

**TABLE F-6  
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY DISTANCE FROM PUBLIC WATER SOURCE,  
BY AREA AND QUINTILE**

Classification/Source	Households Analysed  (N)	Distance from Source (yards)					Total
		0-49	50-199	200-499	500-999	1000+	
<b>Area</b>							
<b>KMA</b>							
Public Standpipe	31	73.7	7.0	6.5	6.7	6.12	100.0
River/Lake/ Spring/Pond	1	100.0	0.0	0.0	0.0	0.0	100.0
<b>Other Towns</b>							
Public Standpipe	73	60.5	18.2	7.1	5.0	9.13	100.0
River/Lake/ Spring/Pond	1	0.0	0.0	0.0	100.0	0.0	100.0
<b>Rural Areas</b>							
Public Standpipe	290	53.3	18.2	10.4	6.6	11.5	100.0
River/Lake/ Spring/Pond	58	47.4	16.5	12.2	6.7	17.2	100.0
<b>Quintile</b>							
<b>Poorest</b>							
Public Standpipe	87	63.2	17.2	9.2	4.6	5.8	100.0
River/Lake/ Spring/Pond	15	40.0	20.0	13.3	13.3	13.3	100.0
<b>2</b>							
Public Standpipe	96	49.0	16.7	11.5	6.3	16.7	100.0
River/Lake/ Spring/Pond	21	47.6	19.1	9.5	4.8	19.1	100.0
<b>3</b>							
Public Standpipe	65	52.3	24.6	3.1	9.2	10.8	100.0
River/Lake/ Spring/Pond	8	75.0	0.0	0.0	12.5	12.5	100.0
<b>4</b>							
Public Standpipe	84	60.7	14.3	9.5	6.0	9.5	100.0
River/Lake/ Spring/Pond	10	30.0	10.0	30.0	10.0	20.0	100.0
<b>5</b>							
Public Standpipe	62	58.1	12.9	12.9	4.8	11.3	100.0
River/Lake/ Spring/Pond	6	33.3	33.3	0.0	0.0	33.3	100.0
<b>Jamaica</b>							
Public Standpipe	394	56.3	17.3	9.4	6.3	10.6	100.0
River/Lake/ Spring/Pond	60	47.6	15.9	11.8	8.1	16.6	100.0

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

**TABLE F-7  
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SOURCE OF LIGHTING,  
BY AREA AND QUINTILE**

Classification	Source of Lighting				All Types
	Electricity	Kerosene	Other	None	
<b>Area</b>					
KMA	81.5	11.8	0.3	6.3	100.0
Other Towns	73.3	26.7	0.0	0.0	100.0
Rural Areas	55.7	43.2	0.2	0.9	100.0
<b>Quintile</b>					
Poorest	36.1	59.5	1.1	3.4	100.0
2	49.0	47.0	0.0	4.0	100.0
3	67.1	31.2	0.3	1.5	100.0
4	74.9	22.7	0.0	2.4	100.0
5	84.2	14.5	0.0	1.3	100.0
Jamaica	68.1	29.1	0.2	2.6	100.0

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

**TABLE F-8  
PERCENTAGE OF HOUSEHOLDS HAVING  
KITCHEN FACILITIES AND EXCLUSIVE USE OF KITCHEN FACILITIES, BY AREA AND QUINTILE**

Classification	Households With Facility	Households Having Exclusive Use of Facility
<b>Area</b>		
KMA	91.7	77.6
Other Towns	93.4	78.7
Rural	94.2	86.8
<b>Quintile</b>		
Poorest	92.6	81.1
2	91.1	82.2
3	94.4	83.1
4	93.6	84.3
5	93.6	80.8
Jamaica	93.2	82.0

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

**TABLE F-9**  
**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TENURE STATUS, BY AREA AND QUINTILE**

Tenure Status	Area			
	Jamaica	KMA	Other Towns	Rural Areas
Owned By Household Member	58.7	46.0	52.7	70.8
Rent-Free	11.6	10.2	8.8	13.8
Rented				
Leased	2.9	2.7	3.3	2.8
Private Rented	22.9	36.7	26.4	11.0
Government Rented	1.6	2.3	3.6	0.2
Squatter	2.2	2.0	4.7	1.2
Other	0.2	0.2	0.6	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

	Quintile				
	Poorest	2	3	4	5
Owned By Household Member	63.8	62.2	62.2	60.2	54.9
Rent-Free	13.7	13.8	9.4	12.6	9.8
Rented					
Leased	3.3	3.3	5.0	1.4	2.2
Private Rented	13.3	17.1	17.4	21.0	30.9
Government Rented	1.5	0.3	2.4	2.9	1.1
Squatter	4.1	3.3	3.5	1.7	0.8
Other	0.4	0.0	0.0	0.2	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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

**TABLE F-10  
PERCENTAGE DISTRIBUTION OF TENNANT HOUSEHOLDS BY LANDLORD TYPE,  
BY AREA AND QUINTILE**

Classification	Households Analysed N	Person or Agency From Whom Rented				Total
		Relative	Private Employer	Public Agency	Private Individual/ Agency	
<b>Area</b>						
KMA	251	5.1	11.2	2.2	81.5	100.0
Other Towns	111	8.8	11.9	0.0	79.3	100.0
Rural	120	4.5	7.9	1.4	86.1	100.0
<b>Quintile</b>						
Poorest	45	8.9	6.7	0.0	84.4	100.0
2	62	4.8	6.5	1.6	87.1	100.0
3	76	4.0	18.4	0.0	77.6	100.0
4	94	6.4	10.6	2.1	80.9	100.0
5	205	5.4	10.7	2.4	81.5	100.0
Jamaica	482	5.8	10.5	1.5	82.2	100.0

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

**TABLE F-11  
MEAN MONTHLY RENTAL PAYMENT, AND RENT AS A PERCENTAGE  
OF TOTAL HOUSEHOLD CONSUMPTION,  
BY AREA AND QUINTILE**

Classification	Households Analysed (N)	Mean Monthly Rent (\$)	Rent as Percentage of Total Household Consumption
<b>Area</b>			
KMA	240	965	11.3
Other Towns	105	729	9.2
Rural	119	404	6.2
<b>Quintile</b>			
Poorest	42	122	4.2
2	62	245	5.8
3	72	376	6.3
4	89	606	8.1
5	199	1,179	11.1
Jamaica	464	770	9.8

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

**TABLE F-12**  
**MEAN MONTHLY WATER PAYMENT AND WATER PAYMENT**  
**AS A PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,**  
**BY AREA AND QUINTILE**

Classification	Households Analysed  (N)	Mean Monthly Water Payment  (\$)	Water as Percentage of Total Household Consumption
<b>Area</b>			
KMA	420	244	2.4
Other Towns	233	205	2.4
Rural	228	185	2.3
<b>Quintile</b>			
Poorest	48	142	4.1
2	71	196	3.3
3	151	188	2.8
4	195	218	2.5
5	416	236	2.1
Jamaica	881	219	2.4

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

**TABLE F-13**  
**MEAN MONTHLY ELECTRICITY PAYMENT AND ELECTRICITY PAYMENT AS**  
**PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,**  
**BY AREA AND QUINTILE**

