





## **ACKNOWLEDGEMENTS**

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The main poverty estimates and characteristics of the poor are presented in Chapter Two. Particular focus is placed on children, youth and the elderly in poverty, and the working poor. Chapter Three addresses the financial difficulties that households faced and their coping strategies. Elizabeth Talbert of the CSO wrote these two chapters. She also prepared the Differences in Methodology, and the Survey Design.

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Chapter Seven presents an institutional assessment of various government ministries/ departments and other organizations that provide social safety nets for the poor. Prof. Elsie LeFranc prepared this chapter. Chapter Eight highlights the major policy issues emanating from the main findings and presents policy recommendations to address these issues. Carlos Pol of the Ministry of Economic Development wrote this chapter.

# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS .....</b>	<b>i</b>
<b>LIST OF TABLES .....</b>	<b>v</b>
<b>LIST OF FIGURES .....</b>	<b>viii</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>x</b>
<b>INTRODUCTION .....</b>	<b>1</b>
Background .....	1
Methodology .....	2
<b>CHAPTER 1 – DEMOGRAPHIC CHARACTERISTICS .....</b>	<b>15</b>
1.1. Introduction.....	15
1.2. Changes in the Population Structure, 1980 to 2002 .....	15
1.3. Ethnicity.....	15
1.4. Age and Sex Structure .....	16
1.4.1. National Level .....	16
1.4.2. Regional Level.....	17
1.5. Household Size and Composition.....	19
1.5.1. Household Size .....	19
1.5.2. Household Composition .....	20
1.5.3. Household Headship .....	20
1.6. Conclusion.....	20
<b>CHAPTER 2 - POVERTY ESTIMATES AND CHARACTERISTICS OF THE POOR ...</b>	<b>21</b>
2.1. Introduction.....	21
2.2. Poverty Estimates .....	21
2.3. Distribution of the Poor and Indigent Population.....	22
2.4. Distribution of the Poor and Indigent Households .....	24
2.5. Persistence of Poverty.....	25
2.6. Perception of Poverty .....	26
2.7. Household Consumption .....	29
2.9. Youth in Poverty.....	31
2.10. The Elderly in Poverty.....	33
2.11. The Working Poor .....	34
2.12. Conclusion.....	35
<b>CHAPTER 3 - COPING STRATEGIES AND SOCIAL ASSISTANCE PROGRAMMES</b>	
<b>IN BELIZE .....</b>	<b>36</b>
3.1. Introduction.....	36
3.2. Level of Economic Vulnerability .....	36
3.3. The Economic vulnerability of the non-poor households.....	38
3.4. Types of Financial Difficulties .....	38
3.5. Rural Poverty and food insecurity.....	39
3.6. Poverty and human capital investment .....	40

3.7. Gender and Economic Vulnerability .....	41
3.8. Duration of Financial Difficulties.....	42
3.9. Main Coping Strategies .....	42
3.10. Ethnicity and coping strategies .....	44
3.12. Rural/Urban Differences.....	45
3.13. Gender and Coping Strategies .....	46
3.14. Coping by reducing access to basic social services .....	46
3.15. The value of education.....	47
3.16. Social Assistance Programmes .....	49
3.17. Poverty and Access .....	50
3.18. Social Investment Fund (SIF) .....	52
3.19. Summary.....	53
<b>CHAPTER 4 - HOUSING.....</b>	<b>55</b>
4.1. Introduction.....	55
4.2. Dwelling Type .....	55
4.3. Tenure of Dwelling and Land .....	56
4.4. Construction Material of Outer Walls and Roofing .....	60
4.5. Household Density.....	63
4.6. Amenities .....	64
4.6.1. Toilet Facilities .....	64
4.6.2. Kitchen Facilities .....	65
4.6.3. Cooking Fuel .....	65
4.6.4. Source of Drinking-Water .....	66
4.6.5. Lighting.....	67
4.7. Public Health Risks: waste disposal, problems with rats/roaches/bats.....	68
4.8. Housing Quality Index (HQI).....	69
4.9. Ownership of Durable Goods .....	72
4.10. Conclusion.....	72
<b>CHAPTER 5- EDUCATION .....</b>	<b>74</b>
5.1. Introduction.....	74
5.2. Enrolment .....	74
5.3. Attendance .....	76
5.4. Transportation.....	77
5.5. Source of Meals .....	79
5.6. Cost of Schooling .....	80
5.7. Financial Assistance .....	82
5.8. Level of Schooling and Attainment .....	82
5.9. Conclusion.....	83
<b>CHAPTER 6 -HEALTH .....</b>	<b>85</b>
6.1. Introduction.....	85
6.2. Health Status .....	85
6.2.1. Self-Reported Illness/injury.....	85
6.2.2. Duration and severity of illness. ....	86
6.3. Use of Health Care Facilities .....	86
6.3.1. Use of Health Care Facilities in previous 30 days .....	86

6.3.2. Perception of Quality of Health Service .....	89
6.4. Purchase of medication.....	89
6.5. Health Care Expenditure.....	89
6.6. Child Health.....	90
6.6.1. Immunization Coverage .....	90
6.6.2. Nutritional Status. ....	91
6.7. Conclusion.....	92
<b>CHAPTER 7 -INSTITUTIONAL ASSESSEMENT .....</b>	<b>94</b>
7.1. The Poverty Alleviation Programme – 1998-2003.....	94
7.2. Current Poverty Situation and Issues.....	95
7.3. The Implementation Process: Establishing Linkages .....	100
7.4. Structure and Organisation .....	105
7.5. Resources .....	107
<b>CHAPTER 8 - POLICY IMPLICATIONS.....</b>	<b>110</b>
8.1. Introduction.....	110
8.2. Population Trends .....	112
8.3. Poverty.....	113
8.4. Coping Strategy .....	114
8.5. Housing.....	115
8.6. Education.....	116
8.7. Health.....	117

## **APPENDICES**

### **APPENDIX A - TABLES**

### **APPENDIX B – DIFFERENCES IN METHODOLOGY**

### **APPENDIX C – SURVEY DESIGN**

### **APPENDIX D – 2002 LSMS QUESTIONNAIRE**

### **APPENDIX E - RESPONSE RATES AND WEIGHTING FACTORS**

## LIST OF TABLES

### CHAPTER 1

Table 1-1	Profile of Population
Table 1-2	Percentage Distribution of Population by Sex and Selected Characteristics
Table 1-3	Aged-Child Ratio and Age Dependency Ratio of the Population,
Table 1-4	Aged-Child Ratio and Age Dependency Ratio of the Population by Region
Table 1-5	Mean Household Size
Table 1-6	Distribution of Households by Size,
Table 1-7	Distribution of Households by Size and Region

### CHAPTER 2

Table 2-1	Poor and Indigent Population by Selected Characteristics
Table 2-2	Poverty Gap and Severity by District
Table 2-3	Poor and Indigent Households by Selected Characteristics
Table 2-3a	Female-headed Households by Poverty Status
Table 2-4	Poverty Rates for Children 0-17 Years by Selected Characteristics
Table 2-5	Children 0 - 13 Years by Family Structure
Table 2-6	Children 5-17 Attending School by Economic Status
Table 2-7	Poverty Rates for Youth 14 - 24 Years by Selected Characteristics
Table 2-8	Youth 14 - 24 Years by Economic and Poverty Status
Table 2-9	Poverty Rates for the Elderly, 65+ Years by Selected Characteristics
Table 2-10	Elderly 65+ Years by Economic and Poverty Status
Table 2-11	Working Poor by Selected Characteristics
Table 2-12	Occupation and Industry by Poverty Status

### CHAPTER 3

Table 3-1	Households Experiencing Financial Difficulties by Poverty Status and Selected Characteristics
Table 3-2a	Households Experiencing Financial Difficulties by Type of Difficulties and Selected Characteristics
Table 3-2b	Households Experiencing Financial Difficulties Type of Difficulties and Poverty Status of Household
Table 3-2c	Households Experiencing Financial Difficulties by Type of Difficulties and Quintile
Table 3-2d	Households Experiencing Financial Difficulties by Type of Difficulties and Sex of Head of Household
Table 3-3a	Households Experiencing Financial Difficulties by Type and Length of Time of Difficulties
Table 3-3b	Poor Households Experiencing Financial Difficulties by Type and Length of Time of Difficulties
Table 3-3c	Non- Poor Households Experiencing Financial Difficulties by Type and Length of Time of Difficulties
Table 3-3d	Male-Headed Households Experiencing Financial Difficulties by Type and Length of Time of Difficulties
Table 3-3e	Female-Headed Households Experiencing Financial Difficulties by Type and Length of Time of Difficulties

Table 3-4a	Households Experiencing Financial Difficulties by Type of Coping Strategies Implemented and Poverty Status
Table 3-4b	Households Experiencing Financial Difficulties by Type of Coping Strategies Implemented and Quintile
Table 3-4c	Male-Headed Households Experiencing Financial Difficulties by Type of Coping Strategies Implemented and Poverty Status of Households
Table 3-4d	Female-Headed Households Experiencing Financial Difficulties by Type of Coping Strategies Implemented and Poverty Status of Households
Table 3-5	Households with at Least One Project Implemented by Poverty Status of Household and Selected Characteristics
Table 3-6	Households with at Least One Project Implemented by Type of Projects and Poverty Status of Households
Table 3-7	Households That Benefited From At Least One Project by Type of Projects and Poverty Status of Households
Table 3-8	Households That Benefited From At Least One Project by Type of Benefits and Poverty Status of Household
Table 3-9	Households' Knowledge of Source of Funding for Projects Implemented

#### **CHAPTER 4**

Table 4-1	Percentage Distribution of Selected Housing Characteristics, 1991 - 2002
Table 4-2	Selected Housing Characteristics by Region
Table 4-3	Persons per bedroom by quintile and region
Table 4-4	Ownership of Dwelling Unit by quintile and region
Table 4-5	Material of Outer Walls by quintile and region
Table 4-6	Material Used for Roofing by quintile and region
Table 4-7	Toilet Facility by quintile and region
Table 4-8	Exclusive Use of Water Closet (W.C.) by quintile and region
Table 4-9	Access to drinking water by quintile and region
Table 4-10	Access to Electricity by quintile and region
Table 4-11	Garbage Disposal by quintile and region
Table 4-12	Housing Quality Index (HQI), 1991-2002 Indicator of Housing Quality
Table 4-13	Housing Quality Index (HQI) by Region, Census 2000 and LSMS 2002
Table 4-14	Percentage of Households Owning Selected Durable Goods
Table 4-15	Percentage of Households Owning Selected Durable Goods by Region
Table 4-16	Percentage of Households Owning Selected Durable Goods by Quintile

#### **CHAPTER 5**

Table 5-1	Enrolment by Selected Characteristics, 1995 and 2002
Table 5-2	Enrolment Rates by Selected Characteristics, 1995 and 2002
Table 5-3	Days Absent by Selected Characteristics
Table 5-4	Days Absent by Selected Characteristics
Table 5-5	Days Absent by Reason
Table 5-6	Mean Distance from School and Mode of Transportation by Selected Characteristics
Table 5-7	Source of Meals other than School Feeding Programmes, by Selected Characteristics
Table 5-8	Mean cost of schooling by Selected Characteristics, 2002
Table 5-9	Source of Financial Assistance by Selected Characteristics



- Table 5-10 Level of Schooling Last Attended for Those Not Attending School by Selected Characteristics
- Table 5-11 Qualification Attained for Those Not Attending School, by Selected Characteristics

## **CHAPTER 6**

- Table 6-1 Percentage Reported Illness/Injury in 30 - Day Reference Period by Selected Characteristics
- Table 6-2** Self-Reported Illness/Injury by Occurrence of Illness, Mean Days of Impairment and Selected Characteristics
- Table 6-3 Self-Reported Illness/Injury by Care Seeking Behaviour and Selected Characteristics
- Table 6-4 Care Seeking Behaviour by Type of Health Care facilities used and Selected Characteristics
- Table 6-5 Source of Health Care in the Past Thirty Days and Twelve Months by Selected Characteristics
- Table 6-6 Reasons for Visiting the Private and Local Health Facilities by Selected Characteristics
- Table 6-7 Reasons for No Visits to Health Facilities during the Past Twelve Months by Selected Characteristics
- Table 6-8 Level of Satisfaction with Health Care Services by Selected Characteristics
- Table 6-9 The Ill/injured Expenditure on Medical Care in Public and Private Facilities by Selected Characteristics
- Table 6-10 Immunisation Coverage of Children by Selected Characteristics
- Table 6-11 Immunisation Coverage of Children for 1995 and 2002 LSMS
- Table 6-12 Nutritional Status of Children less than 5 years by Selected Characteristics

## LIST OF FIGURES

### CHAPTER 1

- Figure 1-1 Median Age by Ethnicity
- Figure 1-2 Median Age by Region
- Figure 1-3 Mean Household Size by Region

### CHAPTER 2

- Figure 2-1 Poverty Estimates
- Figure 2-2 Poor Population by District
- Figure 2-3 Poverty Gap by District
- Figure 2-4 Distribution of Total Population and Poor Persons by District
- Figure 2-5 Poor Children 0 to 13 years by Family Status
- Figure 2-6 Youth Labour Force Participation and Unemployment Rates by Poverty Status
- Figure 2-7 Poverty Rates by Age Group
- Figure 2-8 Working Poor by Selected Industries

### CHAPTER 3

- Figure 3-1 Households With Financial Difficulties by Poverty Status and District
- Figure 3-2 Households With Financial Difficulties Related to Food Expense by District
- Figure 3-3 Types of Financial Difficulties by Location of Households
- Figure 3-4 Households With Financial Difficulties Related to Education and Health by Quintile
- Figure 3-5 Coping Strategies by Poverty Status of households
- Figure 3-6** Households that Benefited from Community Projects by Type of Projects and Poverty Status of Households
- Figure 3-7 Distribution of SIF Funds 1996 to 2002 by District

### CHAPTER 4

- Figure 4-1 Percentage of Undivided Private Dwellings by Region
- Figure 4-2 Ownership of Dwelling
- Figure 4-3 Percentage of Households who Own/Hire Purchase Dwelling by Quintile and Region
- Figure 4-4 Ownership of Land
- Figure 4-5 DFC Home Owners by Income and Type of House
- Figure 4-6 Material used for Outer Wall
- Figure 4-7** Percentage of Households with Less than Four Persons per Bedroom by Quintile and Region
- Figure 4-8 Access to water Closet by Quintile and Region
- Figure 4-9 Access to Drinking Water Piped into Dwelling or Purified Water by Quintile and Region
- Figure 4-10 Access to Electricity by Quintile and Region
- Figure 4-11 Percentage of Households who Prepare Garbage for Municipal Collection or take it to Public Dump by Quintile and Region
- Figure 4-12 Main Indicators of Housing Quality
- Figure 4-13 Housing Quality Index

## **CHAPTER 5**

- Figure 5-1 Primary and Secondary Net Enrolment Rates by Quintile
- Figure 5-2 Distribution of Students Absent by Number of Days Absent and Quintile
- Figure 5-3 Type of Transportation by Quintile
- Figure 5-4 Source of meals by Quintile
- Figure 5-5 Transportation and lunch & Snacks as a Percentage of Total Cost of Schooling by Quintile
- Figure 5-6 Qualifications Attained for Persons Not Attending School by Quintile

## **CHAPTER 6**

- Figure 6-1 Percentage of Those who Reported Illness and Sought Health Care by District
- Figure 6-2 Percentage Utilizing Public and Private Health Facilities
- Figure 6-3 Percentage Utilizing Public and Private Health Facilities by Quintile

## **CHAPTER 7**

- Figure 7-1** Social sector expenditure expressed as a percentage of total government expenditure. 1992-2002
- Figure 7-2** Real GDP growth rates and total social expenditure expressed as a percentage of GDP, 1986 - 1997

## **EXECUTIVE SUMMARY**

### **Background**

The Government of Belize (GOB) received funding from the United Kingdom Government through its Department for International Development (DFID) to update the 1995 Poverty Assessment. A team of consultants from the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) of the University of the West Indies was contracted to do the study and assist GOB in developing the capacity to conduct future poverty research on its own. The Central Statistical Office was sub-contracted to collect the data.

### **Methodology**

The 2002 poverty assessment had three components, a Living Standards Measurement Survey (LSMS), pre and post-survey focus group discussions, and institutional assessment of relevant government ministries/departments and non-government organizations. The LSMS was conducted over a four-week period in February/March 2002, and covered about 1700 households. The questionnaire comprised sections on household expenditure on food and non-food items, housing characteristics, households' knowledge of and participation in community projects and, households experiencing financial difficulties and their coping strategies. Basic demographic, health and education information were asked of individuals five years or older, while those 14 years or older also provided information on their economic activities. Only the demographic and health information (including anthropometrics) were asked of children under five

The pre-survey focus group discussions were conducted in 10 communities in Orange Walk, Belize, and Cayo and Toledo districts. The information collected was used to inform the development of the LSMS questionnaire. There were also 10 post-survey focus group discussions, which were conducted in the same districts. The post-survey groups consisted of poor and non-poor individuals from urban and rural areas and of the four major ethnic groups. The discussions were based on the main findings of the LSMS.

Although the expenditure approach to assessing poverty was used for the 1995 and 2002 LSMS there were differences in the use of adult equivalent in estimating the minimum food requirements. In 2002, adult equivalent was established for 9 different age groups based on the sex of each group. However, in 1995 adult equivalent was established for only 3 age groups and there was no consideration for sex. Furthermore, a mean adult equivalent based on a family of five was used to estimate the indigent line in 1995, while in 2002 the actual cost of the food basket was used as the indigent line. These differences did not allow for direct comparison of the 1995 and 2002 poverty estimates.

### **Demographic Characteristics**

The population of Belize remains young. In 2002, children under 18 years accounted for almost one half of the population. There were 82 dependent persons (children zero to 14 years and elderly persons 65 years or older) for every 100 persons in the working age population (15 to 64 years). This dependency ratio is a decrease compared to 1991 (93 to 100). The population distribution by sex shows similar proportions of males and females for the country. However, further analysis at the geographic level indicates that in Orange Walk and Cayo districts and in

urban areas, males accounted for more than one half of the population. This was also true among the Mestizo population, which remains the dominant ethnic group in the Belize. One half of the country's population are Mestizos and one quarter are Creoles.

The average household size in 2002 was 4.6 persons with rural households being slightly larger than urban households. At the district level, average household size varied between 6 (Toledo) and 4 (Belize). Females were the heads of 26.8% of the households. Belize City alone accounted for two of every five female-headed households.

### Poverty Estimates and Characteristics of the Poor

The 2002 poverty estimates indicate that 10.8% of the population were very poor or indigent, and 33.5% were poor. The poverty rates varied by district and were highest for Toledo, where 79% of the population were poor, and lowest in Belize District (24.8%). These two districts also had the highest and lowest percentage of the indigent population, respectively. The rate of poverty in Orange Walk and Stann Creek were very similar and only slightly above the national rate. Cayo and Corozal districts joined Belize as the districts with the lowest levels of poverty.

**Belize: 2002 Poverty Estimates**  
**2002 LSMS**

	Corozal	Orange Walk	Belize	Cayo	Stann Creek	Toledo	Urban	Rural	Total
Indigent Population	6.2	7.1	4.9	4.8	5.6	56.1	4.8	17.4	<b>10.8</b>
Poor Population	26.1	34.9	24.8	27.4	34.8	79.0	23.7	44.2	<b>33.5</b>
Poor Males									<b>33.9</b>
Poor Females									<b>33.2</b>
Poor Children	29.9	40.7	28.0	32.0	38.4	84.5	26.6	51.0	<b>39.0</b>
Poor Youth	25.7	38.2	23.4	29.1	36.3	79.3	25.5	44.2	<b>33.9</b>
Poor Elderly	23.4	23.1	19.8	24.6	40.1	64.8	19.9	33.5	<b>26.5</b>
Working Poor									<b>29.8</b>
Indigent Households	5.0	4.3	3.7	3.1	4.9	45.0	3.3	12.7	<b>7.5</b>
Poor Households	19.9	23.2	18.4	20.5	25.9	67.3	17.2	33.7	<b>24.5</b>
Female-heads									<b>21.8</b>
Male-heads									<b>25.5</b>

The Poverty gap was 11.1% at the country level. However, the gap in Toledo District was far higher, 44.4%. In all the other districts, poverty gap was lower than the national rate and ranged from 6.2 in Belize District to 9.3 in Orange Walk. The severity of poverty measure indicates that poverty was most severe in Toledo District (31.5%). In the other districts, the severity rates ranged from 2.8 in Belize and Cayo districts to 3.8 in Orange Walk. The Gini index, which measures the level of inequality, indicates that Belize District had the highest level of inequality and Toledo District the lowest level.

The level of poverty among children (0 to 17 years) was 39%, while the corresponding rates among the youth (14 to 24 years) and elderly (65 years or older) were 33.9% and 26.5%, respectively. The working poor accounted for 29.8% of the labour force. At the household level, 7.5% were very poor and 24.5% were poor. The level of poverty among female-headed households (21.8%) was lower compared to male-headed households (25.5%).

### **Coping Strategies and Social Assistance Programmes**

More than one third of the households reported experiencing financial difficulties. The main types of financial difficulties that households experienced were those relating to utility, education and health, and food expenses. Regardless of the type of financial difficulties, they tend to last for more than one year. People turned to prayers as their main means of coping with their financial difficulties. The poor were more likely to hustle and less likely to borrow or pawn, compared to the non-poor.

The qualitative data from the focus group discussions provided more in-depth information on the coping strategies of the poor. The data revealed that the poor who are ‘managing’ tend to borrow less, save more and recycle compared to the ‘hopeless poor.’”

The Social Investment Fund has provided \$23 million since 1996 for various community projects. Toledo and Belize districts have received equal shares amounting to one half of the total funds. Most of the projects were for education and water and sanitation.

### **Housing**

There has been a decreasing trend in the ownership of dwellings, although the housing stock has increased. A closer look at the housing projects funded by the Development Finance Corporation indicates that a high proportion of the houses built between 1996 and 2002 are vacant. The majority of owners earn more than \$20,000 per year.

The use of concrete for outer walls and sheet metal for roofing has increased. However, thatch and asbestos roofing were still used widely in rural areas. The use of these inadequate roofing materials was even higher among the poor compared to the non-poor. Water closet was the commonest means of toilet facility, especially in urban areas and particularly in Belize City, where 93.4% of households used this means to dispose of their sewerage. The rural poor were least likely to have access to water closet. They used mainly pit latrines. Furthermore, rural households tended to share toilet facilities with another household more than those in urban areas.

The single main source of drinking water is private vat/drum/well not piped into dwelling. However, water piped into dwelling and purified water, which are considered the only safe sources of drinking water, were used in one half of households. There was noticeable increase in the use of purified water. In rural areas, a high proportion of households used private vat/drum/well or river/stream/creek/pond, which are considered inadequate source of drinking water. Only 13 of every 100 of the poorest households in rural areas had water piped into their dwelling.

Rural electrification has increased to 65% of households. However, only 35% of the poorest households in the rural areas have access to electricity compare to universal access among the wealthiest in urban areas. Overall, housing conditions have improved, but rural households are at greater risk of having inadequate housing conditions compared to urban households.

## **Education**

Children have universal access to primary education regardless of their poverty status. However, as they matriculate for secondary school, the access to this level of education is influenced by their poverty status. The level of access seemed to increase with improvements in one's poverty status. The poorest had least access to secondary school. Their net secondary school enrolment was 34.6% compared to 75.2% for those in the wealthiest quintile.

The mean cost of schooling per year was \$444 for a primary school student, \$1006 for a secondary school student, and \$3444 for a student attending a tertiary level institution. Education fee accounted for 43.4% of the total cost of schooling among the wealthiest, but only 10.6% among the poorest. The poor spent a high proportion of schooling cost on non-educational items such as transportation and meals, which indicates the need for assistance in defraying these costs. Only a small proportion of students received financial assistance for schooling expenses. Most of the assistance was from family or friends. The poorest students were least likely to receive financial assistance

Two of every three persons that were not enrolled in school had attained primary level education and the remaining one had attained a secondary or tertiary level education. Only 5.6% in the poorest quintile had attained secondary or higher education compared to 39.7% in the wealthiest quintile.

## **Health**

Data on morbidity indicate that persons in the wealthiest quintile were most likely to report an illness and seek care. People were ill for an average of eight days, but were not able to carry out normal duties for an average of four days. Most people sought health care when they were sick. However, the rate is even higher among children and the elderly.

The main source for medical care was the public health facilities, while medication was purchased mainly at private facilities (drugstores). A small proportion sought health care abroad. The average cost per visit was \$8.00 at public and \$67.00 at private facilities. The average cost of medication was also lower at the public compared to private facilities. Generally, most people were satisfied with the quality of service at the health facilities. However, the level of satisfaction was slightly lower for public compared to private facilities and those abroad.

Immunization coverage for children under five years was very high regardless of the poverty status and sex of the child. Corozal and Orange Walk districts had the highest coverage for DPT and OPV.

## **Institutional Assessment**

An analysis of social sector expenditure (Education, Health, Human development and Housing) indicates that its share of the total budget has declined from 36% in 1991/92 to 30% in 2001/2002. Furthermore, almost 80% of the social sector budget goes to recurrent expenditures, mainly salaries and remuneration. Nevertheless, there has been significant rises in capital expenditure in the health, education and housing sectors.

High levels of programme segregation and inadequate targeting of the poor and vulnerable have impeded the effective translation of pro-poor policies into actual practice. The challenge of implementing poverty reducing measures in an integrated framework and carefully targeting the groups and individuals most at risks remains of primary concern.

## **Policy Implications and Recommendations**

Several policy issues and recommendations emanated from the general findings of the 2002 poverty study. These addressed the issues relating to poverty and housing, education and health. The following are some of the major policy issues:

- Re-examination of the programmes set forth in the current Poverty Elimination Strategy and Action Plan.
- Strengthen and diversify certain programmes that have targeted the Toledo district, such TDC, CARD, BNTF and SIF.
- Anti-poverty measures for Orange Walk and Stann Creek districts.
- Creation of more employment opportunities especially for youth.
- Financing for starter houses or for building material
- Measures to increase home ownership among the poor.
- Programmes that offer homes for indigent at near grant terms and for provision of labour concept.
- Improve water quality (potable water) to poorer household.
- More access to secondary and tertiary level training opportunities countrywide in light of the fact that rural areas have the lowest enrolment rate.
- Introduction of more vocational and technical training programmes as a means of improving preparation for the job market.
- Financial assistance to the poor for non-education cost.
- Public awareness programmes on health issues for the elderly and youngest age group.
- Offering generic medication to the public
- Provide more mobile clinics in remote areas.



## INTRODUCTION

### Background

The benchmark results provided by the first Living Standards Measurement Survey (LSMS) in 1995 provided much needed information on the poverty situation in Belize. The results were subsequently used to develop the 1998-2003 National Poverty Elimination Strategy and Action Plan (NPESAP). The Government of Belize (GOB), as well as, non-government organizations (NGOs) and international funding agencies relied on the poverty indicators and the NPESAP when developing or funding poverty reduction programmes.

GOB recognized the need for updated poverty indicators so that its continued efforts in eliminating poverty would be better targeted. In 2000, the government sought and received support from the United Kingdom Government through its Department for International Development (DFID) to update the 1995 poverty report. Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) of the University of the West Indies was later contracted to conduct the assessment.

The 2002 poverty assessment has three components, a quantitative Living Standards Measurement Survey (LSMS), qualitative focus group discussions and institutional assessments of relevant government ministries/department and NGOs that respond to the poverty situation. The National Human Development Advisory Committee (NHDAC)<sup>1</sup> was responsible for overseeing the poverty assessment process, while the Central Statistical Office (CSO) was sub-contracted by SALISES to conduct the fieldwork and data processing of the LSMS.

Preparations were made to conduct the LSMS in 2000. However, there were numerous delays mainly due to hurricanes, so it was not until February 2002 that the LSMS was conducted. One of the main objectives of the 2002 poverty assessment was to assist GOB in developing in-country capacity to conduct future surveys. Therefore, training and skills transfer were major components of the exercise. CSO staff and NHDAC representatives received training in various areas including poverty analysis and report writing. A team of authors from these two organizations was instrumental in the preparation of this report. They received assistance from the SALISES team members who gave guidance during the writing process and reviewed each draft.

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<sup>1</sup> The Ministry of Economic Development chairs the NHDAC. This ministry was also responsible for overseeing the 1995 Poverty Assessment

## **Methodology**

### Definitions and Concepts

#### *Poverty*

There are various definitions of poverty. However, all the definitions have a fundamental notion of a deficiency of resources. Poverty, for the purpose of this study, is defined as, 'the inability to maintain a minimum standard of living' (World Bank, 1990). Poverty may be measured as absolute or relative. The use of a poverty line and comparisons of quintiles are examples of each, respectively. Both are used in this report.

#### *Types of Poverty*

Poverty may be classified into three different types, chronic, structural and transitory. *Chronic poverty* relates to the inability to manage ones own livelihood over a long period. According to the World Bank's definition, the individuals lose the capacity to exercise discretion over their own existence, suffer social exclusion and remain locked in poverty from one generation to another. The indigent or very poor persons are more vulnerable to chronic poverty. Certain sub-groups of the population or those in particular areas of the country that have been marginalized traditionally are also vulnerable to chronic poverty.

*Structural poverty* relates to changes in the structure of the economy or other changes in macro-economic policies. For example, whenever a private company or the public service reduces employment to balance expenditure and revenue, the workers who lose their job could fall into poverty. This happens if they lack the necessary skill to be employed elsewhere, or the capital to start their own business. Even those who find employment could end up as the working poor if the wages or salary they earn are inadequate to meet their basic needs.

*Transitory poverty* results when individuals have a collapse in income and have the capacity to correct their situation in the short or medium term. They depend on their marketable skills, knowledge, access to credit or ownership of productive assets to help them restore themselves to income earning activities or to take advantage of opportunities in the market as they arise. If individuals lack the marketable skills or productive assets they could be exposed to a longer term of poverty, which is no longer transitory and can become chronic.

#### *Expenditure Data*

The 2002 LSMS used expenditure, rather than income data for estimating poverty indicators. One of the main reasons for not using income data is because respondents are reluctant to give such information, and they sometimes under or over-estimate their income. When the Central Statistical Office collects data on income, respondents who refuse to give their exact income are asked to identify their income level from an Income Flash Card, which includes a range of income levels by specific pay periods. However, this approach could also result in exaggerated income and lower response rate compared to other questions on employment.

The LSMS required households to give information on their food and non-food expenditure for the past seven and 30 days. Households also provided their estimated of items that were home produced or received as gifts. This took into consideration households that depended more on

subsistence farming and home produce items for household consumption. This approach also has its limitations, since households were expected to recall information. Furthermore, it is suspected that the household estimated cost of home produced items and gifts were underestimated. Nevertheless, it has proven to give reliable estimates. Since this approach was also used for the 1995 LSMS and in other Caribbean countries, it allows for comparisons and trend analysis.

A variety of food items was included in the list. This took into consideration the cultural food preferences among the various ethnic groups. Even though there are some basic food items that are commonly preferred by all, the diet composition varies from one group to the next and even within groups. There was also a wide range of other non-food items, which also reflected differences at the urban/rural level. Expenditure on certain non-food items that operate with electricity would be negligent in rural areas where there is no access to electricity.

#### *Minimum Cost Food Basket*

The Caribbean Food and Nutrition Institute (CFNI) estimates the minimum food requirement at 2400 calories per adult per day. The CFNI uses a software programme that generates a basket of food items that yields 2400 calories at the cheapest cost. The food items in the basket are selected from a list of basic food items that reflect the cultural dietary differences in Belize. CSO provided the list of food items and their unit cost, which was obtained from the February 2002 round of price collection for the Consumer Price Index. The Minimum Cost Daily Food Basket for each district and the country is presented in Tables A-1 to A-7.

**Table A-1**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Corozal)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WHEAT FLOUR,ALL PURP,ENRH	2.16	61	223.2	0.07
RICE,PARBOILED	2.16	61	227.5	0.09
CRACKERS,SODA	2.16	61	269.2	0.31
BANANA,GREEN (FIG)	5.54	157	90.9	0.10
PLANTAIN,RIPE,RAW	5.54	157	124.6	0.15
DASHEEN,FRESH TUBER,RAW	5.54	157	144.6	0.35
SUGAR,LIGHT BROWN,DEMARRA	2.15	61	240.0	0.07
COCONUT,MEAT,RAW	1.63	46	84.8	0.04
RED PEAS,WH SEEDS,DRY,RAW	1.63	46	155.2	0.07
CARROT,FRESH,RAW	2.52	71	27.3	0.16
ONIONS,BULB,RAW	2.52	71	21.8	0.13
CABBAGE,COMMON,RAW	2.52	71	14.3	0.12
CORN,IMMATURE,RAW,SWEET	2.52	71	32.6	0.31
ORANGE,ALL VARIETIES	1.35	38	13.1	0.01
RAISINS,UNBLEACHED	1.35	38	103.9	0.25
WATERMELON	1.35	38	6.4	0.03
APPLE	1.35	38	20.7	0.08
CHICKEN,DRESS,YOUNG/BRLER	0.67	19	27.8	0.06
MILK,COW,DRY,WHOLE	0.67	19	93.9	0.14
STEW STEAK,LEAN&FAT,RAW	0.67	19	33.8	0.10
HEN EGGS,WH,FRSH,FRZN,RAW	0.67	19	26.3	0.06
PORK FEET,TROTTERS,MEDFAT	0.67	19	29.7	0.08
CHEESE,HARD,CHEDDAR	0.67	19	76.3	0.21
HAM,BONELESS	0.67	19	30.7	0.16
PORK.RETAIL,SHOULDER,RAW	0.67	19	41.6	0.17
SHORTENING,VEGETABLE	0.32	9	79.6	0.02
OIL,PURE,ALL KNDS,BLND,AV	0.32	9	79.6	0.03
OIL,COCONUT	0.32	9	80.9	0.05

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	596.90	POTASSIUM(MG)=	4173.70
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	1247.90
PROTEIN(G)=	62.60	ZINC(MG)=	6.90
FAT(G)=	71.20	VITAMIN A(R.E.)=	2142.90
SATURATED FAT(G)=	29.40	THIAMIN(MG)=	2.20
CHOLESTEROL(MG)=	173.60	RIBOFLAVIN(MG)=	1.23
CARBOHYDRATE(G)=	387.70	NIACIN(MG)=	15.90
FIBRE(G)=	17.40	FOLACIN(UG)=	360.70
CALCIUM(MG)=	619.80	CYANO COBALAMIN(UG)=	1.80
IRON(MG)=	16.30	VITAMIN C(MG)=	109.70

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.14  
TOTAL AMOUNT(KG)= 1.43  
TOTAL COST(\$)= 3.41

**Table A-2**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Orange Walk)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WHEAT FLOUR,ALL PURP,ENRH	2.16	61	223.2	0.07
RICE,PARBOILED	2.16	61	227.5	0.08
CRACKERS,SODA	2.16	61	269.2	0.27
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.15
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.34
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.26
SUGAR,LIGHT BROWN,DEMARRA	2.15	61	240.0	0.06
RED PEAS,WH SEEDS,DRY,RAW	1.63	46	155.2	0.08
COCONUT,MEAT,RAW	1.63	46	84.8	0.06
ONIONS,BULB,RAW	3.14	89	27.3	0.15
CABBAGE,COMMON,RAW	3.14	89	17.8	0.10
CARROT,FRESH,RAW	3.14	89	34.1	0.20
TOMATO,RIPE,RAW	3.14	89	16.9	0.20
ORANGE,ALL VARIETIES	1.30	37	12.6	0.01
BANANA	1.30	37	22.0	0.02
RAISINS,UNBLEACHED	1.30	37	100.1	0.24
LIME	1.30	37	9.3	0.03
CHICKEN,THIGH,RAW	0.61	17	29.0	0.03
BEEF,CANNED,MEDIUM FAT	0.61	17	38.0	0.12
PORK FEET,TROTTERS,MEDFAT	0.61	17	27.3	0.06
HEN EGGS,WH,FRSH,FRZN,RAW	0.61	17	24.2	0.06
MILK,COW,DRY,WHOLE	0.61	17	86.4	0.18
CHEESE,HARD,CHEDDAR	0.61	17	70.2	0.18
HAM,BONELESS	0.61	17	28.2	0.15
PORK SAUSAGE,RAW	0.61	17	56.8	0.14
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.6	0.03
SHORTENING,VEGETABLE	0.34	10	84.6	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.7	0.03

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	713.10	POTASSIUM(MG)=	4613.40
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	1602.20
PROTEIN(G)=	63.80	ZINC(MG)=	6.20
FAT(G)=	71.40	VITAMIN A(R.E.)=	2694.40
SATURATED FAT(G)=	24.00	THIAMIN(MG)=	3.20
CHOLESTEROL(MG)=	168.50	RIBOFLAVIN(MG)=	1.26
CARBOHYDRATE(G)=	387.40	NIACIN(MG)=	16.40
FIBRE(G)=	16.40	FOLACIN(UG)=	378.00
CALCIUM(MG)=	627.70	CYANO COBALAMIN(UG)=	1.30
IRON(MG)=	17.90	VITAMIN C(MG)=	146.80

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.26  
TOTAL AMOUNT(KG)= 1.48  
TOTAL COST(\$)= 3.33

**Table A-3**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Belize)**  
**LSMS 2002**

ITEM	Amount (OZ)	Amount (GR)	ENERGY (KCAL)	COST (\$)
WHEAT FLOUR,ALL PURP,ENRH	2.16	61	223.2	0.07
RICE,PARBOILED	2.16	61	227.5	0.09
CRACKERS,SODA	2.16	61	269.2	0.26
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.20
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.34
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.34
SUGAR,LIGHT BROWN,DEMARRA	2.15	61	240.0	0.06
RED PEAS,WH SEEDS,DRY,RAW	0.91	26	86.5	0.04
PEANUTS,RAW WITH SKIN,DRD	0.91	26	106.3	0.08
COCONUT,MEAT,RAW	0.91	26	47.3	0.05
ONIONS,BULB,RAW	2.52	71	21.8	0.12
CARROT,FRESH,RAW	2.52	71	27.3	0.16
CABBAGE,COMMON,RAW	2.52	71	14.3	0.12
CORN,IMMATURE,RAW,SWEET	2.52	71	32.6	0.31
ORANGE,ALL VARIETIES	1.42	40	13.8	0.01
RAISINS,UNBLEACHED	1.42	40	109.5	0.27
PAWPAW	1.42	40	10.5	0.04
LIME	1.42	40	10.1	0.05
PORK FEET,TROTTERS,MEDFAT	0.70	20	30.9	0.04
STEW STEAK,LEAN&FAT,RAW	0.70	20	35.2	0.09
HEN EGGS,WH,FRSH,FRZN,RAW	0.70	20	27.4	0.06
CHICKEN,DRESS,YOUNG/BRLER	0.70	20	29.0	0.07
MILK,COW,DRY,WHOLE	0.70	20	97.8	0.20
PORK SAUSAGE,RAW	0.70	20	64.3	0.12
HAM,BONELESS	0.70	20	32.0	0.16
PORK.RETAIL,SHOULDER,RAW	0.70	20	43.4	0.17
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.6	0.03
SHORTENING,VEGETABLE	0.34	10	84.6	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.7	0.04

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	621.70	POTASSIUM(MG)=	4323.80
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	1401.00
PROTEIN(G)=	62.90	ZINC(MG)=	7.10
FAT(G)=	76.70	VITAMIN A(R.E.)=	2186.50
SATURATED FAT(G)=	21.80	THIAMIN(MG)=	3.30
CHOLESTEROL(MG)=	174.10	RIBOFLAVIN(MG)=	1.22
CARBOHYDRATE(G)=	375.90	NIACIN(MG)=	20.40
FIBRE(G)=	14.30	FOLACIN(UG)=	304.80
CALCIUM(MG)=	504.40	CYANO COBALAMIN(UG)=	1.90
IRON(MG)=	16.40	VITAMIN C(MG)=	141.20

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.14  
TOTAL AMOUNT(KG)= 1.42  
TOTAL COST(\$)= 3.64

**Table A-4**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Cayo)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WH FLOUR,ALL PURP,UNENRH	2.30	65	237.0	0.07
RICE,PARBOILED	2.30	65	241.5	0.10
SPAGHETTI,ENRICHED,DRY	2.30	65	241.5	0.23
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.09
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.17
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.28
SUGAR,LIGHT BROWN,DEMARRA	2.15	61	240.0	0.06
COCONUT,MEAT,RAW	1.63	46	84.8	0.04
RED PEAS,WH SEEDS,DRY,RAW	1.63	46	155.2	0.08
CABBAGE,COMMON,RAW	3.14	89	17.8	0.10
CARROT,FRESH,RAW	3.14	89	34.1	0.20
ONIONS,BULB,RAW	3.14	89	27.3	0.20
TOMATO,RIPE,RAW	3.14	89	16.9	0.20
ORANGE,ALL VARIETIES	1.46	41	14.2	0.01
RAISINS,UNBLEACHED	1.46	41	112.5	0.30
LIME	1.46	41	10.4	0.03
WATERMELON	1.46	41	6.9	0.02
PORK FEET,TROTTERS,MEDFAT	0.60	17	26.6	0.04
CHICKEN,THIGH,RAW	0.60	17	28.2	0.05
HEN EGGS,WH,FRSH,FRZN,RAW	0.60	17	23.6	0.04
BEEF,CANNED,MEDIUM FAT	0.60	17	36.9	0.12
MILK,COW,DRY,WHOLE	0.60	17	84.0	0.13
CHEESE,HARD,CHEDDAR	0.60	17	68.3	0.15
PORK SAUSAGE,RAW	0.60	17	55.2	0.10
PORK.RETAIL,SHOULDER,RAW	0.60	17	37.3	0.14
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.1	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.3	0.03
OIL,COCONUT	0.34	10	85.6	0.04

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	722.10	POTASSIUM(MG)=	4591.90
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	706.70
PROTEIN(G)=	65.60	ZINC(MG)=	6.90
FAT(G)=	65.30	VITAMIN A(R.E.)=	2697.60
SATURATED FAT(G)=	30.00	THIAMIN(MG)=	3.40
CHOLESTEROL(MG)=	164.70	RIBOFLAVIN(MG)=	1.20
CARBOHYDRATE(G)=	398.00	NIACIN(MG)=	17.60
*FIBRE(G)=	16.20	FOLACIN(UG)=	388.50
CALCIUM(MG)=	625.00	CYANO COBALAMIN(UG)=	1.20
IRON(MG)=	17.70	VITAMIN C(MG)=	145.10

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.31  
TOTAL AMOUNT(KG)= 1.50  
TOTAL COST(\$)= 3.03

\*Represents crude fiber which is only a portion of dietary fiber.

**Table A-5**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Stann Creek)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WHEAT FLOUR,ALL PURP,ENRH	2.53	72	261.0	0.09
RICE,PARBOILED	2.53	72	266.1	0.09
BREAD,WHITE,ENRICHED	2.53	72	192.9	0.08
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.20
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.34
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.34
JAMS AND PRESERVES	3.50	99	240.0	0.03
RED PEAS,WH SEEDS,DRY,RAW	2.51	71	240.0	0.13
CARROT,FRESH,RAW	2.52	71	27.3	0.16
ONIONS,BULB,RAW	2.52	71	21.8	0.16
CABBAGE,COMMON,RAW	2.52	71	14.3	0.16
CORN,IMMATURE,RAW,SWEET	2.52	71	32.6	0.42
BANANA	1.33	38	22.5	0.01
ORANGE,ALL VARIETIES	1.33	38	12.9	0.01
WATERMELON	1.33	38	6.3	0.01
RAISINS,UNBLEACHED	1.33	38	102.3	0.19
CHICKEN,THIGH,RAW	0.62	18	29.2	0.02
MILK,COW,DRY,WHOLE	0.62	18	86.8	0.14
BEEF,CANNED,MEDIUM FAT	0.62	18	38.2	0.14
HEN EGGS,WH,FRSH,FRZN,RAW	0.62	18	24.3	0.06
PORK FEET,TROTTERS,MEDFAT	0.62	18	27.4	0.08
LUNCHEON MEAT,PORK,CANNED	0.62	18	58.5	0.14
PORK SAUSAGE,RAW	0.62	18	57.1	0.16
PORK.RETAIL,SHOULDER,RAW	0.62	18	38.5	0.15
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.6	0.03
SHORTENING,VEGETABLE	0.34	10	84.6	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.7	0.03

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	648.60	POTASSIUM(MG)=	4670.10
ENERGY(KCAL)=	2400.20	SODIUM(MG)=	1219.20
PROTEIN(G)=	68.10	ZINC(MG)=	7.50
FAT(G)=	59.90	VITAMIN A(R.E.)=	2107.30
SATURATED FAT(G)=	15.90	THIAMIN(MG)=	3.60
CHOLESTEROL(MG)=	162.70	RIBOFLAVIN(MG)=	1.38
CARBOHYDRATE(G)=	409.20	NIACIN(MG)=	18.80
FIBRE(G)=	20.90	FOLACIN(UG)=	513.40
CALCIUM(MG)=	524.60	CYANO COBALAMIN(UG)=	1.30
IRON(MG)=	20.10	VITAMIN C(MG)=	122.70

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.22  
TOTAL AMOUNT(KG)= 1.46  
TOTAL COST(\$)= 3.41



**Table A-6**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Toledo)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WH FLOUR,ALL PURP,UNENRH	2.3	65	237.0	0.08
RICE,PARBOILED	2.3	65	241.5	0.11
SPAGHETTI,ENRICHED,DRY	2.3	65	241.5	0.31
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.17
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.31
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.31
SUGAR,LIGHT BROWN,DEMARRA	2.15	61	240.0	0.07
COCONUT,MEAT,RAW	1.63	46	84.8	0.04
RED PEAS,WH SEEDS,DRY,RAW	1.63	46	155.2	0.1
CARROT,FRESH,RAW	3.14	89	34.1	0.25
ONIONS,BULB,RAW	3.14	89	27.3	0.2
CABBAGE,COMMON,RAW	3.14	89	17.8	0.15
TOMATO,RIPE,RAW	3.14	89	16.9	0.2
PAWPAW	1.36	38	10.0	0.04
RAISINS,UNBLEACHED	1.36	38	104.6	0.67
WATERMELON	1.36	38	6.4	0.04
BANANA	1.36	38	23.0	0.16
CHICKEN,THIGH,RAW	0.69	20	32.5	0.03
BEEF,CANNED,MEDIUM FAT	0.69	20	42.5	0.17
CHEESE,HARD,CHEDDAR	0.69	20	78.6	0.17
HEN EGGS,WH,FRSH,FRZN,RAW	0.69	20	27.1	0.08
PORK FEET,TROTTERS,MEDFAT	0.69	20	30.6	0.09
MILK,COW,DRY,WHOLE	0.69	20	96.7	0.22
PORK.RETAIL,SHOULDER,RAW	0.69	20	42.9	0.13
SNAPPER	0.69	20	9.1	0.11
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.6	0.03
SHORTENING,VEGETABLE	0.34	10	84.6	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.7	0.04

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	711.30	POTASSIUM(MG)=	4674.90
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	619.70
PROTEIN(G)=	68.30	ZINC(MG)=	6.80
FAT(G)=	63.80	VITAMIN A(R.E.)=	2763.80
SATURATED FAT(G)=	24.10	THIAMIN(MG)=	3.40
CHOLESTEROL(MG)=	175.90	RIBOFLAVIN(MG)=	1.27
CARBOHYDRATE(G)=	397.80	NIACIN(MG)=	17.70
FIBRE(G)=	16.20	FOLACIN(UG)=	384.00
CALCIUM(MG)=	651.30	CYANO COBALAMIN(UG)=	1.20
IRON(MG)=	17.50	VITAMIN C(MG)=	137.20

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.33  
TOTAL AMOUNT(KG)= 1.51  
TOTAL COST(\$)= 4.29

**Table A-7**  
**Belize: Minimum Cost Daily Food Basket per Individual,**  
**February 2002, 2400 Kilocalories (Country)**  
**LSMS 2002**

ITEM	AMOUNT (OZ)	AMOUNT (GR)	ENERGY (KCAL)	COST (\$)
WH FLOUR,ALL PURP,UNENRH	2.53	72	261.0	0.08
RICE,PARBOILED	2.53	72	266.1	0.09
BREAD,WHITE,ENRICHED	2.53	72	192.9	0.08
DASHEEN,FRESH TUBER,RAW	5.51	156	143.7	0.17
PLANTAIN,RIPE,RAW	5.51	156	123.9	0.15
POTATO,IRISH,FRSH TBR,RAW	5.51	156	92.5	0.26
SUGAR,DARK BROWN,CRUDE	2.27	64	240.0	0.06
RED PEAS,WH SEEDS,DRY,RAW	0.91	26	86.5	0.04
COCONUT,MEAT,RAW	0.91	26	47.3	0.02
PEANUTS,RAW WITH SKIN,DRD	0.91	26	106.3	0.08
CORN,IMMATURE,RAW,SWEET	2.52	71	32.6	0.06
ONIONS,BULB,RAW	2.52	71	21.8	0.12
CABBAGE,COMMON,RAW	2.52	71	14.3	0.08
CARROT,FRESH,RAW	2.52	71	27.3	0.16
RAISINS,UNBLEACHED	1.38	39	106.4	0.20
LIME	1.38	39	9.9	0.03
WATERMELON	1.38	39	6.5	0.03
APPLE	1.38	39	21.2	0.09
CHICKEN,THIGH,RAW	0.63	18	29.6	0.02
PORK FEET,TROTTERS,MEDFAT	0.63	18	27.8	0.04
STEW STEAK,LEAN&FAT,RAW	0.63	18	31.7	0.08
MILK,COW,DRY,WHOLE	0.63	18	88.1	0.13
HEN EGGS,WH,FRSH,FRZN,RAW	0.63	18	24.7	0.05
CHEESE,HARD,CHEDDAR	0.63	18	71.5	0.16
PORK SAUSAGE,RAW	0.63	18	57.9	0.11
HAM,BONELESS	0.63	18	28.8	0.15
OIL,PURE,ALL KNDS,BLND,AV	0.34	10	84.1	0.03
MARGRNE,REG,HRD,VG FT OLY	0.34	10	70.3	0.03
OIL,COCONUT	0.34	10	85.6	0.05

**NUTRIENT COMPOSITION OF DIET SELECTED**

WATER(G)=	638.80	POTASSIUM(MG)=	4390.70
ENERGY(KCAL)=	2400.30	SODIUM(MG)=	1152.50
PROTEIN(G)=	64.60	ZINC(MG)=	7.90
FAT(G)=	71.70	VITAMIN A(R.E.)=	2154.80
SATURATED FAT(G)=	27.90	THIAMIN(MG)=	3.00
CHOLESTEROL(MG)=	165.80	RIBOFLAVIN(MG)=	1.03
CARBOHYDRATE(G)=	386.00	NIACIN(MG)=	18.00
*FIBRE(G)=	14.50	FOLACIN(UG)=	318.30
CALCIUM(MG)=	663.90	CYANO COBALAMIN(UG)=	1.70
IRON(MG)=	17.00	VITAMIN C(MG)=	111.80

**Total Calories and Total Cost**

TOTAL AMOUNT(LB)= 3.17  
TOTAL AMOUNT(KG)= 1.44  
TOTAL COST(\$)= 2.63

### *Adult Equivalent*

The minimum nutritional requirements vary according to the age and sex of the members of the households. For example, a baby requires only 27% or 648 of the 2400 calories that an adult requires, while a 14-year-old girl requires 69.5% or 1668 calories. The adult equivalents are factored into the estimation of the minimum cost of the daily food requirements for the household.

**Table B-1**  
**Belize: Adult Equivalent by Age and Sex**  
**2002 LSMS**

Age	Adult Equivalent	
	Male	Female
Less than 1	0.270	0.270
1 to 3	0.468	0.436
4 to 6	0.606	0.547
7 to 9	0.697	0.614
10 to 14	0.825	0.695
15 to 18	0.915	0.737
19 to 29	1.000	0.741
30 to 60	0.966	0.727
61+	0.773	0.618

**Table B-2**  
**Belize: Adult Equivalent by Age**  
**1995 LSMS**

Age	Adult Equivalent
Less than 12	0.3
12 to 19	0.5
20+	1.0

The 2002 LSMS used specific adult equivalents for nine different age groups and for males and females (Table B1). On the other hand, the 1995 LSMS used only three different age groups (Table B2) and no consideration for the differences in sex. This is one of the main areas where the methodology differs for 1995 and 2002. A standard mean adult equivalent was used in 1995. However, in 2002 it varied by district (Table B-5). A detailed description of the differences in methodology is presented in Appendix B.

**Table B-5**  
**Belize: Mean Adult Equivalent by District**  
**1995 and 2002 LSMS**

District	Mean Adult Equivalent	
	1995	2002
Corozal	0.62	0.75
Orange Walk	0.62	0.75
Belize	0.62	0.74
Cayo	0.62	0.74
Stann Creek	0.62	0.76
Toledo	0.62	0.72

### *The Indigent Line*

The indigent line is defined as the *minimum cost of food requirement necessary for healthy existence* of an individual or members of a household. Therefore, the cost of the food basket established for each district was used as the indigent line in the respective districts.. When an individual or household is unable to satisfy basic food needs, they fall below the indigent line and are considered very poor.

**Table B-8**  
**Belize: Indigent and Poverty Lines by District**  
**2002 LSMS**

District	Minimum Cost Daily Requirement \$	Daily Indigent Line \$	Monthly Indigent Line \$	Monthly Poverty Line \$
Corozal	3.41	3.41	102.30	192.32
Orange Walk	3.33	3.33	99.90	178.82
Belize	3.64	3.64	109.20	222.77
Cayo	3.03	3.03	90.90	150.89
Stann Creek	3.41	3.41	102.30	179.03
Toledo	4.29	4.29	128.70	236.81

### *Poverty Line*

The poverty line is one of the key factors in estimating the number of poor or non-poor persons. It is based on the minimum estimated cost of basic food and non-food items that a household requires to meet its basic needs. The poverty line is derived when a non-food cost is added to the indigent line. The non-food cost is estimated using the pattern of expenditure of the poorest 40% of the population. The cost of the food basket is inflated by multiplying the reciprocal of the food share of the poorest 40% of the population. Persons whose per-capita consumption falls below the poverty line are considered poor.

### **Poverty Measures**

The three main measures of poverty, the Head Count Index, the Poverty Gap and the Severity of Poverty are used in this report to measure the different aspects of poverty. These measures were established by Foster, Geer and Thornbecks and are commonly referred to as the FGT measures. The definitions of these poverty measures are taken from the World Bank International (WBI) Programs, *Basic Poverty Measurement and Diagnostic Course*.

The most basic of these measures, the *Head Count Index*, is defined as the proportion of the population that is poor i.e. the number of persons that fall below the poverty line expressed as a percentage of the total population. One of the weaknesses of the head count index is that it is insensitive to the change in the level of poverty and that it indicates the extent, but not the depth of poverty.

The *Poverty Gap* Index is based on the aggregate poverty deficit of the poor relative to the poverty line. It measures the average distance that poor persons are from the poverty line. This index gives an estimate of the minimum cost of eliminating poverty by bringing each poor person up to the poverty line. When the poverty line is multiplied by the poverty gap, the product is the average cost of moving a poor person at the poverty line. For example, in 1995 the Poverty Gap was 8.7% and the annual Poverty line was \$1,287.45. Therefore, it would have cost an average of \$112.01 per year to move each poor person to the poverty line. However, the objective of poverty elimination is to move the poor and those vulnerable people just above the poverty line to a more secure position above the poverty line. Even though the poverty gap index gives an indication of the depth of poverty it does not address the inequalities among the poor.

The *Severity of Poverty* Index also measures the distance of each person from the poverty line. However, it does not use the average distance, but the average squared distance of each poor person from the poverty line. By squaring the distance for each person, those farthest away from the poverty line are weighted more. The higher the index is the more severe poverty is. This index addresses issues of inequalities among the poor and is best used for comparison and not on its own. In 1995, the Severity of Poverty index was 4.3 for the country, but ranged from 2.2 in Orange Walk to 12.2 in Toledo. This indicates that poverty was most severe in Toledo and least severe in Orange Walk. Comparisons could also be made between years, or with other countries that apply the same method of measuring poverty.

Another measure of poverty, the *Gini Coefficient* is also used in this study. The coefficient, which is reflected by a diagram called the Lorenze Curve, ranges from 0 to 1 and measures the inequalities in the distribution of income or expenditure. As the coefficient reaches one the more skewed is the distribution of income or expenditure.

#### *Consumption Quintiles*

This measure of relative poverty is used mainly for comparison of the poorest 20% or the first quintile of the population with others. The quintiles are developed based the share of total expenditures. Most of the analysis in the report is based on comparison by quintile especially in respect to access to education, health and housing.

*Aged-Child Ratio* (Source: Shryock, H., et al, 1976. *The Methods and Materials of Demography*, p.133.)

The ratio of the number of elderly persons to the number of children, or the aged-child ratio, takes into account the numbers and changes at both ends of the age distribution simultaneously. It may be represented by the following formula:

$$\text{Population 65+ years} / \text{Population 0-14 years} * 100$$

Populations with aged-child ratios under the value 15 may be described as young (e.g. Belize) and populations with aged-child ratios over the value 30 may be described as old.

*Age Dependency Ratio* (Source: Shryock, H., et al, 1976. *The Methods and Materials of Demography*, p.133.)

The variations in the proportions of children, aged persons, and persons of “working age” are taken account of jointly in the so-called age dependency ratio. The age dependency ratio represents the ratio of the combined child population and aged population to the population of intermediate age. One formula for the age dependency ratio useful for international comparisons relates the number of persons under 15 and 65 and over to the number 15 to 64:

$$(\text{Population 0-14} + \text{Population 65+}) / (\text{Population 15-64}) * 100$$

The *child dependency ratio*, or the component of the age dependency ratio representing children under 15, is the ratio of children under 15 to persons 15 to 64 years (*Source: Shryock, H., et al, 1976. The Methods and Materials of Demography, p.133.*).

The *old-age dependency ratio*, or the component representing persons 65 and over, is the ratio of persons 65 and over to persons 15 to 64 (*Source: Shryock, H., et al, 1976. The Methods and Materials of Demography, p.133.*).

### *Housing Quality Index*

A Housing Quality Index (HQI) provides a reasonable indicator of the changes in the quality of the housing stock. Selected summary data are used to calculate the HQI, defined as the mean of the individual scores. For the purposes of the 2002 LSMS, the HQI is calculated using the following formula:

#### **Belize: Housing Quality Index (HQI), 2002 Indicator of Housing Quality**

	<b>2002 LSMS</b>
Percentage of Households with Exclusive Use of Kitchen (a)	95.9
Percentage of households with Electricity for Lighting (b)	87.4
Percentage of Households with Undivided Private House (c)	83.3
Percentage of Households who Own/Hire-Purchase Dwelling Unit (d)	68.3
Percentage of Households with Drinking Water Piped into dwelling/Purified Water (e)	49.8
Percentage of Households with Exclusive Use of Water Closet (f)	45.2
Percentage of Households with Concrete Outer Walls (g)	42.1
Sum of total percentages (h = a + b + c + d + e + f + g)	472.1
<b>HQI</b> (HQI = Sum of total percentages/number of indicators = h/7 =472.1/7)	<b>67.4</b>

## **CHAPTER 1 – DEMOGRAPHIC CHARACTERISTICS**

### **1.1. Introduction**

This chapter presents the profile of the Belizean population in the 2002 Living Standard Measurement Survey (LSMS). To explain the population dynamics, the main 2002 LSMS demographic findings were compared with those of the 1995 LSMS and past censuses. The descriptive analysis of the population includes the age and sex population structure by ethnicity and region (urban, rural, and district). The household size, composition, and headship were described to further illustrate the characteristics of the Belizean population.

### **1.2. Changes in the Population Structure, 1980 to 2002**

Decreasing crude death rates after 1970 and crude birth rates after 1980 (CSO, 2001) along with an increasing foreign-born population (Table 1-1) have all contributed to the demographic changes in Belize. As a consequence, a steady decrease in the proportion of the youngest age group, 0 to 4 years, from 16.7% of the population in 1980 to 13.0% in 2002 was noticeable (Table 1-1). This change in the population age structure was accompanied by an increase in the foreign born population from 8.9% in 1980 to 14.5% in 2002, with the biggest increase occurring between 1980 and 1991. Most of the foreign born population come from Central American countries and settle primarily in the rural areas (CSO, 2001a). This has caused a change in the urban:rural distribution of the population towards the rural areas over the twenty year period of the 1980 and 2000 censuses (Table 1-1). Immigration has caused significant changes in the structure of the population, especially after 1980.

### **1.3. Ethnicity**

Belize is a multi-racial society with ethnic groups heavily intermixed. The single largest ethnic group is the Mestizos (Table 1-1), descendants from intermarriages of Spanish and Maya. Other numerically significant ethnic groupings are the Creole, Maya, and Garifuna. During the intercensal period 1980 to 1991, immigrants were mostly Mestizos, while emigrants were principally Creoles and Garifuna. This accounted for the shift to the present ethnic structure.

The Mestizos now comprise 53.2% of the population compared to 33.0% in 1980 (Table 1-1). The Cayo district, a recipient of the many international migrants, now represents 21.5% of the population compared to 15.7% in 1980. The Creole population, the majority of whom live in the Belize district, experienced a subsequent drop in its share of the total population to 25% in 2002. This is reflected in the decrease of the proportion of the population living in the Belize district. The Maya (10.1%) and the Garifuna (6.9%) were the other two largest ethnic groups. The Mestizos live primarily in Corozal, Orange Walk, and Cayo. The Creoles were concentrated in the Belize district, the Mayas in the Toledo district, and the Garifuna in the Stann Creek district (CSO, 2001a).

## 1.4. Age and Sex Structure

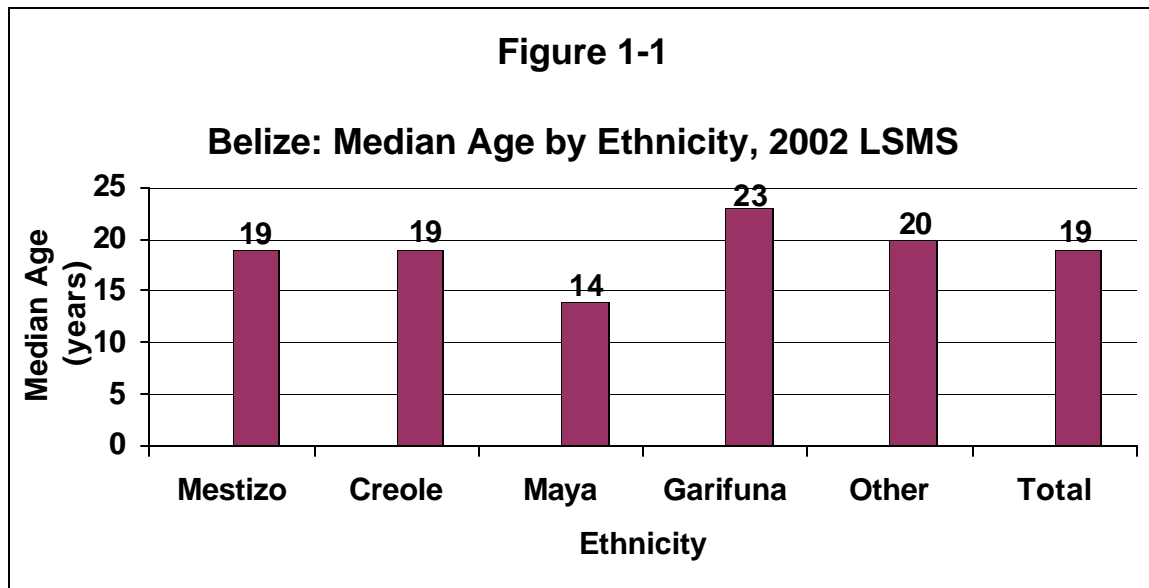
### 1.4.1. National Level

The sex composition of the population in 2002 showed similar numbers of males and females, a characteristic similar to those in the past years (Table 1-1). Differences in the sex composition can be noted when the population is disaggregated by age. In the age group 55 to 74 years, there were notably more males than females (55.1% males vs. 44.9% females), while in the older age group of 80 to 84 years, the highest percentage of females can be seen (56.9%), (Table 1-2).

Further analysis of the sex composition shows that the foreign born population 55 to 74 years consists of 60.2% males. This is perhaps due to the male dominated character of the immigrant group.

Despite the increase in the average age of the population from a mean age of 22.2 years in 1991 to 24.0 years in 2002, accompanied by an increase in the median age from 17 years in 1991 to 19 years in 2002 (Table 1-1), Belize can still be described as a young population with slightly less than half of its population (47.7%) consisting of children less than 18 years.

The ethnic group with the youngest population was the Maya, with a median age of 14 years (Figure 1-1). The median age of the Mayas was five years less than the national average. Undoubtedly the Mayas contribute to the young population in the Toledo district. The Garifuna had the highest median age, 23 years.





The aged-child ratio (see Appendix A) is the proportion of children to aged persons. It is considered one of the best index of “aging” (Shryock, H., et.al., 1976) and is sensitive to differences or changes in composition of the aged and/or child age groups. In Belize, the aged-child ratio increased from 9.7 in 1991 to 11.1 in 2002 (Table 1-3). This means that, in 1991, for every 100 children 0 to 14 years, there were 9.7 aged persons 65+ years. While in 2002, for every 100 children 0 to 14 years, there were 11.1 aged persons 65+ years. Although the increase in the ratio is characteristic of a gradually aging population, Belize continues to be a young population<sup>2</sup>.

A “crude” measure<sup>3</sup> that shows the level of economic burden placed on the working age population is the age dependency ratio (see Appendix A). This ratio is defined as the ratio of children 0 to 14 years and persons 65+ years to those in the working age population 15 to 64 years. The age dependency ratio dropped from 92.9 dependent persons per 100 persons of working age in 1991 to 81.9 per 100 in 2002 (Table 1-3) suggesting that the economic burden has decreased.

