

## Use of Public/Private Sector Services 1989-1995

For those seeking medical care, there has been a marked preference for private sector care providers has been observed between 1989 and 1995 (see Table 4.4). This could be due to the greater availability and physical access to private sector care centres, shorter waiting time for care, and the perception of a higher quality of care from these providers. These will need to be further investigated.

Since 1991, the combined use of private and public health care providers by those seeking medical care has been recorded. This has fluctuated over the years. However, between 1994 and 1995, there was an increase in the

**TABLE 4.5**  
**LEVEL OF CARE (PERCENTAGE OF RESPONDENTS) USED IN JAMAICA, 1989-1995**

Year	Primary	Level Out-Patient	Hospitalization (Total In-patient)
S.C. '89 <sup>a</sup>	75.7	18.9	2.9
'90	74.3	21.2	4.5
'91	75.7	18.5	5.8
'92	72.0	17.7	3.5
'93	68.3	24.8	3.8
'94	78.1	15.7	5.4
'95	76.6	17.9	6.2

<sup>a</sup> - 2nd round of SLC '89

combined use of private and public medical care from 4.5 per cent to 6.3 per cent.

A marked increase from 61.0 per cent in 1989 to 66.4 per cent in 1995, was observed in the reported use of the private sector by health care seekers. This has been in spite of increases in the cost of medical care services from this source during this period. In concurrence the use of public sector care providers decreased by 11.8 percentage points from 39.0 per cent to 27.2 per cent between 1989 and 1995 (see Table 4.4).

The sources at which medication were purchased were first documented in the S.C. in 1992. The private sector continues to provide the main source of medication (see Table 4.4). Between 1994 and 1995 alone there was an increase in the use of the private sector as the source for medication from 75.6 per cent to 81.9 per cent. At the same time, the public sector and the combined use of both sectors as a source of medication decreased. The shift from public to private sector for medical supplies may be tied to inadequacy in the supply of drugs in the public sector.

Percentage hospitalization of those seeking medical care also documented in the S.C. since 1992, has fluctuated for this period. Caution should be exercised in the comparison of the levels of private hospitalization versus public hospitalization, as private hospitals are few and mainly located in the major urban centres; therefore this type of care is not readily available to all respondents in the sample.

Analysis of the use of health care services by level of care revealed that primary health care, a major component of the health care system, continued to be the most utilized source of health care (see Table 4.5). There was a marginal decrease in the proportion of health care seek-

**TABLE 4.6**  
**PERCENTAGE ILL/INJURED SEEKING MEDICAL CARE, 1989-1995**

Classification	1989	1990	1991	1992	1993	1994	1995
<b>AREA</b>							
KMA	56.7	40.5	48.0	58.8	60.1	55.9	52.6
Other Towns	45.5	40.9	45.6	52.4	51.6	59.0	57.5
Rural Areas	47.2	36.8	48.6	47.1	47.2	47.0	62.8
<b>QUINTILE</b>							
Poorest	43.7	35.7	38.7	34.7	39.0	44.3	55.4
2	49.8	38.0	52.0	45.8	48.7	44.6	60.1
3	47.5	38.8	48.7	53.5	45.4	50.8	58.4
4	52.7	40.2	50.6	55.9	63.4	56.8	63.4
5	51.6	39.7	47.8	60.3	60.3	63.4	58.4
<b>SEX</b>							
Male	44.7	37.9	48.5	49.0	48.0	49.0	59.0
Female	52.8	39.2	47.4	52.5	54.7	53.4	58.9
<b>JAMAICA</b>	<b>49.0</b>	<b>39.0</b>	<b>47.7</b>	<b>50.9</b>	<b>51.8</b>	<b>51.5</b>	<b>58.9</b>

**TABLE 4.7**  
**MEAN PATIENT EXPENDITURE (\$) ON HEALTH CARE IN PUBLIC AND PRIVATE FACILITIES IN THE 4 WEEK REFERENCE PERIOD, 1989-1995**

Year	Visits		Drugs	
	Private	Public	Private	Public
1989	57	11	48	5
1990	72	11	43	4
1991	82	11	95	8
1992	167	14	234	17
1993	298	115	331	131
1994	461	91	417	163
1995	496	130	509	234

ers utilizing primary health care services from 78.1 per cent in 1994 to 76.6 percent. The proportion of health care seekers needing hospitalization and out-patient care increased in this period.

Between 1992 and 1994 there was little change in the health seeking behaviour of those ill/injured (see Table 4.6). In 1995 however, an increase in the health seeking behaviour of those ill/injured was recorded, from 51.5 per cent in 1994 to 58.9 per cent. Using health seeking behaviour of those ill/injured as an indicator of availability and access to health care, respondents from the Rural Areas reported an improvement in access to and availability of medical care. There was also a concurrent improvement in access to health care for those in the lower consumption groups. In 1994, some 44.3 per cent of the ill/injured individuals in the poorest quintile sought medical care. This increased to 55.4 per cent in 1995, the highest since the implementation of the survey.

## HEALTH CARE EXPENDITURE

### Expenditure During the Four-Week Reference Period

Mean individual expenditure on visits by those ill/injured for public services was \$130.4 (see Table C-4). Mean expenditure on visits to public health care providers was highest in the following categories: for individuals in the KMA, in the wealthiest quintile, for females, and for individuals in the 20-39 year age group. In the KMA, high patient expenditure on visits reflected the fee structure of the user fee programme, where higher fees are charged for care in higher level facilities. High mean expenditure for public health care by respondents from quintile 5 may be attributed to the geographic location of the members of this quintile, as a disproportionate number of households of this consumption group are located in the KMA and Other Towns, where the higher level health care facilities are located.

Mean patient expenditure on visits in the private sector was \$495.9, compared with \$130.4 in the public sector.

As expected, mean expenditure on visits in the private sector increased from the poorest consumption group to the wealthiest consumption group (see Table C-4), and suggests that the poor and non-poor seek medical care from different private care providers, with a tendency for individuals in the higher consumption groups to seek medical care from specialist services.

The highest mean patient expenditure was observed in the 60-64 year old age group at \$1,078.2. Although this may be a reflection of the complicated health conditions of the elderly and the need for specialist services, care should be taken in this analysis as the sample size for this group was extremely small (n=31). This statistic, however, has value as it provides an indication of the possible cost for private health care services to this group (see Table C-4).

Mean patient expenditure on drugs was highest in the private sector at \$509.3, compared to \$233.6 in the public sector. The observed disparity in the cost of drugs between public and private providers, is a result of the low sensitivity of the public sector health care services to price increases due to strategies implemented by the Government of Jamaica to protect public health care users from high prices.

Between 1989 and 1995, there was an observable increase in expenditure on visits and drugs from the private sector (see Table 4.7). Meanwhile, in the public sector, patient health care expenditure remained low and stable between 1989 to 1992. In 1993, however, a substantial increase in mean patient expenditure for both visits and drugs was observed in this sector. This coincided with the vigilant implementation of the Government's cost recovery, user fee programme. Despite this, the gap in mean patient expenditure between the public and private sector users was still evident, reflecting the impact of strategies implemented by the Government, to cushion health care cost to public health service users.

## HEALTH INSURANCE COVERAGE

Health insurance coverage was 9.7 per cent, with the highest coverage in the KMA (14.8 per cent) and in the wealthiest consumption group, (25.7 per cent) (see Table C-5). When analyzed by age, the highest level of insurance coverage was observed in the 30-49 year age group, while the lowest coverage was found in the 65+ age group. A similar pattern of health insurance coverage was observed for those seeking medical care. Of those seeking medical care, the KMA had the highest insurance coverage at 14.7 per cent. By quintile the highest prevalence of insurance coverage was exhibited by health care seekers of quintile 5 at 19.2 per cent. A concern to health policy analysts and decision makers should be the high prevalence of reported illness/injury and high patient expenditure in the 60+ age group and the low Health Insurance Coverage to health care seekers in this group.

## CHILD HEALTH

### Immunization Coverage

Preventive health intervention in the 0-4 year age group is an essential health strategy for developing countries such as Jamaica. The main health strategy for the prevention of childhood diseases is the immunization of children less than 5 years, with the four essential vaccines OPV, DPT, BCG and a vaccine against measles.

For the vaccines OPV and DPT, full coverage to the receipt of 3 or more doses can only be achieved after the age of 6 months, while the vaccine against measles is given at 12 months. For this reason, in the analysis of immunization coverage, OPV and DPT were examined for the age group 6-59 months, the measles vaccine for the age group 12-59 months, and BCG for all children under the age of five years. This data was not similarly treated in previous years making it difficult to compare coverage rates from earlier surveys.

Immunization coverage in the respective categories was high for all groups of respondents. Lowest coverage was for the vaccine against measles, while the highest coverage was for the category 'Receiving 3 or More Doses of DPT'. The immunization target set by the Ministry of Health for Jamaica is 100.0 per cent coverage for each vaccine. Reported rates ranged from 92.6 per cent for the vaccine against measles to 98.1 per cent for DPT. This reflects efforts made by the Ministry of Health in maintaining preventive health care programmes for children less than five years old (see Table C-6).

### Birth Registration

In 1995 some 95.2 per cent of the children in the 0-59 months age group were reportedly registered. Registration was highest in the KMA where access to registration facilities is greatest. Children from households in quintile 5 were more likely to be registered than children from households in the poorest quintile. There was no statistically significant difference in the registration of males and females (see Table C-7).

### Diarrhoea

Reported cases of diarrhoea in children 0-59 months are used as a measure of the health status of this group. Diarrhoea is a serious condition in children under five years of age and has been found to be linked to poor environmental health conditions. In 1995, reported cases of diarrhoea were at 7.1 per cent of this group. Reports of this condition were highest in the Rural Areas, (10.7 per cent), and among children in the poorest quintile (9.1 per cent) (see Table C-8).

## NUTRITION

A variety of methods can be used to assess the health status of population groups. One of these methods employed in the Survey of Living Conditions, is the use of anthropometric measurements (weights and heights) to estimate nutritional status of children 0-59 months old. The assessment of these simple physical examinations, takes the form of comparisons with reference standards set by The World Health Organization. This comparative analysis easily reveals whether growth and development have faltered.

In this report, nutritional status is estimated using three anthropometric indices, namely weight for age<sup>8</sup>, height for age<sup>9</sup> and weight for height<sup>10</sup>. Malnutrition may be defined by two extremes: undernutrition, which is evidence of nutritional deficiencies, and overnutrition or obesity, evidence of nutritional excess. The 1995 S.C. report focuses on undernutrition, which in terms of the three anthropometric indices will mean: low weight for age, low height for age (or stunting), and low weight for height (or wasting).

Levels of undernutrition were estimated using Z scores<sup>11</sup>, and The World Health Organization's recommendation that Z scores of -2 standard deviations from the reference mean be used as indicators of low weight for age, low height for age, and low weight for height.

### Prevalence of Undernutrition

Of the 769, 0-59 month olds evaluated, 5.1 per cent had low weight for age, 6.8 per cent low height for age and 4.0 per cent low weight for height (see Tables D-1 to D-4).

### Undernutrition by Area

Table D-1 shows the prevalence of undernutrition by the three geographic classifications of the survey. The KMA reported the highest prevalence of low weight for age at 9.2 per cent. This was significantly higher than in Other Towns, at 2.1 per cent, and Rural Areas at 3.6 per cent.

The prevalence of stunting, (low height for age) was also estimated to be higher in the KMA at 8.9 per cent, than in the Rural Areas, 6.1 per cent. There was no statistically significant difference between the prevalence of low weight for age by area.

### Undernutrition by Consumption Group

The levels of undernutrition by consumption group are presented in Table D-2. They appeared to display some unexpected findings. These findings resulted from the disaggregation of a small sample into smaller population groups. The observed levels of undernutrition should therefore be viewed with this limitation in mind. To assess

undernutrition by consumption group. multiple regression models were designed to investigate which consumption groups were more likely to have higher levels of undernutrition (see Appendix D1-D3).

As expected, the occurrence of low weight for age was less likely in children from quintile 5 than in children from the poorest consumption group. This was also true for low height for age and low weight for height.

In assessing the prevalence of undernutrition by low weight for age, children from quintile 2 were less exposed to undernutrition, 1.6 per cent, than children from quintile 1, 5.7 per cent (see Table D2 and Appendix A1). The observed difference in the levels of low weight for age between quintiles 3 and 4 at 6.4 per cent and 11.3 per cent respectively, was not statistically significant.

Fewer children from quintile 2, (4.3 per cent), were assessed with low height for age, than children from the poorest consumption group, 10.2 per cent, ( see Table D2 and Appendix A2). The observed difference in the levels of low weight for height in quintiles 2, (3.2 per cent), 3 (2.9 per cent) and 4 (7.2 per cent) were not statistically significant (see Appendix A3).

### Undernutrition by Sex and Age groups

The data were also disaggregated by sex (Table D3) and age groups (Table D4). There was no statistically significant difference in the prevalence of undernutrition by either group.

In Tables D5-D8, the prevalence of undernutrition is presented as a percentage of the median, as in previous years, for the purpose of comparison<sup>12</sup>.

### CONCLUSION

Self reported injury was recorded separately for the first time in the 1995 survey. However, only 54 respondents reported any form of injury, accounting for less than 1.0 per cent of the sample.

Some 9.8 per cent of the sample reported illness, a decline over previous years when the prevalence of reported illness/injury ranged from 10.6 to 18.3 per cent. As a measure of the demand for health care services, this suggests a reduced demand for health care. However, a relatively high demand continued in the at-risk groups, namely: respondents from the Rural Areas, women, the very young and the elderly.

Statistics on reported Protracted Illness/Injury, support the theory that biological factors such as age and sex are significant determinants of vulnerability to chronic conditions. For the period 1990-1995, females reported more protracted conditions than males and the prevalence of protracted illness increased with age, especially among adults in the 50+ age group.

Some changes in the health care seeking behaviour were noted. The increased availability of health care services has significantly reduced the gap between consumption groups in the use of health care services, moving towards a state of equity (see Table 4.6). The gap between health seeking behaviour of males versus females was also reduced as more males sought medical care. These changes coincided with a number of health education initiatives undertaken by the Ministry of Health and the NGO community. These education programmes disseminate the information which individuals could use to develop the skills necessary to make positive health choices and improve, maintain and promote good health, and are an integral part of the Ministry of Health's Health Reform Programme. There was an increase in the percentage of ill/injured who sought medical care. Most importantly, the ill/injured from the Rural Areas and the poor, reported an improvement in their health seeking behaviour. This resulted in a significant reduction in the disparities among socio-economic groups in health seeking behaviour.

