

TABLE E-3
PERCENTAGE ENROLLED IN PUBLIC AND PRIVATE INSTITUTIONS BY AREA, QUINTILE, SEX AND AGE, 1996

Category	Public	Private	Total
Area			
KMA (N=446)	95.6	4.4	100.0
Other Towns (N=341)	95.9	4.1	100.0
Rural Areas (N=916)	97.8	2.2	100.0
Quintile			
Poorest (N=411)	98.1	2.0	100.0
2 (N=376)	96.8	3.2	100.0
3 (N=373)	97.6	2.4	100.0
4 (N=324)	98.8	1.2	100.0
5 (N=219)	91.3	8.7	100.0
Sex			
Male (N=877)	96.7	3.3	100.0
Female (N=826)	96.9	3.1	100.0
Age (Years)			
3-5 (N=14)	100.0	0.0	100.0
6-11 (N=917)	95.9	4.1	100.0
12-14 (N=473)	98.3	1.7	100.0
15-16 (N=224)	97.8	2.2	100.0
17-18 (N=69)	94.2	5.8	100.0
19-24 (N=6)	100.0	0.0	100.0
JAMAICA	96.8	3.2	100.0

Note: Figures adjusted for non-response

TABLE E-4
PERCENTAGE ENROLMENT BY AGE, EDUCATION LEVEL AND QUINTILE, 1996

Age and Education Level	Poorest	Quintile 2	Quintile 3	Quintile 4	Quintile 5
3-5 Years	(N=132)	(N=96)	(N=95)	(N=82)	(N=51)
Early Childhood	75.0	77.1	79.0	84.2	90.2
Primary	3.8	3.1	2.1	2.4	3.9
None	21.2	19.8	19.0	13.4	5.9
Sub-total	100.0	100.0	100.0	100.0	100.0
6-11 Years	(N=258)	(N=215)	(N=222)	(N=180)	(N=110)
Early Childhood	4.3	5.1	4.1	6.7	3.6
Primary	92.3	91.2	93.2	91.1	90.0
Secondary	3.1	2.8	2.7	1.7	6.4
None	0.4	0.9	0.0	0.6	0.0
Sub-total	100.0	100.0	100.0	100.0	100.0
12-14 Years	(N=116)	(N=117)	(N=100)	(N=100)	(N=63)
Primary	25.0	19.7	26.0	22.0	19.1
Secondary	70.7	76.9	74.0	76.0	81.0
None	4.3	3.4	0.0	2.0	0.0
Sub-total	100.0	100.0	100.0	100.0	100.0
15-16 Years	(N=66)	(N=68)	(N=55)	(N=58)	(N=38)
Secondary	66.7	83.8	92.7	79.3	97.4
Tertiary	1.5	2.9	0.0	5.2	0.0
None	31.8	13.2	7.3	15.5	2.6
Sub-total	100.0	100.0	100.0	100.0	100.0
17-18 Years	(N=54)	(N=56)	(N=56)	(N=59)	(N=43)
Secondary	25.9	14.3	28.6	37.3	48.8
Tertiary	0.0	0.0	3.6	10.2	4.7
None	74.1	85.7	67.9	52.5	46.5
Sub-total	100.0	100.0	100.0	100.0	100.0
19-24 Years	(N=125)	(N=137)	(N=143)	(N=155)	(N=171)
Secondary	1.6	1.5	2.1	3.2	5.9
Tertiary	0.0	0.7	2.8	3.9	7.0
None	98.4	97.8	95.1	92.9	87.1
Sub-total	100.0	100.0	100.0	100.0	100.0

Note: Figures adjusted for non-response

TABLE E-5
PERCENTAGE ENROLMENT IN SECONDARY AND TERTIARY EDUCATION BY AREA, QUINTILE, SEX AND AGE, 1996

Category	All Age (7-9)	Junior* High	New Secondary	Compr. High	Secondary High	Technical High	Vocation/ Agricult.	University/ Post Sec.	Adult/ Night	Total
Area										
KMA (N=234)	20.0	2.3	12.3	10.9	36.9	1.7	4.4	9.2	2.4	100.0
Other Towns (N=160)	18.9	2.5	16.7	8.6	35.0	7.9	4.1	5.8	0.5	100.0
Rural Areas (N=396)	21.8	3.7	17.7	18.1	25.8	4.5	3.4	4.3	0.8	100.0
Quintile										
Poorest (N=153)	36.6	5.2	18.3	9.2	20.3	5.2	3.3	0.7	1.3	100.0
2 (N=170)	22.4	2.9	22.9	18.2	27.7	1.8	-	1.8	2.4	100.0
3 (N=157)	20.4	3.2	14.0	15.9	29.9	8.3	3.8	3.8	0.6	100.0
4 (N=168)	15.5	2.4	11.3	19.1	32.7	4.8	4.8	8.9	0.6	100.0
5 (N=142)	7.0	2.1	12.7	7.8	48.6	2.8	7.8	9.9	1.4	100.0
Sex										
Male (N=388)	24.5	3.0	16.8	14.4	29.0	4.2	3.1	4.8	0.3	100.0
Female (N=402)	16.9	3.1	14.8	13.5	33.2	4.4	4.6	7.4	2.1	100.0
Age										
6-11 (N=30)	31.5	15.8	3.7	6.0	39.6	3.4	-	-	-	100.0
12-14 (N=375)	36.2	2.7	15.7	15.3	26.9	2.7	-	-	0.5	100.0
15-16 (N=244)	7.6	3.5	23.9	14.9	37.1	7.2	1.0	3.4	1.4	100.0
17-18 (N=92)	-	1.0	7.8	16.2	41.9	5.9	12.8	13.7	0.8	100.0
19-24 (N=42)	-	-	-	-	10.7	-	30.4	51.7	7.3	100.0
Jamaica (N=790)	20.6	3.0	15.8	13.9	31.1	4.3	4.0	6.1	1.2	100.0

Note: Figures adjusted for non-response

* Primary and Junior High (7-9) included.

- No persons enrolled

TABLE E-6
PERCENTAGE DISTRIBUTION OF HIGHEST GRADE ACHIEVED BY 12-18 YEAR OLDS OUT-OF-SCHOOL,
BY AREA, QUINTILE, SEX AND AGE, 1996

Category	Grades 1-6	Grades 7-9	Grades 10-11	Grades 12-13	Total
Area					
KMA (N=59)	2.9	36.7	59.1	1.3	100.0
Other Towns (N=41)	0.0	45.3	54.7	0.0	100.0
Rural Areas (N=113)	6.3	42.9	50.2	0.7	100.0
Quintile					
Poorest (N=73)	5.5	48.0	45.2	1.4	100.0
2 (N=73)	4.1	43.8	52.1	0.0	100.0
3 (N=61)	1.6	36.1	60.7	1.6	100.0
4 (N=64)	3.1	37.5	59.4	0.0	100.0
5 (N=38)	2.6	18.4	71.1	7.9	100.0
Sex					
Male (N=127)	4.3	47.1	47.9	0.6	100.0
Female (N=86)	3.8	33.7	61.6	0.9	100.0
Age (years)					
12-14 (N=9)	41.5	58.5	0.0	0.0	100.0
15-16 (N=41)	4.8	75.3	19.9	0.0	100.0
17-18 (N=163)	2.0	32.8	64.3	0.9	100.0
Jamaica (N=213)	4.1	41.5	53.7	0.7	100.0

Figures adjusted for non-response

TABLE E-7
PERCENTAGE OF CHILDREN IN PRIMARY AND SECONDARY SCHOOLS SENT TO SCHOOL
BY SEX, SCHOOL TYPE, QUINTILE AND AREA, 1996

NUMBER OF DAYS SENT TO SCHOOL IN REFERENCE WEEK							
Group	0	1	2	3	4	5	Total
Sex							
Male (N=872)	3.2	0.4	2.5	5.3	12.7	76.0	100.0
Female (N=825)	2.2	0.3	2.3	3.7	9.8	81.7	100.0
School Type							
Primary (N=522)	1.4	0.5	1.9	3.7	14.0	78.5	100.0
All Age/Pr.& Jn. High (1-6) (N=478)	3.2	0.0	3.2	5.2	11.2	77.1	100.0
All Age/Pr.& Jn. High (7-9) (N=159)	3.4	0.0	3.1	5.1	13.4	75.0	100.0
Junior High (N=25)	0.0	0.0	3.8	3.1	20.7	72.5	
New Sec. (N=123)	6.3	0.0	0.9	6.3	7.7	78.9	100.0
Compreh. High (N=111)	3.0	0.0	1.7	6.4	11.3	77.6	100.0
Second. High (N=245)	3.0	1.2	2.6	2.2	6.0	85.0	100.0
Technical High (N=36)	0.0	0.0	0.0	10.8	2.5	86.8	100.0
Quintile							
Poorest (N=406)	2.5	0.0	1.7	5.7	15.5	74.6	100.0
2 (N=378)	2.7	0.5	2.9	4.5	12.7	76.7	100.0
3 (N=370)	0.8	0.0	2.4	2.7	10.0	84.1	100.0
4 (N=321)	3.4	0.3	3.4	6.5	10.0	76.3	100.0
5 (N=222)	4.1	0.9	1.4	4.5	3.6	85.6	100.0
Area							
KMA (N=448)	5.2	0.6	3.6	4.6	11.0	75.0	100.0
Other Towns (N=335)	1.5	0.0	1.2	4.4	8.9	84.0	100.0
Rural Areas (N=914)	1.9	0.3	2.2	4.5	12.3	78.8	100.0
Jamaica (N=1698)	2.7	0.3	2.4	4.5	11.3	78.8	100.0

Note: Figures adjusted for non-response

TABLE E-8
PERCENTAGE DISTRIBUTION OF PARTICIPATION IN THE SCHOOL BASED FEEDING PROGRAMMES,
BY TYPE OF MEAL, SCHOOL TYPE, AREA AND QUINTILE, 1996