This decline in the age dependency ratio can be attributed to the decrease in the child dependency ratio (see Appendix A) from 84.7 children per 100 persons of working age in 1991 to 73.7 per 100 in 2002. The old age dependency ratio (see Appendix A) remained almost constant and was 8.2 persons in old age per 100 persons of working age in 2002. Thus, differences and changes in the age dependency ratios largely reflect differences and changes in the proportion of the population under 15 rather than in the proportion of the population 65 and over.

These differences were principally related to a decrease in the fertility rate. In Belize, fertility rates show a decreasing trend. In 2001, for instance, the total fertility rate was 3.4 children per woman, while in 1995, the corresponding figure was 4.0 children (Central Statistical Office, 2002).

#### 1.4.2. Regional Level

Belize is comprised of six districts: Corozal and Orange Walk in the north, the Belize district in the east, Cayo in the west and Stann Creek and Toledo in the south. These districts have both urban and rural areas. The age structure of the population varies by region (Figure 1-2). The rural areas have a younger population than do the urban areas. On average, the population in the rural areas (median - 17 years) was three years younger than the urban. The districts with the youngest population were Toledo (median - 15) and Cayo (median - 17 years).

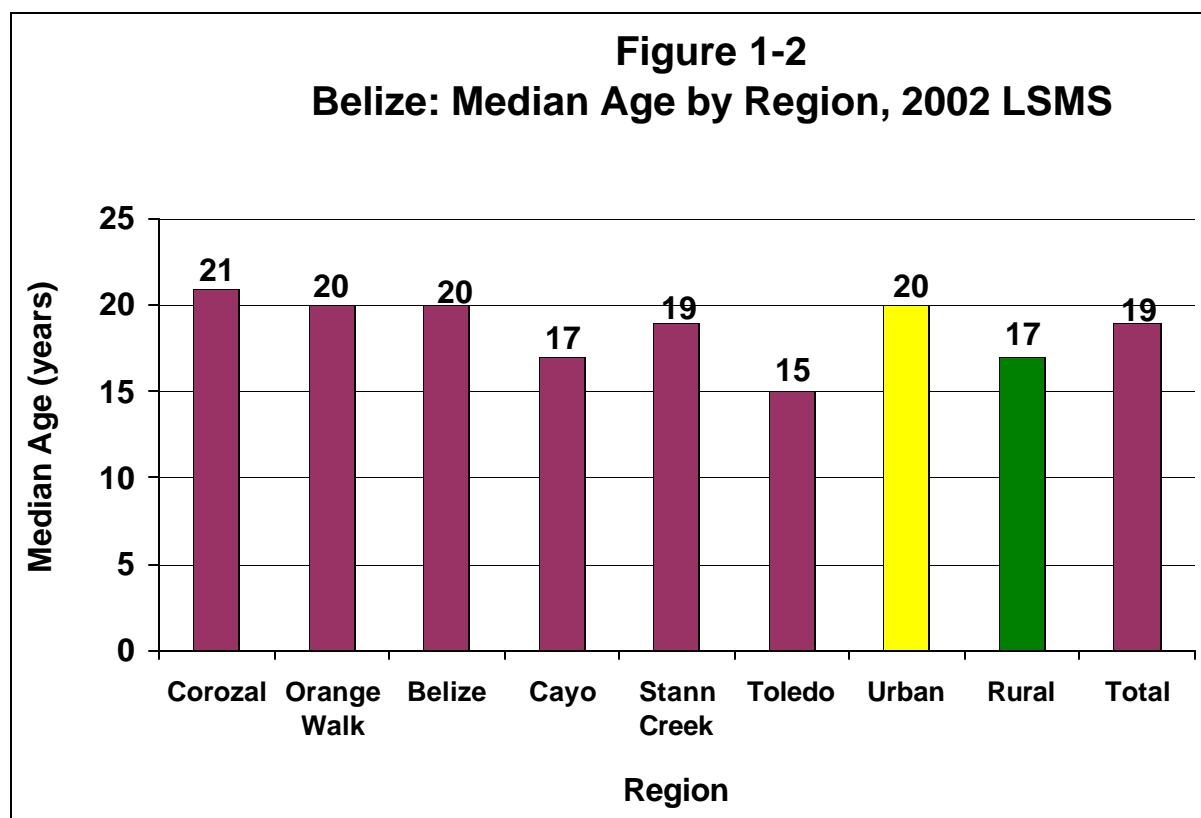
The likelihood that the Toledo will continue to have the youngest population is very high since it has the highest total fertility rate in the country, 5.6 children per women in 1999

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<sup>2</sup> Populations with aged-child ratios under the value of 15 may be described as young and populations with aged-child ratios over the value of 30 may be described as old. (Shryock,H., et. al.,1976. The Methods and Materials of Demography, p.133).

<sup>3</sup> The indicator is “crude” since it does not take into account adjustments for employment, under-employment, unemployment, and other variables affecting the labour force.

(CSO, 2001b). It is interesting to note that, in 2000, the Toledo has the highest percentage of its population living in the rural areas i.e. 81.4%, when compared to other districts (CSO, 2001a).



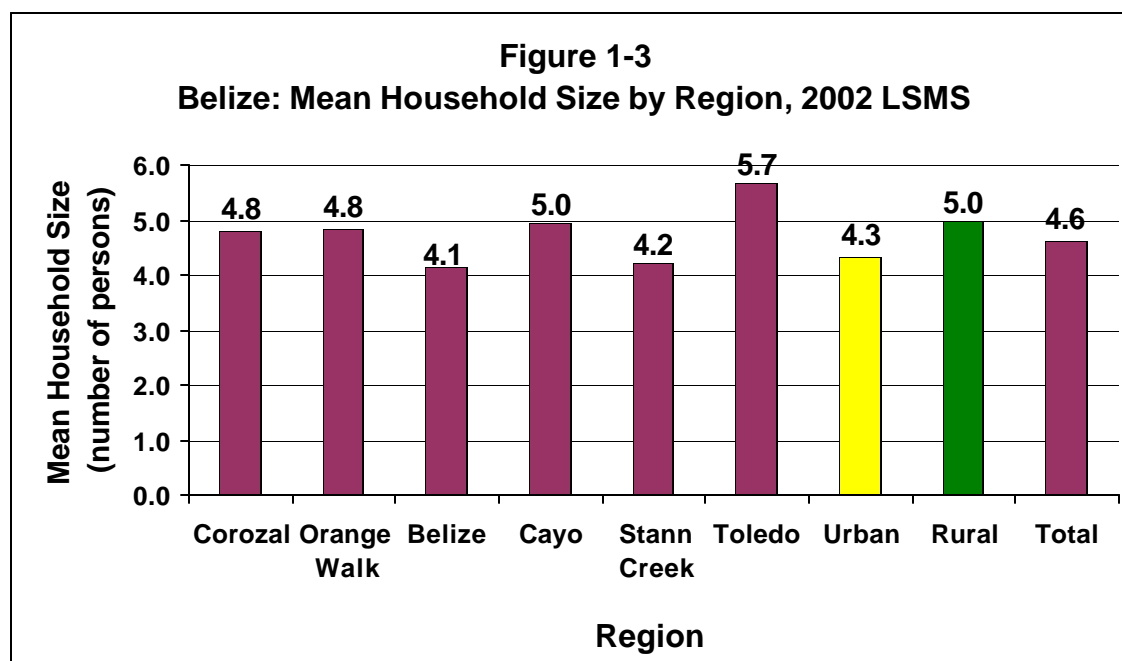
Belize City has the highest percentage of persons 65+ years (5.2%), the lowest percentage of persons 0 to 14 years (37.9%), and consequently the highest aged-child ratio (Table 1-4). This city comprises 23.3% of the country's population (Table 1-1) and has 70.1% of the population in the Belize district. The Belize district had the lowest total fertility rate in 1999, 3.0 children per woman (CSO, 2001b). Therefore, it is very likely that Belize City will continue to have the fastest aging population in the country.

Between 1995 and 2002, the age dependency ratio decreased in both urban and rural areas (Table 1-4). Although the greatest decrease in the age dependency ratio occurred in the rural areas - from 113.8 dependent persons per 100 persons of working age in 1995 to 92.0 per 100 in 2002, they still have a higher age dependency ratio than the urban areas.

## 1.5. Household Size and Composition

### 1.5.1. Household Size

The household is defined as a group of people – related and unrelated – living together, sleeping most nights of the week under the same roof, and sharing at least one daily meal (CSO, 2002a). Nationally, the mean household size was 4.6 persons in 2002 (Table 1-5). It is important to note that the household size has decreased since 1991 (Table 1-6). In 1991, for example, 50.6% of the households had 5+ persons compared to 45.8% in 2002.



The mean household size in the rural areas was 5.0 persons per household, while in the urban it was 4.3 (Figure 1-3). Half of the households in the rural areas had 5+ persons living in them compared with 41.2% of urban households (Table 1-7). Household size ranged from 5.7 persons per household in Toledo to 4.1 in the Belize district (Figure 1-3). Toledo and Cayo had the largest household sizes, while Belize and Stann Creek had household sizes smaller than the national average.

In general, the number of persons per household is decreasing. This finding is consistent with the declining trend in fertility (CSO, 2001b). Compared to 1991, there was a 4.8 percentage points decrease of households with five or more members (Table 4-1). This change is accompanied by an increase of households with three or four persons. However, there still remains a significant proportion of the population living in large households. For example, slightly less than half of the households, 45.7%, are comprised of five or more members (Table 1-7). Urban areas have smaller household sizes. Belize City, for example, has 39.2% of its households with five or more persons, while in the rural areas the corresponding figure is 51.7%.

### 1.5.2. Household Composition

In 2002, an average household in Belize had one adult male, one adult female and three children (Table 1-5). Differences in household composition existed between the mean number of children in the rural and urban households. Rural households (3.4 children) had on average one more child than did urban households (2.7 children).

### 1.5.3. Household Headship

The head of a household is determined by the members of the household and is therefore a subjective response<sup>4</sup>. Male-headed households represented the majority i.e. 73.2% of households in Belize (Table 1-5). There were no significant differences in the household size and composition of male and female-headed households. It is important to note that female-household headship was more likely to be an urban phenomenon: 41.2% of the female-headed households and 20.0% of male-headed households were found in Belize City.

## 1.6. Conclusion

The current increase in the proportion of the population 15 to 64 years indicates the need to focus on policies regarding the present labour force situation, which will especially address the issue of youth unemployment. *“There is some evidence that the government has already began to do this as it has decided that more comprehensive attention is needed for Belizean young people, especially due to persistent problems with urban gang activity, increasing community concerns about public safety, recent legislative changes to attempt to divert young offenders from the prison system, and the need to better create improved self-help opportunities for young people in such areas as entrepreneurship and personal development”* (Government of Belize, 2002, p.60). It is also important that these new initiatives pay particular attention to the ethnic differences in labour force development and employment patterns.

Since the children remain the predominant population, policies on reproductive health, maternal and child health, and formal and informal education should be given priority. Community development policies should target specific populations, for example, persons 65+ years in Belize City.

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<sup>4</sup> Although leaving to the household members the decision as to who should be designated as the head may introduce a subjective element into the concept of the household head, the procedure usually has the merit of describing social reality as the household members see it. In this sense, it may be superior to the arbitrary designation as the head, the household member who has the largest income or who is the oldest member. (Shryock,H., et. al., 1976. The Methods and Materials of Demography, p. 171.)

## CHAPTER 2 - POVERTY ESTIMATES AND CHARACTERISTICS OF THE POOR

### 2.1. Introduction

This chapter presents the 2002<sup>5</sup> estimates on the percentage of the population below the poverty line, the indigent line<sup>6</sup>, and other poverty measures i.e. the poverty gap, the severity of poverty and the Gini coefficient. The poverty measures were disaggregated by selected socio-economic factors including geographical area, ethnicity, sex and age group. Special emphasis is given to the gender of the head of household, children, youth, the elderly and the working poor. The definitions and estimations of these poverty measures are presented in Appendix A.

### 2.2. Poverty Estimates

The four poverty estimates, percentage below the poverty line, percentage below the indigent line, the poverty gap, and the severity of poverty for 2002 are presented in Figure 2-1. It shows that 33.5% of the population were below the poverty line and 10.8% were below the indigent line (Fig. 2-1). This means that one in every three persons was poor i.e. not able to meet basic food and non-food costs, while one in every nine persons was very poor or not able to meet basic food cost. This level of poverty was relatively high compared to other countries in the region. For example, the corresponding rate for Jamaica in 2001 was 16.8% below the poverty line.

The "income gap ratio" measures the mean depth of poverty as a proportion of the poverty line (Ravallion, M. 1992.37).<sup>7</sup> The ratio reflects "the percentage shortfall of the average income of the poor from the poverty line" (Sen, 1981), and therefore gives an idea of the income needed to bring the poor up to the poverty line. The poverty gap, which measures the average distance between the poor and the poverty line, was 11.1% (Figure 2-1). This implies that it would cost 11.1% of the poverty line to move each poor person out of poverty and close the gap between the poor and non-poor. The cost could be even higher than the 11.1% of the poverty line, since this would only bring the poor to the poverty line. The main objective of a poverty elimination/reduction strategy is to move the poor and vulnerable non-poor (i.e. those persons just above the poverty line) to a comfortable point **above** the poverty line. This would provide some cushion so that if they were to experience any economic shock they would not easily revert to poverty.

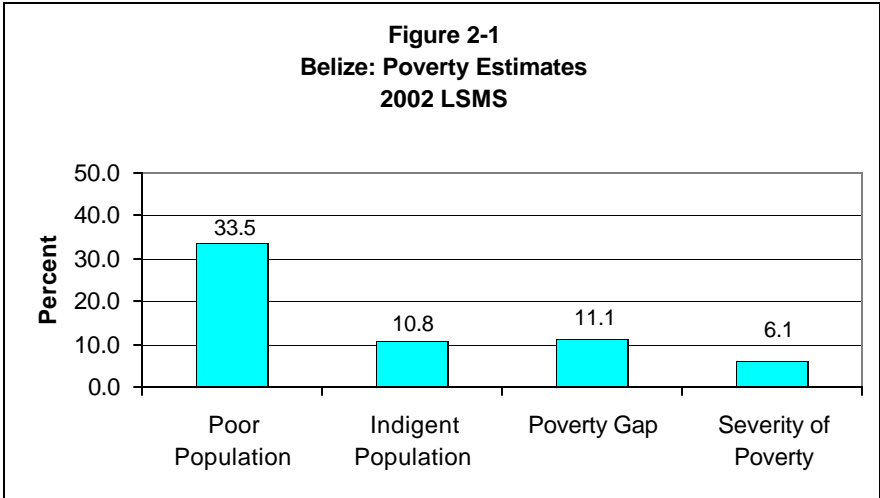
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<sup>5</sup> There were differences in the methodology used in 2002 and 1995. Therefore, this chapter does not present any comparison with the 1995 data. An explanation of the main differences in methodology is presented in Appendix B.

<sup>6</sup> The indigent and poverty lines established for each district are presented in Appendix B, Table B-7. Toledo District has the highest indigent and poverty lines and Cayo the lowest. These figures are based on the minimum cost food baskets for the respective districts (Appendix A, Tables A-1 to A-6), and the poverty line also includes an estimate of basic non-food consumption. An individual whose total consumption is lower than the indigent line is considered to be **very poor or indigent**, while an individual is considered to be **poor** if his/her total monthly consumption is lower than the poverty line.

<sup>7</sup> The poverty line minus the average income of the poor divided by the poverty line.

The severity of poverty measure represents the mean squared distance that each poor person is from the poverty line. This measure is similar to the poverty gap, but gives more weight to those farthest from the poverty line. It is used mainly to compare different levels, groups or years. In 2002, the severity of poverty was 6.1%. Nationally, the Gini index<sup>8</sup> was 0.4.



**2.3. Distribution of the Poor and Indigent Population**

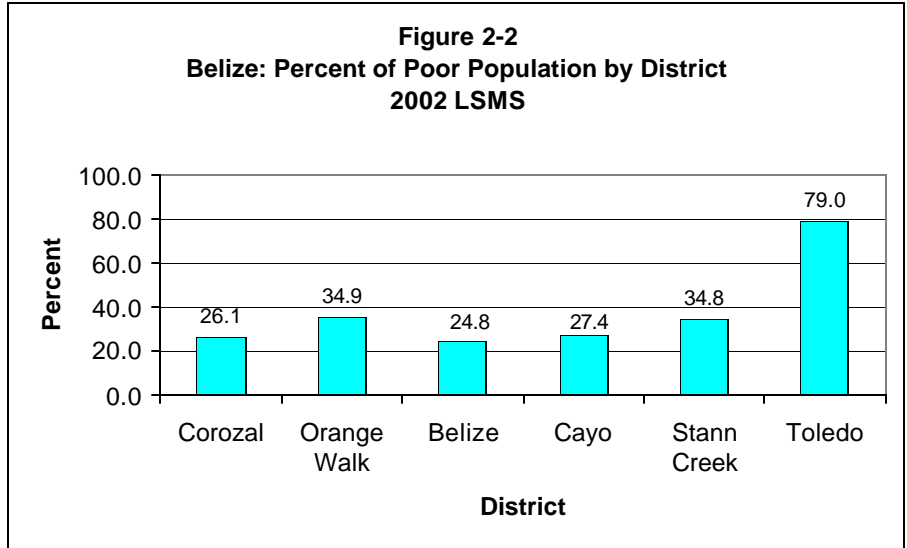
**2.3.1. Area of Residence**

The rate of poverty in rural areas (44.2%) was much higher compared to urban areas (23.7%). Nevertheless, it is suspected that pockets of urban poverty could be as high or even higher than the rates in some rural. The qualitative data from the focus group discussions reveal that residents from Port Loyola, Collect and Lake Independence on south side Belize City do not have access to some basic utilities. Residents noted that several houses were linked to one that has access to electricity and the bill was shared. Others have no toilet facilities. Some of them do not have public water pumped into their yard and have to go to public pumps and wait in long lines. Many of them lived in swampy areas where the yard was flooded most of the time and the children have no place to play. The parents complained that their children have suffered from itch, malaria and other diseases due to the swampy water.

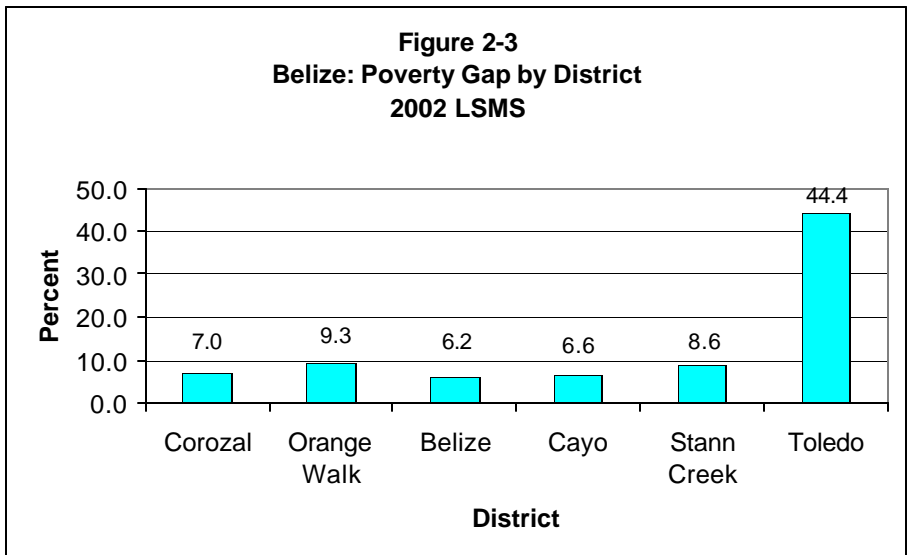
Toledo District had the highest level (79%) of poverty and Belize District the lowest (24.8%), (Fig. 2-2). The corresponding rates in the other districts were higher in Orange Walk (34.9%) and Stann Creek (34.8%) compared to Corozal (26.1%) and Cayo (27.4%). The proportion of indigent population was 7.1% or lower, in all the districts except Toledo (Table 2-1).

<sup>8</sup> The Gini index indicates the level of inequality, and is represented by a measure ranging from 0 to 1, inclusive. Zero (0) represents perfect equality, while ‘1’ implies that all the wealth is concentrated in the hands of a single person.

Belize and Cayo had 5% of their population living on or below the indigent line, while Stann Creek has 5.6% and Corozal and Orange Walk have 6.2% and 7.1%, respectively. On the other hand, the majority of Toledo's population (56%) was indigent or extremely poor.



At the district level, Toledo had the highest poverty gap (44.4%), while Belize District had the lowest (6.2%), (Figure 2-3)



The severity index presented in Table 2-2 indicates that Toledo District stands out as the district with the most severe level of poverty (31.5%). In the other five districts, there was little difference in the severity of poverty, which ranged from 2.9 to 4.3%.

The Gini index ranged from 0.2 in Orange Walk to 0.6 in Belize district. Cayo and Stann Creek have the same level 0.3, while Corozal's was the same as the country (Table 2-2). These figures imply that inequality was lowest where the incidence of poverty was highest and vice versa. Toledo District had the lowest level of inequality and the highest incidence of poverty, and Belize District has highest inequality and lowest incidence poverty.

### 2.3.2. Ethnicity

A comparison among the four major ethnic groups shows that the incidence of poverty was highest among the Mayas (77%) and lowest among the Garifuna (24.3%). The corresponding rates for Creole and Meztizo were 26.5% and 30.1%, respectively. It should be noted that the high rate of poverty among the Mayas was in tandem with the high rate in Toledo District (79%), which has a predominantly high proportion of this ethnic group. The same was so for the Creoles that were predominant in Belize District. The poverty rates for Creoles and Belize District were similar, 26.5% and 24.8%, respectively.

## 2.4. Distribution of the Poor and Indigent Households

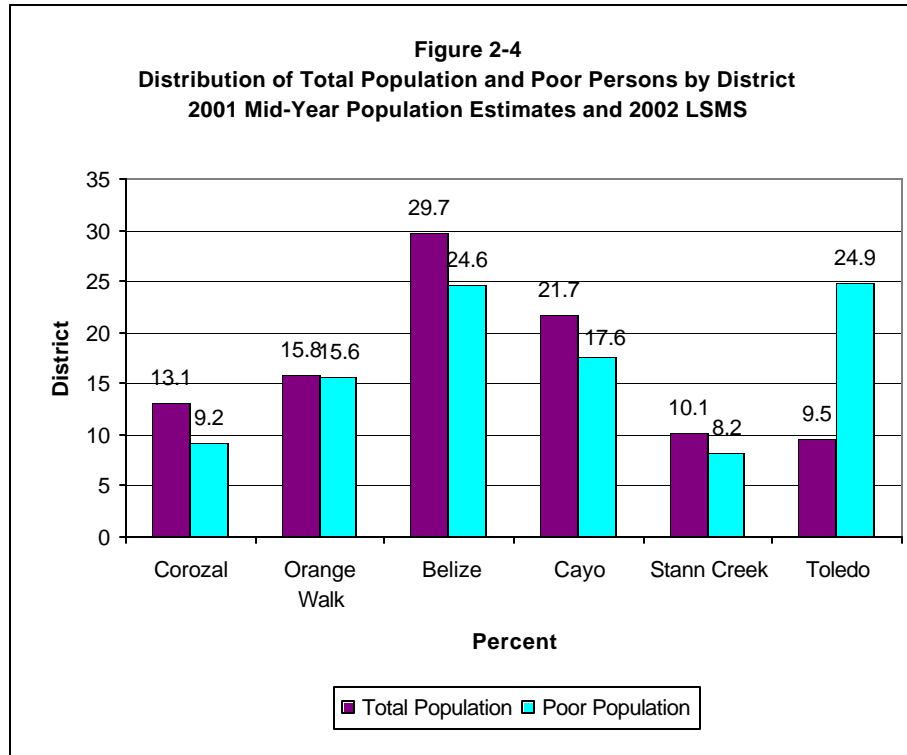
As would be expected the pattern of poverty at the household level was similar to that of the individuals. Thus, the proportion of households below the poverty line was almost twice as high in rural areas compared to urban areas and only 3.3% of urban households were very poor, while in rural areas 12.7% of households were indigent. (Table 2-3). At the district level, the majority of Toledo's households were poor (67.3%), while 45% were indigent. These rates were far higher compared to the other districts (Table 2-3).

Although there was no difference in the level of poverty between males and females (Table 2-1), there was a difference between male and female-headed households. A higher percentage of male-headed (25.5%) compared to female-headed households (21.8%) were poor. Further analysis of the female-headed households presented in Table 2-3b shows that poverty was lower among single-female-headed households compared to female-headed households that have a spouse or partner living in the same household, 20.4% and 23.9%, respectively. These findings require further investigation, especially since there is a general belief that poverty is higher among female-headed households.



## 2.5. Persistence of Poverty

Toledo stands out far above the other districts with its high level of poor and indigent population, wide poverty gap and most severe level of poverty. Although this district has the smallest share of the population (9.5%), it has the biggest share of the poor people in the country (24.9%). That means that one in every four persons living on or below the poverty line lives in Toledo District (Fig.2-4).



Toledo's poverty situation has persisted despite government's efforts to alleviate poverty particularly in that district. Several projects have been implemented, including the Environment, Social and Technical Assistance Programme (ESTAP<sup>9</sup>) and CARD<sup>10</sup>. These projects were designed specifically for Toledo and were executed in that district only. Furthermore, the Social Investment Fund (SIF) and the Basic Needs Trust Fund have implemented several projects in Toledo Districts between 1996 and 2002. None of these projects has conducted an assessment, which makes it difficult to determine the level of impact. However, it should be noted that Toledo District experienced a devastating hurricane in 2001 that affected some of the efforts made by these projects. According to the Fourth Report on Assessment of Damages Due to Hurricane Iris (Ministry of Natural Resources 2001), 21,600 persons mainly from Toledo and Stann Creek districts, were directly affected. The report points

<sup>9</sup> ESTAP was established in conjunction with the upgrading of the Southern Highway.

<sup>10</sup> CARD is an agricultural base project that has a social component.

out that, ‘damages from the storm’s passage are greatest in the area of agriculture and fisheries, tourism, forest/biodiversity resources, and housing stock.’ The preliminary estimates indicate that the total cost of damage amounts to \$195 million. The agriculture sector accounts for the majority (\$102.6mil) of this cost, while housing (\$43 mil) and tourism (\$39 mil) accounts for a sizeable proportion.

Data from the LSMS indicate that nationally, 12.4% of all households stated that they had been affected by Hurricane Iris. However, one in every three household in Toledo District was affected. The majority of households (56.1%) affected reported that their homes were partly damaged or completely destroyed, while 40.5% reported that their crops or livestock were destroyed. Only a small percentage of households reported that their business was affected (6.4%) and damage to roads (6.8%). A sizeable proportion (28.4%) reported ‘other’ effects, but these were not specified.

In a focus group session held among Mayas in Toledo to discuss issues of poverty, the participants concurred that the effects of the hurricane had hampered their efforts to confront poverty. Furthermore, they commented on their limited access to credit and linked this to landlessness. Many of them did not own the land, which if owned could be used as collateral. They claim that there was no market for some of the crops they produce and that they make limited profit from the sale of rice. Toledo now has a new programme, Toledo Development Corporation (TDC), which was established in 2002 to continue the development efforts after ESTAP was abolished.

Some of the factors that might have contributed to the high level of poverty in Orange Walk District were the fall in world prices of sugar, (the mainstay of this district), the effects of two hurricanes and subsequent flooding. Stann Creek, another of the poorer districts, was also affected by hurricane, which destroyed many of the banana plantations. However, there has been an increase in shrimp farming and other aqua culture activities in this district, which provided more job opportunities.

In the case of Belize, Corozal and Cayo, the districts with the lowest level of poverty, Corozal benefited from the establishment of a commercial free zone, while Belize District benefited from the boom in the construction and tourism industries. Cayo District has benefited from access to micro credit through the Small Farmers and Business Bank and other projects that targeted the poor and vulnerable. Furthermore, this district with its rich natural resources and attractive tourist sites has experienced exceptional growth in eco-tourism. These new and expanded ventures have provided employment opportunities.

## **2.6. Perception of Poverty**

Participants in the post-survey focus group discussions were asked to give their definition of poverty and the reasons why they think that some people are poor. Boxes 1 and 2 present the main responses on the conditions and causes of poverty and highlight the ethnic differences in perception. Conditions of poor health and schooling were universal across ethnic groups. However, the causes of poverty varied.

### Box 1 – Conditions of Poverty

Creole	Garifuna	Maya	Mestizo
<ul style="list-style-type: none"> <li>▪ Rats, flooring of muddy water with no lights</li> <li>▪ Some days going hungry</li> <li>▪ Poor school attendance</li> <li>▪ Poor health</li> <li>▪ No or Limited amenities</li> <li>▪ <i>We have about five houses to one (electric) meter: right in Collect and Port Loyola.</i></li> <li>▪ <i>It is rough to get water. I have to be using buckets to get water at the public pipe, need water line. I have to wake up early 4:00 a.m. to get there before the crowd.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Poor health</li> <li>▪ No or Limited amenities</li> <li>▪ <i>They have no money and no ideas</i></li> <li>▪ <i>They live from hand to mouth</i></li> <li>▪ <i>You have to use your left hand and right hand</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ No food, clothes <i>Our food is not nutritious...eating tortilla with lau instead of tortilla with a piece of chicken leg....</i></li> <li>▪ Poor schooling: <i>My children say that I am mean as I do not send them to school, but I could not afford it.</i></li> <li>▪ Poor health</li> <li>▪ Life is a struggle: <i>Sometimes have and sometimes don't have...</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Large families</li> <li>▪ Insufficient land</li> <li>▪ Poor schooling</li> <li>▪ Limited amenities</li> </ul>

Source: 2002 LSMS Post Survey Focus group Discussions

## Box 2 – Causes of poverty

Creole	Garifuna	Maya	Mestizo
<p>Low wages, unemployment, and high demand for few jobs in urban areas.</p> <p>Loss of respect for family; Single mothers and irresponsible fathers: <i>Females over the years have grown more independent, and in turn directly or indirectly pushing their female children...[but without fathers] to keep them in check, the boys are pushed to gangs and drugs, only want to drink and have girls."</i></p> <p>Insufficient education: <i>Nowadays, if you don't have a piece of paper you don't have a job.</i></p> <p>Overspending: <i>They budget poor and they live above their means with higher purchase."</i></p>	<p>Lack of employment opportunities and job discrimination: <i>They snub us and the Hispanics get work.</i></p> <p>Single parenting and poor parental supervision: <i>Males, especially go astray with the end result of delinquency and crime</i></p> <p>Cultural erosion &amp; unwillingness to work: <i>Children have become dependent on things from abroad... they shame to go a bush"</i></p> <p>Insufficient and inappropriate education: <i>Dunce head linked to fisherman and farmer, that means you are no good</i></p> <p>Scarcity of land and agricultural marketing problems: <i>They would not give you a helping hand... no loans to farmers</i></p>	<p>Landlessness: <i>The land is not owned; it is a reservation , therefore access to loans is difficult</i></p> <p>Alcoholism: <i>The money is spent in the bars buying short rum...It takes away food from the family table.</i></p> <p>Loss of culture of self-sufficiency: <i>Instead of making sugar, [you] start buy sugar...too much influence from outside.</i></p> <p>Poor markets for produce: <i>Everything is hard for us; we lack marketing and job...even though we harvest rice, when it sells no profit made, this is why we stop.</i></p>	<p>Low wages and preferential treatment of "foreigners": <i>They come in and work for cheaper without work permits... newcomers get benefit over the people who are form here...</i></p> <p>Loss of self-sufficiency and neglected resources: <i>Self-sufficiency is not encouraged... Belizeans feel it is degrading to grow and sell products.</i></p> <p>Insufficient and inappropriate education: <i>Education is geared to white collar jobs and not farming and rearing of chickens and animals for daily use</i></p> <p>Inadequate use of land: <i>Whereas some need the land, others have land which they are not utilising.</i></p>

Source: 2002 LSMS Post Survey Focus group Discussions

## 2.7. Household Consumption

A closer look at the consumption patterns reveal that the mean per capita yearly food expenditure was \$1202. At the district level, Belize (\$1607), Stann Creek (\$1414) and Corozal (\$1352) had the highest per capita food expenditure, while in the other three districts food expenditure was lower than the national per capita. Toledo District had the lowest per capita food expenditure (\$701) although the cost of minimum food requirements in this district was the highest in the country (\$1127). This explains the high level of poverty experienced in this district.

Per capita non-food consumption expenditure was higher compared to food expenditure. Non-food consumption included items such as education, health, clothing and transportation expenses and amounted to \$1,709. Belize District also had the highest per capita non-food consumption expenditure (\$2728), followed by Corozal (\$1912) and Cayo (\$1632). The lowest non-food consumption expenditure was for Toledo District (\$1008).

**Table 1**  
**Belize: Consumption and Non-consumption Expenditure by District**  
**2002 LSM**

	Consumption			Non-Consumption	Total
	Food	Non-Food	Total		
	\$	\$	\$	\$	\$
Total	1202	1709	2912	262	3174
Corozal	1334	1912	3246	257	3503
Orange Walk	1056	1535	2591	197	2789
Belize	1580	2728	4308	417	4725
Cayo	1140	1632	2772	309	3081
Stann Creek	1402	1441	2843	255	3098
Toledo	701	1008	1709	137	1846

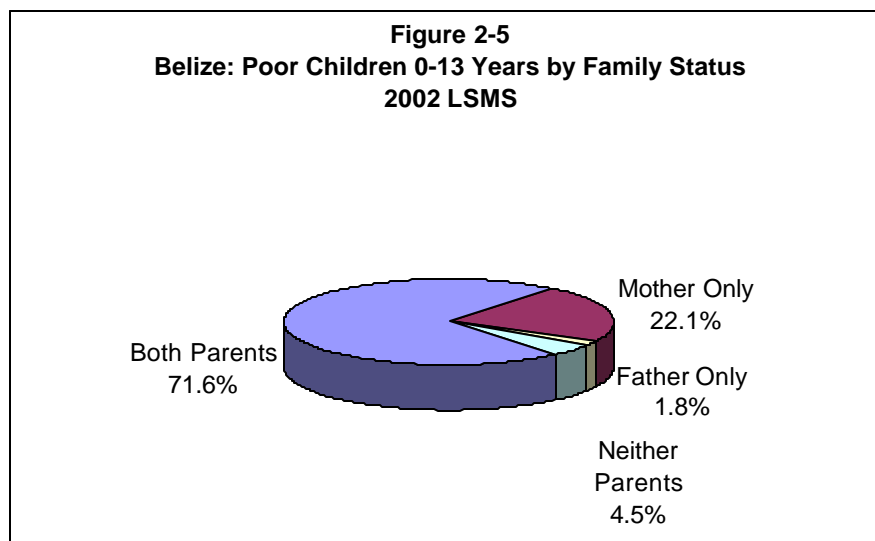
Non-food consumption expenditure accounted for 58.7% of total consumption expenditure, while food accounted for 41.3%. In all the districts, non-food consumption expenditure accounted for a bigger share than food, except in Stann Creek District where the share was almost equal. As expected, the share of non-food consumption expenditure in Belize District was highest compared to the other districts.

Overall, consumption expenditure (food and non-food) accounted for the biggest share of household expenditure. The non-consumption expenditure, which include, repayment of loans and interest, accounted for only 8.3% of total expenditure. The corresponding rates at the district level for non-consumption expenditure range from 7.1% in Orange Walk to 10% in Cayo.

## 2.8. Children in Poverty

The analyses of children 0 to 17 years indicate that 39% of them were living in poverty (Table 2-4). This rate was the highest compared to any other age group in the population and was even higher among children in rural areas (51%), Toledo (84.5%) district, and Maya children (83.3%). There was no significant difference between boys and girls (39%). A closer look at the mean age of children by quintile shows a lower mean age for children in Quintile One (8 years) compared to those in Quintile Five (8.8 years).

Among poor children under 14 years, 71.7% were living with both parents, while only 4.5% were living with neither parent (Fig. 2-5). Poor children living with a single parent were more likely to live with their mother than with their father, 22.1% compared to 1.8%, respectively. There was no difference between poor and non-poor children in terms of parental presence.



The high rate of poverty among children means that two out of every five children do not have their basic food and non-food needs met. This has serious implications including mal-nutrition, school absenteeism and dropout, and child labour and its worst forms. A recent study on child labour, the Child Activity Survey (CAS)<sup>11</sup> indicates that 11% of children in Belize were economically active and 6% were engaged in child labour.

The CAS data also revealed that 6.7% of children who go to school, also work. This rate was much higher in Toledo District where one in every four children who goes to school also works. In the other districts, the corresponding rates range from 2.8% in Orange Walk to 6% in Cayo. The proportion of rural children who go to school and also work (8.6%) was twice as high as that of urban children. A comparison of the ethnic groups shows no significant difference in the proportion of Creole and Mestizo children who go to school and also work. However, the

<sup>11</sup> The Central Statistical Office conducted the Child Activity Survey in 2001 with support from SIMPOC.

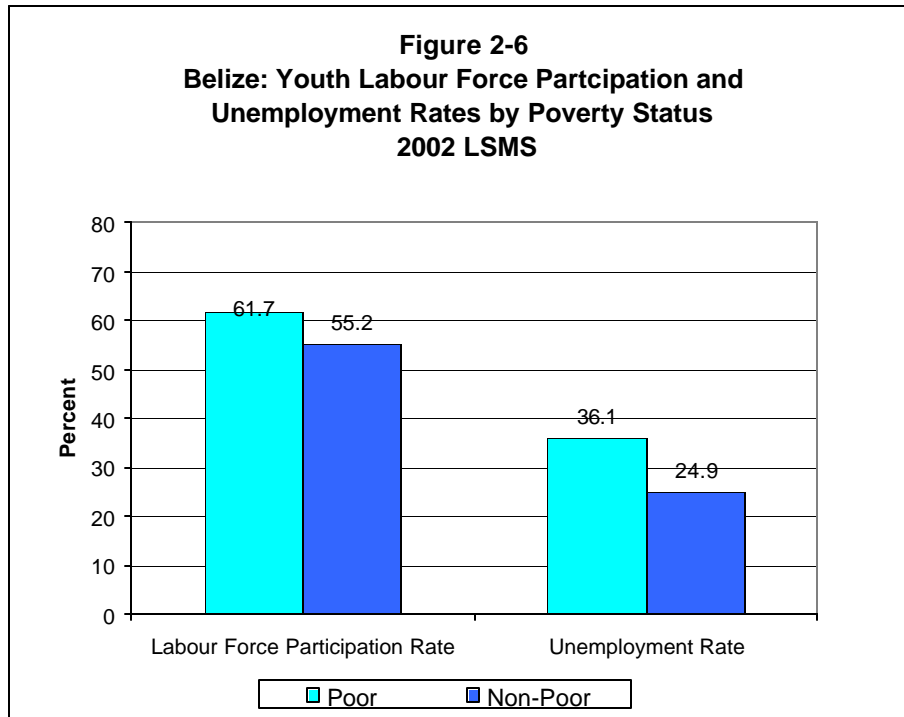
corresponding rate for Maya children was much higher (22.8%). This means that one in every five Maya children who goes to school also works. More boys (13.1%) who go to school also work compared to girls (5.7%). As expected, older children, 15 to 17 years who go to school (13.1%) were more likely to also work compared to younger children (5.7%). These children have to manage school and work and also find time for leisure. Many of them who work (31%) contribute to household income

Belize is a signatory to the Convention on the Rights of the Child (CRC) and other international conventions that address issues concerning the rights and welfare of children. Furthermore, the Families and Children Act Chapter 173 of the Laws of Belize covers various issues including duties of parents to maintain a child, parental responsibility and harmful employment of children (GOB 2002). The National Committee for Families and Children is charged with promoting, monitoring and evaluating the implementation of the CRC, and ensuring that the various institutions, communities and homes in Belize understand and apply the standards of protection and care of children set out in the Families and Children Act. There were other NGOs that also advocate for the rights and welfare of children.

## **2.9. Youth in Poverty**

Persons in the 14 to 24 years age group were classified as youth. However, it should be noted that the younger youth 14 to 17 years were also classified as older children. Therefore, in this chapter, children and youth were not mutually exclusive groups. The level of poverty among youth was 33.9%, which is almost the same as the total population. The figures in Table 2-7 show that 25.5% of urban youth compared to 44.2% of rural youth were poor. The corresponding rates at the district level and among the four major ethnic groups follow the same general patterns in the total population. There was little difference in the proportion of young men (32.7%) and women (35%) in poverty. The older youth 18 to 24 years (31.7%) have a lower percentage of poverty compared to the younger youth (36.7%).

Table 2-8, which presents the distribution of youth by economic and poverty status shows that 39.4% percentage of poor youth were employed, 22.3% were unemployed and 38.3% were outside of the labour force. This distribution was different from that of the non-poor youth, which was 41.5% employed, 13.9% unemployed and 44.8% out of the labour force.



The labour force participation rate (LFPR)<sup>12</sup> among poor youth was higher than that of the non-poor youth, 61.7% compared to 55.2%. This was mainly because more non-poor youth are out of the labour force, attending school. Unemployment rate among poor youth was 11 percentage points higher than that of non-poor youth (Fig. 2-6). Overall, youth unemployment was higher compared to any other age group.

The majority of poor working youth (69%) worked as paid employees at private business, while 15% worked as unpaid family workers and 9% have their own business. This group has the highest percentage of unpaid family workers (14%) compared to other age groups. Only 7% of non-poor working youth were so engaged.

The Government of Belize (GOB) in recognising the high rate of youth unemployment and the resulting high crime rate established the Youth for the Future initiative in 2001 to address these problems. Among its goals, this initiative seeks to ‘offer opportunities for youth enterprise development through training and access to credit,’ and ‘offer career guidance, job preparedness and the opportunity to learn new skills’ (GOB 2002b). One of its components is the Youth Enterprise Fund, which assist youth with loan funds for viable productive ventures. GOB has also embarked on the expansion of the Center for Employment Training (CET)<sup>13</sup> programme in all districts

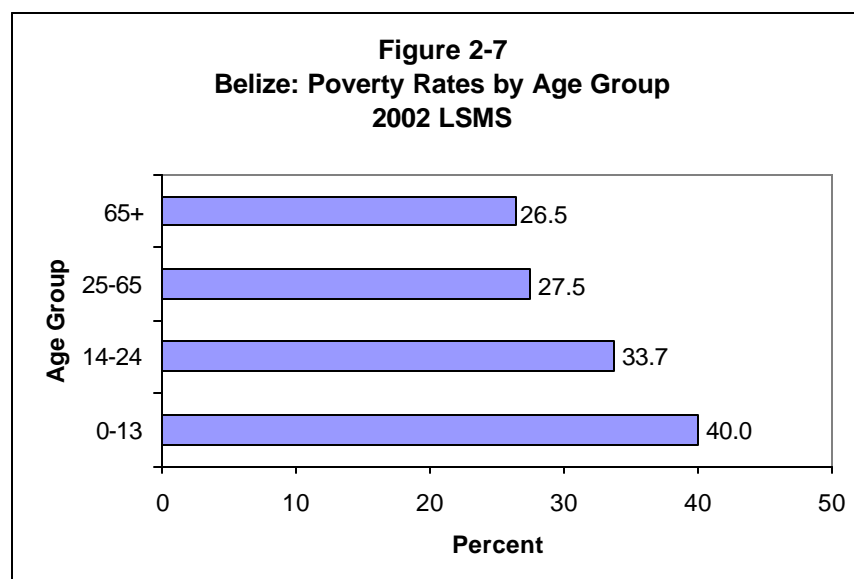
<sup>12</sup> The number of youth 14 to 24 years in the labour force (employed + unemployed) expressed as a percentage of all youth 14 to 24 years.

<sup>13</sup> CET provides technical and vocational training, employment counseling and job placement.



## 2.10. The Elderly in Poverty

The rate of poverty among the elderly, persons 65 years and older was 26.5% in 2002. Their level of poverty was lower compared to the total population and to youth and children (Fig.2-7). The general pattern of poverty experienced by the total population at the geographic level was also evident among the poor older persons (Table 2-9).



It should be noted that although the Garifuna has the lowest proportion of poor (24.3%), this was not the case among their elderly population. The proportion of poor elderly Garifuna was 31.5%, the second highest compared to the other ethnic groups. There is need for further investigation of the reasons why elderly Garifuna have a high level of poverty compared to the general Garifuna population. As noted in Chapter 1, this ethnic group has the highest median age compared to other ethnic groups. The figures also show that there was no difference in the incidence of poverty between older men and women.

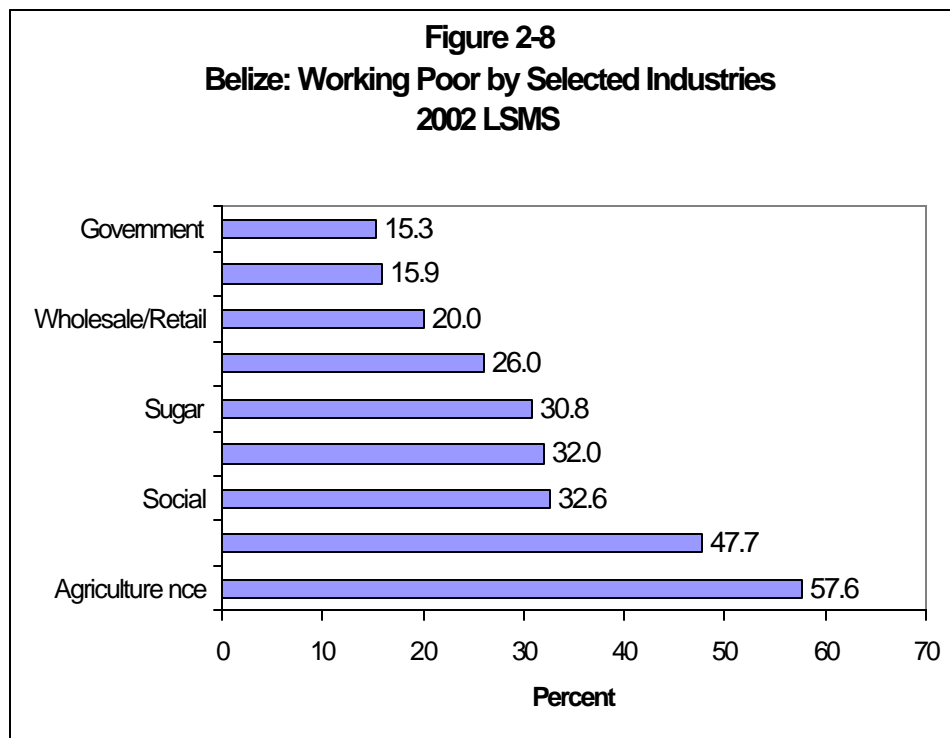
The majority of the elderly poor were not in the labour force (60.8%), while 27.8% of them were working. Table 2-8 shows that these rates were higher for the non-poor (64.3%) compared to the poor (32.4%). When persons in the working age population (14+ years) were asked if they receive social welfare assistance, only 10% responded, yes. The Ministry of Human Development pays \$5.00 per week to persons 60 years and older who do not have any source of income, pension or other social assistance, while the Belize Social Security Board matches this amount. Furthermore, GOB has promised to pay a social security pension to all women 65 years and older who had not contributed to the scheme. In 2002, GOB also adopted a Policy for Older Persons (MOHD, 2002), which is based on the principles of individuality, independence, dignity and productive ageing. One of the objectives of this policy is to, 'guarantee proper resource allocation for the social and economic welfare of older persons, while appropriately respecting their rights, responsibilities and roles.' The National Council on Ageing is responsible for implementing and monitoring the goals and objectives of this policy.

## 2.11. The Working Poor

The working poor is classified as those persons in the labour force that fall below the poverty line. This group comprised 29.8% of the labour force in 2002 (Table 2-11). Therefore, three in every ten persons in the labour force were not able to meet their basic food and non-food requirements. Women (27.3%) in the labour force were less likely than men (31.5%) to be poor. This finding is contrary to the general belief that men have better paying jobs than women do, and therefore requires further investigation. On the other hand, 48.8% of poor people in the working age population were working. This rate was higher for men (74.3%) compared to women (25.7%).

The working poor were mainly engaged as paid private employees (59.6%) or had their own business (25.8%). The corresponding rates for the non-poor were 55.7% and 27.4%, respectively (Table 2-11). Although the proportion of having own business was similar for the working poor and non-poor, the working poor (4.7%) were less likely than the non-poor (8%) to own a business with paid help

The figures in Table 2-12 indicate that most workers were occupied in elementary occupation (47%). However, poor workers were more likely than non-poor workers to be in this category, 47% compared to 27.8%. After elementary occupation, poor workers were mainly engaged as agriculturalists (14.7%) and craft workers (14%). A similar proportion of the non-poor was engaged in craftwork, while only 5.5% were in agriculture. The data also indicate that agriculture workers were the most likely to be poor (47%) compared to those in other occupations.



Further analyses by industry also show that workers engaged in non-classified agriculture (subsistence farming) and citrus were more likely than those in banana and sugar industries to be poor. Those working with Government and the tourism industry were among the least likely to be poor (Fig.2-8).

GOB recognises the need to foster employment and sustainable livelihoods. One of its priority areas outlined in the 1998-2003 the National Poverty Elimination Strategy and Action Plan (NPESAP) (NHDCA, 1998) is to ‘ Encourage self-employment for poor households through access to credit and training for small enterprise development.’ The government has also committed itself to support ‘programmes to increase the capabilities of young men and women, especially in deprived urban areas, for entry into the labour market and the optimisation of job opportunities.’

## **2.12. Conclusion**

Toldeo District stands out far above the other district with its high level of poor and indigent population. Among the other districts, Orange Walk and Stann Creek districts have relatively high levels of poverty. Overall, Belize District has the lowest rate of poverty. Although poverty was higher in rural compared to urban areas, it is suspected that pockets of urban poverty could be higher than some rural areas. The Mayas, show up as the poorest ethnic group and the Creoles the least poor. There was little difference in poverty between males and females. However, the proportion of poor female-headed household was lower than that of male-headed household.

Children under 18 years have the highest rate of poverty compared to any other age group. Youth unemployment was very high, especially among the poor, and more than one quarter of the elderly population were still working. Three in every ten persons in the labour force were poor, while almost half of the poor were working. Those engaged in elementary and agricultural occupations were most likely to be poor.

These findings have identified specific groups for the purpose of targeting, which have serious implications for the development of poverty elimination strategies. Although the previous strategy had targeted these poor groups the programmes and projects have not impacted sufficiently to create positive change. This raises the issue of developing appropriate interventions for targeting and ensuring that benefits reach those that they intend to reach. Special emphasis should also be placed on developing strategies that are sensitive to the cultural and ethnic dimensions of poverty. It is important that programmes for the poor are designed and implemented in a fashion that would minimize exclusion and inclusion errors. These types of errors occur when members of the target group were omitted from coverage of the programme or when non-members of the target group were included in the coverage. Most importantly, a comprehensive assessment of the 1998-2003 Poverty Elimination Strategy and Action Plan should be conducted before another strategy is developed.

## **CHAPTER 3 - COPING STRATEGIES AND SOCIAL ASSISTANCE PROGRAMMES IN BELIZE**

### **3.1. Introduction**

Both poor and non-poor households are typically exposed to natural risks (e.g. hurricanes and earthquakes) and man-made risks (e.g. inflation and economic reforms). However, the poor are the most vulnerable in any society and have fewer mechanisms to deal with these risks. The World Bank advocates that given their high level of vulnerability the poor should have adequate access to social risk management tools. This chapter presents information on the types of financial difficulties that households faced and the coping strategies they used to reduce their vulnerability. The general conclusion from this analysis is that the coping strategies used by the poor was not developmental and they had little access to social risk management tools. Frankenberger and Goldstein (1992, p.73) have suggested that coping strategies occur when:

*People living in conditions where their main sources of income are under recurrent threat develop strategies to minimize risk to immediate food security and to longer-term livelihood security.*

As households and individuals continue to use the same coping strategies, these mechanisms become adaptive strategies because of their long-term nature. Policy intervention would then be designed to encourage the poor to maximize the potential of the strategies that are developmental. The analysis of the Belizean LSMS 2002, shows that most of the coping strategies by the poor had not acquired developmental features to enable the households to break the cycle of poverty. There was little dependence on the State provided programmes and the personal and the community networks provided more support in the time of need. The data revealed that there was little awareness of the Social Investment Fund and its programmes. There is no comparable data on these issues from the 1995 LSMS.

### **3.2. Level of Economic Vulnerability**

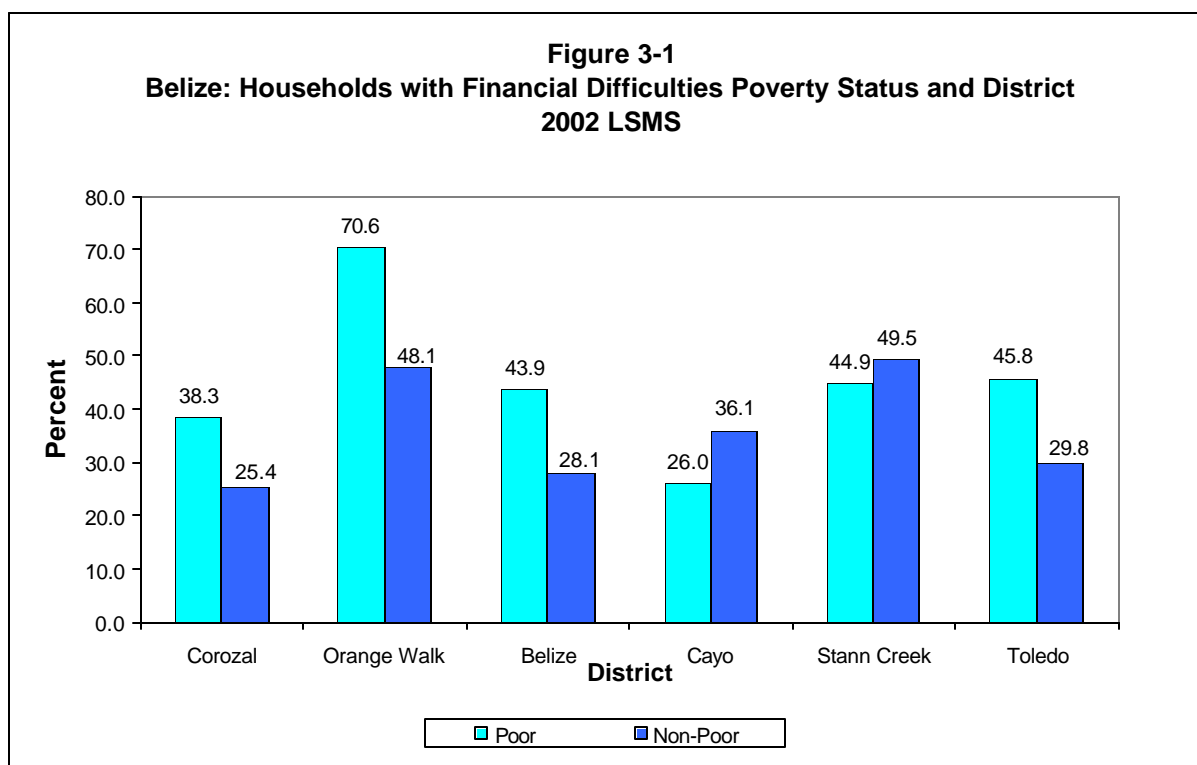
Things are really rough for some people; they have to pick up pint bottle...you think it is only crack-heads that pick up pint. The children that go to school have to pick up pint bottle and sell one for 5¢. These children live in cardboard boxes. We have to make our houses out of old cardboard. *(A focus group participant in Southside, Belize City).*

One of the first steps in measuring the vulnerability of any household is to examine its level of financial difficulty. Household heads were asked to state whether they were presently experiencing any financial difficulty. While recognizing the limitation of this subjective measure, it is nevertheless useful indicator of the extent to which households feel financially comfortable.

Economic vulnerability was high in Belize as 36.8% of all households stated that they were experiencing financial difficulties at the time of the survey (Table 3-1). In Orange Walk District 53.3% had the highest percentage of all households with financial difficulties, while Belize District- the urban center (31%) had the lowest. However, from the above-mentioned quote it is evident that there is severe economic deprivation in Belize City.

Poverty and level of economic vulnerability are linked as the poorer districts, Toledo, Stann Creek and Orange Walk had a higher proportion of households that reported financial difficulties compared to the other districts.

However, although 67.3% of Toledo’s households lived on or below the poverty line (Table 2-3), only 40.6% reported that they had financial difficulties. Toledo is the only district where the proportion of households with financial difficulties was lower than the proportion of poor households (Figure 3-1). It is not immediately clear why this is so.



However, the exposure and the high level of vulnerability to natural disasters are high in Toledo. This Mayan female captured the effect of the hurricane during a focus group discussion<sup>14</sup>:

*Nothing to sell, hurricane destroy everything. Everything got lost beans, rice, and corn. Punish about six months.*

<sup>14</sup> The effect of the hurricane is more comprehensively discussed in the poverty chapter.

### 3.3. The Economic vulnerability of the non-poor households

Financial difficulties are not restricted to poor households as the non-poor also suffer economic vulnerability: 34.2% of all non-poor household revealed that they were experiencing financial difficulties. As expected, a higher proportion of poor households (44.6%) compared to non-poor households (34.2%) experienced financial difficulties. However, there were noted differences in Cayo and Stann Creek. In Cayo, 26% of all the poor households compared to 36.1% of the all non-poor had this experience; while in Stann Creek 44.9% of poor household and 49.5% of non-poor had financial difficulties (Figure 3-1). The high proportion of non-poor households experiencing financial difficulties in Stann Creek (49.5%) and Orange Walk (48.1%) districts means that there was a high proportion of vulnerable non-poor in these districts *who are bordering just above the poverty line and are members of “the at-risk group”*. This group could fall below the poverty line if they were to remain in this situation for a prolonged period.

### 3.4. Types of Financial Difficulties

The types of financial difficulties experienced by households reveal their food insecurity and human capital issues. The level of difficulty faced when paying education and health is indicative of the household’s ability to invest in its human capital. The main types of financial difficulties experienced by households were those relating to utility bills, education, health, and food expenses (Table 3-2a). The majority of all households facing financial difficulties reported that they had difficulty meeting utility bills (53.1%).

However, meeting health care and education costs was extremely difficult for high proportions of households, as 42.8% of all households had difficulty with education, and 39.6% with health. Food insecurity was an important issue as 38.4% of all households had difficulty meeting their food expenses. Households facing difficulties in Corozal (52%), Belize (68.4%) and Cayo (59.6%) districts all had utility expenses as their number one financial difficulty. These districts were more likely to be non-poor and generally had higher utility costs than the other districts. As a poor male focus group participant puts it:

*Say you are making \$150.00 because that’s the most minimum wages you can ever make, when you finish paying water and light and gave your children money to take to school, then you still have other things to buy, say you need a piece of plywood, which cost \$1.45 a ft.*

*Comparatively, Cayo (28%) and Orange Walk (27%) districts had the highest proportion of households with difficulties with the transportation costs (Table 3-2a). It should be noted that these two districts have a high proportion of commuters. In both districts, workers and students commute on a daily basis to Belmopan and Belize Cities. Also, there is significant movement of people from the rural areas to the district towns of San Ignacio and Benque Viejo in Cayo and Orange Walk Town. As expected, the proportion of rural households (26%) with levels of financial difficulty meeting transportation expenses is much higher than that of urban households (18%)<sup>15</sup>.*

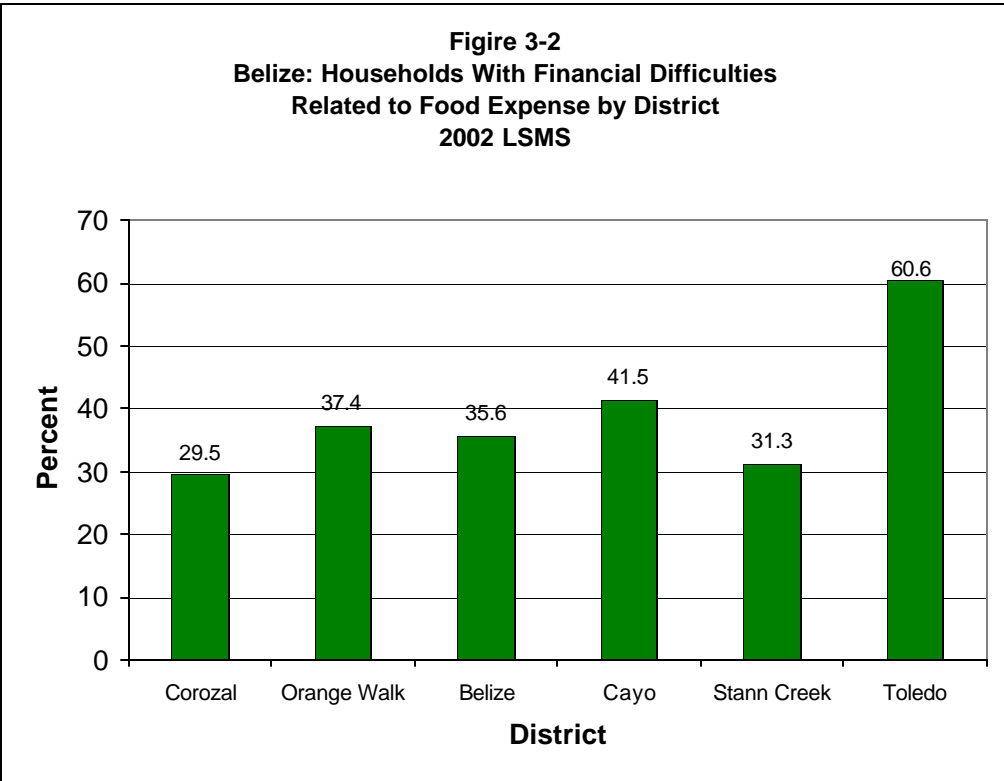
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<sup>15</sup> Between 2001 and 2002, both Orange Walk and Cayo experienced civil unrest related to transportation (e.g.

The majority of urban households (64.5%) had financial difficulty meeting the cost of utility bills. This proportion is far higher than that of any other type of financial difficulties that they faced (Figure 3-3). A closer look at the average monthly payments for utilities in urban areas shows that electricity is \$59, water is \$35, and telephone is \$78. These rates are higher when compared to rural areas where, a substantially lower proportion (37.2%) of households have difficulty meeting the cost of utility bills.

**3.5. Rural Poverty and food insecurity**

The poor everywhere are more likely to suffer from food insecurity. Rural poverty and Belize was no exception. Generally, rural households were more likely to have difficulty with food (44.9%) (Figure 3-3). For the poorest district- Toledo, meeting their food expenses was the number one financial difficulty. Social interventions to improve food security need to be a number one priority because three out of every five households in this district had difficulty in meeting food expenses. This proportion was much higher than in other districts, which ranged from 29.5% in Corozal District to 41.5% in Cayo District (Figure 3-2).



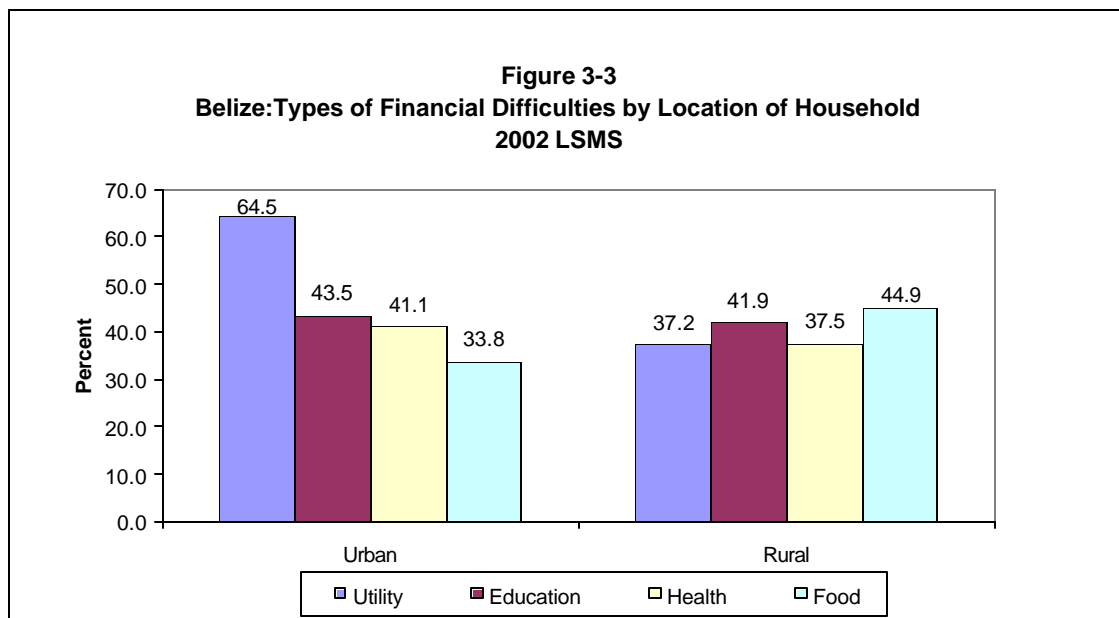

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*having timely and affordable bus runs). The following years, 2002, another riot broke out in Benque Viejo, Cayo District mainly due to the increase in bus fare. Protesters and police were injured in this riot. A commission of inquiry was set up after each of the riots. The reports have not yet been published. Nevertheless, the bus fares were reviewed and the proposed increases were lowered*

This high proportion of households in Toledo with a food expense difficulty is a reflection of its high level of indigent households (45%) and population (56.1%), (Tables 2-1 and 2-3). During the focus group discussions held among Mayans in Toledo District, the participants explained that only those who were ‘not so poor’ could afford to buy chicken, beef and fish most of the time, but that the poor could only afford to buy these items sometimes, and the very poor seldom bought them. Most Mayan households grow their own rice, corn and beans.