Classification	Households Analysed  (N)	Mean Monthly Electricity Payment  (\$)	Electricity as Percentage of Total Household Consumption
<b>Area</b>			
KMA	433	663	6.4
Other Towns	269	487	5.7
Rural	499	378	5.0
<b>Quintile</b>			
Poorest	84	272	6.6
2	136	320	5.5
3	198	418	5.8
4	287	458	5.5
5	496	643	5.8
Jamaica	1,201	510	5.8

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

**TABLE F-14**  
**MEAN MONTHLY TELEPHONE PAYMENT AND TELEPHONE EXPENSES**  
**AS PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,**  
**BY AREA AND QUINTILE**

Classification	Households Analysed (N)	Mean Monthly Telephone Payment (\$)	Telephone as Percentage of Total Household Consumption
<b>Area</b>			
KMA	182	508	3.7
Other Towns	74	387	3.4
Rural	54	398	3.5
<b>Quintile</b>			
Poorest	0		
2	10	198	3.7
3	27	364	4.5
4	69	334	3.5
5	204	529	3.6
Jamaica	310	462	3.6

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

**TABLE F-15**  
**MEAN MONTHLY MORTGAGE PAYMENT AND MORTGAGE PAYMENT AS A**  
**PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,**  
**BY AREA AND QUINTILE**

Classification	Households Analysed (N)	Mean Monthly Mortgage Payment (\$)	Mortgage as Percentage of Total Household Consumption
<b>Area</b>			
KMA	58	1,742	13.0
Other Towns	6	596	4.4
Rural	8	778	8.6
<b>Quintile</b>			
Poorest	3	65	1.5
2	3	202	3.4
3	8	505	6.1
4	17	593	6.7
5	41	2,150	13.7
Jamaica	72	1,550	12.0

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

**TABLE F-16**  
**MEAN MONTHLY PROPERTY TAX PAYMENT AND PROPERTY TAX PAYMENT**  
**AS A PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,**  
**BY AREA AND QUINTILE**

Classification	Households Analysed  (N)	Mean Monthly Property Tax Payment  (\$)	Property Tax as Percentage of Total Household Consumption
<b>Area</b>			
KMA	134	70	0.6
Other Towns	76	76	0.9
Rural	483	13	0.2
<b>Quintile</b>			
Poorest	108	9	0.3
2	113	8	0.1
3	134	20	0.3
4	132	15	0.2
5	206	66	0.6
Jamaica	693	32	0.4

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

**TABLE F-17**  
**PERCENTAGE OF HOUSEHOLDS OWNING SELECTED DURABLE GOODS, BY AREA**

Durable Good	Area			
	Jamaica (N=1962)	KMA (N=646)	Other Towns (N=384)	Rural Areas (N=932)
Sewing Machines	14.9	20.1	15.5	10.8
Gas Stoves	55.4	71.8	58.4	41.9
Electric Stoves	1.4	2.5	1.1	0.7
Refrigerators/Freezers	45.6	58.6	46.1	35.5
Air Conditioners	0.5	1.1	0.3	0.1
Fans	32.6	53.9	32.5	16.7
Radio/Cassette Players	71.9	74.3	70.1	70.8
Phonographs	0.3	0.3	0.4	0.3
Stereo Equipment	9.0	13.1	10.2	5.5
Video Equipment	18.2	26.3	21.5	10.7
Washing Machines	2.6	5.1	2.1	1.0
TV Sets	52.3	67.6	54.4	39.8
Bicycles	9.9	10.4	11.0	9.1
Motor Bikes	1.0	0.7	0.7	1.3
Cars/Other Vehicles	7.9	11.6	10.1	4.1
None	15.5	10.5	12.6	20.4

Note: Estimates adjusted for non-response

**TABLE F-18**  
**PERCENTAGE OF HOUSEHOLDS OWNING SELECTED DURABLE GOODS, BY QUINTILE**

Durable Good	Quintile				
	Poorest (N=271)	2 (N=305)	3 (N=340)	4 (N=421)	5 (N=625)
Sewing Machines	5.9	11.8	12.6	16.4	19.2
Gas Stoves	19.6	36.4	52.9	60.6	73.8
Electric Stoves	0.0	0.0	0.6	0.7	3.2
Refrigerators/Freezers	14.8	27.2	42.4	48.7	63.0
Air Conditioners	0.0	0.0	0.3	0.2	1.1
Fans	7.7	14.8	28.5	35.4	50.4
Radio/Cassette Players	58.7	68.2	71.2	78.9	73.4
Phonographs	0.0	0.0	0.0	0.2	0.6
Stereo Equipment	1.1	2.6	3.8	9.3	16.8
Video Equipment	1.8	7.2	10.9	19.2	32.6
Washing Machines	0.0	0.0	0.3	0.7	6.9
TV Sets	21.0	38.4	49.7	60.6	65.1
Bicycles	3.7	7.9	9.4	11.6	13.4
Motor Bikes	1.1	0.7	1.5	1.2	0.6
Cars/Other Vehicles	0.0	1.6	1.8	5.7	17.9
None	31.4	22.0	15.9	10.2	10.6



**SECTION G**

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**FOOD STAMP  
PROGRAMME**

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**TABLE G-1  
PERCENTAGE OF HOUSEHOLDS RECEIVING OR EVER  
APPLIED FOR FOOD STAMPS, BY AREA AND QUINTILE**

Classification	Receiving Food stamps	Not receiving food stamps		Total
		Applied	Never Applied	
<b>Area</b>				
KMA (N=647)	7.5	9.3	83.3	100.0
Other Towns (N=384)	18.9	10.5	70.7	100.0
Rural Areas (N=931)	31.0	14.0	55.0	100.0
<b>Quintile</b>				
Poorest (N=273)	45.1	20.5	34.4	100.0
2 (N=311)	37.0	16.7	46.3	100.0
3 (N=342)	21.9	17.3	60.8	100.0
4 (N=429)	14.7	10.7	74.6	100.0
5 (N=607)	5.1	3.6	91.3	100.0
Jamaica (N=1,962)	20.5	11.7	67.8	100.0

**TABLE G-2  
NUMBER AND PERCENTAGE OF  
HOUSEHOLDS RECEIVING FOOD STAMPS;  
BY AREA AND QUINTILE**

Classification	Households Receiving Food Stamps (N)	Percentage of Total Recipients (%)
<b>Area</b>		
KMA	49	12.7
Other Towns	70	17.7
Rural Areas	288	69.6
<b>Quintile</b>		
Poorest	123	30.2
2	115	28.3
3	75	18.4
4	63	15.5
5	31	7.6
Jamaica	407	100.0

**TABLE G-3  
PERCENTAGE DISTRIBUTION OF NUMBER OF RECIPIENTS IN  
HOUSEHOLDS RECEIVING FOOD STAMPS, BY  
AREA AND QUINTILE**

Classification	Number of Recipients in Household			Total
	One	Two	Three or more	
<b>Area</b>				
KMA (N=49)	86.0	8.2	5.8	100.0
Other Towns (N=70)	72.2	25.2	2.6	100.0
Rural Areas (N=1,288)	74.4	19.5	6.1	100.0
<b>Quintile</b>				
Poorest (N=124)	62.9	26.6	10.5	100.0
2 (N=115)	76.5	17.4	6.1	100.0
3 (N=75)	78.7	18.7	2.7	100.0
4 (N=62)	83.9	14.5	1.6	100.0
5 (N=31)	96.8	3.2	0.0	100.0
Jamaica (N=407)	75.4	19.1	5.5	100.0

Note: Regional and Jamaica percentages adjusted for non-response.