The public sector continued to experience problems in its provision of medication to its patients, due mainly to the inadequacies in vital supplies. The 'Pharmaceutical Services Supply Systems', continued to suffer severely from shortages of technical and administrative staff to support its daily operations. To date only five of its drug windows are functional, two of which are located in the KMA. With the high cost for drugs from private sector providers, it is becoming increasingly difficult for the poor and the elderly to fully meet their medication needs.

Public sector drug dispensaries are therefore an important part of the health care equation and efforts should be made to revitalize this service.

High reported illness/injury and patient expenditure in the 60+ age group and low insurance coverage to this group support the establishment of a Health Insurance Scheme for pensioners by the Government of Jamaica. In collaboration with a proposed National Health Insurance Scheme<sup>13</sup>, this could further improve access to health services for all groups and should prove a positive step towards equity in access to health care.

Diarrhoeal disease does not appear to be a national health problem for children in the 0-59 month age group, however, rates of diarrhoeal disease of over 10.0 per cent in the under fives from the Rural Areas suggest that environmental health conditions in some Rural Areas may not be satisfactory. This should be investigated and programmes implemented to ensure that access to safe drinking water, and sanitary means of excreta and garbage disposal are at acceptable levels.

Although the high levels of malnutrition that were seen in the 1960's, are no longer observed, in some communities, undernutrition may still be present at unacceptably high levels. In the 1995 findings children from the KMA

and the poorest consumption group, exhibited significantly higher levels of undernutrition than other comparable population groups. Anthropometric assessments of below 'normal' measurements, do not necessarily indicate poor nutritional status. There are other pathological conditions which may account for small physical structure. The finding of small physical structure in identified population groups, however serves the purpose of alerting medical professionals to possible health problems in these groups. The nutritional and health status of children from the KMA and the poorest consumption group therefore need to be a concern to health professionals, health and nutrition planners, and decision makers.

The Government of Jamaica has continued its efforts to keep the prevalence of undernutrition in the 0-59 months age group at low levels. These efforts are evident in the development of a National Infant Feeding Policy, a key element of which is the promotion of breast feeding and the achievement in 1995 of establishing 'Baby Friendly Hospitals'<sup>14</sup>. These efforts have seen some success and could be extended, with reinforced targeting to the population groups identified as being at greatest risk of undernutrition, namely children from the KMA and children from the poorest consumption groups.

## Endnotes

- 1 Thompson, E. (1996); In Rural Areas... Doctors In Demand. The Daily Gleaner January 4, 1996 Vol 162, No.4 pA1 and A3.
- 2 Comparisons of reported illness from 1989-1991 are not included for age, due to the use of disparate age categories in S.C. reports for these years.
- 3 Planning Institute of Jamaica (1994): Health, Economic and Social Survey of Jamaica. report prepared from data provided by the Ministry of Health. p22.1. Kingston.
- 4 Comparisons of reported protracted illness for 1990 and 1991 are not included for age, due to disparate age categories in S.C. reports for these years.
- 5 A young adult is here defined as an individual between the ages of 17-29 years, while a child is an individual below the age of 17 years.
- 6 Public health care users for this purpose included those who used public health care services only as well as those who used both public and private health care services combined.
- 7 All users of public drug windows, comprising those who used public drug windows only and those who used both the public drug windows and the private drug providers.
- 8 Weight for age, is the most common measure of health and nutritional well being. It allows for the weight of the child to be compared with the reference standard set by the World Health Organization, National Center for Health Statistics.
- 9 Height for age, measures the cumulative effect of poor health. A measure of low height for age or stunting, suggests chronic undernutrition.
- 10 Weight for Height, is the most sensitive measure of the three, and gives an indication of the current nutritional status of the individual. Low estimates of weight for height are referred to as wasting.
- 11 Introducing the use of z scores rather than percentage of the median as in previous years, has several statistical advantages and facilitates easy comparison across groups by statistical manipulation.
- 12 This comparison will be presented in a separate report.
- 13 Lalta, S. (1995): Review of Health Financing in Jamaica and a Survey of the Feasibility of National Health Insurance. ISER UWI/MONA.
- 14 The Baby Friendly Hospital Initiative (MBFH), was launched by UNICEF and PAHO/WHO as a global campaign aimed at fostering national action by preparing the health system and mobilizing health care workers to protect and support breast-feeding. The Government of Jamaica has adopted this initiative.

# FOOD STAMP PROGRAMME

## INTRODUCTION

The Food Stamp Programme was initiated by the Government in 1984, with assistance from the World Food Programme and bilateral donors. The Food Stamp Programme (FSP) represents a move away from general subsidies to a targeted programme. The aim of the programme is to provide a "safety net" for the poor. The goal of the programme is to improve the nutritional status of individuals who are classified as poor or vulnerable.

To this end, the programme provides two categories of benefits to individuals:

1. Health-related: The group receiving this benefit is made up of Pregnant and Lactating Women, and Children Under Six Years old attending public health clinics.

2. Income-related: Recipients of income-related benefits are the Elderly/Poor/Disabled, and Single Member Households and families with annual incomes below \$7,000 and \$18,000 per annum respectively.

In 1994 a Special Skills Training Programme was introduced with the aim of removing from the Food Stamp Programme, persons who have the potential to provide

for themselves. Emphasis is placed on providing training opportunities to the poor, women and young mothers, persons with disabilities, street and working children and households that receive food stamp benefits.<sup>1</sup> Towards the end of 1995 the government removed the kerosene subsidy. To buffer the effect of the increase in kerosene price on the most vulnerable individuals, the government placed an additional 30,000 households on food stamps.<sup>2</sup> In spite of this development, the distribution of food stamps fell short of the target of 320,000 individuals/households by 28.0 per cent.

## DISTRIBUTION OF FOOD STAMPS

The survey data for 1995 shows that the food stamp programme was successful in targeting the poor. Except for a few cases, the data continue to show an inverse relationship between consumption levels and food stamps received. Tables 5.3 and 5.4 show that the poorest quintiles (1 and 2) received over 60.0 per cent of the food stamps distributed in 1995.

TABLE 5.1  
DISTRIBUTION OF FOOD STAMPS BY CATEGORY OF RECIPIENT, BY AREA AND QUINTILE

Classification	Children Aged Less Than Six	Pregnant/ Lactating Women	Elderly/Poor/ Disabled	Single Person Household	Family Plan	Total
<b>Area</b>						
KMA (N=54)	45.2	6.7	43.3	3.3	1.6	100.0
Other Towns (N=54)	35.0	0.0	58.3	5.2	1.5	100.0
Rural Areas (N=299)	49.8	4.3	42.5	2.3	1.2	100.0
<b>Quintile</b>						
Poorest (N=133)	47.4	3.8	43.6	2.3	3.0	100.0
2 (N=123)	48.8	5.7	41.5	4.1	0.0	100.0
3 (N=80)	52.5	2.5	41.3	3.8	0.0	100.0
4 (N=43)	46.5	2.3	48.8	2.3	0.0	100.0
5 (N=28)	28.6	3.6	64.3	0.0	3.6	100.0
<b>Jamaica (N=407)</b>	<b>47.1</b>	<b>4.1</b>	<b>44.7</b>	<b>2.8</b>	<b>1.3</b>	<b>100.0</b>

**TABLE 5.2**  
**DISTRIBUTION OF BENEFICIARIES BY CATEGORIES, AREA AND QUINTILE, 1995**

	CATEGORY					Total
	Children Under Six Years	Pregnant/ Lactating Women	Elderly/Poor/ Disabled	Single Member Household	FamilyPlan	
<b>Area</b>						
KMA	13.7	23.	13.8	17.0	17.8	14.3
Other Towns	9.9	0.0	17.4	24.9	15.6	13.4
Rural Areas	76.4	76.8	68.8	58.1	66.7	72.4
<b>Quintile</b>						
Poorest	32.6	31.3	32.0	25.0	80.0	32.7
2	31.1	43.8	28.2	41.7	0.0	30.2
3	21.8	12.5	18.2	25.0	0.0	19.7
4	10.4	6.3	11.6	8.3	0.0	10.6
5	4.2	6.3	9.9	0.0	20.0	6.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The allocation of food stamps to individuals remained fairly stable, moving from 6.8 per cent in 1994 to 7.2 per cent in 1995 (See Table 5.3). However, the distribution of food stamps among the regions changed in favour of the Rural Areas. There was a 3.1 percentage point increase in the relative share of food stamps allocated to Rural Areas.

The percentage of households in the sample that receive food stamps decreased by 3.1 percentage points, moving from 19.5 per cent in 1994 to 16.4 per cent in 1995 (See Table 5.4); the change is statistically significant. This was reflected in all regions, but the reduction of stamps allocated within Other Towns was most pronounced.

This chapter looks at individual and household data in relation to programme participation, and outlines the distribution of food stamps by area, category and quintile. The difficulties or problems experienced in obtaining food stamps, and the reasons some households did not apply are also reviewed.

#### **COVERAGE OF INDIVIDUAL BENEFICIARIES** **DISTRIBUTION BY BENEFICIARY CATEGORY**

The data in Table 5.1 indicate the proportional distribution of benefits among the recipients. The beneficiaries in the two categories, Children Aged Less Than Six Years and Elderly/Poor/Disabled, accounted for 91.8 per cent of the total number of food stamps distributed in 1995. Compared with the previous year, this represents a 2.4 percentage point increase (See Table 5.1). This increase was due primarily to an increase in the proportion of food stamps allocated to the Elderly/Poor/Disabled category.

#### **Distribution By Area**

Table 5.2 shows that 72.4 per cent of food stamps went to individuals in Rural Areas, followed by the KMA, with 14.3 per cent and Other Towns 13.4 per cent. Compared with 1994 the proportion of food stamps allocated to the

KMA and Other Towns decreased, while the proportion to Rural Areas increased. Although the Urban share increased in 1994, by 1995 it had reversed to what it was in 1993. The decrease reflected in KMA and Other Towns could be due to the removal of able-bodied persons from the food stamp programme.

During the period 1990 to 1995, the number of individuals in Jamaica receiving food stamps grew by 3.5 percentage points, moving from 3.7 per cent to 7.2 per cent. The proportion of individuals in each region receiving stamps increased between 1990 and 1995 as follows: KMA from 1.2 per cent to 2.6 per cent; Other Towns 3.9 per cent to 4.7 per cent; and Rural Areas 4.9 per cent to 12.3 per cent. Growth was therefore strongest in Rural Areas, increasing by 7.4 percentage points (See Table 5.3)

#### **Distribution By Quintile**

The distribution of total benefits given to each quintile by category reveal that for all quintiles, Children Under Six Years and Elderly/Poor/Disabled accounted for approximately 90 per cent of the benefits. While Children Under Six Years accounted for the largest proportion of food stamps allocated to the Poorest quintile (47.4 per cent), Elderly/Poor/Disabled individuals accounted for the largest proportion of stamps allocated to the wealthiest quintile (64.3 per cent) (see Table 5.1). This is a departure from last year when Children Under Six Years received the largest proportion of benefits allocated to the wealthiest consumption group.

The distribution to each category of beneficiary by quintile reveals that, in general, the proportion of benefits decreases with increasing consumption levels. This is reflected in the relative proportion of stamps (6.9 per cent) allocated to the wealthiest group (quintile 5) and that (32.7 per cent) allocated to the poorest quintile. The relative proportion of food stamps allocated to individuals in quintiles 3 and 4 remained stable over the period 1994-

**TABLE 5.3**  
**PERCENTAGE OF INDIVIDUALS RECEIVING FOOD STAMPS AND DISTRIBUTION OF RECIPIENTS,**  
**BY AREA AND QUINTILE, 1990-1995**

Category	Percentage of Individuals receiving Food Stamps <sup>a</sup>						Distribution of Total Individuals Receiving Food Stamps <sup>b</sup>					
	1990	1991	1992	1993	1994	1995	1990	1991	1992	1993	1994	1995
<b>Area</b>												
KMA	1.2	1.5	2.0	2.6	3.5	2.6	8.7	7.3	10.1	11.8	16.1	14.3
Other Towns	3.9	4.5	5.4	6.7	5.4	4.7	18.4	15.1	16.4	16.7	14.6	13.4
Rural Areas	4.9	7.9	8.5	10.4	9.5	12.3	72.9	77.6	73.5	71.5	69.3	72.4
<b>Jamaica</b>	3.7	5.5	6.9	7.2	6.8	7.2	100.0	100.0	100.0	100.0	100.0	100
<b>Quintile</b>												
<b>Poorest</b>	6.7	9.8	11.5	12.9	14.2	16.8	36.1	34.5	32.8	34.2	41.6	32.7
2	5.0	7.7	9.2	10.1	8.1	13.0	27.1	27.5	26.9	28.1	23.7	30.2
3	3.2	5.4	6.9	6.3	6.8	6.6	17.3	19.1	20.2	18.2	19.9	19.7
4	3.2	3.6	4.5	5.1	3.5	3.3	13.4	12.6	13.5	14.1	10.4	10.6
5	1.1	1.8	2.3	2.2	1.5	2.0	6.1	6.3	6.6	5.4	4.4	6.9
<b>Jamaica</b>	3.7	5.5	6.9	7.2	6.8	7.2	100.0	100.0	100.0	100.0	100.0	100

(a) Distribution within Area and Quintile

(b) Distribution across Area and Quintile

95, averaging 19.8 per cent and 10.5 per cent respectively. Quintiles 2 and 5 recorded noticeable increases of 6.3 percentage points and 2.5 percentage points. There was a reduction, however, of 8.8 percentage points in the proportion allocated to the Poorest quintile (see Tables 5.2 and 5.3). All of the beneficiary categories, with the exception of Family Plan, recorded a relative decrease in allocation to the Poorest quintile. The survey data show that the relative decrease in stamps allocated to the Poorest quintile was accompanied by an increase in stamps distributed to quintile two. The net effect is that relatively poor individuals remain the primary beneficiaries of the food stamp programme.

In keeping with this development, the data show that the share of benefits among quintiles did not become any more progressive. The Poorest quintiles (1 and 2) accounted for 62.9 per cent of beneficiaries compared with 65.4 per cent in 1994, while the wealthiest quintiles (4 and 5) contained 17.5 per cent of the beneficiaries, compared with 14.8 per cent in 1994. In addition, Table 5.3 also shows that whereas the allocation of food stamps within quintiles 3, 4 and 5 remained fairly stable relative to 1994, there was an increase in the proportion of individuals in quintiles 1 and 2 who received food stamps.