### 3.6. Poverty and human capital investment

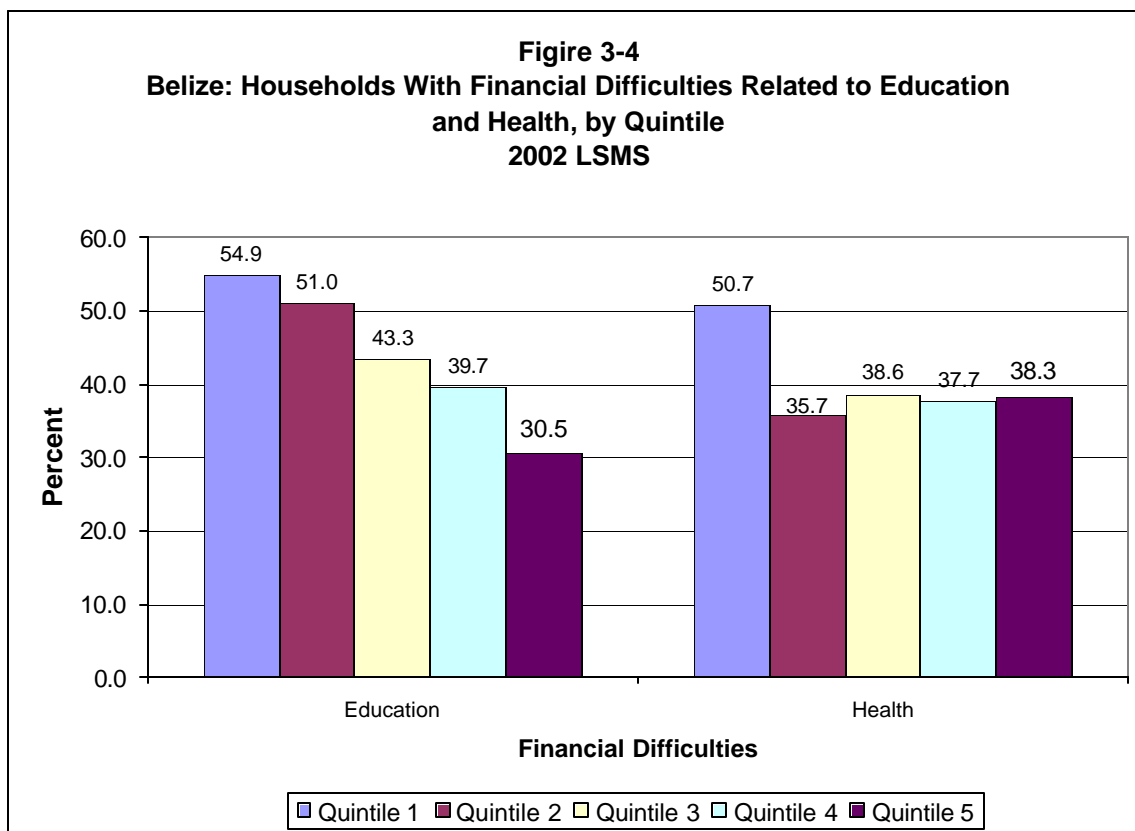
Human capital investment has been proven to be one of the more sustainable strategies for breaking the cycle of poverty. The link between poverty and limited human capital investment was well established in the Belize LSMS 2002. The poorer districts had higher proportions of financial difficulty meeting their education and health expenses. Orange Walk had difficulty mainly with education (47.2%) and health (47.4%) related expenses, while Stann Creek's main difficulty was with health (47.8%) expenses. One half of poor households found it financially difficult to meet their school expenses (Table 3-2b). Rural households were more likely to have difficulty with food (44.9%) and health (41.9%) related expenses than any other financial difficulty (Figure 3-3). The majority of households in quintile one, the poorest, had financial difficulties in meeting education (54.9%), food (54.2%) and health (50.7%) expenses (Table 3-2c). On the other hand, poor households were more likely than the non-poor to have difficulty with education and food expenses.



The wealthier are better able to invest in human capital. A closer look at households that experienced financial difficulties with education and health, by their consumption quintile, indicates that the majority of households in quintiles one and two had difficulty with education expenses (Figure 3-4). As the quintile number increases, quintile five being the wealthiest, the likelihood of having difficulty with education expenses decreases. In regard to health,



households in the poorest had the highest proportion (50.7%) with this type of financial difficulty. The corresponding rates for the other quintiles were much lower and similar to each other.



### 3.7. Gender and Economic Vulnerability

Even though financial difficulties relating to utility expenses was very high for both male and female-headed households, the proportion of female-headed households with this type of financial difficulty was much higher, 65.6% compared to 46.8% (Table 3-2d). There was very little difference between male and female-headed households that had difficulty in meeting food and clothing expenses. However, male-headed households (14.8%) were less likely than the female-headed (27%) to have difficulty in meeting mortgage/rent. Female-headed households were more likely to have difficulty in meeting school expenses, but less likely to have difficulty in meeting health related expenses compared to male-headed households.

### **3.8. Duration of Financial Difficulties**

The duration of household economic stress is indicative of the household's ability to absorb shocks. Overall, difficulties related to utility (51%) and food expenses (51.3%) were less likely to last for more than one year (Table 3-3a). Among the poor households, health (47.1%), food (48%) and utility (49.3%) related expenses were less likely to last for more than a year, while for non-poor households it was utility (51.6%) and food (53.2%) expenses (Table 3-3b & c). In male-headed households, utility (49.2%) expenses were least likely to last more than one year, while in female-headed it was food (48%) related expenses (Table 3-3c & d).

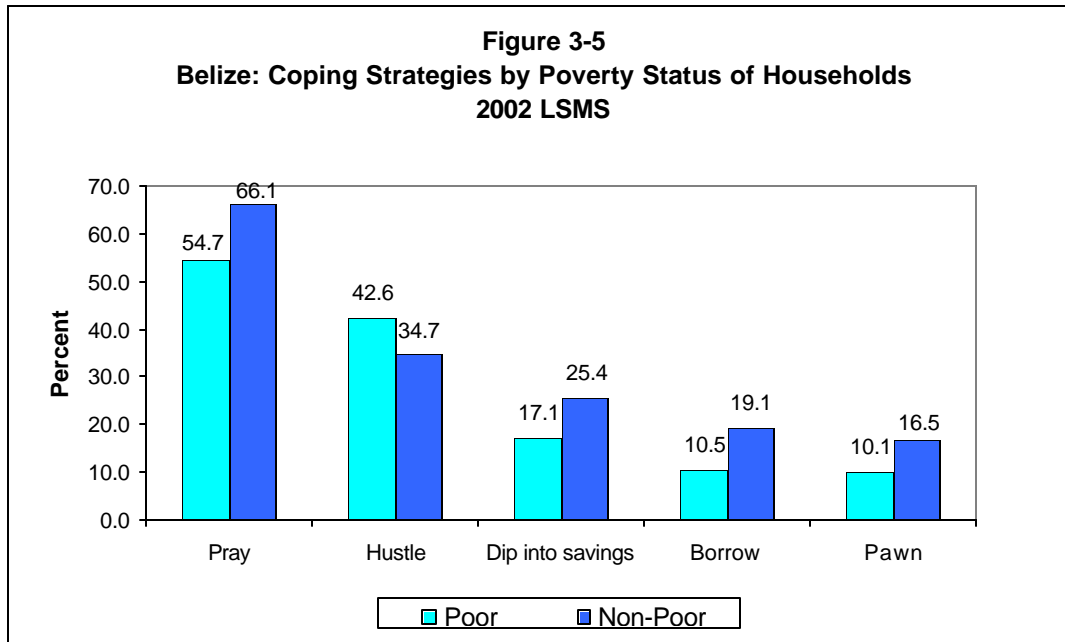
### **3.9. Main Coping Strategies**

*You can't wait around for help as nobody wouldn't come and help you. You have to get up and fight for yourself and take what you can. (A focus group participant in Southside, Belize City).*

All households experiencing financial difficulties used various coping mechanisms. An analysis of the coping strategies of the poor and the non-poor revealed that Belizeans depend more on their own personal networks than on State intervention- a point that is supported by their generally low awareness of and access to social investment projects. The qualitative data provided more information than the quantitative data.

The quantitative data revealed that reliance on divine intervention was the main coping strategy used in Belize. The majority of households (63%) turned to prayers. This non-developmental strategy has critical implications for the breaking the cycle of poverty since it presents limited opportunity for human advancement. Approximately one in three households 'forgo necessities' or 'Don't pay bills on time' to cope with their financial difficulties (Table 3-4a). More than one quarter of all households also 'ask relatives for help' when they were faced with financial difficulties, while 12.3% said that they asked politicians for help. Political patronage was more prevalent among the poor households who were more likely than the non-poor to seek politicians' help when faced with financial difficulties.

Reliance on divine intervention was more prevalent among the non-poor (66.1%) compared with the poor (54.7%). Non-poor households were also more likely than the poor to 'dip into savings', borrow and pawn, while the poor were more likely to 'hustle' (Figure 3-5).



The quantitative data showed also that the coping strategies used by the poor usually do not require repayment. On the other hand, the non-poor used coping strategies that could lead to more financial difficulties. This group depletes its savings, commits itself to repay loans or repay deposits to retrieve pawn items. Any of these methods could result in additional financial difficulties if they default.

The qualitative data from the focus group discussions revealed more dynamism and creativity among the Belizeans. Focus group participants disclosed that they utilized a range of coping strategies. Some main strategies included: rural-urban migration, migration overseas, dependence on remittances, thrifty spending, working hard, occupational multiplicity, hustling, use of a “back garden” with beans and livestock, use of savings and the lotto. Assistance from the politicians was a less popular option. So, too was drug trafficking. An individual attempting to survive will use a multiplicity of strategies. As this male focus group participant put it:

*I am all-purpose except thief.*

And this other male focus group participant agreed:

*Any little things, there are to do, you do, if you don't want to thief out a road, you have to survive.*

Living within your means was one of the main adaptive strategies of the poor. Here are some of the ways that the poor live within their means. According to the non-poor focus group participants, the poor were more thrifty than the non-poor:

*The poor eat beans, bread and egg. Rice and beans is a good meal for poor people.  
They may get sausage once a week.*

*The poor manage on what they can afford. If they can only buy a pack of bread and a tin of sausage, then that is what they buy.*

The children's welfare was priority and so:

*Even when I had things harder than now, I used to buy \$2.00 fish, two bananas and half a pound of rice. If I do not eat, I always make sure that my children eat. (Female from Dangriga).*

A few mothers would sacrifice their bodies so that their children could go to school:

*We have a few women who are forced to become prostitute whether it is illegal or legal, illicit relationship in order that they can send their children to school. (Female poor from Dangriga).*

### **3.10. Ethnicity and coping strategies**

From the qualitative data, there were several similarities among the ethnic groups. The role of remittances was important to all races.

*A Mestizo: We get assistance from abroad.*

*Garifuna: We get help from abroad.*

*A Creole: People get remittances from abroad. If this is late, they borrow and pay when they receive the remittances.*

For health and education expenses, the use of health services across the borders was more prevalent among the Mestizos and the Mayans. Geographic proximity to "across the border" health services proved useful to these ethnic groups. The poorer Mestizos went to Chitomal in Mexico for health care because of the cheaper services. The Mayans used health services in Guatemala as they sometimes found it was easier and quicker to cross the border to access health and education services than to wait/seek public health care in Belize. The time spent waiting for an ambulance from the public health services in Belize or walking to the public hospital or clinic in Belize was better utilized going to Guatemala.

The Mayans also used the bush doctor and home remedies to reduce health care costs. The bush doctor was used for minor injuries as he proved less expensive and in some instances, his methods were more effective.

### **3.11. Different Categories Of The Poor And Their Coping Strategies**

There are several important nuances in the conditions of poverty, which are often not easily nor readily identified in or captured by quantitative measures. Focus group participants identified different types of poverty in Belize. The Creoles mentioned these groups:

1. The economic poor with lack of finance;
2. The social poor with lack of education and
3. The “psychological poor” who were not “functioning individuals.”

The Mestizos spoke of these categories:

1. The poor but managing quite well (because of remittances)
2. The poor but meeting some needs and
3. The very poor and destitute - the “hopeless poor” (meeting no needs)

For purposes of this discussion, the “psychological poor” and the hopeless poor will be considered as members of the same group of poor. The coping strategies used by this latter group were less developmental and less proactive. They sought to meet the day- to-day needs and did not use strategies that entailed long term planning. Begging, borrowing and crediting were among their main strategies. The other poor groups utilized their back gardens, saved more, did not beg and had more access to remittances. They made a more concerted effort to send their children to school. The ‘hopeless poor’, who were - according to the focus group participants - psychologically enslaved to their poverty, had few opportunities to break their cycle of poverty because of their limited awareness of personal and public mechanisms and support programmes.

### **3.12. Rural/Urban Differences**

The participants from the focus groups revealed that there were many similarities by residential areas. Trying to live within one’s means and migration overseas was common to both urban and rural residents. Rural residents were more dependent on their livestock and back garden and rural-urban migration. The urban poor benefited more from the State and being more knowledgeable were able to better access State services. There was more foreign migration among the urban population and “hustling” and illegal activities were more prevalent among the urban residents. Having “multiple fathers” for their children in order to obtain increased income was more prevalent among the Creoles than any other ethnic group. The Mestizos living near the Guatemalan border were at pains to complain about the prostitution among the Guatemalan migrants in Belize. This coping strategy exercised by the aliens had negative effects on the social lives of the poor Mestizos whose spouses used much needed money to pay for the services of the prostitutes and in some case, unions were broken.

### 3.13. Gender and Coping Strategies

According to the quantitative data, although male and female-heads of households use prayers as their main coping strategy, a higher proportion of female-heads (65.6%) compared to male-heads (61.4%) prayed (Tables 3-4c & d). Female-heads of households were more likely than male-heads to 'not pay bills on time' and pawn items. This was even more so among the non-poor heads of households. Twenty-two percent (22%) of non-poor female-heads pawn items as a coping strategy compared to 13.6% of non-poor male-heads of households.

From the qualitative data, the main difference by gender was the use of drug trafficking among the males. Males were also more prone to "hustle" than the females.

### 3.14. Coping by reducing access to basic social services

This section discusses the reduction of access to basic social services in times of financial constraints. The quantitative data showed that the poor withdrew their children from school in times of economic hardships. This has major implications for their human capital investment and the continuation of intergenerational poverty. Quintiles one and three were the most likely to have their children stopped from going to school when they were faced with financial difficulties (Table 3-4b). Some parents had to suffer the resentment from their children when they withdrew them from school.

*Sometimes when my son and daughter went to school it was hard. They say now that I was bad but, I told them I didn't have money to send them. (Mayan female).*

The qualitative data showed that access to health care in Belize was not universal and some very poor persons simply could not afford to seek health care anywhere and watched their sick family members suffer. One Mayan lady said that when she could not help her sick child, she "prayed".

Many of the poor said that they used herb to heal medical ailments. Among the poor Mestizos, the home remedies got priority because of the high cost of medical care:

*Use home remedies first, secondly goes to the general hospital. (A rural Mestizo).*

*For the Mayans in particular, access to the bush doctor was an important way of coping with the high costs of health. In fact his skills were lauded. For some illnesses, the traditional 'bush doctor' is seen as a better 'expert' than trained medical personnel.*

It is better if you go to the bush doctor for snakebite, as the hospital is not as good.

The herbs used by the bush doctor are good and he is cheaper.

The Mayans know the treatment for many illness.

*The Mayan females cited being anointed after childbirth. In addition to the fact that the ‘elders’ prefer this source, the drive to use the bush doctor is also cost related. According to the both male and female Mayan focus groups the bush doctor is cheaper and just as effective for most illnesses that are treated exclusively with herbs and oil.*

Although both Mestizos and Mayan relied heavily on the bush doctor, with serious illnesses, one had to access the private doctor and animals would have to be sold if necessary:

*She will look for a good doctor and if not enough money, she will sell one of her animals.  
(A rural poor Mestizo).*

However, when it comes to their children, they prefer to take them to the doctor and buy the prescribed medication. The cost of medication can be very high, and if the child is suffering from what is perceived to be a relatively minor ailment home remedies become the preferred option.

The males coped with their illness by delaying care and using some home remedy:

*Sometimes when we have a fever, we just buy some rum.*

### **3.15. The value of education**

Even as they struggle to survive, the poor in Belize do not utilize withdrawal from school as an adaptive strategy. The high value of education among all groups was revealed in the focus group discussions. However, where withdrawal occurs among the poorer groups, this does not appear to be on a prolonged basis. Most made an asserted attempt to send their children to school as they saw education as a “liberating tool” from poverty. The educated children were expected to help the parents and the younger ones. This quote reveals the high “liberalizing” power ascribed to education by the poor:

*Parents are realizing now that it is a way to free themselves.*

In the post-survey focus group discussions, the poor were asked how they cope with education and health expenses. Some of them said that they started saving small amounts of money as soon as school closes so that they can buy books and uniforms. Others do not buy uniform every year, but make repairs and adjustments to them. One of the parents said that she buys second hand books and uniforms. The uniforms and books are passed on to younger children. This is the main reason why some of the parents prefer to send their children to the same school. The value of education is revealed in the following quotes:

*We are trying to send our children to school so that they can’t feel what we are feeling.  
(Mayan female in Toledo).*

The value of education was particularly notable among the Mayans who tried to ensure that the younger ones go to school.

*The older ones help the younger ones... the first set don't go, they work and send the younger ones or you sell chicken and beans to send them.*

There was an asserted effort to send the females to school as a form of liberation from “domestic oppression.” The following quote reflects the view of the participants of a female group:

*We want the girls to get an education because the men take advantage of us.*

On the other hand, the male Mayans preferred to send their males to school because the educated females got married and that was considered a loss:

*A girl might graduate from high school and then marries a farmer, after all the sacrifices the parent made she is not helping out.*

Skepticism about the returns from education was higher among the males:

*I know of someone who sent a boy to high school and after he graduated from high school and he did not get any job.*

Some may even end up in jail:

*Lots of boys who have gone to school still do not use their initiative and end up in jail. They become more educated in the things that are wrong.*

However, according to the qualitative data few Mayans obtained high school education, and an even smaller number gained access to tertiary education:

*We children pass the PSE (Primary School Examination) and we can't send them to high school because it is too expensive.*

Their ability to utilize education as a tool for upward social mobility is therefore limited. There was also an expressed disappointment with the way some of these educated children “wasted” their parents’ investment in their education.

Among the Creoles, the males were particularly concerned about the assertive manner in which the mothers encouraged their girls to access education. Nevertheless it was felt by many that the girls would make better use of their education. It was a fairly common view that that girls excelled more than boys educationally, because they are more focused to achieve their goals.

*Some especially boys are looking at areas with fast money without education.*

Education was projected as a critical source for survival among this group. They all projected a resolve to educate their children and verbalized a conscious effort to encourage their girls as strongly as the boys to pursue their educational goals.

*Nowadays if you don't have a piece of paper you have no job.*



*I tell my children all I can give you is education.*

### **3.16. Social Assistance Programmes**

*Why only when is election time, they remember we poor people back here.*  
(Focus group participant, Southside, Belize City).

As the qualitative data revealed, the poor relied heavily on their own family and community networks and had little dependence on State provided assistance. Information on the awareness of community projects was also gathered by the LSMS questionnaire. The results show that 49.3% of households were aware of at least one project that was implemented in their community (Table 3-5). Cayo District households (67.9%) were most likely to be aware of community projects, while Belize District households (34.5%) were the least likely. The corresponding rates for the other districts are 47.2% for Corozal, 54.7% for Orange Walk, 53.9% for Stann Creek and 59.1% for Toledo. There is no difference in the proportion of urban and rural households that were aware of at least one project implemented in the community<sup>16</sup>.

A comparison by the poverty status of households indicates that poor households were less likely than non-poor households to be aware of projects implemented in the community: 41% compared to 52% (Table 3-5). At the district level, there is little difference between the poor and non-poor in Cayo and Orange Walk. However, in the other districts, the proportion of poor households that were aware of community projects was far lower than those in the non-poor group. In Belize District, 17.5% of poor households - compared to 38.4% of the non-poor - were aware of community projects, while in Toledo 49% poor households - compared to 80% of the non-poor households were aware (Table 3-5). It should be noted that these two districts have the lowest and highest proportion of poor households: 18.4% in Belize and 67.3% in Toledo (Table 2-6). Nevertheless, the poor in Toledo were more likely than the poor in Belize District to be aware of projects implemented in their community.

The focus group participants revealed limited knowledge of social assistance programmes that helped the poor and were only able to mention a few. The Mayans mentioned a few.

One participant: *Women's Group Program. Peace Corps come to help people to plant seed.*

Another Participant: *Make craft, basket and bracelet. Sell them ...*

In Cayo, only one focus group participant was aware of any project or programme to assist poor people:

*There was a "Prodere" project (funded from outside Belize), but this was only to assist refugees. (A rural non-poor Mestizo).*

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<sup>16</sup> It should be noted that these figures suggest a higher level of awareness much more so than the number of projects implemented in the communities.

It is evident that living in the urban center did not improve awareness. The majority of the participants in the focus group discussion in Southside, Belize City did not know of any programme. When asked to speak of the programmes that they knew which benefited the poor, this is what the participants said:

1<sup>st</sup> participant: *The only program I know is Mercy Kitchen on Pen Road. The children can go there and pay 50¢ to eat.*

2<sup>nd</sup> participant: *No program.*

3<sup>rd</sup> participant: *They have a program to learn to sew, but you have to pay \$5.00 every Monday.*

4<sup>th</sup> participant: *No program to help poorer class of people. I want my people to know you have to get up and get help.*

5<sup>th</sup> participant: *No program.*

6<sup>th</sup> participant: *No women program in area.*

7<sup>th</sup> participant: *I honestly believe that Youth for the Future Program should have started three four years ago so by now they would have been well established in a different culture.*

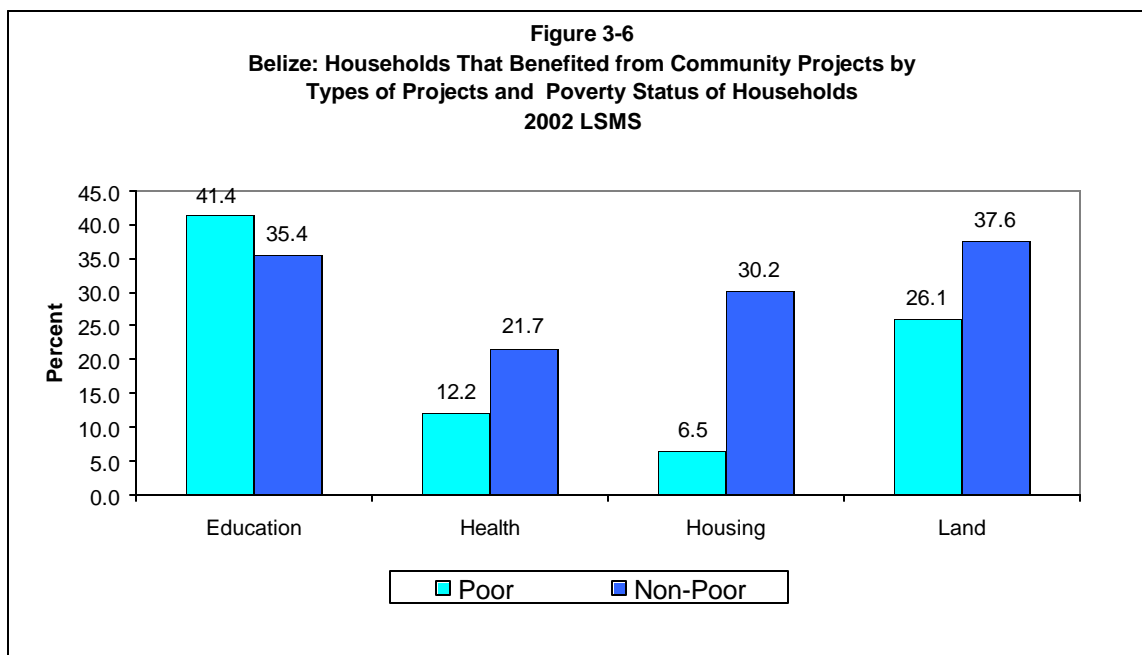
The focus group participants revealed that those who knew “how to access favours” and had more “common sense” were the ones more likely to benefit from projects.

Analysis of the quantitative data showed that households were more likely to know of education and training (33.4%), infrastructure (28.7%) and land (20.8%) projects compared to any other type of projects implemented in the community. Although these three types ranked highest for the poor and non-poor, the rates are lower for the poor (Table 3-6). There is also a noticeable difference between the poor and non-poor especially in respect to housing projects. Only 5.9% of poor households compared to 20.1% of the non-poor were aware of housing projects implemented in their community. This higher knowledge of land projects explains the higher level of access by the non-poor to land projects than the poor. A higher proportion of non-poor compared to the poor was also aware of land projects implemented in the community.

### **3.17. Poverty and Access**

Of all the households that were aware of at least one project implemented in their community, 84% of them said that they had benefited from at least one of the projects. This rate is the same for poor household, while all the non-poor households stated that they had benefited. This implies that the poor were less likely than the non-poor to say that they benefited from community projects.

Poor households were more likely to say that they benefited from education/ training (41.4%), infrastructure (27.3%) and land (26.1%) projects compared to other projects (Figure 3-6). On the other hand, the non-poor households were more likely to say that they had benefited from land (37.6%), education (35.4%) and housing (30.2%) projects (Table 3-7).



A comparison of poor and non-poor households shows that poor households were more likely than the non-poor to say that they benefited from education projects. However, the non-poor was more likely than the poor to say that they benefited from health, housing and land projects (Figure 3-6).

The types of benefits that households received from the projects include, improved quality of service (64.5%), increased community togetherness (30.6%) and getting their own land (25.7%) (Table 3-8). The poor were less likely than the non-poor to benefit from increased employment or to get their own land. Sixteen percent (16%) of the poor compared to 21.5% of non-poor stated that the community projects resulted in increased employment, while 20.7% of the poor compared to 27% of non-poor got their on land.

A closer look at housing projects showed that households that were aware of such projects and said that they benefited from them were more likely to non-poor. Furthermore, the disparity in housing benefits between the poor and non-poor is far more pronounced than the disparity in the benefits from other projects (Figure 3-6). This occurred in spite of government's efforts to provide low-income houses.

One of the interesting points emerging from the focus group discussions was that the State interventions be very sensitive to the pride of the poor. One respondent sought to explain the failure of the Bread and Chocolate project in the following way:

*There was a bread and chocolate project but the women couldn't agree (get along) and that did not come through... Because we are proud, we get offended and don't want others to come in and see our way of life or the food we eat.*

The timing of educational programmes is also important:

*The Ministry of Human Development gives various courses i.e. sewing, cooking, but it is hard for people to attend classes, as they have to take care of the housework and children.*

### **3.18. Social Investment Fund (SIF)**

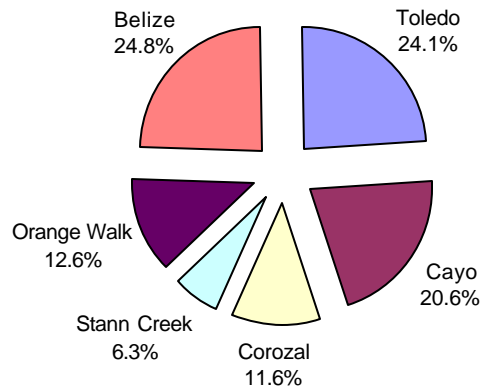
The Social Investment Fund was established in 1996 to 'respond to the basic human needs of the poorest of the poor in Belize'. Its main goal has been to provide community-based sustainable solutions to the social and economic problems of the poor.

Up until 2002, SIF implemented over 200 projects countrywide - amounting to \$23 million. The World Bank (56.8%), GOB (2.9%), the European Union (12.8%) and the United Kingdom Government (9.4%) provided the majority of SIF's funding. In 2003, the World Bank's funding will come to an end; but SIF has already entered into a new arrangement with the Caribbean Development Bank that will provide funding for SIF's projects through the Basic Needs Trust Fund.

According to data from SIF, the majority of SIF's projects were for education, mainly building and rehabilitation of school (40.7%) and water and sanitation (28.7%). Only a small proportion of the funding was directed to health (6.3%), housing (5.2%) and social services (4.9%). Although SIF provided 8.9% of its funds for micro enterprise credit the proportion of funds for organizational strengthening was negligible. These figures imply that most of the funds were used for infrastructural development and very little for direct human development.

This could be one reason for the low level of awareness of the initiatives and its activities that were found by this survey. According to the figures in Table 3-9, 53% of the households that said that they benefited from the community projects, and also said that they were aware of the funding agency for at least one of the projects. However, among those that were aware, only 6% named the Social Investment Fund (SIF) as the funding agency. In the qualitative data, no mention was made of the SIF.

**Figure 3-7**  
**Belize: Distribution of SIF Funds 1996-2002 by District**  
**2003 SIF**



The distribution of SIF's funds by district is based on the 1995 poverty ranking of the districts. Toledo District was ranked as the poorest and therefore most deserving of the funds, followed by Cayo, Corozal, Stann Creek, Orange Walk and Belize. However, the figures indicate that over the six-year period Toledo and Belize districts, the poorest and least poor, received almost equal shares of the funds 24.1% and 24.8%, respectively (Figure 3-7).

Although Toledo received the biggest share of SIF's funds, this was not sufficient to alleviate the poverty situation in that district. Toledo is still ranked as the poorest district with 79% of its population and 67.3% of its households below the poverty line (Table 2-1 & 2-2). Stann Creek District, which ranked fourth received the smallest share, 6.3%. SIF has plans to use the poverty ranking of the district based on the 2002 LSMS to reassess its targeting at the district level.

### **3.19. Summary**

The quantitative data revealed that more than one third of households reported experiencing financial difficulties. The corresponding rates are higher for the poorer districts, Orange Walk, Toledo and Stann Creek. Toledo was the only district where the proportion of households with financial difficulties was lower than the proportion of poor households. The main types of financial difficulties experiences were those related to utility, education, health and food.

When households were faced with financial difficulties, most of them turned to prayers as a coping strategy. Non-poor households were more likely than poor households to pray, while female-heads of households were more likely than male-heads to pray. Heads of households in the poorest quintile were least likely to pray. The poor were more likely than the non-poor to hustle and ask politicians for help.

The qualitative data provided more in-depth information on the coping strategies of the poor. These data showed that the “more hopeless” among the poor were the ones who used the less developmental strategies. The hopeless begged more, over-used their access to credit, borrowed and had no remittances. The ‘managing’ or the ‘better off’ poor did not beg, borrow and saved more.

The development-oriented social risk management strategies used by segments of the poor were “saving”, “using of the back garden” and the pursuit of occupational multiplicity. Poverty reduction strategies could seek to further develop and strengthen these kinds of efforts. What also needs to be harnessed is the high value placed by Belizeans on education. It seems clear that were it more financially accessible, then the poor will invest in education. In addition, given the low awareness of the State-provided social protection programmes, public education and targeting mechanisms need to be improved.

## CHAPTER 4 - HOUSING

### 4.1. Introduction

This chapter describes the housing characteristics of dwelling units occupied by the households selected in the 2002 LSMS. The study therefore excludes all dwelling units that were unoccupied during the time of the survey. It is important to make this distinction since there exists several vacant dwelling units throughout the country, especially in the new housing sites<sup>17</sup>.

The housing characteristics described include dwelling type, tenure of dwelling and land, construction material of outer walls, construction material of roofing, household density and amenities such as toilet and kitchen facilities, cooking fuel, source of drinking water, and lighting. Information is also provided on public health risks related to waste disposal and problems with rats, roaches, and bats. Also, Housing Quality Index (HQI) has been calculated and information is provided on ownership of durable goods. Trends in the housing characteristics are shown using information from the 1995 LSMS and past censuses. The information is disaggregated by region, year, and consumption quintile whenever possible.

### 4.2. Dwelling Type

Undivided private dwellings<sup>18</sup> continued to be the dominant dwelling type in the country: they accounted for 83.3% of households (Table 4-1). The percentage of undivided private dwellings, however, has only increased by 2.2 percentage points since 1991. At the same time, there was a decrease in the number of dwellings that form part of a private house (CSO, 2001a).

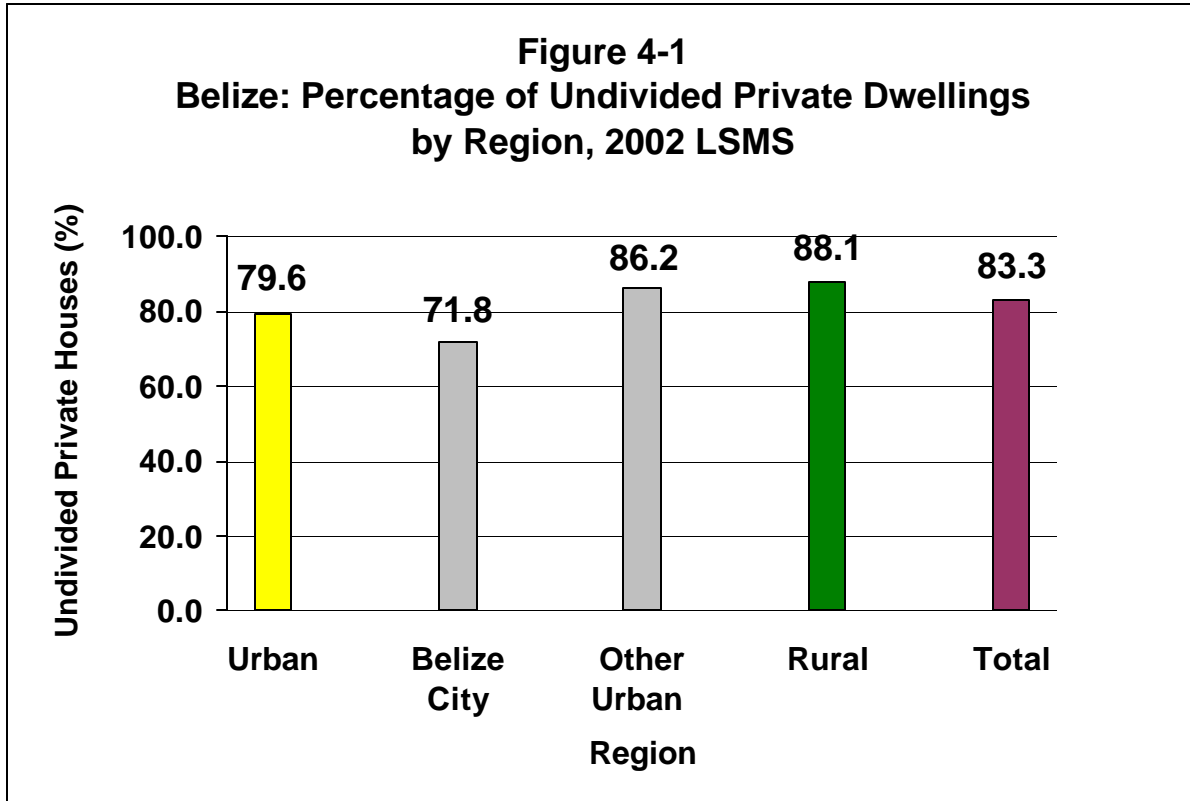
At the regional level, undivided private dwellings were more commonly found in the rural (88.1%) and the 'other' urban areas (86.2%) (Figure 4-1). Belize City, compared to other areas in the country, had dwelling types with unique characteristics (Table 4-2). In Belize City, there were dwelling types, such as double house/duplex<sup>19</sup> (14.0%) and flat/apartment/condominium (7.0%), which were in negligible numbers in the rural and 'other' urban areas. Since Belize City is the most populated urban area in the country and has the highest population density, buildings with multiple dwelling units are expected.

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<sup>17</sup> The Government of Belize has made substantial progress in the construction of new homes with the combined efforts of the Development Finance Corporation and private sector building and financial institutions (Government of Belize, 2002).

<sup>18</sup> This is a single dwelling unit which takes up the complete building; it may be inhabited by one or more households.

<sup>19</sup> This is a dwelling that is joined to only one other dwelling. For this category to apply two separate households must live in the building, one in each dwelling unit.



### 4.3. Tenure of Dwelling and Land

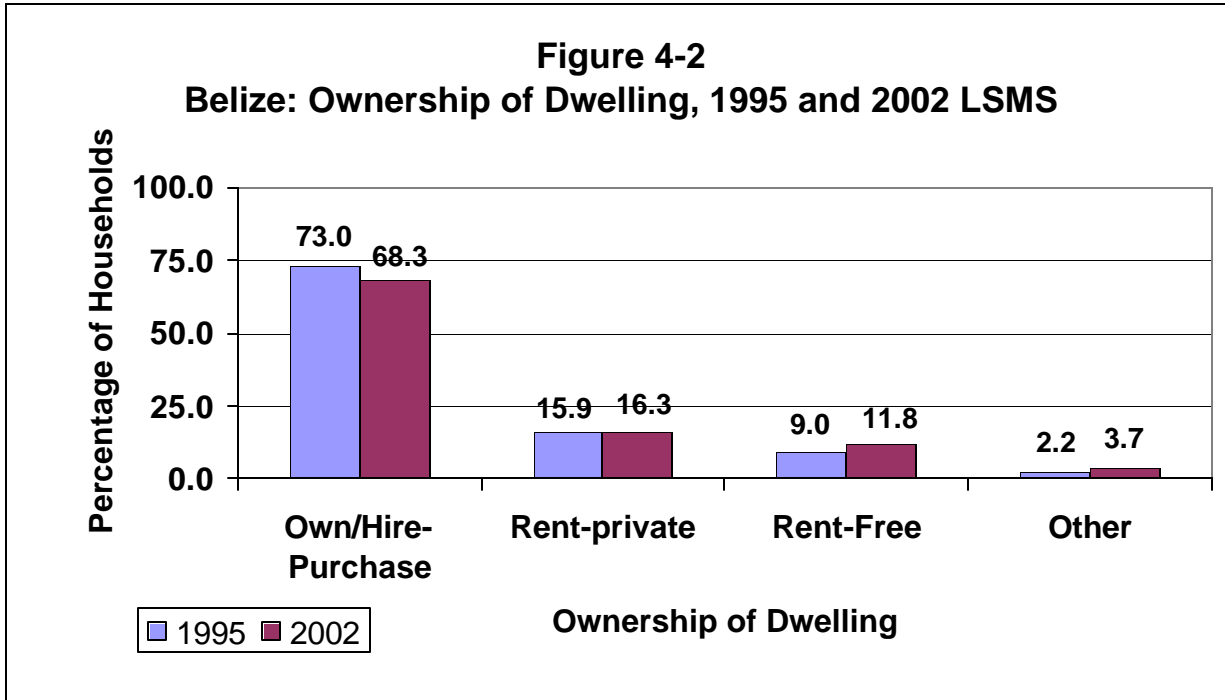
A household's ownership of the dwelling unit and land is very important for financial security and long-term investments. Even so, households who own their dwelling unit and land are sometimes faced with extremely difficult circumstances in life. In these cases, households tend to use their properties or ownership of productive assets to repay debts or to remedy their financial conditions. It is therefore possible for a household to become exposed to poverty that may later become chronic.

In Belize, 68.3% of households owned/hire-purchased<sup>20</sup> their dwelling unit (Table 4-1). In 1991, 65.9% of dwelling units were owned/hire-purchased while in 2000, the corresponding figure was 62.6% (Table 4-1).

The percentage of privately rented dwellings remained almost constant when compared with 1995 (Figure 4-2). The lowest percentage of owned/hire-purchased dwellings is found in Belize City, 58.1% (Table 4.2). Belize City also has the highest percentage of privately rented dwellings (31.6%). The rural areas, however, have the highest percentage of owned/hire-purchased dwellings (72.5%) and the highest percentage of houses rented free (17.5%).

<sup>20</sup> Own/ Hire Purchase is the category which applies when the head or other member of the household owns the dwelling or is making periodic payments in order to own the dwelling sometime in the future.





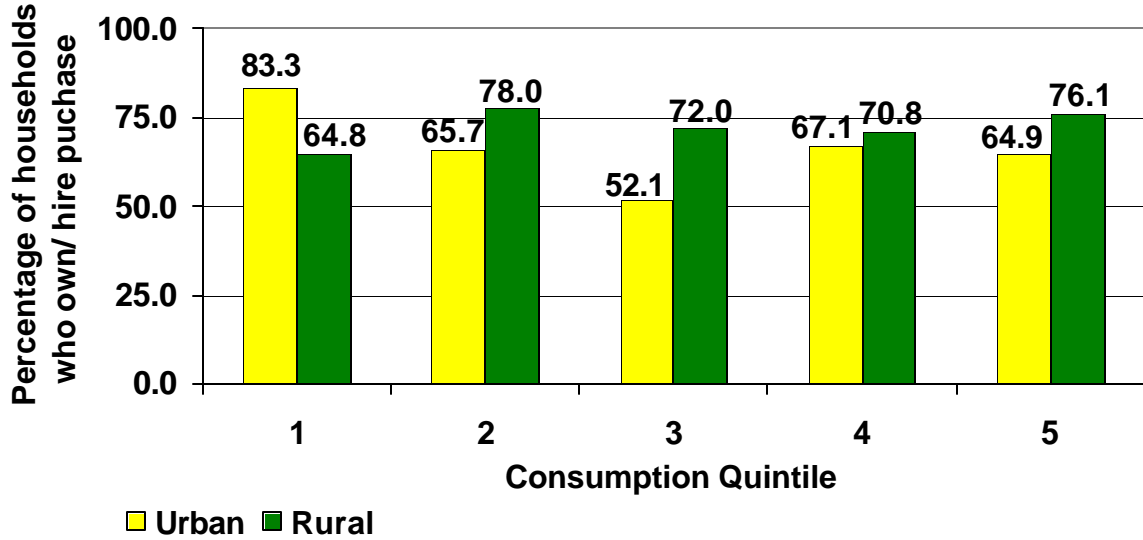
It is interesting to note that, nationally, the likelihood of owning a dwelling does not significantly vary according to quintile status with house ownership ranging from 62 to 73% (Table 4.4). This was also true of households in the rural areas. However, in the urban areas significantly more households in the lowest consumption quintile (83%) owned their house compared with all the other quintiles (Figure 4-3).

Households that neither owned nor hire purchased their dwelling (31.7% of households), were automatically not considered to have any form of ownership of the land (Table 4.1). Four households out of every ten households held their dwellings in freehold tenure<sup>21</sup> and two in leasehold tenure<sup>22</sup>. Compared to 1995, the percentage of freehold lands decreased by 6.3 percentage points while the percentage of leasehold lands increased by 4.9 percentage points (Figure 4-4). The percentage of leasehold land is lowest in Belize City, 14.4% (Table 4-2).

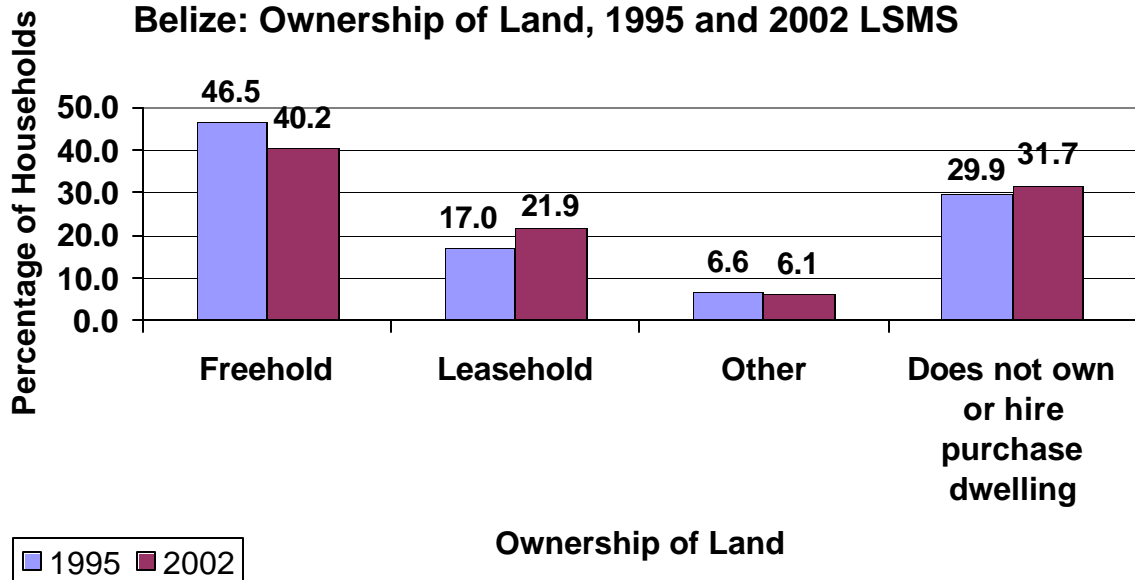
<sup>21</sup> In this type of tenure, some person or persons own the land in perpetuity.

<sup>22</sup> The land is usually owned by the government or some other authority (e.g. a City Council) and is leased for a long time.

**Figure 4-3**  
**Belize: Percentage of Households who Own/ Hire Purchase Dwelling by Quintile and Region, 2002 LSMS**



**Figure 4-4**  
**Belize: Ownership of Land, 1995 and 2002 LSMS**



A closer look at housing projects shows that households that were aware of such projects and said that they had benefited from them were more likely to be non-poor. Furthermore, the disparity in housing benefits between the poor and non-poor is far more pronounced than the disparity in the benefits from other projects (Figure 3-2). This occurred in spite of government's efforts to provide low-income houses. This is not surprising. Although a large number of houses were built and financed between 1995 and 2002 (ref?), nearly half are still vacant and it is felt that the monthly mortgage is too high for many low income households, especially those below the poverty line.

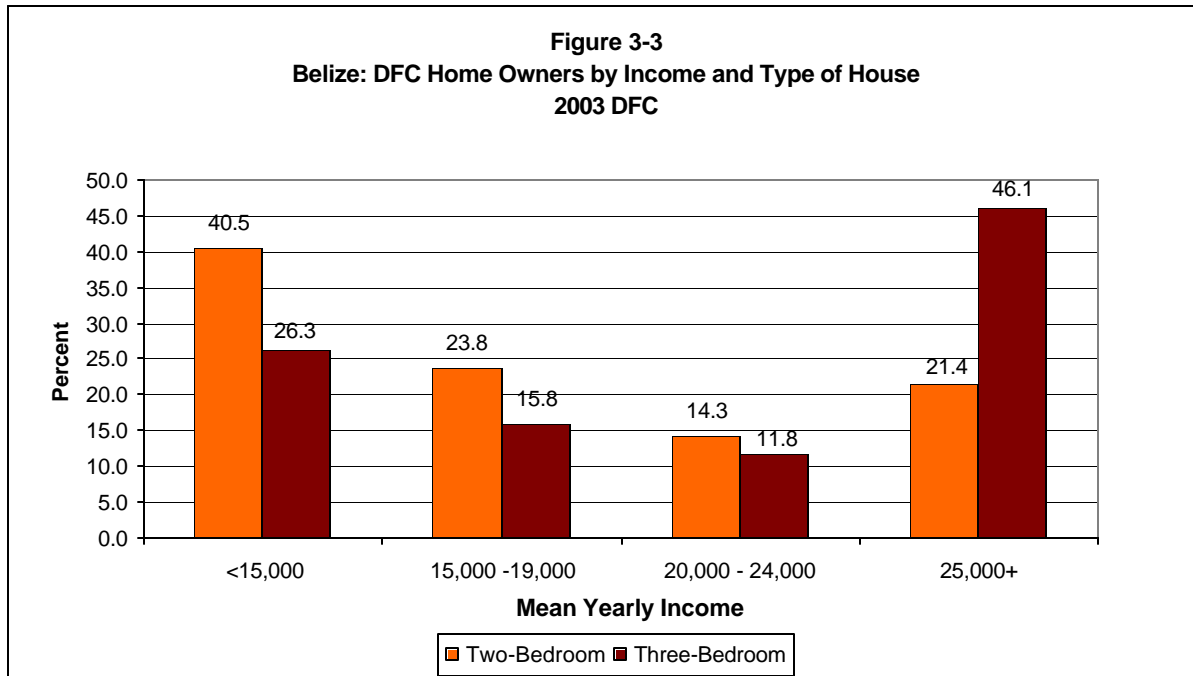
GOB reported in that it has 'led a housing boom of over 8000 new houses' (2002-2003 Budget Speech). Although the government has added to the housing stock, a comparison of the rate of ownership of dwellings between the 1995 and 2002 period shows a decrease from 73% to 68% (Table 4-3). Further comparison of the census data also shows a decrease in ownership from 66% in 1991 to 63% in 2000. The increase in housing stock and a simultaneous decrease in the percentage of ownership suggest that new home ownerships are going to those who already own a house or the houses are remaining vacant.

Information from the Development Finance Corporation (DFC)<sup>23</sup> indicates that between 1995 and 2002 it built and financed approximately 780 houses. So far, 58.2% of the houses have been mortgaged, while the remaining 41.8% are still vacant. The majority of houses (78.6%) are three-bedroom and the remainder two-bedroom ones. The occupancy rate of the three-bedroom houses is higher compared to those with two-bedroom; the figures are 60.6% and 49.1% respectively. Although these houses are considered to be low-income, the average cost of a two-bedroom house is \$39,000 and that of the three-bedroom house - \$60,000. Average monthly mortgages are \$450, and \$715, respectively. These rates are relatively high for the low-income population, and are probably the cause of the high vacancy rate of the two-bedroom houses.

A closer look at the profile of owners indicates that 64.3% of those with two-bedroom house earn less than \$20,000 for the year (Fig. 3-3). This group is exempted from paying income tax since the threshold is at \$20,000. However, one in every three persons who owns a two-bedroom house earns \$20,000 or more per year. This implies that even though their income is above the threshold, it is still insufficient to meet the \$715 monthly mortgage for the three-bedroom house.

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<sup>23</sup> DFC financed several housing projects including Los Lagos, Maxborough and Mahogany Heights in Belize District, and Cohune Walk in Belmopan.



According to the DFC, the majority (57.9%) of those with three-bedroom house earn \$20,000 or more per year. However, there is a sizeable proportion (42.1%) that is earning less than that amount. It should be noted that 29.8% of the three-bedroom houses have joint owners, which probably makes its manageable for them to meet the mortgage payments if both are working. The level of joint owners for two-bedroom houses is lower: 16.7%.

Owners of two-bedroom houses are more likely to be younger than age 35 years (60%), while owners of the three-bedroom houses are more likely to older than 35 years (55.8%). A slightly higher number of women compared to men own two-bedroom houses, while the reverse is so for the three-bedroom houses.

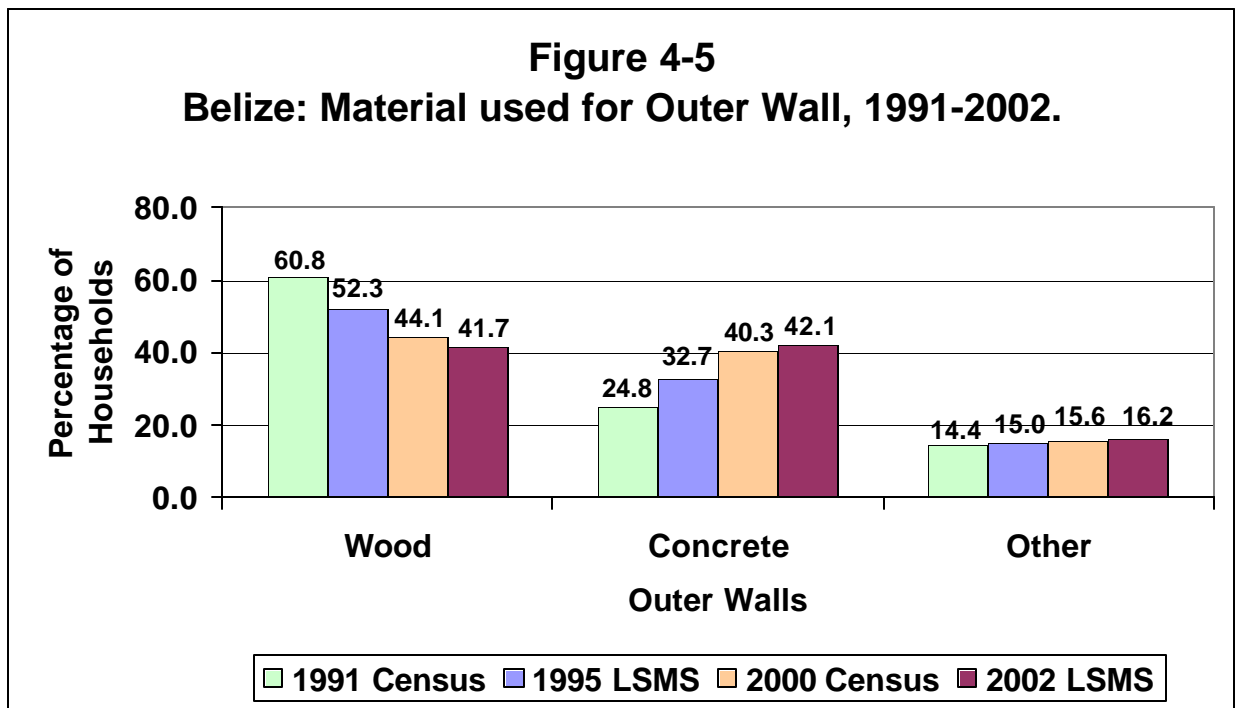
#### **4.4. Construction Material of Outer Walls and Roofing**

Most households throughout the country thought it necessary to have dwellings with strong construction materials that are able to resist strong hurricane winds (Focus Group Discussions, 2003). The capacity of a dwelling unit to resist strong hurricane winds is often measured by the strength of the material used to build the outer walls and roof. Concrete outer walls and roofing of sheet metal (zinc, aluminium), shingle, rubber rye<sup>24</sup> or concrete are usually characteristics of a dwelling with adequate housing structure. A Mayan male expressed his need for better and stronger dwellings by saying, “ *We can still use the thatch houses but with stronger support – concrete post and belt beam*” (Appendix E).

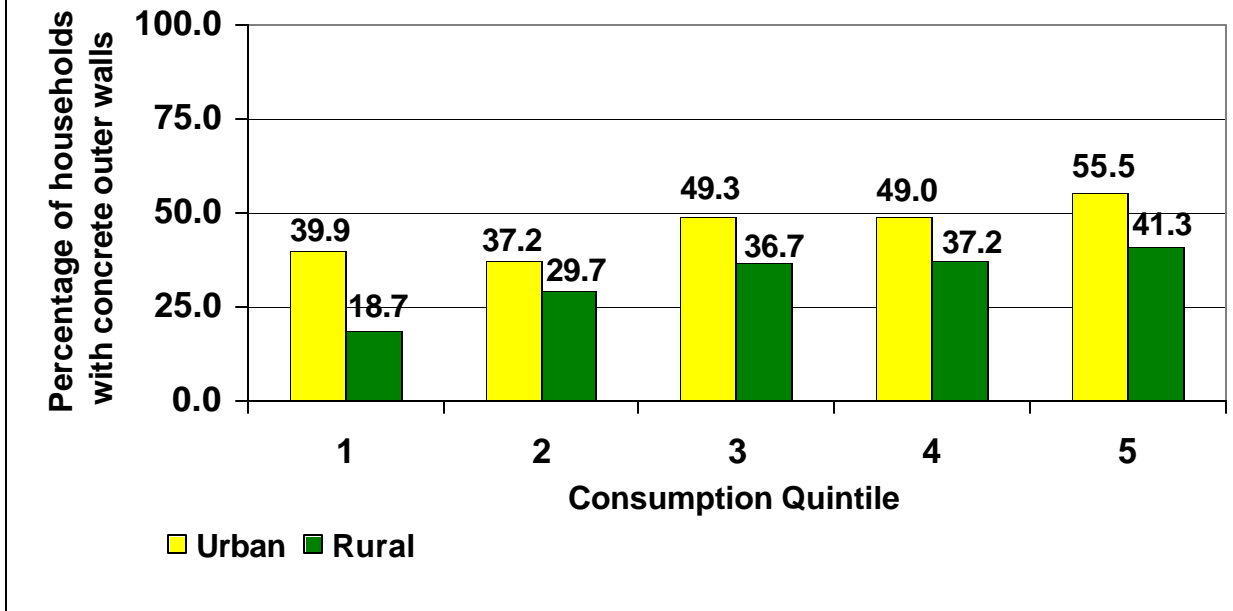
<sup>24</sup> Rubber Rye is coarse black, often corrugated, roof sheeting.

The most common materials used for the outer walls were concrete (42.1%) and wood (41.7%) (Table 4-1). Dwellings with concrete outer walls range from 32.8% in the rural areas to 56.5% in ‘other’ urban areas (Table 4-2). Wooden outer walls are more common in the rural areas (47.8%) and in Belize City (44.1%). It is interesting to note that only Belize City reported a significant number of dwellings with outer walls made of plywood, 7.1% of dwellings. In the rural areas, there were 7.9% of dwellings made of both wood and concrete and 6.1% made of sticks/palmetto.

Concrete outer walls showed a steady increase from 24.8% in 1991 to 42.1% in 2002 (Figure 4-5). This change was accompanied by a constantly decreasing percentage of dwellings with wooden outer walls from 60.8% in 1991 to 41.7% in 2002.



**Figure 4-6**  
**Belize: Households with Concrete Outer Walls on Dwelling**  
**by Quintile and Region, 2002 LSMS**



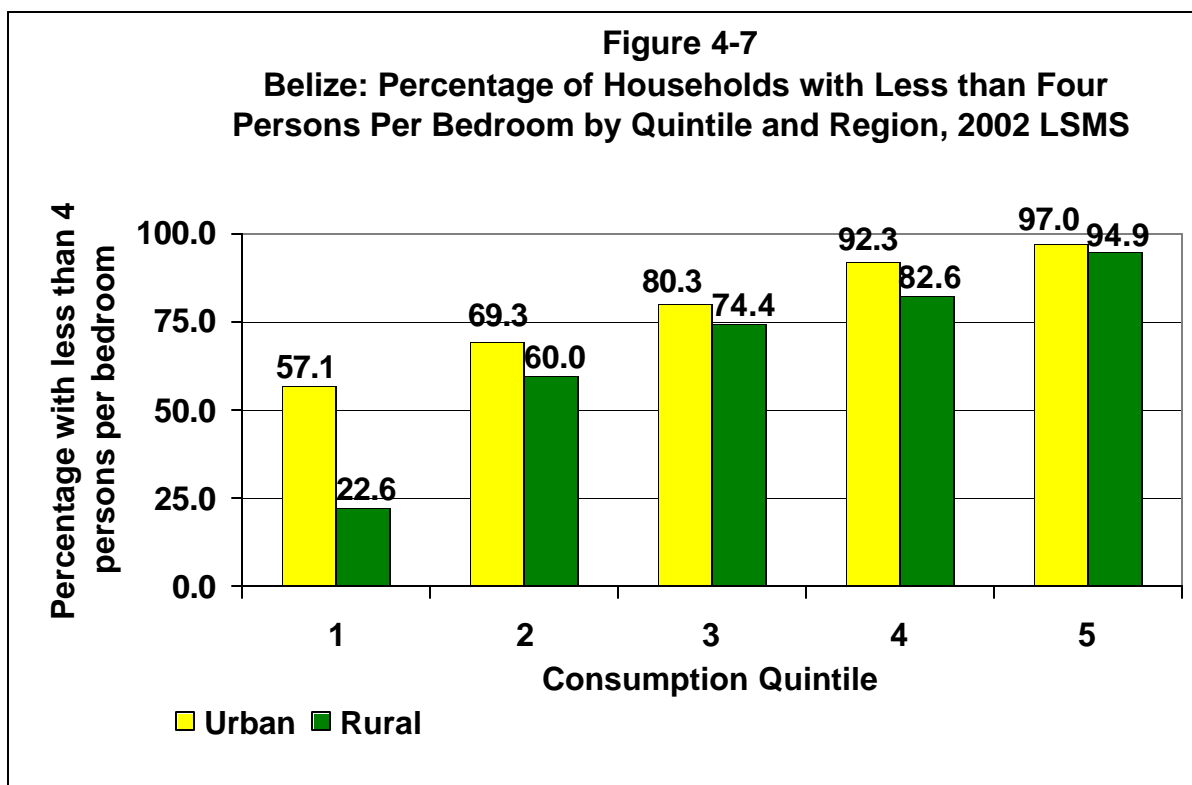
The wealthiest quintile reported the largest percentage of dwellings with concrete outer walls (Table 4-4 and Figure 4-6). This finding is the same in both urban and rural areas. The percentage of concrete dwellings in the urban areas ranged from 37.2% in the second quintile to 55.5% in the fifth quintile (Figure 4-6). In all the consumption quintiles, the urban areas had a higher percentage of concrete walls than the rural areas. The difference in concrete outer walls by region was more noticeable in the first quintile where 18.7% of rural households had concrete outer walls compared to 39.9% of households in the urban areas. Since the material used for construction is particularly important in Belize with its constant exposure to hurricanes, this information is important for the authorities and the emergency services to measure the vulnerability of the buildings in particular parts of the country, specifically dwellings in the poorest consumption quintiles.

Most dwellings, 82.2%, have roofs made of sheet metal. (Table 4-1). Belize City has the highest percentage of sheet metal roofing, 96.6% (Table 4-2). The rural areas have more diverse material for roofing than do the urban areas. The second most common material for roofing in the rural areas is thatch (13.3% of rural dwellings). Inadequate roofing (thatch or asbestos roofs) is found in significant percentages in the poorest quintile in the rural areas (Table 4-6). An alarming 59.5% of poor rural households had inadequate roofing.

#### 4.5. Household Density

The household density, described as the average number of persons per bedroom in a household, is used as an indicator to determine if a household has the level of crowding. Thus, households with bedrooms with more than three persons, are considered in this study to have inadequate bedroom space - a basic unsatisfied need.

As the consumption status increased from poor (quintile one) to non-poor (quintile five), there was a notable decrease in the number of households with inadequate household density: that is, with more than three persons per bedroom (Table 4-3). Sixty six percent of the households in quintile one have an inadequate household density while in quintile five, there was a negligible number (4%) of households with inadequate bedroom space.



The urban households, regardless of quintile level, always had a higher percentage of households with adequate household density (less than four persons per bedroom) than the rural households (Figure 4-7). The difference is more noticeable in the poorest consumption quintile (quintile one). Among the urban poorest households, 57.1% had less than four persons per bedroom. The corresponding figure in the rural poor was 22.6%. Among the wealthiest quintile, the percentage of households with adequate household density in the urban areas is similar to those in the rural areas. Policies regarding household density should focus especially on rural households in the lowest consumption quintile.

## 4.6. Amenities

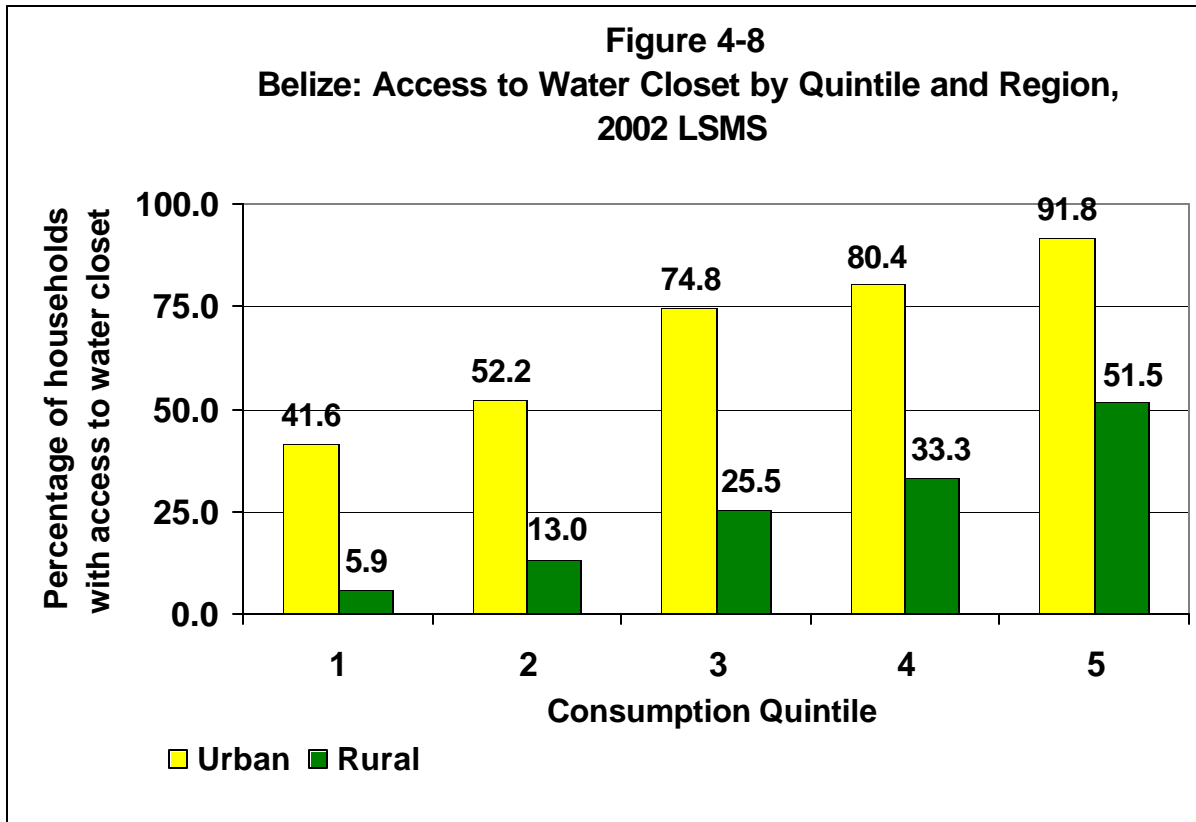
Access to housing amenities such as adequate toilet and kitchen facilities, safe sources of cooking fuel, safe drinking water, and electricity are all useful indicators to measure the availability of services that the households are receiving. The indicators are also useful to assess the distribution of these basic services in an effort to ensure that most households are enjoying the facilities necessary to provide a healthy standard of living.

