

**GHANA LIVING STANDARDS SURVEY
REPORT ON THE THIRD ROUND (GLSS3)**

September 1991 - September 1992

March 1995

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PREFACE

This report presents the main results of the third round of the Ghana Living Standards Survey (GLSS3), which was carried out by the Ghana Statistical Service (GSS). The report provides a snapshot picture of the living conditions of Ghanaian households at a key stage in the country's development process. Fieldwork for the survey covered a period of 12 months (September 1991 to September 1992), some nine years after the commencement of Ghana's Economic Recovery Programme, and immediately prior to the re-introduction of democratic government under the new Fourth Republic.

Included in this report is detailed information on a great variety of socio-economic topics: for instance, demographic characteristics of the population, education, health, employment, housing, as well as household agriculture and household business activity. Perhaps the most valuable part of the report is the detailed information it provides on the income and expenditure of households. It is hoped that the data presented here will provide a solid basis for informed discussion amongst planners and decision makers about current living conditions in Ghana. Researchers wishing to carry out any special analysis of the GLSS data, or requiring more background information about the GLSS, are invited to contact the GSS.

Conducting a complex survey like this one would not have been possible without the help of a large number of people and organisations. The GSS would particularly like to thank the many householders who took part in this survey, often at considerable inconvenience to themselves, and who put up with the frequent visits and questioning by our interviewers. Thanks are also due to the field staff themselves - interviewers, supervisors, drivers and data entry operators - who carried out their duties efficiently and with good spirit, despite the often difficult working conditions. Thanks also to the regional statistical officers, district administrators, officials and many chiefs and CDR representatives, who provided support to our survey teams. Within the GSS itself the main responsibility for carrying out the fieldwork, processing the data and preparing this report has fallen to the Sample Survey Section and the Data Processing and Field Services Division, with additional inputs provided by the Prices and National Accounts sections.

We would like to acknowledge with thanks the technical and financial support received from the Government of Ghana, the World Bank, and the British Overseas Development Administration (ODA). We also wish to thank Mr Peter Digby (ODA Statistical Adviser) and Mr Harold Coulombe (University of Warwick) who both played a major part in GLSS3.

Finally, we wish to take this opportunity to draw the attention of readers to two other publications, which contain data from GLSS3. A report entitled *Rural Communities in Ghana*, which was published in October 1993, is based on information collected from a sample of community leaders around the country, and provides data on community facilities available to rural households. Another report, entitled *The pattern of poverty in Ghana, 1988-1992* and which discusses the changes in living standards in Ghana across all three rounds of the GLSS, will be published shortly by the GSS.

March 1995

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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 current living conditions in Ghana. This present report gives a summary of the main findings of the third round survey, which was carried out by the Ghana Statistical Service over a 12-month period (September 1991 to September 1992).

A representative nationwide sample of more than 4500 households, containing over 20,000 persons, were covered in GLSS3. Detailed information was collected on all aspects of living conditions, including health, education, employment, housing, agricultural activities, the operation of non-farm establishments, remittances, and credit, assets and savings. The particular focus of GLSS3 was on collecting very detailed 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):

Total expenditure

At March 1992 prices, average annual household expenditure (both cash and imputed) was about 748,000 cedis. Given an average household size of 4.5, this implies annual per capita expenditure of about 167,000 cedis (Section 7.1); with the exchange rate of about 400 cedis to the US dollar prevailing at that time, this is equivalent to about 420 US dollars (but more than 800 US dollars if we take purchasing power parities into account). Estimates are given of the level of total expenditure, and of its components, in different localities, ecological zones and regions. Overall, cash expenditure on food represents 40 percent of total household expenditure, while the imputed value of home-produced food consumed by households represents a further 18 percent (Section 7.2).

Cash expenditure

Average annual household cash expenditure was 547,000 cedis, giving an annual per capita cash expenditure of 122,000 cedis (Section 9.1). Food (including also alcohol and tobacco) accounted for 54 percent of total cash expenditure; the next most important expenditure groups were clothing and footwear (9%), and housing and utilities (9%).

The report provides details of average household and per capita expenditures in urban and rural areas, right down to the item level, as well as showing the proportion of households which report expenditures on each item.

Food consumption

Detailed estimates are given on food consumption. At the time of the survey Ghanaian households (which number about 3.3 million) were spending an annual amount of almost 1,000 billion cedis (at March 1992 prices) on purchases of food (Section 9.1); in addition, home-grown food to the value of almost 500 billion cedis was also consumed (Section 8.7). The major components of food consumption, in terms of cash value, are: roots and tubers (28%), cereals and cereal products (16%), and fish (14%). In the rural savannah, cereals and cereal products, and pulses and nuts, are a major input to the household diet, while fish is much less important than in other parts of the country (Section 9.3).

Inequalities of income and expenditure

The report provides some indication of the inequalities between households in their patterns of income and expenditure (Section 7). More detailed information will be provided in *The Pattern of Poverty in Ghana 1988-1992*, to be released shortly by the Ghana Statistical Service.

Employment

Detailed estimates are given of economic activity, employment, unemployment and underemployment. About 76 percent of the adult population (aged 15+) are usually economically active; female activity rates are comparable to those of males. In the rural savannah, almost a fifth of children aged 7-14 are economically active (Section 4.2). Basic hourly wage rates and hours of work are shown for different industries (Section 4.3). Only 5 percent of the usually active population can be classified as usually unemployed, but there is also a 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 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; a total of about 3 million hours a day are spent on fetching wood, and 6 million hours fetching water, with at least a third of this work being done by children aged 7-14 (Section 4.5).

Education

Information is given on levels of educational attainment of the adult population, current school enrolment, educational expenditure by households, and adult literacy rates. Amongst the population of 8 million people aged 15 and over, 3 million have never been to school; in contrast, ½ million have obtained qualifications at the secondary or higher level (Section 2.1). About three-quarters of those aged 6-15, and 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 north of the country (Section 2.2). The average annual cost to a household of maintaining a person at school or college was 16,000 cedis per year (Section 2.3). The overall adult literacy rate (measured by a person's reported ability to write a letter in English or in a Ghanaian language) was 49 percent, with the literacy rate much higher for males (61%) than for females (39%) (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 22 percent of the sample reported having suffered from an illness or injury in the previous two weeks, of whom a half had consulted a medical practitioner (Section 3.2). The survey found that 8 percent of women were currently pregnant, and a further 14 percent had been pregnant in the last 12 months. Seventeen percent of all women aged 15-49 reported using contraceptives, but the majority of them used traditional methods; only 7 percent used modern methods (Section 3.3).

Migration

Some 40 percent of all Ghanaians are migrants, having previously lived in a different locality to 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. Three-quarters of the households in urban areas have access to pipe-borne water, compared with only 14 percent in rural areas. Two-thirds of urban households have electric lighting, compared with only 8 percent of rural households. Most urban households use charcoal for cooking, whereas most households in rural areas use firewood. Only 18 percent of urban households, and 1 percent of rural households, have access to a flush toilet (Section 6.3).

Household agriculture

About 2¼ million households in Ghana own or operate a farm or keep livestock (Section 8.1). Detailed estimates are given of the number of households growing different crops and the estimated annual value of their harvest and sales. The major household crops, in terms of sales, are cocoa, maize, tomatoes, cassava, plantain, yam and onions (Section 8.2). About a million households process crops or fish for sale, with the major responsibility for this processing falling on women. The main sources of income are gari and processed fish (Section 8.6).

Non-farm enterprises

More than 1½ million households in Ghana operate a non-farm business; three-quarters of these businesses are operated by women. Two-thirds of all businesses are engaged in retail trade, and most of the remainder are engaged in some kind of manufacturing (for instance food, beverages, textiles or clothing) (Section 10.1). Details are given of the average cost of inputs, assets, revenues and net income, separately for manufacturing and trading enterprises (Section 10.2).

Remittances

Remittances to households in Ghana total about 60 billion cedis per year; two-thirds of this amount comes from other households in Ghana, and one-third comes from overseas (Section 11.1).

Assets

Detailed information is given on the ownership of various assets. About 40 percent of households own a radio, and 11 percent a television; 15 percent own a bicycle, and 2 percent a car; 27 percent own a sewing machine, and 8 percent a refrigerator.

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MAP SHOWING REGIONAL BOUNDARYIES

ECOLOGICAL ZONES OF GHANA (GLSS 3)

TECHNICAL NOTES

Apparent differences in the base figures of two tables may reflect a small level of non-response in the variables used in either or both tables.

Because of the effects of rounding, percentages may not always add exactly to 100, and 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. A population growth rate of 2.6 percent per annum since the 1984 Census has been assumed, which implies that in March 1992 (the mid-point of the survey period) the population living in private households numbered 14.9 million.

The word 'billion' used in this report means 'one thousand million'.

The symbol '-' in the cell of a table indicates that the value for that cell is zero. The symbol '**' in the cell of a table implies that the percentage or estimated value in that cell is less than half the lowest possible unit which could be used in the table. For instance, in a table showing national estimates of expenditure given in billions of cedis, a '**' in a cell would indicate a value of less than half a billion cedis.

All income and expenditure data given in this report have been deflated, so as to give values for March 1992. This was done using the monthly national Consumer Price Index, produced by the Ghana Statistical Service. The same national deflators were used for urban and rural areas. Over the three-year period March 1992 to March 1995 prices in Ghana have on average approximately doubled.

In March 1992 the exchange rate was about 400 cedis to the US dollar (but about 200 cedis to the US dollar if purchasing power parities (PPP) are used). In March 1995 the exchange rate was about 1150 cedis to the US dollar.

METHODOLOGY

Introduction

Following the pattern set in the first two rounds of the Ghana Living Standards Survey (GLSS), the questionnaire used for the third round again covered a wide spectrum of topics, such as education, health, housing, employment, income and expenditure, which affect the living standards of households. GLSS3 thus provides data on various aspects of Ghanaian household economic and social activities, which are of help for monitoring the impact of the Government's Economic Recovery Programme.

GLSS3 differed from the two previous rounds, however, in concentrating particularly on the income, consumption and expenditure of households at a much more disaggregated level than previously. As a result, GLSS3 should provide much more accurate estimates of income and expenditure, including the imputed value of home produced food which is consumed by households. The data on household expenditure are also being used to derive the weights needed for rebasing the Consumer Price Index. The GLSS data on income, consumption and expenditure, together with other individual, household and community level data collected in GLSS3, will also provide a valuable database for national and regional planning purposes.

In GLSS1 and GLSS2 only two visits, two weeks apart, had been made to each selected household, and the expenditure data on food and non-food items were collected on the second visit, with a recall period of two weeks. An attempt was also made to obtain annual estimates of household expenditure on food and non-food items, as well as annual estimates of consumption of home produced food items.

For GLSS3 much more detailed information was collected by means of frequent visits to each household. Households were visited eight times at two-day intervals in rural areas, and 11 times at three-day intervals in urban areas. By reducing the recall period from two weeks to two or three days, much improved estimates of household consumption and expenditure should be obtained.

Detailed anthropometric data had been collected in GLSS1 and GLSS2, involving the need to include an anthropometrist in each survey team. This topic had to be dropped from GLSS3, so that the expanded income, consumption and expenditure data could be collected.

Sample design

A multi-stage sampling technique was used in selecting the GLSS sample. Technical details of the sample design are given in Appendix 1. Initially, 4565 households were selected for GLSS3, spread around the country in 407 small clusters; in general, 15 households were taken in an urban cluster and 10 households in a rural cluster. The actual achieved sample was 4552 households. Because of the sample design used, and the very high response rate achieved, the sample can be considered as being self-weighting, though in the case of expenditure data (as discussed below) weighting of the expenditure values is required.

Questionnaires

Three types of questionnaires were used for GLSS3: a household questionnaire, a community questionnaire and a price questionnaire. Appendix 2 contains a detailed description of the contents of each questionnaire.

The household questionnaire was in two parts. Part A collected information on household composition, education, health and fertility, employment and time use, migration, and housing characteristics, and it was also used to identify the respondents for Part B. Part B covered agricultural activities, including the consumption of home produce, household expenditure, non-farm enterprises, other income and expenditure, and credit, assets, and savings.

All urban households were given a special diary, and requested to record on a separate page each day all the expenses they incurred. This had to be done by a literate member of the household who had already been identified during the listing exercise. In the case of illiterate households the supervisor or the supplementary interviewer visited them and did the recording. Although to a large extent the use of diaries seems to have served its intended purpose of facilitating the recording of expenditures for many urban households, some caution has to be taken in interpreting the results and estimates derived from the diaries. In particular, while most of the expenses incurred by the household as a unit are likely to have been recorded fairly accurately, it is possible that some of the expenses made by individual members of the household outside the home may have been missed.

Details of infrastructure and other facilities available to rural communities were recorded in the community questionnaire. This questionnaire was usually administered at a meeting with the community chief, along with his elders and other knowledgeable people in the community.

The price questionnaire was used to collect information on prices in the local market. This information is needed for comparing prices in different parts of the country, which would allow the construction of regional price indexes and the adjustment of household expenditures to a common base so as to take account of regional variations in purchasing power.

Fieldwork

GLSS3 fieldwork commenced on 30 September 1991 in both rural and urban clusters, and finished in September 1992. In all, 11 teams were involved in the data collection and data entry exercise. Seven of these were rural teams, three were urban, and the eleventh team was a relieving team. The purpose of the eleventh team was to afford each of the ten regular teams the opportunity to take some time off as annual leave.

Rural teams were composed of three interviewers, one data entry operator, a supervisor and a driver. Two of the three interviewers in a rural team were each assigned a workload of 10 households, which they completed over a cycle of 16 days; over the 12-month survey period, each team covered 44 workloads, spread over 22 cycles. Each workload was divided into two batches of five households, with each batch being visited eight times on alternate days throughout the cycle. The third interviewer (called the supplementary interviewer) undertook price reading in markets of the locality and also stood in for the regular interviewers to allow them to take some time off during the week.

Urban teams had a similar composition to rural teams, except that there were four interviewers in the team. Again, one interviewer did the market pricing and acted as reserve interviewer. In urban teams three interviewers were each assigned a workload of 15 households, divided into three batches. One batch was visited on day 1, the second on day 2, and the third on day 3; the first batch of five households was then revisited on day 4, and so on. In urban areas the cycle was 33 days; each batch was therefore visited 11 times during the cycle. With an urban team covering three workloads in one cycle, 33 workloads could be covered in the course of the 12-month survey period, spread over 11 cycles.

In all 67 interviewers, 11 supervisors, 10 data entry operators and 11 drivers were engaged in the data collection and entry exercise. The majority of the field personnel were permanent staff of the GLSS. The experience gained in the two previous rounds of GLSS greatly helped them in coping with some of the difficult situations which arose with GLSS3 in the field.

The schedule of fieldwork was drawn up, taking into consideration distance and accessibility in the grouping of clusters. Each team was assigned to a well defined zone within the country, and was guided by a map (showing the exact location of Enumeration Areas (EAs) to be visited), and a timetable indicating the cycle and date that selected EAs were to be covered. Three teams, the Mid Forest, Upper Forest and East Forest teams, concentrated on rural settlements in the forest zone. The Savannah team covered all rural EAs in the Northern, Upper West and Upper East regions of Ghana, while the Volta Basin team covered areas lying along the east side of the Volta River. The remaining three teams covered only urban EAs. Urban Team 1 was responsible for selected urban EAs in the more northerly regions. Urban Team 2 covered urban EAs in the Western, Central and part of Greater Accra region. Urban Team 3 was assigned to areas from the east of Ghana to part of Greater Accra.

To a large extent the smooth running of the field operations depended on the roadworthiness of the vehicles. Each team had a vehicle at its disposal, and to ensure that fieldwork was not disrupted a standby vehicle was stationed at headquarters, ready to help out when the need arose. Even so, on a number of occasions when team vehicles broke down, the field personnel had to use the public transport system until help came from headquarters. Besides vehicle breakdown, other field problems included: respondents abandoning interviews in the middle of a cycle, as a result of a death in the family or a key household member having to travel; personnel problems (eg. resignation or ill-health of interviewers, or resulting from a decision made by superior authorities that an interviewer should be redeployed to another area); logistics (eg. problems with the provision of boots, raincoats or bedding); and diaries which respondents had failed to fill in.

The quality of the collected data was maintained through a variety of measures: tight supervision, with one supervisor controlling a team of three or four interviewers; observation of interviews, especially through unannounced supervisory visits; and careful editing of completed questionnaires, first manually by the supervisor and then using computers.

Data processing

The data collected in this survey were entered directly onto microcomputers which had been installed in the eight regional capitals. Kumasi and Accra had two PCs each, while Tamale, Sunyani, Koforidua, Ho, Cape Coast and Sekondi/Takoradi had one each. Special interactive software programs had been prepared for data entry and checking, using the software package Rode-PC. Data entry was done in two rounds. In both urban and rural clusters interviewers completed Part A of the questionnaire by the end of the fifth visit to each household; and after checking them, the supervisor took these questionnaires straight away to the regional capital, where the data entry operator began keying in. Once Part B had been completed, the supervisor took these questionnaires to the regional capital, and returned with the Part A questionnaires, plus detailed printouts showing what errors had been discovered by the editing program during the keying in operation. These errors were then corrected in the field.

By the time the data entry operator had finished keying in the second batch of questionnaires (Part B), the team would have moved from those clusters to the next set of clusters. However, the next set of clusters were very close to the previous ones, so going back to correct errors

detected in the second round involved travelling only a short distance. This arrangement made field reconciliation fairly easy. In addition, each set of clusters had been chosen close together so as to make supervision relatively easy. Finally, clusters in areas that were hardly accessible during the rainy season were scheduled to be covered during the dry season. At regular intervals during the fieldwork the diskettes containing the GLSS3 data for each completed cycle were returned to the headquarters in Accra. Final tabulations were produced using the SAS software package.

Many of the tables in this report make use of one of two key variables: region or ecological zone. There are ten administrative regions in Ghana. For the purposes of the GLSS the country was also divided into three agro-ecological zones: the coastal plain, the middle semi-equatorial forest, and the northern savannah. The accompanying diagram shows the links between these two variables. Five regions are located exclusively in a single zone: Greater Accra is in the Coastal zone; Ashanti is in the Forest zone; and Northern, Upper West and Upper East regions are located entirely in the Savannah zone. Three regions cut across two zones: Western and Central regions are partly in the Coastal zone and partly in the Forest zone; and Brong Ahafo is partly in the Forest zone and partly in the Savannah zone. Finally, there are two regions, Eastern and Volta, which straddle all three zones.

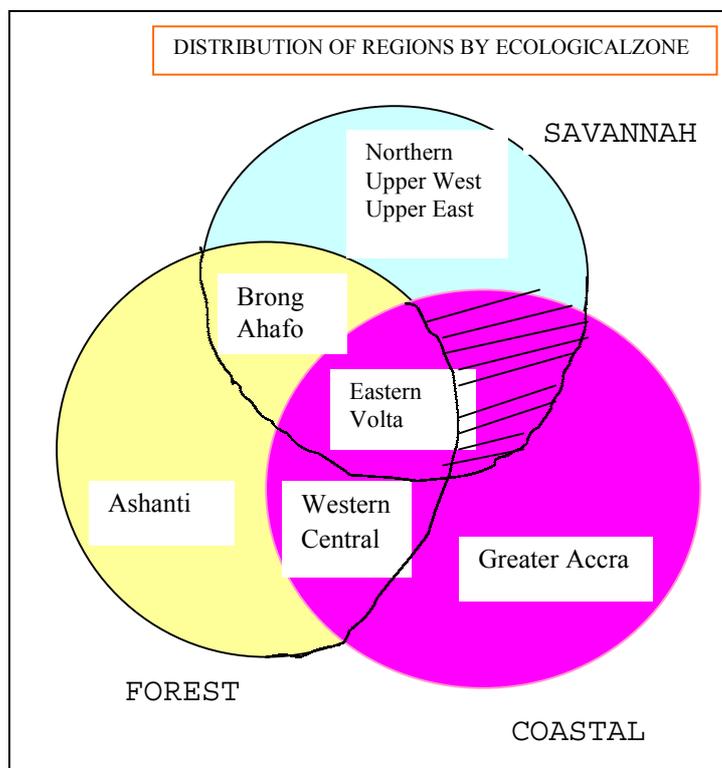


Figure 1

Income and expenditure aggregates

A major element in the analysis of the data from GLSS3 involved the development of a methodology for identifying all the different elements of a household's income and expenditure, and then designing a suitable method of aggregation of these elements. A tentative scheme, for use in GLSS1 and GLSS2, had already been developed by a team from the Development Economics Research Centre at the University of Warwick, UK. Programs had also been written to provide estimates for outliers and missing observations, which otherwise would have caused problems. During 1992 and 1993 the Warwick team worked with the Ghana Statistical Service (GSS) to refine the methodology further, and adapted it for use on the GLSS3 questionnaire. The final structure involved the creation of six major components of income, and six of expenditure; but for some components there was a choice of aggregates which could be used for estimation. Appendix 3 sets out a simplified form of the Warwick structure as it applies to GLSS3, showing which parts of the questionnaire are used for constructing each subaggregate¹.

¹ A full description of the methodology is given in a report entitled *The Estimation of Household Incomes and Expenditures from the First Two Rounds of the Ghana Living Standards Surveys 1987/88 and 1988/89, (Revised version)*, which was prepared by Harold Coulombe, Andrew D. McKay and Jeffery I. Round, and published by the GSS in December 1993. Details of how the methodology applies to the GLSS3 questionnaire, including information on differences between the GLSS3 questionnaire and the one used for GLSS1 and GLSS2, can be found in *Measuring household income and expenditure in the third round of the Ghana Living Standards Survey (GLSS3), 1991/92: a methodological guide*, to be published by the GSS.

Comparing expenditure across households

In order to compare the well-being of different households, we need a basis for comparison. Household total income, or household total expenditure, are obvious candidates for use as a suitable measure. As is usually done on income and expenditure surveys, we have preferred to use total expenditure as the indicator, because it gives a better picture than does income of a household's current living standards, and because the components of expenditure are likely to have been more comprehensively captured in the survey than those of income.

It is first necessary, however, to make a further adjustment to the measure of total expenditure, to take account of the fact that households vary greatly in size; in general larger households will tend to have higher expenditures than smaller households. One option is to do a simple per capita adjustment, dividing total expenditure by the number of persons in the household. An alternative option is to use an adult equivalence scale, in which children of different ages are counted as different fractions of an adult, since it might be felt that children have lower consumption needs than adults. However, since there is at present no agreement as to what would constitute a suitable adult equivalence scale for Ghana, and since it seemed inappropriate to use a scale taken from some other country, the first option was adopted.

One further adjustment is also made to the household expenditure data before the household expenditures can be meaningfully compared. As discussed at the end of Appendix 1, all expenditure data has been adjusted to take account of inflation over the survey period. The data can therefore be considered as being based on prices as at March 1992, which is the midpoint of the survey period.

All the households in the dataset are then ranked in order of their household expenditure per capita, and divided up into five equal groups. The quintile boundaries in GLSS3 (at the prices of March 1992) are as follows:

Expenditure quintile groups		
Inflation-adjusted quintile	Lower	Upper
1	¢ 1,173	¢ 95,189
2	¢ 95,201	¢ 136,598
3	¢ 136,610	¢ 193,442
4	¢ 193,556	¢ 300,452
5	¢ 300,456	¢ 2,476,203

In March 1992 the exchange rate was about 400 cedis to the US dollar.

The use of GLSS data for policy analysis

The GLSS datasets, which span a period of five years, provide a very rich source of data on living conditions in Ghana. Basic reports on the GLSS are issued by the Ghana Statistical Service². Further analysis of the data by outside researchers is encouraged. Where possible, this research can most effectively be done in collaboration with the staff of the GSS. Whenever possible, this research will be published, so as to ensure wide dissemination of the results.

While this present report concentrates on providing a simple description of living conditions in Ghana, as reflected in the GLSS3 data, further more detailed analyses on particular aspects of the data are being carried out. An example is the preparation of an updated poverty profile of Ghana, using data from all three rounds of the GLSS. That report, which has been prepared in collaboration with outside consultants, is being published separately³.

² See *Ghana Living Standards Survey - First Year Report*, GSS, August 1989, and *Rural Communities in Ghana*, GSS, October 1993.

³ *The pattern of poverty in Ghana, 1988-1992*, to be published by the GSS.

1. DEMOGRAPHIC CHARACTERISTICS

1.1 Household composition

GLSS3 covered a nationally representative sample of 4,552 households containing 20,403 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.

Analysis of households shows that 32 percent of households are headed by females. As illustrated in Figure 1.1, the proportion of female-headed households tends to increase with urbanization; for example, whereas 30 percent of households in rural areas are headed by females, the proportion of female-headed households rises to 42 percent in Accra and 36 percent in other urban areas. The mean age of household heads is 44.8 years, with little difference in age between male and female heads (44.5 and 45.3 years respectively). Female household heads in the rural areas tend to be older than their counterparts in urban areas, particularly in Accra (Table 1.1).

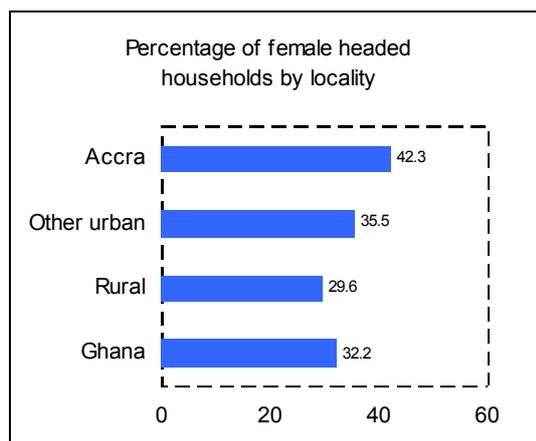


Figure 1.1

Table 1.1 Average age of household heads, by locality and sex

	Male	Female	All
Locality			
Accra	41.4	40.0	40.8
Other Urban	44.4	43.1	44.0
Rural	45.0	47.3	45.6
All	44.5	45.3	44.8
<i>Sample size</i>	<i>3085</i>	<i>1465</i>	<i>4550</i>

Based on the distribution of the sample of persons and households observed in GLSS3, Table 1.2 provides estimates for March 1992 of the total population and total number of households by region, and by some of the main locality classifications used in this report. These estimates assume an overall growth rate for the total population of 2.6 percent per annum since the last population census in 1984. On this basis, the total number of persons in private households in Ghana is taken as 14.9 million, and the total number of households as 3.3 million. For the country as a whole the average household size is 4.5, signifying a decline of 0.3 from the GLSS1 (1987/88) results and a decline of 0.4 from the census figure in 1984. The decline is entirely due to a drop in the size of rural households, from 5.2 in 1984 to 4.6 in 1992; the average size of urban households remained unchanged at 4.3.

In March 1992, the three most northerly regions (Northern, Upper West and Upper East) had average household sizes of almost 6, but these actually represent a substantial reduction when compared with the corresponding figures obtained in the 1984 Census (over 7 in the Upper East, and over 8 in the Northern and Upper West regions). Most other regions showed a small drop in average household size when compared to the 1984 Census results, but in two regions (Brong Ahafo and Central) average household size actually appears to have increased.

Table 1.2 Mean household size, estimated population in private households, and estimated number of households, by region

	Mean household size		Popn. in hhllds in March 1992 [*]		Estimated no. of households based on GLSS3 (March 1992)
	1984 Census (March 1984)	GLSS3 (March 1992)	Projected from Census (millions)	Based on GLSS3 results (millions)	
Ghana	4.9	4.5	14.9	14.9	3,320,000
Western	4.4	4.3	1.4	1.5	350,000
Central	3.8	4.1	1.4	1.5	380,000
Greater Accra	3.9	3.8	1.7	1.7	470,000
Eastern	4.8	4.0	2.0	1.9	480,000
Volta	4.8	4.4	1.5	1.4	310,000
Ashanti	4.7	4.4	2.5	2.4	540,000
Brong Ahafo	5.1	5.3	1.5	1.8	330,000
Northern	8.7	5.7	1.4	1.4	250,000
Upper West	8.4	5.8	0.5	0.5	80,000
Upper East	7.1	5.9	0.9	0.8	140,000
Urban	4.3	4.3	4.7	5.0	1,160,000
Accra	3.7	3.6	1.2	1.2	340,000
Other urban	4.5	4.5	3.6	3.7	820,000
Rural	5.2	4.6	10.2	9.9	2,160,000
Rural coastal		4.0		2.1	520,000
Rural forest		4.4		4.4	1,000,000
Rural savannah		5.4		3.4	630,000

* Note: An annual growth rate of 2.6 percent has been used for each region. The GLSS3 population estimates use the same national estimate of 14.9 million for the population in private households, but with the distribution of the population based on the results of GLSS3. Figures for 1984 are based on Tables 5 and 6 in *1984 Population Census of Ghana: Demographic and Economic Characteristics - (i) Total Country, (ii) Greater Accra Region*, Statistical Service, 1987.

Even if the national estimate of 14.9 million is correct, the regional estimates derived from GLSS3 are all subject to sampling error. However, comparing the crude projected populations for each region with the projections obtained using the GLSS3 results, we see that GLSS3 gives comparable results for most regions; the one possible exception is Brong Ahafo, which has about 300,000 more people (on the basis of the GLSS3) than crude census projections would have suggested. In terms of the urban/rural split, GLSS3 produces higher estimates for urban areas and lower ones for rural areas than those obtained by a crude projection of census figures using a single growth rate; this reflects the fact that the urban population has grown faster than the rural population. Taking 2.6 percent as the overall annual growth rate, the GLSS3 results imply annual growth rates of 3.2 percent for urban areas (3.4 percent for Accra and 2.9 percent for other urban areas) and 2.2 percent for rural areas.

Table 1.3 shows the structure of Ghanaian households. Out of a total of 3.3 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. The other two sizeable categories are the 12 percent of households containing one woman with one or more children, and another 12 percent of households containing one man living alone. In fact, we can see from Table 1.3 that 17 percent of all households contain one person; of these, about 380,000 are male households and 170,000 are female households.

Most of these males are of working age, whereas half of the women are aged 60 or over. Further information on household size is given in the section on housing (see for instance Table 6.7).

Table 1.3 Composition of households

	With children*		Without children*	
	Percentage of total	Estimated households	Percentage of total	Estimated households
	%		%	
Adults in household				
At least one adult of each sex	54.1	1,800,000	8.2	270,000
One man	1.6	50,000	11.5	380,000
Two or more men	0.6	20,000	0.7	20,000
One woman	12.2	410,000	5.1	170,000
Two or more women	4.7	160,000	1.3	40,000
Total	73.2	2,440,000	26.8	880,000

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

1.2 Age and sex distribution

The sample splits into 48.5 percent males and 51.5 percent females. This distribution gives an overall sex ratio of 94 males to every 100 females. The excess of females is observed in all localities (Table 1.4). The population is rather young, registering mean and median ages of 22 and 16 years respectively. The youthfulness of the population is affirmed by the fact that about 54% of the population is under 18 years and seven out of every 10 persons are less than 30 years of age. Children account for 47 percent of the total population while older persons (65+) account for only 4 percent. There are however a higher proportion of children in the rural areas (48%) than in Accra (40%) and other urban areas (45%). This age structure implies a dependency ratio of 103, which means that on average each person of working age (15-64) has him or herself and one additional person to support.

Table 1.4 Age distribution of the population, by locality and sex
Percentages

Age group	Accra		Other urban		Rural		All	
	Male	Female	Male	Female	Male	Female	Male	Female
0-4	5.2	6.5	7.2	6.7	8.2	8.7	7.7	8.0
5-9	6.9	7.6	8.5	7.6	9.3	8.4	8.9	8.1
10-14	6.8	7.3	7.4	7.8	7.4	6.4	7.4	6.8
15-19	5.7	6.5	5.6	5.7	5.3	4.3	5.4	4.8
20-24	3.7	4.9	3.7	4.2	3.0	3.4	3.2	3.8
25-29	4.0	5.2	3.0	4.1	2.5	3.5	2.8	3.8
30-34	2.5	4.5	2.1	3.4	2.2	3.0	2.2	3.2
35-39	3.0	3.7	2.1	3.1	2.0	2.7	2.1	2.9
40-44	2.0	2.3	2.1	2.3	1.7	2.0	1.8	2.1
45-49	1.6	2.0	1.7	1.9	1.5	1.8	1.6	1.8
50-54	2.0	1.7	1.4	1.6	1.3	2.5	1.4	2.2
55-59	0.6	0.9	1.1	0.9	1.0	1.0	1.0	1.0
60-64	0.4	0.4	0.8	0.6	1.4	1.1	1.2	0.9
65+	1.1	1.1	1.3	1.9	2.1	2.3	1.8	2.1
Total	45.6	54.4	48.1	51.9	49.0	51.0	48.5	51.5
Sample	767	915	2458	2653	6667	6943	9892	10511

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 in birth or baptismal certificates. However, such certificates appeared to exist for only 28 percent of the population, signifying that coverage of birth registration in the country is limited; the ages of the remaining 72 percent of the population had to be estimated. While the overall group distribution as shown in the table is likely to be fairly accurate, an examination of individual estimates of age revealed a strong heaping effect of reported ages, with respondents preferring ages ending with a zero and to a lesser extent 5.

1.3 Nationality, language and religion

About 98 percent of the population are Ghanaians; the rest are foreign nationals, the majority of whom are Togolese and Burkinabes (Table 1.5). It should be noted that all diplomatic households were excluded from the survey.

Table 1.5 Distribution of the population by sex and nationality

	Nationality								Percentages	
	Ghana	Burkina Faso	Mali	Nigeria	Ivory Coast	Togo	Other African	Other	Total	Sample size
Sex										
Male	97.6	0.6	0.2	0.1	0.1	1.1	0.3	0.1	100.0	9879
Female	98.1	0.4	0.1	0.2	0.1	0.9	0.3	0.0	100.0	10489
All	97.8	0.5	0.2	0.1	0.1	1.1	0.3	0.1	100.0	20368

Questions pertaining to religion and main language spoken were asked of household heads. With regards to primary language (Appendix Table A1.1), in 47 percent of households the primary language of the household head is Azan, in 13 percent it is Ewe, and in 10 percent it is Ga/Adangbe. In 4 percent of households the primary language is Dagbani, while Nzema and Hausa speaking household heads constitute 2 percent apiece. In 22 percent of households other languages apart from those already mentioned constitute the primary languages of the heads.

The distribution of household heads by their primary language and region of residence (Table 1.6) indicates that a large proportion of Azan-speaking heads of household live in Ashanti (27%), Central (21%), and Eastern (18%) regions. Half the Ewe-speaking heads (49%) live in the Volta region, but there are also significant numbers living in Greater Accra (15%) and Eastern (13%) regions. Almost all the Ga/Adangbe speaking heads of household live in Greater Accra and Eastern regions (62% and 30% respectively), while the great majority of Dagbani-speaking heads (78%) are in the Northern region, and the great majority of Nzema speakers (90%) are in the Western region. Unfortunately, languages spoken in the Upper regions were not well captured due to the fact that the categorizations used in the questionnaire were not exhaustive enough.

Using the sample size information in the table, and allowing for the small amount of non-response on this question, we can estimate the total number of households in the country with heads whose primary language is Azan at about $(2108 \times 730 \times 4552 / 4509)$, which is slightly over one and a half million. Similarly, we estimate that there are almost half a million households headed by Ewe-speakers, and about a third of a million households with heads whose primary language is Ga/Adangbe.

Table 1.6 Household heads by region and primary language

Region	Primary language of household head							All
	Azan	Ewe	Ga/Adangbe	Dagbani	Hausa	Nzema	Other	
	%	%	%	%	%	%	%	%
Western	13.5	4.5	0.9	1.2	9.0	89.9	8.7	10.7
Central	21.3	5.5	1.8	1.2	4.5	2.5	1.1	11.3
Greater Accra	8.8	14.8	61.9	2.3	51.7	2.5	2.9	14.1
Eastern	18.5	13.1	30.5	5.2	11.2	1.3	3.4	14.6
Volta	0.3	49.4	2.0	0.6	-	1.3	9.8	9.2
Ashanti	26.7	5.3	0.7	2.9	10.1	2.5	10.6	16.0
Brong Ahafo	10.6	3.5	0.9	8.1	10.1	-	17.7	10.0
Northern	0.3	3.8	1.3	78.0	3.4	-	16.4	7.5
Upper West	-	-	-	0.6	-	-	10.8	2.4
Upper East	0.0	-	-	-	-	-	18.6	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	2108	601	449	173	79	89	1010	4509

In terms of religious affiliation, the survey indicates that nearly two-thirds (64%) of heads of households in Ghana are Christians. A further 14 percent are Muslim, and 18 percent hold traditional or animist beliefs (Table 1.7). Translated into national terms, this implies that about two million household heads are Christians, half a million are Muslims, and a further half a million are traditionalists or animists. Protestants and Catholics appear to be spread fairly evenly between the different ecological zones, but in the rural Savannah very few household heads belong to other Christian denominations. Islam, on the other hand, appears strongest in the urban areas and in the rural Savannah. Animism and traditional beliefs are practised in all rural areas, but particularly in the Savannah.

Table 1.7 Household heads by religion and locality
Percentages

Religion	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	All
Protestant	31.9	17.8	19.9	20.7	15.8	20.1
Catholic	10.8	16.8	14.9	16.4	11.3	14.7
Other Christian	37.3	34.2	29.8	35.9	8.1	29.4
Muslim	14.3	20.3	5.5	9.3	22.1	14.4
Animist/Traditional	3.9	5.7	24.2	13.4	41.6	17.6
Other	1.7	5.2	5.8	4.4	1.0	3.9
All	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	461	1112	712	1369	859	4513

In terms of region (Tables 1.8 and A1.2), Christian heads of household are found mainly in the south of the country, with Protestants most numerous in Greater Accra and Eastern regions, and Catholics most numerous in Ashanti and Western regions. In contrast, a third of all Muslim heads of household live in the Northern region. Heads of household who follow animist or traditional beliefs are found mainly in the north and east of the country, with the largest numbers being in the Upper East and Volta regions.

Table 1.8 Household heads by religion and region

Region	Religion of household head						Percentages
	Protestant	Catholic	Other Christian	Muslim	Animist/ Traditional	Other	All
	%	%	%	%	%	%	%
Western	5.6	17.0	14.5	7.6	6.1	15.9	10.7
Central	14.2	9.3	15.8	5.1	4.2	25.6	11.3
Greater Accra	21.0	10.4	16.6	12.5	6.8	12.5	14.1
Eastern	19.3	12.0	20.2	4.5	7.4	26.7	14.6
Volta	14.7	13.7	2.6	1.7	16.8	5.7	9.1
Ashanti	14.3	17.8	21.0	15.3	10.8	10.2	16.2
Brong Ahafo	7.8	11.4	8.8	12.3	12.7	2.3	9.9
Northern	2.5	2.1	0.4	32.7	10.8	0.6	7.6
Upper West	0.4	4.7	0.1	4.8	5.2	0.6	2.4
Upper East	-	1.5	-	3.7	19.2	-	4.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	906	664	1325	649	793	176	4513

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. Also included in Table 2.1 are estimates of educational attainment for all adults in Ghana, obtained by grossing up the survey data.

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

Highest level attained	Percentages			Estimates (millions)		
	Males	Females	All	Males	Females	All
	%	%	%	(Millions)		
Never been to school	29.1	49.8	40.3	1.1	2.1	3.2
Less than MSLC*	29.2	26.6	27.8	1.1	1.1	2.2
MSLC*	32.6	20.3	26.0	1.2	0.8	2.0
Secondary or higher	9.1	3.3	6.0	0.4	0.2	0.5
Total	100.0	100.0	100.0	3.6	4.3	7.9

*MSLC Middle School Leaving Certificate here includes commercial/vocational training.

Some 40 percent of all adults (about 3 million people) have never been to school. A further 28 percent (2 million adults) have been to school but have not got any qualifications. Of the rest, some 26 percent (2 million adults) have the MSLC/JSS certificate as their highest qualification, while the remaining 6 percent (½ million adults) have secondary or higher level qualifications.

There is a marked contrast between females and males in their levels of educational attainment. For instance, twice as many females as males (2 million as against 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

Out of the total school age population of 6.9 million people, some 4.1 million (59%) are currently in school. Figure 2.1 illustrates the difference in attendance rates between males and females; 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.

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 attendance rates rise with increased urbanization. For example, about 91 percent of all boys in Accra aged 6 to 11, and 88 percent in other urban areas, are enrolled in school, whereas in rural areas the corresponding figure is only 72 percent.

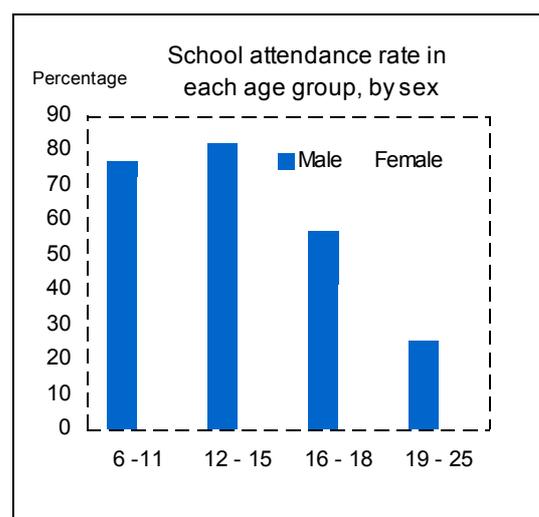


Figure 2.1

A similar pattern is noticeable in respect of school attendance among girls. However, on the whole, the proportion of females in school is significantly lower in all localities and for all ages when compared with their male counterparts.

