20.0 per cent of beneficiary households are represented by the better-off residents (i.e. quintiles 4 and 5).

INDIVIDUAL BENEFICIARIES

The official administrative ceiling of 300,000 beneficiaries for 1990 is equal to 12 per cent of the population. Table 5.2, however, indicates that only 3.7 per cent (277) of the sample of 7484 persons received food stamps. This is slightly less than those persons receiving food stamps in November 1989 (4.2 per cent).

The new division among the categories stipulating that 60 per cent of the benefits go to mothers/children and 40 per cent to the elderly/poor was not met. In fact, survey findings reveal a tendency to the reverse. If the ineligible beneficiaries are excluded (none of the above), the indication from the figures is that 45 per cent of the benefits went to the mothers/children category, and 55 per cent to the elderly/poor.

Coverage by Category

As shown in Table 5.2, the elderly had the best coverage in 1990, at 18.9 per cent, followed by children under five years old with 13.7 per cent, while only 0.5 per cent of pregnant women and lactating mothers in the sample were in receipt of stamps.

Changes in the coverage of individuals followed a pattern similar to that of households; thus the data reveal that there has been a slight decline since November 1989 in the percentage of children under age five who received benefits, while coverage of the elderly held a 3.0 per cent proportionate increase. Because of the gaps in the data, it is not possible to

TABLE 5.2
INDIVIDUALS RECEIVING FOOD STAMPS BY CATEGORY AND QUINTILE 1989, 1990

NOVEMBER 1990	No. Receiving Stamps	Percentage of Quintile					
		All	Poorest	2	3	4	5
Category							
Children < 5 yrs (n=859)	118	13.7	18.6	16.3	13.9	7.8	6.3
Pregnant/Lactating Women (n=219)	1	0.5	1.8	0.0	0.0	0.0	0.0
Elderly (n=689)	130	18.9	31.6	22.9	16.3	17.8	5.3
Handicapped (n.a.)	18	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
None of the above (n.a.)	4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
All Individuals (n=7484)	277 ^c	3.7	6.7	5.0	3.2	2.5	1.1
No. individuals receiving stamps		277	100	75	48	37	17
Distribution (%)		100	36.1	27.1	17.3	13.4	16.1
NOVEMBER 1989							
Category							
Children < 5 yrs (n=1859)	284	15.3	17.7	20.1	14.6	9.7	8.9
Pregnant/Lactating Women (n.a.)	26	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Elderly (n=1473)	240	16.3	28.6	19.6	19.5	8.8	5.7
Handicapped (n.a.)	30	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Consumption < \$2600 (n=61)	20 ^b	32.8	34.7	25.0	-	-	-
None of the above (n.a.)	19	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total (n=16445)	708	4.2	7.2	6.1	4.2	2.5	1.5
No. individuals receiving stamps		708	237	199	138	82	52
Distribution (%)		100	33.4	28.1	19.5	11.6	7.3

ascertain changes in coverage of the other population groups targeted.

Concern has been expressed about the differences reflected in the SLC findings as compared to the Ministry of Labour, Welfare and Sport (MLWS) figures on distribution of stamps to beneficiaries. In Table 5.3, a comparison is made between the coverage implied by the SLC data and that implied by the MLWS data for the September to October 1990 payment period.

The target for coverage of pregnant women and lactating mothers for 1990 was set at 30,000 or 40.4 per cent of the estimated total number of this beneficiary category in the population each month (74,270). The programme is however designed to benefit clinic attenders who, according to Ministry of Health data, were estimated at 67.8 per cent of pregnant women and lactating mothers. As indicated by the survey findings, coverage of this category (0.5 per cent) appears very unsatisfactory. The distribution figures from the

TABLE 5.3
ESTIMATION OF FOOD STAMPS COVERAGE, SEPTEMBER-OCTOBER 1990

	No. in Population	% Targetted	Beneficiaries Reached		
			MLWS		SLC
			No.	%	%
Pregnant/ Lactating	74,270 ^d	40	438	0.6	0.5
Children < 5 years	322,720 ^e	46	111,255	34.5	13.7
Elderly	239,730 ^f	21	n.a	n.a	18.9

TABLE 5.4
HOUSEHOLDS AND INDIVIDUALS RECEIVING FOOD STAMPS BY AREA, NOVEMBER 1990

<u>HOUSEHOLDS</u>	No. Receiving Stamps	All Jamaica	KMA	Other Towns	Rural
Category					
Children < 5 yrs (n=585)	97	16.6	4.9	15.4	22.9
Pregnant/Lactating Women (n=195)	1	0.5	2.0	0.0	0.1
Elderly (n=548)	122	22.3	11.9	21.8	25.6
Handicapped (n.a.)	18	n.a.	n.a.	n.a.	n.a.
None of the above (n.a.)	4	n.a.	n.a.	n.a.	n.a.
Total (n=1828)	235	12.8	4.2	11.5	18.0
No. households receiving stamps		235	22	40	173
Distribution (%)		100	9.4	17.0	73.6
<u>INDIVIDUALS</u>					
Category					
Children < 5 yrs (n=859)	118	13.7	3.8	14.2	17.9
Pregnant/Lactating Women (219)	1	0.5	0.0	0.0	0.9
Elderly (689)	130	18.9	10.1	19.0	21.4
Handicapped (n.a.)	18	n.a.	n.a.	n.a.	n.a.
None of the above (n.a.)	4	n.a.	n.a.	n.a.	n.a.
All individuals (n=7484)	277	3.7	1.2	3.9	4.9
No. individuals receiving stamps		277	24	51	202
Distribution (%)		100	8.7	18.4	72.9

MLWS for September to October 1990 substantiates this also, as they show that 438 or 0.6 per cent of the total number of pregnant women and lactating mothers were in receipt of stamps.

The targetted coverage for children under five years old is 150,000 or about 46 per cent of the estimated number of children less than age five in the population (322,720). In relation to this category also, the programme targets only clinic attenders, but this figure cannot be ascertained from available data. SLC data indicate coverage of 13.7 per cent, while MLWS data show 34.5 per cent or more than twice the SLC figure for those reached in this category.

For the elderly, 50,000 or about 21 per cent of the estimated number in the population (239,730) was targetted. As in the case of the other groups, not all persons in this category qualify for stamps, but means testing is used to determine eligibility. Table 5.3 shows that SLC reached 18.9 per cent of the elderly. However, it is not possible to ascertain MLWS coverage for this category, since it is not distinctly categorized in their data. It can be observed, however, that SLC coverage for this category compares very well with the target figure.

The findings above in relation to pregnant women and lactating mothers highlight the concern expressed for serious under-coverage of this category, and the urgent need to solve the problems of administering the programme to this target group. In relation to children, it is difficult to draw a conclusion due to the disparity between the SLC and MLWS data. On the other hand, it would appear that the elderly were adequately covered in relation to the target, since this is indicated by the SLC data, which would tend to understate rather than overstate coverage.

Coverage by Quintile

Overall, the individual beneficiary categories have shown steady declines in the proportions receiving stamps, from the poorest through to the richest quintiles. Compared to November 1989, there was, generally, a slight decline in coverage across all quintiles - except quintile 4 which retained the same proportion of coverage. The poorest children were three times as likely to obtain food stamps as the wealthiest children, while the poorest of the elderly were six times more likely to receive food stamp benefits. For both groups, this represents an improvement in targetting since November 1989. This was likewise reflected in the overall

TABLE 5.5
LEVEL OF CONTACT WITH FOOD STAMP PROGRAMME BY HOUSEHOLD

	Total	KMA	Area		Elderly	Household Type	
			Other Towns	Rural		Pregnant/Lactating Women	Children < 5 yrs
Applied of which:	31.6	13.6	24.8	44.1	45.2	32.9	45.1
(%) received stamps	40.9	31.0	46.5	41.4	49.0	2.0	39.1
No application made	68.4	86.4	75.2	55.9	54.8	67.1	54.9
Total	100	100	100	100	100	100	100

figures, as the poorest quintile was now six times more likely to receive stamps than the richest quintile, compared to five times more likely in November 1989.

The general decline in benefits to children was reflected across all except the poorest quintile which showed a small proportionate increase. Changes in distribution of benefits across quintiles for the elderly were uneven: the 3 per cent proportionate increase overall was reflected in quintiles 1 and 2, but also in quintile 4 whose coverage was twice that in November 1989; quintiles 3 and 5 showed decreases in coverage.

Overall, in relation to the distribution of benefits across quintiles, there was a slight improvement in the proportion going to the poorer quintiles (63.2 per cent compared to 61.5 per cent in November 1989). However, there was an improvement of a similar magnitude in the fourth quintile.

The distribution of benefits to individual beneficiaries, as in 1989, reveals a somewhat more progressive distribution of benefits than that for households. Sixty-three per cent of benefits went to the poorer quintiles compared to 60.0 per cent for households, and 19.0 per cent to the richer quintiles compared to 21.0 per cent for households.