## COVERAGE OF HOUSEHOLDS

### Regional Distribution

Table 5.4 shows that 16.4 per cent of households in Jamaica received food stamps in 1995, compared with 19.5 per cent in 1994. This represented a decrease of 3.1 percentage points. Over the period 1990 to 1995, however, the proportion of households in receipt of food stamps increased by 3.6 percentage points. The survey data suggest

that since the 1990s, the years 1992 to 1994 represent the high points in the distribution of food stamps to households.

The Rural Areas continue to benefit from the highest level of coverage under the food stamp programme. A total of 72.5 per cent of the households were located in Rural Areas, compared with 12.7 per cent of households in Other Towns and 14.8 per cent for the KMA. Between 1994 and 1995 all of the regions recorded a reduction in the proportion of households receiving food stamps, with Other Towns registering the greatest proportionate reduction in beneficiaries over the period (See Table 5.4).

The degree of coverage enjoyed in Other Towns ranged from 11.5 per cent in 1990 to 10.8 per cent in 1995. In Rural Areas and the KMA, the proportions increased noticeably, from 18.0 per cent to 25.7 per cent and from 4.2 per cent to 7.1 per cent over the period 1990-1995.

The distribution of benefits across regions, however, shows a slightly different picture. Table 5.4 shows that the proportion of stamps allocated to Rural Areas has remained fairly stable over the period 1990 (73.6 per cent) to 1995 (72.5 per cent). During the same period, the proportion of stamps received by households in the KMA increased from 9.4 per cent to 14.8 per cent, while the proportion of food stamps received by households in Other Towns decreased by 4.3 percentage points.

### DISTRIBUTION BY QUINTILE

The allocation of benefits to quintiles showed the same pattern for households and individuals (See Tables 5.4 and 5.3). As in the previous year the distribution of benefits across quintiles declines as consumption rises,

**TABLE 5.4**  
**PERCENTAGE OF HOUSEHOLDS RECEIVING FOOD STAMPS AND DISTRIBUTION OF HOUSEHOLDS, BY AREA AND QUINTILE, 1990-1995**

Category	Percentage of Households Receiving Food Stamps <sup>a</sup>						Distribution of Households <sup>b</sup>					
	1990	1991	1992	1993	1994	1995	1990	1991	1992	1993	1994	1995
<b>Area</b>												
KMA	4.2	5.3	6.9	7.5	9.1	7.1	9.4	8.9	11.0	12.7	16.5	14.8
Other Towns	11.5	12.6	19.5	18.9	15.4	10.8	17.0	14.2	17.9	17.7	15.4	12.7
Rural Areas	18.0	26.8	28.4	31.0	28.2	25.7	73.6	76.9	71.2	69.6	68.1	72.5
<b>Jamaica</b>	12.8	17.8	20.0	20.5	19.5	16.4	100.0	100.0	100.0	100.0	100.0	100
<b>Quintile</b>												
Poorest	29.3	42.6	45.0	45.1	53.9	40.2	33.6	32.6	27.1	30.2	38.6	31.1
2	20.4	27.6	36.6	37.0	28.3	33.2	26.0	25.6	25.4	28.3	23.0	31.4
3	14.2	20.3	27.1	21.9	22.7	17.8	19.1	20.9	22.6	18.4	20.6	18.1
4	9.2	11.7	16.3	14.7	10.8	9.2	14.9	13.9	16.6	15.5	12.2	11.8
5	2.7	4.0	6.1	5.1	3.6	3.9	6.4	7.0	8.4	7.6	5.6	7.6
<b>Jamaica</b>	12.8	17.8	20.0	20.5	19.5	16.4	100.0	100.0	100.0	100.0	100.0	100

Note: a - within area  
b - across areas

varying from 62.5 per cent for the Poorest quintiles to 19.4 per cent for the wealthiest (quintiles 4 and 5). Over the period 1990 to 1995 the share of benefits allocated to the Poorest quintile increased by 2.9 percentage points while that for the wealthiest quintile decreased by 1.9 percentage points (See Table 5.4).

#### DISTRIBUTION BY CATEGORY

Proportionate reduction in coverage was experienced by all three categories relative to 1994. The household data show that the reduction of coverage for the Elderly/Poor/Disabled category ranged from 72 per cent in 1994 to 43.6 per cent in 1995, a decrease of 28.4 percentage points. Also, coverage of households with Children

Aged Less Than Six Years decreased from 28.5 per cent in 1994 to 23.6 per cent in 1995. As in the previous year, households with Elderly/Poor/Disabled remain the category with the best coverage. Pregnant/Lactating Women continue to experience low coverage, 5.0 per cent for 1995, a reduction of 9.9 percentage points relative to 1994. Officials of the Ministry of Labour have recognised the need to provide quick access to benefits for Pregnant and Lactating women and accordingly have shortened the registration process for this category. Currently, on registration at a primary health care clinic, pregnant and lactating women automatically qualify for food stamps.

**TABLE 5.5**  
**PROPORTION OF RECIPIENTS IN HOUSEHOLD, BY AREA AND QUINTILE, 1994-1995**

Area	Number of Recipients in Household			
	Single Recipient		Multiple Recipient	
	1994	1995	1994	1995
<b>Area</b>				
KMA	70.0	83.5	30.0	16.5
Other Towns	77.0	70.5	23.0	29.5
Rural Areas	74.0	81.8	26.0	18.2
<b>Jamaica</b>	76.1	80.6	23.9	19.4
<b>Quintile</b>				
Poorest	71.0	76.7	29.0	23.3
2	71.0	83.7	29.0	16.3
3	78.0	73.3	22.0	26.7
4	91.0	89.7	9.0	10.3
5	95.0	88.0	5.0	12.0
<b>Jamaica</b>	76.1	80.6	23.9	19.4

## NUMBER OF RECIPIENTS PER HOUSEHOLD

As shown in Table 5.6, the vast majority of households (80.6 per cent) receiving benefits were those with Single Recipients, while 19.4 per cent of households had two or more recipients. The same trend is seen in all areas and quintiles. Unlike the previous year, the KMA had the highest proportion of households with single recipients (83.5 per cent). Other Towns on the other hand, had the largest proportion of multiple recipients (29.5 per cent).

Generally, the proportion of households with Multiple Recipients increased with declining welfare status while the opposite is seen for single household recipients. The poorer quintiles therefore have the smallest proportion of single recipient households and the largest proportion of households with multiple recipients (See Table 5.5).

## Level Of Food Stamp Coverage

Tables G-1 and G-4 show the percentage of individuals and households by area and by consumption level who receive food stamps and those who did not receive. Overall, 5,656 individuals and 1,974 households were surveyed. Some 7.2 per cent of individuals and 16.4 per cent of households reported that they received food stamps. Compared with other areas, the KMA continued to record the lowest level of individuals and households receiving food stamps, while the Rural Areas remain the region with the highest level of coverage. Of all the individuals who reported non-receipt of food stamps, 3.7 per cent had in fact applied. Some 89.1 per cent of the individuals in the sample never applied for food stamps (See Table G-1). The data in table G-4 shows that a similar trend obtained for households. Households not receiving food stamps accounted for 83.6 per cent.

## REASONS FOR NOT APPLYING FOR FOOD STAMPS

In all regions, a large percentage of households did not consider themselves eligible for food stamps. Rural Areas had the largest percentage of households (24.2) which were unaware of how to apply for food stamps. On the other hand, Other Towns had the largest proportion of households which thought that it was not worth the trouble and those who did not consider their households eligible.

Reasons most frequently given by households for not applying for food stamps continued to be perceived ineligibility, followed by the lack of knowledge of how to apply and the perception that it was 'not worth the trouble' (see Table G-8). The proportion of households reporting the three major reasons remained fairly stable relative to 1994. These deficiencies seem to be a recurring problem that needs to be addressed.

## Conclusion

The food stamp programme seems to be meeting its objective because most of the beneficiaries are from the low consumption groups and are children and the elderly. The provision of stamps to Pregnant and Lactating Women and to Children Aged Less Than Six Years, through registration at primary health care clinics, encourages preventive health care. To some extent it also successfully screens out wealthier households which tend to use private facilities. The fact that coverage is high among the intended beneficiaries, children six and under, Rural Area dwellers and Elderly/Poor/Disabled, points to the progressiveness of the programme.

In analyzing the data, it is difficult to establish the extent to which the goal of increased nutrition has been achieved, since the allocation of food within the household may shift among family members. More importantly, although adjustments were made, the value of the food stamp has been eroded.<sup>3</sup> In constant 1990 dollars, the value of stamps received per month are as follows: Pregnant and Lactating Women \$17.70, Children Aged Less Than Six Years \$14.20, Elderly/Poor/Disabled \$21.30, Single Member Household \$17.70, and Family Plan \$35.40.

The main findings for the reviewed period as outlined were:

1. Most of the food stamps went to the categories Elderly/Poor/Disabled and Children Aged Six Years and Under.
2. A greater proportion of the recipients within the Poorest quintile were Children Aged Six Years and Under.
3. Over the period 1990-1995, the proportion of individuals receiving food stamps increased.
4. In general, the distribution of food stamps to individuals varied inversely with consumption levels. The data for Single Person Household showed a different pattern; a larger proportion of Single Person Households are to be found in the higher consumption groups.

It is noted that the distribution of the problems cited by households for not applying for stamps during 1994 remained unchanged in 1995. However, the large percentage of households that did not apply and the relatively low level of coverage of eligible individuals and households point to the need for improved dissemination of information and monitoring of the programme.

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Endnotes

<sup>1</sup>The HEART Trust is the primary implementing agency for this new thrust.

<sup>2</sup>The addition of 30,000 households were placed in the family plan category.

<sup>3</sup>The value of the food stamp received per month by the beneficiaries are as follows: Pregnant and Lactating Women \$75., Children Aged Less Than Six Years \$60., Elderly/Poor/Disabled \$90., Single Member Household \$75., and Family Plan \$150.

## HOUSING

## INTRODUCTION

This chapter analyses 1995 data for the housing sector, in terms of location and income, as well as in terms of selected aspects of the housing stock. For the spatial analysis, the divisions used in earlier reports - the Kingston Metropolitan Area (KMA), Other Towns and Rural Areas - are maintained. The chapter closes with a look at expenditure patterns.

## The Housing Stock

In 1995, an estimated 76.1 per cent of the dwellings in Jamaica were detached units. 'Part of House' accounted for 14.1 per cent of the stock and 'Semi-detached House', 5.7 per cent. Together, apartment buildings, townhouses, improvised units and units that were parts of commercial buildings accounted for less than 5.0 per cent of dwellings.

When the latter group was omitted, there was a statistically significant negative correlation between the degree of urbanisation and dwelling type i.e., as the degree of urbanisation increased, the relative number of detached units decreased. In the KMA, 55.0 per cent of the units were detached, climbing to 74.6% in Other Towns and 92.4 per cent in the Rural Areas (See Table 6.1). Conversely, the correlation between the degree of urbanisation and the relative numbers of semi-detached units and parts of houses was positive. About 46.0 per cent of the units in the KMA were semi-detached and parts of houses as against 6.0 per cent in the Rural Areas.

Given their absolute dominance of the housing stock, detached units were the most numerous in all quintiles. Reflecting the association between income and location, there was a negative correlation between quintile and

number of detached units. Some 87.6 per cent of units in the Poorest quintile were detached, falling to 80.4 per cent in Quintile 3 and 71.3 per cent in the upper quintile (See Table F.1). In the case of 'Part of House', the correlation was not significant. However, partly because of the confounding effect of location, the trend was for the numbers to increase with income, 8.1 per cent in the Poorest quintile rising to 15.2 per cent in the upper.

It may be argued that the relative numbers of apartments and townhouses should be increasing at the expense of detached units. In the formal market at least, much new construction takes place in the urban areas where apartments and townhouse complexes are an adjustment to a scarcity of land for residential construction. According to Census data, between 1982 and 1991, almost 70.0 per cent of the increase in apartments and townhouses was located in the KMA.

However, the data did not support the hypothesis that the composition of dwelling units by type should be changing. Over the five years, the contribution of apartments and townhouses was always minimal and, while there have been increases over the last three years, these were inconsequential. The argument made in the 1994 Report, therefore, bears repeating. Recently built apartment blocks and townhouses may, on average, contain larger numbers of dwelling units than in the past. If so, their effect on the composition of the housing stock by type is not commensurate with their effect on the number of dwelling units.

Excluding 1992, the relative numbers of households that occupied parts of houses has remained at about 16 per cent of the households.

TABLE 6.1  
PERCENTAGE DISTRIBUTION OF SELECTED DWELLING TYPES BY LOCATION

TYPE OF DWELLING	KMA	OTHER TOWNS	RURAL AREAS
Separate House, Detached	55.0	74.6	92.4
Semi-detached House	11.6	4.6	1.6
Part of a House	34.9	18.3	4.44

**TABLE 6.2**  
**PERCENTAGE DISTRIBUTION OF DWELLING TYPES, 1990-1995**

DWELLING TYPE	SLC 90	SLC 91	SLC 92	SLC 93	SLC 94	SLC 95
Separate House, Detached	79.0	93.3 <sup>a</sup>	83.5	77.3	78.6	76.1
Part of House	17.8	N/A <sup>a</sup>	9.5	14.3	13.7	14.1
Semi-detached House	2.2	4.3	3.0	5.4	4.6	5.7
Apartment/Townhouse	0.4	1.1	3.1	2.2	2.4 <sup>b</sup>	3.6 <sup>b</sup>
Part of Commercial Building	0.7	1.0	0.8	0.3	0.4	0.4
Other	0.2	0.3	0.2	0.4	0.2 <sup>c</sup>	0.2 <sup>c</sup>

a - The Part of House category was excluded from the 1991 SLC questionnaire, hence the figure presented for Separate House, Detached includes this.

b - Presented separately in the SLC 94 data but combined for this Table.

c - Includes Improvised Housing Unit which is not found in earlier surveys.

### Construction material

Stone, Brick, Wattle and Daub and 'Other' types of material accounted for 5.6 per cent of dwellings (See Table F.2). There is no evidence that the contribution of these materials has changed much over the last three years. Block and Steel accounted for 48.9 per cent of dwellings in 1995, a decrease of only 0.9 percentage point from 1994. The next most frequently used materials were Wood, 29.0 per cent, and Concrete Nog, 16.6 per cent. The figure for Concrete Nog showed a small decrease of 2.2 percentage points below the figure for 1994.

There was a significant correlation between location and material used in outer walls. While in the KMA, 18.4 per cent of dwellings had wooden walls, the figures for Other Towns and Rural Areas were 37.8 per cent and 33.2 per cent respectively. Rural Areas did not have the highest percentage of wooden dwellings but were 4.6 percentage points lower than Other Towns. In Other Towns and the Rural Areas, the percentages of dwellings with block and steel walls were 41.1 per cent and 46.8 per cent respectively, not significantly different from each other but both significantly lower than in the KMA with 56.1 per cent.