Table 2.2 School attendance rate by age, locality and sex

Age group	Percentages								
	Locality								All
	Accra		Other Urban		Rural		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	
6-11	91.3	87.7	87.5	80.2	72.1	67.0	77.0	71.9	74.6
12-15	97.7	74.2	87.8	74.7	77.6	68.5	81.5	70.8	76.6
16-18	69.2	53.6	64.3	47.2	51.7	35.2	56.9	41.1	49.1
19-25	35.6	17.1	33.8	11.6	18.8	5.7	24.6	8.5	16.0
All	75.2	61.0	72.2	56.9	60.9	49.2	64.9	52.4	58.8

Table 2.3 highlights the substantial differences in school enrolment, both between the sexes and between the south and the north of the country. In terms of the sexes, male enrolment rates are in general significantly higher than the rates for females, throughout the country and across age groups. However, this differential between the sexes is much more pronounced in the Northern region than in the other regions. Over 70 percent of children aged 6-11 are currently enrolled in all regions except the Upper West, Upper East and Northern regions. The poor school attendance among children of primary school age in these three regions may be due to a number of factors, including their engagement in economic activities. Turning to the older school age category, (19-25), higher rates of attendance were noted among residents in Volta, Greater Accra and Northern regions. In general, females seem to be at a particular disadvantage in gaining access to education; only 9 percent of women aged 19-25 are enrolled, compared with 25 percent of men of the same age.

Table 2.3 School attendance rate, by region, age and sex

Region	Percentages										
	Age group										
	6 - 11		12 - 15		16 - 18		19 - 25		6-25		All
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Western	83.6	75.7	83.2	75.5	60.3	47.3	8.8	6.0	64.5	54.3	59.5
Central	77.6	72.4	83.3	71.4	61.0	51.7	26.8	6.1	68.0	53.7	60.8
Greater Accra	87.8	85.4	93.2	77.7	65.9	52.5	33.3	15.4	72.8	61.0	66.6
Eastern	87.5	83.5	90.4	81.1	57.1	36.5	19.6	5.6	73.5	57.5	65.6
Volta	80.0	81.4	82.7	81.5	63.5	31.8	40.9	15.4	69.5	61.1	65.6
Ashanti	89.1	81.8	94.0	76.0	55.0	36.3	21.6	6.1	70.1	53.4	61.7
Brong Ahafo	86.1	83.5	83.3	82.5	65.9	53.6	19.0	6.4	69.6	62.1	66.0
Northern	57.2	31.3	63.3	31.5	40.9	22.6	30.6	12.8	51.1	25.8	39.7
Upper West	34.3	33.8	30.8	35.5	42.1	33.3	13.0	6.7	31.1	28.4	29.8
Upper East	30.2	31.9	44.8	34.1	14.3	15.0	22.2	0.0	31.1	25.7	28.6
All	77.0	71.9	81.5	70.8	56.9	41.1	24.6	8.5	64.9	52.4	58.8

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 previous 12 months (Table 2.4). On average, households spent about ₵ 16,000 a year for each household member attending school or college. The annual amount spent is much higher in Accra (₵ 42,000) than in other urban or rural areas (₵ 21,000 and 10,000 respectively). The four main items of expenditure are: food, board and lodging at school (accounting for 25% of total educational expenditure); school and registration fees (23%); uniforms and sports clothes (17%); and books and school supplies (12%). Across localities, the average amount spent on each item of educational expenditure increases with increased urbanization.

Table 2.4 Average amount paid per person attending school/college in the last 12 months, by locality

Type of expense	Cedis				
	Locality			All	
	Accra	Other urban	Rural	Amount	Percentage
	₵	₵	₵	₵	%
School & registration fees	11,600	4,700	1,900	3,700	22.8
Contributions to PTA	1,600	600	200	500	3.0
Uniforms & sports clothes	4,400	3,400	2,100	2,700	16.9
Books & school supplies	4,500	2,700	1,200	2,000	12.2
Transportation to/from school	3,000	1,200	300	800	5.2
Food, board & lodging at school	10,000	5,500	2,300	4,000	24.9
Other expenses (clubs, extra classes)	2,800	1,500	300	900	5.5
Other in-kind expenses	4,100	1,200	1,300	1,500	9.4
Total	42,000	20,700	9,700	16,100	100.0

NOTE: All figures have been rounded to the nearest 100 cedis
The figures are based on those attending school/college.

2.4 Literacy

The GLSS3 questionnaire contained more detailed questions on literacy than those asked in the two earlier rounds. In GLSS1 and GLSS2 three questions had been asked for each person aged 5 and over: whether they could read a newspaper, whether they could write a letter, and whether they could do written calculations. In GLSS3 respondents were asked whether they could read a simple letter in English, and they were then asked in what local language they could read a letter, stating the one in which they were most proficient. A similar pair of questions was asked with respect to writing. (The question on doing written calculations remained unchanged.) It is likely that the different form of questions has had an effect on the estimates of literacy; as a result, the literacy rates for GLSS3 may not be directly comparable with those calculated for the earlier rounds. The GLSS1 report presented results in respect of those aged 9 and over. For this GLSS3 report, we have preferred to concentrate only on adult literacy (those aged 15 and over). Again, as before, we have defined literacy as those who can write a letter, though this time we can separate out those literate in English and those literate in a local language.

The analysis of the literacy section was complicated by an unfortunate error which occurred with the filter questions in this part of the questionnaire. During the first eight months of fieldwork, the questions on literacy were only asked of those people who had never been to school; those who had been to school bypassed this question, even though many of them may not have done enough schooling to be counted as literate. Fortunately it was possible to correct the error, so that for the last four months of the survey the questions on literacy were asked of everyone aged 5 and over. But even this subset poses problems, since the last four months of data for the survey do not provide a representative cross-section of the population in terms of geographical spread. It has therefore been necessary to construct the estimates of literacy by first splitting up the sample into four groups (according to whether or not the person ever went to school, and whether they were interviewed in the first eight months or the last four months of the fieldwork), and then analyse each subset separately by region and locality, before pooling the results. This detailed breakdown was done separately for males and females, and the data were then combined.

Based on the questions used in GLSS3, some 49 percent of adults in Ghana are literate in English or a local language (Table 2.5). There are substantial differences between the sexes, and between localities, in the proportions literate. Six out of every 10 men, but fewer than 4 out of every 10 women, are literate. Two-thirds of adults in urban areas are literate, but only 40 percent of those in rural areas. The figure of 49 percent for the proportion of adults who were literate is about ten percentage points higher than the percentage values obtained in GLSS1 and GLSS2 (when different questions on literacy were used).

Table 2.5 Adult literacy rates, by sex and locality*

	Percentages				
	Urban			Rural	All
	Accra	Other urban	All		
Male	84.7	71.2	74.8	53.5	60.8
Female	73.1	51.1	57.0	28.3	38.5
All	78.3	60.3	65.0	40.0	48.8

*Note: Adult refers to those aged 15 and over. Anyone who said they could write a letter in English or in a Ghanaian language was counted as being literate.

Table 2.6 gives information similar to that in Table 2.6, but separating out those literate only in a Ghanaian language, those literate in both a Ghanaian language and English, and those literate only in English. If we consider only those who said they were literate in a Ghanaian language, the proportion literate drops by only 5 percentage points, from 49 percent to 44 percent; similarly, if we consider only literacy in English, the proportion literate drops only 4 percentage points, from 49 to 45 percent. There is thus considerable overlap in literacy, with 40 percent of adults being literate in both English and a Ghanaian language. The only exception to this pattern is in Accra itself, where a quarter of all adults are literate in English but not in a Ghanaian language.

Table 2.6 Adult literacy rates, by sex and locality and language in which the person is literate

		Literate in:			Illiterate	Total	Sample size
		Ghanaian languages only	Ghanaian languages and English	English only			
Sex	Locality	(percentages)					
Male	Accra	1.6	53.8	29.3	15.3	100.0	448
	Other urban	1.6	64.6	5.0	28.8	100.0	1275
	All urban	1.6	61.8	11.4	25.2	100.0	1723
	Rural	4.1	47.1	2.3	46.5	100.0	3267
	All	3.2	52.2	5.4	39.2	100.0	4990
Female	Accra	3.6	48.1	21.4	26.9	100.0	557
	Other urban	5.0	41.2	4.9	48.9	100.0	1520
	All urban	4.6	43.1	9.3	43.0	100.0	2077
	Rural	4.7	20.6	3.0	71.7	100.0	3752
	All	4.6	28.7	5.2	61.5	100.0	5829
All	Accra	2.8	50.5	25.0	21.7	100.0	1005
	Other urban	3.5	51.8	5.0	39.7	100.0	2795
	All urban	3.2	51.6	10.2	35.0	100.0	3800
	Rural	4.4	32.9	2.7	60.0	100.0	7019
	All	4.0	39.5	5.3	51.2	100.0	10819

*Note: Adult refers to those aged 15 and over. Anyone who said they could write a letter was counted as being literate.

In view of the technical problems experienced in collecting the data on literacy, it would not be appropriate to present literacy rates at the regional level. However, the main factor in determining if a person is literate is whether or not they have been to school; for instance, in all regions of the country, almost four out of every five adults in rural areas who have been to school are literate, whereas for those who have not been to school the percentage who are literate is rarely above 2 percent. Some idea of the variation in literacy rates between regions can therefore be obtained by looking at the proportion of adults who have been to school in each region. These figures are given in Appendix Table A2.1. In urban areas about 3 out of every 4 adults have been to school, while in rural areas the proportion who have been to school is about 1 in 2; and in both urban and rural areas females are at a disadvantage in terms of their exposure to schooling.

3. HEALTH

3.1 Introduction

The health section of the GLSS3 questionnaire sought information on the general health condition of all household members in the two weeks preceding the interview. (This is in contrast to GLSS1 and GLSS2, where a four-week reference period had been used.) For those who had suffered from an injury or illness during the previous two weeks, further information was collected about the type of health care received and the expenditure involved.

Information was also collected about preventive health care and vaccination against DPT, polio, measles and BCG in respect of all children aged seven years and under. For those aged five years and under, some data on post-natal care, particularly breast-feeding, were collected. Information about each child was provided by the child's mother or other household member in charge.

The last part of the health section applied to female household members aged 15 to 49, and gathered information on fertility, pre-natal care and contraceptive use.

3.2 Health condition in the past two weeks

In the country as a whole, about a fifth (22%) of the population 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 are most vulnerable to illness or injury; of those aged 50 and over, a third (37%) suffered from illness or injury during the two weeks preceding the interview. Next came pre-school children and those aged 20-49, a quarter of whom (25%) suffered from illness or injury during the previous two weeks. School age children were least likely to be indisposed; only 1 in 7 of those aged 6 to 19 were reported to have suffered from an illness or injury during the two weeks. The figures in Table 3.1 suggest that there is little difference between the sexes, or between localities, in the pattern of illness and injury.

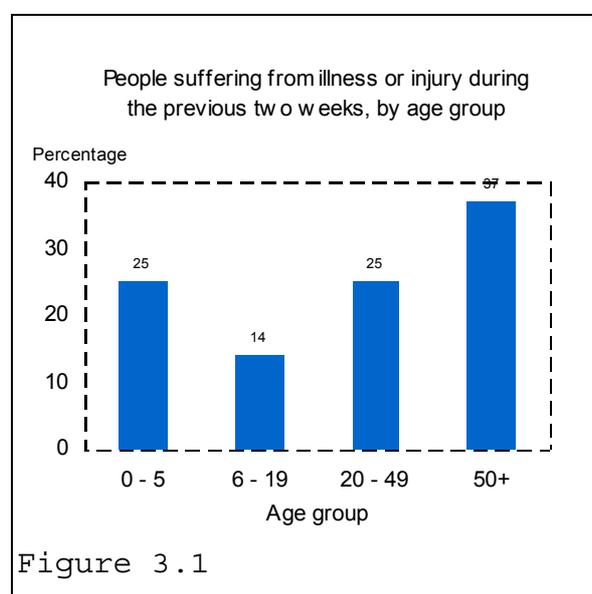


Figure 3.1

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

Age group	Percentages								
	Locality						Country		
	Accra		Other urban		Rural		Male Female		All
	Male	Female	Male	Female	Male	Female	Male	Female	
0 - 5	25.8	30.6	28.2	25.2	23.4	24.1	24.7	24.8	24.7
6 - 19	14.7	10.6	15.0	12.9	14.6	13.4	14.7	13.0	13.9
20 - 49	21.2	22.0	21.9	27.3	24.2	25.4	23.3	25.6	24.6
50+	16.2	39.1	37.0	37.2	37.5	37.9	36.1	37.8	37.0
All	19.0	20.4	21.7	22.6	21.7	22.7	21.5	22.5	22.0

Amongst those who suffered from illness or injury in the previous two weeks, about two-thirds (64%, representing about 13% of the total population) had to stop their usual activities due to the indisposition (Table 3.2). In both urban and rural areas there appeared to be little difference between the sexes in the incidence of illness or injury, 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 rural than in urban areas; in urban areas about half of those who were ill or injured had to stop their usual activities, but in rural areas the proportion stopping their usual activities rose to about 70 percent.

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

Age group	Percentages								
	Locality						Country		
	Accra		Other urban		Rural		Country		All
	Male	Female	Male	Female	Male	Female	Male	Female	
0 - 5	58.6	68.3	46.3	47.1	69.5	69.6	62.8	64.7	63.7
6 - 19	40.5	54.3	41.4	46.8	66.2	70.6	58.0	63.1	60.2
20 - 49	50.8	56.1	52.4	55.5	70.8	72.0	64.3	65.8	65.2
50+	54.5	51.9	52.3	54.2	65.3	74.1	62.1	68.8	65.7
All	49.6	57.8	47.8	52.0	68.1	71.7	61.8	65.6	63.8

About 11 percent of all household members reported having consulted a health practitioner, dentist or traditional healer, or having visited a health centre, in the previous two weeks (Table 3.3). Since, as previously noted (see Table 3.1), 22 percent of people reported that they had suffered from illness or injury in the previous two weeks, this means that only half of those who were indisposed consulted someone; the other half did not consult anyone, although some of them did purchase medicines or medical supplies for their ailments. People in the urban areas are rather more likely to seek consultation than those in the rural areas, even though (as noted above) the levels of illness and injury are about the same in urban and rural areas. School-age children were much less likely to have a consultation than people in other age groups, reflecting the fact (see Table 3.1) that they are less likely to be suffering from illness or injury in the first place.

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

Age group	Percentages								
	Locality						Country		
	Accra		Other urban		Rural		Country		All
	Male	Female	Male	Female	Male	Female	Male	Female	
0 - 5	18.3	23.1	18.2	17.5	13.2	12.7	14.7	14.5	14.6
6 - 19	3.8	4.5	8.3	7.2	5.7	6.3	6.2	6.4	6.3
20 - 49	12.0	15.6	14.2	17.8	10.9	13.7	11.9	15.0	13.6
50+	13.2	22.1	19.3	21.7	14.7	14.6	15.6	16.5	16.1
All	9.9	13.2	13.0	14.2	9.7	11.1	10.5	12.0	11.3

Regarding the type of health practitioner consulted (Table 3.4), half (51%) of those who consulted someone reported that they had seen a doctor or dentist; a further 15 percent saw a nurse, and a similar proportion were examined by a medical assistant. In urban areas, and particularly in Accra, the great majority of medical consultations take place with a doctor or dentist, but in rural areas the consultation is almost as likely to be with a nurse, midwife or medical assistant. One small but interesting feature of Table 3.4 is that males are almost twice as likely as females to consult a traditional healer; 13 percent of males had consulted one in the previous two weeks, but only 7 percent of females had done so.

Table 3.4 Type of health practitioner consulted during the previous two weeks, by locality and sex

Person consulted	Percentages								
	Locality						Country		
	Accra		Other urban		Rural		Male	Female	All
	Male	Female	Male	Female	Male	Female	%	%	%
Doctor or dentist	86.8	87.5	57.3	67.0	39.4	41.8	48.3	53.7	51.2
Nurse or midwife	1.3	5.8	7.0	6.4	18.9	20.8	14.0	15.1	14.6
Medical Assistant	2.6	0.8	13.9	10.5	19.5	19.1	16.6	14.8	15.6
Pharmacist	6.6	1.7	6.6	5.9	6.0	7.7	6.3	6.6	6.4
Traditional healer	2.6	4.2	12.7	7.0	13.8	8.0	12.6	7.3	9.7
Other	-	-	2.5	3.2	2.3	2.6	2.2	2.5	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	76	120	316	373	645	765	1057	1258	2295

NOTE: Others include spiritualists and traditional birth attendants

Illness was the main reason given for consultation (87%); the other most common reasons were injury (6%) or check-up (6%). (Appendix Table A3.1). Most of the consultations took place in hospitals (38%) and clinics (38%); half the consultations took place in public establishments, and half in private ones. The average amount paid for a consultation was ₵530, but this average conceals substantial variations in the amounts paid. Only a quarter of the consultations cost as much as this; a quarter of those consulting a medical practitioner did not pay anything at all, and another quarter paid less than ₵200. In general it appears that traditional healers charge more for their consultations than other health practitioners, while pharmacists charge the least.

More than three-quarters of those who sought medical consultation during the previous two weeks (82%) also purchased medicines and medical supplies. The mean amount paid by these people for medicines and medical supplies was about ₵1,900, but half of those who bought medicines and medical supplies paid no more than ₵1,000. Those who had consulted a doctor or traditional healer spent more on medicines/medical supplies (on average, ₵2,500 and ₵1,800 respectively) than those who had consulted a nurse, midwife or medical assistant (₵1,100) or pharmacist (₵1,000). Medicines and medical supplies purchased for females tended to be rather more expensive than those bought for males.

Attempts were made to find out who paid for most of the medicines and medical supplies purchased after the consultation. The survey revealed that the head of household paid for most of the purchases (83%). Most people have to settle their bills from their own pockets; less than 2% of those who bought medicines and medical supplies after consultation had their bills settled by their employers or government.

3.3 Fertility, pre-natal care and contraceptive use

This section of the questionnaire applied to women aged 15-49. Amongst this group, 74 percent had at some time been pregnant (Table 3.5). About 98 percent of all women over the age of 30 reported that they had at some time been pregnant. Amongst younger women, those in rural areas are much more likely to be become pregnant than those in urban areas; for instance, in the 20-24 year age group, 81 percent of rural women have already recorded at least one pregnancy, whereas amongst urban women in this age group only 50 percent have been pregnant.

We found that 8 percent of all women aged 15-49 years were currently pregnant, and a further 14 percent had been pregnant sometime during the previous 12 months. Overall rates of pregnancy appear highest in the 20-24 year age group, with 11 percent of women in that age group currently pregnant, and a further 24 percent having been pregnant in the previous 12 months. Figure 3.2 illustrates the pattern of current fertility amongst women of different ages, separately for urban and rural areas; in the figure, the two age groups 40-44 and 45-49 have been combined, since the base figures are small. Rates of pregnancy in rural areas are consistently higher than those in urban areas.

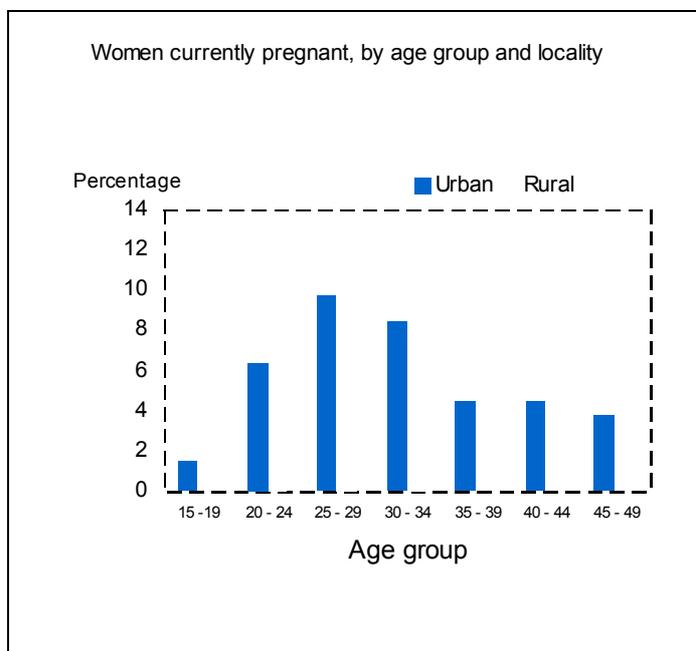


Figure 3.2

Table 3.5 Percent of women aged 15-49 years who were: (i) ever pregnant, (ii) pregnant during the previous 12 months, (iii) currently pregnant, by age group and locality

Age group	Percentages								
	Ever Pregnant			Pregnant during previous 12 months ¹			Currently pregnant		
	Locality			Locality			Locality		
	Urban	Rural	Country	Urban	Rural	Country	Urban	Rural	Country
15-19	8.5	17.2	13.7	1.5	5.2	3.7	1.5	4.5	3.3
20-24	50.5	81.0	69.2	10.8	24.7	19.3	6.4	12.6	10.2
25-29	82.6	94.8	90.1	23.1	25.3	24.5	9.7	11.9	11.1
30-34	97.6	99.0	98.5	10.4	19.6	16.1	8.4	13.6	11.6
35-39	97.3	97.1	97.1	10.0	16.3	13.9	4.5	12.0	9.2
40-44	98.1	99.3	98.8	6.5	11.7	9.8	4.5	6.2	5.6
45-49	97.7	97.9	97.8	1.5	5.8	4.3	3.8	2.1	2.7
All	66.7	78.2	73.8	9.5	16.1	13.6	5.5	9.4	7.9

¹ Excluding those currently pregnant

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 terminations of pregnancy. Older women, and women living in urban areas, were much more likely to have a pregnancy which did not result in a live birth. Thus, while 90 percent of pregnancies amongst rural women aged under 35 resulted in a live birth, only 60 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

Locality	Percentages		
	Age of woman		All
	Under 35	35 or over	
Urban	18.8	40.0	23.2
Rural	10.3	13.1	11.0
All	12.7	19.7	14.3

Women aged 15-49 years who were currently pregnant or were pregnant during the previous 12 months were asked whether they received any pre-natal care. In all, almost three-quarters of them said they had received pre-natal care (Appendix Table A3.2). The proportion receiving pre-natal care was higher in urban areas (83%) than in rural areas (70%). Most pre-natal consultations took place at a pre-natal clinic (54 percent at public ones and 25 percent at private ones); nearly all the remaining consultations were with a doctor (20%), while a very small number were with a traditional birth attendant or other health worker.

Those who did not receive any pre-natal care were asked why they did not go (Appendix Table A3.3). Amongst the reasons given by women in rural areas for not going, the most likely to be mentioned was that they could not afford the care (36%), while a further 27 percent said that pre-natal care was not necessary. Other specific reasons given by rural women were that the health centre was too far away (12%) or that no health care was available (6%). The remaining 18 percent of rural women gave a variety of other reasons for not receiving any pre-natal care.

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 amongst Ghanaian households; only about 17% of women reported that they or their partners were using a contraceptive method. The use of contraceptives was most common amongst women in their thirties, but even amongst 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 amongst those over 30 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	Percentages			
	Locality			Country
	Accra	Other urban	Rural	
15-19	1.9	0.7	4.9	3.3
20-24	12.3	16.7	17.9	16.9
25-29	20.0	19.6	23.7	22.2
30-34	38.7	27.4	19.9	24.0
35-39	47.5	26.6	24.7	27.5
40-44	23.1	17.5	17.7	18.2
45-49	15.2	13.3	11.0	12.0
All	21.1	16.3	16.9	17.2

Amongst women aged 15-49 (or their partners), about 7 percent use modern methods, and 10 percent use traditional methods, to prevent or delay pregnancy. Figure 3.3 and Table 3.8 illustrate how the use of modern and traditional methods of contraception varies according to the age of the woman. In all age groups a higher proportion of women use traditional methods of contraception than use modern methods.

Of the modern methods, the pill was the one most often used (3%), followed by condom, IUD and injection (each about 1%). Of the traditional methods, the rhythm method (3%) and abstinence (7%) were the ones most often mentioned.

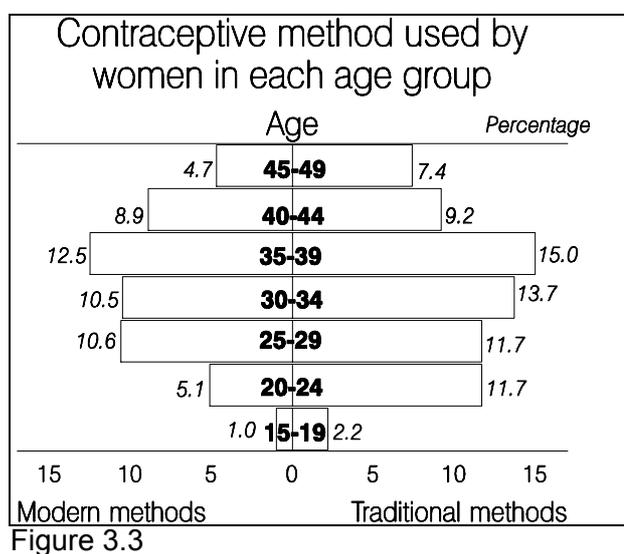


Table 3.8 Percentage distribution of women aged 15-49 years (or their partners), by age group and contraceptive method used

Contraceptive method	Age group							Country
	Percentages							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
MODERN METHOD	1.0	5.1	10.6	10.5	12.5	8.9	4.7	7.3
Pill	0.6	2.4	6.1	4.4	4.6	4.7	1.4	3.4
Condom	0.2	1.3	1.6	2.1	1.2	0.9	0.8	1.2
IUD	-	0.7	0.9	1.4	2.0	0.5	0.3	0.8
Injection	-	0.3	0.7	1.2	2.7	1.9	0.8	0.9
Douche	-	-	0.3	0.2	0.2	-	0.3	0.1
Female sterilization	-	-	-	0.2	0.3	0.7	0.3	0.2
Male sterilization	-	-	-	0.2	-	-	-	*
Other scientific	0.2	0.4	1.0	0.8	1.5	0.2	0.8	0.7
TRADITIONAL METHOD	2.2	11.7	11.7	13.7	15.0	9.2	7.4	9.8
Rhythm	0.6	3.8	2.7	5.1	3.9	2.4	1.4	2.8
Withdrawal	-	-	0.1	0.3	0.2	0.2	0.3	0.1
Abstinence	1.6	7.4	8.5	8.0	10.6	6.1	5.2	6.6
Other	-	0.5	0.4	0.3	0.3	0.5	0.5	0.3
No method used	96.7	83.2	77.8	76.0	72.5	81.8	88.0	82.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	927	754	772	662	593	424	368	4500

In Accra, the rhythm method (8%) was most commonly reported (Table 3.9); this was followed by condom (3%), pill and IUD (2% each). In the other urban areas, the pill (4%) was most commonly used, followed by the rhythm method and then abstinence. In contrast, in the rural areas abstinence was widely reported as the method used to prevent or delay pregnancy; amongst other methods used in rural areas, the main one mentioned was the pill (3%). In the country as a whole, the average (mean) amount paid for modern contraceptives during the previous month by those who used them was about ₵300.

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

Contraceptive method	Percentages			
	Locality			Country
	Accra	Other urban	Rural	
	%	%	%	%
MODERN METHOD	10.5	9.4	5.9	7.3
Pill	2.3	3.9	3.3	3.4
Condom	2.7	1.4	0.8	1.2
IUD	2.3	1.5	0.3	0.8
Injection	0.6	1.5	0.8	0.9
Douche	0.6	0.2	-	0.1
Female sterilization	0.2	0.3	0.1	0.2
Male sterilization	-	0.1	-	*
Other scientific	1.5	0.5	0.6	0.7
TRADITIONAL METHOD	10.8	6.9	11.1	9.8
Rhythm	8.1	3.5	1.7	2.8
Withdrawal	0.6	-	0.1	0.1
Abstinence	1.9	3.2	8.9	6.6
Other	0.2	0.2	0.4	0.3
No method used	78.9	83.8	83.1	82.8
Total	100.0	100.0	100.0	100.0
Sample size	480	1234	2786	4500

3.4 Post-natal care

In the country as a whole, 41% 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; half (50%) of all children aged less than 12 months, and 60 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 a 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	Percentages			
	Locality			Country
	Accra	Other urban	Rural	
0 Year	76.3	68.4	43.6	50.2
1 Year	77.5	67.9	52.5	57.7
2 Years	40.5	51.8	45.5	46.5
3 Years	40.5	47.5	34.2	37.6
4 Years	27.5	42.0	28.6	31.8
5 years	20.0	40.1	27.4	29.7
All	44.7	51.2	38.1	41.4

Amongst those who had been for a post-natal consultation, the average cost of a consultation was 250 cedis, but almost a fifth of consultations were free of charge (Table 3.11). People in rural areas usually pay more for a post-natal consultation than those in urban areas. There appear to be different arrangements for charging, depending on the locality; for instance, in Accra half the post-natal consultations were free of charge, whereas in rural areas the proportion getting free treatment was only 7 percent.

Table 3.11 Amount paid for a post-natal consultation, by locality

	Locality			Country
	Accra	Other urban	Rural	
Amount paid	%	%	%	%
0	51.3	33.0	7.2	17.4
Less than 100 cedis	27.4	23.2	26.4	25.6
100, less than 200 cedis	12.4	24.5	28.4	26.2
200, less than 500 cedis	2.7	11.8	17.2	14.7
500, less than 1000 cedis	4.4	4.8	12.2	9.6
1000 cedis or more	1.8	2.7	8.7	6.6
Total	100.0	100.0	100.0	100.0
Sample size	113	440	1043	1596

Questions were also asked about breast-feeding. The level of breast-feeding in Ghana is very high, with 97 percent of all children under 5 having been breast-fed at some time. 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 breast-fed. Table 3.12 shows the distribution of average age at weaning, by age of child, for children aged 2, 3, 4 and 5. For children aged 2-5, the mean age at weaning was 19 months. The pattern of weaning seems very consistent across the age groups. Less than 5 percent of children have not been breast-fed at all. At each age, a further 10 percent were weaned before they were 12 months old, 20 percent before they were 18 months, and 25 percent before they were 24 months old. This leaves almost 40 percent of children aged 2-5 who were not weaned until after 24 months, and some of these children are still being breast-fed.

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

Age	Not breast-fed	Age at weaning (in months)				Total	Sample size
		< 12	12-17	18-23	24+*		
2	2.0	10.0	22.4	31.4	34.1	100.0	650
3	4.7	9.9	21.1	26.4	37.8	100.0	701
4	4.7	10.2	23.3	25.5	36.3	100.0	717
5	3.9	9.5	22.6	25.0	39.0	100.0	725

** This group includes some children who were still being breast-fed

3.5 Preventive health care

This section of the questionnaire focused on children who were aged seven or under. Its purpose was 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 sought to find out the reasons why some children were not vaccinated against these diseases. Although detailed information was collected about different vaccinations, for simplicity the analysis presented below relates only to whether the child has had any vaccination at all, not necessarily the complete set.

Table 3.13 indicates that about 18 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 complete, at least with regard to children receiving some vaccinations, in rural areas almost a quarter of the children under 8 have apparently never been vaccinated.

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

Age	Percentages			
	Locality			Country
	Accra	Other Urban	Rural	
0 year	2.7	13.4	38.7	31.8
1 year	2.5	5.4	20.0	15.5
2 years	2.4	2.1	16.5	12.5
3 years	2.7	5.7	18.3	14.6
4 years	2.6	5.7	21.2	16.4
5 years	1.6	5.6	21.7	16.4
6 years	3.8	9.5	22.4	18.1
7 years	5.4	6.1	22.7	17.6
All	2.9	6.4	22.5	17.6

Generally, the vaccination programme shows signs of improvement in recent years, since higher proportions of the younger children have been vaccinated. In this connection it should be noted that the figure of 32 percent for the proportion of children under 1 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. When the data for children under 1 are analysed separately according to age in months, it is encouraging to note that the proportion never vaccinated falls from 60 percent for those aged under three months, down to only 11 percent for those aged between 9 and 12 months.

Appendix Table A3.4 indicates that the coverage of the vaccination programme was slightly lower for girls than boys during the first three years of life, but comparable at later ages; the reasons for this are unclear.

Of those who had been vaccinated, 69 percent were reported to have a vaccination book or card.

When asked about the place where the vaccination was given, nearly 45 percent were reported to have been vaccinated by a mobile unit while 35 percent had received their vaccinations from a health centre. As illustrated in Figure 3.4, in rural areas most vaccinations take place in mobile units, whereas in urban areas children are much more likely to be taken to health centres or hospitals in order to get their vaccinations.

For all children receiving vaccinations, the average paid for the last vaccination was 74 cedis, but 12 percent of parents did not have to pay anything for their child's vaccination. As one would expect, vaccinations received at private clinics tended to be more expensive than vaccinations received elsewhere; on average they cost 140 cedis, compared with about 70 cedis in health centres, hospitals and mobile units.

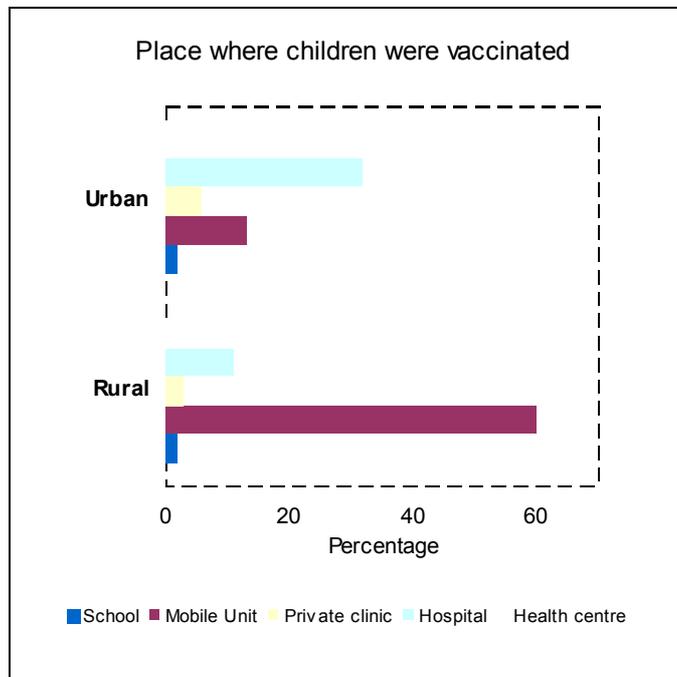


Figure 3.4

Where children had not been vaccinated, the respondents were asked why this was. The most common reason given, mentioned in 44 percent of cases, was that the vaccination centre was too far, while a further 26 percent said they did not know they had to vaccinate the child. Only a few gave lack of vaccines as a reason for their child not being vaccinated, and this occurred only in rural areas. Figure 3.5 shows the distribution of reasons given, separately for urban and rural areas.

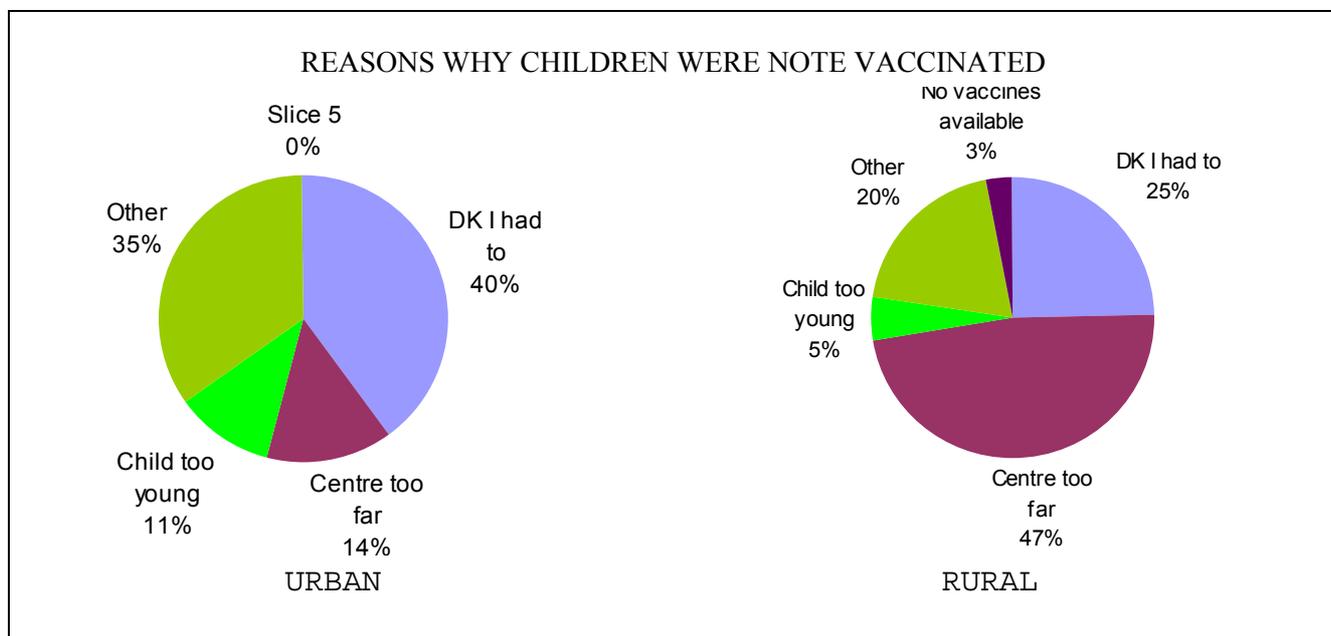


Figure 3.5

4. EMPLOYMENT

4.1 Introduction

The GLSS3 questionnaire contained a wide range of questions on the economic activity, employment, and working conditions of all household members aged 7 and above. In addition to questions about each person's activity status and employment search in the last seven days, the main focus of the employment section was on economic activity over the previous 12 months.

Information was sought on all jobs which a person had done during the previous 12 months, including working for a wage, being self-employed, being engaged in agricultural activity, or having worked unpaid in a household enterprise. Up to five jobs were allowed for, but in practice four different jobs was the maximum number reported. Full details were collected on the pay and conditions for each job. Questions were also asked on each person's employment search activities in the previous 12 months, their earlier employment history, and their current housekeeping activities.

In the study of employment and unemployment, a key concept is that of economic activity. GLSS3 collected extensive information on individuals' economic activity over two time periods: the last seven days and the past 12 months. It is therefore possible to estimate two measures of economic activity for the working-age population.

The first measure is the currently active population, which consists of all those above a certain specific age who did any work (one hour or more) in the last seven days, together with all those who were unemployed during the last seven days but who were available to work; this measure corresponds to the old 'labour force' definition of economic activity, which was previously used for international comparisons.

The second measure (and the one which is more relevant in the context of a household income and expenditure survey) is the usually active population, where persons are counted as active or inactive on the basis of what they did for the majority of the weeks over the past 12 months. The usually active population comprises all persons above a certain age whose main activity status during the previous 52 weeks was either employed or unemployed ('unemployed' is here taken to mean that a person is actively seeking work, or is at least available to take it if it were offered). The usually inactive population refers to all other people, such as students, home-makers, the retired, and income recipients, whose main activity was not being employed or unemployed.

Thus if a person was employed for 20 weeks, was unemployed but available for work for 10 weeks, and inactive for the remainder of the year (22 weeks), they would count as being usually active, since the total period of activity (30 weeks) exceeds the period of inactivity (22 weeks). Within the category 'active', the person would be further classified as being usually employed, since the period of employment exceeded the period of unemployment. A particular exception was made in the case of students; those who had attended school or college at any time in the previous 12 months were counted as being usually economically inactive, though information is still available from the survey on their employment activities.

In measuring the number of weeks a person spends in employment, one cannot simply add together the time reported to be spent in different jobs, since often two or more jobs may be held at the same time. The GLSS3 questionnaire tried to allow for this problem, by asking about overlaps between jobs; for instance, in the case of a person with a second job, they were asked not just for details of the weeks spent in that job, but also for the number of those weeks when they were doing the second job 'at the same time' as the first job. In theory, this latter figure could then be subtracted, so as to arrive at the total number of weeks spent on the first and second jobs. A similar procedure was attempted for third and fourth jobs.

However, when this information was used to arrive at total weeks spent in employment, unsatisfactory results were produced; some of the working age population in employment appeared to have spent considerably more than 52 weeks in the past year working on their main, secondary, and other jobs⁴. A different approach was therefore required to arrive at the number of people economically active. For this, use was made of one section of the questionnaire (4G) which deals with employment search in the past 12 months. Those who had some employment in the past 12 months were asked to give details of the number of weeks when they were without any work, and to specify in how many of those weeks they were actively looking for work. Where a person was not looking for work, a further question was asked about the reasons, which enables one to identify those persons available for work but not actively looking. Fairly similar questions were asked in respect of those who had no work in the past 12 months. It was therefore possible to calculate the number of weeks when each person was unemployed, and the number of weeks when they were inactive, and therefore to derive the number of weeks in employment as a residual.

4.2 Economic activity

Using an estimate of 14.9 million for the population in private households in March 1992, comprising 7.2 million males and 7.7 million females, and assuming that all children under the age of 7 are usually economically inactive, the GLSS3 results indicate a crude activity rate of 42 percent (40% for males and 45% for females). Table 4.1 provides estimates, separately for males and for females, of the usually economically active population in each age group, and it also shows the specific activity rates for different age groups. The data from GLSS3 suggest that, out of a total adult population of about 8 million, some 6 million people are usually economically active, giving an economic activity rate of 76 percent. During those ages (25-59 years) when economic activity rates are at their highest, the rates for women are only marginally lower than those for men, while in the younger age groups the rates for females actually exceed those for males.