COVERAGE BY REGION

Households

Table 5.4 shows that in November 1990, 4 per cent of households in the KMA were in receipt of stamps, compared to 11.5 per cent in Other Towns and 18.0 per cent in Rural Areas. Therefore, Other Towns were three times more likely to receive food stamps than the KMA, while rural households were four and a half times more likely to do so. The majority of households receiving food stamps were therefore rural households (73.6 per cent), with only 9.4 per cent going to the KMA.

Besides the overall picture, and in relation to each beneficiary category, rural households were also most likely to receive food stamps. For households with children under the age of five, those in Other Towns were three times more likely to receive food stamps than households in the KMA, while the figure was almost five times that for rural households. For households with elderly members, those in

Other Towns, like the households in Rural Areas, were only two times more likely to receive benefits.

Individual Beneficiaries

Only 1.2 per cent of individuals received stamps in the KMA, whilst 3.9 and 4.9 per cent, respectively, did so in Other Towns and Rural Areas. Generally, the pattern for individuals receiving food stamps across areas was similar to that for households.

The proportions of benefits distributed across areas were very similar to those for households. In comparison to November 1989, however, there were fewer individuals receiving food stamps (8.7 per cent compared to 12.8 per cent in November 1989) who came from the KMA. The proportion of individuals living in Other Towns who received benefits in November 1990 increased by the same margin—from 14.0 per cent (in November 1989) to 18.4 per cent.

LEVEL OF CONTACT WITH THE FSP

Contact with the Food Stamp Programme is defined as the total number of households applying for stamps, irrespective of whether they have received stamps. Table 5.5 shows the percentage of persons in different household categories who made contact with the FSP.

Household Recipients

Overall, approximately one-third of all households reported having made contact with the FSP. While households in the KMA had the lowest level of contact with the FSP, at 13.6 per cent, the households in Rural Areas, those with children under five years old, and with elderly members had the highest level of contact, at about 44 per cent. Of those making contact, 40.9 per cent of households received stamps in the September-October cycle. The elderly and those in Other Towns represented the highest percentage of successful food stamp household recipients, followed by those in Rural Areas. Households with pregnant women and lactating mothers represented the lowest success rate, at 2.0 per cent.

This section discusses the reasons given by households for not receiving food stamps.

TABLE 5.6
SELF-REPORTED REASONS FOR NOT RECEIVING FOOD STAMPS (%)

	Area					Beneficiary Type		
	All Jamaica (n=1584)	KMA (n=501)	Other Towns (n=776)	Rural Areas (n=776)	Mal- nourished (n=66)	Elderly (n=401)	Pregnant/La- ctating Women (n=148)	Children (n=453)
Non-Applicants	78.5	90.2	85.0	68.4	57.6	67.8	67.6	66.7
Household not considered eligible	31.4	31.5	46.6	25.4	10.6	20.2	13.5	16.8
Do not know how to obtain	16.7	21.6	15.3	14.2	21.2	17.7	21.6	20.8
Not worth the trouble	15.0	21.2	12.1	12.2	10.6	15.2	17.6	16.1
Do not want stigma	9.4	12.0	4.9	9.5	10.6	2.0	6.1	6.2
Other	5.8	3.6	6.2	7.0	4.5	5.2	8.8	6.4
Applicants, not approved	15.8	8.2	9.1	23.3	31.8	21.9	24.3	24.7
Turned down	4.4	1.4	3.6	6.7	6.1	5.2	6.1	6.8
No response received	11.4	6.8	5.5	16.6	25.8	16.7	18.2	17.9
Approved but did not receive stamps	5.7	1.6	5.9	8.2	9.1	9.7	8.1	8.6
No longer eligible	2.1	0.8	3.3	2.4	1.5	1.5	2.0	3.3
Other	3.7	0.8	2.6	5.8	7.6	7.2	6.1	5.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Self-Reported Reasons for Non-Receipt of Stamps

Table 5.6 sets out the frequency of responses for these various household groups. Comparisons can be made with the November 1989 SLC data for households in the three geographic regions, for households with malnourished children, and with children under five years old.

Overall, 21.5 per cent of the households not receiving stamps had in fact applied, while 78.5 per cent had not. In November 1989, 76.0 per cent had not applied. The most frequently cited reason for non-receipt of food stamps was self-perceived ineligibility (31.4 per cent), followed by ignorance of how to obtain stamps (16.7 per cent), and then by applications made but not approved (15.8 per cent). In November 1989, the most frequently cited reasons had followed the same order.

Regarding the principally cited reasons in the three geographic regions (KMA, Other Towns and Rural Areas), the pattern remained the same as in November 1989, with self-perceived ineligibility being the principally cited reason in all regions. In Rural Areas, those who applied but whose applications were not approved (23.3 per cent) ranked as the second reason for non-participation. Lack of knowledge

about the programme (14.2 per cent) remained the third most common reason for non-participation in Rural Areas.

Of the households which did not receive stamps, those with malnourished children, with children under five years old, with pregnant women and lactating mothers, and with elderly members were more likely to apply for food stamps and not have their applications approved than the average household. Those with malnourished children (31.8 per cent) were the most unsuccessful. Rural households were more likely to apply to the programme than those in the KMA and Other Towns, and were also more likely to apply and not have their applications approved. In relation to the latter, households in Other Towns showed the biggest change since November 1989 – a 7.0 per cent proportionate decrease in households applying and not having their applications approved. Ignorance of the programme continued to rank as either the second or third most common reason for non-receipt for all groups.

For almost all household groups who had reported reasons for non-receipt of food stamps, a larger percentage of households had not applied for food stamps in November 1990 than in 1989. Only in those households with malnourished children was there a slight decrease in the percent-

age of those who had not applied. The percentage of households in the KMA and in Other Towns who did not apply for stamps increased proportionately by 6.0 per cent and 5.0 per cent, respectively, while that in Rural Areas remained relatively stable.

Of household groups that have November 1989 comparisons, only households in Rural Areas and those with malnourished children showed decreased proportions of those who cited self-perceived ineligibility as a reason for not applying. Other groups showed an increase in the proportion of households giving this as a reason. For example, 46.6 per cent of households in Other Towns (the largest percentage of the groups) cited self-perceived ineligibility as a reason, representing a significant proportionate increase (19.4 per cent) since November 1989. Households with pregnant women and lactating mothers, and with malnourished children showed the lowest proportions of those who cited this as a reason.

For all household categories, there was a proportionate decrease in those indicating lack of knowledge about the programme as a reason for not receiving food stamps. Those in Rural Areas and Other Towns had the greatest proportionate decreases. By contrast, for most household groups there were increases in the percentages who felt it was not

worth the trouble to apply. The malnourished had the least proportion which expressed this feeling, while those in the KMA ranked highest.

Of those not wanting the stigma attached to receipt of food stamps, there was a drastic proportionate reduction in the number of households in Other Towns (by 13.1 percentage points) indicating this reason. The elderly were by far the least likely (at 2.0 per cent) to indicate this as a reason for non-receipt of stamps in November 1990.

Despite the improvements noted in regard to ignorance of the Food Stamp Programme, there is still need for public education about the programme. Indications are that the administrative process still needs speedy attention, as there remain significant numbers of households with malnourished children, pregnant women and lactating mothers, and children under five years old who have applied for food stamps without having their applications approved.

On the whole, there is some indication that targetting is moving in the right direction. However, the people to whom it should matter (i.e. the malnourished and those in rural areas where the greatest percentage of the poor exists) increasingly do not consider it worth the effort to apply for benefits. ■

Footnotes

Tables 5.1 & 5.2

- a This total represents the total number of households with at least one allocation, but is not the sum of the categories receiving because a household may be counted in more than one category.
- b An additional 81 households with 89 members were receiving stamps in the category "Poor" i.e. total income < \$2,600 (see Jamaica Survey of Living Conditions November 1989, p.44)
- c Six (6) recipients were not classified by category

Table 5.3

- d. Computed by PIOJ from data supplied by STATIN and Ministry of Health
- e. Demographic Statistics 1990, STATIN
- f. As in (d) above

Housing

INTRODUCTION

Part I of the 1990 Survey of Living Conditions addresses issues of housing and housing related costs. There were thirty questions which were aimed at giving a general idea regarding the existing housing conditions and related expenses that are faced by the population. These covered three major areas of investigation, namely, the structure of the housing unit, the availability of amenities and utilities, and costs such as rent, mortgage and property tax payments, as well as electricity and water charges.

A large portion of the analysis presented in this chapter is devoted to investigations into housing related expenditure. An attempt has been made to place these in a suitable perspective by using total household consumption as a cross classification variable.

DWELLING TYPE

The predominant and preferred dwelling structure in Jamaica has traditionally been the separate or detached housing unit (see Paul Chen-Young *et al.* *A Study of Housing in Jamaica*. Vol. 1, *Technical, Sociological, Financial and Economic Aspects of Housing in Jamaica*.) This trend has continued, with these units comprising 79.0 per cent of all dwelling types (Table 6.1). The next largest group is the category 'Part of House', with 17.8 per cent.

