

**TABLE C-2**  
**USE OF PUBLIC/PRIVATE HEALTH SECTOR BY ILL/INJURED PERSONS**  
**PURCHASE OF MEDICATIONS AND HOSPITALIZATION DURING THE MEDICAL CARE,**  
**FOUR WEEK REFERENCE PERIOD, BY AREA, QUINTILE, SEX AND AGE**

| Classification those injured | Percentage of Those Seeking Medical Care |             |            | Source of Care<br>(Of Those Seeking Medical Care) |             |            | Percentage Hospitalization |            |
|------------------------------|--|-------------|------------|---|-------------|------------|----------------------------|------------|
|                              | Pub.                                     | Priv.       | Both       | Pub   | Priv.       | Both       | Pub.                       | Priv.      |
| <b>Area</b>                  |  |             |            |   |             |            |                            |            |
| KMA (N=205)                  | 28.9                                     | 63.0        | 8.1        | 19.0  | 79.6        | 1.5        | 7.7                        | 0.8        |
| Other Town (N=122)           | 26.3                                     | 68.2        | 5.5        | 9.8   | 88.8        | 1.4        | 7.2                        | 0.0        |
| Rural Are (N=416)            | 26.8                                     | 67.5        | 5.7        | 16.9  | 81.1        | 2.0        | 4.9                        | 0          |
| <b>Quintile</b>              |  |             |            |   |             |            |                            |            |
| Poorest (N=157)              | 47.1                                     | 49.4        | 3.5        | 20.7  | 78.2        | 1.2        | 6.9                        | 1.2        |
| 2 (N=158)                    | 25.3                                     | 66.3        | 8.4        | 17.2  | 81.7        | 1.1        | 3.2                        | 0.0        |
| 3 (N=113)                    | 22.7                                     | 69.7        | 7.6        | 17.6  | 81.1        | 1.4        | 6.1                        | 0.0        |
| 4 (N=153)                    | 21.7                                     | 68.0        | 10.3       | 14.8  | 81.8        | 3.4        | 8.3                        | 0.0        |
| 5 (N=162)                    | 16.8                                     | 80.0        | 3.2        | 11.1  | 87.2        | 1.7        | 4.3                        | 0.0        |
| <b>Sex</b>                   |  |             |            |   |             |            |                            |            |
| Male (N=306)                 | 26.5                                     | 65.3        | 8.2        | 15.4  | 83.6        | 1.0        | 4.9                        | 0.5        |
| Female (N=437)               | 27.8                                     | 67.2        | 5.0        | 17.2  | 80.6        | 2.3        | 6.7                        | 0.0        |
| <b>Age(Years)</b>            |  |             |            |   |             |            |                            |            |
| 0-4 (N=147)                  | 33.8                                     | 60.2        | 6.1        | 12.7  | 87.3        | 0.0        | 6.1                        | 1.0        |
| 5-9(N=77)                    | 20.2                                     | 72.5        | 7.3        | 22.1  | 77.9        | 0.0        | 0.0                        | 0.0        |
| 10-19 (N=79)                 | 35.2                                     | 62.2        | 2.6        | 26.7  | 73.3        | 0.0        | 7.1                        | 0.0        |
| 20-29 (N=69)                 | 20.9                                     | 72.9        | 6.2        | 12.7  | 85.2        | 2.1        | 6.6                        | 0.0        |
| 30-39 (N=63)                 | 19.2                                     | 74.2        | 6.5        | 11.2  | 86.2        | 2.6        | 7.8                        | 0.0        |
| 40-49 (N=53)                 | 26.8                                     | 67.8        | 5.4        | 20.6  | 76.8        | 2.7        | 11.7                       | 0.0        |
| 50-59 (N=66)                 | 41.1                                     | 54.5        | 4.4        | 19.3  | 78.2        | 2.5        | 6.5                        | 0.0        |
| 60-64 (N=31)                 | 26.4                                     | 67.7        | 5.9        | 16.2  | 83.8        | 0.0        | 16.0                       | 0.0        |
| 65+ (N=158)                  | 21.0                                     | 70.2        | 8.8        | 14.7  | 81.2        | 4.2        | 2.9                        | 0.0        |
| <b>Jamaica (N=743)</b>       | <b>27.2</b>                              | <b>66.4</b> | <b>6.3</b> | <b>16.4</b>                                       | <b>81.9</b> | <b>1.7</b> | <b>6.0</b>                 | <b>0.2</b> |

**TABLE C-3**  
**LEVEL OF CARE BY AREA, QUINTILE, SEX AND AGE**

| Those seeking medical<br>care | LEVELS OF CARE |             |                                |                                |
|-------------------------------|----------------|-------------|--------------------------------|--------------------------------|
|                               | Primary        | Outpatient  | Both Primary<br>and Outpatient | Hospitalization<br>(inpatient) |
| <b>Area</b>                   |                |             |                                |                                |
| KMA (N=108)                   | 68.3           | 24.5        | 7.2                            | 8.5                            |
| Other Town(N=93)              | 74.0           | 20.5        | 5.5                            | 7.2                            |
| Rural Areas(N=262)            | 81.1           | 14.2        | 4.7                            | 4.9                            |
| <b>Quintile</b>               |                |             |                                |                                |
| Poorest (N85)                 | 72.4           | 26.4        | 1.2                            | 8.1                            |
| 2 (N=95)                      | 80.0           | 13.7        | 6.3                            | 3.2                            |
| 3 (N=66)                      | 81.8           | 13.6        | 4.6                            | 6.1                            |
| 4 (N=97)                      | 73.2           | 16.5        | 10.3                           | 8.3                            |
| 5 (N=94)                      | 80.9           | 14.9        | 4.3                            | 4.3                            |
| <b>Sex</b>                    |                |             |                                |                                |
| Male (N=179)                  | 74.0           | 19.3        | 6.7                            | 5.4                            |
| Female (N=260)                | 78.4           | 16.9        | 4.7                            | 6.7                            |
| <b>Age(Years)</b>             |                |             |                                |                                |
| 0-4 (N=91)                    | 78.8           | 16.1        | 5.1                            | 7.1                            |
| 5-9 (N=39)                    | 77.2           | 20.6        | 2.1                            | 0.0                            |
| 10-19 (N=37)                  | 73.5           | 23.9        | 2.6                            | 7.1                            |
| 20-29 (N=41)                  | 75.3           | 18.5        | 6.2                            | 6.6                            |
| 30-39 (N=40)                  | 79.3           | 12.5        | 8.2                            | 7.8                            |
| 40-49 (N=33)                  | 69.9           | 24.6        | 5.4                            | 11.7                           |
| 50-59 (N=41)                  | 67.5           | 27.8        | 4.7                            | 6.5                            |
| 60-64 (N=18)                  | 71.1           | 22.8        | 6.2                            | 16.0                           |
| 65+(N=99)                     | 82.1           | 10.8        | 7.1                            | 2.9                            |
| <b>Jamaica (N=472)</b>        | <b>76.6</b>    | <b>17.9</b> | <b>5.5</b>                     | <b>6.2</b>                     |

**TABLE C-4**  
**EXPENDITURE ON MEDICAL CARE, IN PUBLIC/**  
**PRIVATE SECTOR BY THOSE ILL/INJURED, BY AREA, QUINTILE, SEX AND AGE**

| Classification      | Mean No.<br>of Visits | Mean Total Cost Incurred<br>for All Visits in<br>Last 4 Weeks Excluding<br>Drugs and Costs Reim-<br>bursed by Insurance<br>(\$) |         | Mean Cost (\$) of Drugs by<br>Source |         |
|---------------------|-----------------------|---|---------|--------------------------------------|---------|
|                     |                       | Public  | Private | Public                               | Private |
| Area                |                       |   |         |                                      |         |
| KMA (N=205)         | 1.5                   | 162.4   | 462.9   | 293.4                                | 358.2   |
| Other Towns (N=122) | 1.7                   | 128.8   | 715.8   | 242.6                                | 693.5   |
| Rural Areas (N=416) | 1.5                   | 114.2   | 449.7   | 194.4                                | 537.0   |
| Quintile            |                       |   |         |                                      |         |
| Poorest (N=157)     | 1.5                   | 140.2   | 342.1   | 146.6                                | 354.2   |
| 2 (N=158)           | 1.4                   | 81.0  | 494.2   | 164.7                                | 412.9   |
| 3 (N=113)           | 1.5                   | 114.2   | 433.3   | 173.1                                | 442.7   |
| 4 (N=153)           | 1.6                   | 161.6   | 547.5   | 397.0                                | 683.3   |
| 5 (N=162)           | 1.6                   | 186.6   | 591.1   | 381.0                                | 628.4   |
| Sex                 |                       |   |         |                                      |         |
| Male (N=306)        | 1.6                   | 122.8   | 492.1   | 251.0                                | 500.1   |
| Female (N=437)      | 1.5                   | 135.9   | 498.5   | 222.6                                | 516.9   |
| Age (years)         |                       |   |         |                                      |         |
| 0-4 (N=147)         | 1.4                   | 104.3   | 310.8   | 199.8                                | 340.7   |
| 5-9 (N=77)          | 1.3                   | 74.8  | 287.6   | 430.9                                | 369.1   |
| 10-19 (N=79)        | 1.2                   | 54.5  | 395.3   | 242.9                                | 293.0   |
| 20-29 (N=69)        | 1.4                   | 326.4   | 395.9   | 156.6                                | 556.9   |
| 30-39 (N=63)        | 1.9                   | 326.9   | 557.3   | 139.5                                | 729.6   |
| 40-49 (N=53)        | 1.5                   | 46.2  | 578.0   | 445.7                                | 418.4   |
| 50-59 (N=66)        | 1.7                   | 153.3   | 447.0   | 241.7                                | 396.3   |
| 60-64 (N=31)        | 1.7                   | 39.9  | 1078.2  | 95.9                                 | 810.2   |
| 65+(N=158)          | 1.7                   | 106.7   | 658.7   | 135.6                                | 744.1   |
| Jamaica (N=743)     | 1.5                   | 130.4   | 495.9   | 233.6                                | 509.3   |

**TABLE C-5**  
**PERCENTAGE OF RESPONDENTS WITH HEALTH INSURANCE BY**  
**AREA, QUINTILE, SEX AND AGE**

| Classification           | Percentage<br>of Total Sample<br>with Health<br>Insurance | Percentage<br>of Those<br>Seeking Medical<br>Care with<br>Health Insurance |
|--------------------------|---|--|
| <b>Area</b>              |   |  |
| KMA (N=2,291)            | 14.8  | 14.7   |
| Other Towns (N=1,492)    | 8.7   | 6.0  |
| Rural Areas (N=3,747)    | 6.6   | 10.1   |
| <b>Quintile</b>          |   |  |
| Poorest (N=1,508)        | 1.7   | 2.3  |
| 2 (N=1,505)              | 4.1   | 9.5  |
| 3 (N=1,503)              | 3.6   | 7.6  |
| 4 (N=1,506)              | 13.0  | 14.4   |
| 5 (N=1,508)              | 25.7  | 19.2   |
| <b>Sex</b>               |   |  |
| Male (N=3,666)           | 9.8   | 9.2  |
| Female (N=3,861)         | 9.6   | 11.6   |
| <b>Age (years)</b>       |   |  |
| 0-4 (N=851)              | 6.2   | 11.7   |
| 5-9 (N=917)              | 8.0   | 20.5   |
| 10-19 (N=1,647)          | 8.3   | 13.0   |
| 20-29 (N=1,272)          | 10.5  | 16.7   |
| 30-39 (N=991)            | 14.4  | 18.1   |
| 40-49 (N=649)            | 17.1  | 11.4   |
| 50-59 (N=439)            | 10.7  | 7.7  |
| 60-64 (N=191)            | 8.0   | 0.0  |
| 65+(N=573)               | 3.1   | 2.1  |
| <b>Jamaica (N=7,530)</b> | <b>9.7</b>  | <b>10.6</b>  |

**TABLE C-6**  
**IMMUNIZATION COVERAGE OF CHILDREN (0-59 MONTHS OLD) BY**  
**AREA, QUINTILE, SEX AND AGE**

| Group                  | Percentage<br>6-59 Months<br>Receiving<br>3 or More<br>Doses of<br>OPV | Percentage<br>6-59 Months<br>Receiving 3<br>or More<br>Doses of DPT<br>(%) | Percentage<br>Receiving<br>BCG (%) | Percentage<br>12-59 Month<br>Vaccinated<br>Against<br>Measles<br>(%) |
|------------------------|--|--|------------------------------------|--|
| <b>Area</b>            |  |  |                                    |  |
| KMA (N=257)            | 97.9   | 99.2   | 90.6                               | 90.6   |
| Other Towns (N=153)    | 99.3   | 96.5   | 97.7                               | 92.8   |
| Rural Areas (N=410)    | 97.0   | 97.8   | 96.9                               | 92.5   |
| <b>Quintile</b>        |  |  |                                    |  |
| Poorest (N=242)        | 97.8   | 97.8   | 93.3                               | 92.4   |
| 2 (N=186)              | 99.3   | 99.3   | 96.4                               | 91.7   |
| 3 (N=172)              | 95.0   | 95.7   | 94.3                               | 90.0   |
| 4 (N=110)              | 96.5   | 98.8   | 97.9                               | 94.2   |
| 5 (N=96)               | 96.2   | 98.7   | 97.8                               | 97.5   |
| <b>Sex</b>             |  |  |                                    |  |
| Male (N=421)           | 96.6   | 97.3   | 95.3                               | 93.5   |
| Female (N=399)         | 97.9   | 98.9   | 94.6                               | 90.3   |
| <b>Jamaica (N=834)</b> | <b>97.3</b>  | <b>98.1</b>  | <b>95.4</b>                        | <b>92.6</b>  |

**TABLE C-7**  
**PERCENTAGE OF BIRTHS REGISTERED**  
**(CHILDREN 0-59 MONTHS), BY AREA**  
**QUINTILE, SEX**

| Classification         | Percentage of Births Registered |
|------------------------|---------------------------------|
| <b>Area</b>            |                                 |
| KMA (N=257)            | 96.2                            |
| Other Towns (N=153)    | 94.8                            |
| Rural Areas (N=410)    | 94.6                            |
| <b>Quintile</b>        |                                 |
| Poorest (N=242)        | 94.6                            |
| 2 (N=200)              | 93.0                            |
| 3 (N=172)              | 95.9                            |
| 4 (N=110)              | 95.5                            |
| 5 (N=96)               | 97.9                            |
| <b>Sex</b>             |                                 |
| Male (N=421)           | 94.9                            |
| Female (N=399)         | 95.5                            |
| <b>Jamaica (N=820)</b> | <b>95.2</b>                     |



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# SECTION D

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## NUTRITION

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**TABLE D-1**  
**PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTH**  
**BY AREA**

|                        |           | Low Weight for Age (Z-score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Area                   | n         |                                  | Per cent   |
| KMA (n=238)            | 22        |                                  | 9.2        |
| Other Towns (n=149)    | 3         |                                  | 2.1        |
| Rural Areas (n=388)    | 14        |                                  | 3.6        |
| <b>JAMAICA (n=769)</b> | <b>39</b> |                                  | <b>5.1</b> |

  

|                        |           | Low Height for Age (Z-Score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Area                   | n         |                                  | Per cent   |
| KMA (n=235)            | 21        |                                  | 8.9        |
| Other Towns (n=140)    | 7         |                                  | 5.0        |
| Rural Areas (n=377)    | 23        |                                  | 6.1        |
| <b>JAMAICA (n=752)</b> | <b>51</b> |                                  | <b>6.8</b> |