In this survey, the Rural Areas had the highest percentage of nog dwellings, 17.0 per cent. This, however, was similar to the other two figures - 16.8 per cent in the Other

towns and 16.1 per cent in the KMA. The difference between the figures for the two upper quintiles, 13.8 per cent and 15.0 per cent and that for Quintile 2, 21.4 per cent, was significant, unlike in 1994, but is perhaps due to sampling error.

As in 1994, there was a negative rank correlation between the relative numbers of wooden buildings and buildings made of block and steel by quintile ( $r_s = -0.9$ ). Given the small value of  $n$ , 5, the correlation was not significant. However, the trend was that, as income increased, so did the consumption of block and steel at the expense of wood.

### AMENITIES

#### Toilet facilities

The adequacy of sanitary services is an important indicator of the condition of the housing stock. Adequacy can be measured in terms of type of toilet and in terms of whether these facilities are being shared. A word of caution that was mentioned in an earlier report is repeated here: there are locations in Jamaica where, for ecological reasons, pit latrines would be the suitable type of toilet. There is nothing intrinsically inferior about pit latrines compared with flush toilets, provided the pit latrines are properly constructed and maintained.

**TABLE 6.3**  
**PERCENTAGE DISTRIBUTION OF WOOD AND BLOCK AND STEEL BY QUINTILE**

QUINTILE	WOOD	RANK	BLOCK AND STEEL	RANK
Poorest	45.9	1	33.9	5
2	33.9	3	39.3	4
3	35.4	2	41.4	3
4	26.5	4	53.2	2
5	19.1	5	59.7	1

$r_s = -0.9$

**TABLE 6.4**  
**PERCENTAGE DISTRIBUTION BY TYPE OF TOILET BY LOCATION**

TYPE OF TOILET	KMA	OTHER TOWNS	RURAL AREAS
WC linked to Sewer	49.2	8.5	5.2
WC not linked to Sewer	35.1	41.0	24.3
Pit	15.7	49.8	70.3
Other	0.0	0.8	0.26
None	0.0	0.0	0.01

In 1995, 52.3 per cent of the households reported that they had access to flush toilets, (WC), with 21.0 per cent linked to sewers. Just over 47.0 per cent had pit latrines and the rest had other arrangements. The figures for 'None', zero per cent throughout the island (See Table F.3) could have been due either to sampling error or to a desire on the part of respondents without toilets to avoid embarrassment.

Access to flush toilets linked to sewers was significantly higher in the KMA, 49.2 per cent, than in Other Towns, 8.5 per cent and in the Rural Areas, 5.2 per cent (See Table 6.4). Access to central sewerage is definitely a KMA phenomenon. It is only in the KMA that more toilets are sewered than not. When the numbers of flush toilets not linked to sewers are compared, the differences among the locations are much smaller - the KMA, 35.1 per cent; Other Towns, 41.0 per cent and Rural Areas, 24.3 per cent.

Just under 15.0 per cent of households in the Rural Areas shared toilets, compared with 26.8 per cent in Other Towns and 29.0 per cent in the KMA (See Table F.3). On this variable, the Rural Areas performed better than the urban areas and if, as noted in the 1993 Report, the sharing of toilets is a surrogate for overcrowding, then overcrowding continued to be worse in Other Towns and the KMA than in the Rural Areas. As was expected, fewer flush toilets than pit toilets were shared (See Table 6.5).

There have been no significant changes in the relative access to pit latrines and flush toilets over the past six years though there is a hint that the number of flush toilets might be increasing slightly at the expense of pit toilets (See Table 6.6). Still, in 1995 as in other years, over 45.0 per cent of the households used pit latrines.

Because other types of toilets accounted for less than 1 per cent in each quintile, the number of pit toilets can be taken as the complement of the number of flush toilets (See Table 6.7).

There was a strong, inverse correlation between income and the relative number of pit toilets. The use of pit toilets, therefore, has nothing to do with ecology. Just over a quarter of the households in the upper quintile use pit toilets while the comparable figure for the poorest quintile was 82.0 per cent. On the other hand, at first a little surprisingly, more sharing takes place in the upper quintiles. This is linked to two related factors. First, that over 25.0 per cent of the households in the upper quintile use pit latrines at all is a reflection of the wide range of incomes contained in this quintile. The incomes at the bottom of the quintile are low. Partly because of this, relatively more households in the upper quintiles rent or use parts of houses as dwelling units leading to greater sharing. Some 36.5 per cent of upper quintile households using pit toilets shared these facilities as opposed to 18.8 per cent in the Poorest quintile.

### Drinking Water

The source of drinking water is, perhaps, a more useful indicator of living conditions than type of toilet. If water has to be carried over long distances, hygiene can be affected as households try to conserve its use and the time available for other tasks is reduced. Rain-water and water from wells, rivers and springs, if not treated, can present danger to health.

The data in Table 6.8 show the sources of water by area for 1995. Wells and 'Other' have been omitted because their contribution was minimal (See Table F.5). Overall,

**TABLE 6.5**  
**PERCENTAGE OF SELECTED TYPES OF TOILETS SHARED, BY LOCATION**

TYPE OF FACILITY	JAMAICA	PERCENTAGE SHARED		
		KMA	OTHER TOWNS	RURAL AREAS
WC linked to sewer	17.1	16.7	27.0	13.4
WC not linked to sewer	20.4	38.2	14.4	5.8
Pit	25.0	47.6	36.9	17.8

**TABLE 6.6**  
**PERCENTAGE DISTRIBUTION OF TYPE OF TOILET, BY YEAR, 1990-1995**

TYPE OF FACILITY	SLC 90	SLC 91	SLC 92	SLC 93	SLC 94	SLC 95
WC <sup>a</sup>	51.4	47.4	49.6	49.6	51.0	52.3
Pit Latrine	47.7	50.8	49.3	49.6	48.4	47.5
Other	0.4	0.2	0.6	0.7	0.6	0.3
None	0.5	1.5	0.5	0.1	0.1	0.0

<sup>a</sup>-Flush toilets were combined prior to 1994

the degree of access to publicly-supplied potable water was fair. A majority of the households in each location had access to publicly-supplied, potable water. The figures for the three locations - KMA, Other towns and Rural Areas - were 98.5 per cent, 86.8 per cent and 63.2 per cent respectively.

The figures indicate a negative correlation between degree of urbanisation and use of untreated water. About 33.0 per cent of the households in Rural Areas had to use untreated water from tanks, rivers and ponds compared to under 10.0 per cent in Other Towns and less than 1.0 per cent in the KMA.

In terms of income, a little over 60.0 per cent of households in the upper quintile had access to indoor taps/pipes. This compared to a mere 12.3 per cent in the Poorest quintile (See Table F.5). Conversely, in the upper quintile, 8.6 per cent of the households used public standpipes increasing to 15.8 per cent in Quintile 3 and to 30.8 per cent in the Poorest quintile. So, while about 70 per cent of the households had access to treated water, in the lower quintiles, the issue was convenience.

Not surprisingly, more households in the two lower quintiles, 36.9 per cent in the Poorest and 29.1 per cent in Quintile 2, had to use untreated water (See Table F.5). However, that households in the other quintiles did so indicated that there are persons, in all income groups, who have inconsistent supplies or no access to publicly-supplied water. This was a predominantly rural phenomenon. Some 36.8 per cent of the households in the rural areas

**TABLE 6.7**  
**PERCENTAGE DISTRIBUTION AND PERCENTAGE SHARED, PIT TOILETS**

QUINTILE	PERCENTAGE	
	PIT	SHARED
Poorest	82.0	18.8
2	69.5	18.8
3	56.2	24.7
4	42.8	29.2
5	26.3	36.5

were affected, compared with 13.2 per cent and 1.5 per cent in the Other Towns and the KMA.

To measure the level of deprivation in the poorest quintile and the Rural Areas, in terms of water supply, indices of dissimilarity were calculated. For the Rural Areas, the reference distribution was the KMA's i.e., it was assumed that the distribution in the KMA was what should be aimed at. For the Poorest quintile, the reference was Quintile 5.

The 1995 index for the Rural Areas was 61.2, meaning that the source of domestic water for 61.2 per cent of households in Rural Areas would have to be improved in some way before the distribution there would be the same as that in the KMA. The 1995 index for the Poorest quintile was 48.5 - one measure for which the difference between the two extreme groups, by location, was greater than the difference by quintile.

In each year since 1991, the relative number of households having access to indoor tap/pipes has increased over the previous year. This could be taken as a surrogate for a gradual improvement in living conditions. However, using the binomial test for small samples, the trend was not statistically significant although the major problem was that the number of years was too small. There could well be, therefore, an underlying trend that will become evident with more surveys.

Using the relevant class marks, the weighted mean distances travelled to public standpipe and river/lake/pond, by area, were calculated (See Table 6.10 and Table F.6).

Despite the small number of responses and the care with which these data have to be interpreted, the overall pattern supports the hypothesis that, to fetch water, more time/distances have to be covered in the Rural Areas than in the KMA. This was another case in which location was a better predictor than income as the relationship between quintile and distance travelled to public standpipes was unclear (See Table F.6).

### Lighting

For the country as a whole, two sources accounted for over 95.0 per cent of the lighting used in households -

**TABLE 6.8**  
**PERCENTAGE DISTRIBUTION OF DWELLINGS, BY SOURCE OF WATER**

AREA	PERCENTAGE OF HOUSEHOLDS WITH ACCESS TO				
	INDOOR TAP/PIPE	OUTSIDE PRIVATE TAP/PIPE	PUBLIC STANDPIPE	RIVER/LAKE/ SPRING/POND	RAINWATER (TANK)
KMA	75.1	21.8	1.6	0.1	0.5
Other Towns	44.2	26.0	16.6	1.1	8.7
Rural Areas	17.2	18.5	27.5	8.0	34.5

electricity, 71.5 per cent and kerosene, 25.7 per cent. Nevertheless, there was a statistically significant association between location and type of fuel used for lighting. In the KMA, 86.8 per cent of the households used electricity and 7.7 per cent used kerosene. The comparable figures for the Rural Areas were 58.8 per cent and 39.8 per cent with the figures for Other Towns 75.0 per cent and 23.7 per cent.

At higher levels of income, more electricity than kerosene is consumed. The two distributions were not independent as the one was virtually the complement of the other ( $r=-0.99$ ) (See Table 6.11). For each type of fuel, however, the differences among the quintiles were significant. In the upper quintile, 85.6 per cent of the households used electricity for lighting dropping steadily to 43.5 per cent in the Poorest quintile. Conversely, 54.6 per cent of the Poorest quintile used kerosene and this was the only quintile in which more persons used kerosene than electricity.

The variation among the quintiles was greater for kerosene than for electricity. The percentage of households in the upper quintile using electricity was 1.96 times that in the Poorest quintile while the (reverse) comparative ratio for kerosene was 4.71.

The number of households using electricity in each year was higher than in the preceding year and this was almost exactly paralleled by decreases in the number of households using kerosene (See Table 6.12). Again, because of the small number of years, the binomial test gave

a value of  $p=.031$  meaning that the trend to increasing use of electricity was not statistically significant. However, it is likely that, despite its cost, more households are using electricity for a number of reasons -

i. it is more convenient to use electricity; ii. the Rural Electrification Programme is increasing access to the utility; and iii. electricity poses a lower risk to users and provides better lighting than kerosene.

If this is correct, the differences among the quintiles and the locations will diminish over time, as the use of electricity becomes more and more widespread and its usefulness as an indicator of living conditions will disappear. Interestingly, compared with 1994, the greatest relative increase in the use of electricity, about 13 percentage points, occurred in the Poorest quintile.

#### Kitchens

In each location and in each quintile, over 90.0 per cent of the households had kitchens. The differences among the locations and quintiles were not significant (See Table F.8). Access to kitchens is uniformly widespread in terms of location.

Significantly more rural households, 88.8 per cent, had exclusive use of kitchens (See Table F.8). This seemed another consequence of the above average sharing of dwellings in the more urbanised areas. As expected also, sharing was associated more with the upper quintiles.

**TABLE 6.9**  
**PERCENTAGE DISTRIBUTION OF SOURCE OF WATER, BY YEAR, 1990-1995**

SOURCE OF WATER	SLC 90	SLC 91	SLC 92	SLC 93	SLC 94	SLC 95
Indoor tap/pipe	38.4	37.1	37.6	38.9	40.1	42.3
Outside private tap/pipe	22.8	25.8	21.1	23.4	22.9	21.1
Public standpipe	17.1	14.8	17.9	20.0	18.7	16.5
River/pond	5.7	5.1	6.3	3.1	2.7	2.9
Rainwater (tank)	13.4	13.1	13.6	11.4	12.5	13.2
River/pond <sup>a</sup>	2.7	4.3	3.6	3.1	3.2	4.1

<sup>a</sup> - Includes well

**TABLE 6.10**  
**WEIGHTED MEAN DISTANCES TRAVELLED FOR**  
**WATER, BY SOURCE AND AREA**

AREA	DISTANCE TRAVELLED (YARDS)	
	PUBLIC STANDPIPE	RIVER/LAKE/SPRING/POND
KMA	84(8)	0
Other Towns	87(65)	24(1)
Rural Areas	156(262)	285(75)

NOTE: Values in brackets were the number of households analysed.

**TABLE 6.11**  
**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY**  
**SELECTED SOURCES OF LIGHTING, BY QUINTILE**

QUINTILE	SOURCE OF LIGHTING	
	ELECTRICITY	KEROSENE
Poorest	43.5	54.6
2	57.3	41.1
3	69.4	28.2
4	77.2	20.2
5	85.6	11.6
JAMAICA	71.5	25.7

### Tenure

Despite the emergence of rentals as an important form of tenure, (25.0 per cent of households), freehold tenure is still preferred in the island. According to the survey, about 73.5 per cent of dwellings were owned (See Table F.9). A little over 80.0 per cent of these dwellings were occupied by the owners' households and the rest by someone related to the owner ('Rent-free').

As is evident in Table 6.13, there was a significant correlation between location and tenure. The percentage of owned units was highest in the Rural Areas, 85.2 per cent, and lowest in the KMA, 59.2 per cent. The converse applied to rentals: in the KMA, 38.5 per cent of the

households were renting compared with 13.7 per cent in the Rural Areas, with Other Towns in-between these two figures at 28.6 per cent.