Category	Milk/ Nutribun	Cooked Meal	Both	Non- Participation	Total
School Type					
Primary (N=522)	31.6	16.7	24.5	27.2	100.0
All Age/Pr.&Jn. High (1-6) (N=478)	35.6	15.2	19.8	29.4	100.0
All Age (7-9) (N=159)	21.8	18.0	28.2	32.0	100.0
Pr.&Jn. High/Jn. High (7-9) (N=25)	6.8	40.1	16.2	36.9	
New Secondary (N=123)	14.4	28.6	15.2	41.8	100.0
Comprehensive (N=111)	3.0	36.3	19.9	40.8	100.0
Secondary High (N=244)	1.6	43.4	8.9	46.1	100.0
Technical High (N=36)	0.0	37.7	7.8	54.5	100.0
Area					
KMA (N=446)	27.3	17.7	23.2	31.8	100.0
Other Towns (N=341)	24.2	20.8	26.1	28.9	100.0
Rural Areas (N=911)	20.9	27.0	15.7	36.4	100.0
Quintile					
Poorest (N=405)	28.4	18.5	16.1	37.0	100.0
2 (N=380)	21.0	25.5	25.3	28.2	100.0
3 (N=374)	24.6	26.2	19.3	29.9	100.0
4 (N=316)	25.3	22.8	21.5	30.4	100.0
5 (N=223)	12.6	25.5	20.6	41.3	100.0
Jamaica (N=1698)	23.4	23.1	19.9	33.6	100.0

TABLE E-9
MEAN ANNUAL EXPENDITURE ON SCHOOL AND SCHOOL RELATED ITEMS, BY AREA, QUINTILE, AND SCHOOL TYPE (\$), 1996

Area	Tuition & Fees/ Contribution	Books	T&F/C & B as % of TOTAL	Extra Lessons	EL as a % of TOTAL	Transport	Trans. as a % of TOTAL	Lunch & Snacks	L&S as a % of TOTAL	Uniforms	Other Supplies	TOTAL
KMA (N=527)	\$2,831.00	\$1,325.00	20.3%	\$4,204.00	20.5%	\$4,216.00	20.5%	\$6,144.00	29.9%	\$1,329.00	\$468.00	\$20,517.00
Other Towns (N=399)	\$2,236.00	\$1,178.00	20.4%	\$2,222.00	13.3%	\$3,301.00	19.7%	\$5,845.00	34.9%	\$1,411.00	\$535.00	\$16,728.00
Rural Areas (N=1071)	\$1,898.00	\$867.00	19.8%	\$2,059.00	14.8%	\$2,945.00	21.1%	\$4,660.00	33.4%	\$1,132.00	\$387.00	\$13,948.00
Quintile												
Poorest (N=486)	\$1,315.00	\$614.00	16.6%	\$1,641.00	14.2%	\$2,775.00	23.9%	\$4,016.00	34.7%	\$966.00	\$258.00	\$11,585.00
2 (N=434)	\$1,810.00	\$820.00	19.3%	\$2,907.00	21.3%	\$2,640.00	19.3%	\$4,162.00	30.5%	\$1,006.00	\$309.00	\$13,654.00
3 (N=433)	\$1,965.00	\$974.00	20.2%	\$2,153.00	14.8%	\$2,515.00	17.3%	\$5,221.00	35.9%	\$1,276.00	\$437.00	\$14,541.00
4 (N=380)	\$2,246.00	\$1,354.00	20.3%	\$2,738.00	15.5%	\$3,247.00	18.3%	\$6,135.00	34.7%	\$1,425.00	\$549.00	\$17,694.00
5 (N=267)	\$4,569.00	\$1,823.00	23.1%	\$4,199.00	15.2%	\$6,473.00	23.4%	\$8,114.00	29.4%	\$1,749.00	\$692.00	\$27,619.00
School Type												
Early Child. (N=334)	\$2,496.00	\$374.00	23.0%	\$2,032.00	16.3%	\$2,598.00	20.8%	\$3,788.00	30.3%	\$911.00	\$290.00	\$12,489.00
Primary (N=521)**	\$1,886.00	\$856.00	16.8%	\$3,072.00	18.9%	\$4,682.00	28.8%	\$4,299.00	26.4%	\$1,105.00	\$378.00	\$16,278.00
All Age (1-6) (N=451)	\$450.00	\$730.00	10.6%	\$2,061.00	18.5%	\$1,982.00	17.8%	\$4,358.00	39.1%	\$1,200.00	\$374.00	\$11,155.00
All Age (7-9) (N=160)	\$614.00	\$986.00	11.9%	\$2,224.00	16.6%	\$2,445.00	18.2%	\$5,272.00	39.3%	\$1,435.00	\$441.00	\$13,417.00
Pr./Jn. High (1-6) (N=11)	\$180.00	\$745.00	6.6%	\$5,000.00	35.8%	\$2,400.00	17.2%	\$4,686.00	33.6%	\$705.00	\$240.00	\$13,956.00
Pr./Jn. High (7-9) (N=16)	\$480.00	\$778.00	9.9%	\$3,000.00	23.6%	\$3,006.00	23.7%	\$4,254.00	33.5%	\$951.00	\$215.00	\$12,684.00
Junior High (N=9)	\$2,213.00	\$972.00	15.8%	\$5,000.00	24.8%	\$3,900.00	19.4%	\$5,909.00	29.3%	\$1,732.00	\$413.00	\$20,139.00
New Second. (N=120)	\$1,975.00	\$1,331.00	19.3%	\$2,400.00	14.0%	\$2,799.00	16.4%	\$6,253.00	36.6%	\$1,650.00	\$680.00	\$17,088.00
Comprehensive (N=111)	\$2,435.00	\$1,736.00	21.7%	\$2,119.00	11.0%	\$3,363.00	17.5%	\$7,524.00	39.2%	\$1,439.00	\$564.00	\$19,180.00
Secondary High (N=234)	\$4,252.00	\$2,351.00	25.8%	\$4,728.00	17.8%	\$4,169.00	15.7%	\$8,745.00	32.9%	\$1,649.00	\$694.00	\$26,588.00
Technical High (N=30)	\$3,123.00	\$1,983.00	21.6%	\$3,875.00	16.4%	\$4,025.00	17.1%	\$8,678.00	36.8%	\$1,292.00	\$626.00	\$23,602.00
Jamaica (N=1997)	\$2,266.00	\$1,058.00	20.1%	\$2,798.00	11.8%	\$3,405.00	20.6%	\$5,300.00	32.1%	\$1,240.00	\$436.00	\$16,503.00

* Tuition and Fees are not sanctioned for the schools highlighted. Voluntary financial contributions are requested.

** Primary category includes private preparatory schools which charge school fees, and Primary schools for which voluntary financial contributions are requested.

TABLE E-10
SECONDARY SCHOOL FEES, AND ASSISTANCE GIVEN THROUGH THE GOVERNMENT'S FINANCIAL ASSISTANCE PROGRAMME (FAP) AND OTHER SOURCES, BY AREA, QUINTILE AND SCHOOL TYPE (MEAN DOLLAR(\$) VALUES), 1996

Area	Secondary School Fees	Assistance from FAP	% share of School Fees	Assistance from Other Sources	% share of School Fees
KMA	(N=129) 4196	(N=4) 1393	33.2%	(N=18) 3931	93.7%
Other Towns	(N=90) 3812	(N=6) 1967	51.6%	(N=11) 3282	86.1%
Rural Areas	(N=203) 2864	(N=14) 1104	38.5%	(N=31) 2022	70.6%
Quintile					
Poorest	(N=59) 2531	(N=7) 1093	43.2%	(N=15) 1657	65.4%
2	(N=95) 2698	(N=7) 864	32.0%	(N=8) 2725	101.0%
3	(N=88) 3584	(N=6) 2225	62.1%	(N=8) 3600	104.0%
4	(N=93) 3816	(N=2) 1250	32.7%	(N=13) 2869	75.2%
5	(N=87) 4521	(N=2) 1500	33.2%	(N=16) 4029	89.1%
School Type					
New Secondary	(N=102) 2011	(N=8) 1001	49.8%	(N=10) 1773	88.2%
Comprehensive	(N=90) 2728	(N=10) 1169	42.8%	(N=12) 2247	82.4%
Secondary High	(N=196) 4684	(N=2) 1800	38.4%	(N=26) 3834	81.8%
Technical High	(N=34) 3040	(N=4) 2229	73.3%	(N=12) 2196	72.2%
Jamaica	(N=422) 3501	(N=24) 1368	39.1%	(N=60) 2868	81.9%

Note: Figures not in brackets are the mean dollar values

SECTION F

HOUSING

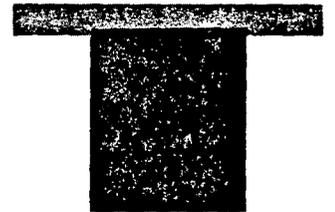


TABLE F-1
PERCENTAGE DISTRIBUTION OF DWELLINGS BY TYPE OF HOUSING UNIT, BY AREA AND QUINTILE, 1996

Type of Housing unit	Jamaica (N=1824)		KMA (N=552)	Other Towns (N=360)	Rural Areas (N=912)
Separate House Detached	76.0		53.9	80.1	90.0
Semi-detached House	5.7		11.8	2.4	2.8
Part of a House	14.4		25.9	15.8	5.7
Apartment Building	1.8		4.1	1.7	0.2
Town House	1.5		4.2	0.0	0.1
Improvised Housing Unit	0.1		0.2	0.0	0.1
Part of Commercial Building	0.4		0.0	0.0	0.7
Other	0.2		0.0	0.0	0.3
All Types	100.0		100.0	100.0	100.0
Type of Housing Unit	Poorest Quintile (N=227)	Quintile 2 (N=276)	Quintile 3 (N=335)	Quintile 4 (N=395)	Quintile 5 (N=591)
Separate House Detached	91.6	83.7	84.2	76.1	69.0
Semi-detached House	4.9	7.6	4.5	6.6	6.1
Part of a House	2.6	7.3	9.3	14.8	21.0
Apartment Building	0.0	0.7	0.3	1.8	2.2
Town House	0.0	0.0	0.6	0.5	1.2
Improvised Housing Unit	0.4	0.0	0.3	0.0	0.0
Part of Commercial Building	0.0	0.7	0.9	0.0	0.3
Other	0.4	0.0	0.0	0.0	0.3
All types	100.0	100.0	100.0	100.0	100.0

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

TABLE F-2
PERCENTAGE DISTRIBUTION OF DWELLINGS BY MATERIAL OF OUTER WALL, BY AREA AND QUINTILE,
1996

Classification	Wood	Stone	Brick	Concrete Nog	Block & Steel	Wattle & Daub	Other	All Types
Area								
KMA	18.4	0.6	1.2	12.5	61.5	0.0	5.9	100.0
Other Towns	37.2	0.5	0.0	11.9	48.7	0.0	1.8	100.0
Rural	30.5	0.1	1.0	12.3	54.2	0.7	1.2	100.0
Quintile								
Poorest	41.0	0.0	0.9	11.5	44.9	0.4	1.3	100.0
2	36.6	0.4	1.1	14.9	46.4	0.4	0.4	100.0
3	33.8	0.3	0.6	12.9	50.3	0.6	1.5	100.0
4	26.4	0.0	0.8	13.7	53.6	0.5	5.1	100.0
5	17.5	0.5	0.7	11.4	64.9	0.2	4.9	100.0
Jamaica	27.7	0.4	0.9	12.3	55.6	0.3	2.9	100.0