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

Age group	Total population			Usually economically active population			Usual activity rates		
	Male	Female	All	Male	Female	All	Male	Female	All
	(millions)			(millions)			(per cent)		
7 - 14	1.85	1.72	3.57	0.14	0.14	0.28	7.7	8.0	7.8
15 - 19	0.81	0.72	1.52	0.22	0.26	0.48	27.6	36.0	31.5
20 - 24	0.48	0.56	1.04	0.29	0.42	0.72	61.0	75.7	68.9
25 - 44	1.32	1.80	3.12	1.25	1.67	2.92	94.3	93.0	93.5
45 - 59	0.58	0.74	1.32	0.56	0.68	1.24	96.5	92.1	94.0
60 +	0.45	0.45	0.90	0.39	0.29	0.68	85.7	65.0	75.4
7 +	5.50	5.98	11.48	2.85	3.45	6.30	51.8	57.8	54.9
15 +	3.65	4.26	7.91	2.71	3.31	6.02	74.4	78.0	76.4

⁴ It seems probable that this problem was mainly due to the way the relevant questions were worded. For instance, for second and subsequent jobs respondents were asked whether the job was being done *at the same time as other jobs*. If a person was doing one job in the morning, and the other one in the afternoon, they might well consider that the jobs were not being done *at the same time*. Perhaps a better phrase would have been *during the same week as other jobs*.

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 the rural areas than in the urban areas, and this difference is most noticeable amongst the younger age groups and amongst the elderly.

Table 4.2 Sex-age specific usual activity rates, by locality

	Percentages							
	Urban			Rural				Country
	Accra	Other	All	Coastal	Forest	Savannah	All	
Males								
7 - 14	1.1	2.6	2.3	8.1	3.4	20.6	10.2	7.7
15 - 19	5.2	14.2	11.9	24.3	31.6	47.6	35.9	27.6
20 - 24	41.9	42.6	42.4	57.1	79.9	71.8	72.6	61.0
25 - 44	87.0	92.7	91.0	93.3	96.4	97.6	96.2	94.3
45 - 59	94.3	95.4	95.1	94.3	98.0	98.0	97.2	96.5
60+	56.0	76.7	72.7	87.7	92.5	86.7	89.3	85.7
7+	45.2	44.9	45.0	50.5	53.0	61.1	55.3	51.8
15+	62.5	66.7	65.6	73.9	79.1	82.0	79.0	74.4
Female								
7 - 14	3.2	3.3	3.2	8.0	7.2	16.1	10.4	8.0
15 - 19	14.8	20.8	19.2	46.7	43.4	54.0	47.6	36.0
20 - 24	56.1	62.0	60.3	76.5	87.5	88.6	85.4	75.7
25 - 44	86.2	89.9	88.8	94.8	95.7	95.5	95.5	93.0
45 - 59	82.9	90.2	88.4	94.8	96.7	89.8	93.7	92.1
60+	28.0	55.3	50.7	71.8	73.8	60.7	69.7	65.0
7+	49.0	50.5	50.1	61.3	60.9	63.9	62.0	57.8
15+	64.6	69.9	68.5	81.8	83.6	84.0	83.3	78.0
Both sexes								
7 - 14	2.2	2.9	2.8	8.1	5.2	18.4	10.3	7.8
15 - 19	10.3	17.6	15.7	34.8	36.9	50.3	41.1	31.5
20 - 24	50.0	52.9	52.1	67.7	84.0	80.5	79.5	68.9
25 - 44	86.5	91.0	89.7	94.1	96.1	96.4	95.8	93.5
45 - 59	88.4	92.8	91.7	94.6	97.3	93.4	95.2	94.0
60+	42.0	65.0	60.9	79.2	83.1	75.7	79.7	75.4
7+	47.3	47.9	47.7	56.2	57.0	62.5	58.7	54.9
15+	63.7	68.4	67.2	78.3	81.5	83.0	81.3	76.4

Table 4.2 also sheds light on the activities of young children aged 7 to 14. Although children were automatically counted as students (and therefore usually economically inactive) if they had attended school at any time in the previous 12 months, GLSS3 still recorded 8 percent of children in this age group as being economically active. There was great variation between different parts of the country in the level of economic activity amongst young children. In the coastal and forest zones, and in the urban areas of the savannah zone, the proportion of children who were economically active was fairly low. But in the rural areas of the savannah zone, as many as 21 percent of boys, and 16 percent of girls, were economically active, and the proportion active rose to more than 30 percent amongst boys and girls who were aged 13 and 14.

Almost all adults who are classified as economically active are actually employed. The employed element in the usually active population totals 5.7 million adults (2.6 million men and 3.1 million women). Table 4.3 shows the usual employment status of adults, separately for males and females in urban and rural areas. The main contrast in the status of men and women is that about twice as many males as females are classified as students, having reported that they had attended school at some time in the previous 12 months. About 5 percent of women were classified as home-makers, because they were not usually economically active and had spent an average of at least three hours a day on housekeeping activities, but were not students or retired (the latter being defined as persons aged 60 and over and not usually active). For each sex, about 5 percent were inactive, but could not be classified as students, retired or home-makers; they were therefore left in the 'other' category.

There are significant contrasts in the employment status of adults in urban and rural areas. In urban areas about 60 percent of men and women are usually employed, whereas in rural areas about 80 percent of men and women are usually employed. Unemployment is a significant factor in urban areas, but is almost non-existent in rural areas. In urban areas a much higher proportion of adults are still attending school than is the case in rural areas.

Table 4.3 Usual employment status, by sex and locality (population aged 15+) Percentages

	Urban areas			Rural areas			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
<u>Employment status</u>									
Employed	59.2	60.1	59.7	78.2	81.5	80.0	71.7	73.9	72.9
Unemployed	6.5	8.6	7.6	0.8	1.9	1.4	2.8	4.2	3.6
Student	22.0	11.9	16.5	15.2	7.0	10.8	17.6	8.7	12.8
Retired	2.1	3.6	2.9	1.6	3.7	2.7	1.7	3.6	2.8
Home-maker	2.1	8.0	5.3	0.2	3.0	1.7	0.9	4.8	3.0
Other	8.1	7.9	8.0	3.9	2.9	3.4	5.4	4.7	5.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	<i>1726</i>	<i>2081</i>	<i>3807</i>	<i>3271</i>	<i>3754</i>	<i>7025</i>	<i>4997</i>	<i>5835</i>	<i>10832</i>

The discussion so far has focused on the classification of people according to their usual activity. In the survey, information was also collected on people's activity over the previous seven days; this information enables us to obtain estimates of the currently active population. For purposes of comparison, these figures are also shown in Table 4.4. In defining current economic activity, people were defined as currently employed if they had worked for at least one hour during the previous week. Those who were unemployed were classified according to whether they were actively seeking work, or if not actively seeking whether they were available to work if work became available. A new category has been added to cover those people who reported that they could not work during the previous week because they were ill or injured, or on vacation. Students were defined as those who did no work during the last week but had not yet left school. Home-makers were defined as those not in the previous categories who did any housework during the previous seven days.

The figures for current economic activity are broadly similar to those for usual economic activity. The main differences are those resulting from these definitional changes. Thus the number of students is sharply reduced, with many long-term students being classified as currently employed because they did at least one hour of work in the previous seven days. The number of males and females classified as home-makers increased sharply in terms of current economic activity; in the case of males, most of these people had previously been classified in the 'other' category for usual activity, while in the case of females the new additions to the home-maker category were drawn equally from those who were usually employed and from those classified in the 'other' category.

Table 4.4 Current and usual employment status by sex (population aged 15+)

	Percentages					
	Current economic activity			Usual economic activity		
	Male	Female	All	Male	Female	All
	%	%	%	%	%	%
<u>Employment status</u>						
Employed	76.8	74.8	75.7	71.7	73.9	72.9
Unemployed (seeking)	2.6	2.5	2.6	2.8	4.2	3.6
(available)	0.7	1.4	1.1			
Ill/on vacation/etc.	0.3	0.3	0.3	-	-	-
Student	9.0	4.9	6.8	17.6	8.7	12.8
Retired	2.1	4.0	3.1	1.7	3.6	2.8
Home-maker	6.1	10.9	8.7	0.9	4.8	3.0
Other	2.2	1.2	1.7	5.4	4.7	5.0
All	100.0	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	4997	5835	10832	4997	5835	10832

4.3 Employment and working conditions

The GLSS3 questionnaire allowed for the recording of up to five jobs held in the last year, but no one in our sample reported as many as five jobs. Some 81 percent of all adult males and 81 percent of adult females reported that they had had at least one job in the last year; only 19 percent had not had a job. About 19 percent of all adults (18% of males and 20% of females) reported that they had had two jobs; only one percent of males and one percent of females reported having had more than two jobs.

People were first asked whether they had done any work during the past 12 months for which they received a wage or other payment; as illustrated in Table 4.5, some 14 percent of adults (mainly men) reported that they had done such work. A further 23 percent (mainly women) had not received wages or other payment but reported that they had made money through self-employment activities such as trading. A further large group of men and women (43% in all) reported that they had done some work on a farm, or in a field, or herding. The last group were the 1 percent who reported that they had worked unpaid for an enterprise belonging to a member of the household.

Table 4.5 Type of work done in the last 12 months, by sex (population aged 15+)

	Percentages			Estimate (millions)		
	Male	Female	All	Male	Female	All
	%	%	%			
<u>Type of work</u>						
Wage employment	20.7	7.5	13.6	0.76	0.32	1.08
Self-employment	12.5	31.8	22.9	0.46	1.35	1.81
Farm employment	46.4	39.6	42.8	1.69	1.69	3.38
Unpaid family work	1.2	1.7	1.5	0.04	0.07	0.12
No employment	19.2	19.4	19.3	0.70	0.83	1.52
Total	100.0	100.0	100.0	3.65	4.26	7.91
<i>Sample size</i>	4997	5835	10832			

Respondents were asked who their employer was in their main job over the last 12 months (Table 4.6). Over two-thirds reported that they were self-employed. Almost all women who worked were self-employed in their main job; only about 1 in 17 women were working for an employer. A large number of men were also self-employed, but about 1 in 5 worked for an employer.

Table 4.6 Main employer, by sex (Population aged 15+)

	Percentages			Estimate (millions)		
	Male	Female	All	Male	Female	All
	%	%	%			
<u>Main employer</u>						
Government	8.8	3.4	5.9	0.32	0.14	0.47
State-owned company	1.7	0.2	0.9	0.06	0.01	0.07
Private company or business	7.4	1.9	4.5	0.27	0.08	0.36
Other employer	0.6	0.2	0.4	0.02	0.01	0.03
Self-employed	62.3	74.9	69.1	2.27	3.19	5.46
No main job	19.2	19.4	19.3	0.70	0.83	1.53
Total	100.0	100.0	100.0	3.65	4.26	7.91
<i>Sample size</i>	4997	5835	10832			

Information was also sought on the type of occupation of all jobs which people held. The occupational classification of the main job of the usually active population is shown in Table 4.7. The table highlights the large proportion of people, both men and women, who are principally engaged in agricultural occupations; in all, there are about 3½ million people in the usually active population whose main occupation is agricultural⁵. Also significant is the high proportion of women (almost a quarter) engaged in selling, and the larger proportion of men than women with occupations in the area of production. A surprising feature of GLSS3 was that none of the women covered in the survey had a main occupation in the administrative or managerial field. Table 4.8 provides similar detailed estimates to those given in Table 4.7, but separately for urban and rural areas.

Table 4.7 Type of occupation of main jobs, for the usually active population aged 15+

	Percentages			Estimate (millions)		
	Males	Females	All	Males	Females	All
	%	%	%			
<u>Occupation</u>						
Professional/technical	5.5	3.2	4.2	0.14	0.10	0.24
Administrative/managerial	0.5	-	0.2	0.01	*	0.01
Clerical	3.6	1.6	2.5	0.09	0.05	0.15
Sales	4.4	23.9	15.1	0.12	0.76	0.87
Service	3.4	2.2	2.8	0.09	0.07	0.16
Agricultural	64.3	58.6	61.1	1.67	1.85	3.53
Production	18.4	10.4	14.0	0.48	0.33	0.81
Total	100.0	100.0	100.0	2.60	3.17	5.77
<i>Sample size</i>	3561	4337	7898			

⁵ Further information on agricultural employment is given in Footnote 1 in Section 8.1.

Table 4.8 Estimated number of males and females in different occupations, by locality (main job of usually economically active population)

Occupation	Urban			Rural		
	Male	Female	Total	Male	Female	Total
Professional/technical	70,000	70,000	140,000	70,000	30,000	100,000
Admin./managerial	10,000	*	10,000	*	*	*
Clerical	70,000	50,000	120,000	20,000	*	30,000
Sales	80,000	470,000	550,000	30,000	290,000	320,000
Service	50,000	50,000	90,000	40,000	20,000	70,000
Agricultural	180,000	140,000	320,000	1,490,000	1,720,000	3,200,000
Production	280,000	160,000	450,000	190,000	170,000	360,000
Total	750,000	930,000	1,680,000	1,850,000	2,230,000	4,080,000

The educational status of the usually active population varies widely according to the type of main occupation, reflecting largely the differences between urban and rural areas in the level of educational attainment. Overall, almost half of the usually active population with a main occupation in the last 12 months have never been to school, while at the other extreme some 7 percent have attained a level of education beyond the Middle School Leaving Certificate. Over half of those in professional/technical or administrative/managerial occupations have gone beyond the MSLC, while in other occupational groups less than 10 percent have done so, and in the case of those in agricultural occupations less than 2 percent have done so.

Table 4.9 Educational levels of the usually active population, by sex and main occupation Percentages

	Occupation	Educational attainment				Total	Sample size
		Never been to school	Less than MSLC*	MSLC*	Secondary or higher		
Males	Prof/tech/admin						
	/managerial	4.2	2.4	28.3	65.1	100.0	212
	Clerical	2.3	7.0	41.9	48.8	100.0	129
	Sales	19.7	17.8	40.8	21.7	100.0	157
	Service	33.9	16.5	43.0	6.6	100.0	121
	Agricultural	48.0	22.6	26.6	2.8	100.0	2288
	Production	21.4	21.3	50.0	7.3	100.0	654
	All	37.1	20.2	32.7	10.0	100.0	3561
Females	Prof/tech/admin						
	/managerial	4.3	4.3	44.6	46.8	100.0	139
	Clerical	1.4	1.4	38.0	59.2	100.0	71
	Sales	45.3	25.0	26.5	3.2	100.0	1036
	Service	20.6	22.7	46.4	10.3	100.0	97
	Agricultural	69.0	21.5	9.1	0.4	100.0	2541
	Production	41.9	29.4	26.7	2.0	100.0	453
	All	56.3	22.3	17.6	3.9	100.0	4337
Both sexes	Prof/tech/admin						
	/managerial	4.3	3.1	34.8	57.8	100.0	351
	Clerical	2.0	5.0	40.5	52.5	100.0	200
	Sales	41.9	24.1	28.4	5.6	100.0	1193
	Service	28.0	19.3	44.5	8.3	100.0	218
	Agricultural	59.1	22.0	17.4	1.5	100.0	4829
	Production	29.8	24.6	40.5	5.1	100.0	1107
	All	47.6	21.3	24.4	6.6	100.0	7898

Note: The categories Professional/technical and Administrative/managerial have been joined together, since the base figures for the latter category are very small (17 males and no females).

Analysis of the usually active population by the industry of their main occupation reveals the expected patterns corresponding to the occupational classifications shown above. For the country as a whole, the major industries are agriculture, employing about 3½ million people, trading with almost a million people, and manufacturing, and community and other services, each with about ½ million people. The other five sectors (mining, utilities, construction, transport/communication, and financial services) employ no more than about ¼ million people altogether.

Table 4.10 Type of industry of main jobs, and estimates of the total number of jobs in each industry, for the usually active population aged 15 and over

Industry	Percentages			Estimate (millions)		
	Males	Females	All	Males	Females	All
	%	%	%			
Agriculture	66.2	58.9	62.2	1.72	1.86	3.59
Mining	1.0	0.1	0.5	0.03	*	0.03
Manufacturing	6.7	9.4	8.2	0.17	0.30	0.47
Utilities	0.2	0.1	0.1	0.01	*	0.01
Construction	2.5	0.1	1.2	0.06	*	0.07
Trading	4.7	25.0	15.8	0.12	0.79	0.91
Transport/communication	4.5	0.2	2.2	0.12	0.01	0.13
Financial services	0.9	0.2	0.5	0.02	0.01	0.03
Community & other services	13.3	6.0	9.3	0.34	0.19	0.54
Total	100.0	100.0	100.0	2.60	3.17	5.77
Sample size	3561	4337	7898			

There is a substantial variation in the number of hours worked in the main job (Table 4.11). About half of the usually active population who had a job in the last 12 months (48%) spent on average at least 40 hours per week in their main job, with 6 percent spending more than 70 hours a week. The young and the old spent less time in their main job than did those in the main working age group (25 to 59). At all ages women spend less time on average in their main job than do men (Figure 4.1 and Appendix Table A4.1); overall, 60 percent of men work at least 40 hours a week, whereas less than 40 percent of women do so.

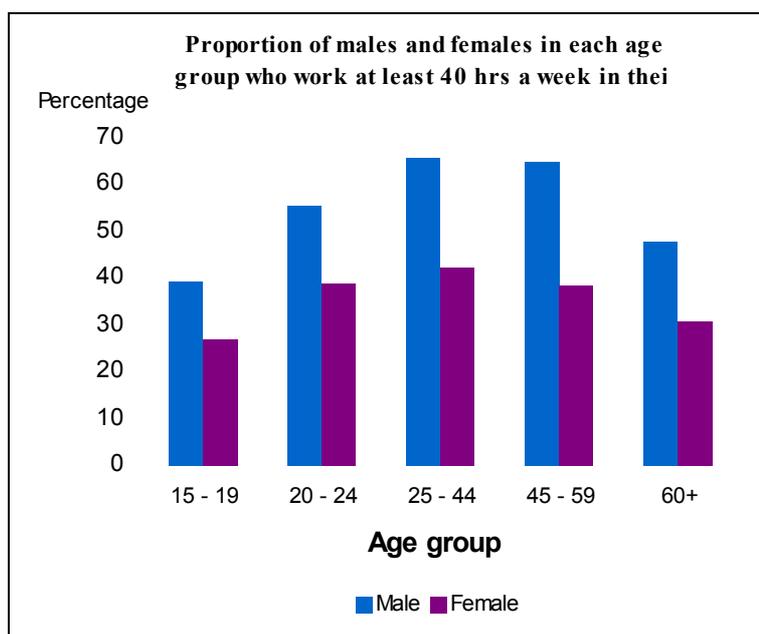


Figure 4.1

Hours of work also vary substantially, depending on the sector of the economy in which the person is employed (Table 4.12). In three sectors (utilities, transport/communications, and financial services) almost all employees work at least 40 hours a week. In contrast, two-thirds of employees in the agricultural sector (63%) work less than 40 hours a week on average. In general, in nearly all sectors, men tend to work longer hours than women, and the differences are particularly marked in the case of agriculture and manufacturing (Appendix Table A4.2).

Table 4.11 Distribution of hours worked per week, by age
(main job of usually active population aged 15 and over)

Age	Hours worked per week									Percentages	
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	ALL	Sample size	
	(percentages)										
15-19	5.5	9.5	22.3	30.0	18.2	6.0	4.8	3.7	100.0	620	
20-24	4.3	7.9	17.3	24.4	26.3	9.2	5.5	5.1	100.0	902	
25-44	1.4	6.0	16.9	23.5	29.9	8.5	6.6	7.3	100.0	3845	
45-59	1.7	5.6	16.0	26.2	30.7	8.3	5.6	5.9	100.0	1652	
60+	2.6	8.3	19.6	29.1	24.9	6.8	4.8	3.9	100.0	893	
ALL	2.2	6.7	17.5	25.3	28.2	8.2	5.9	6.1	100.0	7912	

Table 4.12 Distribution of hours worked per week, by industry
(main job of usually active population aged 15 and over)

Industry	Hours of work per week in main job									Percentages	
	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	All	Sample size	
	(percentages)										
Agriculture	2.3	7.2	20.9	32.4	24.7	6.9	3.9	1.6	100.0	4920	
Mining	.	.	2.4	24.4	41.5	19.5	2.4	9.8	100.0	41	
Manufacturing	3.1	7.3	13.5	15.2	31.6	11.7	10.0	7.6	100.0	643	
Utilities	.	.	.	.	81.8	.	9.1	9.1	100.0	11
Construction	1.1	3.2	4.3	14.0	45.2	17.2	9.7	5.4	100.0	93	
Trading	2.2	8.1	10.2	13.1	27.8	11.0	10.8	16.8	100.0	1249	
Transport/communication	.	2.3	0.6	2.3	30.2	14.5	16.9	33.1	100.0	172	
Financial services	.	2.5	.	7.5	65.0	.	7.5	17.5	100.0	40	
Community & other services	1.9	2.0	17.7	15.4	42.9	6.0	4.8	9.4	100.0	735	
ALL	2.3	6.7	17.5	25.3	28.2	8.2	5.9	6.1	100.0	7904	

Respondents were asked whether they received payment for the work they did. In most sectors almost everyone received money. The one exception was the agricultural sector, where only 60 percent of workers received money for their work; only 42 percent of women receiving payment, as against 81 percent of men. Amongst those who did receive payment, the average hourly wage was 176 cedis. In terms of classification by industry (Tables 4.13), the average basic wage ranged from 475 cedis an hour for those working in community and other services, down to 102 cedis for those working in the agricultural sector. Incidentally, this latter figure for agriculture corresponds to a wage of 816 cedis for an 8-hour working day, which is comparable with the level of the national minimum daily wage at the time of the survey (790 cedis). In terms of occupation, average hourly earnings ranged from almost 800 cedis an hour for professional/technical workers, and administrative/managerial staff, down to 100 cedis for agricultural workers.

As part of the employment section of the questionnaire, 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, 39 percent of all employees did not enter into any formal contract of employment with their employers before starting work. Moreover, five out of every ten workers are in organisations where trade unions do not exist.

Table 4.13 Average basic hourly earnings in main job, by sex and industry, and by sex and occupation (main job of usually active population aged 15+)

cedis

	Male	Female	All		Male	Female	All
<u>Industry</u>				<u>Occupation</u>			
Agriculture	119	71	102	Professional/technical	773	796	782
Mining	189	(158)	185	Administrative/managerial	775	.	775
Manufacturing	167	170	169	Clerical	243	280	256
Utilities	(123)	(150)	131	Sales	283	162	178
Construction	191	(107)	187	Service	145	198	168
Trading	294	165	182	Agricultural	117	70	100
Transport/communication	147	131	146	Production	165	171	167
Financial services	304	(257)	293				
Community & other services	440	538	475	All	187	164	176

Note: The averages shown in brackets are based on less than 10 observations. No average wage is shown

For women in administrative/managerial occupations, since the sample did not contain anyone in this category.

Collection of income taxes from workers is made relatively easy because over 70 percent of employees have such taxes deducted at source before receiving their pay. Many workers enjoy certain benefits as part of their job; for instance, seven out of ten are entitled to paid holidays, and a similar proportion get paid sick leave. Five out of ten enjoy free or subsidized medical care. In contrast, the situation is not very encouraging in respect of the provision of accommodation and transport; only 13 percent of workers either have free accommodation or pay subsidized rent, while only 17 percent are entitled to free or subsidized transport to and from work.

Although training is a critical component in personnel development, and contributes significantly to increased productivity, most organisations seem not to have given it the attention it deserves. As a result, 70 percent of workers report that they have never received any training related to their main job since they started work.

4.4 Unemployment and underemployment

The usually active population is classified into one of two groups, employed or unemployed, depending on which state they were in for the greater number of weeks over the previous 12 months. 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 work which they did. The unemployment rate is then determined as the proportion of the usually economically active population who are usually unemployed.

For the country as a whole, the adult unemployment rate is 4.7 percent. It is slightly higher for females (5.4%) than for males (3.7%). In most rural areas, as suggested by the figures in Table 4.14, unemployment rates are very low, and there was very little difference between the ecological zones. In contrast, the rates in urban areas are very much higher. For instance, for the 15-24 age group, GLSS3 recorded unemployment rates in excess of 40 percent for males in Accra (though admittedly the sample of economically active males in this age group on which the percentage was based is very small) and rates in excess of 20 percent for both males and females in other urban areas.

Table 4.14 Unemployment rates, by sex, age and locality

	Percentages				
	Urban			Rural	Country
	Accra	Other	All		
Males					
15 - 19	40.0	22.5	24.4	3.1	6.3
20 - 24	42.3	20.0	25.5	2.7	8.8
25 - 44	12.0	6.5	8.0	0.7	3.3
45 - 59	7.6	4.3	5.1	0.0	1.8
60+	7.1	11.4	10.8	0.7	2.5
All (15+)	14.0	8.5	9.9	1.1	3.7
Female					
15 - 19	6.2	30.0	25.0	4.4	8.9
20 - 24	13.0	23.5	20.8	5.0	9.9
25 - 44	7.1	12.1	10.8	1.9	5.1
45 - 59	14.3	7.9	9.4	1.1	3.5
60+	0.0	10.3	9.3	0.6	2.3
All (15+)	9.0	13.6	12.5	2.2	5.4
Both sexes					
15 - 19	14.3	27.0	24.8	3.8	7.7
20 - 24	23.6	22.2	22.5	4.1	9.4
25 - 44	9.2	9.8	9.6	1.4	4.3
45 - 59	10.9	6.1	7.2	0.6	2.7
60+	4.8	10.9	10.1	0.7	2.4
All (15+)	11.2	11.4	11.3	1.7	4.7

Unemployment is only one aspect of the underutilization 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 underemployed. Figure 4.2 shows the breakdown of the adult population into the different categories of employment, while Table 4.15 gives similar information separately by sex and locality.

Figure 4.2 Activity status of the adult population in the last seven days

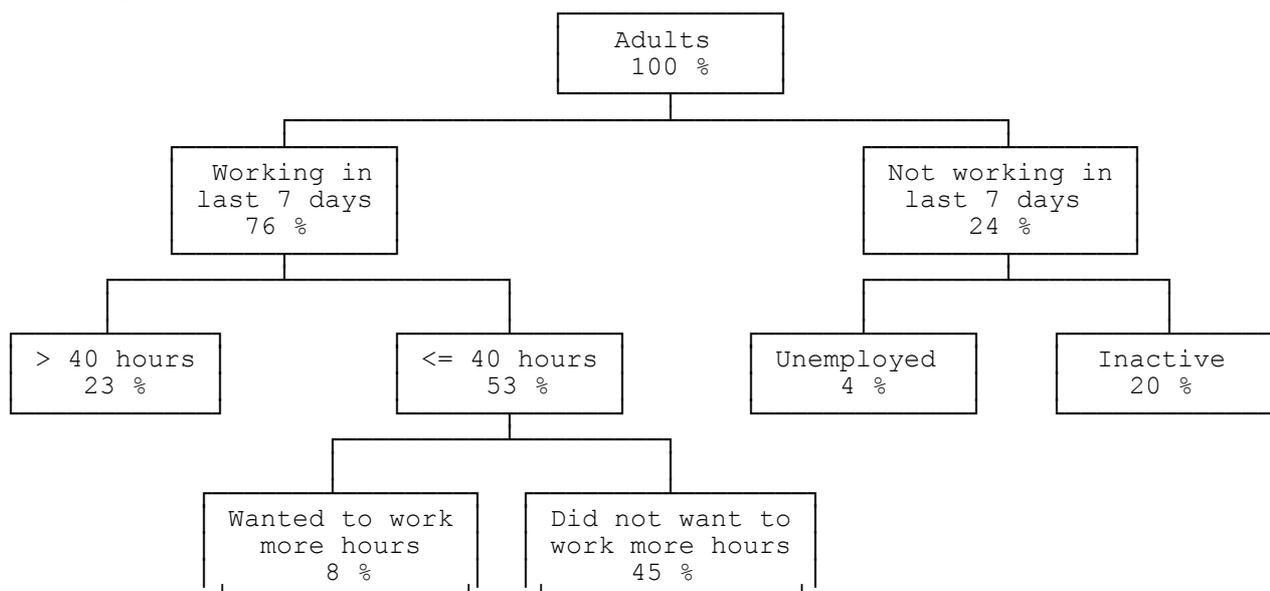


Table 4.15 Activity status of the adult population in the last seven days, by sex and locality

	Urban			Rural			Country		
	Male	Female	All	Male	Female	All	Male	Female	All
Activity in last seven days	%	%	%	%	%	%	%	%	%
Working	62	62	62	85	81	83	77	75	76
More than 40 hours in main job	31	27	29	26	15	20	28	19	23
40 hours or less in main job:									
want to work more hours	6	6	6	10	7	8	9	7	8
do not want more work	25	29	27	49	59	54	40	48	45
Not working	38	38	38	15	19	17	23	25	24
Unemployed	7	8	8	2	2	2	3	4	4
Inactive	31	30	30	13	16	15	20	21	20
	100	100	100	100	100	100	100	100	100
Sample sizes	1705	2048	3753	3255	3735	6990	4960	5783	10743

Out of every 100 adults, 76 reported that they had done some work in the last seven days, leaving 24 who had not worked; out of the 24 not working, 4 were currently unemployed and 20 were inactive. Out of every 76 who were working, 23 had worked more than 40 hours in their main job, while the remaining 53 worked 40 hours or less. Out of the 53, 8 reported that they would like to have done more work. In terms of those currently economically active, these figures imply a current unemployment rate of 5 percent, with an additional 10 percent reporting that they were underemployed. Unemployment is an urban characteristic; 11 percent of currently active urban adults were unemployed, whereas only about 2 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. Males and females have almost identical rates of unemployment, and the same is true of underemployment.

4.5 Housekeeping activities

GLSS3 collected detailed time-use information on a variety of housekeeping activities. For each person aged 7 and over questions were asked about fetching wood, fetching water, and other household duties (such as cooking, cleaning, doing the laundry, shopping and child care). Although these activities are very much part of everyday life, they usually take more of an individual's time and often at higher opportunity cost than is realised. For each of these three activities, people were asked whether they had spent any time on the activity in the last seven days, and if so, how many hours. At the analysis stage these weekly figures were converted to give daily estimates.

Table 4.16 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 (as well as the average for all persons aged 7 or over), and an estimate of what this means in terms of total person hours per day for the country as a whole. Almost all females and over two-thirds of all males engage in some housekeeping activity. Across the population aged 7 and over, females spend an average of three hours each day on housekeeping activities, whereas males spend only just over an hour. Some females spend considerable time on housekeeping duties; for instance, 8 percent of females spend at least six hours a day on housekeeping activities. When these figures are converted into estimates for the whole country, we find that males spend some 7 million hours a day overall on housekeeping activities, whereas females spend as much as 18 million hours a day.

A breakdown of household activities shows that, on average, each person spends about a quarter of an hour a day collecting wood, half an hour a day fetching water, and over an hour on other housekeeping activities.

Table 4.16 Average and estimated total time spent on various housekeeping activities, by sex (population aged 7+)

Activity		Proportion doing that activity	Average time spent		Estimated total time spent per day by all aged 7+
			By those doing that activity	By all those aged 7+	
			(minutes per day)		(million hours)
Fetching wood	Males	24 %	38	9	0.8
	Females	43 %	52	22	2.2
	All	34 %	47	16	3.1
Fetching water	Males	45 %	48	21	2.0
	Females	68 %	60	40	4.0
	All	57 %	55	31	6.0
Other housekeeping	Males	61 %	75	45	4.2
	Females	90 %	135	122	12.2
	All	76 %	112	85	16.3
All housekeeping activities	Males	70 %	108	76	7.0
	Females	93 %	199	185	18.4
	All	82 %	162	133	25.4

When we look at the individual activities, we find that a third of the population is engaged in wood collection, and 6 percent spend at least an hour a day fetching wood (Table A4.5). Collecting wood is done by females of all ages, whereas amongst males it is mainly the younger ones (if at all) who collect wood. With the exception of Accra, wood fetching is common in all parts of the country, but more time has to be spent on it in the north of the country than in the south (Table 4.16). Across the country as a whole, rural dwellers spend on average three times as long each day collecting wood (21 minutes) as their urban counterparts (7 minutes).

In the case of water, 43 percent of the population obtain their water without any loss of time (Table A4.7), and a similar proportion spend an average of less than an hour a day fetching water; this still leaves 14 percent (representing 1½ million people) 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 piped water or other convenient water supplies, rural dwellers spend more time fetching water (37 minutes on average per day) than their urban counterparts (21 minutes).

As with fetching wood and fetching water, the burden of other household duties falls mainly on females. But in contrast to the time spent fetching wood and water, which are mainly rural activities, members of urban households reported spending longer on other household duties (such as cooking, cleaning, doing the laundry, shopping and child care), perhaps reflecting the more complicated lifestyle which members of urban households tend to lead.

The net effect of all this is that people in urban and rural areas spend about the same amount of time overall (two hours a day on average) on all housekeeping activities (Table 4.17). In the urban areas people spend very little time collecting wood, but this is counterbalanced by the greater length of time spent on other housekeeping duties, compared with those living in rural areas. In the rural areas, those living in the savannah zone spend on average at least 50 percent more time fetching wood and water than rural dwellers in the coastal and forest zones.

Table 4.17 Average time spent per day on various housekeeping activities, by sex and locality (population aged 7+)

		minutes per day							
		Urban			Rural				Country
		Accra	Other	All	Coastal	Forest	Savannah	All	
Activity									
Fetching wood	Males	-	6	4	8	14	10	11	9
	Females	-	13	9	19	24	43	29	22
	All	-	9	7	14	19	27	21	16
Fetching water	Males	10	17	15	20	26	25	25	21
	Females	15	30	26	35	38	70	48	40
	All	13	24	21	28	32	48	37	31
Other housekeeping	Males	53	61	59	36	43	35	39	45
	Females	124	142	137	119	110	116	114	122
	All	92	104	101	80	77	76	77	85
All housekeeping activities	Males	63	84	79	64	83	70	74	76
	Females	140	184	173	173	172	229	191	185
	All	105	137	129	121	128	152	135	133

A comparison across regions (Appendix Tables A4.4, A4.6, A4.8, and A4.10) indicates fairly similar figures for most regions, except for the Upper East, where people spend on average over three hours a day on housekeeping activities. This higher figure for the Upper East is almost entirely due to the fact that people in the Upper East have to spend an average of half an hour longer a day fetching water than people in other regions (Table A4.8).

One aspect of housekeeping, which can be observed from the detailed tables in the Appendix, but which is concealed in the tables presented in the text, is the major contribution which young children make to housekeeping activities. This is shown clearly in Table 4.18, which indicates the total amount of time devoted to each housekeeping activity by people of different ages.

Table 4.18 Estimated total hours per day spent on housekeeping activities, by age and sex

		Million hours per day							
		Fetching wood		Fetching water		Other housekeeping		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Age									
7-14		0.4	0.5	1.1	1.2	1.6	2.2	3.1	3.9
15-19		0.2	0.3	0.5	0.5	0.8	1.5	1.5	2.3
20-24		0.1	0.2	0.2	0.4	0.4	1.4	0.6	2.0
25-44		0.1	0.8	0.2	1.4	0.8	4.7	1.2	6.9
45-59		*	0.3	*	0.4	0.2	1.7	0.3	2.4
60+		*	0.1	*	0.1	0.2	0.7	0.2	0.9
All		0.8	2.2	2.0	4.0	4.2	12.2	7.0	18.4

Out of a total of 25 million hours a day spent on all housekeeping activities, children under 15 account for 7 million hours. Boys and girls aged 7-14 each spend about the same lengths of time on each activity: ½ million hours collecting wood each day, 1 million hours collecting water, and 2 million hours on other housekeeping activities. Because adult males make only a minor contribution to housekeeping activities, the efforts of young boys are particularly noticeable.

All the tables so far on housekeeping activities have been presented in terms of individuals. However, we can see the effect of housekeeping activities on the household unit by summing the individual responses across all household members. Table 4.19 shows, for five different localities, the proportion of households engaged in each housekeeping activity, and the average number of hours per week spent on the activity by those households which engage in that activity. When we gross up these figures to the national level, we get the same estimates as those obtained from grossing up the individual-level data.

Table 4.19 Percentage of households engaged in different housekeeping activities in the last seven days, and average length of time household members spend per week on those activities, by locality

	Urban			Rural				Country
	Accra	Other	All	Coastal	Forest	Savannah	All	
<u>Fetching wood</u>								
Percent of households (%)	0.2	24.9	17.7	56.6	73.5	70.6	68.6	50.8
Average hours per week	1.0	15.8	15.7	8.6	10.0	18.1	12.2	12.6
<u>Fetching water</u>								
Percent of households (%)	52.3	62.3	59.4	87.7	89.4	94.8	90.6	79.7
Average hours per week	8.4	15.9	14.0	11.5	13.7	24.1	16.4	15.8
<u>Other housekeeping activities</u>								
Percent of households (%)	98.1	97.1	97.4	97.4	97.8	98.3	97.8	97.7
Average hours per week	31.9	44.1	40.5	29.4	30.3	36.8	32.0	35.0
<u>All housekeeping activities</u>								
Average hours per week	35.7	56.6	50.5	43.6	49.3	71.8	54.5	53.1
<i>Sample size</i>								
	463	1129	1592	718	1374	868	2960	4552
National estimate of total hours spent per week on all activities (million hours)								
	12	46	59	23	49	45	118	176

In a half of all households in the country, household members spend time fetching wood; households engaged in fetching wood spend on average almost two hours a day in this activity. In rural areas two-thirds of all households spend time fetching wood, but even in urban areas outside Accra a quarter of all households fetch wood. As far as fetching water is concerned, in four out of every five households in the country, household members spend time fetching water; on average these households spend over two hours a day fetching water. Over half of all urban households, and over 90 percent of rural households, spend time fetching water. When we combine the time spent on fetching wood, fetching water, and all other housekeeping activities, we find that the members of a household spend an average of 53 hours a week (or more than 7 hours a day) on housekeeping activities. For the country as a whole, this represents an input of 176 million person-hours per week (or 25 million person-hours a day).

5. MIGRATION

5.1 Migration patterns

The section on migration was limited to persons aged 15 years and over. The questions elicited information about place of birth, place of previous residence, activity status/occupation of migrants at their previous place of 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 analysis, return and in-migrants are often combined and referred to as migrants.

Out of the total adult population in Ghana, about 57 percent are migrants (Table 5.1). Across localities, the proportion of migrants in Accra is slightly greater (62%) than that in other urban and rural localities (56%), with the rates for males and females being almost identical. Overall, 40 percent are in-migrants and 16 percent are return migrants (Table 5.2).

Table 5.1 Percentage migrants by present locality and sex

	Percentages			
	Accra	Other urban	Rural	All
Sex				
Male	62.7	56.6	56.1	56.8
Female	61.1	56.1	55.8	56.4
All	61.8	56.3	55.9	56.6

In regional terms, Table 5.2 reveals that over half the population of Greater Accra, and almost half the population of Eastern 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. In fact the contrast between regions in the south and north of the country is seen clearly when we look at the overall level of migration. In the three most northerly regions (Northern, Upper West and Upper East) only about a third of the population are migrants, whereas in each of the other seven regions at least half the population are migrants.

Table 5.2 Percent of migrants by region

Region	Percentages				Sample size
	In Migrants	Return Migrants	Non Migrants	Total	
Western	46.6	15.0	38.5	100.0	1087
Central	37.5	26.5	36.1	100.0	1051
Greater Accra	55.0	8.1	36.9	100.0	1399
Eastern	48.6	13.9	37.5	100.0	1349
Volta	38.0	19.6	42.5	100.0	1001
Ashanti	42.6	19.4	38.0	100.0	1686
Brong Ahafo	43.6	14.3	42.1	100.0	1174
Northern	26.0	10.2	63.8	100.0	1005
Upper West	18.7	16.6	64.7	100.0	331
Upper East	5.5	25.2	69.3	100.0	563
All	40.3	16.3	43.4	100.0	10646

An analysis of migrants by previous place of residence does not suggest any large drift of population from rural to urban areas. Table 5.3 suggests that a third of all migration flows (34%) involve rural-rural migration, and another third (31%) involve urban-rural migration. A further quarter (25%) involve inter-urban migration flows, leaving only a tenth of all migration moves (10%) as being from rural to urban areas. Since in-migrants constitute more than 70 percent of total migrant flows, the analysis would not be much different if we excluded returning migrants.

Table 5.3 Analysis of migration flows by origin and destination

Locality of previous residence	Percentages of total			
	Locality of current residence			Total
	Accra	Other urban	Rural	
Accra	0.4	3.4	5.6	9.4
Other urban	6.9	14.4	25.4	46.7
Rural	2.6	7.2	34.0	43.9
Total	9.9	25.1	65.0	100.0

Sample size = 5642

5.2 Reasons for moving

Analysis of the reasons for people moving from one place to another (Table 5.4) suggests that it is domestic considerations, rather than employment needs, which have the greatest influence on migration flows. We found that one fifth of all migrants (18%) cited marriage as the basis for migrating, and two-fifths (43%) mentioned other family reasons. A further quarter (24%) said they had moved for work-related reasons, involving their own or their spouse's employment.

Table 5.4 Distribution of migrants by current locality and reason for most recent migration

Reason for migrating	Percentages			
	Current locality			All
	Accra	Other urban	Rural	
	%	%	%	%
Own employment	17.4	11.5	14.6	14.1
Spouse's employment	9.5	11.7	8.8	9.6
Marriage	10.5	19.7	18.7	18.1
Other family reasons	41.7	33.3	46.8	42.8
School	7.8	9.0	3.7	5.5
Drought or War	0.3	0.1	0.7	0.5
Other	12.8	14.8	6.7	9.4
All	100.0	100.0	100.0	100.0
Sample size	619	1551	3908	6078

6. HOUSING

6.1 Type of occupancy

The data collected on housing in GLSS 3 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 occupancy status (past and present), housing expenditure and the type of facilities available to the household members. The head of household or other person in charge provided the information.

In all three localities (Accra, other urban and rural areas) only about 1 in 10 households live in single family houses (Table 6.1). Three-quarters of all households live in rooms in compound houses and in other types of rooms. In Accra itself, a fifth of all households live in apartments or flats, and in other urban areas almost a tenth do so. Female-headed households are less likely than male-headed ones to be occupying family houses or huts/buildings, but more likely to be occupying rooms (Appendix Table A6.1).