### 4.6.1. Toilet Facilities

The main types of toilet facilities used were water closets (54.8% of households) and pit latrines (39.7% of households). Since 1991, there has been a constant increase in the use of water closet and as a consequence, a decrease in the use of pit latrines (Table 4-1). In 1991, 34.8% of dwellings had a water closet compared to 54.8% in 2002. Although this trend is favourable for the households, it is important to highlight that 3.5% of dwellings do not have any type of toilet facility. Also 10.0% of households reported sharing their toilet facility with another person not of the household.

Marked differences of types of toilet facilities occurred between urban and rural areas (Table 4-2). While Belize City had 93.4% of its households with water closet, the rural areas only had 26.1% of households with this facility. Pit latrine remained, by a large margin, the most common toilet facility in the rural areas: 65.2% of rural households. 'Other' urban areas had a corresponding figure of 34.9%. In general, access to a water closet was enjoyed primarily in Belize City while the rest of the country was faced with other alternative types of toilet facilities such as the pit latrine. It is also important to note that the sharing of a toilet facility with another household was much more common in the rural areas (14.1% of rural households) than the urban. In Belize City, for example, there was a negligible amount of households that shared their toilet facility.





The presence of a water closet was negligible in the poorest quintile in both urban and rural areas (Table 4-7 and 4-8). Access to a water closet in both urban and rural areas steadily increases as the quintile level increased from the poorest to the wealthiest (Figure 4-8). The gap between the percentage of households with access to a water closet in the urban areas compared to the percentage with access in the rural areas remained very large regardless of quintile level. In the poorest quintile, for example, only 5.9% of households in the rural areas have access to water closet, compared to 41.6% in the urban areas.

#### 4.6.2. Kitchen Facilities

Most kitchen facilities were indoor (87.0%) and were not shared with another household (95.9%) (Table 4-1). Since 1991 there has been a gradual shift from outdoor kitchens to more indoor kitchens. Rural households have the highest percentage of outdoor kitchens, 20.2% (Table 4-2). The presence of outdoor kitchens was negligible in Belize City.

#### 4.6.3. Cooking Fuel

Butane gas was the most popular source of cooking fuel in 81.2% of households (Table 4-1). The other common source of cooking fuel used was wood: 15.0% of households. Wood, however, continued to be used by a large number of households in the rural areas, 28.6% of households (Table 4-2).

#### 4.6.4. Source of Drinking-Water

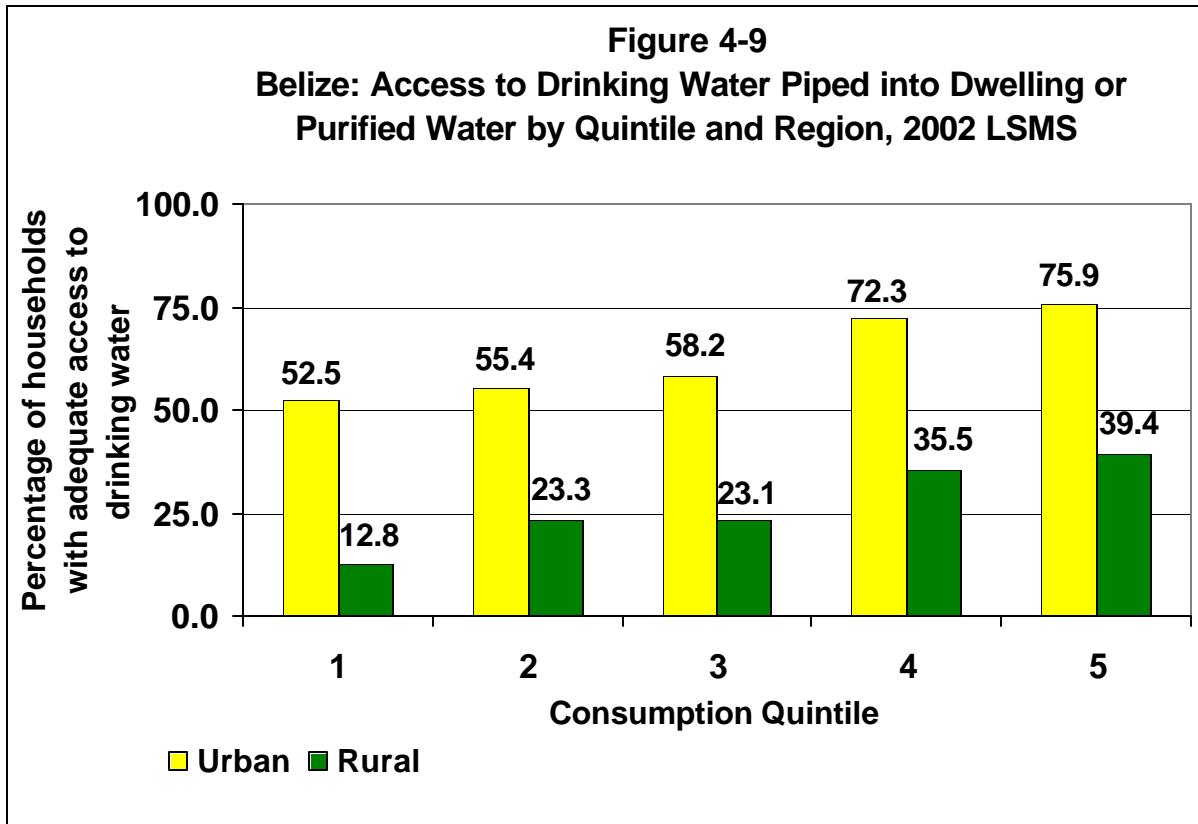
The source of drinking water can sometimes be used as one indicator of whether or not the household has access to safe drinking water. No information was collected on the water treatment methods used at the household level. For the purposes of this study, water piped into dwelling (public or private), and purified water were considered as the only safe sources of drinking water.

Most common sources of drinking water included private vat/drum/well that were not piped (29.5%), water piped into dwelling (25.5%) and purified water (24.3%) (Table 4-1). The number of households using purified water is increasing. Nonetheless, there are still a few households (2.6%, although less than previous years) who are drinking water from river/stream/creek/pond/spring.

Belize City had the highest percentage of households drinking water piped into dwelling (36.8%), and using purified water (36.8%) (Table 4-2). “Other” urban areas also have high percentages of these sources of drinking water. The need for safe drinking water is evident in the rural areas, where 40.8% of the households are drinking water from a private vat/drum/well that is not piped, and 5.7% are drinking water from the river, stream, creek, pond, or spring.

Although Belize City has the highest percentage of households with adequate sources of drinking water, there were specific areas such as Collet and Port Loyola Divisions, which reported having serious problems with access to drinking water piped into dwelling (Focus Group Discussions, 2003). In these areas, persons voiced their need for water piped into their dwelling. A concerned person living in the area stated (Focus Group Discussions, 2003), “*I have to wake up as early as 4:00 a.m. to get there (public pipe) before the crowd.*” The need for potable water was a concern raised by most districts in the country (Appendix E).

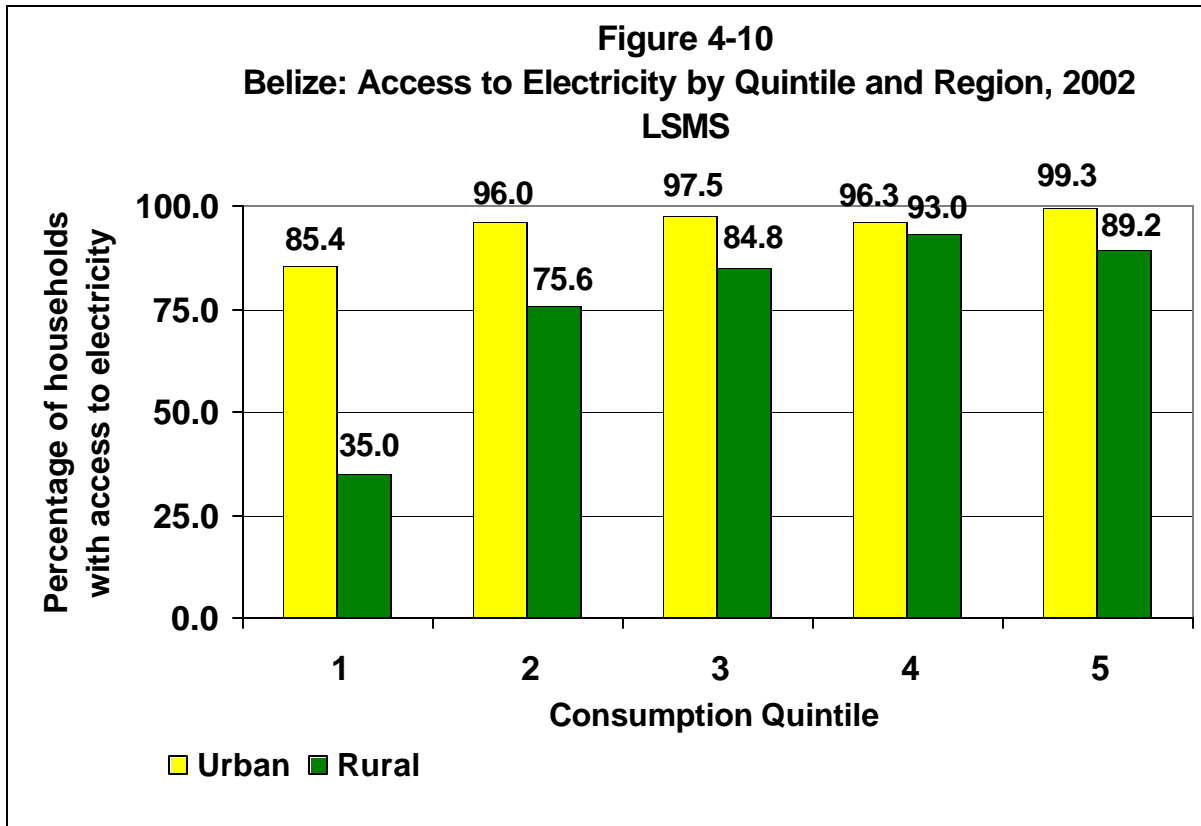
Urban areas were in better conditions than the rural areas concerning access to water piped into dwelling or purified water (Table 4-9 and Figure 4-9). In all the consumption quintiles, the rural areas had fewer households with access to purified water, or to water piped into the dwelling. As the consumption quintile changes from poorest to wealthiest levels, the percentage of households with access to water piped into dwelling, or to purified water increased. It is important to note that only 12.8% of households in the poorest quintile in the rural areas have access to water piped into dwelling or to purified water.



#### 4.6.5. Lighting

Although electricity from the Belize Electricity Limited (BEL) has been increasing its coverage since 1991 (Table 4-1), and is the main source of artificial lighting for 95.4% of urban households (Table 4-2), there is still much more work to be done in supplying electricity – and especially to the rural areas. Only 65.0% of rural households have access to electricity from BEL. The electrical coverage in the rural areas in 2002 was similar the country coverage in 1995 (Table 4-1 and 4-2). Other sources of lighting used in the rural areas include kerosene lamp (19.7%) and electricity from private generator (4.5%) (Table 4-2).

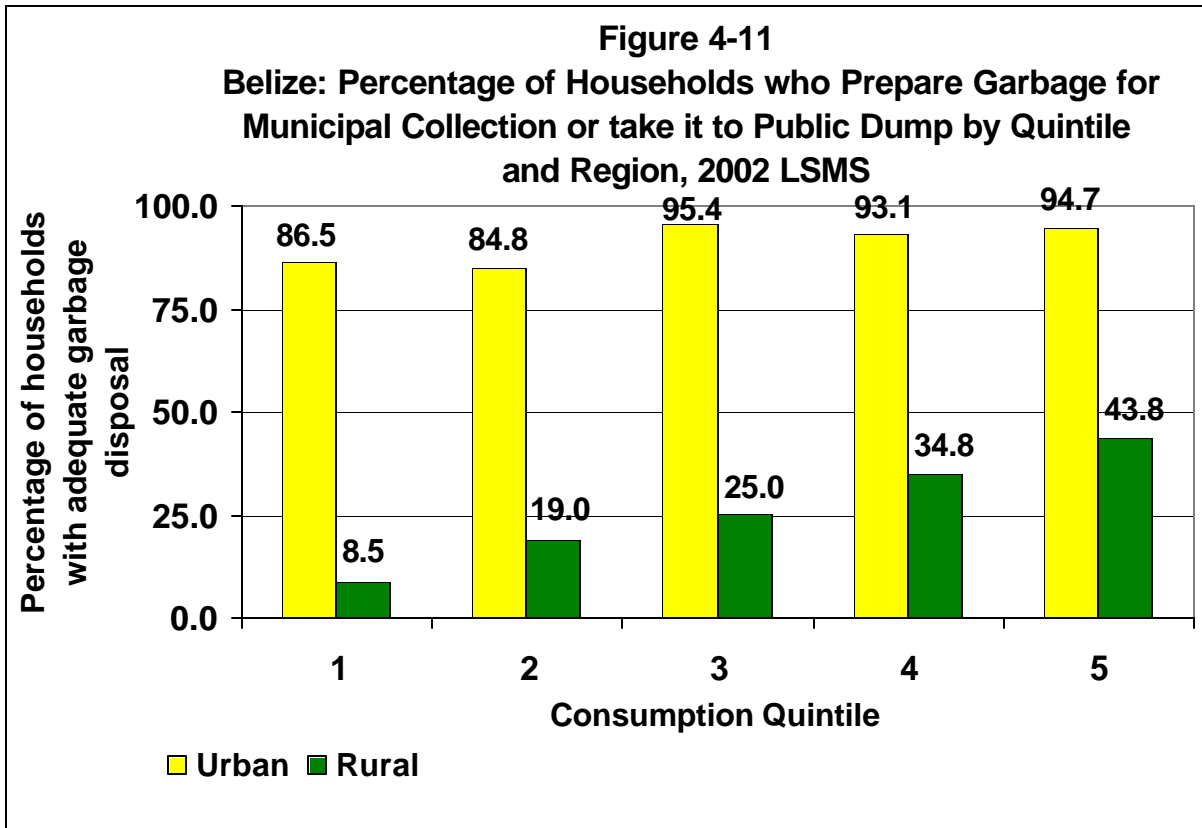
For the country as a whole, most households (87%) reported access to electricity. However, there is a significant rural/urban difference: in the urban areas a mere 3% reported no access to electricity – whereas in the rural areas this figure was 24%. (Table 4-10). At the same time, there is a very wide variation in access according to quintile status: almost one-half (48%) of those in the poorest quintile reported no access; the comparative proportion in the richest quintile is 4%. Regardless of geographical location (i.e. rural *versus* urban) this quintile gap is wide: in the rural areas, the difference is 65% *versus* 11%; in the urban areas it is 15% *versus* 1%. The need for electricity is then most urgent for households in the poorest quintile in the rural areas (Table 4-10).



#### **4.7. Public Health Risks: waste disposal, problems with rats/roaches/bats**

Proper disposal of waste can assist in reducing public health risks for a household. Preparing the garbage for municipal collection or taking it to a public dump, whenever there is no municipal collection available, can both be considered adequate forms of garbage disposal. The most common forms of waste disposal are preparing waste for municipal collection (54.0%) and burning (26.2%) (Table 4-1). In the urban areas, the most common form of waste disposal for 90.1% of households is through municipal collection (Table 4-2). In the rural areas, where municipal collection is minimal, households are more likely to burn their garbage (53.1%), take it to a public dump (17.7%) or dump it in their own yard (14.4%). Burning the garbage can have very serious health effects, such as respiratory infections.

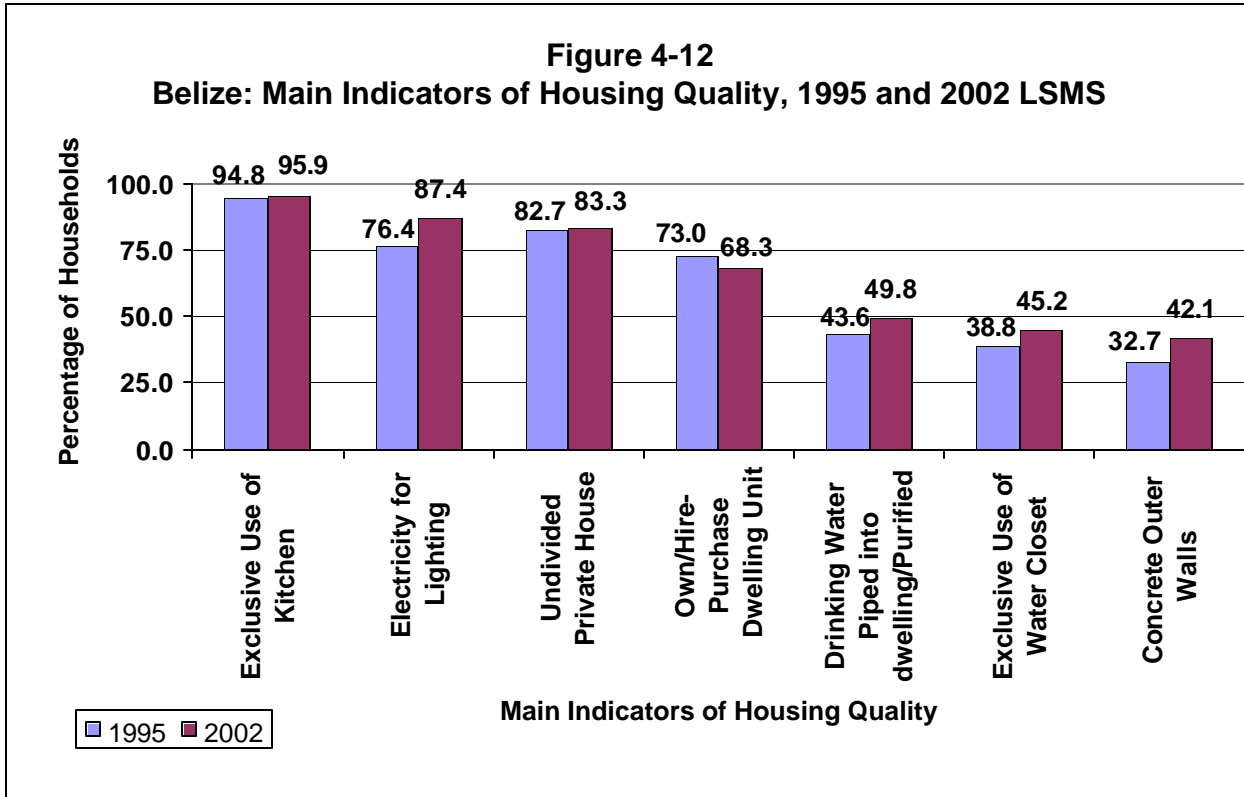
It is thus evident that inadequate garbage disposal is a major concern in the rural areas (Table 4-11 and Figure 4-11). In the rural areas, the percentage of households with adequate garbage disposal increases as the quintile consumption increases (Figure 4-11). However, the percentage of households with adequate garbage disposal in the rural areas remains very low (less than 44.0%) in all the quintiles. The poorest quintile in the rural areas, for example, only has 8.5% of its households with adequate garbage disposal.



Another issue of public health concern has to do with possible problems with animals and insects that are carriers and/or transmitters of diseases such as rats, roaches or bats. A significant number of households (41.1%) stated that they are facing problems with rats, roaches and bats (Table 4-2). Households in the rural areas (44.5%) and Belize City (43.8%) reported the highest problem with these animals and insects.

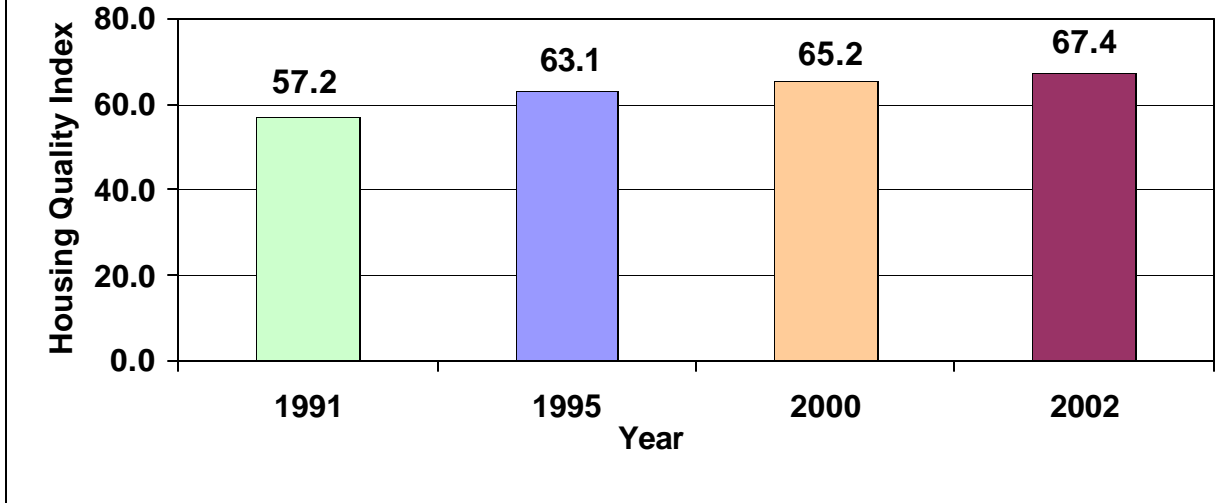
#### **4.8. Housing Quality Index (HQI)**

The HQI (see Appendix A), defined as the mean of the individual scores of selected summary data, provides a reasonable indicator of the changes in the quality of the housing stock (Table 4-12). Significant improvements in the housing conditions since 1991 is reflected by the increased use of the following: dwellings with concrete outer walls, exclusive use of water closet, access to drinking water piped into dwelling or the use of purified water, and access to electricity for lighting (Table 4-12 and Figure 4-12). The biggest increase was recorded in access to electricity and the use of dwellings with concrete outer walls. Indicators such as ‘living in an undivided private house’ and ‘exclusive use of kitchen’ remained stagnant over time. It is noteworthy that the only indicator of housing quality that showed an overall decrease was ‘ownership of the dwelling unit’.



In general, the HQI increased by 10.2 percentage points during the period 1991 to 2002 (Table 4-12). Although the HQI is increasing over time, the rate of increase has been gradually declining over the most recent years (Figure 4-13). In the period 1991 to 1995, there was a 5.9 percentage points increase in the HQI compared to only a 2.1 percentage points increase between 1995 and 2000.

**Figure 4-13**  
**Belize: Housing Quality Index, 1991-2002.**  
**Source: 1991 and 2000 Census, 1995 and 2002 LSMS**



The highest increase in the HQI between the periods 2000 to 2002 occurred in Belize City (3.4 percentage points increase) while the lowest increase occurred in the rural areas (1.6 percentage points) (Table 4-13). If this trend continues, and the rural areas continue to have the greatest housing problems and the slowest improvements to alleviate their poor housing conditions, this could also mean that the gap between rural and urban areas as indicated by the housing quality index is likely to increase over time.

Specific areas of high concern in the rural areas include the need for water closets, the need for drinking water piped into dwelling or purified water, the need for stronger outer walls for the dwelling units, and the need for more electrical coverage (Table 4-13). Belize City had the following areas of highest concern: few dwellings with concrete outer walls and a low percentage of dwelling units being owned by the household. ‘Other’ urban areas had the following indicators with the lowest percentages: dwellings with concrete outer walls, dwellings with exclusive use of water closet, and access to drinking water piped into dwelling or to purified water.

The number of bedrooms in a household can also be considered as an indication of the housing quality. About 4.9% of households do not have a bedroom (Table 4-1). Households without bedrooms can be found mostly in the rural areas: 9.4% of households in the rural areas may be so described (Table 4-2). Significant changes in the number of bedrooms in a dwelling unit were particularly noted in households with one bedroom: since 1991 there has been a 11.2 percentage points decrease. Since 1991 as well, there has been a 2.6 percentage points increase (Table 4-1) of households with four or more bedrooms. In general, the average number of bedrooms in a dwelling unit in the rural areas is lower than that in the urban areas: 2.0 bedrooms in the rural versus 2.4 bedrooms in the urban areas.

#### **4.9. Ownership of Durable Goods**

Most people consider stoves and radios as “must have” household appliances (Focus Group Discussions, 2003). These items were the most common items in a household (Table 4-14). Over 81.2 percent of households owned these appliances. Stoves and radios were present in 85.4% and 81.3% of households, respectively. However, 75.8% of households in the rural areas had stoves (Table 4-15).

The most common means of transportation for a household were bicycles (61.5% of households) (Table 4-14). Only 32.0% of households owned cars or other vehicles. Cars and motor vehicles were generally not considered vital for many households (Focus Group Discussions, 2003).

It is interesting to note that computers were only present in 12.3% of households (Table 4-14). Households with at least a computer ranged from 21.7% of households in Belize City to 5.2% of households in the rural areas (Table 4-15). Moreover, computers were primarily present in households belonging to the wealthiest quintiles, quintiles four and five (Table 4-16).

With the exception of bicycles and sewing machines, all other durable goods are least likely to be found in a rural household and most likely to be present in a Belize City household (Table 4-15). As the consumption quintile increases from poorest to wealthiest, the likelihood of owning a durable good increases (Table 4-16). This statement is true for all durable goods except for bicycles.

#### **4.10. Conclusion**

There were significant improvements in the housing conditions between 1995 and 2002. In spite of this, the survey continues to reflect several areas of great concern. There was a decreasing trend in the percentage of owned/hire purchased dwelling units, with only 68.3% of households owning hire/purchasing their dwelling. Despite the increasing access to better housing conditions, less than half of the dwelling units have access to: drinking water piped into dwelling or purified water, exclusive use of water closet, and dwellings with concrete outer walls.

In 2002, there were marked differences by region and consumption status. The poorest quintile in the rural areas tended to have the most inadequate housing characteristics. Urban areas, nonetheless, also had ‘pockets’ of dwellings with poor housing conditions, especially in their poorest consumption quintiles. Belize City, for example, had 7.1% of dwelling units with outer walls made of plywood.

Although the HQI is increasing over time, in recent years the rate of increase has been gradually declining. Moreover, the highest increase in the HQI between the periods 2000 to 2002 occurred in Belize City while the lowest increase occurred in the rural areas. If this trend continues, the urban: rural gap will increase; the rural areas will continue to have the greatest housing problems and the slowest improvements to alleviate their poor housing conditions.



In terms of ownership of durable goods, it is interesting to note that 12.3% of the population owned computers with a concentration of ownership in Belize City and the wealthiest quintiles, quintiles four and five. In the rural areas, only 5.2% of households have at least one computer. Durable goods, with the exception of bicycles and sewing machines, are least likely to be found in rural households and most likely to be present in Belize City households.

## **CHAPTER 5- EDUCATION**

### **5.1. Introduction**

This chapter examines the extent to which Belizeans are participating in education services, analyses factors that impact on such participation, and looks at achievement levels as a result of participating in Education. The main findings including comparisons with the first Poverty Assessment Study of 1995 and data from the Statistical Digest of the Ministry of Education, Youth and Sports (MOEYS), 2002, are presented along with some conclusions.

### **5.2. Enrolment**

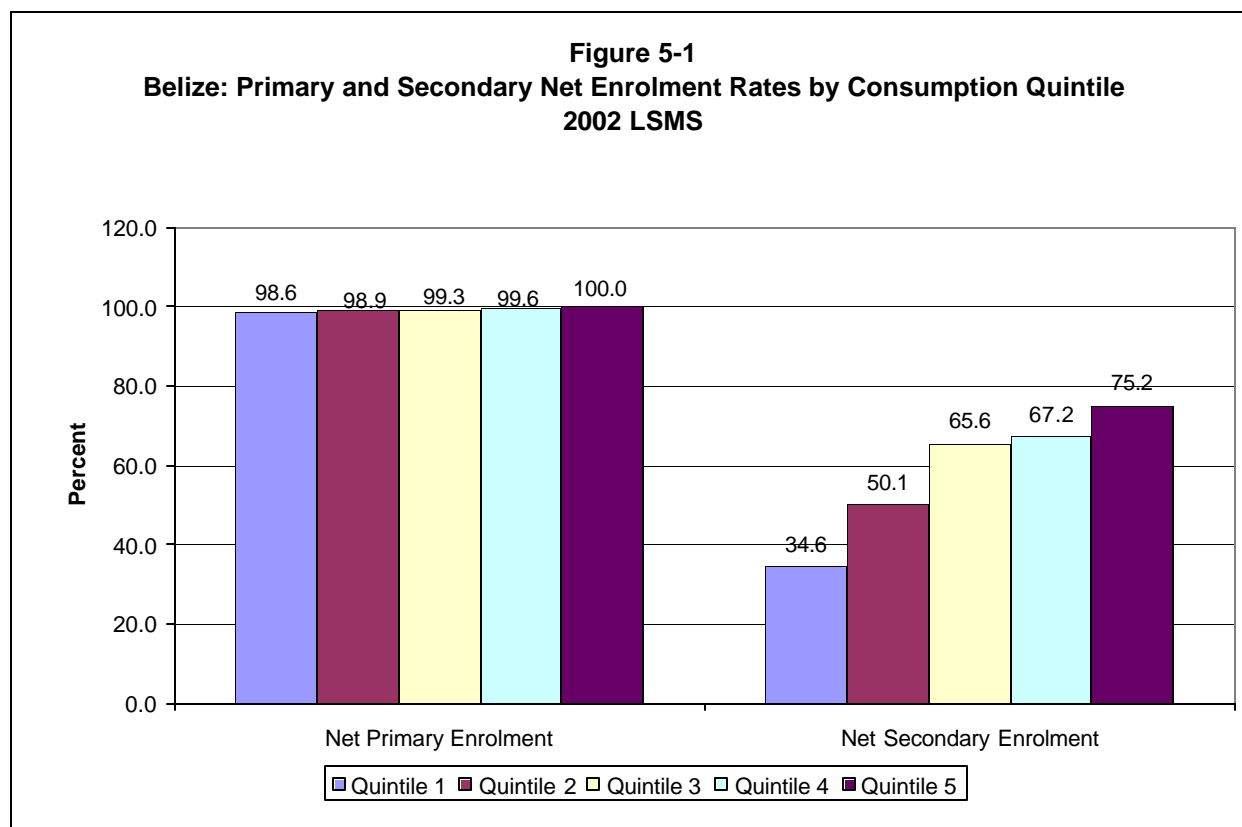
The distribution of persons enrolled in school indicates that 75% were at primary level, 18.6% at secondary and 5.8% at tertiary. This distribution is different compared to 1995 when 82.2% were at primary, 13.7% at secondary and 2.5% at tertiary (Table 5-1). Belize District (22.7%) had the highest proportion at secondary school and Toledo District (10.7%) the lowest. It should be noted that Belize District has the highest proportion of secondary school aged children and more access to secondary schools. This district alone accounts for 17 of the 36 secondary schools countrywide, while Toledo district has only two (MOEYS, 2001). Most of the tertiary level institutions are also located in Belize District. Therefore, movements from other districts to Belize District for education purposes was commonplace up until the 1990s when tertiary level institutions were established in the other districts.

In the rural areas, the proportion of enrolment in secondary school was only 12.8% compared to 23.7% in urban areas. Access to secondary schools in rural areas is limited compared to urban areas. Three of every four secondary schools are located in urban areas (MOS, 2002), even though the urban/rural distribution of the population is similar (CSO, 2000). Many children from rural areas commute to secondary schools in urban areas. Therefore, it is suspected that a sizeable proportion of the 12.8% of enrolment for rural areas attended secondary schools in urban areas.

Examined by Consumption Quintile, the data showed, expectedly, a positive relationship with education level. As consumption status improved, the proportion at the secondary and tertiary levels increased as seen in Table 5-1. Ninety per cent (90%) of the poorest were enrolled at the primary level, while the enrolment of the wealthiest group was 56.6%. In terms of secondary level enrolment, 8.9% of the poorest, compared to 29.9 per cent of the wealthiest, were enrolled. At the tertiary level, while less than 1.0% of the poorest was enrolled (0.4%), a substantial 13.2% of the wealthiest group were enrolled. The distribution by sex was similar.

The level of participation in the education system is more clearly understood when the age and level of schooling of the students are taken into consideration. This is best expressed as the gross and net enrolment rates. These rates were estimated for primary and secondary levels and

presented in Table 5-2. The primary school gross enrolment rate<sup>25</sup> was 112.6% in 2002, while primary school net enrolment rate<sup>26</sup> was 99.2%. These rates are similar compared to the 1995 LSMS and MOEYS' 2001-2002 figures. At the secondary level, gross enrolment<sup>27</sup> was 80.4% and net enrolment<sup>28</sup> was 60.4%. The 1995 net enrolment was higher (66.8%), while the gross enrolment was lower (46.2%). Both the gross and net figures for 2002 were higher than the 2001-2002 MOEYS' figures, 45% and 60.6%, respectively.



There is no difference in primary net enrolment by Consumption Quintile. However, secondary school net enrolment increased as the consumption status improved (Fig. 5-1). Nine of every twelve persons aged 13 to 16 years in Quintile Five were enrolled in secondary school compared to four of every twelve in Quintile One. There was little difference between Quintiles Three and Four. These figures imply that education for all at the primary level is universal despite the economic status. However, this is not the case at the secondary level where, the access to education is influenced by economic status. The Focus Group Discussions (FGD) clearly

<sup>25</sup> The number of children enrolled in primary schools expressed as a percentage of all children 5 to 12 years.

<sup>26</sup> The number of children 5 to 12 years enrolled in primary schools expressed as a percentage of all children 5 to 12 years.

<sup>27</sup> The number of children enrolled in secondary schools expressed as a percentage of all children 13 to 16 years.

<sup>28</sup> The number of children 13 to 16 years enrolled in secondary schools expressed as a percentage of all children 13 to 16 years.

showed, however, that parents placed much importance on having an education and skill as expensive as it might be. In addition they recognised that one of the main causes of poverty is poor education and lack of a skill.

At the primary level, Belize District had the highest net (100%) and gross enrolment (112.7%) rates. In the other districts, primary net enrolment ranged from 97.3% in Toledo to 99.5% in Orange Walk and Cayo. Primary gross enrolment was above 100% in all the districts. As expected, Belize District had the highest net enrolment rate at the secondary level.

These figures reflect enrolment in academic institutions, largely. However, the need for more vocational and technical training was highlighted by comments of certain ethnic groups in the focus group discussions. In general it was felt that the education system is oriented towards academics and de-emphasizes production, skills-training and farming. The Garifina claimed that education was not geared toward farm projects, while the Mayas felt that training in new craft areas was necessary along with improvements in the quality of craft items.

### **5.3. Attendance**

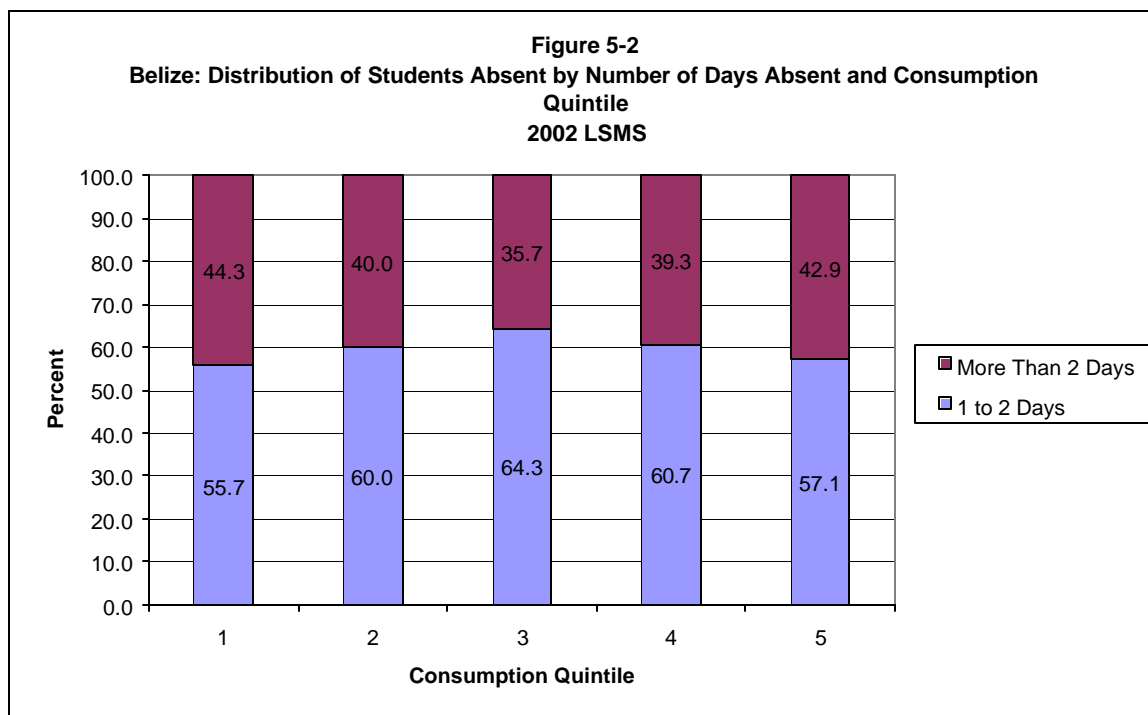
While school enrolment is important to the acquisition of knowledge, attendance is even more critical to performance. This is an important factor in a child's rate of learning. An analysis of the rate of attendance and/or absenteeism at school can reveal inhibiting or enhancing factors. It is to be noted, however, that the data reported here are based on households' responses and not on school records. In effect, therefore, the data really reflect the effort of households to send children to school. These data will be used here as a proxy for school attendance rates.

One in every five students (19.6%) was absent for at least one day during the four-week reference period (Table 5-3). This rate was higher for Corozal (29.5%), Stann Creek (28%) and Cayo (25.6%) districts and lower for Belize (17.1%), Toledo (14.8%) and Orange Walk (7.45) districts. Those in urban areas (22%) were more likely to have been absent compared to those in rural areas (16.7%), while the Mayas were least likely to be absent from classes compared to the other ethnic groups.

When students are absent from school they miss new lessons, homework, tests or exams that they might have to do when they return to school. Therefore, the length of time away from school could also affect their performance. Among those that were absent 60% were absent one or two days, 27.3% were absent for three to five days and 13.2% were absent for more than five days (Table 5-4). It should be noted that the total number of days absent could have occurred at different times during the four-week reference period.

Although Toledo District had one of the lowest levels of absenteeism, this district was most likely to have students absent for more than five days from school. Approximately, one in every five students that was absent in Toledo District missed school for more than five days. There was not much difference in the level of absenteeism between urban and rural students.

Students in Consumption Quintiles One (44.3%) and Five (42.9%) were more likely to be absent for more than two days, while those in Quintile Three were least likely (35.7%), (Fig. 5-2). There was no difference in the distribution for Quintiles Two and Four.



Females (44%) were more likely to be absent for more than two days compared to males (36.4%), and primary school students (43.1%) were more likely than those in secondary schools (27.1%) to be absent from school for more than two day.

When asked about the reason for absence from school, three of every five students stated that the absence was due to their own illness. The majority of those that were ill (53.2%) were absent from school for less than three days, 30.5% were absent for three to five days and 16.2% were absent for six or more days. Some of the other reasons given for absence from school included rain (6.8%), money problems (3.8%) home duties (3.3%), working (3%), and truancy (2.9%).

Although the rate of truancy is small, it is suspected that many students would not admit this as a reason for missing school. Therefore, the rate could be even higher. The Ministry of Education has taken conscious efforts to reduce the rate of truancy and has implemented a program to get children off the streets and into school. Additional personnel were hired to address this issue.

#### **5.4. Transportation**

Both enrolment and attendance can be affected by the means that students use to get to school. According the Education Act of 1991 (MOEYS Handbook of Policies and Procedures) two miles is the allowable walking distance for students eight years or less and three miles for students

eight years and older. As a result, schools are generally located within these mile radiuses from residential areas or villages. On average, students travelled some 2.2 miles from their homes/residences to school (Table 5-6). Those travelling distances in excess of the mean distance were students from the wealthiest Consumption Quintiles, those from the rural areas and those attending secondary and tertiary level institutions, the latter being located mainly in the urban centre.

By and large, households select the secondary level school that is perceived to be the best, and in many instances this means having to travel long distances. The general findings indicate the relationship between consumption status and access to higher levels of education and the fact that to a large extent, ethnic composition indicates consumption status and geographical location and therefore access to higher level of education.

Analysis of mode of transportation showed walking to be the overwhelming choice with 62.1% of students walking to school. This was followed by 11.7% using school bus, 10.3% private vehicle, 8.3% relying on public transportation and 3.4% using some 'other' means (Table 5-6).

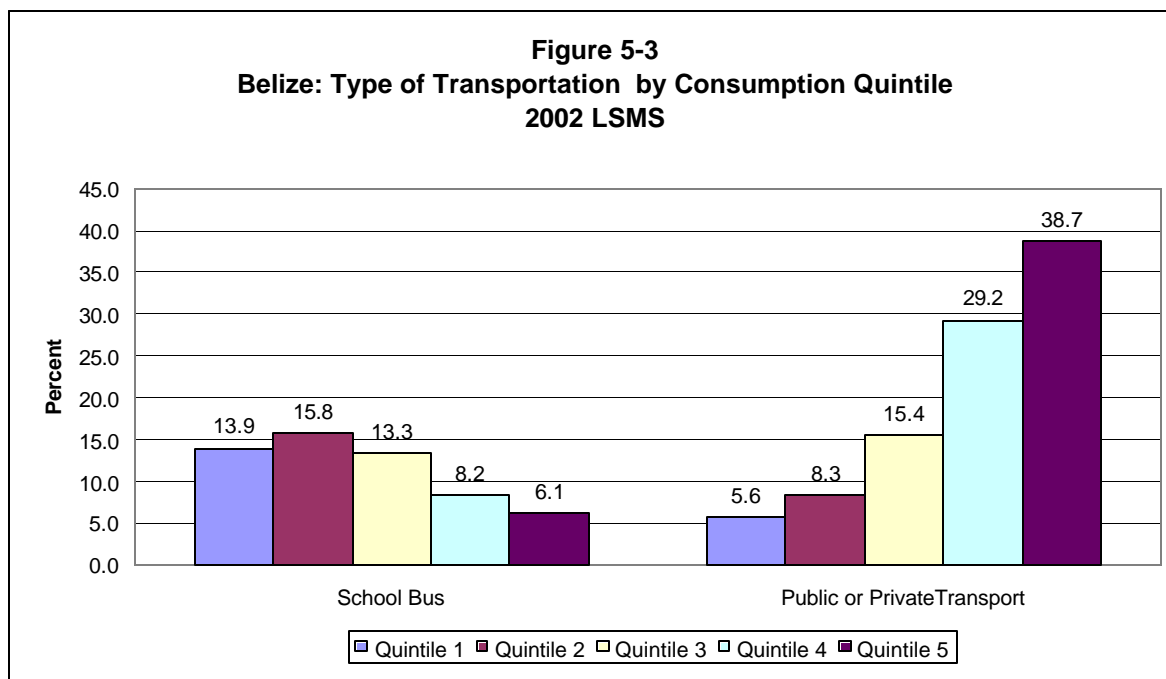
Students in Toledo District were more likely than those in any other district to walk to school (79%). The mean distance from home to school in this district 1.7 miles, a shorter distance compared to the mean distance of 2.2 miles for all students. In Stann Creek District, the students were more likely than those in any other district to use school bus for transportation to school. This is expected since the mean distance from home to school in this district is 2.8 miles which is higher compared to the other districts, and higher than the two-mile walking distance threshold for children eight years or younger. In such cases, GOB provides school bus runs. Public transportation use was highest in Cayo and Orange Walk districts. These two districts have much more regular public runs from rural areas to their urban towns and Belize City where students commute to school. Belize District stands out with the highest proportion of students (17%) using private vehicle to get to school, and Corozal followed with 14.1%.

One of every five students in rural areas relied on school bus as the means of transportation to school. This proportion is far higher compared to urban areas where only 4.6% use school bus to get to school. The provision of school bus is necessary in rural areas where the schools are farther than the two-mile distance from the students' home. On an average, rural students live 3.2 miles from their schools, compared to urban students' distance of 1.4 miles. Urban students (64.3%) were more likely than rural students (59.5%) to walk to school.

Further analysis by Consumption Quintile indicates that as the consumption status increased, the tendency to walk to school decreased. The majority of students in Quintile One (76.3%) walked to school compared to 39.6% of those in Quintile Five (Table 5-6). Students in the poorest quintiles were more likely than those in Quintiles Four and Five to take the school bus. This is expected since school buses are operated at subsidized rates and students pay minimal or no fare.

When it comes to public or private transportation, the use of this mode of transportation increased as the consumption status improved. Only 5.6% of students in Quintile One compared to 38.7% of those in Quintile Five used public or private transportation (Fig. 5-3). These modes of transportation come with a cost that is not affordable for students in the poorest quintiles.

Although the public bus charges a reduced rate for students who commute during the school week, transportation cost could still amount to at least \$60. per month for a students who paid \$3.00 per day.

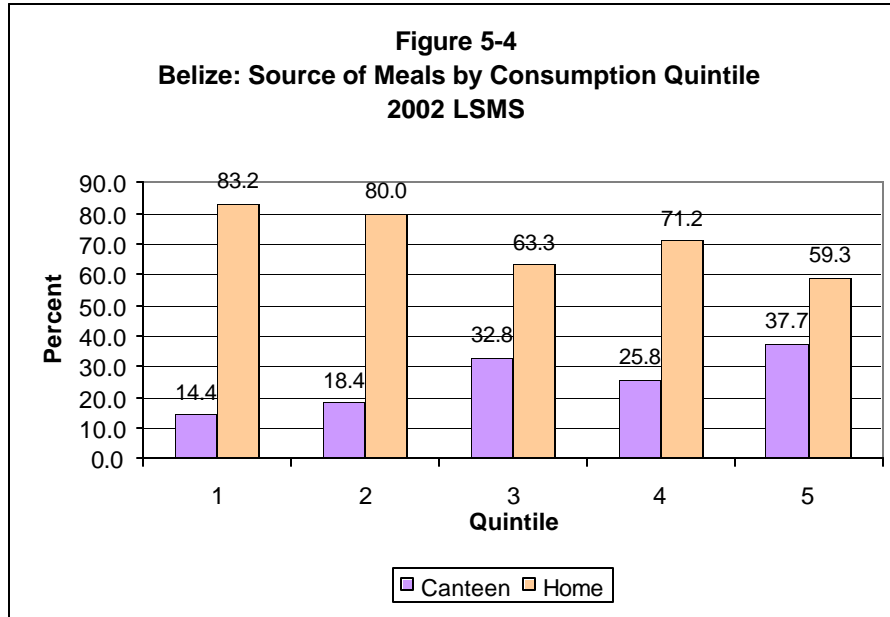


A comparison by ethnic group indicates that the Mayas had the highest proportion using the school bus (20.1%) and the Creole had highest proportions using private vehicle (14.8%) or public transportation (10.7%). There was no significant difference in the proportion of Mestizo that used school bus, public transportation or private vehicle.

### 5.5. Source of Meals

Students' health and in particular nutrition can negatively or positively affect their academic performance. The source of meals can indicate in some way access to food. The majority (72.2%) of students had their school meals from home and 25% bought food from school canteen. The use of the school canteen was highest in Cayo (34%), Corozal (29%) and Stann Creek (26.8%) districts. In Toledo District, only 11.5% had meals from the canteen, while in Belize and Orange Walk districts the corresponding rates were 23.4% and 21,2% respectively. Students in urban areas were more likely to have food from the canteen compared to those from rural areas.

There is a positive relationship between consumption status and canteen use as a source of school meal, while the tendency to have home meals decreased as consumption status increased (Fig. 5-4). Students in Quintile One were most likely to have home meals and least likely to have canteen meals and those in Quintile were least likely to have home meals and most likely to have canteen meals.



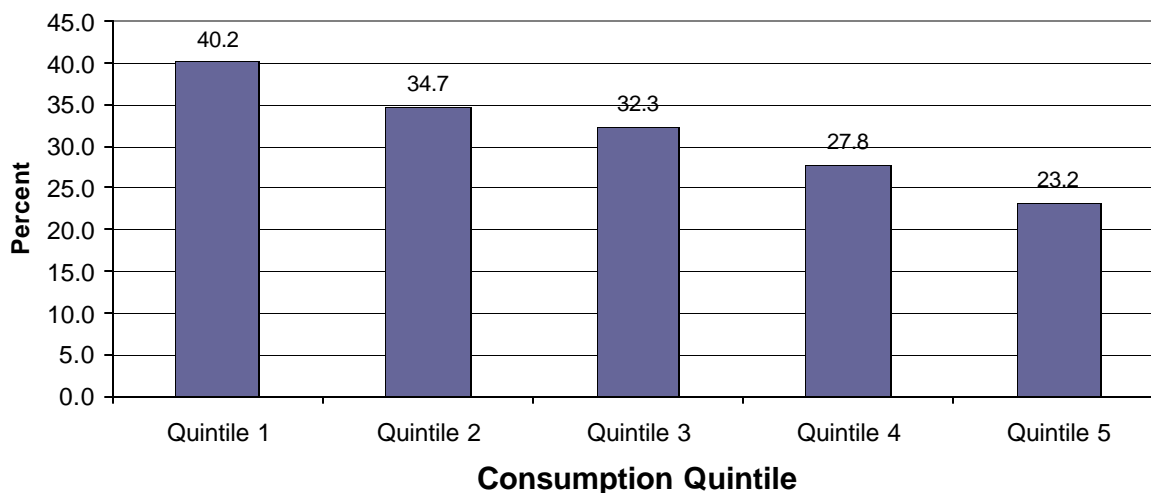
Maya students were most likely to have home meals (89.9%) compared to other students. As expected, meals from home were more evident among primary level students (79.6%). The majority of secondary school students (56.3%) had canteen meals. This is the only sub-group of students that relied on canteen meals more so than home meals. This is probably due to the time of schooling, which begins at eight in the morning to two in the afternoon, with a 45 minutes lunch break that should be spent on campus. The students prefer to buy canteen food during the lunch break than to bring food from home. Primary school children get a much longer lunch break, 90 minutes, and therefore have more time go home to eat.

## 5.6. Cost of Schooling

The mean cost of schooling per year/student was \$784.32. One quarter of this amount was for education fees, 16.7% for transportation, 16.4% for books (Table 5-8). Belize District had the highest mean cost of schooling (\$960.53). This high cost is mainly the result of the high cost of school fees in this district, which accounted for 36.2% of the total cost of schooling. School fee in this district was \$110 higher than in Orange Walk, which had the next highest school fees, and five times higher compared to Corozal with the lowest school fees. The mean cost of schooling for urban areas was 47.9% higher compared to rural. However, most of the cost of schooling in urban areas was for school fees (30.4%), while in rural areas, transportation cost (23.4%) accounted for the biggest share.



**Figure 5-5**  
**Belize: Transportation and Lunch & Snacks as a Percentage of Total Cost**  
**of Schooling by Consumption Quintile**  
**2002 LSMS**



The total cost for lunch and snacks and transportation comprised approximately 30% of total schooling costs. However for the poorest consumption group, transportation and lunch and snacks accounted for 40.2% of total schooling cost, a finding demonstrating the significant proportion of schooling costs spent on non-education items for this consumption group and indicating the need for assistance to the poor in defraying non-education costs such as transportation and meals.

Regarding the expenditure on education fees, while the poorest spent 10.6% of total schooling costs on this item, the wealthiest spent 43.4%. The poorest also spent one fifth of schooling costs on Books (20.9%), while their wealthy counterparts spent 12.8%. Mean cost of books was highest for the Belize District, secondary schools and quintile five as compared to the lowest for Corozal, primary school and quintile one. While these were highest in nominal terms, as a percentage of total schooling costs, they were low compared to the proportions these costs accounted for by the less wealthy districts, ethnic and consumption groups.

Expectedly, as education level increased, cost of schooling or schooling expenses increased. Mean schooling costs for primary level students was \$444.29, while for tertiary level students it was \$3,443.53. Much of this huge differential was attributed to Education fees which are substantially more at the tertiary level accounted for 25% of schooling costs, representing the single largest proportion of total schooling costs, followed by transportation, books and lunch and snacks.

## **5.7. Financial Assistance**

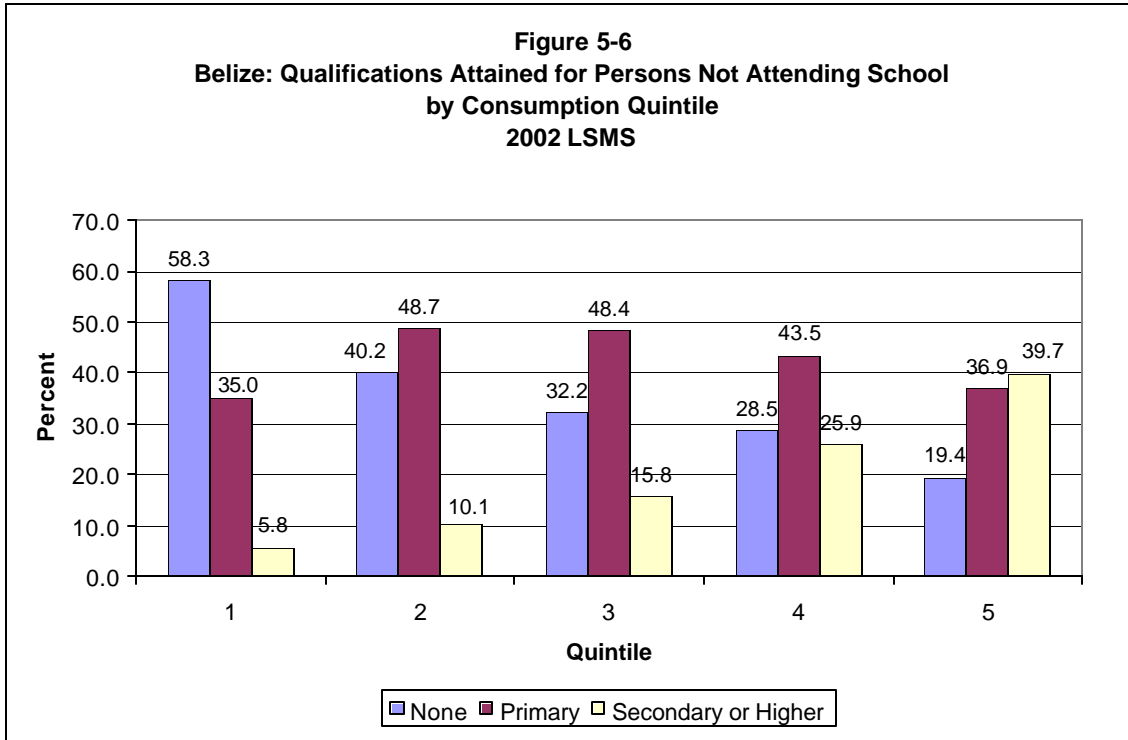
The high cost of schooling makes it necessary to provide assistance to students in financial difficulty. The MOEYS provides such financial assistance to needy students, but access remains a large challenge. In some instances parents are requested to travel long distances and wait in line for long periods to request assistance from the Ministry of Education and in the process lose a day/evening/week. This could have been a major factor in the very high percentage of students (83.8%) that did not receive any financial assistance (Table 5-9). Of the remaining 16% who had some source of financial assistance, the vast majority, 70% received assistance from family or friends and the remaining 30% received assistance from some 'other' source. In addition the FGD revealed that parents coped with the cost of schooling by dealing with one expense at a time, obtaining loans, and selling household items.

Further analysis shows that students from the Orange Walk (3.3%), Corozal (7.3%) and Toledo Districts (7.1%) had extremely low access to financial assistance, while in Belize District, 27.8% of students received assistance. The corresponding rates in Stann creek and Cayo districts were 17.9% and 14.8%, respectively. Students in urban areas were more likely than those in rural areas to receive financial assistance, 23.5% compared to 7.7%.

A comparison by consumption quintile indicates that students in Quintile One (11.2%), the poorest, were least likely to get financial assistance for schooling. However, students in Quintile Two (19%) were most likely, along with those in Quintile Four. Creole (28.1%) and Garifuna (26.1%) students were more likely than the Maya and Mestizo to have access to financial assistance. However, it should be noted that 86.6% of assistance to Garifuna were from families or friends compared to the 64% of Creole students who got assistance from the same source. Once again, the link between geographical location, consumption status and ethnicity was very evident and serves to explain the access to higher levels of education and therefore the need for financial assistance.

## **5.8. Level of Schooling and Attainment**

Last level of schooling attended among respondents out of school showed that two-thirds (66.3%) last attended primary school, while 20% last attended secondary school, 10.7% tertiary or higher and 3% some other level of schooling (Table 5-10). There were no gender differences in last education level attended, but consumption status showed significant differences. As status improved the proportions having last attended secondary and tertiary level education increased considerably. According to parents the educational achievement of children was viewed as the major thrust to the improvement of family circumstances. Further analysis showed a similar trend by selected characteristics i.e. district, location, ethnicity, etc. However it was noted that level of school last attended among respondents was highest in the Belize District and urban areas, the wealthiest consumption quintiles and among the Creole and Garifuna ethnic groups, while it was least for the Toledo district, rural areas, the poorest consumption quintiles and the Maya and Mestizo ethnic groups.



Qualifications attained showed a similar trend as that of last level of schooling attended, where overall it was highest for primary (42.5%) and lowest at the tertiary and ‘other’, 9.8% and 2.5%, respectively (Table 5-11). Between High School and Tertiary Level Diplomas, upwards of one-fifth of the out of school population (21.4%) possessed these qualifications. The Belize district, urban areas, wealthiest consumption groups (Fig 5-6), Creole and Garifuna ethnic groups possessed the best qualifications, namely high school and tertiary level diplomas.

## 5.9. Conclusion

To a large extent the data on enrolment and attendance reflect the MOES policy (Education Act 1991) on compulsory schooling at the primary level, and secondary enrolment based on availability of space and tuition affordability. Toledo District and the poorer consumption quintiles appeared to be most in need of assistance in raising secondary level enrolment. There is, however, an emerging policy which will extend compulsory schooling to include secondary school age children.

With respect to attendance, girls appeared to be absent for longer periods compared to boys. This perhaps warrants further investigation. The cost of transportation and lunch and snacks, accounted for a sizeable proportion of schooling cost. These non-educational expenses could be subsidised to ease the burden of school cost.

While there are no tuition fees at the secondary level, it was noted that education fees, which include, lab and activity fees could amount to significant costs to parents. This could pose a

deterrent to participation in schooling in that parents may be experiencing hardships in meeting these costs. Leveraging financial assistance should be made much easier, particularly for the poor by improving policies and procedures for disbursement of financial aid.

Generally, the positives to be noted are the almost universal access to primary education and the significantly increased secondary enrolment levels. These levels of the education sector are most critical to national development and poverty reduction. At the tertiary level, the enrolment of males increased substantially since 1995, although remaining lower than the enrolment of females. This is an encouraging sign, however, giving the concern of males' academic under-participation.

## CHAPTER 6 -HEALTH

### 6.1. Introduction

This chapter examines several aspects of health of the Belizean population, including health status (self-reported), health care services utilisation, quality of health care and expenditure on health care. It also describes the immunisation status of children under 5 years old. It also examines differences between socio-economic (area of residence, consumption quintile) and demographic groups (gender, age and ethnicity).

### 6.2. Health Status

The health status of the Belizean population is measured in terms of self-reported illness/injury in the previous 30 days, and the nature and duration of the illness.

#### 6.2.1. Self-Reported Illness/injury

Table 6-1 shows the rate of reported illness/injury over the 30-day period, by socio-economic characteristics. In 2002, 18.4% of the respondents reported illness/injury during this reference period. This rate was an increase compared to 1995 when only 10% reported an illness/injury<sup>29</sup>. Stann Creek District (25.4%) reported the highest percentage of illness/injury. The rate was lowest in Orange Walk with 13.1%. A higher percentage of persons in the urban areas (19.9%) reported illness when compared with the rural areas (16.7%).

A higher percentage of respondents in the wealthiest quintile (21.3%) reported illness followed by 19.4% in quintile 4. Reported illness was lowest among persons in the third quintile (15.7%), while about 17% of persons in the two poorest quintiles reported illness. A higher percentage of females (20.4%) than males (16.3%) reported illness and this finding is consistent with other studies.

A comparison among the four major ethnic groups shows that the Mayas (27%) were most likely to report illness; followed by Garifuna (20%). Similar percentages of Creoles (17.1%) and Mestizos (17.5%) reported illness/injury.

Reported illness was highest among the 0 to 4 year age group (31.3%), and decreased to below the national average by age 10-14 years. The percentage increases at age group 25 –34 years to 19.2 % and to 26.7% among the elderly 65+. Much of the difference in the prevalence of illness/injury between 1995 and 2002 is accounted for by age group differences, especially in the children under five years of whom 9% reported illness in 1995 compared with 31% in 2002.

Thirty one percent (31%) of the respondents who reported illness stated that their illness was recurring (Table 6-2). There were few socio-economic differences in the prevalence of recurring

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<sup>29</sup> There is a small, but perhaps significant difference in the wording that may account for the difference i.e. the 1995 asks 'Have you...during the 30 days? e.g. cold, diarrhoea, or other illness/injury due to accident?' and the 2002 asks 'Have you...during the 30 days? e.g. cold, diarrhoea, .asthma, illness due to hypertension?'

illness. However, differences by age group were marked. For all the age groups less than 5 years recurring illness was less than the national average. But among those 35-64 years it was 44% and the majority of elderly (73.8%) respondents reported recurring illness. These findings reflect the occurrence of chronic diseases such as diabetes and hypertension among older individuals and suggest that chronic diseases are very prevalent in the older population.

#### 6.2.2. Duration and severity of illness.

The duration and severity of illness was measured by a) the length of illness (duration) and b) how long the respondent was unable to carry out normal activities (severity) (Table 6.2)

The mean number of days of illness is 7.6 days. Cayo District reported the highest mean days of illness (9.4 days). Respondents in this district were ill on an average of three days longer than those in Stann Creek District (6 days) who reported the least mean days of illness. There was little difference in the mean days of illness for respondents in quintiles, gender and ethnicity. However, the mean duration increase with increasing age after age 20 years to a high of 10.4 days in the elderly i.e. 65 years and over.

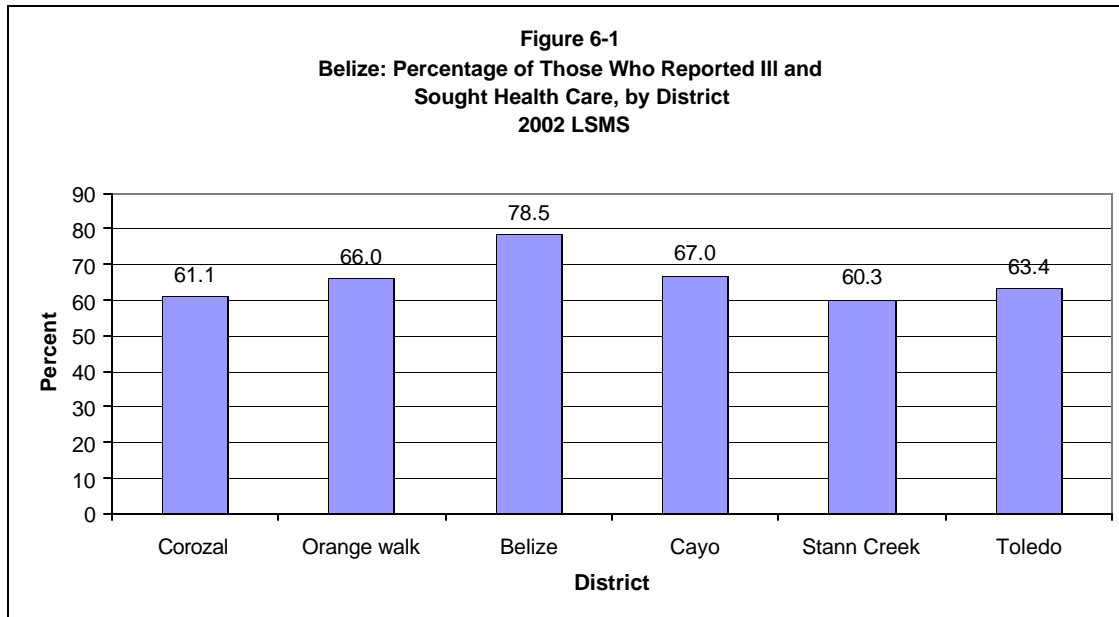
When respondents who reported illness were asked how many days they were unable to carry out normal activities they reported a mean of 4.3 days – slightly more than one half of the mean number of days of illness.

### **6.3. Use of Health Care Facilities**

#### 6.3.1. Use of Health Care Facilities in previous 30 days

The use of health care facilities by those who reported illness/injury is analyzed in terms of: percentage seeking health care; type of health care sought: whether, public or private, in Belize or abroad. It was possible for ill individuals to seek health care services at more than one place.

Nationally, 68.5 of those reporting illness/injury sought health care, whether in Belize and/or abroad. Figure 6-1 shows that the Belize district has the highest rate (78.5%) of respondents who sought health care compared to any other district. The rate was lowest in Stann Creek district (60.3%). A higher rate of urban (70.4%) compared to rural (65.2%) sought medical care and this may explain the higher use of health care facilities by the Belize district population which is largely urban. There was no difference by gender. However, there were differences by ethnic groups, with fewer Mayans (62.0%) and Mestizos (65.1%) seeking health care compared with Garifunas (73.0%) and Creoles (77.5%). The percentage seeking health care increased with consumption quintile with 63% of ill persons in the poorest quintile seeking health care compared with over 70 percent of ill persons in the two wealthiest quintiles. Children under 5 and the elderly reporting illness, were more likely to seek health care when compared with other age groups (Table 6.3).



Respondents seeking health care were asked where the visit took place i.e. whether in Belize or abroad, and the type of provider i.e. whether public or private. It was possible for ill individuals to seek health care services at more than one place.