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

TABLE F-3
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TYPE OF TOILET FACILITY AND AREA, 1996

Type of Toilet Facility	JAMAICA		KMA		OTHER TOWNS		RURAL AREAS	
	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use
WC Linked To Sewer	23.4	19.1	48.0	38.3	11.0	9.4	10.7	9.3
WC Not Linked To Sewer	30.2	24.9	37.1	26.6	38.1	33.4	21.8	20.0
Pit	46.1	34.6	14.7	10.6	50.6	30.4	67.2	54.0
Other	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3
None	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
All Types	100	78.9	100.0	75.7	100.0	73.5	100.0	83.5

Note: Estimates adjusted for non-response

TABLE F-4
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TYPE OF TOILET FACILITY, AND QUINTILE, 1996

Type of Toilet Facility	Poorest		Quintile 2		Quintile 3		Quintile 4		Quintile 5	
	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use	Households with facility	Households having exclusive use
WC Linked To Sewer	8.8	7.4	13.1	12.4	17.2	14.5	23.9	19.3	32.8	27.3
WC Not Linked To Sewer	8.8	8.8	23.3	19.6	26.6	23.6	33.4	27.2	38.1	31.1
Pit	82.5	67.7	63.3	47.6	55.6	45.3	42.2	31.4	29.0	17.7
Other	0.0	0.0	0.4	0.4	0.3	0.3	0.5	0.5	0.0	0.0
None	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
All Types	100.0	83.9	100.0	80.0	100.0	83.7	100.0	78.4	100.0	76.1

TABLE F-5
PERCENTAGE DISTRIBUTION OF DWELLINGS BY SOURCE OF DRINKING WATER, BY AREA AND QUINTILE,
1996

Classification	Indoor Tap/Pipe	Outside Private Tap/Pipe	Public Standpipe	Well	River/Lake/-Spring Pond	Rainwater (Tank)	Other	All Types
Area								
KMA	74.4	22.0	2.6	0.0	0.2	0.2	0.7	100.0
Other Towns	42.7	30.6	14.9	0.0	1.0	7.8	3.1	100.0
Rural	23.4	19.5	23.8	0.2	4.4	24.2	4.7	100.0
Quintile								
Poorest	14.2	24.3	30.5	0.4	4.4	18.1	8.0	100.0
2	27.3	28.7	21.1	0.0	3.3	16.0	3.6	100.0
3	36.7	24.5	15.5	0.0	2.4	17.9	3.0	100.0
4	47.3	24.2	11.7	0.0	2.5	10.9	3.3	100.0
5	59.9	17.8	9.7	0.2	1.4	9.5	1.5	100.0
Jamaica	44.3	22.5	14.9	0.1	2.3	12.9	3.0	100.0

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

**TABLE F-6
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY DISTANCE FROM PUBLIC WATER SOURCE,
BY AREA AND QUINTILE, 1996**

Classification	Analysed(N)	0-49 yds.	50-199 yds.	200-499 yds.	500-999 yds.	1000+ yds.	TOTAL
KMA							
Public Standpipe	11	50.4	8.4	41.2	0.0	0.0	100.0
Spring/Pond	1	0.0	0.0	0.0	100.0	0.0	100.0
Other Towns							
Public Standpipe	48	63.1	22.5	10.5	0.0	3.9	100.0
Spring/Pond	2	50.0	0.0	50.0	0.0	0.0	100.0
Rural							
Public Standpipe	212	47.9	22.6	14.1	7.0	8.4	100.0
Spring/Pond	38	31.9	18.8	15.1	9.4	24.7	100.0
Quintile/Source	Analysed(N)	0-49 yds.	50-199 yds.	200-499 yds.	500-999 yds.	1000+ yds.	TOTAL
Poorest							
Public Standpipe	66	50.0	21.2	18.2	6.1	4.6	100.0
Spring/Pond	9	22.2	11.1	22.2	33.3	11.1	100.0
Quintile 2							
Public Standpipe	57	52.6	21.1	15.8	3.5	7.0	100.0
Spring/Pond	8	37.5	25.0	25.0	0.0	12.5	100.0
Quintile 3							
Public Standpipe	50	50.0	26.0	10.0	6.0	8.0	100.0
Spring/Pond	8	37.5	12.5	25.0	0.0	25.0	100.0
Quintile 4							
Public Standpipe	43	51.2	27.9	11.6	7.0	2.3	100.0
Spring/Pond	9	22.2	22.2	11.1	22.2	22.2	100.0
Quintile 5							
Public Standpipe	55	50.9	21.8	10.9	3.6	12.7	100.0
Spring/Pond	7	42.9	14.3	0.0	0.0	42.9	100.0
JAMAICA							
Public Standpipe	271	50.9	22.0	14.6	5.4	7.1	100.0
Spring/Pond	41	32.3	17.1	17.0	11.0	22.6	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 , 1996

Classification	Electricity	Kerosene	Other	None	All Types
Area					
KMA	90.0	6.9	0.0	3.2	100.0
Other Towns	78.3	21.4	0.0	0.3	100.0
Rural	66.9	31.1	1.7	0.3	100.0
Quintile					
Poorest	56.4	41.9	0.9	0.9	100.0
2	67.8	31.5	0.4	0.4	100.0
3	71.3	26.7	0.6	1.5	100.0
4	80.5	18.0	0.5	1.0	100.0
5	86.4	11.4	1.2	1.0	100.0
Jamaica	76.9	21.1	0.8	1.3	100.0

TABLE F-8
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS HAVING KITCHEN FACILITIES, BY AREA AND QUINTILE,
1996

Classification	Households with Facility	Households having Exclusive Use of Facility
Area		
KMA	94.6	80.0
Other Towns	90.0	79.3
Rural	94.5	86.3
Quintile		
Poorest	90.7	85.4
2	94.6	86.6
3	93.1	86.6
4	95.7	84.0
5	93.4	77.8
Jamaica	93.6	82.8

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

TABLE F-9
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TENURE STATUS, BY AREA AND QUINTILE, 1996

Tenure Status	Jamaica	KMA	Other Towns	Rural Areas	Poorest	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Owned by Household Member	60.3	44.7	59.1	72.0	76.7	70.3	67.8	60.2	50.9
Rent-Free	13.8	16.9	10.0	13.3	13.2	16.7	14.9	10.9	14.6
Rented									
Leased	1.9	3.1	2.0	1.0	2.6	0.7	2.1	1.3	2.0
Private Rented	20.7	31.0	25.7	11.3	4.4	7.6	12.5	22.8	30.9
Government Rented	0.7	0.8	1.2	0.3	0.0	0.4	0.9	0.8	0.7
Squatter	1.4	2.6	1.2	0.6	1.8	1.1	0.9	2.5	0.3
Other	1.2	1.0	0.9	1.5	1.3	3.3	0.9	1.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

TABLE F-10
PERCENTAGE DISTRIBUTION OF RENTERS BY PERSON OR AGENCY FROM WHOM PROPERTY RENTED BY AREA AND QUINTILE, 1996

Classification	Households Analysed (N)	Relative	Private Employer	Public Agency	Private Individual/Agency	Total
Area						
KMA	173	4.8	6.0	0.9	88.3	100.0
Other Towns	95	6.6	8.6	3.7	81.2	100.0
Rural	109	10.5	5.7	3.8	80.0	100.0
Quintile						
Poorest	16	6.3	0.0	0.0	93.8	100.0
2	23	8.7	17.4	0.0	73.9	100.0
3	49	4.1	4.1	6.1	85.7	100.0
4	95	9.5	6.3	5.3	79.0	100.0
5	194	5.7	7.2	0.5	86.6	100.0
Jamaica	377	6.6	6.5	2.3	84.5	100.0

Note: Estimates adjusted for non-response

TABLE F-11
MEAN MONTHLY RENTAL PAYMENT AND RENT AS PERCENTAGE OF TOTAL HOUSEHOLD CONSUMPTION,
BY AREA AND QUINTILE, 1996

Classification	Households Analysed (N)	Mean Monthly Rent (\$)	Rent as % of Total Household Consumption
Area			
KMA	165	2,379	13.2
Other Towns	96	1,270	9.9
Rural	99	904	7.8
Quintile			
Poorest	15	191	3.7
2	23	415	4.4
3	46	870	7.7
4	91	1,111	8.6
5	185	2,228	12.5
Jamaica	360	1,747	11.5

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

TABLE F-12
MEAN MONTHLY WATER PAYMENT AND WATER PAYMENT AS PERCENTAGE OF
TOTAL HOUSEHOLD CONSUMPTION BY AREA AND QUINTILE, 1996

Classification	Households Analysed (N)	Mean Monthly Water Payment (\$)	Water as % of Total Household Consumption
Area			
KMA	370	390	2.0
Other Towns	214	391	2.5
Rural	287	309	2.4
Quintile			
Poorest	56	340	3.4
2	96	298	2.9
3	139	332	2.5
4	198	374	2.5
5	382	395	1.9
Jamaica	871	366	2.2

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, 1996

Classification	Households Analysed (N)	Mean Monthly Payment (\$)	Electricity as % of Total Household Consumption
Area			
KMA	406	944	5.0
Other Towns	271	743	4.9
Rural	573	638	4.9
Quintile			
Poorest	114	591	6.3
2	161	708	6.4
3	214	697	5.3
4	283	762	5.3
5	478	855	4.3
Jamaica	1,250	770	4.9

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

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

Classification	Households Analysed (N)	Mean Monthly Telephone Payment (\$)	Telephone as % of Total Household Consumption
Area			
KMA	229	717	3.2
Other Towns	133	623	3.2
Rural	115	542	3.1
Quintile			
Poorest	18	505	4.4
2	44	437	3.5
3	64	492	3.3
4	102	543	3.1
5	249	773	3.1
Jamaica	477	653	3.2

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

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

Classification	Households Analysed (N)	Mean Monthly Mortgage Payment	Mortgage as % of Total Household Consumption
Area			
KMA	41	2,992	12.9
Other Towns	14	866	4.8
Rural	5	1,474	10.0
Quintile			
Poorest	-	-	-
2	3	277	1.8
3	13	1,076	6.6
4	19	1,177	7.2
5	25	3,687	13.1
Jamaica	60	2,338	11.0

