

GHANA LIVING STANDARDS SURVEY

REPORT OF THE FOURTH ROUND (GLSS 4)

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PREFACE AND ACKNOWLEDGEMENTS

This report presents the main results of the Fourth Round of the Ghana Living Standards Survey (GLSS 4) with labour force module. The fieldwork covered a period of 12 months (April 1998 to March 1999) and nearly seven years after the third round of the survey in 1991/1992. The survey instruments and methodology were based on those of the third round with some minimal modifications.

Subsequent to the introduction of the Structural Adjustment Programmes (SAP), poverty reduction, including the set up of a monitoring and evaluation of welfare information system, has been the focal point of Government policy and programmes. Additionally, the need has been expressed for a labour information system to monitor levels of employment, underemployment and unemployment on a continuous basis to measure the effect of the Economic Recovery Programme (ERP) launched in 1983. GLSS 4 therefore carried a special module on the labour force.

The GLSS 4 is a nation-wide survey which collected detailed information on a variety of topics, including demographic characteristics of the population, education, health, employment and time use, migration, housing conditions, household agriculture and non-farm businesses. It is expected that together with the results of the earlier rounds, the GLSS 4 will provide needed information to policy-makers, business persons and academic analysts for evaluating living standards and labour force information systems in the country.

For purposes of comparability the income and expenditure module used in the third round survey was not modified. This is particularly useful as it will enable the evaluation of poverty trends over the survey period. Researchers who are interested in carrying out further analysis with the GLSS data sets are encouraged to apply to the Statistical Service for further details.

The methodology of the GLSS 4 is such that it required large human and material resources and monetary support. We wish, at this time, to express appreciation for the many contributions that brought such a complex survey to a successful end. The Ghana Statistical Service (GSS) would like to thank the selected households for their patience and cooperation in going through the frequent visits and questioning by the interviewers. Many thanks also go to the field staff, drivers and data entry operators for their courage, diligence and efficient work despite some difficulties. The regional and district administrators and traditional chiefs also deserve commendation for their support.

The GSS would like to acknowledge, with many thanks, the technical assistance, financial contribution and support from the Government of Ghana, the World Bank and the European Union. Special thanks go to Dr. Sudharshan Canagarajah, Mr. John Y. Ngwafon, Mr. Harold Coulombe, Mr. Pascal Heus, Mr. Claus Pörtner (all of the World Bank) and Mrs. Marian Ketting of the European Union for their contributions. Our appreciation also goes to Professor W. K. Asenso-Okyere (ISSER) for his assistance in writing the statistical report at the time the GSS was too busy with Census 2000. Finally, the devoted services of all project personnel and all others who may have contributed to the success of the survey are duly recognised.

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EXECUTIVE SUMMARY

The Ghana Living Standards Survey (GLSS), with its focus on the household as a key social and economic unit, provides valuable insights into living conditions in Ghana. This present report gives a summary of the main findings of the fourth round survey, which was carried out by the Ghana Statistical Service (GSS) over a 12-month period (April 1998 to March 1999).

A representative nationwide sample of more than 5,998 households, containing over 25,000 persons, was covered in GLSS 4. Detailed information was collected on all aspects of living conditions, including health, education, employment, housing, agricultural activities, the operation of non-farm establishments, remittances, savings, and credit and assets. The special focus of GLSS 4 was on collecting detailed labour force, income and expenditure data in respect of all household members.

The key findings of the survey are as follows (references are to the relevant sections of the report):

Education

Information are given on levels of educational attainment of the adult population, current school enrolment, educational expenditure by households, adult literacy rates, and apprenticeship training. About 32 percent of all adults (representing nearly three and a half million people) have never been to school, a quarter went to school but did not obtain any qualifications; about 33 percent have the MSLC/JSS certificate as their highest qualification, while the remaining 10 percent (a million adults) have secondary or higher-level qualifications (Section 2.1).

About 8 in every ten children aged 6-15, and about half of those aged 16-18, are currently attending school or college. Attendance rates for females are lower than those for males, especially in the northern half of the country (Section 2.2). The average annual cost to a household of maintaining a person at school or college was ₵163,500 per year in March 1999 cedis (Section 2.3). The survey results indicate that 50 percent of adults in Ghana are literate in English or a local language. There are substantial differences between the sexes, and between localities, with regard to literacy. A little over 6 out of every 10 men, but fewer than 4 out of every 10 women, are literate. More than two-thirds (66%) of adults in urban areas are literate, but in rural areas only 41 percent are literate (Section 2.4).

Health

The survey collected data on each person's health condition over the previous two weeks; on the fertility, pre-natal care and contraceptive use of women aged 15-49; on the post-natal care of children aged 5 years and under; and on the preventive health care and vaccination of children aged 7 years and under. About 26 percent of the sample reported having suffered from an illness or injury in the previous two weeks, 61 percent of whom had to stop their usual activities due to the indisposition (Section 3.2).

The survey found that 7.0 percent of women were currently pregnant, and a further 13.2

percent had been pregnant in the last 12 months. Only about 15 percent of all women aged 15-49 or their partners reported using contraceptives; about 11 percent use modern methods, and 4 percent use traditional methods, to prevent or delay pregnancy (Section 3.3). The level of breastfeeding in Ghana is very high; about 98 percent of all children under 5 have been breastfed at one time or another. About 7 percent of children below the age of 8 have never been vaccinated against any of the childhood killer diseases.

Employment

As a major focus of the survey, a wide range of estimates of economic activity, employment, unemployment, underemployment and working conditions are given in the report. The survey also has detailed information about time spent on housekeeping activities. About 77 percent of the adult population (aged 15+) is currently economically active. The activity rates for males and females differ, with the rate for women in the age group (15-64) lower than those for men, but in the younger age group (7-14) and the older age group (65+) the rates for females exceed those for males. For each age group the activity rates for males and females are higher in rural areas (apart from rural savannah) than in urban areas (Section 4.2).

The majority of the working population is employed in agricultural activities (55.0%), followed by trading (18.3%) and then manufacturing (11.7%). Whereas 27.4 percent of working females are engaged in trading, only 7.4 percent of males are traders. The highest hourly wage rates are obtained in mining and quarrying, followed by financial services and then trading. For all areas of employment, females earn lower wages than males (Section 4.3). About 8 percent of the currently active population can be classified as unemployed, but there is also a high degree of underemployment, with some people having a job but wanting to do more work (Section 4.4).

In many households, particularly in rural areas, family members (especially women) spend a great deal of their time fetching water and firewood, in addition to the time spent on other household activities such as cooking and cleaning (Section 4.5).

Migration

The report provides data on migration to create some awareness that would generate further discussions and research into the complex field of population relocation. Some 52 percent of all Ghanaians are migrants, having previously lived in a locality different from where they are living at present; a further 16 percent have moved away from their birthplace, but subsequently returned (Section 5.1).

Housing

Detailed information is presented on a variety of housing characteristics: the occupancy status of the household; household size and room density; access to drinking water, toilet facilities, source of lighting and fuel, rubbish disposal, and materials used in house construction. A little over 40 percent (24 percent in urban areas and 60 percent in rural areas) of the households own the houses they live in. About 80 percent of the households in urban areas have access to pipe-borne water, compared with only 19 percent in rural areas. More than three-quarters of urban households have electricity for lighting, compared with only 17 percent of rural households. Most urban households use charcoal for cooking, whereas most households in

rural areas use firewood. Only 14 percent of urban households, and 2 percent of rural households, have access to a flush toilet (Section 6.3).

Household agriculture

About 2.7 million households in Ghana own or operate a farm or keep livestock (Section 7.1). More than half of households, which cultivate crops hire labour for their operations. The major crops, in terms of sales, are cocoa, maize, groundnuts/peanuts, and rice (Section 7.2). About 2 and a half million households process crops or fish for sale, with the major responsibility for this activity falling on women.

Non-farm enterprises

Approximately 1.9 million households or 49 percent of all households in Ghana operate a non-farm business with women operating two-thirds of these businesses. About 56 percent of all businesses involve retail trade, and most of the rest cover some kind of manufacturing (for instance food, beverages, textiles or clothing) (Section 8.1).

Total expenditure

Average annual household expenditure (both cash and imputed) relative to March 1999 prices was about ₵4,244,000. Given an average household size of 4.3, this implies annual per capita expenditure of about ₵987,000 (Section 9.1). With an exchange rate of ₵2,394 to the US dollar prevailing at March 1999, the average annual household expenditure is US\$1,773 and the pre-capita expenditure is US\$412. Overall, cash expenditure on food represents 45.4 percent of total household expenditure, while the imputed value of own-produced food consumed by households represents a further 10.3 percent (Section 9.2).

Cash expenditure

Relative to March 1999 prices, Ghanaian households spend on average almost ₵3,500,000 a year (at March 1999 prices), or ₵804,000 on per capita basis (Section 9.3). On national terms, just below half of total cash expenditure (46%) went to food and beverages; and alcohol and tobacco, and clothing and footwear, each accounted for about 10 percent of it. The next most important expenditure groups, in terms of amount spent, are recreation and education (7.5%), transport and communications (5.6%), housing and utility (6.4%) and household goods, operations and services (6.0%).

Food consumption

At the time of the survey Ghanaian households (which number about 4.2 million) were spending on average an amount of almost ₵2.4 billion (at March 1999 prices) on food (Section 9.5), with own-grown food consumed amounting to the value of almost ₵435,000 (Section 8.7). The most important food consumption subgroups, in terms of cash expenditure are roots and tubers (22%), fish (16%), cereals and cereal products (15%), vegetables (9%), and meat (5%). Prepared meals account for 11 percent by value of total food consumption.

While the pattern of consumption, in terms of food subgroups, is broadly similar in urban and rural areas, residents in rural areas consume more roots and tubers, and pulses and nuts than their counterparts in urban areas. Expenditure on alcohol and tobacco is also higher in rural

areas. In contrast, the consumption of meat and prepared meal are much higher in urban areas than in rural areas, and urban residents spend much more on cereals and cereal products and poultry and poultry products than their rural counterparts (Section 9.5).

Remittances

About 76 percent of all households reported having remitted money or goods in the previous 12 months to persons who were not their household members. The bulk of these remittances to non-household members went to relatives (93%), and in particular to parents or children (50%), brothers or sisters (18%), and other relatives (23%). Such income flows from the household benefited females (64%) more than their male counterparts (36%).

Whilst annual remittances to people overseas total only about ₵6 billion in March 1999 cedis, the value of remittances received from abroad is about ₵339 billion, which represents 40 percent of all remittances received.

Assets

In general, the level of ownership of most assets is much higher in urban areas than it is in rural areas. It is higher in Accra than in other urban areas, and higher in the rural coastal and rural forest than it is in the rural savannah.

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LIST OF ABBREVIATIONS

The following abbreviations are used through out this report.

GSS	Ghana Statistical Service
GLSS	Ghana Living Standards Survey
GLSS 1	Ghana Living Standards Survey Round 1
GLSS 2	Ghana Living Standards Survey Round 2
GLSS 3	Ghana Living Standards Survey Round 3
GLSS 4	Ghana Living Standards Survey Round 4
MSLC	Middle School Living Certificate
JSS	Junior Secondary School
SAP	Social Adjustment Programme
ERP	Economic Recovery Programme
ISSER	Institute of Statistical, Social and Economic Research
PNDC	Provisional National Defence Council
GDHS	Ghana Demographic and Health Survey
CWIQ	Core Welfare Indicators Questionnaire
SAS	Statistical Analysis System
IMPS	Integrated Microcomputer Processing System
INC	Income
EXP	Expenditure
AGG	Aggregate

SELECTED ENUMERATION AREAS FOR GLSS 4

ECOLOGICAL ZONES OF GHANA (GLSS)

Technical Notes

Because of the effects of rounding, percentages may not always add exactly to 100, and for the same reasons estimated numbers may not add exactly to the estimated totals shown in the table.

Where national estimates have been given, these have been obtained by grossing up the sample data, as described at the end of Appendix 1.

The word ‘billion’ used in this report means ‘one thousand million’. The symbol ‘–’ and ‘.’ in the cell of a table indicates that the value for that cell is zero.

All income and expenditure data given in this report have been deflated to give values for March 1999. This was done using the monthly national Consumer Price Index, produced by the Ghana Statistical Service, and the price data collected as part of the survey.

1 DEMOGRAPHIC CHARACTERISTICS

1.1 Household Composition

The data from the fourth round of the Ghana Living Standards Survey (GLSS 4) covered a nationally representative sample of 5,998 households containing 25,855 household members. For the purposes of the survey, a household was defined as a person living alone or any group of persons staying together and sharing the same catering arrangements. Membership of a household was based on the same criterion but with the added condition that a person must have been living in the household for at least nine out of the last 12 months. The only exceptions to this rule were: absent household heads; children under nine months; and students and seasonal workers who had not been living as part of another household for the period they were absent.

Table 1.1 shows estimates of the total population and total number of households for March 1999 by locality. The estimation is based on a projection of the 1984 census population, using parameters obtained from the survey sample with an overall growth rate for the total population of 2.6 percent per annum. On this basis, the total number of persons in private households in Ghana is given as 18.1 million, and the total number of households as 4.2 million.

Table 1.1 Mean household size, estimated population in private households, and estimated number of households, by region

Locality	Mean household size		Population in households in March 1999		Estimated number of households based on GLSS4 (March 1999)
	1984 Census (March 1984)	GLSS4 (March 1999)	Projected from census (millions)	Based on GLSS4 results (millions)	
<u>Ghana</u>	<u>4.9</u>	<u>4.3</u>	<u>18.1</u>	<u>18.1</u>	<u>4,210,000</u>
Western	4.4	4.5	1.7	1.9	420,000
Central	3.8	3.8	1.7	2.1	540,000
Greater Accra	3.9	3.7	2.1	2.6	730,000
Volta	4.8	5.0	2.5	1.9	380,000
Eastern	4.8	4.4	1.8	2.5	570,000
Ashanti	4.7	4.0	3.1	3.2	740,000
Brong Ahafo	5.1	3.9	1.8	1.6	450,000
Northern	8.7	5.2	1.7	1.1	200,000
Upper West	8.4	6.0	0.7	0.4	60,000
Upper East	7.1	5.0	1.1	0.8	150,000
<u>Urban</u>	<u>4.3</u>	<u>3.9</u>	<u>5.8</u>	<u>6.7</u>	<u>1,700,000</u>
Accra	3.7	3.6	1.3	1.9	550,000
Other urban	4.5	4.0	4.5	4.8	1,150,000
<u>Rural</u>	<u>5.2</u>	<u>4.5</u>	<u>12.3</u>	<u>11.4</u>	<u>2,510,000</u>
Rural Coastal		4.1		2.7	650,000
Rural Forest		4.5		5.8	1,290,000
Rural Savannah		5.1		2.9	570,000

Being derived from survey results, the information in Table 1.1 concerning the regional estimates obtained from the survey are subject to sampling error even if the national estimate of 18.1 million assumed from the projection is correct. This explains why the projected populations for each region using the survey results are different from the simple projections made from the census data. In terms of the urban/rural split, the survey produces higher estimates for urban areas and lower ones for rural areas than those obtained by a simple projection of census figures using the same growth rate; this reflects the fact that the urban population has grown faster than the rural population. Compared with the 2.6 percent overall annual population growth rate, results from the survey imply annual growth rates of 3.6 percent for urban areas, (5.3 percent for Accra and 3.0 percent for other urban areas) and 2.0 percent for rural areas.

The average household size is 4.3 as compared to 4.9 that was observed in the 1984 census (Table 1.1). The urban household size in 1984 dropped from 4.3 to 3.9 in 1999 while the rural household size dropped by a relatively bigger margin from 5.2 to 4.5.

While the Central, Greater Accra, Brong Ahafo, Western, Eastern and Ashanti Regions have average household sizes which are equal to or less than the national average, the averages for the Volta, Northern, Upper East and Upper West Regions are higher than that for the whole country. According to Table 1.1 average household sizes seemed to have increased slightly from 1984 to 1999 for the Western, Central and Volta Regions but decreased for all the other regions over the 1984-1999 period.

The survey results indicate that one in every three households in Ghana has a female as the head of the household, with distinct location differences (Figure 1.1). The proportion of female-headed households is higher in rural coastal areas (40%) and other urban areas (39%) apart from Accra than all the other areas. Females head only 20 percent of the households in the rural savannah zone.

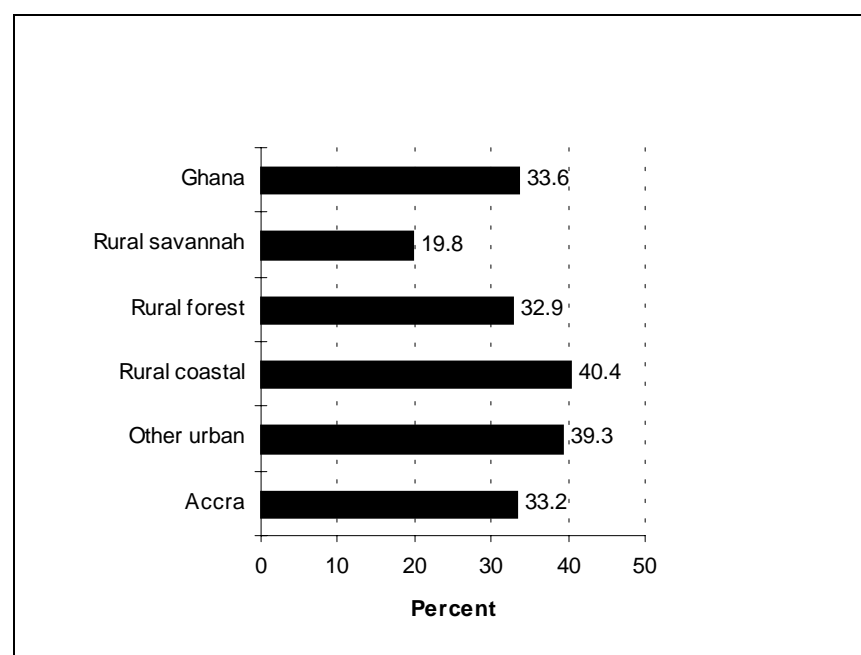


Figure 1.1: Percentage of female-headed households, by locality

For the country as a whole, the average age of a household head is estimated to be 44.9 years. Household heads in the rural areas tend to be older than those in the urban areas, including Accra (Table 1.2). In general, female-headed households are older than male-headed households.

Table 1.2: Average age of household heads, by locality and sex

Locality	Male	Female	All
<u>Urban</u>	43.1	45.2	43.8
Accra	40.9	44.0	41.7
Other urban	44.2	45.5	44.7
<u>Rural</u>	44.4	48.3	45.6
Rural Coastal	45.7	50.0	47.4
Rural Forest	43.4	46.9	44.5
Rural Savannah	45.1	49.0	45.8
All	44.0	47.0	44.9
Sample Size	3981	2017	5998

Table 1.3 shows the composition of Ghanaian households. Out of the estimated total of 4.2 million households in Ghana, just over half (54%) contain at least one adult of each sex, together with one or more children aged under 15 years. Whereas 9.4 percent of households contain one woman living with one or more children only 1.2 percent of households have one man living with children. About 17 percent of households contain only one person; of these, about 446,000 are one-man households and 253,000 are one-woman households. Further information on household size is given in the section on housing.

Table 1.3 Composition of households

Adults in household	With Children		Without Children	
	Percentage of total	Estimated households	Percentage of total	Estimated households
At least one adult of each sex	54.4	2,290,000	9.7	408,000
One man	1.2	50,000	10.5	446,000
Two or more men	0.6	25,000	0.9	34,000
One woman	9.4	396,000	6.0	253,000
Two or more women	5.6	236,000	1.7	72,000
Total	71.3	2,997,000	28.7	1,213,000

Note: A child is defined as a person aged under 15.

1.2 Age and sex distribution

The population in general is quite young; about 5 out of every 10 persons are less than 20 years of age and about 69 percent of the population is under 30 years of age. Children (under 15 years) account for 44 percent of the total population while older persons (65+) account for only 5 percent. There is however a higher proportion of children in rural areas (46%) than in Accra (35%) and other urban areas (40.7%). This age structure implies a dependency ratio of 96, which means that on average each person of working age (15-64) has one additional person to support (Table 1.4).

Results of the survey give a distribution of 47.8 percent males and 52.2 percent females, indicating an overall sex ratio of 92 males to every 100 females. A larger proportion of female population is observed in all localities and age groups except for the youthful population (under 24 years of age) in the rural areas, where males outnumber females. The larger proportion of females in the higher age groups is a reflection of the demographic fact that in general women live longer than men.

Table 1.4 Age distribution of the population, by locality and sex (percent)

Age group	Accra		Other urban		Rural		All	
	Male	Female	Male	Female	Male	Female	Male	Female
0-4	4.6	5.2	5.4	5.4	7.2	7.1	6.6	6.5
5-9	6.2	6.2	7.4	7.3	8.4	8.0	7.9	7.7
10-14	6.2	6.7	7.2	8.0	7.5	7.3	7.3	7.5
15-19	5.4	6.1	6.0	6.0	5.2	4.5	5.4	5.0
20-24	4.4	5.3	3.9	4.3	3.2	3.0	3.5	3.5
25-29	4.7	4.4	2.6	4.1	2.3	3.7	2.6	3.8
30-34	3.0	4.3	2.4	3.4	2.2	3.3	2.3	3.4
35-39	2.7	3.8	2.5	2.9	2.4	3.1	2.4	3.1
40-44	2.6	2.5	1.8	3.0	2.0	2.3	2.0	2.5
45-49	2.1	2.1	2.1	2.0	1.8	2.1	1.9	2.1
50-54	1.9	1.6	1.3	1.6	1.7	1.9	1.6	1.8
55-59	0.9	1.4	1.2	1.1	1.1	1.2	1.1	1.2
60-64	0.8	0.7	0.9	1.3	1.0	1.4	0.9	1.3
65+	1.7	2.1	2.1	2.9	2.4	2.8	2.2	2.8
All	47.3	52.7	46.6	53.4	48.3	51.7	47.8	52.2
Sample size	1103	1184	2920	3391	8425	8832	12448	13407

The ages shown in Table 1.4 are those reported by the respondents in each household. Where possible, the statement of age was based directly on the information provided on birth or baptismal certificates. Where there was no documentary proof of age, a calendar of events was used to assist in estimating the respondent's age. While the overall group distribution as shown in Table 1.4 is fairly accurate, an examination of individual estimates of age revealed a strong heaping of ages, with respondents preferring ages ending with zero and to a lesser extent 5.

1.3 Nationality, ethnicity and religion

The survey sample is predominantly Ghanaian with about 99 percent of those interviewed reported as Ghanaians; the rest are foreign nationals, majority of whom are Togolese and Burkinabes (Table 1.5). It should be noted that diplomatic households were excluded from the survey.

Table 1.5 Distribution of the population by sex and nationality (percent)

Sex	Nationality								Total	Sample size
	Ghana	Burkina Faso	Mali	Nigeria	Cote d'Ivoire	Togo	Other African	Other		
Male	98.6	0.3	0.1	0.1	0.1	0.7	0.1	0.0	100.0	12448
Female	98.7	0.2	0.1	0.1	0.1	0.6	0.1	0.0	100.0	13407
All	98.7	0.3	0.1	0.1	0.1	0.6	0.1	0.1	100.0	25855

With regard to ethnicity, Table 1.6 shows that a little over half (53%) of the heads of households are Akans (18% Asante, 13% Fanti and 22% other Akan). A further 13 percent of heads of households identified themselves as Ewes, and 10 percent as Ga/Adangbes. About 4 percent identified themselves with the Dagomba ethnic group while Hausa household heads constitute 3 percent. Other groups like Mamprusi, Kusasi, Kasema Nankani, Konkomba, Nanumba and several others form about 12 percent of the heads of households covered in the survey.

Table 1.6 Household heads by region and ethnicity (percent)

Ethnicity	Western	Central	G.Accra	Volta	Eastern	Ashanti	B/A	Northern	U.West	U/East	Total
Asante	4.1	2.7	6.8	0.2	7.9	76.4	13.7	0.6	-	-	17.6
Fanti	20.5	66.3	7.7	0.5	5.4	5.1	1.7	-	-	-	12.9
Other Akan	45.1	23.3	14.7	0.9	46.2	4.7	57.4	0.3	-	0.4	22.1
Ga-Adangbe	4.5	1.0	48.3	0.9	16.8	0.8	0.7	0.8	-	-	10.2
Ewe	3.3	1.4	12.0	71.7	11.8	2.5	2.2	5.0	-	-	12.4
Guan	1.6	2.9	1.5	13.0	5.9	-	3.5	-	-	-	3.2
Hausa	-	0.4	2.8	1.7	1.3	0.8	2.0	1.7	-	1.5	1.3
Dagomba	1.1	0.3	1.7	0.8	0.9	1.3	0.6	47.5	0.8	1.9	3.8
Grussi/Frafra	0.8	-	0.9	-	0.4	1.2	1.7	2.2	-	25.8	1.9
Dagarti	0.5	-	-	-	0.4	0.5	1.9	5.3	99.2	0.4	2.7
Other	18.6	1.7	3.6	10.3	3.0	6.6	14.6	36.7	-	70.0	11.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	639	700	859	640	820	1060	540	360	120	260	5998

Table 1.6 also shows the composition of ethnic groups in all the ten regions of Ghana. The Western and Central Regions are inhabited largely by Fantis and other Akans while Ashanti Region is dominated by Asantes. Household heads in Volta and Upper East Regions are also quite homogeneous; Volta Region is largely inhabited by Ewes and to some extent Guans,

and almost all heads in Upper West are reported as Dagarti. The regions that are heterogeneous include Eastern, Brong Ahafo and Greater Accra. A greater proportion of other household heads in the Greater Accra Region identified themselves as mostly Ga/Adangbe, other Akans and Ewes. Although the “other Akans” group has a greater percentage share of household heads in the Eastern and Brong Ahafo Regions, all the ethnic groups also live in these two regions (see Appendix Table A1.1 for the distribution of the ethnic groups in the country).

In terms of religious affiliation, the survey indicates that more than two-thirds (72%) of heads of households in Ghana are Christians; Catholics account for 16 percent of total population, Pentecostals 13 percent, Presbyterians 11 percent, and Methodists 10 percent. The Spiritualist group form about 5 percent, the Anglicans about 2 percent while other Christian denominations account for a sizable proportion of the population (16 percent).

About 12 percent of heads of households are Muslims, and 15 percent hold traditional or animist beliefs (Table 1.7). Translated in absolute terms, this implies that about three and a half million household heads are Christians, a little over one million are Muslims, traditionalists or animists. Very few rural household heads in the savannah zone belong to other Christian denominations apart from the Catholic Church. Islam, on the one hand, appears strongest in the urban areas and in the rural savannah. Animism (no religion group) appears to be spread fairly evenly between the different ecological zones. Traditional religion, on the other hand, is common with some rural households, particularly rural households in the savannah and coastal areas.

Table 1.7 Household heads by religion and locality (percent)

Religion	Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	All
Catholic	6.0	16.1	15.7	15.9	22.6	16.0
Anglican	6.8	2.7	0.8	1.5	0.3	2.1
Presbyterian	18.9	11.5	8.0	12.7	6.4	11.3
Methodist	11.9	9.8	15.7	10.3	1.7	9.8
Pentecostal	21.3	13.4	10.2	16.6	4.1	13.3
Spiritualist	3.4	3.7	9.7	5.8	0.8	4.8
Other Christian	12.7	17.1	15.6	19.3	7.1	15.5
Muslim	11.3	17.4	6.3	6.0	19.7	11.8
Traditional	0.6	2.2	11.0	2.2	29.7	7.8
No religion	6.8	6.0	6.9	9.4	7.5	7.6
Other	0.3	0.1	0.1	0.1	0.2	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	899	1940	960	5998

In terms of regional distribution, Christian heads of households are found largely in the south of the country, with Presbyterians in large numbers in the Eastern Region, Methodists mostly in the Central Region and Pentecostals mostly in the Greater Accra and Ashanti Regions (Table 1.8). The Catholic Church dominates the population in four regions: Western Region, Volta Region, Brong Ahafo Region and Upper West Region, where 7 in every 10 heads of households are Catholics. The population in Northern Region is mainly Muslim and that of Upper East is

mainly traditional, with each religious group accounting for more than half of the total population in the respective region. Muslim heads of households account for about 58 percent of all household heads in the Northern Region, while traditionalists account for about two-thirds (66.5%) of heads of households in Upper East Region (see Appendix Table A1.2 for details on the distribution of religious groups in the country).

Table 1.8 Household heads by religion and region (percent)

Religion	Western	Central	G.Accra	Volta	Eastern	Ashanti	B/A	Northern	U.West	U/East	Total
Catholic	21.4	17.3	6.3	24.2	9.5	13.6	20.4	11.7	71.7	11.9	16.0
Anglican	4.7	2.7	5.6	0.3	1.3	1.3	-	-	-	0.4	2.1
Presbyterian	3.3	3.1	18.0	21.3	26.0	6.7	8.3	3.6	-	0.8	11.3
Methodist	16.0	19.0	12.3	0.8	6.1	13.2	9.1	0.3	-	-	9.8
Pentecostal	16.0	8.3	20.1	8.9	16.0	17.6	14.4	3.3	-	-	13.3
Spiritualist	7.8	13.1	3.3	2.5	5.7	4.2	1.1	0.8	-	-	4.8
Other Christian	16.9	18.4	14.8	7.0	17.9	23.7	18.1	3.9	-	5.0	15.5
Muslim	8.1	8.7	9.9	7.5	5.7	10.1	10.9	57.8	2.5	14.6	11.8
Traditional	0.3	4.1	1.6	20.3	1.5	0.6	6.9	13.1	12.5	66.5	7.8
No religion	5.5	5.1	7.8	7.0	10.0	8.9	10.7	5.6	13.3	-	7.6
Other	-	-	0.2	0.2	0.2	0.1	-	-	-	0.8	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	639	700	859	640	820	1060	540	360	120	260	5998

2 EDUCATION

2.1 Educational attainment

Table 2.1 highlights educational attainment of people aged 15 years and over. The use of this age as the cut-off point is based on the fact that the legislated minimum age for entering primary school is 6, and that a new entrant will have to do at least 10 years of schooling to qualify to sit the middle school leaving certificate (MSLC) examination or 9 years of schooling to qualify to sit the Basic Education Certificate of Examination (BECE). Also included in Table 2.1 are estimates of educational attainment for all adults in Ghana, obtained by grossing up the survey data (see Appendix 3 for the calculation of the estimates).

Table 2.1 Levels of educational attainment, by sex, and estimates of educational attainment for the population aged 15 and above

Highest level attained	Percent			Estimates (millions)		
	Males	Females	All	Males	Females	All
Never been to school	21.1	41.0	31.8	1.0	2.3	3.3
Less than MSLC/BECE	24.6	25.6	25.1	1.2	1.4	2.6
MSLC/BECE	38.6	27.8	32.8	1.8	1.5	3.3
Secondary or higher	15.8	5.7	10.4	0.7	0.3	1.0
Total	100.0	100.0	100.0	4.7	5.5	10.2

About 32 percent of all adults (representing about three and a half million people) have never been to school. A further 25 percent (almost three million adults) went to school but did not obtain any qualifications. About 33 percent (three million and three hundred adults) have the MSLC/JSS certificate as their highest qualification, while the remaining 10 percent (a million adults) have secondary or higher-level qualifications.

There is a marked contrast between females and males in levels of educational attainment. For instance, more than twice as many females as males (2.4 million as against 1.1 million) have never been to school; in contrast, only half as many females as males have secondary or higher qualifications.

2.2 School attendance

Two aspects of formal schooling, current and past school attendance are presented in this section of the report. The first section reports on current school attendance of people who are more likely to be in school at all the levels of the education ladder in Ghana. Tables 2.2 and 2.3 present school attendance rates by age, sex and locality.

The results on school attendance show that some 5.2 million (59%) of the total school age population of 8.3 million people are currently in school. Figure 2.1 illustrates the difference in

attendance rates between males and females for different age groups; in each age group, the proportion of females attending school is lower than the corresponding proportion for males, and the differences are most marked in the 19-25 age group, thus indicating a higher female dropout rate than males.

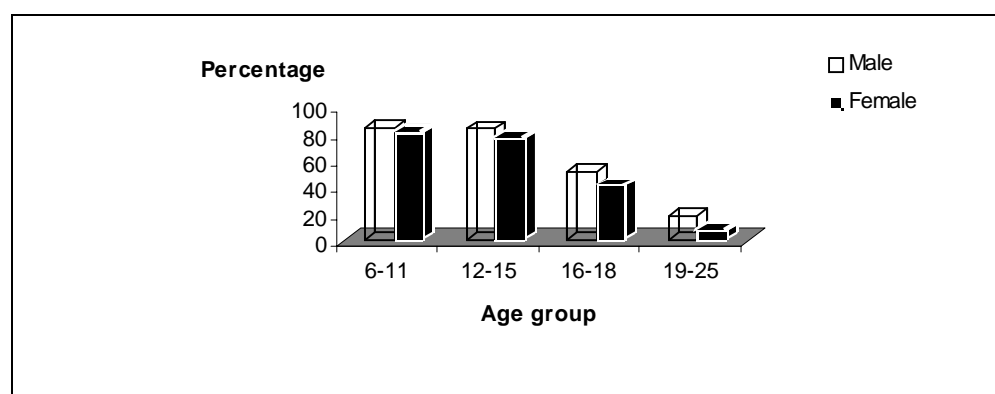


Figure 2.1: School attendance rate in each age group, by sex

Table 2.2 highlights the links between school attendance and place of residence. Not only are a higher proportion of urban dwellers of school going age actually in school, but also attendance rates rise with increased urbanisation. For example, 95 percent of all boys in Accra aged 6 to 11, and 91 percent in other urban areas, were enrolled in school at the time of the survey, whereas in rural savannah the corresponding figure is only 66 percent.

Table 2.2 School Attendance rate by age, locality and sex

Age group	Accra		Other urban		Rural Coastal		Rural Forest		Rural Savannah		Ghana		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
6-11	95.0	85.6	91.1	87.4	82.7	85.7	90.8	88.2	66.3	61.3	84.4	81.6	83.1
12-15	85.9	85.2	89.9	81.2	91.0	81.4	86.8	81.0	66.5	55.2	83.8	76.8	80.4
16-18	70.9	42.1	58.2	50.5	55.6	37.5	41.6	40.2	48.3	29.1	51.9	41.8	47.0
19-25	25.1	17.3	22.5	10.3	12.2	9.8	10.9	4.5	25.7	4.6	19.0	8.5	13.5
All	69.2	57.9	70.6	60.5	70.0	63.6	67.7	61.8	55.6	45.8	66.2	58.4	62.3

A similar pattern is noticeable in respect of school attendance among girls. On the whole, however, the proportion of females in school is significantly lower in all localities and for all ages (apart from age group 6-11 in rural coastal) when compared with their male counterparts.

Table 2.3 highlights the substantial differences in school attendance, both between the sexes and between the south and the north of the country. In terms of the sexes, male attendance rates are, in general, higher than the rates for females throughout the country and across age groups. There are a few exceptions though; female attendance rates for age group 6-11 in Volta, Eastern and Upper West, for age group 12-15 in Upper West and for age group 16-18 in Ashanti and Upper West Regions are higher than the males' attendance rates. Over 80 percent of children aged 6-11 are currently attending school in all regions except Upper West,

Upper East and Northern Regions. Turning to the older school age category, 19-25, higher rates of attendance were noted among residents in Volta, Greater Accra and Upper West Regions. For this age group too, females have a low attendance rate; only 9 percent of females aged 19-25 are currently in school, compared with 19 percent of males of the same age.

Table 2.3 School attendance rate, by region, age and sex (percent)

Region	Age group								6 - 25		
	6 -11		12 -15		16 -18		19 -25				
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Western	93.6	90.8	93.0	84.3	50.1	41.1	11.0	4.5	70.3	62.4	66.0
Central	84.7	82.6	89.1	81.6	49.2	32.5	12.3	4.8	71.3	62.1	66.6
Greater Accra	91.7	85.9	87.3	85.4	68.4	43.4	27.5	17.9	69.5	60.2	64.8
Volta	81.4	83.6	84.6	82.0	57.9	50.1	22.9	14.3	65.2	63.9	64.6
Eastern	89.0	90.4	87.1	77.4	46.1	42.8	13.7	8.0	69.1	59.6	64.5
Ashanti	90.8	87.8	85.4	78.3	40.1	43.4	9.2	6.4	65.1	57.7	61.2
Brong Ahafo	91.6	83.9	88.7	82.3	55.6	37.9	14.2	2.4	72.6	61.8	67.2
Northern	67.2	57.3	71.9	46.1	38.6	32.1	24.4	4.0	56.1	40.9	49.2
Upper West	60.3	73.2	62.6	71.6	62.9	68.7	49.1	18.2	59.0	64.5	61.6
Upper East	64.9	54.6	60.2	47.2	59.9	18.5	28.4	6.8	56.3	41.6	50.0
All	84.4	81.6	83.8	76.8	51.9	41.8	19.0	8.5	66.2	58.4	62.3

The second aspect of schooling looks at the historicity of adults' attendance in formal education. All household members aged 15 years and over were asked whether they have ever been to school. The results for adults are summarised in Table 2.4 by region, sex and rural-urban location. School attendance here also increases with urbanisation, and female attendance is consistently lower than that of male attendance. The rates for the northern sector of the country are significantly lower than the rates in the south; while more than two-thirds of adults in almost all the regions in the south have been to school before, only about a third of adults in the north had done the same. Another notable observation is the differences between males and females' rates in urban areas, as compared to the variation in rural areas; the situation for females in this case is worse in rural areas than in urban areas.

Table 2.4 Proportion of adults in each region who have been to school, by sex and locality (percent)

Region	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Western	91.5	79.4	84.8	87.3	58.2	72.0	88.3	63.6	75.2
Central	84.1	64.6	72.6	79.2	54.5	64.9	80.6	57.5	67.1
Greater Accra	93.0	80.4	86.6	85.8	61.9	72.5	92.6	79.1	85.6
Volta	89.8	70.4	80.1	80.4	55.0	67.0	82.7	58.5	70.2
Eastern	87.7	74.6	80.2	86.3	62.3	73.5	86.6	65.1	74.9
Ashanti	92.6	82.6	86.7	88.8	64.8	75.5	90.2	72.1	80.0
Brong Ahafo	85.8	69.1	75.9	83.9	58.4	70.8	84.4	61.9	72.3
Northern	59.4	20.1	41.4	42.6	23.0	32.8	46.0	22.5	34.5
Upper West	56.2	56.2	56.2	52.3	23.8	38.7	53.6	34.8	44.5
Upper East	85.7	50.0	66.7	29.6	12.3	21.0	35.7	16.9	26.3
All	87.8	73.8	80.2	74.5	51.5	62.4	79.2	59.6	68.8

2.3 Educational expenses

In the survey, detailed information was collected on the educational expenses incurred by households for each household member attending school or college during the last 12 months preceding the interview. Table 2.5 presents average amount of money spent on different expenditure items for the last 12 months preceding the survey.

On average, households spent about ₵163,500 a year for each household member attending school or college. The annual amount spent is much higher in Accra (₵447,821) than in other urban (₵214,203) or rural areas where the average expenses were far less than the national average. In general, rural savannah's average figure is the lowest, rounding to a low average of about ₵50,393. The four main items of expenditure are: school and registration fees (accounting for 36 percent of total educational expenditure); food, board and lodging at school (34 percent); uniforms and sports clothes (8 percent); and books and school supplies (8 percent).

Table 2.5: Average amount paid per person attending school/college in the last 12 months, by locality (cedis)

Item	Locality					All	
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	Amount	%
School & registration fees	185,549	86,075	18,170	39,790	7,283	59,158	36.2
Contributions to PTA	4,993	2,543	870	2,063	1,569	2,231	1.4
Uniforms & sports clothes	24,201	15,665	9,153	11,132	11,344	13,393	8.2
Books & school supplies	43,847	15,940	6,260	7,544	5,919	13,056	8.0
Transportation to/from school	29,736	9,333	3,969	3,383	1,529	7,515	4.6
Food, board & lodging at school	134,751	66,033	44,318	44,961	17,411	55,803	34.1
Other expenses (clubs, extra classes)	26,541	13,632	5,550	4,965	1,812	9,168	5.6
Other in-kind expenses	8,203	4,982	636	1,254	3,526	3,198	2.0
Total	457,821	214,203	88,926	115,092	50,393	163,522	100.0

Note: All figures have been rounded to the nearest 100 cedis.

The figures are based on those who attended or were attending school/college in the last 12 months.

Apart from rural-urban differences, the amount spent on education also increases as one moves higher on the education ladder. This is particularly so with the proportion of total amount spent on school and registration fees as well as amount spent on books and school supplies (see Appendix Tables A2.1, A2.2, A2.3 and A2.4).

2.4 Literacy

Questions concerning literacy were asked to find out whether respondents could read or write a simple letter in English or in a local language, in which they were most proficient. Questions involving calculations were also asked to elicit information about numeracy levels of respondents. The data have been analysed separately for males and females and also for the type of locality people live in.

The results indicate that 50 percent of adults in Ghana are literate in English or a local language (Table 2.6). There are substantial differences between the sexes, and between localities. A little over 6 out of every 10 men, but fewer than 4 out of every 10 women, are literate. Almost two-thirds (66%) of adults in urban areas are literate, but in rural areas only 41 percent are literate.

Table 2.6 Adult literacy rates, by sex and locality (percent)

	Urban			Rural			All	Ghana
	Accra	Other urban	All	Coastal	Forest	Savannah		
Male	84	76	78	63	70	35	57	65
Female	66	51	55	26	36	13	27	37
All	74	62	66	42	52	24	41	50

Note: Adult refers to those aged 15 and over. All those who said they could write a letter in English or in a Ghanaian language were considered as being literate.

Table 2.7 gives information similar to that in Table 2.6, but the information is separated into those literate only in a Ghanaian language, those literate in both a Ghanaian language and English, and those literate only in English. If those who said they were literate in only a Ghanaian language are excluded, the proportion literate (in English) drops by just 5 percentage points from 50 percent to 45 percent; if literacy in Ghanaian language is considered, the proportion who are literate drops by 12 percentage points, from 50 to 38 percent. There is therefore considerable overlap in literacy, with 34 percent of adults being literate in both English and a Ghanaian language. The only exception to this pattern is in Accra, where more than a quarter of all adults are literate in English but not in a Ghanaian language.

Table 2.7 Adult literacy rates in English and Ghanaian language, by sex and locality (percent)

Sex	Locality	Literate in			Illiterate	Total	Sample size
		Ghanaian languages only	Ghanaian languages and English	English only			
Male	Accra	1.3	50.2	32.6	16.0	100.0	690
	Other Urban	3.9	53.3	18.0	24.9	100.0	1686
	Rural Coastal	5.0	46.4	10.9	37.6	100.0	875
	Rural Forest	6.5	52.2	9.3	32.0	100.0	2063
	Rural Savannah	2.9	23.8	8.1	65.2	100.0	1419
	All	4.5	46.1	13.7	35.8	100.0	6733
Female	Accra	3.4	35.4	27.4	33.7	100.0	744
	Other Urban	5.4	31.4	12.7	50.5	100.0	2057
	Rural Coastal	2.7	16.9	7.2	73.2	100.0	1154
	Rural Forest	6.7	23.1	6.0	64.2	100.0	2323
	Rural Savannah	2.5	8.5	3.7	85.3	100.0	1408
	All	4.8	23.1	9.6	62.6	100.0	7687
All	Accra	2.4	42.3	29.9	25.4	100.0	1435
	Other Urban	4.7	41.2	15.1	39.0	100.0	3743
	Rural Coastal	3.7	29.5	8.8	58.0	100.0	2029
	Rural Forest	6.6	36.6	7.5	49.2	100.0	4386
	Rural Savannah	2.7	16.1	5.9	75.3	100.0	2828
	All	4.6	33.7	11.5	50.2	100.0	14420

*Note: Adult refers to those aged 15 and over. All those who said they could write a letter were considered as being literate.

2.5 Apprenticeship training

Results in Table 2.8 show the distribution of apprentices in various industrial sectors of the Ghanaian economy. The major trade groups, which take young persons as apprentices are tailoring, carpentry and mechanical work. Tailoring is very common among both females and males. In a sample of 3,438 trainees in Ghana, about 37 percent (66 percent of females and 13 percent of males) of them are estimated to be engaged in tailoring. The other major trades like carpentry, masonry, blacksmithing, mechanical, electronics/electrical, and painting/spraying are dominated by males, with less than 2 percent of females engaged in them.

Table 2.8 Distribution of apprentices by main trade learnt, by sex and locality (percent)

Main trade learnt	Locality						Ghana		
	Urban			Rural			Male	Female	All
	Male	Female	All	Male	Female	All			
Carpentry	16.0	0.4	8.5	15.7	-	9.0	15.8	0.2	8.8
Masonry	8.5	-	4.4	11.4	-	6.6	10.2	-	5.7
Tailoring	13.2	64.4	37.8	12.5	68.1	36.0	12.8	66.4	36.8
Blacksmithing	4.0	-	2.1	3.4	-	2.0	3.6	-	2.0
Mechanical	17.2	0.3	9.1	11.2	0.4	6.6	13.6	0.3	7.7
Electronics/Electrical	8.9	-	4.6	5.0	-	2.9	6.5	-	3.6
Painting/spraying	4.8	1.1	3.0	3.1	0.7	2.1	3.7	0.9	2.5
Other	27.5	33.7	30.5	37.7	30.8	34.8	33.6	32.1	33.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In terms of duration of training, blacksmithing, mechanical work and training in electrical work take the longest time among the trade groups covered. On average it takes about two and half years for an apprentice to complete training in the other trades, but apprenticeship in the above trade groups could take the trainee about four years and over to master the trade properly. Duration of training for males is also estimated to be longer than for females. It takes nearly three years (34 months) for a male to complete the apprenticeship, whereas for females it takes about two years (26 months) to do so. The average length of apprenticeship training in urban areas was found to be longer than the length in rural areas (Table 2.9). These differences are not gender or location related but are due to the type of trade involved.

Table 2.9 Average length of apprenticeship training by main trade learnt, sex and locality (months)

Main trade learnt	Locality						Ghana		
	Urban			Rural			Male	Female	All
	Male	Female	All	Male	Female	All			
Carpentry	39.5	29.6	39.2	29.4	-	29.4	33.4	29.6	33.4
Masonry	31.2	-	31.2	30.0	-	30.0	30.4	-	30.4
Tailoring	37.1	29.4	30.8	31.4	26.0	27.0	33.7	27.5	28.6
Blacksmithing	55.5	-	55.5	39.3	-	39.3	46.3	-	46.3
Mechanical	36.9	19.1	36.5	35.9	29.2	35.8	36.4	22.7	36.2
Electronics/Electrical	36.7	-	36.7	41.7	-	41.7	39.0	-	39.0
Painting/spraying	32.6	16.6	29.1	37.1	23.7	35.2	35.4	20.1	32.8
Other	35.3	24.1	28.9	29.7	21.5	26.5	31.5	22.8	27.4
All	37.2	27.3	32.4	31.8	24.5	28.7	33.9	25.8	30.2

3 HEALTH

3.1 Introduction

The health section sought information on the general health condition of all household members in the two weeks preceding the interview. For those who had suffered from an injury or illness during the previous two weeks, further information was collected about the health effects on usual activities, the type of health care received and the expenditure incurred.

Information was also collected about preventive health care and vaccination against DPT, polio, measles and BCG in respect of all children aged 7 years and under. For those aged five years and under, some data on post-natal care, particularly breast-feeding, were collected. The child's mother or other responsible household member provided information about each child. The last part of the health section applied to female household members aged 15 to 49 years. The section has information on fertility, pre-natal care and contraceptive use.