The category 'Part of House' is a renting concept and has its basis in the socio-economic factors which have led to the sharing of housing units. Hence, in urban areas where conditions dictate high levels of sharing, 'Part of House' constitutes 32.9 per cent of KMA dwelling types and 23.0 per cent for Other Towns, as against 5.2 per cent for Rural Areas. The regional distribution of detached housing units is the converse of this, being 92.6 per cent in Rural Areas, 64.4 per cent in the KMA, and 70.7 per cent in Other Towns. It should be noted that 'Part of House' in many instances represents a part of a detached housing unit suggesting the need for care to be taken when comparing the percentages of detached houses across the three areas.

Apartment buildings and town houses constitute a small percentage of all dwelling types (0.4 per cent) and are almost non-existent in Rural Areas (0.2 per cent) where, unlike the situation in the KMA, there is no acute land shortage.

It has been shown that households in Rural Areas are generally poorer, and it is evident from the quintile distribution that the poorer households have higher percentages for detached houses (89.0 per cent and 89.6 per cent for the first two quintiles, respectively, as against 72.5 per cent for the wealthiest). On the other hand, the wealthier households (of the KMA and Other Towns) show the highest percentages, in the quintile distribution, for the 'Part of House' category with 17.8 per cent and 22.9 per cent, respectively, for the two wealthiest quintiles. This suggests that the dwelling type of a household is not necessarily an indicator of wealth but more a function of the area of residence.

TABLE 6.1
DWELLING TYPES BY AREA AND QUINTILE (%)

TYPE	Area			Quintile					All Jamaica
	KMA	Other Towns	Rural	Poorest	2	3	4	5	
Separate house detached	64.4	70.7	92.6	89.0	89.6	83.5	77.7	72.5	79.0
Semi-detached house	1.8	3.7	1.3	0.8	0.0	1.9	2.1	3.2	2.0
Part of house	32.9	23.0	5.2	9.8	10.1	13.3	17.8	22.9	17.8
Apartment/Town House	0.7	0.3	0.2	0.4	0.0	0.3	1.0	0.2	0.4
Part of a commercial building	0.2	1.6	0.6	0.0	0.0	0.9	0.8	1.1	0.7
Others	0.0	0.7	0.1	0.0	0.3	0.0	0.5	0.2	0.2
All Types	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 6.2
MATERIAL USED FOR OUTER WALLS OF HOUSEHOLD DWELLINGS BY AREA AND QUINTILE (%)

	Area			Quintile					All Jamaica
	KMA	Other Towns	Rural	1	2	3	4	5	
Wood	15.1	31.0	37.0	45.5	41.9	30.1	25.1	18.4	29.6
Stone	0.6	2.0	1.3	0.4	1.0	1.6	1.3	1.4	1.2
Brick	3.3	1.7	0.4	0.4	0.0	2.2	1.8	2.1	1.5
Concrete nog	22.8	20.4	23.2	21.2	26.2	20.6	24.6	20.9	22.5
Block & Steel	52.3	44.0	37.4	31.1	29.9	42.4	43.5	55.3	42.9
Wattle & Daub	0.2	0.3	0.3	0.0	0.3	0.3	0.8	0.0	0.3
Others	5.7	0.6	0.4	1.5	0.7	2.8	2.9	1.8	2.0
All Types	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

CONSTRUCTION MATERIAL

Wood, concrete nog and block and steel comprise the building materials for outer walls of nearly all (95.0 per cent) of the housing units in Jamaica. However, concrete nog and wood, to a lesser extent, are being replaced by block and steel as building materials.

For the construction of outer walls in housing units, wood is predominantly used in Rural Areas. Of all the dwellings utilizing wood as the main material of outer walls, 65.4 per cent were found to be in Rural Areas as against 20.0 per cent in Other Towns and 14.6 in the KMA. The portability of housing units of this type makes it a practical choice for poor rural households whose dwellers frequently either occupy lands without security of tenure or lease the lands on which their unit is built. More than one third (37.0 per cent) of rural households, therefore, have dwellings with outer walls made of wood, whereas the KMA has only 15.1 per cent of such cases; the 31.0 per cent shown for Other Towns is indicative of the rurality of many towns.

Buildings constructed of block and steel outer walls are generally newer and more costly, hence we see the wealthier,

faster growing KMA area having the largest percentage for this dwelling type, with 52.3 per cent of its dwellings having outer walls of block and steel; while Rural Areas show the least proportion of such units, with 37.4 per cent.

The even distribution (between 20 and 24 per cent) of dwelling types having concrete nog as the main material of outer walls is consistent with this building material being the predominant material used for housing construction (walls) during the 1940s and early 1950s (See Paul Chen-Young *et al.*, *op. cit.*).

With respect to the quintile distribution, 45.5 per cent of the poorest households have units with outer walls made of wood. Moving up the quintiles from poorest to wealthiest, there is a steady decline in the percentage of housing units which utilize wood as the main material of outer walls.

The more costly block and steel housing units which are concentrated more in the KMA and Other Towns are distributed in favour of the wealthier households while the concrete nog category shows an even distribution across all quintiles.

TABLE 6.3
HOUSEHOLD TENURE BY AREA AND QUINTILE (%)

Tenure	Area			Quintile					All Jamaica
	KMA	Other Towns	Rural	Poorest	2	3	4	5	
Owner Household	49.2	61.8	82.7	84.8	77.8	71.2	65.4	58.5	69.1
-with outstanding mortgage	23.1	12.6	2.8	1.3	3.5	11.2	7.7	16.2	8.6
-no outstanding mortgage	76.9	87.4	97.1	98.7	96.5	88.8	92.3	83.8	91.3
Renter Household	41.7	29.9	13.0	11.0	16.4	21.2	28.0	34.3	24.4
Other	9.0	8.3	4.3	4.2	5.7	7.6	6.5	7.1	6.4

TABLE 6.4
HOUSEHOLD TOILET AND KITCHEN FACILITIES BY AREA AND QUINTILE (%)

	<i>Area of Residence</i>			<i>Population Quintile</i>					<i>All Jamaica</i>
	<i>KMA</i>	<i>Other</i>	<i>Rural</i>	<i>Poorest</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
Toilet									
W.C.	82.2	54.8	28.5	14.1	28.9	41.8	55.0	70.7	51.4
Having Exclusive Use	51.1	46.0	25.8	11.3	18.5	31.7	39.8	55.4	38.2
Pit	17.3	42.4	71.1	82.1	68.7	56.6	43.5	28.2	47.7
Having Exclusive Use	9.3	26.2	60.6	70.7	56.9	46.5	31.9	18.7	36.8
Other	0.5	0.3	0.4	0.0	0.7	0.3	0.3	0.5	0.4
Having Exclusive Use	0.4	0.0	0.1	0.0	0.7	0.0	0.0	0.2	0.2
None	0.0	2.5	0.0	3.8	1.7	1.3	1.3	0.5	0.5
All Types	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Having Exclusive Use	60.8	72.5	86.5	81.0	76.1	78.2	71.1	74.2	75.2
Kitchen	91.8	90.1	98.6	95.4	93.9	94.6	93.2	95.9	94.6
Having Exclusive use	68.3	77.8	91.4	87.9	85.2	86.7	76.9	78.9	81.1

HOUSING TENURE

Just over two-thirds (69.1 per cent) of all households are owner-occupied. Of the owner-occupied households, only 8.6 per cent had an outstanding mortgage. Only 24.4 per cent of all households reported that they paid rent for their dwellings.

Status by area suggests that rural households are more likely to own the dwelling in which they live than are residents of Other Towns and KMA. Less than half (49.2 per cent) of KMA households own the dwellings in which they reside, compared with 82.7 per cent for rural Jamaica. It may be observed also that rural homeowners are less dependent on mortgage financing (2.8 per cent) than are KMA and Other Town residents with 23.1 and 12.6 per cent, respectively.

Renter households constitute a significant housing category in the KMA (41.7 per cent) and to a lesser extent in Other Towns (29.9 per cent). In Rural Areas, only 13.0 per cent of dwellings are renter-occupied. This situation of greater renting in urban areas is consistent with internal migration, which is manifested by the movement of families and individuals from their rural family homes to urban areas in search of a better quality of life.

The quintile distribution shows that more of the poorest households (84.8 per cent) own their home than do the wealthiest (58.5 per cent) – thereby showing that home ownership, by itself, is not an indicator of wealth. As a

corollary, in comparison to poorer households, a greater percentage of the wealthier households are renters (34.3 per cent for the wealthiest as against 11.0 per cent for the poorest).

By contrast, the percentage of owner households with an outstanding mortgage increases progressively (that is, from 1.3 per cent to 16.2 per cent) with wealth, which is likely to be related to the ability to pay installments for units that building societies are willing to finance.

The 'Other' category of tenure includes households whose occupants are required to but are not paying rent; households from whose occupants rent is not required, such as households occupying a dwelling in which the owner – possibly a relative – has migrated; and 'squatter' households – households with no legal tenure. The percentages falling within this group change systematically with area, showing a greater concentration in urban areas with KMA and Other Towns having 9.0 and 8.3 per cent, respectively, as against Rural Areas with 4.3 per cent. By quintile, it is notable that the poorest two groups have the lowest percentages belonging to this category.