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

TABLE F-16
MEAN MONTHLY PROPERTY TAX PAYMENT AND PROPERTY TAX PAYMENT AS PERCENTAGE OF
TOTAL HOUSEHOLD CONSUMPTION, BY AREA AND QUINTILE, 1996

Classification	Households Analysed (N)	Mean Monthly Property Tax Payment	Property Tax as % of Total Household Consumption
Area			
KMA	158	58	0.3
Other Towns	125	33	0.2
Rural	545	27	0.2
Quintile			
Poorest	122	11	0.1
2	135	18	0.2
3	153	22	0.2
4	176	24	0.2
5	242	66	0.3
Jamaica	828	35	0.2

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

TABLE F-17
PERCENTAGE OF HOUSEHOLDS OWNING SELECTED DURABLE GOODS, BY AREA, 1996

Durable Good	Code	Jamaica (N=1823)	KMA (N=551)	Other Towns (N=360)	Rural (N=912)
Sewing Machines	601	14.2	17.8	13.4	12.0
Gas Stoves	602	65.8	76.1	72.7	55.6
Electric Stoves	603	1.5	3.8	0.6	0.2
Refrigerators/Freezers	604	51.9	63.2	55.3	42.4
Air Conditioners	605	0.6	1.0	1.1	0.1
Fans	606	39.8	63.2	40.8	22.7
Radio/Cassette Players	607	69.9	65.0	71.7	72.8
Phonographs	608	0.8	0.2	2.6	0.5
Stereo Equipment	609	12.6	17.6	17.0	7.2
Video Equipment	610	20.4	27.7	27.3	12.4
Washing Machines	611	3.9	7.1	4.8	1.3
TV Sets	612	61.2	70.5	69.0	51.3
Bicycles	613	11.8	13.3	13.7	9.9
Motor Bikes	614	1.2	0.7	0.6	1.8
Cars/Other Vehicles	615	10.6	13.9	11.1	8.1
None		14.0	13.2	10.7	16.0

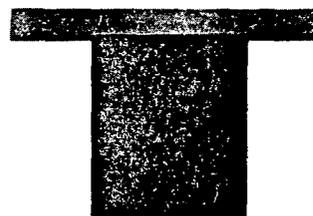
Note: Estimates for Area and Jamaica adjusted for non-response

TABLE F-18
PERCENTAGE OF HOUSEHOLDS OWNING SELECTED DURABLE GOODS, BY QUINTILE, 1996

Durable Good	Code	Poorest	Quintile 2 (N=227)	Quintile 3(N=275)	Quintile 4(N=395)	Quintile 5(N=591)
Sewing Machines	601	8.8	12.0	11.6	16.7	16.2
Gas Stoves	602	39.2	55.6	65.1	71.6	74.5
Electric Stoves	603	0.0	0.0	0.3	0.5	2.7
Refrigerators/Freezers	604	26.9	42.5	46.6	57.5	61.1
Air Conditioners	605	0.0	0.0	0.0	0.0	1.4
Fans	606	17.6	26.9	29.9	43.5	52.1
Radio/Cassette Players	607	66.5	66.2	67.2	73.2	73.3
Phonographs	608	0.0	0.7	0.9	1.3	0.8
Stereo Equipment	609	3.5	5.1	7.2	12.2	21.5
Video Equipment	610	4.8	10.5	14.6	20.8	31.6
Washing Machines	611	0.9	1.1	0.3	3.0	9.0
TV Sets	612	42.3	53.8	58.2	65.6	69.0
Bicycles	613	6.6	10.2	9.9	16.5	13.7
Motor Bikes	614	0.9	0.7	1.8	0.8	1.5
Cars/Other Vehicles	615	1.8	2.2	5.4	6.3	23.2
None		23.8	16.7	14.3	11.6	11.5

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

SECTION G



FOOD STAMP PROGRAMME

**TABLE G-1
DISTRIBUTION OF FOOD STAMPS STATUS, BY AREA AND QUINTILE, 1996**

Classification	Receiving Food Stamps	No Longer Receiving Food Stamps	Applied Within the past 12 Months but Not Receiving	Applied Before the past 12 Months but Not Receiving	Never Applied	Total
Area						
KMA (N=2,070)	4.0	1.1	0.8	1.5	92.6	100.0
Other Towns (N=1,350)	8.2	4.7	2.0	2.9	82.2	100.0
Rural Area (N=3,568)	9.5	5.6	2.5	3.4	78.9	100.0
Quintile						
Poorest (N=1396)	15.3	5.5	2.8	4.6	71.9	100.0
2 (N=1395)	7.4	5.8	3.1	2.4	81.3	100.0
3 (N=1394)	7.8	4.5	1.8	3.0	83.0	100.0
4 (N=1,403)	4.9	3.1	1.4	2.5	88.2	100.0
5 (N=1,400)	2.9	1.5	0.4	1.3	93.9	100.0
WELFARE BENEFITS						
Public Assistance	73.8	0.9	0.9	1.6	22.9	100.0
Poor Relief	45.0	2.0	2.4	4.4	46.3	100.0
No Benefit	4.0	2.3	1.0	2.1	90.6	100.0
Jamaica (N=6,988)	7.5	4.0	1.9	2.7	84.0	100.0

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

TABLE G-2
SELF REPORTED REASONS FOR HOUSEHOLDS NOT APPLYING FOR FOOD STAMPS, BY AREA AND QUINTILE, 1996

Classification	Did Not Consider Household Eligible	Did Not Know How to Apply	Not Worth the Trouble	Did Not Want Stigma	Other	Total
Area						
KMA (N=1891)	49.0	18.8	18.2	7.0	7.1	100.0
Other Towns (N=1105)	58.2	18.6	10.4	6.0	6.7	100.0
Rural Areas (N=2792)	53.9	16.5	10.6	6.4	12.6	100.0
Quintile						
Poorest (N=1026)	49.3	20.8	11.4	3.7	14.8	100.0
2 (N=1111)	48.0	21.0	15.9	6.1	9.1	100.0
3 (N=1132)	52.3	19.4	13.6	4.5	10.3	100.0
4 (N=1220)	52.1	18.9	13.8	8.3	7.0	100.0
5 (N=1299)	60.9	10.4	11.7	9.0	8.0	100.0
Jamaica (N=5788)	53.0	17.7	13.3	6.5	9.6	100.0

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

TABLE G-3
DISTRIBUTION OF INDIVIDUALS RECEIVING FOOD STAMPS BY AREA AND QUINTILE, 1996

Classification	Number of Individuals Receiving Food Stamps (n)	Percentage of Total Recipients (%)
Area		
KMA	78	17.1
Other Towns	108	20.9
Rural Areas	341	62.0
Quintile		
Poorest	206	38.8
2	108	19.2
3	107	20.0
4	67	13.9
5	39	8.2
JAMAICA	527	100.0

**TABLE G-4
NUMBER AND PERCENTAGE OF HOUSEHOLDS RECEIVING FOOD STAMPS, BY AREA AND QUINTILE, 1996**

Classification	Households Receiving Food Stamps (N)	Percentage of Total Recipients (%)
Area		
KMA	44	12.90
Other Towns	64	18.77
Rural Areas	233	68.33
Quintile		
Poorest	99	29.03
2	77	22.60
3	77	22.58
4	55	16.13
5	33	9.68
Jamaica	341	100.00

TABLE G-5
NUMBER AND PERCENTAGE OF ELIGIBLE INDIVIDUALS RECEIVING FOOD STAMPS,
BY BENEFICIARY CATEGORY, AREA AND QUINTILE, 1995-1996

	Children Aged less than Six Years+				Pregnant/Lactating Women				Elderly/Poor/Disabled			
	1995		1996		1995		1996		1995		1996	
	N	%	N	%	N	%	N	%	N	%	N	%
Area												
KMA	244	6.9	212	7.7	31	0	21	0	74	27.3	42	34.6
Other Towns	144	10.8	131	12.6	13	0	16	40.9	46	31.5	55	39.3
Rural Areas	406	26.5	379	25.3	64	8	54	16.1	197	39.8	182	42.9
Quintile												
Poorest	226	23	190	20.5	35	2.9	25	16	78	48.7	69	49.3
2	178	21.4	174	19.5	30	10	23	26.1	78	35.9	65	43.1
3	178	16.3	150	20	19	5.3	16	12.5	54	33.3	54	38.9
4	124	12.1	130	13.9	15	0	11	9.1	43	32.6	56	33.9
5	88	9.1	78	11.5	9	0	16	12.5	64	21.9	35	22.9
Jamaica	794	17.9	722	34.6	108	4.6	91	4.4	317	35.3	279	36.4

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

(ii) Estimates for Area and Jamaica adjusted for non-response

TABLE G-6
SELF-REPORTED REASONS FOR NON-RECEIPT OF FOOD STAMPS AMONG APPLICATIONS
WHICH HAVE BEEN SUBMITTED MORE THAN 12 MONTHS EARLIER, 1996

Classification	Never Checked Back	Put on File	Turned Down	Did Not Receive in Mail	Other	Don't Know	Total
Area							
KMA (N=39)	0.0	28.2	2.4	11.9	3.4	54.2	100.0
Other Towns (N=39)	0.0	4.7	20.7	7.9	2.4	64.3	100.0
Rural Areas (N=124)	3.7	13.0	6.0	2.4	8.4	66.5	100.0
Quintile							
Poorest (N=68)	4.4	19.1	8.8	2.9	10.3	54.4	100.0
2 (N=36)	2.8	25.0	5.6	2.8	2.8	61.1	100.0
3 (N=41)	0.0	4.9	4.9	2.4	7.3	80.5	100.0
4 (N=38)	0.0	5.3	13.2	18.4	2.6	60.5	100.0
5 (N=19)	5.3	15.8	5.3	0.0	0.0	73.7	100.0
Jamaica (N=202)	2.2	14.4	8.2	5.4	6.2	63.6	100.0

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

TABLE G-7
WHAT HAPPEN TO APPLICATION OF INDIVIDUALS WHO APPLIED WITHIN THE LAST 12 MONTHS
BUT NOT RECEIVING FOOD STAMPS, BY AREA AND QUINTILE, 1996