The number of households describing themselves as squatters was microscopic at 0.7 per cent (See Table F.9). As argued in the 1994 Report, one explanation could be that questions about house tenure are threatening to respondents in non-legal arrangements. Therefore, some of them might have given socially acceptable answers. More likely, most households that were squatting on land owned their buildings. Consequently, while the number of land squatters might be high, the number of house squatters is minimal.

The pattern of a higher rate of ownership in the Poorest quintile than in the upper quintile was evident too, in 1995. When the distribution of tenure in the Rural Areas is used as the reference, the Index of Dissimilarity for the KMA was 25.8 (See Endnote 5). However, the utility of this index is limited. Rentals are associated with urbanisation and modernisation and the dichotomy between the KMA, in particular, and the Rural Areas will become more pronounced.

On the face of it, the significant negative correlation between ownership and income could be a little unexpected. Some 72.2 per cent of households in the Poorest quintile owned their dwellings compared with 59.2 and 51.3 per cent in the two upper quintiles. However, the intervening variable was location. Relatively more upper quintile households are found in the KMA. Particularly for the resident in Kingston/Urban St Andrew, individual residential lots are very scarce and apartment buildings and townhouses for rental are one response. In any case though, rented accommodation is not intrinsically inferior to owned units. Rented housing can be high quality housing.

The dominant landlords, by far, were private individuals/agencies. In the KMA, over 90.0 per cent of landlords were private individuals/agencies with marginally lower figures for Other Towns and the Rural Areas (See Table F.10). Relatives accounted for 5.1 per cent overall and other types of landlord - relative, private employer or public agency - a mere 3.8 per cent of the total. Therefore, for example, the differences among the locations in terms

**TABLE 6.12**  
**PERCENTAGE OF HOUSEHOLDS BY SOURCE OF LIGHTING, 1990 - 1995**

SOURCE OF ENERGY	YEAR					
	SLC 90	SLC 91	SLC 92	SLC 93	SLC 94	SLC 95
Electricity	66.0	67.2	67.3	68.1	70.8	71.5
Kerosene	31.3	30.1	30.4	29.1	26.9	25.7
Other	0.3	2.6	0.4	0.2	0.7	0.5
None	2.3	N/A	1.9	2.6	2.4	2.3

**TABLE 6.13**  
**PERCENTAGE DISTRIBUTION OF TENURE STATUS, BY AREA**

TYPE OF TENURE	KMA	OTHER TOWNS	RURAL AREAS
Owned by Household Member	43.8	59.4	70.2
Rent-free	15.4	11.4	15.0
Rented	38.5	28.6	13.7
Squatter	1.4	0.3	0.4
Other	1.0	0.3	0.7

**TABLE 6.14**  
**PERCENTAGE DISTRIBUTION OF TENURE BY QUINTILE**

TYPE OF TENURE	Poorest	2	3	4	5
Owner	71.2	66.1	66.8	59.2	51.3
Rent-free	16.5	14.5	15.1	15.4	12.1
Rented	12.0	17.4	17.5	24.2	34.6
Squatter-occupied	0.4	1.6	0.3	1.0	0.5
Other	0.0	0.3	0.3	0.2	1.6

of relatives who were landlords were statistically significant but 'unimportant'.

The dominance of private individuals/agencies as landlords was repeated in all the quintiles with over 85.0 per cent of the households in each quintile renting from private individual agencies/individuals (See Table F.10).

As with other temporal comparisons, the issue is whether there have been significant changes over the last six years. Excluding 1990 when a different classification was used, there have been none. The number of persons living rent-free increased between 1991 and 1992 but has remained steady since.

**TABLE 6.15**  
**PERCENTAGE DISTRIBUTION OF TENURE STATUS OF HOUSEHOLDS, 1990-1995**

TENURE	SLC 90	SLC 91	SLC 92	SLC 93	SLC 94	SLC 95
Owner	67.2	60.6	60.2	58.7	59.1	59.1
Rent-free	N/A	9.99	12.5	11.6	13.2	14.4
Rented	26.0	27.7	25.2	27.4	25.7	25.0
Squatted	N/A	0.9	0.8	2.2	1.7	0.7
Other	3.8	0.9	1.3	0.2	0.2	0.7

## EXPENDITURE PATTERNS

### Water

The mean monthly payment for water in the KMA was \$320 declining through \$286 for Other Towns to \$250 for the Rural Areas (See Table F.12). In each case, the figure for 1995 was higher than that for 1994.

For households with metered water supplies, the cost per unit of water consumed is constant across the island. As in 1994, and assuming that most households are metered, there was no difference in the consumption of water among the locations, for households with access to publicly provided water. The slightly higher consumption in the KMA is linked to the higher incomes there and, associated with this, greater prevalence of washing machines, cars, lawns, gardens and so on. Reflecting the higher incomes in the KMA, payments for water as a percentage of total household consumption was lowest there, 2.0 per cent, though the absolute amount paid was highest. Again using mean payment as a surrogate for consumption, use of water in the Poorest quintile was about 60.0 per cent that of the upper quintile, an insignificant increase over 1994.

### Electricity

The grand mean payment for electricity was two times that for water and accounted for about 5.0 per cent of total consumption islandwide (See Table F.13). Despite this, the number of households using [and paying for] electric-

TABLE 6.16a

YEAR	PERCENTAGE OF HOUSEHOLDS WITH TELEPHONES
SLC 90	8.2
SLC 91	9.4
SLC 92	12.1
SLC 93	18.6
SLC 94	18.7
SLC 95	20.9

TABLE 6.16b  
MEAN MONTHLY PAYMENTS FOR UTILITIES, 1993  
TO 1995 (\$)

UTILITY	SLC 93	SLC 94	SLC 95
Water	219	256	294
Electricity	510	619	595
Telephone	462	364	414

ity was higher than the number with access to publicly-supplied water, suggesting the wider availability of electricity and that the use of electricity might be one of the earliest indicators of improvements in living conditions.

Use of this utility, too, was associated with location and with income. Households in the KMA consumed, on average, 1.46 times the electricity which the average household in the Rural Areas consumed, and 1.3 times as much as a household in Other Towns. The mean amount spent by households in the Poorest quintile was about 66.0 per cent of that spent by the upper quintile.

### Telephones

The 1994 Report had made the point that there were some problems in interpreting the data on telephone use as an indicator of relative living conditions. The telephone, as more of a good choice than either electricity or water, is found in fewer homes, 414 (21.0 per cent of the total), than water, 945 or 48 per cent, and electricity, 1,287 or 65.0 per cent. On the other hand, because it is more of a luxury, its acquisition will be sensitive to household income and availability.

Interpretation of data on expenditure for telephones is problematic because of two conflicting tendencies. In the KMA, the presence of more higher income households tends to push consumption upwards and, hence, also, the mean payment for telephones. In the Rural Areas, the average cost per call is higher, given that a large percentage of calls originating there will be long distance calls. It is the combined effect of these two opposing tendencies which helps to explain why the mean consumption in the Rural Areas was as much as 73.0 per cent of that in the KMA - a ratio higher than the ratios for electricity and water (See Table F.12). The following list shows the

percentage of households with telephones over the last six years.

More and more households are acquiring telephones and, while in the latter years the rate of increase has slowed down, the difference between 1995 and the early years is significant. One reason must be the small size of the base. In the Rural Areas, for example, a mere 8.6 per cent of households had telephones [again assuming that households analysed were equal to households with the facility] (See Table F.14). Another reason continues to be that, despite the cost, telephones can contribute significantly to feelings of security and well-being for a household, and their use can be easily controlled.

Three years is far too short a period to determine whether a trend exists in the mean payments for utilities. This will have to wait for later reports. Furthermore, the mean monthly payments for electricity and telephones did not show a steady increase over the period. Another question that can be examined in subsequent Reports is whether the amounts paid for utilities are becoming decreasing percentages of total consumption. Between 1993 and 1995, this was the case but more data are needed before firm conclusions can be reached.

## RENTALS AND MORTGAGES

### Rent

In 1995, the mean monthly rent in the KMA, \$1,709, was significantly higher than the figure for the Other Towns, \$766, and almost three times the figure in the Rural Areas, \$608 (See Table F.11). Factors such as access to services, cost of construction and sheer demand in the urban areas and the KMA help to explain the differentials among the locations.

As with other variables, the differences among the quintiles were much sharper than among the locations. The mean monthly rent for the upper quintile was almost 7.5 times the figure for the Poorest quintile, compared

TABLE 6.17  
MEAN MONTHLY PAYMENTS FOR RENT AND  
MORTGAGES, 1990-1995 (\$)

ITEM	SLC90	SLC91	SLC92	SLC93	SLC94	SLC95
Mortgage (\$)	412	704	1172	1550	1274	2227
% of Total Consumption	9.8	11.3	10.9	12.6	9.7	11.5
Rent (\$)	234	421	432	770	1136	1120
% of Total Consumption	9.2	11.2	7.4	9.8	10.2	10.1
Mortgage/Rent	1.76	1.67	2.71	2.01	1.12	1.84

**TABLE 6.18**  
**PERCENTAGE OF PERSONS OWNING EARLY INDICATOR GOODS**

DURABLE GOODS	% OF HOUSEHOLDS OWNING GOODS
Gas Stove	64.0
TV Set	58.7
Refrigerator/Freezer	49.4
Fan	40.1

with the figure for the KMA which, as noted above, was 3 times that of the Rural Areas.

Using mean rental payments only, households may be classified into three groups - the two lowest quintiles, Quintiles 3 and 4, and the upper quintile, which stands alone. Within each group, rentals appeared similar. However, an interesting aside was that the higher the income, the higher the amounts paid for rentals in relative and absolute terms. This pattern partly contrasted with that for utilities where the relative amounts paid were higher in the lower quintiles. The reason for the difference may be that the groups belong to separate and distinct market segments as far as rentals were concerned. On the other hand, the cost per unit for consumption of utilities is unrelated to a household's income.

### Mortgages

The data for mortgage payments by location were based on a total of only 72 households, very unevenly spread among the locations and quintiles (See Table F.15). Not much can be gleaned from these figures, therefore. The mean figure for the island, \$2,227, was 74.0 per cent higher than the figure for 1994. However, given the size of the sub-sample and that the 1994 figure was lower than that for 1993, this change might not mean anything.

The distorting effect of small sample size is evident, too, when mean payments were compared by quintile. The figure for the Poorest quintile was \$1 000, more than those for the next three quintiles. No meaningful comment can be made about these data.

Over the years there have been dramatic increases in the nominal amounts paid for mortgages and rents. Be-

**TABLE 6.19**  
**PERCENTAGE OF POPULATION OWNING SEMI-LUXURY GOODS**

DURABLE GOOD	% OF HOUSEHOLDS OWNING GOOD
Video Equipment	18.9
Sewing Machine	12.5
Bicycle	11.1
Stereo Equipment	11.1

tween 1990 and 1995 the factor of increase for the former was 5.4 and, for the latter, 4.85. What was interesting, too, was that, in every other year except 1994, the mean amount paid for rent was significantly below that paid for mortgage, on occasion almost half the figure. The numbers of mortgagors analysed was small but the relationship was too pronounced to be attributed to error. Also, in each year, most respondents came from the upper quintile. In Jamaica, then, the hypothesis that rental and owner housing in the private sector are substitutable and that the cost of rental equals the cost to own a dwelling does not apply.

### Property Tax

Across the island, mean monthly property tax figures remained very low at \$26 (See Table F.16). It was \$31 in 1994, an insignificant difference. However, that 705 households were analysed implies that the figure is robust and that the level of property tax across the island may need to be revised. In no location were property tax payments more than 0.5 per cent of total consumption.

In terms of location, the figure for the KMA, \$61, was again dramatically higher than those for Other Towns and Rural Areas, \$27 and \$16 respectively. Outside the upper quintiles, the differences among the quintiles were insignificant with a range of \$27.

### Ownership of durable goods

Of the 16 durable goods about which questions were asked, 13.1 per cent of the households, a marginal increase over 1994, owned none. (See Table F.17). For the other households and as was the case in 1994, three classes of good were identifiable.

Radio/cassette players remained the nearest to an ubiquitous good, found in 72.0 per cent of the households. The other group consisted of those goods found in between 40.0 per cent and 70.0 per cent of the households. They were presumed to be goods acquired as a household's living conditions improved above some basic level and, therefore, are early indicators of improvements in living standards. If this description is correct, large fractions of the population have not yet reached the level indicated by ownership of these goods (See Table 6.18). According to the survey, about 35.0 per cent of the households are using wood and/or charcoal for cooking. Despite this, the Table points to rationality in the behaviour of households. Of the goods in the list, gas stoves which would have the greatest ameliorative impact are most widespread. The importance of entertainment and relaxation as a basic need is seen in the number of households with television sets. Fans, on the other hand, are almost a luxury good.

The third group of goods was found in less than 40.0 per cent of the households (See Table 6.19).

**TABLE 6.20**  
**PERCENTAGE OWNING LUXURY GOODS**

DURABLE GOOD	% OF POPULATION OWNING GOOD
Electric stove	1.0
Air Conditioner	0.7
Phonograph	0.0
Washing Machine	3.4
Motor Bike	1.0
Car/Other Vehicle	9.0

As argued in the 1994 Report, sewing machines are becoming scarce because of the increase in the purchase of ready-made clothes and in the use of dress-makers outside the home. The use of bicycles has become associated with certain parishes. These two goods are not true semi-luxury goods and their numbers should decline even further if conditions in the economy improve. Conversely, if conditions in the economy do improve, the numbers of households acquiring video and stereo equipment should increase.

The make-up of the next group of goods was similar to that of those described as semi-luxury. This group included goods found in very few homes - apparently because they are luxury goods as in the case of air conditioners or, as in the case of phonographs, because they have been largely replaced (See Table 6.20).

With the exception of radio/cassette players, the KMA performed far better than Other Towns and Rural Areas in terms of ownership of the selected goods (See Table F.17). Table 6.21 contains the location quotients, by quintile, for goods found in at least 10.0 per cent of the households.

This table is one way of summarising the gaps among the quintiles and the effect of income on living conditions. For every other good analysed, except stereo equipment and radio/cassette player, the two upper quintiles were 'oversupplied' and the two lowest quintiles 'undersupplied'. A minor point of interest was that the location

**TABLE 6.21**  
**LOCATION QUOTIENTS FOR SELECTED GOODS, BY QUINTILE**

GOOD	LOCATION QUOTIENT				
	Poorest	2	3	4	5
Radio/Cassette Players	0.85	1.05	1.04	1.00	1.02
Gas Stoves	0.52	0.82	1.01	1.07	1.19
TV Sets	0.62	0.79	0.99	1.08	1.18
Refrigerators	0.37	0.68	0.99	1.08	1.31
Stereo Equipment	0.24	0.43	0.67	0.93	1.73
Video Equipment	0.26	0.41	0.72	1.16	1.60
Sewing Machines	0.65	0.88	0.77	1.03	1.22
Bicycles	0.45	0.77	0.82	1.17	1.30

**TABLE 6.22**  
**VALUES OF *d* FOR SELECTED GOODS**

ITEM	<i>d</i>
Gas Stove	42.9
TV Set	32.7
Refrigerator	46.8
Stereo equipment	16.5
Video equipment	25.3

quotients for the top end goods, stereo and video equipment, were far more polarised than the rest, pointing of course to the greater dominance of these goods in upper quintile households.