HOUSING AMENITIES

Toilet

Table 6.4 addresses the matter of housing facilities. The pattern of distribution of toilet facilities is similar in both SLC 89-2 and SLC 90. Most households have either water

TABLE 6.5
HOUSEHOLD UTILITIES BY AREA AND QUINTILE (%)

Utility	Area of Residence				Quintile					All Jamaica
	KMA	Other Towns	Rural	Poorest	2	3	4	5		
SLC 1990										
Lighting										
Electricity	82.4	73.5	51.3	30.8	43.6	61.0	73.9	83.6		66.0
Kerosene	10.7	26.2	47.8	67.3	53.7	35.2	23.4	13.4		31.3
Other	0.2	0.0	0.6	1.5	0.3	3.5	0.3	0.2		0.3
None	6.7	0.3	0.2	0.4	2.4	0.3	2.4	2.9		2.3
Drinking Water										
Indoor tap/pipe	64.8	43.1	18.3	7.6	14.1	28.2	35.7	59.9		38.4
Outside private tap/pipe	31.1	27.9	14.9	18.6	23.6	21.8	29.7	19.9		22.8
Public Standpipe	2.1	12.0	29.7	31.8	26.3	21.2	14.7	8.9		17.1
River/pond	0.0	1.7	11.4	14.8	11.4	6.3	4.2	1.4		5.7
Rain water (tank)	0.3	12.3	22.8	23.5	20.5	18.7	14.2	8.9		13.4
Other	1.7	2.9	3.0	3.8	4.0	3.8	1.6	1.1		2.7
Telephone	16.3	11.4	2.7	0.4	1.4	2.2	6.7	20.0		8.2
SLC 1989-2										
Lighting										
Electricity	82.4	66.7	48.0	26.3	44.2	60.1	67.8	81.2		61.6
Kerosene	11.2	32.8	51.2	71.1	53.7	37.4	29.2	16.7		36.4
Other	0.5	0.3	0.3	0.5	0.0	0.4	0.4	0.2		0.3
None	6.0	0.3	0.5	1.9	2.0	1.9	2.4	1.8		1.7
Drinking Water										
Indoor tap/pipe	62.9	41.4	16.7	8.3	14.4	28.6	39.8	55.4		34.3
Outside private tap/pipe	32.3	29.2	14.6	10.4	22.8	29.1	25.9	21.0		22.3
Public Standpipe	2.9	17.2	31.8	41.7	29.5	20.0	17.9	10.3		20.9
River/pond	0.0	0.9	11.2	13.6	10.2	6.9	3.9	1.5		6.1
Rain water (tank)	0.1	8.0	22.4	21.7	18.7	12.5	10.1	9.9		13.4
Other	1.6	3.1	3.1	4.1	4.2	2.8	2.2	1.7		2.7
Telephone	10.9	9.2	1.1	0.8	0.5	2.1	4.0	12.3		5.4

closet (W.C.) facilities (51.4 per cent in 1990) or pit latrines (47.7 per cent). This represented an improvement over SLC 89-2 where there was a smaller percentage of W.C.s (45.8 per cent) and more pit latrines (51.5 per cent).

In terms of area distribution, the vast majority of KMA residents have W.C. facilities (82.2 per cent) although only about half (51.1 per cent) have exclusive use. The availability of W.C.s is much less in Other Towns (54.8 per cent) and even scarcer in Rural Areas (28.5 per cent). This is due partly to the fact that the installation of a water closet is dependent on the presence of an indoor water tap or pipe and, as is shown in Table 6.5, only 43.1 per cent and 18.3 per cent of Other Town and Rural households, respectively, have indoor taps or pipes. Consequently, Other Town and Rural Area households utilize the pit latrine to a greater extent than KMA, with 42.4 and 71.1 per cent, respectively (as against 17.3 per cent for KMA).

Water closets have higher installation and running costs than do pit latrines. As a result, the quintile distribution shows that the poorer households depend primarily on the pit latrine (82.1 per cent for the poorest households), while the wealthier households use primarily W.C.s (70.7 per cent for the wealthiest households).

Kitchen

Nearly all households have kitchen facilities (94.6 per cent) and only 13.4 per cent share such facilities. The area distributions show that the availability of kitchen facilities is generally greater than 90.0 per cent, with Rural Areas being the highest at 98.6 per cent. Sharing of kitchen facilities was greatest in KMA, with 31.7 per cent, which is partly a result of the high level of renting. Rural Jamaica had the least sharing of kitchen facilities with 91.4 per cent having exclusive use.

In terms of quintiles, the kitchen facilities were fairly evenly distributed. Exclusivity of use was higher in the case of the poorer households (suggesting Rural Area and less renting), with the poorest households having 87.9 per cent exclusive use and the wealthiest households 78.9 per cent.

Utilities

This section addresses questions such as the source of lighting and drinking water, and whether or not the dwelling has a working telephone. It may be observed from Table 6.5 that the pattern of distribution of all three utilities was consistent with (although more favourable than) the findings of SLC 89-2.

Sixty-six per cent of all households in 1990 indicated electricity as their source of lighting, a 4.4 percentage point increase over SLC 89-2. This compares well with the increase (5.3 per cent) reported by the Jamaica Public Service in the number of residential users - an average of 274,692 (preliminary) in 1990 as against 260,946 in 1989 (see *Economic and Social Survey of Jamaica, 1990*). The 5.1 percentage point decline in the percentage of kerosene oil users (36.4 per cent for SLC 89-2 to 31.3 per cent for SLC 90) would appear to be directly related to the increase of a similar magnitude in the percentage of electricity users.

The data by area show that improvements took place only in Other Towns and Rural Areas. KMA, however, continued to have the greatest percentage of electricity users with 82.4 per cent, followed by Other Towns and Rural Areas with 73.5 and 51.3 per cent, respectively. The distribution for kerosene oil use is the reverse of this, with the least percentage of users being in KMA (10.7 per cent) and the greatest percentage being in Rural Areas (47.8 per cent); 26.2 per cent of Other Towns households used kerosene oil for lighting. The data could not however determine how much of the high use of kerosene oil in Rural Areas was due to the non-availability of electricity.

With regard to the source of drinking water, overall, there was a 4.6 percentage point increase in indoor or outdoor taps or pipes, moving from 56.6 per cent in SLC 89-2 to 61.2 per cent in SLC 90. All regions showed increases, but this was most marked in Rural Areas. A significant 5.7 per cent of all households still used river and pond water in SLC 90.

Piped water was the predominant drinking water source in both KMA (95.9 per cent) and Other Towns (71.0 per cent). There were only 33.2 per cent of Rural Area households with piped water on their premises. A significant 12.0 per cent of Other Town households used standpipes as did an even more significant 29.8 per cent of Rural Area households. The case was similar for rain water use with 12.3 per cent in Other Towns and 22.8 per cent in Rural Areas. A disturbing 11.4 per cent of Rural Area households use river or pond water for drinking. Other Towns had 1.7 per cent such cases, while KMA had none.

The data by quintile show that the wealthier households depended more on water piped into their premises, while the poorer households depended more on public standpipes, river or pond water and rain water.

The SLC reports a relatively small percentage of households with telephones, at 8.2 per cent in 1990; however, this is 2.8 percentage points more than there were in 1989. This increase was reflected in all geographic areas, but was

evident only in the two wealthiest quintiles. While urban households continue to have the greatest percentage of dwellings with installed telephones, the increase noted was proportionately greatest for the Rural Areas. On the other hand, the disparity by quintile was increased, ranging from a low of 0.4 per cent for the poorest households to a high of 20.0 per cent for the wealthiest households.

HOUSING EXPENSES

This section considers the five major housing operational costs, namely rent, mortgage payments, electricity and water charges and property tax payments. It should be noted that each payment or charge is expressed as a percentage of the total value of household consumption. Since this may be based on the earnings of more than one household occupant, the percentage may be lower than if it were related to the earnings of the household member(s) who is (are) actually responsible for making the payment. Some households indicated that they were provided with the good or service but showed no payments. Since the aim of this section of the analysis is to examine costs, the households with zero payments have not been included in the grouped cost distributions and in the calculation of the means. Each expenditure which is given as a 'Percentage of Total Household Consumption' has been calculated for those households indicating the respective cost, and the total consumption expenditure of these households only has been taken.

All payments except taxes have been expressed on a per month basis; taxes have been expressed on an annual basis.