Area		Approved	Put on File	Turned Down	Don't Know
KMA	N=17	36.38	23.53	0.00	9.68
Other Towns	N=26	0.00	5.88	33.33	23.66
Rural	N=87	63.64	70.59	66.67	66.67
Quintiles					
1	N=38	27.27	35.29	33.33	27.96
2	N=42	36.36	17.65	44.44	33.33
3	N=24	27.27	17.65	0.00	19.35
4	N=20	9.09	23.53	11.11	15.05
5	N=6	0.00	5.88	11.11	4.3
Jamaica	N=130	8.46	13.08	6.92	71.54

TABLE G-8
SELF-REPORTED REASONS FOR NON-RECEIPT OF FOOD STAMPS AMONG INDIVIDUALS RECEIVING FOOD STAMPS DURING THE MARCH OR APRIL PAYMENT CYCLE, 1996

Classification	Did Not Go to Paystation	No One at Paystation	Went but Could Not Wait	Did Not Receive Entitlement in Mail	Other
Area					
KMA	24.24	0.0	0.0	0.0	0.0
Other Towns	18.91	13.19	0.0	0.0	0.0
Rural Areas	56.85	86.81	100.0	100.0	100.0
Quintile					
Poorest	0.0	70.16	0.0	0.0	48.3
2	14.34	20.42	0.0	47.8	0.0
3	32.42	0.0	0.0	0.0	51.7
4	17.81	0.0	100.0	52.2	0.0
5	35.43	9.42	0.0	0.0	0.0
Jamaica	44.36	27.25	3.3	6.26	18.9

Note: Estimates for Area and Jamaica 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, 1996

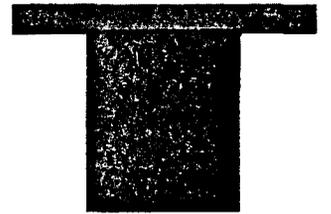
	Lateness/Absence of Officer	Rudeness of Officer	Disorderliness of Crowd	Inadequate Accommodation	Transportation	Long Lines	Not in Mail	Other	Total
Jamaica	11.4	8.1	35.2	5.5	15.2	11.3	5.3	8.1	100.0
Area									
KMA	0.0	0.0	23.8	0.0	16.8	22.5	0.0	31.6	-
Other Towns	71.0	37.1	6.7	0.0	0.0	53.2	0.0	27.4	-
Rural Areas	29.0	62.9	69.5	100.0	83.2	24.4	100.0	41.1	-
Total	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	-

TABLE G-10
SELF-REPORTED REASONS FOR NON-RECEIPT OF FOOD STAMPS AMONG INDIVIDUALS WHO APPLIED
WITHIN THE LAST 12 MONTHS DURING THE MARCH OR APRIL PAYMENT CYCLE, 1996

Classification	Went to Pay Station but Not on List	Have Not Gone Back to Check	Other
Area			
KMA	0.0	33.33	60.0
Other Towns	0.0	0.00	0.0
Rural Areas	100.0	66.67	40.0
Total	100.0	100.0	100.0
Quintile			
Poorest	100.0	33.33	20.0
2	0.0	33.33	20.0
3	0.0	33.33	40.0
4	0.0	0.00	20.0
5	0.0	0.00	0.0
Total	100.0	100.0	100.0

Note: Estimates for Area adjusted for non-response

APPENDICES



APPENDIX 1

SURVEY DESIGN

1. Starting with SLC 92, detailed documentation on the survey design and relevant technical aspects have been included in the SLC reports in the form of two Appendices. Appendix I provides the details on how the survey was conducted while 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 sources.

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. However, from 1989, emphasis has been annually placed on a specific social sector in an attempt to capture basic data which might be useful in policy formulation. A synopsis of focus topics is provided below.

Table AP-I.1
Focus in SLC rounds, 1989 to 1996

SLC round	Focus Topics	Associated Questionnaires
SLC 89-2	Expanded Health	Public Primary, Secondary & Tertiary Health Services
	Fertility Last Pregnancy	Private Primary, Secondary & Tertiary Health Services
SLC 90	Expanded Education	Primary & Secondary School Teachers, Administrators
SLC 91	Expanded Housing	
SLC 92	Poverty	
SLC 93	Employment & Time Use Social Mobility	
SLC 94	Experimental Consumption Modules	
SLC 95	Persons aged 60+ years	
SLC 96	Consumer Satisfaction with Health Services Child Fostering	

3. Excluding the Cover, the questionnaire for SLC 96 was divided into the following 13 parts (including Part A Supplement).

Part A: General Health of all household members

Part A: Supplement - Consumer Satisfaction with Health Services

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: Child Fostering

Part E: Daily Expenses (past 7 days)

Part F: Food Expenses Including Home Production and Food Received as Gift (Past 7 Days and past 30 Days)

Part G: Non-food Consumption Expenditures (Past 30 Days and in Most Cases past 12 Months)

Part H: Non-consumption Expenditures Such as Insurance, Gifts, and Donations Etc., (Past 30 Days and past 12 Months)

Part I: Receipt of Food Stamps and Reasons for Not Receiving

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 R: Household Roster of All Members

4 The periods given in brackets against parts E to H are the reference periods adopted for collecting the expenditure data. All of the above modules, with the exception of Parts A and D, were the same as in SLC 95. Along with Part A- Health, a Supplement was introduced to collect information on Consumer Satisfaction with the Health Services. In SLC 96, the focus module on Child Fostering was given as Part D.

II. Sampling Design

5 The sample dwellings for SLC 96 was a sub-set of the April 1996 Labour Force Survey (LFS). SLC 95 was conducted in May-June with a sub-set of the sample dwellings of April 1995 Labour Force Survey and, since the sample dwellings in the Labour Force Survey gets repeated once a year, the sample dwellings in SLC 96 were identical with those in SLC 95.

In 1993, a Master Sample of 32 dwellings was selected from each selected ED for the quarterly LFS, and was arranged in 8 panels of 4 sample dwellings each. The 8 panels were each a systematic sample of the Master Sample. In each round of the quarterly LFS, 4 panels were canvassed; 2 continued from the previous quarter and 2 of the succeeding panels. This type of rotation of panels results in identical sample dwellings once every year. This scheme of rotation of panels reduces respondent fatigue. More details on the sampling design are given in the following paragraphs.

6 The design adopted for the LFS (all surveys of STATIN follow the same design) is a two-stage stratified random sampling design, with the first stage being a selection of areas 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 sampling regions (strata) of equal size, in terms of dwellings. Two Enumeration Districts were selected from each sampling region with probability proportionate to size. In each selected ED, a list of all dwellings was prepared which formed the frame for selection of the Master 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 sampling region and preparing up dated lists of dwellings in each. The sampling regions are also updated on the basis of available information on new dwellings. Up to date and comprehensive data on dwellings is generally available only after the results of a population census and, therefore, in between the censuses. Whatever revisions are made to the LFS sample 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 the Labour Force Surveys in 1988 and the SLC 88 were those selected in 1983 with sampling regions formed on the basis of 1982 population census; the sample was revised in 1989 and was adopted for all quarterly Labour Force Surveys and the Survey of Living Conditions conducted during 1989 to 1992. In 1993, the sample dwellings for the LFS were again revised, after further revision of the sampling regions based on the dwellings data collected in the population census of 1991 and this sample was then adopted for the LFS and SLC surveys in 1993 and onwards.

9 For the revision of LFS sample in 1989, the country was divided into 217 sampling regions (or strata) of equal size (the prescribed size was 2,400 dwellings per sampling region); and for the revision in 1993, the country was divided into 234 sampling regions each containing about 2,500 dwellings. In the 1989 revision, a Master Sample of dwellings was formed by selecting 36 dwellings 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 sample dwellings from an ED were selected as a systematic sample with a random start. 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 sampling regions. On the other hand, the quarterly LFS surveys of 1993 to 1995 covered 7,488 dwellings drawn from 468 EDs and 234 sampling regions.

III. Panels:

10 The 8 panels in the Master Sample of the 1993 revision were formed in such a manner that each panel was a systematic subsample of the Master Sample. The coverage of the panels in each quarterly LFS is as follows:

11 If the 8 panels are labeled as A, B, C, D, E, F, G and H, then the panels covered in each quarterly LFS are -

<u>Quarter</u>	<u>Panels</u>
April	A, B, C, D
July	C, D, E, F
October	E, F, G, H
January	G, H, A, B
April	A, B, C, D

12 It will be observed that the panels get repeated after one year; and the panels covered in alternate quarterly LFS comprise different dwellings. Thus, the April and October LFS cover different dwellings. The EDs in all the quarterly LFS will, however, be the same.

Implications of Samples with Different Dwellings

13 The sample dwellings for SLC 95 were a subset of the sample dwellings for April 1995 LFS while those for SLC 94 and SLC 93 were subsets of the corresponding October LFS. Hence, the sample dwellings of SLC 95 were different from those in SLC 94 or SLC 93.

14 The advantage of identical dwellings which obtained in SLC 93 and SLC 94 was restored in SLC 95 and SLC 96, with both surveys being conducted in May-June.

IV. SLC Sample

15 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 of the LFS sample dwellings were covered in SLC 88, SLC 89-1, SLC 90 and SLC 91, SLC 93, SLC 94 and SLC 95; and two thirds of the LFS sample dwellings in SLC 89-2. In SLC 92, all LFS samples in ten parishes and two thirds of the samples in Kingston, St. Andrew, Clarendon and St. Catherine were covered, to provide parish estimates.

16 In the Labour Force Survey conducted in April 1996, the sample comprised 468 Enumeration Districts (EDs), drawn from 234 sampling regions, with 16 dwellings selected from each ED- a total of 7,488. For the SLC 96, conducted in May 1996, 78 sampling regions (selected on a circular systematic sampling basis from the 234 sampling regions), along with the 2 EDs and 32 dwellings from each sampling region, covered in the April LFS, were included in the SLC sample. Thus, the sample for SLC 96 covered 2,496 dwellings.

17 In this context, it may be noted that the sample of 78 sampling regions were selected from all the 234 sampling regions in the country for SLC 93 to SLC 96, unlike in some of the previous rounds, when the sampling regions were selected separately from each parish giving rise to rounding off errors in the parish proportions. Thus, no weighting at the parish level, to take account of the differences in sampling fractions, will be necessary in SLC 93 to SLC 96.

V. Investigations

18 The Interview method is followed in the conducting of the SLC, that is, the interviewers of STATIN visit the households in the selected dwellings and record the information canvassed 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.

19 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 keeping nor willing to keep accounts, or to follow adequately the concepts, definitions and instructions.