3.2 Health condition in the past two weeks

A little over a quarter (26%) of the population in the survey reported that they had suffered from an illness or injury during the two weeks preceding the interview (Figure 3.1). As one would expect, older people and young children are most vulnerable to illness or injury. More than a third of those aged 50 and over (37%), and 5 years and lower (36%) suffered from illness or injury during the two weeks preceding the interview. About a quarter (27%) of those in age group 20-49 suffered from illness or injury during the previous two weeks. The results indicate that school age children are least likely to be indisposed; only 1 in 6 of those aged 6 to 19 were reported to have suffered from an illness or injury during the two weeks under consideration.

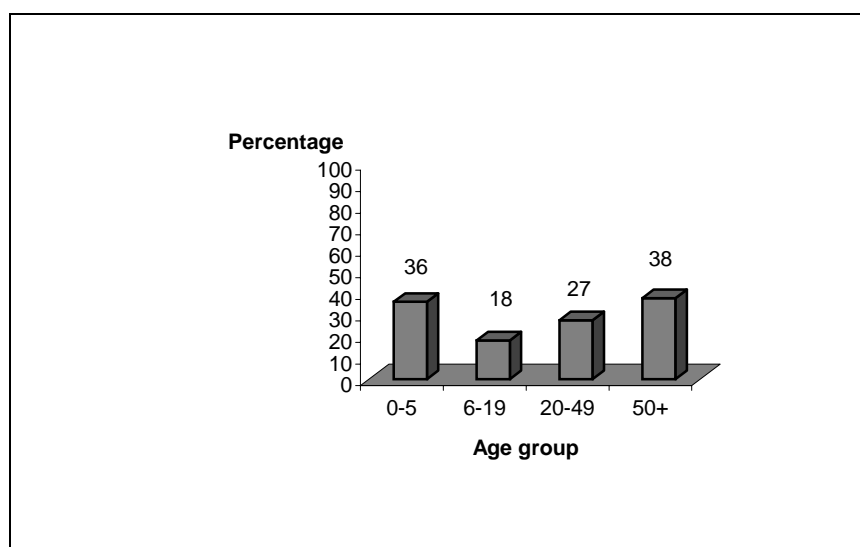


Figure 3.1: People suffering from illness or injury during the previous two weeks, by age group

Table 3.1 suggests that there is little difference between the sexes in the lower age groups, although males in the age categories (0-5 and 6-19) appear to have suffered from an illness or injury more than females. The only exception to this is found in Accra where females in the 0-5 age group tend to have suffered significantly more than males of the same age. Across all ecological zones older females (20 years and above) tend to suffer from illness and injury more than males.

Table 3.1 Percent of people suffering from an illness or injury during the previous two weeks, by age group, locality and sex (percent)

Age group	Accra		Other Urban		Rural Coastal		Rural Forest		Rural Savannah		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
0 – 5	17.6	32.0	36.7	36.8	40.4	29.7	43.4	36.9	35.1	29.9	37.9	33.9	35.9
6 - 19	11.1	8.4	18.6	18.0	18.6	17.1	20.5	18.7	18.5	18.9	18.6	17.4	18.0
20 - 49	15.1	16.8	22.0	31.0	24.4	31.7	29.8	36.0	20.8	27.9	23.6	30.5	27.4
50+	24.6	28.5	30.9	41.0	35.9	44.1	33.5	49.0	29.1	38.1	31.6	42.8	37.6
All	15.0	16.8	23.6	28.0	26.3	28.3	28.9	31.7	23.7	26.3	24.9	27.9	26.5

About 61 percent (representing about 15% of the total population) of those who suffered from illness or injury in the previous two weeks, had to stop their usual activities due to the indisposition (Table 3.2). Apart from Accra, the data from both urban and rural areas show little difference between the sexes in the effects of illness or injury on usual activity, but generally females were rather more likely than males to stop their usual activities if they were indisposed. In general, the effects of illness and injury appear to be slightly greater in urban areas than in rural areas; this is particularly so for Accra when the information is compared to what pertains in rural savannah.

Table 3.2 Percent of people suffering from an illness or injury who had to stop their usual activity during the previous two weeks, by age group, locality and sex

Age group	Accra		Other urban		Rural coastal		Rural forest		Rural Savannah		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
0 - 5	85.9	61.9	70.2	67.1	70.0	54.5	64.2	65.8	56.2	58.9	65.0	62.9	64.0
6 - 19	92.5	67.1	53.4	65.4	64.6	58.2	55.7	58.3	57.9	57.2	58.6	60.4	59.5
20 - 49	67.6	74.0	54.6	56.1	60.0	62.6	69.8	60.9	57.1	49.5	62.6	58.6	60.1
50+	70.6	67.1	51.8	65.4	54.9	69.4	61.7	64.9	55.1	64.3	57.4	65.9	62.6
All	77.3	68.8	57.0	61.9	63.2	61.9	63.2	62.1	56.8	55.8	61.2	61.2	61.2

About 44 percent of all people who reported ill or suffered from injury consulted a health practitioner (including traditional healer), dentist or visited a health centre, in the previous two weeks (Table 3.3). The other half did not consult any health care provider, although some of them did purchase medicines or medical supplies for their ailments. People in the urban areas especially Accra, are more likely to seek consultation with a health care provider than those in the rural areas. School-age children and adults above 50 years of age are less likely to consult a health care provider than people in other age groups.

Table 3.3 Percent of people who reported ill and consulted a health practitioner or dentist, during the previous two weeks, by age group, locality and sex

Age group	Accra		Other urban		Rural coastal		Rural forest		Rural Savannah		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
0 - 5	67.2	64.3	66.0	56.6	54.0	46.7	46.9	40.3	54.8	33.6	53.9	45.1	49.7
6 - 19	57.4	48.9	47.7	46.1	46.7	43.0	31.6	30.5	39.5	35.1	40.6	38.4	39.5
20 - 49	62.9	67.9	44.6	55.3	45.0	49.8	41.3	41.4	41.5	35.4	44.2	46.7	45.7
50+	83.6	70.4	44.6	44.6	53.1	36.1	29.5	31.1	32.9	29.8	41.4	36.8	38.6
All	65.2	64.0	50.0	51.4	49.4	44.5	38.5	36.9	42.4	34.0	45.2	42.7	43.8

Regarding the type of health practitioner consulted (Table 3.4), almost half (46%) of those who consulted a health practitioner reported that they had seen a doctor; 18 percent saw medical assistants, a further 16 percent saw a nurse. Consultation with traditional provider, spiritualist and TBA formed less than 10 percent of those who reported ill or had injuries in the country. The great majority of medical consultations in urban areas, and Accra in particular, take place with a doctor, but in rural areas the consultation is almost as likely to be with a doctor, medical assistant as a nurse. This is particularly so in rural savannah where people are more likely to see medical assistant than a doctor. There are not many differences in the pattern of choice of health providers by males and females.

Table 3.4 Percent of people who reported ill and consulted a health practitioner or dentist, during the previous two weeks, by type of provider, locality and sex

Practitioner Consulted	Locality												
	Accra		Other urban		Rural coastal		Rural forest		Rural Savannah		Ghana		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Trad. healer	1.9	3.6	5.9	4.3	6.4	3.9	7.5	4.8	7.2	9.7	6.4	5.1	5.7
Doctor	65.4	70.5	61.3	64.5	39.6	45.2	37.3	41.0	20.0	20.8	43.0	48.4	45.9
Dentist	0.9	-	0.3	0.2	-	0.4	0.4	0.4	0.4	-	0.4	0.3	0.3
Nurse	1.9	2.2	10.3	12.4	23.3	20.6	15.9	15.6	22.1	26.4	15.5	15.7	15.6
Med.Asst.	1.9	3.6	7.6	7.7	14.4	13.2	26.0	25.0	34.0	27.8	19.1	16.6	17.7
Midwife	-	0.7	1.2	2.8	-	1.3	2.0	2.9	1.3	0.5	1.2	2.1	1.7
Pharmacy	28.0	19.4	5.6	4.9	1.5	2.2	2.4	2.7	1.3	1.9	4.9	4.6	4.8
TBA	-	-	0.3	-	-	0.4	-	0.2	-	-	0.1	0.1	0.1
Spiritualist	-	-	0.3	0.9	0.5	1.3	0.4	1.3	1.3	0.5	0.5	1.0	0.8
Other	-	-	7.3	2.4	14.4	11.4	7.9	6.3	12.3	12.5	8.9	6.2	7.4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
Sample size	108	127	344	487	226	253	438	489	279	232	1396	1588	2983

Illness was the main reason given for consultation (91%); the other most common reasons are injury (7%) or check-up (1%). Most consultations take place in clinics (40%) and hospitals (35%). The numbers of consultations that take place in public and private establishments are nearly equal. A few consultations (about 5%) take place in quasi-public facilities. For those who pay for the services of health care providers, the average amount paid for a consultation is ₵29,400, but this average conceals substantial variations in the amounts paid. About a third do not pay anything, and for those who pay, the minimum amount is ₵100 and the maximum is ₵350,000. About 80 percent of all clients paid less than or just ₵10,000 for health care in the last 2 weeks preceding the interview.

A third of those who sought medical consultation during the previous two weeks purchased medicines and medical supplies. Only 3 percent of this group received their medicines and supplies free of charge, half of them spent about ₵2,500, and another quarter paid up to ₵4,500. In a few cases (less than 1%) there were responses of more than ₵200,000 expenditure on medicines and supplies

Information on financiers of medical bills including cost of consultations and hospital admissions revealed that the expenditures are borne mostly by heads of household (80% of the cases). Most people settled their bills by themselves, while less than 5 percent are settled by employers or government.

3.3 Fertility, pre-natal care and contraceptive use

This section of the questionnaire was administered to women aged 15-49. Among this group, 74 percent had at some time been pregnant (Table 3.5). More than 97 percent of all women above the age of 30 reported that they have ever been pregnant. Among younger women, those in rural areas are much more likely to become pregnant than those in urban areas. For instance, in the 20-24 year age group, 70 percent of rural women had already experienced at least one pregnancy, whereas amongst urban women in this age group only 50 percent had been pregnant before. Teenage pregnancy is also twice as common in rural areas as in urban areas.

Table 3.5 The situation of pregnancy for women aged 15-49 years, by age group and locality (percent)

Age group	Ever pregnant			Pregnant during previous 12 months			Currently pregnant		
	Urban	Rural	Ghana	Urban	Rural	Ghana	Urban	Rural	Ghana
15-19	6.9	15.1	11.6	2.3	5.0	3.9	1.0	4.1	2.8
20-24	51.8	72.3	63.8	9.3	16.5	13.5	7.1	12.9	10.5
25-29	81.5	94.2	89.7	19.3	28.3	25.1	8.5	10.5	9.8
30-34	96.9	97.7	97.4	18.8	19.8	19.4	8.0	11.5	10.3
35-39	99.1	99.7	99.5	11.7	17.5	15.5	6.7	8.9	8.1
40-44	97.6	99.5	98.8	7.1	7.2	7.2	1.8	4.2	3.3
45-49	99.9	98.7	99.1	3.1	4.2	3.8	0.4	2.6	1.8
All	66.9	78.6	74.2	10.3	15.0	13.2	4.9	8.2	7.0

About 7 percent of all women aged 15-49 years were currently pregnant, and a further 13.2 percent had been pregnant sometime during the previous 12 months. Overall, rates of current pregnancy appear highest in the 20-24, 25-29 and 30-35 age groups, with around a tenth of women in those age groups currently pregnant. The 25-29 age group had the highest frequency of pregnancies in the previous 12 months with 25.1%.

Figure 3.2 illustrates the pattern of current fertility amongst women of different ages, separately for urban and rural areas with the two age groups, 40-44 and 45-49, having been combined, since the base figures are small. Rates of pregnancy in rural areas are consistently higher than those in urban areas.

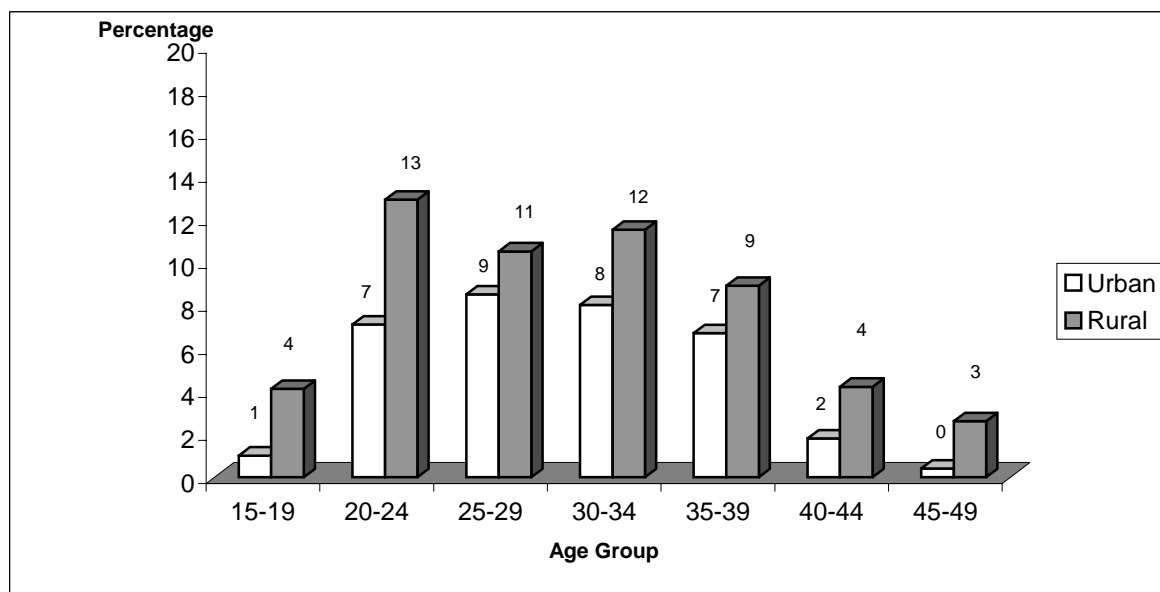


Figure 3.2: Women currently pregnant, by age group and locality

Women who had been pregnant in the previous 12 months were asked about the outcome of their pregnancy. Overall, some 14 percent of all pregnancies did not result in live births (Table 3.6). This figure includes both planned and unplanned termination of pregnancy. Older women, and women living in urban areas, were more likely to have a pregnancy which did not result in a live birth. Thus, while around 90 percent of pregnancies amongst rural women aged under 35 resulted in a live birth, only 77 percent of pregnancies amongst urban women aged 35 or over did so.

Table 3.6 Percentage of pregnancies in the last 12 months not resulting in a live birth, by age of woman and locality (percent)

Locality	Age of woman		All
	Under 35	35 or over	
Urban	17.6	27.7	19.8
Rural	9.1	20.1	11.7
All	11.6	22.3	14.1

Women aged 15-49 years who were currently pregnant or pregnant during the previous 12 months were asked whether they received any pre-natal care. In all, eight out of every 10 of them said they had received pre-natal care. The proportion receiving pre-natal care in rural areas is not very different from the proportion in urban areas but rural women in the age group 35-39 are less likely to receive pre-natal care than their counterparts in the urban areas.

Pregnant women who did not receive any pre-natal care were asked why they refused to do so. Amongst the reasons given by women in rural areas for not seeking pre-natal care, were that pre-natal care was not necessary (34% of respondents), and that they could not afford the care (33%

of respondents). Other specific reasons given by rural women were that the health centre was too far away (5%) or that the service was not available (3%). The remaining 25 percent of rural women gave a variety of other reasons for not receiving pre-natal care (see Appendix Table A3.3 for details on locality differences).

Women aged 15-49 years were also asked whether they or their partners were using any method to prevent or delay pregnancy. Table 3.7 shows that, in the country as a whole, contraceptive use is very low among Ghanaian households; only about 15% of women reported that they or their partners were using a contraceptive method. The use of contraceptives was most common among women aged 25-39 years, but even among this group less than 30 percent were using any form of contraception. In terms of locality, there is little difference between urban and rural areas in the levels of contraceptive use by different age groups, except that there is a slightly higher rate of contraceptive use among those over 30 but less than 45 years living in Accra.

Table 3.7 Percent of women aged 15-49 years (or their partners) who are using any contraceptives to prevent or delay pregnancy, by age and locality

Age group	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
15-19	1.8	1.7	3.5	4.3	2.4	2.8
20-24	7.6	15.5	13.6	18.7	12.1	14.8
25-29	9.9	22.2	19.9	26.3	21.1	21.8
30-34	27.2	26.2	31.4	24.3	28.8	27.0
35-39	31.6	26.3	16.0	31.1	21.6	26.0
40-44	17.5	17.8	14.9	14.1	13.2	15.4
45-49	8.0	10.6	8.8	9.3	4.1	8.2
All	14.2	16.0	15.4	18.7	15.7	16.5

Among women aged 15-49 (or their partners), about 11 percent use modern methods, and 4 percent use traditional methods, to prevent or delay pregnancy. Table 3.8 illustrates how the use of modern and traditional methods of contraception varies according to the age of the woman.

Of the modern methods, the pill was the one most often used (5.4%), followed by injectable (2.5%) and condom (1.9%). Of the traditional methods, the rhythm method (2.5%) and abstinence (1%) were the ones mentioned most often.

Table 3.8: Distribution of women aged 15-49 years (or their partners), by age group and contraceptive method used (percent)

Contraceptive method	Age group							Ghana
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Modern Method	1.6	10.4	15.2	16.4	17.4	10.6	5.2	10.8
Pill	0.5	5.8	8.7	7.3	9.3	4.5	2.1	5.4
Condom	1.1	2.7	2.4	2.3	1.8	2.2	0.8	1.9
IUD	-	-	0.4	0.5	1.0	0.3	0.2	0.3
Injection	-	1.5	3.4	4.9	3.7	2.8	2.3	2.5
Douche	-	0.1	0.1	0.2	0.4	-	-	0.1
Female sterilisation	-	-	0.1	0.3	1.0	0.8	-	0.3
Male sterilization	-	-	-	-	-	-	-	-
Other sterilization	-	0.3	0.1	0.7	0.3	0.2	-	0.2
Traditional Method	1.3	3.2	5.3	6.7	5.4	5.1	3.5	4.2
Rhythm	0.7	2.6	2.9	4.1	3.0	3.2	1.9	2.5
Withdrawal	0.2	0.1	0.6	0.2	0.5	0.3	0.4	0.3
Abstinence	0.2	0.4	1.6	1.8	1.1	1.1	0.8	1.0
Other	0.2	0.1	0.2	0.6	0.8	0.5	0.4	0.4
No method used	97.1	86.4	79.5	76.9	77.2	84.3	91.3	85.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1221	900	1032	951	800	639	502	6046

In Accra, the pill (3.7%) was most commonly reported (Table 3.9). This was followed by condom (3.2%), and rhythm method (2.3%). In the other urban areas, the pill (4.8%) was also the most commonly used method, followed by injectable, IUD and rhythm, with all of them sharing about 2.8% of the women population. Information from Table 3.9 also shows that women in rural forest appear to use contraceptives more than women in other areas.

Table 3.9 Distribution of women aged 15-49 years (or their partners), by locality group and contraceptive method used (percent)

Contraceptive method	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
Modern Method	9.1	11.7	9.0	11.2	11.0	10.7
Pill	3.7	4.8	3.8	7.5	4.7	5.4
Condom	3.2	2.8	1.0	1.4	1.4	1.9
IUD	0.5	0.4	0.3	0.3	0.2	0.3
Injection	1.0	2.9	2.5	1.6	4.5	2.5
Douche	0.2	0.2	-	0.1	0.1	0.1
Female sterilization	0.2	0.4	0.4	0.3	0.1	0.3
Male sterilization	-	-	-	-	-	-
Other sterilization	0.3	0.2	1.0	-	-	0.2
Traditional Method	3.3	4.6	3.0	5.5	2.6	4.2
Rhythm	2.3	2.7	1.8	3.5	1.2	2.5
Withdrawal	0.2	0.3	0.3	0.4	0.3	0.3
Abstinence	0.5	1.3	0.6	1.0	0.9	1.0
Other	0.3	0.3	0.3	0.6	0.2	0.4
No method used	87.6	83.6	88.2	83.4	86.4	85.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	629	1638	836	1826	1117	6046

The national average cost of contraceptives for the month preceding the interview was about ₵1500. About 17% of all the clients did not pay anything for the contraceptives they used, less than a quarter paid ₵2,000 and above with a maximum in this group reaching about ₵25,000 for the month preceding the interview. There are not much variation between the localities in terms of the amount paid; clients paid about ₵1,600 in urban areas and ₵1,400 in rural areas.

3.4 Post-natal care

In the country as a whole, 39 percent of the children aged five years and under had received post-natal care (Table 3.10). As one would expect, very young children are the ones who are most likely to receive post-natal care; two-thirds of all children aged less than 12 months, and 73 percent of children aged 12 to 23 months, were reported to have received post-natal care in the last 12 months. The lower value for children aged less than one year is probably due to their age, since on average these children will only be six months old, and will therefore not have had a chance of receiving post-natal care over the full 12-month period.

Table 3.10 Percent of children aged five years and under who had post-natal care in the previous 12 months, by age and locality

Age	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
0 year	76.1	74.0	63.6	64.8	59.7	66.0
1 year	83.2	74.5	69.1	71.8	74.1	73.3
2 years	56.0	35.5	37.3	39.2	37.1	39.1
3 years	42.0	17.3	10.3	22.4	31.2	23.7
4 years	30.7	23.5	17.8	24.6	22.1	23.0
5 years	7.9	17.2	14.8	18.8	20.3	17.5
All	48.4	39.4	34.6	39.9	38.5	39.2

More than half (52%) of those who have had post-natal care paid ₵1000 or over for the service. Less than one percent did not pay any money for the care (Table 3.11). People living in Accra usually pay more for a post-natal consultation than those in other areas. This may be due to the use of private facilities for the purpose for some Accra residents.

Table 3.11 Distribution of amount paid for post-natal consultation, by locality (percent)

Amount paid	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
Nothing	1.1	0.8	-	0.6	-	0.5
Less than ₵100	-	0.4	-	-	2.4	0.6
₵100 to less than ₵200	-	2.3	2.6	0.6	9.6	3.2
₵200 to less than ₵500	1.1	26.0	28.4	18.3	18.2	19.8
₵500 to less than ₵1000	11.7	23.3	25.8	26.7	20.9	23.4
₵1000 or over	86.2	47.3	43.2	53.7	49.0	52.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	108	263	163	493	311	1339

Questions were also asked about breastfeeding. The level of breastfeeding in Ghana is very high, with 98 percent of all children under 5 having been breastfed at one time or another. In trying to estimate the average age at weaning, it is most useful to look at the distribution of age at weaning for children aged at least 24 months, since most children of a younger age are still being breastfed. Table 3.12 shows the distribution of average age at weaning, by age of child, for children aged 2, 3, 4 and 5 years. The pattern of weaning seems very consistent across the age groups. At each age, about 6 percent were weaned before they were 12 months old, 22 percent before they were 18 months, and 48 percent before they were 24 months old. This leaves almost 51 percent of children aged 2-5 who were not weaned until after 24 months, and 2 percent of children who were not breastfed beyond 24 months.

Table 3.12 Distribution of children aged 2-5, by age of child and age in months at weaning (percent)

Age	Not breast-fed	Age at weaning (in months)				Total	Sample size
		< 12	12-17	18-23	24+		
2	0.8	6.5	16.5	29.4	46.7	100.0	702
3	1.2	5.7	15.3	28.4	49.3	100.0	692
4	2.2	5.4	15.6	25.3	51.5	100.0	760
5	2.0	6.2	14.6	21.1	56.1	100.0	706
All	1.6	5.9	15.5	26.0	51.0	100.0	2860

3.5 Preventive health care

This section of the questionnaire focused on children who were aged seven or under. Its purpose is to find out whether children had been vaccinated against each of the six childhood killer diseases, the source of the vaccination, and the expenses incurred. In addition, it seeks to find the reasons why some children are not vaccinated against these diseases. Although detailed information was collected about different vaccinations, for simplicity, the information presented below relates only to whether the child has had any vaccination at all, and not necessarily the complete set of vaccinations.

Table 3.13 indicates that about 7 percent of children below the age of 8 have never received any vaccination. While the coverage of the vaccination programme in urban areas appears fairly high, at least with regard to children receiving some vaccinations, more than 5 percent of rural

children under 8 years old have apparently never been vaccinated. The percentage of these children is as high as 12 percent in rural savannah.

Nearly one fifth (19.5%) of children aged under one year have apparently never been vaccinated. This is quite high especially in rural areas but it should be noted that the proportion of children under one year who have never been vaccinated is somewhat misleading, because very young babies may not be old enough to have had a chance of having some of the vaccinations; for instance, vaccination against measles is not normally given until around nine months.

Table 3.13 Percent of children aged 7 years and under who have not been vaccinated, by age of child and locality

Age	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
0 year	11.1	12.1	19.5	19.9	28.0	19.5
1 year	0.0	0.9	8.0	5.2	7.3	4.9
2 years	0.0	1.2	7.8	4.8	9.0	5.2
3 years	0.0	1.4	0.7	5.1	9.9	4.7
4 years	3.0	0.0	1.0	3.9	7.8	3.6
5 years	0.0	2.7	3.6	3.4	10.8	4.9
6 years	0.0	1.3	2.0	4.8	14.4	5.5
7 years	0.0	2.6	1.3	3.8	13.9	4.9
All	1.4	2.6	5.2	6.4	12.4	6.5

For all children receiving vaccinations, the average amount paid for the last vaccination was ₵710; a little over a quarter (27%) of parents did not have to pay anything for their child's vaccination, about a quarter of all clients paid ₵200, another quarter paid ₵500 and only a third paid more than ₵1,000.

Reasons parents gave for not sending their children for vaccinations varied among respondents. The most common and specific reasons were three: about 28 percent of them mentioned that the vaccination centre was too far, while a further 26 percent said they did not know they had to vaccinate the child and about one eighth of them said their children were too young for vaccination. Figure 3.3 shows the distribution of reasons given, separately for urban and rural areas.

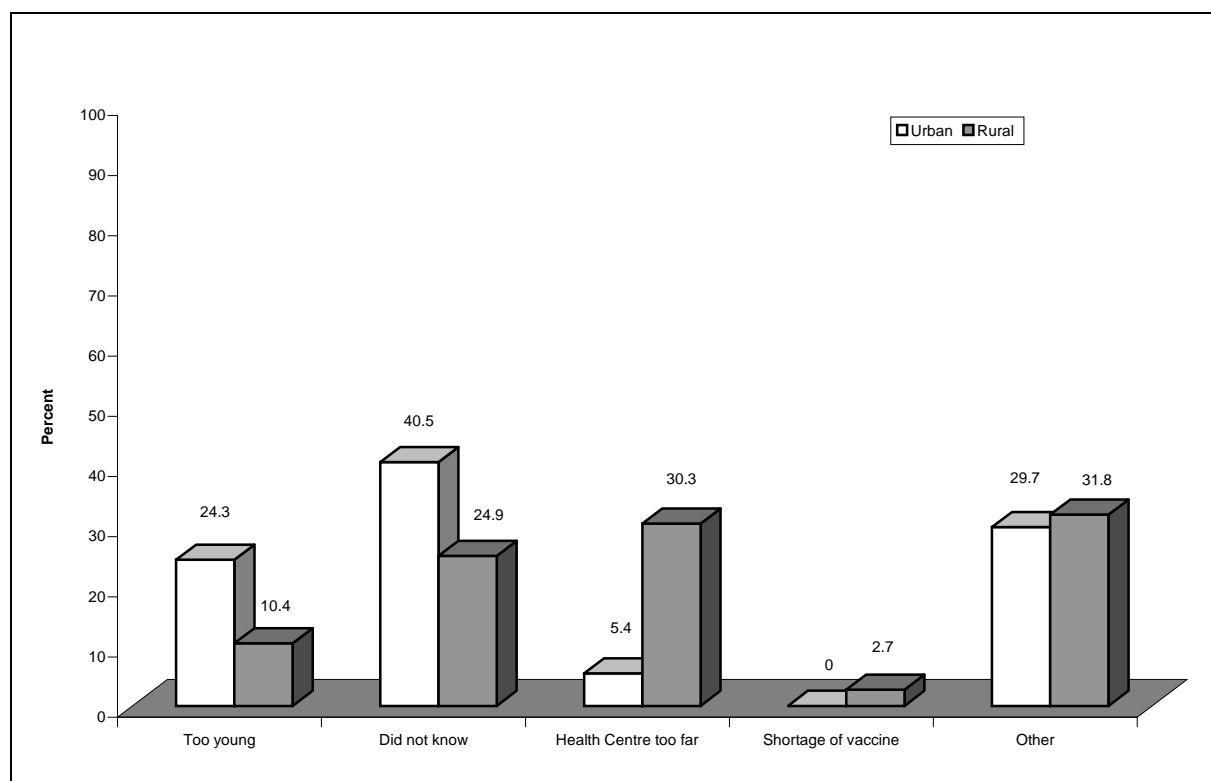


Figure 3.3: Reasons why children were not vaccinated, by locality

4 EMPLOYMENT

4.1 Introduction

The survey questionnaire contained a wide range of questions on the economic activity, employment, and working conditions of all household members aged 7 years and above. Questions asked concerned each person's activity status and employment search in the last seven days, as well as the person's economic activity status over the previous 12 months. There were other questions that sought individuals' employment history and their current housekeeping activities.

Information was sought on all jobs which a person had done during the previous 12 months preceding the interview, including working for a wage, being self-employed, being engaged in agricultural activity, or having worked unpaid in a household enterprise. Up to four jobs were allowed, but most parts of the report present summaries on the main job of individuals. Full details were collected on the pay and conditions for each job. The analyses of the employment section look at the activity status of the individual, employment situation in the main occupation and industrial classifications, the type of work people do and their main employers. Simple time use analysis for both economic and non-economic activities, including house keeping has also been done. Age, sex, education and locality differences have been explored in almost all the tables presented.

4.2 Economic activity

The economic activity of the entire population is divided into two broad groups; the economically active and the non-economically active. The economically active is that part of the population which actually engages or is available to engage in the production of economic goods and services, while the non-active is that part which for reasons such as age, education or incapacitation cannot engage in production. At any given time, an economically active person may either be employed or unemployed.

To avoid difficulties associated with recall of responses pertaining to the last 12 months, the report dwells heavily on the information concerning the activity status of individuals in the past seven days preceding the interview. People were therefore described as employed if they did some work for profit or family gain in the past 7 days. In this connection, it should be noted that a person is counted as being employed during a week if they did any work at all during that week; no account is taken of the amount of time spent. The others in the active group were described as unemployed if they were recorded as actively seeking work, or were at least available to take up work if they were offered some.

Using an estimate of 18.1 million for the population in private households in March 1999, comprising 8.7 million males and 9.4 million females, and assuming that all children under the age of 7 are usually economically inactive, the survey results indicate a crude activity rate of 64 percent. Table 4.1 provides estimates, separately for males and females, of the economically active population in each age group, and it also shows the specific activity rates for different age groups.

The data suggest that out of a total population of about 14.7 million (7 years and above), some 11.3 million people are currently economically active, giving an economic activity rate of around 77 percent. The economic activity rate for women in the age group (15-64) are lower than those for men, but in the younger age group (7-14) and the older age group (65+) the rates for females exceed those for males.

Table 4.1 National estimates of total population and currently economically active population, and sex-age specific activity rates

Age group	Total Population			Currently economically active Population			Current activity rates		
	Male	Female	All	Male	Female	All	Male	Female	All
	(millions)			(millions)			(percent)		
7-14	2.21	2.19	4.40	0.72	0.74	1.47	25.5	30.3	27.8
15-24	1.62	1.55	3.17	1.15	1.02	2.16	69.3	64.3	66.6
25-44	1.69	2.33	4.02	1.48	1.92	3.40	87.8	80.9	83.8
45-64	1.01	1.15	2.17	0.90	1.01	1.92	77.1	78.3	87.9
65 +	0.41	0.51	0.91	0.32	0.41	0.73	77.1	78.3	77.7
All	6.94	7.73	14.67	5.57	6.01	11.59	78.1	75.8	77.2

Table 4.2 provides similar sex-age specific activity rates, separately for the different localities and ecological zones. For each age group the activity rates for males and females are higher in rural areas (apart from rural savannah) than in urban areas, and this difference is most noticeable amongst the younger age groups and the elderly. The activity rates in Accra and rural coastal for the younger age group (7-14) are particularly high.

Table 4.2 also sheds light on the activities of young children aged 7 to 14 years. Although children are usually considered economically inactive, the survey still recorded 25.5 percent of children in this age group as being economically active. As already mentioned, there are great variations among different parts of the country in the level of economic activity amongst young children.

Table 4.2 Current activity rates, by sex, age and locality (percent)

	Urban			Rural				
Age group	Accra	Other	All	Coastal	Forest	Savannah	All	Ghana
<u>Males</u>								
7-14	47.9	14.2	18.0	94.4	13.6	23.3	26.9	25.5
15-24	67.4	59.4	61.4	79.7	71.1	70.5	72.1	69.3
25-44	80.5	83.8	82.7	95.0	94.3	82.0	90.6	87.8
45-64	86.2	89.0	88.2	88.4	93.8	84.6	89.6	77.1
65 +	62.7	76.0	73.9	76.6	88.8	66.1	78.2	77.1
7 +	79.0	77.0	77.5	89.2	83.0	69.6	79.2	78.1
<u>Females</u>								
7-14	93.2	24.0	32.6	85.8	20.4	25.4	29.7	30.3
15-24	65.5	59.1	60.7	71.4	66.0	63.2	66.1	64.3
25-44	76.5	80.4	79.3	86.2	86.1	71.7	81.7	80.9
45-64	88.6	87.1	87.5	90.1	89.6	79.3	86.5	78.3
65 +	92.7	73.4	76.4	89.5	84.6	54.7	79.0	78.3
7 +	77.7	74.7	75.5	85.2	79.4	65.2	76.0	75.8
<u>Both Sexes</u>								
7-14	73.9	19.6	26.0	90.4	16.8	24.2	28.2	27.8
15-24	66.2	59.2	61.0	74.9	68.5	67.1	69.0	66.6
25-44	78.4	81.9	80.8	89.7	89.6	76.1	85.4	83.8
45-64	87.3	88.0	87.8	89.3	91.6	82.0	88.0	87.9
65 +	77.4	74.7	75.1	84.2	86.6	61.5	78.6	77.7
7 +	78.3	75.7	76.4	86.9	81.1	67.4	77.5	77.2

Most of the adults who are classified as economically active are employed. The employed adults in the active population total 8.3 million (4.1 million males and 4.2 million females). Table 4.3 shows the employment status of adults in the last 7 days, separately for males and females in urban and rural areas. The results show that nearly nine out of ten adults are economically active. About 4 percent of women are classified as homemakers, because they were not economically active but had spent some time on housekeeping activities, and about 2 percent of male adults are also classified as homemakers. Only 1 percent of all adults are classified as students in the seven-day period because they did not work and have not left school. About 3 percent of adults were reported as sick or disabled and less than 1 percent of adults stated that they were too old to work. In all, about 4 percent of adults are classified as economically inactive for other reasons.

There appears to be differences in the employment status of adults in urban and rural areas. In urban areas about 80 percent of male adults and 77 percent of female adults are employed, whereas in rural areas about 84 percent of males and 82 percent of females are employed. Unemployment is a significant phenomenon in urban areas, but it is relatively small in rural areas.

Table 4.3 Employment status of population aged 15+, by sex and locality (percent)

Employment Status	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Employed	79.6	77.4	78.3	86.0	82.3	84.0	84.0	80.7	82.1
Unemployed	13.2	10.9	11.9	4.4	4.2	4.3	7.2	6.4	6.7
Student	1.0	0.8	0.9	1.6	0.8	1.2	1.4	0.8	1.1
Home-maker	1.6	4.2	3.0	2.0	4.4	3.3	1.9	4.3	3.2
Too old	0.5	0.4	0.5	0.2	0.5	0.3	0.3	0.5	0.4
Sick/Disabled	1.6	3.0	2.4	2.5	3.3	3.0	2.2	3.2	2.8
Other	2.6	3.2	3.0	3.3	4.6	4.0	3.1	4.1	3.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1601	2033	3634	3420	4150	7570	5021	6183	11204

4.3 Employment and working conditions

This section presents information on employment and working conditions of the employed in the working age population (15-64), which is estimated at about 6.9 million adults in the country.

People were asked whether they had done any work during the past 7 days for which they received pay, profit, family gain, or did anything for barter or home use. As shown in Table 4.4, some 14 percent of adults reported that they had done work in wage employment. A further 69 percent were involved in self-employment (39% in agriculture and 30% in non-agricultural activities). Less than a fifth (17.2%) of adults in the working age (15-64) engaged themselves in unpaid family enterprises; majority of this group (15.3%) were involved in agriculture.

There were significant contrasts between the results from urban and rural areas, and also between males and females. More than three quarters of urban workers (about 80%) were involved in non-agricultural work, but just a little over a quarter of the rural people were involved in non-agricultural activities. The distribution of males and females among the type of work indicates that more males were involved in wage employment than females but the percentage of females in unpaid family work far exceeds the percentage of males in that activity.

Table 4.4 Type of work engaged in by the population aged 15-64 years during the last 7 days, by locality and sex (percent)

Type of work	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Wage employment	42.4	12.5	25.9	14.3	3.3	8.3	23.0	6.2	13.8
Self-employment (non-agriculture)	32.8	64.4	50.3	12.7	28.0	21.0	18.9	39.6	30.2
Unpaid family worker (non-agriculture)	2.0	5.0	3.7	0.8	1.4	1.1	1.1	2.6	1.9
Self-employment (agriculture)	19.1	11.7	15.0	59.6	40.6	49.3	47.0	31.4	38.5
Unpaid family worker (agriculture)	3.4	6.1	4.9	12.4	26.7	20.1	9.6	20.1	15.3
Other	0.3	0.2	0.3	0.3	-	0.1	0.3	0.1	0.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1189	1467	2656	2658	3134	5792	3847	4601	8448

Respondents were asked who was their employer in their main job over the last 7 days (Table 4.5). Over half of them (52%) reported that they were self-employed in agricultural activities, a further one-third (34.3%) were either engaged by the private informal sector or other self-employment activities outside the agricultural sector. The government sector employs only 6.2 percent and about 7.5 percent is employed by the formal private sector. Almost all working women are self-employed in their main job; only about 1 in 16 women were working for an employer. A large number of men are also self-employed, but about 1 in 4 worked for an employer. Over 90 percent of workers in rural areas worked as self-employed (both in agriculture and non-agriculture), and also in the informal private sector. In urban areas on the other hand, relatively more people were employed in the formal sector. The government and the formal private sectors employed about 12 percent and 15 percent respectively.

Table 4.5 Type of employer for population aged 15-64 years in the last 7 days, by locality and sex (percent)

Main employer	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Self-employment (agriculture)	22.0	16.2	18.8	71.1	64.0	67.2	55.9	48.7	52.0
State-owned company	17.5	6.5	11.4	6.3	1.8	3.9	9.8	3.3	6.2
Private formal	25.0	6.0	14.5	7.6	1.4	4.2	13.0	2.9	7.5
Private informal & self-employment (non-agriculture)	35.5	71.4	55.3	15.0	32.8	24.7	21.4	45.1	34.3
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1195	1472	2667	2668	3152	5820	3863	4624	8487

Information was also sought on the type of occupation of all jobs which people did. The occupational classification of the main job of the currently active population is shown in Table 4.6. The Table shows that large proportions of people, both men and women, are principally engaged in agricultural occupations; in all, there are about 3.7 million employed people in the working age population whose main occupation is in agriculture. Also significant is the high proportion of women (a little over a quarter) engaged in sales or commerce, and a relatively larger proportion of men in occupations in production. About 70 percent of workers in rural areas are involved in agricultural occupations, whereas about a third of workers in urban areas are involved in commerce. A quarter of the urban employees is also involved in production.

Table 4.6 Main occupation of the population aged 15-64 years in the last 7 days, by locality and sex (percent)

Main occupation	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Professional/Technical	9.4	4.7	6.8	4.1	1.8	2.8	5.7	2.7	4.1
Adm./Managerial	1.3	0.2	0.7	0.0	0.0	0.0	0.4	0.1	0.2
Clerical	8.2	2.6	5.1	1.7	0.5	1.0	3.7	1.2	2.3
Sales/Commercial	15.0	48.2	33.4	4.6	17.6	11.6	7.8	27.3	18.5
Service	11.3	7.3	9.1	2.9	2.5	2.7	5.5	4.0	4.7
Agricultural	24.8	15.9	19.9	74.3	66.5	70.1	59.0	50.3	54.3
Production	30.0	21.1	25.1	12.5	11.2	11.8	17.9	14.4	16.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1190	1479	2669	2664	3154	5818	3854	4633	8487

Analysis of the working age population by industry also reveals the role of agriculture in the Ghanaian economy especially in rural areas. For the country, as a whole, there are three major sectors, which absorb about 95 percent of the country's work force; the agricultural sector employs a little over half; trading absorbs nearly one-fifth, manufacturing employs one-eighth, the rest (one-tenth) in this group is employed by community or social services set-up. The other five sectors (mining, utilities, construction, transport/communication, and financial services) employ no more than 6 percent of the work force (see Table 4.7).

In urban areas the major employment groups are trading (33% of the labour force), agriculture (21%), manufacturing (18%), and community or social services sector, which also employs about 18 percent of the labour force. These four groups also dominate the rural sector but agriculture alone employs more than two-thirds as observed in Table 4.7.

Table 4.7 Distribution of population aged 15-64 years in the last 7 days, by type of work and sex (percent)

Main industry	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Agriculture	25.7	17.1	21.0	75.1	66.9	70.7	59.8	51.1	55.0
Mining/Quarrying	2.3	0.0	1.0	1.0	0.1	0.5	1.4	0.1	0.7
Manufacturing	13.6	20.9	17.6	6.8	10.7	8.9	8.9	13.9	11.7
Utilities	0.8	0.3	0.5	0.1	0.0	0.1	0.4	0.1	0.2
Construction	4.9	0.1	2.2	1.9	0.2	1.0	2.8	0.2	1.4
Trading	13.5	48.6	32.8	4.6	17.5	11.6	7.4	27.4	18.3
Transportation/comm.	11.2	0.2	5.1	1.7	0.1	0.8	4.6	0.1	2.2
Financial services	4.2	0.4	2.1	0.5	0.0	0.2	1.7	0.1	0.8
Community/Social ser.	23.8	12.5	17.5	8.2	4.5	6.2	13.0	7.1	9.8
All	100	100	100	100	100	100	100	100	100
Sample size	1195	1072	2667	2668	3152	5820	3863	4624	8487

The analysis of educational attainment of workers in the various industrial sectors reveals that about one-tenth of workers have had a secondary school education or a set higher, about a third have middle school leaving certificate (MSLC) or basic school certificate of education. A further fifth of the workers went to school but did not complete the first cycle, while a third of them indicated that they have never been to school.

The educational status of the employed population also varies widely according to the type of main occupation, reflecting largely the differences between urban and rural areas in the level of educational attainment. Over three quarters of those in administration or managerial occupations and about two-thirds of those in professional or technical occupations have gone beyond the MSLC/BECE level, while one-sixth of those in services have also gone beyond this level; in the other occupational groups less than one-eighth have done so.

Table 4.8 Educational levels of the active population, by sex and main occupation

Main Occupation	Educational Attainment				Total	Sample size
	Never been to school	Less than MSLC/BECE	MSLC/BECE	Secondary or Higher		
<u>Males</u>						
Professional/Technical	1.8	3.2	25.9	69.1	100.0	220
Admin. or Managerial	0.0	6.3	12.5	81.3	100.0	16
Clerical	0.7	3.5	41.1	54.6	100.0	141
Sales or Commercial	7.7	15.7	46.0	30.7	100.0	300
Service	13.8	15.4	50.8	20.0	100.0	195
Agricultural	29.9	24.2	39.0	6.9	100.0	2268
Production	13.2	18.8	50.8	17.2	100.0	687
All	21.5	20.1	41.5	16.9	100.0	3827
<u>Females</u>						
Professional/Technical	0.8	1.6	36.0	61.6	100.0	125
Admin. or Managerial	0.0	0.0	33.3	66.7	100.0	3
Clerical	18.5	0.0	48.1	33.3	100.0	54
Sales or Commercial	31.4	26.9	36.5	5.2	100.0	1254
Service	13.6	19.1	54.9	12.3	100.0	162
Agricultural	55.9	25.5	17.8	0.8	100.0	2314
Production	37.6	26.9	30.1	5.3	100.0	657
All	43.1	24.9	26.9	5.2	100.0	4569
<u>Both Sexes</u>						
Professional/Technical	1.4	2.6	29.6	66.4	100.0	345
Admin. or Managerial	0.0	5.3	15.8	78.9	100.0	19
Clerical	5.6	2.6	43.1	48.7	100.0	195
Sales or Commercial	26.8	24.7	38.4	10.1	100.0	1554
Service	13.7	17.1	52.7	16.5	100.0	357
Agricultural	43.0	24.8	28.3	3.8	100.0	4582
Production	25.1	22.8	40.7	11.4	100.0	1344
All	33.3	22.7	33.5	10.5	100.0	8396

There is a substantial variation in the number of hours worked in the main job (Table 4.9). About 45 percent of those who had a job in the last 7 days worked at least 40 hours per week on their main job, with 8.5 percent spending more than 70 hours a week. More than three-quarters of workers in administration, managerial, clerical and service occupations spent at least 40 hours a week working. A little over half of those in professional/technical, production and sales/commerce occupations also do the same, whereas only a third of those in agriculture spend that much time working (Table 4.9).

Table 4.9 Distribution of hours worked per week by main occupation of active population aged 15 and over (percent)

Main Occasion	Hours worked per week								All	Sample size
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 +		
Professional/Technical	5.5	2.6	11.2	28.2	39.1	5.2	4.3	4.0	100.0	348
Admin. or Managerial	0.0	5.0	0.0	5.0	70.0	5.0	5.0	10.0	100.0	20
Clerical	6.6	1.5	2.0	9.1	56.1	8.6	4.5	11.6	100.0	198
Sales or Commercial	9.2	9.4	11.3	12.7	17.1	9.2	12.7	18.3	100.0	1571
Service	5.0	3.1	5.6	9.7	20.0	11.1	11.4	34.2	100.0	360
Agricultural	8.1	11.9	21.9	24.9	23.0	5.3	2.4	2.4	100.0	4620
Production	12.4	8.0	10.6	13.4	25.7	9.7	8.8	11.6	100.0	1355
All	8.7	9.8	16.5	19.8	23.6	7.1	5.8	8.5	100.0	8472

Hours of work also vary substantially, depending on the sector of the economy in which the person is employed (Table 4.10). More than three-quarters of people in three sectors; transport/communication, mining/quarrying and the financial services work at least 40 hours a week. In contrast, two-thirds of employees in the agricultural sector and about half in manufacturing work less than 40 hours a week on average.

Table 4.10 Distribution of hours worked per week, by industry of active population aged 15 years and over (percent)

Main industry	Hours worked per week								All	Sample size
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 +		
Agriculture	8.0	12.0	21.8	24.8	23.0	5.4	2.5	2.6	100.0	4686
Mining/Quarrying	8.9	1.8	3.6	1.8	58.9	8.9	8.9	7.1	100.0	56
Manufacturing	13.6	9.7	11.4	14.7	24.0	8.0	8.7	9.8	100.0	990
Utilities	5.6	5.6	5.6	11.1	38.9	11.1	0.0	22.2	100.0	18
Construction	11.1	6.8	12.0	12.0	35.0	12.0	5.1	6.0	100.0	117
Trading	9.4	8.7	11.3	12.9	17.2	9.5	12.4	18.6	100.0	1555
Transportation/comm.	3.3	1.1	2.2	4.3	29.9	12.5	10.9	35.9	100.0	184
Financial services	7.2	1.4	1.4	7.2	47.8	14.5	5.8	14.5	100.0	69
Community/Social ser.	6.0	3.1	8.3	18.1	33.2	8.2	8.2	14.9	100.0	797
All	8.7	9.8	16.5	19.8	23.6	7.1	5.8	8.5	100.0	8472

Respondents were asked whether they received payment for the work they did. Among those who did receive payment, the average hourly wage was ¢918 (¢1,084 for men and ¢756 for women). In terms of classification by industry (Tables 4.11), the average basic wage ranged from ¢381 an hour for women working in the agricultural sector up to about ¢2,554 for men engaged in trading. The figure for women in agriculture corresponds to a wage of ¢3,048 for an 8-hour working day as compared to an 8-hour daily wage of ¢20,432 for men in trading. The national minimum daily wage at the time of the survey was ¢2,900.