TABLE 6.6
MEAN MONTHLY RENT PAYMENTS BY AREA AND QUINTILE

		Mean Rent Payments (\$)	Rent as Percentage of total household consumption
Area			
KMA	(n=189)	264	9.6
Other Towns	(n=95)	234	9.4
Rural	(n=106)	179	8.1
Quintile			
Poorest	(n=24)	95	8.8
2	(n=43)	88	5.5
3	(n=57)	99	5.6
4	(n=92)	189	7.6
5	(n=174)	357	10.5
All Jamaica	(n=390)	234	9.2

Rent

Of the 1828 households in the survey, 24.0 per cent reported living in rented dwellings. Of these, 45 households reported that they did not pay rent. When asked if they received assistance from someone who is not a member of the household, the response was as follows:

Source of Assistance	Relative	Employer	Public Agency	Private Individual or Agency	None
Number of Households	4	4	1	3	33

The 33 household respondents indicating no assistance in rent payment are living rent free. This group no doubt includes households living in (or 'looking after') the dwelling of a relative or friend who lives elsewhere.

Table 6.6 shows the mean monthly rental charge for all renter households by region and by population quintile. The mean rent for all renter households was \$234 per month. This comprises 9.2 per cent of their total household consumption expenditure.

The area distribution shows that urban rent is at least 30 per cent higher than in the Rural Areas. KMA had the highest mean rent, forming 9.6 per cent of total consumption expenditure. The quintile distribution shows a wide disparity in mean rent, with the wealthiest households paying more than three and one half times as much as the poorest households; and 89 per cent more than the next wealthiest quintile. In terms of the percentage of total household consumption, there was a 5 per cent difference between the second poorest quintile and the wealthiest quintile.

Half of all households paid \$100 or less per month for rent; 64.8 per cent paid less than \$200. The most common

rental payment was between \$50 and \$100 which accounted for 28.2 per cent.

The data by area show rent in all areas being mainly in the under- \$300 groupings with Rural areas showing a significant concentration in the under-\$100 groupings. In the KMA, 3.7 per cent of households paid \$1,200 and over. Despite this, the median rent for Other Towns (\$150) is higher than that for KMA (\$110).

Nearly all households in the poorest quintile paid less than \$200 for rent (91.7 per cent) whereas only half of the wealthiest quintile did so.

Mortgage

There were 108 households (or 5.9 per cent of all households) who indicated that they had an outstanding mortgage. Of these, 102 or 94.0 per cent responded to the question regarding their last mortgage payment. A total of 9.8 per cent of the households with outstanding mortgages indicated that they paid no mortgage. The questionnaire did not address the reasons for the non-payment of outstanding mortgages.

Care has to be taken when considering the data presented on mortgage-paying households, especially at the quintile level, as the data, due to the small numbers, may not have retained its representative character.

The mean mortgage payments for all households in Jamaica was \$412 (which is 76 per cent more than the mean payments for rent). This constitutes 9.8 per cent of the households' total consumption expenditure (Table 6.8).

From the data by area, it is interesting to note that the highest mean mortgage (\$583) was paid by households of Other Towns; while KMA and Rural Areas have similar mean mortgages of \$356 and \$339, respectively. This finding requires further investigation. One possible indicator of house price is the material that is used in its construction

TABLE 6.7
DISTRIBUTION OF RENT PAYMENTS BY AREA AND QUINTILE (%)

MONTHLY RENT PAYMENTS	Area			Quintile					All Jamaica (n=390)
	KMA (n=189)	Other Towns (n=95)	Rural (n=179)	1 (n=24)	2 (n=43)	3 (n=57)	4 (n=92)	5 (n=174)	
Under \$50	16.4	14.7	28.3	29.2	41.9	28.1	20.6	8.6	19.2
\$50 but less than \$100	28.0	26.3	30.2	41.7	30.2	43.9	21.7	24.1	28.2
\$100 but less than \$200	19.6	16.8	14.1	20.8	20.9	14.0	22.8	14.4	17.4
\$200 but less than \$300	8.5	12.6	4.7	0.0	4.6	7.0	12.0	9.2	8.5
\$300 but less than \$400	4.8	10.5	4.7	4.2	0.0	1.7	9.8	7.5	6.2
\$400 but less than \$500	8.5	3.2	6.6	4.2	0.0	0.0	7.6	10.3	6.7
\$500 but less than \$600	6.3	5.3	4.7	0.0	0.0	5.3	3.3	9.2	5.6
\$600 but less than \$800	2.6	5.3	1.9	0.0	0.0	0.0	0.0	6.9	3.1
\$800 but less than \$1200	1.6	4.2	2.8	0.0	2.3	0.0	0.0	5.7	2.6
\$1200 and over	3.7	1.0	1.9	0.0	0.0	0.0	2.2	4.6	2.6
MEDIAN (\$)	110.0	150.0	70.0	70.0	50.0	58.0	115.0	200.0	100.0

TABLE 6.8
MEAN MONTHLY MORTGAGE PAYMENTS BY AREA
AND QUINTILE

		Mean mortgage payments (\$)	Mortgage as percentage of total household consumption
Area			
KMA	(N=49)	356	7.5
Other Towns	(N=24)	583	14.6
Rural	(N=19)	339	11.2
Quintile			
Poorest	(N=2)	605	19.8
2	(N=5)	87	3.2
3	(N=19)	187	6.3
4	(N=18)	268	8.6
5	(N=48)	580	11.0
All Jamaica	(N=92)	412	9.8

(hence its age). Other indicators include the date the mortgage began (hence cost price) and the area in which the dwelling is located within each of the three broad areas. Households reporting outstanding mortgages revealed, with respect to area and construction material, that 40.8 per cent of the houses in KMA and 36.8 per cent of the houses in Rural Areas were constructed of concrete nog (indicating older and, quite likely, cheaper houses); only 16.7 per cent of the houses in Other Towns are made of this material. In fact,

TABLE 6.9
OUTER WALL MATERIAL OF HOUSEHOLDS PAYING
MORTGAGES BY AREA (%)

	KMA	Other Towns	Rural
Wood	6.1	0.0	10.5
Stone	0.0	0.0	5.3
Brick	2.0	8.3	5.3
Concrete Nog	40.8	16.7	36.8
Block & Steel	32.6	75.0	42.1
Other	18.4	0.0	0.0

64.5 per cent of all nog houses which are on mortgage, are in KMA. Whereas the more modern and, presumably, the more expensive block and steel houses make up 75.0 per cent of all houses in Other Towns which have an outstanding mortgage, only 32.6 and 42.1 per cent of KMA and Rural Areas, respectively, fall in this category.

The impact of mortgage payments on total consumption expenditure is less on KMA residents (7.5 per cent) than on Rural households (11.2 per cent), although the mean payment of the former is greater. Mortgage payments as a percentage of total consumption is greatest for Other Town residents at 14.6 per cent.

With regard to the data by quintile, the households of the first two quintiles are considered too few to be representative of that group; however, the fact that there are only seven households with outstanding mortgages in these quintiles, may be an indication of the inability of a large portion of them to qualify for mortgage financing. There were steep increases in mean mortgage payments from the third quintile up. Similar increases may be noted for mortgage as a percentage of total household consumption expenditure.

TABLE 6.10
DISTRIBUTION OF MONTHLY MORTGAGE PAYMENTS BY AREA AND QUINTILE (%)

	Area			Quintile					All Jamaica (n=92)
	KMA (n=49)	Other Towns (n=24)	Rural (n=19)	Poorest (n=2)	2 (n=5)	3 (n=19)	4 (n=18)	5 (n=48)	
Under \$100	12.2	33.3	26.3	0.0	80.0	21.0	16.7	16.7	20.7
\$100 but less than \$200	30.6	12.5	10.5	0.0	0.0	47.4	38.9	8.3	21.7
\$200 but less than \$300	14.3	12.5	15.8	50.0	20.0	10.5	5.6	16.7	14.1
\$300 but less than \$400	14.3	16.7	10.5	0.0	0.0	15.8	11.1	16.7	14.1
\$400 but less than \$600	16.3	4.2	21.0	0.0	0.0	5.3	16.7	18.7	14.1
\$600 but less than \$1200	10.2	4.2	15.8	50.0	0.0	0.0	11.1	12.5	9.8
\$1200 and over	2.0	16.7	0.0	0.0	0.0	0.0	0.0	10.4	5.4
MEDIAN (\$)	216.0	210.0	290.0	605.0	50.0	150.0	180.0	327.0	220.0

TABLE 6.11
MEAN MONTHLY EXPENDITURE ON ELECTRICITY BY AREA
AND QUINTILE

Area		Mean Monthly Electricity (\$)	Electricity as Percentage of Total Household Consumption
KMA	(n=341)	149	4.0
Other Towns	(n=231)	117	4.1
Rural	(n=454)	105	4.4
Quintile			
Poorest	(n=68)	77	5.8
2	(n=110)	79	4.6
3	(n=169)	124	5.2
4	(n=247)	120	4.5
5	(n=432)	141	3.7
All Jamaica	(n=1026)	122	4.2

Hence, it is evident that the wealthier the household, the larger the portion of its consumption expenditure that it is willing (or able) to allocate for the payment of mortgage.

The grouped distribution of monthly mortgages (Table 6.10) shows positive skewness; there is a fairly even spread up to \$1200 with 25.0 per cent of the households paying \$117 and less, and half paying up to \$220 per month. Of note is the significant 15.2 per cent of households that pay \$800 and more per month for mortgage.