VI. Incentive Scheme

20 There was a delay of about 2 ½ months in completing the field work under SLC 93. In order to reduce this delay, an incentive scheme was introduced in SLC 94, which was effective in eliminating the delays. Hence, this scheme was continued in SLC 95 and SLC 96. The investigations commenced by the middle of May and the cut off date was prescribed as July 10. All the questionnaires received in STATIN on or before the cut off date were paid at the following rates:

Completed Questionnaire	<u>Jam \$</u>
Senior Supervisor	15
Supervisor	35
Interviewer	100
Anthropometric Measurements	
Supervisor	150
Interviewer (who assisted)	50
Child (payment in kind)	35

21 It was made clear that only those questionnaires which were received on or before the cut off date and which

were accepted for analysis would be eligible for the incentive. This had a salutary effect and 1744 completed questionnaires and anthropometric data on 723 children were received by the cut off date. These accounted for almost all those finally analysed.

VII. Supervision

22 Apart from the intensive training given to the interviewers and supervisors before the start of the investigations, the SLC statistician and consultant visited all the supervisors' zones during the early part of the field work. A few questionnaires of each interviewer were scrutinised and on-the-job training was provided, where necessary.

VIII. Non-Response

23 In SLC 96, it was observed that the non-completion of questionnaires was about 24.2 per cent compared to 20.8 per cent in SLC 95, 22.0 per cent in SLC 94, 20.5 per cent in SLC 93, 28.1 percent in SLC 92 and 29.8 percent in SLC 91. Only one questionnaire, forming 0.0 per cent was rejected for analysis at the time of data cleaning, because of inconsistent data, compared to 0.2 per cent in SLC 95, 0.3 per cent in SLC 94, 1.1 per cent in SLC 93, 1.6 per cent in SLC 92 and 1.3 percent in SLC 91. The following table shows the non-interview rates from SLC 90 to SLC 96.

Table AP-I.2
Planned and Final Sample Sizes, SLC 90 to SLC 96

Year	Sample Size		Non-Response Rates (%) Non-Interview			
	Planned	Analysed	Dwelling vacant/ closed*	Refusals	Rejected in data cleaning	Total
90	2,592	1,828	18.0	9.7	2.0	29.7
91	2,592	1,786	19.4	10.4	1.3	31.1
92	6,237	4,485	19.3	8.8	1.6	29.7
93	2,496	1,963	12.1	8.4	1.1	21.6
94	2,496	1,940	15.1	6.9	0.3	22.3
95	2,496	1,976	14.9	5.7	0.2	20.8
96	2,496	1,825	16.3	7.9	0.0	24.2

* - Includes dwellings demolished or merged or ED not canvassed due to violent activities.

24 The total number of questionnaires accepted for analysis in SLC 96 was 1,824 compared to 1,976 in SLC 95, 1,940 in SLC 94 and 1,963 in SLC 93. The non-completion of questionnaires due to the households' refusal to furnish information was 7.9 per cent in SLC 96 compared

to 5.7 per cent in SLC 95, 6.9 per cent in SLC 94, 8.4 per cent in SLC 93, 8.8 percent in SLC 92 and 10.4 percent in SLC 91. Thus, there was an increase in refusals in SLC 96. The non-interview due to other reasons was also higher in SLC 96 compared to the earlier three rounds. This is primarily due to the violent activities in some parts of the country.

25 In one ED (W 58/59) in the parish of Kingston, however, none of the 16 dwellings could be visited by the interviewer because of violent activities in that area during the period of investigations, both in SLC 95 as well as SLC 96.

IX. Adjustment for Non-Response

26 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 were some non-interviews and they were found to be uneven across geographic areas, unless adjustment factors are applied for non-interviews the self-weighting nature of the sample would be affected. These adjustment factors (also called raising factors) were applied at the Enumeration District level to correct for non-response at that level, since 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 considered unreasonable.

27 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.

28 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 were not applied in the earlier rounds. But, in this round, the adjustments for non-response were applied even to the estimates for quintiles, as basically, there does not appear to be any conceptual difficulty.

X. Data Entry/Cleaning

29 Before data entry, all the questionnaires were edited and coded, by three Assistants, appointed for the purpose. All clerical errors were removed at this stage. All questionnaires which were partly completed or not filled out at all were removed from data entry operations. After screening of the questionnaires by the Assistants, they were once more scrutinised by the SLC statisticians.

30 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 programme. The computer printouts of the data in respect of all households were compared with the questionnaires to spot data entry errors, first by the Assistants and then by the SLC statisticians.

31 Immediately after the data were entered and the data sets formed, checks for area classification, that is, Kingston Metropolitan Area, Other Towns and Rural Areas were undertaken through a computer programme.

32 The consumption expenditure data collected in Parts E to H were then 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. 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.

33 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 for detailed scrutiny. Of the 1,825 household questionnaires included in the data set, 119 questionnaires were taken for detailed examination and of these, one questionnaire with inconsistent data, which could not be removed at the editing stage, was rejected. Five questionnaires with clerical errors were corrected; and the remaining 113 questionnaires were accepted.

34 Thus, against 1,825 questionnaires included in the

data set, 1,824 household questionnaires were considered in the final processing- 552 from the Kingston Metropolitan Area (KMA); 360 from the Other Towns; and 912 from the Rural Areas. Compared to SLC 95, the number of household questionnaires analysed in SLC 96 was less by 77 in KMA, by 39 in Other Towns and by 36 in Rural Areas. In the country as a whole, the shortfall in questionnaires analysed in SLC 96 was 152, compared to the number analysed in SLC 95.

XI. Distribution of Households with Females as Head

35 Two tables (Table A-9 and Table A-10) 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. This concept was used from SLC 92 onwards.

XII. Measurement of Malnutrition

36 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.

37 The median weight for height, height for age and weight for age referred to above relate to a reference population accepted by WHO for international comparisons. The criteria adopted for this purpose are described in Annex 3 of the publication "Measuring Change in Nutritional Status" issued by the WHO.

38 The field supervisors of STATIN 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 90 per cent of the children of age 0-59 months in the sample households, were accepted for analysis in SLC 95.

APPENDIX 11

SOME TECHNICAL ASPECTS

I. Construction of an annualised consumption data set

1 The household expenditures were collected in Parts E to H and J, out of which Part H relates to specified non-consumption expenditures and Part J on housing and utilities. Parts E, F and G relate to food and non-food commodity consumption and services. The expenditures were collected for the various items with different reference periods depending on their frequency of purchase.

2 To arrive at a total consumption expenditure figure, the consumption data in each part were annualised and a sum made of the different parts. However, since several parts ask about consumption expenditures for two different periods of time, one of the two time periods must be selected, or an average of the two.

3 Different time periods are affected by different problems. The short reference period may be affected by netting 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. 7 days figures multiplied by 365/7, and 30 days figures multiplied by 365/30).

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 expenditure 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 consumed any specified item in parts E to G, 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 skip the relevant space provided for the amount. Hence, all blank spaces in Parts E to G 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. 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 Unlike in SLC 91-93, in the SAS data sets in SLC 94 and 95, the dollars and cents in consumption and non-consumption expenditure modules were treated as one numeric variable. This was continued in SLC 96.

Deflators

9 The expenditure aggregates compiled from the survey were at current prices; quite often the estimates had 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. The STATIN publications show the indices for all major groups of commodities, together with an all-group index.

10 In the chapter on Consumption in this report, STATIN/PIOJ used a simple arithmetic average of the April to June 1996 indices, for deflation of SLC 96 expenditure aggregates. The indices for the Food and Drink group and the All-Group indices for January to September 1996 are given in the Table AP II.1, for ready reference.

Table AP II.1
National and Regional monthly price indices
October 1995 to September 1996
(Base: January 1988 = 100)

Year/Month	Jamaica	KMA	Other Towns	Rural Areas
(All Commodity index)				
1995				
October	810.3	799.0	809.2	825.8
November	833.0	823.2	834.4	845.1
December	869.3	851.4	876.4	888.2
1996				
January	892.1	871.1	902.2	913.3
February	921.4	895.8	934.3	946.7
March	936.3	910.3	947.1	963.6
April	948.8	922.8	958.3	976.8
May	960.0	940.5	973.1	977.3
June	963.6	943.7	978.4	980.6
July	970.3	948.7	985.0	989.5
August	978.4	959.1	989.0	997.1
September	989.4	966.6	1,001.8	1,011.5

(Food and Drinks Group index)

Year/Month	Jamaica	KMA	Other Towns	Rural Areas
1995				
October	902.6	909.0	889.3	903.0
November	934.5	946.3	923.1	927.9
December	966.6	968.8	959.1	968.4
1996				
January	990.4	987.0	982.7	998.4
February	1,013.2	1,005.4	1,010.8	1,023.0
March	1,028.1	1,023.1	1,015.9	1,040.2
April	1,037.5	1,032.3	1,020.9	1,052.3
May	1,041.6	1,043.0	1,033.1	1,044.6
June	1,044.8	1,048.1	1,039.4	1,044.1
July	1,045.3	1,042.7	1,042.6	1,049.5
August	1,055.3	1,057.3	1,044.7	1,058.9
September	1,063.1	1,058.3	1,053.9	1,073.5

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 96 are shown in Table AP II.2. As mentioned in Appendix I, there was a change in the order of canvassing the expenditure modules in SLC 94 with Food expenses module coming immediately after the daily expenses module followed by non-food consumption expenditures module and last the non-consumption expenditures module. The order followed in SLC 96 was the same as in SLC 95 and SLC 94; there was also no change in the items. Hence the code numbers of items included in each group and sub-group shown below are the same as in SLC 94 and SLC 95.

Table AP II.2
Items included in Commodity Groups and Sub-Groups
SLC 96

Group/sub-group	Item codes
Commodity groups	
1 Food and beverages	(Given below)
2 Fuel and household supplies	102 to 105; 304 to 308,312
3 Housing and household operational expenses	309 to 311 + (rent+ utilities+mortgage+p.tax)
4 Household durable goods	313 to 321
5 Personal care	301 to 303
6 Health care	322 to 324
7 Clothing and footwear	325 to 332
8 Transportation	338 to 344
9 Education	333, 335
10 Recreation	336, 337, 345, 346
11 Miscellaneous consumption	106; 334, 347 to 349;
Sub-groups (under food)	
1 Meat, poultry and fish	201 to 213
2 Dairy products	214 to 221
3 Oils and fats	222

Group/sub-group	Item codes
4 Cereals and cereal products	223 to 225, 227 to 231
5 Starchy roots and tubers	232 to 235, 226
6 Vegetables	236 to 238
7 Fruits	239 to 241
8 Sugar/sweets	242, 243
9 Miscellaneous food	244 to 252
10 Beverages	253 to 255
11 Meals away from home	101

II. Annualised Expenditure Data Set

12 The annualised expenditure data from SLC 96 was given in SAS data set ANNUAL, as in previous rounds. Table AP II.3 gives the list of variables with a brief description of each variable.