  

|                        |           | Low Weight for Height (Z-Score <-2) |            |
|------------------------|-----------|-------------------------------------|------------|
| Area                   | n         |                                     | Per cent   |
| KMA (n=238)            | 11        |                                     | 4.6        |
| Other Towns (n=149)    | 4         |                                     | 2.8        |
| Rural Areas (n=388)    | 16        |                                     | 4.1        |
| <b>JAMAICA (n=769)</b> | <b>31</b> |                                     | <b>4.0</b> |

**TABLE D-2 \***  
**PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTHS, BY QUINTILE**

|                        |           | Low Weight for Age (Z-score2 ) |            |
|------------------------|-----------|--------------------------------|------------|
| Quintile               | n         |                                | Per cent   |
| Poorest (n=229)        | 13        |                                | 5.7        |
| 2 (n=181)              | 3         |                                | 1.6        |
| 3 (n=171)              | 11        |                                | 6.4        |
| 4 (n=97)               | 11        |                                | 11.3       |
| 5 (n=86)               | 1         |                                | 1.2        |
| <b>JAMAICA (n=769)</b> | <b>39</b> |                                | <b>5.1</b> |

  

|                        |           | Low Height for Age (Z-score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Quintile               | n         |                                  | Per cent   |
| Poorest (n=226)        | 23        |                                  | 10.2       |
| 2 (n=184)              | 8         |                                  | 4.3        |
| 3 (n=166)              | 13        |                                  | 7.8        |
| 4 (n=93)               | 7         |                                  | 7.5        |
| 5 (n=83)               | 0         |                                  | 0          |
| <b>JAMAICA (n=752)</b> | <b>51</b> |                                  | <b>6.8</b> |

  

|                        |           | Low Weight for Height (Z-Score<-2) |            |
|------------------------|-----------|------------------------------------|------------|
| Quintile               | n         |                                    | Per cent   |
| Poorest (n=229)        | 12        |                                    | 5.2        |
| 2 (n=181)              | 6         |                                    | 3.2        |
| 3 (n=171)              | 5         |                                    | 2.9        |
| 4 (n=97)               | 7         |                                    | 7.2        |
| 5 (n=86)               | 1         |                                    | 1.2        |
| <b>JAMAICA (n=769)</b> | <b>31</b> |                                    | <b>4.0</b> |

\* -Table generated from the disaggregation of a small sample into five population group



**TABLE D-3**  
**PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTH,**

|                        |           | Low Weight for Age (Z-score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Sex                    | n         |                                  | Per cent   |
| Male (n=397)           | 19        |                                  | 4.8        |
| Female (n=372)         | 20        |                                  | 5.4        |
| <b>JAMAICA (n=769)</b> | <b>39</b> |                                  | <b>5.1</b> |

  

|                        |           | Low Height for Age (Z-Score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Sex                    | n         |                                  | Per cent   |
| Male (n=389)           | 31        |                                  | 8.0        |
| Female (n=363)         | 20        |                                  | 5.5        |
| <b>JAMAICA (n=769)</b> | <b>51</b> |                                  | <b>6.8</b> |

  

|                        |           | Low Weight for Height (Z-Score <-2) |            |
|------------------------|-----------|-------------------------------------|------------|
| Sex                    | n         |                                     | Per cent   |
| Male (n=397)           | 16        |                                     | 4.0        |
| Female (n=372)         | 15        |                                     | 4.0        |
| <b>JAMAICA (n=769)</b> | <b>31</b> |                                     | <b>4.0</b> |

**TABLE D-4\***  
**PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTHS BY AGE**

|                        |           | Low Weight for Age (Z-score <-2 ) |            |
|------------------------|-----------|-----------------------------------|------------|
| Age (months)           | n         |                                   | Per cent   |
| 0-11 (n=158)           | 5         |                                   | 3.2        |
| 12-23 (n=164)          | 10        |                                   | 6.1        |
| 24-35 (n=163)          | 10        |                                   | 6.1        |
| 36-47 (n=150)          | 10        |                                   | 6.7        |
| 48-59 (n=134)          | 4         |                                   | 3.0        |
| <b>JAMAICA (n=769)</b> | <b>39</b> |                                   | <b>5.1</b> |

  

|                        |           | Low Height for Age (Z-score <-2) |            |
|------------------------|-----------|----------------------------------|------------|
| Age (months)           | n         |                                  | Per cent   |
| 0-11 (n=155)           | 11        |                                  | 7.1        |
| 12-23 (n=156)          | 15        |                                  | 9.6        |
| 24-35 (n=158)          | 7         |                                  | 4.4        |
| 36-47 (n=148)          | 10        |                                  | 6.8        |
| 48-59 (n=133)          | 8         |                                  | 6          |
| <b>JAMAICA (n=752)</b> | <b>51</b> |                                  | <b>6.8</b> |

  

|                        |           | Low Weight for Height (Z-Score <-2) |            |
|------------------------|-----------|-------------------------------------|------------|
| Age (months)           | n         |                                     | Per cent   |
| 0-11 (n=158)           | 5         |                                     | 3.2        |
| 12-23 (n=164)          | 10        |                                     | 6.1        |
| 24-35 (n=163)          | 5         |                                     | 3.1        |
| 36-47 (n=150)          | 5         |                                     | 3.3        |
| 48-59 (n=134)          | 6         |                                     | 4.5        |
| <b>JAMAICA (n=769)</b> | <b>31</b> |                                     | <b>4.0</b> |

\* - Table generated from the disaggregation of a small sample into five population groups

**TABLE D-5**  
**SEVERITY AND PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTH, BY AREA**

| Low Weight for Age     |           |                     |          |                    |           |                   |  |
|------------------------|-----------|---------------------|----------|--------------------|-----------|-------------------|--|
| Area                   | n         | Moderate<br>Percent | n        | Severe<br>Per cent | n         | Total<br>Per cent |  |
| KMA (n=238)            | 25        | 10.5                | 2        | 0.8                | 27        | 11.3              |  |
| Other Towns (n=149)    | 4         | 2.8                 | 0        | 0.0                | 4         | 2.8               |  |
| Rural Areas (n=388)    | 15        | 3.9                 | 1        | 0.3                | 16        | 4.2               |  |
| <b>JAMAICA (n=769)</b> | <b>44</b> | <b>5.7</b>          | <b>3</b> | <b>0.4</b>         | <b>47</b> | <b>6.1</b>        |  |

  

| STUNTING               |           |                     |          |                    |           |                   |  |
|------------------------|-----------|---------------------|----------|--------------------|-----------|-------------------|--|
| Area                   | n         | Moderate<br>Percent | n        | Severe<br>Per cent | n         | Total<br>Per cent |  |
| KMA (n=238)            | 5         | 2.1                 | 5        | 2.1                | 10        | 4.2               |  |
| Other Towns (n=149)    | 3         | 2.1                 | 0        | 0.0                | 3         | 4.1               |  |
| Rural Areas (n=388)    | 13        | 3.4                 | 4        | 1.4                | 17        | 4.8               |  |
| <b>JAMAICA (n=769)</b> | <b>21</b> | <b>2.7</b>          | <b>9</b> | <b>1.2</b>         | <b>30</b> | <b>3.9</b>        |  |

  

| WASTING                |          |                     |          |                    |           |                   |  |
|------------------------|----------|---------------------|----------|--------------------|-----------|-------------------|--|
| Area                   | n        | Moderate<br>Percent | n        | Severe<br>Per cent | n         | Total<br>Per cent |  |
| KMA (n=238)            | 3        | 1.3                 | 1        | 0.4                | 4         | 1.7               |  |
| Other Towns (n=149)    | 0        | 0.0                 | 0        | 0.0                | 0         | 0.0               |  |
| Rural Areas (n=388)    | 5        | 1.3                 | 1        | 0.3                | 6         | 1.6               |  |
| <b>JAMAICA (n=769)</b> | <b>8</b> | <b>1</b>            | <b>2</b> | <b>0.3</b>         | <b>10</b> | <b>1.3</b>        |  |

**TABLE D-6\***  
**SEVERITY AND PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTHS, BY QUINTILE**

| Quintile        | Moderate |          | Low Weight for Age<br>Severe |          | Total |          |
|-----------------|----------|----------|------------------------------|----------|-------|----------|
|                 | n        | Per cent | n                            | Per cent | n     | Per cent |
| Poorest (n=229) | 14       | 6.1      | 2                            | 0.9      | 16    | 7.0      |
| 2 (n=181)       | 3        | 1.6      | 0                            | 0.0      | 3     | 1.6      |
| 3 (n=171)       | 14       | 8.2      | 1                            | 0.6      | 15    | 8.8      |
| 4 (n=97)        | 11       | 11.3     | 0                            | 0.0      | 11    | 11.3     |
| 5 (n=86)        | 2        | 2.3      | 0                            | 0.0      | 2     | 2.3      |
| JAMAICA (n=769) | 44       | 5.7      | 3                            | 0.4      | 47    | 6.1      |

  

| Quintile        | Moderate |          | STUNTING<br>Severe |          | Total |          |
|-----------------|----------|----------|--------------------|----------|-------|----------|
|                 | n        | Per cent | n                  | Per cent | n     | Per cent |
| Poorest (n=229) | 8        | 3.5      | 6                  | 2.6      | 13    | 6.1      |
| 2 (n=181)       | 5        | 2.7      | 0                  | 0.0      | 5     | 2.7      |
| 3 (n=171)       | 6        | 3.5      | 2                  | 1.2      | 8     | 4.7      |
| 4 (n=97)        | 2        | 2.1      | 1                  | 1.0      | 3     | 3.1      |
| 5 (n=86)        | 0        | 0.0      | 0                  | 0.0      | 0     | 0.0      |
| JAMAICA (n=769) | 21       | 2.7      | 9                  | 1.2      | 30    | 3.9      |

  

| Quintile        | Moderate |          | WASTING<br>Severe |          | Total |          |
|-----------------|----------|----------|-------------------|----------|-------|----------|
|                 | n        | Per cent | n                 | Per cent | n     | Per cent |
| Poorest (n=229) | 4        | 1.7      | 0                 | 0.0      | 4     | 1.7      |
| 2 (n=181)       | 2        | 1.1      | 0                 | 0.0      | 2     | 1.1      |
| 3 (n=171)       | 2        | 1.2      | 1                 | 0.6      | 3     | 1.8      |
| 4 (n=97)        | 0        | 0.0      | 1                 | 1.0      | 1     | 1.0      |
| 5 (n=86)        | 0        | 0.0      | 0                 | 0.0      | 0     | 0.0      |
| JAMAICA (N=769) | 8        | 1.0      | 2                 | 0.3      | 10    | 1.3      |

\* Data generated from the disaggregation of a small sample into five groups

**TABLE D-7**  
**SEVERITY AND PREVALENCE OF UNDERNUTRITION AMONG CHILDREN 0-59 MONTHS**

| Sex             | Moderate |          | Low Weight for Age<br>Severe |          | Total |          |
|-----------------|----------|----------|------------------------------|----------|-------|----------|
|                 | n        | Per cent | n                            | Per cent | n     | Per cent |
| Male (n=397)    | 21       | 5.3      | 1                            | 0.3      | 22    | 5.6      |
| Female (n=372)  | 23       | 6.2      | 2                            | 0.5      | 25    | 6.7      |
| JAMAICA (n=769) | 44       | 5.7      | 3                            | 0.4      | 47    | 6.1      |

  

| Sex             | Moderate |          | STUNTING<br>Severe |          | Total |          |
|-----------------|----------|----------|--------------------|----------|-------|----------|
|                 | n        | Per cent | n                  | Per cent | n     | Per cent |
| Male (n=397)    | 13       | 3.3      | 5                  | 1.3      | 18    | 4.6      |
| Female (n=372)  | 8        | 2.1      | 4                  | 1.1      | 12    | 3.2      |
| JAMAICA (n=769) | 21       | 2.7      | 9                  | 1.2      | 30    | 3.9      |

  

| Sex             | Moderate |          | WASTING<br>Severe |          | Total |          |
|-----------------|----------|----------|-------------------|----------|-------|----------|
|                 | n        | Per cent | n                 | Per cent | n     | Per cent |
| Male (n=397)    | 4        | 1.0      | 0                 | 0.0      | 4     | 1.0      |
| Female (n=372)  | 4        | 2.1      | 2                 | 0.5      | 6     | 1.6      |
| JAMAICA (n=769) | 8        | 2.7      | 2                 | 0.3      | 10    | 1.3      |

**TABLE D-8\***  
**SEVERITY AND PREVALENCE OF UUDERNUTRITION AMONG CHILDREN 0-59 MONTHS, BY AGE**

| Age (months)    | n  | Moderate |          | Low Weight for Age<br>Severe |          | n  | Total    |          |
|-----------------|----|----------|----------|------------------------------|----------|----|----------|----------|
|                 |    | Per cent | Per cent | Per cent                     | Per cent |    | Per cent | Per cent |
| 0-11 (n=158)    | 7  | 4.4      |          | 1                            | 0.6      | 8  | 5.0      |          |
| 12-23 (n=164)   | 11 | 6.7      |          | 0                            | 0.0      | 11 | 6.7      |          |
| 24-35 (n=163)   | 8  | 4.9      |          | 1                            | 0.6      | 9  | 5.5      |          |
| 36-47 (n=150)   | 12 | 8.0      |          | 0                            | 0.0      | 12 | 8.0      |          |
| 48-59 (n=134)   | 6  | 4.5      |          | 1                            | 0.7      | 7  | 5.2      |          |
| JAMAICA (n=769) | 44 | 5.7      |          | 3                            | 0.4      | 47 | 6.1      |          |

| Age(months)     | n  | Moderate |         | STUNTING<br>Severe |         | n  | Total   |         |
|-----------------|----|----------|---------|--------------------|---------|----|---------|---------|
|                 |    | Percent  | Percent | Percent            | Percent |    | Percent | Percent |
| 0-11 (n=158)    | 4  | 2.5      |         | 1                  | 0.6     | 5  | 3.1     |         |
| 12-23 (n=164)   | 7  | 4.3      |         | 3                  | 1.8     | 10 | 6.1     |         |
| 24-35 (n=163)   | 1  | 0.6      |         | 2                  | 1.2     | 3  | 1.8     |         |
| 36-47 (n=150)   | 6  | 4.0      |         | 1                  | 0.7     | 6  | 4.7     |         |
| 48-59 (n=134)   | 3  | 2.2      |         | 2                  | 1.5     | 5  | 3.7     |         |
| JAMAICA (n=769) | 21 | 2.7      |         | 9                  | 1.2     | 30 | 3.9     |         |

| Age (months)    | n | Moderate |          | WASTING<br>Severe |          | n  | Total    |          |
|-----------------|---|----------|----------|-------------------|----------|----|----------|----------|
|                 |   | Per cent | Per cent | Per cent          | Per cent |    | Per cent | Per cent |
| 0-11 (n=158)    | 1 | 0.6      |          | 0                 | 0.0      | 1  | 0.6      |          |
| 12-23 (n=164)   | 1 | 0.6      |          | 0                 | 0.0      | 1  | 0.6      |          |
| 24-35 (n=163)   | 2 | 1.2      |          | 1                 | 0.6      | 3  | 1.8      |          |
| 36-47 (n=150)   | 2 | 1.3      |          | 1                 | 0.7      | 3  | 2.0      |          |
| 48-59 (n=134)   | 2 | 1.5      |          | 0                 | 0.0      | 2  | 1.5      |          |
| JAMAICA (n=769) | 8 | 1.0      |          | 2                 | 0.3      | 10 | 1.3      |          |

\* - Data generated from the disaggregation of a small sample into five population groups