The data by area reveal surprising differences. Other Towns, which had the largest mean, have the smallest median at \$210, and it may be thus seen that they have the most skewed distribution. For the Rural Areas, the median at \$290 is the largest and is closest to the mean, thus revealing very

little skewness. Of note is the 16.7 per cent of Other Towns paying \$1,200 and above.

The quintile distribution, to a large extent, is as one would expect – with the distribution showing more of the wealthier households in the higher payment classes.

Electricity

There were 1151 households which indicated that electricity was their source of lighting. Of these, 52 households (4.6 per cent) did not respond regarding the cost on their last electricity bill. Of those that did respond, 6.6 per cent indicated that there was no cost. Explanations as to why a household should indicate no charge for electricity consumed include illegal connections, those with utility charges included in the rent, and the use of private generators, among others.

The mean monthly electricity bill for households paying for electricity was \$122, and this constituted 4.2 per cent of the total value of household consumption. KMA had the largest mean electricity cost at \$149; with Rural Areas having the lowest at \$105. Electricity costs as a percentage of total household expenditure varied very little, ranging from 4.4 per cent for Rural to 4.0 per cent for KMA.

The quintile distribution of mean costs were not as evenly distributed as that by area. There was a progressive increase in the mean monthly electricity cost, with \$77 for the poorest quintile and nearly twice that amount or \$141 for the wealthiest. This pattern was reversed for electricity cost as a percentage of total household consumption. Whereas the poorest quintile contributed 5.8 per cent of their total household consumption in expenditure on electricity, the wealthiest households paid only 3.7 per cent of theirs.

There are two salient points here, the first of which is that although the poorer households consume less electricity, they have to pay a much larger percentage of their income than the wealthier households (nearly twice in some cases) to cover the cost. Secondly, it is evident that electricity consumption is more a function of wealth than of area of residence.

As regards the grouped distribution of expenditure on electricity, more than half of all households (50.7 per cent)

TABLE 6.12
DISTRIBUTION OF MONTHLY EXPENDITURE ON ELECTRICITY BY AREA AND QUINTILE (%)

	Area			Quintile					All Jamaica (n=1026)
	KMA (n=341)	Other Towns (n=231)	Rural (n=454)	Poorest (n=68)	2 (n=110)	3 (n=169)	4 (n=247)	5 (n=432)	
Under \$50	16.1	24.2	28.6	35.3	36.4	20.1	20.2	21.5	23.5
\$50 but less than \$100	26.1	27.7	27.7	36.8	34.6	31.4	28.3	21.5	27.2
\$100 but less than \$150	19.5	22.9	21.1	19.1	17.3	18.9	24.7	21.1	21.1
\$150 but less than \$200	14.4	9.1	11.4	2.9	8.2	11.8	10.9	14.8	11.9
\$200 but less than \$300	12.9	9.1	8.1	2.9	2.7	11.8	10.9	11.6	9.9
\$300 and over	10.8	6.9	2.9	2.9	0.9	5.9	4.9	9.5	6.4
MEDIAN (\$)	113.0	90.0	85.0	61.0	62.0	93.0	100.0	110.0	96.0

TABLE 6.13
MEAN MONTHLY EXPENDITURE ON WATER BY AREA
AND QUINTILE

		Mean Water Payments (\$)	Water as Percentage of Total Household Consumption
Area			
KMA	(n=364)	118	3.3
Other Towns	(n=196)	77	2.8
Rural	(n=236)	68	2.7
Quintile			
Poorest	(n=34)	51	3.7
2	(n=70)	60	3.3
3	(n=121)	72	3.3
4	(n=193)	81	3.0
5	(n=378)	116	3.0
All Jamaica (n=796)		93	3.0

were billed at less than \$100 per month; 83.7 per cent had bills of less than \$200.

The area distribution shows low level consumers (under \$50) being more in Other Towns and Rural Areas (with 24.2 per cent and 28.6 per cent, respectively) than in the KMA with 16.1 per cent. The KMA had 23.7 per cent of households distributed in the \$200 and above levels, whereas Other Towns and Rural Areas had 16.0 per cent and 11.0 per cent, respectively.

The data is positively skewed for all quintiles in the quintile distribution. However, the magnitude of skew becomes less in moving from the poorest to the wealthiest quintile.

Water

There were 1038 households which indicated that their source of drinking water was either a private indoor or outdoor tap or pipe. Of these households, 96.2 per cent responded to the question asking the cost on their last water bill, 203 of whom indicated a zero on their latest bill. As was the case for electricity, those households stating no charge for water could be tenants with water charges included in the rent, or could have a private source etc.

The mean monthly payments of all households paying for water (Table 6.13) was \$93. Payments were significantly greater for the KMA (\$118) than they were for the other two areas (Other Towns, \$77 and Rural Areas, \$68). Water as a percentage of total household consumption, however, varied very little (but directly with mean cost), ranging from 3.3 per cent for the KMA to 2.7 per cent for Rural Areas, with households of Other Towns showing 2.8 per cent. This is in contrast to electricity payments where there was an inverse relationship between mean monthly payments, on one hand, and the percentage of total household consumption expenditure that this constituted, on the other.

The quintile distribution of mean monthly water expenditure increases progressively with wealth, moving from \$51 for the poorest households to \$116 for the wealthiest. In terms of the percentage of total household consumption expenditure, there are no significant changes in water payments across quintiles. However, as with electricity, it places a greater burden on poorer households.

The grouped distribution of monthly water expenditure (Table 6.14) shows the modal class for all households to be the \$20 to \$50 payment class, which represents 36.4 per cent. Nearly three-quarters of all households (72.6 per cent) pay less than \$100 monthly for water.

The pattern of the data by area shows positive skewness for all three areas. The magnitude of skewness is greatest for KMA, lesser for Other Towns and least for Rural Areas. Most households pay between \$20 and \$100; and nearly all households in all three areas pay under \$150 (KMA 83.5 per cent, 85.2 per cent for Other Towns and 88.5 for Rural Areas).

As expected, the quintile distributions show the wealthier households to have a greater percentage of households in the

TABLE 6.14
DISTRIBUTION OF MONTHLY EXPENDITURE ON WATER BY AREA AND QUINTILE

	Area			Quintile					All Jamaica (n=796)
	KMA (n=364)	Other Towns (n=196)	Rural (n=236)	Poorest (n=34)	2 (n=70)	3 (n=121)	4 (n=193)	5 (n=378)	
Under \$20	9.1	14.3	15.7	17.6	21.4	16.5	10.4	9.8	12.3
\$20 but less than \$50	30.5	40.8	41.9	38.2	42.9	38.0	36.8	34.4	36.4
\$50 but less than \$100	28.0	20.4	20.3	29.4	17.1	25.6	29.0	21.4	23.9
\$100 but less than \$150	15.9	9.7	10.6	5.9	10.0	10.7	12.4	14.8	12.8
\$150 but less than \$200	6.0	6.1	4.7	5.9	4.3	2.5	3.6	7.9	5.7
\$200 but less than \$300	6.3	4.6	2.5	2.9	1.4	4.1	3.6	6.35	4.8
\$300 and over	4.1	4.1	4.2	0.0	2.9	2.5	4.1	5.3	4.1
MEDIAN (\$)	61.0	43.0	36.0	35.0	30.0	40.0	50.0	60.0	50.0

TABLE 6.15
PAYMENT OF PROPERTY TAXES BY AREA AND QUINTILE (%)

	Area				Quintile				All Jamaica (n=1248)
	KMA (n=254)	Other Towns (n=214)	Rural (n=980)	Poorest (n=224)	2 (n=227)	3 (n=224)	4 (n=247)	5 (n=326)	
Pay Property Tax	68.1	58.4	75.0	70.5	67.4	71.4	68.8	74.2	70.7
Do Not Pay Property Tax	31.9	41.6	25.0	29.5	32.6	28.6	31.2	25.8	29.2

higher payment classes. It is instructive that no household in the poorest quintile paid above \$300 per month for water, whereas there were 5.3 per cent of the wealthiest households in this category.

The median monthly water payment, in contrast to the mean, showed little variation, ranging from \$30 for the second quintile to \$60 for the fifth.

Property Taxes

The question regarding the payment of property taxes was asked only of owner-occupied households. Of the 1248 owner-occupied households responding to the question on property tax payment, 70.7 per cent responded that they do pay property tax (See Table 6.15). The area distributions show that a greater percentage of rural households pay tax (75.0 per cent) than do those in the KMA (68.1 per cent) and Other Towns (58.4 per cent). The quintile distributions, on the other hand, show no significant pattern. The payment of tax is in the region of 70 per cent for all quintiles (ranging from 67.4 per cent for quintile two to 74.2 per cent for the wealthiest quintile).

As regards mean property tax payments (Table 6.16), this was \$48, which constituted 0.2 per cent of total household

consumption expenditure. Both the KMA and Other Towns paid far higher property taxes (\$108 and \$97, respectively) than Rural Areas (\$22). This reflects the higher property value of dwellings in KMA and Other Towns, as against those in Rural Areas.