**TABLE G-4  
NUMBER OF ELIGIBLE HOUSEHOLDS AND PERCENTAGE RECEIVING  
FOOD STAMPS, BY BENEFICIARY CATEGORY, AREA AND QUINTILE**

Classification	Beneficiary Category					
	Children Aged Less Than Six Years		Pregnant/Lactating Women		Elderly/Poor/Disabled	
	N	Per cent	N	Per cent	N	Per cent
<b>Area</b>						
KMA	130	13.4	31	0.0	94	21.2
Other Towns	108	25.7	25	12.8	53	36.2
Rural Areas	247	44.5	54	1.6	213	50.1
<b>Quintile</b>						
Poorest	113	42.5	28	7.1	91	59.3
2	124	37.1	34	2.9	78	52.6
3	95	32.6	24	0.0	65	26.2
4	97	20.6	18	5.6	65	30.8
5	56	14.3	6	0.0	61	21.3
Jamaica	485	31.5	110	3.6	360	40.1

Note: (i) N' means number of eligible households in sample

'%' means percentage of eligible households receiving food stamps

(ii) Regional and Jamaica percentages adjusted for non-response

(iii) Eligibility for single member families with income below \$7,000 and families with income less than \$18,000 cannot be determined with sufficient accuracy since consumption measures are used as a proxy for income.

**TABLE G-5  
PERCENTAGE DISTRIBUTION OF INDIVIDUALS IN TERMS OF APPLICATION FOR,  
AND RECEIPT OF, FOOD STAMPS, BY AREA AND QUINTILE**

Classification	Receiving Food Stamps	Not Receiving Food Stamps		Total
		Applied	Never Applied	
<b>Area</b>				
KMA (N=2,247)	2.6	3.1	94.3	100.0
Other Towns (N=1,388)	6.7	3.1	90.2	100.0
Rural Areas (N=3,674)	10.4	4.4	85.2	100.0
<b>Quintile</b>				
Poorest (N=1,432)	12.9	4.9	82.2	100.0
2 (N=1,453)	10.1	3.9	86.0	100.0
3 (N=1,472)	6.3	4.9	88.8	100.0
4 (N=1,478)	5.1	3.9	91.0	100.0
5 (N=1,474)	2.2	1.7	96.1	100.0
Jamaica (N=7,309)	7.2	3.7	89.1	100.0

Note: Regional and Jamaica percentages adjusted for non-response

**TABLE G-6  
DISTRIBUTION OF INDIVIDUALS RECEIVING FOOD STAMPS,  
BY AREA AND QUINTILE**

Classification	Number of Individuals Receiving Food Stamps	Percentage of Total Recipients
<b>Area</b>		
KMA	56	11.8
Other Towns	81	16.7
Rural Areas	364	71.5
<b>Quintile</b>		
Poorest	175	34.2
2	143	28.1
3	87	18.2
4	68	14.1
5	28	5.4
Jamaica	501	100.0

Note: Percentages adjusted for non-response

**TABLE G-7  
NUMBER AND PERCENTAGE OF ELIGIBLE INDIVIDUALS RECEIVING FOOD STAMPS,  
BY BENEFICIARY CATEGORY, AREA AND QUINTILE, 1992-1993**

Classification	Beneficiary Category											
	Children Aged Less Than Six Years				Pregnant/Lactating Women				Elderly/Poor/Disabled			
	1992		1993		1992		1993		1992		1993	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Area</b>												
KMA	298	8.6	186	11.6	44	0.0	32	0.0	170	13.4	141	17.6
Other Towns	247	23.9	153	24.0	37	0.0	25	12.8	169	32.9	81	36.4
Rural Areas	904	33.2	380	38.8	120	4.2	59	1.5	587	39.1	350	46.9
<b>Quintile</b>												
Poorest	401	32.7	197	38.7	52	3.8	30	6.7	206	49.5*	142	52.1
2	367	32.7	184	30.4	52	3.8	36	2.8	195	42.1	122	50.8
3	270	27.8	140	30.0	32	3.1	25	0.0	199	34.2	111	27.0
4	241	16.2	134	16.4	43	0.0	19	5.3	203	20.2	110	32.7
5	170	15.3	64	14.1	22	0.0	6	0.0	123	13.0	87	19.5
Jamaica	1449	24.9	719	28.3	201	2.3	116	3.4	926	31.4	572	37.7

Note: (i) 'N' means number of eligible individuals in sample.  
\*%' means percentage of eligible individuals receiving food stamps.

(ii) For SLC 1992, the maximum qualifying age limit for children was under 5 years.

(iii) Regional and Jamaica percentages adjusted for non-response.

(iv) a- Quintile percentages for the elderly revised for 1992.

**TABLE G-8  
SELF-REPORTED REASONS (PERCENTAGE) FOR HOUSEHOLDS NOT  
APPLYING FOR FOOD STAMPS, BY AREA AND QUINTILE**

Classification	Reason					Total
	Did Not Consider Household Eligible	Did Not Know How to Apply	Not Worth the Trouble	Did Not Want Stigma	Other	
<b>Area</b>						
KMA (N=532)	49.3	20.7	18.3	7.8	3.9	100.0
Other Towns (N=275)	36.1	20.5	27.2	6.3	9.9	100.0
Rural Areas (N=512)	47.6	22.8	15.1	4.8	9.7	100.0
<b>Quintile</b>						
Poorest (N=94)	27.7	40.4	14.9	2.1	14.9	100.0
2 (N=144)	27.1	36.8	22.9	1.4	11.8	100.0
3 (N=207)	31.4	28.0	24.6	6.8	9.2	100.0
4 (N=320)	42.8	21.9	21.6	7.5	6.2	100.0
5 (N=554)	59.9	10.8	16.3	7.8	5.2	100.0
Jamaica (N=1,319)	46.0	21.4	18.9	6.4	7.3	100.0

Note: Regional and Jamaica percentages adjusted for non-response.

**TABLE G-9**  
**PERCENTAGE DISTRIBUTION OF AREAS IN WHICH SELF-REPORTED**  
**PROBLEMS IN OBTAINING FOOD STAMPS OCCURRED, BY AREA**  
**AND RELATIVE FREQUENCY OF PROBLEMS IN JAMAICA**

Area	Problem								Total
	Lateness/ Absence of Officer	Rudeness of Officer	Disorder- liness of Crowd	Inadequate Accom- modation	Transport- ation Difficulties	Long Lines	Not in Mail	Other	
KMA	0.0	0.0	16.5	51.8	19.8	37.3	66.3	36.5	24.8
Other Towns	30.8	23.2	41.0	0.0	0.0	10.0	33.7	10.9	21.7
Rural Areas	69.2	76.8	42.3	48.2	80.2	52.7	0.0	52.6	53.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Jamaica	16.1	7.6	21.9	3.7	9.6	17.7	7.3	16.1	100.0



# APENDICES

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# APPENDIX I

## SURVEY DESIGN

### SLC 93

- 1 Appendix I provides the details on how the survey was conducted, which will facilitate a better understanding of the results presented; and Appendix II gives the basic information on the methodology adopted for annualising the expenditure data collected in the survey and the description of the relevant variables and their source which would be useful to guide those who wish to use the unit record data themselves.