Table 6.1 Distribution of households by type of dwelling and locality
Percentages

Type of Dwelling	Urban areas			Rural	Country
	Accra	Other urban	All urban		
	%	%	%	%	%
One Family House	10.0	9.3	9.5	11.8	11.0
Apartment/Flat	18.0	8.5	11.3	1.2	4.8
Room(s) (compound house)	61.8	70.0	67.6	48.0	54.9
Room(s) (others)	9.1	10.8	10.3	24.6	19.6
Huts/Buildings (same compound)	0.7	0.6	0.6	10.8	7.2
Huts/Buildings (different compounds)	0.2	0.7	0.6	3.6	2.5
Other	0.2	0.1	0.1	-	*
All	100.0	100.0	100.0	100.0	100.0
Sample size	461	1124	1585	2938	4523

The present occupancy status of households is shown in Table 6.2. Two-fifths of all households live in rent-free housing. Over a third own their own homes; owning a home is a common feature in rural areas, while in urban areas (and particularly in Accra) home ownership is much less likely. Male-headed households are more likely than female-headed ones to own their own home. Renting a home is rare in rural areas, but a common occurrence in urban areas. Less than one percent of households are perching in other people's homes.

Table 6.2 Distribution of all households by present occupancy status and locality
Percentages

Occupancy status	Urban areas			Rural	Country
	Accra	Other urban	All urban		
	%	%	%	%	%
Owning	7.6	20.8	17.0	47.8	37.0
Renting	43.0	38.0	39.4	8.9	19.6
Rent free	48.2	40.1	42.4	42.8	42.7
Perching	1.3	1.2	1.2	0.4	0.7
All	100.0	100.0	100.0	100.0	100.0
Sample size	461	1125	1586	2939	4525

The rental sector (constituting households which rent accommodation or live rent-free) is of particular interest. Two-thirds of these renting households have their accommodation provided by a relative, while a quarter rent their accommodation from a private individual or agency (Table 6.3). Government provides accommodation to about 6 percent of households, and private employers account for 2 percent. Households in rural areas are much more likely than those in urban areas to be living in dwellings provided by relatives. In all localities female-headed households are more likely than their male counterparts to get their rented accommodation from relatives, and less likely to get it from private individuals or agencies (Appendix Table A6.2).

Table 6.3 Distribution of households which rent their dwelling, by locality and person from whom they rent

	Percentages				
	Urban areas			Rural	Country
	Accra	Other urban	All urban		
From whom they rented dwelling	%	%	%	%	%
Relative	46.2	46.8	46.6	77.2	63.1
Private employer	2.1	3.7	3.2	1.3	2.2
Government	8.8	11.2	10.4	1.8	5.8
Provider individual or agency	42.6	37.6	39.2	18.9	28.3
Other	0.2	0.7	0.5	0.9	0.7
All	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	420	872	1292	1515	2807

The survey collected information on whether each household had ever moved and, if they had, on the type of accommodation they were previously occupying. Some 26 percent of households had never moved from their present dwelling. The proportions of male and female-headed households who had not moved were about the same (25% of male-headed households and 29% of female-headed households). Information collected on this group of households showed that almost every non-moving household either owned its dwelling (42%) or lived rent-free in it (54%).

Table 6.4 shows the previous and present occupancy status for the remaining 74 percent who had moved at some time from a previous dwelling. The proportion of households in this moving group who own their dwellings has almost tripled (from 12% to 35%) as a result of moving house, while other forms of occupancy status (renting, living rent-free and perching) have decreased. In fact, a lot of households who were previously perching or having free accommodation later moved into their own houses. This change is reflected in both urban and rural areas, but households are more likely to perch in the urban areas than in the rural areas.

There were some differences in the outcome of moves, depending on the sex of the head of household (Appendix Table A6.3). The proportion of male-headed households who were provided with rent-free housing decreased from 49 percent to 33 percent as a result of moving, whereas the proportion of female-headed households in rent-free housing remained about the same as before (51 percent against 54 percent). Male-headed households were much more likely than female-headed households to become owners of their homes as a result of moving house.

Table 6.4 Distribution of moving households, by present locality and (i) previous occupancy status, (ii) present occupancy status

	Percentages							
	Accra		Other urban		Rural		Country	
	Previous status	Present status	Previous status	Present status	Previous status	Present status	Previous status	Present status
	%	%	%	%	%	%	%	%
Owning	1.1	7.5	8.3	19.7	16.0	46.6	12.3	35.1
Renting	49.3	50.9	48.5	45.2	18.1	12.4	29.7	25.5
Rent free	40.2	39.9	36.9	33.9	58.9	40.5	50.9	38.7
Perching	9.4	1.6	6.2	1.2	7.0	0.5	7.1	0.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	373	373	888	888	2071	2071	3332	3332

Respondents in households which had moved were asked what was the main reason for the move from the previous dwelling to this one (Table 6.5). The majority of households had left their previous dwellings due to family reasons (53%) and job reasons (25%). Female-headed households were more likely (65%) than their male counterparts (48%) to have mentioned family reasons as the cause of their move from their previous residences; conversely, female heads were less likely to ascribe their move to job reasons (14% as against 30% for male heads) (Appendix Table A6.4). Only a very few households moved because of cost (2%) or ejection (6%); 14 percent gave a variety of other reasons why they had moved.

Table 6.5 Distribution of moving households, by present locality and reason for moving from previous dwelling

Reason for moving	Percentages				
	Present locality				Country
	Accra	Other urban	All urban	Rural	
	%	%	%	%	%
Family reasons	57.1	46.6	49.7	55.5	53.3
Cost reasons	1.3	2.7	2.3	1.4	1.7
Job reasons	23.9	25.9	25.3	24.9	25.1
Ejected	12.1	9.6	10.3	3.5	6.1
Other	5.6	15.2	12.4	14.7	13.8
All	100.0	100.0	100.0	100.0	100.0
Sample size	373	888	1261	2071	3332

6.2 Household size and housing density

Respondents were asked about the number of rooms their household occupied; bathrooms, toilets and kitchens were not included. About a half of all households occupy only one room (Table 6.6). 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 quarter of all households occupy single rooms.

Table 6.6 Percentage distribution of households in different localities, by number of rooms occupied

No. of rooms occupied	Urban							Rural				Country
	Accra		Other		All	Coastal		Forest	Savannah	All		
	%	%	%	%	%	%	%	%	%	%		
1	52.7	52.0	52.2	61.5	63.7	25.8	52.0	52.1				
2	33.0	30.1	30.9	24.9	22.1	33.5	26.1	27.8				
3	8.4	9.8	9.4	7.1	9.0	19.4	11.6	10.8				
4	4.5	4.2	4.3	3.4	2.6	11.9	5.5	5.1				
5+	1.3	4.0	3.2	3.1	1.5	4.5	4.8	4.3				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
Sample size	463	1124	1587	715	1358	866	2939	4526				

* Note: Bathrooms, toilets and kitchens have not been counted as rooms

To a large extent the variations in rooms occupied are likely to be closely linked to household size. Table 6.7 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 26 percent in Accra to only 10 percent in the rural savannah. At the other extreme, only about 6 percent of households in Accra have as many as eight members, compared with 21 percent in the rural savannah.

Table 6.7 Percentage distribution of households by household size, in different localities

Household size	Urban							Rural				Country
	Accra		Other		All	Coastal		Forest	Savannah	All		
	%	%	%	%	%	%	%	%	%	%		
1	25.7	17.4	19.8	18.1	16.7	9.7	15.0	16.7				
2	12.5	10.3	10.9	13.6	11.3	8.4	11.0	11.0				
3	15.6	13.6	14.1	13.9	14.5	10.1	13.1	13.4				
4	13.0	12.4	12.6	15.2	13.3	13.2	13.8	13.3				
5	10.2	13.5	12.5	13.0	14.0	15.2	14.1	13.6				
6	10.8	10.6	10.7	11.6	11.1	11.5	11.4	11.1				
7	6.5	8.7	8.0	6.4	7.0	10.6	7.9	8.0				
8	2.8	5.8	5.0	3.9	4.3	6.8	4.9	4.9				
9	1.3	3.1	2.6	2.6	3.1	4.0	3.2	3.0				
10+	1.7	4.7	3.8	1.7	4.7	10.4	5.6	5.0				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
Sample size	463	1129	1592	718	1374	868	2960	4552				

Table 6.8 provides estimates, grossed up to the national level, of the number of households of different size, according to the number of rooms they occupy. There are just over half a million single person households, and nearly all of these occupy a single room. At the other extreme, there are about 170,000 households, each with at least 10 members, and the majority of these households each occupy at least four rooms.

Table 6.8 Estimated distribution of households in Ghana, by household size and number of rooms occupied

Household size	Number of rooms occupied*				Total
	1	2	3	4+	
	(Estimates)				
1	470,000	80,000	10,000	*	550,000
2	250,000	90,000	20,000	*	360,000
3	290,000	120,000	30,000	10,000	450,000
4	240,000	140,000	40,000	20,000	440,000
5	210,000	150,000	60,000	40,000	450,000
6	140,000	140,000	60,000	30,000	370,000
7	80,000	90,000	50,000	40,000	260,000
8	40,000	60,000	40,000	40,000	160,000
9	10,000	40,000	20,000	30,000	100,000
10+	10,000	20,000	40,000	100,000	170,000
Total	1,730,000	920,000	360,000	300,000	3,320,000

* Note: Bathrooms, toilets and kitchens have not been counted as rooms.

Various indicators of housing density are available from GLSS3. As an illustration, Table 6.9 shows the average household size, rooms per household, and persons per room, for different localities around the country. Also shown in the table are the proportion of households having 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 4.48 and the average number of rooms per household is 1.86, which results in an average room density of 2.40 persons per room. The highest average room density (2.72) is found in the rural forest areas. This is not because of larger household sizes, but because households there have fewer rooms at their disposal than households elsewhere. The lowest room densities (2.13 persons per room) are in Accra and in the rural savannah, but the reasons for these low figures are very different; in fact, Accra has the lowest average household size, and the rural savannah the highest.

Table 6.9 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	4.30	1.80	2.39	24.5	1.8	16 %
Accra	3.75	1.76	2.13	23.4	1.5	24 %
Other urban	4.52	1.82	2.49	24.9	1.8	13 %
Rural	4.59	1.76	2.61	22.9	2.0	37 %
Rural coastal	4.00	1.65	2.42	19.5	2.0	52 %
Rural forest	4.36	1.61	2.72	18.7	2.3	37 %
Rural savannah	5.45	2.57	2.13	31.3	1.8	26 %
Total	4.48	1.86	2.40	23.7	1.9	30 %

Notes: (a) equals total persons divided by total households containing those persons

(b) equals total rooms divided by total households occupying those rooms

(c) equals total persons divided by total rooms occupied by those persons; it is equivalent to (a) divided by (b).

(d) equals total floor area occupied by all households, divided by total households; in fact, because some areas were measured inside the dwelling and some outside, this estimate has been based only on those households where the area was measured inside the dwelling.

(e) equals total persons divided by total floor area, and then multiplied by 10; it is equivalent to (a) divided by (d) and multiplied by 10.

Because it is room space, rather than the number of rooms, which determines the extent of overcrowding, the last but one column of Table 6.9 shows the average number of persons per 10 square metres. This measure was derived from details of floor area occupied by households, which was 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 their dwellings, and in other cases, it was not possible to move or pack items in rooms before measurements were taken. For about 60 percent of households the measurements were taken inside the dwelling; in the remaining 40 percent of cases the measurements were taken outside. The values shown in the table are based only on those cases where the measurements were taken inside the dwelling; the measurements taken on the outside of dwellings resulted in a similar distribution of densities for every 10 square metres, but with values on the average about 7 percent lower.

The average amount of space occupied by a household is 24 square metres. The mean floor areas vary substantially between localities; it is less than 20 square metres in the rural coastal and forest zones, 24 square metres in urban areas, and as much as 31 square metres in the rural savannah. The resulting densities range from a figure of 1.5 persons per 10 square metres in Accra, up to 2.3 persons per 10 square metres in the rural forest areas.

Finally, the last column of the table indicates that 30 percent of households in Ghana share their dwelling with another household. There are wide variations between localities in the proportion of households who are sharing their dwelling, with the greatest amount of sharing (52%) occurring in the rural coastal area.

6.3 Housing conditions

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 6.10 shows that 36% of households have access to pipe-borne water and 29% use well water, whilst the remaining 35% depend on natural sources for drinking water. In Accra itself every household covered in the survey had access to pipe-borne drinking water; in contrast, a third of households in other urban areas, and 6 out of every 7 in rural areas, do not have access to pipe-borne water (Figure 6.1).

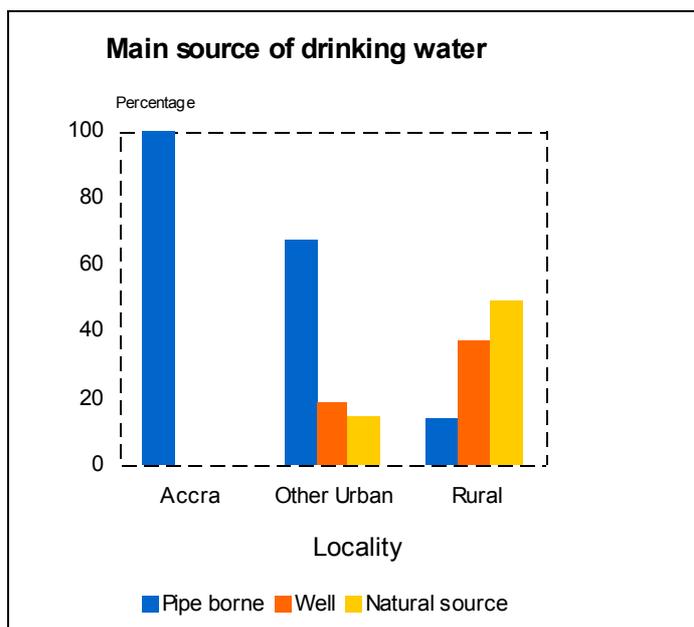


Figure 6.1

In Accra a fifth of households benefit from indoor plumbing, and a further two-fifths have an inside standpipe; the remainder rely mainly on water from neighbours and private standpipes, but a few use public standpipes or water vendors. In other urban areas two-thirds of households have pipe-borne water, but in many cases this comes from a source outside the home; a sizeable minority of households in other urban areas (18%) depend on wells, usually without pumps, for their water supply, and a further 14 percent use natural sources.

In rural areas hardly any households have indoor plumbing or standpipes, but some get their water from a public standpipe or other reliable outside supply. The great majority of rural households, however, have to get their water from wells (37%) or from natural sources (49%). We have already highlighted in Section 4 of this report the great amount of time spent each day by many households in fetching water to meet their daily needs.

Table 6.10 Distribution of households by locality and source of drinking water

Source of drinking water	Percentages				
	Urban areas			Rural	Country
	Accra	Other urban	All urban		
	%	%	%	%	%
Pipe-borne	100.0	67.5	76.9	13.8	36.0
Indoor plumbing	19.3	3.7	8.3	0.3	3.1
Inside standpipe	40.4	25.8	30.0	2.2	12.0
Water vendor	0.7	2.1	1.7	0.3	0.8
Tanker	-	2.7	1.9	0.1	0.8
Neighbour	16.3	8.3	10.6	1.6	4.7
Private outside standpipe	22.0	6.7	11.1	0.8	4.4
Public tap	1.3	18.2	13.3	8.5	10.2
Well	-	18.3	13.0	37.1	28.7
Well with pump	-	3.5	2.5	21.1	14.6
Well without pump	-	14.8	10.5	16.0	14.1
Natural sources	-	14.2	10.1	49.1	35.4
River/spring	-	14.0	10.0	47.3	34.2
Rain	-	0.2	0.1	0.9	0.6
Other	-	-	-	0.9	0.6
All	100.0	100.0	100.0	100.0	100.0
Sample size	460	1125	1585	2935	4520

Provision of utilities

Table 6.11 indicates the availability of basic utilities. In the case of lighting, the main source for households is kerosene (70%), while 30 percent have access to electricity or occasionally a generator. About 90 percent of the households in Accra, and 58 percent of households in other urban areas, use electricity for lighting, whereas only about 8 percent of rural households have access to electricity for lighting. The great majority of rural households (91%) use kerosene for lighting.

Two-thirds of the households in Ghana use wood as their main source of fuel for cooking, and a further quarter of all households use charcoal; only 2 percent use LP gas. The remaining households use kerosene, electricity, or some other fuel for cooking. In urban areas, and particularly in Accra, charcoal is widely used; two-thirds of Accra households, and a half of households in other urban areas, use it. In Accra gas ranks second as a source of fuel, whereas in other urban areas wood is the preferred second choice. In rural areas the great majority of households use wood, but some households use charcoal or other sources. We have already highlighted, in Section 4, the time burden imposed on members of rural households, particularly women, by the need to fetch wood.

Table 6.11 Distribution of households by locality and use of basic utilities

	Percentages				
	Urban areas			Rural	Country
	Accra	Other urban	All urban		
	%	%	%	%	%
<u>Source of lighting</u>					
Electricity (mains)	89.6	58.3	67.4	7.5	28.5
Generator	-	1.9	1.3	1.1	1.2
Kerosene	10.4	39.7	31.2	91.0	70.1
Candle	-	0.1	0.1	0.3	0.2
<u>Source of fuel</u>					
Wood	3.0	42.1	30.7	87.2	67.4
Charcoal	69.4	50.4	55.9	8.2	24.9
Gas	14.1	2.3	5.7	0.3	2.2
Electricity	4.6	1.0	2.0	0.1	0.8
Kerosene	8.7	2.9	4.6	0.5	1.9
Other Fuel	0.2	1.2	0.9	3.6	2.7
<u>Method of rubbish disposal</u>					
Collected	11.7	3.1	5.6	0.4	2.2
Dumped *	79.0	93.4	89.2	96.6	94.0
Burned	7.6	3.0	4.4	1.9	2.8
Buried	1.7	0.4	0.8	1.1	1.0
All	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	<i>461</i>	<i>1123</i>	<i>1584</i>	<i>2935</i>	<i>4519</i>

* Note: Dumping includes the disposal of rubbish either at official collection points, or in other ways apart from collection, burning and burial.

Turning to garbage disposal, it is apparent that dumping is the predominant mode of rubbish disposal in the country as a whole; 79 percent of households in Accra, 93 percent of those in other urban areas, and 97 percent of rural households, dump their rubbish (Table 6.11). Only in Accra do significant numbers of households use other means of disposal; 12 percent have their rubbish collected, and 8 percent burn it.

Toilet facilities

The availability of toilet facilities seems to be a major problem, as the information collected on types of toilet used by households shows that almost a quarter of households in Ghana (23%) do not have any toilet facilities (Table 6.12). Only 7 percent of households have access to flush toilets, and a further 7 percent use KVIPs. The most common form of toilet, used by 50 percent of all households, is the pit latrine, while 11 percent use a pan or bucket.

In terms of locality, rural households fare worst, with 29 percent of households having no access to any kind of toilet and having to relieve themselves in the bush (popularly known as "free range"). Even in urban areas, including Accra, the provision of toilet facilities is far from complete, with more than a tenth of urban households not having access to a toilet. In terms of the country as a whole, these figures imply that about three-quarters of a million households do not have any toilet facilities; 40,000 of these households are in Accra, 110,000 in other urban areas, and 620,000 in rural areas.

Table 6.12 Distribution of households by locality and type of toilet used by the household

Type of toilet	Percentages				
	Urban areas			Rural	Country
	Accra	Other urban	All urban		
%	%	%	%	%	
Flush	30.8	12.1	17.6	1.4	7.1
KVIP	13.2	12.3	12.6	3.7	6.8
Pit latrine	13.7	36.5	29.9	61.3	50.3
Pan/bucket	29.3	23.0	24.8	4.0	11.3
None	11.3	12.9	12.4	28.6	22.9
Other	1.7	3.2	2.8	1.1	1.7
All	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	<i>461</i>	<i>1123</i>	<i>1584</i>	<i>2938</i>	<i>4522</i>

Construction material for dwellings

Table 6.13 shows the main construction materials used for the walls, floors and roofs of dwellings. For walls, the main construction materials are mud (63%) and cement (37%). 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, 8 out of 10 rural households live in dwellings where mud is the main material used in construction.

The pattern for main flooring materials in terms of locality is similar to that of construction material for walls. Over three-quarters (79%) of households live in dwellings with cement as the main floor material, while 20 percent live in dwellings with earth floors. In almost all urban homes the floor is made of cement, whereas in rural areas almost 30 percent of households have their floors made of earth.

In the case of main roofing material, more than half (56%) of households live in houses roofed with iron or zinc sheets, followed by 22 percent in thatched roof houses and about 14 percent in dwellings roofed with asbestos. Iron and zinc roofing is used in all localities, but asbestos roofing is mainly used in urban areas, particularly in Accra, while thatched roofing is mainly used in rural areas.

Table 6.13 Percent distribution of households by locality and main construction material of walls, floor and roof

	Percentages				
	Urban areas			Rural	Country
	Accra	Other urban	All urban		
	%	%	%	%	%
<u>Outside wall material</u>					
Mud	9.8	32.1	25.6	82.5	62.6
Wood	3.3	2.6	2.8	0.6	1.3
Corrugated iron	3.7	0.8	1.6	0.6	1.0
Stone	0.2	2.2	1.6	0.8	1.1
Cement	82.9	62.3	68.3	14.9	33.6
Other	0.2	-	0.1	0.6	0.4
<u>Main flooring material</u>					
Earth	0.7	3.1	2.4	29.4	20.0
Wood	0.4	1.1	0.9	0.3	0.5
Stone	0.2	0.2	0.2	0.2	0.2
Fibre glass	-	0.3	0.2	0.1	0.2
Cement	98.3	95.4	96.2	69.9	79.1
Other	0.4	-	0.1	*	0.1
<u>Main roofing material</u>					
Thatch	-	5.9	4.2	30.8	21.5
Wood	0.4	0.6	0.6	1.3	1.0
Iron/Zinc	44.3	65.3	59.2	53.3	55.4
Cement	9.8	9.9	9.8	2.5	5.0
Asbestos	45.6	17.5	25.7	6.9	13.5
Other	-	0.8	0.6	5.2	3.6
All	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	461	1124	1585	2939	4524

7. TOTAL HOUSEHOLD INCOME AND EXPENDITURE AND THEIR COMPONENTS

7.1 Total household expenditure

The methodology developed for the GLSS enables us to derive estimates of total income and total expenditure for each household covered in the survey, together with estimates of all key components of these totals, as set out in Appendix 3⁶. As described at the beginning of this report, the 4552 households covered in GLSS3 were divided into five quintile groups on the basis of their total expenditure (both actual and imputed). The measure used in ranking the households was their total expenditure per capita.

Table 7.1 shows average annual expenditure, on both a household and a per capita basis, for the country as a whole and for each quintile group. Average annual household expenditure, at March 1992 prices, was 748,000 cedis, while average annual per capita expenditure was 167,000 cedis. At the exchange rate of about 400 cedis to the US dollar prevailing in March 1992, these figures correspond to about 1900 and 400 US dollars respectively. If conversion to US dollars is done using purchasing power parities (PPP), which take account of the differences in price levels between Ghana and the United States, then the equivalent amounts in US dollars would be at least double these figures (ie. of the order of 3800 and 800 dollars respectively).

Looking at the differences across the quintile groups, we find that the average annual household expenditure in the top quintile group (¢ 1,058,000) was more than twice that in the bottom quintile group (¢ 443,000). However, households in the bottom quintile group had an average household size of over 6, while those in the top one had an average of just over 2. As a result of this difference, the contrast in per capita expenditure between quintile groups is very marked, with the average annual per capita expenditure for those in the top quintile group (¢ 467,000) being nearly seven times as much as the average in the bottom quintile group (¢ 69,000).

The net result of these differences is that the 20 percent of households in the bottom quintile group contain over a quarter of the total population but account for only an eighth of total expenditure; in contrast, the 20 percent of households in the top quintile group contain only a tenth of the total population but account for more than a quarter of total household expenditure.

Table 7.1 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.		Hhlds	Persons
			%	%	%			
Lowest	443,000	69,000	20.0	28.5	11.8	6.4	910	5824
Second	618,000	115,000	20.0	23.9	16.5	5.4	911	4885
Third	755,000	161,000	20.0	20.9	20.2	4.7	910	4271
Fourth	866,000	235,000	20.0	16.5	23.1	3.7	911	3361
Highest	1,058,000	467,000	20.0	10.1	28.3	2.3	910	2062
All	748,000	167,000	100.0	100.0	100.0	4.5	4552	20403

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

⁶ See also the footnote on page 4.

We can get a good idea of the relative position of individual regions 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 quintile groups (Table 7.2). If the distribution of expenditure in a region exactly mirrors the national picture, then we would expect to get 20 percent of the households in the region falling in each quintile group. The table thus tells us something about inequalities both within each region and between regions⁷.

Average per capita expenditure is highest in Greater Accra (234,000 cedis at March 1992 prices), followed by Ashanti (191,000 cedis) and Central (181,000 cedis). All the other regions have average per capita expenditures, which are below the national average. In particular, one region (Upper West) has an average per capita expenditure (104,000 cedis) which is less than a half of that in Greater Accra.

As expected, Greater Accra is much better off than other regions; more than a third of its households fall into the top quintile group (number 5), and there are very few households (9%) in the bottom quintile group (number 1). Central and Ashanti regions appear to be better off than average, with well over 40 percent of their households falling into the top two quintile groups. Eastern appears to be the most homogeneous region, with less extremes of wealth or poverty; two-thirds of its households fall in the three middle quintile groups, and fewer than 20 percent in each of the bottom and top quintile groups. In similar vein, it appears that Western and Volta are slightly poorer than average, with larger than average proportions of their households in the bottom two quintile groups and fewer than average in the top quintile group. The poorest regions are the Brong Ahafo, Northern, Upper West and Upper East, with half of their households (and in the case of Upper West over two-thirds) falling in the bottom two quintile groups.

Table 7.2 Percentage distribution of households in each region, by quintile group, and mean annual household and per capita expenditure by region

Region	Quintile					All	Mean annual household expenditure (cedis)	Mean annual per capita expenditure (cedis)	Sample size	
	1	2	3	4	5				Hhlds	Persons
	(Percentages)									
Western	22.9	21.4	21.6	19.0	15.1	100.0	621,000	146,000	485	2062
Central	14.6	19.2	22.3	20.2	23.7	100.0	740,000	181,000	515	2103
Greater Accra	8.9	13.2	19.4	23.5	35.0	100.0	878,000	234,000	638	2397
Eastern	15.4	22.4	22.5	22.5	17.2	100.0	650,000	164,000	662	2628
Volta	21.5	23.6	18.9	20.0	16.0	100.0	711,000	160,000	419	1864
Ashanti	15.5	19.5	18.1	22.3	24.5	100.0	839,000	191,000	734	3221
Brong Ahafo	29.0	23.5	20.4	13.8	13.2	100.0	720,000	136,000	455	2401
Northern	35.0	18.1	16.6	17.5	12.8	100.0	758,000	133,000	343	1954
Upper West	49.6	21.6	16.2	7.2	5.4	100.0	603,000	104,000	111	643
Upper East	28.4	21.6	19.5	19.5	11.1	100.0	861,000	145,000	190	1130
All	20.0	20.0	20.0	20.0	20.0	100.0	748,000	167,000	4552	20403
Sample size	910	911	910	911	910	4552				

⁷ In comparing the levels of expenditure between regions, localities and zones, no allowance has been made for any possible price differences across the country.

Table 7.3 gives estimates of household and per capita expenditure for different localities and ecological zones. Mean household expenditure is almost 30 percent higher in urban areas than it is in rural areas, while per capita expenditure is almost 40 percent higher. In the rural areas, per capita expenditure is higher in semi-urban areas than in small rural areas, and is higher in the coastal zone than in the forest zone, which in turn is higher than in the savannah.

Table 7.3 Mean annual household and per capita expenditure, and estimated total expenditure, for different localities and zones

	Mean annual household expenditure	Mean per capita annual exp.	Estimated total annual exp.	Percentage share of total exp.	Mean household size	Sample size	
						Households	Persons
	(cedis)	(cedis)	(thousand million cedis)	%			
Urban	875,000	205,000	1017	40.9	4.3	1592	6793
Accra	909,000	250,000	307	12.4	3.6	463	1682
Other urban	861,000	190,000	710	28.6	4.5	1129	5111
Rural	680,000	148,000	1468	59.1	4.6	2960	13610
Semi-urban	674,000	164,000	466	18.8	4.1	947	3887
Small rural	682,000	141,000	1002	40.3	4.8	2013	9723
Rural coastal	706,000	176,000	370	14.9	4.0	718	2872
Rural forest	662,000	151,000	663	26.7	4.4	1374	6012
Rural savannah	687,000	126,000	435	17.5	5.4	868	4726
Ghana	748,000	167,000	2485	100.0	4.5	4552	20403

Note: Small rural localities are those with a 1984 population of less than 1500. Semi-urban localities are those with a 1984 population of at least 1500 but less than 5000.

7.2 Components of household expenditure

Table 7.4 shows the breakdown of total expenditure into its components. Out of the mean annual household expenditure of ₵ 748,000, 58 percent represents expenditure on food (40% in cash and 18% for consumption of home-produced food); less than 2 percent is accounted for by housing costs (actual and imputed), and a similar amount goes on remittances. The remaining 39 percent of total expenditure represent other non-food expenditure (34% in cash and 5% 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 2.5 thousand billion cedis. Of this, annual cash expenditure on food accounted for almost a thousand billion cedis, while the annual value of home-produced food consumed by households was almost half a thousand billion cedis. Expenditure on housing (actual and imputed) was just under 50 thousand million cedis. Other expenditure (actual and imputed expenditures on other non-food items, together with remittances) accounted for the remaining one thousand billion cedis⁸.

⁸ Expenditure on remittances includes the value of cash, food and other goods transferred to persons who are not members of the household and where no repayment was to be made at some future date (see Section 11.1).

Table 7.4 Components of household and per capita expenditure, and estimates of total annual household expenditure

Component	Mean annual household expenditure (cedis)	Per capita annual expenditure (cedis)	Estimated total annual expenditure (thousand million cedis)	Percentage distribution %
Food expenditure (actual)	295,000	66,000	982	39.5
Food expenditure (imputed)	138,000	31,000	459	18.5
Expenditure on housing	14,000	3,000	45	1.8
Other non-food exp. (actual)	253,000	56,000	840	33.8
Other non-food exp. (imputed)	38,000	8,000	125	5.0
Expenditure on remittances	10,000	2,000	34	1.4
Total	748,000	167,000	2485	100.0

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

Table 7.5 shows the distribution of expenditure between components, for each region and for the different localities and ecological zones. Among the notable features of the table is the greater importance of consumption of home-produced food in the overall expenditure of households in the savannah zone, and particularly in Upper West where this component represents almost half of total expenditure. Also notable is the higher cost of housing in Greater Accra, with housing costs in Accra itself representing almost 5 percent of total expenditure, whereas in other parts of the country housing's share of total expenditure is never more than 2 percent. A third notable feature is the very low level of remittances made by household members living in the two Upper regions.

Table 7.5 Percentage distribution of household expenditure between components, for each region, locality and ecological zone

Region	Component of expenditure						Total (100%)	Food (actual & imputed) as percentage of total
	Food (actual)	Food (imputed)	Housing (actual & imputed)	Other non-food (actual)	Other non-food (imputed)	Remittances (actual)		
Western	41.6	18.9	1.5	32.4	4.3	1.4	100.0	60.5
Central	43.4	18.3	1.2	31.7	4.0	1.2	100.0	61.7
Greater Accra	43.0	1.1	4.0	40.5	9.6	1.9	100.0	44.1
Eastern	37.9	24.1	1.5	29.8	5.3	1.5	100.0	62.0
Volta	41.0	22.9	1.5	29.8	3.8	1.0	100.0	63.9
Ashanti	37.3	13.3	1.4	41.2	5.0	1.8	100.0	50.6
Brong Ahafo	32.0	23.6	1.4	36.5	4.9	1.6	100.0	55.6
Northern	40.2	27.3	1.4	28.6	2.0	0.6	100.0	67.5
Upper West	28.2	48.1	1.6	19.2	2.9	0.1	100.0	76.3
Upper East	54.3	21.7	1.3	21.4	1.2	0.1	100.0	76.0
Urban	42.0	5.5	2.7	40.7	7.5	1.5	100.0	47.5
Accra	41.6	0.3	4.7	41.4	10.0	2.0	100.0	41.9
Other urban	42.2	7.7	1.8	40.4	6.5	1.3	100.0	49.9
Rural	37.8	27.5	1.2	29.0	3.3	1.3	100.0	65.3
Semi-urban	41.0	20.5	1.2	32.0	3.9	1.4	100.0	61.5
Small rural	36.3	30.8	1.2	27.6	3.0	1.2	100.0	67.1
Rural coastal	45.7	16.9	1.2	31.0	4.0	1.2	100.0	62.6
Rural forest	34.6	26.3	1.2	32.6	3.7	1.7	100.0	60.9
Rural savannah	35.9	38.4	1.3	21.8	2.1	0.6	100.0	74.3
Ghana	39.5	18.5	1.8	33.8	5.0	1.4	100.0	58.0

Finally, Table 7.6 shows how household expenditure on different components varies across the quintile groups. The share of the total budget (actual and imputed) represented by cash expenditure on food remains relatively constant across the quintile groups, but consumption of home-produced food is very much 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 group, but for almost two-thirds of the total budget of households in the bottom quintile group. The proportion of the total budget going on housing remains relatively constant across the quintile groups, but the proportion going on other non-food expenditures (both actual and imputed) is much greater for those households in the higher quintile groups. Also noteworthy is the fact that better off households spend a larger proportion of their expenditure on remittances than poorer households.

Table 7.6 Percentage distribution of household expenditure between components, by quintile group
Percentages

Quintile group	Component of expenditure						Total	Food (actual & imputed) as percentage of total
	Food (actual)	Food (imputed)	Housing (actual & imputed)	Other non-food (actual)	Other non-food (imputed)	Remittances (actual)		
Lowest	37.7	27.6	2.1	28.5	3.3	0.8	100.0	65.3
Second	39.1	23.3	1.8	31.0	3.8	1.0	100.0	62.4
Third	40.1	20.2	1.6	32.5	4.5	1.1	100.0	60.3
Fourth	41.7	17.4	1.6	32.8	5.1	1.3	100.0	59.1
Highest	38.3	11.6	2.0	39.2	6.7	2.1	100.0	49.9
All	39.5	18.5	1.8	33.8	5.0	1.4	100.0	58.0

The six tables given so far in this section all relate to total household and per capita expenditure, including both cash expenditure and imputed expenditure. The value of imputed expenditure, either nationally or for particular localities or quintile groups, can be obtained by subtracting from these amounts the value of cash expenditure; these cash expenditures are given in the Appendix Tables (see for instance Tables A9.27, A9.28, A9.11, A9.12, A9.1 and A9.2) and discussed in Section 9.1.

Overall, imputed expenditure accounts for just over a quarter (27%) of total expenditure. As we would expect, imputed expenditure is very much higher in rural than in urban areas; imputed expenditure represents a third of total expenditure in rural areas (34%), but only a sixth in urban areas (17%). Imputed expenditure is particularly important in the rural savannah, where it accounts for as much as 43 percent of total expenditure. In regional terms, imputed expenditure accounts for between a quarter and a third of total expenditure in all regions except for Greater Accra, where it is very much lower (15%), and Upper West and Upper East where it is very much higher (53% and 41% respectively). In terms of quintile groups, imputed expenditure accounts for a fifth (20%) of total expenditure in the top quintile group, whereas in the bottom quintile group it accounts for over a third of total expenditure (35%).

7.3 Total household income

Although household expenditure is the main monetary measure used in this report, and forms the basis for the construction of the quintiles, the GLSS 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 inevitable that the measures presented here somewhat understate total household income.

At the prices prevailing in March 1992, average annual household income is estimated to be 480,000 cedis, which is equivalent to a per capita income of 107,000 cedis (Table 7.7). Using the March 1992 rate of exchange of 400 cedis to the US dollar, these amounts are equivalent to 1200 and 270 dollars respectively; using purchasing power parities (PPP), the US dollar equivalents of the household and per capita incomes in cedis would be of the order of 2400 and 540 dollars respectively. As expected, there are substantial variations in income across the expenditure quintile groups. People living in households which fall in the lowest quintile group have an average income of only 55,000 cedis, whereas those in the highest quintile group have an average per capita income of 248,000 cedis. The contrast can also be seen when one looks at the percentage share of persons and income in the different quintile groups; thus the 20 percent of households in the lowest quintile group contain 29 percent of the population but generate only 15 percent of total income, while the highest quintile group contains only 10 percent of the population but generates 23 percent of total income.

Table 7.7 Mean annual household and per capita income, by expenditure quintile group

Quintile group	Mean annual household income (cedis)	Mean annual per capita income* (cedis)	Percentage shares			Mean household size	Sample size	
			Hhlds	Persons	Inc.		Hhlds	Persons
			%	%	%			
Lowest	353,000	55,000	20.0	28.5	14.7	6.4	910	5824
Second	453,000	84,000	20.0	23.9	18.9	5.4	911	4885
Third	500,000	107,000	20.0	20.9	20.9	4.7	910	4271
Fourth	531,000	144,000	20.0	16.5	22.1	3.7	911	3361
Highest	561,000	248,000	20.0	10.1	23.4	2.3	910	2062
All	480,000	107,000	100.0	100.0	100.0	4.5	4552	20403

* 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 a regional basis, mean household income varies from a high of 549,000 in Greater Accra (due to the influence of Accra itself) down to a low of 378,000 in the Volta region, while mean per capita income varies from 146,000 cedis in Greater Accra down to 72,000 cedis in the Northern region (Table 7.8).

Table 7.8 Mean annual household and per capita income by region

Region	Mean annual household income (cedis)	Mean annual per capita income (cedis)	Sample size	
			Hhlds	Persons
Western	492,000	116,000	485	2062
Central	483,000	118,000	515	2103
Greater Accra	549,000	146,000	638	2397
Eastern	460,000	116,000	662	2628
Volta	378,000	85,000	419	1864
Ashanti	485,000	111,000	734	3221
Brong Ahafo	534,000	101,000	455	2401
Northern	412,000	72,000	343	1954
Upper West	442,000	76,000	111	643
Upper East	496,000	83,000	190	1130
All	480,000	107,000	4552	20403

Per capita annual income was 121,000 cedis in urban areas and 100,000 cedis in rural areas (Table 7.9). Within rural areas, incomes were rather higher in semi-urban areas than in small rural areas, and higher in the coastal and forest zones than in the savannah. Out of a total national household income of 1.6 thousand billion cedis, 38 percent represents income generated in urban areas and 62 percent income generated in rural areas.

Table 7.9 Mean annual household and per capita income, and estimated total income, for different localities and zones

	Mean annual household income	Mean annual per capita income	Estimated total annual income	Percentage share of total inc.	Mean household size	Sample size	
						Households	Persons
	(cedis)	(cedis)	(thousand million cedis)	%			
Urban	517,000	121,000	601	37.7	4.3	1592	6793
Accra	563,000	155,000	190	11.9	3.6	463	1682
Other urban	499,000	110,000	411	25.8	4.5	1129	5111
Rural	460,000	100,000	993	62.3	4.6	2960	13610
Semi-urban	455,000	111,000	315	19.7	4.1	947	3887
Small rural	462,000	96,000	678	42.5	4.8	2013	9723
Rural coastal	431,000	108,000	226	14.2	4.0	718	2872
Rural forest	477,000	109,000	478	30.0	4.4	1374	6012
Rural savannah	455,000	84,000	289	18.1	5.4	868	4726
Total	480,000	107,000	1594	100.0	4.5	4552	20403

Note: Small rural localities are those with a 1984 population of less than 1500. Semi-urban localities are those with a 1984 population of at least 1500 but

7.4 Components of household income

In the country as a whole, the major sources of household income are agricultural income (40%) and non-farm self-employment income (35%) (Table 7.10). The third main source of income is from wage employment (17%). The remaining sources of income represent only a small part of total income: income from remittances (5%), rental income (1%) and other income (3%). A more detailed definition of each component is given in Appendix 3.

Table 7.10 Components of household and per capita income, and estimates of total annual household income

Component	Mean annual household income	Mean annual per capita income	Estimated total annual income	Percentage distribution
	(cedis)	(cedis)	(thousand million cedis)	%
Wage income from employment	81,000	18,000	270	16.9
Household agricultural income	191,000	43,000	634	39.8
Non-farm self-employment income	168,000	37,000	558	35.0
Rental income (actual and imputed)	6,000	1,000	19	1.2
Income from remittances	22,000	5,000	73	4.6
Other income	12,000	3,000	40	2.5
Total	480,000	107,000	1594	100.0

The composition of household incomes varies across the country (Table 7.11). In urban areas non-farm self-employment income (47%) is the major source of income, with wage income from employment as the second most important source (30%). In rural areas, on the other hand, as one might expect, more than half of total household income is derived from household agriculture (58%), with non-farm self-employment income also important (28%). However, the relative importance of these two components varies considerably across ecological zones; for example, in rural areas in the coastal zone only 37 percent of total household income comes from agriculture, whereas in rural areas of the savannah as much as 72 percent comes from agriculture.

Households in the lowest expenditure quintile derive most of their income (54%) from agriculture; a further 31 percent of income comes from non-farm self-employment, and only 10 percent from wage employment. In contrast, each of these three components is important in the mean income of households in the highest quintile group; 33 percent of their income comes non-farm self-employment, 29 percent from household agriculture, and as much as 26 percent from wage employment.