**APPENDIX D1**  
**REGRESSION MODEL TO IDENTIFY THE CONSUMPTION GROUPS WITH THE HIGHEST**  
**Level of Low Weight for Age**

| Low<br>Weight for Age | Coef.             | t<br>(p<t) | Coef               | t<br>(p<t) |
|-----------------------|-------------------|------------|--------------------|------------|
| Quantile 1            |                   |            | -0.008<br>(0.747)  | -0.323     |
| 2                     | -0.04<br>(0.023)  | -2.276     | -0.048<br>(0.021)  | -2.311     |
| 3                     | 0.008<br>(0.747)  | 0.323      |                    |            |
| 4                     | 0.057<br>(0.111)  | 1.597      | 0.049<br>(0.188)   | 1.317      |
| 5                     | -0.045<br>(0.019) | -2.348     | -0.053<br>(-0.017) | -2.391     |
| Cons.                 | 0.057<br>(0.000)  | 3.712      | 0.064<br>(0.001)   | 3.429      |

**APPENDIX D2**  
**REGRESSION MODEL TO IDENTIFY THE CONSUMPTION GROUPS WITH THE HIGHEST**  
**'Level of Low Height for Age'**

| Low<br>Height for Age | Coef              | t<br>(p<t) |
|-----------------------|-------------------|------------|
| Quantile 1            |                   |            |
| 2                     | -0.057<br>(0.021) | -2.316     |
| 3                     | -0.024<br>(0.397) | -0.847     |
| 4                     | -0.028<br>(0.398) | -0.846     |
| 5                     | -0.1<br>(0.000)   | -5.055     |
| Cons.                 | 0.1<br>(0.000)    | 5.055      |

**APPENDIX D3**  
**REGRESSION MODEL TO IDENTIFY THE CONSUMPTION GROUPS WITH THE HIGHEST**  
**'Levels of Low Weight for Height**

| Low<br>Weight for Height | Coef              | t<br>(p< t ) | Coef             | t<br>(p< t ) | Coef              | t<br>(p< t ) |
|--------------------------|-------------------|--------------|------------------|--------------|-------------------|--------------|
| Quantile 1               |                   |              | 0.023<br>(0.240) | 1.175        | 0.020<br>(0.304)  | 1.030        |
| 2                        | -0.020<br>(0.304) | -1.029       | 0.003<br>(0.876) | 0.156        |                   |              |
| 3                        | 0.023<br>(0.240)  | -1.175       |                  |              | -0.003<br>(0.876) | -0.160       |
| 4                        | 0.020<br>(0.507)  | 0.664        | 0.043<br>(0.148) | 1.467        | 0.040<br>(0.171)  | 1.370        |
| 5                        | -0.041<br>(0.030) | -2.171       | 0.176<br>(0.309) | -1.017       | -0.020<br>(0.238) | -1.180       |
| Cons                     | 0.052<br>(0.000)  | 3.558        | 0.029<br>(0.024) | 2.269        | 0.032<br>(0.013)  | 2.490        |



# **SECTION E**

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## **EDUCATION**

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**TABLE E-1**  
**PERCENTAGE ENROLMENT BY AGE, EDUCATION LEVEL,**  
**AREA AND SEX**

| Age and Education Level | Area         |              |              |              | Sex          |              |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                         | Jamaica      | KMA          | Other Towns  | Rural Areas  | Male         | Female       |
| 3-5 Years               | (N=529)      | (N=154)      | (N=102)      | (N=273)      | (N=272)      | (N=257)      |
| Early Childhood         | 80.8         | 87.5         | 81.2         | 76.3         | 79.3         | 82.3         |
| Primary                 | 4.3          | 2.9          | 1.1          | 6.4          | 3.9          | 4.7          |
| None                    | 14.9         | 9.6          | 17.7         | 17.3         | 16.8         | 13.0         |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 6-11 Years              | (N=1068)     | (N=283)      | (N=215)      | (N=570)      | (N=517)      | (N=551)      |
| Early Childhood         | 0.8          | 0.4          | 0.0          | 1.4          | 0.4          | 1.3          |
| Primary                 | 96.8         | 96.7         | 98.7         | 96.2         | 96.9         | 96.8         |
| Secondary               | 1.5          | 2.4          | 0.9          | 1.3          | 1.6          | 1.5          |
| None                    | 0.8          | 0.6          | 0.4          | 1.0          | 1.1          | 0.5          |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 12-14 Years             | (N=526)      | (N=140)      | (N=102)      | (N=284)      | (N=267)      | (N=259)      |
| Primary                 | 25.4         | 24.6         | 17.1         | 28.8         | 25.5         | 25.4         |
| Secondary               | 72.8         | 74.5         | 80.7         | 69.2         | 71.6         | 74.1         |
| None                    | 1.7          | 0.9          | 2.2          | 2.0          | 2.9          | 0.5          |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 15-16 Years             | (N=334)      | (N=106)      | (N=72)       | (N=156)      | (N=176)      | (N=158)      |
| Primary                 | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          |
| Secondary               | 76.9         | 81.2         | 77.2         | 73.8         | 75.0         | 79.2         |
| Tertiary                | 0.9          | 1.9          | 1.2          | 0.0          | 1.2          | 0.5          |
| None                    | 22.2         | 16.9         | 21.6         | 26.2         | 23.8         | 20.3         |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 17-19 Years             | (N=418)      | (N=125)      | (N=79)       | (N=214)      | (N=203)      | (N=215)      |
| Secondary               | 22.0         | 25.3         | 20.6         | 20.6         | 20.0         | 24.0         |
| Tertiary                | 6.3          | 7.3          | 12.8         | 3.3          | 4.1          | 8.4          |
| None                    | 71.7         | 67.4         | 66.6         | 76.1         | 75.9         | 67.6         |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 20-24 Years             | (N=644)      | (N=231)      | (N=120)      | (N=293)      | (N=317)      | (N=327)      |
| Secondary               | 0.5          | 0.5          | 1.7          | 0.0          | 0.6          | 0.4          |
| Tertiary                | 2.5          | 5.0          | 1.8          | 0.6          | 2.1          | 2.9          |
| None                    | 97.0         | 94.5         | 96.5         | 99.4         | 97.3         | 96.7         |
| <b>Total</b>            | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |

NOTE: Figures adjusted for non-response



**TABLE E-2**  
**PERCENTAGE ENROLMENT BY EDUCATION LEVEL**

| Education Level              | Percentage Enrolment |
|------------------------------|----------------------|
| <b>Total Early Childhood</b> | 17.9                 |
| - Basic/Infant/Kindergarten  |                      |
| <b>Total Primary</b>         | 49.3                 |
| - Primary                    |                      |
| - All Age (1-6)              |                      |
| <b>Total Secondary</b>       | 31.0                 |
| - All Age (7-9)              |                      |
| - New Secondary              |                      |
| - Comprehensive High         |                      |
| - Secondary High             |                      |
| - Technical High             |                      |
| - Vocational                 |                      |
| <b>Total Tertiary</b>        | 1.8                  |
| - University                 |                      |
| - Post-Secondary             |                      |
| - Adult/Night School         |                      |
| - Community College          |                      |
| <b>Total</b>                 | 100.0                |

NOTE: Figures adjusted for non-response

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

| Category                | School Sector |            | Total        |
|-------------------------|---------------|------------|--------------|
|                         | Public        | Private    |              |
| <b>Area</b>             |               |            |              |
| KMA (N=538)             | 96.3          | 3.7        | 100.0        |
| Other Towns (N=380)     | 96.6          | 3.4        | 100.0        |
| Rural Areas (N=100)     | 97.5          | 2.5        | 100.0        |
| <b>Quintile</b>         |               |            |              |
| Poorest (N=464)         | 98.5          | 1.5        | 100.0        |
| 2 (N=437)               | 98.6          | 1.4        | 100.0        |
| 3 (N=402)               | 98.3          | 1.7        | 100.0        |
| 4 (N=370)               | 97.0          | 3.0        | 100.0        |
| 5 (N=253)               | 90.1          | 9.9        | 100.0        |
| <b>Sex</b>              |               |            |              |
| Male (N=945)            | 96.8          | 3.2        | 100.0        |
| Female (N=981)          | 97.1          | 2.9        | 100.0        |
| <b>Age (Years)</b>      |               |            |              |
| 3-5 (N=23)              | 91.5          | 8.5        | 100.0        |
| 6-11 (N=1050)           | 96.2          | 3.8        | 100.0        |
| 12-14 (N=514)           | 99.0          | 1.0        | 100.0        |
| 15-16 (N=254)           | 97.2          | 2.8        | 100.0        |
| 17-19 (N=85)            | 95.4          | 4.6        | 100.0        |
| 20-24 (N=0)             | 0.0           | 0.0        | 0.0          |
| <b>Jamaica (N=1926)</b> | <b>96.9</b>   | <b>3.1</b> | <b>100.0</b> |

NOTE: Figures adjusted for non-response

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

| Age and<br>Education Level | Quintile |         |         |         |         |
|----------------------------|----------|---------|---------|---------|---------|
|                            | Poorest  | 2       | 3       | 4       | 5       |
| <b>3-5 Years</b>           | (N=150)  | (N=110) | (N=124) | (N=79)  | (N=66)  |
| Early Childhood            | 72.0     | 81.8    | 82.3    | 86.1    | 86.4    |
| Primary                    | 6.0      | 3.6     | 4.0     | 2.5     | 4.6     |
| None                       | 22.0     | 14.6    | 13.7    | 11.4    | 9.1     |
| <b>Sub-total</b>           | 100.0    | 100.0   | 100.0   | 100.0   | 100.0   |
| <b>6-11 Years</b>          | (N=273)  | (N=272) | (N=208) | (N=182) | (N=133) |
| Early Childhood            | 0.7      | 1.8     | 0.5     | 0.0     | 0.8     |
| Primary                    | 98.2     | 96.0    | 96.6    | 97.3    | 96.2    |
| Secondary                  | 0.4      | 1.1     | 2.4     | 1.7     | 2.3     |
| None                       | 0.7      | 1.1     | 0.0     | 1.1     | 0.7     |
| <b>Sub-total</b>           | 100.0    | 100.0   | 100.0   | 100.0   | 100.0   |
| <b>12-14 Years</b>         | (N=134)  | (N=111) | (N=118) | (N=107) | (N=56)  |
| Primary                    | 33.6     | 29.7    | 20.3    | 23.4    | 10.7    |
| Secondary                  | 64.2     | 68.5    | 77.1    | 75.7    | 87.5    |
| None                       | 2.2      | 1.8     | 2.5     | 0.9     | 1.8     |
| <b>Sub-total</b>           | 100.0    | 100.0   | 100.0   | 100.0   | 100.0   |
| <b>15-16 Years</b>         | (N=79)   | (N=64)  | (N=72)  | (N=67)  | (N=52)  |
| Primary                    | 0.0      | 0.0     | 0.0     | 0.0     | 0.0     |
| Secondary                  | 56.9     | 78.1    | 81.9    | 82.1    | 92.3    |
| Tertiary                   | 1.3      | 0.0     | 1.4     | 1.5     | 0.0     |
| None                       | 41.8     | 21.9    | 16.7    | 16.4    | 7.7     |
| <b>Sub-total</b>           | 100.0    | 100.0   | 100.0   | 100.0   | 100.0   |
| <b>17-19 Years</b>         | (N=91)   | (N=80)  | (N=85)  | (N=97)  | (N=65)  |
| Secondary                  | 11.0     | 16.3    | 22.3    | 32.0    | 29.2    |
| Tertiary                   | 1.0      | 5.0     | 5.9     | 7.2     | 13.9    |
| None                       | 87.9     | 78.7    | 71.8    | 60.8    | 56.9    |
| <b>Sub-total</b>           | 100.0    | 100.0   | 100.0   | 100.0   | 100.0   |
| <b>20-24 Years</b>         | (N=103)  | (N=124) | (N=140) | (N=137) | (N=140) |
| Secondary                  | 0.0      | 0.8     | 0.0     | 1.5     | 0.0     |
| Tertiary                   | 0.0      | 0.0     | 0.7     | 1.5     | 7.1     |
| None                       | 100.0    | 99.2    | 99.3    | 97.0    | 92.9    |
| <b>Sub-total</b>           | 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 AND SEX**

| Category            | All Age<br>(7-9) | School Type      |               |                   |                   |                             |                          |                 | Total |
|---------------------|------------------|------------------|---------------|-------------------|-------------------|-----------------------------|--------------------------|-----------------|-------|
|                     |                  | New<br>Secondary | Compr<br>High | Secondary<br>High | Technical<br>High | Vocational/<br>Agricultural | University/<br>Post Sec. | Adult/<br>Night |       |
| Area                |                  |                  |               |                   |                   |                             |                          |                 |       |
| KMA (N=252)         | 18.6             | 17.8             | 6.5           | 42.3              | 3.7               | 1.6                         | 6.2                      | 3.3             | 100.0 |
| Other Towns (N=170) | 15.9             | 26.3             | 7.3           | 33.8              | 4.9               | 4.0                         | 7.3                      | 0.6             | 100.0 |
| Rural Areas (N=371) | 26.1             | 26.1             | 16.7          | 24.9              | 3.1               | 0.8                         | 1.9                      | 0.4             | 100.0 |
| Quintile            |                  |                  |               |                   |                   |                             |                          |                 |       |
| Poorest (N=144)     | 43.1             | 27.8             | 9.0           | 15.3              | 3.5               | 0.0                         | 0.7                      | 0.7             | 100.0 |
| 2 (N=147)           | 29.3             | 24.5             | 15.0          | 23.8              | 2.0               | 2.7                         | 2.0                      | 0.7             | 100.0 |
| 3 (N=181)           | 19.3             | 26.0             | 14.4          | 32.6              | 2.8               | 1.1                         | 3.3                      | 0.6             | 100.0 |
| 4 (N=183)           | 14.2             | 23.5             | 13.1          | 33.3              | 7.1               | 2.7                         | 4.9                      | 1.1             | 100.0 |
| 5 (N=138)           | 4.4              | 14.5             | 7.3           | 55.1              | 2.9               | 2.2                         | 10.1                     | 3.6             | 100.0 |
| Sex                 |                  |                  |               |                   |                   |                             |                          |                 |       |
| Male (N=386)        | 22.4             | 27.7             | 11.3          | 28.9              | 3.8               | 1.4                         | 3.4                      | 1.0             | 100.0 |
| Female (N=407)      | 20.6             | 19.3             | 11.3          | 36.0              | 3.5               | 2.0                         | 5.5                      | 1.8             | 100.0 |
| Jamaica (N=793)     | 21.5             | 23.4             | 11.3          | 32.6              | 3.7               | 1.7                         | 4.5                      | 1.4             | 100.0 |

Note: Figures adjusted for non-response

**TABLE E-6**  
**PERCENTAGE DISTRIBUTION OF HIGHEST GRADE ACHIEVED BY 12-19 YEAR OLDS**  
**OUT-OF-SCHOOL, BY AREA, QUINTILE, SEX AND AGE**

| Category               | GRADE      |             |             |            | Total        |
|------------------------|------------|-------------|-------------|------------|--------------|
|                        | 1-6        | 7-9         | 10-11       | 12-13      |              |
| <b>Area</b>            |            |             |             |            |              |
| KMA (N=95)             | 0.0        | 30.3        | 67.5        | 2.2        | 100.0        |
| Other Towns (N=67)     | 1.4        | 37.2        | 61.4        | 0.0        | 100.0        |
| Rural Areas (N=200)    | 3.7        | 46.2        | 49.1        | 1.0        | 100.0        |
| <b>Quintile</b>        |            |             |             |            |              |
| Poorest(N=111)         | 3.6        | 56.8        | 37.8        | 1.8        | 100.0        |
| 2 (N=73)               | 2.7        | 42.5        | 54.8        | 0.0        | 100.0        |
| 3 (N=74)               | 2.7        | 25.7        | 71.6        | 0.0        | 100.0        |
| 4 (N=65)               | 1.5        | 26.2        | 72.3        | 0.0        | 100.0        |
| 5 (N=39)               | 0.0        | 33.3        | 61.5        | 5.1        | 100.0        |
| <b>Sex</b>             |            |             |             |            |              |
| Male (N=197)           | 4.2        | 43.4        | 51.9        | 0.5        | 100.0        |
| Female (N=165)         | 0.0        | 36.3        | 61.9        | 1.8        | 100.0        |
| <b>Age (years)</b>     |            |             |             |            |              |
| 12-14 (N=8)            | 30.9       | 69.1        | 0.0         | 0.0        | 100.0        |
| 15-16 (N=69)           | 2.7        | 76.0        | 21.3        | 0.0        | 100.0        |
| 17-19 (N=285)          | 1.3        | 30.6        | 66.6        | 1.4        | 100.0        |
| <b>Jamaica (N=362)</b> | <b>2.2</b> | <b>40.1</b> | <b>56.5</b> | <b>1.1</b> | <b>100.0</b> |