#### I. Household Questionnaire

- 2 The survey instrument for the survey of living conditions (SLC) is a household questionnaire, the core of which is basically the same from round to round for ensuring continuity and comparability for effective monitoring of the Human Resources Development Programme (HRDP). However, in each round starting from the third round, emphasis was placed on obtaining a wide spectrum of data on one particular social sector to provide the basic data used in policy formulation. Thus, emphasis was placed on the health sector in the third round of the survey conducted in November 1989; on the education sector in the fourth round conducted in November 1990; and on housing in the fifth round conducted in November 1991; and poverty in the sixth round

conducted in August 1992. In the seventh round, that is, SLC 93, conducted in November 1993, the focus was on employment and time use.

- 3 The questionnaire for SLC 93 was divided into the following 14 parts, apart from the Cover:

Part A: General Health of all household members

Part B: Education of all household members of age 3 years and older

Part C: Anthropometric measurements and immunization data for all children 0-59 months old

Part D: Receipt of Food Stamps and reasons for not receiving

Part E: Daily Expenses (past 7 days)

Part F: Non-food consumption expenditures (past 30 days and in most cases past 12 months)

- Part G: Non-Consumption Expenditures such as insurance, gifts, and donations etc.,(past 30 days and past 12 months)
- Part H: Food Expenses including home production and food received as gift (past 7 days and past 30 days)
- Part I: Adequacy of consumption (as perceived by the household)
- Part J: Housing conditions and related Expenses
- Part K: Inventory of durable goods owned by the household
- Part L: Miscellaneous income received by the household
- Part M: Employment and time use
- Part R: Household Roster of all members

4 The periods given in brackets against parts D to H are the reference periods adopted for collecting the expenditure data. In SLC 93, however, the following major changes were made in the standard modules compared with SLC 92. These are-

- (i) Part A: Health- Questions were added (Q21 to Q27) on hospitalisation costs during the past 12 months, at the request of the Ministry of Health;
- (ii) Part B: Education- SLC 92 was started at a time when the schools were closed for the summer vacation and hence some of the questions on school attendance and school feeding programme which were

included in the earlier rounds, have been excluded. Since SLC 93 was launched in November 1993, the earlier module on education has been adopted; Under the school feeding programme, one more question (Q9) on whether the child has actually taken the meal provided by the school was included at the instance of the Ministry of Education;

(iii) Part E: Daily expenses- This part was split into two blocks, Block E1 and Block E2, so that more detailed information could be collected on the meals taken away from home in block E1, to satisfy the requirements of CFNI in their nutrient intake studies; while Block E2 covered the rest of the usual items of this part. The meals taken away from home were collected for each member separately, and according to whether they were purchased or gift or given as part of remuneration. The information was collected on number and value of breakfasts, lunches and dinners and value of alcoholic and non-alcoholic drinks separately.

(iv) Part G: Non-consumption expenditures- The item "taxes and duties not elsewhere classified" omitted in SLC 92, was reintroduced in this round.

(v) Part I: Adequacy of Consumption- A module on adequacy of consumption, as perceived by the household, is included (Part I), at the instance of the World Bank.

## II. Sampling Design

- 5 The sample dwellings for the November 1993 round of SLC was a sub-set of the October 1993 Labour Force Survey (LFS).
- 6 The design adopted for the LFS (all surveys of STATIN follow the same design) was a two-stage stratified random sampling design, with the first stage being a selection of areas (Enumeration Districts of Population Census) and the second stage being a selection of dwellings. For the selection of the first stage units, that is, the Enumeration Districts, all the Enumeration Districts in the country were grouped into strata (also called sampling regions) of equal size, in terms of dwellings. Two Enumeration Districts (ED) were selected from each stratum with probability proportionate to size. In each selected ED, a list of all dwellings is prepared by the field interviewers by house to house visits, which forms the frame for selection of a sample of dwellings for LFS.
- 7 The sample dwellings for the LFS are revised once in 4-5 years by selecting a new sample of two EDs from each stratum and preparing up-to-date lists of dwellings in each; and the strata are up-dated, on the basis of available information on new dwellings. Up-to-date and comprehensive data on dwellings are generally available only after the results of a population census and, therefore, in between the censuses, whatever revisions in the LFS samples take place, they are mostly through the selection of a new sample of EDs and preparation of up-to-date lists of dwellings in the selected EDs.
- 8 The sample dwellings for LFS in 1988 and the corresponding SLC 88 were those selected in 1983 with strata formed on the basis of 1982 population census; the sample was revised in 1989, which was adopted for all quarterly labour force surveys and the surveys on living conditions conducted dur-

ing 1989 to 1992. In 1993, the sample dwellings for the LFS were again revised, after revising the strata based on the dwellings data collected in the population census 1991, and this sample was adopted for the LFS and SLC surveys in 1993.

- 9 For the revision of LFS sample in 1989, the country was divided into 217 strata (or sampling regions) of equal size (the prescribed size was 2,400 dwellings per stratum) and for the revision in 1993, the country was divided, on the basis of 1991 census of dwellings, into 234 strata of size of about 2,500 dwellings each. In the 1989 revision, 36 dwellings were selected from each selected ED while in 1993, this number was reduced to 32 dwellings, to keep the overall sample of dwellings at a manageable level. The 36 dwellings selected from an ED in 1989 were grouped into 12 panels of 3 each and 6 of these panels were covered in each round of LFS, with replacement of 3 panels from round to round; while in the revision of 1993, the 32 dwellings selected from each selected ED were grouped into 8 panels of 4 each and 4 of these panels were covered in each round of LFS. Thus, the LFS surveys conducted during 1989 to 1992 covered in each round 7,812 dwellings selected from 434 EDs which themselves were selected at the rate of 2 each from 217 strata or sampling regions. On the other hand, the LFS surveys of 1993 covered 7,488 dwellings drawn from 468 EDs, which were selected from 234 sampling regions.

## III. Sample Size

- 10 The sample dwellings for the Survey of Living Conditions (SLC) are selected as a random sub-set of the sample for the immediately preceding Labour Force Survey (LFS), to facilitate the linkage of the data collected in both surveys for an integrated analysis. Thus, one-third  $\frac{1}{3}$  of the LFS sample dwellings were covered in SLC 88, SLC 89-1, SLC 90 and SLC 91; and two-

thirds<sup>2</sup>/<sub>3</sub> of the LFS sample dwellings in SLC 89-2; and in SLC 92, all LFS samples in ten parishes and two-thirds <sup>2</sup>/<sub>3</sub> of the samples in Kingston, St. Andrew, Clarendon and St. Catherine were covered, to provide parish estimates.

11 In the Labour Force Survey conducted in October 1993, the sample comprised 468 Enumeration Districts (EDs), drawn from 234 strata (also called sampling regions), with 16 dwellings selected from each ED- a total of 7,488. For the SLC 93, conducted in November 1993, 78 strata (selected on a circular systematic sampling basis from the 234 strata), along with the 2 EDs and 32 dwellings from each included in the October LFS were included in the sample. Thus, the sample for SLC 93 covered 2,496 dwellings.