Public health facilities (71.1%) were the main provider of health care for persons who were ill, while 35.4% of those seeking care attended a private facility. A small percentage (6.3%) sought medical care abroad (Table 6-4). The use of public facility was highest in the Toledo and Belize districts, i.e. over 80%, and lowest in the Corozal District (42.7%) and Orange Walk (53.2%). However, there was no urban/rural difference. More male respondents (78.7%) used public health facility than females (65.8%). Use of public health facilities was highest among the Creoles and Garifunas and lowest among the Mestizos and “other”. Highest use of the private facility was also reported by the Mestizo (41.5%) and by the elderly (47.2%). Figure 6-2 shows that as consumption quintile increased, the tendency to use private facility increased. Among those seeking health care, 15.5% of persons in the poorest consumption quintile used private facilities and this percentage steadily increased to 52.2% in the wealthiest quintile. There was no significant difference by age group.

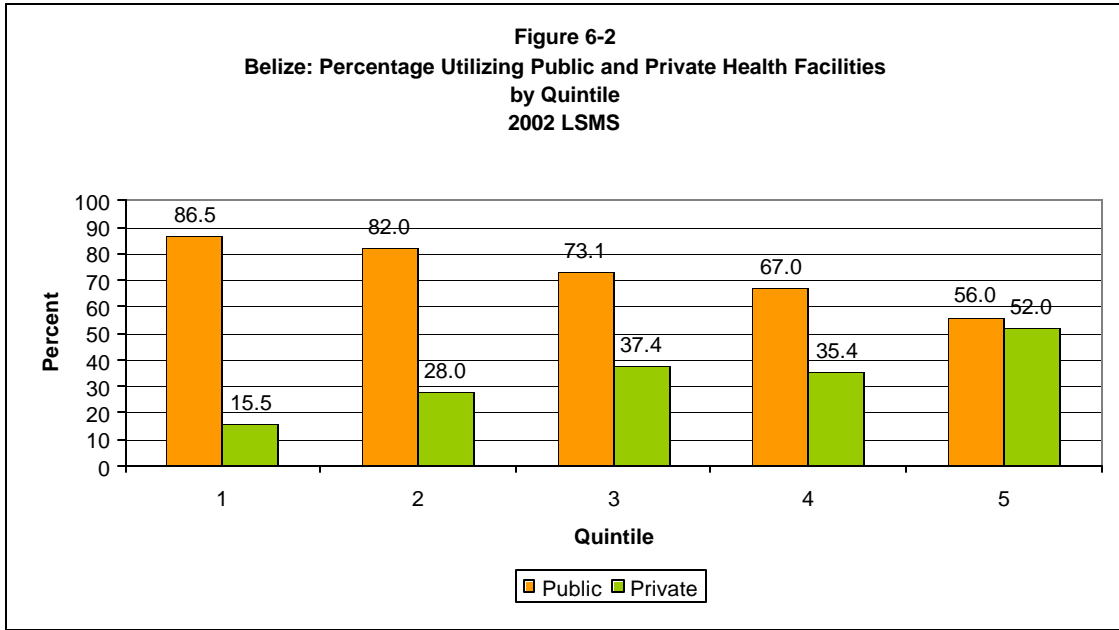
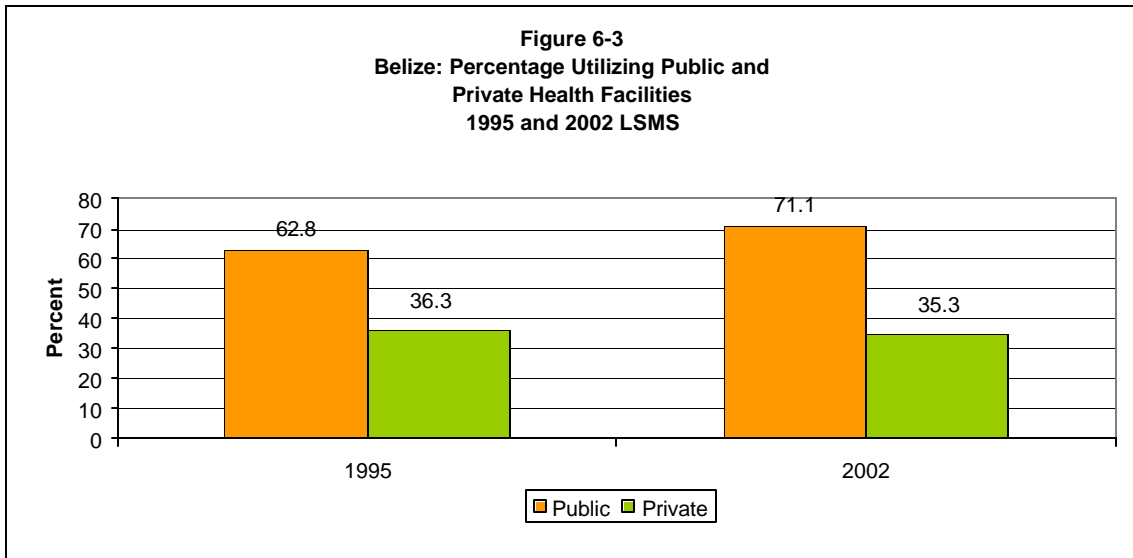


Figure 6.3 shows that there was an increase from 62.8% in 1995 to 71.1% in 2002 in the use of public facility. Private facility use remained same. This suggests that more persons using private facilities also use public health facilities.





### 6.3.2. Perception of Quality of Health Service

In the survey, the respondents were asked to give their perception of the quality of service given at the public, private and health facility abroad (Table 6-8). This was used because the attitude towards the use of the facility is sometimes influenced by the perception of the quality of services of the facilities.

In 2002, over the 12-month reference period, 90.6% of the respondents who used the private facility were satisfied, 88.6% of the respondents who used the Public facility were satisfied and 91.6% of the respondents who used the Health facility abroad were satisfied. The tendency was higher among the wealthiest quintile of the private and abroad facility to rate the quality of service as “satisfied.” While in the public facility, there was little difference among the quintiles in the perception of the quality of service.

### 6.4. Purchase of medication

Purchase of medication by those who reported illness/injury is analyzed in terms of: percentage purchasing medication, from which source whether, public or private, in Belize or abroad.

Nationally, 54.6% of the persons who reported ill, purchased medication (Table 6-3). The majority (90.5%) of those who purchased medication did so at local facilities, while the remainder bought their medication abroad. Private facilities were the main source for purchasing medication, 76.3% compared to 19.9% who purchased from public (Table 6-4).

### 6.5. Health Care Expenditure

The mean total costs incurred over the 30-day reference period, excluding medications and insurance, for all visits was significantly lower for public when compared with private health facilities i.e. B\$16.23 and \$133.45 respectively (Table 6-9).

In 2002, the mean expenditure on the purchase of medication from private and public pharmacies was \$44.74 and \$29.63 respectively. Expenditure on medication did not vary by district, location, ethnicity and gender at private and public facilities. However, there was some variation in expenditure at private pharmacies by consumption quintile with those in the wealthiest quintile spending the most, while the lowest consumption quintile spent the least on medication.

## 6.6. Child Health

### 6.6.1. Immunization Coverage

To ensure the non-occurrence of communicable diseases that mainly affect young children, Belize implemented the Expanded Programme of Immunization (EPI)<sup>30</sup>. In addition to the regular BCG, DPT and polio vaccines, the MMR vaccine was introduced in 1996 to replace the measles vaccine, Hepatitis B was introduced in 1999 and in 2001, the Haemophilus Influenzae Type B (HIB) vaccine was introduced.

This survey found that immunization coverage of children 6 to 59 months receiving 3 or more doses of OPV and DPT was: 67.3% and 69.3% respectively. The Corozal District reported the highest coverage followed by Orange Walk District while Belize district recorded the lowest levels. Some 84.3% and 88.7% of children 0-59 months had received BCG and Hep.B respectively (Table 6-10). Immunization coverage of children 12 to 59 months for measles was 79.1%. Urban areas reported marginally higher level of immunisation coverage with respect to DPT, Polio and Hep B. Immunisation coverage of Creoles was the lowest for these vaccines with the exception of HepB. . There were no significant differences by consumption quintile<sup>31</sup>.

Coverage estimated by this survey is significantly lower than reported by the Ministry of Health statistics. For the same year, Ministry of Health reported that national immunization coverage for children under one year of age was: BCG - 97%, DPT - 89%, OPV3 - 93% and MMR - 89% and Hepatitis B - 97%. While these are not always strictly comparable because of the figures for OPV DPT BCG and HepB pertain to two different age groups and coverage of older children may be lower, the discrepancies are too large to be explained by that alone.

One possible explanation for the discrepancies may be inadequate recording of children vaccinations on the immunization cards. A significant percentage (39.4%) of mothers did not have their child's vaccination card, could not verify the number of doses their child received, were uncertain of the child's immunisation status but stated that their child had received vaccinations. Among these children, excluding the 'don't know' responses, reported immunization coverage was low e.g. for OPV was 53%. However, among the children with cards, a small percentage (6%), was also recorded as 'don't know' for the number of doses of OPV and for the others, the immunization coverage of OPV was 71% i.e. still well below the official figures from the Ministry of Health. Therefore, poor records is obviously a problem, it cannot totally explain these differences.

Another issue to consider is that of under-registration of births because registered births provide the denominator for Ministry of Health statistics. The onus of registering a birth falls on the mother and problems of under-registration have been reported elsewhere

The percentage of registered births was 92.7%. There was no significant difference in the level of birth registration the sex and quintiles. Although over 90 percent of those responding stated

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<sup>30</sup> BCG, DPT Polio and Hepatitis B vaccines are given before the age of 11 months; MMR is given at 12 months

<sup>31</sup> These estimates exclude children for whom the response was DK/NS

that the birth was registered, only about one-quarter (23.4%) had their date of birth verified by a birth certificate.

#### 6.6.2. Nutritional Status.

The nutritional status of children less than 5 years was assessed using anthropometric measurements of weight and height (length), which are compared with reference standards (z-scores) of weight for age (general measure of under nutrition), weight for height (measures wasting, and overweight - obesity) and height for age (measures stunting)<sup>32</sup>. In a normal population, 2.3 percent of the children are expected to z-scores of  $-2.00$  or less, indicative of undernutrition, while 2.3 percent will have z-scores of  $+2.00$  or greater, indicative of overnutrition. There were 870 children in the sample but anthropometric measurements were obtained for 750.

Nationally, 7.5% of children had some level of undernutrition based on weight for age, while stunting was found in 17.5% of children. Some 1.3% of the children were low weight for height i.e. wasted, while 11.3% were overweight for height i.e. obese. Therefore level of wasting was within internationally acceptable limits, but the level of stunting and of obesity was higher than acceptable (Table 6-12).

##### 6.6.2.1. Nutritional status by geographical area

Notable differences in nutritional status were recorded for Belize and Toledo districts. Belize district showed significantly higher levels of overweight for height and the lowest level of low height for age i.e. fewer children in that district were undernourished but more were over nourished. The Toledo District had the highest levels of low height for age (44.9%) i.e. the children were stunted but the level of wasting was within the acceptable limits (Table 6-12).

Urban children also had significantly higher levels of overweight for height than did rural children. Children in the urban areas were also taller.

##### 6.6.2.2. Nutritional status by consumption quintile

Children in the two highest consumption quintiles showed little wasting but more obesity and were also taller than children in the lowest three consumption quintiles.

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<sup>32</sup> The weight-for-age indicator reflects body mass relative to chronological age and is influenced by both the height for age and weight-for-height. Its composite nature makes it difficult to interpret. For example, low weight for age cannot distinguish between short children of adequate body weight and tall, thin children. Low height for age or stunting, measures the cumulative deficient growth associated with long-term factors, including chronic insufficient dietary intake. Low weight for height, or wasting, indicates a recent episode of insufficient weight gain or weight loss, often associated with acute inadequate dietary intake or illness. (WHO)

#### 6.6.2.3. Nutritional status by ethnicity

There was no significant difference in the level of wasting among the ethnic groups. However, significantly more Mayans (40.7%) were low height for age when compared with all the other groups<sup>33</sup>. Stunting among Amerindian populations has been documented elsewhere and there is debate over the role of genetics vis-à-vis socio-economic conditions. This study has already shown a higher level of poverty among the Mayans. Therefore, it is important to examine other health indicators such as infant and young child mortality among the Mayan population to determine whether the stunting observed in this study is genetic or is likely to be associated with other conditions of ill-health, in order to identify the most suitable strategy for addressing this issue.

#### 6.6.2.4. Nutritional status by age and sex

Stunting increased with age, but wasting was more prevalent in the younger age groups i.e. those less than 24 months. These patterns are quite typical of children in developing countries where malnutrition peaks during the weaning age. Stunting increases with age and is indicative of chronic sub-optimal nutrition.

### 6.7. Conclusion

The health indicators presented in this report, suggest that there has been some deterioration in the health status of the population when compared with the findings of the 1995 survey. In 2002, there was a national increase of 8.4% in self-reported illness/injury when compared to 1995. Other health data suggest that there has been some deterioration in health status in recent times. For example, the mortality rate for children aged 1-4 increased from 88 deaths per 100,000 population in 1997 to 121 per 100,000 in 2000. For persons 20-59 years, the mortality rates per 100,000 population were 424 in 1998, 327 in 1999, and 398 in 2000. Among the elderly, the mortality rate was 2,079, 2,499, and 2,356 per 100,000 population for 1998, 1999, and 2000.

While one must be concerned with the health status of the society as a whole, of particular concern must be of those sub-groups reporting levels of illness higher than the national rates. These included: females, persons living in Toledo, the Mayans, the young and the elderly. Internationally, the trend of higher levels of illness among children under five years is quite typical because young children are more vulnerable to disease especially when compared with older children. The elderly are more prone to lifestyle – related illnesses such as chronic diseases. Also typical is the higher rates of reported illness among females even though the mortality rates among males are usually higher.

More difficult to understand are the higher levels by district and ethnic groups. The Mayans not only reported significantly higher levels of illness but also reported significant stunting among the children. They also predominate in Toledo and were among the poorest. Differentials by district also should not be ignored. Other intra-country inequalities were found in this study pointing to a need for focused, targeting interventions that respond to specific problems.

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<sup>33</sup> Guyana's Amerindian population exhibited similar characteristics of little wasting but high level of stunting (IADB. Guyana. Sector Facility: Basic Nutrition Program. Loan proposal)

Some of the findings were counter-intuitive and require further investigation. For example what might be the explanation for the higher level of illnesses among those in the upper consumption quintiles, especially bearing in mind the world-wide trend for the poorer to be the ones more likely to be sick?

The majority of the respondents who reported illness sought some form of health care (68%). The tendency to seek health care was highest in children under 5 and in the elderly. In 1995 and 2002, public facility was the main source of health care in comparison to private and abroad facilities. However, in 2002, there was an 8.3 percentage increase in the use of the public facility. By 2002, there were more public health centers in Belize and this may account for higher usage of these facilities. There was a relationship between the consumption quintiles and the use of health facilities. As the quintile increased, use increased, but the use of the public facility decreased while use of the private facility increased.

Only 6.3% sought health care abroad. The majority of the respondents were from the Corozal, Cayo and Toledo districts. All three districts border Mexico and Guatemala, which were the primary countries where health care was sought.

The main reasons for using the public facility were: consult/treatment for the acute illness, check up and immunization. The tendency for children under 5 to use public facility for immunization was significantly higher than that of private. The users of the public, private and abroad health facilities were satisfied with the quality of service offered at the respective facilities.

The mean total cost incurred for all visits at private facility (\$133.45) far exceed that of the public (\$16.23). The females, elderly and wealthiest quintile spent more at both facilities. The mean expenditures on the purchasing of medication from private and public pharmacies were \$44.74 and \$29.63 respectively.

In respect to immunization, a significant percentage of mothers did not have a vaccination card, and they did not know the type of vaccine nor the number of doses received by their child. Even among those with cards, the level of coverage was lower than official figures. While poor record keeping, both on the part of the mothers and of Ministry of Health, may be easily blamed, other possible causes such as under-registration of birth should be thoroughly investigated.

The nutritional status of children is symptomatic of a country in epidemiological transition. On the one hand, there is chronic under-nutrition, as measured by height for age. On the other, over-nutrition exists in a significant percentage of Belizean children, but especially among those in the upper consumption quintiles, Belize district and among Creoles. Both these extremes of nutritional status are forms of malnutrition that have immediate and long-term consequences.

## CHAPTER 7 -INSTITUTIONAL ASSESSEMENT

### 7.1. The Poverty Alleviation Programme – 1998-2003

The poverty assessment exercise carried out in 1995/96 as well as series of follow-up consultations and discussions at local and district levels provided the government of Belize [GOB] with extensive data about the levels of poverty, some of its main characteristics, as well as some indications about possible methods and means of addressing the problem. At that time, 33% of the total population fell below the poverty line, of whom 13% were deemed to be “indigent” or “extremely poor” [KAIRI 1996]. In terms of its distribution, poverty tended to be higher in the rural areas, the agricultural sector, and among the indigenous population. The incidence of poverty among the Mayans was twice the national average. In considering its response, while the government agreed with the goal set by the 1995 Copenhagen World Social Summit - namely: to halve the proportion of the population living in extreme poverty by the year 2015 - it nevertheless recognised that the limited resource situation mandated an incremental approach and the pursuit of more “modest” targets [National Poverty Elimination Plan, 1997]. The GOB was nevertheless anxious to combine more long-term responses that would seek to eliminate poverty, with mid-term programmes aimed at infrastructural development, and short-term social assistance activities designed to alleviate poverty. In general, the policy and programme responses were then intended to rest on three pillars – all of which were recognised to be interlinked. Significant poverty reduction required

- Sustainable macro-economic growth;
- Increased access to services (such as health and education), and the healthy physical environment necessary for human development; and
- The social protection of vulnerable groups

More specifically, the package of responses to the poverty problem had the following tasks and objectives:

- *Employment creation and the support of sustainable livelihoods.* Focus would be on income generation, entrepreneurial development, investment in small-scale enterprises (in rural and urban areas), land reform, market accessibility, and “environmentally responsible” industrial development.
- *Human capital development;* especially important would be the expansion of access to the primary and secondary levels of education, the creation and expansion of technical and vocational studies, and the development of linked work and study programmes;
- *The expansion of primary and public health care* – with particular focus on poverty related diseases, and on the development and expansion of water and sanitation projects in both rural and low-income areas.
- *The expansion of low-income housing;*

- The *provision of social infrastructure* in poor communities;
- *Cash transfers* to the destitute, the disabled, and the elderly;
- The preparation of a comprehensive *national land use plan*;
- *Environmental protection and conservation*; and
- *Community empowerment, and social participation.*

As a broad-based multi-sectoral strategy, inter-sectoral consultation and co-ordination at the planning, management and implementation levels would be critical for sustained success. GOB therefore emphasised the importance of establishing partnerships between the central government, local organisations such as Town Boards, and Village Councils, and NGOs.

## **7.2. Current Poverty Situation and Issues**

A comparison of the poverty situation Belize at the present time indicates that while there has been some progress in addressing the problem, much remains to be done. Even though some allowance must now be made for the destructive and debilitating effects of the series of hurricanes that have hit Belize over the past 3-5 years the level of poverty continues to be unacceptably high. Analyses of the quantitative data show that the levels of general poverty and indigence are 33.5% and 10.8%, respectively. National level data indicate a fall in the unemployment level - from the high of 13.8% in 1996 to 9.3% in 2001 [Caribbean Development Bank, 2003]. However, it is interesting to note that focus group discussions conducted for this poverty assessment indicate that population-based perceptions of the problems and needs have not changed significantly. Problems identified continue to include high unemployment levels and limited job opportunities, inadequate land policies and the absence of good markets for agricultural products, political patronage and corruption, inadequate educational systems, and socio-economic inequalities - including those induced by racial discrimination.

Certainly, the impacts on the economy and society of the recent natural disasters have been serious. Like many other Caribbean countries, for most of the decade of the 1990s economic growth rates had fluctuated around fairly modest rates – between 1.8% and 4.0%. Since 1999 however, economic growth had been significant – being 6.4% and 10.8% in 1999 and 2000 respectively [Caribbean Development Bank 2003; Central Bank of Belize – Quarterly Reviews]. This was largely due to growth in the agricultural (specifically citrus), manufacturing, marine, and hotel and tourist sectors. The spate of hurricanes over the last three years, and perhaps also some of the developments in the liberalising international economic environment (specifically, the banana dispute and the growing competitiveness of the international environment) has however taken a heavy toll, and by 2001, the disruptions in the export sector were clearly evident: between 2000 and 2001 total exports fell by some 17%. In 2001, GDP growth rate – while still good had dropped to 4.6%.

Declining revenues and/or the need for increased deficit spending<sup>34</sup> can mean some re-ordering of priorities in the official expenditures. In this regard, available evidence shows that like several other countries in the Caribbean, in times of economic difficulty or stringency the social sector (when compared with the non-social sector) is more likely to experience greater shortfalls in expenditure levels [Caribbean Development Bank 2000]. The implications for the capacity of the social sector to meet its stated goals and objectives in a sustained manner are obvious. It is also useful to compare the economic growth rates and social sector expenditure patterns over the decade of the late 1980s – late 1990s in Belize: There does not appear to be any clear association between the two. [Fig. 7-2]– data taken from Caribbean Development Bank 2000, Caribbean Development Bank – Social and Economic Indicators 1999, 2001]. While the volatility in the social sector expenditure levels do not appear to be as high as that of the GDP growth rates, and there would appear to be some effort to maintain the levels during low growth periods, a comparison of the two sets of time series data suggests that the converse does not hold; that is, expansion in GDP has not been reflected in increases in the relative amounts going into the social sector. The graphic illustration provided in Fig. 7-2 shows the noticeable declines in the percentage of the GDP going to the social sector when GDP growth rates peak – especially in 1989, and 1992. The examination of social sector expenditures expressed as a percentage of GDP further shows that apart from increases in 1991, and 1993-94, the secular trend has been downward – falling from 18% in 1986 to 9.9% in 1997. The relatively disadvantaged status of the social sector is also indicated by the fact that **real** levels of social expenditure have been in decline since 1994 [Caribbean Development Bank 2000].

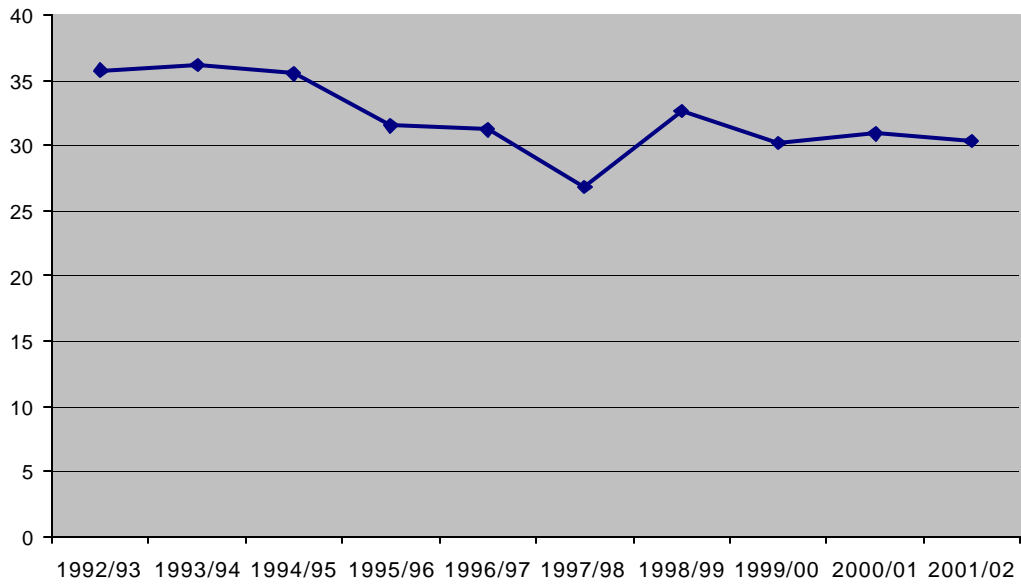
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<sup>34</sup> In Belize, Overall surplus as a percentage of GDP rose from a low of 2.6% in 1996 to 10.3% in 2001. [Caribbean Development Bank 2003]

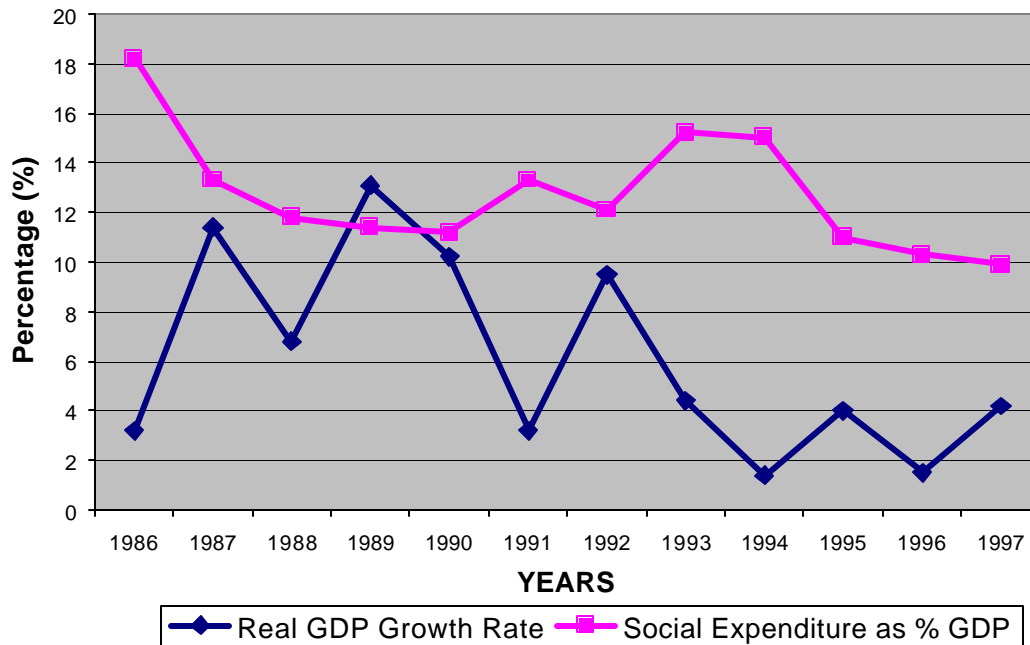


Figure 7-1

Social Sector Expenditure Expressed as a percentage of Total Government Expenditure: 1992 - 2002



**Figure 7-2**  
**Real GDP Growth rates, and Total Social Expenditure Expressed**  
**as a percentage of GDP, 1986-1997**



One fairly recent review of social sector expenditures on basic social services found that very few of the countries in the Caribbean [including Belize] came close to the 20/20 target set by the World Social Summit and Oslo accords [Henry-Lee & Alleyne 1998; 1999]. The examination of social sector expenditure [Education, Health, Human Development, and Housing] expressed as a percentage of total government expenditure [Fig. 7-1] provides further details: the proportion of the actual budget going to this sector fell from 36% in 1991/92 to 30% in 2001/02.<sup>35</sup> Most of the decline, or any significant fluctuations, occurred in the Health, Housing, and Human Development sectors: whereas expenditure on education was more or less constant at approximately 19%, that on Health fell from 11%-7% over the period - after peaking at 14% in 1994/95; that on Human Development fell from 1.8% to 0.9%; that on Housing fell from 2.8% to 0.1% in 1997/98 - recovering to 2.4% by 2001/02. With few exceptions the largest proportion (usually well over 80%) goes to recurrent expenditures - the largest portion of which (traditionally more than 75%) goes to salaries and remuneration. Significant rises in capital expenditures in 1994/95 in the health sector, and in the educational sector between 2001-02 tend to be occasional, and are normally related to one-off activities, and in the latter instance, to the rehabilitative work necessitated by the passage of the hurricanes.

<sup>35</sup> Social sector and total expenditure data (capital and recurrent) for the 1991-2002 period were provided by the Government of Belize.

The main implication of the foregoing discussion is that consistent expansion and development of the social sector – especially in response to growing population demands, or in connection with any poverty reduction initiatives may not be taking place. To the extent that expenditure patterns provide one indication of official commitment to social development then these data suggest that the linkages between social and economic policy and development may in fact be very limited; and further, that any economic growth has not necessarily nor inevitably been linked with, nor translated into social development.

Within this context, it is therefore necessary to look at poverty reduction policies and measures with at least two questions in mind: one has to do with the institutional capacities to achieve the desired goals and bring about significant reductions in the poverty levels; the other concerns the likely efficiency and effectiveness of the approaches being utilised. Experiences in other countries have shown that poverty reduction is likely to be a complex and long-term endeavour. There is general agreement that there need to be clear linkages between poverty reduction goals and macro-economic policy choices. Thus for example, strategies that focus on diversifying production and exports must be deemed critical for the reduction of poverty and social exclusion. Also necessary are improved governance – especially that which enables accountability, effective service delivery, and a conducive climate for investment -, better public expenditure management, and greater investment in human capital and infrastructure. However, there continues to be a great deal of discussion about what might be the most effective strategies and almost everywhere, achievement of pro-poor growth (that is, growth with equity) macro-economic policy continues to be a major challenge.

As indicated earlier, GOB recognised the importance of a multi-pronged approach. To this end, social (especially in health and education) and economic activities were initiated. With assistance from external donors, most of these were implemented through the Basic Needs Trust Fund [BNTF], the Social Investment Fund [SIF], the Environmental and Social Technical Assistance Project [ESTAP], the Commonwealth Debt Relief Fund, the Global Environmental fund [GEF], the Protected Areas Conservation Trust [PACT], and the REAP – Centres for Employment Training and Apprenticeship Programme. One important aspect of these initiatives was the establishment of the Small Farmers and Business Bank to provide “affordable credit” to small farmers and other micro-entrepreneurs. Particular focus was to be given to the poorest districts – Toledo, and Stann Creek. Associated with this array of programmes, were several institutions and organisations - governmental and non-governmental. Many were involved as planners and/or implementers. In light of the multi-sectoral nature of this response – a co-ordinating body was necessary – and to some extent the National Human Development Advisory Council [NHDAC] and the wider Ministry of Economic Development were to undertake this role.

A review of both the performance of the programmes aimed at poverty reduction over the past 3-4 years, and the needs and issues identified by this poverty assessment suggests that there are a number of challenges that need to be addressed if more significant progress is to be made in the areas of poverty reduction. These are discussed in the following sections: *viz.*, the implementation process, structure and organisation, and human resources.

### **7.3. The Implementation Process: Establishing Linkages**

Notwithstanding the general recognition that economic growth alone may not be sufficient for the equitable distribution of goods and services, and that official intervention may then be necessary if the linkage between social and economic development is to be achieved, it has not been easy to move from the prescription stage to effective operationalisation of the policy approach. Examination of the activities of the poverty alleviation and reduction activities in Belize shows that as is often the case, the effective translation of that policy approach into actual practice is impeded by at least two problems. One has to do with the high levels of programme segregation or disconnection where poverty initiatives and other attempts to reduce social exclusion largely operate in isolation of other social development plans, and/or of economic programmes. The other is that very often there is little specific or careful targeting of the poor and the vulnerable. Where this is the case, the implementation – simultaneously or sequentially – of a multiplicity of initiatives can be quickly meaningless, as they will not necessarily have any impact on the groups and individuals at risk. In addition, where poverty-reducing measures are not implemented within an integrated framework, the most efficient use of the available resources is unlikely: instead there is wasteful duplication, and perhaps also, the pursuit of developmental cul-de-sacs where the activities implemented contribute little to any poverty reduction process. In Belize, several examples illustrate the extent of the continuing challenge of beneficially and productively linking the various activities, and therefore also the importance of finding mechanisms to address those difficulties.

#### *i) Small- Enterprise Credit*

The Small Framers Bank was established with the specific aim of providing “affordable credit” to small businesses – including those involved in agricultural production. To this end, the Bank was expected to, and frequently did, collaborate with the Belize Enterprise for Sustainable Technology [BEST], and [BELTRADE]. The Bank provides loans of between US\$375-25,000. At the end of 2000 – marking the end of the first two years of the programme - 1398 loans had been disbursed. The average loan size was US\$3730; 26% went into the agricultural sector, 17% in to secondary manufacturing activities, and the largest portion (57%) going into the Services sector [Annual Report of the Small Framers and Business-Bank, 1998-2000]. Certainly, there have been some successful economic projects in the marine sector, and in respect of the development and production of spices. Some of the loans in the agricultural sector have also been to farmers wishing to diversify their production. Most recently, loans have been used to support there has been a slow but growing involvement in eco-tourism. However, in recent years, many seeking loans have been more interested in tackling the damages caused by the hurricanes; and in the early years of this initiative, political influence and perceptions that the new bank may have been another instrument for the distribution of patronage probably affected the efficient operation of the institution. While some of those early constraints have been addressed, and the experiences with loan delinquencies have induced greater caution by the bank’s managers in the disbursement of loans to the distributive retail sector, at the present time, the loan portfolio nevertheless continues to be relatively simple: the large bulk of the loans is given to enterprises in the retail and distribution sectors: at the end of 2000 the highest proportion – 24% went into

trade and commerce. Average loan sizes are small: US\$2,862, US\$5692, US\$3876, in the agriculture, manufacturing and service sectors, respectively. This raises questions about the real productive potential of these loans.

The loan portfolio managers have recognised the importance of moving away from a purely reactive strategy where loans are disbursed only in response to “walk-in” demands, to one which is more proactive in the encouragement of loans that can help to promote the processing, preservation, and diversification of agricultural produce, crop rehabilitation, agro-forestry activities, the harvesting of medicinal plants and the development of sylvi-pastoral systems. These activities have been identified by the GOB as the ones necessary for economic growth and therefore also for poverty reduction. A national land reform programme that will rationalise the existing land tenure arrangements and provide more equitable access to productive land has also been deemed critical. However, if the loan activities do not proceed in tandem with efforts to address the land tenure problems and issues – especially those related to the more traditional and cultural practices among the indigenous population – then the desired modifications in the level and types of demand for agricultural loans may not occur.

A well-defined pro-poor credit policy that is more clearly linked with the wider agricultural development and macro-economic policies is therefore needed. Within that framework, the bank’s activities need to be better shaped or informed by specific poverty reduction goals, and mechanisms to better identify the needy need to be developed and introduced into its decision-making processes. This would then allow for better and greater targetting of specific individuals, groups and/or areas. In this regard, linkages with other initiatives such as those under a land reform programme, the Environmental and Social Technical Assistance project [ESTAP], the Social Investment Fund [SIF], and the Basic Needs Trust Fund [BNTF] need to be established and developed.

Similarly, credit and investment programmes need to be more closely linked with assessments of market possibilities for the products being supported. It would also be beneficial to establish linkages with other agricultural development initiatives such as those being promoted under the Community Initiated Agriculture and Development [CARD] project – if only to bring about greater rationalisation of the use of available resources.

Attention to the careful establishment and pursuit of linkages with the wider macro-economic policy, and also with other social services, and institutions is especially critical if greater inclusion in the developmental process is to be achieved. Lessons need to be drawn from the evidence emerging from several countries that in reality, the impact of micro-credit on poverty has been overestimated. Even where loans may have been widely disbursed and repaid in a timely manner, the changes in the lives – and therefore the poverty status - of the borrowers have, more often than not, been meagre. The effects have been even more limited where there is poor management and monitoring of the utilisation of the credit [World Bank Poverty Analysis Community Discussion, 2002]. Anecdotal evidence suggests that this may also be the case in Belize; future efforts need to conduct regular assessments with a view to avoiding this kind of outcome.

ii) *Social Infrastructural Development*

An examination of the performance and activities of SIF and BNTF further illustrates the importance of developing these kinds of linkages. Set up since 1996, SIF was established as a response to the earlier poverty assessments. To date they have been very successful in building up the physical and social infrastructures. Water systems, toilets, feeder roads, and drainage systems have been constructed; and health centres and primary educational facilities have been refurbished, extended or upgraded. Since most of these activities were carried out in the poorest areas and were also carried out in response to actual community demands, it may be concluded that the poor did indeed benefit. However, the maintenance and sustainability of the infrastructure, and therefore of the longer term benefits continue to be a major challenge. In this regard, it is likely that were these efforts at social poverty reduction better integrated with economic empowerment activities designed to tackle the root causes of poverty and reduce the levels of individual deprivation, longer term sustainability and progress may be more likely. As it is, the SIF and BNTF implementers bemoan the weakness of the “social” side, and the absence of supportive income-generation projects that could help to tackle the constraints deriving from individual poverty. On the other hand, those responsible for the distribution of business activity loans identify the need for greater social proactivity, and better sensitivity in the expansion of the loan programme to the wider economic growth plans and objectives.

### *iii) Community Development and Participation*

There are several other cases, which illustrate the importance of avoiding the debilitating or non-constructive consequences of programme isolation. Thus for example, there has been some success in developing community profiles and conducting community empowerment discussions under the ESTAP initiative. Community participation through workshops, zone meetings and community discussion groups was good, but the potential benefits of these exercises and the community plans that were produced as a result, will not materialise if functional linkages with investment packages and economic initiatives, or with the progress and management of the environmental protection measures are not developed, linked, and put in place. The collaboration with some of the Mayan organisations in the preparation of community profiles, and the success – in at least once instance – of a community-based initiative in obtaining funds for the management of a protected area provide examples of the possibilities for pro-poor, community-based organisational supports. At the same time, social safety net activities which have little to do with other pro-poor endeavours, or housing and shelter programmes that are either given little priority or bear almost no relationship with any other social or individual poverty reduction efforts are unlikely to have much impact on poverty reduction groups.

The focus on poverty does however need to be deliberate and direct, and must be more than a side-line of other activities. In this regard, the absence of linkages with other infrastructural development initiatives such as those under SIF also does not augur well for the most efficient use of available resources and potentially useful information. Further, regional and community development plans that are produced almost as ends in themselves, and which are completed near the end of a project period will have little impact. The information produced by these plans can be useful to other agencies – governmental and non-governmental; it is then important that follow-up initiatives such as the Toledo Development Council seek to build on the information base so provided.

iv) *Education and Training*

Then there are the activities devoted to the vocational training of young persons, teacher training, and curriculum development which are carried out under the aegis of Ministries of Education, and Human Development, and under the SIF and ESTAP programmes. Here again, it is important to move beyond the current tendency for these to be simple one-off activities, and/or *de facto* ends in themselves; instead, they need to be more clearly defined and shaped by labour market and manpower needs assessments – which are in turn informed by economic and investment planning. This is necessary if they are to have the poverty reduction effects desired, and which are sustained in the longer term. The importance of manpower planning and efficient skill deployment are equally relevant at the implementation and planning levels: that is, skills acquired internally as well as externally - need to be rationally deployed if the high staff turnover problem (see later discussion) is to be minimised.

v) *Access to Health Services*

Finally, if the stated objectives concerning the improvement of more equitable access by the poor to quality health services are to be achieved, then the current efforts to address the financial resource gap through the development of a national health insurance programme will need to focus more specific attention on how to deal with the poor. Some progress in this direction has been made, as the piloting of the proposed National Health Insurance [NHI] scheme was deliberately carried out in one of the poorest areas – South Side Belize. While this may have helped to publicise the idea and reduce the apparent public resistance, focus on the most vulnerable will need to be extended beyond the elderly and the disabled, and mechanisms that can successfully target those with the greatest financial and health needs need to be identified and incorporated into the new programme. In this connection, as the “basic package” of services comes to be defined, attention may need to be turned to the identification of the mechanisms for providing access by the poor to services not likely to be available under the NHI.

In summary, it is important that poverty reduction measures be an integral part of economic strategy and planning, and that social and economic development initiatives be more closely linked than has hitherto been the case. Employment creation strategies, the development of income generating projects, the distribution of credit, and the expansion of access to productive land need to be better integrated and shaped by the broader industrial development goals, policies and strategies. It follows that human development agenda and skill development plans need to enjoy a closer relationship with those industrial goals and policies. Achievement of these kinds of linkages is not very easy, and normally requires the difficult negotiation of individual ministry timetables, as well as many internal financial, political, and organisational hurdles. The medium term strategy plan that could provide the strategic framework to guide the actual plans and actions has received little usage, and preparation of a Human Development Agenda has yet to be completed. This is one indication of the difficulties often found in environments where movement from policy formulation and planning to efficient and effective execution are too easily disturbed by resource constraints, administrative and organisational bottlenecks, and politically flavoured considerations.

In light of the magnitude and complexities of the problems to be tackled, it is difficult to avoid being drawn into the development of grand designs. However, there is unlikely to be the quantum and range of financial and human resources available for satisfactorily addressing all the problems identified, and since planners and implementers can be therefore quickly immobilised by the problem of “overreach”, the avoidance of a long compendium of wishes, and the setting of priorities becomes mandatory. In this respect, the careful sequencing of the proposed activities is equally critical. Experiences in other countries [World Bank 2002 (a) & (b)] have highlighted the need to focus on a limited set of achievables *versus* a broad array of measures - as was the case in the Belize poverty reduction strategic plan - that are neither prioritised nor ranked. Experiences in Belize have also shown how important it is to avoid the problem of “disconnection” between macroeconomic policy and policies for poverty reduction. It is critical to have a clear understanding of the linkages between specific policy and poverty outcomes, and to be in a position to be able to adequately assess and monitor the likely linkages between particular sectors; for example, the effects of a particular industrial policy on the health of the poor. This may then better encourage and support the integration of poverty-reduction issues and concerns into mainstream decision-making processes.

At the present time, there are no system or organisational arrangements in place to monitor these impacts or outcomes, the implementation processes, or any progress made. So far there have been *ad hoc* or one-off evaluations - as for example in the case of the SIF/BNTF, or the World Bank progress reports. The current poverty assessment is expected to be the first step in the direction of establishing regular monitoring systems and procedures. To this must be added the establishment of mechanisms for monitoring and evaluating the efficiency of the services that are of special relevance to the poor. Any monitoring system should also have in place structures and procedures that can assess the various initiatives at different levels in terms of their efficiency, effectiveness, sustainability and actual impact.

Finally, it is useful to have in place contingency plans for dealing with shocks and natural disasters so that their occurrence do not overwhelm nor de-rail existing poverty reduction programmes and plans. At the best of times, in any limited resource situation, hard policy choices must be made, and trade-offs in terms of benefits gained and losses incurred calculated. More often than not however, these kinds of calculations may not be made and if they are, more often than not, they are not evidence-based. The situation can only be made worse where, as in Belize, the passage of three hurricanes in as many years has significantly undermined and thrown the poverty reduction efforts off balance. Given the magnitude and multiplicity of the hurricane-produced needs, carefully developed linkages and programming can and do quickly evaporate in the face of the immediacy and intensity of the new demands on the individual agencies and institutions. This has underscored the importance of incorporating into any poverty reduction strategy not only measures to increase the longer term resilience of the poor, but also those that can prevent the collapse or disintegration of existing poverty reduction plans.



## **7.4. Structure and Organisation**

The success of any proposed intervention will be heavily dependent on the institutional and organisational arrangements set up for its execution. The task is challenging given its very complexity, and the fact that successful implementation will necessarily call on the resources of different sectors and departments within the government, and perhaps also of agencies in the NGO sector. The multi-level nature of the likely activities introduces additional hurdles to be surmounted. And finally, most country experiences have shown that without adequate systems of political and social accountability, and which can allow the adequate representation of the interests of the poor and the vulnerable, the impact on poverty reduction is likely to be very limited. For these reasons, many poverty reduction initiatives have sought to implement the decentralisation and democratisation of local level governance, and to introduce a variety of empowerment measures. In these ways, it is anticipated that the poor will be better able to monitor the activities, and absorb the benefits being provided. The involvement of the critical stakeholders and/or targeted beneficiaries in a participatory process is also expected to enable openness in the decision-making processes (at planning and implementation levels), as well as involvement in any debate about alternative policy choices.

This is a tall order, as it requires, some central and top-down direction and leadership, intersectoral co-ordination and collaboration, participatory governance, community empowerment, and the rational and most efficient use of limited resources. Recognition of these requirements is not new, and expressions of support for institutional arrangements that could ensure their achievement have frequently, and perhaps easily, been made. Actual experience has however, shown that this organisational arrangement, or more correctly, the institutional package, is not easily achieved. Thus for example, decentralisation has not necessarily been as beneficial as hoped, and there continue to be many debates about what are the most effective mechanisms for community participation. In addition, since the early 1980s, the importance of Inter-Sectoral Co-ordination [ISC] has received widespread recognition and support, and continues to be deemed critical for programme success. At a minimum, ISC would help to reduce wasteful duplication, accomplish objectives in a more timely manner, and ideally ensure greater efficiency in the use of the available resources. The general experience in many countries has nevertheless been that solutions are not easily found, neither do they materialise merely or only on the basis of constant affirmations about its necessity. To a large extent the discussions about how to bring about ISC have been confounded by the potential conflict between achieving effectiveness and efficiency on the one hand, and maximising social participation and community empowerment on the other. As already noted, poverty reduction and measures and monitoring cannot be reduced to a single set of arrangements, and the organisations involved will have their own legal and bureaucratic mandates. Several questions and issues therefore need to be addressed. These will include for example, what is the best institution to provide overall leadership, and to collate the information from the many stakeholders needed for policy formulation and decision-making? How will other stakeholders interface with this institution? How much autonomy and power should it have? Under what circumstances should organisational independence or autonomy be conceded? How should specific government sector bodies relate to such an institution? How much decision-making should be left to local government and/or community bodies? There will be many other vexing questions, but to date

there are no clear nor universally applicable guidelines or manuals: ISC continues to an ideal rather than a reality.

The Belizean experience to date also illustrates the challenges and difficulties just described. District teams, community empowerment discussion groups, community zones, and village councils were set up under the ETAP, and Toledo Development schemes. At the national level, the National Human Development Advisory Council [NHDAC] was put in place with a mandate to advance social planning, and to develop and oversee the implementation of a Human Development Agenda in general. More specifically, it was to implement and monitor the poverty reduction programmes. To this end, some funds were received from international donor agencies to support the collection of information at the community level that could then be used to inform the planning and implementation processes. The achievements have however been very limited, and the expectations remain largely unmet. There would appear to be two main reasons for this: one is that the functions of the NHDAC have not been clear, and have changed over time. Thus for example, at various times expectations have been that it would function as a think tank, an implementing body, and a monitoring and evaluating body with oversight and advisory functions. This lack of clarity can only encourage inertia – especially where the participating bodies will expectedly have competing and pressing demands on their limited time and resources. The other reason is the absence of resources and capacity to efficiently perform any of the functions assigned at any given time. NHDAC was therefore not able to implement poverty reduction strategies, collect, collate and beneficially utilise information (community-based or otherwise), enforce compliance to any decisions that it may have made, properly co-ordinate any project activities, or carry out any monitoring and evaluation exercises. Certainly a co-ordinating body is necessary; but without dedicated financial and human resources, clarity of function, direct access to the main centres of political power, the ability to negotiate with the other agencies and institutions with which it must interface, and the capacity to enforce decisions made, frustration and only modest advance are likely.

The multi-sectoral character of any poverty reduction often introduces another dilemma: how much public participation is necessary, and what might be the limits on efficiency? Certainly, the involvement of the critical stakeholders is usually needed for successful programme execution; however, real progress, as well as effective and timely decision-making may often require the minimisation of possible sources of conflict and obstruction. The representation of many different interests can easily introduce debilitating conflicts and *stasis* into any decision-making and implementation process. The importance of leadership, joint planning, transparency and negotiation is undeniable; but the real challenge will be to find the right and most productive balance between the pursuit of transparency and openness, the desire for involvement of all possible stakeholders in the design, planning and implementation stages on the one hand, and the effective and efficient forward movement of the proposed activity on the other. In this regard, pre-programme empowerment evaluations that can help to find answers to at least three questions can be very useful. These are:

- When is participation required, or counter-productive? Community empowerment in the TDC project, while fairly successful in itself, in the final analysis, was not as beneficial as might have been desired, as it was not sufficiently integrated into/linked with concrete programmes of activity.

- What coalition of interests is really necessary for the acceptance and/or implementation of policy?
- What is the ability of the system to resolve conflicts arising from the implementation process – (e.g. an equity-based National Health Insurance Scheme)? In other words, does the fundamental value system and its internal structures provide a basis for the legitimate resolution of conflicting judgements and positions? Every policy change will affect some interest in a potentially negative manner, and there will almost inevitably be some winners and losers. Anticipation of these kinds of consequences is therefore as important as is the prior identification of mechanisms that could reasonably successfully address the likely conflicts and difficulties.

In any plan and implementation programme it is necessary to identify key governance challenges at different stages and different levels, and therefore also the necessary and facilitating institutional and organisational arrangements. In this connection, it is also important to develop a monitoring and evaluation culture that will infuse the institutional structure/environment. Regular evaluation of processes and impacts and of a formative kind will normally provide the feedback often necessary for possible mid-programme adjustments or even re-direction.

## 7.5. Resources

To a large extent many of the difficulties experienced and the gaps and deficiencies found are due to gaps in the available human and resource capacities. This is a longstanding problem area, and poverty reduction programmes are not the only ones seriously affected. The inadequacies extend across different levels: *viz.*, policy analysis and formulation, management, implementation, and monitoring. In addition, most of the Ministries suffer from high staff turnover levels, and some degree of dissatisfaction with the avenues of upward mobility and the patterns of skill use and deployment. All of this is likely to affect performance. The areas in which significant shortages of technical skills exist are listed below:

- *Macro Social and Economic planning*: The Ministries of Economic Development, Health, and Human Development, as well as those currently promoting and developing the planned National Health Insurance Scheme all recognise the importance of producing national plans, medium term strategy plans, and a Human Development Plan and Agenda. However, little progress has been made in these areas, partly because of political bottlenecks, but largely because of the organisational constraints and technical skill shortages. Forward planning and sectoral target setting has therefore so far been hesitant, at best. The skill gaps here have also meant that there are few technical supports for any attempts to specify and operationalise links between poverty reduction strategies and the planning and budgeting processes. In this regard too, there is limited expertise to develop a social agenda and the appropriate techniques for social management. This problem is especially critical for the operations of SIF and the micro-credit facilities.
- *Feasibility studies and implementation planning*: skill shortages at this more operational level have often stymied smooth and effective implementation of an initiative. Thus for example, most loan applications to the Small Farmers and Business Bank, or potential

borrowers could not benefit from technical assistance needed to conduct proper feasibility studies, or for the development of ideas into “bankable” proposals. The Micro-Enterprise Credit Scheme operated by Belize Enterprise for Sustainable Technology [BEST] and using funds from the European Union had similar difficulties, so that many marketing and feasibility studies could not be done.

- *Social and economic policy analyses –*

- i) Especially important would be those that would examine linkages between economic growth targets and poverty reduction goals, and which could improve understanding of the social factors that can most effectively build the capacity to respond to poverty reduction initiatives. In this connection, decisions about the most acceptable or feasible balance between macro-economic development and social development need to be better informed by data and information about the implications of specific sector activity for other sectors, and the likely and actual impacts of specific economic policies on poverty. The Small Farmers and Business Bank, SIF and BNTF are examples of some of the interventions that could benefit from those kinds of analyses and assessments.
- ii) In this regard, it is also necessary to be able to identify likely winners and losers, anticipated and unanticipated consequences, as well as the capacity to deal with potentially negative “fall-out” of an initiative. One example of an initiative that needs to be guided by these kinds of analyses is that which seeks to introduce a National Health Insurance Scheme. Assessments of the dynamics, requirements, and outcomes of any collaboration between the public and private health sectors would also be highly beneficial.

- *Manpower and skill needs assessments:* ideally, economic and poverty reduction planning should be based on, as well as, stimulate assessments of manpower needs. Assessments need to be done not only in respect of labour market needs, but also with regard to the resources need to properly mount and implement a poverty reduction programme. Poverty reduction strategies need to be guided by the identification and mapping of the real constraints posed by resource – human and financial – deficiencies. Resource constraints may also require trade-offs or other significant compromises. Decisions about which ones to make (that is, prioritisation, and possible sequencing), as well as the justification of the approach and strategy to be adopted will require clear and robust information about skill and resource availability and the socio-political factors likely to affect the required deployment. This can be a complex exercise, and the skills to do this are in very short supply. However, a useful start can be made by trying to ensure that planned educational and programmes and training programmes are better geared towards the achievements of identifiable poverty reduction and labour market needs; and that more rational and efficient use and deployment is made of those receiving sponsored training.

- *Impact and process monitoring, assessment and evaluation.* The problems here are both specific and general. Looking first at a specific example, there is the case of the credit facilities, where adequate monitoring could help to minimise the problem of loan defaults; but the cadre of credit officers at the Small Farmers and Business Bank is insufficient to adequately tackle a delinquency portfolio. The same has been true of the operations of

Community Initiated Agricultural Research and Development [CARD] project supported by both the Caribbean Development Bank and IFAD. Set up to on-lend fund to farmers, its actual impact is still to be assessed. Feedback from previous and on-going initiatives would also have been very useful to guide the activities of both the BNTF and SIF. The main funders – that is, the World Bank, do bi-annual assessments that result in aide memoirs. The extent to which these are fed back into local programme planning is unclear; a regular internal monitoring and evaluation system is needed. At a more general level, the severe shortage of financial resources and skill capacities in the National Human Development Advisory Council [NHDAC] has meant that they have found it difficult to engage in either forward planning, target setting, or monitoring and evaluation.

Assessments need to be carried out at different levels – from planning to implementation, and at the community base; poverty-reduction spending and its management also needs to be tracked and evaluated. In this regard, capacities to develop and apply fairly simple tracking instruments or measures are necessary; and this should be developed for the monitoring and evaluation of both process and outcomes outputs. Use of these simple indicators can help to move the exercise beyond monitoring from a managerial perspective only (that is, merely measuring the numbers and size of loans disbursed, the repayment rates on loans, counting the numbers of persons trained in this or that area, or listing the number of community empowerment sessions held), to one that can assess impacts at the beneficiary level.

Given the multi-sectoral and multi-dimensional character of poverty reduction programmes, useful monitoring will mean involvement in a chain of conditions that are meant to achieve the final objectives. This will then require access to individuals with multidisciplinary skills, or to institutional arrangements that can facilitate access to an array of skills drawn, for example, from the managerial and behavioural sciences, and in community development, communication, policy analysis and evaluation, economics, and finance.

In the final analysis, the shortages of skills and expertise have often meant that available skills are stretched too thinly, and too many individuals are called on to wear too many hats. This can only have negative consequences for the efficiency and effectiveness of individual and organisational performance. These insufficiencies have also meant that, too often, policy focus is primarily on “plugging holes” as they open, or on reacting to crises as they occur. The need for capacity-building is clear, and in this regard some attention could be given to the possible usefulness (especially in the short and medium terms) of technical assistance sharing at regional and sub-regional levels.

## CHAPTER 8 - POLICY IMPLICATIONS

### 8.1. Introduction

This chapter summarizes the findings of the different chapters in the Living Standard Measurement Survey (LSMS). The matrix form of this chapter will give a clear view of the problems facing the poor in the country and will set out certain policies to each problem.

It will also suggest broad guidelines that could be followed and used to inform the development of appropriate policy options and interventions. The main findings that came out of the LSMS 2002 can be summarised as follows:

- At 33.5% the poverty levels in Belize are unacceptably high;
- Toledo District and the indigent Mayan population stand out far above the other districts and ethnic groups in terms of both the levels of poverty and indigence.
- The recent natural disasters have – as might be expected – worsened the poverty situation – with the greatest impact felt in the southern part of the country;
- There has been a significant increase in the working age population, and the population is still a relatively young one;
- Children have the highest rate of poverty;
- There are marked differences by region; the rural area had higher poverty levels and correspondingly lower average levels of consumption. The poorest quintile in the rural areas is at greatest risk of having inadequate housing characteristics and amenities;
- School enrolment and attendance reflect the policy of the government's policy on compulsory school attendance at the primary level. At the secondary level, actual attendance would appear to be dependent on availability of space and affordability. Nevertheless, the high proportion of total expenditure going to education could be used as an indicator of the importance given to education by respondents. Education fees currently account for the largest portion of the amounts spent on education.

In general it may be noted that the southern parts of the country have not kept pace with developments in other parts of the country. There are historical, geographic and demographic reasons for this, but more recently, there have been few opportunities for economic growth, and the large number of scattered settlements has made it difficult to provide services. While it is true that millions of dollars have been invested in the southernmost district over the past decades, that district still lags behind the rest of the country. It is important for there to be new and special approaches and measures that can assist the south in catching up with the other regions in Belize. These must include measures that give special benefits to the Toledo District and other disadvantaged rural and urban areas, for example, south side Belize City. An important start was made with the convening of the Toledo Poverty Forum in November 2003, and which was chaired by the Prime Minister and the Minister of Economic Development. Community involvement was high as participants included community leaders of Toledo, Ministers, Chief Executive Officers, international donor partners, public officers, civil society members, members

from the private sector and the wider community. This initiative needs to be strengthened and built on.

These findings have also identified specific groups for the purpose of targeting; this will be especially necessary for the development of appropriate poverty elimination strategies. Although the previous strategies have targeted these poor groups, the programmes and projects have not impacted sufficiently to create positive change. It is important that programmes for the poor are designed and implemented in a fashion that would minimize exclusion and inclusion errors. These types of errors occur when members of the target group are omitted from coverage of the programme or when non-members of the target group are included in the coverage. Most importantly, a comprehensive assessment of the 1998-2003 Poverty Elimination Strategy and Action Plan should be conducted before another strategy is developed.

It is anticipated that recommendations of the findings will be reflected in the new Poverty Elimination Strategy and Action Plan (NPESAP) 2004-2009. A technical assistance project has been approved by the Inter-American Development Bank (IDB) – the principal aims of which are to update and strengthen the current National Poverty Elimination Strategy and Action Plan (NPESAP) 1998-2003, and support the implementation of the new (NPESAP). Planned activities include:

- diagnostic, technical and institutional studies and activities –
- an outcome evaluation of poverty reductions efforts, - with particular focus on specific investment sectors, and geographic areas;
- the identification of potential interventions;
- the development of appropriate and sensitive targeting instruments and the construction of a poverty map,
- An analysis of the institutional strengthening and capacity building needs of NHDAC,
- The formation and development of a decentralized institutional structure for the new NPESAP which can support implementation, monitoring and evaluation and nation-wide consultations.

## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.2. Population Trends</b></p> <ul style="list-style-type: none"> <li>▪ Increase in working age population of persons 25 and above.</li> <li>▪ The rural area still has the highest age dependency ratio in the country.</li> <li>▪ The rural area has a younger population than the urban with Toledo and Cayo Districts having the youngest population</li> <li>▪ The older age dependency ratio has remained almost constant from 1995 – 2002.</li> <li>▪ Toledo District has the highest fertility rate in the country.</li> <li>▪ Belize City will continue to have the fastest aging population in the country.</li> <li>▪ Households with the lowest consumption levels have the biggest household sizes (7.0 persons per household)</li> <li>▪ Low consumption intake is associated, with hunger in many poor families, especially children</li> </ul>	<ul style="list-style-type: none"> <li>(i) Macroeconomic policy development programmes need to focus a great deal of attention on employment creation, entrepreneurship, and income generating activities. Particular attention needs to be given to the youth employment creation – especially those in the rural areas. should seek to create more employment</li> <li>(ii) The rural/urban imbalances need to be urgently addressed.</li> <li>(iii) Economic development policy – in its efforts to ensure greater equity - needs to be particularly sensitive to the ethnic differentials in poverty levels, perceptions of poverty, and therefore to the possible importance of also differentiating and disaggregating the strategies for social inclusion/ and incorporation into the economy.</li> <li>(iv) Creation of rural youth enhancement programmes as part of the educational and community development policies.</li> <li>(v) There needs to be special focus on the needs of the elderly – especially those located in the urban areas. All sectors – government, international and private sector should seek to engage in forward planning and put in place programmes that can meet the needs of an aging population.</li> <li>(vi) The integration of reproductive health programmes (including maternal and child health initiatives) into social policy initiatives needs to be strengthened. Reproductive Health as well as family planning programmes need to be better targeted to the most vulnerable groups in the society.</li> <li>vii) Nutritional policy needs to pay special; attention to the needs of the poor – and in particular the those of children</li> </ul>



## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.3. Poverty</b></p> <ul style="list-style-type: none"> <li>▪ At 33.5% the rate of poverty is unacceptably high. In the rural areas (44%) it is much higher compared to urban areas (24%). The data show that the proportion of poor and indigent or ‘extremely poor’ continue to be the highest in Toledo District while Orange Walk and Stann Creek Districts have relatively high levels of poverty</li>   <li>▪ Children represent the highest rate of poverty compared to any other age group</li>   <li>▪ The Mayas show up as the poorest ethnic group</li>   <li>▪ There are significant pockets of urban poverty.</li>   <li>▪ There is a significant group of the working poor</li> </ul>	<ul style="list-style-type: none"> <li>(i) Anti-poverty measures need to be multi-pronged in that both social and individual poverty needs to be tackled; and immediate poverty alleviation and more long term poverty reduction measures need to be implemented. Given the magnitude and relatively widespread nature of the problems, prioritisation, and the development of a staged and cumulative approach may be wise, nevertheless approaches seek to prioritise. Reexamine programmes set forth in the current National Poverty Elimination Strategy and Action Plan(NPESAP). In this connection, a review and strengthening of the current NPESAP seems necessary.</li>   <li>(ii) Programmes are urgently needed to target specific poor groups in Toledo district. Urgent anti-poverty measures are also needed to target the poor in Orange Walk and Stann Creek Districts.</li>   <li>(iii) Multi-faceted anti-poverty measures must be strengthened in the rural areas. The development of special programmes in the rural areas should seek to concentrate on domestic crops.</li>   <li>(iv) The monitoring and management of migration movements – within as well as into the country – needs to improved and strengthened – so as to ensure that poverty situations are not created and/or made worse and that there is a proper balance between changing and growing socio-economic demands and the available resources.</li>   <li>(v) There needs to be more in-depth analysis of the specific situation and needs of specific groups – such as the urban poor, the Mayans and children.</li>   <li>(vi) Specific policies are needed to tackle the needs and problems among the working poor. In particular, human capital development measures needs to be developed; and social and economic policies geared toward raising productivity levels need to be pursued.</li> </ul>

## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.4. Coping Strategy</b></p> <ul style="list-style-type: none"> <li>▪ Post hurricane recovery efforts.</li>   <li>▪ Poor households were less likely than non-poor households to be aware of projects implemented in the community.</li>   <li>▪ Data show that the poor households are less likely than the non-poor to benefit from housing projects.</li>   <li>▪ Data show that Orange Walk District has the highest percentage of household with financial difficulties.</li>   <li>▪ Rural households are more likely to have difficulty with food and health related expenses.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Economic development policy should prioritize the acceleration of post hurricane recovery activities.</li>   <li>(ii) Strengthening emphasis on small business including access to loans and technical assistance for damaged business.</li>   <li>(i) National community development policy should help to increase awareness by poor households of projects being implemented in their neighbourhood.</li>   <li>(i) Housing policy should aim at increasing benefits of poor households in housing projects</li>   <li>(i) Policies which will stimulate the local economy.</li>   <li>(i) Development of programmes targeting the rural areas such as subsistence farming.</li> </ul>

## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.5. Housing</b></p> <ul style="list-style-type: none"> <li>▪ Household overcrowding remains a serious problem. Again the problem is especially acute in the rural areas where the data show that in quintile one (poorest) there are low percentages 22.6% of households with adequate household density (less than four persons per bedroom).</li> <li>▪ There is presently a decreasing trend in the percentage of households who own/hire-purchase their dwelling unit.</li> <li>▪ There have been improvements in the construction and structure of houses, as the data show an increase in concrete outer walls. However, in quintile one only 18.7% of rural households had concrete outer walls compared to 39.9% in urban areas.</li> <li>▪ The need for safe drinking water is evident in the rural areas where 40.8% of the households are drinking water from a private vat/drum/well that is not piped.</li> <li>▪ Poor garbage disposal in rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Housing policies need to focus urgent attention on initiatives that can reduce the costs of household construction, expansion and maintenance.</li> <li>(ii) In addition, measures are needed which can help to rationalise the use of existing housing stock so that the current levels of overcrowding in poor homes can be reduced, and houses currently empty - perhaps because of the high costs of occupation and maintenance – can be put to use.</li> <li>(iii) Strategies are needed that can make housing ownership more possible as well as sustainable</li> <li>(iv) Strategies are needed that can encourage and support the construction of more resilient housing structures. In particular, the housing quality of poorer households needs to be improved.</li> <li>(v) There needs to be better access to safe water and satisfactory sanitation - especially in the rural areas and among the poorest</li> <li>(vi) Improved garbage disposal and adequate waste management mechanisms are urgently needed in the rural areas</li> </ul>

## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.6. Education</b></p> <ul style="list-style-type: none"> <li>▪ The levels of education vary by quintile status, and were also lowest in rural areas.</li> <li>▪ The levels of financial assistance given to the majority of the poor for education are low, and need to be reviewed.</li> <li>▪ Secondary and Tertiary education is the least attended by the poor.</li> <li>▪ Highest mean cost of schooling for the poor is education fees.</li> <li>▪ The poorest consumption group showed that transportation and lunch and snacks accounted for 40.2% of total schooling cost.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Financial and other support (e.g through a compensatory education financing program) to the poorest quintile should be implemented so as to facilitate greater and more equitable access to secondary and tertiary education. In this regard, specific programmes which identify and target poor families need to be put in place. The delivery of financial assistance could be more efficient if decentralised.</li> <li>(ii) There needs to be greater socio-cultural sensitivity the needs and problems of specific ethnic groups.</li> <li>(iii) Strengthen community groups so as to enable greater community participation in the development of educational policies and programmes at the local &amp; national levels.</li> <li>(iii) Educational programmes need to be more labour market-driven. In this regard, Vocational and technical training programmes as a means of better preparation for the job market should be strengthened.</li> <li>(iv) Greater involvement of private sectors in, for example, sponsoring and mentoring programmes should be supported and encouraged</li> <li>(v) The development of innovative educational programmes such as peer group tutoring and outreach teaching programs should be encouraged and supported as one way of improving the levels of education.</li> <li>(vi) Enforce existing regulations and develop new regulations, which promote children’s attendance in schools. In this connection, programmes and initiatives aimed at changing some existing parental attitudes towards schooling need to be put in place.</li> </ul>

## POLICY IMPLICATIONS OF THE LSMS 2002 FINDINGS

FINDINGS	POLICY ISSUES
<p style="text-align: center;"><b>8.7. Health</b></p> <ul style="list-style-type: none"> <li>▪ The elderly (65+) reported the highest prevalence of reported illness and the 0 to 4 age group had the highest reported rate and they are the ones that have the highest tendency to seek health care.</li> <li>▪ Public health facilities were the main source of health care for the poor with the main reasons for using these being: consults/treatment for acute illness, and check up and immunization.</li> <li>▪ Females reported a higher rate of illness, with an increase gap from 1995 – 2002.</li> <li>▪ There is a guided gap of the mean expenditures on the purchases of medication between private and public pharmacies.</li> <li>▪ The rural areas had a lower prevalence of reported illness/injuries than the urban areas.</li> </ul>	<p>(vii) School costs need to be rationalised, and Textbook assistance programme introduced. – Especially targeted at the most vulnerable groups and communities. Special attention should be given to mechanisms for defraying non-education costs such as transportation and meals among the poor</p> <ul style="list-style-type: none"> <li>(i) Develop health programs to better cater the elderly (65+) and the youngest age group (0 – 4).</li> <li>(ii) Implement the National Health Insurance (NHI) programme countrywide.</li> <li>(i) Increased improved health services in public health facilities.</li> <li>(i) Make health programs more sensitized to female illness</li> <li>(i) Increased availability of cheaper medication alternative.</li> <li>(i) Less medical facilities are found in the rural areas.</li> <li>(ii) Remoteness causes a lower reported prevalence.</li> </ul>

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**APPENDIX A**

**2002**

**LIVING STANDARDS MEASUREMENT SURVEY**

**TABLES**

**Table 1-1**  
**Belize: Profile of Population (Percentages)**  
**1980,1991, 1995, 2000 and 2002**

Selected Characteristics	1980 Census	1991 Census	1995 LSMS	2000 Census	2002 LSMS
Total (N)	100.0 (145,353)	100.0 (185,969)	100.0 (4,314)	100.0 (232,111)	100.0 (7,761)
Urban	52.5	47.0	44.2	45.3	52.0
Belize City	27.4	22.8	22.3	19.6	23.3
Other Urban	25.1	24.2	21.9	25.7	28.7
Rural	47.5	53.0	55.8	54.7	48.0
Corozal	15.8	15.3	17.1	13.9	11.9
Orange Walk	15.7	16.4	17.6	16.4	14.9
Belize	35.0	29.5	27.5	27.2	33.2
Cayo	15.7	20.1	19.7	22.1	21.5
Stann Creek	9.8	9.4	8.6	10.5	7.9
Toledo	8.1	9.4	9.6	10.0	10.6
Males	50.6	50.5	49.9	50.3	49.6
Females	49.4	49.5	50.1	49.7	50.4
0 - 4	16.7	16.1	15.2	14.4	13.0
5 - 9	15.6	14.9	15.1	13.7	14.1
10 - 14	13.8	13.0	14.8	12.8	13.5
15 - 19	12.0	10.9	11.0	11.0	11.2
20 - 24	8.9	9.1	6.8	8.9	8.6
25 - 29	6.2	7.9	6.9	7.8	7.2
30 - 34	4.7	6.4	6.0	6.8	6.5
35 - 39	3.6	4.9	5.5	5.9	5.8
40 - 44	3.5	3.7	4.5	4.7	5.3
45 - 49	3.2	2.6	3.3	3.6	3.7
50 - 54	3.0	2.5	2.4	2.6	2.9
55 - 59	2.2	2.1	2.1	1.9	1.9
60 - 64	1.9	1.9	1.8	1.7	1.8
65 - 69	1.7	1.5	1.6	1.5	1.5
70 - 74	1.1	1.1	1.3	1.1	1.2
75 - 79	0.8	0.7	0.7	0.8	0.6
80 - 84	0.6	0.5	0.6	0.4	0.8
85 +	0.4	0.3	0.5	0.4	0.4
Mean Age	NA	22.2	22.7	23.2	24.0
Median Age	NA	17	17	19	19
Mestizo	33.0	43.7	47.4	48.7	53.2
Creole	39.6	29.8	27.5	24.9	25.3
Maya	9.5	11.0	10.8	10.6	10.1
Garifuna	7.6	6.6	5.0	6.1	6.9
Other	10.3	8.9	9.3	9.7	4.4
Foreign Born	8.9	13.8	11.7	14.8	14.5
Locally Born	91.1	86.1	87.9	85.2	85.5

NA - Not Available



**Table 1-2**  
**Belize: Percentage Distribution of Population by Sex**  
**and Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Male	Female	Total	(N)
Total	49.6	50.4	100.0	(7,761)
Urban	48.0	52.0	100.0	(4,034)
Belize City	47.3	52.7	100.0	(1,809)
Other Urban	48.5	51.5	100.0	(2,225)
Rural	51.4	48.6	100.0	(3,727)
Corozal	50.3	49.7	100.0	(922)
Orange Walk	49.4	50.6	100.0	(1,160)
Belize	48.8	51.2	100.0	(2,580)
Cayo	48.7	51.3	100.0	(1,668)
Stann Creek	55.1	44.9	100.0	(611)
Toledo	49.3	50.7	100.0	(820)
0 - 4	49.2	50.8	100.0	(1,006)
5 - 9	49.9	50.1	100.0	(1,092)
10 - 14	48.5	51.5	100.0	(1,046)
15 - 19	50.6	49.4	100.0	(872)
20 - 24	48.4	51.6	100.0	(669)
25 - 29	47.9	52.1	100.0	(555)
30 - 34	47.8	52.2	100.0	(506)
35 - 39	50.1	49.9	100.0	(450)
40 - 44	49.6	50.4	100.0	(413)
45 - 49	51.2	48.8	100.0	(289)
50 - 54	49.6	50.4	100.0	(226)
55 - 59	53.4	46.6	100.0	(146)
60 - 64	53.6	46.4	100.0	(140)
65 - 69	54.2	45.8	100.0	(118)
70 - 74	59.8	40.2	100.0	(96)
75 - 79	52.1	47.9	100.0	(48)
80 - 84	43.1	56.9	100.0	(59)
85 +	53.6	46.4	100.0	(27)
Mean Age	24	23	24	(7,760)
Median Age	19	18	19	(7,760)
Mestizo	50.0	50.0	100.0	(4132)
Creole	48.8	51.2	100.0	(1,966)
Maya	51.2	48.8	100.0	(787)
Garifuna	45.8	54.2	100.0	(336)
Other	50.0	50.0	100.0	(540)
Foreign Born	54.2	45.8	100.0	(1,123)
Locally Born	48.8	51.2	100.0	(6,638)

One person did not state age.