NOTE: Figures adjusted for non-response

**TABLE E-7**  
**PERCENTAGE ATTENDANCE IN PRIMARY AND SECONDARY SCHOOLS**  
**BY SEX, SCHOOL TYPE, QUINTILE AND AREA**

| NUMBER OF DAYS ATTENDED IN REFERENCE WEEK |            |            |            |            |            |             |              |
|---|------------|------------|------------|------------|------------|-------------|--------------|
| Group                                     | 0          | 1          | 2          | 3          | 4          | 5           | Total        |
| <b>Sex</b>                                |            |            |            |            |            |             |              |
| Male (N=928)                              | 5.4        | 0.4        | 2.2        | 4.3        | 8.3        | 79.4        | 100.0        |
| Female (N=974)                            | 5.4        | 0.7        | 2.5        | 3.9        | 6.4        | 81.1        | 100.0        |
| <b>School Type</b>                        |            |            |            |            |            |             |              |
| Primary (N=619)                           | 5.0        | 0.8        | 3.3        | 5.2        | 6.9        | 78.8        | 100.0        |
| All Age (1-6) (N=552)                     | 5.5        | 0.2        | 1.0        | 3.3        | 7.2        | 82.8        | 100.0        |
| All Age (7-9) (N=170)                     | 4.4        | 1.0        | 1.7        | 1.2        | 13.2       | 78.6        | 100.0        |
| New Sec. (N=186)                          | 4.0        | 0.5        | 4.0        | 6.1        | 6.9        | 78.5        | 100.0        |
| Compreh. High (N=95)                      | 3.4        | 0.0        | 0.0        | 7.1        | 4.6        | 84.9        | 100.0        |
| Technical High (N=30)                     | 4.4        | 0.0        | 0.0        | 4.0        | 19.8       | 71.8        | 100.0        |
| Second. High (N=250)                      | 8.7        | 0.7        | 3.0        | 2.3        | 4.8        | 80.5        | 100.0        |
| <b>Quintile</b>                           |            |            |            |            |            |             |              |
| Poorest (N=455)                           | 6.8        | 0.7        | 4.4        | 4.2        | 10.5       | 73.4        | 100.0        |
| 2 (N=433)                                 | 3.9        | 0.9        | 1.9        | 3.7        | 9.0        | 80.6        | 100.0        |
| 3 (N=394)                                 | 6.6        | 1.0        | 0.8        | 5.3        | 6.6        | 79.7        | 100.0        |
| 4 (N=370)                                 | 3.5        | 0.3        | 1.6        | 3.8        | 6.8        | 84.0        | 100.0        |
| 5 (N=250)                                 | 4.4        | 0.0        | 2.4        | 2.4        | 2.8        | 88.0        | 100.0        |
| <b>Area</b>                               |            |            |            |            |            |             |              |
| KMA (N=536)                               | 4.1        | 0.6        | 1.8        | 3.6        | 5.2        | 84.7        | 100.0        |
| Other Towns (N=378)                       | 4.3        | 0.5        | 2.3        | 3.0        | 5.5        | 84.4        | 100.0        |
| Rural Are (N=919)                         | 6.6        | 0.5        | 2.6        | 4.8        | 9.3        | 76.2        | 100.0        |
| <b>Jamaica (N=1902)</b>                   | <b>5.4</b> | <b>0.6</b> | <b>2.3</b> | <b>4.1</b> | <b>7.3</b> | <b>80.3</b> | <b>100.0</b> |

NOTE: Figures adjusted for non-response

**TABLE E-8**  
**PERCENTAGE DISTRIBUTION OF PARTICIPATION IN THE SCHOOL FEEDING PROGRAMME,**  
**BY TYPE OF MEAL, SCHOOL TYPE, AREA AND QUINTILE**

| Category               | Type of Meal      |                |      | Non-participation | Total |
|------------------------|-------------------|----------------|------|-------------------|-------|
|                        | Milk/<br>Nutribun | Cooked<br>Meal | Both |                   |       |
| School Type            |                   |                |      |                   |       |
| Primary (N=442)        | 27.6              | 13.4           | 14.5 | 44.5              | 100.0 |
| All Age (1-6) (N=398)  | 29.1              | 13.5           | 11.2 | 46.2              | 100.0 |
| All Age (7-9) (N=123)  | 18.5              | 12.0           | 10.0 | 59.5              | 100.0 |
| New Secondary (N=141)  | 2.1               | 17.7           | 4.9  | 75.3              | 100.0 |
| Comprehensive (N=71)   | 1.5               | 8.8            | 11.1 | 78.7              | 100.0 |
| Secondary High (N=194) | 1.6               | 15.8           | 8.4  | 74.2              | 100.0 |
| Technical High (N=24)  | 4.6               | 16.1           | 12.7 | 66.6              | 100.0 |
| Area                   |                   |                |      |                   |       |
| KMA (N=392)            | 17.6              | 10.1           | 14.4 | 57.9              | 100.0 |
| Other Towns (N=238)    | 8.0               | 11.8           | 15.9 | 64.2              | 100.0 |
| Rural Areas (N=763)    | 23.8              | 16.7           | 7.8  | 51.8              | 100.0 |
| Quintile               |                   |                |      |                   |       |
| Poorest (N=359)        | 34.5              | 13.1           | 9.8  | 42.6              | 100.0 |
| 2 (N=313)              | 23.9              | 18.2           | 9.3  | 48.6              | 100.0 |
| 3 (N=282)              | 11.7              | 9.9            | 15.6 | 62.8              | 100.0 |
| 4 (N=273)              | 13.2              | 13.2           | 12.4 | 61.2              | 100.0 |
| 5 (N=166)              | 2.4               | 17.5           | 13.2 | 66.9              | 100.0 |
| Jamaica (N=1393)       | 19.3              | 13.9           | 11.1 | 55.7              | 100.0 |

NOTE: Figures adjusted for non-response

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

| Area                    | Tuition & Fees    | Extra Lessons     | Transport         | Lunch & Snacks    | Uniforms          | Books           | Other Supplies  |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-----------------|
| KMA (N=624)             | \$2,467.00        | \$2,406.00        | \$1,530.00        | \$3,977.00        | \$1,131.00        | \$1,173.00      | \$416.00        |
| Other Towns (N=446)     | \$1,932.00        | \$1,730.00        | \$1,744.00        | \$3,479.00        | \$1,027.00        | \$960.00        | \$345.00        |
| Rural Areas (N=1161)    | \$1,603.00        | \$1,170.00        | \$1,981.00        | \$2,988.00        | \$942.00          | \$822.00        | \$394.00        |
| <b>Quintile</b>         |                   |                   |                   |                   |                   |                 | \$234.00        |
| Poorest (N=522)         | \$909.00          | \$1,660.00        | \$1,456.00        | \$2,013.00        | \$693.00          | \$525.00        | \$416.00        |
| 2 (N=505)               | \$1,369.00        | \$1,430.00        | \$1,658.00        | \$2,985.00        | \$990.00          | \$718.00        | \$402.00        |
| 3 (N=482)               | \$1,748.00        | \$1,290.00        | \$1,500.00        | \$3,598.00        | \$953.00          | \$831.00        | \$419.00        |
| 4 (N=426)               | \$1,915.00        | \$2,432.00        | \$1,867.00        | \$4,408.00        | \$1,101.00        | \$1,326.00      | \$534.00        |
| 5 (N=296)               | \$4,108.00        | \$1,877.00        | \$2,440.00        | \$5,168.00        | \$1,577.00        | \$1,607.00      | \$534.00        |
| <b>School Type</b>      |                   |                   |                   |                   |                   |                 |                 |
| Early Child. (N=355)    | \$1,827.00        | \$1,382.00        | \$2,327.00        | \$2,348.00        | \$711.00          | \$249.00        | \$224.00        |
| Primary (N=607)         | \$1,660.00        | \$1,907.00        | \$1,372.00        | \$3,031.00        | \$933.00          | \$800.00        | \$318.00        |
| All Age (1-6) (N=546)   | \$732.00          | \$1,247.00        | \$1,137.00        | \$2,661.00        | \$816.00          | \$539.00        | \$324.00        |
| All Age (7-9) (N=169)   | \$186.00          | \$2,045.00        | \$1,333.00        | \$2,858.00        | \$977.00          | \$713.00        | \$354.00        |
| New Second. (N=181)     | \$1,585.00        | \$1,565.00        | \$1,798.00        | \$4,605.00        | \$1,290.00        | \$1,189.00      | \$453.00        |
| Comprehensive (N=95)    | \$1,899.00        | \$1,565.00        | \$2,237.00        | \$5,579.00        | \$1,332.00        | \$1,844.00      | \$504.00        |
| Secondary High (N=249)  | \$3,946.00        | \$2,030.00        | \$2,232.00        | \$5,249.00        | \$1,686.00        | \$2,447.00      | \$793.0         |
| Technical High (N=29)   | \$3,140.00        | \$2,414.00        | \$3,233.00        | \$7,163.00        | \$1,741.00        | \$1,886.00      | \$517.00        |
| <b>Jamaica (N=2231)</b> | <b>\$1,971.00</b> | <b>\$1,768.00</b> | <b>\$1,771.00</b> | <b>\$3,387.00</b> | <b>\$1,014.00</b> | <b>\$961.00</b> | <b>\$390.00</b> |

**TABLE E-10**  
**SCHOOL FEES, AND ASSISTANCE GIVEN THROUGH THE GOVERNMENT'S STUDENT ASSISTANCE**  
**PROGRAMME (SAP) AND OTHER SOURCES, BY AREA, QUINTILE, AND SCHOOL TYPE (Mean dollar (\$) Values )**

| Category Area      | Secondary School Fees | Assistance from SAP | Assistance from Other Sources |
|--------------------|-----------------------|---------------------|-------------------------------|
| KMA                | (N=158) 2973          | (N=3) 1346          | (N=14) 3839                   |
| Other Towns        | (N=112) 2256          | (N=6) 707           | (N=14) 2500                   |
| Rural Areas        | (N=219) 2499          | (N=11) 976          | (N=30) 1641                   |
| <b>Quintile</b>    |                       |                     |                               |
| Poorest            | (N=75) 2164           | (N=4) 1400          | (N=10) 1445                   |
| 2                  | (N=83) 2259           | (N=5) 569           | (N=13) 1568                   |
| 3                  | (N=110) 2498          | (N=6) 1148          | (N=16) 1906                   |
| 4                  | (N=123) 2681          | (N=5) 621           | (N=10) 3944                   |
| 5                  | (N=98) 3145           | (N=0) 0             | (N=9) 3767                    |
| <b>School Type</b> |                       |                     |                               |
| New Secondary      | (N=150) 1678          | (N=8) 670           | (N=21) 1448                   |
| Comprehensive      | (N=82) 1650           | (N=6) 1195          | (N=7) 1184                    |
| Secondary High     | (N=222) 3543          | (N=5) 1057          | (N=27) 3509                   |
| Technical High     | (N=28) 3122           | (N=1) 1000          | (N=3) 1693                    |

NOTE: Figures not in brackets are the mean dollar values



# **SECTION F**

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## **HOUSING**

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

| Type of Housing Unit        | Area                |                |                        |                        |
|-----------------------------|---------------------|----------------|------------------------|------------------------|
|                             | Jamaica<br>(N=1976) | KMA<br>(N=629) | Other Towns<br>(N=399) | Rural Areas<br>(N=948) |
| Separate House Detached     | 76.1                | 5.0            | 74.6                   | 92.4                   |
| Semi-detached House         | 5.7                 | 11.6           | 4.6                    | 1.6                    |
| Part of a House             | 14.1                | 24.9           | 18.3                   | 4.4                    |
| Apartment Building          | 2.2                 | 5.0            | 2.2                    | 0.1                    |
| Town House                  | 1.4                 | 3.3            | 0.0                    | 0.6                    |
| Improvised Housing Unit     | 0.1                 | 0.0            | 0.3                    | 0.1                    |
| Part of Commercial Building | 0.4                 | 0.2            | 0.0                    | 0.6                    |
| Other                       | 0.1                 | 0.0            | 0.0                    | 0.2                    |
| All Types                   | 100.0               | 100.0          | 100.0                  | 100.0                  |

  

| Type of Housing Unit        | Quintile           |              |              |              |              |
|-----------------------------|--------------------|--------------|--------------|--------------|--------------|
|                             | Poorest<br>(N=257) | 2<br>(N=313) | 3<br>(N=338) | 4<br>(N=427) | 5<br>(N=641) |
| Separate House Detached     | 87.6               | 83.9         | 80.4         | 76.3         | 71.3         |
| Semi-detached House         | 3.1                | 4.2          | 4.8          | 6.7          | 7.3          |
| Part of a House             | 8.1                | 10.7         | 12.5         | 14.0         | 15.2         |
| Apartment Building          | 0.4                | 0.7          | 1.5          | 1.9          | 2.9          |
| Town House                  | 0.0                | 0.0          | 0.3          | 1.0          | 2.8          |
| Improvised Housing Unit     | 0.0                | 0.0          | 0.3          | 0.0          | 0.2          |
| Part of Commercial Building | 0.8                | 0.7          | 0.0          | 0.2          | 0.3          |
| Other                       | 0.0                | 0.0          | 0.3          | 0.0          | 0.2          |
| 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**

|                | Material of Outer Wall |       |       |              |               |               |       |           |
|----------------|------------------------|-------|-------|--------------|---------------|---------------|-------|-----------|
| Classification | Wood                   | Stone | Brick | Concrete Nog | Block & Steel | Wattle & Daub | Other | All Types |
| Area           |                        |       |       |              |               |               |       |           |
| KMA            | 18.4                   | 0.6   | 1.5   | 16.1         | 56.1          | 0.0           | 7.3   | 100.0     |
| Other Towns    | 37.8                   | 2.6   | 0.0   | 16.8         | 41.1          | 0.0           | 1.7   | 100.0     |
| Rural Areas    | 33.2                   | 0.4   | 0.8   | 17.0         | 46.8          | 0.6           | 1.3   | 100.0     |
| Quintile       |                        |       |       |              |               |               |       |           |
| Poorest        | 45.9                   | 0.8   | 0.0   | 17.1         | 33.9          | 0.8           | 1.6   | 100.0     |
| 2              | 33.9                   | 1.6   | 0.6   | 21.4         | 39.3          | 0.6           | 2.6   | 100.0     |
| 3              | 35.4                   | 0.6   | 0.9   | 19.1         | 41.4          | 0.0           | 2.7   | 100.0     |
| 4              | 26.5                   | 1.4   | 1.2   | 13.8         | 53.2          | 0.0           | 4.0   | 100.0     |
| 5              | 19.1                   | 0.3   | 1.1   | 15.0         | 59.7          | 0.2           | 4.7   | 100.0     |
| Jamaica        | 29.0                   | 0.9   | 0.9   | 16.6         | 48.9          | 0.3           | 3.5   | 100.0     |