Table 4.11 Average basic hourly earnings in main job, by sex and industry, and by sex and main occupation of active population aged 15+ (cedis)

	Male	Female	All		Male	Female	All
<u>Main Industry</u>				<u>Main Occupation</u>			
Agriculture	598	381	512	Professional/Technical	1390	1249	1339
Mining/Quarrying	1505	832	1484	Admin. or Managerial	2599	3452	2694
Manufacturing	1787	801	1156	Clerical	3485	1223	2859
Utilities	1199	600	1105	Sales or Commercial	2802	1093	1427
Construction	1062	512	1019	Service	936	644	805
Trading	2554	1123	1411	Agricultural	616	383	519
Transportation/comm.	1196	920	1187	Production	1009	761	889
Financial services	1478	1257	1454				
Community/Social ser.	1126	896	1035				
All	1070	785	928	All	1084	756	918

Detailed information was also collected on working conditions in respect of employees working in public or private organisations. It is observed that contrary to normal practice, 52 percent of all employees did not enter into any formal contract of employment with their employers before starting work. Moreover, 58 percent of workers are in organisations where trade unions do not exist. These figures are much higher for workers in commerce, agriculture and industrial production. The proportion of workers who have their taxes deducted at source to facilitate collection of income taxes constitute about 58 percent of all the workers. Income tax collection would be relatively easier in occupations like professional or technical, administration or managerial and clerical because over 80 percent of employees in those occupations have such taxes deducted at source from their salaries or wages.

Some workers enjoy certain benefits as part of their job; for instance, six out of ten employees are entitled to paid holidays, and a similar proportion get paid sick leave. Five out of ten enjoy free or subsidised medical care. In contrast, the situation is not very encouraging in respect of the provision of accommodation and transport; only 11 percent of workers either have free accommodation or pay subsidised rent, while only 9 percent are entitled to free or subsidised transport to and from work. About a quarter also receive bonuses, commission and tips from their work. The three occupational groups, professional or technical, administration or managerial and clerical are the only groups of workers, which have many people who benefit from retirement pension and social security benefits. More than 60 percent of workers in the other groups do not have such benefits.

4.4 Unemployment and underemployment

The unemployment rate is defined as the proportion of the economically active population who are not working but are available for work. For the country as a whole, the adult unemployment rate is 8.2 percent. It is lower for males (7.5%) than for females (8.7%). In most rural areas, as suggested by the data in Table 4.12, unemployment rates are very low, and there is very little difference among the ecological zones. In contrast, the rates in urban areas are much higher. For instance, for the age group 15-24 years, the survey recorded unemployment rates close to 30 percent in Accra and rates in excess of 20 percent for both males and females in other urban areas.

Table 4.12 also shows that the unemployment situation is a youthful phenomenon. The unemployment rate in the younger age group (15-24) is more than twice that of the 25-44 age group and more than three times that of the older age group, 45-64.

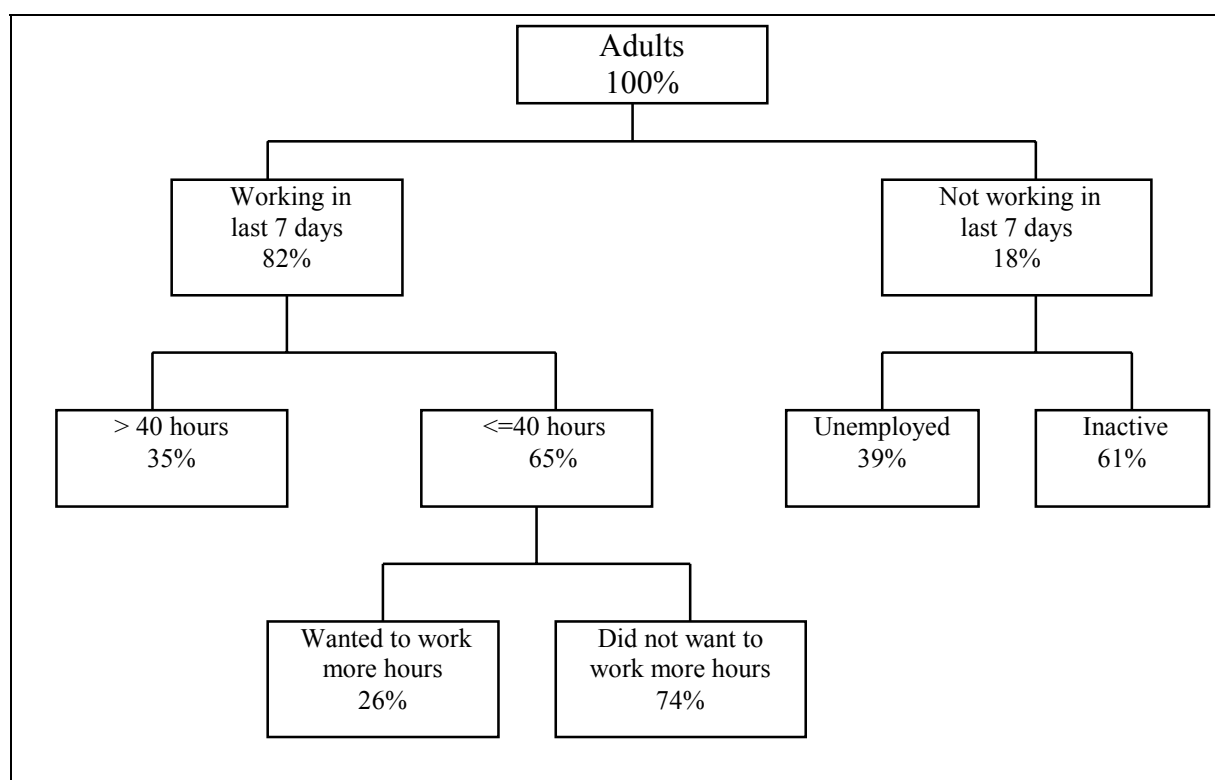
Table 4.12 Unemployment rates, by sex, age and locality of population aged 15-64 years

	Urban			Rural	Ghana
	Accra	Other	All		
<u>Males</u>					
15-24	29.4	23.6	25.3	8.1	12.7
25-44	16.5	13.3	14.4	3.2	7.3
45-64	8.9	6.3	7.0	3.8	4.8
All	16.4	12.7	13.9	4.3	7.5
<u>Females</u>					
15-24	31.7	23.3	25.9	14.8	18.7
25-44	14.8	10.4	11.7	5.2	7.5
45-64	8.7	5.9	6.6	3.5	4.5
All	16.8	11.5	13.0	6.4	8.7
<u>Both sexes</u>					
15-24	30.8	23.5	25.6	11.5	15.9
25-44	15.7	11.7	12.9	4.3	7.4
45-64	8.8	6.1	6.8	3.6	4.7
All	16.6	12.0	13.4	5.5	8.2

Unemployment is only one aspect of the underutilisation of human resources. We also need to take account of underemployment, that is, the extent to which people may be employed but not as fully as may be desirable. Some indication of the probable levels of underemployment can be gained by looking at the responses of those currently working, to a question about whether they wanted to work more hours during the last seven days. This question was only asked of people who said they worked 40 hours or less in their main job in the last week, it being assumed that people who worked over 40 hours could not reasonably be described as being under-employed in terms of hours worked. Figure 4.1 shows the breakdown of the adult population into the different categories of activity.

Out of every 100 adults, 82 reported that they had done some work in the last seven days, leaving 18 who had not worked. For those who were not working, 39 percent of them were currently unemployed and 61 percent were inactive. For those who were working, 35 percent of them worked more than 40 hours in their main job, while the remaining 65 work 40 hours or less. Among those who work less than 40 hours a week, 26 percent reported that they would like to do more work. In terms of those in the economically active adult population, these figures imply an unemployment rate of 7.9 percent, with an additional 15.7 percent reporting that they were under-employed in terms of hours worked.

Figure 4.1: Activity status of the adult population in the last seven days



Unemployment is an urban phenomenon; 13.2 percent of currently active urban adults were unemployed, whereas only about 4.8 percent of adults in rural areas reported that they were currently unemployed. Underemployment, on the other hand, seems to affect people in both urban and rural areas, but it appears to be more pronounced in rural areas where about 15 percent of the adult population is under-employed (Table 4.13). The results of the survey suggest that males and females have almost identical rates of unemployment and underemployment. The only apparent exception is found in rural areas.

Table 4.13 Activity status of the adult population in the last seven days, by sex and locality

Activity in the last 7 days	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Working	79.6	77.4	78.4	86.0	82.3	83.9	84.0	80.6	82.1
More than 40 hours in main job	44.4	39.2	41.5	30.9	16.0	22.7	35.2	23.6	28.8
40 hours or less in main job									
want to more hours	10.9	11.6	11.3	15.7	14.8	15.2	14.2	13.7	13.9
do not want more work	24.3	26.6	25.6	39.4	51.5	46.0	34.6	43.3	39.4
Not working	20.4	22.6	21.6	14.0	17.8	16.1	16.1	19.4	17.8
Unemployed	13.2	10.9	11.9	4.4	4.2	4.3	7.2	6.4	6.7
Inactive	7.2	11.7	9.7	9.6	13.6	11.8	8.9	13.0	11.1
All	100	100	100	100	100	100	100	100	100
Sample size	1601	2033	3634	3420	4150	7570	5021	6183	11204

4.5 Housekeeping activities

Apart from time-use information on economic activities, the survey collected detailed time-use information on a variety of housekeeping activities. Daily expense of time on fetching water, child care, sweeping, garbage disposal and cooking have been reported on all persons aged 7 years and over (Table 4.14). For each of these activities, people were asked whether they had spent any time on the activity in the last seven days, and if so, how many hours were involved. At the analysis stage, these weekly figures were converted to give daily estimates.

Table 4.14 Average time spent on various housekeeping activities by population aged 7+, by sex and locality (percent)

Activity	Sex	Proportion doing that activity (%)	Average time spent (minutes per day)		
			Urban	Rural	Ghana
Collecting wood	Males	16.0	51	28	30
	Females	34.6	44	37	37
	All	25.6	47	34	35
Fetching water	Males	37.7	31	34	33
	Females	60.2	33	44	41
	All	49.1	32	40	38
Child care	Males	12.5	128	102	108
	Females	41.3	200	205	204
	All	27.6	185	182	183
Sweeping	Males	24.9	14	14	14
	Females	71.0	19	21	20
	All	48.9	17	19	19
Garbage disposal	Males	18.4	13	11	11
	Females	47.6	12	11	11
	All	33.6	12	11	11
Cooking	Males	12.3	46	59	55
	Females	64.7	87	118	107
	All	39.7	81	109	99

Although these activities are part of everyday life, they usually take more of an individual's time and often at higher opportunity cost than is realised. Table 4.14 also provides some basic information on each housekeeping activity, separately for each sex; the proportion of males and females engaged in each activity, the average length of time they spend each day on the activity.

A breakdown of household activities shows that, on average, each person spends 35 minutes a day collecting wood, 38 minutes a day fetching water, 19 minutes sweeping, 11 minutes disposing garbage and about 3 hours taking care of children.

An examination of the individual activities reveals that over a quarter of the population is engaged in wood collection (and 4 percent spend at least an hour a day fetching wood). Collecting wood is done by a third (34.6%) of females of all ages, whereas less than a fifth of males do this activity (among males, more of the younger ones, 7-14 years of age, collect wood than the older ones). With the exception of Accra, wood fetching is common in all parts of the country, but more time is spent on it in the savannah and other urban areas of the country than the rural areas in the coastal and forest ecological zones (Table 4.15).

In the case of water, 49 percent of the population obtain their water without any loss of time and about 38 percent spend an average of less than an hour a day fetching water; this still leaves 12 percent who have to spend an average of at least an hour every day fetching water. As one would expect, since some urban dwellers have access to pipe-borne water or other convenient sources of water, rural dwellers spend more time fetching water (48 minutes on average per day) than their urban counterparts (37 minutes).

The time spent on fetching water in the rural savannah is almost double the average for other rural areas and some urban communities.

Table 4.15 Average time spent per day on various housekeeping activities by population aged 7+, by sex and locality (minutes per day)

Activity	Sex	Average time spent (minutes)				
		Urban		Rural		
		Accra	Other	Coastal	Forest	Savannah
Fetching wood	Males	9	51	21	28	33
	Females	5	45	30	33	46
	All	6	47	27	32	43
Fetching water	Males	22	34	26	24	44
	Females	27	35	32	40	58
	All	25	35	30	38	54
Child care	Males	170	95	146	101	84
	Females	251	182	215	243	144
	All	230	167	203	209	129
Sweeping	Males	11	14	10	16	16
	Females	15	20	14	22	23
	All	14	19	13	21	22
Garbage disposal	Males	15	12	7	12	12
	Females	12	12	8	12	10
	All	13	12	8	12	11
Cooking	Males	38	48	56	55	78
	Females	73	92	99	106	152
	All	69	85	93	97	145

As with fetching wood and fetching water, the burden of other household chores falls mainly on females. The differences in the proportion of males and females involved in the other activities are more varied than fetching of wood and water. These differences are more pronounced with sweeping and cooking, where two-thirds of women are involved but not more than a quarter of men are involved. Contrasting the urban responses and rural responses indicates that more time is spent on housekeeping in rural areas than urban areas in almost all

the activities except garbage disposal and wood fetching in Accra (see Appendix Tables A4.5, A4.7, A4.9, A4.11, A4.13, and A4.15 for details on comparison across regions). The contribution of children to housekeeping activities is depicted in Table 4.16, which shows the total amount of time devoted to each housekeeping activity by people of different ages.

Table 4.16 Average time spent per day on housekeeping activities, by age and sex (minutes)

Activity	Sex	Age group						All
		7-14	15-19	20-24	25-44	45-59	60 +	
Fetching wood	Males	29	33	33	27	35	27	30
	Females	30	34	36	41	43	36	37
	All	29	33	35	38	42	34	35
Fetching water	Males	38	38	26	22	23	15	33
	Females	41	42	41	41	42	28	41
	All	39	39	36	37	38	25	38
Child care	Males	93	85	103	117	103	117	108
	Females	84	162	257	228	169	174	204
	All	87	144	240	206	150	160	183
Sweeping	Males	16	16	12	12	13	10	14
	Females	19	22	22	21	19	18	20
	All	18	18	20	19	18	16	19
Garbage disposal	Males	13	11	10	6	8	7	11
	Females	12	11	10	11	9	9	11
	All	12	11	11	11	9	9	11
Cooking	Males	53	44	46	58	64	61	55
	Females	69	85	107	120	116	91	107
	All	67	78	98	111	109	90	99

The contribution of young children is quite substantial but the average time spent on the activities by older age groups, especially for people aged between 20-59, is greater than that of the younger groups. The only exception is the time spent on water fetching and garbage disposal, which are traditionally reserved for the young. Another notable observation in Table 4.16 is the fact that boys and girls do spend almost equal time in most of the activities apart from cooking, where the difference is quite substantial.

5 MIGRATION

5.1 Introduction

The purpose of this section is to provide data on migration to create some awareness that would generate further discussions and research into the complex field of population relocation. The section is limited to persons aged 15 years and over. The questions elicited information about place of birth, place of previous residence, and reasons for migrating. Respondents who were born outside their current place of residence are classified as in-migrants. Persons born at their current place of residence but who had moved out and lived outside their localities for a year or more are referred to as return migrants, while those born at their current place of residence who have never stayed away for a year or more are classified as non-migrants. For purposes of this report, return and in-migrants are often combined and referred to as migrants.

5.2 Migration patterns

Out of the total adult population in Ghana, about 52 percent are migrants (Table 5.1). Across localities, the proportion of migrants in rural forest is slightly larger (60%) than in other urban and rural localities with the rates for males and females being almost identical.

Table 5.1 Extent of migration by present locality and sex (percent)

Sex	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
Male	46.6	49.4	46.6	60.9	45.3	51.4
Female	42.9	51.8	48.3	60.6	46.8	52.2
All	44.7	50.7	47.6	60.8	46.1	51.8

Overall, 36 percent are in-migrants and 16 percent are return migrants (Table 5.2). In regional terms, Table 5.2 reveals that about four in every ten of the population of Greater Accra, Volta and Western Regions, are in-migrants. In contrast, in the north of the country the level of in-migration is fairly low, particularly in the Upper East Region where just about 10% of the population are in-migrants. When one looks at the overall level of migration, the contrast between regions in the south and north of the country becomes very clear. In the Upper West Region, for instance, less than a third of the population are migrants, and about a third in Northern Region are migrants, whereas in each of the other regions at least half the population are migrants.

Table 5.2: Migration status by region (percent)

Region	In migrants	Return migrants	Non migrants	Total	Sample size
Western	40.0	10.1	49.9	100.0	1591
Central	35.1	22.1	42.8	100.0	1231
Greater Accra	42.5	6.2	51.3	100.0	1905
Eastern	34.7	17.1	48.2	100.0	1699
Volta	42.7	14.3	43.0	100.0	1829
Ashanti	37.4	19.2	43.4	100.0	2457
Brong Ahafo	35.1	17.7	47.2	100.0	1224
Northern	24.1	11.6	64.3	100.0	1393
Upper West	19.2	9.1	71.7	100.0	486
Upper East	10.4	35.7	53.8	100.0	623
All	35.7	15.7	48.6	100.0	14436

Tables 5.3 and 5.4 show the analysis of migration flows in the country. The results indicate that two-thirds (67%) of all migrants stay in rural areas, less than a tenth (7.8%) stay in Accra and the rest (about a quarter) stay in other urban areas. In terms of their previous place of residence, the majority (about 60%) of them had moved from an urban area, meaning that about 4 in every 10 individuals migrate from rural areas (Table 5.3).

Table 5.3: Migration flows by previous residence and current residence (percent)

Locality of previous residence	Locality of current residence			Total
	Accra	Other urban	Rural	
Accra	0.2	2.9	6.2	9.3
Other urban	5.7	14.5	29.3	49.3
Rural	1.9	8.0	31.5	41.4
Total	7.8	25.2	67.0	100.0

Note: Total sample size=6,900

The overview of the flows does not suggest any large drift of population from rural to urban areas. Table 5.3 suggests that about a third of all migration flows (about 32%) involve rural-rural migration, and another third (35%) involve urban-rural migration. Almost a quarter (23%) involve inter-urban migration flows, leaving only a tenth of all migration moves (10%) as being from rural to urban areas.

Almost three quarters of migrants in Accra had moved from other urban areas, a quarter moved from rural areas and the rest (about 3%) represents return migrants. Consideration of the flows to other urban areas shows a similar trend but the flow of migrants to rural areas has a bigger share of rural to rural movement (Table 5.4).

Table 5.4: Current residence of migrants by previous residence

Locality of previous residence	Locality of current residence			Total
	Accra	Other urban	Rural	
Accra	2.8	11.4	9.3	9.3
Other urban	73.1	56.8	43.8	49.3
Rural	24.1	31.8	47.0	41.4
Total	100.0	100.0	100.0	100.0
Sample size	601	3518	2866	6985

5.3 Reasons for moving

Analysis of the reasons for people moving from one place to another suggests that it is domestic considerations, rather than employment needs, which have the greatest influence on migration flows. Table 5.5 shows that almost 60 percent of all migrants cited marriage (14%) and other family reasons such as disputes and famine (45%) as the basis for migrating. Over a quarter said they had moved for work-related reasons, involving their own (21%) or their spouse's (7%) employment.

Table 5.5 Distribution of migrants by current locality and reason for most recent migration (percent)

Reason	Locality					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural Savannah	
Own employment	30.4	23.9	16.9	22.3	12.5	21.1
Spouse employment	7.4	6.9	5.2	6.1	7.8	6.5
Marriage	8.3	12.7	10.8	15.3	20.1	14.2
Other family reasons	43.3	41.1	48.9	44.9	50.6	45.2
School	5.2	4.6	1.7	1.3	1.6	2.6
Drought or war	0.3	0.6	2.6	1.0	1.2	1.1
Other	5.0	10.3	13.9	9.1	6.1	9.3
All	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	644	1895	966	2667	1306	7477

6 HOUSING

6.1 Type of dwelling

The data collected on housing in the survey included information on the type of dwelling and the main materials used in the construction of the roof, walls and floor, as well as details of present occupancy status, housing expenditure and the type of facilities available to the household members. The head of household or any other person in charge provided the information.

The results of the survey show that about 16 in every 100 households live in single-family houses or apartments (Table 6.1). Nearly three-quarters (72%) of all households live in rooms in compound houses and in other types of rooms. Households who live in single-family houses and in huts or buildings on the same compound are more common in rural forest than other areas. While there is just a little over one-tenth of households in urban areas who live in single family houses, apartments or flats, about a quarter of households in rural forest live in single family houses.

Apartments are typical of urban areas and so living in apartments or flats is an urban phenomenon. Female-headed households are less likely than male-headed ones to be occupying single family houses or huts/buildings, but more likely to be occupying rooms in compound houses.

Table 6.1 Distribution of households by type of dwelling and locality (percent)

Type of dwelling	Urban Areas			Rural Areas			All	Ghana
	Accra	Other urban	All	Rural coastal	Rural forest	Rural Savannah		
One family house	5.6	7.7	7.1	18.4	15.1	24.0	18.1	14.1
Apartment/flat	5.5	4.2	4.6	1.8	1.0	0.1	0.9	2.3
Room(s) (compound house)	76.8	65.3	68.5	38.5	52.0	35.7	44.7	53.4
Room(s) (others)	10.5	19.9	17.3	29.8	22.5	4.2	19.6	18.7
Huts/Buildings (same compound)	1.5	2.2	2.0	10.9	9.3	33.1	15.7	10.7
Huts/Buildings (different compound)	-	0.3	0.2	0.7	0.3	2.8	1.0	0.7
Other	0.2	0.3	0.3	-	-	0.1	0.0	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

The present occupancy status of households is shown in Table 6.2. Nearly four in every ten households (38%) live in rent-free housing. A little over 40 percent also own the houses they live in. Owning a home is a common feature in rural areas, particularly in rural savannah where more than 60 percent own their houses. In urban areas home ownership is not common; only one quarter of urban dwellers (about 25% of Accra households and 24% of other urban households) own their houses. Renting a home is rare in rural areas, but it is a common occurrence in urban areas. Perching is very uncommon in Ghana; less than one percent of households are perching in other people's homes.

Table 6.2 Distribution of households by present occupancy status and locality (percent)

Occupancy Status	Urban Areas			Rural Areas			All	Ghana
	Accra	Other urban	All	Rural coastal	Rural forest	Rural Savannah		
Owning	24.7	24.1	24.3	47.5	47.8	64.9	52.0	41.9
Renting	34.5	36.7	36.1	12.7	13.4	2.7	10.5	19.9
Rent free	39.5	38.6	38.8	39.6	38.5	32.4	37.2	37.8
Perching	1.3	0.6	0.8	0.2	0.4	-	0.2	0.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

The rental sector (constituting households which rent accommodation or live rent-free) is of particular interest. More than half (54%) of those renting households have their accommodation provided by a relative, while a third rent their accommodation from a private individual or agency (Table 6.3). Government provides accommodation to about 4 percent of households on rental basis while private employers provide about 2 percent. Households in rural areas are much more likely than those in urban areas to be living in dwellings provided by relatives. In urban areas the share of households renting relatives' houses as against those of private individuals or estate agencies is just about equal. In all the localities, it was observed that female-headed households are as equally likely as their male counterparts to get rented accommodation from all the various providers.

Table 6.3 Distribution of households in different localities, by housing provider (percent)

Housing provider	Households							Ghana
	Urban Areas			Rural Areas				
	Accra	Other urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Relative	48.8	44.9	46.0	63.6	60.6	59.9	61.3	54.0
Private employer	4.8	1.2	2.2	0.9	2.9	0.9	2.0	2.1
Government	4.8	5.7	5.5	5.7	2.1	0.9	2.8	4.1
Provider individual or agency	41.6	44.3	43.5	22.1	29.0	9.2	23.6	33.1
Other	-	3.9	2.8	7.7	5.4	29.1	10.4	6.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	459	1189	470	1006	337	1647	1813	3460

6.2 Household size and housing density

Respondents were asked about the number of sleeping rooms their households occupy excluding bathrooms, toilets and kitchens. About 57 percent of all households used only one room (Table 6.4). The distribution of households by number of rooms is similar in Accra and in all other urban areas taken together. In rural areas, however, there is a marked contrast between localities. In both the coastal and forest areas, over 60 percent of rural households occupy just one room, whereas in the rural savannah only a third of all households occupy single rooms.

Table 6.4 Distribution of households in different localities, by number of rooms occupied (percent)

No. of rooms occupied	Urban			Rural				Ghana
	Accra	Other	All	Coastal	Forest	Savannah	All	
1	66.5	62.0	63.3	60.8	60.5	31.0	53.1	56.8
2	26.6	25.2	25.6	25.8	26.3	32.7	27.8	27.0
3	3.1	7.5	6.2	8.0	7.9	22.1	11.5	9.6
4	2.3	2.3	2.3	1.8	3.3	8.0	4.1	3.5
5+	1.6	3.0	2.6	3.6	2.0	6.1	3.4	3.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

To a large extent the variations in rooms occupied are likely to be closely linked to household size. Table 6.5 shows the distribution of households in different localities according to the number of persons in the household. The proportion of single person households varies from 27 percent in Accra to only 10 percent in rural savannah. At the other extreme, only about 5 percent of households in Accra have as many as eight members, compared with 16 percent in rural savannah.

Table 6.5 Distribution of households by household size, and locality (percent)

Household size	Urban			Rural				Ghana
	Accra	Other	All	Coastal	Forest	Savannah	All	
1	26.5	19.9	21.7	17.4	13.7	9.5	13.5	16.5
2	11.1	11.9	11.7	13.1	10.8	7.9	10.6	11.0
3	19.7	13.0	14.9	16.0	13.1	13.4	13.9	14.3
4	14.5	14.6	14.6	14.9	15.9	15.8	15.7	15.3
5	11.5	13.2	12.7	12.9	14.2	16.1	14.4	13.8
6	7.6	11.5	10.4	9.6	12.1	12.9	11.7	11.2
7	4.7	7.0	6.4	7.0	8.7	8.5	8.3	7.6
8	2.3	4.4	3.8	4.0	5.6	5.0	5.1	4.6
9	0.8	2.0	1.6	2.3	2.4	4.3	2.9	2.4
10+	1.5	2.5	2.2	2.8	3.4	6.5	4.0	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

Various indicators of housing density are presented in Table 6.6. These include average household size, rooms per household, and persons per room, all disaggregated by localities. Also

shown in Table 6.6 are the proportion of households that had to share their dwelling with another household and the average number of persons per 10 square metres of floor space.

In the country as a whole, average household size is 4.31 and the average number of rooms per household is 1.74, which results in an average room density of 2.48 persons per room. The highest average room density (2.74 persons per room) is found in the rural forest areas. This is due to the existence of relatively larger household sizes than elsewhere (second after rural savannah), and the relatively fewer rooms in rural localities. The lowest room density (2.18 persons per room) is in the rural savannah, where households in the ecological zone have the highest average number of rooms for household members.

Table 6.6 Indicators of household density, for different localities

Locality	Mean household size	Mean no. of rooms per household	Mean no. of persons per room	Mean area (sq.m.) occupied by household	Mean no. of persons per 10 sq.m.	Proportion of households sharing dwelling
	(a)	(b)	(c)	(d)	(e)	(f)
Urban						
Accra	3.69	1.57	2.36	22.80	1.60	93.4
Other urban	4.00	1.60	2.50	24.00	1.80	89.7
Rural						
Rural Coastal	4.19	1.69	2.48	21.80	1.90	81.70
Rural Forest	4.21	1.53	2.74	19.30	2.20	69.90
Rural Savannah	5.55	2.55	2.18	29.30	1.90	66.80
Total	4.31	1.74	2.48	22.90	1.90	79.40

The last but one column of Table 6.6 shows the average number of persons per 10 square metres of housing space. This indicator, to some extent, measures the degree of overcrowding in households. The measure was derived from details of room area occupied by households, which were collected by the survey teams. It should be noted, however, that some problems were experienced in collecting this data. For instance, in some cases the respondents did not allow full access to rooms and in other cases, it was not possible to move or pack items in rooms before measurements were taken. For about 72 percent of households the measurements were taken inside the rooms; in the remaining 28 percent of cases the measurements were taken outside. The values shown in Table 6.6 are based only on the cases where the measurements were taken inside the dwelling place. The measurements taken on the outside of dwellings resulted in a similar distribution of densities for every 10 square metres.

The average area occupied by a household is almost 23 square metres. It is apparent from Table 6.6 that the mean area does not vary much between localities. The only significant deviation is in rural savannah, where the mean area is 29 square metres. The resulting densities range from an average of 1.6 persons per 10 square metres in Accra to an average of 2.2 persons per 10 square metres in rural forest areas. Sharing of dwellings by different households is common in all the localities, with the greatest level of sharing occurring in the urban areas.

6.3 Housing conditions

6.3.1 Construction materials for dwelling

Information from Table 6.7 shows the main construction materials used for walls, floors and roofs of dwellings. For walls, the main construction materials are mud (53%) and cement (45%). Eight out of every 10 households in Accra, and 6 out of every 10 households in other urban areas, live in dwellings made of cement; in contrast, about two-thirds of rural households live in dwellings where mud is the main material used in construction.

In the case of materials used by households for the construction of floors, cement is most common in all the localities; it is used by more than 80 percent of the households in the country. Less than 15 percent of households live in dwellings with mud floors. In almost all urban homes the floor is made of cement (96.2%), but in rural areas about 22 percent of households have their floors made with earth or mud.

Table 6.7 Distribution of households by locality and main construction material of walls, floor and roof (percent)

	Urban			Rural				Ghana
Material	Accra	Other	All	Coastal	Forest	Savannah	All	
Outside wall material								
Mud	9.8	33.2	26.6	54.5	65.8	83.1	67.5	52.5
Wood	3.7	0.9	1.7	0.6	0.6	0.3	0.5	1.0
Corrugated iron	1.8	0.2	0.6	0.1	0.1	-	0.1	0.3
Stone	0.3	2.0	1.5	0.2	1.3	0.5	0.8	1.1
Cement	84.4	63.3	69.2	43.4	32.2	15.6	30.6	44.8
Other	-	0.4	0.3	1.2	0.1	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Main floor material								
Earth / Mud	-	2.7	1.9	12.2	18.9	35.3	21.5	14.3
Wood	0.5	1.1	0.9	-	0.3	0.2	0.2	0.5
Stone	0.3	1.1	0.9	0.1	0.2	0.3	0.2	0.5
Fibre glass	-	-	-	-	0.2	0.3	0.2	0.1
Cement	99.2	95.1	96.2	87.5	80.5	63.9	78.0	84.7
Other	-	0.1	0.1	0.1	-	-	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Main roofing material								
Thatch (grass, straw)	-	3.9	2.8	13.3	18.8	51.4	25.7	17.3
Wood	0.6	0.9	0.9	0.8	1.1	2.4	1.3	1.2
Iron / Zinc	48.4	75.8	68.0	60.1	75.4	36.7	62.0	64.2
Cement / concrete	4.2	5.6	5.2	1.1	1.1	0.9	1.1	2.6
Asbestos	46.8	13.5	22.9	20.5	2.6	0.2	6.2	12.3
Other	-	0.2	0.1	4.2	1.1	8.4	3.7	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

In the case of main roofing material, more than half (64%) of all households live in houses roofed with iron or zinc sheets, followed by 17 percent in thatched roof houses and about 12

percent in dwellings roofed with asbestos. Iron and zinc roofing is widely used in all localities, but asbestos roofing is mainly used in urban and rural coastal areas, particularly in Accra, where it accounts for 17 percent of the dwellings for all households. Thatched roofing is also the commonest roof type in rural savannah where more than half (51%) of the households dwell in houses roofed with grass or straw.

6.3.2 Source of drinking water

The sources of drinking water have been grouped into three major categories; pipe-borne water (indoor plumbing, inside standpipe, water vendor, tanker, neighbour, and private or public standpipe); well (with or without a pump); and natural (river, rain, lakes and springs). Table 6.8 shows that 42 percent of households have access to pipe-borne water and 34 percent use water from the well, while the remaining 24 percent depend on natural sources for drinking water.

Table 6.8 Distribution of households by locality and source of drinking water (percent)

Source of drinking water	Urban			Rural	Ghana
	Accra	Other urban	All		
Pipe-borne	100	72.8	80.3	18.8	41.6
Indoor plumbing	9.8	5.0	6.4	1.1	3.1
Inside standpipe	38.7	21.0	26.0	1.8	10.7
Water vendor	15.6	4.4	7.5	1.2	3.5
Tanker	0.3	0.1	0.1	0.8	0.6
Neighbour	22.3	8.0	12.1	1.1	5.1
Private outside standpipe	13.1	14.9	14.4	2.6	7.0
Public tap	0.2	19.3	13.9	10.2	11.6
Well	-	15.1	10.8	47.2	33.9
With pump	-	2.8	2.0	31.6	20.8
Without pump	-	12.3	8.8	15.6	13.1
Natural sources	-	12.2	8.8	33.9	24.6
River/spring	-	11.8	8.5	33.6	24.4
Rain	-	0.4	0.3	0.2	0.2
Other	-	-	-	0.1	0.0
All	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	3799	5998

About one tenth (9.8%) of households in Accra benefit from indoor plumbing, and a further two-fifths (38.7%) have an inside standpipe; the remainder rely mainly on water from neighbours and private standpipes, but a few use public standpipes and those who supply water through tankers. In Accra every household covered in the survey had access to pipe-borne water; in contrast, about a third (27%) of households in other urban areas, and 8 out of every 10 in rural areas, do not have access to pipe-borne water (Figure 6.1). In urban areas other than Accra about 73 percent of households have pipe-borne water, but in many cases this comes from a source outside the house; a sizeable number of households in other urban areas (15%) depend on wells, usually without pumps, for their water supply, and a further 12 percent use natural sources.

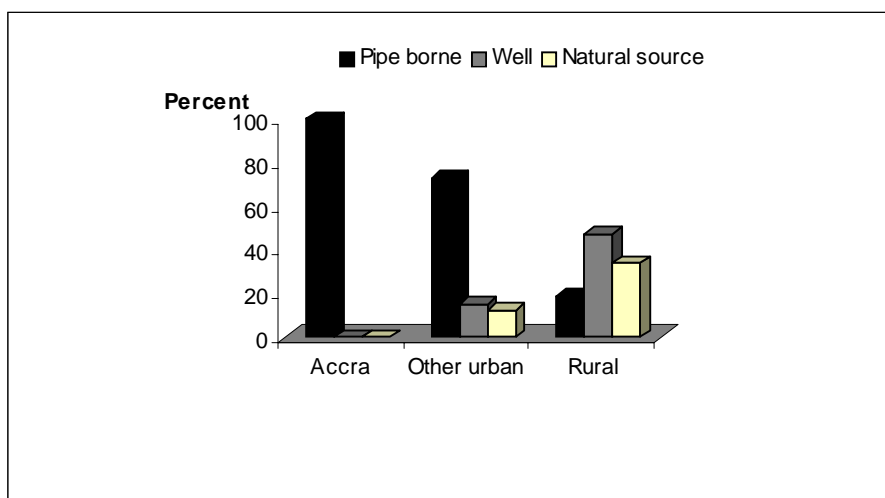


Figure 6.1: Source of drinking water, by locality

In rural areas very few households have indoor plumbing or standpipes, but some get their water from a public standpipe or other reliable outside supply. A great majority of rural households, however, have to get their water from wells (47%) or from natural sources (34%). Unlike the well water in urban areas, much of the water from wells in rural areas are fitted with pumps and account for almost a third of water sources for households.

6.3.3 Provision of basic utilities

Table 6.9 indicates the availability of basic utilities. In the case of lighting, the main source for households is kerosene (60%), while 39 percent have access to electricity or occasionally a generator (0.5%). About 90 percent of the households in Accra, and 72 percent of households in other urban areas, use electricity for lighting. Many rural households (82%) use kerosene for lighting.

Almost two-thirds of the households in Ghana use wood as their main source of fuel for cooking, and 30 percent of all households use charcoal; only 4 percent use liquefied petroleum (LP) gas. In urban areas and particularly in Accra, charcoal is widely used; more than two-thirds of Accra households (71%) and about half of households in other urban areas (57%) use charcoal for fuel. In Accra, gas ranks second as a source of fuel, whereas in other urban areas wood is the preferred second choice. In rural areas many households (about 84%) use wood, but some households use charcoal or other sources.

It is also apparent from Table 6.9 that dumping is the predominant mode of rubbish disposal in the country as a whole; 67 percent of households in Accra, 90 percent of those in other urban areas, and 95 percent of rural households dump their rubbish. It is only in Accra that significant numbers of households use other means of disposal; 22 percent have their rubbish collected, and 11 percent burn it.

Table 6.9 Distribution of households by locality and use of basic utilities (percent)

	Urban			Rural				
Utility	Accra	Other	All	Coastal	Forest	Savannah	All	Ghana
Source of lighting								
Electricity (mains)	90.6	72.2	77.4	26.7	19.0	4.3	17.1	39.2
Generator	0.8	0.3	0.4	0.2	0.5	0.8	0.5	0.5
Kerosene/Gas/lamp	8.4	27.4	22.0	72.9	80.5	93.8	82.0	60.0
Candle	0.2	0.2	0.2	0.2	-	0.5	0.2	0.2
Other	-	-	-	-	0.1	0.6	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source of fuel								
Wood	1.1	34.2	24.9	72.2	87.6	89.2	84.4	62.5
Charcoal	70.5	57.2	60.9	24.8	11.3	5.2	13.0	30.6
Gas	22.7	5.2	10.1	1.1	0.6	0.2	0.6	4.1
Electricity	0.6	0.4	0.5	1.0	0.1	0.1	0.3	0.4
Kerosene	4.5	1.3	2.2	0.8	0.3	0.2	0.4	1.1
Other fuel	0.5	1.6	1.3	0.1	0.1	5.1	1.4	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Method of rubbish disposal								
Collected	22.3	5.3	10.1	-	1.2	-	0.6	4.1
Dumped	66.9	89.6	83.2	95.4	96.3	93.6	95.4	90.9
Burned	10.8	4.7	6.5	4.1	2.0	3.9	3.0	4.3
Buried	-	0.4	0.3	0.4	0.5	2.5	1.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

6.3.4 Toilet facilities

Results as captured in Table 6.10 show that the availability of modern toilet facilities seems to be a major problem in Ghana. The information collected on types of toilet used by households shows that a fifth of households in Ghana do not have any toilet facilities. Only 6 percent of households have access to flush toilets, and 28 percent use Kumasi Ventilated Improved Pit latrines (KVIPs). The most common form of toilet, used by 38 percent of all households, is the ordinary pit latrine, while 7 percent use a pan or bucket for toilet.

Table 6.10 Distribution of households by locality and type of toilet used by the households (percent)

Type of toilet	Urban			Rural				Ghana
	Accra	Other	All	Coastal	Forest	Savannah	All	
Flush toilet	25.0	10.1	14.3	3.6	1.1	0.4	1.5	6.2
KVIP	34.5	50.0	45.7	24.5	19.8	8.4	18.1	28.2
Pit latrine	18.2	17.2	17.5	44.2	67.0	21.9	50.2	38.2
Pan/bucket	17.3	11.7	13.3	2.3	5.2	0.3	3.3	7.0
None	5.0	11.0	9.3	25.5	6.9	69.0	27.0	20.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	620	1579	2199	899	1940	960	3799	5998

In terms of locality, rural households are worse off, with 27 percent of households not having access to any kind of toilet facility and having to ease themselves in the bush or the beach (popularly known as "free range"). The situation in rural savannah is quite alarming; nearly 70 percent of households in this ecological zone do not have access to any toilet facility. Even in urban areas, the provision of toilet facilities is far from encouraging: about a tenth of urban households do not have access to a toilet. In terms of the country as a whole, these figures imply that close to a million households do not have any toilet facilities; 23,500 of these households are in Accra, 131,000 in other urban areas, and 783,000 in rural areas.

7 HOUSEHOLD AGRICULTURE

7.1 Agricultural activities and assets

This section of the report presents data on agricultural activities. The section has information on households' ownership and operation of farms as well as livestock keeping. Data on yields of various agricultural products, sales, processing and purchases as well as inputs of production is presented in the succeeding tables. Data on consumption of own agriculture produce by households are also presented.

It is estimated that about 2,740,000 households in Ghana own or operate a farm or keep livestock. Table 7.1 shows the distribution of these households around the country. Although farming and keeping of livestock is predominantly a rural activity, a significant number of urban households reported that they own or operate a farm or keep livestock; around a third (32%) in urban areas have some involvement in agricultural activities. In the rural areas, agricultural activity is most common in the rural savannah, where only 7 percent of households did not report any agricultural activity. In the rural forest zone the corresponding figure was 14 percent, while in the rural coastal area as many as 25 percent of households are not engaged in agriculture.

Table 7.1 Distribution of households owning or operating a farm or keeping livestock, and national estimates, by locality (percent)

Locality/ecological zone	Households owning or operating a farm or keeping livestock		Women's share of responsibility for agricultural activities (%)
	Sample (%)	National (number)	
Urban area	32	480,000	38
Rural area	85	2,250,000	44
Rural coastal	75	460,000	53
Rural forest	86	1,180,000	46
Rural Savannah	93	620,000	36
Ghana	66	2,740,000	43

For each household engaged in agriculture, questions were asked to determine which members were responsible for the farm or livestock. In 22 percent of agricultural households, responsibility was shared between two or more people; most often this involved a male head of household and his wife. Looking at the characteristics of all those named as having responsibility for agricultural activities in the household, one third are women. As shown in Table 7.1, the role of women in agriculture appears to vary around the country. While women make up more than half (53%) of those with responsibility for agriculture in the rural coastal zone and slightly less than half (46%) in the forest zone, the corresponding figure for the rural savannah zone is only about a third (36%).

Looking specifically at the national estimates for livestock, obtained by projecting the sample figures, it is noted that about one and a half million households in Ghana own livestock (Table 7.2). More than four-fifths of a million (812,000) households raise goats, half a million households raise sheep, and more than a million (1,164,000) households raise chicken. Much smaller numbers of households raise other poultry, pigs, draught animals (such as donkeys, horses and bullocks), and rabbits. In all, Ghanaian households keep about 2 billion goats in the country, 869 million sheep, 1.6 million cattle, 1.2 million pigs, 302 million chickens, and 3.5 million other poultry. The combined value of all these livestock is about ₵3,574 billion; sales of

livestock in the previous 12 months amounted to about ₺257.5 billion, and purchases amounted to about ₺37.8 billion.

Table 7.2 Estimated number of households raising different livestock, the number of livestock, and the estimated value of livestock, sales and purchases

Types of livestock	Number of households raising	Number of livestock	Total value of livestock (million cedis)	Sales in the last 12 months (million cedis)	Purchases in the last 12 months (million cedis)
Draught animals	75,000	183,000	62,200	2,700	4,200
Cattle (inc. cows)	176,000	1,599,000	470,000	19,700	11,500
Sheep	502,000	868,618,000	171,400	18,400	3,300
Goat	812,000	2,016,386,000	172,800	21,500	3,200
Pigs	168,000	1,179,000	78,700	9,400	1,900
Rabbit	8,000	40,000	600	70	30
Chicken	1,164,000	302,472,000	2,410,100	66,900	12,300
Other poultry	291,000	3,408,000	20,000	5,000	300
Other livestock	18,000	63,000	-	70	4
Fish	51,000	13,889,000	186,600	113,300	1,000
Crab	11,000	48,000	300	300	-
Other	7,000	140,000	1,100	20	20
Total	1,541,000	3,208,025,000	3,574,000	257,500	37,800

Livestock owned by households are concentrated predominantly in the rural forest and followed by rural savannah (Table 7.3). For instance, the rural savannah has 96 percent of all draught animals, 71 percent of cattle, and 61 percent of all pigs, while the rural forest has over 99 percent of all goats and sheep. Households living in urban areas own about 36 percent of all fish and 11 percent of all chicken. In the case of draught animals, some ₺200 million was received from renting out such animals.

Table 7.3 Estimated distributions of livestock by locality

Type of livestock	Locality				Ghana
	Urban areas	Rural coastal	Rural forest	Rural Savannah	
Draught animals	8,000	-	-	175,000	183,000
Cattle (inc. cows)	330,000	81,000	54,000	1,135,000	1,599,000
Sheep	382,000	360,000	866,623,000	1,253,000	868,618,000
Goat	679,000	563,000	2,013,204,000	1,940,000	2,016,386,000
Pigs	134,000	185,000	142,000	718,000	1,179,000
Rabbit	6,000	21,000	10,000	2,000	40,000
Chicken	32,857,000	3,448,000	244,130,000	22,037,000	302,472,000
Other poultry	256,000	137,000	354,000	2,660,000	3,408,000
Other livestock	8,000	3,000	27,000	25,000	63,000
Fish	4,933,000	8,942,000	14,000	0	13,889,000
Crab	28,000	19,000	-	-	48,000
Other	7,000	96,000	36,000	1,000	140,000
Total	39,629,000	13,856,000	3,124,594,000	29,946,000	3,208,025,000

Results of the survey also report on agricultural equipment owned by households. Expenses on the recently purchased or hired equipment are reported in sub-section 7.5 of this chapter.

7.2 Harvesting and disposal of crops

7.2.1 Staples grains and cash crops

Out of the estimated 2.7 million households engaged in harvesting staple grains and cash crops, 2.4 million of them harvest maize. Other major crops, in terms of number of households involved, are groundnut (604,100), beans/peas (463,800), cocoa (584,400), sorghum/millet/guinea corn (467,800), and rice (361,400). Table 7.4 provides estimates of the number of households in each ecological zone that harvested different crops in the previous 12 months, and shows the great variations around the country in crops grown. Maize is the only staple or cash crop which is grown extensively in all three zones.

Table 7.4 Estimated number of households in each ecological zone harvesting various staple grains, field and cash crops in the previous 12 months

Crop	Ecological zone			Ghana
	Coastal	Forest	Savannah	
Cocoa	48,800	515,300	20,300	584,400
Coffee	700	6,100	-	6,800
Rubber	-	-	700	700
Coconut	73,200	40,000	1,400	114,600
Wood	126,800	75,300	19,700	221,700
Kenef	-	700	1,400	2,000
Cotton	-	-	19,700	19,700
Groundnut/peanut	48,800	75,900	479,000	604,100
Tobacco	2,000	700	3,400	6,100
Sugar cane	17,600	23,700	-	41,400
Maize	478,000	1,402,100	526,800	2,406,900
Rice	6,100	71,200	284,100	361,400
Sorghum/millet/guinea corn	-	4,700	463,100	467,800
Beans/peas	46,000	109,200	308,500	463,800
Other crops	7,500	53,600	8,800	69,800

The majority of households that grow rice, groundnut and beans/peas, and virtually all the households that grow sorghum/millet/guinea corn, are located in the savanna. The major export crop, cocoa is grown almost exclusively in the forest zone (Table 7.4).

The estimates for some of the smaller crops may be subject to errors, because of the data collection periods. It is however clear that the cultivation of cotton and tobacco takes place mostly in the savannah zone, sugar cane and coconut mostly in the coastal and forest zones, while coffee is grown mainly in the forest zone.

Table 7.5 presents information on harvesting, sales and value of various farm produce in the 12 months preceding the interview. Households, which harvested crops, were asked whether they sold any of the crops unprocessed in the previous 12 months. Only 2 percent of the households processed the cocoa they harvested.