Another crude way of measuring the effect of income on ownership of durable goods is by calculating the difference in ownership between the Poorest and other quintiles. This method assumes that the percentage of households in the poorest quintile who owned a particular good is the percentage in each quintile that would have owned the good 'in any case'. The difference, *d*, between that figure and the percentage for the upper quintile, for example, may be interpreted as being 'caused' by the higher mean income in the upper quintile. This interpretation, however, should not be taken to extremes as *d* excludes the effects of prior and intervening variables.

What is interesting in this table are the low values for stereo and video equipment. This occurred because of the relatively small number of households in the population as a whole owning these items.

### Indices of Housing Amenity

Two Indices of Housing Amenity were constructed using a simple additive scale. The first index used measures that were presumed to contribute positively to well-being, in terms of the physical unit. The measures selected were detached units, block and steel walls, exclusive use of flush toilets, indoor taps, electricity, exclusive use of kitchens and ownership of unit. The second index added an index for durable goods and is perhaps more an index of overall living conditions. Both indices were the un-weighted means of the appropriate percentages of households enjoying these items and were calculated for location and quintile.

The KMA had the best values on both indices but the differences among the locations were relatively small. More importantly, the 1995 indices, virtually the same as the 1994 indices, had remained low indicating that, in this year, too, for the country as a whole, living conditions, as summarised by the selected indicators, were generally poor. Again, too, the index for ownership of durable goods was well below that for the physical unit - 28.7, 24.0 and 18.2 for the KMA, Other Towns and the Rural Areas respectively. See TABLE 6.23.

**TABLE 6.23**  
**INDICES OF HOUSING AMENITY BY LOCALTION,**  
**1994 AND 1995**

LOCATION	Index of Housing Amenity - Physical Unit		Index of Housing Amenity- Including Durable Goods	
	SLC94	SLC95	SLC94	SLC95
KMA	64.5	65.0	59.9	60.4
Other towns	60.0	59.3	55.4	54.7
Rural Areas	56.6	57.4	51.8	52.3

**TABLE 6.24**  
**INDICES OF HOUSING AMENITY BY QUINTILE**  
**1994-1995**

Quintile	Index of Housing Amenity-Physical Unit		Index of Housing Amenity- Including Durable Goods	
	SLC94	SLC95	SLC94	SLC95
Poorest	45.2	50.5	39.8	45.4
2	53.2	53.4	48.7	48.7
3	59.5	59.0	54.7	54.0
4	63.7	63.6	58.7	54.4
5	68.3	67.2	63.4	62.3

The indices for the quintiles were as follows. See TABLE 6.24.

The indices confirm what has been discussed above. Income appears to be a better predictor of housing and general living conditions than location, though there is overlap between the two variables. There was virtually no change from 1994 and the comments made then are appropriate. Conditions throughout the country are harsh generally and particularly so for rural households and households in the lower quintiles.

### Conclusion

In 1995, as in the other years for which SLC data are available, the two major predictor variables used - location and income - were significantly correlated with most of the dependent variables. Housing conditions as measured by the selected variables were best in the KMA and worst in the Rural Areas with Other Towns occupying an intermediate position. Similarly, but in a more pronounced fashion, most measures improved with income. The major exception was tenure but this was explained largely on the basis of location. The report also noted that rented accommodation can be high quality accommodation.

No standard exists against which to assess overall conditions. On some measures e.g., access to potable water, ownership and exclusive use of kitchens and, perhaps, the use of electricity, the island mean suggested that conditions were at least fair. However, when the con-

sumption of durable goods was examined, living conditions appeared harsh in 1995, as they did in earlier surveys. And, as implied above, households in the lower quintiles and from the Rural Areas were the least well placed.

It may be argued that this comment about the persistence of the harshness of living conditions generally and particularly in the Rural Areas and in the lower quintiles are too extreme. Several apparent trends seem to argue against this. These include the following three -

- i. the number of households with flush toilets has been increasing slightly since 1991 with complementary small decreases in the use of pit toilets;
- ii. throughout the period of the Reports, there have been increases in the number of households using electricity for lighting and a generally slow decline in the number using kerosene;
- iii. the number of households using indoor taps/pipes has increased slightly since 1991.

In addition, the indices of amenity had increased over the period and although none of these trends was statistically significant individually and the differences were small, there may be, in fact, underlying real increases in the use of utilities. The effect of small sample size has been noted.

However, the use of utilities such as water and electricity is at least partly insensitive to income. Similarly, a block-and-steel building that has indoor plumbing and is wired for electricity retains these features even if it is sequentially occupied by progressively lower income households. Consequently, while the survey has shown that the physical stock is of fair quality, general living conditions could well be worse than implied by the variables relating to the structure. Perhaps for the future, in addition to measures based on the consumption of durable goods, measures to do with privacy, space and the maintenance of dwellings would be included in the surveys. These should improve the analysis.

The significant spatial variations in the standard of living should be cause for concern. The spatial divisions used in the survey were very broad but it was clear that the worst living conditions are found among poor households in the rural areas. Apologists for urban-based development programmes would point to the spatial concentration of poverty there. This argument is valid but incomplete. Urban development efforts must be complemented by simultaneous attention to rural locations with their higher degrees of destitution. Contributing to the concentration of poverty in urban areas is the insufficient attention paid to the rural.

## TECHNICAL NOTES

1. It was decided not to calculate the error associated with each estimate of a proportion. However, assuming that  $p=0.5$ , the maximum error for proportions based on the total sample was 2.9 per cent ( $\alpha=.01$ ). Wherever the actual proportion was more or less than 0.5, the actual error was, of course, smaller.
2. In this section of the Report, all tests of correlation were done at the 99 per cent level of confidence.
3. The null hypothesis,  $H_0$ , for this test was that, on the assumption that there was no trend, the probability of any year having a value higher than the previous was 0.5 i.e., in any one year  $p=q=0.5$ . Using the binomial formula, the probability of obtaining four or more positive signs in five years i.e., four or more years with each higher than the preceding, was  $p=.188$ . However, the effect of the small size of the sample should be noted. Even if all the years had a positive sign, the probability that it would have been due to chance would be 0.31, still well above the level of significance set ( $\alpha=.01$ ). The value of  $r$  was also calculated, and while this was 0.84, this too was not significant at the .01 level.
4. An index of dissimilarity is based on the differences between the percentage distributions of two groups on a selected variable. Using one group's distribution as the reference, the index shows the percentage of individuals in the other group who would have to change their status so that their group's distribution would become the same as the reference group. The index is, therefore, a measure of relative deprivation. It can be calculated by dividing the sum of the absolute differences between the paired figures by 2 or by finding the sum of absolute values with the same sign. The index for source of drinking water, KMA versus Rural Areas, was calculated as indicated below. The KMA was the reference location.

### SOURCE OF WATER

LOCATION	Indoor private	Outside standpipe	Public	Well	River	Rainwater	Other
KMA	75.1	21.8	1.6	0.0	0.1	0.5	0.9
Rural	17.2	18.5	27.5	0.1	8.0	24.5	4.2
Difference	-57.9	-3.3	25.9	0.1	7.9	24.0	3.3
Rural-KMA							

Sum of differences with negative signs  $(-57.9) + (-3.3) = 61.2$  [Index of Dissimilarity - 61.2]

The index above was the sum of difference with negative signs.

5. A location quotient is the ratio between an actual distribution and a hypothesized 'expected' figure. It is found by dividing the actual distribution by the expected figure. A value less than unity indicates an 'undersupply' of a good and a value above unity an 'oversupply'. In the case of durable goods, the expected figure was the overall weighted mean for each good. The mean represents the percentage of households in each quintile that would have owned a particular good if the distribution of that good among the quintiles were random. For example, the island mean for gas stoves was 64.0 per cent (See Table F.17) and the actual figure for the Poorest quintile was 33.5 per cent. Therefore, the location quotient for the Poorest quintile was .523  $[33.5/64.0]$ , an undersupply. Put another way, given that, in the population as a whole, 64.0 per cent of the households had gas stoves, the Poorest quintile had about 52 per cent of the number of gas stoves it 'ought' to have had.
6. Any index of quality-of-life, such as this one, is sensitive to the number and type of measures used and to their weightings. There are no definitive indicators that should be included and, often, the choice of indicators is determined by what is available. The Index of Housing Amenity should, therefore, be interpreted only in terms of the indicators used and their weightings. It cannot be used to infer about living conditions generally.

To construct this index, measures on each variable that were presumed to contribute positively to well-being i.e., that were measures of amenity, were used. The example below demonstrates how the indices for the KMA were derived. Both indices were the unweighted means of the sums of the respective totals. Note that, in calculating the index for durable goods, the value for 'None' was subtracted as that measure was one measure of disamenity.

# Standard tables

Note: In all Standard tables, percentages may not add to 100.0 due to rounding



## SECTION A

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# DEMOGRAPHIC CHARACTERISTICS

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**TABLE A-1  
DISTRIBUTION OF SAMPLE HOUSEHOLDS AND HOUSEHOLD MEMBERS,  
BY AREA AND QUINTILE**

Classification Area	Households Analysed	Household Members Analysed	Households Distribution	Household Members
	(N)	(N)	(%)	(%)
KMA	629	2,298	34.4	32.6
Other Towns	399	1,492	19.3	19.0
Rural Areas	948	3,749	46.2	48.4
<b>Quintile*</b>				
Poorest	257	1,509	13.0	20.0
2	313	1,505	15.8	20.0
3	338	1,504	17.1	20.0
4	427	1,512	21.6	20.0
5	641	1,509	32.4	20.0
<b>Jamaica</b>	<b>1,976</b>	<b>7,539</b>	<b>100.0</b>	<b>100.0</b>

NOTE: (i) Per cent estimates for Area and Jamaica adjusted for non-response

(ii) Percentages may not add to 100 due to rounding

\* The appendix describes the method used to classify household members into quintiles based on per capita consumption expenditure.

**TABLE A-2  
PERCENTAGE DISTRIBUTION OF HOUSEHOLD MEMBERS BY QUINTILE, AND AREA**

Quintile Area	Poorest (N=1509)	2 (N=1505)	3 (N=1504)	4 (N=1512)	5 (N=1509)
KMA	14.7	17.1	30.5	35.7	54.4
Other Towns	16.2	16.2	21.5	23.4	21.6
Rural	69.1	66.7	47.9	40.9	24.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**TABLE A-3**  
**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY HOUSEHOLD SIZE, AREA, QUINTILE AND SEX OF HEAD OF HOUSEHOLD**

Classification	Households	Household Size								Total
	Analysed (N)	1	2	3	4	5	6	7	8	
<b>Area</b>										
KMA	629	21.9	19.0	15.0	14.6	10.3	7.9	4.6	6.7	100.0
Other Towns	399	22.4	13.8	18.9	13.5	11.3	8.0	5.0	7.1	100.0
Rural	948	22.4	13.6	14.5	12.3	12.1	10.1	5.0	10.1	100.0
<b>Quintile</b>										
Poorest	257	9.3	6.2	7.8	11.7	14.8	14.4	9.3	26.5	100.0
2	313	10.5	7.7	14.4	13.7	17.6	15.3	9.6	11.2	100.0
3	338	13.9	8.6	18.1	16.0	15.1	11.8	5.0	11.5	100.0
4	427	16.6	19.9	19.2	16.6	11.5	7.7	4.5	4.0	100.0
5	641	40.9	22.9	15.0	11.1	5.3	2.7	0.9	1.3	100.0
<b>Sex of Household Head</b>										
Male	1,125	27.0	15.0	14.1	13.4	10.4	8.6	4.0	7.5	100.0
Female	851	16.0	16.2	17.4	13.2	12.5	9.3	6.0	9.5	100.0
<b>Jamaica</b>	1,976	22.2	15.5	15.5	13.3	11.3	8.9	4.8	8.4	100.0

NOTE: Estimates for Area, Sex of Household Head and Jamaica adjusted for non-response

**TABLE A-4**  
**HOUSEHOLD COMPOSITION BY AREA AND QUINTILE**

Classification	Household Members Analysed (N)	Mean Total Size	Mean No. of Adult Males	Mean No. of Adult Females	Mean No. of Children
<b>Area</b>					
KMA	2,298	3.59	1.09	1.32	1.18
Other Towns	1,492	3.72	1.15	1.27	1.30
Rural	3,749	3.97	1.25	1.25	1.48
<b>Quintile</b>					
Poorest	1,509	5.87	1.44	1.65	2.79
2	1,505	4.81	1.24	1.57	2.00
3	1,504	4.45	1.30	1.50	1.65
4	1,512	3.54	1.20	1.29	1.05
5	1,509	2.35	0.99	0.88	0.49
<b>Jamaica</b>	7,539	3.79	1.18	1.28	1.34

NOTE: Estimates for Area and Jamaica adjusted for non-response

**TABLE A-5  
HOUSEHOLD COMPOSITION BY SEX OF HOUSEHOLD HEAD, AND AREA**

Area	SEX OF HEAD OF HOUSEHOLD									
	Household Members Analysed	Mean Total Size	Male Mean No. of Adult Males	Mean No. of Adult Females	Mean No. of Children	Household Members Analysed (N)	Mean Total Size	Female Mean No. of Adult Males	Mean No. of Adult Females	Mean No. of Children
KMA	1,031	3.22	1.38	0.91	0.93	1,267	3.94	0.83	1.71	1.41
Other Towns	827	3.54	1.40	1.01	1.13	665	3.96	0.81	1.63	1.53
Rural	2,212	3.81	1.46	0.99	1.37	1,537	4.24	0.91	1.67	1.67
<b>Jamaica</b>	<b>4,070</b>	<b>3.58</b>	<b>1.42</b>	<b>0.97</b>	<b>1.19</b>	<b>3,469</b>	<b>4.07</b>	<b>0.86</b>	<b>1.68</b>	<b>1.53</b>

NOTE: Estimates adjusted for non-response.