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

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

| Type of Toilet Facility | AREA                     |                                 |                          |                                 |                          |                                 |                          |                                 |
|-------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|
|                         | 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      | 21.0                     | 17.4                            | 49.2                     | 41.0                            | 8.5                      | 6.2                             | 5.2                      | 4.5                             |
| WC Not Linked To        | 31.3                     | 24.9                            | 35.1                     | 21.7                            | 41.0                     | 35.1                            | 24.3                     | 22.9                            |
| Sewer                   | 47.5                     | 35.6                            | 15.7                     | 8.3                             | 49.8                     | 31.4                            | 70.3                     | 57.8                            |
| Pit                     | 0.3                      | 0.2                             | 0.0                      | 0.0                             | 0.8                      | 0.5                             | 0.2                      | 0.2                             |
| Other                   | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             |
| None                    | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             |
| All Types               | 100.0                    | 78.1                            | 100.0                    | 71.0                            | 100.0                    | 73.2                            | 100.0                    | 85.4                            |

NOTE: Estimates adjusted for non-response

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

| 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      | 7.5                      | 6.7                             | 9.8                      | 6.2                             | 13.8                     | 12.9                            | 23.1                     | 20.4                            | 32.4                     | 27.2                            |
| WC Not Linked To        | 10.2                     | 8.2                             | 20.0                     | 15.4                            | 29.7                     | 22.2                            | 33.7                     | 27.9                            | 41.3                     | 34.4                            |
| Sewer                   | 82.0                     | 66.6                            | 69.8                     | 56.7                            | 56.2                     | 42.3                            | 42.8                     | 30.3                            | 26.3                     | 16.7                            |
| Pit                     | 0.4                      | 0.4                             | 0.3                      | 0.3                             | 0.3                      | 0.3                             | 0.5                      | 0.2                             | 0.0                      | 0.0                             |
| Other                   | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             |
| None                    | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             | 0.0                      | 0.0                             |
| All Types               | 100.0                    | 81.9                            | 100.0                    | 78.7                            | 100.0                    | 77.8                            | 100.0                    | 78.8                            | 100.0                    | 78.4                            |

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

| Classification   | Source of Drinking Water |                             |                     |      |                            |                     |       | All Types |
|--|--------------------------|-----------------------------|---------------------|------|----------------------------|---------------------|-------|-----------|
|  | Indoor Tap/<br>Pipe      | Outside Private<br>Tap/Pipe | Public<br>Standpipe | Well | River/Lake/<br>Spring/Pond | Rianwater<br>(Tank) | Other |           |
| Area   |                          |                             |                     |      |                            |                     |       |           |
| KMA  | 75.1                     | 21.8                        | 1.6                 | 0.0  | 0.1                        | 0.5                 | 0.9   | 100.0     |
| Other Towns  | 44.2                     | 26.0                        | 16.6                | 0.0  | 1.1                        | 8.7                 | 3.4   | 100.0     |
| Rural Areas  | 17.2                     | 18.5                        | 27.5                | 0.1  | 8.0                        | 24.5                | 4.2   | 100.0     |
| Quintile   |                          |                             |                     |      |                            |                     |       |           |
| Poorest  | 12.3                     | 20.0                        | 30.8                | 0.0  | 7.7                        | 21.9                | 7.3   | 100.0     |
| 2  | 21.4                     | 19.4                        | 29.8                | 0.3  | 5.8                        | 19.1                | 4.2   | 100.0     |
| 3  | 36.6                     | 26.5                        | 15.8                | 0.0  | 6.3                        | 12.5                | 2.4   | 100.0     |
| 4  | 46.0                     | 24.4                        | 13.3                | 0.0  | 3.1                        | 10.9                | 2.4   | 100.0     |
| 5  | 60.8                     | 17.7                        | 8.9                 | 0.0  | 1.6                        | 9.8                 | 1.2   | 100.0     |
| Jamaica  | 42.3                     | 21.1                        | 16.5                | 0.1  | 4.0                        | 13.2                | 2.9   | 100.0     |
| NOTE: Estimates for Area and Jamaica adjusted for non-response |                          |                             |                     |      |                            |                     |       |           |

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

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

| Classification             | Households<br>Analysed (N) | Distance from Source (yards) |        |         |         |       | Total |
|----------------------------|----------------------------|------------------------------|--------|---------|---------|-------|-------|
|                            |                            | 0-49                         | 50-199 | 200-499 | 500-999 | 1000+ |       |
| Area/Source                |                            |                              |        |         |         |       |       |
| KMA                        |                            |                              |        |         |         |       |       |
| Public Standpipe           | 8                          | 65.9                         | 22.7   | 11.4    | 0.0     | 0.0   | 100.0 |
| River/Lake/<br>Spring/Pond | 0                          | 0.0                          | 0.0    | 0.0     | 0.0     | 0.0   | 0.0   |
| Other Towns                |                            |                              |        |         |         |       |       |
| Public Standpipe           | 65                         | 56.9                         | 34.3   | 8.8     | 0.0     | 0.0   | 100.0 |
| River/Lake/<br>Spring/Pond | 1                          | 100.0                        | 0.0    | 0.0     | 0.0     | 0.0   | 100.0 |
| Rural Areas                |                            |                              |        |         |         |       |       |
| Public Standpipe           | 262                        | 57.0                         | 22.2   | 13.6    | 2.2     | 5.0   | 100.0 |
| River/Lake/<br>Spring/Pond | 75                         | 43.9                         | 18.3   | 18.3    | 3.5     | 16.1  | 100.0 |
| Quintile/Source            |                            |                              |        |         |         |       |       |
| Poorest                    |                            |                              |        |         |         |       |       |
| Public Standpipe           | 80                         | 61.3                         | 17.5   | 11.3    | 2.5     | 7.5   | 100.0 |
| River/Lake/<br>Spring/Pond | 20                         | 30.0                         | 20.0   | 20.0    | 10.0    | 20.0  | 100.0 |
| 2                          |                            |                              |        |         |         |       |       |
| Public Standpipe           | 91                         | 47.3                         | 33.0   | 17.6    | 1.1     | 1.1   | 100.0 |
| River/Lake/<br>Spring/Pond | 18                         | 50.0                         | 11.1   | 27.8    | 0.0     | 11.1  | 100.0 |
| 3                          |                            |                              |        |         |         |       |       |
| Public Standpipe           | 53                         | 58.5                         | 28.3   | 3.8     | 0.0     | 9.4   | 100.0 |
| River/Lake/<br>Spring/Pond | 18                         | 44.4                         | 22.2   | 11.1    | 5.6     | 16.7  | 100.0 |
| 4                          |                            |                              |        |         |         |       |       |
| Public Standpipe           | 56                         | 62.5                         | 19.6   | 16.1    | 0.0     | 1.8   | 100.0 |
| River/Lake/<br>Spring/Pond | 12                         | 41.7                         | 25.0   | 16.7    | 0.0     | 16.7  | 100.0 |
| 5                          |                            |                              |        |         |         |       |       |
| Public Standpipe           | 55                         | 63.6                         | 21.8   | 9.1     | 3.6     | 1.8   | 100.0 |
| River/Lake/<br>Spring/Pond | 8                          | 62.5                         | 12.5   | 12.5    | 0.0     | 12.5  | 100.0 |
| Jamaica                    |                            |                              |        |         |         |       |       |
| Public Standpipe           | 335                        | 57.3                         | 24.6   | 12.6    | 1.7     | 3.9   | 100.0 |
| River/Lake/<br>Spring/Pond | 76                         | 44.8                         | 18.0   | 18.0    | 3.4     | 15.8  | 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 |           |
| Area           |                    |          |       |      |           |
| KMA            | 86.8               | 7.7      | 0.5   | 5.0  | 100.0     |
| Other Towns    | 75.0               | 23.7     | 0.5   | 0.8  | 100.0     |
| Rural Areas    | 58.8               | 39.8     | 0.6   | 0.9  | 100.0     |
| Quintile       |                    |          |       |      |           |
| Poorest        | 43.5               | 54.6     | 0.4   | 1.5  | 100.0     |
| 2              | 57.3               | 41.1     | 0.7   | 1.0  | 100.0     |
| 3              | 69.4               | 28.2     | 0.6   | 1.8  | 100.0     |
| 4              | 77.4               | 20.2     | 0.2   | 2.1  | 100.1     |
| 5              | 85.6               | 11.6     | 0.8   | 2.0  | 100.0     |
| Jamaica        | 71.5               | 25.7     | 0.5   | 2.3  | 100.0     |

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

**TABLE F-8**  
**PERCENTAGE DISTRIBUTION 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 |
|----------------|--------------------------|---|
| Area           |                          |   |
| KMA            | 92.7                     | 75.1  |
| Other Towns    | 94.3                     | 80.1  |
| Rural Areas    | 95.8                     | 88.8  |
| Quintile       |                          |   |
| Poorest        | 93.8                     | 86.9  |
| 2              | 93.2                     | 83.9  |
| 3              | 94.1                     | 82.8  |
| 4              | 96.9                     | 84.8  |
| 5              | 94.8                     | 80.2  |
| Jamaica        | 94.4                     | 82.4  |

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 | 59.1         | 43.8         | 59.4         | 70.2         |
| Rent-Free                 | 14.4         | 15.4         | 11.4         | 15.0         |
| Rented                    |              |              |              |              |
| Leased                    | 1.3          | 1.3          | 1.3          | 1.4          |
| Private Rented            | 21.8         | 34.2         | 25.5         | 11.1         |
| Government Rented         | 1.9          | 3.0          | 1.8          | 1.2          |
| Squatter                  | 0.7          | 1.4          | 0.3          | 0.4          |
| Other                     | 0.7          | 1.0          | 0.3          | 0.7          |
| <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          |              |              |              |              |              |
| Rent-Free         | 16.5         | 14.5         | 15.1         | 15.4         | 12.1         |
| Rented            |              |              |              |              |              |
| Leased            | 2.3          | 1.9          | 0.3          | 1.4          | 0.8          |
| Private Rented    | 8.5          | 12.3         | 16.0         | 21.1         | 31.9         |
| Government Rented | 1.2          | 3.2          | 1.2          | 1.7          | 1.9          |
| Squatter          | 0.4          | 1.6          | 0.3          | 1.0          | 0.5          |
| Other             | 0.0          | 0.3          | 0.3          | 0.2          | 1.6          |
| <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 TENANT HOUSEHOLDS BY LANDLORD TYPE, BY AREA AND QUINTILE**

| Classification | Households<br>Analysed<br>(N) | Relative | From Whom Rented |               |                               | Total |
|----------------|-------------------------------|----------|------------------|---------------|-------------------------------|-------|
|                |                               |          | Private Employer | Public Agency | Private Individual/<br>Agency |       |
| Area           |                               |          |                  |               |                               |       |
| KMA            | 213                           | 3.2      | 0.8              | 1.8           | 94.2                          | 100.0 |
| Other Towns    | 102                           | 7.1      | 4.8              | 1.1           | 87.0                          | 100.0 |
| Rural Areas    | 119                           | 7.5      | 1.7              | 2.7           | 88.2                          | 100.0 |
| Quintile       |                               |          |                  |               |                               |       |
| Poorest        | 28                            | 3.6      | 3.6              | 0.0           | 92.9                          | 100.0 |
| 2              | 44                            | 6.8      | 0.0              | 0.0           | 93.2                          | 100.0 |
| 3              | 56                            | 7.1      | 0.0              | 3.6           | 89.3                          | 100.0 |
| 4              | 86                            | 10.4     | 3.1              | 1.0           | 85.4                          | 100.0 |
| 5              | 210                           | 3.3      | 2.4              | 2.4           | 91.9                          | 100.0 |
| Jamaica        | 434                           | 5.1      | 1.9              | 1.9           | 91.1                          | 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<br>(N) | Mean Monthly Rent<br>(\$) | Rent as % of Total<br>Household Consumption |
|-----------------|----------------------------|---------------------------|---|
| <b>Area</b>     |                            |                           |   |
| KMA             | 203                        | 1,709                     | 11.8  |
| Other Towns     | 99                         | 766                       | 8.3   |
| Rural Areas     | 119                        | 608                       | 6.3   |
| <b>Quintile</b> |                            |                           |   |
| Poorest         | 27                         | 229                       | 4.3   |
| 2               | 42                         | 379                       | 5.5   |
| 3               | 52                         | 703                       | 7.1   |
| 4               | 92                         | 879                       | 8.6   |
| 5               | 208                        | 1,707                     | 11.2  |
| <b>Jamaica</b>  | <b>421</b>                 | <b>1,210</b>              | <b>10.1</b>                                 |

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<br>(N) | Mean Monthly<br>Water Payment<br>(\$) | Water as % of<br>Total Household Consumption |
|-----------------|----------------------------|---------------------------------------|--|
| <b>Area</b>     |                            |                                       |  |
| KMA             | 454                        | 320                                   | 2.0  |
| Other Towns     | 235                        | 286                                   | 2.3  |
| Rural Areas     | 254                        | 250                                   | 2.2  |
| <b>Quintile</b> |                            |                                       |  |
| Poorest         | 50                         | 214                                   | 2.9  |
| 2               | 85                         | 229                                   | 2.6  |
| 3               | 156                        | 262                                   | 2.4  |
| 4               | 230                        | 292                                   | 2.3  |
| 5               | 422                        | 326                                   | 1.9  |
| <b>Jamaica</b>  | 943                        | 294                                   | 2.1  |

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<br>(N) | Mean Monthly<br>Electricity Payment<br>(\$) | Electricity as % of Total Household<br>Consumption |
|-----------------|----------------------------|---|--|
| <b>Area</b>     |                            |   |  |
| KMA             | 467                        | 704   | 4.5  |
| Other Towns     | 280                        | 618   | 4.8  |
| Rural Areas     | 540                        | 483   | 4.3  |
| <b>Quintile</b> |                            |   |  |
| Poorest         | 101                        | 432   | 5.8  |
| 2               | 161                        | 461   | 5.1  |
| 3               | 218                        | 622   | 5.5  |
| 4               | 292                        | 604   | 4.8  |
| 5               | 515                        | 644   | 3.8  |
| <b>Jamaica</b>  | 1,287                      | 595   | 4.5  |

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<br>(N) | Mean Monthly Telephone Payment<br>(\$) | Telephone as % of Total Household<br>Consumption |
|-----------------|----------------------------|--|--|
| <b>Area</b>     |                            |  |  |
| KMA             | 214                        | 634                                    | 3.2  |
| Other Towns     | 118                        | 488                                    | 3.3  |
| Rural Areas     | 82                         | 585                                    | 3.9  |
| <b>Quintile</b> |                            |  |  |
| Poorest         | 18                         | 467                                    | 4.7  |
| 2               | 27                         | 297                                    | 3.1  |
| 3               | 45                         | 345                                    | 2.8  |
| 4               | 80                         | 568                                    | 3.8  |
| 5               | 244                        | 646                                    | 3.1  |
| <b>Jamaica</b>  | <b>414</b>                 | <b>585</b>                             | <b>3.3</b>                                       |

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<br>(N) | Mean Monthly Mortgage Payment<br>(\$) | Mortgage as % of Total Household<br>Consumption |
|-----------------|----------------------------|---------------------------------------|---|
| <b>Area</b>     |                            |                                       |   |
| KMA             | 60                         | 2,507                                 | 12.7  |
| Other Towns     | 5                          | 737                                   | 5.7   |
| Rural Areas     | 7                          | 1,077                                 | 5.4   |
| <b>Quintile</b> |                            |                                       |   |
| Poorest         | 4                          | 1,000                                 | 13.0  |
| 2               | 2                          | 265                                   | 3.2   |
| 3               | 12                         | 565                                   | 3.7   |
| 4               | 20                         | 873                                   | 6.0   |
| 5               | 34                         | 3,112                                 | 13.3  |
| <b>Jamaica</b>  | <b>72</b>                  | <b>2,227</b>                          | <b>11.5</b>                                     |