Table 7.5 Estimated number of households harvesting various staple grains and field and cash crops, percentage selling their crops, and estimated annual value of harvest and sales

Crop	Estimated number of households harvesting crop in last 12 months	Percentage selling any unprocessed crop in the last 12 months	Estimated annual value of	
			total harvest	sales
			(billion cedis)	
Cocoa	584,400	98	809.4	379.2
Coffee	6,800	75	1.2	0.7
Rubber	700	0	0.3	-
Coconut	114,600	60	17.7	10.4
Wood	221,700	10	14.8	1.1
Kenef	2,000	63	1.0	0.7
Cotton	19,700	97	7.7	7.7
Groundnut/peanut	604,100	63	146.1	60.2
Tobacco	6,100	92	6.0	5.5
Sugar cane	41,400	71	5.1	3.9
Maize	2,406,900	53	544.7	230.1
Rice	361,400	63	126.0	53.3
Sorghum/millet/guinea corn	467,800	23	98.4	11.9
Beans/peas	463,800	41	43.1	18.5
Other crops	69,800	62	13.9	10.4
Any/all crops	2,491,700	54	1,834.0	793.6

A high percentage (at least 90%) of growers of cotton, tobacco and coffee also do not process their products. But for growers of other main crops (maize, groundnut, and rice), between one half and two-thirds of the households reported selling part of their unprocessed produce the previous 12 months.

Due to home consumption of some of the farm produce there is a difference between the value of harvested produce and the value of sales. The estimated total annual value of the harvest of staple grains, field crops and cash crops produced by Ghanaian households was about ₵1,834 billion relative to mid-March 1999 prices, while the value of sales was about ₵794 billion. Cocoa and maize are the major cash crops in terms of both harvest and sales; cocoa harvested annually by households is valued a little over ₵809 billion, and sales amount to about ₵379 billion, while the annual maize harvest is valued about ₵545 billion and value of maize sales is ₵230 billion. These two crops thus account for about 74 percent of the total harvest of staple grains and cash crops, and for 77 percent of all sales. Two other crops are important in terms of the value of their sales; groundnut with annual sales of about ₵60 billion, and rice with sales of about ₵53 billion. Sorghum/millet/guinea corn produced is worth about ₵98 billion, but only 12 percent of the crop is sold (Table 7.5).

Beside cocoa, other important cash crops in the forest zone are maize and to a lesser extent rice, beans or peas and groundnuts (Table 7.6). There is some sale of cocoa in the coastal zone, as defined for this survey; other crops, which are sold in the coastal zone are maize, coconuts and rice. In the savannah zone, the major crops in terms of sales are maize and groundnut; other significant crops are rice, sorghum/millet/guinea corn and beans/peas. A small amount of income is also earned from sales of cotton and tobacco.

Overall, the forest zone, which contains a little over half of the rural household population of Ghana, accounts for more than two-thirds (69%) of the total sales of staple grains and cash crops.

Table 7.6 Estimated annual value of harvested crops and value of sales by households of unprocessed staple grains, field and cash crops, by ecological zone

Crop	Annual value of harvest				Annual value of sales			
	Ecological zone				Ecological zone			
	Coastal	Forest	Savannah	Ghana	Coastal	Forest	Savannah	Ghana
	(billion cedis)				(billion cedis)			
Cocoa	19.0	752.0	38.3	809.4	15.1	358.9	5.3	379.2
Coffee	0.1	1.1	-	1.2	0.0	0.7	-	0.7
Rubber	-	-	0.3	0.3	-	-	-	-
Coconut	15.6	2.0	0.0	17.7	8.9	1.5	0.0	10.4
Wood	8.4	5.7	0.6	14.8	0.7	0.3	0.0	1.1
Kenef	-	0.1	0.9	1.0	-	0.1	0.6	0.7
Cotton	-	-	7.7	7.7	-	-	7.7	7.7
Groundnut/peanut	6.9	12.9	126.3	146.1	5.0	6.8	48.4	60.2
Tobacco	1.0	3.0	2.0	6.0	0.6	3.0	2.0	5.5
Sugar cane	1.7	3.5	-	5.1	0.6	3.3	-	3.9
Maize	69.6	328.9	146.1	544.7	27.4	146.4	56.3	230.1
Rice	23.8	26.7	75.5	126.0	10.9	7.3	35.1	53.3
Sorghum/millet/guinea corn	-	0.5	97.9	98.4	-	0.2	11.8	11.9
Beans/peas	3.7	11.0	28.4	43.1	1.9	7.7	8.8	18.5
Other crops	0.3	9.3	3.3	13.9	0.3	7.6	2.5	10.4
Total	150.2	1,156.8	527.4	1,834.0	71.5	543.8	178.3	793.6

7.2.2 Roots, fruits, vegetables and other crops

Of the crops presented in Table 7.7, the ones involving a large number of households are cassava (1.5 million households) and pepper (1.3 million households). These two crops are harvested extensively in all three ecological zones, especially in rural forest where more than two-thirds of households are involved. Next are yam, plantain, cocoyam, okro and tomatoes in that order. The growing of plantain, cocoyam and many of the crops occurs more often with households in the forest zone than with those in the other two zones. Oil palm cultivation is also extensively done in the forest zone where about 468,000 households are involved in it. A sizeable number of households in the coastal zone (146,000) also cultivate oil palm as compared to about 21,000 involved in the savannah zone.

Table 7.7 Estimated number of households harvesting various fruits, root crops and vegetables in the previous 12 months, by ecological zone

Crop	Ecological zone			Ghana
	Coastal	Forest	Savannah	
Avocado pear	60,000	353,000	5,000	418,000
Banana	57,000	272,000	16,000	345,000
Colanut	12,000	38,000	1,000	52,000
Mango	62,000	213,000	17,000	292,000
Oil palm	146,000	468,000	21,000	636,000
Oranges	85,000	273,000	7,000	365,000
Pawpaw	92,000	377,000	24,000	494,000
Pineapple	76,000	234,000	3,000	313,000
Other fruit	14,000	22,000	4,000	41,000
Cassava	289,000	985,000	243,000	1,517,000
Cocoyam	90,000	704,000	72,000	866,000
Plantain	124,000	757,000	61,000	942,000
Potatoes	12,000	29,000	37,000	78,000
Yam	87,000	575,000	283,000	945,000
Garden egg/egg plant	102,000	248,000	57,000	407,000
Leafy vegetable	113,000	366,000	217,000	696,000
Okro	92,000	356,000	365,000	814,000
Onion	19,000	87,000	47,000	153,000
Pepper	227,000	693,000	343,000	1,264,000
Tomatoes	136,000	384,000	210,000	730,000
Other vegetables	102,000	111,000	27,000	241,000

Table 7.8 presents data on households' production, market supply and values of sales for various root crops, fruits and vegetables. A high proportion (two-thirds or more) of households growing cassava, leafy vegetables, plantain and pepper had harvested some of their crop in the previous two weeks. Given that a household grows a certain crop, the likelihood of them having sold any of it in the previous two weeks is greatest in the case of cola nuts (33%), followed by plantain (21%), onion and oil palm (each estimated at 16%).

Table 7.8 Estimated number of households harvesting various fruits, root crops and vegetables, percentage harvesting or selling in the previous two weeks, and estimated annual value of harvest and sales

	Estimated number of households	Percentage of these households:		Estimated annual value of:	
Crop	harvesting crops in last 12 months	harvesting in last two weeks	selling produce in last two weeks	total harvest	sales
(billion cedis)					
Avocade pear	418,000	24	4	11.2	4.1
Banana	345,000	38	14	20.4	10.0
Cola nut	52,000	36	33	4.3	3.6
Mango	292,000	28	3	8.7	0.9
Oil palm	636,000	66	16	87.5	36.9
Oranges	365,000	29	6	16.5	10.1
Pawpaw	494,000	42	1	6.6	0.5
Pineapple	313,000	33	4	9.9	3.5
Other fruit	41,000	47	8	3.9	0.2
Cassava	1,517,000	76	15	562.8	120.6
Cocoyam	866,000	54	7	159.4	39.0
Plantain	942,000	66	21	401.6	173.0
Potatoes	78,000	39	13	33.3	18.2
Yam	945,000	33	5	223.0	51.1
Garden egg/egg plant	407,000	51	9	60.4	11.8
Leafy vegetable	696,000	77	4	15.1	3.7
Okro	814,000	47	8	34.3	11.6
Onion	153,000	41	16	104.0	84.2
Pepper	1,264,000	66	8	75.2	16.8
Tomatoes	730,000	42	9	61.5	31.3
Other vegetables	241,000	78	2	2.4	0.1
Total				1 901.9	631.2

Since the survey was spread fairly evenly throughout the year in each part of the country, it is possible to project the two-week figures for each household to arrive at a reasonable estimate of the total annual value of the harvest and of the sales. The estimated total value of the harvest for all the crops is at ¢1,902 billion, using March 1999 prices. The major crops in terms of value are cassava (valued at ¢563 billion), plantain (¢402 billion), yams (¢223 billion), and cocoyam (¢159 billion); other valuable crops were oranges, pepper, onion and tomatoes.

The total annual value of the sales of crops is estimated to be about ¢631 billion relative to mid-March 1999 prices, with the major crops in terms of harvest featuring prominently in sales. In the coastal zone, out of a total income of ¢70 billion from the sale of roots, vegetables and other crops, two-thirds came from just four crops: cassava, oil palm, plantain, and pepper (Table 7.9). The agricultural income base is rather wider in the forest zone, but 83 percent of the income comes from five crops: plantain, cassava, cocoyam, oil palm and tomatoes with plantain and cassava alone accounting for 62% of total sales. In the rural savannah two crops, onions and yams, account for more than two-thirds of all income from the sale of roots, vegetables and other crops.

Table 7.9 Estimated annual value of the harvest and sales of root crops, fruits and vegetables, by ecological zone

Crop	Annual value of harvest (billion cedis)				Annual value of sales (billion cedis)			
	Ecological zone				Ecological zone			
	Coastal	Forest	Savannah	Ghana	Coastal	Forest	Savannah	Ghana
Avocado pear	0.3	10.9	0.0	11.2	-	4.1	-	4.1
Banana	2.5	17.2	0.7	20.4	0.5	9.1	0.4	10.0
Colanut	0.7	3.5	-	4.3	0.7	2.9	-	3.6
Mango	0.1	8.5	0.1	8.7	-	0.9	-	0.9
Oil palm	23.2	64.4	0.9	87.5	11.5	25.1	0.3	36.9
Oranges	5.2	11.2	0.1	16.5	2.8	7.2	0.0	10.1
Pawpaw	0.8	5.2	0.6	6.6	0.2	0.4	0.0	0.5
Pineapple	3.9	6.0	0.0	9.9	2.4	1.2	-	3.5
Other fruit	0.2	3.6	-	3.9	0.1	0.2	-	0.2
Cassava	133.7	357.4	71.7	562.8	20.1	89.2	11.3	120.6
Cocoyam	16.1	132.3	11.0	159.4	2.7	35.9	0.4	39.0
Garden egg/egg plant	4.2	53.1	3.1	401.6	2.3	7.9	1.5	173.0
Leafy vegetable	2.3	10.8	2.1	33.3	0.5	3.1	0.1	18.2
Okro	4.7	15.2	14.4	223.0	2.8	7.0	1.8	51.1
Onion	4.7	11.0	88.3	60.4	4.6	0.3	79.4	11.8
Pepper	12.4	40.0	22.8	15.1	4.5	9.3	3.0	3.7
Plantain	36.0	342.1	23.5	34.3	9.8	148.3	14.9	11.6
Potatoes	1.0	2.7	29.5	104.0	0.5	1.6	16.1	84.2
Tomatoes	6.5	44.4	10.6	75.2	2.5	21.6	7.2	16.8
Yam	30.8	96.3	96.0	61.5	1.3	8.5	41.3	31.3
Other vegetables	0.8	1.2	0.3	2.4	0.0	0.1	-	0.1
Total	290.0	1,236.0	375.9	1,901.9	69.6	383.9	177.7	631.2

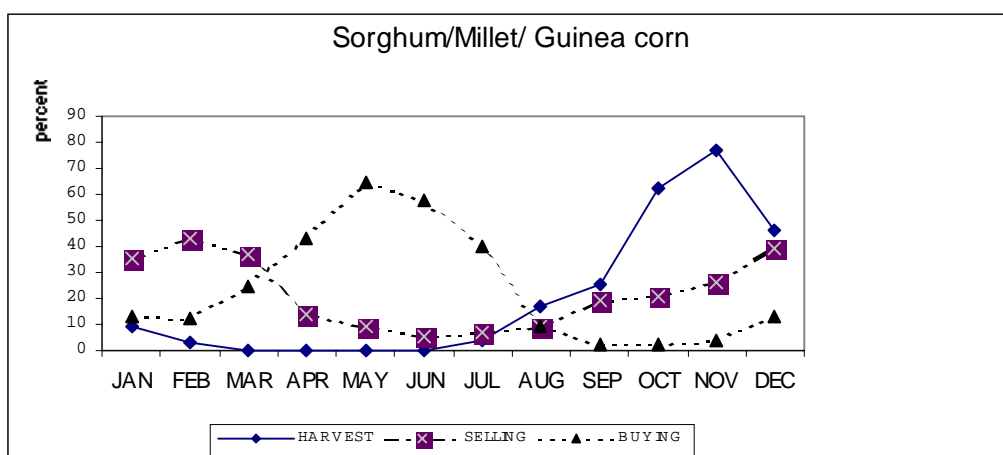
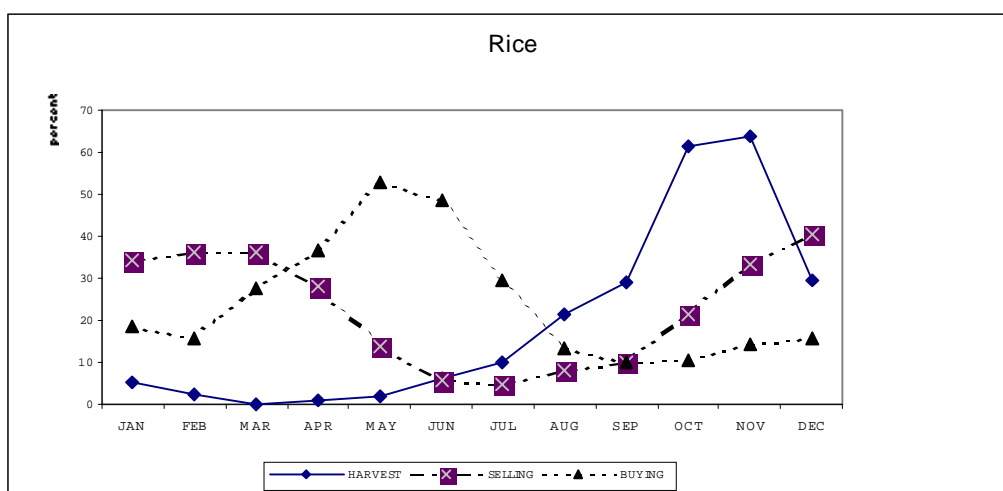
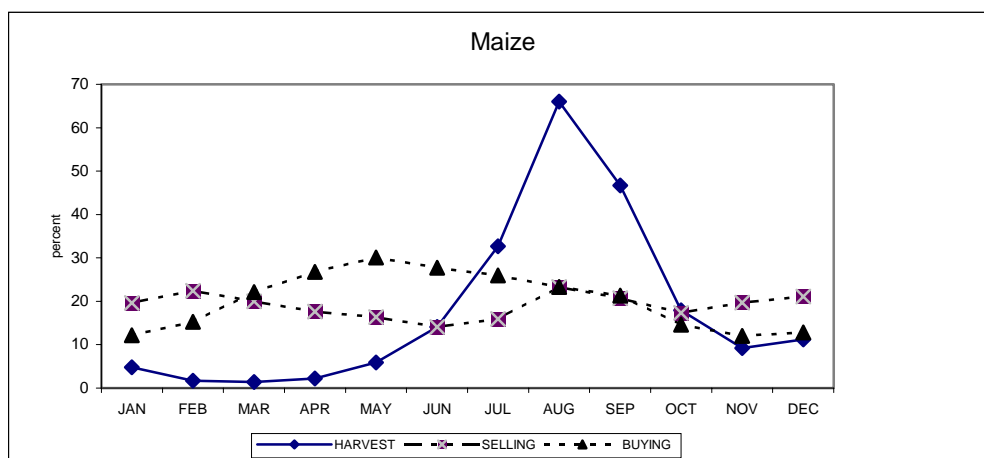
The presentation so far has been on unprocessed agricultural produce. Some farm produce are processed by the household or transformed into other goods, which can be used by the household or sold; alternatively the household may choose to consume the unprocessed food itself. The processing of agricultural food produce is discussed in section 7.6, while the home consumption of agricultural produce is dealt with in section 7.7.

7.3 Seasonal patterns

Where agricultural households grow any of the six crops (maize, rice, cassava, yam, plantain, and sorghum/millet/guinea corn) in the last 12 months, they were asked to give information about the seasonal characteristics of each crop grown; this was done by asking them to specify the main months of the year when each crop was harvested, sold, or bought for home consumption. Figures 7.1 and 7.2 show, for each crop, the percentage of households harvesting, selling, or buying the crop during each month of the year. Although for some crops there are slight variations between the ecological zones in the timing of each activity, the general pattern is fairly similar.

Cereal crops (maize, rice, and sorghum/millet/guinea corn) display marked seasonal variations in the pattern of harvesting. Most households do not harvest cereals in the first half of the year probably because of the dry season, which invariably determines the farming seasons in all the ecological zones in the country. For example, almost none of the households produce sorghum/millet/guinea corn during the period, April to June; less than 5 percent harvest maize between January and April and very few households harvest rice between March and June.

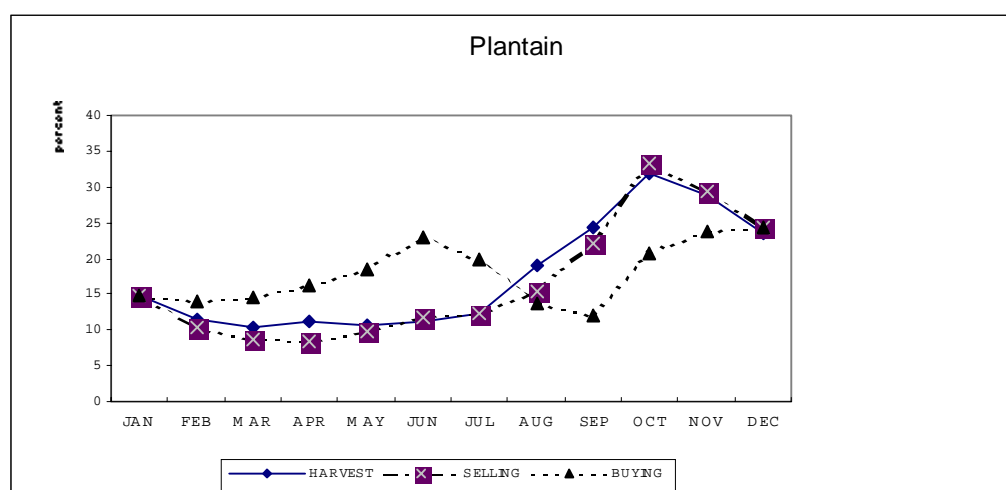
Figure 7.1: Seasonal patterns of harvesting, selling and buying various cereal crops amongst those households, which cultivate those crops.

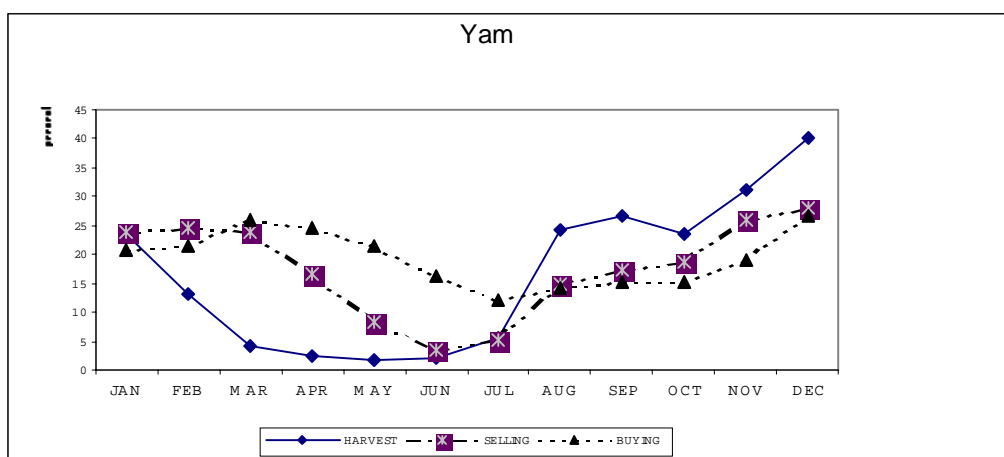
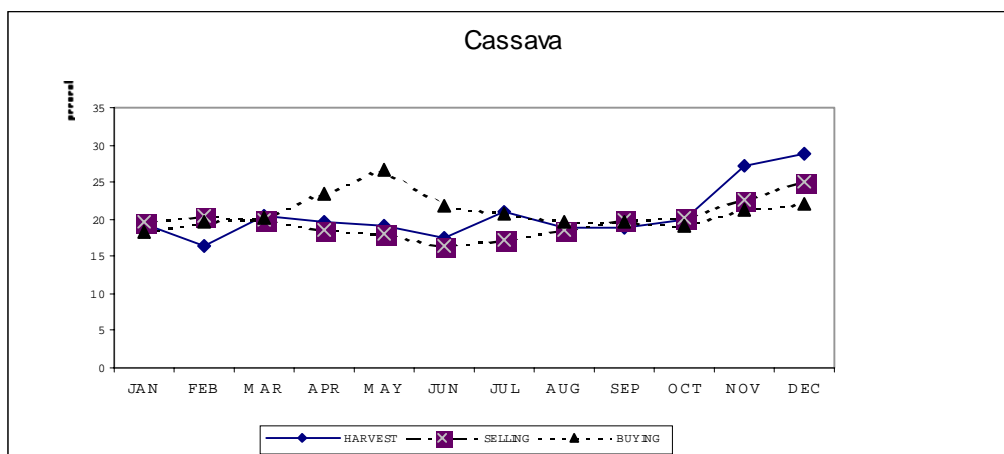


Majority of maize growing households harvest their crop during the third quarter, July-September, while most of the rice crop and sorghum/millet/guinea corn are harvested during the last trimester, September-December. Of the other crops, yams display quite a strong seasonal pattern in harvesting, with most of the yams being harvested around the end of the year. Plantain displays a much more even pattern of harvesting, but with a peak around the end of the year. Cassava is the crop with the most consistent pattern of harvesting, with harvesting being reported every month of the year by about a third of cassava growing households.

Sales of maize by households spread evenly across the months of the year, with deviations in June, October and January. In the case of rice and sorghum/millet/guinea corn, the selling of these crops follows within a month or two after the harvest. Sales of plantain and yam mirror exactly the harvesting pattern, with peak selling occurring in the month of peak harvesting. Apart from the months of May, June and July cassava is fairly evenly sold throughout the year; in the rest of the months of the year about a fifth of the households growing cassava report a sale.

Figure 7.2: Seasonal patterns of harvesting, selling and buying other crops amongst those households, which cultivate those crops.





The purchasing of a crop for home consumption by households that grow that crop has the same seasonal pattern for all the crops. Figures 7.1 and 7.2 depict a complete symmetry between harvesting and buying for all the crops, meaning that most farmers, as expected, buy these crops when harvest is at its minimum.

7.4 Other agricultural income

This section reports on the analysis of households that derive some income in cash or kind from sales of other types of agricultural produce other than grains, vegetables, roots and cash crops. Table 7.10 provides estimates, at the national level, of the number of households receiving income from each source and the annual amount received. Estimates of the number of households are given to the nearest 1,000, and estimates of sales to the nearest 100 million cedis, to indicate that they may be subject to fairly large margins of sampling error.

Table 7.10 Estimates of number of agricultural households selling various types of agricultural produce, and estimated value of sales

Source of sales	National estimates	
	Number of households	Annual sales (billion cedis)
Hunting (including snails)	164,000	13.1
Honey	41,000	1.7
Palm wine/akpeteshie/pito	118,000	50.0
Fruit berries	194,000	6.6
Milk	1,000	0.1
Other dairy products	7,000	1.5
Eggs	121,000	4.0
Hides, wool, skin	2,000	0.3
Mushrooms	68,000	0.7
Total		71.5

Since information on these sales was only sought from those households that owned or operated a farm or kept livestock, any sales by non-agricultural households are excluded. The total annual value of sales of agricultural produce by agricultural households is about ₦72 billion. Most of this agricultural income comes from the sale of palm wine/akpeteshie, pito, mmedaa, and similar drinks (₦50 billion). Sale of produce from hunting (including snail collection) brings a total of ₦13.1 billion, sale of fruits/berries and others yields ₦6.6 billion and the sale of eggs amounts to a further ₦4.0 billion. Relatively small amounts are received from sales from other agricultural produce, such as honey, mushrooms, hides, wool and skins.

7.5 Agricultural inputs

Table 7.11 provides a summary of results on various costs involved in producing crops and costs in raising livestock. The figures are projected to the national level. More than half (about 1.8 million) of households, which cultivated crops in the last 12 months, hired labour on their farms, and over half (1.9 million) of them spent money on hand tools. Other farm inputs, which many agricultural households spend money on, are seeds, bags, containers, strings and fertilizers. In all, a total of about ₦358 billion was spent on crop inputs in the 12 months preceding the interview. Hired labour (₦166 billion) represented almost half (46%) of this total cost; other important items, in terms of cost were purchased seeds (₦30 billion), hand tools (₦24 billion being spent on locally made hand tools, and ₦2 billion cedis on imported hand tools), inorganic fertilizer (₦25 billion), organic fertilizer (₦16 billion) and transport of crops (₦15 billion). Renting of equipment also cost about ₦15 billion to agricultural households.

Most of the households who used fertilizers, insecticides, herbicides and others, obtained the items mainly from the private sector. The percentage supplied by the private sector ranged from 53 percent in the case of insecticides to 99 percent in the case of renting animals (Table 7.11).

Table 7.11 Availability and cost of purchasing farm inputs

Input	Estimated no. of households purchasing in last 12 months	Amount spent per year (cash & kind)	Percent obtaining Item from:		Percent reporting that item is sometimes unavailable
			Private sector (%)	Ministry of Agriculture (%)	
(billion cedis)					
<u>Crop inputs</u>		<u>358.2</u>			
Fertilizer (inorganic)	372,000	25.3	72.6	21.0	14
Organic fertilizer	186,000	16.4	80.2	16.5	23
Insecticides	447,000	26.7	53.1	39.9	22
Herbicides	106,000	6.8	63.9	31.6	8
Storage of crops	147,000	3.0			
Purchased seed	92,000	30.3	79.6	9.6	16
Irrigation	6,000	0.8			
Bags, containers, strings	724,000	10.6	96.7	1.1	14
Petrol/diesel/oil	207,000	3.2			12
Spare parts	28,000	4.8	89.5	5.3	26
Hired labour	1,854,000	165.9			18
Transport of crops	300,000	15.2			
Renting animal	100,000	3.0	99.3	-	5
Renting equipment	198,000	15.4			34
Hand tools (local)	1,931,000	24.3			5
Hand tools (imported)	160,000	1.8			
Repairs/maintenance	70,000	0.8			
Other crop cost	139,000	3.9			
<u>Livestock inputs</u>		<u>38.7</u>			
Animal feed (inc. salt)	151,000	8.9	79.1	14.5	12
Veterinary services/medicine	381,000	7.2	22.5	76.5	22
Paid labour for herding	52,000	7.3			20
Maintenance of pens/stables	203,000	4.8			4
Transport of animal feed	24,000	0.7			
Commission on sale of animals	47,000	0.5			
Compensation for damage caused by animals	203,000	4.9			
Other livestock costs	20,000	0.2			
Hired labour	10,000	4.3			9
<u>Fish inputs</u>		<u>81.0</u>			
Fuel	8,000	31.5	70.0		30
Hired labour	19,000	27.3			24
Spare parts	8,000	11.8	77.8		22
Repair & maintenance	48,000	7.9	92.3		19
Hiring equipment	4,000	1.3	100.0		100
Other inputs	11,000	81.0	100.0		21

In respect of livestock inputs, about €39 billion was spent in the previous 12 months, with the major items in terms of cost being animal feed, paid labour and veterinary services (accounting for €9 billion, €7 billion and €7 billion respectively). Animal feed is normally obtained from the private sector, while the Ministry of Food and Agriculture normally provides veterinary services.

7.6 Home processing of agricultural produce

Detailed information on processing of crops or smoking of fish is presented in Table 7.12. Unlike the previous section, estimates in this section include both agricultural and non-agricultural households. In all, almost 2.5 million households in the country, representing about 61 percent of all households, are involved in crop processing or the smoking of fish. Almost 40% of urban households and 75% of rural households are engaged in processing. In rural forest and rural savannah the proportion engaged in processing of agricultural produce is higher than the proportion in rural coastal. In each of the three ecological zones it is women who have the prime responsibility for the processing of agricultural produce or fish; in all localities more than four-fifths of those involved in processing were found to be women.

Table 7.12 Distribution of households processing crops or fish for sale or use by the household, by locality

Locality	Households processing crops or fish for sale or use by the household		Women's share of responsibility for processing
	Percentage	Estimated number	
Urban areas	38	557,000	89
Rural areas	75	1,932,000	90
Rural coastal	60	355,000	85
Rural forest	72	970,000	90
Rural savannah	93	607,000	92
Ghana	61	2,489,000	90

The main activities (shown in Table 7.13) are the processing of maize flour (undertaken by 50 percent of households and spread across all three main ecological zones), the processing of flour from other grains, and the processing of cassava flour (involving 44,000 households, living mainly in the rural savannah and rural forest zones). Other major food processing activities include the processing of shelled groundnuts, husking and polishing of rice and the preparation of gari.

Virtually every household that reported that they had engaged in a processing activity during the previous 12 months, had actually done some processing during the two weeks immediately preceding the interview. Total annual labour costs (in cash and in kind, including the time spent on these activities by the household members themselves) are estimated at ₵220 billion, while other costs are ₵409 billion. In many cases the households themselves had produced the agricultural item being processed originally, but in a few instances (especially for home-brewed drink and fish) the raw materials are purchased or obtained from other sources.

Total annual sales of home-processed agricultural items and smoked fish amount to about ₵1,283 billion. Home brewed drink, processed fish, gari and other nuts are the items that were frequently processed during the two-week period. These were also the ones that were most likely to be sold in the previous two weeks of the interview. In contrast, very few of those who processed flour, rice or shelled groundnuts reported that they sold any in the previous two weeks (Table 7.13).

Table 7.13 Estimated number of households processing various agricultural items, value of labour and other inputs, percentage selling the items, and estimated annual value of sales

Item processed/transformed	Estimated no. of households processing item in the last 12 months	Estimated annual value of labour costs (billion cedis)	Estimated annual value of other costs (billion cedis)	Percent selling the item in the last 2 wks	Estimated annual value of sales (billion cedis)
Maize flour	2,014,000	67.1	95.8	5	256.1
Flour from other grains	103,000	17.4	67.5	4	102.5
Husked/polished rice	22,000	10.0	30.7	5	90.3
Home brewed drink	9,000	8.5	10.4	45	56.4
Cassava flour	44,000	12.8	20.8	6	31.2
Shelled groundnut	20,000	9.3	4.9	3	24.5
Processed fish	71,000	39.1	96.4	48	386.0
Gari	70,000	7.3	2.7	17	34.2
Shea butter	3,000	14.6	5.2	20	38.5
Other nuts	59,000	10.6	16.3	26	61.4
Other	74,000	23.3	58.7	18	202.2
Any/all items		220.1	409.3		1,283.2

7.7 Home consumption of own produce

The survey collected detailed information on all home-produced food, which was consumed by the household itself. Starting from the second visit by the interviewer, the household was asked to indicate how much of each home-produced item they had consumed since the interviewer's previous visit. As expected, for many households, particularly in rural areas, a large proportion of the food consumed comes from their own produce.

The quantities consumed of each item of home-produced food were stated in units chosen by the respondent, who was then asked to state, for each item, how much they could now sell one unit for. These prices, which can be regarded as being farm-gate prices, were then used to value the household's consumption of home-produced food.

On average, relative to March 1999 prices, each household in Ghana consumed a quantity of home-produced food which was valued at about ₵424,000 annually (Table 7.14). This works out to about ₵98,000 annually on a per capita basis, or ₵1,700 billion if projected to the national level.

Roots and tubers account for about sixty percent of the total value of home consumption. The other food subgroups, which feature prominently in home consumption, are cereals and cereal products (14%), vegetables (7%), and pulses and nuts (5%). Appendix Table A7.1 gives the detailed breakdown of home consumption of different food items, while Appendix Table A7.2 gives the percentage of households in different localities who reported that they had consumed each home-produced item in the previous 12 months.

Table 7.14 Value of average annual household and per capita consumption of home-produced food, and estimate of total national value, by food subgroup

GROUP	Consumption of food produced by the household itself			
	Average annual household consumption	Average annual per capita consumption	Estimated value of national annual consumption	Percentage distribution
	(cedis)	(cedis)	(billion cedis)	%
1. Food & Beverages	424,105	98,387	1,717	99.5
Cereals and cereal products	61,194	14,196	249	14.4
Roots and tubers	253,508	58,810	1,032	59.8
Pulses and nuts	22,367	5,189	91	5.3
Vegetables	30,466	7,068	124	7.2
Fruits	4,466	1,036	18	1.1
Oils and animal fats	3,839	891	16	0.9
Meat	14,862	3,448	60	3.5
Poultry and poultry products	12,135	2,815	49	2.9
Fish	19,310	4,480	79	4.6
Milk and milk products	39	9	0	0.0
Non-alcoholic beverages	3	1	0	0.0
2. Alcohol & Tobacco	1,575	368	8	0.5
Alcoholic drinks	1,575	368	8	0.5
All Home Consumption	434,915	101,527	1,725	100.0
Sample size	5998	25,855		

As one would expect, much of home consumption takes place in rural areas; on average, the value of home produced food consumed annually by rural households was about ¢603,000 around March 1999, while the corresponding figure for urban households was only ¢116,000 (Table 7.15). Overall, urban households, which constitute about a third of the total population, account for only ten percent of the total home-produced food consumed by households.

Table 7.15 Value of average annual household and per capita consumption of home produced food, and national estimate, for urban and rural households, by food subgroup

GROUP	Consumption of food produced by the household itself							
	Urban areas				Rural areas			
	Average annual household consumption	Average annual per capita consumption	Estimate of total annual consumption	Percentage distribution	Average annual household consumption	Average annual per capita consumption	Estimate of total annual consumption	Percentage distribution
	(cedis)	(cedis)	(billion cedis)	%	(cedis)	(cedis)	(billion cedis)	%
1. Food & Beverages	114,267	29,222	170	98.8	600,427	132,187	1,546	99.6
Cereals and cereal products	12,196	3,119	18	10.5	89,556	19,716	231	14.9
Roots and tubers	75,116	19,209	112	65.0	356,768	78,544	919	59.2
Pulses and nuts	2,885	738	4	2.5	33,644	7,407	87	5.6
Vegetables	8,338	2,132	12	7.2	43,274	9,527	111	7.2
Fruits	885	226	1	0.8	6,539	1,440	17	1.1
Oils and animal fats	417	107	1	0.4	5,820	1,281	15	1.0
Meat	1,001	256	1	0.9	22,886	5,038	59	3.8
Poultry and poultry products	1,948	498	3	1.7	18,031	3,970	46	3.0
Fish	11,481	2,936	17	9.9	23,841	5,249	61	4.0
Milk and milk products	0	0	-	0.0	61	12	0	0.0
Non-alcoholic beverages	0	0	-	0.0	5	1	0	0.0
2. Alcohol & Tobacco	1,378	352	2	1.2	2,227	490	6	0.4
Alcoholic drinks	1,378	352	2	1.2	2,227	490	6	0.4
All Home Consumption	115,645	29,574	172	100.0	602,654	132,677	1,552	100.0
Sample size	2199	8599			3799	17,256		

The differences in value of various food items consumed by the coastal areas on one hand and the forest and savannah areas on the other hand are shown in Table 7.16. Consumption of home-produced food is more prevalent in the savannah and forest areas than it is in the coastal areas. The average annual value of home-produced food consumed by households in the savannah zone is ₦696,000; the corresponding figure for the forest zone is ₦492,000, and for the coastal zone it is ₦179,000.

In the coastal areas, roots and tubers account for almost two-thirds of the value of all home-produced food consumed by households, fish account for about 10 percent, while cereals and cereal products account for no more than 9 percent. Roots and tubers also account for almost three-quarters, cereals 11 percent and vegetables 7 percent of total home consumption in the forest areas.

In the savannah zone roots and tubers accounts for about two-fifths of total consumption. Pulses and nuts, and vegetables, are also common items among home consumption for households in the savannah, than for households further in the forest and coastal areas.

Table 7.16 Value of average annual household and per capita consumption of home produced food, and national estimate, by ecological zone and food subgroup

GROUP	Consumption of food produced by the household itself											
	Average annual household consumption				Average annual per capita consumption				Percentage distribution			
	Coastal	Forest	Savannah	Ghana	Coastal	Forest	Savannah	Ghana	Coastal	Forest	Savannah	Ghana
	(cedis)				(cedis)				%	%	%	%
1. Food & Beverages	178,606	490,829	688,416	422,189	45,933	119,211	125,623	97,943	99.8	99.8	99.1	99.6
Cereals and cereal products	16,034	52,210	159,761	61,194	4,124	12,681	29,153	14,196	9.0	10.6	23.0	14.4
Roots and tubers	114,428	356,911	259,970	253,508	29,429	86,686	47,440	58,810	64.0	72.6	37.4	59.8
Pulses and nuts	10,753	16,232	56,386	22,367	2,765	3,942	10,289	5,189	6.0	3.3	8.1	5.3
Vegetables	10,393	32,037	61,665	30,466	2,673	7,781	11,253	7,068	5.8	6.5	8.9	7.2
Fruits	1,801	7,100	3,112	4,466	463	1,724	568	1,036	1.0	1.4	0.4	1.1
Oils and animal fats	1,611	4,683	5,786	3,839	414	1,137	1,056	891	0.9	1.0	0.8	0.9
Meat	1,120	6,372	57,903	14,862	288	1,548	10,566	3,448	0.6	1.3	8.3	3.5
Poultry and poultry products	3,548	12,835	25,417	12,135	912	3,117	4,638	2,815	2.0	2.6	3.7	2.9
Fish	18,918	2,436	58,236	19,310	4,865	592	10,627	4,480	10.6	0.5	8.4	4.6
Milk and milk products	0	13	164	39	0	3	30	9	0.0	0.0	0.0	0.0
Non-alcoholic beverages	-	0	16	3	-	0	3	1	-	0.0	0.0	0.0
2. Alcohol & Tobacco	215	839	7,301	1,916	55	204	1,332	444	0.1	0.2	1.0	0.5
Alcoholic drinks	215	839	7,301	1,916	55	204	1,332	444	0.1	0.2	1.0	0.5
All Home Consumption	178,820	491,668	695,717	424,105	45,989	119,416	126,956	98,387	100.0	100.0	100.0	100.0
Sample size	2078	2720	1200	5998	8080	11199	6576	25855				

Table 7.17 shows, for each region, the percentage distribution of the value of home produced food across food subgroups. It highlights the differences in home consumption between the south and the north of the country; in particular, in the two upper northern regions (Upper West and Upper East Regions), which fall entirely within the savannah ecological zone, cereals and cereal products account for a larger share of home consumption than do roots and tubers.

Households in the Upper East Region also make greater use of pulses and nuts, and vegetables, taken from their own production. There is even balance between roots and tubers on one hand, and cereals and cereal products on the other hand in terms of their share of consumption of own-produce in the Northern Region. Each group accounts for about a quarter of total home consumption in the region. Other important sub-groups are meat (20%), vegetables (11%), and pulses and nuts (10%).

Table 7.17 Distribution of consumption of own produce across food subgroups, by region (percent)

	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
	%	%	%	%	%	%	%	%	%	%	%
Cereals & cereal products	6.9	8.7	5.4	17.2	10.1	10.2	9.2	27.9	61.0	51.3	14.4
Roots & tubers	76.0	63.8	27.4	43.5	73.4	76.1	74.3	22.8	3.4	1.3	59.8
Pulses & nuts	2.9	4.4	1.4	4.5	5.9	2.0	3.2	10.4	9.3	24.1	5.3
Vegetables	5.4	8.0	1.1	7.2	4.1	6.9	9.7	10.5	5.8	11.3	7.2
Fruits	1.4	1.5	0.0	0.4	1.2	1.2	1.5	0.0	3.1	-	1.1
Oils & animal fats	0.8	1.6	-	0.1	1.2	1.1	0.1	1.1	6.6	0.0	0.9
Meat	1.5	1.4	0.0	0.2	1.6	0.6	0.6	19.8	0.2	0.0	3.5
Poultry & poultry products	3.2	4.2	4.2	1.9	2.0	1.5	1.4	5.2	1.3	11.2	2.9
Fish	1.6	6.2	60.5	25.0	0.4	0.1	-	1.0	-	-	4.6
Milk & milk products	-	0.0	-	0.0	0.0	-	0.0	0.1	-	0.0	0.0
Non-alcoholic beverages	-	-	-	0.0	-	-	-	-	0.0	-	0.0
Alcoholic drinks	0.3	0.2	-	0.0	0.1	0.3	0.0	1.2	9.2	0.8	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average household consumption	695,044	282,486	24,588	489,326	534,490	302,420	670,697	953,020	383,616	220,972	424,105
Average per capita consumption	147,946	85,565	6,888	104,008	136,409	73,744	160,896	129,614	55,064	49,147	98,387
Total consumption	301	134	14	212	297	217	246	233	31	39	1,725
Sample size	639	700	859	640	820	1060	540	360	120	260	5,998
Households reporting consumption	419	537	58	530	639	758	455	318	115	246	4,075

8 NON-FARM ENTERPRISES

8.1 Characteristics of non-farm enterprises

Apart from agricultural data, detailed information was also collected on all non-farm enterprises or businesses operated by households. Respondents were asked whether, during the previous 12 months, any household member had operated his or her own business or trade, or worked as a self-employed professional or craftsman or fisherman. If they did, details were collected of the type of activity undertaken, and the person in the household who was responsible for that activity. Up to three activities were listed in order of importance, in terms of how much money they brought into the household. Detailed information was then collected for these business activities, covering basic background information about how the business was operated, the expenditures incurred, the assets of each business, the revenues received, and estimates of net income and inventory of each business.

Approximately 1.9 million households in Ghana, representing 49 percent of all households, operate a non-farm enterprise of one sort or another (Table 8.1). Because some households have more than one business activity, the total number of businesses operated is somewhat higher (about 2.3 million). Restricting the collection of information to the first three enterprises operated by each household did not lead to the loss of any appreciable amount of information, since very few households undertake more than three activities.

It is significant to note that women play a major role in operating many of these businesses. Asked to identify the household member who knew most about each activity, respondents reported a female member of the household in two cases out of every three. Where a male member of the household is involved in a non-farm enterprise, it is nearly always the head of household; in half the cases where a female is responsible, the person is the wife of the head of household, while in most of the other cases the person is herself the head of household.

In terms of type of household activity, manufacturing and trading account for 80 percent of all non-farm businesses, with trading outnumbering manufacturing by 2 to 1. In total, there were about 550,000 household manufacturing enterprises, 1.3 million trading enterprises, and 460,000 other types of enterprise.

Table 8.1 Basic Characteristics of non-farm enterprises

Locality	Proportion of households operating a business	Estimated number of households operating a business	Estimated number of businesses operated by industrial classification				Proportion operated by females
			M ² ufacturing	Trading	Others	Total	
Accra	61.8	250,000	50,000	190,000	60,000	300,000	64.5
Other Urban	54.4	590,000	160,000	410,000	150,000	710,000	70.9
Rural Coastal	56.2	330,000	120,000	240,000	50,000	420,000	70.8
Rural Forest	46.2	540,000	130,000	330,000	170,000	630,000	63.7
Rural Savannah	31.6	200,000	80,000	120,000	30,000	220,000	54.9
Ghana	49.0	1,910,000	550,000	1,290,000	460,000	2,300,000	66.3

One eighth of the non-farm enterprises operated by the households stated that their businesses had been registered with a government agency. Information collected on the most difficult factors affecting the establishment of non-farm enterprises clearly showed that the major problem is lack of credit or capital to start with. About 60 percent of the respondents cited capital or credit as the most limiting factor for their enterprises. Only 3 percent identified technical know-how as their major drawback, while less than 1 percent attributed their difficulty to government regulation. Over a third (35%) of the enterprises were operating without any difficulty.

Most of the enterprises were set up with household savings, assistance from relatives or friends and proceeds from family farm. In all, less than half (46%) of the enterprises were set up with household savings, and about a third of them were established with loans from relatives. Proceeds from family farms accounted for about 2 percent. Other sources of funding include proceeds from non-farm enterprises (2.4%), remittances from abroad (0.9%), income from family property, and other sources of social support including NGOs, District Assemblies, solidarity associations and church assistance.

As to whether in the previous 12 months any of the households had tried to obtain financial assistance from any bank or other financial institution, it was observed that majority of enterprises (93%) did not. Five percent of the enterprises had tried to obtain assistance but had been unsuccessful; only 2 percent succeeded in obtaining credit from financial institutions.

Few enterprises rely on outside sources for their operations. Over 80 percent of enterprises did not depend on credit from any source during the previous 12 months. Of the remainder, 8 percent relied on family and friends and 6 percent utilized proceeds from their operations, while 1 percent used credit from a bank or financial institution. For those enterprises that utilised a credit facility, from whatever source, the loans during the 12-month period ranged from ¢1000 to almost ¢6 million. Almost half of the enterprises (45%) appeared not to have repaid any part of their loans (including in-kind payments) in the previous 12 months.

8.2 Expenditure inputs, assets, revenues, and net income

Detailed information was also collected on the value of different inputs to non-farm enterprises. Table 8.2 shows the detailed breakdown of expenditure inputs, separately for enterprises engaged in manufacturing, trading or other activities; the latter group covers a wide variety of activities and it is therefore difficult to interpret the significance of the average values obtained. On average, households spend about ¢3.4 million annually on inputs for non-farm household enterprises. Trading enterprises spend 4.3 million cedis, while expenditures on manufacturing enterprises average ¢2.3 million.

More than 80 percent of expenditures on trading is spent on articles purchased for resale. Expenditures on raw materials constitute the largest component among the manufacturing items accounting for almost two-thirds of the total value of inputs. Also shown in Table 8.2 are estimates of the total value of all inputs to household non-farm enterprises. More than ¢7,700 billion worth of inputs are used for these businesses annually; about ¢5,500 billion worth of inputs are used for trading establishments, ¢1,234 billion for manufacturing enterprises, and the remaining ¢980 billion for other types of non-farm enterprises.