**TABLE A-6  
HOUSEHOLD COMPOSITION BY SEX OF HOUSEHOLD HEAD AND QUINTILE**

Quintile	SEX OF HEAD OF HOUSEHOLD									
	Household Members Analysed (N)	Mean Total Size	Male Mean No. of Adult Males	Mean No. of Adult Females	Mean No. of Children	Household Members Analysed (N)	Mean Total Size	Mean No. of Adult Males	Mean No. of Adult Females	Mean No. of Children
Poorest	756	5.91	1.78	1.37	2.75	753	5.84	1.10	1.91	2.82
2	799	4.87	1.59	1.36	1.93	706	4.74	0.86	1.80	2.08
3	727	4.20	1.50	1.17	1.53	777	4.71	1.08	1.85	1.78
4	855	3.48	1.40	1.07	1.00	657	3.63	0.93	1.57	1.13
5	933	2.25	1.24	0.58	0.43	576	2.54	0.52	1.43	0.59
<b>Jamaica</b>	<b>4070</b>	<b>3.62</b>	<b>1.44</b>	<b>0.98</b>	<b>1.23</b>	<b>3469</b>	<b>4.08</b>	<b>0.86</b>	<b>1.68</b>	<b>1.53</b>

**TABLE A-7  
PERCENTAGE DISTRIBUTION OF HOUSEHOLD MEMBERS BY  
AGE GROUP, SEX AND AREA**

Age Group of Household  Members (years)	MALE				FEMALE				Total Jamaica
	Area				Area				
	KMA (N=1061)	Other Towns (N=744)	Rural Areas (N=1867)	Total (N=3672)	KMA (N=1237)	Other Towns (N=748)	Rural Areas (N=1882)	Total (N=3867)	
0-4	12.8	12.5	11.5	12.1	11.4	8.9	11.3	10.9	11.5
5-9	12.1	11.8	13.0	12.5	9.2	11.3	13.9	11.8	12.1
10-14	9.0	13.4	12.8	11.7	11.2	11.2	12.4	11.8	11.8
15-19	10.4	10.5	10.3	10.4	9.5	10.2	9.8	9.8	10.1
20-24	10.5	7.1	8.2	8.7	9.6	9.6	7.4	8.6	8.6
25-29	9.0	8.0	7.3	8.0	11.1	9.6	6.7	8.8	8.4
30-34	7.3	8.2	6.2	6.9	8.6	8.2	7.3	7.9	7.5
35-39	7.0	6.4	5.4	6.1	6.2	7.8	4.3	5.6	5.8
40-44	5.9	5.7	4.9	5.3	6.2	4.4	4.5	5.1	5.2
45-49	3.6	4.0	3.2	3.5	3.1	2.5	3.1	3.0	3.2
50-54	3.8	2.5	3.5	3.4	3.5	1.8	2.9	2.9	3.2
55-59	2.2	1.6	2.9	2.5	2.1	3.9	2.9	2.8	2.6
60-64	1.5	2.3	2.9	2.3	2.0	2.3	3.0	2.5	2.4
65+	5.0	5.8	8.0	6.6	6.4	8.4	10.3	8.6	7.7
<b>All Ages</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

NOTE: Estimates adjusted for non-response .

**TABLE A-8  
PERCENTAGE DISTRIBUTION OF HOUSEHOLD MEMBERS BY SEX OF HOUSEHOLD HEAD,  
AREA, AND AGE GROUP**

Age Group of Household  Members (years)	MALE				FEMALE				BOTH SEXES			
	Area				Area				Area			
	KMA (N=1031)	Other Towns (N=827)	Rural Areas (N=2212)	Total (N=4070)	KMA (N=1267)	Other Towns (N=665)	Rural Areas (N=1537)	Total (N=3469)	KMA (N=2298)	Other Towns (N=1492)	Rural Areas (N=3749)	Jamaica (N=7539)
0-4	10.8	9.3	10.6	10.4	13.1	12.2	12.5	12.7	12.1	10.6	11.3	11.5
5-9	10.0	9.6	13.1	11.6	11.0	13.9	14.0	12.8	10.5	11.5	13.4	12.1
10-14	8.7	12.8	12.4	11.5	11.3	11.8	13.0	12.1	10.2	12.3	12.6	11.8
15-19	9.3	9.2	8.9	9.1	10.3	11.8	11.8	11.2	9.9	10.4	10.1	10.1
20-24	9.5	7.9	8.0	8.4	10.3	8.9	7.4	8.8	10.0	8.3	7.8	8.6
25-29	9.5	9.6	7.2	8.3	10.6	7.7	6.7	8.5	10.1	8.8	7.0	8.4
30-34	9.9	8.9	7.0	8.1	6.7	7.6	6.4	6.8	8.1	8.3	6.8	7.5
35-39	7.0	7.5	5.0	6.1	6.2	6.6	4.6	5.6	6.6	7.1	4.9	5.8
40-44	7.2	5.6	5.2	5.8	5.2	4.3	4.0	4.5	6.1	5.0	4.7	5.2
45-49	4.0	4.1	3.8	3.9	2.8	2.1	2.3	2.5	3.3	3.2	3.2	3.2
50-54	4.3	2.4	4.1	3.8	3.1	1.9	2.1	2.5	3.6	2.2	3.3	3.2
55-59	2.7	2.2	3.4	3.0	1.8	3.4	2.1	2.2	2.2	2.8	2.9	2.6
60-64	1.9	3.1	2.9	2.7	1.6	1.4	3.0	2.1	1.7	2.3	2.9	2.4
65+	5.3	7.9	8.5	7.5	6.0	6.4	10.2	7.9	5.7	7.2	9.2	7.7
<b>All Ages</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

NOTE: Estimates adjusted for non-response .

**TABLE A-9  
COMPOSITION OF HOUSEHOLDS WITH FEMALES AS HEAD,  
BY AREA AND QUINTILE**

Classification	Households Analysed (N)	Household Composition (per cent)				Total
		No man, No Child	No man, With Children	With man, No Child	With man, With Children	
<b>Area</b>						
KMA	321	33.1	39.8	6.6	20.6	100.0
Other Towns	166	32.1	43.5	4.6	19.8	100.0
Rural	364	29.2	48.2	4.3	18.4	100.0
<b>Quintile</b>						
Poorest	129	17.8	57.4	0.0	24.8	100.0
2	149	16.8	57.1	3.4	22.8	100.0
3	165	23.6	52.7	3.0	20.6	100.0
4	181	32.6	39.8	8.3	19.3	100.0
5	227	54.2	25.6	7.5	12.8	100.0
<b>Jamaica</b>	851	31.3	43.9	5.3	19.6	100.0

NOTE: Estimates for Area and Jamaica adjusted for non-response.

**TABLE A-10  
COMPOSITION OF HOUSEHOLDS WITH FEMALES AS HEAD, BY AREA  
(WEIGHTED BY HOUSEHOLD SIZE)**

Area	Households Analysed (N)	Household Composition (per cent)				Total
		No man, No child	No man With Children	With man, No Child	With man, With Children	
KMA	321	15.8	50.1	4.1	30.1	100.0
Other Towns	166	14.7	56.1	2.5	26.7	100.0
Rural	364	12.3	58.2	2.9	26.7	100.0
<b>Jamaica</b>	851	14.1	54.6	3.3	28.0	100.0

NOTE: Estimates for Area and Jamaica adjusted for non-response.

**TABLE A-11**  
**DISTRIBUTION OF HOUSEHOLDS BY SEX OF HEAD OF HOUSEHOLD, AREA AND QUINTILE**

Classification Area	Sex of head of Household					
	Male Households Analysed		Female Households Analysed		Both Sexes Households Analysed	
	(N)	(%)	(N)	(%)	(N)	(%)
KMA	308	48.4	321	51.7	629	100.0
Other Towns	233	57.9	166	42.1	399	100.0
Rural	584	61.9	364	38.1	948	100.0
<b>Quintile</b>						
Poorest	128	49.8	129	50.2	257	100.0
2	164	52.4	149	47.6	313	100.0
3	173	51.2	165	48.8	338	100.0
4	246	57.6	181	42.4	427	100.0
5	414	64.6	227	35.4	641	100.0
<b>Jamaica</b>	<b>1,125</b>	<b>56.0</b>	<b>851</b>	<b>44.0</b>	<b>1,976</b>	<b>100.0</b>

NOTE: Estimates for Area and Jamaica adjusted for non-response.

**TABLE A-12**  
**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY GENDER, AREA,  
AND SIZE OF HOUSEHOLD**

Size	AREA											
	JAMAICA (N=1976)			KMA (N=629)			Other Towns (N=339)			Rural Areas (N=948)		
	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %
1	14.9	6.8	0.0	13.3	7.7	0.0	14.6	7.0	0.0	16.5	5.8	0.0
2	2.2	2.5	10.5	2.0	4.1	13.0	2.7	1.6	9.0	2.1	1.8	9.3
3	0.6	1.9	12.7	0.9	2.9	10.8	0.2	1.8	16.1	0.6	1.1	12.7
4	0.2	0.5	13.1	0.2	0.5	14.4	0.0	0.6	13.7	0.2	0.4	12.2
5+	0.1	0.6	33.5	0.1	0.9	29.2	0.5	0.2	32.0	0.0	0.4	36.9
<b>Total</b>	<b>18.0</b>	<b>12.2</b>	<b>69.8</b>	<b>16.5</b>	<b>16.1</b>	<b>67.4</b>	<b>18.1</b>	<b>11.2</b>	<b>70.7</b>	<b>19.4</b>	<b>9.5</b>	<b>71.1</b>

NOTE: Estimates adjusted for non-response .

**TABLE A-13  
PERCENTAGE DISTRIBUTION OF SINGLE GENDER HOUSEHOLDS BY QUINTILE  
AND SIZE OF HOUSEHOLD**

All Household Size	QUINTILE														
	1 (N=257)			2 (N=313)			3 (N=338)			4 (N=427)			5 (N=641)		
	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %	All Male %	All Female %	Mixed %
1	3.5	5.4	0.0	5.4	4.8	0.0	9.5	4.1	0.0	11.2	5.4	0.0	29.2	10.5	0.0
2	0.4	0.4	5.8	1.0	1.3	5.1	1.2	1.5	5.9	3.5	1.9	13.8	3.1	4.5	14.8
3	0.8	0.4	6.6	0.6	1.3	12.2	0.3	3.3	13.3	0.2	2.1	15.7	1.1	1.7	13.0
4	0.0	0.8	10.5	0.0	0.6	13.7	0.6	0.3	15.1	0.0	0.5	16.9	0.2	0.3	10.9
5+	0.4	0.0	65.0	0.0	1.6	52.4	0.3	1.2	43.5	0.0	0.5	28.3	0.2	0.2	10.4
<b>Total</b>	5.1	7.0	87.9	7.0	9.6	83.4	11.8	10.4	77.8	15.0	10.3	74.7	33.7	17.2	49.1



**SECTION B**

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**HOUSEHOLD  
CONSUMPTION**

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**TABLE B-1**  
**MEAN ANNUAL PER CAPITA CONSUMPTION BY AREA AND COMMODITY GROUP**

Commodity Group	JAMAICA		KMA	AREA Other Towns		Rural Area		
	(\$)	Per cen of Total		(\$)	of Total	(\$)	Per cent	
1 Food and Beverages	19,439	54.7	23,920	50.0	20,008	56.2	16,200	59.5
2 Fuel and Household Supplies	1,774	5.0	1,988	4.2	1,990	5.6	1,545	5.7
3 Housing & Household Expenses	3,882	10.9	6,954	14.5	3,690	10.4	1,891	6.9
4 Household Durable Goods	435	1.2	744	1.6	241	0.7	304	1.1
5 Personal Care	892	2.5	1,035	2.2	1,030	2.9	741	2.7
6 Health Care	937	2.6	1,193	2.5	1,015	2.8	734	2.7
7 Clothing and Footwear	3,567	10.0	4,949	10.4	3,211	9.0	2,776	10.2
8 Transportation	2,651	7.5	3,943	8.2	2,818	7.9	1,716	6.3
9 Education	1,021	2.9	1,521	3.2	1,037	2.9	678	2.5
10 Recreation	340	1.0	737	1.5	138	0.4	152	0.6
11 Miscellaneous Consumption	584	1.6	816	1.7	454	1.3	480	1.8
<b>Total Consumption Expenditure</b>	<b>35,522</b>	<b>100.0</b>	<b>47,801</b>	<b>100.0</b>	<b>35,632</b>	<b>100.0</b>	<b>27,216</b>	<b>100.0</b>
<b>Median Per Capita Expenditure</b>	<b>26,521</b>		<b>35,205</b>		<b>29,454</b>		<b>21,572</b>	

NOTE: Figures adjusted for non-response

**TABLE B-2**  
**MEAN ANNUAL PER CAPITA CONSUMPTION BY QUINTILE AND COMMODITY GROUP**

Commodity Group	Poorest		Quintile 2		Quintile 3		Quintile 4		Quintile 5	
	(\$)	Per cent of Total								
1 Food and Beverages	7,983	64.1	12,320	62.6	16,248	60.9	22,300	58.6	37,989	48.5
2 Fuel and Household Supplies	804	6.5	1,286	6.5	1,617	6.1	2,107	5.5	2,987	3.8
3 Housing & Household Expenses	577	4.6	981	5.0	1,958	7.3	3,538	9.3	11,435	14.6
4 Household Durable Goods	59	0.5	139	0.7	210	0.8	416	1.1	1,302	1.7
5 Personal Care	392	3.1	579	2.9	844	3.2	1,003	2.6	1,652	2.1
6 Health Care	257	2.1	415	2.1	557	2.1	1,048	2.8	2,268	2.9
7 Clothing and Footwear	1,297	10.4	2,302	11.7	2,946	11.0	4,037	10.6	6,988	8.9
8 Transportation	447	3.6	798	4.1	1,142	4.3	1,832	4.8	8,916	11.4
9 Education	399	3.2	559	2.8	702	2.6	957	2.5	2,237	2.9
10 Recreation	39	0.3	56	0.3	120	0.4	224	0.6	1,186	1.5
11 Miscellaneous Consumption	194	1.6	258	1.3	341	1.3	607	1.6	1,438	1.8
<b>Total Consumption Expenditure</b>	<b>12,449</b>	<b>100.0</b>	<b>19,692</b>	<b>100.0</b>	<b>26,685</b>	<b>100.0</b>	<b>38,069</b>	<b>100.0</b>	<b>78,398</b>	<b>100.0</b>