12 In this context, it may be noted that since the sample of 78 strata were selected from all the 234 strata in the country, unlike in some of the previous rounds, when the sample strata were selected separately from each parish giving rise to rounding off errors in the sampling proportions, no weighting at the parish level to take account of the differences in sampling fractions will be necessary in SLC 93.

#### IV. Distribution of Household Members by Regions

13 As mentioned in paragraph 8, the SLC 93 and the corresponding LFS were conducted

on a new sample of dwellings, for which the sampling regions were formed on the basis of the preliminary data on dwellings furnished by the 1991 population census. For the earlier rounds of SLC, the sampling regions were those formed generally with the data on number of dwellings furnished by the earlier population census conducted in 1982. Thus, the sample adopted for SLC 93 takes into account the new dwellings constructed between 1982 and 1991. The total number of occupied dwellings in the country in 1991 was 553,829 against 508,710 in 1982, or an increase of 8.9 per cent. During this period, KMA's population increased by 12.8 per cent; that of Other Towns by 15.0 per cent and Rural Areas by 3.2 per cent. These differential rates of population growth changed the pattern of representation of these three area divisions in the new sample, as shown in Table 1.1 below.

14 The increase in representation of KMA in the SLC 93 sample, with a corresponding decline in the rural samples, was reflected in all the quintiles, as can be seen from Table A-2.

15 In spite of these differences in the sample dwellings of SLC 92 and SLC 93, it is remarkable that the aggregates generated from both these surveys agree closely, as observed in the report.

**TABLE APPENDIX I.1  
DISTRIBUTION OF HOUSEHOLD MEMBERS BY REGIONS,  
SLC 92 AND SLC 93**

Region	Distribution of Household		Distribution of Census	
	SLC 92	SLC 93	1982	1991
KMA	28.9	32.2	31.4	32.7
Other Towns	18.3	18.9	16.4	17.4
Rural Areas	52.8	48.9	52.2	49.9
Jamaica	100.0	100.0	100.0	100.0

## V. Investigations

- 16 The Interview method was followed in conducting the SLC, that is, the Interviewers of STATIN visit the households in the selected dwellings and record the information which was elicited by oral enquiry. All surveys conducted by STATIN follow the same method of investigations. There are several advantages in the interview method. In this method, the interviewer can be trained intensively in the concepts, definitions and details of classifications so that a high degree of consistency in the replies can be obtained. Since the interviewers make personal visits and contact the households, non-response can be reduced to a minimum. The use of interviewers also makes it possible to employ a variety of techniques to maintain the interest of the respondent and increase the reliability and completeness of the data collected.
- 17 The main disadvantage of the interview method, however, is that the data collected, especially on topics such as consumption expenditures, are largely based on the recollection of the respondent; but experience has shown that the alternative, which is to ask the respondent to complete the questionnaire, has disadvantages as well. Many of the households are neither capable of, nor willing to keep accounts, nor to follow adequately the concepts, definitions and instructions.
- 18 The field investigations for SLC 93 were undertaken in November 1993 to March 1994; all the completed questionnaires were received in STATIN by the end of March 1994. There was a delay of about 2 1/2 months in completing the field work, due to the backlog of work on other surveys of STATIN. The proportion of questionnaires completed in each month was 17.1 per cent in November 93; 32.9 per cent in December 93; 35.3 per cent in January 94; 10.1 per cent

in February 94; and 4.6 per cent in March 94.

## VI. Non-response

- 19 In SLC 93, it was observed that the non-completion of questionnaires was about 20.5 per cent against 28.1 per cent in SLC 92 and 29.8 per cent in SLC 91. Another 1.1 per cent of the questionnaires were rejected for analysis because of inconsistent data against 1.6 per cent in SLC 92 and 1.3 per cent in SLC 91. Thus the response rate was much better in SLC 93, presumably because of the new sample of dwellings.
- 20 Out of the 20.5 per cent non-response in SLC 93, 12.1 per cent was due to the dwelling being vacant or closed or demolished or merged by the time of the interviewer's visit, that is, factors which were beyond the control of the interviewers. This percentage was 19.3 per cent in SLC 92 and 19.4 per cent in SLC 1991. The non-completion of questionnaires due to the households' refusal to furnish information, which accounted for the balance of non-response, was 8.4 per cent in SLC 93 compared to 8.8 per cent in SLC 92 and 10.4 per cent in SLC 91. Thus, there was a slight decrease in refusals by households to provide information in SLC 93.

## VII. Adjustment for Non-response

- 21 The sample assigned to the LFS (also SLC) is designed in such a manner that it is self-weighting and that each dwelling in the sampling universe is given an equal probability of being represented in the sample. For such a sample, the estimates can be built up by pooling the results of all households straightaway without assigning weights at any stage. But, since there is some non-interview and it was found to be uneven across geographic areas, the self-weighting nature of the sample would be affected, unless adjustment factors are applied for non-interview. These adjustment factors (also called

raising factors) were applied at the Enumeration District level to correct for non-response at that level, from SLC 90. The raising factor for an ED is the total number of dwellings assigned under the self-weighting design divided by the number of dwellings for which data are finally accepted for analysis. The implicit assumption is that the non-responding dwellings/households will have similar features as the responding. Since an ED is a small geographic area, this assumption is not unreasonable.

- 22 The application of the non-response adjustment factors at the ED level is equivalent to the application of the same factor to all household observations within the ED. Hence, the non-response adjustment factor (also called the raising factor), relevant to each household, is included in the SAS data set, for use by those involved in data processing.
- 23 The non-response adjustment factors were applied in generating all the aggregates involving the pooling of information from all households of an ED or group of EDs, such as estimates for parishes, regions, and Jamaica. In the case of aggregates which cut across EDs, such as the distributions by population deciles and quintiles, the non-response adjustment factors cannot be conceptualised and, therefore, not applied.

### VIII. Data Entry/Cleaning

- 24 Before data entry, the questionnaires were edited and coded, by the Editor-Coders of the Surveys Division of STATIN. All clerical errors were removed at this stage. All questionnaires which were partly completed or not filled up at all were removed from data entry operations. The data entry was done on personal computers and adequate computer checks for ensuring consistency in totals, codes etc, which are feasible at this stage, were introduced in the data entry programme. The computer printouts of the data in respect of all households were

compared with the questionnaires to spot data entry errors.

- 25 Immediately after the data were entered and the data sets were formed, checks for area classification, that is, Kingston Metropolitan Area, Other Towns and Rural Areas were undertaken through a computer programme.
- 26 Then, the consumption expenditure data collected in Parts E to H were annualised. The method followed is described in Appendix II. At this stage, four indicators were adopted for cleaning the data, namely, (i) per capita annual household consumption expenditure; (ii) the percentage expenditure on Food group; (iii) the percentage expenditure on Meals taken away from home; and (iv) the percentage expenditure on Housing. These indicator values were calculated for all households along with the corresponding mean and standard deviation for these four variables. This operation was done for households falling into each of the five per capita consumption expenditure quintiles formed on the basis of indicator (i), for ensuring adequate dispersal of the cleaning process.
- 27 In each quintile, the questionnaires of households which fell beyond the range "mean plus or minus two standard deviations" for any of the four indicators were taken up for detailed scrutiny. Out of 1,985 household questionnaires included in the data set, 195 questionnaires were thus taken up for detailed examination. Out of these, 22 questionnaires with abnormal or inconsistent data which could not be removed at the editing stage were rejected; 46 questionnaires with clerical errors were corrected; and the rest 127 questionnaires were accepted.
- 28 Thus, against 1,985 questionnaires included in the data set, 1,963 household questionnaires were considered in the final process-

ing 647 from the Kingston Metropolitan Area (KMA); 384 from Other Towns; and 932 from Rural Areas.