The quintile distribution of mean property taxes paid showed a significant difference in tax payments between the wealthiest quintile and the other four quintiles, with the former paying between three and six times as much as the others. As was the case for the area distribution, this is a good indication of the distribution of property by value. It also suggests that the property value of the wealthiest quintile is on average at least three times greater than that of households in the other four quintiles, and more than twice that of the national average.^G

Mean annual property tax as a percentage of total household consumption was generally low, at 0.2 per cent.

The grouped distribution of annual expenditure on property tax shows that more than half of all households pay \$8 or less annually; 87.7 per cent of all households pay under \$100 (See Table 6.17).

The area distributions also show major differences according to location. Fifty per cent of households paid

TABLE 6.16
MEAN ANNUAL EXPENDITURE ON PROPERTY TAXES BY AREA AND QUINTILE

		Mean Annual Tax (\$)	Tax as Percentage of Total Household Consumption
AREA			
KMA	(n=142)	108	0.2
Other Towns	(n=119)	97	0.3
Rural	(n=562)	22	0.1
QUINTILE			
Poorest	(n=156)	18	0.1
2	(n=144)	19	0.1
3	(n=145)	23	0.1
4	(n=161)	32	0.1
5	(n=217)	118	0.2
JAMAICA	(n=823)	48	0.2

TABLE 6.17
DISTRIBUTION OF ANNUAL EXPENDITURE ON PROPERTY TAXES BY AREA AND QUINTILE

	Area				Quintile					All Jamaica (n=823)
	KMA (n=142)	Other Towns (n=119)	Rural (n=22)	Poorest (n=156)	2 (n=144)	3 (n=145)	4 (n=161)	5 (n=217)		
Under \$10	29.6	28.6	59.8	59.6	58.3	62.1	50.9	29.0	50.1	
\$10 but less than \$20	5.6	13.4	18.1	16.0	20.1	11.7	18.0	12.0	15.3	
\$20 but less than \$50	23.4	16.0	10.7	12.8	11.1	12.4	11.2	18.4	13.6	
\$50 but less than \$100	16.9	20.2	7.1	8.9	6.2	9.0	11.8	15.2	10.7	
\$100 but less than \$200	10.6	10.1	2.7	2.6	2.8	2.8	5.6	9.7	5.1	
\$200 but less than \$500	7.7	7.6	0.9	0.0	1.4	1.4	1.9	8.3	5.0	
\$500 and over	6.3	4.2	0.7	0.0	0.0	0.7	0.6	7.4	2.2	
MEDIAN (\$)	30.0	30.0	5.0	5.0	5.0	5.0	7.0	25.0	8.0	

under \$5 in Rural Areas but under \$30 in KMA and Other Towns. Again, there is a significant 24.6 per cent in KMA and 21.92 per cent in Other Towns that pay over \$100, while only 4.3 per cent of rural households pay over \$100.

The quintile distributions show much similarity between the first four quintiles. The fifth quintile, however, had a significantly larger median than the others and much greater percentages in the higher payment classes. For example, there were 15.7 per cent paying \$200 and over, as against 0 - 2.5 per cent for the other quintiles.

CONCLUSION

It has been noted in this analysis, as it was in the report on the previous SLC survey (November 1989), that poorer households are more likely to own the dwelling in which they live than are the wealthier households (See Table 6.3). This result may be unexpected as wealth is generally associated with assets. In the November 1989 report, the socio-cultural factors affecting home ownership were cited, while the present report provides some insight into the financial factors determining tenure. For instance, it has been shown by using property tax payments (presented in Table 6.16) that although a much greater proportion of the dwellings owned by the poorest households are owner-occupied, the property value of these housing units is much less than that of the housing units owned by the wealthiest households.

Furthermore, property value in the KMA and Other Towns has been shown to be more expensive than that in Rural Areas (Table 6.16). Hence, although there are wealthier households in the urban areas where they are closer to the industrial and business centers, the higher cost of housing there may make it more difficult for these households to own the home in which they live than it would be for a poorer household in rural Jamaica. Consequently, there is a greater

percentage of renting in urban areas where conditions also dictate a high degree of occupancy of units which are not self-contained, thereby resulting in the sharing of facilities (Table 6.4). It should be noted that there is also greater access to land on which to build a home in the rural areas which facilitates a higher level of home ownership there than in the urban areas.

There has been a general increase in the use of electricity for lighting and piped water for drinking purposes reported in SLC 90 as against SLC 89-2. However, the preceding analysis has shown that the rural areas are seriously underserved. For example, there is low availability of piped water in Rural Areas, and although access to potable water is boosted in these areas by the use of water tanks, close to one-half of households rely on public standpipes and other unsatisfactory sources. This not only limits their ability to install and use the more modern water closets (Table 6.4), but also has negative implications for health.

It has been shown that the expenditure on electricity (Table 6.11) as a percentage of total household consumption expenditure is greater than that for water (Table 6.12). The data also show that it is more difficult for the poor to afford payments for water and (to a greater extent) electricity than it is for the wealthy (whose consumption is greater in both cases).

Property tax payments for poor and rural households were shown to be very low (Table 6.16), being \$5 and under annually in many cases. Many of these households paying \$5 annually for property tax are in areas where neither water nor electricity are available. It would be instructive to determine how much more these poor rural households would be willing to pay for tax and to what extent this additional payment could assist in the provision of piped water (even public standpipes) and electricity. ■

Appendix

SURVEY DESIGN

I. Sampling Design

1. The sample dwellings for the Survey of Living Conditions (SLC) are selected as a random sub-set of the sample for the immediately preceding Labour Force Survey (LFS). Thus, for the November 1990 round of the SLC, a one third sub-sample of the corresponding October 1990 round of LFS was adopted. The selection of the SLC samples as a sub-set of the corresponding LFS facilitates the linkage of the data collected in both surveys for an integrated analysis.
2. The design adopted for the LFS (all surveys of STATIN follow the same design) was a two-stage stratified random sampling design, with the first stage being a selection of areas (Enumeration Districts of Population Census) and the second stage being a selection of dwellings. For the selection of the first stage units, all the Enumeration Districts (EDs) in the country were grouped into 217 strata of equal size, in terms of dwellings. Two Enumeration Districts were selected from each stratum with probability proportionate to size. At the second stage, 18 dwellings from the Enumeration District, selected circular systematically, were included in the sample.

II. Sample Size

3. Thus, in each round of the LFS, the sample consists of 434 Enumeration Districts (EDs), drawn from 217 strata, with 18 dwellings selected from each ED – a total of 7,812. For the SLC conducted in November 1990, out of the 217 strata, a sample of 72 strata were selected circular systematically with a random start. The 144 sample EDs and the sample dwellings in these strata were covered in the survey, except those dwellings which were vacant or closed or where the households refused to give information in the corresponding LFS.

III. Investigations

4. The Interview Method was followed in conducting the SLC, that is, STATIN interviews visited the households in the selected dwellings and recorded the information which was elicited by oral enquiry. All surveys conducted by STATIN follow the same method of investigation.

IV. Household Questionnaire

5. The survey instrument for the Survey of Living Conditions is a household questionnaire, the core of which is basically the same from round to round for ensuring continuity and comparability for effective monitoring of the Human Resources Development Programme (HRDP). However, in

each round, the focus is on obtaining a wide spectrum of data on one particular social sector which will form the basic data used in policy formulation. Thus, the focus was on the Health sector in the third round of the survey conducted in November 1989; on the Education sector in the fourth round conducted in November 1990; and on Housing in the fifth round conducted in November 1991.

6. The questionnaire for SLC, November 1990 round was divided into the following 18 parts:

- Part A: General health of all household members
- Part B1: General education – education of all household members of age 3 years and older
- Part B2: Persons no longer in school with primary education only
- Part B3: Persons no longer in school with secondary education only
- Part B4: Persons presently enrolled in primary school
- Part B5: Persons presently enrolled in secondary school
- Part B6: Persons presently enrolled in post-secondary school
- Part C: Anthropometric measurements and immunization data on children 0-59 months old
- Part D: Daily expenses (past 7 days)
- Part E: Non-food consumption expenditures (past weeks and in most cases past 12 months)
- Part F: Non-consumption expenditures such as insurance, taxes, gifts, and donations (past 30 days and past 12 months)
- Part G: Food expenses (past 7 days and past 4 weeks)
- Part H: Consumption of home production and food received as gifts (past 7 days and past 4 weeks)
- Part I: Housing conditions and related expenses
- Part J: Inventory of durable goods owned by the household
- Part K: Miscellaneous income received by the household
- Part L: Receipt of Food Stamps and reasons for non-receipt.

Part R: Household roster of all members

7. The periods given in brackets against parts D to H are the reference periods adopted for collecting the expenditure data.