Table AP II.3
Contents of STATIN's Data Set "ANNUAL"
SLC 96
(List of Variables and Description)

Variable	Description
1 SERIAL	Household Identification Number
2 PARISH	Parish Number
3 CONST	Constituency Number
4 DISTRICT	Enumeration District Number
5 EDWGHT	Non-Response Weight for ED
6 DWELLING	Dwelling Number
7 HH	Household Number in Dwelling
8 HHSIZE1	Household Size- All Individuals
9 HHSIZE2	Household Size- Members only
10 T_MEAL	Annual Purchased Meal Expenditure
11 TOT_TAX	Annual Property Tax Payment
12 TOT_WAT	Annual Water Bill
13 ELECTRIC	Annual Electricity Bill
14 TOT_TELE	Annual Telephone Bill
15 TOT_MORT	Annual Mortgage Payment
16 RENT	Annual Rent Expenditure
17 TCGIFT	Annual value of Gifts of Non-Food Consump.
18 HOMEGIFT	Annual Value of Home Produced and Gift Food
19 TOTGIFT	Annual value of gifts of Food and Non-Food Consumption
20 UTILITY	Annual Utility Bill (TOT_WAT+ELECTRIC+TOT_TELE)
21 HOUSING (RENT+TOT_MORT+TOT_TAX+UTILITY+ HOUSEHOLD OPERATIONAL EXPENSES)	Annual Housing Expenditure
22 NON_FOOD	Annual Non-Food Expenditure (Purchased+TCGIFT+HOUSING)
23 TOT_FOOD	Annual Food Expenditure (Purchased+HOMEGIFT)
24 CONS	Annual Consumption Expenditure (TOT_FOOD+NON_FOOD)
25 PERCAP1	Per Capita Annual Consumption (All Individuals)
26 PERCAP2	Per Capita Annual Consumption (Members only)
27 T_NONCON	Annual Non-Consumption Expenditure
28 TOT_EXP	Annual Expenditure (CONS+T_NONCON)
29 POPDEC	Per Capita Population Decile
30 POPQUINT	Per Capita Population Quintile
31 AREA	Area codes for KMA, Other Towns and Rural

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, EDWGHT (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 Food expenditure (Part F) and Consumption expenditure (Part G) 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, three data sets were created - first for household questions; second for the persons receiving food stamps and the third for persons who applied 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. The following table shows the list of data sets prepared in SLC 96 for the standard modules.

Table AP II.4
List of Data Sets in SLC 96

Record Name	Description
REC001.SSD	Cover
REC002.SSD	Part A - Health (Page A1)
REC003.SSD	Part A - Health (Page A2)
REC004.SSD	Part A - Health (Page A3)
REC005.SSD	Part A - Health (Page A4)
REC006.SSD	Part A - Health (Page A5)
REC007.SSD	Part A - Health (Page A6)
REC008.SSD	Part A - Health (Page A7)
REC009.SSD	Part A - Health (Page A8)
REC010.SSD	Part A - Health (Page A9)
REC011.SSD	Page A - Health (Page A10)
REC012.SSD	Part B - Education (Page B1)
REC013.SSD	Part B - Education (Page B2)
REC014.SSD	Part C - Anthropometric Measurements
REC015.SSD	Part D - Child Fostering (Page D1)
REC016.SSD	Part D - Child Fostering (Page D2)
REC017.SSD	Part D - Child Fostering (Page D3)
REC018.SSD	Part D - Child Fostering (Page D4)
REC019.SSD	Part D - Child Fostering (Page D5)
REC020.SSD	Part D - Roster of Non-Resident Children
REC021.SSD	Part E - Daily Expenses
REC022.SSD	Part F - Respondent
REC023.SSD	Part F - Food Expenses -Purchased
REC024.SSD	Part F - Food Expenses -Home Production/Gifts
REC025.SSD	Part G - Respondent
REC026.SSD	Part G - Consumption Expenditure
REC027.SSD	Part H - Non-Consumption Expenditure
REC028.SSD	Part I - Food Stamps
REC029.SSD	Part J - Housing Expenses
REC030.SSD	Part K - Durable Goods-Inventory
REC031.SSD	Part K - Durable Goods-Acquisition Value
REC032.SSD	Part L - Miscellaneous Income
REC033.SSD	Roster - Principal Earner
REC034.SSD	Roster - Age, Sex and other details of members
THOMFOOD.SSD	Total Annual Home Produced Food

THOUSEXP.SSD	Total Household Operational Expenses
TOTMEALS.SSD	Total Annual Expenditure on Meals away from Home
ANNUAL.SSD	Total Annual Consumption Expenditure, etc

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 to SLC 96, as the sample size was relatively small.

VI. Estimation

16 The estimation of aggregates from SLC 96 is straightforward, as in SLC 93 to SLC 95.

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 comprises 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 to SLC 96, the sampling fraction being the same in all parishes, there is no necessity of any weighting except the weights (or raising factors) for non-response.

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

Strata (Sampling Regions) from parish "t" included in the survey	L_t
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_{is}
Non-response raising factor for the "i"th ED in the "s"th sampling region	$f_{is} = m/m_{is}$
Unit Value for the 'j'th sub-unit in the 'i'th primary unit (ED)	Y_{ij}
Sample Mean for the 'i'th selected ED in the 's'th region	\bar{Y}_{is}

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-

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

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

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

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

Estimates of Mean Per Capita Consumption

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 96 and presented below, with comparative figures for SLC 95. 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.

Table AP II.5-(i)
Number in Sample, Mean and Standard Error of Estimates of Per Capita Consumption, by Regions, SLC 95 and SLC 96

Area	SLC 95			SLC 96		
	Sample (house holds)	Mean Cons (\$)	Standard Error %	Sample (house holds)	Mean Cons (\$)	Standard Error %
KMA	629	47,801	5.3	567	55,460	4.8
Other Towns	399	35,632	5.3	358	44,126	5.8
Rural Areas	948	27,216	3.4	899	34,352	3.6
Jamaica	1,976	35,522	2.9	1,824	43,050	2.7

24 The standard errors were compiled for the mean per capita consumption estimates at current prices. More often, what would be required is to test the difference in the estimates of mean per capita consumption at constant prices between surveys. Usually, the deflator, based on the consumer price indices, is applied to the aggregate estimate of mean per capita consumption, to arrive at the mean consumption estimate at constant prices. The above percentage standard errors, could, however, be applied to the constant price estimates, on the assumption that the same deflator could be applied to the household level consumption. In cases where the standard errors are dealt with in the measuring units (such as \$), then the current price estimate of standard error has to be divided by the deflator.

Caution

25 When the sample size is small, it is not worthwhile to compile standard errors for all the detailed breakdowns, as they are likely to be relatively large and of limited use. For instance, the standard errors of the regional estimates of mean per capita consumption given above, though useful in giving an idea of the magnitude of the sampling error, is not found useful in testing the difference in mean consumption in two successive surveys. The standard errors are large and the standard error of the difference would be even larger. The result would be that, even large observed differences in estimates of mean consumption in two surveys would be within the confidence limits, for accepting the null hypothesis that there is no real difference in the means in the population. For this reason, in the following paragraphs, only the standard errors of some estimates for the country as a whole are presented for a few more variables.

Mean Household Composition

26 The following table presents the standard errors of the estimates of mean household size, number of adult males, adult females and children for the years 1993 to 1996.

Table AP II.5-(ii)
Number in Sample, Mean and Standard Error of Household Size, Mean Number of Adult Males, Adult Females and Children, in Jamaica, SLC 93 to SLC 96

Variable	1993	1994	1995	1996
Sample Size (N=)	1,963	1,940	1,976	1,824
Household Size				
Mean (No.)	3.77	3.69	3.79	3.79
S.E	0.058	0.058	0.060	0.063
% S.E	1.54	1.57	1.58	1.66
Variable	1993	1994	1995	1996
Adult Males				
Mean (No.)	1.16	1.16	1.18	1.18
S.E	0.022	0.021	0.021	0.022
% S.E	1.90	1.81	1.78	1.86
Adult Females				
Mean (No.)	1.29	1.26	1.28	1.27
S.E	0.022	0.022	0.023	0.025
% S.E	1.71	1.75	1.80	1.95
Total Adults				
Mean (No.)	2.45	2.42	2.46	2.45
S.E	0.034	0.033	0.033	0.036
% S.E	1.39	1.36	1.34	1.45

Variable	1993	1994	1995	1996
Sample Size (N=)	1,963	1,940	1,976	1,824
No. of Children				
Mean (No.)	1.33	1.27	1.34	1.34
S. E	0.036	0.036	0.037	0.039
% S.E	2.71	2.83	2.76	2.91

S.E. - Standard Error

IX. Tests of Significance

Difference in means of two samples

27 The broad principles in testing the means obtained from two samples are described below.

Hypothesis:

28 The hypothesis in testing for significance is that there is no difference in the means of the populations from which the two samples were selected. If it is known that the standard deviations of the two populations are known to be equal, it will be a test whether these two samples came from the same population.

29 This hypothesis is also called the "null" hypothesis, that is the difference in the population means is zero, though there is some observed difference in the sample means.

Assumptions:

- 30 The assumptions involved in the test are that -
- The two samples are independent; and
 - The samples are large (i.e. more than 100 each)

Notation:

Item	Sample 1	Sample 2
Sample size	n_1	n_2
Sample mean	\bar{x}_1	\bar{x}_2
Sample standard deviation	S_1	S_2
Variance of the mean	$\frac{(S_1)^2}{n_1}$	$\frac{(S_2)^2}{n_2}$
Standard error of mean	$\sqrt{\frac{(S_1)^2}{n_1}}$	$\sqrt{\frac{(S_2)^2}{n_2}}$
Difference in sample means	$\bar{x}_1 - \bar{x}_2$	
Standard Error of difference (s.e. diff)	$\sqrt{\frac{(S_1)^2}{n_1} + \frac{(S_2)^2}{n_2}}$	

Z- statistic

$$Z = \frac{\bar{x}_1 - \bar{x}_2}{\text{(s. e. diff)}}$$

31 In large samples, the Z - statistic is distributed in the "normal distribution" with 0 mean and unit standard deviation. For this distribution, 95 per cent of the observations are within + or - 1.96 and 99 per cent between + or - 2.58. Any observed Z which is beyond these limits will make the hypothesis that there is no difference between the means suspect and, therefore, we reject the hypothesis. If the Z is between the limits specified, it only means that there is no evidence to justify the rejection of the hypothesis that there is no difference in the means in the two populations.