#### **IX. Measurement of Malnutrition**

- 29 Standards set by the World Health Organisation were used to measure malnutrition. Normal weight for height is defined as more than 80 per cent of the median weight for height. Severe wasting is defined as weight for height less than 70 per cent of the median. Moderate wasting is weight for height between 70 and 80 per cent of the median. Normal height for age is 90 per cent of the median or above. Moderate stunting is height for age from 85 per cent to 90 per cent of the median. Extremely low weight for age is less than 60 per cent of the median. Moderate low weight for age is 60 to 80 per cent of the median. Normal weight for age is 80 per cent of the median or greater.

- 30 Investigators trained by the Ministry of Health measured the standing height of children aged over two years, and length (lying down) in younger children using a measuring board. The anthropometric measurements on about 84 per cent of the children of age 0-59 months in the sample households, were accepted for analysis in SLC 93.

#### **X. Distribution of Households with Females as Head**

- 31 Two tables (Table A-8 and Table A-9) present the distribution of households with females as head according to "no man, no child"; "no man, with children"; "with man, no child" and "with man, with children". In these tables, man is taken to mean the spouse of the female head who is a member of the household. In SLC 92 also, this concept was used.□



# APPENDIX II

## SOME TECHNICAL ASPECTS

### I. Construction of an Annualised Consumption Data Set

- 1 The household expenditures were collected in Parts E to I, out of which Part G relates to specified non-consumption expenditures and Part I on housing and utilities and the rest on consumption. The expenditures were collected for the various items with different reference periods depending on their frequency of purchase, etc.
- 2 To arrive at a total consumption expenditures figure, the consumption data in each part were annualised and a sum made of the different parts. However, since several parts ask about consumption expenditures for two different periods of time, one of the two time periods must be selected, or an average of the two.
- 3 Different time periods are affected by different problems. The short reference period may be affected by catching expenditures of the previous period; it may be that the item was not purchased in that period. On the other hand, the long period may be affected by the respondent's "recall lapse", that is, the

respondent not being able to recall all the purchases in that period.

- 4 The method followed so far in all the rounds of SLC for annualising the consumption expenditure is to take an average of both the short and long reference periods. This tends to smooth out possible distortions by choosing a middle ground between the two time periods. Technically, the portion of the long term expenditure that does not include the short term expenditure (e.g. the 11 months previous to the last month if the long period is one year and the short period is one month) was calculated and then annualised, and an equal weighted average of this annualisation and the short period annualisation was taken. For all items for which only one time period is used, the consumption figure is annualised by straight forward multiplication (i.e. weekly figures multiplied by 52, and monthly figures multiplied by 12).
- 5 The following paragraphs describe the procedures followed in annualising the expenditures and grouping the data by commodity groups and sub-groups.

#### Single quotation

- 6 For all items for which only one reference period is prescribed or for which the expen-

diture was reported for one of the two reference periods, the annualisation of expenditure on that item is simple - the reported figure was multiplied by  $365/p$ , where 'p' stands for the period for which the expenditure was reported. In the case of two reference periods, the following procedure was followed:

### Notation

$s_t$  - short period expenditure;  $s_p$  - short period (days);  
 $l_t$  - long period expenditure;  $l_p$  - long period (days);  
 '.' - data missing.

### Formulae

if  $s_t = .$  and  $l_t = .$  then value = 0;  
 else if  $s_t = .$  then value =  $l_t * 365/l_p$ ;  
 else if  $l_t = .$  then value =  $s_t * 365/s_p$ ;  
 else if  $l_t = s_t$  then value =  $s_t * 365/l_p$ ;  
 else value =  $[0.5*s_t + 0.5*(l_t - s_t)/(l_p - s_p)] * 365/s_p$ .

### Missing values

- 7 When the household had not spent any amount on a specified item in parts E to H, the interviewer will answer the relevant lead question on whether the household purchased or received as gift or consumed homegrown (in case of food) with a "no"; and skipped the relevant space provided for the amount. Hence, all blank spaces in Parts E to H should not be treated as missing values. When the household was unable to provide the amount for an item, then an "N.S" (not stated) was written in that space. Such cases where the respondent was unable to provide amount to only some items were found to be rare. STATIN does not, therefore, impute values in such cases.

### Monetary values

- 8 In SLC 93, as in SLC 91 and SLC 92, in data entry, the dollars and cents were provided positions as separate variables; hence these were concatenated to arrive at the value for the item.

## Deflators

- 9 The expenditure aggregates compiled from the survey were at current prices; quite often the estimates were required to be deflated to the price levels in one of the previous years, to make valid comparisons on the basis of constant price series. In the reports on SLC, STATIN/PIOJ presents the consumption aggregates at constant prices also to assess the real trends in consumption. The monthly consumer price indices compiled by STATIN are used as deflators for this purpose. These indices are compiled for Jamaica and the three major area divisions, namely, KMA, Other Towns and Rural Areas, which are identical with the regions adopted for SLC consumption aggregates.
- 10 These indices are presented for all major groups of commodities, together with an all-group index. The indices for the food and drink group and the all-group indices for the months in which SLC 93 field investigations had taken place, are given in the Table Appendix II.1. In the chapter on Consumption in this report, STATIN/PIOJ used a weighted average of these indices, the weights being the proportion of questionnaires completed during the month, for deflation of SLC 93 aggregates. The proportion of questionnaires completed each month is given in paragraph 18 in Appendix I.

## Commodity groups and sub-groups

- 11 The annual household consumption was grouped under 11 Commodity Groups and 11 sub-groups under food. Both the groups and the sub-groups, broadly correspond to the grouping in the Consumer Price Indices. The codes of items included in each commodity group and subgroup in SLC 93 are shown in Table Appendix II.2.

## II. Annualised Expenditure Data Set

- 12 The annualised expenditure data from SLC 93 was given in SAS data set ANNUAL. Table Appendix II.3 gives the list of vari-

**TABLE APPENDIX II.1**  
**NATIONAL AND REGIONAL MONTHLY PRICE INDICES**  
**JANUARY 1993 TO MARCH 1994**  
**(BASE: JANUARY 1988 = 100)**

Year/Month	Jamaica	KMA	Other Towns	Rural Areas
(All Commodity Index)				
1993				
January	423.2	414.2	422.5	435.5
February	425.2	415.1	426.8	437.3
March	430.7	418.8	432.1	445.5
April	435.5	423.6	436.7	450.4
May	442.8	433.9	442.0	455.0
June	447.8	437.7	446.9	461.6
July	466.0	456.9	464.4	478.9
August	481.9	473.6	482.7	492.3
September	502.3	494.0	504.4	511.9
October	514.6	506.6	517.7	523.1
November	531.2	524.2	530.9	540.5
December	546.0	538.4	545.3	556.3
1994				
January	558.9	549.4	560.9	570.1
February	578.0	568.6	578.9	589.6
March	590.4	580.8	589.2	603.8
(Food and Drinks Group Index)				
1993				
January	455.5	453.0	451.8	460.3
February	457.0	453.3	456.4	461.4
March	462.4	456.1	459.7	470.9
April	464.7	460.0	461.0	471.9
May	467.3	465.3	461.9	472.5
June	473.7	470.1	467.9	480.9
July	497.4	496.1	491.3	502.1
August	517.5	516.6	517.3	518.6
September	543.1	543.3	543.4	542.8
October	558.8	559.8	560.5	556.7
November	580.2	582.7	578.5	578.5
December	595.8	601.2	588.2	594.0
1994				
January	607.9	608.2	604.3	609.6
February	632.5	633.8	629.1	632.9
March	649.1	649.7	643.3	651.6

ables with a brief description of each variable.