**Table 1-3**  
**Belize: Aged-Child Ratio and Age Dependency Ratio of the Population,**  
**1991, 1995, 2000, and 2002**

Age Group	1991 Census	1995 LSMS	2000 Census	2002 LSMS
0-14	81,644	1,945	95,102	3,145
15-64	96,424	2,161	127,265	4,267
65+	7,901	203	9,744	349
Don't Know/Not Stated Age	0	5	0	1
<b>Aged-Child Ratio</b>	<b>9.7</b>	<b>10.4</b>	<b>10.2</b>	<b>11.1</b>
<b>Age-Dependency Ratio</b>	<b>92.9</b>	<b>99.4</b>	<b>82.4</b>	<b>81.9</b>

**Table 1-4**  
**Belize: Aged-Child Ratio and Age Dependency Ratio of the Population by Region**  
**LSMS 1995 and 2002**

Urban/Rural	Age Group			Aged - Child Ratio	Age Dependency Ratio
	0-14	15-64	65+		
<b>Total</b>					
1995	1,945	2,161	203	10.4	99.4
2002	3,145	4,267	349	11.1	81.9
<b>Urban</b>					
1995	733	1020	117	16.0	83.3
2002	1,529	2,324	179	11.7	73.5
<b>Belize City</b>					
1995	397	508	50	12.6	88.0
2002	684	1029	94	13.7	75.6
<b>Other Urban</b>					
1995	336	512	67	19.9	78.7
2002	845	1294	84	9.9	71.8
<b>Rural</b>					
1995	1212	1141	86	7.1	113.8
2002	1616	1942	170	10.5	92.0

**Table 1-5**  
**Belize: Mean Household Size**  
**2000, 2002**

	<b>2000 Census</b>	<b>2002 LSMS</b>
<b>Total Households</b>		
(N)	(51,945)	(1,681)
Mean Household Size	4.5	4.6
Mean of Adult Males	1.3	1.4
Mean Number of Adult Females	1.3	1.4
Mean number of Children	3.0	3.0
Mean Household Size in Urban Areas	4.1	4.3
Mean Household Size in Belize City	3.9	4.2
Mean Household Size in Other Urban	4.2	4.4
Mean Household Size in Rural Areas	4.9	5.0
 <b>Male Headed Household</b>		
(N)	(39,500)	(1,230)
Mean Household Size	4.6	4.7
Mean of Adult Males	1.3	1.4
Mean Number of Adult Females	1.3	1.3
Mean number of Children	3.0	3.0
Mean Household Size in Urban Areas	4.1	4.3
Mean Household Size in Belize City	3.8	4.1
Mean Household Size in Other Urban	4.3	4.5
Mean Household Size in Rural Areas	5.0	5.0
 <b>Female Headed Household</b>		
(N)	(12,445)	(451)
Mean Household Size	4.1	4.4
Mean of Adult Males	1.4	1.4
Mean Number of Adult Females	1.5	1.6
Mean number of Children	2.8	3.0
Mean Household Size in Urban Areas	4.0	4.3
Mean Household Size in Belize City	4.0	4.4
Mean Household Size in Other Urban	3.9	4.1
Mean Household Size in Rural Areas	4.3	4.9

**Table 1-6**  
**Belize: Distribution of Households by Size,**  
**1991, 2000, 2002**

Household Size	Census 1991		Census 2000		LSMS 2002	
	Number	Percentage	Number	Percentage	Number	Percentage
1	4,114	10.9	6,257	12.0	180	10.7
2	4,475	11.9	6,738	13.0	183	10.9
3	4,801	12.7	7,677	14.8	256	15.2
4	5,196	13.8	8,399	16.2	293	17.4
5	NA	NA	7,234	13.9	245	14.6
6	NA	NA	5,532	10.6	186	11.0
7+	NA	NA	10,108	19.5	339	20.1
5+	19,072	50.6	22,874	44.0	770	45.8
Total	37,658	100.0	51,945	100.0	1,681	100.0

NA - Not Available

**Table 1-7**  
**Belize: Distribution of Households by Size and Region**  
**2000 and 2002**

	Census 2000		LSMS 2002	
	Number	Percentage	Number	Percentage
<b>Total</b>	51,945	100.0	1,681	100.0
Household Size				
1	6,257	12.0	180	10.7
2	6,738	13.0	183	10.9
3	7,677	14.8	256	15.2
4	8,399	16.2	293	17.4
5	7,234	13.9	245	14.6
6	5,532	10.6	186	11.0
7+	10,108	19.5	339	20.1
<b>Urban</b>	25,909	100.0	936	100.0
Household Size				
1	3,575	13.8	110	11.7
2	3,845	14.8	101	10.8
3	4,251	16.4	155	16.6
4	4,477	17.3	184	19.7
5	3,647	14.1	140	15.0
6	2,502	9.7	102	10.9
7+	3,612	13.9	143	15.3
<b>Belize City</b>	11,716	100.0	432	100.0
Household Size				
1	1,890	16.1	62	14.3
2	1,892	16.1	48	11.1
3	1,905	16.3	69	15.9
4	1,988	17.0	85	19.6
5	1,555	13.3	65	15.0
6	1,002	8.6	46	10.7
7+	1,484	12.7	58	13.5
<b>Other Urban</b>	14,193	100.0	504	100.0
Household Size				
1	1,685	11.9	48	9.5
2	1,953	13.8	53	10.6
3	2,346	16.5	87	17.2
4	2,489	17.5	100	19.8
5	2,092	14.7	75	15.0
6	1,500	10.6	56	11.1
7+	2,128	15.0	85	16.8
<b>Rural</b>	26,036	100.0	745	100.0
Household Size				
1	2,682	10.3	70	9.4
2	2,893	11.1	81	10.8
3	3,426	13.2	100	13.5
4	3,922	15.1	108	14.5
5	3,587	13.8	105	14.1
6	3,030	11.6	84	11.2
7+	6,496	25.0	197	26.4

**Table 2-1**  
**Belize: Poor and Indigent Population by**  
**Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	2002		
	(N)	% Poor	% Indigent
<b>Country</b>	<b>7,761</b>	<b>33.5</b>	<b>10.8</b>
<b>Location</b>			
Urban	4,034	23.7	4.8
Rural	3,727	44.2	17.4
<b>District</b>			
Corozal	922	26.1	6.2
Orange Walk	1,160	34.9	7.1
Belize	2,580	24.8	4.9
Cayo	1,668	27.4	4.8
Stann Creek	611	34.8	5.6
Toledo	820	79.0	56.1
<b>Ethnicity</b>			
Creole	1,966	26.5	5.1
Garifuna	336	24.3	2.2
Maya	787	77.0	54.8
Mestizo	4,132	30.1	6.2
Other	533	27.8	8.4
<b>Place of Birth</b>			
Belize	6,638	32.2	10.1
Abroad	1,123	41.7	15.1
<b>Sex</b>			
Male	3,851	33.9	11.2
Female	3,910	33.2	10.5

**Table 2-2**  
**Belize: Poverty Gap, Severity and Gini Index by District**  
**2002 LSMS**

District	Poverty Gap	Severity of Poverty	Gini Index
	2002	2002	2002
<b>Country</b>	<b>11.1</b>	<b>6.1</b>	<b>0.4</b>
Corozal	7.0	3.3	0.4
Orange Walk	9.3	3.8	0.2
Belize	6.2	2.8	0.6
Cayo	6.6	2.8	0.3
Stann Creek	8.6	3.3	0.3
Toledo	44.4	31.5	0.2



**Table 2-3**  
**Belize: Poor and Indigent Households**  
**by Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	Households		
	Total	% Poor	% Indigent
<b>Country</b>	<b>1,681</b>	<b>24.5</b>	<b>7.5</b>
<b>Location</b>			
Urban	936	17.2	3.3
Rural	745	33.7	12.7
<b>District</b>			
Corozal	192	19.9	5.0
Orange Walk	240	23.2	4.3
Belize	624	18.4	3.7
Cayo	336	20.5	3.1
Stann Creek	145	25.9	4.9
Toledo	144	67.3	45.0
<b>Head of Household</b>			
Male-Headed Households	1,230	25.5	8.1
Female-Headed Households	451	21.8	5.6

**Table 2-3a**  
**Belize: Female-Headed Households by Poverty Status**  
**2002 LSMS**

Type of Household	N	% Poor
Female-headed household, with spouse/partner	175	23.9
Female-Headed-households, No spouse/partner	276	20.4
Female-Headed-households, No spouse/partner, 2+ person household	227	24.3
Female-Headed-households, No spouse/partner, one person household	48	2.1

**Table 2-4**  
**Belize: Poverty Rates for Children 0-17 Years**  
**by Selected Characteristics**  
**2002 LSMS**

<b>Selected Characteristics</b>	<b>2002 (N)</b>	<b>% Poor</b>
<b>Country</b>	<b>3,701</b>	<b>39.0</b>
<b>Location</b>		
Urban	1,816	26.6
Rural	1,886	51.0
<b>District</b>		
Corozal	405	29.9
Orange Walk	529	40.7
Belize	1,137	28.0
Cayo	875	32.0
Stann Creek	279	38.4
Toledo	476	84.5
<b>Ethnicity</b>		
Creole	918	29.6
Garifuna	135	26.2
Maya	462	83.3
Mestizo	1,941	34.0
Other	245	37.9
<b>Place of Birth</b>		
Belize	3,492	38.2
Abroad	209	52.7
<b>Sex</b>		
Male	1,829	38.8
Female	1,872	39.2
<b>Age</b>		
0-4	1,006	37.8
5-13	1,952	40.5
14-17	743	36.7

**Table 2-5**  
**Belize: Children 0 - 13 Years by Family Structure**  
**2002 LSMS**

Living With	Total	Poor	Non-Poor
Total	2,833	1,132	1,696
%	100.0	100.0	100.0
Both Parents	72.0	71.7	72.3
Mother Only	21.2	22.1	20.6
Father Only	1.5	1.8	1.3
Neither Parents	5.3	4.5	5.8

**Table 2-6**  
**Belize: Children 5-17 Attending School by Economic Status**  
**2001 Child Activity Survey**

<b>Selected Characteristics</b>	<b>Economic Status</b>			
	<b>Total (N)</b>	<b>%</b>	<b>Economically Active</b>	<b>Not Economically Active</b>
<b>Total</b>	<b>67,692</b>	<b>100.0</b>	<b>6.7</b>	<b>93.3</b>
<b>District</b>				
Corozal	9,194	100.0	4.6	95.4
Orange Walk	10,996	100.0	2.8	97.2
Belize	17,624	100.0	3.6	96.4
Cayo	15,473	100.0	6.0	94.0
Stann Creek	7,037	100.0	5.7	94.3
Toledo	7,367	100.0	24.8	75.2
<b>Residence</b>				
Urban	29,719	100.0	4.2	95.8
Rural	37,973	100.0	8.6	91.4
<b>Ethnicity</b>				
Creole	18,146	100.0	4.3	95.7
Garifuna	4,550	100.0	5.3	94.7
Maya	7,604	100.0	22.8	77.2
Mestizo	33,861	100.0	4.8	95.2
Other	3,531	100.0	4.4	95.6
<b>Sex</b>				
Male	34,263	100.0	8.6	91.4
Female	33,429	100.0	4.7	95.3
<b>Age group</b>				
5-14	58,905	100.0	5.7	94.3
15-17	8,787	100.0	13.1	86.9

**Table 2-7**  
**Belize: Poverty Rates for Youths 14 - 24 Years**  
**by Selected Characteristics**  
**2002 LSMS**

<b>Selected Characteristics</b>	<b>2002</b>	
	<b>(N)</b>	<b>% Poor</b>
<b>Country</b>	<b>1,726</b>	<b>33.9</b>
<b>Location</b>		
Urban	957	25.5
Rural	770	44.2
<b>District</b>		
Corozal	205	25.7
Orange Walk	249	38.2
Belize	578	23.4
Cayo	372	29.1
Stann Creek	145	36.3
Toledo	176	79.3
<b>Ethnicity</b>		
Creole	449	24.7
Garifuna	82	20.3
Maya	161	76.3
Mestizo	917	32.4
Other	117	32.2
<b>Place of Birth</b>		
Belize	1,467	31.3
Abroad	260	48.2
<b>Sex</b>		
Male	848	32.7
Female	879	35.0
<b>Age Group</b>		
14-17	743	36.7
18-24	984	31.7

**Table 2-8**  
**Belize: Youths 14 - 24 Years by Economic**  
**and Poverty Status**  
**2002 LSMS**

	<b>Total</b>	<b>% Poor</b>	<b>Non-Poor</b>
<b>(N)</b>	<b>1,726</b>	<b>585</b>	<b>1,142</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Employed	40.8	39.4	41.5
Unemployed	16.6	22.3	13.8
Not in the Labour Force	42.6	38.3	44.8
Unemployment rate	29.0	36.1	24.9
LFPR	57.4	61.7	55.2

**Table 2-9**  
**Belize: Poverty Rates for the Elderly, 65+ Years**  
**by Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	2002	
	(N)	% Poor
<b>Country</b>	<b>297</b>	<b>26.5</b>
<b>Location</b>		
Urban	146	19.9
Rural	151	33.5
<b>District</b>		
Corozal	41	23.4
Orange Walk	58	23.1
Belize	103	19.8
Cayo	47	24.6
Stann Creek	27	40.1
Toledo	21	64.8
<b>Ethnicity</b>		
Creole	85	17.8
Garifuna	19	31.5
Maya	22	50.7
Mestizo	145	30.8
Other	26	9.6
<b>Place of Birth</b>		
Belize	237	20.7
Abroad	60	49.5
<b>Sex</b>		
Male	160	26.5
Female	137	26.5

**Table 2-10**  
**Belize: Elderly 65+ Years by Economic**  
**and Poverty Status**  
**2002 LSMS**

	2002	
	% Poor	% Non-Poor
<b>(N)</b>	<b>93</b>	<b>257</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
Employed	27.8	32.4
Unemployed	11.4	3.2
Not in the Labour Force	60.8	64.3

**Table 2-11**  
**Belize: Working Poor by Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	(N)	Total	2002	
			% Poor	% Non-Poor
<b>Labour Force</b>				
Total	3,235	100.0	29.8	70.2
Male	1,971	100.0	31.5	68.5
Female	1,264	100.0	27.3	72.7
<b>Category of Worker</b>				
(N)		2,597	699	1,898
Total		100.0	100.0	100.0
Own Business, paid help		7.1	4.7	8.0
Own Business, without paid help		19.9	21.1	19.4
Paid Employee, Govn't		9.7	5.8	11.1
Paid Employee, Quasi Govn't		1.9	0.6	2.4
Paid Employee, Private		56.7	59.6	55.7
Unpaid Family Worker		4.4	7.8	3.2
Dk/Ns		0.3	0.4	0.3
<b>Hours Usually Work</b>				
Less than 35 hours per week	445	100.0	29.9	70.1
35 or more hours per week	2,152	100.0	26.3	73.7



**Table 2-12**  
**Belize: Occupation and Industry by Poverty Status**  
**2002 LSMS**

Selected Characteristics	2002			
	(N)	Total	Poor	Non-Poor
<b>(N)</b>			<b>699</b>	<b>1,898</b>
<b>Occupation</b>			<b>100.0</b>	<b>100.0</b>
Managers/Legislators			2.6	10.9
Professionals			1.3	4.6
Technicians			2.4	6.5
Clerks			1.1	8.6
Service Workers			8.5	12.3
Agriculturalists			14.7	5.5
Craft Workers			14.0	14.2
Plant & Machine			8.0	9.1
Elementary Workers			47.0	27.8
Other Labourers			0.2	0.2
Defense Force			0.2	0.2
<b>Industry</b>	<b>(N)</b>	<b>Total</b>	<b>Poor</b>	<b>Non-Poor</b>
Sugar	156	100.0	30.8	69.2
Citrus	94	100.0	47.7	52.3
Bananas	63	100.0	34.3	65.7
Agriculture nec	232	100.0	57.4	42.6
Construction	189	100.0	31.7	68.3
Wholesale/retail	446	100.0	20.4	79.6
Tourism	269	100.0	15.7	84.3
Government	302	100.0	15.5	84.5
Social	357	100.0	32.6	67.4
Other	489	100.0	19.5	80.5

**TABLE 3-1**  
**Belize: Households Experiencing Financial Difficulties by**  
**Poverty Status and Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	% Households with Financial Difficulties					
	Total (N) %		Poor (N) %		Non Poor (N) %	
<b>Total</b>	1,681	36.8	412	44.6	1,269	34.2
<b>District</b>						
Corozal	192	28.0	38	38.3	154	25.4
Orange Walk	240	53.3	56	70.6	184	48.1
Belize	624	31.0	115	43.9	509	28.1
Cayo	336	34.0	69	26.0	267	36.1
Stann Creek	145	48.3	38	44.9	108	49.5
Toledo	144	40.6	97	45.8	47	29.8
<b>Location</b>						
Urban	936	38.4	161	51.6	775	35.7
Rural	745	34.7	251	40.1	494	32.0

**Table 3-2a**  
**Belize: Households Experiencing Financial Difficulties by Type of Difficulties and Selected Characteristics**  
**2002 LSMS**

Type of Financial Difficulties	District							Area	
	Total	Corozal	Orange Walk	Belize	Cayo	Stann Creek	Toledo	Urban	Rural
<b>Total Households</b>	<b>618</b>	<b>54</b>	<b>128</b>	<b>194</b>	<b>114</b>	<b>70</b>	<b>58</b>	<b>360</b>	<b>259</b>
Utility Bills	53.1	52.0	37.9	68.4	59.6	39.3	40.5	64.5	37.2
School/Education Fees	42.8	36.4	47.2	40.5	49.9	30.1	48.5	43.5	41.9
Health related expenses	39.6	44.7	47.4	21.8	49.6	47.8	47.6	41.1	37.5
For Food	38.4	29.5	37.4	35.6	41.5	31.3	60.6	33.8	44.9
Clothing costs	31.4	33.2	33.6	27.6	27.7	27.4	48.9	27.7	36.4
Loans/Debt	29.0	33.6	38.4	25.2	31.2	35.9	3.9	27.2	31.5
Transportation Costs	21.0	17.9	26.8	19.9	28.1	13.2	10.1	17.7	25.6
Mortgage/Rent	18.9	7.6	14.9	30.5	22.0	12.1	2.1	25.7	9.5
For Vacation	17.7	36.9	17.4	7.6	17.1	34.9	14.7	14.9	21.5
Entertainment costs	11.9	32.3	18.3	6.0	9.3	10.4	6.1	8.7	16.5
Other	3.5	1.9	0.8	1.9	4.3	7.5	9.7	2.0	5.6

**Table 3-2b**  
**Belize: Households Experiencing Financial Difficulties**  
**Type of Difficulties and Poverty Status of Household**  
**2002 LSMS**

Type of Financial Difficulties	Households with Financial Difficulties		
	% Total	% Poor	% Non-Poor
<b>Total Household</b>	<b>618</b>	<b>184</b>	<b>435</b>
Utility Bills	53.1	50.2	54.3
School/Education Fees	42.8	50.2	39.8
Health related expenses	39.6	41.7	38.7
For Food	38.4	46.3	35.1
Clothing costs	31.4	38.3	28.4
Loans/Debt	29.0	22.8	31.6
Transportation Costs	21.0	18.7	22.0
Mortgage/Rent	18.9	9.8	22.8
For Vacation	17.7	13.4	19.5
Entertainment costs	11.9	9.7	12.9
Other	3.5	4.3	3.2

**Table 3-2c**  
**Belize: Households Experiencing Financial Difficulties by Type of Difficulties and Quintile**  
**2002 LSMS**

<b>Type of Financial Difficulties</b>	<b>Quintile</b>					
	<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Total Households</b>	<b>618</b>	<b>54</b>	<b>128</b>	<b>194</b>	<b>114</b>	<b>70</b>
Utility Bills	53.1	45.6	52.9	51.9	56.9	55.4
School/Education Fees	42.8	54.9	51.0	43.3	39.7	30.5
Health related expenses	39.6	50.7	35.7	38.6	37.7	38.3
For Food	38.4	54.2	43.6	30.8	36.4	32.1
Clothing costs	31.4	47.8	27.4	28.2	27.9	30.0
Loans/Debt	29.0	28.5	22.3	23.4	32.1	36.9
Transportation Costs	21.0	21.5	18.5	17.7	19.7	26.9
Mortgage/Rent	18.9	4.9	14.8	16.9	27.5	25.0
For Vacation	17.7	18.8	11.7	17.4	18.9	21.0
Entertainment costs	11.9	11.2	11.0	9.3	13.9	13.5
Other	3.5	5.9	3.0	2.6	3.3	3.2

**Table 3-2d**  
**Belize: Households Experiencing Financial Difficulties by**  
**Type of Difficulties and Sex of Head of Household**  
**2002 LSMS**

Type of financial difficulty	Head of household		
	Total	Male	Female
<b>Total Households</b>	<b>618</b>	<b>410</b>	<b>208</b>
Utility Bills	53.1	46.8	65.6
School/Education Fees	42.8	40.6	47.3
Health related expenses	39.6	42.4	34.1
For Food	38.4	38.6	38.0
Clothing costs	31.4	30.8	32.6
Loans/Debt	29.0	31.0	24.9
Transportation Costs	21.0	21.4	20.1
Mortgage/Rent	18.9	14.8	27.0
For Vacation	17.7	17.6	17.8
Entertainment costs	11.9	12.0	11.8
Other	3.5	3.9	2.8

**Table 3-3b**  
**Belize: Poor Households Experiencing Financial Difficulties by**  
**Type and Length of Time of Difficulties**  
**2002 LSMS**

Types of difficulty	(N)	Length of time		
		< 6 months	6 - 12 months	> 1 year
<b>Total household</b>	<b>184</b>			
Utility Bills	92	29.7	21.0	49.3
School/Education Fees	92	27.4	16.1	56.5
Health related expenses	77	41.2	11.7	47.1
For Food	85	41.8	10.2	48.0
Clothing costs	70	29.6	7.2	63.2
Loans/Debt	42	37.9	5.7	56.4
Transportation Costs	34	17.2	3.7	75.5
Mortgage/Rent	18	37.0	6.7	56.4
For Vacation	25	27.9	8.1	63.9
Entertainment costs	18	33.0	12.0	55.0
Other	8	58.4	0.0	41.6

**Table 3-3c**  
**Belize: Non- Poor Households Experiencing Financial Difficulties by**  
**Type and Length of Time of Difficulties**  
**2002 LSMS**

Types of difficulty	(N)	Length of time		
		< 6 months	6 - 12 months	> 1 year
<b>Total household</b>	<b>435</b>			
Utility Bills	236	34.4	13.9	51.6
School/Education Fees	173	24.5	14.3	61.2
Health related expenses	168	23.7	13.3	63.0
For Food	153	35.0	11.8	53.2
Clothing costs	124	26.5	16.0	56.6
Loans/Debt	137	25.9	16.0	58.1
Transportation Costs	95	26.3	18.2	55.5
Mortgage/Rent	99	31.1	13.8	55.1
For Vacation	85	26.6	5.9	67.5
Entertainment costs	56	35.4	7.2	57.4
Other	14	9.2	9.2	81.6



**Table 3-3d**  
**Belize: Male-Headed Households Experiencing Financial Difficulties by**  
**Type and Length of Time of Difficulties**  
**2002 LSMS**

Types of difficulty	(N)	Length of time		
		< 6 months	6 - 12 months	> 1 year
<b>Total household</b>	<b>410</b>			
Utility Bills	192	35.4	15.5	49.2
School/Education Fees	167	27.4	14.2	58.4
Health related expenses	174	30.3	13.4	56.2
For Food	159	37.1	9.9	53.0
Clothing costs	125	31.4	14.5	54.1
Loans/Debt	127	31.1	12.8	56.1
Transportation Costs	88	23.7	14.6	61.7
Mortgage/Rent	61	34.2	9.6	56.2
For Vacation	72	30.8	4.7	64.5
Entertainment costs	49	36.2	12.6	51.2
Other	16	29.1	8.0	62.9

**Table 3-3e**  
**Belize: Female-Headed Households Experiencing Financial Difficulties by**  
**Type and Length of Time of Difficulties**  
**2002 LSMS**

Types of difficulty	(N)	Length of time		
		< 6 months	6 - 12 months	> 1 year
<b>Total household</b>	<b>208</b>			
Utility Bills	136	29.9	16.5	53.5
School/Education Fees	98	22.3	16.1	61.6
Health related expenses	71	26.4	11.4	62.3
For Food	79	38.2	13.8	48.0
Clothing costs	68	21.1	9.8	69.0
Loans/Debt	52	22.7	15.7	61.6
Transportation Costs	41	25.1	14.3	60.7
Mortgage/Rent	56	29.6	16.2	54.2
For Vacation	37	19.4	9.7	71.0
Entertainment costs	24	31.9	0.0	68.1
Other	6	21.9	0.0	78.1

**Table 3-4a**  
**Belize: Households Experiencing Financial Difficulties by**  
**Type of Coping Strategies Implemented and Poverty Status**  
**2002 LSMS**

<b>Types of Coping Strategy</b>	<b>% Total</b>	<b>% Poor</b>	<b>% Non-Poor</b>
<b>Total Household</b>	<b>618</b>	<b>184</b>	<b>435</b>
Pray	62.8	54.7	66.1
Hustle	37.1	42.6	34.7
Forego	34.8	33.2	35.4
Don't pay bills on time	32.6	33.3	32.3
Ask relative help	26.8	28.6	26.0
Dip into savings	22.9	17.1	25.4
Borrow	16.6	10.5	19.1
Pawn	14.6	10.1	16.5
Ask local/abroad	12.9	14.4	12.3
Ask relative abroad	12.5	9.0	14.0
Seek politicians help	12.3	14.9	11.1
Sell assets	11.5	12.2	11.2
Stop pay bills	6.4	8.2	5.6
Stop children school	4.7	6.3	4.1
Illegal activities	1.3	2.5	0.7
Other	8.2	11.6	6.8

**Table 3-4b**  
**Belize: Households Experiencing Financial Difficulties by**  
**Type of Coping Strategies Implemented and Quintile**  
**2002 LSMS**

Types of Coping Strategy	% Total	Quintile				
		1	2	3	4	5
<b>Total Household</b>	<b>618</b>	<b>94</b>	<b>120</b>	<b>123</b>	<b>141</b>	<b>139</b>
Pray	62.8	44.7	64.3	70.0	68.1	61.9
Hustle	37.1	42.8	46.1	33.6	31.4	34.1
Forego	34.8	37.0	30.6	35.6	35.6	35.6
Don't pay bills on time	32.6	33.5	29.3	30.8	34.3	34.9
Ask relative help	26.8	29.1	29.1	23.7	27.1	25.6
Dip into savings	22.9	12.6	19.3	27.0	21.0	31.5
Borrow	16.6	14.2	12.5	16.5	18.2	20.1
Pawn	14.6	7.0	17.3	11.7	19.8	15.0
Ask local/abroad	12.9	19.0	9.4	14.4	12.2	11.3
Ask relative abroad	12.5	8.4	9.8	17.4	13.2	12.6
Seek politicians help	12.3	18.9	14.7	10.8	9.0	10.2
Sell assets	11.5	16.4	16.4	7.5	5.9	13.1
Stop pay bills	6.4	14.4	5.0	0.8	6.5	6.8
Stop children school	4.7	11.0	1.9	7.2	2.3	3.1
Illegal activities	1.3	3.3	1.2	0.9	0.0	1.5
Other	8.2	14.5	8.9	6.3	6.6	6.6

**Table 3-4c**  
**Belize: Male-Headed Households Experiencing Financial Difficulties by**  
**Type of Coping Strategies Implemented and Poverty Status of Households**  
**2002 LSMS**

Type of Coping Strategies	% Total	% Poor	% Non-Poor
<b>Total Household</b>	<b>410</b>	<b>128</b>	<b>282</b>
Pray	61.4	55.5	64.0
Hustle	36.9	43.6	33.9
Forego	33.8	34.8	33.3
Don't pay bills on time	30.2	31.3	29.7
Ask relative help	25.8	31.1	23.3
Dip into savings	24.6	16.2	28.5
Borrow	17.5	10.6	20.6
Pawn	12.8	10.9	13.6
Sell assets	12.6	15.6	11.2
Seek politicians help	12.1	13.7	11.4
Ask local/abroad	12.0	13.4	11.3
Ask relative abroad	10.8	9.0	11.6
Stop pay bills	6.3	6.9	6.0
Stop children school	5.0	6.3	4.4
Illegal activities	1.7	2.8	1.1
Other	9.2	10.8	8.4

**Table 3-4d**  
**Belize: Female-Headed Households Experiencing Financial Difficulties by**  
**Type of Coping Strategies Implemented and Poverty Status of Households**  
**2002 LSMS**

<b>Types of Coping Strategy</b>	<b>% Total</b>	<b>% Poor</b>	<b>% Non-Poor</b>
<b>Total Household</b>	<b>208</b>	<b>55</b>	<b>152</b>
Pray	65.6	53.5	70.0
Don't pay bills on time	37.5	38.4	37.2
Hustle	37.3	40.6	36.2
Forego	36.9	29.8	39.5
Ask relative help	28.7	22.8	30.9
Dip into savings	19.6	19.5	19.7
Pawn	18.4	8.3	22.0
Ask relative abroad	15.9	8.9	18.4
Ask local/abroad	14.8	17.0	14.0
Borrow	14.8	10.4	16.4
Seek politicians help	12.6	18.0	10.7
Sell assets	9.3	4.4	11.1
Stop pay bills	6.5	11.4	4.7
Stop children school	4.2	6.3	3.5
Illegal activities	0.5	1.8	0.0
Other	6.3	13.4	3.7

**Table 3-5**  
**Belize: Households with at Least One Project Implemented by**  
**Poverty Status of Household and Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	% Households with at least one project implemented					
	Total (N)	%	Poor HH (N)	%	Non Poor HH (N)	%
<b>Total</b>	<b>1,681</b>	<b>49.3</b>	<b>412</b>	<b>41.0</b>	<b>1,269</b>	<b>52.0</b>
<b>District</b>						
Corozal	192	47.2	38	36.2	154	49.9
Orange Walk	240	54.7	56	53.7	184	55.0
Belize	624	34.5	115	17.5	509	38.4
Cayo	336	67.9	69	63.8	267	68.9
Stann Creek	145	53.9	34	36.4	111	60.0
Toledo	144	59.1	97	49.0	47	80.0
<b>Location</b>						
Urban	936	49.2	161	35.9	775	52.0
Rural	745	49.4	251	44.2	494	52.0

**Table 3-6**  
**Belize: Households with at Least One Project Implemented by**  
**Type of Projects and Poverty Status of Households**  
**2002 LSMS**

Type of Projects	% Total	% Poor	% Non Poor
Total	1,681	412	1,269
Education/training	33.4	31.1	34.2
Infrastructure	28.7	23.5	30.3
Health	17.9	12.9	19.6
Entrepreneurial Development	17.2	14.4	18.1
Housing	16.6	5.9	20.1
Land	20.8	14.1	22.9
Others	4.4	2.5	5.0



**Table 3-7**  
**Belize: Households That Benefited From At Least One Project by**  
**Type of Projects and Poverty Status of Household**  
**2002 LSMS**

Type fo Projects	Households that benefited		
	% Total	% Poor HH	% Non Poor HH
<b>Total</b>	<b>699</b>	<b>143</b>	<b>556</b>
Education/Training	36.7	41.4	35.4
Infrastructure	27.5	27.3	27.6
Health	19.8	12.2	21.7
Entrepreneurial Development	12.5	14.1	12.1
Housing	25.3	6.5	30.2
Land	35.2	26.1	37.6
Other	8.0	4.9	8.8

**Table 3-8**  
**Belize: Households That Benefited From At Least One Project by**  
**Type of Benefits and Poverty Status of Household**  
**2002 LSMS**

Type of Benefits	Poverty Status		
	Total	% Poor	% Non Poor
<b>Total</b>	<b>699</b>	<b>142</b>	<b>557</b>
Save Time	14.2	11.5	14.9
Reduce Cost	12.3	10.9	12.6
Improved quality of service	64.5	68.9	63.4
Increased Income	11.5	13.5	11.0
Increased community togetherness	30.6	26.4	31.7
Reduced woes	10.7	5.6	12.0
Increased employment	20.4	16.0	21.5
Other	17.3	15.0	17.9
Get own land	25.7	20.7	27.0
DK/NS	6.3	5.4	6.6

**Table 3-9**  
**Belize: Households' Knowledge of Source of Funding**  
**for Projects Implemented**  
**2002 LSMS**

<b>Source of Funding</b>	<b>(N)</b>	<b>%</b>
<b>Total Households</b>	<b>699</b>	
Social Investment Fund	32	4.5
Others	484	69.2
Dk/Ns	333	47.6

**Table 4-1**  
**Belize: Percentage Distribution of Selected Housing Characteristics, 1991 - 2002**

<b>Housing Characteristics</b>	<b>1991 Census</b>	<b>1995 LSMS</b>	<b>2000 Census</b>	<b>2002 LSMS</b>
(No. of Households)	(37,658)	(921)	(51,945)	(1,681)
<b>No. Persons</b>				
Total	100.0	NA	100.0	100.0
1	10.9	NA	12.0	10.7
2	11.9	NA	13.0	10.9
3	12.7	NA	14.8	15.2
4	13.8	NA	16.2	17.4
5+	50.6	NA	44.0	45.8
<b>No. Bedrooms</b>				
Total	100.0	100.0	100.0	100.0
Zero	0.0	4.2	4.7	4.9
1	30.1	23.7	23.4	18.9
2	33.7	38.5	36.4	39.1
3	18.9	24.6	24.8	25.9
4+	8.6	8.6	10.3	11.2
Don't know/ Not stated	8.6	0.3	0.3	0.0
<b>Dwelling Type</b>				
Total	100.0	100.0	100.0	100.0
Undivided Private House	81.1	82.7	83.7	83.3
Part of a Private House	7.8	5.2	5.3	3.3
Flat/Apartment/Condominium	2.3	2.4	2.7	3.3
Double House/Duplex	5.3	6.7	3.9	6.4
Other	3.5	2.8	4.2	3.7
DK/NS	0.0	0.1	0.1	0.0
<b>Ownership of Dwelling</b>				
Total	100.0	100.0	100.0	100.0
Own/Hire-Purchase	65.9	73.0	62.6	68.3
Rent-private	20.1	15.9	19.9	16.3
Rent-Free	10.3	9.0	12.2	11.8
Other	3.6	2.1	5.1	3.7
DK/NS	0.2	0.1	0.2	0.0
<b>Ownership of Land</b>				
Total	100.0	100.0	100.0	100.0
Freehold	34.7	46.5	30.6	40.2
Leasehold	25.8	17.0	24.7	21.9
Other	5.4	5.3	6.8	2.9
Not Stated	0.5	1.3	0.2	3.2
Not Applicable (does not own or hire purchase dwelling)	33.5	29.9	37.7	31.7
<b>Outer Walls</b>				
Total	100.0	100.0	100.0	100.0
Wood	60.8	52.3	44.1	41.7
Plywood	NA	0.0	3.2	4.4
Concrete	24.8	32.7	40.3	42.1
Wood and Concrete	4.8	7.3	4.3	6.7
Sticks/Palmetto	NA	0.0	5.9	3.5
Other	9.6	7.5	2.1	1.6
DK/NS	0.0	0.2	0.2	0.1
<b>Roofing</b>				
Total	100.0	100.0	100.0	100.0
Sheet Metal (zinc, aluminium)	78.1	82.2	80.1	82.2
Concrete	4.4	5.9	8.3	8.4
Thatch	13.5	9.3	7.7	6.1
Other	4.1	2.4	3.7	2.9
DK/NS	0.0	0.2	0.2	0.1

**Table 4-1 (Continued)**  
**Belize: Selected Housing Characteristics, 1991 - 2002**

<b>Housing Characteristics</b>	<b>1991 Census</b>	<b>1995 LSMS</b>	<b>2000 Census</b>	<b>2002 LSMS</b>
<b>Toilet Type</b>				
Total	100.0	100.0	100.0	100.0
Water Closet	34.8	41.0	49.9	54.8
Pit Latrine	51.3	52.3	44.0	39.7
Other	5.7	0.2	1.6	1.7
None	8.2	4.8	4.3	3.5
Dk/NS	0.0	1.6	0.2	0.3
<b>Toilet facility shared with another person not of the household or with another household</b>				
Total	100.0	100.0	100.0	100.0
Yes	9.9	7.1	9.5	10.0
No	81.9	86.8	86.0	86.3
Not Applicable (Household does not have toilet facility)	8.1	6.2	4.5	3.8
<b>Location of Kitchen</b>				
Total	100.0	100.0	100.0	100.0
Indoor	83.3	79.4	85.0	87.0
Outdoor	16.7	19.0	12.9	12.1
DK/NS	0.0	1.6	2.1	0.9
<b>Kitchen shared with another household</b>				
Total	100.0	100.0	100.0	100.0
Yes	2.9	3.4	2.7	3.4
No	97.1	94.9	94.8	95.9
Dk/NS	0.0	1.7	2.5	0.7
<b>Cooking Fuel</b>				
Total	100.0	100.0	100.0	100.0
Wood	29.2	21.0	15.8	15.0
Gas (Butane)	62.0	72.6	79.5	81.2
Other	8.8	6.2	3.9	3.2
Dk/Ns	0.0	0.2	0.8	0.7
<b>Drinking-Water</b>				
Total	100.0	100.0	100.0	100.0
Public/Private piped into dwelling	31.3	43.6	29.9	25.5
Public piped into yard	18.0	18.8	17.0	12.6
Private Vat/Drum/Well, Not Piped	20.1	20.0	27.3	29.5
Public Standpipe/Hand Pump	5.6	7.2	4.2	3.2
River/Stream/Creek/Pond/Spring	7.5	2.6	2.2	2.6
Purified Water	NA	NA	16.9	24.3
Other	17.6	7.6	2.2	2.3
Dk/Ns	0.0	0.2	0.2	0.1
<b>Lighting</b>				
Total	100.0	100.0	100.0	100.0
Kerosene Lamp	29.3	19.7	13.2	9.3
Electricity	67.2	76.4	81.7	87.4
Electricity from BEL	NA	NA	79.0	81.9
Electricity from Private Generator	NA	NA	2.7	5.5
Other	3.5	3.8	4.9	3.1
Dk/Ns	0.0	0.1	0.2	0.2
<b>Waste Disposal</b>				
Total	NA	NA	100.0	100.0
Prepare for municipal collection	NA	NA	50.9	54.0
Take it to public dump	NA	NA	8.5	9.2
Dump it in own yard	NA	NA	4.5	7.5
Burn it	NA	NA	32.9	26.2
Other	NA	NA	3.0	3.0
Dk/Ns	NA	NA	0.2	0.1

**NA - Not Available**

**Table 4-2**  
**Belize: Selected Housing Characteristics by Region, 2002**  
**2002 LSMS**

<b>Housing Characteristics</b>	<b>Total</b>	<b>%</b>	<b>Urban</b>	<b>%</b>	<b>Belize City</b>	<b>%</b>	<b>Other Urban</b>	<b>%</b>	<b>Rural</b>	<b>%</b>
<b>No. Persons</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
1	180	10.7	110	11.7	62	14.3	48	9.5	70	9.4
2	182	10.8	101	10.8	48	11.1	53	10.6	81	10.8
3	256	15.2	155	16.6	69	15.9	87	17.2	100	13.5
4	293	17.4	184	19.7	85	19.6	100	19.8	108	14.5
5+	771	45.9	385	41.1	169	39.1	216	42.9	386	51.8
<b>No. Bedrooms</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
0	83	4.9	13	1.3	1	0.3	11	2.2	70	9.4
1	318	18.9	142	15.2	54	12.6	88	17.4	176	23.7
2	657	39.1	383	41.0	198	45.8	186	36.8	273	36.7
3	435	25.9	293	31.3	142	32.8	151	30.0	141	19.0
4+	188	11.2	105	11.2	37	8.5	68	13.5	84	11.2
<b>Dwelling Type</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
Undivided Private House	1,401	83.3	745	79.6	310	71.8	435	86.2	656	88.1
Part of a Private House	55	3.3	38	4.0	24	5.5	14	2.8	18	2.4
Flat/Apartment/Condominium	55	3.3	50	5.4	30	7.0	20	4.0	5	0.7
Double House/Duplex	108	6.4	79	8.5	61	14.0	19	3.7	29	3.9
Other	61	3.7	24	2.5	7	1.7	16	3.2	38	5.1
<b>Ownership of Dwelling</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
Own/Hire-Purchase	1,148	68.3	608	65.0	251	58.1	357	70.9	540	72.5
Rent-private	273	16.3	235	25.1	136	31.6	98	19.5	38	5.2
Rent-Free	198	11.8	68	7.2	26	6.0	41	8.2	130	17.5
Other	62	3.7	26	2.7	19	4.3	7	1.4	37	4.9
<b>Ownership of Land</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
Freehold	677	40.2	368	39.3	174	40.3	194	38.5	308	41.4
Leasehold	368	21.9	192	20.5	62	14.4	130	25.8	176	23.6
Other	49	2.9	16	1.8	6	1.4	10	2.0	32	4.4
Not Stated	54	3.2	31	3.3	8	1.9	23	4.5	23	3.1
Not Applicable (does not own or hire purchase dwelling)	533	31.7	328	35.0	181	41.9	147	29.1	205	27.5
<b>Outer Walls</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
Wood	701	41.7	348	37.2	191	44.1	157	31.2	353	47.3
Plywood	74	4.4	49	5.3	31	7.1	18	3.6	25	3.3
Concrete	708	42.1	463	49.5	178	41.3	285	56.5	245	32.8
Wood and Concrete	112	6.7	54	5.7	28	6.5	25	5.1	59	7.9
Sticks/Palmetto	58	3.5	13	1.4	1	0.3	12	2.4	45	6.1
Other	27	1.6	9	0.9	3	0.7	6	1.1	18	2.4
DK/NS	1	0.1	0	0.0	0	0.0	0	0.0	1	0.2
<b>Roofing</b>										
<b>Total</b>	<b>1,681</b>	<b>100.0</b>	<b>936</b>	<b>100.0</b>	<b>432</b>	<b>100.0</b>	<b>504</b>	<b>100.0</b>	<b>745</b>	<b>100.0</b>
Sheet Metal (zinc, aluminium)	1,382	82.2	830	88.7	417	96.6	412	81.8	553	74.2
Concrete	142	8.4	92	9.8	9	2.2	83	16.4	50	6.7
Thatch	102	6.1	3	0.3	0	0.0	3	0.6	99	13.3
Other	49	2.9	8	0.9	4	0.8	5	0.9	41	5.5
DK/NS	5	0.3	3	0.3	2	0.4	1	0.2	3	0.4

**Table 4-2 (Continued)**  
**Belize: Selected Housing Characteristics by Residence, 2002**  
**2002 LSMS**

<b>Housing Characteristics</b>	<b>Total</b>	<b>%</b>	<b>Urban</b>	<b>%</b>	<b>Belize City</b>	<b>%</b>	<b>Other Urban</b>	<b>%</b>	<b>Rural</b>	<b>%</b>
<b>Toilet Type</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Water Closet	922	54.8	727	77.7	403	93.4	323	64.2	195	26.1
Pit Latrine	667	39.7	181	19.3	5	1.2	176	34.9	486	65.2
Other	28	1.7	19	2.0	17	4.0	1	0.2	10	1.3
None	59	3.5	6	0.6	2	0.5	3	0.7	54	7.2
Dk/NS	5	0.3	4	0.4	4	0.9	0	0.0	1	0.2
<b>Toilet facility shared with another person not of the household or with another household</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Yes	168	10.0	62	6.7	22	5.1	40	8.0	105	14.1
No	1,439	85.6	861	92.0	400	92.7	461	91.4	579	77.7
DK/NS	11	0.7	3	0.4	3	0.8	0	0.0	8	1.0
not have toilet facility)	63	3.8	9	1.0	6	1.4	3	0.7	54	7.2
<b>Location of Kitchen</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Indoor	1,462	87.0	876	93.6	416	96.3	460	91.3	586	78.6
Outdoor	204	12.1	54	5.7	11	2.5	43	8.5	150	20.2
DK/NS	15	0.9	6	0.7	5	1.1	1	0.3	9	1.2
<b>Kitchen shared with another household</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Yes	57	3.4	24	2.6	10	2.3	14	2.8	33	4.4
No	1,612	95.9	907	96.9	419	96.9	488	96.9	706	94.7
DK/NS	12	0.7	5	0.5	4	0.8	1	0.3	7	0.9
<b>Cooking Fuel</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Wood	252	15.0	39	4.2	6	1.5	33	6.5	213	28.6
Gas (Butane)	1,365	81.2	861	92.0	405	93.7	456	90.5	504	67.6
Other	54	3.2	31	3.3	17	4.0	14	2.7	23	3.1
Dk/NS	11	0.6	5	0.5	4	0.8	1	0.3	6	0.8
<b>Drinking-Water</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Public/Private piped into dwelling	429	25.5	306	32.7	159	36.8	148	29.3	122	16.4
Public piped into yard	211	12.6	73	7.8	10	2.2	63	12.5	139	18.6
Private Vat/Drum/Well, Not Piped	495	29.5	191	20.5	83	19.3	108	21.5	304	40.8
Public Standpipe/Hand Pump	54	3.2	5	0.6	2	0.5	3	0.6	48	6.5
River/Stream/Creek/Pond/Spring	59	3.5	17	1.8	15	3.5	2	0.4	42	5.7
Purified Water	408	24.3	330	35.2	159	36.8	171	33.9	78	10.5
Other	23	1.4	13	1.4	4	0.9	9	1.8	10	1.4
Dk/NS	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
<b>Lighting</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Kerosene Lamp	156	9.3	9	1.0	7	1.6	3	0.5	147	19.7
Electricity from BEL	1,377	81.9	893	95.4	417	96.4	476	94.5	484	65.0
Electricity from Private Generator	93	5.5	13	1.4	2	0.5	11	2.2	80	10.7
Other	51	3.1	18	1.9	5	1.1	13	2.6	34	4.5
Dk/NS	4	0.2	3	0.3	1	0.3	1	0.3	1	0.1
<b>Waste Disposal</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Prepare for municipal collection	908	54.0	843	90.1	412	95.3	431	85.6	65	8.8
Take it to public dump	155	9.2	24	2.6	7	1.6	17	3.3	132	17.7
Dump it in own yard	126	7.5	19	2.0	9	2.2	9	1.8	108	14.4
Burn it	440	26.2	44	4.7	3	0.6	42	8.3	396	53.1
Other	50	3.0	6	0.6	1	0.3	5	0.9	44	5.9
Dk/NS	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
<b>Problems with rats/roaches/bat</b>										
Total	1,681	100.0	936	100.0	432	100.0	504	100.0	745	100.0
Yes	691	41.1	360	38.5	189	43.8	171	33.9	331	44.5
No	987	58.7	575	61.4	242	55.9	333	66.1	413	55.4
Dk/NS	2	0.1	1	0.1	1	0.3	0	0.0	1	0.1

**Table 4-3**  
**Belize: Persons per bedroom by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Persons per bedroom					
	Adequate (3 or less persons per bedroom)		Inadequate (more than 3 persons per bedroom)		Total	Number
	Number	%	Number	%	%	
1	73	33.9	143	66.1	216	100.0
2	170	63.9	96	36.1	266	100.0
3	228	77.4	67	22.6	294	100.0
4	336	88.8	42	11.2	379	100.0
5	507	96.3	19	3.7	526	100.0
<b>Total</b>	1,314	78.2	367	21.8	1,681	100.0

**Urban**

Quintiles (Per capita consumption in HH)	Persons per bedroom					
	Adequate (3 or less persons per bedroom)		Inadequate (more than 3 persons per bedroom)		Total	Number
	Number	%	Number	%	%	
1	40	57.1	30	42.9	71	100.0
2	77	69.3	34	30.7	112	100.0
3	118	80.3	29	19.7	147	100.0
4	222	92.3	18	7.7	241	100.0
5	354	97.0	11	3.0	365	100.0
<b>Total</b>	813	86.8	123	13.2	936	100.0

**Rural**

Quintiles (Per capita consumption in HH)	Persons per bedroom					
	Adequate (3 or less persons per bedroom)		Inadequate (more than 3 persons per bedroom)		Total	Number
	Number	%	Number	%	%	
1	33	22.6	112	77.4	145	100.0
2	93	60.0	62	40.0	155	100.0
3	109	74.4	38	25.6	147	100.0
4	114	82.6	24	17.4	138	100.0
5	152	94.9	8	5.1	160	100.0
<b>Total</b>	501	67.3	244	32.7	745	100.0



**Table 4-4**  
**Belize: Ownership of Dwelling Unit by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Ownership					
	Own/Hire purchase		Does not own/hire purchase		Total	
	Number	(%)	Number	(%)	Number	(%)
1	153	70.9	63	29.1	216	100.0
2	194	72.8	72	27.2	266	100.0
3	183	62.0	112	38.0	294	100.0
4	259	68.5	120	31.5	379	100.0
5	359	68.3	167	31.7	526	100.0
Total	1,148	68.3	533	31.7	1,681	100.0

**Urban**

Quintiles (Per capita consumption in HH)	Ownership					
	Own/Hire purchase		Does not own/hire purchase		Total	
	Number	(%)	Number	(%)	Number	(%)
1	59	83.3	12	16.7	71	100.0
2	73	65.7	38	34.3	112	100.0
3	77	52.1	71	47.9	147	100.0
4	161	67.1	79	32.9	241	100.0
5	237	64.9	128	35.1	365	100.0
Total	608	65.0	328	35.0	936	100.0

**Rural**

Quintiles (Per capita consumption in HH)	Ownership					
	Own/Hire purchase		Does not own/hire purchase		Total	
	Number	(%)	Number	(%)	Number	(%)
1	94	64.8	51	35.2	145	100.0
2	120	78.0	34	22.0	155	100.0
3	106	72.0	41	28.0	147	100.0
4	98	70.8	40	29.2	138	100.0
5	122	76.1	38	23.9	160	100.0
Total	540	72.5	205	27.5	745	100.0

**Table 4-5**  
**Belize: Material of Outer Walls by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Material of Outer Walls					
	Concrete		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	55	25.6	160	74.4	216	100.0
2	87	32.8	179	67.2	266	100.0
3	127	43.0	168	57.0	294	100.0
4	169	44.7	210	55.3	379	100.0
5	269	51.2	257	48.8	526	100.0
Total	708	42.1	973	57.9	1,681	100.0

**Urban**

Quintiles (Per capita consumption in HH)	Material of Outer Walls					
	Concrete		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	28	39.9	43	60.1	71	100.0
2	42	37.2	70	62.8	112	100.0
3	73	49.3	75	50.7	147	100.0
4	118	49.0	123	51.0	241	100.0
5	203	55.5	163	44.5	365	100.0
Total	463	49.5	473	50.5	936	100.0

**Rural**

Quintiles (Per capita consumption in HH)	Material of Outer Walls					
	Concrete		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	27	18.7	118	81.3	145	100.0
2	46	29.7	109	70.3	155	100.0
3	54	36.7	93	63.3	147	100.0
4	51	37.2	87	62.8	138	100.0
5	66	41.3	94	58.7	160	100.0
Total	245	32.8	501	67.2	745	100.0

**NOTE:** Adequate: Concrete; Inadequate: Wood, Stucco, Wood and Concrete, Brick, Plywood, Sticks/palmetto, Makeshift, Other

**Table 4-6**  
**Belize: Material Used for Roofing by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Material Used for Roofing					
	Adequate		Inadequate		Total	
	Number	(%)	Number	(%)	Number	(%)
1	148	68.6	68	31.4	216	100.0
2	250	94.0	16	6.0	266	100.0
3	288	97.8	6	2.2	294	100.0
4	362	95.6	17	4.4	379	100.0
5	514	97.8	11	2.2	526	100.0
Total	1,563	93.0	118	7.0	1,681	100.0

**Urban**

Quintiles (Per capita consumption in HH)	Material Used for Roofing					
	Adequate		Inadequate		Total	
	Number	(%)	Number	(%)	Number	(%)
1	69	97.1	2	2.9	71	100.0
2	112	100.0	0	0.0	112	100.0
3	147	100.0	0	0.0	147	100.0
4	238	99.0	2	1.0	241	100.0
5	363	99.3	3	0.7	365	100.0
Total	929	99.2	7	0.8	936	100.0

**Rural**

Quintiles (Per capita consumption in HH)	Material Used for Roofing					
	Adequate		Inadequate		Total	
	Number	(%)	Number	(%)	Number	(%)
1	79	54.6	66	45.4	145	100.0
2	138	89.6	16	10.4	155	100.0
3	141	95.7	6	4.3	147	100.0
4	124	89.7	14	10.3	138	100.0
5	152	94.6	9	5.4	160	100.0
Total	634	85.1	111	14.9	745	100.0

**NOTE:** Adequate: Sheet metal (zinc, aluminium), shingle, rubber rye, concrete  
 Inadequate: Thatch, Asbestos, Other

**Table 4-7**  
**Belize: Toilet Facility by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Toilet Facility					
	Water Closet		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	38	17.6	178	82.4	216	100.0
2	78	29.4	188	70.6	266	100.0
3	148	50.2	147	49.8	294	100.0
4	240	63.2	139	36.8	379	100.0
5	418	79.5	108	20.5	526	100.0
Total	922	54.8	759	45.2	1,681	100.0

**Urban**

Quintiles (Per capita consumption in HH)	Toilet Facility					
	Water Closet		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	29	41.6	41	58.4	71	100.0
2	58	52.2	53	47.8	112	100.0
3	110	74.8	37	25.2	147	100.0
4	193	80.4	47	19.6	241	100.0
5	335	91.8	30	8.2	365	100.0
Total	727	77.7	209	22.3	936	100.0

**Rural**

Quintiles (Per capita consumption in HH)	Toilet Facility					
	Water Closet		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	8	5.9	136	94.1	145	100.0
2	20	13.0	135	87.0	155	100.0
3	38	25.5	109	74.5	147	100.0
4	46	33.3	92	66.7	138	100.0
5	83	51.5	78	48.5	160	100.0
Total	195	26.1	550	73.9	745	100.0

**Note:** Adequate: Water closet (W.C.) linked to BWS sewer system or to septic tank;  
 Inadequate: Pit latrine, Other, None, etc.

**Table 4-8**  
**Belize: Exclusive Use of Water Closet (W.C.) by quintile and region, 2002**  
**2002 LSMS**

Quintiles  (Per capita consumption in HH)	Exclusive Use of W.C.					
	Total		Urban		Rural	Number
	Number	%	Number	%		%
1	32	100.0	26	80.5	6	19.5
2	74	100.0	56	74.7	19	25.3
3	136	100.0	105	77.3	31	22.7
4	227	100.0	185	81.6	42	18.4
5	386	100.0	310	80.3	76	19.7
Total	855	100.0	681	79.7	173	20.3

**NOTE:** Exclusive use of W.C. linked to sewer system or septic tank and does not share toilet facility

**Table 4-9**  
**Belize: Access to drinking water by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles  (Per capita consumption in HH)	Access to Drinking Water					
	Piped Water in Dwelling or Purified Water		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	56	25.8	160	74.2	216	100.0
2	98	36.8	168	63.2	266	100.0
3	120	40.6	175	59.4	294	100.0
4	223	58.9	156	41.1	379	100.0
5	341	64.8	185	35.2	526	100.0
Total	837	49.8	844	50.2	1,681	100.0

**Urban**

Quintiles  (Per capita consumption in HH)	Access to Drinking Water					
	Piped Water in Dwelling or Purified Water		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	37	52.5	34	47.5	71	100.0
2	62	55.4	50	44.6	112	100.0
3	86	58.2	62	41.8	147	100.0
4	174	72.3	67	27.7	241	100.0
5	277	75.9	88	24.1	365	100.0
Total	636	68.0	300	32.0	936	100.0

**Rural**

Quintiles  (Per capita consumption in HH)	Access to Drinking Water					
	Piped Water in Dwelling or Purified Water		Other		Total	
	Number	(%)	Number	(%)	Number	(%)
1	19	12.8	126	87.2	145	100.0
2	36	23.3	119	76.7	155	100.0
3	34	23.1	113	76.9	147	100.0
4	49	35.5	89	64.5	138	100.0
5	63	39.4	97	60.6	160	100.0
Total	201	26.9	544	73.1	745	100.0

\* The LSMS did not capture information if drinking water was treated or not.

**NOTE:** Other includes Private vat/drum/well, not piped, public piped into yard, public standpipe or hand pump, public well, River/stream/creek/pond/spring, other

**Table 4-10**  
**Belize: Access to Electricity by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Access to Electricity					
	Yes		No		Total	
	Number	(%)	Number	(%)	Number	(%)
1	111	51.6	104	48.4	216	100.0
2	224	84.2	42	15.8	266	100.0
3	268	91.1	26	8.9	294	100.0
4	360	95.1	19	4.9	379	100.0
5	506	96.2	20	3.8	526	100.0
<b>Total</b>	<b>1,470</b>	<b>87.4</b>	<b>211</b>	<b>12.6</b>	<b>1,681</b>	<b>100.0</b>

**Urban**

Quintiles (Per capita consumption in HH)	Access to Electricity					
	Yes		No		Total	
	Number	(%)	Number	(%)	Number	(%)
1	61	85.4	10	14.6	71	100.0
2	107	96.0	5	4.0	112	100.0
3	144	97.5	4	2.5	147	100.0
4	232	96.3	9	3.7	241	100.0
5	363	99.3	2	0.7	365	100.0
<b>Total</b>	<b>906</b>	<b>96.8</b>	<b>30</b>	<b>3.2</b>	<b>936</b>	<b>100.0</b>

**Rural**

Quintiles (Per capita consumption in HH)	Access to Electricity					
	Yes		No		Total	
	Number	(%)	Number	(%)	Number	(%)
1	51	35.0	94	65.0	145	100.0
2	117	75.6	38	24.4	155	100.0
3	125	84.8	22	15.2	147	100.0
4	129	93.0	10	7.0	138	100.0
5	143	89.2	17	10.8	160	100.0
<b>Total</b>	<b>564</b>	<b>75.7</b>	<b>181</b>	<b>24.3</b>	<b>745</b>	<b>100.0</b>

**NOTE:** Access to electricity includes electricity from BEL or from private generator  
Households without electricity use gas lamp, kerosene lamp or another source of light.