Table 7.11 Percentage distribution of household income between components for each region, locality, ecological zone and quintile group

	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	15.7	43.5	36.5	1.3	1.9	1.2	100.0
Central	11.6	36.4	45.3	0.8	4.7	1.2	100.0
Greater Accra	37.0	2.2	47.0	1.4	9.0	3.4	100.0
Eastern	13.2	47.4	31.2	1.1	3.9	3.2	100.0
Volta	14.9	46.6	34.1	1.3	1.9	1.3	100.0
Ashanti	17.5	31.8	36.3	0.7	7.1	6.5	100.0
Brong Ahafo	11.0	58.8	25.3	1.0	3.6	0.3	100.0
Northern	10.2	59.1	26.9	2.1	1.3	0.4	100.0
Upper West	7.0	66.6	21.4	1.8	0.8	2.3	100.0
Upper East	4.0	81.6	11.7	2.1	0.6	*	100.0
Urban	30.0	10.6	46.7	1.1	7.1	4.6	100.0
Accra	42.0	(-0.2)	41.6	1.6	10.7	4.4	100.0
Other urban	24.4	15.6	49.0	0.8	5.4	4.7	100.0
Rural	9.0	57.5	27.9	1.3	3.0	1.3	100.0
Semi-urban	12.8	43.8	36.6	1.1	4.1	1.7	100.0
Small rural	7.3	63.8	23.9	1.4	2.6	1.1	100.0
Rural coastal	11.3	36.8	46.0	0.9	3.9	1.0	100.0
Rural forest	10.0	58.6	24.7	1.2	3.8	1.6	100.0
Rural savannah	5.7	71.7	18.9	1.7	1.2	0.9	100.0
Quintile group							
Lowest	10.0	53.7	30.7	1.8	3.3	0.5	100.0
Second	12.2	46.2	34.7	1.2	4.0	1.8	100.0
Third	14.6	40.2	37.9	1.0	4.4	2.0	100.0
Fourth	18.1	36.6	37.4	1.0	4.1	2.9	100.0
Highest	26.3	28.6	33.0	1.2	6.4	4.5	100.0
Total	16.9	39.8	35.0	1.2	4.6	2.5	100.0

7.5 Comparison of income and expenditure

Whereas the previous four sections dealt separately with income and expenditure, in this section we compare the income and expenditure levels directly. Here, however, the analysis is done in terms of individuals, not households. In the earlier sections, equal numbers of households were assigned to each quintile group on the basis of their per capita expenditures (i.e. household expenditure divided by the number of persons in the household). In this section, we again calculate per capita income and per capita expenditure, but this time we assign them to each person in the household; each decile group therefore contains equal numbers of persons, rather than equal numbers of households. Table 7.12 shows the decile groups for per capita income and per capita expenditure, and the means of each decile group.

As expected, there is a greater spread in incomes than in expenditures. Whereas per capita expenditure ranges from a low of about 1,000 cedis to a high of 2.5 million cedis, per capita income ranges from zero up to 4.3 million cedis. There were actually a few people who reported negative incomes, but for this analysis by deciles their incomes have been set equal to zero. The apparent shortfall in income, as reported in the survey, is highlighted by the fact that the mean per capita expenditure is 167,000 cedis, whereas the median per capita income is only 107,000 cedis.

Table 7.12 Decile groups for per capita income and per capita expenditure, and means of each decile group

Decile group	Expenditure		Income		cedis
	Decile boundaries	Mean	Decile boundaries	Mean	
	Lowest	1,000 - 64,000	49,000	0 - 21,000	13,000
2	64,000 - 81,000	73,000	21,000 - 34,000	28,000	
3	81,000 - 98,000	89,000	34,000 - 46,000	40,000	
4	98,000 - 114,000	106,000	46,000 - 59,000	53,000	
5	114,000 - 132,000	123,000	59,000 - 72,000	66,000	
6	132,000 - 152,000	141,000	72,000 - 89,000	80,000	
7	152,000 - 181,000	165,000	89,000 - 112,000	99,000	
8	181,000 - 219,000	199,000	112,000 - 148,000	128,000	
9	219,000 - 302,000	254,000	148,000 - 223,000	179,000	
Highest	302,000 - 2.5 m	469,000	223,000 - 4.3 m	386,000	
All	1,000 - 2.5 m	167,000	0 - 4.3 m	107,000	

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

Table 7.13 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. It can be seen that some individuals have very high incomes but very low expenditures, and vice versa. In the case of expenditure, the 10 percent of the population with the lowest expenditure account for only 3 percent of total expenditure, while the 10 percent with the highest expenditure account for 28 percent. When we look at income, the inequalities are even sharper; the lowest 10 percent, in terms of income, account for only 1 percent of total income, whereas the highest 10 percent account for 38 percent.

Table 7.13 Comparison of per capita income and per capita expenditure

Income decile groups	Expenditure decile groups										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	1.1	.8	1.0	.8	.6	.7	.5	.5	10.0	1.2	1.2
2	2.6	1.9	1.5	.9	.7	.8	.5	.5	.3	.3	10.0	2.6	3.8
3	1.9	1.8	1.3	.9	1.1	.9	1.0	.6	.3	.2	10.0	3.8	7.5
4	1.0	1.6	1.5	1.4	1.3	.9	.7	.9	.4	.4	10.0	4.9	12.5
5	.7	1.0	1.3	2.1	1.3	1.2	1.1	.4	.7	.2	10.0	6.1	18.6
6	.4	.4	.9	1.3	1.4	1.2	1.4	1.4	1.0	.5	10.0	7.5	26.1
7	.3	.8	1.2	.9	1.3	1.5	1.1	1.2	1.0	.8	10.0	9.3	35.4
8	.3	.3	.5	.7	.7	1.2	1.7	1.5	1.8	1.3	10.0	12.0	47.3
9	.1	.5	.5	.5	.7	1.0	1.2	1.5	2.1	1.9	10.0	16.7	64.0
10	.1	.1	.2	.5	.5	.6	.8	1.2	1.9	4.0	10.0	36.0	100.0
Share of total sample	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	100.0	(20403)	
Share of total expenditure	2.9	4.4	5.4	6.3	7.4	8.5	9.9	11.9	15.2	28.1	100.0		
Cumulative share of total exp.	2.9	7.3	12.7	19.0	26.4	34.8	44.7	56.7	71.9	100.0			

These differences can be conveniently 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 7.1). If there was total equality of incomes, the curve would lie on the 45° line; the extent to which the curve diverges from this line indicates the extent of inequality. We can see that the population is more unequal in terms of income than in terms of expenditure. These inequalities are measured by the Gini coefficient; if there was total equality of income and expenditure for everyone, then the Gini coefficients for both would be zero. In fact, for GLSS3, the Gini coefficient for income is 0.48, while for expenditure it is 0.35 .

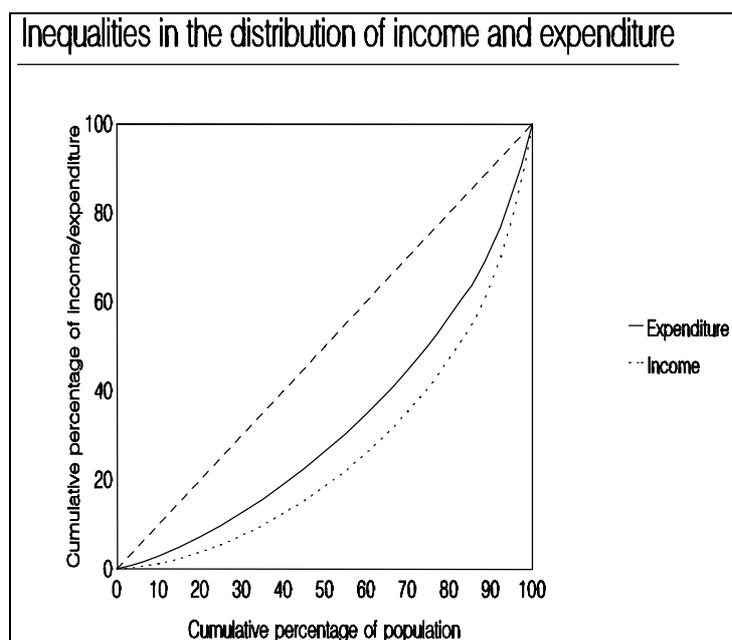


Figure 7.1

8. HOUSEHOLD AGRICULTURE

8.1 Agricultural activities and assets

The Ghana Living Standards Survey provides a wealth of data on agricultural activities. In this report we can only touch on some of the key findings. Using information from Section 6 of the GLSS3 questionnaire, we estimate that about 2¼ million households in Ghana own or operate a farm or keep livestock. Table 8.1 shows the distribution of these households around the country. Although farming and the keeping of livestock is predominantly a rural activity, it is significant that a third of urban households report that they own or operate a farm or keep livestock; if we exclude households living in Accra, where agricultural activity is almost non-existent, we find that almost half the households in other urban areas have some involvement in agricultural activities. In the rural areas, agricultural activity is most common in the rural savannah, where only 6 percent of households did not report any agricultural activity. In the rural forest zone the corresponding figure was 11 percent, while in the rural coastal area as many as 22 percent of households are not engaged in agriculture⁹.

For each household engaged in agriculture, questions were asked to determine which members were responsible for the farm or livestock. In 13 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, we find that a third are women. At the national level, this means that about 910,000 women in Ghana have some responsibility for agricultural activities in their households; two-thirds (63%) of these women were recorded as heads of their respective households. As illustrated in Table 8.1, the role of women in agriculture appears to vary around the country. Whilst women make up two-fifths of those with responsibility for agriculture in the rural coastal and forest zones, the corresponding figure for the rural savannah is only a fifth. Where men have responsibility for agricultural activities, these duties fall almost entirely on male heads of household; it is rare for other male members of the household to own or operate a farm, or keep livestock, although they may well take part in the household's agricultural activities.

Table 8.1 Percentage distribution of households owning or operating a farm or keeping livestock, and national estimates, by locality

Locality/ecological zone	Households owning or operating a farm or keeping livestock		Women's share of responsibility for agricultural activities
	Percentage	Estimated number	
Urban areas	33 %	390,000	34 %
Rural areas	88 %	1,900,000	35 %
Rural coastal	78 %	410,000	42 %
Rural forest	89 %	890,000	40 %
Rural savannah	94 %	590,000	21 %
Ghana	69 %	2,280,000	35 %

⁹ Some information on agricultural employment was given in Section 4, where it was estimated that there are 1.7 million men and 1.8 women in the usually active population with a main job in agriculture. In addition, an estimated 300,000 men and 300,000 women amongst those classified as economically active had a main job which was non-agricultural but a second job which was agricultural. A further 300,000 men and 200,000 women can be classified as usually economically inactive but with a main job in agriculture. In all, therefore, there are about 2.3 million men and 2.3 million women who have some involvement in agriculture. One million children aged 7 to 14 (600,000 boys and 400,000 girls) also engage in agricultural work sometime during the year.

Looking specifically at the national estimates for livestock, obtained by grossing up the sample figures, we note that about one and a half million households in Ghana own livestock. Table 8.2 provides a summary of livestock ownership in the country. Three-quarters of a million households raise goats, half a million households raise sheep, and more than a million households raise chickens. Much smaller numbers of households raise other poultry, cattle, pigs, draught animals (such as donkeys, horses and bullocks), and rabbits. In all, Ghanaian households look after about four million goats in the country, three million sheep, one million cattle, half a million pigs, 21 million chickens, and three million other poultry. The combined value of all these livestock is about 130 billion cedis; sales of livestock in the previous 12 months amounted to about 14 billion cedis, and purchases to about three billion cedis.

Table 8.2 Estimated number of households raising different livestock, the number of livestock, and the estimated value of livestock, sales and purchases

Type of livestock	Estimated values				
	Number of households raising	Number of livestock	Total value of livestock	Sales in the last 12 months	Purchases in the last 12 months
			million cedis	million cedis	million cedis
Draught animals	60,000	160,000	8900	900	300
Cattle (inc. cows)	150,000	1,090,000	44600	3300	500
Sheep	470,000	2,760,000	22000	2400	400
Goats	730,000	3,960,000	20600	2700	300
Pigs	110,000	550,000	5600	800	100
Rabbits	10,000	80,000	100	*	*
Chickens	1,300,000	21,300,000	22900	2800	1600
Other poultry	250,000	2,590,000	2500	700	*
Other	50,000	140,000	n.a.	100	*
Total	1,500,000	32,620,000	127200	13800	3100

Livestock owned by households are concentrated predominantly in the rural savannah (Table 8.3); for instance, the rural savannah has 80 percent of all draught animals and cattle, 60 percent of all pigs, and at least 40 percent of all sheep, goats and chickens. Most of the rest of the livestock are in the rural forest and rural coastal zones, but roughly 10 percent of all cattle, sheep, goats and chickens are owned by households living in urban areas. In the case of draught animals, some 200 million cedis was received in the previous year from renting out animals.

Table 8.3 Estimated distribution of livestock by locality

Type of livestock	Locality				Country
	Urban areas	Rural coastal	Rural forest	Rural savannah	
Draught animals	10,000	-	10,000	130,000	160,000
Cattle (inc. cows)	110,000	50,000	50,000	880,000	1,090,000
Sheep	340,000	310,000	870,000	1,240,000	2,760,000
Goats	470,000	490,000	1,190,000	1,800,000	3,960,000
Pigs	30,000	140,000	50,000	330,000	550,000
Rabbits	-	20,000	30,000	20,000	80,000
Chickens	3,280,000	1,870,000	7,130,000	9,020,000	21,300,000
Other poultry	200,000	120,000	300,000	1,980,000	2,590,000
Other	*	30,000	40,000	60,000	140,000
Total	4,440,000	3,040,000	9,670,000	15,470,000	32,620,000

Information was also collected on agricultural equipment owned by households. Although the numbers in the sample are rather small (and the sampling error of our estimates correspondingly large), we estimate that there are the following quantities of agricultural equipment in the country: about 7,000 tractors, with a current value of about 13 billion cedis; 8,000 ploughs, valued at two billion cedis; 6,000 trailers, valued at one billion cedis, 25,000 pieces of animal drawing equipment with a value of 600 million cedis; and 47,000 sprayers, with a value of two billion cedis. As expected, most of the sprayers were found in the rural forest area, while most of the other drawing equipment was found in the rural savannah.

8.2 Harvesting and disposal of crops

Staple grains and cash crops

Out of the estimated two million households engaged in harvesting staple grains and cash crops, as many as 1¼ million households harvest maize. Other major crops, in terms of the numbers of households involved, are groundnuts (470,000 households), beans/peas (440,000), cocoa and sorghum/millet/guinea corn (both about 380,000), and rice (220,000 households). Table 8.4 provides estimates of the number of households in each ecological zone who harvested different crops in the previous 12 months, and illustrates 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. The great majority of households growing rice, groundnuts and beans/peas, and virtually all the households growing sorghum/millet/guinea corn, are located in the savannah. The major crop, cocoa, is grown almost exclusively in the forest zone. The estimates for some of the smaller crops are subject to wide sampling error, because of the sample design. However, it is clear that most growing of cotton and tobacco takes place in the savannah, and most harvesting of sugar cane and coconuts takes place in the other two zones; coffee is grown mainly in the forest zone.

Table 8.4 Estimated number of households in each ecological zone harvesting various staple grains, field and cash crops in the previous 12 months

Crop	Estimated number of households			Ghana
	Ecological zone			
	Coastal	Forest	Savannah	
Cocoa	40,000	340,000	*	380,000
Maize	380,000	860,000	500,000	1,740,000
Groundnut/peanut	40,000	50,000	390,000	470,000
Rice	*	50,000	160,000	220,000
Beans/peas	50,000	60,000	330,000	440,000
Coconut	60,000	40,000	*	100,000
Sorghum/millet /guinea corn	-	*	380,000	380,000
Sugar cane	20,000	10,000	*	40,000
Coffee	*	10,000	*	10,000
Tobacco	-	-	20,000	20,000
Cotton	*	-	10,000	10,000
Wood	*	*	-	*
Other crops	10,000	10,000	*	20,000

Households which harvested crops were asked whether they sold any of the crop unprocessed in the previous 12 months (Table 8.5). As expected, almost everyone who harvested cocoa did sell some unprocessed. For the other three main crops (maize, groundnuts, and rice), between a half and two-thirds of the households reported selling part of their harvest in the previous 12 months.

The estimated total annual value of the harvest of staple grains and cash crops produced by Ghanaian households was about 162 billion cedis at March 1992 prices, while the value of sales was about 89 billion cedis. Cocoa and maize are the major cash crops in terms of both harvest and sales; cocoa harvested annually by households is valued at 43 billion cedis, and sales at 40 billion cedis, while the maize harvest is valued at 61 billion cedis annually and sales of maize at 27 billion cedis. These two crops thus account for 65 percent of the total harvest of staple grains and field and cash crops, and for 75 percent of all sales. Two other crops are important in terms of the value of their sales: groundnuts with annual sales of 8 billion cedis, and rice with sales of 7 billion cedis. A valuable crop of sorghum/ millet/guinea corn is produced, worth about 17 billion cedis, but only 10 percent of the crop is sold.

Table 8.5 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
thousand million cedis				
Cocoa	380,000	94 %	43.3	39.5
Maize	1,740,000	55 %	61.4	27.3
Groundnut/peanut	470,000	65 %	15.1	7.4
Rice	220,000	51 %	10.6	5.9
Beans/peas	440,000	39 %	7.3	2.5
Coconut	100,000	62 %	1.9	1.7
Sorghum/millet /guinea corn	380,000	15 %	17.2	1.7
Sugar cane	40,000	55 %	2.3	1.4
Coffee	10,000	80 %	0.7	0.6
Tobacco	20,000	46 %	0.3	0.2
Cotton	10,000	38 %	0.8	0.2
Wood	*	83 %	0.1	0.1
Other crops	20,000	64 %	0.6	0.5
Any/all crops	2,000,000	70 %	161.6	88.9

In trying to interpret the relative value of sales of crops in different ecological zones, it is worth bearing in mind that the forest zone contains many more people than either the coastal or savannah zones. If we consider only the rural population of each zone, then for every two rural dwellers in the coastal zone there are three rural dwellers in the savannah and four in the forest. In terms of households, there are about 520,000 households in the rural coastal zone, about 1.00 million households in the rural forest zone, and about 630,000 households in the rural savannah, making a total of 2.16 million rural households in Ghana.

Besides cocoa, other important cash crops in the forest zone are maize, and to a much smaller extent rice, sugar cane and coffee (Table 8.6). There is some sale of cocoa in the coastal zone, as defined for this survey; other coastal crops which are sold are maize and coconuts. In the savannah the major crops in terms of sales are maize and groundnuts; 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 less than half of the rural population of Ghana, accounts for over two-thirds of the total sales of staple grains and cash crops.

Table 8.6 Estimated annual value of harvested crops and sales by households of unprocessed staple grains, field and cash crops, by crop and ecological zone

Crop	Estimated annual value of harvest				Estimated annual value of sales			
	Ecological zone			Total	Ecological zone			Total
	Coastal	Forest	Savannah		Coastal	Forest	Savannah	
	(thousand million cedis)				(thousand million cedis)			
Cocoa	2.6	39.9	0.7	43.3	1.7	37.2	0.6	39.5
Maize	9.5	28.2	23.7	61.4	3.4	16.5	7.4	27.3
Groundnut/peanut	0.7	0.9	13.4	15.1	0.4	0.7	6.3	7.4
Rice	0.2	5.4	5.0	10.6	0.2	3.8	1.9	5.9
Beans/peas	0.7	0.9	5.7	7.3	0.2	0.6	1.7	2.5
Coconut	1.5	0.2	0.2	1.9	1.4	0.1	0.2	1.7
Sorghum/millet /guinea corn	-	*	17.1	17.2	-	*	1.7	1.7
Sugar cane	0.8	1.4	*	2.3	0.2	1.1	*	1.4
Coffee	*	0.6	*	0.7	-	0.5	*	0.6
Tobacco	-	-	0.3	0.3	-	-	0.2	0.2
Cotton	*	-	0.8	0.8	-	-	0.2	0.2
Wood	0.1	*	-	0.1	*	*	-	0.1
Other crops	0.1	0.4	0.1	0.6	*	0.4	0.1	0.5
Total	16.2	78.2	67.1	161.6	7.6	61.0	20.3	88.9

Roots, fruits, vegetables and other crops

Of the crops shown in Table 8.7, the ones involving the largest number of households are cassava (1.7 million households) and pepper (1.3 million households); these two crops are harvested extensively in all three ecological zones. Next in order come plantain, cocoyam, okra and yam; the growing of plantain and cocoyam occurs more often with households in the forest zone than with those in the other two zones, whilst the growing of okra and yam tends to be more common in both the forest and the savannah than in the coastal areas. Other major crops, in terms of involving a large number of households, are tomatoes (in all three zones) and oil palm (mainly in the coastal and forest zones).

Households were asked whether they had harvested and/or sold any of their crops in the two weeks prior to the interview (Table 8.8). A high proportion (two-thirds or more) of those growing oil palm, plantain, cassava, cocoyam 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 plantain (22% of those growing had sold some), followed by cola nuts, oil palm, cassava, cocoyam and bananas.

Since the survey was spread fairly evenly throughout the year in each part of the country, it is possible to gross up 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 shown in Table 8.8 is 399 billion cedis, at March 1992 prices. The major crops in terms of value are cassava (valued at 106 billion cedis), yams (74 billion cedis), plantains (58 billion cedis), and cocoyam (45 billion cedis); other valuable crops were tomatoes, oil palm and pepper.

Table 8.7 Estimated number of households in each ecological zone harvesting various root crops, fruits and vegetables other crops in the previous 12 months

Crop	Number of households			
	Ecological zone			Ghana
	Coastal	Forest	Savannah	
Avocado pear	30,000	240,000	10,000	280,000
Bananas	40,000	250,000	30,000	320,000
Cola nut	*	20,000	*	20,000
Mango	40,000	150,000	20,000	220,000
Oil palm	150,000	410,000	40,000	600,000
Oranges	40,000	180,000	10,000	230,000
Pawpaw	70,000	270,000	30,000	370,000
Plantains	190,000	780,000	80,000	1,050,000
Pineapple	70,000	140,000	10,000	220,000
Other fruit	*	10,000	*	10,000
Cassava	420,000	970,000	330,000	1,730,000
Cocoyam	140,000	740,000	90,000	980,000
Onion	40,000	120,000	40,000	200,000
Sweet potatoes/potatoes	20,000	20,000	20,000	50,000
Yam	80,000	530,000	290,000	900,000
Garden eggs/egg plant	130,000	290,000	70,000	490,000
Leafy vegetables	10,000	90,000	280,000	380,000
Okra	130,000	430,000	410,000	970,000
Pepper	260,000	680,000	330,000	1,270,000
Tomatoes	210,000	420,000	200,000	830,000
Other vegetables	*	50,000	70,000	110,000

Table 8.8 Estimated number of households harvesting various root crops, fruits and vegetables, percentage harvesting or selling in the previous two weeks, and estimated annual value of harvest and sales

Crop	Estimated number of households harvesting crop in last 12 months	Percentage of these households:		Est. annual value of:	
		harvesting in last two weeks	selling crop in last two weeks	total harvest	sales
(thousand million cedis)					
Avocado pear	280,000	28 %	4 %	1.0	0.4
Bananas	320,000	41 %	15 %	3.4	1.3
Cola nut	20,000	31 %	17 %	0.8	0.6
Mango	220,000	27 %	3 %	1.0	0.2
Oil palm	600,000	78 %	16 %	22.3	9.2
Oranges	230,000	29 %	4 %	1.8	0.8
Pawpaw	370,000	37 %	2 %	0.8	0.2
Plantains	1,050,000	76 %	22 %	58.2	16.2
Pineapple	220,000	48 %	7 %	3.4	0.5
Other fruit	10,000	33 %	0 %	0.1	-
Cassava	1,730,000	76 %	16 %	106.2	21.3
Cocoyam	980,000	71 %	15 %	45.2	11.7
Onion	200,000	29 %	10 %	8.2	13.5
Sweet potatoes/potatoes	50,000	34 %	3 %	0.4	0.1
Yam	900,000	44 %	8 %	73.7	13.6
Garden eggs/egg plant	490,000	51 %	9 %	8.0	4.7
Leafy vegetables	380,000	56 %	1 %	2.9	0.1
Okra	970,000	45 %	8 %	9.9	2.6
Pepper	1,270,000	66 %	8 %	19.1	6.0
Tomatoes	830,000	54 %	14 %	31.5	27.6
Other vegetables	110,000	86 %	1 %	1.2	*
Total				399.1	130.6

The total annual value of the sales of these crops is estimated to be about 131 billion cedis at March 1992 prices, with the same crops as just mentioned featuring prominently in sales.¹⁰ In the coastal zone, out of a total income of 28 billion from the sale of roots, vegetables and other crops, three-quarters comes from just three crops: tomatoes, cassava, and pepper (Table 8.9). The income base is rather wider in the forest zone, but 80 percent of the income from roots, vegetables and other crops comes from five crops: oil palm, plantain, cassava, cocoyam and tomatoes (but see the comment in the footnote). In the rural savannah just two crops, onions and yams, appear to account for two-thirds of all income from the sale of roots, vegetables and other crops, but the values for onions should be treated with caution, for the reasons stated in the next paragraph.

Table 8.9 Estimated annual value of the harvest and sales of root crops, fruit and vegetables, by ecological zone

Crop	Estimated annual value of harvest				Estimated annual value of sales			
	Ecological zone			Total	Ecological zone			Total
	Coastal	Forest	Savannah		Coastal	Forest	Savannah	
	(thousand million cedis)				(thousand million cedis)			
Avocado pear	0.1	0.9	-	1.0	*	0.4	-	0.4
Bananas	0.6	2.3	0.5	3.4	0.2	1.1	0.1	1.3
Cola nut	-	0.8	-	0.8	-	0.6	-	0.6
Mango	0.3	0.3	0.5	1.0	*	*	0.2	0.2
Oil palm	4.8	16.4	1.0	22.3	1.7	7.4	0.1	9.2
Oranges	0.6	1.1	*	1.8	0.5	0.4	*	0.8
Pawpaw	0.1	0.5	0.2	0.8	-	0.1	*	0.2
Plantains	8.3	47.1	2.7	58.2	1.8	13.2	1.1	16.2
Pineapple	0.8	2.4	0.1	3.4	0.1	0.5	*	0.5
Other fruit	-	0.1	-	0.1	-	-	-	-
Cassava	28.9	64.4	12.8	106.2	5.6	13.2	2.4	21.3
Cocoyam	5.1	35.6	4.6	45.2	1.1	8.4	2.2	11.7
Onion	0.3	1.7	6.2	8.2	*	1.2	12.3	13.5
Sweet potatoes/potatoes	0.1	0.1	0.2	0.4	*	-	0.1	0.1
Yam	1.5	31.3	40.8	73.7	0.2	3.2	10.2	13.6
Garden eggs/egg plant	1.9	5.4	0.7	8.0	0.9	3.6	0.2	2.6
Leafy vegetables	*	0.5	2.4	2.9	-	0.1	*	0.1
Okra	1.5	2.8	5.7	9.9	0.8	1.2	0.6	2.6
Pepper	5.3	7.0	6.8	19.1	3.4	1.5	1.0	6.0
Tomatoes	8.7	17.9	4.9	31.5	12.0	13.2	2.4	27.6
Other vegetables	*	0.2	1.1	1.2	*	-	*	*
Total	69.2	238.9	91.1	399.1	28.4	69.2	33.0	130.6

¹⁰ The estimates for sales given in Tables 8.8 and 8.9 are based on the raw values obtained from the questionnaire, before any cleaning of the data (eg. treatment of outliers and missing observations) was done for the construction of the income and expenditure aggregates; this was done so that the sales figures would be consistent with the harvest figures, which have not been cleaned for use in the income and expenditure aggregates. Usually, as was the case with the tables for staple grains, there is hardly any difference in the estimates obtained from the two sources, but in the case of three crops (tomatoes, oil palm, and garden eggs) the estimates do differ appreciably. Had the cleaned data set been used, the estimate of total sales of oil palm would have fallen from 9.2 to 7.0 billion cedis; within that figure, the sales in the forest zone would have fallen from 7.4 to 5.2 billion cedis. Similarly, sales of garden eggs/egg plant would have fallen from 4.7 to 2.6 billion cedis, with the forest component falling from 3.6 to 1.5 billion cedis. Finally, tomatoes would have been reduced from 27.6 to 16.1 billion cedis; sales in the coastal and forest zones would have fallen to 5.8 and 7.9 billion cedis respectively. Total sales would have been 115 billion cedis, instead of 131 billion cedis.

The high values for the harvest and sales of onions in the savannah result almost entirely from the situation found in one cluster surveyed in the Upper East, where all ten households surveyed reported that they had harvested or sold onions in the two weeks prior to the survey; this one cluster accounted for two-thirds of the total harvest of onions in the savannah, and for almost the entire sales of onions in the savannah. A more realistic estimate of the harvest and sales of onions in the savannah would probably be considerably lower than the values shown in the table.

So far we have considered only that part of the harvest which is sold directly by the household in unprocessed form. For some crops, some of the remaining harvest will be processed by the household, and 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 products is discussed below in Section 8.6, while the home consumption of agricultural produce is dealt with in Section 8.7.

8.3 Seasonal patterns

Where agricultural households grew any of the six crops (maize, rice, cassava, yam, plantain, and sorghum/millet/guinea corn) they were asked to give information about the seasonal characteristics of each crop which they grew; 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 8.1 and 8.2 show, for those households which grow each crop, the percentage of households harvesting, selling, or buying the crop during each month of the year. Although for some crops there were slight variations between the ecological zones in the timing of each activity, the general pattern is fairly clear.

Cereal crops (maize, rice, and sorghum/millet/guinea corn) display marked seasonal variations in the pattern of harvesting. The great majority of maize growing households harvest their crop during the three month period July/August/September; most of the rice crop is harvested during the three months September/October/November; and most of the crop of sorghum/millet/guinea corn is harvested during the three months October/November/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 harvesting building up to a peak around the end of the year. Cassava is the most consistent crop in terms of harvesting pattern, with harvesting being reported every month of the year by about a third of cassava growing households.

The pattern of sales also varies for different crops. In the case of rice and sorghum/millet/guinea corn, the selling of crops follows on within a month or two of the harvest. Sales of plantain and yam exactly mirror the harvesting pattern, with peak selling occurring in the month of peak harvesting. Sales of maize increase only slightly following the harvest. Cassava is the only one of the six crops where there is no seasonal pattern in sales; in every month of the year about a fifth of the households growing cassava report a sale.

One might have expected that the buying of a crop for home consumption by households which grew that crop would be most likely to occur in the months immediately preceding the harvest, but this only seems to be true in the case of rice and sorghum/millet/guinea corn, where the main months for buying the crop for home consumption are March/April/May/June. The other four crops do not display any strong seasonal trends in the pattern of buying for home consumption.

Figure 8.1 Seasonal pattern of harvesting, selling and buying various cereal crops, amongst those households which grow that crop

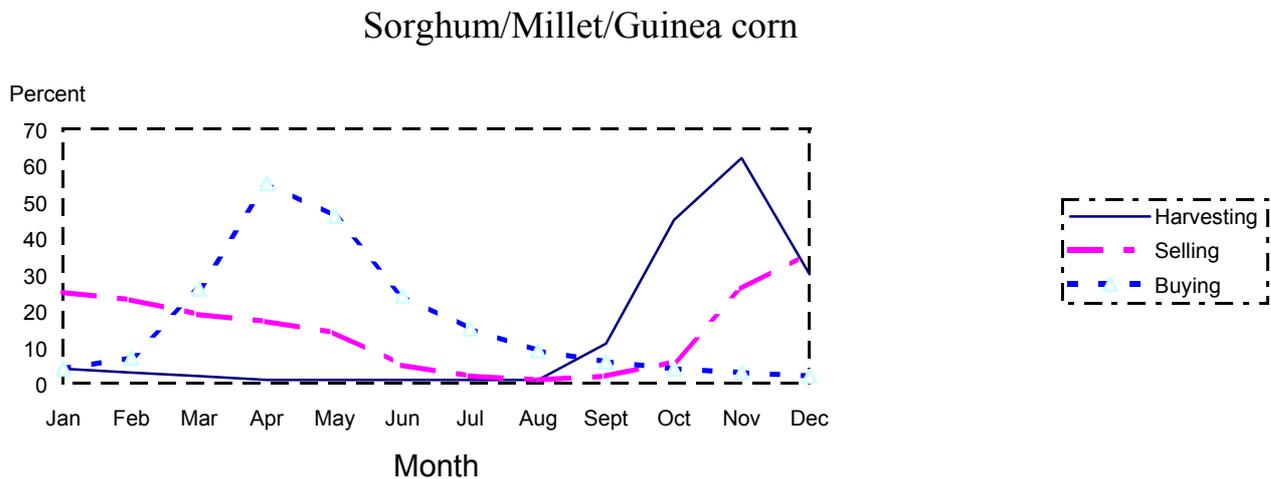
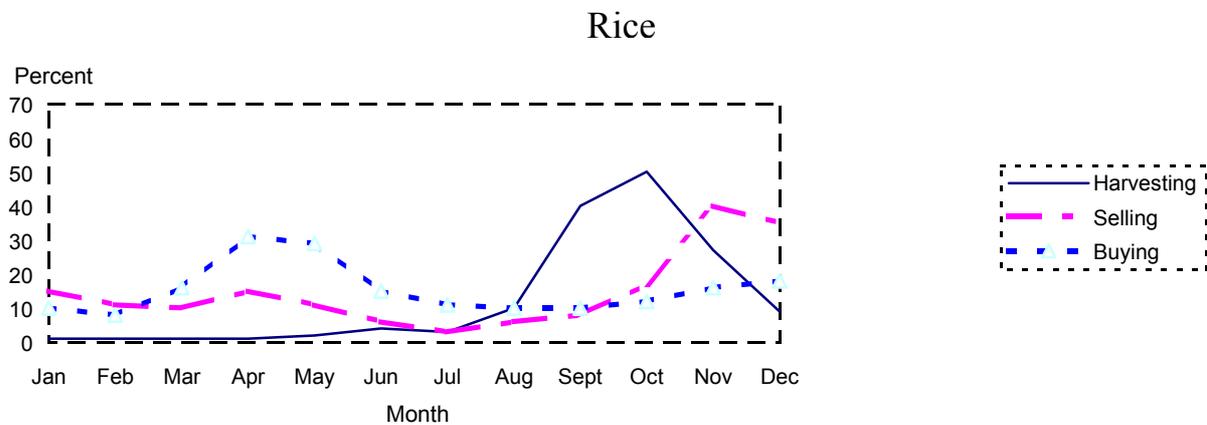
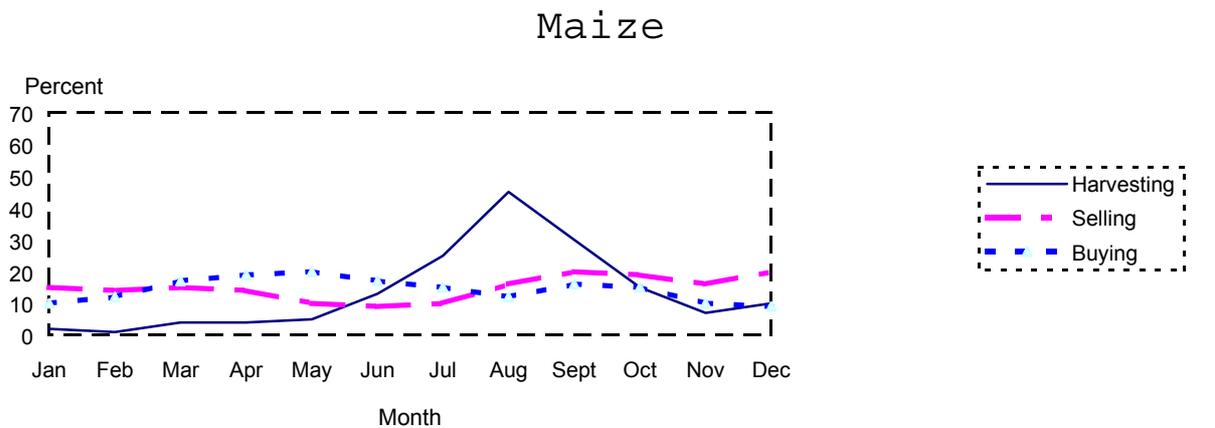
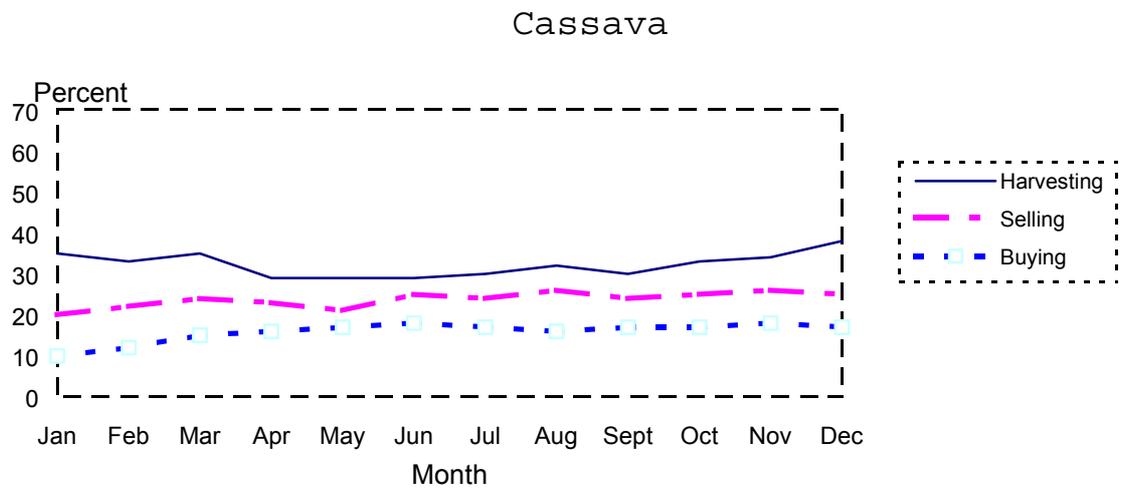
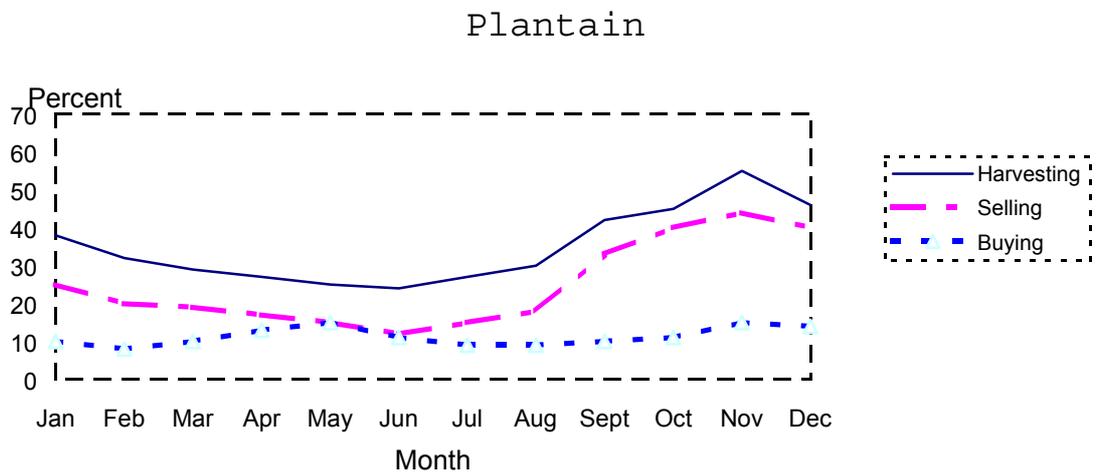
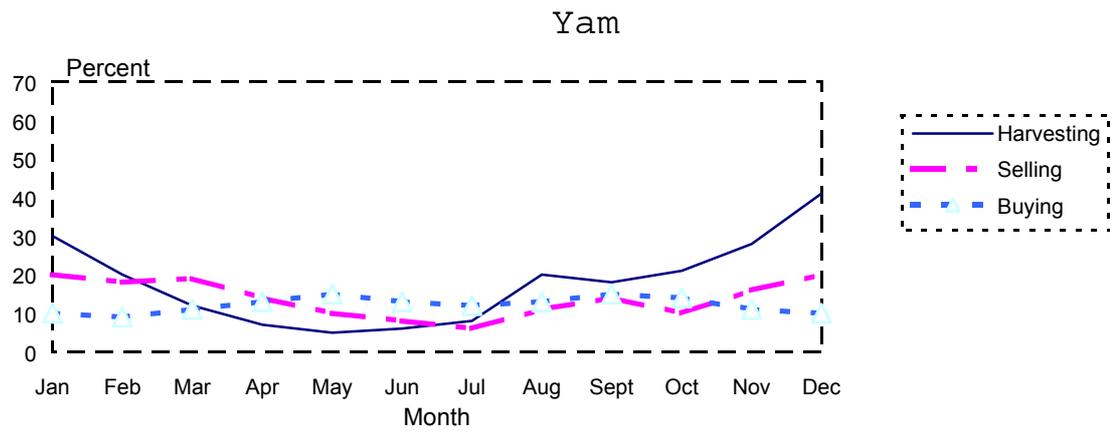


Figure 8.2 Seasonal pattern of harvesting, selling and buying other crops, amongst those households which grow that crop



8.4 Other agricultural income

Many households derive some income in cash or kind from household sales of some other types of agricultural produce. Table 8.10 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 10,000, and estimates of sales to the nearest 100 million cedis, to indicate that they are subject to fairly large margins of sampling error. The estimates for two items, milk and other dairy products, have not been shown, since so few households sell this type of produce.

Since information on these sales was only sought from those households which owned or operated a farm or kept livestock, any sales by non-agricultural households will be excluded; this deficiency in the data is likely to result in a substantial underestimate of the sales derived from fishing, particularly for coastal areas, and some of the other estimates will also be lower than they should be, if many non-agricultural households engage in these activities.