Table 8.2 Expenditure on inputs to non-farm enterprises

Expenditures item	Average annual expenditure on input per enterprise (cedis)				Estimated national annual value of inputs			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
		(cedis)				(billion cedis)		
Hired labour	266,700	47,600	344,500	159,100	146	61	158	365
Raw materials	1,314,900	204,800	460,600	519,900	718	264	212	1194
Spare parts	91,100	64,600	273,800	112,800	50	83	126	259
Articles for resale	154,700	3,638,000	331,800	2,147,900	84	4694	153	4931
Rental of land/buildings	7,000	9,500	15,500	10,200	4	12	7	23
Rental of machinery	14,600	500	17,100	7,200	8	1	8	16
Maintenance/repairs	17,100	2,800	67,500	19,200	9	4	31	44
Rental of vehicles	22,300	24,500	8,300	20,800	12	32	4	48
Oil and fuel	137,600	15,100	391,600	119,600	75	20	180	275
Other transport	41,300	150,300	46,100	103,500	23	194	21	238
Electricity	20,600	6,400	33,300	15,200	11	8	15	35
Water	13,900	6,700	28,000	12,600	8	9	13	29
Taxes	27,800	31,800	34,900	31,500	15	41	16	72
Other expenses	131,400	53,600	78,900	77,100	72	69	36	177
Total expenditure	2,261,000	4,256,300	2,132,000	3,356,600	1,234	5,492	980	7,706
Sample size	805	1903	678	3386				

Table 8.3 shows the sources of revenue for non-farm enterprises, and how the income was allocated. On average non-farm enterprises received over ₺4 million annually; trading and other enterprises tended to receive more on average than manufacturing enterprises. Almost all the revenue was received in the form of cash. For the country as a whole, the total amount received was about ₺9,750 billion. Of the income distribution, the largest share (₺731,800 on average) went to the household itself; each enterprise saved on average ₺248,000 per annum on its operations, while smaller amounts went to other households or were used for other purposes.

Information was collected on the fixed assets owned by the non-farm businesses, such as buildings, land, equipment, tools or machinery, and vehicles of various kinds. An attempt was then made to estimate the element of depreciation involved. For this purpose the value of buildings and equipment/tools/machinery was assumed to depreciate by 11 percent per annum geometrically, while land was assumed not to lose value; vehicles were assumed to depreciate by 40 percent per annum, and other items by 32 percent.

Table 8.3 Sources of revenue, and allocation of income, from non-farm enterprises

	Average revenue per enterprise (cedis)				Estimated national revenue (billion cedis)			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
<u>Sources of revenue</u>								
Cash received	2,684,800	4,823,500	2,867,900	3,923,900	1,553	6,538	1,365	9,456
Receipts as goods & services	8,700	2,300	11,700	5,700	5	3	6	14
Home consumption of output	81,900	147,600	48,200	112,200	47	200	23	270
Income from rentals	300	5,400	3,500	3,800	0	7	2	9
Total	2,775,700	4,978,800	2,931,300	4,045,600	1,605	6,748	1,396	9,749
<u>Allocation of income</u>								
Own household	638,600	698,000	941,300	731,800	369	946	448	1,764
Other households	26,200	27,900	65,000	31,800	15	38	31	84
Savings	171,400	243,800	352,700	248,000	99	331	168	598
Other purposes	43,800	69,200	100,100	69,200	25	94	48	167
Total	880,000	1,038,900	1,459,100	1,080,800	508	1409	695	2,613

Overall, each non-farm enterprise experienced an annual depreciation in its assets of about ¢230,000 (Table 8.4). Manufacturing enterprises recorded on average annual depreciation of ¢160,000 of their assets, while that of trading enterprises depreciated by about ¢150,000. The major depreciation of assets, averaging about ¢560,000 per annum occurred with the 'other' businesses, principally due to the assumed depreciation in the value of cars used by enterprises in the transport sector. Overall, there is an estimated total depreciation of assets of about ¢540 billion a year, with almost ¢260 billion of this amount being accounted for by the relatively small number of 'other' non-farm enterprises.

Table 8.4 Estimates of depreciation for assets of non-farm enterprises

Asset	Average annual depreciation per enterprise (cedis)				Estimated annual depreciation (billion cedis)			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
Buildings	44,100	30,100	52,300	37,900	24	39	24	87
Lands	0	0	0	0	0	0	0	0
Machines/Equipments/Tools	30,400	2,400	43,000	17,200	17	3	20	40
Bicycles	1,700	1,400	5,700	2,300	1	2	3	5
Carts	0	0	500	100	0	0	0	0
Cars	34,200	48,700	313,900	98,400	19	63	144	226
Boats	0	100	0	100	0	0	0	0
Other vehicles	26,700	52,900	125,300	61,200	15	68	58	140
Other	25,400	13,900	17,300	17,300	14	18	8	40
Total	162,600	149,700	558,100	234,500	90	193	257	538

Table 8.5 provides a summary balance sheet for manufacturing, trading, and 'other' non-farm enterprises. The analysis of the figures suggests some discrepancy in reported incomes and/or expenditures; incomes appear to be underreported or the expenditures overreported. This means that, after allowing for expenditure on inputs and for depreciation, there should be very little left over from income for distribution, but the reported figure for disposed income suggests otherwise.

The average annual income reported by non-farm enterprises was ¢4,045,600, while expenditures on inputs were ¢3,356,600 and depreciation was estimated at ¢234,500; this leaves only ¢454,500 for distribution, yet on average businesses reported distribution of ¢1,080,800. The figures presented in this section should therefore be treated with caution, but they may nonetheless provide some useful indicators of general trends.

Table 8.5 Summary of incomes and expenditures for non-farm enterprises

	Average annual amount (cedis)				Estimated national amount (billion cedis)			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
Income received	2,775,700	4,978,800	2,931,300	4,045,600	1,605	6,748	1,396	9,749
Expenditure on inputs	2,261,000	4,256,300	2,132,000	3,356,600	1,234	5,492	980	7,706
Depreciation of assets	162,600	149,700	558,100	234,500	90	193	257	538
Disposal of income	880,000	1,038,900	1,459,100	1,080,800	508	1409	695	2,613

9. TOTAL HOUSEHOLD INCOME AND EXPENDITURE AND THEIR COMPONENTS

9.1 Total household expenditure

The survey methodology enables the derivation of estimates of total income and total expenditure for each household covered in the survey, together with estimates of all key components of the totals, as set out in Appendix 2. As described at the beginning of this report, the 25,855 individuals covered in GLSS 4 were ranked into five quintiles on the basis of total expenditure (both actual and imputed) per capita.

The average annual household expenditure and per capita expenditure, for each quintile, is shown in Table 9.1. Average annual household expenditure, relative to March 1999 prices, was ¢4,244,000 while average annual per capita expenditure was ¢987,000 for the same period. At the exchange rate of about ¢2,394 to the US dollar prevailing in March 1999, these figures correspond to about US\$1,773 and US\$412, respectively.

Looking at the differences across the quintiles, Table 9.1 shows that the average annual household expenditure in the fifth quintile (¢6,422,000) was more than thrice that in the first quintile (¢1,658,000). Households in the first quintile, however, had an average household size of almost 6 persons, while those in the top quintile had an average of almost 3 persons. As a result of this difference, the contrast in per capita expenditure between quintiles is very marked, with the average annual per capita expenditure for those in the fifth quintile (¢2,293,000) being more than eight times that of the average in the first quintile (¢281,000). The net result of these differences is that the 20 percent of the individuals in the lowest quintile have only 5.7% of total expenditure, while the top 20 percent have almost 46% of total expenditure.

Table 9.1 Mean annual household and per capita expenditure, by quintile group

Quintile group	Mean annual household expenditure (cedis)	Mean annual per capita expenditure* (cedis)	Percentage shares			Mean household Size	Sample size	
			Hhlds	Persons	Exp.		Hhold s	Persons
			%	%	%			
Lowest	1,658,000	281,000	14.7	20.0	5.7	5.9	919	5,170
Second	2,747,000	509,000	15.9	20.0	10.3	5.4	1004	5,152
Third	3,538,000	737,000	18.1	20.1	15.0	4.8	1139	5,184
Fourth	4,655,000	1,135,000	21.1	20.0	23.2	4.1	1261	5,177
Highest	6,422,000	2,293,000	30.3	20.0	46.0	2.8	1675	5,171
All	4,244,000	987,000	100.0	100.0	100.0	4.3	5,998	25,855

Note: Mean per capita expenditure is equal to total household expenditure divided by total number of persons in the household; it can be obtained by dividing mean household expenditure by mean household size.

The relative position of individual regions can be obtained by comparing the average per capita expenditure for each region with the averages for other regions, and by looking at the distribution of households between the different quintiles (Table 9.2).¹ Average per capita expenditure is highest in Greater Accra Region (¢1,883,000 at March 1999 prices), followed by Ashanti Region (¢1,221,000) and then Western Region (¢995,000). All the other regions have an average per capita expenditure below the national average of ¢987,000. Each of five regions (Central, Volta, Northern, Upper West and Upper East), has an average per capita expenditure of less than half of that of Greater Accra Region (¢941,000).

Greater Accra Region is better off than other regions: More than 60 % of its households fall into the highest quintile, and very few households, less than 1 %, fall into the lowest quintile. The per capita expenditure levels in Western, Ashanti and Greater Accra Regions are higher than the average, with over 51 percent of the households falling in the top two quintiles.

Table 9.2 Distribution of households in each region, by quintile, and mean annual household and per capita expenditure (Percent).

Region	Quintile						Mean annual household expenditure (cedis)	Mean annual per capita expenditure (cedis)	Sample size	
	1	2	3	4	5	All			Hholds	Persons
	(Percentages)									
Western	6.2	16.0	23.5	24.4	29.9	100.0	4,677,000	995,000	639	3,002
Central	15.4	22.6	19.8	22.4	19.7	100.0	2,977,000	902,000	700	2,311
Greater Accra	0.6	3.2	9.2	26.1	60.9	100.0	6,777,000	1,883,000	859	3,070
Volta	18.2	19.0	22.8	21.9	18.1	100.0	4,000,000	851,000	640	3,011
Eastern	9.8	20.7	23.8	25.0	20.7	100.0	3,736,000	958,000	820	3,213
Ashanti	7.9	11.2	14.9	20.6	45.5	100.0	5,008,000	1,221,000	1,060	4,347
Brong Ahafo	8.3	18.2	23.1	21.2	29.2	100.0	3,544,000	844,000	540	2,251
Northern	40.7	22.0	14.9	12.5	10.0	100.0	2,837,000	386,000	360	2,647
Upper West	47.0	25.4	15.3	8.0	4.2	100.0	2,462,000	352,000	120	836
Upper East	65.4	18.0	8.9	5.1	2.6	100.0	1,793,000	399,000	260	1,169
All	14.7	15.9	18.0	21.1	30.3	100.0	4,244,000	487,000	5,998	25,855

Central Region appears to have the least inequality in expenditure distribution, compared to other regions; almost two-thirds of households in Central Region fall in the three middle quintiles. Central, Eastern and Volta Regions fall slightly below the national average in terms of household per capita expenditure. The poorest regions are the Northern, Upper West and Upper East, where more than 40% of the households fall in the lowest quintile (Table 9.2).

Table 9.3 gives estimates of household and per capita expenditures for different localities and ecological zones. Mean household expenditure is almost 60 percent higher in urban areas than in rural areas, while per capita expenditure is just over 80 percent higher. In the rural areas, per capita expenditure is higher in the forest zone than in the coastal zone, which in turn is higher than in the savannah zone.

¹ In comparing the levels of expenditure between regions, localities and zones, consideration has not been given to possible price differences among different localities of the country.

Table 9.3 Mean annual household and per capita expenditure, and estimated total expenditure, for different localities and zones

Locality	Mean annual household expenditure (cedis)	Mean annual per capita expenditure (cedis)	Estimated total annual exp. (billion cedis)	Percentage share of total expenditure	Mean household size	Sample size	
						Households	Persons
Urban	5,595,000	1,435,000	8,339	48.3	3.9	2,199	8,598
Accra	6,941,000	1,928,000	2,965	17.2	3.6	620	2,287
Other urban	5,054,000	1,264,000	5,374	31.1	4.0	1,579	6,311
Rural	3,463,000	769,000	8,916	51.7	4.5	3,799	17,256
Rural Coastal	3,484,000	850,000	2,190	12.7	4.1	899	3,764
Rural Forest	3,909,000	869,000	4,855	28.1	4.5	1,940	8,159
Rural Savannah	2,656,000	521,000	1,871	10.8	5.1	960	5,333
All	4,244,000	987,000	17,255	100.0	4.3	5,998	25,855

9.2 Components of household expenditure

The breakdown of total expenditure into its components is shown in Table 9.4. Out of the mean annual household expenditure of ¢4 million, 55 percent represents expenditure on food (45 percent in cash and 10 percent for consumption of own-produced food); exactly 2 percent is accounted for by housing costs (actual and imputed). The remaining 42 percent of total expenditure represents other non-food expenditure (36 percent in cash and 6 percent for the imputed value of non-food items used by the household).

Translated into national terms, total annual household expenditure is estimated to be about ¢17,256 billion. Of this amount, annual cash expenditure on food accounted for over ¢7,800 billion, while the annual value of own-produced food consumed by households was almost ¢2,000 billion. Expenditure on housing (actual and imputed) was over ¢300 billion. Other expenditures (actual and imputed expenditures on other non-food items) accounted for the remainder.

Table 9.4 Components of household and per capita expenditure, and estimates of total annual household expenditure

Expenditure component	Mean annual household expenditure (cedis)	Mean annual per capita expenditure (cedis)	Estimated total annual expenditure (billion cedis)	Percentage distribution
Food expenditure (actual)	1,927,000	448,000	7,835	45.4
Food expenditure (imputed)	437,000	102,000	1,778	10.3
Expenditure on housing	84,000	20,000	342	2.0
Other non-food expenditure (actual)	1,534,000	357,000	6,237	36.1
Other non-food expenditure (imputed)	262,000	61,000	1,065	6.2
Total	4,244,000	987,000	17,256	100.0

Note: Expenditure on housing includes both actual and imputed elements.

Table 9.5 shows the distribution of expenditure among components, for each region and for the different localities and ecological zones. Among the notable features of Table 9.5 is the greater importance of food expenditure (actual and imputed) in the overall expenditure of Ghanaian households. The region with the highest percentage of total expenditure on food (actual and imputed) is Upper West (69%) and the lowest is Greater Accra (48%). Rural households spend over 60 percent of their expenditure on food (42.6% on actual and 17.7% on imputed) whereas the urban households spend just over 50 percent of their total expenditure on food (48.4% actual and 2.4% imputed).

Also notable is the higher cost of housing in Greater Accra Region, with housing cost in Accra itself representing over 3 percent of total expenditure. Followed closely are Upper East and Upper West Regions with 2.8 percent and 2.6 percent, respectively of total expenditure.

Table 9.5 Components of household expenditure by locality (percent)

Locality	Component of expenditure					Total	Food (actual & imputed) as percentage of total
	Food		Housing	Other non-food			
	Actual	Imputed	(Atual & imputed)	Actual	Imputed		
Region							
Western	40.5	14.7	1.5	36.9	6.3	100.0	55.3
Central	48.7	11.2	1.9	32.8	5.5	100.0	59.9
Greater Accra	47.4	0.6	3.0	40.2	8.8	100.0	48.0
Eastern	45.2	13.1	1.7	34.8	5.1	100.0	58.4
Volta	43.1	16.0	1.5	35.1	4.3	100.0	59.1
Ashanti	46.3	6.6	1.6	38.3	7.1	100.0	53.0
Brong Ahafo	44.8	17.6	1.5	32.5	3.6	100.0	62.4
Northern	43.0	23.7	2.1	27.8	3.4	100.0	66.7
Upper West	55.0	13.4	2.6	26.3	2.6	100.0	68.5
Upper East	47.4	13.9	2.8	31.4	4.5	100.0	61.4
Urban	48.4	2.4	2.4	39.3	7.5	100.0	50.8
Accra	46.7	0.6	3.2	40.7	8.9	100.0	47.3
Other urban	49.4	3.4	2.0	38.5	6.7	100.0	52.8
Rural	42.6	17.7	1.6	33.2	4.9	100.0	60.3
Rural coastal	48.8	10.1	1.9	33.8	5.4	100.0	58.9
Rural forest	40.9	17.2	1.4	35.0	5.5	100.0	58.1
Rural savannah	39.7	27.8	1.7	27.8	3.0	100.0	67.5
Ghana	45.4	10.3	2.0	36.1	6.2	100.0	55.7

Table 9.6 shows how household expenditure on the different components vary across quintiles. The share of the total budget (actual and imputed) represented by cash expenditure on food remains relatively constant across the quintiles, but consumption of home-produced food remains more important for households which are less well off; as a result, food accounts for only half of the total budget of households in the highest quintile, but over 60 percent of the budget of households in the bottom quintile. The proportion of the total budget

going to housing remains relatively constant across quintiles, but the proportion going to other non-food expenditures (both actual and imputed) is much greater for those households in the higher quintiles.

Table 9.6 Components of household expenditure by quintile (percent)

Quintile	Component of expenditure					Total	Food (actual & imputed) as percentage of total
	Food		Housing	Other non-food			
	Actual	Imputed	(actual & imputed)	Actual	Imputed		
Lowest	45.1	17.6	3.0	31.6	2.7	100.0	62.7
Second	45.1	16.6	2.0	33.2	3.1	100.0	61.7
Third	44.6	14.9	1.8	34.4	4.3	100.0	59.5
Fourth	45.7	11.1	1.9	35.9	5.2	100.0	56.8
Highest	45.6	6.1	1.9	38.1	8.3	100.0	51.7
All	45.4	10.3	2.0	36.1	6.2	100.0	55.7

9.3 Cash expenditure on major expenditure groups

The study involved the collection of very detailed information on household cash expenditures from every household included in the survey. Details of food expenditures were collected at five-day intervals over a period of 35 days in all the households surveyed. Items purchased frequently were covered in the same way, but for less frequently purchased items the reference period was 3 months or 12 months, depending on the household's frequency of purchase. All expenditure values were subsequently projected to give annual estimates.

Table 9.7 shows that Ghanaian households were spending on average almost ¢3,500,000 a year (at March 1999 prices). This is equivalent to an annual per capita expenditure of about ¢804,000 per person. On national terms, total cash expenditure amounted to ¢14,100 billion. Just below half of this cash expenditure (46%) went to food and beverages. Alcohol and tobacco, and clothing and footwear, each accounted for about 10 percent of total cash expenditures. The next most important expenditure groups, in terms of amount spent, were recreation and education (7.6%), transport and communications (5.6%), housing and utility (6.4%) and household goods, operations and services (6.0%).

Table 9.7 Average annual household and per capita cash expenditure, and estimated total national expenditure, by expenditure group

Expenditure Group	Average annual household cash expenditure (cedis)	Average annual per capita expenditure (cedis)	Estimated national annual cash expenditure (billion cedis)	Frequency distribution (percent)
Food & beverage	1,579,970	368,531	6,425	45.6
Alcohol & tobacco	358,325	83,126	1,457	10.3
Clothing & footwear	345,678	80,193	1,406	10.0
Housing & utility	221,717	51,435	902	6.4
Household goods, operation & services	206,890	51,435	841	6.0
Medical care & health expenses	159,409	36,981	648	4.6
Transport & communications	195,223	45,289	794	5.6
Recreation & education	264,306	61,315	1,075	7.6
Miscellaneous goods & services	134,321	31,160	546	3.9
Total	3,465,839	804,026	14,094	100.0

Cash expenditure was much higher in urban areas than in rural areas; average household cash expenditure was ¢4.9 million per annum in urban areas, compared with ¢2.6 million per annum in rural areas (Table 9.8). Considering that rural households tend to be larger than urban households, the differences are even more marked on per capita basis; average cash expenditure was ¢1.3 million per person per year in urban areas, but only around ¢580,000 in rural areas. In percentage terms, rural households spend proportionately more on the following expenditure groups: food and beverages; clothing and footwear; and alcohol and tobacco than their urban counterparts.

Table 9.8 Mean annual household cash expenditure by locality and expenditure group

Expenditure Group	Mean annual household cash expenditure			Percent of total		
	Urban ¢	Rural ¢	Country ¢	Urban %	Rural %	Country %
Food & beverage	2,226,268	1,205,870	1,579,970	45.2	46.0	45.6
Alcohol & tobacco	490,150	282,020	358,325	9.9	10.8	10.3
Clothing & Footwear	439,147	291,575	345,678	8.9	11.1	10.0
Housing & utility	406,633	114,680	221,717	8.2	4.4	6.4
Household goods, operation & services	264,098	173,775	206,890	5.4	6.6	6.0
Medical care & health expenses	201,327	135,145	159,409	4.1	5.2	4.6
Transport & communications	288,018	141,510	195,223	5.8	5.4	5.6
Recreation & education	428,575	169,221	264,306	8.7	6.5	7.6
Miscellaneous goods & services	185,198	104,871	134,321	3.8	4.0	3.9
Total	4,929,415	2,618,668	3,465,839	100.0	100.0	100.0
Sample size (Households)	2199	3799	5998			

Aggregating up the survey data to get national estimates (Table 9.9), urban areas account for only a third of the total population, but account for 52 percent of total annual cash expenditures (¢7,359 billion at March 1999 prices, as against ¢6,744 billion spent by residents in rural areas). Rural areas' share of total cash expenditures per expenditure group is highest for medical care and health expenses (54%), and lowest for housing and utility (33%).

Table 9.9 Mean annual per capita cash expenditure, and estimated total annual cash expenditure, by locality and expenditure group.

Expenditure Group	Mean annual per capita cash expenditure			Estimated total annual cash expenditure per group			Rural share of total cash expenditure
	Urban	Rural	Country	Urban	Rural	Country	
	¢	¢	¢	(billion cedis)			%
Food & beverage	569,318	265,479	366,531	3,319	3,106	6,425	48.3
Alcohol & tobacco	125,345	62,088	83,126	731	726	1,457	49.8
Clothing & Footwear	112,302	64,192	80,193	665	751	1,406	53.4
Housing & utility	103,987	25,247	51,435	606	295	902	32.7
Household goods, operation & services	67,537	38,258	47,996	394	448	841	53.3
Medical care & health expenses	51,485	29,753	36,981	300	348	648	53.7
Transport & communications	73,654	31,154	45,289	429	364	794	45.8
Recreation & education	109,598	37,255	61,315	639	436	1,075	40.6
Miscellaneous goods & services	47,360	23,088	31,160	276	270	546	49.5
Total	1,260,586	576,514	804,026	7,359	6,744	14,094	47.9
Sample size (Persons)	8,599	17,256	25,855				

Variations in the pattern of expenditure among the different quintiles are shown in Table 9.10. Total cash expenditure per person in the highest quintile is about 25 times that in the lowest quintile. For four expenditure groups (food and beverages; alcohol and tobacco; clothing and footwear; and household goods, operation and services), individuals in the highest quintile spend about twenty times as much per capita as individuals in the lowest quintile; the corresponding ratios for other expenditure groups are 28 times as much for medical care and health expenses, and for recreation and education, 26 times as much for housing and utility, 42 times for miscellaneous goods and services, and as much as 53 times for transport and communications.

Table 9.10 Mean annual per capita cash expenditure, by quintile and expenditure group (cedis and percent)

Expenditure Group	Quintile					Country	Quintile					Country
	1	2	3	4	5		1	2	3	4	5	
	¢	¢	¢	¢	¢		%	%	%	%	%	
Food & beverage	102,800	190,591	272,948	428,560	837,293	366,531	47.4	47.9	46.8	46.0	44.3	45.6
Alcohol & tobacco	26,942	40,934	58,856	94,400	194,399	83,126	12.4	10.3	10.1	10.1	10.3	10.3
Clothing & Footwear	23,318	42,999	60,487	91,148	182,916	80,193	10.8	10.8	10.4	9.8	9.7	10.0
Housing & utility	10,747	21,713	34,237	65,379	125,020	51,435	5.0	5.5	5.9	7.0	6.6	6.4
Household goods, operation & services	16,406	25,530	37,422	52,291	108,271	47,996	7.6	6.4	6.4	5.6	5.7	6.0
Medical care & health expenses	9,050	18,415	27,557	41,803	88,029	36,981	4.2	4.6	4.7	4.5	4.7	4.6
Transport & communications	6,845	15,624	26,346	43,460	134,113	45,289	3.2	3.9	4.5	4.7	7.1	5.6
Recreation & education	15,353	29,293	43,237	78,407	140,197	61,315	7.1	7.4	7.4	8.4	7.4	7.6
Miscellaneous goods & services	5,224	12,964	21,947	36,867	78,751	31,160	2.4	3.3	3.8	4.0	4.2	3.9
Total	216,685	398,063	583,037	932,315	1,888,989	804,026	100.0	100.0	100.0	100.0	100.0	100.0
Sample size (Persons)	5,170	5,152	5,184	5,177	5,171	25,855						

9.4 Cash expenditure at the subgroup and item level

In the previous section, the description was on expenditure at the group level. In this section cash expenditure is discussed in greater detail. Table 9.11 shows a similar breakdown of expenditure to that given in Table 9.7, but with expenditure given at the subgroup level. In the food sub group, the major expenditure items are fish (which accounts for 11% of total cash expenditure), cereals and cereal products (8%), roots and tubers (7%), prepared meals (7%), and vegetables (5%). In other groups, important subgroups of expenditure items are education (6% of total cash expenditure), purchased fares (4%), clothing materials (4%) and fuel and power (3%).

Table 9.11 Average annual household cash expenditure, per capita expenditure and estimated total national expenditure, by subgroup of expenditure

Group (subgroup)	Average annual household cash expenditure (Cedis)	Average annual per capita expenditure (Cedis)	Estimated total annual cash expenditure (Billion cedis)	Percentage distribution %
1. Food & Beverage	1,858,306	431,099	7,557	53.5
Cereals and cereal products	286,005	66,349	1,163	8.3
Roots and Tubers	253,860	58,892	1,032	7.2
Pulses and nuts	74,946	17,386	305	2.2
Oils and animal fat	82,938	19,240	337	2.4
Fruits	24,710	5,732	100	0.7
Poultry and poultry products	63,730	14,784	259	1.8
Milk and milk products	40,358	9,363	164	1.2
Fish	367,266	85,201	1,494	10.6
Miscellaneous foods	42,120	9,771	171	1.2
Spices	38,026	8,821	155	1.1
Non-alcoholic beverages	24,748	5,741	101	0.7
Prepared meals	247,344	57,380	1,006	7.1
Soft drinks	33,920	7,869	138	1.0
Meat	108,699	25,217	442	3.1
Vegetables	169,636	39,353	690	4.9
2. Alcohol & Tobacco	79,990	18,557	325	2.3
Alcoholic drinks	68,356	15,858	278	2.0
Cigarettes and tobacco	11,634	2,699	47	0.3
3. Clothing & Footwear	345,678	80,194	1,406	10.0
Clothing materials	136,994	31,781	557	4.0
Tailoring charges	25,767	5,978	105	0.7
Ready made clothes	109,561	25,417	446	3.2
Footwear	73,356	17,018	298	2.1
4. Housing & Utility	126,174	29,272	513	3.8
Rent paid	23,056	5,349	94	0.7
Water	44,119	10,235	179	1.3
Electricity	47,196	10,949	192	1.4
Garbage	2,390	555	10	0.1
Property charges	9,413	2,184	38	0.3
5. Household Goods, Operations & Services	302,433	70,161	1,230	8.8
Fuel and power	95,543	22,165	389	2.8
Soft furnishes	29,325	6,803	119	0.8
Furniture and floor coverings	724	168	3	0.0
Electrical and other appliances	17,327	4,020	70	0.5

Group (subgroup)	Average annual household cash expenditure (Cedis)	Average annual per capita expenditure (Cedis)	Estimated total annual cash expenditure (Billion cedis)	Percentage distribution %
Glassware, utensils, etc	26,280	6,097	107	0.8
Non-durable household goods	131,338	30,468	534	3.8
Household services	1,896	440	8	0.1
6. Medical Care & Health Expenses	159,409	36,991	648	4.6
Medical products and appliances	59,170	13,737	241	1.7
Hospital services	73,350	17,016	298	2.1
Other health services	26,889	6,238	109	0.8
7. Transport & Communication	195,223	45,289	793	5.6
Purchase of personal transport	4,050	940	16	0.1
Operation of personal transport	38,470	8,924	156	1.1
Purchased fares	141,459	32,817	575	4.1
Communication	11,244	2,608	46	0.3
8. Recreation & Education	264,305	61,316	1,075	7.6
Recreation equipment	4,421	1,026	18	0.1
Entertainment	2,413	560	10	0.1
Gambling	33,733	7,826	137	1.0
Newspaper ,books, and magazines	10,807	2,507	44	0.3
Education	212,931	49,397	866	6.1
Miscellaneous Goods & Services	134,321	31,161	547	3.8
Personal care services	49,554	11,496	202	1.4
Personal care goods	37,005	8,585	150	1.1
Jewellery watches ,rings	20,833	4,833	85	0.6
Writing and drawing equipment	1,431	332	6	0.0
Expenditure in restaurants & hotels	1,157	268	5	0.0
Financial and other services	24,341	5,647	99	0.7
Total Cash Expenditure	3,465,839	804,040	14,094	100.0

9.5 Total food consumption expenditure

Cash expenditure and the consumption of home produced food have been treated separately up to this stage. Cash expenditure was examined in Sections 9.3 and 9.4, and home consumption in Section 7.7. In this section these two components are combined, to arrive at estimates of total food consumption, at the household level and on a per capita` basis.

While the estimates of the value of total food consumption for different parts of the country provide some useful insights, it needs to be stressed that some of the differences revealed may not reflect different nutritional intakes by households, as differences in prices between different parts of the country. All cash expenditures and values given for home consumption represent estimates of actual expenditures and values for those areas where the data were collected; no adjustments have been made for possible price differences between localities.

For the country as a whole, the average value of annual household food consumption was about ¢2.4 million at March 1999 prices; on a per capita basis, this works out to about ¢548,000 (Table 9.12). Cash expenditure on food accounts for 96 percent of total food consumption, with the remaining 4 percent representing the value of home-produced food.

At the national level, the total annual value of all food consumed is ₺9,590 billion. The three most important food consumption subgroups, in terms of cash expenditure value, are roots and tubers (22%), fish (16%), and cereals and cereal products (15%). The other important food subgroups are vegetables (8%), and meat (5%). Prepared meals account for 11 percent by value of total food consumption.

Table 9.12 Average value of annual household and per capita food consumption (both cash expenditure and home-produced), and estimated total value, by food subgroup, and food budget shares

Group/ Subgroup	Mean annual household food consumption			Mean annual per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash Expenditure ¢	Home Produced ¢	Total ¢	Cash Expenditure ¢	Home Produced ¢	Total ¢		
1. Food & Beverage	1,858,306	422,189	2,280,497	431,099	97,943	529,041	9,275	96.5
Cereals and cereal products	286,005	61,194	347,199	66,349	14,196	80,545	1,412	14.7
Roots and tubers	253,860	253,508	507,369	58,892	58,810	117,702	2,063	21.5
Pulses and nuts	74,946	22,367	97,313	17,386	5,189	22,575	396	4.1
Vegetables	169,636	30,466	200,102	39,353	7,068	46,421	814	8.5
Fruits	24,710	4,466	29,176	5,732	1,036	6,768	119	1.2
Oils and animal fat	82,938	3,839	86,777	19,240	891	20,131	353	3.7
Meat	108,699	14,862	123,562	25,217	3,448	28,665	502	5.2
Poultry and poultry products	63,730	12,135	75,864	14,784	2,815	17,599	309	3.2
Fish	367,266	19,310	386,576	85,201	4,480	89,680	1,572	16.4
Milk and milk products	40,358	39	40,397	9,363	9	9,372	164	1.7
Spices	38,026	.	38,026	8,821	.	8,821	155	1.6
Miscellaneous foods	42,120	.	42,120	9,771	.	9,771	171	1.8
Prepared meals	247,344	.	247,344	57,380	.	57,380	1,006	10.5
Non-alcoholic beverages	24,748	3	24,752	5,741	1	5,742	101	1.0
Soft drinks	33,920	.	33,920	7,869	.	7,869	138	1.4
2. Alcohol & Tobacco	79,990	1,916	81,905	18,557	444	19,001	315	3.5
Alcoholic drinks	68,356	1916	70,271	15,858	444	16,302	268	3.0
Cigarettes	11,634	.	11,634	2,699	.	2,699	47	0.5
Total Food Consumption	1,938,296	424,105	2,362,402	449,656	98,387	548,042	9,590	100.0

Table 9.13 shows the urban/rural differences in food consumption at the household level. Although households in urban areas spend more on food than rural households, this difference is more than counterbalanced by the higher level of home consumption in rural areas. Average annual household food consumption around March 1999 was about ₦2.8 million in urban areas and about ₦2.1 million in rural areas.

Table 9.13 Value of average annual household food consumption and estimated total food consumption (both cash expenditure and home-produced) , by food subgroup and locality.

Group/ Subgroup	Urban areas –Household consumption				Rural areas -Household consumption			
	Cash Expenditure	Value of home produced food	Total	Estimated total (all urban)	Cash Expenditure	Value of home produced food	Total	Estimated total (all rural)
	₺	₺	₺	(billion cedis)	₺	₺	₺	(billion cedis)
1. Food & Beverage	2,639,882	114,267	2,754,149	4,110	1,404,160	600,425	2,004,585	5,164
Cereals and cereal products	404,220	12,196	416,416	621	217,577	89,556	307,133	791
Roots and tubers	378,901	75,116	454,017	677	181,482	356,768	538,250	1,386
Pulses and nuts	87,740	2,885	90,625	135	67,539	33,644	101,183	261
Vegetables	243,603	8,338	251,941	376	126,821	43,274	170,095	438
Fruits	47,944	885	48,829	73	11,261	6,539	17,800	46
Oils and animal fat	116,504	417	116,921	174	63,508	5,820	69,328	179
Meat	173,013	1,001	174,014	259	71,472	22,886	94,358	243
Poultry and poultry products	115,083	1,948	117,031	174	34,004	18,031	52,035	134
Fish	397,510	11,481	408,991	610	349,760	23,841	373,601	962
Milk and milk products	70,955	0	70,955	106	22,648	61	22,709	58
Spices	42,199	.	42,199	63	35,610	.	35,610	93
Miscellaneous foods	55,812	.	55,812	83	34,194	.	34,194	88
Prepared meals	401,075	.	401,075	598	158,358	.	158,358	408
Non-alcoholic beverages	41,031	0	41,031	61	15,323	5	15,328	39
Soft drinks	64,292	.	64,292	100	14,603	.	14,603	38
2. Alcohol & Tobacco	73,534	1,378	74,912	112	83,727	2,227	85,954	221
Alcoholic drinks	65,607	1,378	66,985	100	69,947	2,227	72,174	186
Cigarettes	7,927	.	7,927	12	13,780	.	13,780	35
Total Food Consumption	2,713,416	115,645	2,829,061	4,222	1,487,887	602,652	2,090,539	5,385

After allowing for the difference in household size between urban and rural areas, it is found that per capita food consumption is ₦724,235 in the urban areas and ₦500,197 in the rural areas (Table 9.14).

Table 9.14 Value of average per capita food consumption (both cash expenditure and home-produced), and food budget shares, by food subgroup and locality.

Group/ Subgroup	Urban areas –Per capita consumption				Rural areas –Per capita consumption			
	Cash Expenditure	Value of home produced food	Total	Food budget share	Cash Expenditure	Value of home produced food	Total	Food budget share
	¢	¢	¢	%	¢	¢	¢	%
1. Food & Beverage	675,857	29,221	705,078	97.2	309,133	172,141	481,274	96.4
Cereals and cereal products	103,370	3,119	106,489	14.7	47,901	19,716	67,617	13.5
Roots and tubers	96,895	19,209	116,104	16.0	39,954	118,499	158,453	31.7
Pulses and nuts	22,438	738	23,176	3.2	14,869	7,407	22,276	4.5
Vegetables	62,296	2,132	64,428	8.9	27,920	9,527	37,447	7.5
Fruits	12,261	226	12,487	1.7	2,479	1,440	3,919	0.8
Oils and animal fat	29,793	107	29,900	4.1	13,982	1,281	15,263	3.1
Meat	44,244	256	44,500	6.1	15,735	5,038	20,773	4.2
Poultry and poultry products	29,430	498	29,928	4.1	7,486	3,970	11,456	2.3
Fish	101,654	2,936	104,590	14.4	77,002	5,249	82,251	16.4
Milk and milk products	18,145	0	18,145	2.5	4,986	13	4,999	1.0
Spices	10,791	.	10,791	1.5	7,840	.	7,840	1.6
Miscellaneous foods	14,273	.	14,273	2.0	7,528	.	7,528	1.5
Prepared meals	102,566	.	102,566	14.2	34,863	.	34,863	7.0
Non-alcoholic beverages	10,493	0	10,493	1.4	3,373	1	3,374	0.7
Soft drinks	17,208	.	17,208	2.4	3,215	.	3,215	0.6
2. Alcohol & Tobacco	18,805	352	19,157	2.7	18,433	490	18,923	3.8
Alcoholic drinks	16,778	352	17,130	2.4	15,399	490	15,889	3.2
Cigarettes	2,027	.	2,027	0.3	3,034	.	3,034	0.6
Total Food Consumption	694,662	29,573	724,235	100	327,566	172,631	500,197	100

There are differences in the pattern of food consumption in different parts of the country, as shown in Table 9.15. Notable features are the relative importance of cereals and cereal products, and pulses and nuts, in the diet of households in the rural savannah, and their reduced consumption of roots and tubers compared with rural coastal and forest zones. The value of vegetables consumed is almost similar in all localities. Consumption of fruit is generally low in all areas, but especially low in the rural savannah. Meat and poultry and poultry products form a small part of the diet in the rural coastal zone.

Table 9.15 Food budget shares (including both cash expenditure and home-produced), by locality.

Group/ Subgroup	Locality					Country
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	
	%	%	%	%	%	%
1. Food & Beverage	96.5	97.9	96.2	97.1	92.7	96.5
Cereals and cereal products	13.8	15.2	14.4	12.4	20.0	14.7
Roots and Tubers	12.3	17.9	23.4	29.6	19.6	21.5
Pulses and nuts	3.0	3.3	4.6	3.5	8.2	4.1
Vegetables	8.5	9.1	8.6	7.9	8.1	8.5
Fruits	2.4	1.4	1.2	0.8	0.6	1.2
Oils and animal fat	3.7	4.4	3.7	3.3	2.9	3.7
Meat	5.6	6.4	2.2	4.5	6.8	5.2
Poultry and poultry products	4.3	4.1	2.1	2.6	2.8	3.2
Fish	14.2	14.6	20.9	19.1	12.2	16.4
Milk and milk products	3.2	2.1	1.4	1.2	0.5	1.7
Spices	1.2	1.7	1.6	1.3	2.6	1.6
Miscellaneous foods	2.1	1.9	1.8	1.4	1.9	1.8
Prepared meals	17.2	12.6	8.5	7.9	5.9	10.5
Non-alcoholic beverages	2.1	1.1	0.9	0.8	0.4	1.0
Soft drinks	2.9	2.1	0.9	0.8	0.2	1.4
2. Alcohol & Tobacco	3.6	2.2	3.8	2.8	7.3	3.5
Alcoholic drinks	3.3	1.9	3.4	2.3	6.0	3.0
Cigarettes	0.3	0.3	0.4	0.5	1.3	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Per Capita Food Consumption (¢)	901,436	661,105	504,231	509,708	353,522	548,044
Total Food Consumption (Billion Cedis)	1,397	2,824	1,288	2,819	1,278	9,607

Fish is a major component of diet in all localities; consumption is highest in rural areas of the coastal zone and lowest in the rural savannah zone. Spices are consumed fairly evenly throughout the country, with rural savannah consuming the largest amount. Milk and milk products, miscellaneous foods, prepared meals, and non-alcoholic beverages, and soft drinks are consumed mainly in urban areas, particularly in Accra. Finally, consumption of alcoholic drinks is higher in rural areas than urban areas, while reported expenditures on cigarettes and tobacco are lower in Accra than other localities.

9.6 Availability of consumer items

Besides the detailed expenditure data, the survey collected information on the availability of various key consumer items. Households were asked whether, in the last 12 months, they had tried to purchase any of the selected consumer items but found them unavailable or if they do sometimes find them unavailable. If they ever found them unavailable they were asked whether the shortages over the last 12 months were worse, the same, or better compared with the preceding year. In interpreting the results presented in Table 9.16, the frequency with which households purchased these different items should be borne in mind. Kerosene was the item that most households (21%) found unavailable at some time in the year.

Table 9.16 Percentage of all households reporting items unavailable in the last 12 months, by locality.

Item	Locality					Country
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	
Maize/maize flour	0.3	0.4	0.9	1.5	2.1	1.1
Sorghum/ Millet	0.0	0.0	0.2	0.2	2.8	0.6
Rice	0.0	0.2	0.5	1.7	4.0	1.3
Cooking oil	0.0	0.2	0.4	1.8	2.3	1.1
Sugar	0.0	0.2	0.3	1.5	2.0	0.9
Cloths/Shoes	0.0	0.8	0.1	2.1	5.1	1.7
Gas	3.3	0.8	0.3	0.1	0.0	0.6
Kerosene	5.4	20.8	19.8	25.2	22.8	20.7
Charcoal/Firewood	0.0	0.7	0.9	1.2	3.4	1.3
Health/personal care items	0.2	0.2	0.2	2.8	3.5	1.6
Petrol	3.3	1.2	1.3	3.3	0.9	2.0

In terms of variations across localities, the problem of unavailability of items was often more serious in the rural savannah and rural forest areas than it was in urban areas or in the rural coastal areas. This was particularly so in the case of rice, cooking oil, sugar, clothes/shoes, kerosene, and health or personal care items.

9.7 Total household income

Household expenditure is the main monetary measure used in this report and forms the basis for the construction of the quintiles; however the survey did collect detailed information on all sources of household income. It is the general experience in household surveys that it is much more difficult to capture all elements of income, and it is therefore plausible that the income figures presented in this section may understate total household income.

At the prices prevailing in March 1999, average annual household income is estimated to be ₵2,267,000, which is equivalent to a per capita income of ₵527,000 (Table 9.17). Using the March 1999 exchange rate of ₵2,394 to the US dollar, average annual household income and average per capita income amount to US\$947 and US\$220, respectively.

There are substantial variations in income across the expenditure quintiles. People who fall in the lowest quintile have an average per capita income of only ¢166,000 whereas those in the highest quintile have an average per capita income of ¢1,080,000. This contrast is also seen when one looks at the percentage share of persons and income in the different quintiles; thus the 20 percent in the lowest quintile generate only slightly more than six percent of total income, while the highest quintile generates 40 percent of total income.

Table 9.17 Mean annual household and per capita income, by quintile.

Quintile	Mean annual household income (cedis)	Mean annual per capita income* (cedis)	Percentage share			Mean household size	Sample size	
			Households	Persons	Income		Hholds	Persons
Lowest	979,000	166,000	14.7	20.0	6.4	5.9	919	5,170
Second	1,770,000	328,000	15.9	19.9	12.4	5.4	1,004	5,152
Third	2,009,000	419,000	18.0	20.0	16.0	4.8	1,139	5,184
Fourth	2,673,000	652,000	21.1	20.0	24.9	4.1	1,261	5,177
Highest	3,025,000	1,080,000	30.3	20.0	43.7	2.8	1,675	5,171
All	2,267,000	527,000	100.0	100.0	100.0	4.3	5998	25,855

* Note: Mean per capita income is equal to total household income divided by total number of persons; it can be obtained by dividing mean household income by mean household size.

On regional basis, mean annual household income varies from a high of ¢3,356,000 in Greater Accra Region to a low of ¢1,442,000 in the Upper West Region, while mean per capita income varies from a high of ¢932,000 in Greater Accra Region to a low of ¢206,000 in Upper West Region (Table 9.18).

Table 9.18 Mean annual household and per capita income by region.

Region	Mean annual household income (cedis)	Mean annual per capita income (cedis)	Sample size	
			Households	Persons
Western	2,671,000	568,000	639	3,002
Central	1,464,000	444,000	700	2,311
Gt. Accra	3,356,000	932,000	859	3,070
Eastern	2,055,000	415,000	820	3,213
Volta	1,950,000	527,000	640	3,011
Ashanti	2,550,000	622,000	1,060	4,347
Brong Ahafo	2,302,000	548,000	540	2,251
Northern	1,552,000	210,000	360	2,647
Upper West	1,442,000	206,000	120	836
Upper East	1,446,000	321,000	260	1,169
All	2,267,000	527,000	5,998	25,855

There is also a contrast in per capita annual income in the urban and rural localities of Ghana. Per capita annual income was ¢692,000 in urban areas and ¢469,000 in rural areas (Table 9.19). Within the rural areas, incomes were higher in the forest zone than in the coastal and savannah zones. Out of a total national household income of ¢9,218 billion, 44 percent represent income generated in urban areas and 56 percent represent income generated in rural areas.

Table 9.19 Mean annual household and per capita income, and estimated total income, by locality

Locality	Mean annual household income (cedis)	Mean annual per capita income (cedis)	Estimated total annual income (billion cedis)	Percentage share of total income	Mean household size	Sample size	
						Households	Persons
Urban	2,700,000	692,000	3,758	43.7	3.9	2199	8,599
Accra	3,500,000	972,000	1,495	16.2	3.6	620	2,287
Other urban	2,379,000	595,000	2,520	27.4	4.0	1579	6,311
Rural	2,017,000	469,000	5,059	56.3	4.5	3799	17,256
Rural Coastal	1,615,000	394,000	1,015	11.0	4.5	899	3,764
Rural Forest	2,354,000	523,000	2,924	31.7	5.1	1940	8,159
Rural Savannah	1,781,000	349,000	1,255	13.6	5.1	960	5,333
Ghana	2,267,000	527,000	9,218	100.0	4.3	5998	25,855

9.8 Components of household income

In Ghana, the major source of household income is agriculture (37%), followed by non-farm self-employment (31%), wage employment (23%), net remittances (5%), rental income (2%) and other income (2%) (Table 9.20).

Table 9.20 Components of household and per capita income, and estimates of total annual household income.

Income component	Mean annual household income (cedis)	Mean annual per capita household income (cedis)	Estimated total annual income (billion cedis)	Percentage distribution
Wage income from employment	516,000	120,000	2,099	22.8
Household agricultural income	838,000	195,000	3,406	37.0
Non-farm self-employment income	709,000	165,000	2,882	31.3
Rental income (actual & imputed)	46,000	11,000	186	2.0
Net remittance*	108,000	25,000	441	4.8
Other income	50,000	12,000	204	2.2
Total	2,267,000	527,000	9,218	100.0

* Note: Net remittance = Income from remittances - expenditure on remittances.

The composition of household incomes varies across the country (Table 9.21). In urban areas, non-farm self-employment income (40%) is the major source of income, with wage income as the second most important source (32%). In rural areas, on the other hand, more than half of total household income is derived from agriculture (54%), with non-farm self-employment income comprising 24%. The relative importance of agriculture and non-farm self-employment varies considerably across ecological zones. For example, in rural areas in the coastal zone only 35 percent of total household income comes from agriculture, whereas in the rural savannah as much as 71 percent comes from agriculture.

Table 9.21 Distribution of household income by component, locality and quintile (percent).

Locality/ Quintile	Components of income						Total (100%)
	Wage income from employment	Household agricultural income	Non-farm self- employment income	Rental income	Income from remittances	Other Income	
Region							
Western	22.1	51.6	20.0	1.1	3.2	2.0	100.0
Central	13.7	41.1	34.3	1.8	7.6	1.5	100.0
Greater Accra	38.9	7.8	38.9	1.8	10.1	2.3	100.0
Eastern	14.9	50.7	21.9	3.1	6.8	2.6	100.0
Volta	18.0	34.8	34.3	1.7	9.6	1.6	100.0
Ashanti	22.8	23.6	33.6	1.9	14.8	3.3	100.0
Brong Ahafo	9.3	55.1	27.9	1.4	6.0	0.3	100.0
Northern	11.4	58.6	23.2	3.0	3.0	0.8	100.0
Upper West	16.5	46.4	26.4	4.0	1.8	4.8	100.0
Upper East	12.9	63.6	15.0	2.7	4.4	1.3	100.0
Urban	32.3	10.3	39.7	1.8	13.0	2.8	100.0
Accra	34.7	7.9	42.4	2.1	10.8	2.0	100.0
Other urban	30.3	12.3	37.5	1.6	14.9	3.5	100.0
Rural	13.7	54.0	23.8	2.2	4.9	1.4	100.0
Rural coastal	18.7	35.1	35.2	2.9	7.1	1.0	100.0
Rural forest	15.6	54.6	21.4	1.8	4.7	1.8	100.0
Rural savannah	6.4	71.4	16.0	2.0	3.0	1.2	100.0
Quintile							
Lowest	6.3	59.7	20.4	4.1	7.6	1.9	100.0
Second	13.4	53.1	25.3	2.3	4.6	1.3	100.0
Third	14.5	49.4	26.9	2.2	5.4	1.5	100.0
Fourth	23.0	36.9	29.3	1.7	7.4	1.7	100.0
Highest	29.0	20.3	34.6	1.5	11.7	2.9	100.0
Total	21.9	35.5	30.0	1.9	8.5	2.1	100.0

Households in the lowest quintile derive most of their income (60%) from agriculture compared with the highest quintile that derive most of their income from non-farm self-employment (35%) and wage employment (29%). Net remittance represents around 8 and 12 per cent of total income for the lowest and highest quintiles, respectively. For the second quintile net remittance constitutes the lowest percentage of income with 4.6%.