**Table 4-11**  
**Belize: Garbage Disposal by quintile and region, 2002**  
**2002 LSMS**

**Total**

Quintiles (Per capita consumption in HH)	Garbage Disposal					
	Adequate		Inadequate		Total	
	Number	(%)	Number	(%)	Number	(%)
1	74	34.2	142	65.8	216	100.0
2	124	46.6	142	53.4	266	100.0
3	177	60.3	117	39.7	294	100.0
4	272	71.8	107	28.2	379	100.0
5	416	79.2	109	20.8	526	100.0
<b>Total</b>	<b>1,064</b>	<b>63.3</b>	<b>617</b>	<b>36.7</b>	<b>1,681</b>	<b>100.0</b>
Urban	867	92.6	69	7.4	936	100.0
Rural	197	26.4	548	73.6	745	100.0

**NOTE:** Adequate: Prepare for Municipal collection, take it to public dump;  
 Inadequate: Dump it in own yard, burn it, bury it, throw it into river, creek, pond/sea



**Table 4-12**  
**Housing Quality Index (HQI), 1991-2002**  
**Indicator of Housing Quality**

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	<b>1991 Census</b>	<b>1995 LSMS</b>	<b>2000 Census</b>	<b>2002 LSMS</b>
Exclusive Use of Kitchen	97.1	94.8	94.8	95.9
Electricity for Lighting	67.2	76.4	81.7	87.4
Undivided Private House	81.1	82.7	83.7	83.3
Own/Hire-Purchase Dwelling Unit	65.9	73.0	62.6	68.3
Drinking Water Piped into dwelling/Purified Water	31.3	43.6	46.8	49.8
Exclusive Use of Water Closet	32.8	38.8	46.6	45.2
Concrete Outer Walls	24.8	32.7	40.3	42.1
Total	400.2	442.0	456.4	472.1
<b>HQI</b>	57.2	63.1	65.2	67.4

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**Table 4-13**  
**Housing Quality Index (HQI) by Region, Census 2000 and LSMS 2002**

Indicator of Housing Quality	Census 2000				LSMS 2002			
	Urban	Belize City	Other Urban	Rural	Urban	Belize City	Other Urban	Rural
Undivided Private House	77.7	70.8	83.4	89.7	79.6	71.8	86.2	88.1
Ownership of Dwelling Unit	53.0	46.3	58.5	72.2	65.0	58.1	70.9	72.5
Concrete Walls	49.6	40.5	57.0	31.0	49.5	41.3	56.5	32.8
Exclusive Use of W.C.	72.0	81.5	64.2	21.3	72.9	88.2	59.7	23.2
Exclusive Use of Kitchen	94.8	93.3	96.0	94.4	96.9	97.0	96.8	94.4
Drinking water Piped into dwelling/Purified Water	67.9	75.7	61.5	25.8	68.0	73.6	63.2	26.9
Electricity for Lighting	95.4	96.8	94.2	68.0	96.8	97.0	96.7	75.7
Total	510.4	504.8	514.9	402.4	528.5	526.8	530.0	413.6
<b>HQI</b>	72.9	72.1	73.6	57.5	75.5	75.3	75.7	59.1

**Table 4-14****Belize: Percentage of Households Owning Selected Durable Goods  
2002 LSMS**

<b>Durable Good</b>	<b>2002</b>
Gas/Gas and Electric Stoves	85.4
Radio/Cassettes/CD players	81.3
Fans	77.7
TV sets/VCR/Video Equipments/Game boys/Play stations	74.3
Refrigerators or freezers	64.6
Bicycles	61.5
Washing Machines	55.7
Record player/Stereos	33.2
Sewing Machines	27.5
Dryers	14.2
Computers,printers,etc.	12.3
Musical Equipments	7.3
Electric Stoves	4.7
Air Conditions	3.7
Motorbikes	3.3
Other Electrical Equipment (toasters, blenders, microwaves)	51.0
Cars, other Vehicles	32.0
Other Stereo Equipment (equalizers,tweeters)	12.1

**Table 4-15**

**Belize: Percentage of Households Owning Selected Durable Goods by Region, 2002**

**LSMS 2002**

<b>Durable Good</b>	<b>Urban</b>	<b>Belize City</b>	<b>Other Urban</b>	<b>Rural</b>
Gas/Gas and Electric Stoves	93.0	95.9	90.5	75.8
Radio/Cassettes/CD players	86.3	91.0	82.4	75.0
Fans	90.5	94.7	86.9	61.6
TV sets/VCR/Video Equipments/Game boys/Play stations	88.3	92.2	85.0	56.6
Refrigerators or freezers	78.2	84.3	73.1	47.4
Bicycles	61.3	60.5	61.9	61.8
Washing Machines	64.0	66.1	62.3	45.2
Record player/Stereos	41.6	49.2	35.1	22.6
Sewing Machines	25.2	19.1	30.5	30.2
Dryers	16.2	17.5	15.1	11.8
Computers, printers, etc.	17.9	21.7	14.7	5.2
Musical Equipments	8.9	11.6	6.7	5.3
Electric Stoves	6.5	8.8	4.6	2.4
Air Conditions	5.2	6.3	4.2	1.8
Motorbikes	3.4	4.2	2.8	3.2
Other Electrical Equipment (toasters, blenders, microwaves)	63.7	69.8	58.4	35.2
Cars, other Vehicles	35.9	37.0	35.0	27.0
Other Stereo Equipment (equalizers, tweeters)	16.5	16.9	16.1	6.5

Table 4-16

## Belize: Percentage of Households Owning Selected Durable Goods by Quintile, 2002

LSMS 2002

Durable Good	Quintile				
	1	2	3	4	5
Gas/Gas and Electric Stoves	56.1	81.8	91.3	92.6	90.7
Radio/Cassettes/CD players	64.5	78.5	80.3	85.5	87.1
Fans	40.6	69.2	82.0	85.4	89.3
TV sets/VCR/Video Equipments/Game boys/Play stations	34.2	67.9	77.8	83.9	85.1
Refrigerators or freezers	27.5	49.8	63.9	73.3	81.3
Bicycles	56.3	66.8	64.9	63.7	57.4
Washing Machines	25.5	40.1	56.3	61.8	71.2
Record player/Stereos	15.1	24.0	26.4	38.0	45.6
Sewing Machines	24.6	21.7	26.6	27.3	32.1
Dryers	7.1	7.7	11.0	17.4	20.0
Computers,printers,etc.	3.0	2.5	4.5	10.3	26.8
Musical Equipments	3.2	3.1	5.0	8.1	11.9
Electric Stoves	1.7	3.8	1.3	3.1	9.4
Air Conditions	3.2	1.1	1.2	1.3	8.4
Motorbikes	2.7	1.4	3.1	4.1	4.2
Other Electrical Equipment (toasters, blenders, microwaves)	16.0	35.6	46.4	56.9	71.6
Cars, other Vehicles	11.4	18.0	25.2	32.0	51.3
Other Stereo Equipment (equalizers,tweeters)	4.1	6.3	7.7	14.1	19.3

**TABLE 5-1**  
**Belize: Enrolment by Selected Characteristics, 1995 and 2002**  
**1995 and 2002 LSMS**

Selected Characteristics	Total		Primary		Secondary		Tertiary		Other	
	1995	2002	1995	2002	1995	2002	1995	2002	1995	2002
<b>Total</b>	<b>1,350</b>	<b>2,467</b>	<b>1,110</b>	<b>1,851</b>	<b>185</b>	<b>459</b>	<b>34</b>	<b>143</b>	<b>21</b>	<b>14</b>
<b>Percentage</b>	<b>100.0</b>	<b>100.0</b>	<b>82.2</b>	<b>75.0</b>	<b>13.7</b>	<b>18.6</b>	<b>2.5</b>	<b>5.8</b>	<b>1.6</b>	<b>0.6</b>
<b>Age Group</b>										
5 - 12	100.0	100.0	97.7	99.2	0.4	0.4	0.0	0.0	1.9	0.4
13 - 16	100.0	100.0	53.1	38.7	46.2	60.4	0.4	0.5	0.4	0.4
17 - 18	100.0	100.0	3.5	0.0	78.9	74.6	17.5	24.4	0.0	0.9
19+	100.0	100.0	0.0	0.0	25.0	16.2	71.9	81.1	3.1	2.7
<b>District</b>										
Corozal	100.0	100.0	83.1	81.0	10.0	15.7	4.6	3.2	2.3	0.0
Orange Walk	100.0	100.0	91.6	75.7	7.6	16.8	0.0	6.9	0.8	0.6
Belize	100.0	100.0	72.2	68.4	20.6	22.7	4.3	8.6	3.0	0.3
Cayo	100.0	100.0	78.5	75.3	18.8	19.7	2.0	4.5	0.8	0.4
Stann Creek	100.0	100.0	89.7	79.0	9.3	16.5	0.9	3.9	0.0	0.7
Toledo	100.0	100.0	95.4	84.9	3.8	10.7	0.8	2.3	0.0	2.1
<b>Location</b>										
Urban	100.0	100.0	72.7	66.9	20.7	23.7	3.9	8.8	2.7	0.5
Rural	100.0	100.0	89.7	84.4	8.2	12.8	1.5	2.2	0.7	0.6
<b>Quintile</b>										
1	100.0	100.0	92.2	90.0	6.7	8.9	0.6	0.4	0.6	0.7
2	100.0	100.0	88.7	83.7	9.0	12.0	0.0	3.9	2.3	0.4
3	100.0	100.0	79.6	74.0	18.4	21.7	0.7	3.6	1.3	0.7
4	100.0	100.0	73.6	67.4	18.2	22.9	6.4	9.0	1.8	0.7
5	100.0	100.0	58.1	56.6	27.1	29.9	12.4	13.2	2.3	0.3
<b>Sex</b>										
Male	100.0	100.0	85.0	75.7	11.9	19.0	1.6	4.9	1.5	0.5
Female	100.0	100.0	79.3	74.4	15.6	18.3	3.4	6.7	1.6	0.7
<b>Ethnicity</b>										
Creole	100.0	100.0	76.2	66.5	18.4	25.0	3.2	8.4	2.2	0.2
Garifuna	100.0	100.0	78.6	67.8	18.6	25.0	1.4	7.3	1.4	0.0
Maya	100.0	100.0	95.4	86.4	4.6	11.3	0.0	1.9	0.0	0.5
Mestizo	100.0	100.0	82.6	78.6	12.9	15.8	2.9	5.3	1.6	0.4
Other	100.0	100.0	88.6	67.0	8.8	23.6	1.8	4.9	0.9	4.5

**Table 5-2**  
**Belize: Enrolment Rates by Selected Characteristics, 1995 and 2002**  
**1995 and 2002 LSMS**

Selected Characteristics	1995				2002			
	Primary Enrolment		Secondary Enrolment		Primary Enrolment		Secondary Enrolment	
	Net	Gross	Net	Gross	Net	Gross	Net	Gross
<b>Total</b>	<b>97.7</b>	<b>112.8</b>	<b>46.2</b>	<b>66.8</b>	<b>99.2</b>	<b>112.6</b>	<b>60.4</b>	<b>80.8</b>
<b>District</b>								
Corozal	97.1	105.2	53.3	73.3	99.0	112.5	50.9	79.9
Orange Walk	99.5	117.2	28.3	39.1	99.5	115.2	56.2	71.0
Belize	94.7	109.9	58.8	84.5	100.0	112.7	69.7	86.9
Cayo	98.3	114.9	52.5	81.4	99.5	112.0	59.7	91.9
Stann Creek	100.0	114.3	35.0	50.0	98.1	116.9	46.1	93.3
Toledo	100.0	120.2	16.0	20.0	97.3	108.6	52.2	59.0
<b>Sex</b>								
Male	97.5	113.1	39.4	61.4	99.5	114.4	57.7	78.1
Female	97.9	112.5	52.4	71.7	98.9	110.8	63.4	83.7
<b>Quintile</b>								
1	99.3	117.1	24.6	36.9	98.6	113.6	34.6	49.0
2	96.0	111.3	33.3	49.2	98.9	110.3	50.1	67.4
3	98.1	112.3	58.9	75.3	99.3	112.4	65.6	82.1
4	96.6	108.7	60.0	88.9	99.6	113.8	67.2	89.7
5	98.5	111.9	67.7	112.9	100.0	113.0	75.2	104.0

**TABLE 5-3**  
**Belize: Days Absent by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Days Absent					
	Total		0 days		At Least One day	
	Number	%	Total	%	Total	%
<b>Total</b>	<b>2,460</b>	<b>100.0</b>	<b>1,979</b>	<b>80.4</b>	<b>481</b>	<b>19.6</b>
<b>District</b>						
Corozal	279	100.0	197	70.5	82	29.5
Orange Walk	351	100.0	325	92.6	26	7.4
Belize	814	100.0	675	82.9	139	17.1
Cayo	577	100.0	430	74.4	147	25.6
Stann Creek	164	100.0	118	72.0	46	28.0
Toledo	275	100.0	234	85.2	41	14.8
<b>Location</b>						
Urban	1,318	100.0	1,028	78.0	290	22.0
Rural	1,142	100.0	951	83.3	191	16.7
<b>Quintile</b>						
1	514	100.0	410	79.8	104	20.2
2	535	100.0	445	83.2	90	16.8
3	485	100.0	394	81.2	91	18.8
4	493	100.0	391	79.3	102	20.7
5	433	100.0	339	78.2	94	21.8
<b>Sex</b>						
Male	1,216	100.0	993	81.6	223	18.4
Female	1,244	100.0	986	79.3	258	20.7
<b>Ethnicity</b>						
Creole	651	100.0	521	80.0	130	20.0
Garifuna	103	100.0	85	82.0	19	18.0
Maya	262	100.0	224	85.4	38	14.6
Mestizo	1,290	100.0	1,032	80.0	258	20.0
Other	154	100.0	117	76.3	36	23.7
<b>Education Level</b>						
Primary	1,851	100.0	1,475	79.7	376	20.3
Secondary	459	100.0	377	82.1	82	17.9
Tertiary	135	100.0	112	83.2	23	16.8
Other	14	100.0	14	100.0	0	0.0

\* Excludes 7 cases for persons who are attending foreign university.



**TABLE 5-4**  
**Belize: Days Absent by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Days Absent							
	Total		1-2		3-5		6+	
	Number	%	Total	%	Total	%	Total	%
<b>Total</b>	<b>481</b>	<b>100.0</b>	<b>286</b>	<b>59.5</b>	<b>132</b>	<b>27.4</b>	<b>63</b>	<b>13.1</b>
<b>District</b>								
Corozal	82	100.0	49	59.1	25	31.0	8	10.0
Orange Walk	26	100.0	15	57.7	8	29.1	3	13.2
Belize	139	100.0	80	57.7	45	32.2	14	10.1
Cayo	147	100.0	93	63.4	29	19.3	25	17.3
Stann Creek	46	100.0	25	53.7	16	35.0	5	11.3
Toledo	41	100.0	24	59.4	9	22.9	8	19.2
<b>Location</b>								
Urban	290	100.0	170	58.7	79	27.1	41	14.2
Rural	191	100.0	116	60.7	53	27.7	22	11.5
<b>Quintile</b>								
1	104	100.0	58	55.7	29	28.2	17	16.0
2	90	100.0	54	60.0	26	28.8	10	11.2
3	91	100.0	58	64.3	27	29.2	6	6.5
4	102	100.0	62	60.7	26	25.3	14	14.0
5	94	100.0	54	57.1	24	25.7	16	17.2
<b>Sex</b>								
Male	223	100.0	142	63.6	59	26.5	22	9.9
Female	258	100.0	144	56.0	73	28.1	41	15.9
<b>Ethnicity</b>								
Creole	130	100.0	76	58.3	32	24.8	22	16.9
Garifuna	18	100.0	6	32.2	9	52.5	3	18.5
Maya	38	100.0	22	58.5	11	27.6	5	14.0
Mestizo	258	100.0	154	59.9	74	28.5	30	11.7
Other	37	100.0	28	74.5	6	17.0	3	6.8
<b>Education Level</b>								
Primary	376	100.0	214	56.9	107	28.5	55	14.6
Secondary	82	100.0	60	72.9	17	20.5	5	6.6
Tertiary	23	100.0	12	54.4	8	34.1	3	11.5

**TABLE 5-5**  
**Belize: Days Absent by Reason, 2002**  
**2002 LSMS**

Days Absent	Day Absent Total      %		Reason for Absent			
			Own Illness Total      %		Other Total      %	
<b>Total</b>	<b>481</b>	<b>100.0</b>	<b>298</b>	<b>100.0</b>	<b>184</b>	<b>100.0</b>
<b>1-2</b>	286	59.5	158	53.2	128	69.7
<b>3-5</b>	132	27.4	91	30.5	41	22.2
<b>6+</b>	63	13.1	48	16.2	15	8.1

**TABLE 5-6**  
**Belize: Mean Distance from School and Mode of Transportation by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Mean Distance (m/s.)	Number	Mode of Transportation %						
			Total	Walk	Cycle	School Bus	Public Transport	Private Vehicle	Other
<b>Total</b>	<b>2.2</b>	<b>2,460</b>	<b>100.0</b>	<b>62.1</b>	<b>4.1</b>	<b>11.7</b>	<b>8.3</b>	<b>10.3</b>	<b>3.4</b>
<b>District</b>									
Corozal	1.6	279	100.0	58.6	10.0	9.0	8.4	14.1	0.0
Orange Walk	2.3	351	100.0	66.5	1.3	5.5	10.9	6.4	9.3
Belize	2.4	814	100.0	53.3	5.5	12.4	8.3	17.0	3.5
Cayo	2.5	577	100.0	67.7	3.2	6.8	13.1	8.3	0.8
Stann Creek	2.8	164	100.0	53.1	2.0	39.3	0.0	0.7	5.0
Toledo	1.7	275	100.0	79.5	0.4	14.3	0.0	1.8	4.0
<b>Location</b>									
Urban	1.4	1,318	100.0	64.3	4.6	3.6	7.3	15.9	4.3
Rural	3.2	1,142	100.0	59.5	3.4	21.1	9.5	4.0	2.5
<b>Quintile</b>									
1	1.4	514	100.0	76.3	1.9	13.9	3.6	2.0	2.3
2	1.9	534	100.0	69.8	2.8	15.8	5.7	2.6	3.4
3	2.4	485	100.0	63.8	5.7	13.3	11.5	3.9	1.8
4	3.2	493	100.0	57.0	2.8	8.2	12.1	17.1	2.8
5	2.4	433	100.0	39.6	7.9	6.1	9.4	29.3	7.6
<b>Sex</b>									
Male	2.4	1,216	100.0	60.3	5.5	12.0	8.5	9.3	4.4
Female	2.1	1,244	100.0	63.8	2.7	11.5	8.2	11.4	2.5
<b>Ethnicity</b>									
Creole	2.8	651	100.0	54.6	3.7	13.5	10.7	14.8	2.7
Garifuna	2.9	103	100.0	74.1	5.3	11.1	3.7	4.8	1.0
Maya	2.5	262	100.0	74.7	1.4	20.1	2.7	0.5	0.5
Mestizo	1.9	1,290	100.0	63.3	4.2	9.4	9.0	9.5	4.7
Other	1.9	154	100.0	53.7	8.6	9.8	5.9	19.0	3.2
<b>Education Level</b>									
Primary	1.0	1,851	100.0	70.0	3.3	10.9	3.2	9.3	3.2
Secondary	5.4	459	100.0	38.4	5.8	16.8	23.4	11.3	4.3
Tertiary*	7.2	135	100.0	34.0	8.4	5.4	26.8	21.9	3.5
Other	13.1	14	100.0	58.8	7.8	16.1	17.3	0.0	0.0

\*Excludes 7 cases who attend foreign university

**TABLE 5-7**  
**Belize: Source of Meals other than School Feeding Programmes,**  
**by Selected Characteristics**  
**2002 LSMS**

Selected Characteristics	Number	Meal Source			
		Total	Canteen	Home	Other
<b>Total</b>	<b>2,023</b>	<b>100.0</b>	<b>25.0</b>	<b>72.2</b>	<b>2.8</b>
<b>District</b>					
Corozal	266	100.0	29.0	68.8	2.2
Orange Walk	329	100.0	21.2	78.5	0.3
Belize	592	100.0	23.4	71.4	5.2
Cayo	460	100.0	34.0	63.3	2.7
Stann Creek	141	100.0	26.8	70.2	3.1
Toledo	235	100.0	11.5	88.0	0.5
<b>Location</b>					
Urban	1,029	100.0	33.8	62.0	4.2
Rural	994	100.0	16.0	82.7	1.3
<b>Quintile</b>					
1	446	100.0	14.4	83.2	2.4
2	449	100.0	18.4	80.0	1.7
3	418	100.0	32.8	63.3	3.9
4	373	100.0	25.8	71.2	3.0
5	337	100.0	37.7	59.3	3.0
<b>Sex</b>					
Male	1,001	100.0	25.7	71.8	2.5
Female	1,022	100.0	24.4	72.6	3.0
<b>Ethnicity</b>					
Creole	475	100.0	31.6	66.1	2.4
Garifuna	78	100.0	30.4	63.2	6.4
Maya	219	100.0	10.1	89.9	0.0
Mestizo	1,126	100.0	25.3	71.5	3.2
Other	125	100.0	20.3	76.8	2.8
<b>Education Level</b>					
Primary	1,625	100.0	17.4	79.6	3.1
Secondary	398	100.0	56.3	42.1	1.5

Excludes 286 cases for persons whose source of meal is school feeding programmes.

**TABLE 5-8**  
**Belize: Mean cost of schooling by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Mean Cost (\$)						
	Transport	Lunch & Snacks	Uniform	Books	Other Supplies	Education fees	Other
<b>Total</b>	130.88	100.34	72.78	128.76	31.56	196.28	123.71
<b>District</b>							
Corozal	139.04	91.99	50.36	86.52	30.32	64.68	56.29
Orange Walk	117.84	73.47	53.26	112.18	20.49	236.41	227.54
Belize	141.22	111.95	96.43	171.18	38.97	347.98	52.80
Cayo	126.68	111.63	73.88	128.96	33.16	135.23	206.63
Stann Creek	142.50	87.05	57.49	108.20	32.06	68.12	259.07
Toledo	38.44	94.70	93.10	102.25	28.60	93.32	107.13
<b>Location</b>							
Urban	118.98	107.14	80.18	152.57	33.00	273.77	136.07
Rural	142.49	89.53	64.57	103.24	29.77	91.63	88.52
<b>Quintile</b>							
1	91.22	57.59	55.82	77.29	20.69	39.17	28.61
2	85.26	71.89	53.06	99.88	24.38	67.11	51.36
3	80.59	83.57	66.20	117.06	27.54	86.02	46.91
4	162.24	112.71	89.02	171.53	35.73	142.77	275.82
5	182.94	159.73	106.08	189.13	52.30	641.27	144.60
<b>Sex</b>							
Male	120.15	97.12	78.52	123.32	30.84	235.99	137.55
Female	142.99	103.72	66.86	134.30	32.26	157.16	107.83
<b>Ethnicity</b>							
Creole	135.16	118.08	96.71	168.20	36.34	185.45	72.52
Garifuna	314.27	101.72	86.06	160.41	44.84	112.33	15.73
Maya	61.38	90.52	86.44	91.44	28.63	122.46	31.38
Mestizo	121.11	91.17	63.32	115.03	28.20	198.34	176.75
Other	184.03	140.91	57.59	157.71	49.22	335.41	71.43
<b>Education Level</b>							
Primary	99.04	63.45	60.82	83.65	23.01	54.71	59.61
Secondary	127.79	175.44	114.29	258.32	55.29	220.28	54.86
Tertiary	220.94	228.15	111.50	337.34	67.04	1757.17	721.39
Other	212.50	58.96	92.35	139.81	62.33	93.57	0.00

**TABLE 5-9**  
**Belize: Source of Financial Assistance by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Number	Source of Financial Assistance			
		Total	None	Family/Friend	Other
<b>Total</b>	<b>2,467</b>	<b>100.0</b>	<b>2,069</b>	<b>277</b>	<b>121</b>
<b>District</b>					
Corozal	279	100.0	92.7	4.3	3.0
Orange Walk	355	100.0	95.6	1.8	2.5
Belize	815	100.0	72.0	19.4	8.5
Cayo	578	100.0	85.2	11.2	3.6
Stann Creek	165	100.0	82.2	12.9	5.0
Toledo	275	100.0	92.8	5.4	1.7
<b>Location</b>					
Urban	1,324	100.0	76.5	16.5	7.0
Rural	1,143	100.0	92.4	5.2	2.5
<b>Quintile</b>					
1	514	100.0	88.8	6.5	4.7
2	534	100.0	81.1	13.9	5.1
3	486	100.0	82.7	11.2	6.1
4	494	100.0	81.0	14.3	4.7
5	439	100.0	85.8	10.3	3.9
<b>Sex</b>					
Male	1,222	100.0	86.0	10.0	3.9
Female	1,245	100.0	81.7	12.4	5.9
<b>Ethnicity</b>					
Creole	652	100.0	71.8	18.1	10.0
Garifuna	103	100.0	73.9	22.6	3.5
Maya	262	100.0	93.5	4.7	1.8
Mestizo	1,296	100.0	87.9	9.2	2.9
Other	154	100.0	90.8	3.2	6.0
<b>Education Level</b>					
Primary	1,851	100.0	86.3	10.0	3.6
Secondary	459	100.0	79.8	14.2	5.9
Tertiary	143	100.0	63.7	18.3	18.0
Other	14	100.0	90.9	0.0	9.1

**TABLE 5-10**  
**Belize: Level of Schooling Last Attended for Those Not Attending School**  
**by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Number	Level of schooling for those not attending school				
		Total	Primary	Secondary	Tertiary	Other
<b>Total</b>	<b>3,891</b>	<b>100.0</b>	<b>2,579</b>	<b>777</b>	<b>416</b>	<b>119</b>
<b>District</b>						
Corozal	509	100.0	75.5	15.3	7.1	2.1
Orange Walk	601	100.0	74.6	17.0	7.5	0.9
Belize	1,373	100.0	49.5	29.0	16.4	5.1
Cayo	756	100.0	73.5	16.0	9.4	1.1
Stann Creek	326	100.0	73.0	17.8	7.8	1.4
Toledo	326	100.0	83.6	6.3	4.1	6.0
<b>Location</b>						
Urban	2,093	100.0	55.5	26.2	15.1	3.2
Rural	1,798	100.0	78.9	12.7	5.6	2.9
<b>Quintile</b>						
1	584	100.0	87.5	8.0	2.3	2.2
2	723	100.0	78.9	14.5	4.1	2.6
3	791	100.1	70.3	21.9	4.8	3.1
4	824	100.0	61.5	23.0	12.6	2.8
5	969	100.0	44.9	27.1	23.9	4.1
<b>Sex</b>						
Male	1,923	100.0	65.9	20.0	10.6	3.4
Female	1,968	100.0	66.7	19.9	10.7	2.7
<b>Ethnicity</b>						
Creole	1,018	100.0	53.1	27.9	14.6	4.4
Garifuna	201	100.0	60.5	21.4	14.2	4.0
Maya	300	100.0	88.7	7.1	3.9	0.3
Mestizo	2,068	100.0	72.2	17.8	8.2	1.9
Other	304	100.0	52.2	20.3	19.1	8.4

**TABLE 5-11**  
**Belize: Qualification Attained for Those Not Attending School,**  
**by Selected Characteristics, 2002**  
**2002 LSMS**

Selected Characteristics	Number	Qualification attained for those not attending school					
		Total	None	Primary School	Highschool Diploma	Tertiary Level Diploma	Other
<b>Total</b>	<b>3,891</b>	<b>100.0</b>	<b>1,309</b>	<b>1,655</b>	<b>449</b>	<b>380</b>	<b>98</b>
<b>District</b>							
Corozal	509	100.0	47.8	35.4	7.7	6.6	2.5
Orange Walk	601	100.0	32.2	52.0	8.3	7.1	0.2
Belize	1,373	100.0	16.5	46.6	17.8	15.2	4.0
Cayo	756	100.0	45.2	34.2	9.2	8.4	3.0
Stann Creek	326	100.0	38.8	43.9	9.7	6.2	1.3
Toledo	326	100.0	54.5	36.9	4.3	3.7	0.7
<b>Location</b>							
Urban	2,093	100.0	23.2	43.7	15.4	13.7	4.0
Rural	1,798	100.0	45.8	41.2	7.0	5.2	0.9
<b>Quintile</b>							
1	584	100.2	58.3	35.0	3.8	1.9	1.2
2	723	100.0	40.2	48.7	5.6	4.5	1.0
3	791	100.0	32.2	48.4	11.2	4.6	3.6
4	824	100.0	28.5	43.5	14.2	11.6	2.1
5	969	100.0	19.4	36.9	18.6	21.1	4.0
<b>Sex</b>							
Male	1,923	100.0	32.9	43.6	11.0	9.6	3.0
Female	1,968	100.0	34.4	41.5	12.0	10.0	2.1
<b>Ethnicity</b>							
Creole	1,018	100.0	14.9	52.3	16.6	13.1	3.0
Garifuna	201	100.0	17.4	54.3	12.6	12.2	3.5
Maya	300	100.0	53.2	36.0	4.2	4.6	2.0
Mestizo	2,068	100.0	40.5	40.0	9.8	7.6	2.1
Other	304	100.0	41.1	25.3	13.1	16.6	3.8



**Table 6-1**  
**Belize: Percentage Reported Illness/Injury in 30 - Day**  
**Reference Period by Selected Characteristics, 2002**  
**LSMS 1995 and 2002**

Selected Character	Reported Illness/Injury			
	1995 (N)	%	2002 (N)	%
<b>Total</b>	<b>4,387</b>	<b>9.9</b>	<b>7,761</b>	<b>18.4</b>
<b>District</b>				
Corozal	750	3.7	922	20.9
Orange Walk	770	10.6	1,160	13.1
Belize	1,205	6.6	2,580	15.5
Cayo	863	13.4	1,668	19.9
Stann Creek	377	14.3	611	25.4
Toledo	422	17.5	820	23.8
<b>Location</b>				
Urban	1,941	7.6	4,034	19.9
Rural	2,446	11.7	3,727	16.7
<b>Quintile</b>				
1	NA	NA	1,510	17.9
2	NA	NA	1,544	17.3
3	NA	NA	1,543	15.7
4	NA	NA	1,556	19.4
5	NA	NA	1,608	21.3
<b>Sex</b>				
Male	2,189	9.8	3,851	16.3
Female	2,198	10.0	3,910	20.4
<b>Ethnicity</b>				
Creole	1,206	6.1	1,966	17.1
Garifuna	220	6.8	336	20.1
Maya	474	21.3	787	26.9
Mestizo	2,081	10.0	4,132	17.5
Other	406	8.4	533	15.8
<b>Age Group</b>				
0-4	660	8.9	1,006	31.3
5-9	663	6.6	1,092	19.4
10-19	1,127	6.5	1,918	14.1
20-24	300	7.7	669	11.4
25-34	564	11.0	1,062	13.2
35-64	857	13.3	1,665	19.2
65+	216	26.9	350	26.7

NA - Information not available

**Table 6-2**  
**Belize: Self-Reported Illness/Injury**  
**by Occurance of Illness, Mean Days of Impairment and**  
**Selected Characteristics 2002**  
**2002 LSMS**

Selected Characteristics	30 Day Reporting Period			
	(N)	Recurring Illness	Mean days of Illness/ injury impairment	
<b>Total</b>	<b>1,425</b>	<b>31.2</b>	<b>7.6</b>	<b>4.3</b>
<b>District</b>				
Corozal (N=193)	20.9	26.4	8.6	3.8
Orange Walk (N=152)	13.1	24.7	6.8	3.4
Belize (N=399)	15.5	32.9	6.2	4.0
Cayo (N=331)	19.9	36.8	9.4	5.1
Stann Creek (N=155)	25.4	34.2	6.0	3.4
Toledo (N=195)	23.8	25.4	8.3	5.1
<b>Location</b>				
Urban (N=801)	19.9	30.9	7.0	4.2
Rural (N=624)	16.7	31.5	8.4	4.4
<b>Quintile</b>				
1 (N=270)	17.9	27.1	7.9	5.3
2 (N=267)	17.3	30.4	7.6	3.2
3 (N=242)	15.7	30.6	7.3	3.8
4 (N=302)	19.4	31.0	7.1	4.1
5 (N=343)	21.3	35.5	8.0	4.8
<b>Sex</b>				
Male (N=628)	16.3	29.5	7.7	4.2
Female (N=796)	20.4	32.5	7.5	4.3
<b>Ethnicity</b>				
Creole (N=335)	17.1	33.7	6.5	4.3
Garifuna (N=67)	20.1	36.4	5.0	2.3
Maya (N=212)	26.9	26.8	7.6	4.6
Mestizo (N=724)	17.5	30.1	8.5	4.3
Other (N=84)	15.8	36.7	6.1	4.3
<b>Age Group</b>				
0-4 (N=315)	31.3	21.9	6.2	4.0
5-9 (N=212)	19.4	26.2	6.1	3.1
10-19 (N=270)	14.1	19.2	5.6	2.9
20-24 (N=76)	11.4	23.1	7.0	3.0
25-34 (N=140)	13.2	29.5	8.3	4.7
35-64 (N=319)	19.2	44.0	10.4	5.5
65+ (N=93)	26.7	74.8	11.4	7.3

**Table 6-3**  
**Belize: Self-Reported Illness/Injury by Care Seeking**  
**Behaviour and Selected Characteristics 2002**  
**2002 LSMS**

Selected Characteristics	30 Day Reporting Period		
	Reported Illness	Seek Medical Care	Purchase Medication
<b>Total</b>	<b>1,425</b>	<b>68.1</b>	<b>54.6</b>
<b>District</b>			
Corozal	193	61.2	64.8
Orange Walk	152	66.2	86.0
Belize	399	78.5	43.0
Cayo	331	67.0	63.5
Stann Creek	155	60.3	54.8
Toledo	195	63.4	28.7
<b>Location</b>			
Urban	801	70.4	56.6
Rural	624	65.2	52.1
<b>Quintile</b>			
1	270	63.9	39.2
2	267	59.8	54.1
3	242	68.1	59.0
4	302	71.4	53.2
5	343	75.0	65.2
<b>Sex</b>			
Male	628	67.3	54.0
Female	796	68.8	55.1
<b>Ethnicity</b>			
Creole	335	77.5	43.6
Garifuna	67	73.0	59.6
Maya	212	62.0	31.8
Mestizo	724	65.1	65.8
Other	84	68.2	57.2
<b>Age Group</b>			
0-4	315	75.7	51.2
5-9	212	67.8	51.6
10-19	270	51.4	49.5
20-24	76	54.2	49.3
25-34	140	60.2	60.6
35-64	319	59.5	60.6
65+	93	72.7	62.8

**Table 6-4**  
**Belize: Care Seeking Behaviour by Type of Health Care**  
**Facilities used and Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	Those Seeking Medical Care (%)					Those Purchasing Medication (%)				
	Total	Public Facility	Private Facility	Health facilities abroad	Other	Total	Locally	Abroad	Public	Private
<b>Total</b>	<b>971</b>	<b>71.1</b>	<b>35.4</b>	<b>6.3</b>	<b>5.6</b>	<b>860</b>	<b>90.5</b>	<b>6.7</b>	<b>19.9</b>	<b>76.3</b>
<b>District</b>										
Corozal	118	42.7	59.2	12.3	2.8	146	85.4	9.3	29.4	69.0
Orange Walk	100	53.2	34.6	5.4	16.4	137	95.2	3.3	15.8	84.2
Belize	313	83.8	25.6	2.2	3.1	178	96.7	0.7	20.6	74.2
Cayo	222	69.2	39.9	6.9	4.3	227	92.7	6.3	21.4	75.7
Stann Creek	93	74.9	45.8	5.8	4.5	95	89.2	9.8	11.0	78.3
Toledo	124	83.4	22.1	11.1	8.8	77	72.4	19.2	13.7	80.6
<b>Location</b>										
Urban	564	71.6	37.7	5.2	3.8	483	93.7	4.1	12.9	84.7
Rural	407	71.2	32.2	7.9	8.0	377	86.3	10.0	28.8	65.6
<b>Quintile</b>										
1	173	86.5	15.5	5.8	10.8	124	85.7	10.1	22.2	73.4
2	160	82.0	27.9	2.8	2.9	152	95.2	3.0	22.6	75.1
3	165	73.1	37.4	2.9	5.5	154	93.2	6.8	17.6	78.9
4	216	67.8	35.4	5.6	4.0	178	90.5	7.0	21.1	73.3
5	257	56.6	52.0	11.7	5.1	253	88.3	7.0	17.5	79.1
<b>Sex</b>										
Male	423	78.7	29.5	4.3	4.9	367	92.5	5.1	22.4	75.7
Female	548	65.8	39.9	7.9	6.1	493	89.0	7.9	18.0	76.8
<b>Ethnicity</b>										
Creole	260	88.0	23.1	2.6	4.6	155	94.3	3.5	18.4	73.7
Garifuna	49	82.1	43.3	4.6	0.0	40	100.0	0.0	8.0	92.0
Maya	131	75.5	23.4	8.5	11.8	85	79.1	15.9	16.8	78.1
Mestizo	471	62.4	41.5	7.9	5.2	527	90.4	6.7	22.0	75.6
Other	58	52.3	59.4	6.5	3.6	53	91.0	7.0	16.7	76.8
<b>Age Group</b>										
0-4	243	75.4	33.6	2.7	4.2	171	94.3	4.0	18.4	81.0
5-9	221	72.0	26.4	5.2	6.6	119	91.8	8.2	19.3	78.1
10-19	50	76.7	30.1	2.3	8.0	145	91.8	5.1	18.9	76.4
20-24	77	85.3	24.3	5.5	5.1	41	91.3	3.1	15.5	84.5
25-34	310	66.1	37.3	12.1	6.5	93	91.4	3.8	18.1	75.0
35-64	220	61.7	44.7	11.7	5.5	225	85.8	10.7	22.9	71.2
65+	69	74.6	47.2	3.4	5.4	66	89.5	7.2	21.3	75.2

**Table 6-5**  
**Belize: Source of Health Care in the Past Thirty Days and Twelve Months by**  
**Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	Local Private (%)		Local Public (%)		Abroad (%)	
	30 Days	12 months	30 Days	12 months	30 Days	12 months
<b>Total</b>	343	1,077	690	1,922	61	253
	100.0	100.0	100.0	100.0	100.0	100.0
<b>District</b>						
Corozal	20.4	15.3	7.3	9.3	23.8	26.2
Orange Walk	10.1	12.9	7.7	11.7	8.8	9.5
Belize	23.3	24.6	37.6	34.5	11.1	16.8
Cayo	25.8	22.2	22.3	20.3	25.2	24.6
Stann Creek	12.5	13.1	10.1	10.1	8.8	4.5
Toledo	8.0	11.9	14.9	14.1	22.4	18.4
<b>Location</b>						
Urban	61.9	56.9	58.1	57.1	47.6	55.4
Rural	38.1	43.1	41.9	42.9	52.4	44.6
<b>Quintile</b>						
1	7.8	11.2	21.7	22.0	16.4	14.3
2	13.0	11.1	19.0	21.4	7.3	10.7
3	18.0	18.5	17.5	18.9	7.7	7.4
4	22.2	23.2	20.9	20.2	19.6	21.3
5	39.0	36.0	20.9	17.4	49.0	46.3
<b>Sex</b>						
Male	36.4	41.1	47.8	45.6	29.5	40.1
Female	63.6	58.9	52.2	54.4	70.5	59.9
<b>Ethnicity</b>						
Creole	17.5	22.8	32.9	28.4	10.9	10.5
Garifuna	6.2	4.9	5.9	5.9	3.7	2.9
Maya	9.0	10.1	14.4	13.1	18.2	16.3
Mestizo	57.0	52.1	42.5	47.6	61.1	61.2
Other	10.3	10.1	4.4	5.1	6.1	9.2
<b>Age Group</b>						
0-4	23.8	19.1	26.6	28.1	10.8	6.8
5-9	11.7	11.1	15.9	13.1	13.0	9.2
10-19	12.7	13.4	16.1	15.5	5.4	11.3
20-24	3.0	6.9	5.3	7.8	3.8	6.6
25-34	10.6	12.3	9.4	11.5	19.4	13.5
35-64	28.6	28.0	19.7	17.4	42.1	40.7
65+	9.5	9.2	7.5	6.6	3.9	11.8

**Table 6-6**  
**Belize: Reasons for Visiting the Private and Local Health Facilities, 2002**  
**LSMS 2002**

Selected Characteristics	Local Private Facility				Local Public Facility				
	Check Up	Consult/ treatment for acute illness	Other	Total	Immunization/C hild Health	Consult/ treatment for acute illness	Check Up	Other	Total
<b>District</b>									
Corozal	25.5	14.4	8.3	15.3	8.7	8.3	10.6	10.6	9.3
Orange Walk	12.3	15.1	9.6	12.9	13.5	14.9	8.0	7.2	11.7
Belize	27.2	24.0	23.4	24.6	47.4	25.8	42.1	35.8	34.5
Cayo	16.0	23.2	25.6	22.2	10.1	23.2	20.3	21.9	20.3
Stann Creek	13.0	11.7	15.5	13.1	6.2	11.5	7.3	12.5	10.1
Toledo	6.0	11.5	17.6	11.9	14.0	16.3	11.6	12.0	14.1
<b>Urban/Rural</b>									
Urban	46.7	61.1	58.2	56.9	54.5	55.9	57.1	61.3	57.1
Rural	53.3	38.9	41.8	43.1	45.5	44.1	42.9	38.7	42.9
<b>Ethnicity</b>									
Creole	24.3	21.1	24.4	22.8	40.7	23.0	33.3	25.8	28.4
Garifuna	5.8	4.3	5.0	4.9	5.8	5.6	3.9	8.3	5.9
Maya	5.7	9.3	15.2	10.1	12.7	14.7	10.2	12.5	13.1
Mestizo	53.7	54.8	46.2	52.1	37.2	52.4	45.1	47.6	47.6
Other	10.5	10.5	9.1	10.1	3.5	4.3	7.4	5.8	5.1
<b>Quintile</b>									
1	7.6	9.3	17.5	11.2	22.3	25.5	18.0	18.3	22.0
2	6.4	10.4	16.1	11.1	20.7	23.1	17.6	21.9	21.4
3	18.3	20.9	14.6	18.5	23.5	15.7	19.8	21.3	18.9
4	27.8	25.1	16.1	23.2	23.8	17.4	26.3	18.0	20.2
5	40.0	34.4	35.7	36.0	9.7	18.3	18.3	20.5	17.4
<b>Sex</b>									
Male	40.0	42.5	39.7	41.1	46.3	46.9	43.5	44.2	45.6
Female	60.0	57.5	60.3	58.9	53.7	53.1	56.5	55.8	54.4
<b>Age Group</b>									
0-4	16.2	21.8	16.7	19.1	91.8	18.8	12.7	12.5	28.1
5-9	7.9	14.9	7.2	11.1	5.7	19.4	11.5	7.1	13.1
10-19	10.8	15.0	12.7	13.4	1.1	19.6	18.2	15.7	15.5
20-24	5.6	6.8	8.2	6.9	0.0	6.8	8.0	15.3	7.8
25-34	11.2	11.8	14.2	12.3	1.0	11.4	13.8	17.4	11.5
35-64	34.6	23.6	30.2	28.0	0.4	18.7	23.3	22.6	17.4
65+	13.8	6.0	10.8	9.2	0.0	5.2	12.6	9.4	6.6
<b>Belize</b>	<b>250</b>	<b>525</b>	<b>302</b>	<b>1,077</b>	<b>311</b>	<b>834</b>	<b>355</b>	<b>422</b>	<b>1,922</b>

**Table 6-7**  
**Belize: Reasons for No Visits to Health Facilities during the Past Twelve Months, 2002**  
**LSMS 2002**

Selected Characteristics	Local Private Facility				Local Public Facility				Health Facility Abroad				
	Can't afford it	Did not want to/not sick enough	Other	Total	Waiting time too long	Did not want to/not sick enough	Other	Total	Can't afford it	Too far	Did not want to/not sick enough	Other	Total
<b>District</b>													
Corozal	7.5	11.5	13.3	9.8	14.3	16.7	14.1	15.2	8.7	10.7	11.7	13.3	10.5
Orange Walk	16.8	10.9	22.8	15.8	14.6	13.3	25.6	18.9	19.0	22.9	7.5	30.7	16.2
Belize	39.1	24.2	28.0	32.1	25.3	25.6	25.0	25.3	38.5	39.4	20.1	24.7	30.3
Cayo	20.9	16.6	16.7	18.7	27.1	13.2	19.4	18.0	18.9	8.9	21.5	21.4	19.3
Stann Creek	10.2	5.2	7.0	7.9	15.5	5.6	7.5	7.9	3.9	5.1	19.4	5.2	10.0
Toledo	5.6	31.5	12.2	15.6	3.2	25.6	8.3	14.7	11.0	13.1	19.8	4.6	13.8
<b>Location</b>													
Urban	54.6	48.4	53.6	52.3	52.3	41.7	57.8	50.3	50.7	57.0	55.0	54.4	53.3
Rural	45.4	51.6	46.4	47.7	47.7	58.3	42.2	49.7	49.3	43.0	45.0	45.6	46.7
<b>Ethnicity</b>													
Creole	34.7	20.5	19.0	27.2	31.6	19.9	19.8	21.6	32.0	31.7	20.7	23.0	26.8
Garifuna	7.1	2.6	3.8	5.0	4.2	3.3	2.9	3.3	5.0	3.2	6.4	2.9	5.1
Maya	7.5	26.9	11.0	14.8	3.9	20.7	9.3	13.2	11.2	8.8	18.0	4.1	12.9
Mestizo	47.8	41.8	58.2	47.4	56.0	43.0	58.8	51.8	48.2	51.2	44.1	63.0	48.4
Other	3.0	8.1	8.0	5.6	3.1	12.9	9.1	9.7	3.6	5.0	10.5	7.1	6.6
<b>Quintile</b>													
1	24.2	26.0	18.9	23.9	5.3	20.5	15.1	15.9	23.7	10.7	19.7	15.2	20.2
2	26.6	17.4	16.9	21.8	11.7	15.5	13.2	13.9	22.3	14.4	16.8	17.3	19.0
3	21.0	15.6	15.4	18.2	21.7	20.9	17.9	19.7	20.5	19.6	18.1	21.3	19.6
4	15.9	21.2	21.5	18.7	21.5	18.3	20.4	19.7	17.7	24.5	21.0	20.1	19.8
5	12.3	19.9	27.2	17.4	39.8	24.8	33.4	30.8	15.8	30.9	24.4	26.1	21.4
<b>Sex</b>													
Male	46.7	50.0	46.2	47.7	39.1	48.6	45.0	45.6	46.4	43.1	47.0	46.3	46.3
Female	53.3	50.0	53.8	52.3	60.9	51.4	55.0	54.4	53.6	56.9	53.0	53.7	53.7
<b>Age Group</b>													
0-4	23.2	17.9	17.7	20.4	21.9	9.1	12.3	12.4	24.4	27.4	17.2	15.9	21.1
5-9	15.6	16.2	14.2	15.6	10.8	16.6	13.6	14.4	13.4	13.6	15.8	15.3	14.5
10-19	16.9	22.7	18.1	19.1	14.6	25.1	15.4	19.3	15.5	13.0	20.4	21.7	17.8
20-24	5.9	7.9	6.0	6.6	6.3	7.4	4.6	6.0	6.3	8.3	7.1	6.6	6.8
25-34	11.4	14.0	13.5	12.6	12.0	14.0	12.4	13.0	10.8	12.2	13.9	13.7	12.4
35-64	20.5	17.1	25.0	20.1	28.1	24.4	31.5	28.1	21.4	18.7	21.0	21.8	21.1
65+	6.6	4.2	5.6	5.6	6.4	3.5	10.1	6.8	8.2	6.7	4.5	5.1	6.4
<b>Belize</b>	<b>983</b>	<b>693</b>	<b>333</b>	<b>2,008</b>	<b>200</b>	<b>554</b>	<b>587</b>	<b>1,340</b>	<b>1,235</b>	<b>249</b>	<b>1,067</b>	<b>285</b>	<b>2,836</b>

**Table 6-8**  
**Belize: Level of Satisfaction with Health Care Services by Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	Local Private Facility			Local Public Facility			Health Facility Abroad		
	Dissatisfied	Satisfied	Total	Dissatisfied	Satisfied	Total	Dissatisfied	Satisfied	Total
<b>District</b>									
Corozal	16.5	15.1	15.3	6.9	9.6	9.3	4.8	28.2	26.2
Orange Walk	13.0	12.9	12.9	17.6	10.9	11.7	14.8	9.0	9.5
Belize	26.9	24.3	24.6	32.9	34.7	34.5	10.1	17.4	16.8
Cayo	20.1	22.4	22.2	25.8	19.5	20.3	45.4	22.7	24.6
Stann Creek	9.4	13.5	13.1	8.2	10.3	10.1	9.7	4.0	4.5
Toledo	14.2	11.7	11.9	8.7	14.8	14.1	15.1	18.7	18.4
<b>Location</b>									
Urban	45.1	58.1	56.9	55.1	57.4	57.1	26.3	58.1	55.4
Rural	54.9	41.9	43.1	44.9	42.6	42.9	73.7	41.9	44.6
<b>Ethnicity</b>									
Creole	22.2	22.8	22.8	27.9	28.5	28.4	10.6	10.5	10.5
Garifuna	5.2	4.8	4.9	6.3	5.8	5.9	0.0	3.1	2.9
Maya	11.5	10.0	10.1	9.4	13.5	13.1	26.6	15.3	16.3
Mestizo	50.1	52.4	52.1	54.4	46.7	47.6	57.3	61.5	61.2
Other	10.9	9.8	9.9	2.0	5.5	5.1	5.6	9.6	9.2
<b>Quintile</b>									
1	8.5	11.5	11.2	16.0	22.8	22.0	15.1	14.3	14.3
2	14.5	10.7	11.1	19.1	21.8	21.4	5.9	11.1	10.7
3	9.3	19.5	18.5	14.8	19.4	18.9	10.9	7.1	7.4
4	30.5	22.4	23.2	22.8	19.9	20.2	38.3	19.7	21.3
5	37.2	35.9	36.0	27.3	16.1	17.4	29.8	47.8	46.3
<b>Sex</b>									
Male	39.3	41.3	41.1	51.2	44.9	45.6	53.5	38.9	40.1
Female	60.7	58.7	58.9	48.8	55.1	54.4	46.5	61.1	59.9
<b>Age Group</b>									
0-4	10.1	20.0	19.1	20.7	29.1	28.1	5.1	7.0	6.8
5-13	6.5	11.6	11.1	9.9	13.5	13.1	5.6	9.6	9.2
14-17	13.3	13.4	13.4	14.0	15.7	15.5	21.0	10.4	11.3
18-25	9.2	6.7	6.9	6.9	7.9	7.8	5.9	6.7	6.6
26-64	18.1	11.8	12.3	14.1	11.1	11.5	10.5	13.8	13.5
65+	31.3	27.7	28.0	24.0	16.6	17.4	47.0	40.2	40.7
	11.5	8.9	9.2	10.4	6.1	6.6	5.1	12.4	11.8
<b>Total</b>	<b>101</b>	<b>976</b>	<b>1,077</b>	<b>220</b>	<b>1,703</b>	<b>1,922</b>	<b>22</b>	<b>232</b>	<b>253</b>



**Table 6-9**  
**Belize: The Ill/injured Expenditure on Medical Care at Public and Private**  
**Facilities by Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	Mean No. of Visit	Mean Total Cost Incurred for all Visits in the last 30 Days		Mean Cost (\$) of Drugs	
		Public	Private	Public	Private
<b>District</b>					
Corozal	2.5	30.33	103.23	26.47	42.07
Orange Walk	1.7	11.38	219.06	29.34	25.77
Belize	2.0	20.33	211.59	46.62	60.74
Cayo	1.8	14.89	103.42	25.10	44.48
Stann Creek	1.9	7.94	63.23	7.88	49.03
Toledo	2.1	8.91	93.27	17.90	41.84
<b>Location</b>					
Urban	1.9	18.85	146.13	30.69	47.38
Rural	2.1	12.48	112.97	29.00	40.19
<b>Ethnicity</b>					
Creole	2.1	12.10	246.91	44.25	43.85
Garifuna	1.8	0.58	35.51	25.84	62.41
Maya	1.8	4.99	55.42	6.04	28.70
Mestizo	2.0	25.37	108.78	24.79	41.92
Other	1.9	14.36	223.32	58.62	80.59
<b>Quintile</b>					
1	2.0	14.62	76.15	16.90	22.68
2	2.0	13.94	122.20	16.28	42.44
3	2.0	9.76	77.91	26.38	33.54
4	1.9	19.62	70.89	30.40	41.22
5	2.1	21.64	217.00	47.89	64.67
<b>Sex</b>					
Male	2.0	12.68	123.38	28.17	45.05
Female	2.0	19.42	139.50	30.87	44.52
<b>Age Group</b>					
0-4	1.8	7.50	51.67	23.00	36.61
5-9	1.6	1.63	65.73	32.02	28.20
10-19	1.8	2.23	84.41	16.46	25.44
20-24	1.5	14.49	45.21	14.45	31.97
25-34	2.2	21.13	122.95	26.70	44.16
35-64	2.3	40.89	265.46	39.24	73.93
65+	3.1	39.11	142.07	40.35	58.03
<b>Belize</b>	2.0	16.23	133.45	29.63	44.74

**Table 6-10**  
**Belize: Immunisation Coverage of Children by Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	6-59 Months			12-59 Months		0-59 Months			
	Total (N)	Percentage Receiving 3 or more Doses of OPV	DPT	Total (N)	Percentage Vaccinated Against Measles	Total (N)	Percentage Receiving BCG	Percentage Receiving HEP. B	Percentage of births registered
<b>Belize</b>	<b>914</b>	58.1	60.0	<b>813</b>	79.1	<b>1006</b>	85.3	78.2	92.7
<b>District</b>									
Corozal	79	97.4	96.0	72	96.3	89	97.0	91.7	94.6
Orange Walk	135	81.9	81.0	118	97.2	139	100.0	96.9	91.0
Belize	291	39.2	39.2	254	74.3	332	75.9	69.8	90.1
Cayo	205	61.8	63.8	187	71.3	229	81.4	75.0	93.2
Stann Creek	77	48.6	67.5	71	82.0	81	93.7	83.0	94.8
Toledo	127	51.7	51.8	111	70.8	136	87.3	73.2	97.3
<b>Location</b>									
Urban	453	60.0	61.7	404	83.7	498	87.8	81.6	91.8
Rural	462	56.3	58.2	410	74.6	508	83.0	74.8	93.6
<b>Ethnicity</b>									
Creole	240	35.7	38.5	217	75.8	270	75.1	70.3	88.7
Garifuna	29	67.8	75.8	25	91.2	31	84.7	84.7	96.5
Maya	134	50.6	52.9	117	72.3	142	88.8	74.3	98.4
Mestizo	458	72.3	72.4	407	84.0	501	90.5	84.3	93.3
Other	52	51.0	58.7	47	61.9	62	80.5	68.2	91.1
<b>Quintile</b>									
1	244	54.9	56.5	218	73.4	269	83.7	73.9	93.6
2	189	66.0	67.1	166	83.8	208	89.5	79.8	87.5
3	183	56.2	56.5	156	81.2	200	85.8	77.2	94.5
4	170	57.5	58.7	154	77.9	183	85.0	81.8	95.1
5	129	56.4	62.5	119	81.6	146	82.2	80.6	93.1
<b>Sex</b>									
Male	451	54.8	56.2	397	78.8	495	83.6	77.5	91.8
Female	463	61.4	63.7	417	79.3	512	87.0	78.8	93.6

**Table 6-11**  
**Belize: Immunisation Coverage of Children for 1995 and 2002 LSMS**  
**LSMS 1995 and 2002**

Year	Percentage 6-59		Percentage 12-59 Month Vaccinated Against Measles	Percentage Receiving BCG	Percentage Receiving HEP. B	Percentage of births registered
	Percentage 6-59 Months Receiving 3 or more Doses of OPV	Months Receiving 3 or more Doses of DPT				
1995	83.8	84.0	NA	63.9	NA	NA
2002	65.7	67.1	86.1	63.9	78.6	93.0

NA - Information not available

**Table 6-12**  
**Belize: Nutritional status of children less than 5 years**  
**by Selected Characteristics, 2002**  
**LSMS 2002**

Selected Characteristics	Weight for Height				Weight		Height	
	(N)	Under-weight for height %	Over-weight for height %	Under weight for age %	(N)	Under height for age %		
<b>District</b>								
Corozal	80	2.4	8.8	3.4	80	13.5		
Orange Walk	115	2.6	10.5	7.8	115	18.9		
Belize	169	1.4	22.4	6.1	171	9.4		
Cayo	178	0.0	1.8	5.9	175	12.8		
Stann Creek	68	0.0	6.0	8.7	66	18.2		
Toledo	111	1.7	14.1	13.5	107	43.7		
<b>Location</b>								
Urban	327	1.6	15.4	5.5	322	13.6		
Rural	394	1.0	7.5	8.9	392	21.7		
<b>Ethnicity</b>								
Creole	157	1.5	18.6	4.5	158	8.9		
Garifuna	23	0.0	8.4	17.2	19	15.2		
Maya	114	1.7	8.6	13.8	113	39.8		
Mestizo	383	1.3	9.1	6.9	382	16.7		
Other	44	0.0	9.7	0.0	42	9.9		
<b>Quintile</b>								
1	208	1.4	7.6	11.3	206	32.3		
2	157	2.1	5.9	5.9	153	13.9		
3	135	1.5	13.3	7.1	137	19.5		
4	131	0.8	15.0	5.8	130	8.2		
5	90	0.0	19.8	3.6	88	4.9		
<b>Sex</b>								
Male	358	1.5	7.6	5.8	360	17.8		
Female	363	1.0	14.8	8.9	354	17.9		
<b>Age group (Months)</b>								
0-11	119	2.8	15.9	5.2	120	11.3		
12-23	159	2.4	9.0	6.2	160	19.6		
24-35	159	0.6	8.9	7.4	156	15.9		
36-47	145	0.7	9.5	7.4	143	18.5		
48-59	139	0.0	14.3	10.3	135	23.2		
<b>Belize</b>	721	1.3	11.3	7.3	714	17.9		

## APPENDIX B:

### DIFFERENCES IN METHODOLOGY 1995 and 2002 LSMS

The 1995 and 2002 LSMS collected the same basic information required for estimating poverty measures. They also used the same methodology for the estimations, except for one crucial aspect, which is the application of adult equivalents (AE). This crucial difference does not allow for comparison of the 1995 and 2002 estimates

#### *Adult Equivalent*

The Caribbean Food and Nutrition Institute estimates the minimum food requirement for Belize at 2400 calories per adult per day. This minimum requirement varies according to the age and sex of the members of the households. For example, a baby requires only 27% or 648 of the calories that an adult requires, while a 14-year-old girl requires 69.5% or 1668 calories. The 2002 LSMS used specific AEs for nine different age groups and for males and females. On the other hand, the 1995 LSMS used only three different age groups and no consideration for the differences in sex (Tables B-1 & B-2).

**Table B-1**  
**Belize: Adult Equivalent by Age and Sex**  
**2002 LSMS**

Age	Adult Equivalent	
	Male	Female
Less than 1	0.270	0.270
1 to 3	0.468	0.436
4 to 6	0.606	0.547
7 to 9	0.697	0.614
10 to 14	0.825	0.695
15 to 18	0.915	0.737
19 to 29	1.000	0.741
30 to 60	0.966	0.727
61+	0.773	0.618

**Table B-2**  
**Belize: Adult Equivalent by Age**  
**1995 LSMS**

Age	Adult Equivalent
Less than 12	0.3
12 to 19	0.5
20+	1.0

Apart from the differences in values of the AEs, their application is also different. In 1995, the indigent line was developed on the basis of a family of five persons, comprising two adults, one teenager and two children younger than 12 years.

**Table B-3**  
**Belize: Adult Equivalent for Five-Member Household**  
**1995 LSMS**

Composition of Five-Member Household	Adult Equivalent
Adult (2)	1.0
Teenager (1)	0.5
Child (2)	0.3
<b>Total</b>	<b>3.1</b>
<b>Mean</b>	<b>0.62</b>

The figures in Table B-3 show that total AE for the five-member household is 3.1  $((1 \times 2) + (0.5 \times 1) + (0.3 \times 2))$ . Therefore, the mean AE for this household is 0.62  $(3.1/5)$ . The minimum cost daily requirement was multiplied by the mean AE to estimate the indigent line, e.g. Corozal is \$2.05  $(\$3.30 \times 0.62)$ , (Table B-4).

**Table B-4**  
**Belize: Indigent Line by District**  
**1995 LSMS**

District	Mean Adult Equivalent	Minimum Cost Daily Requirement \$	Daily Indigent Line \$	<sup>1</sup> Monthly Indigent Line \$	*Monthly Poverty Line \$
Corozal	0.62	3.30	2.05	61.38	102.03
Orange Walk	0.62	2.87	1.78	53.38	99.26
Belize	0.62	2.81	1.74	52.27	117.41
Cayo	0.62	3.25	2.02	60.45	95.21
Stann Creek	0.62	2.80	1.74	52.08	114.44
Toledo	0.62	4.48	2.78	83.33	105.78
Total	0.62	3.32	2.06	61.75	105.82

<sup>1</sup> 1 month = 30 days

Note that the mean AE was applied in all the districts without consideration for differences at that level. However, when AE was applied in 2002, the mean at the district level ranged from 0.72 in Toledo to 0.76 in Stann Creek (Table B-5). These rates reflect the household composition in the respective districts and were lowest in areas where the average number of children was highest. These rates were also higher compared to 1995.

**Table B-5**  
**Belize: Mean Adult Equivalent by District**  
**1995 and 2002 LSMS**

District	Mean Adult Equivalent	
	1995	2002
Corozal	0.62	0.75
Orange Walk	0.62	0.75
Belize	0.62	0.74
Cayo	0.62	0.74
Stann Creek	0.62	0.76
Toledo	0.62	0.72

In 2002, a total AE was estimated for each household according to its size and composition. Table B-6 has an example of the total AE for a five-member household.

**Table B-6**  
**Belize: Adult Equivalent for a Five-Member Household**  
**2002 LSMS**

Composition of a Five-Member Household	Adult Equivalent
Male, 42 years	0.966
Female, 39 years	0.727
Female 19 years	0.741
Female 15 years	0.737
Male 9 years	0.697
<b>Total</b>	<b>3.868</b>

The total AE was then used instead of the total number of persons in the household to estimate the per capita consumption for members of that household (e.g. Table B-7).

**Table B-7**  
**Belize: Adult Equivalent Per Capita Consumption**  
**for a five-Member Household in Belize City**  
**2002 LSMS**

Indicator	Amount
Total household Members	5
Total Adult Equivalent	3.9
Total Monthly Household Consumption (\$)	985.80
Monthly Per Capita Consumption (\$)	197.16
<b>Adult Equivalent Monthly Per capita Consumption (\$)</b>	<b>252.77</b>

The figures in Table B-7 show that AE monthly per capita consumption is \$252.77 ( $\$985.80 / 3.9$ ), which is higher than the per capita consumption, \$197.16 ( $\$985.80 / 5$ ).

The cost of the minimum food basket established for each district was used as the indigent line for 2002. Note that the daily values for both are the same. (Table B-8)

**Table B-8**  
**Belize: Indigent and Poverty Lines by District**  
**2000 LSMS**

District	Minimum Cost Daily Requirement \$	Daily Indigent Line \$	Monthly Indigent Line \$	Monthly Poverty Line \$
Corozal	3.41	3.41	102.30	192.32
Orange Walk	3.33	3.33	99.90	178.82
Belize	3.64	3.64	109.20	222.77
Cayo	3.03	3.03	90.90	150.89
Stann Creek	3.41	3.41	102.30	179.03
Toledo	4.29	4.29	128.70	236.81

In the example given of the five-member household, individuals in that household would not be considered poor since their AE monthly per capita consumption is \$252.77, which is above the poverty line for Belize District (\$222.77).



**Table B-9**  
**Belize: Comparison of Adult Equivalent 1995 & 2002**  
**1995 & 2002 LSMS**

Factors	Adult Equivalent	
	1995	2002
Age	Yes	Yes
Sex	No	Yes
District	No	Yes
Applied to Food Basket	Yes	No
Applied to Consumption	Not sure	Yes

The two methodologies presented show that in 1995 the application of adult equivalents gave little consideration to differences in age and no consideration for sex. There was also a lack of consideration for differences in the size and composition of households. An average household size with a particular composition was established to estimate mean AE, which was applied to all the districts without consideration for differences at that level. Data from 1991 Census indicate that average household size range from 4.4 in Belize District to 5.4 in Orange Walk. In 1995, the mean AE was applied to the cost of the food basket to estimate the indigent line. However, it is not clear whether that methodology also applied AE to consumption. The 2002 methodology allowed for the estimation of total AE for each size and composition of household and applied the total AE to estimate per capita consumption.

There was also a difference in the methodology used for establishing the consumption quintiles. In 1995, household consumption was used to establish the quintiles. However, in 2002, the quintiles were established using individual consumption. This and all the other differences made it difficult to compare the results of the 1995 and 2002 results.

# APPENDIX C

## SURVEY DESIGN

### The 2002 LSMS

The main purpose of the LSMS was to provide estimates on the level of poverty and a profile of the poor with respect to their education, health and coping strategy. The LSMS was conducted in February 2002. A total of 1680 households were sampled countrywide representing 3.1% of the total household enumerated in the 2000 Population and Housing Census. The households were randomly selected from enumeration districts in urban and rural areas and from each district. A household is defined as one or more persons who sleep most nights of the week under the same roof and share at least one daily meal. Household members could be related or unrelated, or a mixture of both.

### *Sample Design*

The design adopted for the LSMS is a two stage stratified random sample design, with the first stage a selection of Enumeration Districts (EDs) or Primary Sampling Units (PSUs) and the second stage a selection of households. For the selection of the PSUs, all the EDs in the country were grouped into sampling regions or strata of approximate equal size, in terms of households. An ED is a specially demarcated geographic area containing an average of 150 households with Belize having a total of 354 EDs. For the LSMS, an ED with less than 80 dwellings was combined with another ED to ensure that there were sufficient households for the proper selection of the sample in the selected EDs.

The sample design used was also a paired selection design, that is, two EDs were selected from each sampling region by applying the probability proportionate to size (pps) sampling methodology. The sampling regions were established by dividing the total household population into strata of approximately 1500 households. Certain urban areas were designated as one sampling region, while other urban areas and all rural areas in each district were divided into two or more sampling regions, depending on their total number of households (Table C-1).