Table 8.10 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 (thousand million cedis)
Hunting (including snails)	140,000	1.3
Fishing (including crabs)	40,000 ¹	4.0 ¹
Honey	20,000	0.1
Palm wine/akpeteshie etc.	130,000	6.1
Fruit/berries etc.	140,000	0.7
Eggs	130,000	1.1
Hides, wool, and skins	30,000	0.1
Mushrooms	60,000	0.2
Total		13.6

¹ Note: The estimates of number of households getting income from the sale of fish, and the value of the sales of fish, are likely to be substantially underestimated, for the reasons described in the text.

The total annual value of sales of agricultural produce by agricultural households is about 14 billion cedis; a half of all sales are by households in the rural forest zone, and there are also substantial sales in the rural savannah. Most of this agricultural income comes from the sale of palm wine/akpeteshie, pito, mmedaa, and similar drinks (6 billion cedis) and from the sale of fish (at least 4 billion cedis). Sales of produce from hunting (including snail collection) and the sale of eggs each brings in a further one billion cedis, and sales of fruit/berries etc. rather less than one billion cedis. Relatively small amounts are received from sales of other agricultural produce, such as mushrooms, honey, hides, wool and skins. As one would expect, most of the sales are made by rural households; the only exception is eggs, where most of the income is received by urban households.

8.5 Agricultural inputs

Agricultural households were asked about various costs involved in producing crops and in raising livestock. Table 8.11 provides a summary of the results, grossed up to the national level. Of the 2.1 million agricultural households which have crops, more than half used hired labour during the previous 12 months for work on their crops, and over half spent money on hand tools; a third of all agricultural households spent money on seeds. In all, a total of about 41 billion cedis was spent on crop inputs in the previous 12 months. Hired labour (22 billion cedis) represented half of this total cost; other important items, in terms of cost, were hand tools (3½ billion cedis being spent on locally made hand tools, and one billion cedis on imported hand tools), inorganic fertilizer and purchased seeds (each about three billion cedis) and insecticides and transport of crops (each about two billion cedis).

About half of the households who used fertilizers, insecticides, or herbicides, obtained these items from the Ministry of Agriculture. Most of the rest obtained their supplies of these items from the private sector, but a few obtained them from cooperatives, NGOs, or other sources. Purchased seeds and seedlings came mostly from the private sector. Households rarely reported receiving items on credit.

Table 8.11 Estimated number of households purchasing various crop and livestock inputs, amount spent, sources of supply, and percentage of households reporting items sometimes unavailable

	Estimated no. of households purchasing in last 12 months	Amount spent per year (cash & kind)	Percent obtaining item from:		Percent reporting item sometimes unavailable
			Private sector	Min. of Agric	
		(million cedis)			
<u>Crop inputs</u>		41400			
Fertilizer (inorganic)	270,000	3000	49%	42%	24%
Organic fertilizer	110,000	900	55%	41%	15%
Insecticides	260,000	2300	36%	58%	29%
Herbicides	30,000	300	51%	49%	36%
Storage of crops	90,000	300			
Purchased seeds, etc.	720,000	2700	86%	8%	15%
Irrigation	10,000	200			
Bags, containers, string	540,000	1000	88%	2%	13%
Petrol/diesel/oil	90,000	800			29%
Spare parts	10,000	400	87%	13%	13%
Hired labour	1,390,000	21900			
Transport of crops	160,000	1700			
Renting animals	50,000	300	95%	2%	0%
Renting equipment	40,000	600	96%	2%	26%
Hand tools (local)	1,580,000	3500			10%
Hand tools (imported)	430,000	1000			5%
Repairs/maintenance	20,000	100			
Other crop costs	50,000	400			
<u>Livestock inputs</u>		4300			
Animal feed (inc. salt)	110,000	1200	84%	5%	16%
Veterinary services	210,000	1000	18%	76%	18%
Paid labour for herding	20,000	600			
Maintenance of pens, stables	130,000	500			
Transport of animal feed	20,000	500			
Commission on sale of animals	70,000	100			
Compensation for damage caused by animals	130,000	400			
Other livestock costs	10,000	*			

Agricultural households were asked if items were sometimes unobtainable. Around 30 percent of those purchasing insecticides, herbicides, petrol/diesel/oil, and agricultural equipment reported that these items had at times during the year been unobtainable.

In respect of livestock inputs, about four billion cedis was spent in the previous 12 months, with the major items in terms of cost being animal feed and veterinary services (each accounting for one billion cedis). Animal feed is normally obtained from the private sector, while veterinary services are normally supplied by the Ministry of Agriculture.

8.6 Home processing of agricultural produce

Households were asked for details of any processing of crops or smoking of fish (Table 8.12). Unlike the case with the previous section, this section included both agricultural and non-agricultural households, and so the estimates in respect of fish processing should be more complete. In all, just over a million households in the country, representing about a third of all households, are involved in crop processing or the smoking of fish. As expected, very few urban households are engaged in processing, but almost a half of all rural households are engaged; in fact, in the rural savannah the proportion engaged in processing is as high as three-quarters. In each of the three main ecological zones it is women who have the prime responsibility for the processing of agricultural produce or fish; in the country as a whole, about 1.4 million women, but only 160,000 men, have some responsibility for the processing of agricultural produce or fish.

Table 8.12 Distribution of households processing crops or fish for sale or use by the household, by locality

Locality/ecological zone	Households processing crops or fish for sale or use by the household		Women's share of responsibility for processing
	Percentage	Estimated number	
Urban areas	5 %	60,000	91 %
Rural areas	47 %	1,010,000	89 %
Rural coastal	29 %	150,000	81 %
Rural forest	37 %	380,000	89 %
Rural savannah	76 %	480,000	93 %
Ghana	32 %	1,070,000	90 %

The main activities (shown in Table 8.13) are the processing of maize flour (engaged in by more than half a million households, spread across all three main ecological zones), the processing of flour from other grains (involving a quarter of a million households, almost exclusively in the rural savannah), and the processing of cassava flour (involving a quarter of a million households, living mainly in the rural savannah and rural forest zones). Of the other activities, the processing of shelled groundnuts and rice husking and polishing are done almost entirely by households in the rural savannah, while the preparation of gari is done in each of the three rural localities. The estimates given here for the preparation of home-brewed drink are likely to be underestimates of the true figures, since this item had already been covered in an earlier part of the questionnaire (see Table 8.10). Three categories of produce obtained through home processing (oil from nuts, dried fruits/vegetables, and shea or groundnut butter) were not specifically covered in GLSS3, though some of these activities may have been captured in the 'other' category.

Virtually every household which 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 with our survey team. Total labour costs (in cash and kind, and including the time spent on these activities by the household members themselves) are estimated at 10 billion cedis annually, while other costs are 5 billion cedis. In 90 percent of cases the agricultural item being processed had been produced originally by the households themselves, but in a few instances (especially for home-brewed drink and cassava flour) the raw materials were sometimes purchased or (in the case of fish) obtained from other sources.

Table 8.13 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 (cash & kind)	Estimated annual value of other costs	Percent selling the item in the last 2 wks	Estimated annual value of sales
		(million cedis)	(million cedis)		(million cedis)
Maize flour	640,000	2500	1300	2 %	900
Flour from other grains	290,000	2100	1700	1 %	500
Husked/polished rice	80,000	200	100	2 %	200
Home-brewed drink	20,000	200	*	80 %	600
Cassava flour	250,000	900	300	4 %	200
Shelled groundnuts	150,000	600	100	5 %	200
Processed fish	30,000	700	200	87 %	6300
Gari	100,000	1400	300	80 %	6800
Other items	280,000	1700	1000	33 %	5900
Any/all items	1,070,000	10300	5000		21600

Total annual sales of home-processed agricultural items and smoked fish amounts to about 22 billion cedis. Home-brewed drink, gari and smoked fish are produced mainly for sale, and the great majority of households involved in processing these items had actually sold some in the previous two weeks. In contrast, very few of those who processed flour, rice or shelled groundnuts reported having sold any in the previous two weeks. This contrast is also borne out by the figures for sales, where home-brewed drink, gari and smoked fish are the only items where annual revenues from sales exceed the labour and other costs involved in the processing.

8.7 Home consumption of own produce

For many households, particularly in rural areas, a large proportion of the food consumed comes from their own produce. GLSS3 sought detailed information on all home-produced food which was consumed by the household itself. On each visit by the interviewer, the household was asked to say how much of each home-produced item they had consumed since the interviewer's previous visit. In fact, overall, about two-thirds of all households reported some consumption of home-produced food during the survey period; the proportion of households reporting any home consumption was 31 percent in urban areas and 87 percent in rural areas, but these figures are not directly comparable, because the reference period was 30 days for urban households and only 4 days for rural households.

Generally, the approach used in GLSS3 for measuring home consumption was very different from that used in the earlier rounds of the GLSS¹¹. 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, around March 1992, each household in Ghana consumed a quantity of home-produced food which was valued at about 138,000 cedis annually, at the prices prevailing in March 1992 (Table 8.14). This works out at about 31,000 cedis annually on a per capita basis, or 457 billion cedis if grossed up to the national level.

Roots and tubers account for over half of the total value of home consumption (54%). The other food subgroups which feature prominently in home consumption are cereals and cereal products (17%), vegetables (9%), and pulses and nuts (9%). Appendix Table A8.1 shows the detailed breakdown of home consumption of different food items, while Appendix Table A8.2 shows the percentage of households in different localities who reported that they had consumed each home-produced item in the previous 12 months.

Table 8.14 Value of average annual household and per capita consumption of home-produced food, and estimate of total national value, by food subgroup

GROUP Subgroup	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)	(thousand million cedis)	%
1. FOOD & BEVERAGES	137,180	30,604	456	99.7
Cereals and cereal products	24,030	5,361	80	17.5
Roots and tubers	73,878	16,482	245	53.7
Pulses and nuts	12,117	2,703	40	8.8
Vegetables	12,244	2,732	41	8.9
Fruit	3,375	753	11	2.5
Oils and animal fats	1,238	276	4	0.9
Meat	3,070	685	10	2.2
Poultry and poultry products	5,828	1,300	19	4.2
Fish	1,284	287	4	0.9
Milk and milk products	100	22	*	0.1
Non-alcoholic beverages	16	3	*	*
2. ALCOHOL & TOBACCO	377	84	1	0.3
Alcoholic drinks	377	84	1	0.3
ALL HOME CONSUMPTION	137,557	30,688	457	100.0
<i>Sample size</i>	4552	20403		

¹¹ The differences between GLSS3, on the one hand, and GLSS1 and GLSS2 on the other, in the treatment of home consumption are discussed in *Measuring household income and expenditure in the third round of the Ghana Living Standards Survey (GLSS3), 1991/92: a methodological guide*, to be published by the GSS.

As one would expect, most home consumption takes place in rural areas; on average, the value of home produced food consumed annually by rural households was about 186,000 cedis around March 1992, while the corresponding figure for urban households was only 47,000 cedis (Table 8.15). Overall, urban households, which contain a third of the total population, consume only 12 percent of the total home-produced food consumed by households.

The contrast in the pattern of home consumption, between the coastal and forest areas on the one hand and the savannah area on the other, are illustrated in Table 8.16. Consumption of home-produced food is very much more important in the savannah than it is further south. The average annual value of home-produced food consumed by households in the savannah is 237,000 cedis; the equivalent figure for the forest zone is 139,000 cedis, and for the coastal zone is 70,000 cedis. In the coastal and forest areas, roots and tubers account for two-thirds of the value of all home-produced food consumed by households, while cereals and cereal products account for no more than 10 percent. In the savannah zone, on the other hand, there is an even balance between these two food subgroups, with each one accounting for about a third of total home consumption. Pulses and nuts, and vegetables, are also much more important elements in home consumption for households in the savannah, than for households further south.

Appendix Tables A8.3 and A8.4 provide a regional breakdown of household and per capita home consumption at the subgroup level, while Table A8.5 provides estimates of the total annual value of the consumption of home produce for each food subgroup in each region. Table 8.17 shows, for each region, the percentage distribution of the value of home-produced food across food subgroups. This table highlights the differences in home consumption between the south and the north of the country; in particular, in the three most northerly regions (Northern, Upper West and Upper East), 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, while households in the north also make greater use of pulses and nuts, and vegetables, taken from their own production.

Table 8.15 Value of average annual household and per capita consumption of home produced food, and estimate of total national value, for urban and rural households, by food subgroup

GROUP Subgroup	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)	(thousand million cedis)	%	(cedis)	(cedis)	(thousand million cedis)	%
1. FOOD & BEVERAGES	47,050	11,027	55	99.8	185,657	40,377	401	99.7
Cereals and cereal products	5,462	1,280	6	11.6	34,016	7,398	74	18.3
Roots and tubers	31,594	7,404	37	67.0	96,620	21,014	209	51.9
Pulses and nuts	3,091	724	4	6.6	16,972	3,691	37	9.1
Vegetables	2,892	678	3	6.1	17,274	3,757	37	9.3
Fruit	2,256	529	3	4.8	3,977	865	9	2.1
Oils and animal fats	224	53	*	0.5	1,784	388	4	1.0
Meat	391	92	*	0.8	4,512	981	10	2.4
Poultry and poultry products	1,051	246	1	2.2	8,397	1,826	18	4.5
Fish	89	21	*	0.2	1,928	419	4	1.0
Milk and milk products	-	-	-	-	153	33	*	0.1
Non-alcoholic beverages	-	-	-	-	24	5	*	*
2. ALCOHOL & TOBACCO	74	17	*	0.2	539	117	1	0.3
Alcoholic drinks	74	17	*	0.2	539	117	1	0.3
ALL HOME CONSUMPTION	47,124	11,044	55	100.0	186,196	40,494	402	100.0
<i>Sample size</i>	1592	6793			2960	13610		

Table 8.16 Value of average annual household and per capita consumption of home produced food, and estimate of total national value, by ecological zone and food subgroup

GROUP Subgroup	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	70,111	138,923	236,028	137,180	17,991	31,412	43,109	30,604	99.8	99.8	99.6	99.7
Cereals and cereal products	7,215	8,439	76,810	24,030	1,851	1,908	14,029	5,361	10.3	6.1	32.4	17.5
Roots and tubers	47,478	95,721	75,826	73,878	12,183	21,643	13,849	16,482	67.6	68.8	32.0	53.7
Pulses and nuts	4,028	6,372	34,441	12,117	1,034	1,441	6,290	2,703	5.7	4.6	14.5	8.8
Vegetables	4,613	10,706	26,527	12,244	1,184	2,421	4,845	2,732	6.6	7.7	11.2	8.9
Fruit	1,914	4,457	3,704	3,375	491	1,008	677	753	2.7	3.2	1.6	2.5
Oils and animal fats	550	2,159	675	1,238	141	488	123	276	0.8	1.6	0.3	0.9
Meat	920	4,110	4,523	3,070	236	929	826	685	1.3	3.0	1.9	2.2
Poultry and poultry products	2,174	5,726	11,557	5,828	558	1,295	2,111	1,300	3.1	4.1	4.9	4.2
Fish	1,211	1,233	1,485	1,284	311	279	271	287	1.7	0.9	0.6	0.9
Milk and milk products	8	-	414	100	2	-	76	22	*	-	0.2	0.1
Non-alcoholic beverages	-	-	66	16	-	-	12	3	-	-	*	*
2. ALCOHOL & TOBACCO	161	231	959	377	41	52	175	84	0.2	0.2	0.4	0.3
Alcoholic drinks	161	231	959	377	41	52	175	84	0.2	0.2	0.4	0.3
ALL HOME CONSUMPTION	70,272	139,154	236,987	137,557	18,032	31,464	43,284	30,688	100.0	100.0	100.0	100.0
<i>Sample size</i>	<i>1621</i>	<i>1864</i>	<i>1067</i>	<i>4552</i>	<i>6317</i>	<i>8244</i>	<i>5842</i>	<i>20403</i>				

Table 8.17 Percentage distribution of consumption of own produce across food subgroups, by region

	Percentages										
	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
	%	%	%	%	%	%	%	%	%	%	%
Cereals & cereal products	2.7	5.5	13.1	6.6	17.0	6.2	8.0	38.4	38.4	54.6	17.5
Roots & tubers	75.9	75.1	39.6	65.4	49.6	71.2	65.6	31.4	10.3	*	53.7
Pulses & nuts	3.7	5.7	2.8	4.6	6.3	4.4	5.5	12.2	22.8	25.6	8.8
Vegetables	8.4	6.2	12.8	4.9	9.4	7.5	9.5	12.9	13.1	12.0	8.9
Fruit	3.6	2.7	2.2	2.7	2.8	3.0	1.6	0.1	7.4	0.6	2.5
Oils & animal fats	1.2	0.7	-	1.4	1.9	2.0	0.2	-	-	-	0.9
Meat	1.2	1.7	0.5	4.0	4.1	0.9	3.5	0.7	0.7	1.3	2.2
Poultry & poultry products	3.1	2.2	7.0	3.3	6.0	4.6	5.0	3.7	4.5	5.6	4.2
Fish	0.1	0.3	22.0	1.7	2.4	-	0.7	0.3	0.2	-	0.9
Milk & milk products	-	-	-	-	*	-	-	0.4	0.3	0.1	0.1
Non-alcoholic beverages	-	-	-	-	-	-	0.1	-	-	-	*
Alcoholic drinks	0.2	*	-	-	0.5	0.2	0.3	*	2.2	0.1	0.3
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	116,577	134,985	8,998	165,080	161,576	110,925	169,192	205,587	289,973	327,508	137,557
Average per capita consumption	27,421	33,058	2,396	39,318	36,319	25,278	32,062	36,088	50,058	55,068	30,688
Total consumption (billions)	41	51	4	80	49	59	56	51	23	45	457
<i>Sample size</i>	<i>485</i>	<i>515</i>	<i>638</i>	<i>662</i>	<i>419</i>	<i>734</i>	<i>455</i>	<i>343</i>	<i>111</i>	<i>190</i>	<i>4552</i>
<i>Households reporting consumption</i>	<i>356</i>	<i>374</i>	<i>65</i>	<i>482</i>	<i>314</i>	<i>504</i>	<i>402</i>	<i>286</i>	<i>99</i>	<i>188</i>	<i>3070</i>

9. HOUSEHOLD EXPENDITURE

9.1 Cash expenditure on major expenditure groups

A major part of GLSS3 involved the collection of very detailed information on household cash expenditure from every household included in the survey. Details of food expenditure were collected at two-day intervals over a period of 14 days in the case of rural households, and at three-day intervals over a period of 30 days in the case of urban households. Other items purchased frequently were covered in the same way, but for less frequently purchased items the reference period was three months or 12 months, depending on the household's frequency of purchase. All expenditure values were subsequently multiplied up to give annual estimates.

Around March 1992, Ghanaian households were spending on average almost 550,000 cedis a year, at March 1992 prices (Table 9.1). This is equivalent to a per capita expenditure of about 122,000 cedis for every man, woman and child in Ghana. In national terms, total cash expenditure was about 1800 billion cedis. Just over half of this cash expenditure (51%) went on food and beverages. Clothing and footwear, and housing and utilities, both accounted for 9 percent of total cash expenditure. The next most important expenditure groups, in terms of amount spent, were household goods, operations and services (accounting for 7% of all cash expenditure), and transport and communications (6%).

Table 9.1 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 total annual cash expenditure (thousand million cedis)	Percent distribution (%)
Food & beverages	276,511	61,691	919	50.6
Alcohol & tobacco	18,948	4,227	63	3.5
Clothing & footwear	51,107	11,402	170	9.3
Housing & utilities	48,652	10,854	162	8.9
Household goods, operations & services	38,924	8,684	129	7.1
Medical care & health expenses	22,691	5,062	75	4.2
Transport & communications	34,501	7,697	115	6.3
Recreation & education	26,057	5,813	87	4.8
Miscellaneous goods & services	29,397	6,559	98	5.4
Total	546,788	121,991	1817	100.0

As expected, cash expenditure is very much higher in urban areas than in rural areas; average household cash expenditure was 726,000 cedis per annum in urban areas, compared with 450,000 cedis per annum in rural areas (Table 9.2). When we allow for the fact that rural households tend to be larger than urban households, the differences are even more marked; average cash expenditure was 170,000 cedis per person per year in urban areas, but only 98,000 cedis in rural areas (Table 9.3).

In percentage terms, rural households spend proportionately more on the following expenditure groups: food and beverages; clothing and footwear; household goods, operation and services; medical care and health expenses; and much more on alcohol and tobacco. In contrast, rural households spend proportionately less on: housing and utilities; transport and communications; recreation and education; and much less on miscellaneous goods and services.

Table 9.2 Mean annual household cash expenditure by locality and expenditure group

Expenditure group	Mean annual household cash exp.			Percentage distribution		
	Urban	Rural	Country	Urban	Rural	Country
	¢	¢	¢	%	%	%
Food & beverages	353,833	234,925	276,511	48.7	52.2	50.6
Alcohol & tobacco	13,852	21,688	18,948	1.9	4.8	3.5
Clothing & footwear	64,502	43,903	51,107	8.9	9.7	9.3
Housing & utilities	73,659	35,201	48,652	10.1	7.8	8.9
Household goods, operation & services	47,947	34,071	38,924	6.6	7.6	7.1
Medical care & health expenses	23,890	22,046	22,691	3.3	4.9	4.2
Transport & communications	47,704	27,399	34,501	6.6	6.1	6.3
Recreation & education	41,015	18,012	26,057	5.6	4.0	4.8
Miscellaneous goods & services	59,704	13,097	29,397	8.2	2.9	5.4
All groups	726,106	450,342	546,788	100.0	100.0	100.0
Sample size	1592	2960	4552			

Grossing up the survey data to get national estimates (Table 9.3), we find that while urban areas account for only a third of the total population, they account for 46 percent of total annual cash expenditure (844 billion cedis at March 1992 prices, as against 973 billion cedis spent by residents in rural areas). Rural areas' share of total cash expenditure in each expenditure group is highest for alcohol and tobacco (75%) and medical care and health expenses (64%), and lowest for housing and utilities (47%), recreation and education (45%), and miscellaneous goods and services (29%).

Table 9.4 illustrates how per capita cash expenditure varies across quintile groups. There is great variation in the pattern of expenditure between the different quintile groups. Total cash expenditure per head in the highest quintile group is more than eight times that in the lowest quintile group. For five expenditure groups (food and beverages, alcohol and tobacco, clothing and footwear, housing and utilities, and medical care and services), households in the highest quintile group spend six to seven times as much per capita as households in the bottom quintile group; the corresponding ratios for other expenditure groups are nine times as much for household goods, operation and services, and for recreation and education, but 24 times as much for transport and communications, and 36 times as much for miscellaneous goods and services. Looking at the percentage distributions for the five quintile groups, the major contrast is seen to be between the highest quintile group, on the one hand, and the other four quintile groups. A fifth of total cash expenditure among the high-spending households goes on transport and communications and on miscellaneous goods and services, which is a much higher proportion than amongst the lower-spending households; this higher spending is counterbalanced mainly by relatively lower expenditure on food and beverages.

Further tables on cash expenditure are included in the Appendix 6. These tables are given on a household, per capita and national basis, and show the distribution of cash expenditure across the expenditure groups, classified by region (Tables A9.1 - A9.4), and by different breakdowns of locality and ecological zone: Accra/other urban/rural (Tables A9.5 - A9.7), Accra/other urban/semi-urban/small rural (Tables A9.8 - A9.10), Accra/other urban/rural coastal/rural forest/rural savannah (Tables A9.11 - A9.13), and coastal/forest/savannah (Tables A9.14 - A9.16). Also included in the appendix are detailed tables for each of five localities (Accra/other urban/rural coastal/rural forest/rural savannah) and for Ghana, showing the distribution of cash expenditure for each quintile group, where the quintile groups are those formed at the national level (Tables A9.17 - A9.28).

Table 9.3 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 exp.			Rural share of total cash expenditure
	Urban	Rural	Country	Urban	Rural	Country	
	¢	¢	¢	(thousand million cedis)			
Food & beverages	82,924	51,093	61,691	411	508	919	55 %
Alcohol & tobacco	3,246	4,717	4,227	16	47	63	75 %
Clothing & footwear	15,117	9,548	11,402	75	95	170	56 %
Housing & utilities	17,263	7,656	10,854	86	76	162	47 %
Household goods, operation & services	11,237	7,410	8,684	56	74	129	57 %
Medical care & health expenses	5,599	4,795	5,062	28	48	75	64 %
Transport & communications	11,180	5,959	7,697	55	59	115	51 %
Recreation & education	9,612	3,917	5,813	48	39	87	45 %
Miscellaneous goods & services	13,992	2,849	6,559	69	28	98	29 %
All groups	170,169	97,943	121,991	844	973	1817	54 %
Sample size	6793	13610	20403				

Table 9.4 Mean annual per capita cash expenditure, by quintile and expenditure group: Ghana

Ghana	Quintile group					Country	Quintile group					Country
	1	2	3	4	5		1	2	3	4	5	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
<u>Expenditure group</u>												
Food & beverages	24,111	42,055	61,003	92,158	166,116	61,691	53.3	53.6	53.2	53.0	44.6	50.6
Alcohol & tobacco	1,971	3,005	3,505	5,711	12,574	4,227	4.4	3.8	3.1	3.3	3.4	3.5
Clothing & footwear	4,725	8,023	11,266	15,728	31,499	11,402	10.4	10.2	9.8	9.1	8.5	9.3
Housing & utilities	5,022	7,146	10,256	14,716	31,058	10,854	11.1	9.1	8.9	8.5	8.3	8.9
Household goods, operation & services	3,087	5,527	7,753	11,946	28,586	8,684	6.8	7.0	6.8	6.9	7.7	7.1
Medical care & health expenses	1,978	3,410	4,865	7,283	14,476	5,062	4.4	4.3	4.2	4.2	3.9	4.1
Transport & communications	1,575	3,360	5,488	9,091	37,568	7,697	3.5	4.3	4.8	5.2	10.1	6.3
Recreation & education	1,853	3,791	5,861	8,859	16,728	5,813	4.1	4.8	5.1	5.1	4.5	4.8
Miscellaneous goods & services	934	2,201	4,696	8,287	33,810	6,559	2.1	2.8	4.1	4.8	9.1	5.4
All groups	45,256	78,518	114,693	173,779	372,415	121,989	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	5824	4885	4271	3361	2062	20403						

Many interesting contrasts can be seen from the detailed expenditure tables given in Appendix 6. We can see, for instance, the relatively consistent level of average per capita cash expenditure across different regions, though with much higher levels observed in Greater Accra and in Ashanti, and with a much lower level in the Upper West region (Table A9.3). The pattern of cash expenditure in Accra itself is not very different from that in other urban areas, but average per capita expenditure is about a third higher in Accra (Tables A9.5 and A9.6). Similarly, the pattern of cash expenditure in semi-urban areas (those with a 1984 population of at least 1500 but less than 5000 people) is little different from that in small rural areas (those with a 1984 population of less than 1500), but average per capita expenditure is about a third higher (Tables A9.8 and A9.9).

The variations across quintile groups which are shown in Table 9.4 (and duplicated in Table A9.28) are not always repeated when one looks at the expenditure patterns in different localities (Tables A9.18, A9.20, A9.22, A9.24 and A9.26). Miscellaneous goods and services (which includes items such as personal care goods and services, and financial services) is the only expenditure group where there is consistent pattern in all parts of the country, with its share of total cash expenditure rising as one moves up the quintile groups. Transport and communications is another group where the pattern is fairly consistent in most parts of the country; higher spending households tend to spend a greater share of their total cash expenditure on transport and communications than do poorer households, but this does not hold true in the rural savannah. The other expenditure groups show conflicting patterns across quintile groups, or else the percentage shares rise across quintile groups in some parts of the country but fall in others.

9.2 Cash expenditure at the subgroup and item level

In the previous section the description was in terms of expenditure at the group level. In this section we look at cash expenditure in greater detail. Table 9.5 shows a similar breakdown of expenditure to that given in Table 9.1, but with expenditure given at the subgroup level. In the food group, the major items of expenditure are fish (which accounts for 11% of total cash expenditure), cereals and cereal products (8%), roots and tubers (7%), prepared meals (5%), and vegetables (5%). In other groups, important subgroups of expenditure are fuel and power (5% of total cash expenditure), and clothing materials, non-durable household goods and purchased fares (each 4%).

Cash expenditure at the most detailed item level is given in Appendix Table A9.29; the table shows the average annual household and per capita expenditures on each of the individual items shown in the questionnaire. These values are given separately for urban and rural areas, and for the whole of Ghana. Appendix Table A9.30 shows, separately for urban and rural areas, the proportion of households which reported a cash expenditure within the stated time period. For food items and for other items purchased frequently, it is not possible to give a combined estimate of the proportion of households in the whole of Ghana reporting expenditure, since the reference periods in urban and rural areas were different; combined estimates are only possible in the case of infrequent purchases of non-food items, where similar reference periods were used for both urban and rural households.

The pattern of food consumption is discussed more fully in Section 9.3. Looking at the values of average per capita cash expenditure on non-food items shown in Table A9.29, we see that expenditure on various items of clothing and footwear (adinkra, polyester material, tailoring charges, suits, underwear, leather and canvas shoes, and sandals) is much higher in urban areas than in rural areas, whilst expenditure on repairs to clothing and footwear is lower.

Table 9.5 Average annual household cash expenditure, per capita expenditure and estimated total national expenditure, by subgroup of expenditure

Ghana Living Standards Survey 1991/92 (GLSS3)

GROUP Subgroup	Average annual household cash expenditure	Average annual per capita expenditure	Estimated total annual cash expenditure	Percentage distrib- ution
	(cedis)	(cedis)	(thousand million cedis)	%
1. FOOD & BEVERAGES	276,511	61,691	919	50.6
Cereals and cereal products	43,105	9,617	143	7.9
Roots and tubers	37,934	8,463	126	6.9
Pulses and nuts	13,028	2,907	43	2.4
Vegetables	26,541	5,922	88	4.9
Fruit	2,513	561	8	0.5
Oils and animal fats	13,205	2,946	44	2.4
Meat	18,662	4,164	62	3.4
Poultry and poultry products	6,748	1,506	22	1.2
Fish	59,141	13,195	197	10.8
Milk and milk products	5,094	1,137	17	0.9
Spices	8,096	1,806	27	1.5
Miscellaneous foods	7,083	1,580	24	1.3
Prepared meals	29,464	6,574	98	5.4
Non-alcoholic beverages	3,975	887	13	0.7
Soft drinks	1,921	429	6	0.4
2. ALCOHOL & TOBACCO	18,948	4,227	63	3.5
Alcoholic drinks	14,689	3,277	49	2.7
Cigarettes and tobacco	4,259	950	14	0.8
3. CLOTHING & FOOTWEAR	51,107	11,402	170	9.3
Clothing materials	22,262	4,967	74	4.1
Tailoring charges	5,128	1,144	17	0.9
Ready made clothes	13,972	3,117	46	2.6
Footwear	9,744	2,174	32	1.8
4. HOUSING AND UTILITIES	48,652	10,854	162	8.9
Rent and housing charges	16,482	3,677	55	3.0
Fuel and power	27,305	6,092	91	5.0
Other utilities	4,864	1,085	16	0.9
5. HOUSEHOLD GOODS, OPERATIONS & SERVICES	38,924	8,684	129	7.1
Soft furnishings	4,107	916	14	0.8
Furniture and floor coverings	2,290	511	8	0.4
Glassware, utensils, etc.	2,910	649	10	0.5
Electrical and other appliances	7,608	1,697	25	1.4
Non-durable household goods	21,661	4,833	72	4.0
Household services	348	78	1	0.1
6. MEDICAL CARE & HEALTH EXPENSES	22,691	5,062	75	4.2
Medical products and appliances	10,801	2,410	36	2.0
Hospital services	4,395	981	15	0.8
Other medical services	7,494	1,672	25	1.4
7. TRANSPORT & COMMUNICATIONS	34,501	7,697	115	6.3
Purchase of personal transport	4,666	1,041	16	0.9
Operation of personal transport	8,307	1,853	28	1.5
Purchased fares	21,174	4,724	70	3.9
Communications	354	79	1	0.1
8. RECREATION & EDUCATION	26,057	5,813	87	4.8
Recreation equipment	1,201	268	4	0.2
Entertainment	420	94	1	0.1
Gambling	7,986	1,782	27	1.5
Newspapers, books and magazines	1,214	271	4	0.2
Education	15,236	3,399	51	2.8
9. MISCELLANEOUS GOODS & SERVICES	29,397	6,559	98	5.4
Personal care services	3,942	879	13	0.7
Jewellery, watches, etc.	2,674	597	9	0.5
Personal care goods	8,388	1,871	28	1.5
Writing and drawing equipment	104	23	*	*
Expenditure in restaurants & hotels	379	85	1	0.1
Financial and other services	13,910	3,103	46	2.5
TOTAL CASH EXPENDITURE	546,788	121,991	1817	100.0

In the case of housing and utilities, urban households spend on average far more than rural households on rental payments, and more on construction and repairs. Urban households also spend far more on electricity, gas for cooking, charcoal, firewood, and water charges; kerosene and other liquid fuel is the only item in the housing and utilities group where per capita expenditure by rural households greatly exceeds that of urban households. In the household goods, operation and services group, urban households tend to spend more than rural households on most items, particularly furnishings and electrical items.

As for medical care and health expenses, rural households have higher per capita cash expenditure than urban households on painkillers, antibiotics, and anti-malaria medicine, but lower expenditure on most other medical services (except traditional doctors and spiritual healers). Urban households have much higher per capita expenditure on all forms of transport and communications, except for bicycles. Similarly, urban households have higher expenditures on items for recreation and education, and on miscellaneous goods and services; the only exception is gambling (lotto, etc.), where per capita expenditure is higher in rural than in urban areas.

Using the data given in Appendix Table A9.29, it is easy to estimate national values for total annual cash expenditure on particular items. As an illustration, consider two items, smoked fish (071) and charcoal (312). According to the survey, average annual household expenditure on smoked fish was ₪ 40,734; in urban areas it was ₪ 34,735, while in rural areas it was ₪ 43,960. To get total national expenditure on smoked fish, we multiply 40734 by the number of households in the sample (4552) and then by the grossing up factor appropriate for this survey (730), to arrive at a figure of 135 billion cedis. The amount spent by urban households was 34735 multiplied by 1592 (the number of urban households in the sample) multiplied by 730 (i.e. 40 billion cedis), while the annual amount spent by rural households was 43960 multiplied by 2960 (the number of rural households in the sample) multiplied by 730 (95 billion cedis). All these amounts are at March 1992 prices.

In similar fashion, the total amount spent annually (at March 1992 prices) on the purchase of charcoal was 7704 multiplied by 4552 and multiplied again by 730 (i.e. 26 billion cedis). Of this total annual expenditure, 19 billion cedis represents expenditure by urban households (15932 multiplied by 1592 multiplied by 730), and the remaining 7 billion cedis represents expenditure by rural households (3279 multiplied by 2960 multiplied by 730).

It should be noted that all estimates are subject to sampling error. The precision of an estimate for a particular item depends principally on two factors: the number of households reporting expenditure on that item and the variation between households in the amount they spend on the item. An indication of the former is provided in Appendix Table A9.30, which shows the proportion of households in urban and rural areas reporting expenditure on each item in a specified period.

The information provided so far on average household expenditure on a particular item represents an average across all households, whether or not they purchased the item during the reference period. Instead of using this average, it is possible to calculate the average annual expenditure just for those households which reported expenditure on the item; this can be done using the information provided in Table 9.30. For instance, in the case of charcoal, the average annual expenditure of urban households was 15,932 cedis, but in fact only 64.5 percent of urban households reported expenditure on charcoal in the last 30 days. If we consider only those households, then their average annual expenditure can be calculated as $15932 \times 100 / 64.5$, which is about 24,700 cedis. Similarly, the average annual expenditure of those rural households (13.9 percent of all rural households) which purchased charcoal in the previous 14 days can be calculated as $3279 \times 100 / 13.9$, which is about 23,600 cedis.

Thus, while the average expenditure on charcoal of all urban households is very much higher than the average expenditure of all rural households, the level of expenditure of those households which purchased charcoal was almost the same for urban and rural areas. The apparent large differences in overall levels of average expenditure can therefore be explained almost entirely in terms of the higher proportion of households in urban areas which purchase charcoal, rather than by any difference in the amount actually spent by those households on charcoal.

9.3 Total food consumption

Up to this stage cash expenditure and the consumption of home-produced food have been treated separately; cash expenditure was examined in Sections 9.1 and 9.2, and home consumption in Section 8.7. In this section we combine these two components, to arrive at estimates of total food consumption, at the household level and on a per capita basis. Whilst 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, so much 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.¹²

For the country as a whole, the average value of annual household food consumption around March 1992 was about 430,000 cedis at March 1992 prices; on a per capita basis, this works out at about 97,000 cedis (Table 9.6). Cash expenditure on food accounts for two-thirds (68 %) of total food consumption, with the other third (32 %) representing the value of home-produced food.

At the national level, the total annual value of all food consumed is over 1400 billion cedis. The three most important food subgroups, in terms of cash value, are roots and tubers (which account for 26 % of food consumption), cereals and cereal products (16 %), and fish (14 %); other important food subgroups are vegetables (9 %), pulses and nuts (6 %), and meat (5 %). Prepared meals account for 7 percent by value of total food consumption.

Tables 9.7 and 9.8 show the urban/rural differences in food consumption, on a household and per capita basis respectively. 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 1992 was about 410,000 cedis in urban areas, but about 440,000 cedis in rural areas. When we allow for the difference in household size between urban and rural areas, we find that per capita food consumption is almost identical in urban and rural areas (about 97,000 and 96,000 cedis respectively).

¹² The use of actual prices for this report differs from the approach adopted for the GSS/World Bank work on poverty profiles. For that work it was necessary to take account of both temporal and spatial variations in prices of different commodities. See *The Pattern of Poverty in Ghana 1988-1992*, to be published by the Ghana Statistical Service.

Table 9.6 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 (thousand million cedis)	Food budget shares %
	Cash expenditure	Home-produced	Total	Cash expenditure	Home-produced	Total		
	¢	¢	¢	¢	¢	¢		
1. FOOD & BEVERAGES	276,511	137,180	413,691	61,691	30,604	92,295	1375	95.5
Cereals and cereal products	43,105	24,030	67,135	9,617	5,361	14,978	223	15.5
Roots and tubers	37,934	73,878	111,812	8,463	16,482	24,945	372	25.8
Pulses and nuts	13,028	12,117	25,145	2,907	2,703	5,610	84	5.8
Vegetables	26,541	12,244	38,785	5,922	2,732	8,654	129	9.0
Fruit	2,513	3,375	5,888	561	753	1,314	20	1.4
Oils and animal fats	13,205	1,238	14,443	2,946	276	3,222	48	3.3
Meat	18,662	3,070	21,732	4,164	685	4,849	72	5.0
Poultry and poultry products	6,748	5,828	12,576	1,506	1,300	2,806	42	2.9
Fish	59,141	1,284	60,425	13,195	287	13,482	201	14.0
Milk and milk products	5,094	100	5,194	1,137	22	1,159	17	1.2
Spices	8,096	-	8,096	1,806	-	1,806	27	1.9
Miscellaneous foods	7,083	-	7,083	1,580	-	1,580	24	1.7
Prepared meals	29,464	-	29,464	6,574	-	6,574	98	6.8
Non-alcoholic beverages	3,975	16	3,991	887	3	890	14	0.9
Soft drinks	1,921	-	1,921	429	-	429	6	0.4
2. ALCOHOL & TOBACCO	18,948	377	19,325	4,227	84	4,311	64	4.5
Alcoholic drinks	14,689	377	15,066	3,277	84	3,361	50	3.5
Cigarettes and tobacco	4,259	-	4,259	950	-	950	14	1.0
TOTAL FOOD CONSUMPTION	295,459	137,557	433,016	65,918	30,688	96,606	1439	100.0

Table 9.7 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)
	¢	¢	¢	(thousand million cedis)	¢	¢	¢	(thousand million cedis)
1. FOOD & BEVERAGES	353,833	47,050	400,883	466	234,925	185,657	420,582	909
Cereals and cereal products	50,725	5,462	56,187	65	39,007	34,016	73,023	158
Roots and tubers	57,580	31,594	89,174	104	27,367	96,620	123,987	268
Pulses and nuts	12,738	3,091	15,829	18	13,184	16,972	30,156	65
Vegetables	36,048	2,892	38,940	45	21,429	17,274	38,703	84
Fruit	3,471	2,256	5,727	7	1,998	3,977	5,975	13
Oils and animal fats	16,128	224	16,352	19	11,633	1,784	13,417	29
Meat	30,144	391	30,535	35	12,487	4,512	16,999	37
Poultry and poultry products	8,562	1,051	9,613	11	5,773	8,397	14,170	31
Fish	56,558	89	56,647	66	60,530	1,928	62,458	135
Milk and milk products	9,508	-	9,508	11	2,721	153	2,874	6
Spices	8,534	-	8,534	10	7,860	-	7,860	17
Miscellaneous foods	8,787	-	8,787	10	6,167	-	6,167	13
Prepared meals	45,181	-	45,181	53	21,011	-	21,011	45
Non-alcoholic beverages	6,630	-	6,630	8	2,547	24	2,571	6
Soft drinks	3,241	-	3,241	4	1,211	-	1,211	3
2. ALCOHOL & TOBACCO	13,852	74	13,926	16	21,688	539	22,227	48
Alcoholic drinks	10,599	74	10,673	12	16,889	539	17,428	38
Cigarettes and tobacco	3,253	-	3,253	4	4,799	-	4,799	10
TOTAL FOOD CONSUMPTION	367,685	47,124	414,809	482	256,613	186,196	442,809	957

Table 9.8 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 shares	Cash expenditure	Value of home-produced food	Total	Food budget shares
	¢	¢	¢	%	¢	¢	¢	%
1. FOOD & BEVERAGES	82,924	11,027	93,951	96.6	51,093	40,377	91,470	95.0
Cereals and cereal products	11,888	1,280	13,168	13.5	8,484	7,398	15,882	16.5
Roots and tubers	13,494	7,404	20,898	21.5	5,952	21,014	26,966	28.0
Pulses and nuts	2,985	724	3,709	3.8	2,867	3,691	6,558	6.8
Vegetables	8,448	678	9,126	9.4	4,660	3,757	8,417	8.7
Fruit	813	529	1,342	1.4	435	865	1,300	1.3
Oils and animal fats	3,780	53	3,833	3.9	2,530	388	2,918	3.0
Meat	7,065	92	7,157	7.4	2,716	981	3,697	3.8
Poultry and poultry products	2,007	246	2,253	2.3	1,256	1,826	3,082	3.2
Fish	13,255	21	13,276	13.7	13,164	419	13,583	14.1
Milk and milk products	2,228	-	2,228	2.3	592	33	625	0.6
Spices	2,000	-	2,000	2.1	1,710	-	1,710	1.8
Miscellaneous foods	2,059	-	2,059	2.1	1,341	-	1,341	1.4
Prepared meals	10,589	-	10,589	10.9	4,570	-	4,570	4.7
Non-alcoholic beverages	1,554	-	1,554	1.6	554	5	559	0.6
Soft drinks	760	-	760	0.8	263	-	263	0.3
2. ALCOHOL & TOBACCO	3,246	17	3,263	3.4	4,717	117	4,834	5.0
Alcoholic drinks	2,484	17	2,501	2.6	3,673	117	3,790	3.9
Cigarettes and tobacco	762	-	762	0.8	1,044	-	1,044	1.1
TOTAL FOOD CONSUMPTION	86,170	11,044	97,214	100.0	55,810	40,494	96,304	100.0

While the pattern of consumption, in terms of food subgroups, is broadly similar in urban and rural areas, there are some interesting differences. In terms of monetary value, residents in rural areas consume more cereals and cereal products, roots and tubers, and pulses and nuts, and poultry and poultry products, than their counterparts in urban areas. (Expenditure on alcohol and tobacco is also higher in rural areas.) In contrast, the consumption of meat is much higher in urban than in rural areas, and urban residents spend much more on prepared meals than their rural counterparts. Fish is an important component in the diet of both urban and rural dwellers, and both groups consume similar amounts of fish (in terms of value). For all other food subgroups, the consumption of urban residents (in terms of value) is slightly higher than that of rural residents.