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



**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<br>(N) | Mean Monthly Property Tax Payment<br>(\$) | Property Tax as % of Total Household<br>Consumption |
|-----------------|----------------------------|---|---|
| <b>Area</b>     |                            |   |   |
| KMA             | 129                        | 61  | 0.3   |
| Other Towns     | 108                        | 27  | 0.2   |
| Rural Areas     | 468                        | 16  | 0.2   |
| <b>Quintile</b> |                            |   |   |
| Poorest         | 107                        | 14  | 0.2   |
| 2               | 126                        | 13  | 0.2   |
| 3               | 128                        | 18  | 0.2   |
| 4               | 134                        | 22  | 0.2   |
| 5               | 210                        | 46  | 0.3   |
| <b>Jamaica</b>  | <b>705</b>                 | <b>26</b>                                 | <b>0.2</b>  |

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

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

| Durable Good           | Code | Area                |                |                        |                  |
|------------------------|------|---------------------|----------------|------------------------|------------------|
|                        |      | Jamaica<br>(N=1976) | KMA<br>(N=605) | Other Towns<br>(N=389) | Rural<br>(N=946) |
| Sewing Machines        | 601  | 13.5                | 17.6           | 14.2                   | 10.2             |
| Gas Stoves             | 602  | 64.0                | 79.9           | 71.0                   | 49.3             |
| Electric Stoves        | 603  | 1.0                 | 2.0            | 0.5                    | 0.5              |
| Refrigerators/Freezers | 604  | 49.4                | 64.8           | 53.4                   | 36.2             |
| Air Conditioners       | 605  | 0.7                 | 1.4            | 0.7                    | 0.2              |
| Fans                   | 606  | 40.1                | 66.1           | 32.9                   | 23.7             |
| Radio/Cassette Players | 607  | 72.0                | 71.1           | 70.5                   | 73.3             |
| Phonographs            | 608  | 0.0                 | 0.0            | 0.0                    | 0.0              |
| Stereo Equipment       | 609  | 11.1                | 16.6           | 14.1                   | 5.7              |
| Video Equipment        | 610  | 18.9                | 26.0           | 24.3                   | 11.5             |
| Washing Machines       | 611  | 3.4                 | 6.3            | 3.4                    | 1.3              |
| TV Sets                | 612  | 58.7                | 74.1           | 62.0                   | 45.9             |
| Bicycles               | 613  | 11.1                | 12.4           | 13.2                   | 9.2              |
| Motor Bikes            | 614  | 1.0                 | 0.4            | 0.5                    | 1.6              |
| Cars/Other Vehicles    | 615  | 9.0                 | 11.3           | 10.4                   | 6.6              |
| None                   | 13.1 | 9.0                 | 13.2           | 16.0                   |                  |

Note: Estimates adjusted for non-response

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

| Durable Good                | Code | Quintile           |             |              |              |              |
|-----------------------------|------|--------------------|-------------|--------------|--------------|--------------|
|                             |      | Poorest<br>(N=260) | 2<br>(N310) | 3<br>(N=337) | 4<br>(N=422) | 5<br>(N=647) |
| Sewing Machines             | 601  | 8.8                | 11.9        | 10.4         | 14.0         | 16.5         |
| Gas Stoves                  | 602  | 33.5               | 52.6        | 64.7         | 68.5         | 76.4         |
| Electric Stoves             | 603  | 0.0                | 0.0         | 0.0          | 0.0          | 2.3          |
| Refrigerators/Freezers      | 604  | 18.1               | 33.5        | 49.0         | 53.3         | 64.9         |
| Air Conditioners            | 605  | 0.0                | 0.0         | 0.0          | 0.5          | 1.5          |
| Fans                        | 606  | 14.6               | 23.9        | 36.5         | 39.8         | 56.3         |
| Radio/Cassette Play-<br>ers | 607  | 61.2               | 75.5        | 74.8         | 72.0         | 73.1         |
| Phonographs                 | 608  | 0.0                | 0.0         | 0.0          | 0.0          | 0.0          |
| Stereo Equipment            | 609  | 2.7                | 4.8         | 7.4          | 10.4         | 19.2         |
| Video Equipment             | 610  | 5.0                | 7.7         | 13.6         | 22.0         | 30.3         |
| Washing Machines            | 611  | 1.2                | 0.3         | 0.6          | 1.9          | 7.7          |
| TV Sets                     | 612  | 36.5               | 46.1        | 58.2         | 63.5         | 69.2         |
| Bicycles                    | 613  | 5.0                | 8.4         | 9.2          | 13.0         | 14.5         |
| Motor Bikes                 | 614  | 0.8                | 0.3         | 0.6          | 0.7          | 1.7          |
| Cars/Other Vehicles         | 615  | 1.2                | 1.6         | 2.1          | 6.9          | 19.8         |
| None                        |      | 28.1               | 14.5        | 11.6         | 11.4         | 8.8          |



# **SECTION G**

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## **FOOD STAMP PROGRAMME**

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**TABLE G-1**  
**PERCENTAGE DISTRIBUTION OF INDIVIDUALS IN TERMS OF APPLICATION FO**  
**AND RECEIPT OF FOOD STAMPS, BY AREA AND QUINTILE**

| NOT RECEIVING FOOD STAMPS |             |         |               |       |
|---------------------------|-------------|---------|---------------|-------|
| Classification            | Food Stamps | Applied | Never Applied | Total |
| Area                      |             |         |               |       |
| KMA (N=2,040)             | 2.6         | 1.5     | 95.9          | 100.0 |
| Other Towns (N=1,198)     | 4.7         | 3.5     | 91.8          | 100.0 |
| Rural Areas (N=2,418)     | 12.3        | 5.6     | 82.1          | 100.0 |
| Quintile                  |             |         |               |       |
| Poorest (N=791)           | 16.8        | 8.2     | 75            | 100.0 |
| 2 (N=944)                 | 13          | 5.1     | 81.9          | 100.0 |
| 3 (N=1205)                | 6.6         | 4.0     | 89.4          | 100.0 |
| 4 (N=1,300)               | 3.3         | 2.8     | 93.9          | 100.0 |
| 5 (N=1,416)               | 2           | 1.1     | 96.9          | 100.0 |
| Jamaica (N=5,656)         | 7.2         | 3.7     | 89.1          | 100.0 |

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

**TABLE G-2**  
**DISTRIBUTION OF INDIVIDUALS RECEIVING FOOD**  
**STAMPS, BY AREA AND QUINTILE**

| Classification  | Number of<br>Individuals<br>Receiving<br>Food Stamps | Percentage<br>of Total<br>Recipients |
|-----------------|--|--------------------------------------|
| <b>Area</b>     |  |                                      |
| KMA             | 54   | 14.3                                 |
| Other Towns     | 54   | 13.4                                 |
| Rural Areas     | 299  | 72.4                                 |
| <b>Quintile</b> |  |                                      |
| Poorest         | 133  | 32.7                                 |
| 2               | 123  | 30.2                                 |
| 3               | 80   | 19.7                                 |
| 4               | 43   | 10.6                                 |
| 5               | 28   | 6.9                                  |
| <b>Jamaica</b>  | <b>407</b>   | <b>100.0</b>                         |

Note: Percentages adjusted for non-response.

**TABLE G-3**  
**NUMBER AND PERCENTAGE OF ELIGIBLE INDIVIDUALS RECEIVING FOOD STAMPS,**  
**BY BENEFICIARY CATEGORY, AREA AND QUINTILE, 1994-1995**

| Classification  | Beneficiary Categories                     |             |            |             |                                 |             |            |            |                       |             |            |             |
|-----------------|--|-------------|------------|-------------|---------------------------------|-------------|------------|------------|-----------------------|-------------|------------|-------------|
|                 | Children<br>Aged Less<br>Than<br>Six Years |             |            |             | Pregnant/<br>Lactating<br>Women |             |            |            | Elderly/Poor/Disabled |             |            |             |
|                 | 1994<br>N                                  | 1995<br>%   | 1994<br>N  | 1995<br>%   | 1994<br>N                       | 1995<br>%   | 1994<br>N  | 1995<br>%  | 1994<br>N             | 1995<br>%   | 1994<br>N  | 1995<br>%   |
| <b>Area</b>     |  |             |            |             |                                 |             |            |            |                       |             |            |             |
| KMA             | 153  | 15.1        | 244        | 6.9         | 32                              | 5           | 31         | 0          | 73                    | 32.9        | 74         | 27.3        |
| Other Towns     | 145  | 19.1        | 144        | 10.8        | 27                              | 13.4        | 13         | 0          | 80                    | 31.2        | 46         | 31.5        |
| Rural Areas     | 381  | 31.7        | 406        | 26.5        | 65                              | 11.3        | 64         | 8          | 338                   | 45.2        | 197        | 39.8        |
| <b>Quintile</b> |  |             |            |             |                                 |             |            |            |                       |             |            |             |
| Poorest         | 181  | 36.5        | 226        | 23          | 33                              | 18.2        | 35         | 2.9        | 140                   | 57.1        | 78         | 48.7        |
| 2               | 167  | 22.2        | 178        | 21.4        | 31                              | 6.5         | 30         | 10         | 136                   | 38.2        | 78         | 35.9        |
| 3               | 131  | 25.2        | 178        | 16.3        | 24                              | 12.5        | 19         | 5.3        | 105                   | 40.9        | 54         | 33.3        |
| 4               | 126  | 13.5        | 124        | 12.1        | 18                              | 16.7        | 15         | 0          | 67                    | 32.9        | 43         | 32.6        |
| 5               | 74   | 10.8        | 88         | 9.1         | 18                              | 0           | 9          | 0          | 43                    | 9.3         | 64         | 21.9        |
| <b>Jamaica</b>  | <b>679</b>                                 | <b>23.7</b> | <b>794</b> | <b>17.9</b> | <b>124</b>                      | <b>11.3</b> | <b>108</b> | <b>4.6</b> | <b>491</b>            | <b>40.9</b> | <b>317</b> | <b>35.3</b> |

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

**TABLE G-4**  
**SELF-REPORTED REASONS FOR NON-RECEIPT OF FOOD STAMPS**  
**AMONG APPLICATIONS WHICH HAVE BEEN SUBMITTED MORE THAN 12 MONTHS EARLIER**

| CLASSIFICATION         | Reason                   |                |                |                               |       |               |       |
|------------------------|--------------------------|----------------|----------------|-------------------------------|-------|---------------|-------|
| Classification         | Never<br>Checked<br>Back | Put on<br>File | Turned<br>Down | Did not<br>Receive<br>In Mail | Other | Don't<br>Know | Total |
| Area                   |                          |                |                |                               |       |               |       |
| KMA (N=39)             | 0.0                      | 28.2           | 2.4            | 11.9                          | 3.4   | 54.2          | 100   |
| Other Towns<br>(N=39)  | 0.0                      | 4.7            | 20.7           | 7.9                           | 2.4   | 64.3          | 100   |
| Rural Areas<br>(N=124) | 3.7                      | 13.0           | 6.0            | 2.4                           | 8.4   | 66.5          | 100   |
| Quintile               |                          |                |                |                               |       |               |       |
| Poorest (N=68)         | 4.4                      | 19.1           | 8.8            | 2.9                           | 10.3  | 54.4          | 100   |
| 2 (N=36)               | 28.8                     | 25.0           | 5.6            | 2.8                           | 2.8   | 61.1          | 100   |
| 3 (N=41)               | 0.0                      | 4.9            | 4.9            | 2.4                           | 7.3   | 80.5          | 100   |
| 4 (N=38)               | 0.0                      | 5.3            | 13.2           | 18.4                          | 2.6   | 60.5          | 100   |
| 5 (N=19)               | 5.3                      | 15.8           | 5.3            | 0.0                           | 0.0   | 73.7          | 100   |
| Jamaica (N=202)        | 2.2                      | 14.4           | 8.2            | 5.4                           | 6.2   | 63.6          | 100   |

Note: Regional and Jamaica percentages adjusted for non-response

**TABLE G-5**  
**NUMBER AND PERCENTAGE OF**  
**HOUSEHOLDS RECEIVING FOOD STAMPS,**  
**BY AREA AND QUINTILE**

| Classification | Households<br>Receiving<br>Food Stamps<br>(N) | Percentage<br>of Total<br>Recipients<br>(%) |
|----------------|---|---|
| Area           |   |   |
| KMA            | 46  | 14.8  |
| Other Towns    | 42  | 12.7  |
| Rural Areas    | 243   | 72.5  |
| Quintile       |   |   |
| Poorest        | 103   | 31.1  |
| 2              | 104   | 31.4  |
| 3              | 60  | 18.1  |
| 4              | 39  | 11.8  |
| 5              | 25  | 7.6   |
| Jamaica        | 331   | 100   |

**TABLE G-6**  
**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=46)          | 83.5                              | 14.5 | 2.0           | 100.0 |
| Other Towns (N=42)  | 70.5                              | 29.5 | 0.0           | 100.0 |
| Rural Areas (N=243) | 81.8                              | 14.5 | 3.7           | 100.0 |
| <b>Quintile</b>     |                                   |      |               |       |
| Poorest (N=103)     | 76.7                              | 18.5 | 4.9           | 100.0 |
| 2 (N=104)           | 83.7                              | 14.4 | 1.9           | 100.0 |
| 3 (N=60)            | 73.3                              | 21.7 | 5.0           | 100.0 |
| 4 (N=39)            | 89.7                              | 10.3 | 0.0           | 100.0 |
| 5 (N=25)            | 88.0                              | 12.0 | 0.0           | 100.0 |
| Jamaica (N=331)     | 80.6                              | 16.4 | 3.0           | 100.0 |

Note: Regional and Jamaica percentages adjusted for non/resonse

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

| Classification  | Children Aged Less Than Six Years |             | Pregnant\ Lactating Women |            | Elderly\Poor\ Disabled |             |
|-----------------|-----------------------------------|-------------|---------------------------|------------|------------------------|-------------|
|                 | N                                 | Percent     | N                         | Percent    | N                      | Percent     |
| <b>Area</b>     |                                   |             |                           |            |                        |             |
| KMA             | 158                               | 9.4         | 30                        | 0.00       | 58                     | 32.9        |
| Other Towns     | 109                               | 12.2        | 12                        | 0          | 40                     | 33.1        |
| Rural Areas     | 259                               | 36.1        | 59                        | 8.7        | 152                    | 51.0        |
| <b>Quintile</b> |                                   |             |                           |            |                        |             |
| Poorest         | 124                               | 31.5        | 35                        | 2.9        | 58                     | 62.1        |
| 2               | 120                               | 33.3        | 28                        | 10.7       | 61                     | 47.5        |
| 3               | 110                               | 23.6        | 17                        | 5.9        | 42                     | 40.5        |
| 4               | 100                               | 13.0        | 13                        | 0.0        | 38                     | 36.8        |
| 5               | 72                                | 8.3         | 8                         | 0.0        | 51                     | 25.5        |
| <b>Jamaica</b>  | <b>526</b>                        | <b>23.6</b> | <b>101</b>                | <b>5.0</b> | <b>250</b>             | <b>43.6</b> |

Notes: (i) 'N' means number of eligible households in sample '%' means percentage of eligible household 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-8**  
**SELF-REPORTED REASONS 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=553)             | 44.1                                | 18.9                      | 17.8                  | 8.4                 | 10.8       | 100.0        |
| Other Towns (N=320)     | 50.2                                | 19.8                      | 21.3                  | 5.3                 | 3.4        | 100.0        |
| Rural Areas (N=586)     | 49.1                                | 24.2                      | 16.9                  | 6.7                 | 3.1        | 100.0        |
| <b>Quintile</b>         |                                     |                           |                       |                     |            |              |
| Poorest (N=102)         | 26.5                                | 38.2                      | 23.5                  | 4.0                 | 7.8        | 100.0        |
| 2 (N=165)               | 32.7                                | 30.9                      | 26.7                  | 3.0                 | 6.7        | 100.0        |
| 3 (N=240)               | 41.7                                | 26.7                      | 20.4                  | 6.7                 | 4.5        | 100.0        |
| 4 (N=352)               | 44.6                                | 22.4                      | 21.6                  | 8.0                 | 3.4        | 100.0        |
| 5 (N=600)               | 59.2                                | 12.3                      | 13.8                  | 8.3                 | 6.3        | 100.0        |
| <b>Jamaica (N=1459)</b> | <b>47.3</b>                         | <b>21.1</b>               | <b>18.2</b>           | <b>7.1</b>          | <b>6.3</b> | <b>100.0</b> |

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**

|             | Problem                            |                        |                                 |                                     |               |                |       |       |
|-------------|------------------------------------|------------------------|---------------------------------|-------------------------------------|---------------|----------------|-------|-------|
|             | Lateness/<br>Absence of<br>Officer | Rudeness of<br>Officer | Disorder-<br>liness of<br>crowd | Transpor-<br>tation<br>Difficulties | Long<br>Lines | Not in<br>Mail | Other | Total |
| KMA         | 15.9                               | 53.8                   | 39.1                            |                                     | 40.4          | 0.0            | 0.0   | -     |
| Other Towns | 14.8                               | 46.2                   | 0.0                             |                                     | 0.0           | 42.0           | 25.4  | -     |
| Rural Areas | 69.3                               | 0.0                    | 60.9                            | 100.0                               | 59.6          | 58.0           | 74.6  | -     |
| Total       | 100.0                              | 100.0                  | 100.0                           | 100.0                               | 100.0         | 100.0          | 100.0 | -     |
| Jamaica     | 19.6                               | 6.3                    | 14.3                            | 15.1                                | 15.4          | 14.8           | 14.5  | 100.0 |



# APPENDICES

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# APPENDIX I

## SURVEY DESIGN

1 Since 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, 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 sources. In the Report on SLC 94, however, one more Appendix (Appendix III), which presented a brief report on the results of the two experimental consumption modules canvassed in that round was included. The 1995 Report covers Appendices I and II.