9.9 Comparison of income and expenditure

Whereas the previous four sections dealt separately with income and expenditure, in this section direct comparison of income and expenditure levels is made. The presentation is carried out in terms of individuals and not households.

The deciles for per capita income and per capita expenditure, and the means of each decile are presented in Table 9.22. There is a larger spread in incomes than in expenditures. Whereas per capita expenditure ranges from a low of ¢63,000 to a high of ¢24.2 million, per capita income ranges from zero to ¢32.4 million.

Table 9.22 Decile for per capita income and per capita expenditure, and means of each decile.

Decile	Expenditure			Income		
	Decile boundaries		Mean	Decile boundaries		Mean
Lowest	63,000	- 322,000	236,000	0	- 49,000	18,000
2	322,000	- 459,000	389,000	49,000	- 111,000	81,000
3	459,000	- 587,000	520,000	111,000	- 185,000	146,000
4	587,000	- 713,000	650,000	185,000	- 268,000	225,000
5	713,000	- 873,000	793,000	268,000	- 363,000	314,000
6	873,000	- 1,095,000	984,000	363,000	- 491,000	426,000
7	1,095,000	- 1,358,000	1,223,000	491,000	- 662,000	572,000
8	1,358,000	- 1,759,000	1,537,000	662,000	- 942,000	786,000
9	1,759,000	- 2,513,000	2,083,000	942,000	- 1,500,000	1,182,000
Highest	2,513,000	- 24,221,000	3,891,000	1,500,000	- 32,409,000	2,702,000
All	63,000	- 24,221,000	1,290,000	0	- 32,409,000	667,000

Note: Although exact boundaries were used in determining the decile, these have been rounded to the nearest thousand cedis for convenience of presentation.

Table 9.23 provides a more detailed analysis of the distribution of the sample by income and expenditure, highlighting the inequalities in the distribution of income and expenditure. Some individuals have high incomes but low expenditures, and vice versa. In the case of expenditure, the 10 percent of the population with the lowest expenditure account for less than 2 percent of total expenditure, while the 10 percent with the highest expenditure account for more than 31 percent of total expenditure. A look at income reveals even sharper inequalities.

Table 9.23 Comparison of per capita income and per capita expenditure

Income decile	Expenditure decile										Share of total sample	Share of total income	
	1	2	3	4	5	6	7	8	9	10		%	Cum
	Percentage share of total sample												
1	2.6	1.6	0.9	0.8	0.9	0.7	0.6	0.8	0.6	0.7	10.0	0.3	0.3
2	3.4	1.7	1.1	0.9	0.8	0.4	0.4	0.3	0.3	0.3	10.0	1.2	1.5
3	1.9	2.0	1.5	1.3	0.8	0.8	0.7	0.2	0.3	0.4	10.0	2.3	3.8
4	0.8	1.9	2.0	1.5	1.1	0.9	0.6	0.8	0.4	0.3	10.0	3.4	7.2
5	0.5	1.0	1.8	1.2	1.5	1.1	1.1	0.9	0.6	0.2	10.0	4.8	12.0
6	0.4	1.0	1.1	1.6	1.4	1.3	1.3	1.0	0.6	0.3	10.0	6.5	18.5
7	0.2	0.3	0.9	1.4	1.4	1.6	1.4	1.3	0.9	0.6	10.0	8.8	27.3
8	0.1	0.2	0.3	0.8	1.1	1.6	1.7	1.9	1.7	0.9	10.0	12.1	39.4
9	.	0.1	0.3	0.4	0.6	1.0	1.5	1.6	2.4	1.7	10.0	18.1	57.5
10	.	0.2	0.1	0.1	0.4	0.7	0.8	1.2	2.1	4.8	10.0	42.5	100.0
Share of total sample											100.0 (25855)		
Share of total expenditure	1.9	3.2	4.2	5.3	6.5	8.0	10.0	12.6	17.0	31.3		100.0	
Cumulative share of total expenditure	1.9	5.1	9.3	14.6	21.1	29.1	39.1	51.7	68.7	100.0			

The differences between income and expenditure can be illustrated by means of a Lorenz curve, which plots a cumulative percentage of all persons, ranked from lowest to highest in terms of per capita income against their cumulative share of total income. A similar curve can be drawn using the expenditure data (Figure 9.1). If there were total equality of incomes, the curve would lie on the 45 degree line.

The extent to which the curve deviates from this line indicates the extent of inequality in income distribution. It can be seen from Figure 9.1 that the population is more unequal in terms of income than in terms of expenditure. These inequalities can be quantified by the Gini coefficient. If there was total equality of income and expenditure for everyone, then the Gini coefficient for each would be zero. For the GLSS 4, the Gini coefficient for income is 60 while that for expenditure is 0.43.

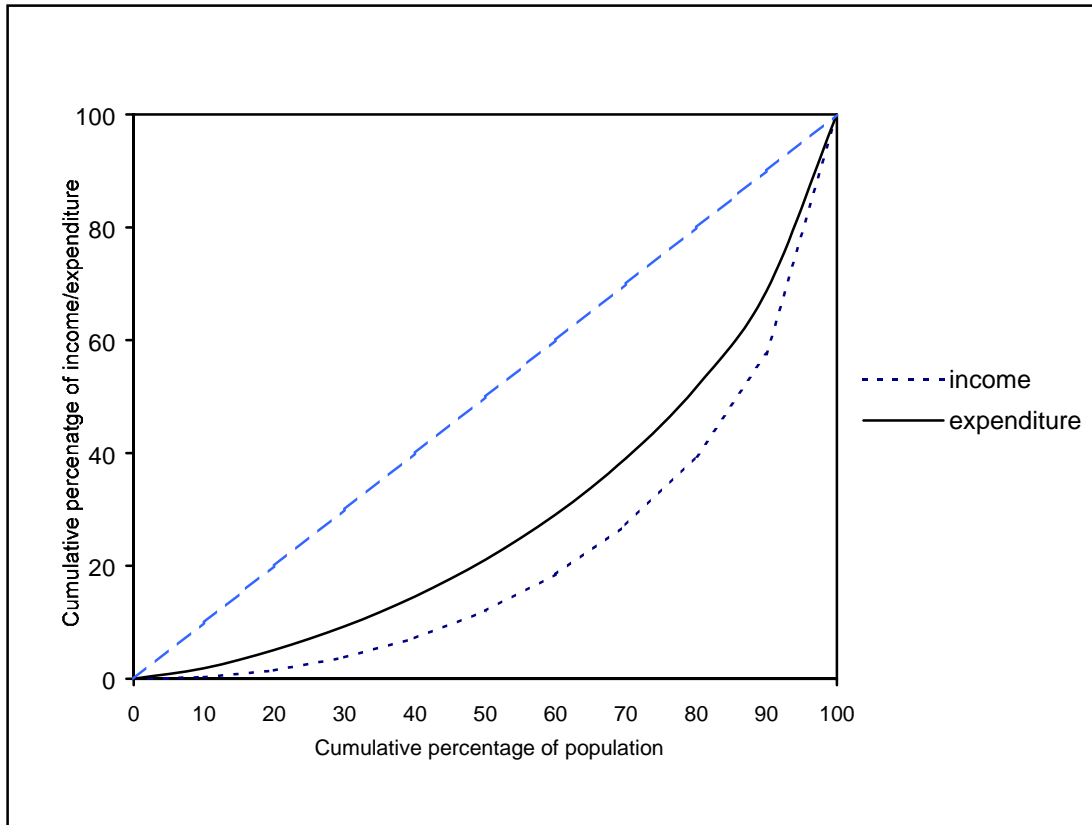


Figure 9.1 Inequalities in the distribution of income and expenditure

9.10 Transfers

9.10.1 Remittances

A section of the GLSS 4 questionnaire sought information on income transfers to and from households. In a few cases the household reported having some members living temporarily away from the household, to whom they sent cash, food or goods. These were not counted as remittances, since they are effectively transferred within households. About 76 percent of all households reported having remitted money or goods in the previous 12 months to persons who were not their household members. The bulk of these remittances to non-household members went to relatives (93%), and in particular to parents or children (50%), brothers or sisters (18%), and other relatives (23%). Such income flows from the household benefited females (64%) more than males (36%). About 47 percent of all remittances sent were on a regular basis (7%, weekly; 19%, monthly; 11%, quarterly; and 10%, annually) and 51 percent on an irregular basis.

Almost all reported remittances from households (96%) were free, in that they would not be repaid by the recipients. A small proportion of recipients (2%) were living outside Ghana. The estimated total annual value of all remittances paid out was about ₵473 billion (Table 9.24).

Table 9.24 Mean annual household expenditure on, and receipts from remittances, and estimated total remittances, by locality.

Locality	Annual expenditure on remittances			Annual receipts from remittances		
	By households which actually remitted	By all households	Est. total expenditure	By households which actually received	By all households	Est. total income
	(cedis)		(billion cedis)	(cedis)		(billion cedis)
Urban	325,000	138,000	205	853,000	340,000	507
Accra	400,000	184,000	77	1,284,000	453,000	191
Other urban	292,000	119,000	128	710,000	295,000	316
Rural	240,000	104,000	268	277,000	110,000	285
Rural Coastal	240,000	96,000	59	291,000	125,000	76
Rural Forest	260,000	138,000	182	319,000	133,000	175
Rural Savannah	157,000	410,000	27	156,000	52,000	34
Ghana	271,000	116,000	473	488,000	195,000	792

In the same way as households incurred expenditure on transfers, they also received some income by this means. About 67 percent of all households reported having received money or goods in the last 12 months from individuals who were not members of their households. Regarding the frequency of remittances, 44 percent of all remittances received were made on a regular basis (6%, weekly; 16%, monthly; 10% quarterly; and 12% annually), while 53 percent were made on an irregular basis. Like remittances made out by households, in-flows were usually not to be repaid. The total estimated value of remittances received was ¢792 billion.

Households that reported making remittances spent about ¢271,000 annually on them, while those who received remittances received almost twice as much in the form of income transfers. Remittances from urban households were higher than those from rural households. Overall, households in Ghana spent an average of ¢116,000 a year on remittances, and in turn received ¢195,000 in remittances (Table 9.24). With the exception of the rural savannah, receipts appear to be higher than expenditures on remittances across all localities.

Table 9.25 provides national estimates of the value of total annual transfers in the form of remittances. While annual remittances to people overseas total only about ¢6 billion, the value of remittances received from abroad is about ¢339 billion, which represents 40 percent of all remittances received.

Table 9.25 Estimated total annual expenditure on remittances, by locality of destination, and total annual income from remittances, by locality of person remitting

Locality	Estimated expenditure on remittances Locality of household receiving (billion cedis)				Estimated incomes from remittances Locality of household giving (billion cedis)			
	Urban	Rural	Abroad	Total	Urban	Rural	Abroad	Total
Urban	158	48	2	209	259	17	269	545
Rural	150	118	4	272	155	72	70	297
Total	308	167	6	480	414	89	339	842

9.10.2 Miscellaneous income and expenditure

Apart from remittances, the survey sought information about miscellaneous incomes and expenditures of households. In the case of miscellaneous income, households were asked how much income in cash or kind they received in the last 12 months from various sources: social security payments, state pensions, or from other government sources; and retirement benefits, dowries or inheritances, or from other non-government sources. Receipts from susu (the mutual saving scheme widely used in Ghana) were specifically excluded. Table 9.26 shows the average amount received from each source, by households in urban and rural areas.

Households reported receiving on average ₵63,000 a year from miscellaneous sources. This represents an annual income of about ₵256 billion nationally. On average, urban households received more from each source than rural households except from other government sources, where rural households received more than the urban households. Dowry or inheritance forms an important source of miscellaneous income for both the urban and rural households.

Table 9.26 Mean annual amounts of income received by urban and rural households from a variety of sources by locality.

Source of income	Mean household income			Estimated total miscellaneous income (billion cedis)
	Urban	Rural (cedis)	All	
Central government				
Social security	1,400	1,800	1,600	6.7
State pension	27,100	10,000	16,300	66.1
Other	600	4,000	2,800	11.3
Other sources				
Retirement benefits	13,400	1,000	5,600	22.6
Dowry or inheritance	26,200	24,800	25,300	103.1
Other (excluding susu)	15,900	8,900	11,400	46.5
Total	84,600	50,500	63,000	256.3

Information on various miscellaneous expenditures was also collected in the survey. These were expenditures on taxes, such as TV licences and property taxes; contributions to self-help projects; weddings, dowries, funerals or other ceremonies; gifts and presents (excluding all things mentioned under transfers); and other miscellaneous expenditures (excluding contributions to susu). On the average, households spend about ₦133,000 a year on the various items shown in Table 9.27. This is equivalent to a total expenditure across the country of about ₦540 billion.

Urban households on the average spend more on miscellaneous expenditures than rural households except for contributions to self-help projects where the rural people spend more than the urban people. The two major items of miscellaneous expenditure were expenditures on weddings, dowries, funerals and other ceremonies, which accounted for about 300 billion cedis annually (55% of total miscellaneous expenditure) and expenditure on gifts and presents which also accounted for ₦130 billion annually (24% of total miscellaneous expenditure)

Table 9.27 Mean annual amounts of expenditure paid by urban and rural households for a variety of purposes, and estimated total miscellaneous expenditure

Purpose of expenditure	Mean household expenditure			Estimated total miscellaneous expenditure (billion cedis)
	Urban	Rural (cedis)	All	
Taxes (TV License, property tax etc.)	3,700	1,300	2,200	8.8
Contributions to self-help projects	9,500	10,200	9,900	40.4
Weddings, dowry, funeral, etc.	91,900	62,900	73,500	298.9
Gifts and presents (excluding remittances)	36,700	28,900	31,800	129.3
Other miscellaneous expenditures	21,500	12,500	15,800	64.3
Total	163,300	115,800	133,200	541.7

10. CREDIT, ASSETS AND SAVINGS

10.1 Credit

The availability or provision of credit provides an important source of additional finance for households, either to relieve a household during a difficult period or enable it to expand activities. Households were therefore asked for details of any loans they had taken.

A little over a third of all households (35%) reported that they owed money or goods to other persons, institutions or businesses. The extent of indebtedness, as measured by the proportion of households taking out loans, is lowest in the rural savannah, where less than 20 percent of the households were indebted and highest in rural coastal, where 38 percent of households were indebted. As to the source of the loans, over half (58%) came from relatives, friends or neighbours and almost a quarter (22%) from traders. The only other significant sources were money lenders (5%) and formal financial institutions that is, private and state banks (6%).

As to the purpose for which the loans were used, 35 percent were for the purchase of consumer goods, 22 percent for business expansion, 10 percent for health reasons, 9 percent for ceremonies such as weddings or funerals and 7 percent for agriculture inputs. For 92 percent of the loans, the lenders did not require any guarantee. Cattle, land or some other asset was used to guarantee the remaining 8 percent of the loans.

In a few instances, involving about 3.5 percent of all households interviewed in the survey, a household member had tried to get a loan but had been refused. Of the reasons given for the refusal of loans, the most common (mentioned by 43%) was that the person had insufficient income. Other refusals occurred because of insufficient collateral security (20%), inappropriate purpose for the loan (17%), and previous debt problems (9%).

10.2 Assets and durable consumer goods

Information was gathered from households on ownership of various assets and consumer durables. Table 10.1 shows the proportion of households in different localities owning various assets and consumer durables, and the contrast in ownership between urban and rural areas.

In general, the rate of ownership of most items is much higher in urban areas than it is in rural areas. It is higher in Accra than in other urban areas, and higher in the rural coastal and rural forest than it is in the rural savannah. The only clear exceptions to this rule are the ownership of houses and bicycles, where the pattern of ownership is reversed. Bicycle ownership is particularly interesting. Of the three-quarters of a million households owning a bicycle, almost half are in the rural savannah, where 49 percent of households reported that the household has at least one bicycle. In the case of electrical items, much of the variation in ownership is undoubtedly due to the absence of electricity in many rural areas.

Also shown in Table 10.1 are estimates for the country as a whole of the number of households owning each asset or good, and the total number of each asset or good owned.

The national estimates obtained by aggregating the sample figures indicate, for instance, that households have over 2.5 million radios of any kind, almost 1 million television sets, and about 700,000 refrigerators.

Table 10.1 Proportion of households owning various assets and consumer durables by locality (percent)

Asset/ consumer durable	Urban			Rural				National estimates		
	Accra	Other urban	All	Coastal	Forest	Savannah	All	%	Hholds owning (millions)	Total owned
				(Percentages)						
Furniture	74.4	74.7	74.6	60.2	66.8	35.1	57.2	63.5	2.58	3.50
Sewing machine	34.7	34.0	34.2	25.4	34.0	17.6	27.8	30.1	1.22	1.41
Stove	33.9	18.0	22.5	8.6	7.1	2.3	6.2	12.2	0.50	0.53
Refrigerator	40.6	26.5	30.5	8.6	8.0	1.1	6.4	15.2	0.61	0.71
Air con.	0.8	0.1	0.3	.	0.1	.	0.0	0.3	0.01	0.01
Fan	60.5	36.8	43.5	12.3	11.6	1.5	9.2	21.8	0.89	1.04
Radio	9.8	13.9	12.8	12.5	15.7	13.0	14.2	13.7	0.56	0.59
Radio cassette	58.4	48.0	51.0	29.8	37.8	30.1	34.0	40.2	1.64	1.78
Record player	3.9	3.8	3.8	0.8	1.8	0.3	1.2	2.1	0.09	0.09
3-in-1 Radio	10.0	5.5	6.8	1.0	2.4	0.2	1.5	3.4	0.14	0.15
Video	12.3	5.8	7.6	1.7	1.9	0.3	1.4	3.9	0.16	0.16
Washing machine	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.01	0.01
Television	48.2	36.1	39.5	13.2	14.0	2.5	10.9	21.4	0.87	0.94
Camera	6.6	4.1	4.8	1.2	1.4	0.6	1.2	2.5	0.10	0.11
Electric iron	62.1	37.2	44.2	12.7	12.0	1.8	9.6	22.3	0.91	0.98
Bicycle	6.1	12.4	10.6	10.7	13.3	48.8	21.6	17.6	0.72	0.82
Motor cycle	0.6	1.5	1.2	0.4	0.7	1.8	0.9	1.0	0.04	0.04
Car	7.3	2.6	3.9	1.3	1.6	0.5	1.3	2.2	0.09	0.10
House	13.4	16.5	15.6	37.9	36.0	42.0	38.0	29.8	1.21	1.31
Land/plot	11.8	17.6	16.0	22.7	37.7	10.7	27.3	23.2	0.94	1.06
Shares	4.0	3.5	3.7	1.7	1.8	0.2	1.4	2.2	0.09	0.11
Boat	.	0.1	0.0	.	.	1.0	0.3	0.2	0.01	0.01
Canoes	0.3	0.9	0.7	1.9	0.4	3.1	1.4	1.2	0.05	0.07
Outboard motor	0.6	0.3	0.4	0.2	0.1	0.4	0.2	0.3	0.01	0.01
<i>Sample size</i>	<i>620</i>	<i>1579</i>	<i>2199</i>	<i>899</i>	<i>1940</i>	<i>960</i>	<i>3799</i>	<i>5998</i>	<i>(13.43)</i>	

10.3 Savings

Limited information was collected on savings accounts held by members of the household. More than a quarter of all households (28%) reported that someone in the household owned a savings account. Figure 10.1 highlights the variation between different parts of the country in the proportion of households maintaining a savings account. About 35 percent of the households in Accra maintained a savings account, whereas in rural savannah only about 13 percent maintained an account.

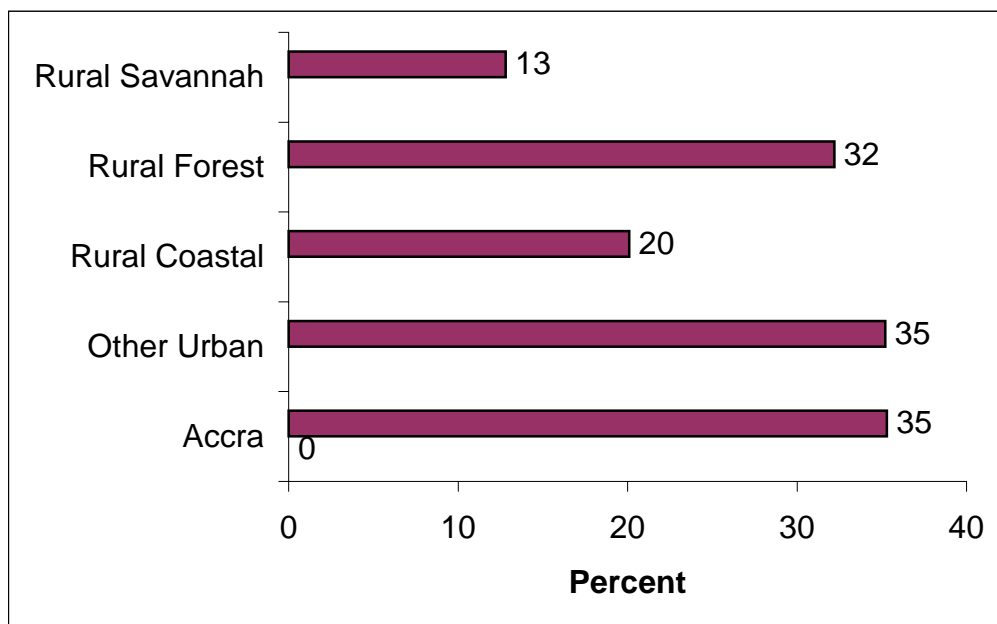


Figure 10.1 Proportion of households maintaining savings account by locality

Appendix 1

SAMPLE DESIGN FOR ROUND 4 OF THE GLSS

A nationally representative sample of households was selected in order to achieve the survey objectives.

Sample Frame

For the purposes of this survey the list of the 1984 population census Enumeration Areas (EAs) with population and household information was used as the sampling frame. The primary sampling units were the 1984 EAs with the secondary units being the households in the EAs. This frame, though quite old, was considered inadequate, it being the best available at the time. Indeed, this frame was used for the earlier rounds of the GLSS.

Stratification

In order to increase precision and reliability of the estimates, the technique of stratification was employed in the sample design, using geographical factors, ecological zones and location of residence as the main controls. Specifically, the EAs were first stratified according to the three ecological zones namely; Coastal, Forest and Savannah, and then within each zone further stratification was done based on the size of the locality into rural or urban.

SAMPLE SELECTION

EAs

A two-stage sample was selected for the survey. At the first stage, 300 EAs were selected using systematic sampling with probability proportional to size method (PPS) where the size measure is the 1984 number of households in the EA. This was achieved by ordering the list of EAs with their sizes according to the strata. The size column was then cumulated, and with a random start and a fixed interval the sample EAs were selected.

It was observed that some of the selected EAs had grown in size over time and therefore needed segmentation. In this connection, such EAs were divided into approximately equal parts, each segment constituting about 200 households. Only one segment was then randomly selected for listing of the households.

Households

At the second stage, a fixed number of 20 households was systematically selected from each selected EA to give a total of 6,000 households. Additional 5 households were selected as reserve to replace missing households. Equal number of households was selected from each EA in order to reflect the labour force focus of the survey.

NOTE: The above sample selection procedure deviated slightly from that used for the earlier rounds of the GLSS, as such the sample is not self-weighting. This is because,

1. given the long period between 1984 and the GLSS 4 fieldwork the number of households in the various EAs are likely to have grown at different rates.
2. the listing exercise was not properly done as some of the selected EAs were not listed completely. Moreover, it was noted that the segmentation done for larger EAs during the listing was a bit arbitrary.

METHODOLOGY

Survey Period

The survey was spread over a 12-month period in order to ensure a continuous collection of household consumption expenditures and changes occurring thereof. The year was divided into 10 cycles of 36 days each. Interviews were conducted on the first 35 days of each cycle, while the 36th day was used by the field team for travelling to the next set of EAs.

Data Collection

Eleven teams were involved in the data collection. The purpose of the eleventh team was to afford each of the 10 regular teams the opportunity to take one month off as annual leave. The leave arrangements were such that there were always 10 teams at work. The constitution of a team is shown below:

- 1 Supervisor
- 4 Interviewers
- 1 Driver
- 1 Data Entry Operator

The Supervisor was the team leader and was responsible for overseeing, monitoring and, where necessary, correcting the work of the interviewers and the data entry operator. The interviewers conducted daily interviews with the household. To avoid any interruption in the survey schedule, three interviewers were always at work while the fourth took some rest.

Microcomputers (one per data collection team) were installed in the regional offices of the Ghana Statistical Service for the immediate entry of data from all questionnaires that were completed by each team. The data entry operator, who was stationed at the regional office, was responsible for entering the data collected from the field onto the microcomputer. On the other hand, the driver conveyed the team from the regional office to the places (EAs) where the survey was being carried out.

Interviewer Workload

A workload refers to the number of households selected for interviewing in each EA during a period of one cycle. Each enumerator covered one workload per cycle, and made a total of 7 visits at 5 days interval. In addition to the expenditure data, specific portions of the questionnaire were administered on each visit.

An interviewer was expected to complete 4 interviews (or households) a day, whether he/she was working in an urban or rural EA. Thus, a workload for a cycle of 5 days is 20 households.

In order not to complicate the data collection or miss any of the households the workload was divided into 5 batches of 4 households. The Batches were visited according to the following days of the 36 days cycle:

Batch	Cycle Days
1	1, 6, 11, 16, 21, 26, 31
2	2, 7, 12, 17, 22, 27, 32
3	3, 8, 13, 18, 23, 28, 33
4	4, 9, 14, 19, 24, 29, 34
5	5, 10, 15, 20, 25, 30, 35

NOTE: The 36th day of each cycle is used for travelling to the next set of EAs. These numbers are not actual calendar dates since the cyclic period of 36 days will lead to workloads in different EAs starting on different dates. The fourth interviewer will take over the work of interviewers (one at a time) so that each interviewer could have some rest during the cycle. This was arranged to suit the team's field itinerary.

To overcome the problem of memory lapse, a diary of daily consumption and expenditure was kept to support the interviews. During the first visit a literate person was identified in each household and trained to record all subsequent expenditures made by the household and to submit the diary to the interviewer on his or her next visit for entry into the appropriate sections. Where a household had no literate member the supervisor made daily visits to the household to record all expenditures in the diary meant for the household. Throughout the period of the survey, interviewers worked in separate EAs but were stationed in such a way that supervision would be manageable.

COMPUTATION OF WEIGHTS

In order to get the true contribution of each selected EA in the sample, weights were computed based on the true sizes of the EAs since 1984, using the household listing from the 2000 Population and Housing Census conducted by the GSS. Even though the survey fieldwork was completed about a year ago before the census, in practice, the results will not differ significantly.

Let M_i = Number of 1984 population census household in the i^{th} selected EA
 M_i^* = Number of 2000 Population households in the i^{th} selected EA
 α = Number of EAs selected at the first stage
 ie. α = 300
 β = Number of households selected at the second stage
 ie. β = 20

$$\text{Then } P_{1i} = \frac{\alpha M_i}{\sum M_i^*} \quad \text{and} \quad P_{2i} = \frac{\beta}{M_i^*}$$

where P_{1i} and P_{2i} are the first and second stage probabilities of selection respectively

The overall probability of selection of households in a given EA is,

$$F_i = P_{1i} P_{2i} = \frac{\alpha \beta}{\sum M_i^*} * \frac{M_i}{M_i^*}$$

The weighting coefficient for the i^{th} EA W_i , is given by the reciprocal of the overall probability of selecting that EA.

$$\text{Hence, } W_i = \frac{1}{F_i} = \frac{\sum M_i^*}{\alpha \beta} * \frac{M_i^*}{M_i}$$

Given that $\alpha = 300$ and $\beta = 20$ and $\sum M_i^* = 2,444,836$ (from 1984 census sample frame) then,

$$W_i = 407.5 * \frac{M_i^*}{M_i}$$

Survey Coverage

Out of the selected 6000 households 5999 were successfully interviewed. One household was further dropped during the data cleaning exercise because it had very few records for many of the sections in the questionnaire. This gave 5998 household representing 99.7% coverage. Overall, 25,694 *eligible household members* (unweighted) were covered in the survey.

Grossing up estimates

To obtain national estimates, the sample figures have to be grossed up by the appropriate factor. The 5998 households covered in the GLSS 4 contained 25,694 individuals and an average household size of 4.3. Using the 1984 population figure of 12.1 million (mid-March 1984) and the official growth rate of 2.6 the projected March 1999 population is about 18.3 million. This gives a grossing up multiplier of 712 (18.3 million divided by 25,964). The corresponding multiplier, when the weights are applied, is 708.

Appendix 2

CONTENTS OF GLSS 4 QUESTIONNAIRE

Household Questionnaire

The household questionnaire was used to collect information on various topics, some of which pertain to eligible individual household members. The questionnaire is in two parts, A and B.

PART A

Section 1: Household Roster

The purpose of this section is to identify usual members of households, and to collect demographic data such as age, sex, marital status etc. regardless of his or her other socio-economic standing.

Section 2: Education

The objective of this section is to measure the level of education or formal schooling of all household members aged five (5) years or more. It is also intended to measure how much was spent on education of household members during the past 12 months, time spent on primary schooling, type of school (public or private) attended and the highest educational qualification achieved, including short training course. Information on adult literacy levels and apprenticeship of persons was also collected in this section.

Section 3: Health

This section gathers information on health status of all household members that will be used to measure the cost of medical care and the use made of the different kinds of health services and facilities available. Information on preventive services during the past 12 months, fertility and child mortality is collected.

Section 4: Employment

This section is designed to gather information on employment, time use and the different sources of income for household members aged 7 years and over. This section is the special module of the fourth round of the survey and is therefore expanded to include several labour details.

Section 5: Migration

The purpose of this section is to gather limited data on the spatial mobility of household members. The section is brief, focusing on the most recent migration to elicit information on previous place of residence, type of work and reasons for moving.

Section 6: Identification of Respondents for Next visits

This section is mainly used to identify eligible members of household and make appointments with them for sections 8, 9, and 10 of the questionnaire.

Section 7: Housing

The quality of house occupied by the household is paramount to the welfare of the members. In this regard, the section seeks information on the type of dwelling, occupancy status, number of rooms and room space, expenditures, utilities and amenities as well as the physical characteristics of the dwelling.

PART B

Section 8: Agriculture

The purpose of this section is to collect data on the household's agricultural activities. It covers agricultural assets such as land, livestock and equipment. Furthermore, it provides data on agricultural production, technology, processing, marketing, income and consumption patterns.

Section 9: Household Expenditure

This section collects data on households expenditures on food and non-food items over a period of 35 days.

Section 10: Non-Farm Enterprise

This section is designed to obtain information on income for the household, specifically from non-farm enterprises. It also identifies which household members are responsible for each non-farm enterprise in terms of decision making and the allocation of income it generates. Non-farm enterprises that are currently operating and those that were operational some time in the past 12 months but currently not operating are considered.

Section 11: Remittances

Information on cash and/or in-kind remittances is collected in this section. Transfers to the household are considered as income whereas transfers from the household constitute expenditures. In the analysis however, net remittance is used.

Section 12: Credit, Assets and Savings

This section of the questionnaire is designed to collect information on loans, assets and savings. The household members who contracted loans and those operating savings accounts are identified for interviewing.

APPENDIX 3

DESCRIPTION OF INCOME AND EXPENDITURE VARIABLES

A. CONTENTS OF THE FILES INC*: DISAGGREGATED HOUSEHOLD INCOME VARIABLES (expressed on an annual basis)

- INC1 SCHOL = Value of educational scholarship (at individual level)
- INC2 J1CASH = Employment income in cash, main job
J1SECASH = Self-employment income in money, main job
J1BONC = Bonus inc. in money pay, main job
J1BONK = Bonus not inc. in money, main job
J1K = Employment income in kind, main job
J1H = Employment income as subsd housing, main job
J1TR = Employment income as subsd transport, main job
J1OTH = Employment income in other forms, main job (all variables at individual level)
- INC3 J2CASH = Employment income cash, 2nd job
J2SECASH = Self-employment income in cash, 2nd job
J2K = Employment income in food/animals, 2nd job
J2H = Employment income as housing/transport/other, 2nd job (all variables at individual level)
- INC4 J3CASH = Employment income cash, 3rd job
J3SECASH = Self-employment income in cash, 3rd job
J3K = Employment income in kind, 3rd job (all variables at individual level)
- INC5 J4CASH = Employment income cash, 4th job
J4SECASH = Self-employment income in cash, 4th job
J4K = Employment income in kind, 4th job (all variables at individual level)
- INC6 INCWAT = Income from water sold (at household level)
- INC7 INCLND1 = Income from renting out land
INCLND2 = Income from sharecropping (both at household level)
- INC8 INCLIV = Income from renting out livestock (at household level)
- INC9 INCEQ = Income from renting out agricultural. Equipment (at level of each individual item)
- INC10 PSV1 = Revenue from sale of cash crops-main outlet
CROPSV2 = Revenue from sale of cash crops-other outlet (both at level of each individual crop)
- INC11 ROOTSV = Revenue from sale of roots/fruit/vegetables (at level of each individual crop)
- INC12 OTHAGINC = Revenue from other agricultural income (at household level)
- INC13 INCTRCRP = Revenue from transformed crops (at level of each individual product)
- INC14 INCNFC = Revenue in cash from non-farm enterprises
INCNFK = Revenue in goods/services from non-farm enterprises
INCNFDOM = Value of output of non-farm enterprises consumed domestically
INCNFRNT = Non-farm rent income
PRNFDOM = Profit of non-farm enterprises used within household
PRNFUND1 = Profit of non-farm enterprises paid to other households

PRNFUND2 = Profit of non-farm enterprises saved
 PRNFUND3 = Profit of non-farm enterprises for other uses (at level of each enterprise)
INC15 INCREM = Income from remittances (at level of each individual remittance)
INC16 INCMISC = Miscellaneous income (at level of each individual category)

B. CONTENTS OF THE FILES EXP*: DISAGGREGATED HOUSEHOLD EXPENDITURE VARIABLES (expressed on an annual basis)

EXP1 EDUCEXP = Expenditure on education (at individual level)
EXP2 WATB1 = Water bill - 1
 WATB2 = Water bill - 2
 ELECB = Electric bill
 GARB = Garbage disposal bill (at household level)

EXP3 LANDEXP = Expenditure on renting farm land (at level of individual farm)
EXP4 CROPEXP = Expenditure on crop inputs (at level of each individual input)
EXP5 LIVEXP = Expenditure on livestock inputs (at level of each individual input)
EXP6 FDPREXP1 = Labour costs on food processing
 FDPREXP2 = Other costs on food processing (both at level of each individual product)
EXP7 HP = Consumption of home production
EXP8 YREXP = Less frequent non-food expenditure (at level of each item purchased)
EXP9 DAYEXP = Frequent non-food expenditure
EXP10 FOODEXP = Food expenditure (actual)
EXP11 NFINP = Exp. on inputs of non-farm enterprises (at level of each expenditure item)
EXP12 EQDEPN = Depreciation of farm equipment (at level of each individual item)
EXP13 ASSDEPN = Depreciation of non-farm capital assets (at level of asset type within each enterprise)
EXP14 REMITEXP = Expenditure on remittances (at level of each individual remittance)
EXP15 MISCEXP = Miscellaneous expenditure (at household level)
EXP16 USEVAL = Use value of durable goods (at level of each type of asset/good)
EXP17 RENTPAID = Actual rental payment in cash and kind (at household level)
EXP18 IMPRTOWN = Value of imputed rental services - household owner (at household level)
EXP19 IMPRTPAR = Value of imputed rental services - paid by parents (at household level)
EXP20 IMPRTEMP = Value of imputed rental services - paid by employers (at household level)
EXP21 IMPRTSQU = Value of imputed rental services - squatter (at household level)

C. CONTENTS OF THE FILES SUBAGG*: SUBAGGREGATES OF HOUSEHOLD INCOMES AND EXPENDITURES

All variables are at the household level, except those in the files SUBAGG2, SUBAGG3, SUBAGG4 and SUBAGG5, which are at the individual level.

<u>SUBAGG1</u>	SCHOL1 = Value of scholarship, last 12 months
<u>SUBAGG2</u>	J1TOT = Total wage income main job – past 12 months
<u>SUBAGG3</u>	J2TOT = Total wage income 2 nd job – past 12 months
<u>SUBAGG4</u>	J3TOT = Total wage income 3 rd job – past 12 months
<u>SUBAGG5</u>	J4TOT = Total wage income 4 th job – past 12 months
<u>SUBAGG6</u>	FD = Total wage income paid in food HO = Total wage income paid in housing GD = Total wage income paid in other forms
<u>SUBAGG7</u>	SEFARM = Farm self employment income
<u>SUBAGG8</u>	SENONF = Non farm self employment income
<u>SUBAGG9</u>	WATINC = Income from water sold
<u>SUBAGG10</u>	LNDINC1 = Income from renting out land LNDINC2 = Income from sharecropping
<u>SUBAGG11</u>	LIVINC = Income from renting out livestock
<u>SUBAGG12</u>	EQINC = Income from renting out agricultural equipment
<u>SUBAGG13</u>	CRPINC1 = Revenue from sale of cash crops – main outlet CRPINC2 = Revenue from sale of cash crops – other outlet
<u>SUBAGG14</u>	ROOTINC = Revenue from sale of roots/fruit/vegetables
<u>SUBAGG15</u>	INCOTHAG = Revenue from other agricultural source
<u>SUBAGG16</u>	TRCRPINC = Revenue from the sale of transformed crop products
<u>SUBAGG17</u>	NFCINC = Revenue in cash from non farm enterprises NFKINC = Revenue in goods/services of non farm enterprises NFDOMINC = Value of non farm enterprise products consumed domestically PROFITNF = Profit of non farm enterprises for own purposes NFRNTINC = Non farm rent income
<u>SUBAGG18</u>	REMINC = Income from remittances
<u>SUBAGG19</u>	MISCINC = Miscellaneous income
<u>SUBAGG20</u>	EXPEDUC = Expenditure on educational items
<u>SUBAGG21</u>	HHUTILS = Expenditure on household utilities
<u>SUBAGG22</u>	EXPLAND = Expenditure on renting farm land
<u>SUBAGG23</u>	EXPCROP = Expenditure on crop input
<u>SUBAGG24</u>	EXPLIV = Expenditure on livestock inputs
<u>SUBAGG25</u>	EXFPDPR1 = Labour costs on food processing EXFPDPR2 = Other costs on food processing
<u>SUBAGG26</u>	HOMEPRO = Consumption of home-produced food
<u>SUBAGG27</u>	EXPYEAR = Less frequent non-food expenditure
<u>SUBAGG28</u>	EXPDAY = Frequent non-food exp.
<u>SUBAGG29</u>	EXPFOOD = Food expenditure (actual)
<u>SUBAGG30</u>	INPNF = Expenditure on non-farm enterprises
<u>SUBAGG31</u>	DEPNEQ = Depreciation of farming equipment
<u>SUBAGG32</u>	DEPNASS = Depreciation of non farm capital assets
<u>SUBAGG33</u>	EXPREMIT = Expenditure on remittances
<u>SUBAGG34</u>	EXPMISC = Miscellaneous expenditure

<u>SUBAGG35</u>	VALUSE = Use value of durable goods
<u>SUBAGG36</u>	RENT1 = Imputed rent - household owner
<u>SUBAGG37</u>	RENT2 = Imputed rent - paid by parents
<u>SUBAGG38</u>	RENT3 = Actual rent in cash and kind
<u>SUBAGG39</u>	RENT4 = Imputed rent - paid by employers
<u>SUBAGG40</u>	RENT5 = Imputed rent - squatters

D. CONTENTS OF THE FILES AGG*: AGGREGATES OF HOUSEHOLD INCOMES AND EXPENDITURES

All variables are at the household level

<u>AGG1</u>	TOTEMP = Income from employment
<u>AGG2</u>	AGRI1 = HH agricultural income (1)
	AGRI1C = HH agricultural income (1)- corrected
	AGRI2 = HH agricultural income (2)
	AGRI2C = HH agricultural income (2)- corrected
	HHAGDEPN = Depreciation of farm equipment
<u>AGG3</u>	NFSEY1 = Gross non-farm self-employment income (1)
	NFSEY2 = Gross non-farm self-employment income (2)
	NFSEY3 = Gross non-farm self-employment income (3)
	NFDEPN = Non-farm capital assets depreciation
<u>AGG4</u>	IMPRT = Actual and imputed rental income
<u>AGG5</u>	REMITINC = Income from remittances
<u>AGG6</u>	OTHERINC = Other income
<u>AGG7</u>	EXPFOOD = Food expenditure (actual)
	EXPFOODC = Food expenditure (actual)- corrected
<u>AGG8</u>	HOUSEXP = Expenditure on housing
<u>AGG9</u>	OTHEXP = Other expenditure (actual)
	OTHEXPC = Other expenditure (actual)-corrected
<u>AGG10</u>	IMPFOOD = Imputed food expenditure
	IMPFOODC = Imputed food expenditure- corrected
<u>AGG11</u>	IMPNFEXP = Other expenditure (imputed)
<u>AGG12</u>	EXPREMIT = Expenditure on remittances

Appendix 4

SUPPLEMENTARY TABLES

Table A1.1 Distribution of household heads by ethnicity and region (percent)

Ethnicity	Western	Central	G.Accra	Volta	Eastern	Ashanti	B/A	Northern	U.West	U/East	Ghana
Asante	2.5	1.8	5.5	0.1	6.2	76.8	7.0	0.2	-	-	100
Fanti	17.0	60.2	8.6	0.4	5.7	7.0	1.2	-	-	-	100
Other Akan	21.8	12.3	9.5	0.5	28.6	3.8	23.4	0.1	-	0.1	100
Ga-Adangbe	4.7	1.1	67.9	1.0	22.6	1.5	0.7	0.5	-	-	100
Ewe	2.8	1.3	13.8	61.5	13.0	3.5	1.6	2.4	-	-	100
Guan	5.2	10.4	6.7	43.0	24.9	-	9.8	-	-	-	100
Hausa	-	3.8	30.4	13.9	13.9	11.4	13.9	7.6	-	5.1	100
Dagomba	3.0	0.9	6.5	2.2	3.0	6.1	1.3	74.3	0.4	2.2	100
Grussi/Frafra	4.4	-	7.1	-	2.7	11.5	8.0	7.1	-	59.3	100
Dagarti	1.9	-	-	-	1.9	3.1	6.3	11.9	74.4	0.6	100
Other	16.6	1.7	4.3	9.2	3.5	9.8	11.0	18.4	-	25.4	100
All	10.7	11.7	14.3	10.7	13.7	17.7	9.0	6.0	2.0	4.3	100
Sample size	638	700	860	640	820	1060	540	360	120	260	5998

Table A1.2 Household heads by religion and region

	Western	Central	Gr. Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Catholic	14.3	12.6	5.6	16.2	8.1	15.0	11.5	4.4	9.0	3.2	100
Anglican	24.0	15.2	38.4	1.6	8.8	11.2	-	-	-	0.8	100
Presbyterian	3.1	3.2	22.9	20.1	31.4	10.5	6.6	1.9	-	0.3	100
Methodist	17.4	22.7	18.1	0.9	8.5	23.9	8.4	0.2	-	-	100
Pentecostal	12.8	7.3	21.7	7.1	16.4	23.4	9.8	1.5	-	-	100
Spiritualist	17.4	32.1	9.8	5.6	16.4	15.7	2.1	1.0	-	-	100
Other Christian	11.6	13.8	13.6	4.8	15.8	26.9	10.5	1.5	-	1.4	100
Muslim	7.3	8.6	12.0	6.8	6.6	15.1	8.3	29.4	0.4	5.4	100
Traditional	0.4	6.2	3.0	28.0	2.6	1.3	8.0	10.1	3.2	37.2	100
No religion	7.7	7.9	14.8	9.9	18.1	20.8	12.8	4.4	3.5	-	100
Other	-	-	25.0	12.5	25.0	12.5	-	-	-	25.0	100
Total	10.7	11.7	14.3	10.7	13.7	17.7	9.0	6.0	2.0	4.3	100.0
Sample size	639	700	859	640	820	1060	540	360	120	260	5998

Table A2.1 Average amount paid per person attending primary school in the last 12 months, by locality (cedis)

Item	Locality					All	
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Amount	Percentage
	¢	¢	¢	¢	¢	¢	%
School & registration fees	136,046	47,943	13,306	23,366	3,016	34,911	28.6
Contributions to PTA	4,515	1,966	708	1,784	1,298	1,819	1.5
Uniforms & sports clothes	24,683	14,533	8,896	10,564	10,244	12,482	10.2
Books & school supplies	30,368	11,484	4,829	6,101	3,632	9,027	7.4
Transportation to/from school	18,162	7,310	3,199	2,759	82	4,973	4.1
Food, board & lodging at school	121,747	58,674	40,732	42,308	14,584	49,184	40.3
Other expenses (clubs, extra classes)	27,614	11,269	4,784	3,701	1,178	7,564	6.2
Other in-kind expenses	6,057	2,970	446	946	2,423	2,046	1.7
Total	369,192	156,149	76,900	91,529	36,457	122,006	100.0

Note: The figures are based on those who attended or were attending school/college in the last 12 months.

Table A2.2 Average amount paid per person attending junior secondary school in the last 12 months, by locality (cedis)

Item	Locality					All	
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Amount	Percentage
	¢	¢	¢	¢	¢	¢	%
School & registration fees	294,664	240,175	83,682	246,561	44,409	215,404	50.9
Contributions to PTA	7,993	6,549	3,524	4,726	4,443	5,805	1.4
Uniforms & sports clothes	24,919	23,147	12,037	17,238	19,321	20,362	4.8
Books & school supplies	61,388	33,512	20,999	21,133	22,461	33,059	7.8
Transportation to/from school	52,148	18,523	13,374	9,321	11,689	21,253	5.0
Food, board & lodging at school	162,183	98,254	75,270	68,916	46,051	94,787	22.4
Other expenses (clubs, extra classes)	27,683	29,129	14,961	14,206	5,496	21,032	5.0
Other in-kind expenses	15,321	15,993	3,585	2,432	17,136	11,220	2.7
Total	646,299	465,282	227,432	384,533	171,006	422,922	100.0

Note: The figures are based on those who attended or were attending school/college in the last 12 months.

Table A2.3 Average amount paid per person attending senior secondary school in the last 12 months, by locality (cedis)

Item	Locality					All	
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Amount	Percentage
	¢	¢	¢	¢	¢	¢	%
School & registration fees	390,894	389,489	112,880	219,995	84,208	325,728	51.2
Contributions to PTA	4,852	4,925	1,600	11,753	6,141	5,750	0.9
Uniforms & sports clothes	20,507	21,725	26,867	21,992	14,884	20,970	3.3
Books & school supplies	138,156	44,336	75,938	48,609	27,510	66,691	10.5
Transportation to/from school	99,143	16,061	38,727	15,451	35,399	38,642	6.1
Food, board & lodging at school	207,737	101,421	315,338	136,390	55,954	135,045	21.2
Other expenses (clubs, extra classes)	13,084	28,019	33,009	54,661	22,924	27,473	4.3
Other in-kind expenses	21,546	15,016	3,187	9,935	14,530	15,393	2.4
Total	895,919	620,992	607,546	518,786	261,550	635,692	100.0

Note: The figures are based on those who attended or were attending school/college in the last 12 months.