There are substantial differences in the pattern of food consumption in different parts of the country, as illustrated by the figures in Table 9.9. (The data in this table are extracted from Appendix Tables A9.31 to A9.35 which show, for each locality, the value of average household and per capita consumption of different food subgroups.)

Table 9.9 Food budget shares (including both cash expenditure and home-produced), by locality

	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Ghana
	%	%	%	%	%	%
1. FOOD & BEVERAGES	97.3	96.4	94.7	95.9	94.1	95.5
Cereals and cereal products	14.7	13.1	13.6	8.6	28.4	15.5
Roots and tubers	13.0	24.6	25.0	35.5	20.8	25.8
Pulses and nuts	2.5	4.3	4.5	3.8	12.2	5.8
Vegetables	9.2	9.5	8.4	8.7	9.0	9.0
Fruit	1.3	1.4	1.5	1.8	0.7	1.4
Oils and animal fats	4.5	3.8	3.5	3.4	2.3	3.3
Meat	8.4	7.0	2.4	5.3	3.1	5.0
Poultry and poultry products	2.6	2.2	2.2	3.1	4.0	2.9
Fish	14.3	13.4	21.1	16.1	6.6	14.0
Milk and milk products	3.9	1.7	0.9	0.6	0.5	1.2
Spices	1.5	2.3	1.7	1.5	2.2	1.9
Miscellaneous foods	2.5	2.0	1.6	1.4	1.3	1.7
Prepared meals	15.2	9.3	7.2	5.0	2.6	6.8
Non-alcoholic beverages	2.3	1.3	0.9	0.7	0.3	0.9
Soft drinks	1.5	0.5	0.4	0.4	0.1	0.4
2. ALCOHOL & TOBACCO	2.7	3.6	5.3	4.1	5.9	4.5
Alcoholic drinks	2.4	2.6	4.3	3.2	4.6	3.5
Cigarettes and tobacco	0.3	1.0	1.0	1.0	1.3	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
PER CAPITA FOOD CONSUMPTION (cedis)	104,676	94,760	110,313	91,761	93,573	96,606
TOTAL FOOD CONSUMPTION (thousand million cedis)	129	354	231	403	323	1439

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 other rural areas. The value of vegetables consumed is fairly similar in all areas. Consumption of fruit appears rather low in all areas, but especially in the rural savannah. Again with oils and animal fats, consumption is lowest in the rural savannah. Meat forms only a small part of the diet in the rural coastal and rural savannah, but in the rural savannah this is counterbalanced by higher consumption of poultry and poultry products than elsewhere.

Fish is a major component of the diet in all areas; consumption is extremely high in rural areas of the coastal zone, but relatively low in the rural savannah. Spices are consumed fairly evenly throughout the country. 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 appears higher in rural areas, while reported expenditures on cigarettes and tobacco are lower in Accra than elsewhere.

9.4 Availability of consumer items

Besides collecting detailed expenditure data, GLSS 3 also collected information about the availability of various key consumer items. Households were asked whether, in the last 12 months, they had tried to purchase any of 11 particular items but found them unavailable; if they did sometimes find them unavailable, they were also asked whether the shortages over the last 12 months were worse, the same, or better than compared with the preceding year. Table 9.10 shows the responses to the first question. In interpreting these responses, we need to bear in mind the frequency with which households purchase different items (see Appendix Table A9.30); for instance, relatively few households will have tried to purchase millet or sorghum in the last 12 months, whereas most households will have tried to purchase sugar.

Most of the 11 items were generally available throughout the year in all parts of the country, but for all items there was some unavailability. Kerosene was the item which most households (14%) had found unavailable at some time in the year, followed by clothes/shoes (10%), health/personal care items such as soap and medicine (10%), sugar (7%) and rice (7%). For each of the 11 items, roughly half the households reporting unavailability said it occurred often, while the other half said it had occurred only once or twice in the past 12 months.

In terms of variations across localities, the problem of unavailability of items was often more serious in the rural coastal and rural forest areas than it was in urban areas or in the rural savannah. This was particularly true in the case of rice, cooking oil, sugar, clothes/shoes, kerosene, and health/personal care items. Asked how shortages over the past 12 months compared with the shortages for the preceding year, most households experiencing unavailability of items reported that the situation now was the same, or not so bad, as it had been previously; only a few households reported that the situation was now worse.

Table 9.10 Percentage of all households reporting items unavailable in the last 12 months, by locality

Item	Percentages					Ghana
	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	
Maize/maize flour	5.4	1.2	7.0	7.4	0.6	4.3
Sorghum/millet	0.4	2.3	0.6	2.1	1.8	1.7
Rice	0.9	1.6	10.3	12.8	3.1	6.6
Cooking oil	0.9	1.4	5.2	8.0	2.2	4.1
Sugar	1.5	2.3	11.3	12.2	4.8	7.1
Clothes/shoes	0.0	3.3	14.5	18.9	5.6	9.9
Gas	0.9	1.1	0.0	0.0	0.1	0.4
Kerosene	4.5	10.6	15.3	19.4	12.7	13.8
Charcoal/firewood	7.6	1.7	4.3	6.6	0.0	3.9
Health/personal care items	4.8	4.9	12.3	17.0	5.2	9.8
Petrol	0.2	0.8	0.3	3.2	0.1	1.3

10. NON-FARM ENTERPRISES

10.1 Characteristics of non-farm enterprises

As part of GLSS3, detailed information was collected on all non-farm enterprises 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 had, 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, and very 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 1.7 million households in Ghana, representing a half of all households, operate a non-farm enterprise of one sort or another (Table 10.1). Because some households have more than one business activity, the total number of businesses operated is somewhat higher (about 2.1 million). Restricting our detailed collection of information to only the first three enterprises operated by each household has led to very little loss of information, since very few households (perhaps 10,000) have more than three activities.

It is significant that women play the major role in operating many of these businesses. Asked to name the household member who knew most about each activity, respondents named a female member of the household in three cases out of every four. 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 involved, she is the wife of a male head of household, while in most of the other cases she is herself the head of household.

In terms of type of household activity, manufacturing and trading account for 90 percent of all businesses, with trading businesses outnumbering manufacturing businesses by 2 to 1. In total, there are about 630,000 household manufacturing enterprises, 1.3 million trading enterprises, and 230,000 other types of enterprise. Amongst the manufacturing activities, there are 310,000 enterprises involved in food manufacturing and 80,000 in beverages, 120,000 engaged in manufacturing textiles or clothes, and 40,000 making wood products. Almost all the trading enterprises are engaged in retail trade. Included in the 'other' category are 80,000 enterprises engaged in providing personal and household services, 30,000 providing social or community services, 30,000 engaged in fishing, 30,000 in construction, and 20,000 in the transport sector.

Table 10.1 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'facturing	Trading	Others	Total	
Accra	54 %	180,000	60,000	130,000	30,000	220,000	77 %
Other urban	62 %	510,000	140,000	450,000	90,000	670,000	74 %
Rural coastal	56 %	290,000	120,000	200,000	30,000	350,000	80 %
Rural forest	39 %	390,000	170,000	240,000	50,000	460,000	71 %
Rural savannah	50 %	320,000	140,000	240,000	30,000	410,000	74 %
Ghana	51 %	1,700,000	630,000	1,260,000	230,000	2,110,000	75 %

There is little difference between localities in the proportion of households engaged in manufacturing activities, whereas urban households are more likely than rural households to be engaged in trading or other activities. Women run 87 percent of the trading enterprises and 68 percent of the manufacturing enterprises, but only 24 percent of the other businesses.

Of all the non-farm enterprises operated by households, only 13 percent had been registered with a government agency; the rest had no links with any government agency, which might affect any bid they might make for assistance from such agencies.

In the case of each enterprise, households were asked what was the single most serious difficulty in establishing the enterprise. Over a third (37 %) of the enterprises were reportedly set up without any difficulty, but for more than a half (57%) capital and credit were identified as the most serious problem when they started. Only 4 percent identified technical know-how as their major problem, while less than 1 percent attributed their difficulty to government regulation. There was a fairly similar pattern of responses across localities; in terms of industry, the problem of obtaining capital in the early stages appears slightly more acute in the case of trading establishments (59%) than it is for manufacturing (53 %) or other enterprises (52 %).

Overall, 7 out of 10 enterprises (70%) were set up with household savings, and a further one in five (18%) with loans from relatives. Only 1 percent were established with funding mainly from banks and other financial agencies. As to whether in the previous 12 months any of these enterprises had tried to obtain financial assistance from any bank or other financial agency, it is observed that the great majority of enterprises (91%) had not. Eight percent had tried to obtain assistance but had been unsuccessful; only 1 percent succeeded in obtaining credit from financial institutions.

This finding is not surprising, since over 84 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 5 percent utilised proceeds from their operations, while only 2 percent used credit from a bank or financial institution. For those enterprises that utilised a credit facility of some sort, from whatever source, their loans during the 12 month period ranged from 600 cedis to almost 6 million cedis, but almost half of the enterprises (48 %) appeared not to have repaid any part of their loans (including in-kind payments) in the previous 12 months.

10.2 Expenditure inputs, assets, revenues, and net income

Detailed information was collected on the value of different inputs to non-farm enterprises. Table 10.2 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, each enterprise requires annual inputs of almost half a million cedis, with trading enterprises requiring rather more inputs than average, and manufacturing enterprises rather less than average.

In the case of household businesses engaged in manufacturing, raw materials account for almost three-quarters of the total value of inputs. With trading establishments, on the other hand, articles to be resold account for over 80 percent of the total value of inputs to the business. Also shown in Table 10.2 are estimates of the total value of all inputs to household non-farm enterprises. Almost a thousand billion cedis worth of inputs are used for these businesses; 700 billion cedis worth of inputs are used for trading establishments, 200 billion cedis for manufacturing enterprises, and the remaining 100 billion cedis for other types of enterprise.

Table 10.2 Expenditure inputs to non-farm enterprises

Expenditure item	Average annual expenditure input per enterprise (cedis)				Estimated annual value of total inputs (all enterprises)			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
	cedis				thousand million cedis			
Hired labour	15,000	9,100	64,100	17,000	10	11	15	36
Raw materials	215,900	54,900	63,900	105,300	139	67	15	221
Spare parts	1,700	300	51,800	6,400	1	*	12	13
Articles for resale	21,400	470,000	87,100	290,200	14	574	20	608
Rental of land/buildings	1,400	1,700	5,800	2,000	1	2	1	4
Rental of machinery	200	*	5,200	700	*	*	1	1
Maintenance/repairs	500	200	14,300	1,800	*	*	3	4
Rental of vehicles	100	5,000	7,200	3,800	*	6	2	8
Oil and fuel	10,600	2,400	83,100	13,900	7	3	19	29
Other transport	7,600	16,400	12,800	13,300	5	20	3	28
Electricity	800	500	3,400	1,000	1	1	1	2
Water	2,700	700	2,000	1,400	2	1	*	3
Taxes	2,500	4,700	7,300	4,300	2	6	2	9
Other expenses	12,600	9,700	7,400	10,400	8	12	2	22
Total expenditure	293,100	576,100	415,300	471,400	188	702	96	987
Sample size	867	1723	312	2902				

Table 10.3 shows the sources of revenue for non-farm enterprises, and how the income was allocated. On average enterprises received just over half a million cedis; trading and other enterprises tended to receive rather 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 over one thousand billion cedis. Of the income allocated, the largest share (125,000 cedis on average) went to the household itself; each enterprise saved on average 40,000 cedis per annum, while smaller sums went to other households or were used for other purposes. At the national level, reported allocations amounted to about 400 million cedis.

An important but sometimes ignored aspect of running a business is the implied cost involved in the depreciation of fixed assets used in the business. Detailed information was collected on the main assets used in the business, such as buildings, land, equipment/tools/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.

Overall, each non-farm enterprise experienced an annual depreciation in its assets of about 19,000 cedis (Table 10.4). Manufacturing and trading enterprises had average depreciations of only six thousand cedis; in the case of manufacturing enterprises half of this depreciation arose from depreciation on equipment/tools/machinery used in the business. The major depreciation, averaging almost 130,000 cedis, 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 depreciation of assets of about 40 billion cedis a year, with 30 billion cedis of this being accounted for by the relatively small number of 'other' enterprises.

Finally, Table 10.5 provides a summary balance sheet for manufacturing, trading, and 'other' enterprises. The figures given in this table would appear to indicate that, after allowing for expenditure inputs and for depreciation, there should be very little left over from income for distribution. For instance, the average annual income reported by non-farm enterprises was 512,000 cedis, while expenditures on inputs were 466,000 cedis and depreciation was estimated at 19,000 cedis; this leaves only 27,000 cedis for distribution, yet on average businesses reported distribution of 185,000 cedis. Clearly there is some discrepancy in reported incomes or expenditures, and this requires further investigation. The figures presented in this section should therefore be treated with caution, but they may nonetheless provide some useful indicators of general trends.

Table 10.3 Sources of revenue, and allocation of income, from non-farm enterprises

	Average annual value per enterprise				Estimated annual value for all enterprises			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
	cedis				thousand million cedis			
<u>Sources of revenue</u>								
Cash received	353,500	529,800	552,600	478,200	227	646	128	1,001
Receipts as goods & services	7,000	11,400	8,100	9,700	5	14	2	20
Home consumption of output	21,700	25,700	16,700	23,500	14	31	4	49
Income from rentals	100	*	700	100	*	*	*	*
Total	382,300	566,900	578,100	511,500	246	691	134	1,071
<hr style="border-top: 1px dashed black;"/>								
<u>Allocation of income</u>								
Own household	110,500	117,500	204,600	125,000	71	143	47	262
Other households	8,200	9,100	27,900	10,900	5	11	6	23
Savings	29,100	39,200	71,000	39,600	19	48	16	83
Other purposes	6,800	7,600	22,300	9,000	4	9	5	19
Total	154,600	173,400	325,800	184,500	99	211	75	385

Table 10.4 Estimates of depreciation for assets of non-farm enterprises

Asset	Average annual value of depreciation per enterprise				Estimated annual value of depreciation (all enterprises)			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
	cedis				thousand million cedis			
Buildings	1,300	1,500	2,900	1,600	0.8	1.9	0.7	3.4
Land	-	-	-	-	-	-	-	-
Equipment/tools/machinery	3,400	600	7,000	2,200	2.2	0.8	1.6	4.6
Bicycles	200	*	300	100	0.1	0.1	0.1	0.2
Cars	-	1,600	103,500	12,400	-	1.9	23.9	25.9
Boats	-	100	6,100	700	-	0.1	1.4	1.5
Other vehicles	-	300	5,600	800	-	0.4	1.3	1.7
Other	1,300	1,500	2,200	1,500	0.8	1.8	0.5	3.2
Total	6,100	5,700	127,700	19,300	4.0	6.9	29.6	40.4

Table 10.5 Summary of incomes and expenditures for non-farm enterprises

	Average annual value per enterprise				Estimated annual value for all enterprises			
	Type of business activity			All non-farm enterprises	Type of business activity			All non-farm enterprises
	Manufacturing	Trading	Other		Manufacturing	Trading	Other	
	cedis				thousand million cedis			
Income received	382,300	566,900	578,100	511,500	246	691	134	1,071
Expenditure inputs	293,100	576,100	415,300	465,900	188	702	96	987
Depreciation of assets	6,100	5,700	127,700	19,300	4	7	30	40
Disposal of income	154,600	173,400	325,800	184,500	99	211	75	385

11. INCOME AND EXPENDITURE TRANSFERS

11.1 Remittances

One section of the GLSS 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 are not counted as remittances, since they are effectively transfers within the household. On the other hand, 41 percent of all households reported having remitted money or goods in the previous 12 months to persons who were not household members. The bulk of these remittances to non-household members went to relatives (95%), and in particular to parents or children (52%), brothers or sisters (19%), and other relatives (18%). Such income flows from households seem to have benefited female relatives more (64%) than their male counterparts (36%).

Almost all reported remittances from households (98%) were free, in that they would not be repaid by the recipients. The cash component of remittances made to individuals reported in the 12 months prior to the interview ranged from very low amounts up to about a quarter of a million cedis, with a median value of about 10,000 cedis. There was a similar variation in the value of food remittances, with the median value given to each recipient being about 4,000 cedis. An insignificant proportion of recipients (3%) were living outside Ghana.

The estimated total annual value of all remittances paid out was about 35 billion cedis (Table 11.1); two-thirds of this amount represented cash transfers, and the other third represented transfers in the form of food or other goods.

Table 11.1 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 remitted	By all households	Est. total expenditure	By households which received	By all households	Est. total income
	¢	¢	thousand million cedis	¢	¢	thousand million cedis
Urban	33,000	14,000	16	83,000	30,000	35
Accra	41,000	19,000	6	121,000	47,000	16
Other Urban	29,000	12,000	9	66,000	23,000	19
Rural	21,000	9,000	19	33,000	11,000	25
Rural Coastal	24,000	9,000	4	36,000	13,000	7
Rural Forest	22,000	11,000	12	37,000	15,000	15
Rural Savannah	16,000	4,000	3	16,000	4,000	3
Ghana	25,000	10,000	35	51,000	18,000	60

In the same way as households incurred expenditure on transfers, they also received some income by this means; again, transfers between household members are not counted as remittances. Some 16 percent of all households reported having received money or goods in the last 12 months from individuals who were not members of the household. Regarding the frequency of remittances, it is observed that 57 percent of all remittances received were made on a regular basis (11% weekly, 18% monthly, 12 quarterly, and 16 percent annually), while 41 percent were made on an irregular basis. Like remittances made out by households, in-flows were usually not to be repaid. Within the period of 12 months preceding the survey, cash in-flows from individuals to households ranged from small amounts up to 1.6 million cedis, with a median value of the order of about 15,000 cedis. The total estimated value of remittances received was 60 billion cedis.

Households that reported making remittances spent about 25,000 cedis annually on them, while those who received remittances received twice as much in the form of income transfers. In terms of amount remitted, a quarter of all remittances made, and a quarter of all remittances received, were between households in the same town or village. Remittances from urban households were higher than those from rural households. In overall terms, households in Ghana spent an average of 10,000 cedis a year on remittances, and in turn received 18,000 cedis in remittances. With the exception of the rural savannah, receipts appear to be significantly higher than expenditures on remittances across all localities.

Table 11.2 provides national estimates of the value of total annual transfers in the form of remittances. Whilst annual remittances to people overseas total only about one billion cedis, the value of remittances received from abroad is about 20 billion cedis, which represents a third of all remittances received; one sixth of the amount remitted from overseas comes from other African countries, and five-sixths from outside Africa. Once these transfers from abroad are removed, we would expect household income from remittances to balance household expenditure on remittances, and this is indeed roughly the case.

Table 11.2 Estimated total annual expenditure on remittances, by locality of destination and total annual income from remittances, by locality of person remitting

Locality	Estimated expenditures on remittances				Estimated incomes from remittances			
	Locality of household receiving				Locality of household giving			
	Urban	Rural	Abroad	Total	Urban	Rural	Abroad	Total
	(thousand million cedis)				(thousand million cedis)			
Urban	11	4	*	16	18	2	16	35
Rural	8	11	1	19	9	13	4	25
Total	19	15	1	35	27	15	20	60

11.2 Miscellaneous income and expenditure

Aside 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 had 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 11.3 shows the average amount received from each source, by households in urban and rural areas.

Overall, households reported receiving on average 13,500 cedis a year from miscellaneous sources; in national terms, this represents an annual income of about 45 billion cedis. On average, urban households received more from each source than rural households; the one exception was income from dowries or inheritances, where rural households tended to receive more than urban households. Almost half of the miscellaneous income of urban households was received from a variety of non-government sources, which were not separately identified in the questionnaire.

Table 11.3 Mean annual amounts of income received by urban and rural households from a variety of sources, and estimated total miscellaneous income

	Mean household income			Estimated total miscellaneous income
	Urban	Rural	All	
	¢	¢	¢	thousand million cedis
<u>Source of income</u>				
Central government				
Social security	700	100	300	1
State pension	3,900	1,600	2,400	8
Other	1,500	500	900	3
Other sources				
Retirement benefits	5,300	2,300	3,300	11
Dowry or inheritance	1,100	2,500	2,000	7
Other (excluding susu)	11,000	1,100	4,500	15
Total	23,400	8,200	13,500	45

Information was also collected on various miscellaneous expenditures: 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 remittances already counted elsewhere); and other miscellaneous expenditures (excluding contributions to susu). On average, households spent about 17,000 cedis a year on the various items shown in Table 11.4; this is equivalent to a total expenditure across the country of about 56 billion cedis. Urban households spent almost twice as much as rural households on these miscellaneous expenditures. The two major items of miscellaneous expenditure were expenditures on weddings, dowries, funerals and other ceremonies, which accounted for about 36 billion cedis annually, and expenditure on gifts and presents (12 billion cedis).

Table 11.4 Mean annual amounts of expenditure paid by urban and rural households for a variety of purposes, and estimated total miscellaneous expenditure

	Mean household expenditure			Estimated total miscellaneous expenditure
	Urban	Rural	All	
	¢	¢	¢	thousand million cedis
<u>Purpose of expenditure</u>				
Taxes (TV, property tax, etc.)	500	100	300	1
Contributions to self-help projects	1,200	1,100	1,100	4
Weddings, dowries, funerals, etc.	14,700	8,800	10,800	36
Gifts and presents (exc. remittances)	4,700	2,800	3,500	12
Other miscellaneous expenditures	1,900	700	1,100	4
Total	22,900	13,500	16,800	56

12. CREDIT, ASSETS AND SAVINGS

12.1 Credit

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

About a quarter of all households (28%) reported that they owed money or goods to another person, institution or business. The extent of indebtedness, as measured by the proportion of households taking out loans, appeared to be lowest in the rural savannah, where less than 20 percent of households are indebted. As to the source of loans, two-thirds (67%) came from relatives, friends or neighbours. The only other significant sources were traders (17%) and formal financial institutions such as state banks (10%). As to the purpose for which the loans were used, 26 percent were for the purchase of consumer goods, 24 percent for business expansion, 12 percent for health reasons, and 11 percent for ceremonies such as weddings or funerals. For 93 percent of the loans the lender did not require any guarantee; in the other 7 percent of cases, cattle, land, housing or something else was used to guarantee the loan.

In a few instances, involving about 8 percent of all households, 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 40%) was that the person had insufficient income; other refusals occurred because of insufficient collateral security (16%), inappropriate purpose of the loan (10%), and previous debt problems (9%).

12.2 Assets and durable consumer goods

Information was gathered from households on ownership of various assets and consumer durables. Table 12.1 shows the proportion of households in different localities owning various assets and consumer durables, while Figure 12.1 shows the contrast in ownership between urban and rural areas.

In general, the rate of ownership of most items is very much higher in urban areas than it is in rural areas; it is usually 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 half a million households owning a bicycle, more than half are in the rural savannah, where 43 percent of households report 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.

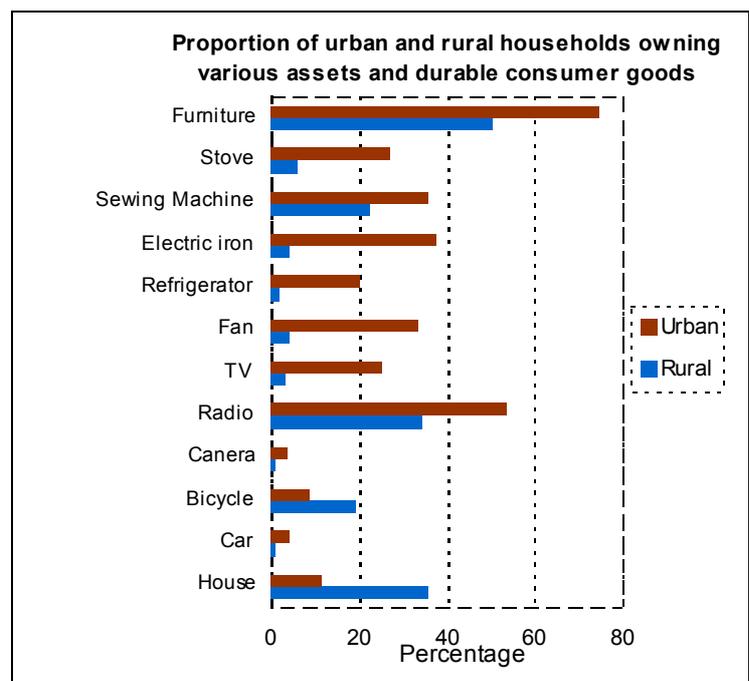


Figure 12.1

Also shown in the right hand columns of Table 12.1 are estimates, for the country as a whole, of the number of households owning each asset or good, and of the total numbers of each asset or good which are owned. The national estimates obtained by grossing up the sample figures indicate, for instance, that households have over 1½ million radios, almost 400,000 television sets, and about 300,000 refrigerators. Some items (such as washing machines, airconditioners, record players, videos, boats and canoes) have not been included in the table because their numbers are too small to be estimated accurately by means of a sample survey.

Table 12.1 Proportion of households owning various assets and consumer durables by locality, and estimates of ownership

Asset/consumer durable	Urban			Rural				National estimates		
	Accra	Other urban	All	Coastal	Forest	Savannah	All	%	Hhlds owning	Total owned
	(percentages)							(millions)		
Furniture	74.9	74.2	74.4	66.4	52.2	34.3	50.4	58.8	1.95	2.19
Stove	34.6	23.8	26.9	8.1	6.9	4.5	6.5	13.6	0.45	0.49
Sewing machine	36.7	35.1	35.6	22.1	27.1	15.4	22.5	27.1	0.90	0.99
Electric iron	50.3	32.0	37.3	4.5	5.7	0.7	4.0	15.6	0.52	0.54
Refrigerator	33.0	15.0	20.2	1.5	2.8	0.3	1.8	8.2	0.27	0.29
Fan	46.7	28.0	33.4	5.3	5.5	0.2	3.9	14.2	0.47	0.52
Television	38.9	19.4	25.1	4.3	4.1	0.8	3.2	10.8	0.36	0.37
Radio of any kind	60.3	50.5	53.3	31.8	38.5	29.5	34.2	40.9	1.35	1.62
Camera	5.0	3.1	3.6	1.0	1.5	0.7	1.1	2.0	0.07	0.07
Bicycle	2.4	11.2	8.6	8.4	9.1	43.4	19.0	15.4	0.51	0.57
Car	6.5	3.0	4.0	1.0	0.7	0.7	0.7	1.9	0.06	0.07
House	6.3	13.6	11.4	34.7	33.9	39.6	35.8	27.3	0.91	0.96
Sample size	463	1129	1592	718	1374	868	2960	4552	(3.32)	

12.3 Savings

Some limited information was also collected on savings accounts held by members of the household. About a quarter of all households (28%) reported that someone in the household owned a savings account; in 3 percent of households more than one savings account was held by members of the household. Figure 12.2 highlights the variation between different parts of the country in the proportion of households maintaining a savings account. Almost half of the households in Accra maintain a savings account, whereas in rural Savannah only about 1 in 8 households maintains an account.

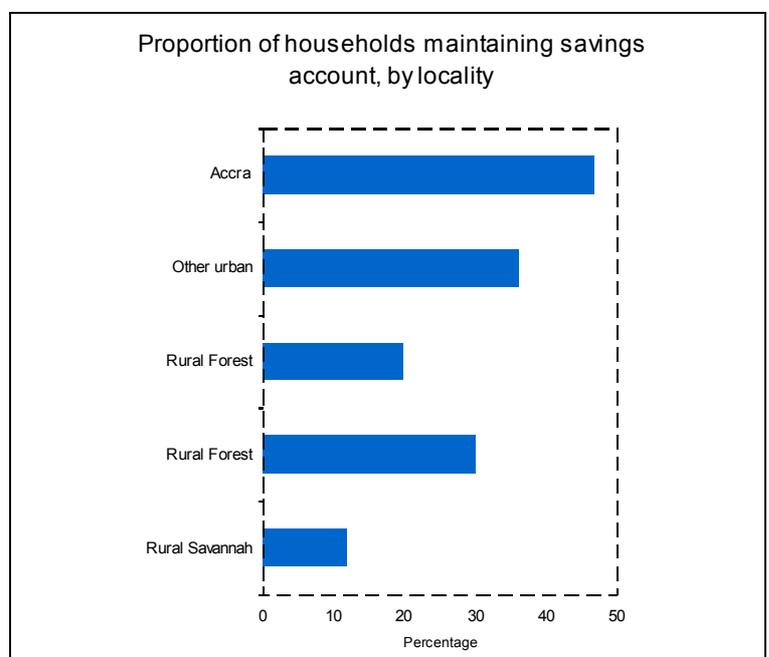


Figure 12.2

Appendix 1

SAMPLE DESIGN FOR ROUND 3 OF THE GLSS

This appendix describes the sample design used for the third round of the GLSS. The focus is on the basic principles underlying the design and on how the design was actually implemented. Some of the problems experienced in the implementation of the design are discussed¹³. To appreciate the design used for GLSS3, it is first necessary to describe the sampling design used for GLSS1 and GLSS2.

Sample design for GLSS1 and GLSS2

The Ghana Statistical Service (GSS) had created a master sample of enumeration areas (EAs), which serves as the sampling frame used for selecting households for each annual round of the GLSS. To prepare this master sample, the 12,969 EAs from the 1984 Population Census were first placed in order, by region within each location (rural/semi-urban/urban), in turn within each ecological zone (coastal/forest/savannah). A total of 800 EAs were then systematically selected from this list with probability proportional to size (PPS), and these selected EAs were then assigned systematically to eight separate replicates of 100 EAs. Each replicate thus provides a representative PPS sample of EAs.

For GLSS1 two replicates (1 and 5) were used. The number of households in each EA at the time of the 1984 Census had been used as the measure of size for making the initial PPS selection of EAs for the master sample, but some allowance needed to be made for changes in size since the census. If a fixed number of households were taken in each selected EA, then the probability of selection of a household in an EA whose size had not changed since the census would be greater than the probability of selection for a household in an EA which had grown in size.

One way of making allowances for this change would be to adjust the number of households taken in each selected EA, to take account of any changes in the measure of size. Thus, if it was originally planned to take 16 households in each EA, this number would be increased to 24 if the number of households in an EA had increased by 50 percent since the census. This method has two disadvantages: first, fieldwork quotas no longer remain fixed, which poses problems for field administration; and secondly, the final sample size is not known in advance, but depends on the changes in the measure of size for the selected EAs.

For the GLSS an alternative procedure¹⁴ was adopted, which takes account of the changes in the measures of size for the selected EAs, but which has the merit of keeping all fieldwork quotas, and therefore the final sample size, fixed. The households in the 200 selected EAs were first listed in the field, and a ratio calculated for each EA (the number of households listed divided by the number of households counted in the census). In a few cases where EAs appeared to be very large, in terms of geographic spread or population size, a decision was made to divide the EA into smaller segments, and to select one segment at random; the number of households listed in this segment was then compared with the estimated size of the same segment in the 1984 Census.

¹³ A much fuller description of the sample design is contained in *Sample Design and Implementation in the First Three Rounds of the Ghana Living Standards Survey*, to be published by the Ghana Statistical Service.

¹⁴ A full description of this procedure is given in Chris Scott and Ben Amenuvegbe, "Reconciling fixed interview workloads with self-weighting sampling when size measures are defective", *Journal of Official Statistics*, Vol. 7, No. 3, 1991, pp. 367-373

Using the same PPS method as described above, 200 'workloads' were then allocated among these 200 EAs, with probability proportional to this calculated ratio. With this method of allocation most EAs received one workload, but a few received two or three or none at all. At the next stage of sample selection 16 households were selected to make up each workload; thus an EA, for example, which received two workloads provided 32 households for the sample. The total sample therefore consisted of 3200 households, and the sample design provided a self-weighting sample, since each household in Ghana had an equal probability of being selected.

The original idea was that a rotating panel design would be used, with half of the sample being retained each year for re-interview and the other half being replaced. This design would provide a representative sample of households each year, but it also had the advantage of continuity from one year to the next, enabling more precise estimates to be made of the changes occurring in the socio-economic situation of households. Half the workloads from GLSS1 were therefore retained for GLSS2, and attempts were made to re-interview the same households. The other half of the GLSS2 sample was taken from the 100 EAs in replicate 6 of the master sample.

Initial considerations for GLSS3

For GLSS3 it was initially expected that the same sample design would be followed, with replicate 6 being retained and replicate 1 being replaced by replicate 2. A listing exercise was therefore carried out for replicate 2 in July/August 1989. However, following discussions between the GSS and the World Bank, it was decided that GLSS3 would differ substantially from GLSS1 and GLSS2, by giving much fuller attention to household expenditure and consumption, and with less attention to some of the topics covered previously. In order to obtain high quality data on household consumption and expenditure it was also decided that a larger and more widespread sample was required¹⁵.

The total number of households which could be covered in GLSS3 would depend in large part on the number of visits which would be required to collect data from each household. Two key factors had first to be considered: the recall period and the reference period. A two-week recall period had been used in GLSS1 and GLSS2 for most consumption and expenditure items. However, experimental studies in Ghana suggested that using such a long recall period resulted in a memory loss of more than 20 per cent, at least for frequently purchased items¹⁶.

Ideally one could visit each household every day, but such a scheme would be very costly. Some improvement in recall could be expected by using a diary or account-book to enable the household itself to keep a record of its own consumption and expenditure, with the interviewer passing by from time to time to check that the diary was being used properly and to transfer the data into the main questionnaire. But the use of a diary obviously required the presence in the household of at least one literate person. Based on these considerations, it was decided that in rural areas interviewers would visit households at two-day intervals, while in urban areas they would use the diary method as far as possible and visit households at three-day intervals.

¹⁵ The sample design used for GLSS3 is based on the recommendations contained in an internal report prepared for the Ghana Statistical Service by Dr Chris Scott, a World Bank consultant.

¹⁶ "Recall loss and recall duration: an experimental study in Ghana", Chris Scott and Ben Amenuvegbe, *INTERSTAT*, No. 4, 31-55, March 1991.

The second key factor to be considered was the reference period, which is the total period to which consumption and expenditure reporting for each household relate. If there was only one interview, the reference period would be equal to the recall period, otherwise the reference period for each household would generally be the sum of the recall periods.

In the urban sector, where a high proportion of households receive a monthly wage or salary, household expenditure during each month is affected by the pay day, and it was therefore important that the reference period should also be a month. If a shorter reference period were taken, those households with a reference period which included the pay day would be likely to appear richer than they really were, while those with a reference period which did not contain a pay day might be expected to appear poorer than they really were. In the rural sector, on the other hand, monthly wages are rare, and the periodicity of expenditures is more likely to be weekly, related to the timing of the weekly market.

In the light of these considerations it was decided that interviewers in the rural areas would make eight visits to each household, at two-day intervals, whilst in the urban areas interviewers would make 11 visits at three-day intervals, supported by a diary of consumption and expenditure. Since no consumption and expenditure data are collected on the first visit to each household, the reference period for rural areas would therefore be 14 days (ie. 7×2), and for urban areas 30 days (ie. 10×3).

Number of workloads and total sample size

For GLSS1 and GLSS2 the survey design had been based on the use of ten survey teams, each with two interviewers. The same scheme was proposed for GLSS3, but with the addition of one extra survey team, which would act as a relieving team to allow each of the ten teams to take some annual leave. It was envisaged that, in both rural and urban areas, each interviewer would be able to do five interviews per day. Since an interviewer was to visit each household every second day in rural clusters but only every third day in urban clusters, an interviewer's workload was 10 households during each cycle in rural areas, and 15 in urban areas.

In order to get high quality data, it was important that the survey covered a whole year, or at least almost the whole year, so as to take account of any seasonal variations. Since a cycle in a rural area was to last 16 days, 22 were needed to cover the whole year; similarly, in urban areas where each cycle lasted 33 days, 11 were needed to cover a year.

Allowing for seven rural and three urban teams at work in each cycle, the use of the above sample design would have led to a sample size of 4070 households, made up of 3080 rural and 990 urban households. However, with this design, if the two interviewers in a team were to work in the same cluster, this would have resulted in the use of only 154 rural and 33 urban clusters, with 20 households being taken in each rural cluster and 30 in each urban one.

These figures were considered unsatisfactory; the number of households being taken in each cluster was inefficiently high, while the number of urban clusters was too small for analytical purposes. Two modifications were therefore recommended by the consultant, both of which were adopted. First, it was proposed that the two interviewers in each team should work in different clusters; this would halve the number of households interviewed in each cluster, while doubling the number of clusters covered in the survey. Secondly, since the new number of urban clusters (66) was still uncomfortably small, it was proposed that three regular interviewers should be used in each urban team, instead of two.

The fieldwork design proposed by the consultant, and implemented for GLSS3, therefore involved a fieldwork allocation of 99 urban and 308 rural workloads (Table 1). In urban areas the 99 workloads were accomplished by three survey teams, each with three interviewers (plus one spare), doing 11 33-day cycles spread out over a year. In rural areas the 308 workloads were achieved by seven survey teams, each with two interviewers (plus one spare), doing 22 16-day cycles spread out over the year.

Each workload in urban areas contained 15 households, while rural workloads contained 10 households. The final sample consisted of $(99 \times 15 =)$ 1485 households in urban areas, and $(308 \times 10 =)$ 3080 households in rural areas, making a total of 4565.

Table 1 Final sample design for GLSS 3

Area	Teams (a)	Interviewers per team (b)	Cycles (c)	Clusters (d) = (a) x (b) x (c)	Households per cluster (e)	Total households (f) = (d) x (e)
Rural	7	2	22	308	10	3080
Urban	3	3	11	99	15	1485
						4565

Urban households in this sample therefore constitute $(1485/4565 \times 100 =)$ 32.5 per cent of the total sample. This chosen fieldwork design thus produces a 32.5/67.5 split between urban and rural households, which happens to mirror almost exactly the anticipated 35/65 split in the population as a whole, based on the 1984 census results. If the sample of 4565 households had been split on a 35/65 basis, this would have resulted in 1598 households in urban areas. We thus have a shortfall of 113 households in urban areas, and a corresponding excess in rural areas, as compared with the expected number which would be achieved using random sampling. It was realised that, if allowances for this small imbalance between urban and rural households could be made at the design stage, this would avoid the need for re-weighting of the data at the analysis stage.

This shortfall can be approximately made up by counting 11 urban areas as "rural" for fieldwork purposes (ie. $11 \times 10 = 110$) and then reassigning them back to urban at the analysis stage. The aim was therefore to select 110 urban workloads and 297 rural ones, but to allocate 11 urban workloads as "rural" for fieldwork purposes, producing the desired 99/308 urban/rural split.

Selection of enumeration areas

In attempting to select 407 EAs for this survey, it was desirable to avoid those EAs (replicates 1, 5 and 6) which had already been used for GLSS1 and GLSS2. It was therefore necessary to draw on all of the five other available replicates. However, because replicate 2 had already been listed, it was decided to take this replicate in its entirety, and then select 307 EAs from the four remaining replicates. The relisting work for these four replicates was carried out around August 1990.

The selection of these 307 EAs was made more complicated by two considerations. In the first place, rural EAs had to be oversampled and urban EAs undersampled, to counterbalance the fact that at the second stage of selection 15 households were to be taken in selected urban EA but only 10 households in each rural EA. The balance between urban and rural EAs was also upset by the effect of introducing a second PPS stage following the listing exercise, which resulted in some EAs receiving two workloads and a corresponding number receiving none at all. The correct balance between urban and rural workloads was finally achieved, with 113 urban and 294 rural EAs being selected.