**Table C-1:  
Belize: Sampling Regions by District and Urban/Rural  
2002 LSMS**

District	# Of Sampling Regions		
	Total	Urban	Rural
Corozal	4	1	3
Orange Walk	5	2	3
Belize	12	10	2
Belize City - North side		3	-
Belize City - Southside		6	-
San Pedro		1	-
	7	4	3

Cayo		1	-
Belmopan		1	-
Benque Viejo		2	-
San Ignacio/Santa Elena	3	1	2
Stann Creek	3	1	2
Toledo	34	19	15
<b>TOTAL</b>			

### ***Variance and Sampling Errors***

The sampling design adopted for the LSMS is a self weighting design, that is, the probability of the selection of a second stage unit (household) is the same for all units in the population, which in effect means a uniform sampling fraction for all strata (which are equal in size in terms of dwellings) with an equal number of second stage units being selected from the two first stage units. The only weights applied to the data was that for non-response, that is, for each ED, the number of households selected was divided by the number of responding households.

The formulae for the estimation of the sample mean and its variance (the standard error is the square root of the variance) are as follows:

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

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

where

- $L_t$  strata (sampling regions) from district 't'
- $M$  (same for all regions) sub-units (dwellings) in Sampling Region
- $2$  (same for all regions) Number of first stage units (EDs) selected from a sampling region
- $m$  (same for all EDs) Number of second stage units (dwellings) drawn from one selected ED
- $m_{is}$  Number of dwellings analysed from the 'i'th selected ED in the "s"th sampling region
- $f_{is} = m/m_{is}$  Non-response raising factor for the 'i'th ED in the "s"th sampling region

$Y_{ij}$  Unit Value for the 'j'th sub-unit in the 'i'th primary unit (ED)

$\bar{y}_i$  Sample Mean for the 'i'th selected ED in the 's'th region

The formulae are due to the sampling design involving paired selection of first stage units (EDs) with probability proportionate to size, from each sampling region.

### ***The Questionnaire***

The 2002 LSMS questionnaire (Appendix D) included three main sections and 14 subsections. Section One was comprised of household level questions on housing and household expenses on food and non-food items. The head of the household or any other responsible adult that had information concerning the spending patterns of the household completed this section. The head of household was defined as that person recognised by the other household members as the head.

#### Section 1: For Heads of Household

Section 1A: Housing and Related Expenses

Section 1B: Coping Strategy

Section 1C: Food Expenses

Section 1D: Home Produced Items

Section 1E: Monthly Expenditure

Section 1F: Annual Expenditure

Section 1G: Miscellaneous

#### Section 2: For Persons 5 Years or Older

Section 2A: General Characteristics

Section 2B: Health

Section 2C: Education

Section 2D: Economic Activity

#### Section 3: For Children Less than 5 Years

Section 3A: General Characteristics

Section 3B: Health

Section 3C: Immunisation Coverage and Anthropometrics.

Sections Two and Three were comprised of individual level questions for persons five years or older, and under five years, respectively. In most cases, especially among persons 14 years or older, the individual household members provided the information for Section Two, while the head of household or a responsible adult provided the information for children under 14 years in Section 2 and for those under five years in Section Three.

The questionnaire booklet allowed for information on five persons in the household i.e., three copies of Section 2 and two copies of Section 3. Additional Person forms were used when a household had more than three persons 5 year or older or more than two persons under five years. A Spanish version of the questionnaire was prepared and used at households where Spanish is the first language. However, the information obtained from such households was recorded in the English version of the questionnaire.

### ***Training***

The UWI team member conducted a one-week training workshop on the piloting of the LSMS questionnaire for CSO staff involved in the survey. The training session covered topics on the meaning and purpose of the LSMS, concepts and definition of poverty, questionnaire design and interviewing techniques. Participants spent most part of the training reviewing the various sections of the questionnaire and conducting the pilot exercise. UWI team members accompanied district supervisors in the field-testing of the questionnaire. The workshop ended with a review of the field procedures and necessary adjustments made to the questionnaire.

Ninety-five (95) persons including interviewers, field supervisors, editor/coders, district supervisors and CSO headquarter staff, participated in the four-day training workshop for the execution of the LSMS. Since the number of participants was unmanageable for one training group, two training groups were formed based on the district where field staff would work. Group One comprised those from Corozal, Orange Walk and Belize districts, while Group Two, comprised those from Cayo and Stann Creek and Toledo districts. The training for Group One started two days before Group Two, and there were two days of simultaneous training. Members of the UWI team and CSO staff conducted the training during the week of February 12, 2002 in Belmopan.

Participants were instructed on interviewing techniques and procedures, concepts and definition and on completing the questionnaire. They also participated in mock interviews. Each of them received a copy of the Training Manual that was prepared for the LSMS. This manual was used as a guide at the training sessions and as reference material for the field exercise. Editor/Coders received an additional half-day of training on editing and coding guidelines.

There was also a two-day training session for the community nurses aid (CNA) that were selected to conduct the anthropometrics. This training involved, theory and practical exercise in measuring the weight and height of children less than five years. Two personnel of the Ministry of Health conducted the training in Belize City, while children from two day-care centres were weighed and measured for the practical exercise.

### ***Fieldwork***

The survey was administered over a four-week period beginning February 17, 2002. Interviewers were given a list of approximately 24 households to complete within one week. The list included, the address of the household, the name of the head of the household and additional information to identify the specific addresses in the selected EDs. Interviewers were instructed to interview only those households on the lists. If the

address had a new household, they interviewed the new household at the address listed. Interviewers noted such changes on their household list. They also noted changes with respect to description of the dwelling units or status of the households. This information was used to update the sampling frame.

District supervisors were directly responsible for the overall supervision of the fieldwork and editing/coding of questionnaires in their respective district. Field supervisors were responsible for supervising the work of the interviewers (no more than five) assigned to them. They reviewed the completed questionnaires submitted by interviewers, assisted interviewers in obtaining information from household that refused to participate in the survey, helped to locate certain addresses that the interviewer could not find, and conducted re-interviews at selected households to ensure the accuracy of the data collected. CSO headquarters staff and one of the UWI team members also assisted with field supervision. CSO headquarter staff visited each district on a weekly basis. They reviewed completed questionnaire, conducted field visits, and responded to queries and concerns. Headquarter staff also prepared a report for each visit, which was forwarded to the respective district supervisor.

The anthropometrics exercise began after the fieldwork for the LSMS was completed. The CNA worked in teams of two and were sometimes assisted by a CSO staff member. Each team was given a list of all the households sampled that had children less than five years. The list, which was prepared by the interviewers when they completed their interviews, included the address of the households, name and age of the children under five years and name of the head of household. The interviewers had informed these households that the children would be measured at a later date.

The Ministry of Health provided the equipment to measure the height and weight of the children. Health clinics were used as the centres for conducting the anthropometrics in urban areas, while health posts or school buildings were used in rural areas. In some cases, children were measured at their homes. Each child that was measured received a special treat.

### ***Editing, Coding and Data Processing***

The editing and coding of questionnaires were done at the district level, while additional editing and coding checks, and data entry were conducted at CSO headquarters. After data entry, consistency checks were run and headquarter staff conducted the computer editing of the data. One of the UWI team members designed the data entry screen using Microsoft Access. The database was later converted to SPSS files for generating tables and basic poverty indicators.

### ***Response Rate***

Overall, 85.4% of the household sampled provided complete information. This high response is comparable to other surveys that had much shorter questionnaires. This completion rate ranged as high as 94.4% in Stann Creek district to 80% in Belize district. As noted earlier, the response rate by ED was used to determine the raising factor, which is estimated by taking the total number of households assigned under the self-weighting

design divided by the number of households with data accepted for analysis (Appendix E).

### **Focus Group Discussions**

FGD were conducted before and after the LSMS. These allowed for people to participate and share their perception of poverty and their own status. The pre-survey FGD produced useful information that required further investigation to include in the LSMS, while the post-survey FGD allowed for further discussions on data produced by the survey.

#### ***Pre-Survey Focus Group Discussion***

Five groups were selected for the pre-survey FGD, which were conducted in November 2000. Two of the groups represented urban areas and the remainder rural areas. These groups also represented the four major ethnic groups of Belize, the Creole, Garifuna and Maya and Mestizo. The Mayas were represented in two groups, one for males and the other females, and both of them were rural (Table C-2).

**Table C-2**  
**Belize: Pre-Survey Focus Group Discussions**  
**2002 LSMS**

No.	Urban/Rural	Ethnicity	Place Conducted
1	Rural	Mestizo	Corozal Town, Corozal
2	Urban	Creole	Belize City, Belize
3	Urban	Garifuna	Dangriga, Stann Creek
4	Rural	Maya (Female)	San Antonio, Toledo
5	Rural	Maya (Male)	San Antonio, Toledo

Each of the FGDs included eight participants who were selected by CSO's District Supervisor in the respective district. The FGDs were held in areas where the ethnic groups are concentrated. Trained moderators conducted the sessions, while note takers recorded the information. The moderators used a set of basic questions in all the FGDs. These questions addressed issues concerning poverty and its causes, land, loans, family, education, health and migration among others. NHDAC members served as observers at some of the sessions.

#### ***Post-Survey Focus Group Discussion***

The post-survey FGDs were conducted almost one year after the 2002 LSMS. These had to wait until the preliminary results of the survey were available, which allowed for the inclusion of questions generated by the findings of the survey. The number of groups (10) and participants per group (10) was higher compared to the pre-survey FGDs. Nevertheless, this set of FGDs followed the same basic procedures used for the pre-survey FGDs.

**Table C-3**  
**Belize: Post-Survey Focus Group Discussions**  
**2002 LSMS**

No.	Urban/Rural	Ethnicity	Poor/Non-Poor	Place Conducted
1	Rural	Mestizo	Poor	San Ignacio, Cayo
2	Rural	Mestizo	Non-Poor	San Ignacio, Cayo
3	Urban	Mestizo	Poor	San Ignacio, Cayo
4	Urban	Mestizo	Non-Poor	Orange Walk Town
5	Urban	Creole	Poor	Belize City, Belize
6	Urban	Creole	Non-Poor	Belize City, Belize
7	Urban	Garifuna	Poor	Dangriga, Stann Creek
8	Urban	Garifuna	Non-Poor	Dangriga, Stann Creek
9	Rural	Maya (Female)	Poor	San Antonio, Toledo
10	Rural	Maya (Male)	Poor	San Antonio, Toledo

The 10 groups represented urban and rural areas, the major ethnic groups, and the poor and non-poor (Table C-3). Participants were selected from communities that were identified as poor or non-poor based on income data from the 2000 Population and Housing Census.

There was a general feeling that the FGDs for the 'poor groups' were comprised of a mixed of poor and non-poor rather than only poor as was intended. Therefore, an additional FGD was conducted in Belize City for an 'urban, poor, Creole' group. CSO headquarters staff recruited the participants for this FGD from the Port Loyola, Collect and Lake Independence areas on Southside Belize City that are known to be the most economically depressed areas. This particular FGD provided rich firsthand information of the experiences of the poor in those areas. The main findings of these FGDs are incorporated in this report and a copy of the full report may be found in Appendix E.

### **Institutional Assessment**

The UWI team leader conducted an assessment of the social sector ministries and departments, as well as NGOs. Administrative records of the various policies, plans and programs that have been implemented to address the needs of the poor were examined. The assessment also included a review of the government's social sector expenditure, which was expressed as a percentage of total government expenditure and gross domestic product. Most importantly, the assessment identified some of the challenges that should be addressed in order to make progress in the area of poverty reduction.



## **Role of the National Human Development Advisory Committee (NHDAC)**

The National Human Development Advisory Committee was the main body that supervised the 2002 Poverty Assessment and was involved at all stages of the process. NHDAC members were updated on the progress of the assessment at its monthly meetings. Some of them received training in data analysis and report writing on poverty data at a one-week workshop held at the University of the West Indies, Mona, Jamaica. The members assisted with questionnaire review, analysis of data and report writing of various chapters of this report, observed FGDs, and reviewed this report.

NHDAC is chaired by the Ministry of Economic Development and is comprised of representatives of key social sector ministries and departments, civil society organisations and the private sector. One of its main responsibilities is social policy development, specifically in the area of poverty elimination. In 1998, NHDAC coordinated the development of the 1998-2003 National Poverty Elimination Strategy and Action Plan (NPESAP). The NPESAP was based on the findings from the 1995 Poverty Assessment and was developed through a consultation process at the national, district and community levels. NHDAC is planning a similar process for developing the 2003-2008 NPESAP based on the findings of the 2002 Poverty Assessment. However, the committee plans to conduct an assessment of the impact of the 1998-2003 NPESAP as a prerequisite for developing the 2003-2008 NPESAP.

## **Limitations of the Assessment Process**

The 2002 LSMS survey was originally planned for 2000. There were several delays due mainly to two natural disasters, Hurricanes Keith and Iris that struck Belize in 2000 and 2001, respectively. The arrangement between the UWI team and CSO also caused some delays. There were crucial times when members from either party were not available. The distance between the two parties also created some problems, especially in those circumstances, such as the problems encountered with the data entry screen, that required one-on-one practical assistance.

Important changes to the questionnaire were made at the training session. This created some problems, since the questionnaires were already mass-produced. The section on food and non-food expenditure was re-printed and attached to the questionnaire, while other changes were written in the questionnaire. This again was a result of the break in communication between the UWI team and CSO.

The sample size for the LSMS was small (1.3% of total household) compared to 10% that the CSO usually uses for other surveys. This small sample allows for disaggregation of the data only at the urban/rural and district levels. Any further disaggregation at the village or community level may result in statistically unreliable estimates.

The expenditure questions required the respondent to recall information on their spending for the past seven and thirty days. This approach has its limitations, since some of the respondents could not recall if they purchased certain items or could not remember the amount of money they spent on particular items.

Respondents who home produced or received as gift certain items were required to give an estimate of the value of these items. It is suspected that the value estimated for home produced or gift items are much lower than the prevailing market price. Since the underestimated value of these items was factored into the overall household expenditure, households that home produced most of their food could be classified as poor because their underestimated household expenses was below the poverty line.

The software programme that CFNI used for generating the minimum cost food basket does not include certain food items that are peculiar to Belize. Therefore, these items were excluded from the selection process in generating the minimum cost food basket for Belize, while other items that are not common to Belize were included. CFNI is in the process of updating its software and would be including these food items peculiar to Belize.

Some of the health centres/post used to conduct the anthropometrics did not have the necessary equipment needed for the exercise. The measuring scales had to be transported from one health centre to the next, sometimes on rough roads. This caused irreparable damage to some of the equipment. Furthermore, some of the buildings used for the anthropometrics were not levelled, which might have caused some inconsistencies in the measures.

The selection of participants, especially for the poor groups did not adequately reflect the poor. One of the poor groups was comprised mostly of people who had jobs and some of them even owned a vehicle. It was difficult to find people who are trained and experience facilitators for FGD. Most of reports from the FGD did not capture the essence of the discussion.

The analysis and writing process also had its limitations. After the initial training for the authors, all communications were done by e-mail, and only one of the authors had direct one-on-one contact with the UWI counterpart. Furthermore, the authors received minimal support from the respective ministries during this process.

## **Capacity Building**

One of the main objectives of the 2002 poverty assessment was to ensure the transfer of knowledge and capacity building for Belize to be able to conduct subsequent poverty assessment on its own. Although, this assessment was the second of its kind, this was the first time that the CSO had been involved in all stages of the poverty assessment. More specifically, CSO staff assisted with the development of the questionnaire and training manuals and the training of field staff. The CSO staff also coordinated the supervision of fieldwork and data processing. Most importantly, the CSO staff developed the capacity

to generate the poverty indicators, run tables, analyse the data and write the report. The Ministries of Economic Development, Education and Health also assisted with the analysis and report writing, while NHDAC members had the opportunity to review and comment on the various documents and procedures during the preparatory and data collection stages, and the report. Overall, there was capacity building at various levels and intensity.

**APPENDIX D**

**BELIZE  
LIVING STANDARD MEASUREMENT  
SURVEY  
FEBRUARY - MARCH 2002**



<b>INSTRUCTIONS</b>	<b>DISTRICT NUMBER</b>	<input type="checkbox"/>
Use No. 2 pencils only. Do not use pen.	<b>URBAN/ RURAL</b>	<input type="checkbox"/>
Check "✓" in the box with the appropriate response.	<b>REGION NUMBER</b>	<input type="checkbox"/> <input type="checkbox"/>
Mark only one response for each question. (Except where stated)	<b>ED NUMBER</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Incorrect</b> <b>Correct</b> <b>Marks</b> <b>Mark</b>	<b>HOUSEHOLD NUMBER</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<b>WEEK NUMBER</b>	<input type="checkbox"/>

ADDRESS AND TELEPHONE # OF HOUSEHOLD:  
\_\_\_\_\_

CITY/TOWN/VILLAGE:  
\_\_\_\_\_

DISTRICT:  
\_\_\_\_\_

INTERVIEWER'S SIGNATURE:  
\_\_\_\_\_

RECORD OF VISITS				
INTERVIEWER CALLS	1	2	3	4
DATE				
TIME STARTED				
TIME ENDED				
RESULT CODE				

RESULT CODES

1 = Complete

2 = Partially complete

3 = No suitable respondent

4 = Vacant

5 = Refusal

6 = Address not found

7 = No contact

8 = Vacant Lot

9 = Under Construction/Not Livable (uninhabitable)

10 = Other (Specify

\_\_\_\_\_)

FIELD SUPERVISOR / DISTRICT SUPERVISOR	
SIGNATURE	DATE

EDITOR/Coder (District Office)	
SIGNATURE	DATE

EDITOR/CODER (Main Office)	
SIGNATURE	DATE

DATA ENTRY OPERATOR	
SIGNATURE	DATE

## FOR ALL MEMBERS OF THE HOUSEHOLD

Please give me the name and age of all the persons who usually sleep and share at least one daily meal with your household.

**INTERVIEWER:** Start with the head, then list all other members (including small children and babies) by order of age (age in the reference week), from the oldest to the youngest.

1.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

2.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

3.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

4.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

5.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

6.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

7.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

8.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

9.

<i>SURNAME</i>	<i>FIRST NAME</i>	<i>AGE</i>
----------------	-------------------	------------

**10.**

---

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*SURNAME*

*FIRST NAME*

*AGE*

**11.**

---

---

*SURNAME*

*FIRST NAME*

*AGE*

**12.**

---

---

*SURNAME*

*FIRST NAME*

*AGE*

**13.**

---

---

*SURNAME*

*FIRST NAME*

*AGE*

**14.**

---

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*SURNAME*

*FIRST NAME*

*AGE*

**15.**

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*SURNAME*

*FIRST NAME*

*AGE*

**INTERVIEWER'S COMMENTS**

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## SECTION 1: TO BE COMPLETED BY HEAD OF HOUSEHOLD

Person #

### SECTION 1A: HOUSING AND RELATED EXPENSES

**1. What type of dwelling does this household occupy?**

- 01.  Undivided private house
- 02.  Part of a private house
- 03.  Flat/apartment/condominium
- 04.  Double house/duplex
- 05.  Combined business/dwelling
- 06.  Barracks
- 07.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**2. Does this household own, rent or lease this dwelling?**

- 01.  Own
- 02.  Hire - Purchase
- 03.  Squat GO TO Q7
- 04.  Rent - private
- 05.  Rent - Govt. GO TO Q6
- 06.  Lease GO TO Q6
- 07.  Rent - free
- 08.  Other (Specify \_\_\_\_\_) GO TO Q7
- 09.  Don't know/Not Stated GO TO Q7

**3. Is the land on which this dwelling is located freehold, leasehold or some other type of occupancy?**

- 01.  Freehold
- 02.  Leasehold
- 03.  Rented
- 04.  Permission to work land
- 05.  Sharecropping
- 06.  Squatted
- 07.  Family member not in this household
- 08.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**If Q2 is '01' GO TO Q4. If Q2 is '02' GO TO Q5**

**4. How much money could you rent your dwelling for per month?**

Amount: Bze\$  **GO TO Q7**

**5. How much money per month does your household pay as mortgage for this dwelling?**

Amount: Bze\$  **GO TO Q7**

**6. How much money per month does your household pay in rent/lease for this dwelling?**

Amount: Bze\$

**7. What is the main material of the outer walls?**

- 01.  Wood
- 02.  Plywood
- 03.  Concrete
- 04.  Wood and Concrete
- 05.  Sticks/palmetto
- 06.  Brick
- 07.  Stucco
- 08.  Makeshift
- 09.  Other (Specify \_\_\_\_\_)
- 99.  Don't know/Not Stated

**8. How many bedrooms are there in this dwelling unit?**

Number of rooms:

**9. What is the main material used for roofing?**

- 01.  Sheet metal (zinc, aluminum)
- 02.  Shingle
- 03.  Rubber rye
- 04.  Concrete
- 05.  Thatch
- 06.  Asbestos
- 07.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated



**10. What type of toilet facility does this household have?**

- 01.  W.C. linked to WASA sewer system
- 02.  W.C. linked to septic tank
- 03.  Pit latrine, ventilated & elevated
- 04.  Pit latrine, ventilated & not elevated
- 05.  Pit latrine, ventilated compost
- 06.  Pit latrine, not ventilated
- 07.  Other (Specify \_\_\_\_\_)
- 08.  None
- 09.  Don't know/Not Stated

**11. Are toilet facilities shared with another person not of this household or with another household?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**12. Is the kitchen indoor or outdoor?**

- 01.  Indoor
- 02.  Outdoor
- 09.  Don't know/Not Stated

**13. Is the kitchen shared with another person not of this household or with another household?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**14. What is the main type of fuel used for cooking?**

- 01.  Wood
- 02.  Gas (Butane)
- 03.  Kerosene (Gas)
- 04.  Electricity
- 05.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**15. How does this household usually dispose of its garbage?**

- 01.  Prepare for municipal collection
- 02.  Take it to public dump
- 03.  Dump it in own yard
- 04.  Burn it
- 05.  Bury it
- 06.  Throw it into river/creek/pond/sea
- 07.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**16. Do you have any problem with rats/roaches/bats?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**17. What is the main source of drinking water for your household?**

- 01.  Private piped into dwelling
- 02.  Private vat/drum/well, not piped
- 03.  Public piped into dwelling
- 04.  Public piped into yard
- 05.  Public standpipe or hand pump
- 06.  Public well
- 07.  River/stream/creek/pond/spring
- 08.  Purified water
- 09.  Other (Specify \_\_\_\_\_)
- 99.  Don't know/Not Stated

**18. How much did you pay for last month's water bill?**

Amount: Bze\$  
 9999 ----- DK/NS  
 9998 ----- Not Applicable

**19. What is the main source of lighting for your household?**

- 01.  Gas lamp
  - 02.  Kerosene lamp
  - 03.  Electricity from BEL
  - 04.  Electricity from private generator
  - 05.  Other (Specify \_\_\_\_\_)
  - 09.  Don't know/Not Stated
- GO TO Q21**

**20. How much did the household pay for last month's electricity bill?**

Amount: Bze\$  
 9999 ----- DK/NS  
 9998 ----- Not Applicable

**21. How much did the household pay for last month's telephone bill?**

Amount: Bze\$  
 9999 ----- DK/NS  
 9998 ----- Not Applicable

22. (FOR EACH OF THE ITEMS IN THE LIST BELOW, ASK THE FOLLOWING QUESTION:  
Do the members of your household have any ...?)

(DO NOT INCLUDE RENTED ITEMS.  
PUT A “✓” IN THE APPROPRIATE BOX FOR EACH ITEM.)

**Do the members of your household have any ...**

ITEM	CODE	YES = 1	NO = 2
Sewing machines	01		
Gas/Gas and electric Stoves	02		
Electric Stoves	03		
Refrigerators or freezers	04		
Air Conditions	05		
Fans	06		
Radio / Cassettes/ CD players	07		
Record player/ Stereo	08		
Other Stereo Equipment (equalizers, tweeters)	09		
TV sets/VCR/Video Equipment/Game boys/Play stations	10		
Washing Machine	11		
Dryers	12		
Bicycles	13		
Motorbikes	14		
Cars, other vehicles	15		
Computer, printer, etc.	16		
Other electrical equipment (toasters, blenders, microwaves)	17		
Musical Equipment	18		

**SECTION 1B: COPING STRATEGIES**

1. What effect has the recent hurricane (KEITH) had on your household's situation?

	EFFECT	YES=1 NO=2
01	NONE	
02	COMPLETELY DESTROYED HOME	
03	PARTLY DESTROYED HOME	
04	DESTROYED CROPS	
05	DESTROYED LIVESTOCK	
06	AFFEC TED OWN BUSINESS	
07	DAMAGED ROADS	
08	OTHER (SPECIFY)	

2. Which of the following programmes/projects have been implemented in your community in the past SIX years (since 1995)? **CODE ALL THAT APPLY**

	a. Type of Programme / Project	b. YES =1 NO =2 DK/ NS =9  IF 2 OR 9 FOR ALL ITEMS, GO TO Q8)	c. Has this programme/ project benefited your household / community in any way?  YES =1 NO =2 DK/NS =9  (IF 2 OR 9 ON ANY ITEM, GO TO Q8)	d. In what way did this Programme/Project benefit your household / community? (MAIN WAY ONLY) Saved time =01 Reduced costs =02 Improved quality of service =03 Increased income =04 Increased community togetherness =05 Reduced woes =06 Increased Employment =07 Other (Specify _____) =08 Get own land =09 DK/NS =99	e. Who funded this Programme / Project?  SIF =1 OTHER =2 DK/NS =9  (IF 1 FOR ANY ITEM GO TO Q3, ELSE GO TO Q8)
01	Training/Educational Programmes in Craft/Tourism				
02	Training/Educational Programmes in Agriculture				
03	Government Housing Schemes				
04	Land Distribution				
05	Agricultural/Other Small Business Loans				
06	Building of School				
07	Rehabilitation of School				
08	Building of Health Facility				
09	Rehabilitation of Health Facility				
10	Building of new feeder road/drainage				
11	Piping of water				
12	Water supply rehabilitation				
13	Sanitation provided/improved				
14	Micro-Enterprise Credit				
15	Micro-Enterprise Training				
16	Marketing				
17	Employment generation project				
18	Training (Specify.....)				
19	Provision of Disability Services				
20	Provision of Juvenile Services				
21	Provision of Counseling Services				
22	Provision of Drug Rehabilitation Services				
23	Provision of Sex Education				
24	Provision of other kinds of services				

**3. Was anybody in your household involved in deciding what was built/rehabilitated or introduced?**

- 01.  Yes (**GO TO Q5**)
- 02.  No
- 09.  Don't know/Not Stated

**4. Why was nobody involved?**

- 01.  Was not asked or required to take part
- 02.  Was not aware of the project
- 03.  Busy/unable to attend meeting(s) on the project
- 04.  Just stayed away
- 05.  Opening hours inappropriate
- 06.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**5. Did any member of this household participate in the provision of any of the following for the project?**

CONTRIBUTION	YES =1	NO =2	DON'T KNOW =9
1. Materials			
2. Labour			
3. Management			
4. Funds			
5. Any combination of the above			

**6. Who made you aware of the project activity?**

- 01.  Social Investment Fund
- 02.  Other (Specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**7. How did this (these) project(s) improve the way you live?  
(MORE THAN ONE ANSWER IS ACCEPTABLE)**

- 01.  Saved time
- 02.  Costs reduced
- 03.  Quality of the service improved
- 04.  Income increased
- 05.  More community togetherness
- 06.  Reduced my/our woes
- 07.  Increased employment
- 08.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**8. Which social and economic projects would you like to have implemented in your community, including what directly affects your household?**

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

**9. Are you presently experiencing any financial difficulty?**

01.  Yes  
 02.  No (GO TO SECTION 1C)  
 09.  Don't know/Not Stated (GO TO SECTION 1C)

**10. Which of the following financial difficulties are you experiencing?**

	<b>a. Type of Financial Difficulty</b> <i>Unable to pay...</i>	<b>b.</b> YES =1 NO =2 (GO TO NEXT TYPE OF FINANCIAL DIFFICULTY) DK/NS =9	<b>c. How long have you been experiencing these difficulties?</b>  PERIOD CODES  LESS THAN 1 MONTH =1 1 TO LESS THAN 3 MONTHS =2 3 TO LESS THAN 6 MONTHS =3 6 MONTHS TO 1 YEAR =4 OVER 1 YEAR =5 Don't know/Not Stated =9
			<b>CODE</b>
01	Utility bills		
02	Mortgage/Rent		
03	For food		
04	Transportation costs		
05	School/Education fees		
06	Health related expenses		
07	Loans/Debt		
08	For vacation		
09	Entertainment costs		
10	Clothing costs		
11	Other (Specify)		

**11. How do you cope?**

	<b>Strategy</b>	YES =1 NO =2 DK/NS =9
01	Dip into savings	
02	Sell assets	
03	Ask local relatives for help	
04	Ask relatives abroad for help	
05	Ask friends local/abroad for help	
06	Forego some necessities	
07	Do not pay bills on time	
08	Stop paying bills	
09	Stop children from going to school	
10	Borrow from established creditors	
11	Hustle (or get additional job)	
12	Illegal activities	
13	Pray	
14	Pawn possessions	
15	Seek assistance from politicians	
16	Other (Specify)	

## SECTION 1C: FOOD EXPENSES

1. During the past 30 days, did this household buy any of the following foods?  PUT A "✓" IN THE APPROPRIATE BOX. IF NO, GO TO Q4.			2. How much did the H/H spend on ..[ ]... during the past 7 days?  IF NOTHING SPENT WRITE 00	3. How much did the H/H spend on ..[ ]... during the past 30 days?  IF NOTHING SPENT WRITE 00  AMOUNT B\$	4 If this household received any ... as gift how much would it cost to buy the amount of ... the household received during the past 30 days? AMOUNT B\$ IF NOTHING RECEIVED WRITE 00 AND GO TO THE NEXT ITEM  AMOUNT BZE \$
Fresh or frozen beef including cow foot, ox tail	YES→	101			
	→ NO				
Fresh or frozen pork including pig foot	YES→	102			
	→ NO				
Fresh or frozen mutton	YES→	103			
	→ NO				
Offal – heart, kidney, liver, tripe etc.	YES→	104			
	→ NO				
Game meats e.g. deer, gibnut, peccary, iguana, rabbit, armadillo.	YES→	105			
	→ NO				
Salted, cured or canned meat (e.g. Pigtail, smoked pork chops)	YES→	106			
	→ NO				
Fresh or frozen fish and shellfish (lobster, conch, shrimp, hicattee, turtle, crab...)	YES→	107			
	→ NO				
Fresh, frozen or canned sausages/ham, morcilla, longaniza.	YES→	108			
	→ NO				
<i>Canned mackerel, sardines, tuna</i>	YES→	109			
	→ NO				
Salted or corned fish	YES→	110			
	→ NO				
Fresh or frozen whole chicken	YES→	111			
	→ NO				
Chicken parts (e.g. Leg and thigh, breast, wings, neck or back, foot)	YES→	112			
	→ NO				
Other poultry, fresh, frozen, salted, or cured	YES→	113			
	→ NO				

Liquid milk (raw milk, pasteurized milk)	YES→	114			
	↯ NO				
Sweetened Condensed milk	YES→	115			
	↯ NO				
Evaporated milk	YES→	116			
	←NO				
Powdered milk (e.g. DANO,KLIM)	YES→	117			
	←NO				
Butter or margarine	YES→	118			
	←NO				
Cheese	YES→	119			
	←NO				
Eggs	YES→	120			
	←NO				
Other dairy products (yogurt, ice cream,...)	YES→	121			
	←NO				
Oils and fats (vegetable oil, coconut oil, shortening)	YES→	122			
	←NO				
Bread, flour tortilla	YES→	123			
	←NO				
Crackers and unsweetened biscuits	YES→	124			
	←NO				
Other baked products (sweetened biscuits, cakes, buns, bullas, powder buns, sweet bread)	YES→	125			
	←NO				
Cassava bread	YES→	126			
	←NO				
Flour	YES→	127			
	? NO				
Rice	YES→	128			
	←NO				
Cornmeal, masa, corn tortilla	YES→	129			
	←NO				
Beans and peas	YES→	130			
	←NO				
Breakfast cereals (cornflakes, oats, corn)	YES→	131			
	? NO				

Cassava	YES→	132			
	←NO				
Potatoes	YES→	133			
	←NO				
Sweet potatoes	YES→	134			
	←NO				
Other roots and tubers (coco, ginger, yam, yampi)	YES→	135			
	←NO				
Other starchy fruits (Plantains, green banana, bread fruit)	YES→	136			
	←NO				
Fresh vegetables, (tomatoes, carrots, lettuce, cabbage, avocado, onion, corn on the cobs, string beans, cilantro, culantro)	YES→	137			
	←NO				
Frozen canned and dried vegetables	YES→	138			
	←NO				
Fruit and vegetable juices (fresh or frozen)	YES→	139			
	←NO				
Fresh fruit (oranges, lime, apples, ripe bananas, melons, pineapples, mangoes, papayas)	YES→	140			
	←NO				
Canned and dried fruits	YES→	141			
	←NO				
Sugar	YES→	142			
	←NO				
Sweets (honey, sweeteners, jams, jellies)	YES→	143			
	←NO				
Soups (packaged, canned, frozen...)	YES→	144			
	←NO				
Prepared meats and fish (seasoned chicken, minute steak)	YES→	145			
	? NO				
Prepared foods (pizzas, fried chicken...)	YES→	146			
	←NO				
Dry packaged foods (macaroni, spaghetti...)	YES→	147			
	←NO				
Powders, flavoring and extracts (baking powder & soda, yeast, vinegar, essence...)	YES→	148			
	←NO				
Sauces and relishes (ketchup, mayonnaise, pepper sauce, pickles...)	YES→	149			
	←NO				





**SECTION 1D: HOME PRODUCED ITEMS**

<b>1.</b> <b>During the past 30 days, did this household eat any ..[ ].. that was home-produced?</b>  <b>PUT A “✓” IN THE APPROPRIATE BOX</b>			<b>2.</b> <b>How much would it cost to buy the amount of <u>home produced</u>..[ ].. the household ate during the past 7 days?</b>  <b>AMOUNTAMOUNT BZE \$</b>	<b>3.</b> <b>How much would it cost to buy the amount of <u>home produced</u>..[ ].. the household ate during the past 30 days?</b>  <b>AMOUNT BZE \$</b>
Poultry	YES→  ¬ NO	201		
Other fresh/cured meats	YES→  ¬ NO	202		
Fresh/cured fish	YES→  ¬ NO	203		
Eggs	YES→  ¬ NO	204		
Rice	YES→  ¬ NO	205		
Cornmeal/flour	YES→  ¬ NO	206		
Cassava flour	YES→  ¬ NO	207		
Ground food (cocoa, cassava, yams etc.)	YES→  ¬ NO	208		
Plantains	YES→  ? NO	209		
Other starchy food	YES→  ¬ NO	210		
Coconut oil/cohune oil	YES→  ¬ NO	211		
Beans	YES→  ¬ NO	212		
Vegetables (tomatoes, carrots, lettuce etc.)	YES→  ¬ NO	213		
Fresh seasonings (thyme, oregano, hot peppers etc.)	YES→  ¬ NO	214		
Milk, diary product	YES→  ←NO	215		
Oranges	YES→	216		

	←NO		
Mangoes	YES→	217	
	←NO		
Bananas	YES→	218	
	←NO		
Other fresh fruits	YES→	219	
	←NO		
Alcoholic beverage	YES→	220	
	←NO		

### SECTION 1E: MONTHLY EXPENDITURE

1. During the past month, did this household spend or receive as gift any of the following items?  PUT A "✓" IN THE APPROPRIATE BOX		2. How much did the H/H spend on... [ ] during the past 30 days?	3. What is the value of all that ..[ ].. the H/H received as a gift during the past 12 months?
		AMOUNT B\$ AMOUNT BZE \$	ESTIMATE MONETARY VALUE AMOUNT BZE \$
Personal care supplies soap, toothpaste/brushes, shaving cream, razors & blades, cosmetics, hair and body care	YES→	301	
	←NO		
Kitchen supplies (napkins, matches, garbage bags, dish washing liquid, scouring pads)	YES→	302	
	←NO		
Toilet supplies (toilet paper, cleanser, fresheners)	YES→	303	
	←NO		
Laundry supplies (soap powders/bars, bleach, starch, fabric softener, clothes pins)	YES→	304	
	←NO		
Other household supplies (mops, liquid cleanser, brooms, light bulbs, batteries, lamps)	YES→	305	
	←NO		
Home help services (cook, baby sitter, domestic helper, gardener)	YES→	306	
	←NO		
Laundry and dry cleaning services	YES→	307	
	←NO		
Rental of equipment (VCR, video cassette, video games)	YES→	308	
	←NO		
Repair on furniture or household equipment	YES→	309	
	←NO		
Medicines (pills, tonics, drugs, family planning supplies)	YES→	310	



Dinner ware (plates, glasses, knives, forks, spoons, plastic containers)	YES→	326		
	←NO			
Cook ware and other small kitchen equipment (ice box, coffee maker, blender, toaster, mixer, hot plate...)	YES→	327		
	←NO			
Radio, television, VCR, stereo system, CD player, computer and accessories and other small household equipment (camera, fan, iron)	YES→	328		
	←NO			
Education expenses (tuition, books, boarding, school bags)	YES→	329		
	←NO			
Medical services (doctor's fee, hospital care, spectacles, traditional healer...)	YES→	330		
	←NO			
Health Insurance	YES→	331		
	←NO			
Motor vehicle insurance	YES→	332		
	←NO			
Vehicles taxes, duties, licenses	YES→	333		
	←NO			
Purchase of motor vehicles, motor cycles for personal use	YES→	334		
	←NO			
Vacation expenses excluding air or sea fares (hotels, travel tax, living expenses)	YES→	335		
	←NO			
Other consumption expenditures flowers, cards, gifts, purchases for special occasions (parties, entertainment relating to weddings, funerals, birthdays, etc.)	YES→	336		
	←NO			

<b>1.</b> <b>During the past 12 months, did this household spend money on any of the following items?</b>  <b>PUT A "✓" IN THE APPROPRIATE BOX</b>		
Life & General Insurance	YES→	337
	←NO	
Donations and gifts (church or union dues, gifts, birthdays, retirement, charities)	YES→	338
	←NO	
Repayment of loans, interest payments	YES→	339
	←NO	

<b>2.</b> <b>How much did the H/H spend on... [ ].. during the past 12 months?</b>  <b>AMOUNT BZE \$</b>	

Support for children who live elsewhere	YES→	340	
	←NO		
Other maintenance of relatives outside the home	YES→	341	
	←NO		
Social Security	YES→	342	
	←NO		
Pension contribution	YES→	343	
	←NO		
Other non-consumption expenditures (legal services)	YES→	344	
	←NO		
Direct Taxes (income tax, land tax and property tax)	YES→	345	
	←NO		
Boledo, lottery, jackpot, casino and other gambling expenses	YES→	346	
	←NO		

## SECTION 1G: MISCELLANEOUS

	<b>1</b> During the past 12 months, has any member of your household received income in cash or in kind from the following sources?	<b>2.</b> What is the value of all income received by members of this household in cash or in kind from ...[ ]... during the past twelve months?
01	Support for children from parents who live elsewhere?	
	YES→	
	←NO	
02	Support for parents from siblings who live elsewhere?	
	YES→	
	←NO	
03	Other relatives or friends who live in Belize?	
	YES→	
	←NO	
04	Other relatives or friends who live abroad?	
	YES→	
	←NO	
05	Rental payments for use of land or other property owned by household members?	
	YES→	
	←NO	
06	Social Welfare?	
	YES→	
	←NO	
07	Interest from loans made by household members or from money deposited in the bank or other financial Institutions?	
	YES→	
	←NO	
08	Dividends?	
	YES→	
	←NO	
09	Lotteries, gambling, inheritances etc.	
	YES→	
	←NO	

## SECTION 2: FOR PERSONS 5 YEARS AND OLDER

Person #

### SECTION 2A: GENERAL CHARACTERISTICS

**1. Are you/Is N male or female?**

1.  Male      2.  Female

**2. What was your/N's age at the last birthday?**

Age   Years

**3. To what ethnic or racial group do you/does N belong?**

01.  Creole  
02.  Garifuna  
03.  Maya (Ketchi/Mopan/Yucatecan)  
04.  Mestizo/Spanish/Latino/Hipanic, etc.  
05.  Other  
09.  Don't know/Not Stated

**4. In what country were you/ was N born?**

\_\_\_\_\_

(IF BELIZE GO TO Q6)

**5. When did you/N come to live in Belize?**

(Year)

**6. What is your/N's relationship to the head of the household?**

01.  Head  
02.  Spouse/partner  
03.  Child/stepchild

04.  Son/daughter-in-law

05.  Grandchild

06.  Other relative

07.  Non-relative

09.  Don't know/Not Stated

(IF 14 YEARS OR OLDER GO TO Q9)

**7. If mother lives in this household:**

Mother's Person #

**8. If father lives in this household:**

Father's Person #:

(GO TO SECTION 2B)

**9. Which of the following is your/N's current union status?**

01.  Legally Married

02.  Common-law union

03.  Visiting

04.  Single

05.  Other

09.  Don't know/Not Stated

GO TO SECTION 2B

**10. If spouse/partner lives in this household**

Spouse/partner Person #

### SECTION 2B: HEALTH

**1. Have you/has N had any illness/injury during the past 30 days? E.g. cold, diarrhoea, asthma, illness due to hypertension, diabetes?**

01.  Yes  
02.  No (GO TO Q21)  
09.  Don't know/Not Stated (GO TO Q21)

**2. Is this a recurring illness? E.g. asthma, illness due to hypertension, diabetes?**

01.  Yes  
02.  No  
09.  Don't know/Not Stated

**3. How long did this last episode of illness/injury last?**

Number of days

**4. How long were you/was N unable to carry out normal activities?**

Number of days

5. Did you/N visit, a doctor, nurse, pharmacist or other health worker during the past 30 days?

- 01.  Yes, in Belize only
- 02.  Yes, outside of Belize only
- 03.  Both
- 04.  No (GO TO Q17)
- 09.  Don't know/Not Stated (GO TO Q17)

6. How many visits did you/N make during the past 30 days?

Number of visits

7. Where did the visits take place? (More than one choice acceptable)

- |                                    | Yes                      | No                       | DK/NS                    |
|------------------------------------|--------------------------|--------------------------|--------------------------|
| 01. Public hospital                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 02. Private hospital               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 03. Private doctor's office        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 04. Public health center/post      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 05. Traditional healer/bush doctor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 06. Health facilities abroad       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 07. Other (specify _____)          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. How much did you/N have to pay for all visits made during the last 30 days? Do not include the cost of medicines nor any cost paid by your insurance.

- A. Local Private Facilities BZE \$:
- B. Local Public Facilities BZE \$
- C. Health Facility Abroad BZE \$

9. Did you/has N spend a night in a public hospital or other public health establishment in the past 30 days?

- 01.  Yes
- 02.  No (GO TO Q12)
- 09.  Don't know/Not Stated (GO TO Q12)

10. How many nights did you/N spend in the public hospital during the past 30 days?

Number of nights

11. How much have you/has N paid or will pay altogether for this stay in a public hospital? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZE \$

12. Did you/N spend a night in a private hospital or any other private health establishment in the past 30 days?

- 01.  Yes
- 02.  No (GO TO Q15)
- 09.  Don't know/Not Stated (GO TO Q15)

13. How many nights did you/N spend in the private hospital during the past 30 days?

Number of nights

14. How much have you/has N paid or will pay altogether for this stay in a private hospital? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZE\$

15. Did you/N spend a night in a health facility abroad in the past 30 days?

- 01.  Yes
- 02.  No (GO TO Q18)
- 09.  Don't know/Not Stated (GO TO Q18)

16. How many nights did you/N spend in the health facility abroad in the past 30 days?

Number of nights

17. How much have you/has N paid or will pay altogether for this stay in the health facility abroad? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZE\$

18. Did you/N buy medicine during the past 30 days for this illness/injury?

- 01.  Yes, locally only
- 02.  Yes, abroad only
- 03.  Yes, locally and abroad
- 04.  No (GO TO Q21)
- 09.  Don't know/Not Stated (GO TO Q21)

19. Did you/N purchase medicine in a public or private facility?

- 01.  Yes, Public only
- 02.  Yes, Private only
- 03.  Both Public and Private
- 09.  Don't Know/Not Stated (GO TO Q21)



**20. How much did you/N spend on medicine at the following facilities? Do not include any cost paid by your insurance.**

- A. Local Private Facilities BZE \$:
- B. Local Public Facilities BZE \$
- C. Health Facility Abroad BZE \$

**21. Are you/is N covered by private insurance?**

01.  Yes
02.  No
09.  Don't know/Not Stated

**22. Did you/N visit any of the following health facilities during the past 12 months?**

- |                           | Yes<br>(1)               | No<br>(2)                | DK/NS<br>(9)             |
|---------------------------|--------------------------|--------------------------|--------------------------|
| A. Local Private Facility | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Local Public Facility  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Health Facility abroad | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**(IF YES FOR ALL GO TO Q28 ELSE CONTINUE)**

**23. What is your/N's main reason for no visits?**

01. Not sick
02. Can't afford it
03. Waiting time too long
04. Does not provide service
05. Opening hours inappropriate
06. Service quality not good
07. Too far
08. Used home remedies
09. Did not want to/not sick enough
10. Other (specify \_\_\_\_\_)
99. Don't know/Not Stated

- A. Local Private Facility
- B. Local Public Facility
- C. Health Facility Abroad

**IF 'NO' FOR ALL IN Q22 GO TO SECTION 2C, ELSE CONTINUE**

**24. How many visits did you/N make in the past 12 months.**

Number of visits

- A. Local Private Facility
- B. Local Public Facility
- C. Health Facility abroad

**25. What is the main reason for your/N's last visit?**

01. Pre/post natal care/newborn checkup
02. Immunization/child health
03. Check up
04. Consult/treatment for acute illness
05. Consult/treatment for chronic illness
06. Hospitalization
07. Diagnostic services
08. Dental care
09. Other (specify \_\_\_\_\_)
99. Don't know/Not Stated

- A. Local Private Facility
- B. Local Public Facility
- C. Health Facility abroad

**26. Did you/N have an appointment?**

- |                           | Yes<br>(1)               | No<br>(2)                | DK/NS<br>(9)             |
|---------------------------|--------------------------|--------------------------|--------------------------|
| A. Local Private Facility | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Local Public Facility  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Health Facility abroad | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**27. On a scale of 1 to 5, how satisfied were you/ was N with the quality of service?**

01. Very dissatisfied
02. Dissatisfied
03. Neither dissatisfied nor satisfied
04. Satisfied
05. Very satisfied

- A. Local Private Facility
- B. Local Public Facility
- C. Health Facility abroad

**SECTION 2C: EDUCATION**

**1. Are you/ is N enrolled in formal school full-time or part-time?**

- 01.  Yes, full-time
- 02.  Yes, part-time
- 03.  No (GO TO Q14)
- 09.  Don't know/Not Stated (GO TO Q14)

**2. What type of school are you/is N attending?**

- 01.  Primary
- 02.  Secondary
- 03.  Sixth Form
- 04.  U.B. (GO TO Q4)
- 05.  Foreign University (GO TO Q4)
- 06.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**3. In what standard/form/year are you/is N presently?**

Std/Form/Year \_\_\_\_\_  
(GO TO Q5)

**4. What type of programme are you/is N doing currently?**

- 01.  Associate Degree
- 02.  Undergraduate Degree
- 03.  Graduate Degree  
(IF 05 IN Q2 IS ANSWERED, GO TO Q7)

**5. How far is your/N's school from this house?**

Number of miles:

**6. How do you/does N usually get to school?**

- 01.  Walk
- 02.  Cycle
- 03.  School bus
- 04.  Public transport
- 05.  Private vehicle
- 06.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**7. During the past 4 weeks that school was in session, how many days did you/N miss?**

Number of days:   IF '00' GO TO Q9

**8. What were the main reasons for your/N's absence from school?**

- 01.  Own illness
- 02.  Truancy
- 03.  Working
- 04.  Duties at home
- 05.  Transport problems
- 06.  Uniform problems
- 07.  Rain
- 08.  Money problems
- 09.  Had to run an errand
- 10.  Other (specify \_\_\_\_\_)
- 99.  Don't know/Not Stated

**IF Q2 IS '03' TO '09', GO TO Q12**

**9. Does your/N's school operate a school-feeding programme?**

- 01.  Yes
- 02.  No (GO TO Q11)
- 09.  Don't know/Not Stated

**10. Do you/N usually eat the meal provided by the school-feeding programme?**

- 01.  Yes (GO TO Q12)
- 02.  No
- 09.  Don't know/Not Stated

**11. What do you/ does N usually eat?**

- 01.  Snack/meal from school canteen/vendor
- 02.  Snacks/meal from home
- 03.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**12. How much did your/N's household pay in the past school year (2000/2001) for the following school expenses?**

- a. Extra lessons : \_\_\_\_\_  
(Outside school hours)
- b. Transport: \_\_\_\_\_
- c. Lunch and snacks: \_\_\_\_\_
- d. Uniforms: \_\_\_\_\_
- e. Books: \_\_\_\_\_
- f. Other Supplies: \_\_\_\_\_
- g. Boarding & lodging: \_\_\_\_\_
- h. Graduation related costs: \_\_\_\_\_
- i. Education fees: \_\_\_\_\_  
(Include activity fees and other school costs)

13. Do you/ does N receive any financial assistance?  
(Main source only)

01.  None
02.  Grant/Scholarship
03.  Family/Friend
04.  Private donor
05.  Student Loan
06.  Other (Specify \_\_\_\_\_)
09.  Don't know/Not Stated

**IF 14 YEARS OR OLDER GO TO SECTION 2D,  
ELSE GO TO Q17**

14. What type of school did you/N last attend?

01.  None (LESS THAN 14 YEARS GO TO  
Q17, ELSE GO TO SECTION 2D)
02.  Pre-school/Nursery/Kindergarten
03.  Primary
04.  Secondary
05.  Technical/vocational
06.  Sixth Form
07.  Teacher's College
08.  Nursing School
09.  Agricultural College
10.  U.B.
11.  Foreign University
12.  Other (specify \_\_\_\_\_)
99.  Don't know/Not Stated

15. What is the last standard/form/year that you/ N completed?

Std/Form/Year \_\_\_\_\_

16. What is the highest certificate, diploma or degree that you/N attained?

01.  None
02.  Primary School Certificate
03.  High School Diploma
04.  GCE 'O' Levels or CXC
05.  Sixth Form Diploma/Associate's Degree

**(INTERVIEWER: QUESTION 16 CONTINUES  
ON THE TOP RIGHT HAND SIDE OF THIS  
PAGE)**

**QUESTION 16 CONTINUE**

06.  Teacher's College Diploma
07.  Nursing School Diploma
08.  Agricultural College Diploma
09.  GCE 'A' Levels
10.  Bachelors Degree
11.  Masters Degree
12.  Ph.D. Degree
13.  Post Graduate Diploma
14.  Other (specify \_\_\_\_\_)
99.  Don't know/Not Stated

**IF 14 YEARS OR OLDER GO TO SECTION 2D,  
ELSE CONTINUE**

17. Do you/ does N have any money earning activity?

01.  Yes
02.  No (End Interview for this Person)
09.  DK/NS (End Interview for this Person)

18. What type of activity are you/is N involved in?

01.  Own business with paid help
02.  Own business without paid help
03.  Paid employee, Government
04.  Paid employee, quasi government
05.  Paid employee, private
06.  Unpaid family worker
09.  Don't know/Not Stated

19. When do you /does N do this activity?

01.  After school
02.  On weekends
03.  Missed school in order to do this
04.  While at school
05.  Other (specify \_\_\_\_\_)
09.  Don't know/Not Stated

20. How many hours per day do you/does N do this activity?

Number of hours:

**(END INTERVIEW FOR THIS PERSON)**

**SECTION 2D: ECONOMIC ACTIVITY - FOR ALL PERSONS 14 YEARS AND OLDER**

1. **LAST WEEK, did you/N do any work for pay, profit or family gain for at least one hour?**

- 01.  Yes (GO TO Q6)
- 02.  No
- 09.  Don't know/Not Stated

2. **Did you/N engage in any activity on the following list for pay, profit or family gain for at least one hour, LAST WEEK?**

- a) Babysitting
- b) Sell pastries/ food from home
- c) Domestic (laundry, ironing, cleaning)
- d) Sell sweets from home (fudge, tableta, etc.)
- e) Cleaning yard/ Cutting grass
- f) Sewing for pay
- g) Nurses' aid – for pay (for elderly)
- h) Clean offices
- i) Subsistence farming
- j) Car washing
- k) Sell food or snacks at market/bus stops/school
- l) Taxi-driver
- m) Barber or hair dresser
- n) Bicycle cart deliveries
- o) Any other activities for pay, profit or family gain.

- 01.  Yes (GO TO Q6)
- 02.  No
- 09.  Don't know/Not Stated

3. **Did you/N have a job/business/farm from which you were/N was temporarily absent LAST WEK?**

- 01.  Yes (GO TO Q6)
- 02.  No
- 09.  Don't know/Not Stated

4. **Could you/N have started a job in the past two weeks if a job had been offered or you/N had the opportunity to work?**

- 01.  Yes (End Interview for this Person)
- 02.  No
- 09.  DK/NS

5. **Why?**

- 01.  In school/Training
- 02.  Illness
- 03.  Disability
- 04.  Home/Family duties
- 05.  Retirement
- 06.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

**(END INTERVIEW FOR THIS PERSON)**

6. **Did you/ N have more than one job/enterprise/activity LAST WEEK?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

7. **What category of worker are you/N in your/N's job/s?**

- |                                     | Main                     | Other                    |
|-------------------------------------|--------------------------|--------------------------|
| 01. Own business, paid help         | <input type="checkbox"/> | <input type="checkbox"/> |
| 02. Own business, without paid help | <input type="checkbox"/> | <input type="checkbox"/> |
| 03. Paid employee- Gov.             | <input type="checkbox"/> | <input type="checkbox"/> |
| 04. Paid employee – Quasi Gov       | <input type="checkbox"/> | <input type="checkbox"/> |
| 05. Paid employee – Private         | <input type="checkbox"/> | <input type="checkbox"/> |
| 06. Unpaid family worker            | <input type="checkbox"/> | <input type="checkbox"/> |
| 09. Don't know/Not Stated           | <input type="checkbox"/> | <input type="checkbox"/> |

8. **What is your job title?**

Title \_\_\_\_\_

ISCO

Description \_\_\_\_\_

Other Job

Title

\_\_\_\_\_

ISCO

Description \_\_\_\_\_

9. **What is the name and address of the business where you/N worked and what type of business is carried on there?**

Name: \_\_\_\_\_

Address & Phone: \_\_\_\_\_

City/Town/Village: \_\_\_\_\_

ISIC:

BCEA:

Description: \_\_\_\_\_

Other Job

Name: \_\_\_\_\_

Address & Phone: \_\_\_\_\_

City/Town/Village: \_\_\_\_\_

ISIC:

BCEA:

Description: \_\_\_\_\_

10. How many hours do you/does N usually work/  
worked in all jobs last week?

Hours usually worked:

Hours worked last week:

11. How far do you/does N live from work?

Number of miles:

12. What main type of transportation do you/does  
N usually use to get to work?

- 01.  Walk
- 02.  Public bus
- 03.  Company vehicle
- 04.  Private vehicle
- 05.  Bicycle
- 06.  Motorcycle
- 07.  Other (specify \_\_\_\_\_)
- 09.  Don't know/Not Stated

13. How long do you/does N take to get to work?

Hours: \_\_\_\_\_ Minutes: \_\_\_\_\_

14. Are you/is N receiving social welfare assistance?

- 01.  Yes
- 02.  No
- 09.  DK/NS

(END INTERVIEW FOR THIS PERSON)

## SECTION 3: FOR CHILDREN LESS THAN 5 YEARS OLD

Person #

### SECTION 3A: GENERAL CHARACTERISTICS

1. Is N male or female

1.  Male                      2.  Female

2. When was N born?

\_\_\_\_/\_\_\_\_/\_\_\_\_  
Day/Month/year

Calculate N's age and record below

Age: years \_\_\_\_\_ months \_\_\_\_\_

3. To what ethnic or racial group does N belong?

01.  Creole  
02.  Garifuna  
03.  Maya (Ketchi/Mopan/Yucatecan)  
04.  Mestizo/Spanish/Latino/Ladino/Hipanic etc.  
05.  Other  
09.  Don't know/Not Stated

4. In what country was N born?

\_\_\_\_\_

(IF BELIZE GO TO Q6)

5. When did N come to live in Belize?

(Year)

6. What is N's relationship to the head of the household?

01.  Child/stepchild  
02.  Grandchild  
03.  Other relative  
04.  Non-relative  
09.  Don't know/Not Stated

7. If mother lives in this household:

Mother's Persons #:    
(ELSE GO TO Q8)

8. If father lives in this household:

Father's Person #:    
(ELSE GO TO SECTION 3B)

### SECTION 3B: HEALTH

1. Has N had any illness/injury during the past 30 days? E.g. cold, diarrhoea, asthma, illness due to hypertension, diabetes?

01.  Yes  
02.  No (GO TO Q21)  
09.  Don't know/Not Stated (GO TO Q21)

2. Is this a recurring illness? E.g. asthma, illness due to hypertension, diabetes?

01.  Yes  
02.  No  
09.  Don't Know/Not Stated

3. How long did this last episode of illness/injury last?

Number of days

4. How long was N unable to carry out normal activities?

Number of days

5. Did N visit, a doctor, nurse, pharmacist or other health worker during the past 30 days?

01.  Yes, in Belize  
02.  Yes, outside Belize  
03.  Both  
04.  No (GO TO Q17)  
09.  Don't Know/Not Stated (GO TO Q17)

6. How many visits did N make during the past 30 days?

Number of visits

7. Where did the visits take place? (More than one choice acceptable)

	Yes (1)	No (2)	DK/NS (9)
01. Public hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02. Private hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
03. Private doctor's office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
04. Public health center/post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
05. Traditional healer/bush doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
06. Health facilities abroad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
07. Other (specify _____)			

8. How much was paid for N for all visits made during the last 30 days? Do not include the cost of medicines nor any cost paid by your insurance.

A. Local Private Facilities BZE \$:

B. Local Public Facilities BZE \$:

C. Health Facility Abroad BZE \$:

9. Did N spend a night in a public hospital or other public health establishment in the past 30 days?

01.  Yes
02.  No (GO TO Q12)
09.  Don't know/Not Stated (GO TO Q12)

10. How many nights did N spend in the public hospital during the past 30 days?

Number of nights

11. How much was paid for N or will be paid altogether for this stay in a public hospital? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZE \$

12. Did N spend a night in a private hospital or any other private health establishment in the past 30 days?

01.  Yes
02.  No (GO TO Q15)
09.  Don't know/Not Stated (GO TO Q15)

13. How many nights did N spend in the private hospital during the past 30 days?

Number of nights

14. How much was paid for N or will be paid altogether for this stay in a private hospital? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZES

15. Did N spend a night in a health facility abroad in the past 30 days?

01.  Yes
02.  No (GO TO Q18)
09.  Don't know/Not Stated (GO TO Q18)

16. How many nights did N spend in the health facility abroad in the past 30 days?

Number of nights

17. How much was paid for N or will be paid altogether for this stay in a private hospital? Do not include the cost of medicine nor any cost paid by your/his/her insurance.

BZES

18. Was any medicine bought for N during the past 30 days for this illness/injury?

01.  Yes, locally
02.  Yes, abroad
03.  Yes, locally and abroad
04.  No (GO TO Q21)
09.  Don't know/Not Stated (GO TO Q21)

19. Was the medicine purchased in a public or private facility?

01.  Yes, Public only
02.  Yes, Private only
03.  Both Public and Private
09.  Don't Know/Not Stated (GO TO Q21)

20. How much was spent on medicine for N at the public sources? Do not include any cost paid by your insurance.

A. Local Private Facilities BZE \$:

B. Local Public Facilities BZE \$:

C. Health Facility Abroad BZE \$:

**21. Is N covered by private insurance?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**22. Did N visit any of the following Health facilities during the past 12 months?**

	Yes (1)	No (2)	DK/NS (9)
A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**(IF YES FOR ALL 3 GO TO Q28 ELSE CONTINUE)**

**23. What is N's main reason for no visits?**

- 01. Not sick
- 02. Can't afford it
- 03. Waiting time too long
- 04. Does not provide service
- 05. Opening hours inappropriate
- 06. Service quality not good
- 07. Too far
- 08. Used home remedies
- 09. Did not want to/not sick enough
- 10. Other (Specify \_\_\_\_\_)
- 99. Don't know/Not Stated

A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>

**24. How many visits did N make in the past 12 months.**

Number of visits

A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>

**25. What is the main reason for N's last visit?**

- 01. Pre/post natal care
- 02. Immunization/child health
- 03. Check up
- 04. Consult/treatment for acute illness
- 05. Consult/treatment for chronic illness
- 06. Hospitalization
- 07. Diagnostic services
- 08. Dental care
- 09. Other (specify \_\_\_\_\_)
- 99. Don't know/Not Stated

A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>

**26. Did N have an appointment?**

	Yes (1)	No (2)	DK/NS (9)
A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. On a scale of 1 to 5, how would you rate the quality of service given to N?**

- 01. Very dissatisfied
- 02. Dissatisfied
- 03. Neither dissatisfied nor satisfied
- 04. Satisfied
- 05. Very satisfied

A. Local Private Facility	<input type="checkbox"/>	<input type="checkbox"/>
B. Local Public Facility	<input type="checkbox"/>	<input type="checkbox"/>
C. Health Facility abroad	<input type="checkbox"/>	<input type="checkbox"/>



**SECTION 3C:**

**1. What is the date of birth based on?**

- 01.  Birth certificate (**RECORD Q3 & GO TO Q4**)
- 02.  Immunization card
- 03.  Parental information
- 04.  Other relative/guardian
- 05.  Other
- 09.  Don't know/Not Stated

**2. Was N's birth registered?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not State

**3. What was N's length at birth?  
(CIRCLE INCHES OR CENTIMETERS)**

\_\_\_\_\_ Inches/Centimeters  DK/NS =  
9

**4. What was N's weight at birth?  
(CIRCLE POUNDS OR GRAMS)**

\_\_\_\_\_ Pounds/Grams  DK/NS =  
9

**5. In the past 2 weeks, has N had 3 or more loose stools  
(diarrhea) per day?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**6. Immunization Status**

**OPV:** \_\_\_\_\_ doses

**DPT:** \_\_\_\_\_ doses

**BCG:** \_\_\_\_\_ doses

**MMR**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not State

**HEP.B**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not State

**7. Was N's immunization card seen?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**8. Was N measured?**

- 01.  Yes
- 02.  No
- 09.  Don't know/Not Stated

**9. Weight: \_\_\_\_\_ Pounds/Grams  
(CIRCLE POUNDS OR GRAMS)**

**10. Length/height: \_\_\_\_\_ Inches/Centimeters  
(CIRCLE INCHES OR CENTIMETERS)**

# APPENDIX E

**Table D-1**  
**Belize: Response Rate and Raising Factor by Enumeration District**  
**2002 LSMS**

Selected Characteristics	Enumeration District	Completion Rate	Raising Factor
<b>Corozal</b>			
Urban	0101/1105	79.2	1.3
	0102	75.0	1.3
Rural	1204	95.8	1.0
	0202	62.5	1.6
	0205	100.0	1.0
	0206	100.0	1.0
	0207	95.8	1.0
	0212	91.7	1.1
<b>Orange Walk</b>			
Urban	0101	87.5	1.1
	0102	87.5	1.1
	0652	87.5	1.1
	1104	87.5	1.1
Rural	0203	100.0	1.0
	0204	95.8	1.0
	0710	87.5	1.1
	0908	95.8	1.0
	1211	62.5	1.6
	2256	95.8	1.0
<b>Belize</b>			
Belize City	0103	66.7	1.5
	0114	91.7	1.1
	0116	79.2	1.3
	0117	58.3	1.7
	0119	83.3	1.2
	0153	79.2	1.3
	0203	79.2	1.3
	0206	83.3	1.2
	0225	62.5	1.6
	0226	100.0	1.0
	0263	75.0	1.3
	0807	83.3	1.2
	1714	62.5	1.6
	1817	91.7	1.1
	2818	87.5	1.1
	3907	95.8	1.0
4818	91.7	1.1	
5907	75.0	1.3	

**Table D-1cont.**  
**Belize: Response Rate and Raising Factor by Enumeration District**  
**2002 LSMS**

Selected Charateristics	Enumeration District	Completion Rate	Raising Factor	
San Pedro	0102	79.2	1.3	
	1102	70.8	1.4	
	Rural	0107	66.7	1.5
		0110	87.5	1.1
		0113	83.3	1.2
		0116	95.8	1.0
		0120	91.7	1.1
		0604	66.7	1.5
<b>Cayo</b>				
Belmopan	0110	70.8	1.4	
	1110	83.3	1.2	
Benque Viejo	0202	100.0	1.0	
	1203	95.8	1.0	
San Ignacio	0110	87.5	1.1	
	0112	79.2	1.3	
	1105	83.3	1.2	
	1106	79.2	1.3	
Rural	0307	70.8	1.4	
	0317	100.0	1.0	
	1307	100.0	1.0	
	1318	91.7	1.1	
	2815	79.2	1.3	
	2816	83.3	1.2	
<b>Stann Creek</b>				
Danriga	0101	87.5	1.1	
	0107/1107	91.7	1.1	
Rural	0752	91.7	1.1	
	1205	100.0	1.0	
	1210	100.0	1.0	
	1216	95.8	1.0	
<b>Toledo</b>				
Punta Gorda	0101	75.0	1.3	
	0106	83.3	1.2	
Rural	0202	79.2	1.3	
	216/1216	87.5	1.1	
	1207	95.8	1.0	
	2211	100.0	1.0	