V. School/Teacher Questionnaires

8. As mentioned earlier, the focus of the fourth round of SLC conducted in November 1990 was on Education and therefore, apart from expanding Part B to comprise 6 sub-parts to cover the various segments of the education sector, a School Administrator Questionnaire was canvassed for all schools which were attended by the children in the sample, to obtain relevant data on school facilities. In all, about 318 school questionnaires were received.
9. A Teacher Questionnaire was also administered to the teachers in these schools, subject to a maximum of ten from a school. If the school had less than ten teachers, all of them were covered. The object of this questionnaire was to collect data on the level of education, experience and orientation of the teachers. Two thousand eight hundred and thirty eight (2,838) teacher questionnaires were collected.

VI. Achievement Test

10. There were 1,853 children attending Grades 2 to 12 in the sample households. The California Achievement Test (CAT) was programmed for these children to test their proficiency in Mathematics and Reading. However, some of these children did not turn up and the Test was finally administered to about 1,048 children. The above data on education collected from the household, school and teacher questionnaires are proposed to be used in an analysis to identify the household, teacher and school factors influencing achievement levels.

VII. Data Entry/Cleaning

11. Before data entry, the questionnaires were edited and coded by the Editor-Coders of the Surveys Division of STATIN. All clerical errors were removed at this stage. The data entry was done on personal computers and adequate computer checks for ensuring consistency in totals, codes etc., feasible at this stage, were introduced in the data entry programme.
12. Immediately after the data were entered and the data sets formed, checks for area classification, that is, Kingston Metropolitan Area, Other Towns and Rural Areas, were undertaken through a computer programme.
13. The consumption expenditure data collected in Parts D to H were then annualised. The method followed is described in a subsequent paragraph. At this stage, four indicators were adopted for cleaning the data, namely, (i) per capita annual Household Consumption expenditure; (ii) the percentage expenditure on the Food group; (iii) the percentage expenditure on Meals taken away

from home; and (iv) the percentage expenditure on Housing. These indicator values were calculated for all households along with the corresponding means and standard deviations for these four variables. This operation was done for households falling into each of the five per capita consumption expenditure quintiles for ensuring adequate dispersal of the cleaning process.

14. In each quintile, the questionnaires of households which fell beyond the range 'mean plus or minus two standard deviations' for any of the four indicators were taken up for detailed scrutiny. Out of 1,877 household questionnaires included in the data set, 132 questionnaires were taken up for detailed examination. Out of these, 49 were rejected (due either to part or total refusal by respondents or on the basis of abnormal data); 11 corrected; 4 completely re-keyed, as they were missed in the keying process; and 68 accepted.
15. Thus, against 1,877 household questionnaires received, 1,828 household questionnaires were considered in the final processing – 598 from the Kingston Metropolitan Area (KMA); 369 from Other Towns; and 861 from Rural Areas.

VIII. Construction of an Annualised Consumption Data Set

16. The household expenditures were collected in Parts D to I, out of which Part F relates to specified non-consumption expenditures and the rest to consumption related expenditure. Part I covers Housing, including utilities, rents, mortgage payments and property taxes. The expenditures in Parts D to H were collected for the various items with different reference periods depending on their frequency of purchase.
17. To arrive at a total consumption expenditure figure, the consumption data in each part were annualised and a sum made of the different parts. However, since several parts ask about consumption expenditures for two different periods of time, one of the two time periods must be selected, or an average of the two.
18. Different time periods are affected by different problems. The short reference period may be affected by catching expenditures of the previous period; it may be that the item was not purchased in that period. On the other hand, the long period may be affected by the respondent's 'recall lapse', that is, the respondent not being able to recall all the purchases in that period.
19. The method followed so far in all the rounds of SLC for annualising the consumption expenditure is to take an average of both the short and long reference periods. This tends to smooth out possible distortions by choosing a middle ground between the two time periods. Technically, the portion of the long term expenditure that does not include the short term expenditure (e.g. the 11 months previous to the last month if the long period is one year and the short period is one month) was calculated and then annualised, and

an equal weighted average of this annualisation and the short period annualisation was taken. For all items for which only one time period is used, the consumption figure is annualised by straight-forward multiplication (i.e. weekly figures multiplied by 52, and monthly figures multiplied by 12).

IX. Tabulation Programme

20. A standard tabulation programme was developed for the basic modules for the different sectors. This programme is followed, with marginal variations, in all the rounds of SLC. Some of these tables are generated in STATIN; some in PIOJ; and a few in the Ministries.

X. Non-Response

21. The dwellings which were vacant, closed or demolished or households which refused to give information in the LFS were excluded from the assignments for the related SLC. Therefore, the non-response in SLC will be a cumulation of the non-response rate in LFS and that in SLC itself. The non-responses in LFS were excluded for the corresponding SLC in order to ensure matching of both surveys for an integrated analysis.
22. In the LFS, October 1990, non-interview was about 17.4 per cent; while in the SLC 90, non-interview was 12.7 per cent. The total cumulated non-interview in SLC 90 was 27.9 per cent. Besides, about 2.0 per cent of the questionnaires were excluded after cleaning the data sets, due to incomplete or abnormal data. Out of the cumulated non-interview in SLC 90, about 9.0 per cent was due to the dwelling being vacant at the time of the LFS or SLC survey, 6.0 per cent due to its being closed, 9.7 per cent due to refusal and the balance (about 3.0 per cent) due to the selected dwelling being demolished or merged or not located.

XI. Estimation

23. The sample assigned to the LFS (and SLC) is designed in such a manner that it is self-weighting and so that each dwelling in the sampling universe is given an equal probability of being represented in the sample. For such a sample, the estimates can be built up by pooling the results of all households without having to assign weights at any stage. But since there is some non-interview and it was found to be uneven across geographic areas, the self-weighting nature of the sample would be affected, unless adjustment factors are applied for non-interview. In the processing of the SLC 90, such adjustment factors (also called raising factors) were applied at the Enumeration District level to correct for non-response at that level. The raising factor for an ED is the total number of dwellings assigned under the self-weighting design divided by the number of dwellings for which data are finally accepted for analysis. The implicit assumption is that the non-responding dwellings/households will have similar features as the responding dwellings/households. Since an ED is a small geographic area, this assumption is not unreasonable.

24. The non-response adjustment factors were applied in generating some of the aggregates such as household expenditures, household sizes and housing characteristics. In some cases, such as the distributions by population quintiles, the non-response adjustment factors cannot be conceptualized and, therefore, are not applied.

XIII. Estimation Formulae

25. Giving that the sampling adopted for the Labour Force Surveys and the Surveys of Living Conditions was designed to be self-weighting (with sampling regions being of equal size and with probability of selection of the second stage units being equal in all strata), the estimation formulae were therefore simplified, as shown below.

Notation

Strata (Sampling Regions)	L
Sub-Units (dwellings in Sampling Region)	M (same for all regions)
Number of first stage units (EDs) selected from a sampling region	2 (same for all regions)
Number of second stage units (dwellings) selected from one selected ED	m (same for all EDs)
Unit Value for the 'j'th sub-unit in the 'i'th primary unit (ED)	Y_{ij}
Sample Mean for the 'i'th selected ED in the 's'th region	\bar{Y}_{is}
Sample Mean for the 's'th region	\bar{Y}_s

then, the Sample Mean is given by the formula:

$$\bar{Y} = \sum_{s=1}^L \sum_{i=1}^2 \sum_{j=1}^m \frac{Y_{ij}}{L \cdot 2m}$$

and the Variance of the Sample Mean (the square root of which is called the Standard Error) is given by the formula:

$$V(\bar{Y}) = \frac{1}{4L^2} \sum_{s=1}^L (\bar{Y}_{1s} - \bar{Y}_{2s})^2$$

where Σ stands for summation.

This simple formula for variance is due to paired selection design, that is two primary selections at the first stage of sampling.

XIV. Standard Errors

26. Based on the above formulae, the mean per capita consumption expenditure and its standard error were compiled for the three area divisions, namely, KMA, Other Towns and Rural Areas from the SLC 90 and presented below in Table A.1.

TABLE A:1
PERCENTAGE STANDARD ERRORS OF MEAN PER CAPITA
CONSUMPTION BY AREA

	Mean (\$)	Standard error
KMA	10,553	5.9
Other Towns	8,185	8.6
Rural	5,562	4.3
All Jamaica	7,616	3.7

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Abbreviations/Acronyms

CAT	California Achievement Test
ED	Enumeration District
HES	Household Expenditure Survey
HRDP	Human Resources Development Programme
IBMS	Institution Based Monitoring System
KMA	Kingston Metropolitan Area
OPV	Oral Polio Vaccine
DPT	Diphtheria Pertussis Tetanus
BCG	Bacillus Calmette Guérin (Vaccine against Tuberculosis)
LFS	Labour Force Survey

MOE	Ministry of Education
MLWS	Ministry of Labour, Welfare and Sports
PIOJ	Planning Institute of Jamaica
SLC	Survey of Living Conditions
STATIN	Statistical Institute of Jamaica
JCTC	Jamaica Commodity Trading Corporation
n.a.	not available
n	Number of responses (Note that non-responses are not shown in the Tables and would account for discrepancies from the total)