### 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 the third round, emphasis was placed in each round, on obtaining a wide spectrum of data on one particular social sector to provide the basic data used in policy formulation, as shown below.

3 The questionnaire for SLC 95 was divided into the following 13 parts, apart from the Cover:

- Part A: General health of all household members
- Part B: Education of all household members of age three years and older

- Part C: Anthropometric measurements and immunization data for all children 0-59 months old
- Part D: Aged (Persons 60+ years)
- 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 (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 94. In Part A- Health, the seven questions on the annual hospitalisation expenses (questions 21 to 27 in Part A of SLC 94) were omitted in SLC 95. In SLC 95, the focus module on the Aged was given as Part D, replacing the Social Mobility module which was the focus module in SLC 94. The two experimental consumption modules canvassed in SLC 94 were also omitted in SLC 95.

**TABLE AP-II.1**  
**FOCUS IN SLC ROUNDS, 1989 to 1995**

| SLC ROUND | Focus Topics                   | Associated Questionnaires                             |
|-----------|--------------------------------|---|
| SLC 88    | Pilot                          |   |
| SLC 89-1  | Core Modules                   |   |
| SLC 89-2  | Expanded Health                | Public Primary, Secondary & Tertiary Health Services  |
|           | Fertility                      | Private Primary, Secondary & Tertiary Health Services |
|           | Last Pregnancy                 |   |
| SLC 90    | Expanded Educations            | Primary & Secondary School Teachers, Administrators   |
| SLC 91    | Expanded Housing               |   |
| SLC 92    | Expanded Housing               |   |
| SLC 93    | Poverty                        |   |
| SLC 94    | Employment & Time Use          |   |
|           | Social Mobility                |   |
| SLC 94    | Experiment Consumption Modules |   |
| SLC 95    | Persons aged 60 + years        |   |

### II. Pre-Test

5 Since the standard modules in SLC 95 were the same as in SLC 94, except for Part A on Health, the pre-test was confined to testing only the following modules:

- Cover Page;
- Part A-Health;
- Part D-Aged;
- Part I-Food Stamps; and Roster.

6 The pre-test was conducted in one ED each in  
18 supervisor Zones. The supervisor selected one  
Interviewer in his/her Zone for the pre-test; and  
from the EDs entrusted to that interviewer for LFS,  
selected one ED for the pre-test.

7 Since the emphasis in the pre-test was on testing  
the Module on the Aged (i.e. Part D), the pre-test  
was carried out on households having at least one  
household member of age 60 years or over. The su-  
pervisor selected from the households in the cho-  
sen ED in the January 1995 LFS, five distinct  
households having at least one aged person. Only  
in two supervisor zones, it was not found possible  
to find 5 distinct households each; in these two  
EDs, two members of age 60 years were covered  
from one of the households. Distinct households  
were prescribed to have a wider dispersal of the  
pre-test.

8 The training for the pre-test was conducted on  
15th March in Kingston; on 16th March at May Pen  
and on 17th March at Black River, for the relevant  
group of supervisors and interviewers. The field  
work was taken up immediately after the training  
and completed before 23rd March. The debriefing  
session was held for one day on 28th March 1995.

9 86 completed questionnaires were received by  
the 27th March. These were analysed and some  
crucial statements were prepared and used at the  
debriefing session. Since the sample households  
were drawn from the January LFS and as there was  
a geographic distribution of the EDs, the results  
from the pre-test were fairly representative of the  
country.

### III. Sampling design

10 The sampling design adopted in the LFS is as  
follows. In 1993, a Master Sample of 32 dwellings  
was selected from each chosen ED for the quarterly  
LFS, which was arranged in eight panels of four  
sample dwellings each. Each of the eight panels  
was a systematic sample of the Master Sample. In  
each round of the quarterly LFS, four panels are  
canvassed, two continued from the previous quar-  
ter and two of the succeeding panels. This type of  
rotation of panels results in the inclusion of com-  
pletely different dwellings in every alternate quar-  
terly LFS. Thus, the October and April LFS will  
cover different dwellings from the Master sample.  
This scheme of rotation was introduced to reduce  
respondent fatigue.

11 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 and the second  
stage being a selection of dwellings. For the selec-  
tion of the first stage units, that is, the Enumeration  
Districts, all the Enumeration Districts in the coun-

try were grouped into sampling regions (strata) of  
equal size, in terms of dwellings. Two Enumera-  
tion Districts were selected from each sampling re-  
gion with probability proportionate to size (meas-  
ured in terms of dwellings). In each selected ED, a  
list of all dwellings, which formed the frame for se-  
lection of the Master sample of dwellings for LFS,  
was prepared.

12 The sample dwellings for the LFS are revised  
once every 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 updated on the basis of available infor-  
mation on new dwellings. Updated and compre-  
hensive data on dwellings is generally available  
only after the results of a population census and  
therefore, in between the censuses, whatever revi-  
sions are made to the LFS sample are mostly  
through the selection of a new sample of EDs and  
the preparation of updated lists of dwellings in the  
selected EDs.

13 The sample dwellings for the Labour Force Sur-  
veys 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 Surveys on Living Conditions con-  
ducted during 1989 to 1992. In 1993, the sample  
dwellings for the LFS were again revised after re-  
vising the sampling regions based on the dwellings  
data collected in the population census 1991. This  
sample was adopted for the LFS and SLC surveys  
in 1993 onwards.

14 For the revision of the 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 revi-  
sion in 1993, the country was divided into 234 sam-  
pling regions each containing about 2,500 dwell-  
ings. 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 three each and six of  
these panels were covered in each round of LFS,  
with replacement of three panels from round to  
round; while in the revision of 1993, the 32 dwell-  
ings selected from each selected ED were grouped  
into eight panels of four each and four of these pan-  
els were covered in each round of LFS. Thus, the  
LFS surveys conducted during 1989 to 1992 cov-  
ered in each round 7,812 dwellings selected from  
434 EDs which themselves were selected at the  
rate of two 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, which were selected from 234 sampling regions.

#### IV. Panels:

- 15 The eight panels in the Master Sample of 1993 revision were formed in such a manner that each panel was a systematic sub-sample of the Master Sample. The coverage of the panels in each quarterly LFS is given below.
- 16 If the eight panels are labelled as A, B, C, D, E, F, G and H, then the panels covered in each quarterly LFS are -

| Quarter | Panels     |
|---------|------------|
| 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 |

- 17 It will be observed that the panels are 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.

#### V. Implications of samples with different dwellings

- 18 The sample dwellings for the SLC 95 was a subset of the April 1995 Labour Force Survey (LFS). Unlike SLC 94 (a subset of the October 1994 LFS sample) in which the sample dwellings were identical to those in SLC 93 (a subset of the October 1993 LFS sample), the sample dwellings in SLC 95 were all different from those in the two earlier rounds, because of the change in timing of the survey within the year. The change was made so that field work and data processing would not be interrupted by the Christmas/New Year's season.
- 19 Thus, the advantage of identical dwellings in SLC 93 and SLC 94 did not exist between SLC 95 and SLC 94. The estimates derived from SLC 95 in the case of demographic characteristics differed, though marginally, from those of SLC 94; but these differences will not only reflect the natural changes within each household but also changes in the sample households. The differences, however, were not statistically significant (vide Appendix II).

#### VI. SLC Sample

- 20 The sample dwellings for the Survey of Living Conditions (SLC) are being selected as a random sub-set of the sample for the immediately preceding Labour Force Survey (LFS), to facilitate the

linkage of an integrated analysis of the data collected in both surveys. 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.

- 21 In the Labour Force Survey conducted in April 1995, 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 95, conducted in May 1995, 78 sampling regions (selected from the 234 sampling regions using circular systematic sampling with equal probability), along with the two EDs and 32 dwellings from each sampling region covered in the April LFS were included in the SLC sample. Thus, the sample for SLC 95 covered 2,496 dwellings.
- 22 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 95, unlike some of the previous rounds in which 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 have been necessary since SLC 93 to the current SLC 95.

#### VII. Training

- 23 The training for the interviewers and supervisors on the concepts, definitions and procedures was organized at four places as follows:

| Centre      | Dates          |
|-------------|----------------|
| Kingston    | May 3-4, 1995  |
| Highgate    | May 4-5, 1995  |
| May Pen     | May 8-9, 1995  |
| Black River | May 9-10, 1995 |

- 24 At each centre, the first day of training was confined to the new and weak interviewers. The focus was on the general procedures for the preparation and submission of completed questionnaires. On the second day all the interviewers and supervisors were given detailed instructions on the concepts, definition and procedures in completing the different modules. Each trainee was supplied with a detailed interviewer's instruction manual.

#### VIII. Investigations

- 25 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 investigation. There are several advantages to 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.

- 26 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, or to follow adequately the concepts, definitions and instructions.

#### IX. Incentive Scheme

- 27 There was a delay of about 2 1/2 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. 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 (same as in SLC 94):

##### Completed Questionnaire

|                   | Jam \$ |
|-------------------|--------|
| Senior Supervisor | 10     |
| Supervisor        | 25     |
| Interviewer       | 75     |

#### Anthropometric Measurements

|                            |    |
|----------------------------|----|
| Supervisor                 | 75 |
| Interviewer (who assisted) | 25 |
| Child (payment in kind)    | 25 |

- 28 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 almost all the completed questionnaires and anthropometric data were received by the cut off date.

#### X. Supervision

- 29 Apart from the intensive training for two days 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.

#### XI. Non-response

- 30 In SLC 95, it was observed that the non-completion of questionnaires was about 20.6 per cent compared with 22.0 per cent in SLC 94, 20.5 per cent in SLC 93, 28.1 per cent in SLC 92 and 29.8 per cent in SLC 91. Another 0.2 per cent of the questionnaires were rejected for analysis at the time of data cleaning, because of inconsistent data, compared with 0.3 per cent in SLC 94, 1.1 per cent in SLC 93, 1.6 per cent in SLC 92 and 1.3 per cent in SLC 91. The following table shows the non-interview rates in SLC 90 to SLC 95.

TABLE AP-I.2  
PLANNED AND FINAL SAMPLE SIZES, SLC 90 to SLC 95

| Year | Sample Sized |          | Non-Interview Dwelling vacant/closed* | Refusals | Non-Responsive Rates (%)  |  | Total |
|------|--------------|----------|---------------------------------------|----------|---------------------------|--|-------|
|      | Planned      | Analysed |                                       |          | Rejected in data cleaning |  |       |
| 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  |

31 The total number of questionnaires accepted for analysis in SLC 95 was 1,976 against 1,940 in SLC 94 and 1963 in SLC 93. The non-completion of questionnaires due to the households' refusal to furnish information was 5.7 per cent in SLC 95 compared with 6.9 per cent in SLC 94, 8.4 per cent in SLC 93, 8.8 per cent in SLC 92 and 10.4 per cent in SLC 91. Thus, there was a decrease in refusals in SLC 95.

32 In one ED (W 58/59) in the parish of Kingston however, none of the 16 dwellings could be contacted by the interviewer because of violent activities in that area during the period of investigations.

## **XII. Adjustment for non-response**

33 The sample assigned to the LFS (also SLC) is designed in such a manner that it is self-weighting and 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) have been applied at the Enumeration District level since SLC 90 to correct for non-response at that level. The raising factor for an ED is the total number of dwellings assigned under the self-weighting design divided by the number of dwellings for which data are finally accepted for analysis. The 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.

34 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.

35 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.

## **XIII. Data entry/cleaning**

36 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 the question-

naires were screened by the assistants, they were once more scrutinised by the SLC statisticians.

37 The data entry was done on personal computers and adequate computer checks for ensuring consistency in such areas as totals and codes, which are feasible at this stage, were introduced in the programme. The computer print-outs 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.

38 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.

39 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. 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.

40 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. Out of 1,982 household questionnaires included in the data set, 140 questionnaires were thus taken for detailed examination. Out of these, 6 questionnaires with abnormal or inconsistent data which could not be removed at the editing stage were rejected; 22 questionnaires with clerical errors were corrected; and the remaining 112 questionnaires were accepted.

41 Thus, against 1,982 questionnaires included in the data set, 1,976 household questionnaires were considered in the final processing- 629 from the Kingston Metropolitan Area (KMA); 399 from the Other Towns; and 948 from the Rural Areas.

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

42 Two tables (Table A-9 and Table A-10) present the distribution of households with females as head according to the categories of "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 also was used in SLC 92 to SLC 94.

## **XV. Measurement of Malnutrition**

43 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.

44 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.

45 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 II

## SOME TECHNICAL ASPECTS

### I. Construction of an annualised consumption data set.

1 The household expenditures were collected in Parts E to H and J, of which Part H relates to specified non-consumption expenditures and Part J 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, or an average of the two, must be selected.

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 =  $[0.5 * s_t + 0.5 * (l_t - s_t) / (l_p - s_p) / s_p] * 365 / s_p$ .

### 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 skipped 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. Such cases where the respondent was unable to provide amount for some items were found to be rare. STATIN does not, therefore, impute values in such cases.