**TABLE B-3**  
**MEAN ANNUAL PER CAPITA CONSUMPTION BY SEX OF HEAD OF HOUSEHOLD, BY COMMODITY GROUP**

Commodity Group	MALE		FEMALE	
	(\$)	Per cent of Total	(\$)	Per cent Total
1 Food and Beverages	20,589	54.0	18,127	55.7
2 Fuel and Household Supplies	1,813	4.7	1,729	5.3
3 Housing & Household Expenses	4,114	10.8	3,618	11.1
4 Household Durable Goods	422	1.1	451	1.4
5 Personal Care	890	2.3	893	2.8
6 Health Care	1,002	2.6	863	2.7
7 Clothing and Footwear	3,648	9.6	3,474	10.7
8 Transportation	3,443	9.0	1,748	5.4
9 Education	995	2.6	1,050	3.2
10 Recreation	439	1.2	227	0.7
11 Miscellaneous Consumption	784	2.1	356	1.1
<b>Total Consumption Expenditure</b>	<b>38,140</b>	<b>100.0</b>	<b>32,536</b>	<b>100.0</b>

NOTE: Figures adjusted for non-response

**TABLE B-4**  
**MEAN ANNUAL PER CAPITA FOOD EXPENDITURE BY AREA, AND COMMODITY GROUP**

Commodity Group	(\$)	Jamaica		KMA		Area Other Towns		Rural Areas	
		Percent of Total	(\$) Total	Percent of Total	(\$) Total	Percent of Total	(\$) Total	Percent of Total	
1 Meat, Poultry and Fish	4,512	23.2	5,016	21.0	4,962	24.8	3,997	24.7	
2 Dairy Products	1,930	9.9	2,253	9.4	2,075	10.4	1,655	10.2	
3 Oils and Fats	511	2.6	554	2.3	530	2.7	476	2.9	
4 Cereals and Cereal Products	2,361	12.1	2,471	10.3	2,420	12.1	2,265	14.0	
5 Starchy Roots and Tubers	1,087	5.6	967	4.0	1,015	5.1	1,197	7.4	
6 Vegetables and Juices	844	4.3	1,064	4.4	795	4.0	716	4.4	
7 Fruits	522	2.7	741	3.1	506	2.5	381	2.3	
8 Sugar/ Sweets	430	2.2	446	1.9	426	2.1	422	2.6	
9 Miscellaneous Food	1,103	5.7	1,390	5.8	1,089	5.4	916	5.7	
10 Breakfast Drinks, Beverages	784	4.0	931	3.9	765	3.8	691	4.3	
11 Meals away from home	5,353	27.5	8,087	33.8	5,425	27.1	3,486	21.5	
<b>Total Consumption Expenditure</b>	<b>19,439</b>	<b>100.0</b>	<b>23,920</b>	<b>100.0</b>	<b>20,008</b>	<b>100.0</b>	<b>16,200</b>	<b>100.0</b>	

Note: Figures adjusted for non-response

**TABLE B-5**  
**MEAN ANNUAL PER CAPITA FOOD EXPENDITURE, BY QUINTILE AND COMMODITY GROUP**

Commodity Group	(\$)	QUINTILE								
		Poorest Per cent Total	(\$)	Quintile 2 Per cent of Total	(\$)	Quintile 3 Per cent of Total	(\$)	Quintile 4 Per cent of Total	(\$)	Quintile 5 Per cent of Total
1 Meat, Poultry and Fish	2,031	25.5	3,084	25.0	3,880	23.9	5,249	23.5	8,234	21.7
2 Dairy Products	804	10.1	1,251	10.2	1,593	9.8	2,170	9.7	3,660	9.6
3 Oils and Fats	286	3.6	380	3.1	450	2.8	570	2.6	856	2.3
4 Cereals and Cereal Products	1,342	16.8	1,875	15.2	2,134	13.1	2,634	11.8	3,748	9.9
5 Starchy Roots and Tubers	667	8.4	909	7.4	979	6.0	1,218	5.5	1,690	4.5
6 Vegetables and Juices	340	4.3	506	4.1	660	4.1	956	4.3	1,680	4.4
7 Fruits	146	1.8	250	2.0	367	2.3	544	2.4	1,246	3.3
8 Sugar / Sweets	286	3.6	352	2.9	390	2.4	470	2.1	632	1.7
9 Miscellaneous Food	575	7.2	845	6.9	967	6.0	1,253	5.6	1,861	4.9
10 Breakfast Drinks, Beverages	248	3.1	409	3.3	519	3.2	844	3.8	1,900	5.0
11 Meals Away From Home	1,257	15.7	2,460	20.0	4,308	26.5	6,392	28.66	12,482	32.9
<b>Total Consumption Expenditure</b>	<b>7,983</b>	<b>100.0</b>	<b>12,320</b>	<b>100.0</b>	<b>16,248</b>	<b>100.0</b>	<b>22,300</b>	<b>100.0</b>	<b>37,989</b>	<b>100.0</b>

**TABLE B-6**  
**MEAN ANNUAL PER CAPITA FOOD EXPENDITURE BY SEX OF HEAD OF HOUSEHOLD AND COMMODITY GROUP**

Commodity Group	(\$)	Household Head	
		Male Per cent of Total	Female Per cent of Total
1 Meat, Poultry and Fish	4,740	23.0	23.5
2 Dairy Products	2,017	9.8	10.1
3 Oils and Fats	524	2.5	2.7
4 Cereals and Cereal Products	2,428	11.8	12.6
5 Starchy Roots and Tubers	1,198	5.8	5.3
6 Vegetables and Juices	877	4.3	4.5
7 Fruits	539	2.6	2.8
8 Sugar / Sweets	435	2.1	2.4
9 Miscellaneous Food	1,104	5.4	6.1
10 Breakfast Drinks, Beverages	927	4.5	3.4
11 Meals away from home	5,800	28.2	26.7
<b>Total Food</b>	<b>20,589</b>	<b>100.0</b>	<b>100.0</b>
<b>Total Consumption Expenditure</b>	<b>38,140</b>		<b>32,536</b>
<b>Total Household Expenditure</b>	<b>40,733</b>		<b>33,779</b>

NOTE: Figures adjusted for non-response

**TABLE B-7**  
**MEAN ANNUAL PER CAPITA CONSUMPTION AND NON-CONSUMPTION EXPENDITURE**  
**BY AREA, QUINTILE AND SEX OF HEAD OF HOUSEHOLD**

Classification	Consumption Expenditure			Non-Consumption Expenditure		Total Expenditure	
	(\$)	(%)	(\$)	(%)	(\$)	(%)	
<b>Area</b>							
KMA	47,801	94.3	2,871	5.7	50,671	100.0	
Other Towns	35,632	94.6	2,054	5.4	37,686	100.0	
Rural Areas	27,216	95.4	1,316	4.6	28,532	100.0	
<b>Quintile</b>							
Poorest	12,449	98.5	195	1.5	12,644	100.0	
2	19,692	96.8	651	3.2	20,343	100.0	
3	26,685	97.2	769	2.8	27,454	100.0	
4	38,069	96.3	1,448	3.7	39,517	100.0	
5	78,398	92.5	6,367	7.5	84,765	100.0	
<b>Sex of Household</b>							
Head							
Male	38,140	93.6	2,594	6.4	40,733	100.0	
Female	32,536	96.3	1,243	3.7	33,779	100.0	
<b>Jamaica</b>	<b>35,522</b>	<b>94.8</b>	<b>1,963</b>	<b>5.2</b>	<b>37,485</b>	<b>100.0</b>	

NOTE: Estimates for Area, Sex of Household Head and Jamaica adjusted for non-response

**TABLE B-8**  
**DISTRIBUTION OF ANNUAL CONSUMPTION EXPENDITURE, BY DECILE AND QUINTILE**

Classification	Percent Share in National Consumption	Mean Consumption (\$)	Minimum and Maximum and Consumption		Mean Food Consumption Amount (\$)	Per cent of Total Consumption
			Minimum (\$)	Maximum (\$)		
<b>Decile</b>						
Poorest	2.94	10,294	1,705	12,700	6,740	65.5
2	4.17	14,606	12,702	16,509	9,228	63.2
3	5.15	18,053	16,537	19,623	11,329	62.8
4	6.05	21,342	19,632	23,149	13,318	62.4
5	6.99	24,686	23,176	26,452	15,287	61.9
6	8.19	28,668	26,521	31,200	17,201	60.0
7	9.77	34,159	31,205	37,629	20,231	59.2
8	12.00	41,979	37,649	47,039	24,370	58.1
9	15.59	54,674	47,074	64,346	30,497	55.8
10	29.15	102,091	64,598	423,859	45,471	44.5
<b>Quintile</b>						
Poorest	7.11	12,450	1,705	16,509	7,983	64.1
2	11.20	19,698	16,537	23,149	12,320	62.6
3	15.18	26,677	23,176	31,200	16,248	60.9
4	21.77	38,069	31,205	47,039	22,300	58.6
5	44.74	78,383	47,074	423,859	37,989	48.5
<b>Jamaica</b>	<b>100.00</b>	<b>35,522*</b>	<b>1,705</b>	<b>423,859</b>	<b>19,439*</b>	<b>54.7*</b>

\* Adjusted for non-reponse

**TABLE B-9  
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY ANNUAL CONSUMPTION EXPENDITURE,  
BY AREA**

Annual Consumption Expenditure (\$)	Area			
	KMA	Other Towns	Rural Areas	Jamaica
Less than 12,000	0.1	0.5	0.7	0.5
12,000-24,000	1.7	2.4	3.8	2.8
24,000-36,000	2.0	3.1	6.5	4.3
36,000-48,000	3.8	4.1	7.6	5.6
48,000-60,000	3.9	6.5	7.6	6.1
60,000-72,000	5.6	9.6	9.6	8.2
72,000-84,000	3.5	9.2	8.8	7.1
84,000-96,000	7.1	5.9	8.8	7.6
96,000-108,000	6.2	7.6	7.3	7.0
108,000-132,000	11.7	11.3	11.4	11.5
132,000-156,000	11.5	10.2	9.7	10.4
156,000-180,000	7.7	9.6	4.7	6.7
180,000-204,000	7.7	6.0	4.3	5.8
204,000-228,000	4.1	2.9	2.7	3.2
228,000-240,000	2.5	1.1	1.3	1.7
240,000+	21.1	9.9	5.3	11.6
<b>All Classes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

NOTE: Estimates adjusted for non-response

**TABLE B-10  
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY ANNUAL CONSUMPTION EXPENDITURE,  
BY QUINTILE**

Annual Consumption Expenditure (\$)	Quintile				
	Poorest	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Less than 12,000	3.9	0.0	0.0	0.0	0.0
12,000-24,000	7.0	10.5	1.2	0.0	0.0
24,000-36,000	8.6	1.0	12.7	4.5	0.0
36,000-48,000	10.5	6.7	1.2	12.2	0.5
48,000-60,000	9.7	7.0	6.5	0.0	8.1
60,000-72,000	13.6	11.2	3.9	7.0	8.0
72,000-84,000	12.1	6.1	7.4	7.7	5.2
84,000-96,000	10.9	11.5	8.3	5.6	5.3
96,000-108,000	7.0	10.5	9.2	4.0	6.6
108,000-132,000	7.8	13.1	13.3	13.1	10.3
132,000-156,000	4.7	13.1	13.3	11.2	8.7
156,000-180,000	1.2	4.8	7.1	8.9	8.1
180,000-204,000	2.3	1.3	7.4	8.0	7.0
204,000-228,000	0.0	1.6	1.5	6.1	4.7
228,000-240,000	0.0	0.3	1.8	2.8	2.2
240,000+	0.8	1.3	5.3	8.9	25.4
<b>All Classes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**TABLE B-11**  
**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY ANNUAL CONSUMPTION EXPENDITURE**  
**BY SEX OF HEAD OF HOUSEHOLD**

Annual Consumption Expenditure (\$)	SEX OF HEAD OF HOUSEHOLD	
	Male	Female
Less than 12,000	0.2	0.8
12,000-24,000	2.5	3.1
24,000-36,000	4.5	4.1
36,000-48,000	5.6	5.6
48,000-60,000	7.0	5.0
60,000-72,000	8.4	7.9
72,000-84,000	7.1	7.0
84,000-96,000	7.9	7.3
96,000-108,000	7.1	6.9
108,000-132,000	10.7	12.5
132,000-156,000	9.2	12.0
156,000-180,000	6.7	6.6
180,000-204,000	5.3	6.4
204,000-228,000	4.4	1.7
228,000-240,000	1.7	1.7
240,000+	11.7	11.5
<b>All Classes</b>	<b>100.0</b>	<b>100.0</b>

NOTE: Estimates adjusted for non-response



**SECTION C**

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**HEALTH**

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**TABLE C-1  
SELF-REPORTED ILLNESS/INJURY AMONG HOUSEHOLD MEMBERS AND CARE-SEEKING BEHAVIOUR  
OF THOSE AFFECTED, BY AREA, QUINTILE, SEX AND AGE**

Classification	Percentage Reporting Illness/Injury in 4 week Reference Period	Description (of those ill or injured)		Mean Days of Impairment	Seeking Medical Care (%)
		Condition Began Before Past 4 Weeks %	Mean Days of Illness/Injury		
<b>Area</b>					
KMA (N=2295)	8.9	36.0	9.3	4.0	52.6
Other Tow (N=1492)	8.4	31.6	11.1	6.8	57.5
Rural Areas(N=374)	11.0	30.0	11.3	6.0	62.8
<b>Quintile</b>					
Poorest (N=1508)	10.4	25.0	10.9	6.7	55.4
2 (N=1505)	10.5	30.4	10.7	5.6	60.1
3 (N=1504)	7.5	35.4	11.5	5.4	58.4
4 (N=1509)	10.1	34.0	10.4	5.6	63.4
5 (N=1509)	10.7	36.3	10.1	4.7	58.4
<b>Sex</b>					
Male (N=3670)	8.3	28.4	10.6	6.0	59.0
Female (N=3865)	11.3	34.6	10.7	5.2	58.9
<b>Age (years)</b>					
0-4 (N=852)	17.3	12.9	7.9	3.3	62.2
5-9 (N=917)	8.3	18.1	6.9	3.8	49.1
10-19 (N=1647)	4.9	17.5	6.7	3.0	47.2
20-29 (N=1274)	5.5	12.0	7.9	3.4	59.1
30-39 (N=991)	6.4	29.4	11.5	5.6	63.8
40-49 (N=651)	8.2	26.4	9.2	4.2	61.8
50-59 (N=439)	15.1	44.9	14.7	6.7	63.0
60-64 (N=191)	15.8	53.5	16.4	8.4	60.1
65+ (N=573)	26.8	66.8	15.9	10.3	61.6
<b>Jamaica (N=7535)</b>	<b>9.8</b>	<b>32.0</b>	<b>10.7</b>	<b>5.6</b>	<b>58.9</b>