Table A2.4 Average amount paid per person attending a school higher than a senior secondary school in the last 12 months, by locality (cedis)

Item	Locality					All	
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Amount	Percentage
	¢	¢	¢	¢	¢	¢	%
School & registration fees	604,317	594,705	175,615	84,340	-	504,539	52.3
Contributions to PTA	229	1,605	-	4,719	-	1,115	0.1
Uniforms & sports clothes	10,633	19,403	-	32,838	150,000	21,591	2.2
Books & school supplies	161,029	120,876	63,604	76,437	360,000	141,516	14.7
Transportation to/from school	107,391	67,346	4,004	64,344	50,000	79,360	8.2
Food, board & lodging at school	204,928	200,268	95,406	152,945	-	182,958	19.0
Other expenses (clubs, extra classes)	3,756	2,149	22,339	113,250	-	13,110	1.4
Other in-kind expenses	3,830	27,654	-	95,880	-	20,362	2.1
Total	1,096,113	1,034,006	360,968	624,753	560,000	964,551	100.0

Note: All figures have been rounded to the nearest 1000 cedis

The figures are based on those who attended or were attending school/college in the last 12 months.

Table A3.1 Reasons for medical consultation during the previous two weeks, by locality and sex (percent of people reporting)

Reasons for Visit	Locality												All
	Accra		Other urban		Rural Coastal		Rural Forest		Rural Savannah		Ghana		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Check up	2.8	2.2	0.9	1.5	0.5	-	0.4	1.1	1.3	1.9	0.9	1.3	1.1
Illness	88.8	96.4	87.7	91.5	89.1	92.5	87.6	93.3	91.5	95.4	88.6	93.2	91.1
Injury	8.4	1.4	11.1	6.2	10.4	7.5	11.3	4.6	7.2	2.8	10.2	4.9	7.3
Vaccination	-	-	-	-	-	-	0.2	0.2	-	-	0.1	0.1	0.1
Pre-natal care	-	-	-	0.4	-	-	-	0.8	-	-	-	0.4	0.2
Post-natal care	-	-	0.3	0.4	-	-	0.4	-	-	-	0.2	0.1	0.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	108	127	344	487	226	253	438	489	279	232	1396	1588	2983

Table A3.2 Women aged 15-49 years, currently pregnant or pregnant during the previous 12 months, who have received pre-natal care, by age group and locality (percent)

Age group	Locality					Ghana
	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	
15 - 19	49.7	89.1	96.0	81.2	72.8	83.0
20 - 24	67.9	82.2	85.1	77.4	88.6	81.0
25 - 29	78.5	85.7	84.5	80.0	78.0	81.5
30 - 34	86.2	83.3	80.1	83.4	78.8	82.1
35 - 39	100.0	95.8	76.0	68.4	75.8	78.6
40 - 44	78.8	79.9	81.6	80.5	85.7	81.6
45 - 49	-	100.0	100.0	82.0	97.1	91.8
All	80.9	86.1	83.7	78.5	80.0	81.4

Table A3.3 Women aged 15-49 years, currently pregnant or pregnant during the previous 12 months, who have never went for pre-natal consultation, by locality and reason for not going (percent)

Reason for no pre-natal care	Locality					Country
	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	
Cannot afford	13.3	26.3	36.0	37.4	35.4	33.2
No health care available	6.7	-	4.0	3.3	2.1	2.8
Centre too far	-	-	-	3.3	14.6	4.6
Not necessary	46.7	44.7	24.0	34.1	27.1	34.1
Other	33.3	28.9	36.0	22.0	20.8	25.3
All	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	16	37	30	94	50	228

Table A3.4 Children aged 7 years or under who have never been vaccinated, by age, locality and sex of child (percent)

	Locality						Country	
	Accra		Other urban		Rural			
	Male	Female	Male	Female	Male	Female	Male	Female
Age								
0 year	20.9	0.0	14.4	9.7	22.4	21.7	20.7	18.4
1 year	0.0	0.0	1.8	0.0	6.0	6.9	4.8	5.0
2 years	0.0	0.0	2.2	0.0	7.1	6.4	5.5	4.8
3 years	0.0	0.0	0.0	2.4	5.5	6.6	4.2	5.2
4 years	7.9	0.0	0.0	0.0	5.6	3.5	4.7	2.4
5 years	0.0	0.0	1.6	3.8	5.9	5.9	4.7	5.0
6 years	0.0	0.0	1.1	1.6	7.3	7.7	5.3	5.6
7 years	0.0	0.0	3.4	1.7	5.8	6.6	4.9	5.0
All	2.9	0.0	3.0	2.2	8.0	8.1	6.7	6.3

Table A4.1 Educational levels of the active population, by sex and type of work (percent)

Type of Work	Educational Attainment				Total	Sample size
	Never been to school	Less than MSLC/BECE	MSLC/BECE	Secondary or Higher		
<u>Males</u>						
Wage employment	8.4	9.4	41.4	40.8	100.0	876
Self-employment (non-agriculture)	13.5	21.1	48.1	17.4	100.0	726
Unpaid family worker (non-agriculture)	4.8	26.2	42.9	26.2	100.0	42
Self-employment (agriculture)	29.7	22.9	40.7	6.7	100.0	1807
Unpaid family worker (agriculture)	30.2	29.1	32.4	8.2	100.0	364
Other	25.0	16.7	33.3	25.0	100.0	12
All	21.5	20.1	41.5	16.9	100.0	3827
<u>Females</u>						
Wage employment	10.3	9.6	43.6	36.5	100.0	282
Self-employment (non-agriculture)	33.7	25.7	35.3	5.3	100.0	1813
Unpaid family worker (non-agriculture)	21.8	30.3	35.3	12.6	100.0	119
Self-employment (agriculture)	53.2	27.2	18.8	0.8	100.0	1435
Unpaid family worker (agriculture)	58.7	23.7	16.5	1.2	100.0	917
Other	0.0	0.0	100.0	0.0	100.0	3
All	43.1	24.9	26.9	5.2	100.0	4569
<u>Both Sexes</u>						
Wage employment	8.9	9.4	42.0	39.7	100.0	1158
Self-employment (non-agriculture)	27.9	24.4	39.0	8.7	100.0	2539
Unpaid family worker (non-agriculture)	17.4	29.2	37.3	16.1	100.0	161
Self-employment (agriculture)	40.1	24.8	31.0	4.1	100.0	3242
Unpaid family worker (agriculture)	50.6	25.2	21.0	3.2	100.0	1281
Other	20.0	13.3	46.7	20.0	100.0	15
All	33.3	22.7	33.5	10.5	100.0	8396

Table A4.2 Educational levels of the active population, by sex and main employer (percent)

Main Employer	Educational Attainment				Total	Sample size
	Never been to school	Less than MSLC/BECE	MSLC/BECE	Secondary or Higher		
<u>Males</u>						
Self-employment (agriculture)	29.8	24.1	39.2	6.9	100.0	2154
State-owned company	5.1	3.2	38.2	53.5	100.0	374
Private formal	10.1	12.7	45.3	32.0	100.0	497
Private informal & self-employment (non-agriculture)	14.1	21.7	46.8	17.5	100.0	802
All	21.5	20.1	41.5	16.9	100.0	3827
<u>Females</u>						
Self-employment (agriculture)	55.3	25.8	18.0	0.9	100.0	2237
State-owned company	3.3	2.6	42.4	51.7	100.0	151
Private formal	15.4	15.4	47.7	21.5	100.0	130
Private informal & self-employment (non-agriculture)	34.5	26.0	34.1	5.4	100.0	2051
All	43.1	24.9	26.9	5.2	100.0	4569
<u>Both Sexes</u>						
Self-employment (agriculture)	42.8	25.0	28.4	3.8	100.0	4391
State-owned company	4.6	3.0	39.4	53.0	100.0	525
Private formal	11.2	13.2	45.8	29.8	100.0	627
Private informal & self-employment (non-agriculture)	28.7	24.8	37.7	8.8	100.0	2853
All	33.3	22.7	33.5	10.5	100.0	8396

Table A4.3 Educational levels of the active population, by sex and main industry (percent)

Main Industry	Educational Attainment				Total	Sample size
	Never been to school	Less than MSLC/BECE	MSLC/BECE	Secondary or Higher		
<u>Males</u>						
Agriculture	29.7	24.1	39.1	7.0	100.0	2301
Mining/Quarrying	7.7	21.2	53.8	17.3	100.0	52
Manufacturing	15.1	20.6	48.0	16.3	100.0	344
Utilities	0.0	7.1	50.0	42.9	100.0	14
Construction	10.0	18.2	45.5	26.4	100.0	110
Trading	9.9	15.2	45.4	29.4	100.0	282
Transportation/comm.	5.1	16.3	55.6	23.0	100.0	178
Financial services	1.6	4.8	36.5	57.1	100.0	63
Community/Social ser.	7.2	7.2	38.7	46.8	100.0	483
All	21.5	20.1	41.5	16.9	100.0	3827
<u>Females</u>						
Agriculture	55.7	25.6	17.8	0.9	100.0	2343
Mining/Quarrying	0.0	66.7	33.3	0.0	100.0	3
Manufacturing	37.6	26.3	30.0	6.1	100.0	643
Utilities	0.0	0.0	75.0	25.0	100.0	4
Construction	14.3	57.1	28.6	0.0	100.0	7
Trading	31.7	26.3	36.8	5.2	100.0	1257
Transportation/comm.	0.0	0.0	50.0	50.0	100.0	4
Financial services	0.0	0.0	16.7	83.3	100.0	6
Community/Social ser.	6.6	10.3	49.3	33.8	100.0	302
All	43.1	24.9	26.9	5.2	100.0	4569
<u>Both Sexes</u>						
Agriculture	42.9	24.8	28.3	4.0	100.0	4644
Mining/Quarrying	7.3	23.6	52.7	16.4	100.0	55
Manufacturing	29.8	24.3	36.3	9.6	100.0	987
Utilities	0.0	5.6	55.6	38.9	100.0	18
Construction	10.3	20.5	44.4	24.8	100.0	117
Trading	27.7	24.3	38.3	9.6	100.0	1539
Transportation/comm.	4.9	15.9	55.5	23.6	100.0	182
Financial services	1.4	4.3	34.8	59.4	100.0	69
Community/Social ser.	7.0	8.4	42.8	41.8	100.0	785
All	33.3	22.7	33.5	10.5	100.0	8396

Table A4.4 Distribution of population aged 7 + years by hours spent per day on fetching wood, by sex and age group (percent)

Sex	Age group	Hours per day spent on fetching wood								All	Sample size
		0	< 1	1-	2-	3-	4-	5-	6-		
Males	7-14	79.9	18.2	1.6	0.1	0.0	0.0	0.1	0.0	100.0	3097
	15-19	74.8	23.2	1.1	0.4	0.1	0.1	0.1	0.1	100.0	1385
	20-24	85.6	12.4	1.6	0.1	0.0	0.1	0.2	0.0	100.0	894
	25-44	86.6	12.2	0.9	0.2	0.0	0.0	0.0	0.0	100.0	2381
	45-59	88.5	10.2	0.8	0.3	0.2	0.1	0.1	0.0	100.0	1178
	60 +	90.5	8.9	0.5	0.1	0.0	0.0	0.0	0.0	100.0	812
	All	83.3	15.2	1.2	0.2	0.1	0.1	0.1	0.0	100.0	9747
Females	7-14	75.3	22.2	1.9	0.4	0.2	0.1	0.0	0.0	100.0	3063
	15-19	65.8	29.8	3.6	0.2	0.2	0.2	0.2	0.0	100.0	1262
	20-24	64.3	29.5	4.5	1.4	0.2	0.0	0.0	0.0	100.0	907
	25-44	55.5	35.6	6.8	1.3	0.4	0.2	0.1	0.1	100.0	3271
	45-59	51.1	39.0	7.1	1.6	0.5	0.4	0.2	0.0	100.0	1288
	60 +	68.1	26.5	4.4	0.5	0.3	0.1	0.0	0.2	100.0	1051
	All	63.7	30.2	4.7	0.9	0.2	0.2	0.1	0.0	100.0	10842
Both sexes	7-14	77.6	20.2	1.8	0.2	0.0	0.0	0.0	0.0	100.0	6160
	15-19	70.5	26.4	2.3	0.3	0.2	0.2	0.2	0.0	100.0	2647
	20-24	74.8	21.0	3.1	0.8	0.1	0.1	0.1	0.0	100.0	1801
	25-44	68.6	25.7	4.4	0.8	0.1	0.1	0.1	0.1	100.0	5652
	45-59	68.9	25.2	4.1	1.0	0.2	0.2	0.2	0.0	100.0	2466
	60 +	77.9	18.8	2.7	0.3	0.1	0.1	0.0	0.1	100.0	1863
	All	73.0	23.1	3.0	0.6	0.1	0.1	0.1	0.1	100.0	20589

Table A4.5 Average minutes per day spent on fetching wood, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Males	7-14	22	20	24	24	21	42	29	61	31	39	29
	15-19	54	18	19	33	23	31	30	60	26	50	33
	20-24	25	23	43	32	17	28	27	87	23	11	34
	25-44	29	26	23	24	17	39	20	45	24	17	27
	45-59	21	24	14	28	25	54	19	94	25	17	34
	60 +	56	19	36	35	18	29	11	36	17	26	27
	All	31	21	25	28	21	38	26	62	25	33	30
Females	7-14	25	25	17	31	20	29	33	40	51	39	29
	15-19	25	19	31	37	25	32	27	79	41	38	34
	20-24	25	24	26	31	23	51	32	55	49	41	36
	25-44	33	33	29	49	27	52	32	52	45	43	40
	45-59	30	28	34	49	35	54	35	59	44	41	42
	60 +	28	24	36	30	21	60	43	48	44	43	36
	All	29	28	28	41	25	46	33	55	46	41	37
Both sexes	7-14	24	22	22	27	21	35	31	49	48	39	29
	15-19	36	19	26	35	24	32	29	70	39	39	33
	20-24	25	24	36	31	21	46	31	65	42	37	35
	25-44	32	32	27	43	25	50	30	51	44	42	38
	45-59	28	27	25	45	33	54	33	67	41	41	40
	60 +	33	23	36	31	20	56	41	43	38	38	34
	All	29	26	26	37	24	44	31	57	43	40	35

Table A4.6 Distribution of population aged 7 + years by hours spent per day on fetching water, by sex and age group (percent)

Sex	Age group	Hours per day spent on fetching water								All	Sample size
		0	< 1	1-	2-	3-	4-	5-	6-		
Males	7-14	42.6	44.6	7.8	4.0	0.6	0.2	0.3	0.1	100.0	3097
	15-19	40.9	47.4	7.0	3.7	0.4	0.4	0.3	0.1	100.0	1385
	20-24	61.2	34.3	3.1	0.8	0.2	0.2	0.0	0.1	100.0	894
	25-44	78.5	19.3	1.7	0.4	0.0	0.0	0.0	0.0	100.0	2381
	45-59	90.2	8.9	0.6	0.1	0.2	0.0	0.0	0.0	100.0	1178
	60 +	91.9	7.6	0.4	0.0	0.0	0.1	0.0	0.0	100.0	812
	All	62.7	30.5	4.3	2.9	0.3	0.1	0.1	0.1	100.0	9747
Females	7-14	34.3	49.4	10.2	4.5	0.8	0.3	0.4	0.2	100.0	3063
	15-19	25.4	55.9	10.6	5.8	1.4	0.5	0.2	0.2	100.0	1262
	20-24	26.0	55.6	11.7	4.7	1.1	0.4	0.3	0.1	100.0	907
	25-44	36.8	46.7	11.6	3.9	0.9	0.1	0.1	0.1	100.0	3271
	45-59	57.0	32.6	7.5	1.7	0.5	0.4	0.2	0.1	100.0	1288
	60 +	78.9	17.6	2.9	0.6	0.1	0.0	0.0	0.0	100.0	1051
	All	40.3	44.8	9.7	3.8	0.8	0.2	0.2	0.1	100.0	10842
Both sexes	7-14	38.4	47.0	9.0	4.3	0.7	0.2	0.3	0.1	100.0	6160
	15-19	33.5	51.4	8.7	4.7	0.9	0.4	0.2	0.2	100.0	2647
	20-24	43.5	45.0	7.4	2.8	0.7	0.3	0.2	0.1	100.0	1801
	25-44	54.4	35.1	7.4	2.4	0.5	0.1	0.1	0.1	100.0	5652
	45-59	72.9	21.3	4.2	0.9	0.4	0.1	0.1	0.0	100.0	2466
	60 +	84.5	13.3	1.8	0.3	0.1	0.0	0.0	0.0	100.0	1863
	All	50.9	38.0	7.2	2.9	0.6	0.2	0.2	0.1	100.0	20589

Table A4.7 Average minutes per day spent on fetching water, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Males	7-14	44	32	26	32	30	49	39	61	39	37	38
	15-19	49	26	30	32	30	43	28	69	21	30	36
	20-24	19	27	15	38	21	23	19	81	17	50	26
	25-44	24	22	16	21	29	21	19	43	35	29	23
	45-59	30	22	11	20	20	22	26	180	34	23	24
	60 +	20	38	8	15	14	41	29	9	0.0	23	18
	All	38	29	22	31	28	40	31	62	31	34	33
Females	7-14	39	35	38	42	33	54	35	60	28	39	41
	15-19	36	32	32	53	33	40	31	96	43	53	42
	20-24	35	23	17	39	40	42	40	101	39	36	40
	25-44	31	34	21	49	28	43	33	72	44	49	41
	45-59	23	31	13	36	25	37	35	91	41	54	39
	60 +	28	25	13	27	25	33	23	54	51	42	28
	All	35	33	26	45	31	46	34	77	39	47	40
Both sexes	7-14	41	34	32	37	31	51	37	60	30	38	40
	15-19	41	29	31	43	31	41	30	85	36	44	39
	20-24	30	24	16	39	33	36	35	97	34	42	35
	25-44	30	32	19	46	29	39	30	69	44	46	37
	45-59	25	30	13	35	24	34	34	93	41	49	36
	60 +	26	27	11	24	22	34	24	49	51	37	26
	All	36	31	24	40	30	44	33	74	38	43	38

Table A4.8 Distribution of population aged 7 + years by hours spent per day on child care, by sex and age group (percent)

Sex	Age group	Hours per day spent on child care								All	Sample size
		0	< 1	1-	2-	3-	4-	5-	6-		
Males	7-14	94.4	3.6	1.3	0.2	0.1	0.1	0.1	0.3	100.0	3097
	15-19	95.4	2.8	0.9	0.4	0.1	0.0	0.1	0.3	100.0	1385
	20-24	93.6	3.4	1.5	0.8	0.1	0.1	0.0	0.6	100.0	894
	25-44	76.9	9.8	6.2	2.8	1.4	1.2	0.6	1.0	100.0	2381
	45-59	82.3	6.6	5.6	2.5	0.9	0.6	0.5	1.0	100.0	1178
	60 +	89.7	3.1	3.7	1.6	0.5	0.5	0.1	0.9	100.0	812
	All	88.3	5.3	3.2	1.3	0.5	0.5	0.3	0.9	100.0	9747
Females	7-14	87.9	6.8	2.8	1.2	0.4	0.4	0.3	0.3	100.0	3063
	15-19	78.0	7.8	4.3	2.9	1.2	1.1	1.6	3.2	100.0	1262
	20-24	50.4	11.0	8.4	6.5	4.7	2.8	3.5	12.7	100.0	907
	25-44	27.9	16.9	14.3	10.2	6.0	4.9	4.3	15.4	100.0	3271
	45-59	55.0	14.9	11.2	5.7	2.8	2.3	1.7	6.4	100.0	1288
	60 +	71.4	7.6	7.9	4.2	2.1	2.0	0.9	4.0	100.0	1051
	All	60.0	11.4	8.4	5.4	3.0	2.4	2.1	7.3	100.0	10842
Both sexes	7-14	91.2	5.2	2.0	0.7	0.2	0.2	0.2	0.3	100.0	6160
	15-19	87.1	5.2	2.5	1.6	0.6	0.5	0.8	1.7	100.0	2647
	20-24	71.8	7.2	4.9	3.7	2.4	1.4	1.8	6.7	100.0	1801
	25-44	48.6	13.9	10.9	7.1	4.1	3.3	2.8	9.4	100.0	5652
	45-59	68.0	10.9	8.5	4.2	1.9	1.5	1.1	3.9	100.0	2466
	60 +	79.3	5.6	6.1	3.1	1.4	1.3	0.5	2.6	100.0	1863
	All	73.4	8.5	5.9	3.5	1.8	1.5	1.3	4.2	100.0	20589

Table A4.9 Average minutes per day spent on child care, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Males	7-14	45	52	109	78	154	74	33	75	289	51	76
	15-19	83	-	176	43	16	26	103	105	59	48	80
	20-24	72	208	118	73	260	117	-	72	34	50	99
	25-44	147	60	157	89	148	108	73	79	77	58	113
	45-59	155	58	125	64	80	247	38	91	53	77	114
	60 +	121	87	56	55	243	332	17	62	122	83	135
	All	133	65	144	74	141	152	60	82	129	61	107
Females	7-14	97	37	122	73	159	85	93	73	73	60	83
	15-19	199	88	225	150	214	246	93	156	50	107	174
	20-24	395	168	250	174	289	324	195	185	81	73	254
	25-44	358	146	248	203	222	310	129	158	71	139	222
	45-59	175	98	192	164	214	311	79	120	54	91	170
	60 +	259	108	145	116	225	290	108	123	108	110	171
	All	297	126	227	170	226	286	122	146	72	110	200
Both sexes	7-14	85	40	117	75	159	82	80	74	129	56	81
	15-19	182	88	213	123	194	230	94	137	52	80	156
	20-24	362	170	223	157	287	309	195	172	74	66	237
	25-44	294	132	227	184	211	279	120	146	72	120	201
	45-59	165	91	172	145	190	298	70	108	54	87	155
	60 +	233	106	136	96	228	300	100	111	112	96	163
	All	250	117	207	149	214	265	112	131	82	93	181

Table A4.10 Distribution of population aged 7 + years by hours spent per day on sweeping, by sex and age group (percent)

Sex	Age group	Hours per day spent on sweeping								All	Sample Size
		0	< 1	1-	2-	3-	4-	5-	6-		
Males	7-14	72.9	26.4	0.6	0.1	0.0	0.0	0.0	0.0	100.0	3097
	15-19	67.8	31.1	0.6	0.1	0.1	0.0	0.1	0.1	100.0	1385
	20-24	73.9	25.6	0.4	0.0	0.0	0.0	0.0	0.0	100.0	894
	25-44	77.7	22.0	0.3	0.0	0.0	0.0	0.0	0.0	100.0	2381
	45-59	86.6	13.1	0.3	0.1	0.0	0.0	0.0	0.0	100.0	1178
	60 +	85.8	14.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	812
	All	76.2	23.3	0.4	0.1	0.0	0.0	0.0	0.0	100.0	9747
Females	7-14	42.1	55.4	2.1	0.2	0.1	0.0	0.0	0.0	100.0	3063
	15-19	19.9	76.1	3.4	0.4	0.1	0.1	0.0	0.0	100.0	1262
	20-24	17.4	77.6	4.3	0.4	0.1	0.0	0.0	0.1	100.0	907
	25-44	17.4	77.7	4.6	0.3	0.0	0.0	0.0	0.0	100.0	3271
	45-59	30.6	66.0	3.1	0.2	0.1	0.0	0.0	0.0	100.0	1288
	60 +	50.1	48.5	1.1	0.2	0.0	0.0	0.0	0.0	100.0	1051
	All	29.4	67.0	3.2	0.3	0.1	0.0	0.0	0.0	100.0	10842
Both sexes	7-14	57.6	40.8	1.3	0.2	0.0	0.0	0.0	0.0	100.0	6160
	15-19	45.0	52.6	2.0	0.3	0.1	0.1	0.0	0.0	100.0	2647
	20-24	45.5	51.8	2.4	0.2	0.1	0.0	0.0	0.0	100.0	1801
	25-44	42.8	54.2	2.8	0.2	0.0	0.0	0.0	0.0	100.0	5652
	45-59	57.3	40.7	1.7	0.2	0.0	0.0	0.0	0.0	100.0	2466
	60 +	65.7	33.5	0.7	0.1	0.0	0.0	0.0	0.0	100.0	1863
	All	51.6	46.3	1.9	0.2	0.0	0.0	0.0	0.0	100.0	20589

Table A4.11 Average minutes per day spent on sweeping, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Male	7-14	15	11	11	15	16	17	24	19	19	18	15
	15-19	20	12	14	15	23	13	25	12	12	13	17
	20-24	14	10	9	8	9	13	11	30	13	12	12
	25-44	12	9	7	10	14	13	21	13	16	11	12
	45-59	13	16	9	10	12	13	25	12	21	10	13
	60 +	13	7	6	10	12	17	13	4	9	23	11
	All	15	11	10	13	16	14	22	17	16	15	14
Female	7-14	16	13	14	18	18	21	28	21	27	21	19
	15-19	18	15	15	21	24	23	23	22	18	21	20
	20-24	19	19	12	22	26	21	27	24	19	19	21
	25-44	19	19	13	23	21	25	27	22	24	21	21
	45-59	20	17	12	20	20	20	25	22	18	18	19
	60 +	19	15	8	20	18	19	21	18	22	16	17
	All	18	17	13	21	21	22	26	22	23	20	20
Both sexes	7-14	16	13	13	17	17	20	27	20	26	20	18
	15-19	19	14	14	19	24	21	24	21	17	18	19
	20-24	18	16	11	18	22	20	24	26	18	16	19
	25-44	18	18	12	20	20	23	26	21	23	20	20
	45-59	19	17	12	19	19	19	25	20	18	17	18
	60 +	18	14	7	18	17	18	20	17	21	18	16
	All	18	15	12	19	20	21	25	21	22	19	19

Table A4.12 Distribution of population aged 7 + years by hours spent per day on garbage disposal, by sex and age group (percent)

Sex	Age group	Hours per day spent on garbage disposal							Sample size
		0	< 1	1-	2-	3-	4-	All	
Males	7-14	63.8	35.7	0.5	0.0	0.0	0.0	100.0	3097
	15-19	81.7	18.1	0.1	0.1	0.1	0.0	100.0	1385
	20-24	89.3	10.6	0.0	0.0	0.1	0.0	100.0	894
	25-44	92.2	7.8	0.0	0.0	0.0	0.0	100.0	2381
	45-59	95.3	4.6	0.1	0.0	0.0	0.0	100.0	1178
	60 +	94.8	5.2	0.0	0.0	0.0	0.0	100.0	812
	All	82.0	17.8	0.2	0.0	0.0	0.0	100.0	9747
Females	7-14	40.4	58.6	0.9	0.0	0.0	0.0	100.0	3063
	15-19	46.5	53.2	0.2	0.0	0.1	0.0	100.0	1262
	20-24	47.2	52.4	0.3	0.0	0.1	0.0	100.0	907
	25-44	55.8	43.7	0.2	0.0	0.0	0.1	100.0	3271
	45-59	66.7	33.2	0.1	0.1	0.1	0.0	100.0	1288
	60 +	76.1	23.6	0.2	0.0	0.1	0.0	100.0	1051
	All	52.9	46.6	0.4	0.0	0.1	0.0	100.0	10842
Both sexes	7-14	52.2	47.1	0.7	0.0	0.0	0.0	100.0	6160
	15-19	64.9	34.8	0.1	0.0	0.1	0.0	100.0	2647
	20-24	68.1	31.6	0.2	0.0	0.1	0.0	100.0	1801
	25-44	71.1	28.6	0.1	0.1	0.0	0.1	100.0	5652
	45-59	80.4	19.5	0.1	0.0	0.0	0.0	100.0	2466
	60 +	84.3	15.6	0.1	0.0	0.1	0.0	100.0	1863
	All	66.7	32.9	0.3	0.0	0.0	0.0	100.0	20589

Table A4.13 Average minutes per day spent on garbage disposal, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Males	7-14	15	10	10	7	8	20	22	19	11	5	12
	15-19	9	8	19	6	8	11	19	15	10	4	11
	20-24	11	6	23	4	3	9	10	14	9	5	10
	25-44	12	8	4	4	6	8	9	6	7	5	6
	45-59	22	9	3	3	4	15	17	5	10	6	8
	60 +	10	8	11	5	9	19	9	4	9	6	9
	All	14	9	11	6	8	16	20	15	9	6	11
Females	7-14	14	10	12	9	9	16	20	12	10	6	12
	15-19	12	10	9	11	8	13	19	12	8	6	11
	20-24	11	10	14	7	8	11	14	13	7	6	10
	25-44	12	14	11	9	11	13	15	9	12	5	11
	45-59	10	13	5	7	9	11	14	9	10	5	9
	60 +	14	10	6	6	7	14	16	6	9	5	9
	All	13	11	11	9	9	14	17	10	10	5	11
Both sexes	7-14	14	10	11	8	8	17	20	15	10	5	12
	15-19	11	10	12	9	8	13	19	13	9	6	11
	20-24	11	10	16	7	7	11	13	13	7	6	10
	25-44	12	13	10	8	10	13	15	9	11	5	10
	45-59	12	13	5	6	8	11	14	9	10	5	9
	60 +	13	10	8	6	7	14	15	6	9	5	9
	All	13	11	11	8	9	14	18	11	10	5	11

Table A4.14 Distribution of population aged 7 + years by hours spent per day on cooking, by sex and age group (percent)

Sex	Age group	Hours per day spent cooking								All	Sample size
		0	< 1	1-	2-	3-	4-	5-	6-		
Males	7-14	96.3	2.2	1.0	0.4	0.2	0.0	0.0	0.0	100.0	3097
	15-19	88.2	8.0	2.2	1.5	0.1	0.0	0.0	0.0	100.0	1385
	20-24	84.7	9.7	4.0	1.5	0.0	0.1	0.0	0.0	100.0	894
	25-44	80.6	11.8	4.5	2.1	0.8	0.1	0.0	0.0	100.0	2381
	45-59	86.1	7.5	3.4	1.7	1.1	0.3	0.0	0.0	100.0	1178
	60 +	85.8	7.0	4.6	1.7	0.7	0.1	0.0	0.0	100.0	812
	All	88.1	7.1	2.9	1.3	0.5	0.1	0.0	0.0	100.0	9747
Females	7-14	79.1	10.6	5.8	2.6	1.3	0.3	0.1	0.1	100.0	3063
	15-19	31.8	27.2	19.0	13.5	5.4	2.0	0.5	0.6	100.0	1262
	20-24	20.1	25.6	18.3	22.1	9.5	3.1	0.4	1.0	100.0	907
	25-44	7.6	17.5	24.5	28.2	15.3	5.0	0.9	1.0	100.0	3271
	45-59	14.4	17.6	25.2	25.0	11.2	5.1	0.5	1.0	100.0	1288
	60 +	36.5	19.6	21.0	14.6	6.4	1.7	0.0	0.2	100.0	1051
	All	35.3	17.6	17.8	17.1	8.3	2.9	0.5	0.6	100.0	10842
Both sexes	7-14	87.7	6.4	3.4	1.5	0.7	0.1	0.1	0.0	100.0	6160
	15-19	61.3	17.2	10.2	7.3	2.6	0.2	0.2	0.3	100.0	2647
	20-24	52.1	17.7	11.2	11.8	4.8	1.6	0.2	0.5	100.0	1801
	25-44	38.4	15.1	16.1	17.2	9.2	2.9	0.5	0.6	100.0	5652
	45-59	48.6	12.8	14.8	13.9	6.4	2.8	0.5	0.5	100.0	2466
	60 +	58.0	14.1	13.8	9.0	3.9	1.0	0.0	0.1	100.0	1863
	All	60.3	12.6	10.7	9.6	4.6	1.5	0.2	0.3	100.0	20589

Table A4.15 Average minutes per day spent on cooking water, by age, sex and region

Sex	Age group	Region										All
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	
Males	7-14	46	57	45	51	41	67	51	73	-	90	56
	15-19	47	33	57	31	59	55	41	69	24	137	48
	20-24	40	36	35	57	51	50	34	64	-	109	47
	25-44	58	46	34	49	61	61	49	78	177	143	56
	45-59	63	48	47	62	65	96	50	54	43	175	66
	60 +	101	34	35	76	68	68	50	51	120	193	62
	All	56	43	40	50	60	64	47	72	85	140	56
Females	7-14	57	54	44	72	67	78	62	98	47	124	69
	15-19	75	68	57	103	84	87	70	154	69	158	85
	20-24	100	78	61	118	113	100	89	160	156	155	102
	25-44	125	107	87	130	108	106	99	162	116	194	117
	45-59	112	105	78	121	113	108	83	162	112	193	114
	60 +	98	92	65	103	88	87	77	133	109	165	91
	All	104	94	75	116	100	98	85	156	107	180	104
Both sexes	7-14	55	54	44	69	63	76	60	90	47	119	67
	15-19	69	64	57	88	80	82	64	149	59	156	79
	20-24	87	71	58	107	102	92	80	146	156	150	93
	25-44	113	100	80	121	101	100	89	156	119	192	109
	45-59	100	99	73	115	107	106	78	157	110	192	107
	60 +	99	85	59	100	85	85	73	127	110	169	86
	All	95	88	70	107	94	93	79	148	106	177	97

Table A4.16 Percentage Employees that Recieve Sudsidies from Employers by Industry, Occupation and Main Employer.

	Bonuses, Commission & Tips	Food, Crops and Animals	Free Accomo- dation	Free Transport	Free Medical Care
Industry	30.2	8.6	10.1	18.7	49.9
Agriculture	19.3	13.5	18.8	5.7	40.5
Mining/Quarrying	59.6	5.6	25.5	82.6	95.8
Manufacturing	30.3	19.7	9.4	21.4	46.8
Utilities	16.9	0.0	0.0	7.5	55.8
Construction	4.2	2.9	0.5	4.8	20.1
Trading	20.4	24.2	4.6	2.5	27.0
Transport/Communication	42.2	4.8	11.4	24.1	44.5
Financial Services	61.9	0.0	6.0	13.7	65.0
Community / Social Services	17.3	6.6	14.4	6.3	53.4
Occupation	23.4	9.2	10.5	8.9	46.3
Service	12.5	12.7	9.2	5.7	38.0
Professional / Technical	21.1	4.0	10.8	8.3	53.1
Administrative / Managerial	37.1	0.0	3.0	0.0	56.3
Clerical	34.9	1.3	14.3	18.9	75.5
Sales / Commerce	24.4	13.6	4.0	2.8	25.9
Agricultural	15.7	15.9	24.1	6.4	38.8
Production	29.2	13.7	9.0	23.5	44.6
Main Employer	17.8	8.3	8.2	9.3	42.3
Self-employed (Agriculture)	5.1	6.9	2.3	7.7	47.2
Government	23.5	1.2	13.5	9.8	70.8
Private (Formal Sector)	30.6	16.1	13.1	18.9	38.0
Private (Informal) & Self-employed (Non-agricultural)	12.0	9.0	4.0	0.6	13.2

Table A4.17 Percentage Employees that Receive Benefits from Their Employers by Industry, Occupation and Main Employer.

	Paid Holiday	Paid Sick Leave	Retirement Pension	Social Security Benefits
Industry	53.0	57.1	31.7	44.2
Agriculture	38.0	45.8	19.5	36.4
Mining/Quarrying	85.8	96.4	44.3	58.9
Manufacturing	48.3	42.2	18.1	35.7
Utilities	55.8	55.8	64.5	55.8
Construction	17.6	21.3	5.5	12.1
Trading	30.3	36.8	7.7	19.4
Transport/Communication	55.1	62.6	21.6	39.5
Financial Services	63.7	70.6	53.4	71.1
Community / Social Services	82.8	82.1	50.6	69.1
Occupation	56.8	57.2	31.8	45.6
Service	47.8	46.0	31.7	36.9
Professional / Technical	92.8	90.7	52.4	81.1
Administrative / Managerial	75.3	63.1	33.4	53.3
Clerical	85.0	88.1	59.6	75.8
Sales / Commerce	27.3	33.8	7.9	16.4
Agricultural	31.7	42.1	17.6	30.4
Production	46.5	48.3	20.0	33.8
Main Employer	56.9	61.6	28.2	48.2
Self-employed (Agriculture)	64.6	83.6	28.7	67.6
Government	94.3	93.9	64.6	85.5
Private (Formal Sector)	42.7	47.1	15.8	29.7
Private (Informal) & Self-employed (Non-agricultural)	25.9	21.6	3.7	9.9

Table A4.18 Percentage Employees that had Taxes Deducted from Pay, Had a Written Contract and are Registered with a Trade Union.

	Taxes Deducted from Pay	With Written Contract	With Trade Union
Industry	55.3	44.4	43.6
Agriculture	40.3	33.5	35.2
Mining/Quarrying	91.7	84.4	89.8
Manufacturing	43.4	29.7	23.5
Utilities	67.6	34.2	55.8
Construction	25.0	22.8	9.1
Trading	28.1	23.1	16.7
Transport/Communication	46.8	37.0	46.9
Financial Services	77.1	63.9	55.7
Community / Social Services	77.9	71.4	59.4
Occupation	57.1	47.3	39.9
Service	39.5	36.0	33.9
Professional / Technical	85.8	80.7	73.1
Administrative / Managerial	92.8	63.8	33.4
Clerical	85.4	76.6	65.5
Sales / Commerce	31.1	16.6	13.9
Agricultural	35.9	30.0	31.7
Production	46.3	38.4	33.8
Main Employer	60.7	49.3	46.3
Self-employed (Agriculture)	73.6	63.4	71.6
Government	95.2	83.4	77.7
Private (Formal Sector)	35.2	32.4	26.6
Private (Informal) & Self-employed (Non-agricultural)	38.8	17.8	9.2

Table A6.1 Distribution of households by type of dwelling, locality and sex of head of household (percent)

Type of dwelling	Locality						Ghana	
	Accra		Other urban		Rural		Male	Female
	Male	Female	Male	Female	Male	Female		
One family house	3.9	9.2	8.3	6.6	19.5	15.0	15.2	11.8
Apartment/Flat	5.8	4.9	4.6	3.7	1.0	0.8	2.4	2.1
Room(s) (compound house)	77.3	75.7	63.0	68.9	41.1	52.4	50.2	59.8
Room(s) (others)	11.4	8.7	20.1	19.7	18.9	21.1	18.4	19.4
Huts/Buildings (same compound)	1.4	1.5	3.3	0.5	18.0	10.6	12.8	6.5
Huts/Buildings (different compound)	-	-	0.2	0.5	1.4	0.2	1.0	0.2
Other	0.2	-	0.4	0.2	0.0	-	0.2	0.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	414	206	960	620	2608	1191	3982	2017

Table A6.2 Distribution of households, which rent their dwelling, by locality, sex of head of household, and person from whom they rent

From whom they rented dwelling	Locality						Country	
	Accra		Other urban		Rural		Male	Female
	Male	Female	Male	Female	Male	Female		
Relative	12.1	8.8	3.0	3.2	7.6	8.3	6.3	5.6
Private employer	5.1	14.0	1.3	1.6	2.3	1.0	2.3	3.6
Government	-	-	10.7	7.6	10.9	5.2	8.8	5.6
Private individual or agency	82.8	77.2	84.8	87.6	78.3	85.4	82.1	85.2
Other	-	-	0.3	-	1.0	-	0.5	-
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	157	57	394	185	304	96	855	338

Table A7.1 Average value of reported household and per capita home consumption of food and beverages, by item and locality

		Average value of annual household home consumption			Average value of annual per capita home consumption		
		Urban	Rural	Ghana	Urban	Rural	Ghana
1. Food & Beverages							
01	Cereals And Cereal Products						
001	Rice (Paddy, Grain)	331	3958	5162	85	1752	1197
002	Maize - Cob (Fresh)	55	5260	3535	142	1158	820
003	Maize - Flour/Dough	10658	53987	38102	2726	11886	8839
004	Sorghum	-	1266	802	-	279	186
005	Millet Grain	227	1700	1160	58	374	269
006	Millet Flour	153	9891	6321	39	2178	1466
007	Guinea Corn	246	9486	6099	63	2088	1415
008	Other Grains	-	7	4	-	1	1
009	Other Flour	25	0	9	6	0	2
02	Roots And Tubers						
010	Cassava - Roots	28989	160644	112376	7413	35367	26070
011	Cassava - Gari	37	2259	1445	10	497	335
012	Cassava -(Other Forms)	3757	21585	15049	961	4752	3491
013	Yams	14719	57661	41917	3764	12694	9724
014	Cocoyams	11031	36688	27281	2821	8077	6329
015	Plantain	13552	76230	53251	3466	16782	12353
016	Sweet Potato	49	490	328	13	108	76
017	Other Roots & Tubers	2982	1212	1861	763	267	432
03	Pulses And Nuts						
020	Bambara Beans	83	1986	1288	21	437	299
022	Cowpeas	157	2503	1643	40	551	381
023	Groundnuts (Roasted Raw)	1147	12559	8375	293	2765	1943
024	Other Pulses Or Legumes	115	1016	686	29	224	159
025	Palm Nuts	1311	14849	9885	335	3269	2293
026	Coconuts	39	668	437	10	147	101
028	Other Nuts & Seeds	33	64	52	8	14	12
04	Vegetables						
040	Tomatoes	748	4692	3246	191	1033	753
041	Onions	2003	735	1200	512	162	278
042	Carrots	2	12	8	0	3	2
043	Okro	1143	10484	7059	292	2308	1638
044	Garden Eggs, Cucumbers	268	2919	1947	69	643	452
045	Pepper	3079	18196	12654	787	4006	2935
046	Cabbage Or Lettuce	25	37	33	7	8	8
047	Spinach/Leafy Vegetables	837	5087	3529	214	1120	819
048	Other Vegetables	233	1112	790	60	245	183
05	Fruit						
030	Bananas	188	1522	1033	48	335	240
031	Water Melon	4	8	6	1	2	2
032	Oranges, Tangerines	35	969	627	9	213	145
033	Mangoes	140	688	487	36	151	113
034	Pawpaw	211	1012	718	54	223	167
035	Avocado Pears	157	793	560	40	175	130
036	Pineapples	103	1063	711	26	234	165
037	Other Fruits	46	483	323	12	106	75
06	Oils And Animal Fats						
021	Palm Oil	377	3844	2573	96	846	597
027	Coconuts Oil	10	202	132	2	44	31
07	Meat						
062	Game Birds	1	445	282	0	98	65
063	Beef	3	6	5	1	1	1

		Average value of annual household home consumption			Average value of annual per capita home consumption		
		Urban	Rural	Ghana	Urban	Rural	Ghana
064	Mutton	513	101	252	131	22	59
065	Pork	204	17072	10887	52	3758	2526
066	Goat	100	1581	1038	26	348	241
067	Other Domestic Meats	37	3	16	9	1	4
068	Wild Game	144	4123	2664	37	908	618
08	Poultry And Poultry Products						
060	Chicken	1237	11993	8050	316	2640	1867
061	Other Domestic Poultry	164	1629	1092	42	359	253
070	Eggs	547	3964	2711	140	873	629
09	Fish						
069	Fish And Shell Fish	11481	23841	19310	2936	5249	4480
10	Milk And Milk Products						
071	Milk	0	61	39	0	13	9
14	Non-Alcoholic Beverages						
091	Non-Alcoholic Beverages	0	5	3	0	1	1
2. Alcohol & Tobacco							
21	Alcoholic Drinks						
090	Alcoholic Beverages	1378	2227	1916	352	490	444
Total Value Of Home Consumption		115645	602654	424105	29574	132677	98387

Table A7.2 Households reporting consumption of home-produced items during the previous 12 months (percent)

		Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Ghana
1. Food & Beverages							
01 Cereals And Cereal Products							
001	Rice (Paddy, Grain)		2.8	1.0	6.0	37.5	8.8
002	Maize - Cob (Fresh)		31.9	57.3	80.6	61.7	52.9
003	Maize - Flour/Dough		37.3	56.8	81.1	65.6	55.1
004	Sorghum		-	-	0.2	2.4	0.4
005	Millet Grain		0.8	-	0.1	27.8	4.7
006	Millet Flour		2.1	0.1	-	36.9	6.5
007	Guinea Corn		2.1	0.3	0.1	51.1	8.8
008	Other Grains		-	0.1	0.1	0.2	0.1
009	Other Flour		0.1	0.1	0.1	-	0.1
02 Roots And Tubers							
010	Cassava – Roots		28.1	56.4	85.3	37.2	49.4
011	Cassava – Gari		1.7	12.0	11.2	12.9	7.9
012	Cassava -(Other Forms)		10.4	18.4	24.3	31.3	18.4
013	Yams		16.2	13.8	54.8	48.5	31.8
014	Cocoyams		17.0	13.9	61.5	14.5	28.8
015	Plantain		17.5	23.7	64.8	11.4	30.9
016	Sweet Potato		1.1	2.4	2.9	8.5	3.0
017	Other Roots & Tubers		2.2	3.1	7.9	0.8	3.7
03 Pulses And Nuts							
020	Bambara Beans	0.2	1.0	2.2	2.1	27.1	5.6
022	Cowpeas		3.4	6.0	6.7	14.0	6.2
023	Groundnuts (Roasted Raw)		5.8	9.0	6.1	64.4	15.2
024	Other Pulses Or Legumes		2.9	1.9	4.7	17.4	5.4
025	Palm Nuts		14.1	28.4	48.2	9.2	25.0
026	Coconuts		2.3	15.5	6.7	0.7	5.2
028	Other Nuts & Seeds		0.8	1.4	2.3	0.5	1.3
04 Vegetables							
040	Tomatoes		12.9	34.9	40.8	42.0	28.5
041	Onions		4.2	4.4	11.8	10.6	7.3
042	Carrots		0.1	0.3	0.4	0.2	0.2
043	Okra		15.0	26.5	39.6	73.6	32.5
044	Garden Eggs, Cucumbers		7.6	23.0	25.5	13.9	15.9
045	Pepper		23.7	47.2	70.1	63.9	46.2
046	Cabbage Or Lettuce		0.3	0.2	0.5	0.3	0.3
047	Spinach/Leafy Vegetables		17.7	22.8	45.5	43.6	29.8
048	Other Vegetables		8.2	18.6	13.6	9.0	10.8
05 Fruit							
030	Bananas	0.2	6.0	9.6	26.6	6.3	12.6
031	Water Melon		0.4	0.3	0.7		0.4
032	Oranges, Tangerines		5.7	12.9	27.6	6.0	13.3
033	Mangoes		8.9	13.9	26.3	18.5	15.9
034	Pawpaw		12.2	22.4	43.3	16.0	23.1
035	Avocado Pears		9.4	10.8	38.0	5.4	17.3
036	Pineapples		5.4	17.7	22.8	3.9	12.1
037	Other Fruits		0.8	3.0	1.5	1.0	1.3
06 Oils And Animal Fats							
021	Palm Oil		5.9	14.1	24.2	2.7	11.9
027	Coconuts Oil		0.4	5.3	0.9	-	1.2

		Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Ghana
07	Meat						
062	Game Birds		0.1	0.3	1.6	1.0	0.8
063	Beef	0.2	0.1	-	0.2	2.0	0.4
064	Mutton		1.6	3.0	5.6	8.4	4.0
065	Pork		0.6	1.1	0.6	8.3	1.9
066	Goat		4.1	9.9	12.0	20.1	9.7
067	Other Domestic Meats		0.1	0.2	0.8	0.4	0.4
068	Wild Game		1.2	6.2	13.0	6.0	6.4
08	Poultry And Poultry Products						
060	Chicken	0.2	11.1	25.1	43.6	53.9	29.4
061	Other Domestic Poultry		1.5	1.8	4.3	25.4	6.1
070	Eggs		7.9	20.5	34.6	24.6	20.3
09	Fish						
069	Fish And Shell Fish	1.6	2.4	7.7	1.3	2.9	2.8
10	Milk And Milk Products						
071	Milk		0.1	-	0.2	1.6	0.4
14	Non-Alcoholic Beverages						
091	Non-Alcoholic Beverages		0.1	-	0.1	0.3	0.1
2. Alcohol & Tobacco							
21	Alcoholic Drinks						
090	Alcoholic Beverages		1.1	2.1	2.2	11.5	3.1