### III. Identification Variables

- 13 The identification variables, namely, PARISH, CONSTITUENCY, ENUMERATION DISTRICT NUMBER, AREA (i.e KMA, other Towns and Rural Areas), DWELLING NUMBER, HOUSEHOLD # IN DWELLING, RFACTOR (weight for non-response at ED level), were given both in the SAS dataset ANNUAL and Data set REC001.

These identification variables will be used to link SLC and LFS.

### IV. SAS Data Sets

- 14 SAS data sets were created generally one for each page of the questionnaire, except in the case of Consumption expenditure (Part F) and Food expenditure (Part H), where one data set was created for the entire part, because of the similarity of the questions for all items. In the case of food stamps programme, though it was covered in one page in the questionnaire, two data sets were created - one for the persons receiving food stamps and the other for persons who applied

**TABLE APPENDIX II.2**  
**ITEMS INCLUDED IN COMMODITY GROUPS AND SUB-GROUPS**  
**SLC 93**

Group/Sub-group	Item Codes
<b>Commodity groups</b>	
1 Food and beverages	(Given below)
2 Fuel and household supplies	101 to 104; 204 to 208,212
3 Housing and household operational expenses	209 to 211 + (rent+ utilities+mortgage+p.tax)
4 Household durable goods	213 to 221
5 Personal care	201 to 203
6 Health care	222 to 224
7 Clothing and footwear	225 to 232
8 Transportation	238 to 244
9 Education	233, 235
10 Recreation	236, 237, 245, 246
11 Miscellaneous consumption	105; 234, 247 to 249;
<b>Sub-group (Food)</b>	
1 Meat, poultry and fish	401 to 413
2 Dairy products	414 to 421
3 Oils and fats	422
4 Cereals and cereal products	423 to 425, 427 to 431
5 Starchy roots and tubers	432 to 435, 426
6 Vegetables	436 to 438
7 Fruits	439 to 441
8 Sugar/sweets	442, 443
9 Miscellaneous food	444 to 452
10 Beverages	453 to 455
11 Meals away from home	Block E1

for food stamps. The way to link data sets within the SLC is through the four digit serial number of the household, whose variable name is SERIAL.

#### V. Tabulation Programme

- 15 A standard tabulation programme was developed for the basic modules on the different sectors. This programme was improved by the SLC Steering Committee while generating tables from the fourth round of SLC i.e the one conducted in November 1990. The tabulations from the fifth round SLC conducted in November 1991 follow this improved programme. Some of these tables are generated in STATIN; some in PIOJ; and a few in the Ministries. The tabulation programme was further improved in SLC 92 and included a number of parish tables. The Parish tables, however, were not generated

in SLC 93, as the sample size was relatively small.

#### VI. Estimation

- 16 The estimation of aggregates from SLC 93 is straightforward, unlike those from SLC 92, when different sampling proportions were adopted for the parishes.

#### Deciles/quintiles

- 17 The deciles and quintiles are formed of sample household members after arranging them in ascending order of their per capita household consumption. The per capita household consumption is arrived at by dividing the total household consumption by the number of household members. All members of the household are assumed to have the same per capita consumption. The decile classification of households is shown in the SAS data set with label ANNUAL. Quintile 1 com-

**TABLE APPENDIX II.3  
CONTENTS OF STATIN'S DATA SET "ANNUAL"**

Variable Name	Description
1 SERIAL	Household Identification
2 T_MEAL	Annual Purchased Meal Expenditure
3 T_NONCON	Annual Non-Consumption Expenditure
4 TOT_TAX	Annual Property Tax Payment
5 TOT_WAT	Annual Water Bill
6 ELECTRIC	Annual Electricity Bill
7 TOT_TELE	Annual Telephone Bill
8 TOT_MORT	Annual Mortgage Payment
9 UTILITY	Annual Utility Bill (TOT_WAT+ELECTRIC+TOT_TELE)
10 RENT	Annual Rent Expenditure
11 HOUSING	Annual Housing Expenditure (RENT+TOT_MORT+TOT_TAX+UTILITY+HOUSEHOLD OPERATIONAL EXPENSES)
12 RFACTOR	Raising factor (Non-Response Adjustment Factor)
13 PARISH	Parish Number
14 CONST	Constituency Number
15 DISTRICT	Enumeration District Number
16 DWELLING	Dwelling Number
17 HH	Household Number in Dwelling
18 HHSIZE1	Household Size- All Individuals
19 HHSIZE2	Household Size- Members only
20 POPDEC	Per Capita Population Decile
21 POPQUINT	Per Capita Population Quintile
22 HOMEGIFT	Annual Value of Home Produced and Gift Food
23 TCGIFT	Annual value of Gifts of Non-Food Consump.
24 TOTGIFT	Annual value of gifts of Food and Non-Food Consumption
25 NON_FOOD	Annual Non-Food Expenditure (Purchased+TCGIFT+HOUSING)
26 TOT_FOOD	Annual Food Expenditure (Purchased+HOMEGIFT)
27 CONS	Annual Consumption Expenditure (TOT_FOOD+NON_FOOD)
28 PERCAP2	Per Capita Annual Consumption (Members only)
29 T_NONCON	Annual Non-Consumption Expenditure
30 TOT_EXP	Annual Expenditure (CONS+T_NONCON)

prises Deciles 1 & 2; quintile 2 comprises Deciles 3 & 4; and so on.

18 It should be noted that no household was ignored in the analysis of variables according to deciles or quintiles. It should also be understood that the deciles and quintiles comprise of equal numbers of household members and not of households.

### VII. Sampling Errors

19 The sampling design adopted for the labour force surveys and the surveys of living conditions is a self weighting design, that is, the probability of selection of a second stage

unit is the same for all units in the population, which in effect means a uniform sampling fraction for all strata (which are of equal size in terms of dwellings) with an equal number of second stage units being selected from the two first stage units. The sampling regions being of equal size coupled with the fact that the probability of selection of the second stage units being equal in all strata had simplified the estimation formulae. Only in SLC 92, the sampling fractions being different for four parishes, compared to the other 10 parishes necessitated the introduction of appropriate weights at the parish level. In SLC 93, the sampling fraction being the same in all parishes, there is no necessity of any weighting except the

**APPENDIX II.4**  
**NUMBER IN SAMPLE, MEAN AND STANDARD ERROR OF ESTIMATE OF**  
**PER CAPITA CONSUMPTION, SLC 92 and SLC 93**

Area	SLC 92			SLC 93		
	No. in Sample house holds)	Mean Cons. (\$)	Standard Error %	No. in Sample (house holds)	Mean Cons. (\$)	Standard Error %
KMA	1,001	22,653	3.6	647	30,766	4.4
Other Towns	841	18,032	3.0	384	23,523	6.3
Rural Areas	2,643	13,889	2.2	932	18,517	3.6
Jamaica	4,485	16,998	2.0	1,963	23,408	2.7

weights (or raising factors) for non-response.