32 The standard error of the difference in means will be larger than either of the standard errors of the two sample means. Hence, if the sample sizes are small, the standard errors of the sample means will be relatively large and the Z- statistic will turn out to be proportionately smaller. For example, take the case of testing the difference in mean per capita consumption in Other Towns at constant prices in 1994 compared to 1993. The difference was 11.4 per cent (see Table 2.3). In spite of this large difference, the test does not show that it is statistically significant, as the Z- statistic was 1.23 which was less than the specified 1.96 at 95 per cent confidence limit. This is because the percentage standard errors of the sample means were 6.3 in 1993 and 6.4 in 1994 and the standard errors in measuring units were \$ 478 and \$422 respectively. The standard error of the difference was \$638 while the observed difference in the sample means was \$785 at constant 1990 prices. The samples from other towns were 384 households in 1993 and 391 in 1994, which gave rise to the above large standard errors for the estimates of mean consumption.

33 It is therefore desirable to carry out tests for the estimates for Jamaica as a whole, and cases when the differences in the estimates from two years are fairly large. The following tables present some of the test results for Jamaica for some variables.

Table AP II.5 (iii)
Results of Tests of Significance for Jamaica
a. Mean Per Capita Consumption

Year	Sample Size (N=)	Mean Cons. (\$)	S.E. (%)	Diff in Means (\$)	S.E. (\$)	Z Statistic
<u>Mean Per Capita Consumption at Constant 1990 prices</u>						
1996	1824	7,230	2.7	195		
1995	1976	7,793	2.9	223	563	1.90
1995	1976	7,793	2.9	223		
1994	1940	7,652	2.8	207	141	304
1996	1824	7,230	2.7	195		
1990	1828	7,616	3.7	282	386	343

Table AP II.5 (iv)
Results of Tests of Significance for Jamaica
b. Household Composition

Year	Sample Size (N=)	Mean (Number)	S.E. (%)	Diff in Means	S.E.	Z-Statistic
<u>Household Size</u>						
1996	1824	3.79				
1995	1976	3.79	1.57	0.058	0.00	0.00
1995	1976	3.79	1.58	0.060		
1994	1940	3.69	1.57	0.058	-0.10	0.083
<u>Number of Adult Males</u>						
1996	1824	1.18				
1995	1976	1.18	1.78	0.021	0.00	0.00
<u>Number of Adult Females</u>						
1996	1824	1.27	1.95	0.025		
1995	1976	1.28	1.80	0.023	0.10	0.061
<u>Number of Children</u>						
1996	1824	1.34				
1995	1976	1.34	2.76	0.037	0.00	0.00

X. Linking with LFS

34 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, provides for such a linkage.

35 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.

36 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 updated; 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 be no 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.

Linking households of two successive rounds of SLC

37 As explained in paragraphs 9 to 14 in Appendix I, the SLC sample dwellings are selected as a sub-sample of the corresponding Labour Force Survey (LFS) sample. For the LFS, a Master sample of dwellings was selected once in four or five years and grouped into eight panels. In each quarterly survey of LFS, four panels out of the eight will be included, out of which, two panels of dwellings are continued from the previous quarterly LFS while two panels are taken from the Master Sample, according to a particular order of rotation. The Master Sample is retained for a period of four or five years.

38 The Quarterly LFS surveys conducted from 1993 are based on a Master sample prepared in 1992, taking into account the dwellings listed in the population census, 1991. The sample dwellings in two rounds of LFS conducted in the same month in two successive years will be identical, according to the rotation of panels adopted for the quarterly LFS. Since the SLC samples are a sub-set of the corresponding LFS sample dwellings, they will also be identical, provided they are conducted at the same time in two successive years.

39 The SLC 93 and SLC 94 were conducted in November-December, based on the sub-set of dwellings of the corresponding October LFS and, therefore, the sample dwellings were identical. Similarly, the sample dwellings in SLC 95 and SLC 96, both of which were conducted in May-June, based on the corresponding April LFS, were identical.

40 When the sample dwellings are identical in two rounds of LFS or SLC in two years, the interest lies in linking the households or household members for cohort studies. The World Bank and the PDU attempted this

linking earlier by comparing the identification details (parish, constituency, ED number, dwelling number and household number) and the age and sex of the household head given in the SAS data sets. An attempt made on this basis to link the households of SLC 91 with those of SLC 90 resulted in a successful linking of less than 75 per cent of the households.

41 As this method was laborious and as it was not certain as to the number of households that could not be linked due to uncertain linking factors, it was decided to attempt this linking in SLC 96 (with those in SLC 95) manually by comparing the basic household questionnaires. For this purpose, in SLC 96, on the cover page of the questionnaire (top right hand corner) provision was made to record the household serial number of the household in SLC 95, if there is a match. Similarly, in the Roster, a column was added to record the individual number of the household member in SLC 95, if the member was found in SLC 95. Besides, these additions, the household type (in terms of linking) was also recorded on the cover page.

42 The three household types adopted are -

- Continuing from SLC 95..... code 1;
- New dwelling in SLC 96..... code 2; and
- Non-response in SLC 95..... code 3.

43 The entire work was done by arranging both the SLC 95 and SLC 96 questionnaires of each ED, compare the identification and household member details and recorded the links on the Cover page or Roster of the questionnaire, as the case may be.

44 Out of the 1,824 household questionnaires in SLC 96, 1,505 households were linked to the SLC 95. These formed 82.5 per cent compared to less than 75 per cent observed in linking SLC 91 to SLC 90. The following table shows the households classified into the above three categories:

Households of SLC 96 classified according to their linking with SLC 95

Type	No. of households		No. of household members	
	Number	Per cent of total	Total Members	Number Linked to SLC 95
Households linked to SLC 95	1,505	82.5	5,989	5,173
New households in SLC 96	133	7.3	425	-
Non-response in SLC 95	186	10.2	590	-
Total	1,824	100.0	7,004	5,173

45 133 households out of the 1,824 households analysed in SLC 96 or 7.3 per cent of the total were new households (compared to those in SLC 95) living in the selected dwellings while 186 households or 10.2 per cent were not interviewed (due to the dwelling being vacant or closed at the time of the survey, or refusal by the household or rejected because of incomplete data) in SLC 95. The household members who could be linked to SLC 95 formed 86.4 per cent of all household members in the SLC 96 households linked to SLC 95. If all the 7,004 household members in SLC 96 were considered, the percentage of members who were found in SLC 95 was 73.8.

XI. Parish/Area codes

46 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		

XII. Industrial/Occupational Classifications

47 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 AP II.6, for ready reference.

Table AP II.6
Industrial and Occupational Classifications
At One Digit Level
(Adopted for Labour Force Surveys 88 TO 96)

Industrial Classification

<u>One digit code</u>	<u>Description</u>
0	Agriculture, Forestry and Fishing
1	Mining, Quarrying and Refining
2/3	Manufacture
4	Electricity, Gas and Water
5	Construction and Installation
6	Wholesale & Retail trade, Hotels & Restaurants
7	Transport, Storage and Communications
8	Financing, Insurance, Real Estate & Business Services
9	Community, Social and personal Services

Occupational Classification (88 to July 93):

<u>One Digit Code</u>	<u>Description</u>
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

Occupational Classification (July 93 to date):

1	Legislators, Senior Officials and Managers
2	Professionals
3	Technicians and Associate Professionals
4	Clerks
5	Service Workers and Shop and Market Sales Workers
6	Skilled Agricultural and Fishery Workers
7	Craft and related Trades Workers
8	Plant and Machine Operators and Assemblers
9	Elementary Occupations

Abbreviations/Acronyms

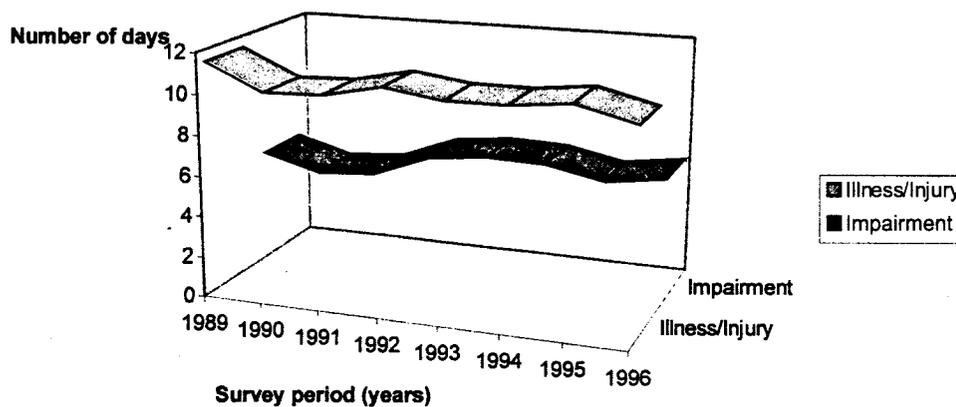
BCG	Bacillus Calmette-Guerin (vaccination against tuberculosis)	MLSSS	Ministry of Labour, Social Security and Sports
CFNI	Caribbean Food and Nutrition Institute	MOEYC	Ministry of Education, Youth and Culture
CPI	Consumer Price Index	MOH	Ministry of Health
DPT	Diphtheria, pertussis, tetanus	N	Number of observations
ED	Enumeration District	NWC	National Water Commission
ESSJ	Economic and Social Survey, Jamaica	OPV	Oral polio vaccine
FSP	Food Stamp Programme	PIOJ	Planning Institute of Jamaica
GCT	General Consumption Tax	SAP	Structural Adjustment Programme
HES	Household Expenditure Survey	SAS	Statistical Analysis Software
HQI	Housing Quality Index	SFP	School Feeding Programme
HRDP	Human Resources Development Programme	SLC	Survey of Living Conditions
JADEP	Jamaica Drugs for the Elderly Programme	STATIN	Statistical Institute of Jamaica
KMA	Kingston Metropolitan Area	WC	Water closet
LFS	Labour Force Survey	WHO	World Health Organization

Copies of this document
can be obtained from:

The Planning Institute
of Jamaica
Documentation Centre
8 Ocean Blvd.
Kingston
Jamaica
Tel: (809) 967-3689-99

FIGURE 4.3

Mean Days of Illness/Injury and Impairment for survey period
1989 - 1996



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