Table A7.3 Average annual household cost of consumption of home-produced food and beverages, by subgroup and region (cedis)

	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	48,140	24,587	1,328	84,306	54,228	30,990	61,639	266,188	234,125	113,261	61,194
Roots & tubers	528,160	180,141	6,734	212,691	392,465	230,084	498,005	216,878	13,175	2,872	253,508
Pulses & nuts	20,426	12,442	337	22,182	31,547	6,167	21,746	98,922	35,779	53,295	22,367
Vegetables	37,637	22,543	281	34,988	21,669	20,856	65,047	100,296	22,273	24,961	30,466
Fruit	9,679	4,356	7	1,720	6,661	3,773	10,308	27	11,738	-	4,466
Oils & animals fats	5,487	4,609	-	677	6,290	3,320	751	10,446	25,169	0	3,839
Meat	10,584	3,878	4	1,181	8,407	1,682	4,028	188,730	897	23	14,862
Poultry & poultry products	21,899	11,976	1,025	9,315	10,884	4,480	9,059	49,838	5,083	24,799	12,135
Fish	11,192	17,497	14,872	122,259	2,015	167	-	9,879	-	-	19,310
Milk & milk products	-	0	-	3	42	-	34	492	-	0	39
Non-alcoholic beverages	-	-	-	1	-	-	-	-	162	-	3
Alcoholic drinks	1,841	458	-	2	283	901	81	11,323	35,215	1,761	1,916
Total											
Sample size	638	700	860	640	820	1060	540	360	120	260	5998
Household reporting consumption	419	537	58	530	639	758	455	318	115	246	4,075

Table A7.4 Average annual per capita cost of consumption of home-produced food and beverage, by subgroup and region (cedis)

	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	10,247	7,447	372	17,920	13,840	7,557	14,787	36,202	33,607	25,191	14,196
Roots & tubers	112,423	54,564	1,886	45,208	100,162	56,105	119,468	29,496	1,891	639	58,810
Pulses & nuts	4,348	3,769	95	4,715	8,051	1,504	5,217	13,454	5,136	11,854	5,189
Vegetables	8,011	6,828	79	7,437	5,530	5,086	15,604	13,641	3,197	5,552	7,068
Fruit	2,060	1,320	*	366	1,700	920	2,473	*	1,685	-	1,036
Oils & animals fats	1,168	1,396	-	144	1,605	809	180	1,421	3,613	*	891
Meat	2,253	1,175	*	251	2,145	410	966	25,668	129	*	3,448
Poultry & poultry products	4,661	3,628	287	1,980	2,778	1,092	2,173	6,778	730	5,516	2,815
Fish	2,382	5,300	4,166	25,987	514	41	-	1,344	-	-	4,480
Milk & milk products	-	*	-	*	11	-	*	67	-	*	*
Non-alcoholic beverages	-	-	-	*	-	-	-	-	23	-	*
Alcoholic drinks	392	139	-	*	72	220	19	1,540	5,055	392	444
Total	147,946	85,565	6,888	104,008	136,409	73,744	160,896	129,614	55,064	49,147	98,387
Sample size	639	700	860	640	820	1,060	540	360	120	260	5,998

Note: * indicates value less than 10 cedis in annual per capita cost

Table A7.5 Estimated total annual national cost of consumption of home-produced food and beverage, by subgroup and region (billion cedis)

	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	21	12	1	37	30	22	23	65	19	20	249
Roots & tubers	229	85	4	92	218	165	182	53	1	1	1,031
Pulses & nuts	9	6	0	10	18	4	8	24	3	9	91
Vegetables	16	11	0	15	12	15	24	24	2	4	124
Fruit	4	2	0	1	4	3	4	0	1	-	18
Oils & animals fats	2	2	-	0	3	2	0	3	2	-	16
Meat	5	2	0	1	5	1	1	46	0	0	60
Poultry & poultry products	9	6	1	4	6	3	3	12	0	4	49
Fish	5	8	9	53	1	0	-	2	-	-	79
Milk & milk products	-	-	-	0	0	-	0	0	-	-	0
Non-alcoholic beverages	-	-	-	0	-	-	-	-	0	-	0
Alcoholic drinks	1	0	-	0	0	1	0	3	3	0	8
Total	301	134	14	212	297	217	246	233	31	39	1,725

Table A9.1 Mean annual household cash expenditure by region and expenditure group (cedis)

Expenditure group	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Nothern	Upper West	Upper East	Ghana
Food & beverage	1,666,097	1,058,276	2,578,602	1,406,846	1,203,561	1,954,358	1,350,094	1,354,282	1,044,075	587,817	1,579,970
Alcohol & tobacco	314,507	199,206	554,225	318,379	256,581	423,487	371,591	425,476	535,210	196,445	358,325
Clothing & Footwear	431,854	196,657	445,425	307,461	274,886	487,789	331,549	291,151	189,939	118,529	345,679
Housing & utility	187,115	130,440	516,582	168,249	129,738	283,197	129,197	129,744	150,607	159,322	221,717
Household goods, operation & services	240,318	120,633	319,511	207,240	167,541	224,395	193,866	200,644	138,211	102,919	206,890
Medical care & health expenses	216,432	98,560	235,327	158,535	135,284	190,669	129,498	104,305	66,214	63,591	159,409
Transport & communications	269,404	74,333	398,551	151,212	159,504	244,916	127,760	93,113	52,337	30,910	195,223
Recreation & education	234,548	135,858	591,845	187,136	200,587	337,853	193,849	157,854	91,035	63,617	264,306
Miscellaneous goods & services	201,751	73,521	180,962	133,082	106,516	176,893	123,165	81,055	54,375	28,491	134,321
Total	3,762,025	2,087,486	5,821,031	3,038,141	2,634,198	4,323,555	2,951,117	2,858,487	2,330,758	1,257,967	3,465,839

Table A9.2 Distribution of mean annual household cash expenditure by expenditure group, by region (percent)

Expenditure group	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Nothern	Upper West	Upper East	Ghana
Food & beverage	44.3	50.7	44.3	46.3	45.7	45.2	45.7	47.4	44.8	46.7	45.6
Alcohol & tobacco	8.4	9.5	9.5	10.5	9.7	9.8	12.6	14.9	23.0	15.6	10.3
Clothing & Footwear	11.5	9.4	7.7	10.1	10.4	11.3	11.2	10.2	8.1	9.4	10.0
Housing & utility	5.0	6.2	8.9	5.5	4.9	6.6	4.4	5.3	6.8	5.2	6.4
Household goods, operation & services	6.4	5.8	5.5	6.8	6.4	5.2	6.6	7.0	5.9	8.2	6.0
Medical care & health expenses	5.8	4.7	4.0	5.2	5.1	4.4	4.4	3.6	2.8	5.1	4.6
Transport & communications	7.2	3.6	6.8	5.0	6.1	5.7	4.3	3.3	2.2	2.5	5.6
Recreation & education	6.2	6.5	10.2	6.2	7.6	7.8	6.6	5.5	3.9	5.1	7.6
Miscellaneous goods & services	5.4	3.5	3.1	4.4	4.0	4.1	4.2	2.8	2.3	2.3	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A9.3 Mean annual per capita cash expenditure by region and expenditure group (cedis)

Expenditure group	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Nothern	Upper West	Upper East	Ghana
Food & beverage	354,642	320,551	722,345	299,031	307,165	476,563	323,879	184,186	149,867	130,738	366,531
Alcohol & tobacco	66,945	60,339	155,255	67,673	65,483	103,266	89,142	57,866	76,824	43,692	83,126
Clothing & Footwear	91,924	59,567	124,777	65,352	70,155	118,946	79,536	39,597	27,264	26,362	80,193
Housing & utility	39,829	39,510	144,710	35,762	33,111	69,057	31,125	20,483	22,869	14,601	51,435
Household goods, operation & services	51,154	36,540	89,505	44,050	42,759	54,718	46,507	27,288	19,839	22,890	47,996
Medical care & health expenses	46,069	29,854	65,922	33,697	34,526	46,494	31,066	14,186	9,504	14,143	36,981
Transport & communications	57,345	22,516	111,646	32,141	40,708	59,722	30,649	12,664	7,518	6,875	45,289
Recreation & education	49,925	41,151	165,794	39,776	51,192	82,384	46,503	21,469	13,067	14,149	61,315
Miscellaneous goods & services	42,944	22,270	50,693	28,287	27,184	43,135	29,547	11,024	7,805	6,337	31,160
Total	800,778	632,298	1,630,647	645,769	672,282	1,054,283	707,954	388,763	334,559	279,787	804,026

Table A9.4 Estimated total annual national cash expenditure, by region and expenditure group (billion cedis)

Expenditure group	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Nothern	Upper West	Upper East	Ghana
Food & beverage	722	502	1,504	610	669	1,405	494	331	85	104	6,425
Alcohol & tobacco	136	95	323	138	143	304	136	104	44	35	1,457
Clothing & Footwear	187	93	260	133	153	351	121	71	15	21	1,406
Housing & utility	81	62	301	73	72	204	48	37	13	12	902
Household goods, operation & services	104	57	186	90	93	161	71	49	11	18	841
Medical care & health expenses	94	47	137	69	75	137	47	25	5	11	648
Transport & communications	117	35	232	66	89	176	47	23	4	5	794
Recreation & education	102	64	345	81	112	243	71	39	7	11	1,075
Miscellaneous goods & services	87	35	106	58	59	127	45	20	4	5	546
Total	1,630	991	3,394	1,318	1,465	3,107	1,080	698	190	222	14,094

Table A9.5 Mean annual household cash expenditure by locality and expenditure group

Expenditure Group	Locality			Country	Locality			Country
	Accra	Other Urban	Rural		Accra	Other Urban	Rural	
	¢	¢	¢		%	%	%	
Food & beverage	2,715,041	2,034,350	1,205,870	1,579,970	43.7	46.0	46.0	45.6
Alcohol & tobacco	588,143	451,673	282,020	358,325	9.5	10.2	10.8	10.3
Clothing & Footwear	496,458	416,644	291,575	345,678	8.0	9.4	11.1	10.0
Housing & utility	539,544	354,445	114,680	221,717	8.7	8.0	4.4	6.4
Household goods, operation & services	364,872	224,529	173,775	206,890	5.9	5.1	6.6	6.0
Medical care & health expenses	249,265	182,504	135,145	159,409	4.0	4.1	5.2	4.6
Transport & communications	427,994	233,056	141,510	195,223	6.9	5.3	5.4	5.6
Recreation & education	647,856	342,474	169,221	264,306	10.4	7.7	6.5	7.6
Miscellaneous goods & services	189,490	183,513	104,871	134,321	3.0	4.1	4.0	3.9
Total	6,218,663	4,423,188	2,618,667	3,465,839	100.1	99.9	100.0	100.0

Table A9.6 Mean annual per capita cash expenditure, by locality and expenditure group

Expenditure Group	Locality			Country
	Accra	Other Urban	Rural	
	¢	¢	¢	
Food & beverage	736,041	508,990	265,479	366,531
Alcohol & tobacco	159,444	113,008	62,088	83,126
Clothing & Footwear	134,588	104,244	64,192	80,193
Housing & utility	146,269	88,681	25,247	51,435
Household goods, operation & services	98,916	56,177	38,258	47,996
Medical care & health expenses	67,575	45,662	29,753	36,981
Transport & communications	116,028	58,310	31,154	45,289
Recreation & education	175,632	85,686	37,255	61,315
Miscellaneous goods & services	51,370	45,915	23,088	31,160
Total	1,685,863	1,106,673	576,514	804,026

Table A9.7 Estimated total annual national cash expenditure, by locality and expenditure group (billion cedis)

Expenditure Group	Locality			Country
	Accra	Other Urban	Rural	
	¢	¢	¢	¢
Food & beverage	1,141	2,178	3,106	6,425
Alcohol & tobacco	247	484	726	1,457
Clothing & Footwear	209	446	751	1,406
Housing & utility	227	379	295	902
Household goods, operation & services	153	240	448	841
Medical care & health expenses	105	195	348	648
Transport & communications	180	250	364	794
Recreation & education	272	367	436	1,075
Miscellaneous goods & services	80	196	270	546
Total	2,614	4,735	6,744	14,094

Table A9.8 Mean annual household cash expenditure by locality and expenditure group

Expenditure Group	Locality					Country	Locality					Country
	Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah		Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
	¢	¢	¢	¢	¢		%	%	%	%	%	
Food & beverage	2,715,041	2,034,350	1,475,728	1,241,945	880,256	1,579,970	43.7	46.0	49.7	44.4	45.5	45.6
Alcohol & tobacco	588,143	451,673	287,460	277,792	285,469	358,325	9.5	10.2	9.7	9.9	14.7	10.3
Clothing & Footwear	496,458	416,644	273,699	335,283	219,990	345,678	8.0	9.4	9.2	12.0	11.4	10.0
Housing & utility	539,544	354,445	146,679	112,929	88,255	221,717	8.7	8.0	4.9	4.0	4.6	6.4
Household goods, operation & Services	364,872	224,529	176,464	181,311	156,030	206,890	5.9	5.1	5.9	6.5	8.1	6.0
Medical care & health expenses	249,265	182,504	157,661	147,805	88,477	159,409	4.0	4.1	5.3	5.3	4.6	4.6
Transport & communications	427,994	233,056	165,176	169,653	62,478	195,223	6.9	5.3	5.6	6.1	3.2	5.6
Recreation & education	647,856	342,474	176,465	197,871	104,541	264,306	10.4	7.7	5.9	7.1	5.4	7.6
Miscellaneous goods & services	189,490	183,513	107,398	130,261	51,196	134,321	3.0	4.1	3.6	4.7	2.6	3.9
Total	6,218,663	4,423,188	2,966,730	2,794,850	1,936,692	3,465,839	100.0	100.0	100.0	100.0	100.0	100.0

Table A9.9 Mean annual per capita cash expenditure, by locality and expenditure group

Expenditure Group	Locality					Country
	Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
	¢	¢	¢	¢	¢	¢
Food & beverage	736,041	508,990	352,465	295,303	158,456	366,531
Alcohol & tobacco	159,444	113,008	68,658	66,052	51,388	83,126
Clothing & Footwear	134,588	104,244	65,371	79,722	39,601	80,193
Housing & utility	146,269	88,681	35,033	26,852	15,887	51,435
Household goods, operation & services	98,916	56,177	42,147	43,111	28,087	47,996
Medical care & health expenses	67,575	45,662	37,656	35,144	15,927	36,981
Transport & communications	116,028	58,310	39,451	40,339	11,247	45,289
Recreation & education	175,632	85,686	42,147	47,049	18,818	61,315
Miscellaneous goods & services	51,370	45,915	25,651	30,973	9,216	31,160
Total	1,685,863	1,106,673	708,579	664,545	348,627	804,026

Table A9.10 Estimated total annual national cash expenditure, by locality and expenditure group (billion cedis)

Expenditure Group	Locality					Country
	Accra	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
	¢	¢	¢	¢	¢	¢
Food & beverage	1,141	2,178	899	1,634	573	6,425
Alcohol & tobacco	247	484	175	365	186	1,457
Clothing & Footwear	209	446	167	441	143	1,406
Housing & utility	227	379	89	149	57	902
Household goods, operation & services	153	240	108	238	102	841
Medical care & health expenses	105	195	96	194	58	648
Transport & communications	180	250	101	223	41	794
Recreation & education	272	367	108	260	68	1,075
Miscellaneous goods & services	80	196	65	171	33	546
Total	2,614	4,735	1,808	3,675	1,261	14,094

Table A9.11 Mean annual household cash expenditure by ecological zone and expenditure group (cedis and percent)

Expenditure Group	Locality			Country	Locality			Country
	Coastal	Forest	Savannah		Coastal	Forest	Savannah	
	¢	¢	¢		%	%	%	
Food & beverage	1,946,452	1,522,883	1,074,744	1,579,970	46.1	44.8	46.6	45.6
Alcohol & tobacco	398,144	341,386	327,768	358,325	9.4	10.0	14.2	10.3
Clothing & Footwear	345,973	391,724	240,799	345,678	8.2	11.5	10.4	10.0
Housing & utility	326,923	182,506	128,412	221,717	7.8	5.4	5.6	6.4
Household goods, operation & services	237,957	199,432	169,997	206,890	5.6	5.9	7.4	6.0
Medical care & health expenses	191,408	163,355	95,053	159,409	4.5	4.8	4.1	4.6
Transport & communications	264,711	195,287	74,749	195,223	6.3	5.7	3.2	5.6
Recreation & education	364,421	250,028	123,303	264,306	8.6	7.3	5.3	7.6
Miscellaneous goods & services	141,813	155,382	73,606	134,321	3.4	4.6	3.2	3.9
Total	4,217,802	3,401,983	2,308,431	3,465,839	100.0	100.0	100.0	100.0

Table A9.12 Mean annual per capita cash expenditure, by ecological zone and expenditure group (cedis)

Expenditure Group	Locality			Country
	Coastal	Forest	Savannah	
	¢	¢	¢	¢
Food & beverage	500,585	369,876	196,121	366,531
Alcohol & tobacco	102,394	82,915	59,812	83,126
Clothing & Footwear	88,977	95,141	43,941	80,193
Housing & utility	84,077	44,327	23,433	51,435
Household goods, operation & services	61,197	48,438	31,021	47,996
Medical care & health expenses	49,226	39,675	17,346	36,981
Transport & communications	68,078	47,431	13,640	45,289
Recreation & education	93,721	60,727	22,501	61,315
Miscellaneous goods & services	36,471	37,739	13,432	31,160
Total	1,084,726	826,269	421,247	804,026

Table A9.13 Estimated total annual national cash expenditure, by ecological zone and expenditure group (billion cedis)

Expenditure Group	Locality			Country
	Coastal	Forest	Savannah	
	¢	¢	¢	¢
Food & beverage	2,742	2,808	874	6,425
Alcohol & tobacco	561	630	267	1,457
Clothing & Footwear	487	722	196	1,406
Housing & utility	461	337	104	902
Household goods, operation & services	335	368	138	841
Medical care & health expenses	270	301	77	648
Transport & communications	373	360	61	794
Recreation & education	513	461	100	1,075
Miscellaneous goods & services	200	287	60	546
Total	5,942	6,274	1,877	14,094

Table A9.14 Average annual household and per capita cash expenditure on different items, in urban and rural areas (cedis)

Expenditure Group		Average Annual Household Expenditure			Average Annual Per Capita Expenditure		
		Urban ¢	Rural ¢	Ghana ¢	Urban ¢	Rural ¢	Ghana ¢
1	Food & Beverages						
01	Cereals and cereal products						
001	Guinea corn/sorghum	973	4448	3174	249	979	736
002	Maize	40645	44135	42855	10394	9716	9942
003	Millet	8639	5241	6487	2209	1154	1505
004	Rice	169254	87691	117594	43283	19306	27280
005	Maize flour etc.	25690	10958	16359	6570	2412	3795
006	Bread, buns	121237	53843	78551	31004	11854	18223
007	Biscuits	29960	6022	14798	7662	1326	3433
008	Flour & other cereal products	7823	5240	6187	2000	1154	1435
02	Roots and tubers						
009	Cassava	104412	44282	66327	26701	9749	15387
010	Cocoyam	14044	6875	9504	3591	1514	2205
011	Plantain	88615	34735	54489	22661	7647	12641
012	Yam	108794	42264	66656	27822	9305	15463
013	Other starchy roots/tubers	2661	2006	2246	680	442	521
014	Kokonte	12285	10397	11089	3142	2289	2573
015	Gari	28727	23475	25401	7346	5168	5893
016	Cassava dough	14596	16870	16036	3733	3714	3720
017	Other starchy products	4766	578	2113	1219	127	490
03	Pulses and nuts						
018	Small beans	20584	12861	15693	5264	2831	3640
019	Bambara beans	787	811	802	201	179	186
020	Broad beans	1192	555	789	305	122	183
021	Groundnuts	26291	24298	25029	6723	5349	5806
022	Other pulses	4239	1328	2395	1084	292	556
023	Dawadawa	2738	4503	3856	700	991	894
024	Kolanut	3437	7038	5718	879	1549	1326
025	Palmnut	28162	15887	20388	7202	3498	4730
026	Other oil seeds & nuts	311	259	278	79	57	64
04	Vegetables						
043	Cocoyam leaves (kontomire)	12052	2686	6119	3082	591	1420
044	Garden eggs	33030	19210	24277	8447	4229	5632
045	Okro	22676	16590	18821	5799	3652	4366
046	Onions & shallots	39264	29561	33119	10041	6508	7683
047	Pepper (green)	10831	3945	6470	2770	869	1501
048	Tomato	93105	44052	62036	23809	9698	14391
049	Other vegetables (not canned)	8969	1967	4534	2294	433	1052
050	Tomato puree (canned)	23232	8724	14043	5941	1921	3258
051	Other canned vegetables	446	87	219	114	19	51
05	Fruits						
035	Avocado pear	4961	996	2351	1200	219	545
036	Banana	10990	2416	5560	2810	532	1290
037	Mango	2577	532	1281	659	117	297
038	Orange	17716	3670	8820	4531	808	2046
039	Pineapple	5014	1730	2934	1282	381	681
040	Other fruits (not canned)	3518	1477	2225	900	325	516
041	Canned fruit	269	143	189	69	32	44
042	Canned fruit juices	3169	297	1350	810	65	313
06	Oils and animal fats						
	Animal fats	555	131	286	142	29	66
027	Coconut oil	8194	7615	7827	2095	1676	1816
028	Groundnut oil	5598	3674	4379	1432	809	1016
029	Palm kernel oil	2063	5506	4244	527	1212	984
030	Red palm oil	51008	29191	37190	13044	6427	8628
031	Shea butter	3914	5917	5183	1001	1303	1202
032	Margarine	2688	966	1597	687	213	371
033	Other vegetable oil & fats	42484	10509	22232	10864	2314	5157

Expenditure Group		Average Annual Household Expenditure			Average Annual Per Capita Expenditure		
		Urban ¢	Rural ¢	Ghana ¢	Urban ¢	Rural ¢	Ghana ¢
07	Meat						
052	Corned beef	3542	602	1680	906	133	390
053	Fresh beef (cattle)	113429	34570	63482	29007	7611	14727
054	Bushmeat	9429	13942	12287	2411	3069	2850
055	Goat (fresh)	15202	5781	9235	3888	1273	2142
056	Fresh mutton	9414	3592	5726	2407	791	1328
057	Pork	10745	7604	8756	2748	1674	2031
058	Snail	6082	2032	3517	1555	447	816
059	Other meat (except poultry)	5169	3350	4017	1322	737	932
08	Poultry and poultry products						
060	Chicken	64283	17274	34509	16439	3803	8006
061	Duck	1104	926	992	282	204	230
062	Guinea fowl	726	1296	1087	186	285	252
063	Other poultry	1501	172	659	384	38	153
064	Chicken eggs	46604	13756	25799	11918	3028	5985
065	Other eggs (not chicken)	865	580	684	221	128	159
09	Fish						
071	Smoked fish	217437	209346	212312	55605	46089	49254
072	Crustaceans (prawns, etc.)	6665	2292	3895	1704	505	904
073	Fish (fresh & frozen)	59160	50807	53869	15129	11185	12497
074	Fish (dried)	29235	40842	36586	7476	8991	8488
075	Fish (fried)	56464	34141	42325	14439	7516	9819
076	Canned fish	17388	4523	9239	4447	996	2143
077	Other fish	11161	7810	9038	2854	1719	2097
10	Milk and milk products						
066	Fresh milk	762	796	783	195	175	182
067	Milk powder	6632	2459	3989	1696	541	925
068	Baby milk	2721	363	1228	696	80	285
069	Tinned milk (unsweetened)	51528	14626	28155	13177	3220	6532
	Tinned milk (sweetened)	5820	719	2589	1488	158	601
070	Other products (e.g. butter,cheese)	3491	3686	3614	893	811	838
11	Spices						
079	Pepper (dry)	18179	13610	15285	4649	2996	3546
080	Salt	9416	15325	13159	2408	3374	3053
081	Other condiments & spices	14604	6675	9582	3735	1469	2223
12	Miscellaneous foods						
079	Sugar	34637	29301	31258	8858	6451	7251
093	Jam	214	78	128	55	17	30
094	Honey	1425	509	845	364	112	196
095	Confectionery (not frozen)	1727	556	986	442	122	229
096	Ice cream, ice lollies, etc.	12775	2803	6459	3267	617	1498
097	Other miscellaneous food items	5034	947	2445	1287	208	567
13	Prepared meals						
086	Cooked rice & stew	106597	41899	65619	27260	9224	15223
087	Fufu & soup	40537	14122	23806	10367	3109	5523
088	Tuo & soup	13686	4530	7887	3500	997	1830
089	Banku & stew	60396	25951	38579	15445	5713	8950
090	Kenkey	72670	38374	50948	18584	8448	11819
091	Koko	28319	16671	20942	7242	3670	4858
092	Other prepared meals	78869	16810	39562	20169	3701	9178
14	Non-alcoholic beverages						
082	Coffee	1022	381	616	261	84	143
083	Chocolate drinks (eg. milo)	29279	12604	18717	7487	2775	4342
084	Tea	8635	1608	4185	2208	354	971
085	Other non-alcoholic beverages	2096	730	1231	536	161	285
15	Soft drinks						
098	Soft drinks & minerals	67292	14603	33920	17208	3215	7869
2	Alcohol & Tobacco						

Expenditure Group		Average Annual Household Expenditure			Average Annual Per Capita Expenditure		
		Urban ¢	Rural ¢	Ghana ¢	Urban ¢	Rural ¢	Ghana ¢
21	Alcoholic drinks						
099	Local & imported beer & Guinness	32012	8988	17429	8186	1979	4043
100	Palm wine	1235	2748	2193	316	605	509
101	Pito	6257	13459	10818	1600	2963	2510
102	Akpeteshie & other local spirits	19595	37990	31246	5011	8364	7249
103	Gin	4579	5793	5348	1171	1275	1241
104	Other alcoholic beverages	1930	968	1321	493	213	306
22	Cigarettes and tobacco						
105	Cigarettes	7194	10476	9273	1840	2306	2151
106	Tobacco (processed)	344	1376	998	88	303	232
107	Other tobacco products	389	1927	1363	100	424	316
3	Clothing & Footwear						
31	Clothing materials						
201	Cotton	92175	69127	77577	23572	15219	17997
202	Silk	6998	5030	5715	1764	1107	1326
203	Handloomed (inc. Kente)	8362	6952	7469	2138	1531	1733
204	Adinkra	4642	5266	5038	1187	1159	1169
205	Polyester material	15137	11492	12829	3871	2530	2976
206	All other clothing material	35470	24256	28367	9071	5340	6581
32	Tailoring charges						
207	Tailoring charges	34918	20470	25767	8930	4506	5978
214	Repairs to clothing	5074	4969	5007	1298	1094	1162
33	Ready made clothes						
208	Suit	3725	1609	2385	953	354	553
209	Smock or other handwoven garment	5724	5725	5725	1464	1260	1328
210	Dress (ladies/girls)	37624	17864	25109	9621	3933	5825
211	Trousers, slacks, shorts, blouse, shirt	39323	28759	32632	10056	6331	7570
212	Underwear	33146	21220	25592	8476	4672	5937
213	Other readymade clothes	16738	11012	13111	4280	2424	3042
34	Footwear						
215	Shoes (leather)	47632	21059	30801	12181	4636	7146
216	Sandals (leather)	13537	7542	9740	3462	1660	2259
217	Shoes (canvas)	11117	5834	7771	2843	1284	1803
218	Sandals (rubber)	14722	14074	14312	3765	3098	3320
219	Other footwear	6338	4987	5483	1621	1098	1272
220	Repairs to footwear	6844	4328	5250	1750	953	1218
4	Housing & Utilities						
41	Rent and housing charges						
303	House rates (property rates)	1373	402	758	351	89	176
304	Basic rates	1730	211	768	442	46	178
307	Other housing charges	19422	1210	7887	4967	266	1830
42	Fuel and power						
310	Gas for cooking	8901	1178	4010	2276	259	930
311	Kerosene & other liquid fuel	29684	44201	38879	7591	9731	9019
312	Charcoal	83684	19835	43230	21391	4367	10029
313	Firewood & other solid fuel	11793	8054	9425	3016	1773	2186
5	Household Goods, Operations & Services						
51	Soft furnishings						
401	Bedsheets, blanket, curtains, etc.	20772	15741	17586	5312	3466	4080
402	Mattress, pillow, sleeping mats	9717	10506	10216	2485	2313	2370
403	Other soft furnishings	903	1250	1123	231	275	260
404	Repairs to soft furnishings	786	177	400	201	39	93
52	Furniture and floor coverings						
408	Carpet & other floor coverings						
410	Repairs to furniture & fittings	1194	452	724	305	99	168

Expenditure Group		Average Annual Household Expenditure			Average Annual Per Capita Expenditure		
		Urban ¢	Rural ¢	Ghana ¢	Urban ¢	Rural ¢	Ghana ¢
53	Glassware, utensils, etc.						
421	Glassware, chinaware, plasticware	11315	8986	9840	2893	1978	2283
422	Cutlery & other tableware	1513	2138	1909	387	471	443
423	Pots, pans & other kitchen utensils	9168	13216	11732	2345	2910	2722
424	Other household utensils & tools	2807	2795	2799	718	615	649
54	Electrical and other appliances						
416	Electric kettle	205	3	77	52	1	18
418	Coalpot/cooking appliance	2087	1758	1879	534	387	436
419	Other appliances	1059	538	729	271	118	169
420	Repairs to appliances	36046	2254	14643	9218	496	3397
55	Non-durable household goods						
425	Soap & washing powder	116440	85381	96768	29777	18797	22449
426	Insecticides & household cleaners	12090	4797	7471	3092	1056	1733
427	Matches	3954	4170	4091	1011	918	949
428	Toilet paper	15314	3034	7536	3916	668	1748
429	Light globes/bulbs	2735	2229	2414	699	491	560
430	Candles	3400	690	1684	870	152	391
431	Other non-durable goods	10608	11816	11373	2713	2601	2638
56	Household services						
432	Domestic staff wages	1059	199	514	271	44	119
433	Household services (lawnsboy, etc.)	926	1646	1382	237	362	321
6	Medical Care & Health Expenses						
61	Medical products and appliances						
501	Pain-killers (e.g. aspirin)	11501	17189	15104	2941	3784	3504
502	Antibiotics	4150	5465	4983	1061	1203	1156
503	Anti-malaria medicines	3695	6617	5545	945	1457	1286
504	Other medical & pharmaceutical prods	49439	23972	33309	12643	5277	7727
505	Therapeutic appliances & equipment	268	207	229	69	46	53
62	Medical service						
506	Medical services	41391	28809	33422	10585	6342	7753
63	Other medical services						
507	Doctors & outpatient consulting fee	24556	17464	20064	6280	3845	4655
508	Dentist	897	305	522	299	67	121
509	Nurses, midwives, etc.	4308	2650	3258	1102	583	756
510	Native doctors & spiritual healers	2415	2841	2685	618	625	623
511	Other practitioners	255	421	360	65	93	84
512	Other medical services	58450	29207	39928	14947	6430	9263
7	Transport & Communications						
71	Operation of personal transport						
604	Tyres	3549	4340	4050	908	955	940
605	Spares & motor vehicle tools	5913	9337	8081	1512	2056	1875
608	Petrol	48292	17199	28599	12350	3787	6634
609	Oil, grease, etc.	1776	1798	1790	454	396	415
72	Purchased fares						
610	Intercity bus (STC, City Express etc)	40950	35757	37661	10472	7872	8737
611	City bus (omnibus, trotro), taxi etc	161310	69134	102928	41251	15220	23878
612	Other (rail, air, boat) & storage charge	1599	449	871	409	99	202
73	Communications						
613	Postal charges (inc. courier services)	1756	911	1221	449	201	283
614	Telegrams, telephones, fax, etc.	22873	2585	10023	5849	569	2325
8	Recreation & Education						
81	Recreation equipment						
705	Sports equipment	1024	73	422	262	16	98
706	Musical equipment	359	702	576	92	155	134
707	Other recreational goods (eg. cassettes)	4646	2715	3423	1188	598	794

Expenditure Group		Average Annual Household Expenditure			Average Annual Per Capita Expenditure		
		Urban ¢	Rural ¢	Ghana ¢	Urban ¢	Rural ¢	Ghana ¢
82	Entertainment						
708	Cinema, video house	1175	592	805	300	130	187
709	Video cassette hire	1598	298	775	409	66	180
711	Others (inc. concerts)	1375	518	833	352	114	193
83	Gambling						
710	Gambling, lotto, raffles, etc.	29642	36102	33733	7580	7948	7826
84	Newspapers, books and magazines						
712	Newspapers	15596	3364	7849	3988	741	1821
713	Books, magazines, etc.	3444	2678	2959	881	590	686
9	Miscellaneous Goods & Services						
91	Personal care services						
801	Barber, beauty shop, etc.	61025	21538	36014	15606	4742	8355
92	Jewellery, watches, etc.						
803	Jewellery, watches, rings, etc.	27800	16800	20833	7109	3699	4833
93	Personal care goods						
804	Goods for personal care	43102	33476	37005	11022	7370	8585
802	Other personal goods	15149	12607	13539	3874	2776	3141
94	Writing and drawing equipment						
805	Writing & drawing equipment/supplies	2250	958	1431	575	211	332
95	Expenditure in restaurants and hotels						
806	Expenditure in restaurants & hotels	833	1345	1157	213	296	268
96	Financial and other services						
807	Financial services (n.e.s.)	7951	9357	8842	2033	2060	2051
808	Other services (n.e.s.)	27089	8791	15499	6927	1935	3596
Total expenditure		4,309,619	2,456,898	3,136,147	1,102,088	540,899	727,542

Table A9.15 Value of average household and per capita food and beverage consumption (both cash expenditure and home-produced), and estimated total annual value, by subgroup: Accra (cedis)

Accra

Group/ Subgroup	Accra - household food consumption			Accra - per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash	Home	Total	Cash	Home	Total		
	Expenditure ¢	Produced ¢	¢	Expenditure ¢	Produced ¢	¢		
1. Food & Beverage	3,185,788	21,953	3,207,741	863,660	5,951	869,611	1,348	96.5
Cereals and cereal products	457,536	.	457,536	124,037	.	124,037	192	13.8
Roots and tubers	409,054	.	409,054	110,893	.	110,893	172	12.3
Pulses and nuts	99,346	1	99,347	26,932	0	26,932	42	3.0
Vegetables	283,752	.	283,752	76,925	.	76,925	119	8.5
Fruits	79,664	9	79,673	21,597	3	21,600	33	2.4
Oils and animal fat	123,754	.	123,754	33,549	.	33,549	52	3.7
Meat	186,995	4	186,999	50,694	1	50,695	79	5.6
Poultry and poultry products	141,317	1,310	142,627	38,311	355	38,666	60	4.3
Fish	450,018	20,629	470,647	121,999	5,592	127,591	198	14.2
Milk and milk products	107,214	.	107,214	29,066	.	29,066	45	3.2
Spices	38,427	.	38,427	10,417	.	10,417	16	1.2
Miscellaneous foods	69,637	.	69,637	18,879	.	18,879	29	2.1
Prepared meals	573,314	.	573,314	155,424	.	155,424	241	17.2
Non-alcoholic beverages	68,417	.	68,417	18,548	.	18,548	29	2.1
Soft drinks	97,343	.	97,343	26,389	.	26,389	41	2.9
2. Alcohol & Tobacco	117,397	0	117,397	31,825	0	31,825	49	3.6
Alcoholic drinks	108,181	.	108,181	29,327	.	29,327	45	3.3
Cigarettes	9,216	.	9,216	2,498	.	2,498	4	0.3
Total Food Consumption	3,303,185	21,953	3,325,138	895,485	5,951	901,436	1,397	100.0

Table A9.16 Value of average household and per capita food and beverage consumption (both cash expenditure and home-produced), and estimated total annual value, by subgroup: Other urban areas (cedis)

Other urban

Group/ Subgroup	Other Urban - household food consumption			Other Urban - per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash Expenditure ¢	Home Produced ¢	Total ¢	Cash Expenditure ¢	Home Produced ¢	Total ¢		
1. Food & Beverage	2,429,711	151,326	2,581,037	608,879	37,657	646,536	2,762	97.9
Cereals and cereal products	383,286	16,985	400,271	95,897	4,250	100,147	429	15.2
Roots and tubers	367,061	104,610	471,671	91,838	26,173	118,011	505	17.9
Pulses and nuts	83,184	4,017	87,201	20,812	1,005	21,817	93	3.3
Vegetables	227,838	11,612	239,450	57,005	2,905	59,910	256	9.1
Fruits	35,490	1,229	36,719	8,879	307	9,186	39	1.4
Oils and animal fat	113,657	1,392	115,049	28,437	145	28,582	122	4.4
Meat	167,523	1,392	168,915	41,914	348	42,262	181	6.4
Poultry and poultry products	104,783	2,199	106,982	26,216	550	26,766	115	4.1
Fish	376,893	7,890	384,783	94,268	1,974	96,242	412	14.6
Milk and milk products	56,718	0	56,718	14,191	0	14,191	61	2.1
Spices	43,680	.	43,680	10,929	.	10,929	47	1.7
Miscellaneous foods	50,384	.	50,384	12,606	.	12,606	54	1.9
Prepared meals	333,444	.	333,444	84,427	.	84,427	357	12.6
Non-alcoholic beverages	30,278	0	30,278	7,576	.	7,576	32	1.1
Soft drinks	55,492	.	55,492	13,884	.	13,884	59	2.1
2. Alcohol & Tobacco	56,313	1,919	58,232	14,089	480	14,569	62	2.2
Alcoholic drinks	48,891	1,919	50,810	12,232	480	12,712	54	1.9
Cigarettes	7,422	.	7,422	1,857	.	1,857	8	0.3
Total Food Consumption	2,486,024	153,245	2,639,269	622,968	38,137	661,105	2,824	100.0

Table A9.17 Value of average household and per capita food and beverage consumption (both cash expenditure and home-produced), and estimated total annual value, by subgroup: Rural coastal (cedis)

Rural coastal

Group/ Subgroup	Rural Coastal - household food consumption			Rural Coastal - per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash	Home	Total	Cash	Home	Total		
	Expenditure ¢	Produced ¢		Expenditure ¢	Produced ¢			
1. Food & Beverage	1,683,840	347,587	2,031,427	402,170	83,018	485,188	1,239	96.2
Cereals and cereal products	272,060	32,548	304,608	64,979	7,774	72,753	186	14.4
Roots and tubers	253,389	241,462	494,851	60,520	57,672	118,192	302	23.4
Pulses and nuts	72,347	24,008	96,355	17,279	5,734	23,013	59	4.6
Vegetables	163,478	17,278	180,756	39,045	4,127	43,172	110	8.6
Fruits	21,185	3,881	25,066	5,060	927	5,987	15	1.2
Oils and animal fat	74,686	3,543	78,229	17,838	846	18,684	48	3.7
Meat	44,634	2,401	47,035	10,660	573	11,233	29	2.2
Poultry and poultry products	36,670	6,822	43,492	8,758	1,629	10,387	27	2.1
Fish	425,840	15,644	441,484	101,708	3,736	105,444	269	20.9
Milk and milk products	30,340	.	30,340	7,247	.	7,247	18	1.4
Spices	34,641	.	34,641	8,274	.	8,274	21	1.6
Miscellaneous foods	38,237	.	38,237	9,133	.	9,133	23	1.8
Prepared meals	179,231	.	179,231	42,808	.	42,808	109	8.5
Non-alcoholic beverages	19,067	.	19,067	4,554	.	4,554	12	0.9
Soft drinks	18,035	.	18,035	4,307	.	4,307	11	0.9
2. Alcohol & Tobacco	79,348	380	79,728	18,952	91	19,043	49	3.8
Alcoholic drinks	71,499	380	71,879	17,077	91	17,168	44	3.4
Cigarettes	7,849	.	7,849	1,875	.	1,875	5	0.4
Total Food Consumption	1,763,188	347,967	2,111,155	421,122	83,109	504,231	1,288	100.0

Table A9.18 Value of average household and per capita food and beverage consumption (both cash expenditure and home-produced), and estimated total annual value, by subgroup: Rural forest (cedis)

Rural forest

Group/ Subgroup	Rural Forest - household food consumption			Rural Forest - per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash	Home	Total	Cash	Home	Total		
	Expenditure ¢	Produced ¢		Expenditure ¢	Produced ¢			
1. Food & Beverage	1,460,429	622,784	2,083,213	347,252	148,081	495,333	2,740	97.1
Cereals and cereal products	199,285	67,092	266,377	47,385	15,953	63,338	350	12.4
Roots and tubers	183,350	450,510	633,860	43,596	107,120	150,716	834	29.6
Pulses and nuts	52,908	21,227	74,135	12,580	5,047	17,627	98	3.5
Vegetables	129,745	40,445	170,190	30,850	9,617	40,467	224	7.9
Fruits	8,710	9,153	17,863	2,071	2,176	4,247	23	0.8
Oils and animal fat	65,335	6,192	71,527	15,535	1,472	17,007	94	3.3
Meat	88,739	8,042	96,781	21,100	1,912	23,012	127	4.5
Poultry and poultry products	38,068	16,689	54,757	9,052	3,968	13,020	72	2.6
Fish	405,150	3,416	408,566	96,334	812	97,146	537	19.1
Milk and milk products	25,125	18	25,143	5,974	4	5,978	33	1.2
Spices	28,158	.	28,158	6,695	.	6,695	37	1.3
Miscellaneous foods	30,954	.	30,954	7,360	.	7,360	41	1.4
Prepared meals	169,736	.	169,736	40,359	.	40,359	223	7.9
Non-alcoholic beverages	17,113	0	17,113	4,069	0	4,069	23	0.8
Soft drinks	18,053	.	18,053	4,292	.	4,292	24	0.8
2. Alcohol & Tobacco	59,308	1,148	60,456	14,102	273	14,375	79	2.8
Alcoholic drinks	48,599	1,148	49,747	11,556	273	11,829	65	2.3
Cigarettes	10,709	.	10,709	2,546	.	2,546	14	0.5
Total Food Consumption	1,519,737	623,932	2,143,669	361,354	148,354	509,708	2,819	99.9

Table A9.19 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by subgroup: Rural savannah (cedis)

Rural savannah

Group/ Subgroup	Rural Savannah - household food consumption			Rural Savannah - per capita food consumption			Estimated value of all food consumption (billion cedis)	Food budget share %
	Cash Expenditure ¢	Home Produced ¢	Total ¢	Cash Expenditure ¢	Home Produced ¢	Total ¢		
1. Food & Beverage	1,028,550	792,019	1,820,569	185,152	142,573	327,725	1,184	92.7
Cereals and cereal products	203,522	188,337	391,859	36,636	33,903	70,539	255	20.0
Roots and tubers	110,369	275,309	385,678	19,868	49,559	69,427	251	19.6
Pulses and nuts	92,605	67,761	160,366	16,670	12,198	28,868	104	8.2
Vegetables	86,586	73,337	159,923	15,587	13,202	28,789	104	8.1
Fruits	7,124	3,746	10,870	1,282	674	1,956	7	0.6
Oils and animal fat	49,350	7,202	56,552	8,884	1,296	10,180	37	2.9
Meat	61,711	72,067	133,778	11,109	12,973	24,082	87	6.8
Poultry and poultry products	23,296	31,239	54,535	4,194	5,623	9,817	35	2.8
Fish	166,580	72,795	239,375	29,986	13,104	43,090	156	12.2
Milk and milk products	10,438	206	10,644	1,879	37	1,916	7	0.5
Spices	51,576	.	51,576	9,284	.	9,284	34	2.6
Miscellaneous foods	36,957	.	36,957	6,653	.	6,653	24	1.9
Prepared meals	115,819	.	115,819	20,849	.	20,849	75	5.9
Non-alcoholic beverages	8,199	20	8,219	1,476	4	1,480	5	0.4
Soft drinks	4,418	.	4,418	795	.	795	3	0.2
2. Alcohol & Tobacco	137,171	6,137	143,308	24,692	1,105	25,797	94	7.3
Alcoholic drinks	111,632	6,137	117,769	20,095	1,105	21,200	77	6.0
Cigarettes	25,539	.	25,539	4,597	.	4,597	17	1.3
Total Food Consumption	1,165,721	798,156	1,963,877	209,844	143,678	353,522	1,278	100.0

Appendix 5

LIST OF PROJECT PERSONNEL

DIRECTORATE

Daasebre Dr. Oti Boateng, Former Government Statistician and National Project Director
Dr. K. A. Twum-Baah, Acting Government Statistician and National Project Technical Director
Mr. Stephen Adjei, Project Sampling Director
Mr. Baah Wadieh, Field Coordinator
Mr. K. B. Danso-Manu, Project Liaison Officer and Data Processing Manager
Ms Abena Asamoabea Ani, Field Coordinator and Data Processing Officer
Mrs. Jacqueline Anum, Field Coordinator and Data Processing Officer
Mr. Adams Kasanga, Project Field Manager and Data Analyst
Mr Eric A. Okrah Field Coordinator
Mr. Alex Ohene Okai, Field Coordinator
Mr. Emmanuel Osafo, Field Coordinator
Mr. Fobi-Boateng, Project Accountant
Mr. Samuel Bannerman, Support Staff

WORLD BANK ADVISERS

Mr. John Ngwafon, Data Processing
Mr. Harold Coulombe, Data Analysis

FIELD SUPERVISORS

E. I. Acquah	George Mettle	Asuana Qaurtey	Harry Charway
George Agbenyo	Faustina Frimpong	Opoku Acheampong	Mark Aryeetey
Paul Addo	Theophilus Okine	Thomas Azure	

SENIOR ENUMERATORS

James Asamoah	Victoria Budu	Christian Assem	Enock Annan
Samuel Adusu	Abeka Ansah	Alexander Bissie	Eric Antwi
Boakye Yiadom	Solomon O. Bempah	Salifu Amadu	

ENUMERATORS

Phllis Quansah	Samuel Obeng	Charles Mensah	Albert Asibu
Peter Takyi Peprah	Patrick O. Danso	Patricia Affum	Mabruk Fuseini
Walter Kombat	Eugene Akoto-Bamfo	Samuel Asante Annoh	Ernest Kpentey
Doreen Biney	Yaw Adu-Twum	Nana Amoah Wiredu	Ben Blankson
Kenneth Nartey	Amoako Minta	Moses Tei Ansah	Felix Asiamah
Laud Aikins Otobil	Opoku Addo	Emmanuel Baidoo	Emmanuel Donkor
Henry Loglo	Thomas Lindsay	Emmanuel Owusu Sefa	Awal Alabira
Bekoe Mawulikan	Christian Aikins	Micheal Asiamah	Emmanuel Q. Mensah
Emmanuel O. Boateng	Gift Ofori	Asare Osei-Akoto	Kenneth Chinful

DATA ENTRY OPERATORS

Charity C. Ameyaw	Gertrude Pennin	Angela Dodoo	Victoria Sottie
Vincentia P. Alih	Lucy Mills	Emelia Acquaye	Victoria Okine
Christiana Wiredu	Samuel A. Dosserh	Peace Sam	Doris Dowuona

DRIVERS

E. A. Anthony	Victor Mensah	Emmanuel Owusu	Gershon K. Nornyigbey
Martin Osei-Kufour	Victor Okine	G. K. Tawiah	Prince Asiedu
Emmanuel K. Anani	George Adjei	Victor H. Mawuko	E. K. Oduro
John Wesley Okai	Henry Oscar Yaw Allan	Samuel Dam	Adamu Issaka