20 The formulae for estimation of sample mean and its variance are as follows:

**Notation**

Strata (sampling regions) from parish *t* included in the survey *L<sub>t</sub>*

Sub-units (dwellings) in sampling region *M* (same for all regions)

Number of first stage units (EDs) selected from a sampling region 2 (same for all regions)

Number of second stage units (dwellings) selected from one selected ED *m* (same for all EDs)

Number of dwellings analysed from *i* th selected ED in the *s* th sampling region *m<sub>is</sub>*

Non-response raising factor for the *i* th ED in the *s* th sampling region *f<sub>is</sub>* = *m/m<sub>is</sub>*

Unit value for the *j* th sub-unit in the *i* th primary unit (ED) *Y<sub>ij</sub>*

Sample mean for the *i* th selected ED in the *s* th region  $\bar{Y}_{is}$

then, in the case of parish estimates, the sample mean and variance of the sample mean for the *t* th parish are given by the following simple formulae-

$$\bar{Y} = \frac{1}{L_t \cdot 2m} \sum_{s=1}^{L_t} \sum_{i=1}^2 \sum_{j=1}^{m_{is}} f_{is} * Y_{ij}$$

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

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

where  $\sum$  stands for summation.

21 The above simple formulae are also applicable in case of all regional aggregates, where the region is built up of sampling regions from parishes with the same sampling fraction.

22 These relatively simple formulae are due to the sampling design involving paired selection of first stage units (i.e. EDs) with probability proportionate to size, from each sampling region.

**VIII Standard Errors**

23 Based on the above formulae, the mean per capita consumption expenditure and its standard error were compiled for the three area

divisions, namely, KMA, Other Towns and Rural Areas from the SLC 93 and presented below, with comparative figures for SLC 92. In the case of a few sampling regions, one of the two EDs belonged to Other Towns and the other to Rural; in such cases, the sampling region as a whole is treated as belonging to Rural, for purposes of compiling the variance of the sample mean.

24 The sample size in SLC 92 was more than twice that in SLC 93, and consequently, the precision of the estimates, measured by the percentage standard error, was more than that in SLC 93, in all the regions.

**IX. Linking with LFS**

25 As mentioned earlier, the selection of SLC sample dwellings as a subset of the immediately preceding LFS facilitates a linkage of the data collected in both the surveys for an integrated analysis. However, it should be remembered that in the SLC a household questionnaire is canvassed while in the LFS, a questionnaire is canvassed for each household member. The SLC, questionnaire, however, provides for such a linkage.

26 Firstly, the identification codes of parish, constituency, enumeration district (ED), dwelling number, and household number for the SLC samples are identical with the corresponding LFS sample dwellings. In the case of LFS, all questionnaires completed for individuals in a household are given the same identification.

27 Secondly, the Roster of household members in the SLC is filled with the data on household members collected in the identification section of LFS, namely, name of the individual, relationship to the head of the household, sex and age and individual number. In the SLC surveys, these details of household members are arranged in the same order of individual numbers; and the details are up-

dated; members who left the household in the intervening period between LFS and SLC are given a code 2, those who are new members a code 3, and those continuing code 1. There will not be the LFS data for members with code 3 and no SLC data for members with code 2. The age and sex data will be helpful in cases where the individual numbers do not seem to correspond.

**X. Parish/Area Codes**

28 The Parish and Area codes are given below for ready reference:

Parish	Code	Area	Code
Kingston	01	KMA	01
St. Andrew	02	Other Towns	02
St. Thomas	03	Rural Areas	03
Portland	04		
St. Mary	05		
St. Ann	06		
Trelawny	07		
St. James	08		
Hanover	09		
Westmoreland	10		
St. Elizabeth	11		
Manchester	12		
Clarendon	13		
St. Catherine	14		

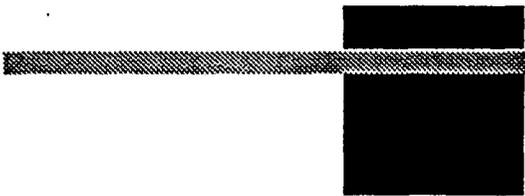
**XI. Industrial/Occupational Classifications**

29 The detailed industrial and occupational classifications, which may be required in the

analysis of some of the variables, are available in a printed form (for sale) with the STATIN. The one digit level classifications are given in Table Appendix II.4, for ready reference.□

**TABLE APPENDIX II.5  
INDUSTRIAL AND OCCUPATIONAL  
CLASSIFICATIONS AT ONE-DIGIT LEVEL  
(ADOPTED FOR LABOUR FORCE SURVEYS 1988  
TO 1993)**

One Digit Code	Description
<b>Industrial Classification</b>	
0	Agriculture, Forestry & Fishing
1	Mining, Quarrying & Refining
2/3	Manufacture
4	Electricity, Gas & Water
5	Construction & Installation
6	Wholesale & Retail trade, Hotels & Restaurants
7	Transport, Storage & Communications
8	Financing, Insurance, Real Estate & Business Services
9	Community, Social & Personal Services
<b>Occupational Classification (1988 to July 1993)</b>	
One Digit Code	Description
1	Professional, Technical, Administrative
2	Executive, Managerial and Independent Occupations
3	Clerical and Sales Occupations
4	Self Employed and Independent Occupations
5	Service occupations
6/7/8	Craftsmen, Production Process and Operating Occupations
9	Unskilled Manual and General occupations
<b>Occupational Classification (July 1993 to date)</b>	
1	Legislators, Senior Officials & Managers
2	Professionals
3	Technicians & Associate Professionals
4	Clerks
5	Service Workers, Shop & Market Sales Workers
6	Skilled Agricultural & Fishery Workers
7	Craft & related Trades Workers
8	Plant & Machine Operators & Assemblers
9	Elementary Occupations



# Abbreviations/ Acronyms

<b>BCG</b>	Bacillus Calmette-Guerin (vaccination against tuberculosis)
<b>CFNI</b>	Caribbean Food and Nutrition Institute
<b>CPI</b>	Consumer Price Index
<b>DPT</b>	Diphtheria, pertussis, tetanus
<b>ED</b>	Enumeration district
<b>ESSJ</b>	Economic and Social Survey, Jamaica
<b>FSP</b>	Food Stamp Programme
<b>GCT</b>	General Consumption Tax
<b>HES</b>	Household Expenditure Survey
<b>HRDP</b>	Human Resources Development Programme
<b>KMA</b>	Kingston Metropolitan Area
<b>LFS</b>	Labour Force Survey
<b>MOE</b>	Ministry of Education
<b>N</b>	Number of observations
<b>NWC</b>	National Water Commission
<b>OPV</b>	Oral polio vaccine
<b>PIOJ</b>	Planning Institute of Jamaica
<b>SAP</b>	Structural Adjustment Programme
<b>SAS</b>	Statistical Analysis Software
<b>SFP</b>	School Feeding Programme
<b>SLC</b>	Survey of Living Conditions
<b>STATIN</b>	Statistical Institute of Jamaica
<b>WC</b>	Water closet