### Monetary values

8 Unlike 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.

### Deflators

9 The expenditure aggregates compiled from the survey were at current prices; hence, quite often the estimates had to be deflated to the price levels in one of the previous years, to make valid com-

**Table AP II.1**  
**NATIONAL AND REGIONAL MONTHLY PRICE INDICES**  
**JANUARY TO SEPTEMBER 1995**  
**(BASE: JANUARY 1988 = 100)**

| Year/Month                          | Jamaica | KMA   | Other Towns | Rural Areas |
|-------------------------------------|---------|-------|-------------|-------------|
| <b>(All Commodity index)</b>        |         |       |             |             |
| 1995                                |         |       |             |             |
| January                             | 701.1   | 690.8 | 695.8       | 717.9       |
| February                            | 709.2   | 696.6 | 703.2       | 729.4       |
| March                               | 715.8   | 701.8 | 709.6       | 737.8       |
| April                               | 723.5   | 710.9 | 717.1       | 743.9       |
| May                                 | 733.7   | 722.1 | 725.7       | 753.7       |
| June                                | 740.9   | 729.6 | 733.7       | 760.0       |
| July                                | 753.5   | 741.9 | 748.8       | 771.6       |
| August                              | 766.4   | 753.2 | 760.8       | 787.0       |
| September                           | 789.2   | 775.5 | 786.2       | 808.8       |
| <b>(Food and Drink Group Index)</b> |         |       |             |             |
| 1995                                |         |       |             |             |
| January                             | 767.9   | 765.6 | 758         | 775.6       |
| February                            | 777.9   | 773.9 | 765.0       | 789.4       |
| March                               | 786.2   | 782.2 | 771.9       | 798.5       |
| April                               | 794.8   | 794.1 | 779.8       | 803.9       |
| May                                 | 807.5   | 809.8 | 791.1       | 813.9       |
| June                                | 816.1   | 818.5 | 800.8       | 821.8       |
| July                                | 831.1   | 833.5 | 818.2       | 835.6       |
| August                              | 848.9   | 849.6 | 834.9       | 855.8       |
| September                           | 878.3   | 881.3 | 866.2       | 881.7       |

parisons on the basis of constant price series. In the reports on SLC, STATIN/PIOJ also present the consumption aggregates at constant prices for the regional and Jamaica estimates of mean per capita consumption and for the mean per capita consump-

**TABLE AP II.2**  
**ITEMS INCLUDED IN COMMODITY GROUPS AND**  
**SUB-GROUPS, SLC 95**

| Group/SUB-Group                              | Item Codes                                   |
|--|--|
| <b>Commodity groups</b>                      |  |
| 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                         |
| <b>Sub-groups (under food)</b>               |  |
| 1 Meat, Poultry and Fish                     | 201 to 213                                   |
| 2 Dairy Products                             | 214 to 221                                   |
| 3 Oils and Fats                              | 222  |
| 4 Cereals and Cereal Products                | 223 to 225, 27 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  |

tion by commodity groups, 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 to the regions adopted for SLC consumption aggregates. The consumer price indices are also compiled for the commodity groups. Except for Personal Care and Health Care which are grouped together and the Education and Recreation group which is combined with the Miscellaneous group, all the other groups for which estimates are calculated in SLC are identical to those adopted in the compilation of the CPI. These commodity group CPI indices are used for deflating the commodity group estimates of current consumption. For both the Personal Care and Health Care groups, the combined CPI is used as deflator; and in the case of Education, Recreation and Miscellaneous consumption groups, the Miscellaneous group CPI is used. 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 1995 indices for deflation of SLC 95 expenditure aggregates. The indices for the Food and Drink group and the All-Group indices for January to September 1995 are given in the Table AP II.1, for ready reference.

11

**TABLE AP II.3**  
**CONTENTS OF STATIN'S DATA SET**  
**"ANNUAL" SLC 95**  
**(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_Meat   | Annual Purchased Meal Expenditure   |
| 11 TOT_TAX  | Annual Property Tax Payment   |
| 12 TOT-WAT  | Annual Water Bill   |
| 13 ELECTRIC | Annual Telephone Bill   |
| 14 TOT-TELE | Annual Telephone Bill   |
| 15 TOT-MORT | Annual Mortgage Bill  |
| 16 RENT     | Annual Rent Expenditure   |
| 17 TCGIFT   | Annual value of gifts of Food and Non-Food Consump.                                       |
| 18 HOMEGIFT | Annual Value of Home Produced and Gift Food   |
| 19 TOTGIFT  | Annual Value of gifts of Food and Non-food Consump.                                       |
| 20 UTILITY  | Annual Utility bill (TOT_WAT+ELECTRIC+TOT_TEL)  |
| 21 HOUSING  | Annual Housing Expenditure (RENT+TOT_MORT+TOT-TAX+UTILITY+HOUSEHOLD OPERATIONAL EXPENSES) |
| 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   |

Consider the deflation of the current price estimate of mean Food & Drink group consumption in Jamaica in SLC 95.

The average price index of the Food & Drink group for Jamaica in 1995 (April - June) was 806.1 and that for 1990 (Oct.-Dec.) was 168.7. The deflator is, therefore, 4.7783 (i.e. 806.1/168.7). The current price mean consumption of the Food & Drink group in SLC 95 was \$19,439. At constant October - December 1990 prices, this becomes \$4,068 (i.e. 19,439/4.7783) compared with \$4,046 in SLC 90. The difference in constant price estimate of mean Food & Drink consumption in SLC 95, compared with that in SLC 90 is, therefore, 0.5 per cent [i.e. {(4068-4046)/4046}x100].

### Commodity Groups and Sub-Groups

12 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 in-

cluded in each commodity group and sub-group in SLC 95 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 the 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 95 was the same as in 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.

## II. Annualised Expenditure Data Set

13 The annualised expenditure data from SLC 95 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.

## III. Identification Variables

14 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

15 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) in which 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 95 for the standard modules.

## V. Tabulation Programme

16 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, that is, 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 at STATIN; some in PIOJ; and a few at 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 95, as the sample size was relatively small.

## VI. Estimation

18 The estimation of aggregates from SLC 95 is straightforward, as in SLC 94 and SLC 93.

### Deciles/quintiles

18 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

TABLE AP 11.4  
LIST OF DATA SETS IN SLC 95

| RECORD NAME      | DESCRIPTION                                      |
|------------------|--|
| REC01.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 B - Education (Page B1)                     |
| REC006.SSD       | Part B - Education (Page B2)                     |
| REC007.SSD       | Part C - Anthropometric Measurements             |
| REC008.SSD       | Part D - Aged Mental Status (Page D1)            |
| REC009.SSD       | Part D - Aged Employment (Page D2-1)             |
| REC010.SSD       | Part D - Aged Employment (Page D2-2)             |
| REC011.SSD       | Part D - Aged Employment (Page D2-3)             |
| REC012.SSD       | Part D - Financial Support (Page D2-4)           |
| REC013.SSD       | Part D - Financial Support (Page D3-1)           |
| REC014.SSD       | Part D - Financial Support (Page D3-2)           |
| REC015.SSD       | Part D Aged Health Status (Page D4-1)            |
| REC016.SSD       | Part D Aged Health Status (Page D4-2)            |
| REC017.SSD       | Part E - Daily Expenses                          |
| REC018.SSD       | Part F - Respondent                              |
| REC019.SSD       | Part F - Food Expenses - Purchased               |
| REC020.SSD       | Part F - Food Expenses - Home                    |
| Production/Gifts |  |
| REC021.SSD       | Part G Respondent                                |
| REC022.SSD       | Part G - Consumption Expenditure                 |
| REC023.SSD       | Part H - Non-Consumption Expenditure             |
| REC024.SSD       | Part I - Food Stamps                             |
| REC025.SSD       | Part I - Food Stamps - Recipients                |
| REC026.SSD       | Part I - Food Stamps - Applied                   |
| REC027.SSD       | Part J - Housing Expenses                        |
| REC028.SSD       | Part K - Durable Goods-Inventory                 |
| REC029.SSD       | Part K - Durable goods-Acquisition Value         |
| REC030.SSD       | Part L -Miscellaneous Income                     |
| REC031.SSD       | Roster - Principal Earner                        |
| REC032.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             |

with label ANNUAL. Quintile 1 comprises Deciles 1 & 2; quintile 2 comprises Deciles 3 & 4 and so on.

19 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 equal numbers of household members and not of households.

## VII. Sampling Errors

20 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 has simplified the estimation formulae. Only in SLC 92, the sampling fractions being different for four parishes, compared with the other 10 parishes necessitated the introduction of appropriate weights at the parish level. In SLC 93 to SLC 95, the sampling fraction being the same in all parishes, presented no necessity of any weighting except the weights (or raising factors) for non-response.

21 The formulae for estimation of sample mean

Strata (Sampling Regions) from parish "t"  
included in the survey

Sub-Units (dwellings) in Sampling Region M (same for all regions)

Number of first stage units (EDs) 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.

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  $Y_{is}$

and its variance are as follows:

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-

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

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

$$V(Y) = \frac{1}{4L^2} \sum_{n=1}^{L'} (Y_{1n} - Y_{2n})^2$$

Where  $\sum$  stands for summation.

- 22 The simple formulae above 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.
- 23 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

- 24 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 95 and presented below, with comparative figures for SLC 94. In the case of a few sampling regions, one of the two EDs belonged to Other Towns and the other to Rural Areas; in such cases, the sampling region as a whole is treated as belonging to Rural Areas, for purposes of compiling the variance of the sample mean.
- 25 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 as-

sumption that the same deflator could be applied to the household level consumption. In case 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

- 26 When the sample size is small, the standard errors for the detailed breakdowns and the confidence intervals are likely to be relatively large. For instance, the standard errors of the regional estimates of Mean Per Capita consumption given above are large and the standard error of the difference in the estimates between two surveys 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. In some cases, this conclusion itself may be useful. 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

- 27 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 1990 to 1995.

### IX. TESTS OF SIGNIFICANCE

#### Difference in means of two samples

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

#### Hypothesis:

- 29 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 equal, it will be a test of whether these two samples came from the same population.

Table AP II.5-(i)  
NUMBER IN SAMPLE, MEAN AND STANDARD ERROR OF ESTIMATES OF PER CAPITA  
CONSUMPTION, BY REGIONS, SLC 94 AND SLC 95

| Area        | SLC94             |                |                  | SLC 95              |                |                  |
|-------------|-------------------|----------------|------------------|---------------------|----------------|------------------|
|             | Sample households | Mean Conc (\$) | Standard Error % | Sample (households) | Mean Conc (\$) | Standard Error % |
| KMA         | 605               | 46,127         | 4.5              | 629                 | 47,801         | 5.3              |
| Other Towns | 391               | 32,406         | 6.4              | 399                 | 35,632         | 5.3              |
| Rural Areas | 944               | 24,296         | 3.6              | 948                 | 27,216         | 3.4              |
| Jamaica     | 1,940             | 32,712         | 2.8              | 1,976               | 35,522         | 2.9              |

**TABLE AP II.5 (iv)**  
**RESULTS OF TESTS OF SIGNIFICANCE FOR JAMAICA**  
**B. HOUSEHOLD COMPOSITION**

| Year                    | Sample Size<br>(N=) | Mean<br>Number | % (No.)<br>Household Size | S.E.  | Diff in<br>Means | S.E.  | Z-Statistic |
|-------------------------|---------------------|----------------|---------------------------|-------|------------------|-------|-------------|
| 1995                    | 1976                | 3.79           | 1.58                      | 0.060 |                  |       |             |
| 1994                    | 1940                | 3.69           | 1.57                      | 0.058 | -0.10            | 0.083 | -1.20       |
| Number of Adult Males   |                     |                |                           |       |                  |       |             |
| 1995                    | 1976                | 1.18           | 1.78                      | 0.021 |                  |       |             |
| 1994                    | 1940                | 1.16           | 1.81                      | 0.021 | -0.02            | 0.030 | -0.67       |
| Number of Adult Females |                     |                |                           |       |                  |       |             |
| 1995                    | 1976                | 1.28           | 1.80                      | 0.023 |                  |       |             |
| 1994                    | 1940                | 1.26           | 1.75                      | 0.022 | -0.02            | 0.032 | -0.63       |
| Total Adults            |                     |                |                           |       |                  |       |             |
| 1995                    | 1976                | 2.46           | 1.34                      | 0.033 |                  |       |             |
| 1994                    | 1940                | 2.42           | 1.36                      | 0.033 | -0.04            | 0.047 | -0.85       |
| Number of Children      |                     |                |                           |       |                  |       |             |
| 1995                    | 1976                | 1.34           | 2.76                      | 0.037 |                  |       |             |
| 1994                    | 1940                | 1.27           | 2.83                      | 0.036 | -0.07            | 0.052 | -1.35       |

**TABLE II.5 (iv)**  
**RESULTS OF TESTS OF SIGNIFICANCE FOR JAMAICA**  
**B. HOUSEHOLD COMPOSITION**

| Year                    | Sample Size<br>(N=) | Mean<br>(Number) | % (No.)<br>Household Size | S.E.  | Diff in<br>Means | S.E.  | Z-Statistic |
|-------------------------|---------------------|------------------|---------------------------|-------|------------------|-------|-------------|
| 1995                    | 1976                | 3.79             | 1.58                      | 0.060 |                  |       |             |
| 1994                    | 1940                | 3.69             | 1.57                      | 0.058 | -0.10            | 0.083 | -1.20       |
| Number of Adult Males   |                     |                  |                           |       |                  |       |             |
| 1995                    | 1976                | 1.18             | 1.78                      | 0.021 |                  |       |             |
| 1994                    | 1940                | 1.16             | 1.81                      | 0.021 | -0.02            | 0.030 | -0.67       |
| Number of Adult Females |                     |                  |                           |       |                  |       |             |
| 1995                    | 1976                | 1.28             | 1.80                      | 0.023 |                  |       |             |
| 1994                    | 1940                | 1.26             | 1.75                      | 0.022 | -0.02            | 0.032 | -0.63       |
| Total Adults            |                     |                  |                           |       |                  |       |             |
| 1995                    | 1976                | 2.46             | 1.34                      | 0.033 |                  |       |             |
| 1994                    | 1940                | 2.42             | 1.36                      | 0.033 | -0.04            | 0.047 | -0.85       |
| Number of Children      |                     |                  |                           |       |                  |       |             |
| 1995                    | 1976                | 1.34             | 2.76                      | 0.037 |                  |       |             |
| 1994                    | 1940                | 1.27             | 2.83                      | 0.036 | -0.07            | 0.052 | -1.35       |

- 30 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:**

- 31 The assumptions involved in the test are that -  
 (i) The two samples are independent; and  
 (ii) 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 | $\sqrt{\frac{(S_1)^2}{n_1} + \frac{(S_2)^2}{n_2}}$      |                              |
| Z- Statistics                | $Z = \frac{\bar{x}_1 - \bar{x}_2}{\text{(s. e. diff)}}$ |                              |

- 32 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.

- 33 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 with 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.

- 34 The following tables present some of the test results for Jamaica for some variables.

**Linking with LFS**

- 35 As mentioned earlier, the selection of SLC sample dwellings as a sub-set 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.

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

- 37 Secondly, the roster of household members in the SLC is filled with the data on household members collected in the identification section of LFS. These are: the 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 so that 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.

**XI. Parish/Area codes**

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

## XII. Industrial/Occupational Classifications

39 The detailed industrial and occupational classifications, which may be required in the analysis of

| 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       | 07   |             |      |
| Westmoreland  | 09   |             |      |
| St. Elizabeth | 11   |             |      |
| Manchester    | 12   |             |      |
| Clarendon     | 13   |             |      |
| St. Catherine | 14   |             |      |

some of the variables, are available in a printed form (for sale) from STATIN. The one digit level classifications are given in Table AP II.6, for ready reference.

**TABLE AP 11.6**  
**INDUSTRIAL AND OCCUPATIONAL CLASSIFICATIONS AT ONE DIGIT LEVEL**  
**(ADOPTED FOR LABOUR FORCE SURVEYS 88 TO 95)**

### Industrial Classification

| One digit code | Description   |
|----------------|---|
| 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):

| 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                |

### 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

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

Notes 

Notes 

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