Initially 113 urban and 294 rural EAs were selected for GLSS3, making a total of 407 EAs, with 14 urban EAs being chosen for reclassification from urban to rural. However, when these EAs were listed and 407 workloads selected, using the same procedure as for GLSS1 and GLSS2, two reclassified EAs did not receive any workloads. The figure of 28 rural workloads with no workload, shown in Table 2, includes one EA which had to be excluded from the final sampling frame because the local chiefs refused to allow the listing exercise to be done.

Table 2 Effect on final sample of second PPS selection and reallocation of some EAs

Type of EA	EAs selected	EAs after reallocation	No. of workloads after listing			
			0	1	2	Total
Urban allocated to urban team	100)	100	11	79	10	99
Urban allocated to rural team	13)	13)	2	11	-	11
Rural	294	294)	28	235	31	297
Total	407	407	41	325	41	407

Survey response

The number of households selected in urban and rural areas, and the actual numbers successfully interviewed in GLSS3, are shown in Table 3.

Table 3 Response achieved in GLSS 3

Area	Covered by	No. of Workloads	No. of households	
			Expected	Achieved
Urban	Urban team	99	1485	1482
Urban	Rural team	11	110	110
Rural	Rural team	297	2970	2960
	Total	407	4565	4552

The design chosen for this survey was intended to ensure that the sample was self-weighting, provided an adequate response was secured on the survey. The number of households achieved in the survey almost exactly matched the number required. The small shortfall arose in cases where an interviewer failed to secure interviews from several of the selected households, and then used up all the reserve list of households in the EA without managing to complete the quota. The number of such cases is so few that it has not been considered necessary to do any imputations or re-weighting for missing households. Re-weighting of income and expenditure has, however, been necessary, for the reasons given below.

Re-weighting

Since GLSS3 was spread out over a whole year, but households only interviewed during a short period of the year, any statement of household income or expenditure will be affected by when the household was interviewed. Because of the effects of inflation, a household interviewed near the end of the survey will tend to have a higher expenditure than if they were interviewed at the beginning of the year. The allocation of fieldwork in Accra and other urban areas was unfortunately not evenly spread throughout the year. With the exception of three workloads which were covered in October 1991, all the other Accra workloads were concentrated in the five month period from May to September 1992, whereas most of the fieldwork in the other urban areas was done in the period October 1991 to April 1992.

It is difficult to make adjustments for the seasonal effects on expenditure of this uneven coverage of urban areas, but some adjustment can easily be made for the effects of inflation. In the main reports for GLSS1 and GLSS2 no adjustments were made for the effects of inflation, since the mean values for different localities would have been comparable; with GLSS3, on the other hand, an adjustment was essential, otherwise the estimates for Accra and other urban areas would be out of line with those for the rest of the country.

In order to put all households on the same basis for comparison, we have taken the midpoint of the survey year (March 1992) and then calculated weights (deflators/inflators) which can be used to adjust all expenditure data. Ideally we might have calculated separate indices for different localities in the country, and for different items of expenditure, but this approach would have become extremely complicated; in any case, the movement of prices in the three main localities of interest (Accra, urban, and rural) appears to have been almost the same during the survey period. We have therefore preferred to use a single weight for each month of the survey, irrespective of locality or region.

To get these weights, we have taken the national CPI index for Ghana and calculated the ratio of the March 1992 figure to the figure for each month from September 1991 to September 1992. For instance, the weight for September 1991 is $(17925.4/17066.4) = 1.0503$; this means that any expenditure data for a household interviewed in September 1991 has been multiplied by 1.0503 before any tables of expenditure are produced.

Grossing up sample figures

Since the 4552 households covered in GLSS3 contained 20,403 household members, the average household size was 4.5. Using the official estimate of 2.6 percent for the annual rate of population growth, it is estimated that the total population in private households grew from a figure of 12.1 million at the time of the last Population Census (March 1984) to a figure of 14.9 million in March 1992. The national estimates presented in this report, which are based on the sample results of GLSS3, were obtained by using a multiplier of 14.9 million divided by 20,403, i.e. 730.

An analysis of the results of the listing exercise carried out in preparation for the GLSS3 fieldwork suggests, in fact, that the annual population growth rate between the time of the 1984 Census and the GLSS3 fieldwork may well have been over 3 percent. The reasoning for this is as follows.

For GLSS3 100 EAs were listed in July/August 1989, and 307 in August 1990. If we take May 1990 as the effective weighted mid-point, this implies a gap of six years and two months since the census, i.e. 6.17 years. When the EAs were listed, the number of households was found to have grown by 32 percent since the census. This implies an annual growth rate of households of 4.5 percent. If this rate of increase in households was maintained between the time of the listing and the main GLSS3 fieldwork (with its mid-point of March 1992), the number of households at the time of GLSS3 will have been 43 percent higher than in the census. However, when the GLSS3 fieldwork was carried out, mean household size was found to have fallen to 4.48, down from 4.89 at the time of the census.

The combined effect of this increase in numbers of households but fall in average household size is an overall increase in population of 31 percent over the eight-year period. This implies an annual population growth rate of 3.4 percent. If this growth rate is applied to the census population, it gives an estimated population of 15.9 million in private households in March 1992, which is one million more people than the number used in this report. Readers who prefer to use this higher growth rate would need to increase all estimates given in this report, whether for the total population, households, or particular subgroups, by about 7 percent; alternatively, if an assumed growth rate of 3.0 percent is preferred, then all estimates should be increased by about 3½ percent.

Appendix 2

CONTENT OF GLSS3 QUESTIONNAIRES

GLSS3 household questionnaire

<u>Section</u>	<u>Topic</u>	<u>Contents</u>
0	Household Identification	Religion of head. Primary language used by respondent. Date and outcome of interviewer visits.
1	Household roster	Identification of household members. Demographic information. Information on parents of household members.
2	Education	Educational career and attainment of household members aged 5 years or older. Schooling expenses in the last 12 months. Literacy. Apprenticeships. Short training courses.
3	Health	Health condition of all household members, and health care received. Vaccinations of children aged 7 years and under. Postnatal care of children aged 5 years and under. Fertility, prenatal care and contraceptive use by women aged 15 to 49 years.
4	Employment and time use	Occupations in the last 12 months of all household members aged 7 and above. Details of each occupation. Employment search in the last 12 months and in the last 7 days. Employment history. Housekeeping activities in the last 7 days.
5	Migration	Changes of residence of all household members aged 15 and over. Reasons for moving.
6	Respondents for later sections	Identification of household members responsible for various activities (owning or operating a farm, food processing, preparing food, purchasing items for the household, running non-farm enterprise).
7	Housing	Type of dwelling, occupancy status, housing expenditure, utilities and amenities.
8	Agriculture	Agricultural assets, plot details, harvest and disposal of crops, seasonality of sales and purchases, other agricultural income, agricultural costs and expenses, processing of agricultural products, consumption of own produce.
9	Household expenditure	Non-food expenses, food expenses, availability of consumer items.
10	Non-farm enterprises	Basic characteristics, income, expenditure and assets of each enterprise.
11	Income transfers and misc. income and expenditures	Transfer payments made by household, income from transfers, miscellaneous income, miscellaneous expenditures.
12	Credit, assets and savings	Credit, assets and durable consumer goods, savings.

GLSS3 Community Questionnaire

<u>Section</u>	<u>Topic</u>	<u>Contents</u>
1	Demographic information	Religion, ethnic groups, migration.
2	Economy and infrastructure	Main economic activities, economic trends, transportation and communication, supply of electricity and water, markets, other socio-economic infrastructure, seasonal labour market.
3	Education	Characteristics and distance to nearest primary and secondary schools, literacy programmes.
4	Health	Health services and personnel, health problems, immunization and anti-malaria campaigns.
5	Agriculture	Planting and sale of major crops, extension services, cooperatives, community equipment, use of fertilizers, insecticides, and irrigation, agricultural wages, sharecropping.

GLSS3 Price questionnaire

<u>Section</u>	<u>Topic</u>	<u>Contents</u>
1	Food prices	Prices of 65 common food items, such as cassava, plantain, oranges, groundnut oil, and sugar.
2	Pharmaceutical items	Prices of 8 pharmaceutical items, such as aspirin, nivaquine, and milk of magnesia.
3	Non-food prices	Prices of 44 non-food items, such as kerosene, firewood, charcoal, hurricane lamp, matches, soap, local cloth, plastic bucket, school uniform, sandals.

Note: The contents of the community and price questionnaires have been shown solely for record purposes. They have not been used at all in the analysis presented in this report.

Appendix 3

GLSS3 INCOME AND EXPENDITURE AGGREGATES AND SUBAGGREGATES

(All aggregates are at the household level)

Income categories -----	Aggregate -----	Subaggregate -----	Item ----	Section -----	
1. Employment income	TOTEMP	J1TOT	Total wage income, main job of last 12 months	4B	
		+ J2TOT	Total wage income, second job of last 12 months	4C	
		+ J3TOT	Total wage income, third job of last 12 months	4D	
		+ J4TOT	Total wage income, fourth job of last 12 months	4E	
		+ J5TOT	Total wage income, fifth job of last 12 months	4F	
2. Household agricultural income	(a) HHAGINC1	CRPINC1	Revenue from sale of cash crops - main outlet	8C	
		+ CRPINC2	Revenue from sale of cash crops - other outlets	8C	
		+ ROOTINC	Revenue from sale of roots/fruit/vegetables	8C2	
		+ INCOTHAG	Revenue from other agricultural sources	8E	
		+ TRCRPINC	Revenue from sale of transformed crop products	8G	
		+ PRO2HOME	Consumption of home-produced food (2)	8H	
		- EXPCROP	Expenditure on crop inputs	8F	
		- EXPFDPR1	Labour costs of food processing	8G	
		- EXPFDPR2	Other costs of food processing	8G	
		- EXPLIV	Expenditure on livestock inputs	8F	
		- EXPLAND	Expenditure on renting farm land	8B	
	(b) HHAGINC2	PRO2HOME + SEFARM	Consumption of home-produced food (2) Farm self-employment income	8H 4BCDEF	
	(c) HHAGDEPN	DEPNEQ	Depreciation of farming equipment	8A	
	3. Non-farm self employment income	(a) NFSEY1	NFCINC	Rev. in cash from non-farm enterprises (NFE)	10D
			+ NFKINC	Revenue in goods/services from NFE	10D
+ NFDOMINC			Value of NFE products consumed domestically	10D	
- INPNF			Expenditure on non-farm enterprises	10B	
(b) NFSEY2		PROFITNF	Profit of NFE used for own purposes	10E	
		+ NFDOMINC	Value of NFE products consumed domestically	10D	
(c) NFSEY3		SENONF	Non-farm self-employment income	4BCDEF	
		+ NFDOMINC	Value of NFE products consumed domestically	10D	
(d) NFDEPN		DEPNASS	Depreciation of non-farm capital assets	10C	
4. Rental income		IMPRT	LNDINC1	Income from renting out land	8A
	+ LNDINC2		Income from sharecropping	8A	
	+ LIVINC		Income from renting out livestock	8A	
	+ EQINC		Income from renting out agricultural equipment	8A	
	+ NFRNTINC		Income from renting NF land, bldgs, equipt and machinery	10D	
	+ RENT1		Imputed rent (household owner)	Equation	
5. Income from remittances	REMITINC	REMINC	Income from remittances	11B	
		+ RENT2	Imputed rent (paid by parents)	Equation	
		+ RENT5	Imputed rent (perchers/squatters)	Equation	
6. Other income	OTHERINC	SCHOL1	Value of scholarships (last 12 mths)	2A	
		+ MISCINC	Miscellaneous income	11C	
		+ WATINC	Income from water sold	7D	

For the presentation of results in Section 7, total income has been calculated as: 1 + 2a + 3c + 4 + 5 + 6

Expenditure categories	Aggregate	Subaggregate	Item	Section
-----	-----	-----	----	-----
7. Food expenditure (actual)	EXPFOOD	EXPFOOD	Food expenditure (actual)	9B
8. Expenditure on housing (actual and imputed)	HOUSEXP	RENT1 + RENT2 + RENT3 + max of (HO and RENT4) + RENT5	Imputed rent (household owner) Imputed rent (paid by parents) Actual rent in cash and kind Total wage inc. paid in the form of housing Imputed rent (paid by employers) Imputed rent (squatters/perchers)	Equation Equation 7C 4BCDEF Equation Equation
9. Other non-food expenditure (actual)	OTHEXP	HHUTILS + EXPEDUC + EXPDAY + EXPYEAR + EXPMISC	Household utilities (water, electricity, garbage) Expenditure on educational items Frequent non-food expenditure Less frequent non-food expenditure Miscellaneous expenditure	7D 2A 9A2 9A1 11D
10. Food expenditure (imputed)	IMPFDEXP	FD + PRO2HOME	Total wage income paid in the form of food Consumption of home produced food (2)	4BCDEF 8H
11. Other non-food expenditure (imputed)	IMPNFEXP	GD +DOMINC +VALUSE	Total wage income paid in other forms Value of NFE products consumed domestically Use value of durable goods	4BCDEF 10D 12B
12. Expenditure on remittances	EXPREMIT	EXPREMIT	Expenditure on remittances	11A

Total expenditure is obtained from: 7 + 8 + 9 + 10 + 11 + 12

Appendix 4

HEADINGS USED FOR IDENTIFYING HOUSEHOLD EXPENDITURES IN GLSS3

Note: Commas are used here to distinguish each item (or group of items) which are shown separately on the questionnaire. (E) identifies items of food expenditure, while (C) identifies food items consumed from home production. For non-food items, semicolons are used to distinguish between those items for which data were collected over a long reference period (three months or twelve months) and those items for which data were collected over a short reference period (two weeks in rural areas and 30 days in urban areas). Certain housing expenditures, taken from Section 7 of the questionnaire, have been identified separately.

1. FOOD & BEVERAGES

01 Cereals & cereal products

(E) Guinea corn/sorghum, maize, millet, rice, maize flour and products (not koko), bread and buns, biscuits, flour and other cereal products

(C) Rice, maize cob (fresh), maize flour/dough, sorghum, millet grain, millet flour, guinea corn, other grains, other flours

02 Roots and tubers

(E) Cassava, cocoyam, plantain, yam, other starchy roots and tubers, kokonte, gari, cassava dough, other starchy products

(C) Cassava roots, gari, other forms of cassava, yams, cocoyams, plantain, sweet potatoes, other roots and tubers

03 Pulses and nuts

(E) Small beans, bambara beans, broad beans, groundnuts, other pulses, dawadawa, kolanut, palmnut, other oil seeds and nuts

(C) Bambara beans, cowpeas, groundnuts (roasted and raw), other pulses or legumes, palmnuts, coconuts, other nuts and seeds

04 Vegetables

(E) Cocoyam leaves (kontomire), garden eggs, okro, onions and shallots, green pepper, tomato, other vegetables (not canned), tomato puree, other canned vegetables

(C) Tomatoes, onions, carrots, okra, garden eggs and cucumbers, pepper, cabbage and lettuce, spinach and other leafy vegetables, other vegetables

05 Fruit

(E) Avocado pear, banana, mango, orange, pineapple, other fruits (not canned), canned fruit, fruit juices

(C) Bananas, water melon, oranges and tangerines, mangoes, pawpaw, avocado pears, pineapples, other fruits

06 Oils and animal fats

(E) Animal fats, coconut oil, groundnut oil, palm kernel oil, red palm oil, shea butter, margarine, other vegetable oils and fats

(C) Palm oil, coconut oil

07 Meat

(E) Corned beef, fresh beef, bushmeat, fresh goat, fresh mutton, pork, snail, other meat except poultry

(C) Game birds, beef, mutton, pork, goat, other domestic meats, wild game

08 Poultry and poultry products

- (E) Chicken, duck, guinea fowl, other poultry, chicken eggs, other eggs
- (C) Chicken, other domestic poultry, eggs

09 Fish

- (E) Smoked fish, crustaceans (lobster/crab/prawns/etc.), fresh and frozen fish, dried fish, fried fish, canned fish, other fish
- (C) Fish and shellfish

10 Milk and milk products

- (E) Fresh milk, milk powder, baby milk, tinned milk (unsweetened), other milk products (including butter and cheese)
- (C) Milk

11 Spices

- (E) Pepper (dry), salt, other condiments and spices

12 Miscellaneous foods

- (E) Sugar, jams, honey, confectionery (not frozen), ice cream and ice lollies etc., other misc. food items

13 Prepared meals

- (E) Cooked rice and stew, fufu and soup, tuo and soup, banku and stew, kenkey, koko, other prepared meals

14 Non-alcoholic beverages

- (E) Coffee, chocolate drinks (including milo), tea, other non-alcoholic beverages
- (C) Non-alcoholic beverages

15 Soft drinks

- (E) Soft drinks and minerals

2. ALCOHOL & TOBACCO

21 Alcoholic drinks

- (E) Local and imported beer and guinness, palm wine, pito, akpeteshie and other local spirits, gin, other alcoholic beverages
- (C) Alcoholic beverages

22 Cigarettes and tobacco

- (E) Cigarettes, processed tobacco, other tobacco products

3. CLOTHING & FOOTWEAR

31 Clothing materials

Cotton, silk, handloomed (including kente), adinkra, polyester material, all other clothing material

32 Tailoring charges

Tailoring charges; repairs to clothing

33 Ready made clothes

Suit, smock or other handwoven garment, dress (ladies/ girls), trousers/slacks/shorts/blouse/shirts, underwear, other readymade clothes

34 Footwear

Shoes (leather), sandals (leather), shoes (canvas), sandals (rubber), other footwear; repairs to footwear

4. HOUSING AND UTILITIES

41 Rent and housing charges

House rates (property rates), basic rates, other housing charges (excluding water/fuel/power);
(From Section 7: rent, mortgage payments, home repairs)

42 Fuel and power

(From Section 7: electricity bill); gas for cooking, kerosene and other liquid fuel (including palm kernel oil), charcoal, firewood and other solid fuel

43 Other utilities

(From Section 7: water bill, garbage disposal bill)

5. HOUSEHOLD GOODS, OPERATIONS & SERVICES

51 Soft furnishings

Bedsheets/bed covers/ blankets/curtains/other linens, mattresses/pillows/sleeping mats, other soft furnishings; repairs to soft furnishings

52 Furniture and floor coverings

Bed, chair, table, carpet and other floor coverings, other furniture and fixtures; repairs to furniture and fittings

53 Glassware, utensils, etc.

Glassware/chinaware/plasticware, cutlery and other tableware, pots/pans/mortars/pestles/ other kitchen utensils, other household utensils and tools (including earthen water cooler)

54 Electrical and other appliances

Electric fan, airconditioner/air cooler, fridges and freezers, electric irons, washing machines and dryers, electric kettles, gas or electric stoves, coalpot and other non-electrical cooking appliances, other appliances, radio/wireless/cassette and radio, TV sets/video/video camera, other (phonogram/CD players/music systems); repairs to appliances

55 Non-durable household goods

Soap and washing powder, insecticides/disinfectants/household cleaners, matches, toilet paper, light globes/bulbs, candles, other non-durable goods

56 Household services

Domestic staff wages; household services (lawnsboy/washman/etc.)

6. MEDICAL CARE & HEALTH EXPENSES

61 Medical products and appliances

Therapeutic appliances and equipment; pain-killers (eg. aspirin/paracetamol), antibiotics, anti-malaria medicines, other medical and pharmaceutical products

62 Hospital services

Hospital expenditure (accommodation/theatre fees), other medical services and supplies

63 Other medical services

Doctors and outpatient consulting fees, dentists, nurses and midwives etc., native doctors and spiritual healers, other practitioners; medical services such as doctor or healer and other medical expenses

7. TRANSPORT & COMMUNICATIONS

71 Purchase of personal transport

Cars and other motor vehicles, motor cycles, bicycles

72 Operation of personal transport

Tyres; spares and motor vehicle tools (excluding tyres), petrol, oil and grease etc.

73 Transport fares

Intercity bus (STC/City Express/etc.), city bus (omnibus or trotro)/taxi/etc., other (rail/air/boats) and storage charges

74 Communications

Postal charges including stamps and courier services, telegrams/telephones/fax/etc.

8. RECREATION & EDUCATION

81 Recreation equipment

Camera and photographic equipment, sports equipment, musical instruments; other recreational goods/parts/accessories (cassettes/video cassettes/etc.)

82 Entertainment

Cinema/video house, video cassettes hire, others including concerts

83 Gambling

Gambling/lotto/raffles/etc.

84 Newspapers, books and magazines

Newspapers, books and magazines etc.

85 Education

Educational cost (transport cost/pocket money/etc.)

9. MISCELLANEOUS GOODS & SERVICES

91 Personal care services

Services of barber/beauty shops/others

92 Jewellery, watches, etc.

Jewellery/watches/rings/etc.

93 Personal care goods

Other personal goods (eg, suitcase/hair brush/comb/shaving equipment); goods for personal care (eg, razor blades/cosmetics/powder/toothpaste)

94 Writing and drawing equipment

Writing and drawing equipment and supplies

95 Expenditure in restaurants and hotels

Expenditure in restaurants and hotels

96 Financial and other services

Financial services (NES), Other services (NES)

Appendix 5

GLSS3 CODING FRAME FOR HOUSEHOLD EXPENDITURES

Note: Section 9B collected data on food expenditures.
 Section 8H collected data on consumption of home produced food.
 Section 9A1 collected data on items purchased less frequently.
 Section 9A2 collected data on frequently purchased items.
 Section 7 collected data on housing.

	<u>9B Food Exp</u>	<u>8H Home Con</u>
1. FOOD & BEVERAGES		
01 Cereals and cereal products	001-008	001-009
02 Roots and tubers	009-017	010-017
03 Pulses and nuts	018-026	020,022-026,028
04 Vegetables	043-051	040-048
05 Fruit	035-042	030-037
06 Oils and animal fats	027-034	021,027
07 Meat	052-059	062-068
08 Poultry and poultry products	060-065	060,061,070
09 Fish	071-077	069
10 Milk and milk products	066-070	071
11 Spices	079-081	
12 Miscellaneous foods	078,093-097	
13 Prepared meals	086-092	
14 Non-alcoholic beverages	082-085	091
13 Soft drinks	098	
2. ALCOHOL & TOBACCO		
21 Alcoholic drinks	099-104	090
22 Cigarettes and tobacco	105-107	
	<u>9A1 Less Freq</u>	<u>9A2 More Freq</u>
3. CLOTHING & FOOTWEAR		
31 Clothing materials	201-206	
32 Tailoring charges	207	214
33 Ready made clothes	208-213	
34 Footwear	215-219	220
4. HOUSING AND UTILITIES		
41 Rent and housing charges	303,304,307	(7Q13,7Q19/20,7Q21)
42 Fuel and power	(7Q30)	310-313
43 Other utilities	(7Q25/26,7Q33)	

	<u>9A1 Less Freq</u>	<u>9A2 More Freq</u>
5. HOUSEHOLD GOODS, OPERATIONS & SERVICES		
51 Soft furnishings	401-403	404
52 Furniture and floor coverings	405-409	410
53 Glassware, utensils, etc.	421-424	
54 Electrical and other appliances	411-419,701-703	420
55 Non-durable household goods		425-431
56 Household services	432	433
6. MEDICAL CARE & HEALTH EXPENSES		
61 Medical products and appliances	505	501-504
62 Hospital services	511-512	
63 Other medical services	506-510	513
7. TRANSPORT & COMMUNICATIONS		
71 Purchase of personal transport	601-603	
72 Operation of personal transport	604	605,608,609
73 Purchased fares		610-612
74 Communications		613,614
8. RECREATION & EDUCATION		
81 Recreation equipment	704-706	707
82 Entertainment		708,709,711
83 Gambling		710
84 Newspapers, books and magazines		712,713
85 Education		718
9. MISCELLANEOUS GOODS & SERVICES		
91 Personal care services		801
92 Jewellery, watches, etc.	803	
93 Personal care goods	804	802
94 Writing and drawing equipment		805
95 Expenditure in restaurants and hotels		806
96 Financial and other services		807,808

Appendix 6

SUPPLEMENTARY TABLES

Table A1.1 Distribution of households in each region, by primary language of household head

Region	Primary language of household head						All	Sample size	
	Akan	Ewe	Ga/Adangbe	Dagbani	Hausa	Nzema			Other
	Western	58.7	5.6	0.8	0.4	1.7			14.7	18.2	100.0	484
Central	88.2	6.5	1.6	0.4	0.8	0.4	2.2	100.0	509
Greater Accra	29.3	14.0	43.8	0.6	7.3	0.3	4.6	100.0	634
Eastern	59.1	12.0	20.8	1.4	1.5	0.2	5.2	100.0	660
Volta	1.7	71.7	2.2	0.2	-	0.2	23.9	100.0	414
Ashanti	78.1	4.4	0.4	0.7	1.3	0.3	14.9	100.0	720
Brong Ahafo	49.6	4.7	0.9	3.1	2.0	-	39.8	100.0	450
Northern	1.8	6.8	1.8	39.8	0.9	-	49.0	100.0	339
Upper West	-	-	-	0.9	-	-	99.1	100.0	110
Upper East	0.5	-	-	-	-	-	99.5	100.0	189
All	46.8	13.3	10.0	3.8	2.0	1.8	22.4	100.0	4509

Table A1.2 Distribution of households in each region, by religion of household head

Region	Religion of household head						All	Sample size
	Protestant	Catholic	Other Christian	Muslim	Animist/Traditional	Other		
	Western	10.6	23.5	39.9	10.2	10.0			5.8	100.0	481
Central	25.2	12.1	41.0	6.4	6.4	8.8	100.0	512
Greater Accra	29.9	10.8	34.6	12.7	8.5	3.5	100.0	636
Eastern	26.6	12.2	40.7	4.4	9.0	7.1	100.0	658
Volta	32.3	22.1	8.3	2.7	32.3	2.4	100.0	412
Ashanti	17.8	16.2	38.1	13.6	11.8	2.5	100.0	729
Brong Ahafo	15.8	16.9	26.1	17.8	22.5	0.9	100.0	449
Northern	6.7	4.1	1.5	62.2	25.2	0.3	100.0	341
Upper West	3.7	28.4	0.9	28.4	37.6	0.9	100.0	109
Upper East	-	5.4	-	12.9	81.7	-	100.0	186
All	20.1	14.7	29.4	14.4	17.6	3.9	100.0	4513

Table A2.1 Proportion of adults in each region who have been to school, by sex and locality

Region	Percentages								
	Urban			Rural			All		
	Male	Female	All	Male	Female	All	Male	Female	All
Western	82.1	61.1	70.4	78.2	47.4	63.0	79.1	51.3	64.9
Central	88.1	65.3	75.5	72.0	37.3	51.9	76.8	45.0	58.6
Greater Accra	91.5	79.2	84.7 (1)	65.8	43.8	53.3	88.6	74.9	81.0
Eastern	90.8	72.3	79.7	78.4	54.9	65.8	81.8	60.6	70.1
Volta	94.5	76.5	84.8	73.6	43.3	58.1	76.7	48.7	62.2
Ashanti	83.8	72.9	77.8	84.3	60.4	70.9	84.1	64.7	73.3
Brong Ahafo	79.5	61.6	70.5	69.9	49.1	59.3	73.0	53.1	62.9
Northern	53.4	22.9	38.3	20.1	8.3	14.0	32.8	13.5	22.9
Upper West	36.4	0.0	16.0 (2)	29.3	14.0	21.2	29.7	12.9	20.8
Upper East	-	-	- (2)	17.7	6.3	11.3	17.7	6.3	11.3
All	83.5	67.5	74.8	64.3	40.6	51.6	71.0	50.2	59.8

Notes: (1) The proportions shown for Greater Accra include the city of Accra. The detailed breakdown for Greater Accra is as follows:

	Male	Female	All
Accra	92.4	80.3	85.7
Gt. Accra urban (exc. Accra)	88.0	74.8	80.8
Gt. Accra all (exc. Accra)	79.0	61.7	69.4
Ghana urban (exc. Accra)	80.4	62.8	70.8

(2) The figure for Upper West urban is based on only 25 observations. The GLSS3 sample did not include any adults in urban areas in Upper East region.

Table A3.1 Percent of people according to reason for consultation during the previous two weeks, by locality and sex

Reason for consultation	Percentages								
	Locality						Country		
	Accra		Other urban		Rural		Male	Female	All
Male	Female	Male	Female	Male	Female	Male	Female	All	
Check up	7.9	10.0	7.0	9.9	3.7	3.5	5.0	6.0	5.6
Illness	82.9	83.3	84.4	84.2	89.8	89.3	87.6	87.2	87.4
Injury	9.2	5.8	8.3	4.0	6.4	5.1	7.1	4.8	5.9
Vaccination	-	-	-	0.3	0.2	-	0.1	0.1	0.1
Pre-natal care	-	0.8	0.3	1.3	-	1.7	0.1	1.5	0.9
Post-natal care	-	-	-	0.3	-	0.4	-	0.3	0.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	76	120	315	373	645	766	1036	1259	2295

Table A3.2 Percent of women aged 15-49 years, currently pregnant or pregnant during the previous 12 months, who have received pre-natal care, by mother's age and locality

Agegroup	Percentages			
	Locality			
	Accra	Other urban	Rural	Country
15-19	100.0	90.9	76.4	79.1
20-24	75.0	82.1	74.1	75.6
25-29	81.2	90.9	68.5	75.4
30-34	91.7	73.5	72.1	73.6
35-39	90.9	90.5	60.4	67.4
40-44	50.0	66.7	65.3	65.2
45-49	100.0	66.7	63.2	65.4
All	83.1	83.3	69.6	73.3

Table A3.3 Percent of women aged 15-49 years, currently pregnant or pregnant during the past 12 months, who never went for pre-natal consultation, by locality and reason for not going

Reason for no pre-natal care	Percentages		
	Locality		
	Urban	Rural	Country
	%	%	%
Cannot afford	2.3	36.9	31.2
No health care available	-	6.5	5.4
Centre too far	-	12.0	10.0
Not necessary	44.2	26.7	29.6
Other	53.5	18.0	23.8
All	100.0	100.0	100.0
Sample size	43	217	260

Table A3.4 Percent of children aged 7 years or under who have never been vaccinated, by age, locality and sex of child

Age	Percentages								
	Locality								
	Accra		Other Urban		Rural		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	All
0 year	5.3	-	6.5	19.6	33.3	43.7	26.6	36.6	31.8
1 year	-	4.2	3.9	7.4	17.1	22.5	12.5	18.2	15.5
2 years	-	5.3	-	4.2	15.7	17.4	11.2	13.8	12.5
3 years	-	4.3	6.3	5.1	19.8	16.8	15.9	13.4	14.6
4 years	-	4.5	4.3	7.3	23.8	18.9	17.4	15.4	16.4
5 years	2.9	-	2.6	8.3	23.0	20.3	17.0	15.7	16.4
6 years	-	6.5	7.1	11.8	23.7	20.7	19.0	17.2	18.1
7 years	-	8.0	7.1	4.7	22.9	22.5	17.7	17.5	17.6
All	1.3	4.2	4.8	8.2	22.4	22.6	17.1	18.1	17.6

Table A4.1 Distribution of hours worked per week, by sex and age
(main job of usually active population aged 15 and over)

		Percentages										
		Hours of work per week in main job								ALL	Sample size	40+
		1-9	10-19	20-29	30-39	40-49	50-59	60-69	70+			
<u>Age</u>												
15-19	Male	4.8	6.9	15.8	33.3	21.3	8.2	7.6	2.1	100.0	291	39.2
	Female	6.1	11.9	28.0	27.1	15.5	4.0	2.4	5.2	100.0	329	27.1
20-24	Male	2.5	6.3	10.6	25.1	30.2	11.7	8.2	5.4	100.0	367	55.5
	Female	5.6	9.0	21.9	23.9	23.6	7.5	3.7	4.9	100.0	535	39.7
25-44	Male	0.7	3.1	11.8	18.7	34.8	12.2	9.3	9.6	100.0	1651	65.9
	Female	2.0	8.2	20.7	27.1	26.2	5.7	4.6	5.6	100.0	2194	42.1
45-59	Male	1.3	3.6	9.3	20.8	37.3	11.2	8.4	8.1	100.0	751	65.0
	Female	2.0	7.3	21.6	30.7	25.2	5.9	3.2	4.0	100.0	901	38.3
60+	Male	0.6	4.3	16.0	31.4	28.2	9.5	5.7	4.3	100.0	507	47.7
	Female	5.2	13.5	24.4	26.2	20.5	3.4	3.6	3.4	100.0	386	30.9
ALL	Male	1.3	4.0	12.1	22.8	32.8	11.2	8.3	7.5	100.0	3567	59.8
	Female	3.0	8.8	21.9	27.4	24.3	5.6	4.0	4.9	100.0	4345	38.8
All	All	2.2	6.7	17.5	25.3	28.2	8.2	5.9	6.1	100.0	7912	48.4

Table A4.2 Distribution of hours worked per week, by industry and sex
(main job of usually active population aged 15 and over)

		Percentages									
		Hours of work per week in main job								ALL	
		1-9	10-19	20-29	30-39	40-49	50-59	60-69	70+		
<u>Industry</u>											
Agriculture	Male	1.4	4.9	13.7	28.6	30.2	11.0	7.4	2.8	100.0	
	Female	3.2	9.4	27.6	36.0	19.6	3.1	0.7	0.4	100.0	
Mining	Male	-	-	-	22.2	44.4	19.4	2.8	11.1	100.0	
	Female	-	-	20.0	40.0	20.0	20.0	-	-	100.0	
Manufacturing	Male	1.3	3.4	5.9	8.0	36.7	18.1	15.6	11.0	100.0	
	Female	4.2	9.6	18.0	19.5	28.6	7.9	6.7	5.7	100.0	
Utilities	Male	-	-	-	-	87.5	-	12.5	-	100.0	
	Female	-	-	-	-	66.7	-	-	33.3	100.0	
Construction	Male	1.1	3.4	4.5	13.6	44.3	18.2	9.1	5.7	100.0	
	Female	-	-	-	20.0	60.0	-	20.0	-	100.0	
Trading	Male	0.6	4.8	6.1	8.5	26.1	10.9	13.3	29.7	100.0	
	Female	2.5	8.6	10.8	13.8	28.0	11.0	10.4	14.9	100.0	
Transport/ communication	Male	-	1.9	0.6	1.9	27.8	14.8	17.9	35.2	100.0	
	Female	-	10.0	-	10.0	70.0	10.0	-	-	100.0	
Financial services	Male	-	3.2	-	6.5	61.3	-	6.5	22.6	100.0	
	Female	-	-	-	11.1	77.8	-	11.1	-	100.0	
Community & other services	Male	1.9	1.1	16.1	16.5	42.3	6.6	4.9	10.8	100.0	
	Female	1.9	3.8	20.6	13.4	43.9	5.0	4.6	6.9	100.0	
All	Male	1.3	4.0	12.1	22.8	32.8	11.2	8.3	7.5	100.0	
	Female	3.0	8.8	21.9	27.4	24.3	5.6	4.0	4.9	100.0	

Table A4.3 Distribution of population aged 7+ by hours of housekeeping per day, by age and sex

		Hours per day for all housekeeping activities								Percentages	
		0	< 1	1-	2-	3-	4-	6-	8+	ALL	
Male	7 - 14	13.9	27.1	29.3	15.5	8.1	4.9	1.0	0.1	100.0	
	15 - 19	14.0	23.5	29.3	15.5	9.4	6.3	1.6	0.5	100.0	
	20 - 24	22.0	33.2	24.5	12.1	5.4	2.6	0.2	0.2	100.0	
	25 - 44	38.3	32.1	17.1	8.3	2.7	1.2	0.3	.	100.0	
	45 - 59	60.4	22.8	7.8	4.5	2.6	1.4	0.4	0.1	100.0	
	60+	65.6	17.8	7.3	5.9	2.4	0.7	0.2	0.2	100.0	
	All	29.8	27.1	21.8	11.5	5.7	3.3	0.7	0.1	100.0	
Female	7 - 14	7.9	21.2	25.8	19.8	11.4	10.1	2.6	1.1	100.0	
	15 - 19	4.9	7.8	19.6	23.8	16.8	19.8	6.2	1.2	100.0	
	20 - 24	2.5	6.0	15.5	20.5	24.8	18.8	8.3	3.7	100.0	
	25 - 44	2.9	5.9	12.5	20.2	21.6	24.6	8.4	4.0	100.0	
	45 - 59	7.1	8.0	15.9	19.6	19.8	21.3	6.5	2.0	100.0	
	60+	27.3	14.0	17.6	15.8	11.4	10.4	2.5	1.0	100.0	
	All	6.9	11.4	18.2	20.1	17.4	17.8	5.8	2.4	100.0	
All	7 - 14	11.0	24.3	27.6	17.6	9.7	7.4	1.8	0.6	100.0	
	15 - 19	9.7	16.1	24.7	19.4	12.9	12.6	3.7	0.8	100.0	
	20 - 24	11.5	18.6	19.6	16.6	15.8	11.3	4.5	2.0	100.0	
	25 - 44	17.9	17.0	14.4	15.1	13.5	14.6	5.0	2.3	100.0	
	45 - 59	30.7	14.5	12.3	12.9	12.2	12.5	3.8	1.2	100.0	
	60+	46.6	15.9	12.4	10.8	6.9	5.5	1.3	0.6	100.0	
	All	17.9	18.9	19.9	16.0	11.8	10.9	3.3	1.3	100.0	

Table A4.4 Average minutes per day spent on all housekeeping, by age, sex and region

		Region										Minutes per day
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	All
Age group												
Male	7 - 14	91	79	77	137	110	123	105	68	64	90	100
	15 - 19	97	95	99	154	133	124	109	84	42	103	111
	20 - 24	65	70	78	90	75	91	82	58	33	106	78
	25 - 44	48	45	50	60	43	64	55	44	38	73	53
	45 - 59	27	12	21	29	46	46	35	40	27	81	35
	60+	21	20	21	27	28	39	29	33	16	96	33
	All	65	61	63	97	80	93	79	58	43	89	76
Female	7 - 14	100	111	94	152	179	149	132	148	162	189	137
	15 - 19	169	174	134	201	224	180	203	223	289	283	190
	20 - 24	193	200	141	242	265	203	251	241	303	331	217
	25 - 44	182	221	179	217	268	209	252	251	290	346	229
	45 - 59	184	189	142	172	246	175	182	211	264	291	197
	60+	70	119	99	107	159	103	117	184	128	171	122
	All	150	168	139	184	222	176	193	208	237	273	185
All	7 - 14	96	95	86	144	143	136	118	104	110	139	118
	15 - 19	130	131	119	177	171	152	151	141	143	181	148
	20 - 24	132	148	113	182	166	153	165	151	168	212	153
	25 - 44	121	148	125	151	161	149	166	162	190	258	154
	45 - 59	102	128	82	111	171	118	112	130	165	201	125
	60+	46	74	62	67	94	75	66	102	64	126	77
	All	108	119	104	142	151	137	136	132	142	188	133

Table A4.5 Distribution of population by hours per day spent fetching wood, by age and sex

		Hours per day fetching wood								Percentages
		0	< 1	1-	2-	3-	4-	6-	8+	All
Age group										
Male	7 - 14	65.7	30.7	2.8	0.5	0.1	0.1	-	-	100.0
	15 - 19	64.5	30.6	3.5	1.2	0.1	-	0.1	-	100.0
	20 - 24	79.7	18.5	1.8	-	-	-	-	-	100.0
	25 - 44	85.0	13.9	0.8	0.3	-	0.1	-	-	100.0
	45 - 59	89.7	8.2	1.5	0.5	0.1	-	-	-	100.0
	60+	91.6	7.6	0.6	-	-	0.2	-	-	100.0
	All	76.1	21.2	2.0	0.5	0.1	0.1	0.0	-	100.0
Female	7 - 14	60.6	33.1	4.7	1.4	0.1	0.1	0.0	-	100.0
	15 - 19	53.9	36.6	7.0	2.0	0.4	0.1	-	-	100.0
	20 - 24	54.6	36.1	6.9	1.2	0.7	0.5	-	-	100.0
	25 - 44	53.7	33.6	8.6	2.9	0.6	0.5	0.1	0.0	100.0
	45 - 59	50.9	36.4	10.2	1.5	0.5	0.3	-	0.2	100.0
	60+	71.1	22.7	5.1	0.5	0.3	0.3	-	-	100.0
	All	56.7	33.6	7.1	1.8	0.4	0.3	0.0	0.0	100.0
All	7 - 14	63.2	31.9	3.7	0.9	0.1	0.1	0.0	-	100.0
	15 - 19	59.5	33.4	5.2	1.5	0.2	0.0	0.0	-	100.0
	20 - 24	66.2	28.0	4.6	0.6	0.4	0.3	-	-	100.0
	25 - 44	67.0	25.2	5.3	1.8	0.3	0.3	0.0	0.0	100.0
	45 - 59	68.0	23.9	6.4	1.1	0.3	0.2	-	0.1	100.0
	60+	81.4	15.1	2.9	0.2	0.2	0.2	-	-	100.0
	All	66.0	27.7	4.7	1.2	0.2	0.2	0.0	0.0	100.0

Table A4.6 Average minutes per day spent fetching wood, by age, sex and region

		Region										Minutes per day
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	All
Age group												
Male	7 - 14	19	10	1	11	13	18	17	9	10	5	12
	15 - 19	21	12	1	19	22	18	16	12	11	4	14
	20 - 24	12	8	1	7	9	7	11	5	4	-	7
	25 - 44	10	4	*	5	10	5	6	9	3	4	6
	45 - 59	5	*	-	3	17	3	7	9	4	9	5
	60+	2	*	-	4	7	4	6	8	-	-	4
	All	13	7	1	9	13	11	12	9	6	4	9
Female	7 - 14	22	11	*	14	16	18	18	24	36	34	17
	15 - 19	21	19	1	15	26	19	29	39	75	63	22
	20 - 24	26	18	1	20	33	17	25	54	62	39	23
	25 - 44	28	18	1	13	33	18	32	50	61	84	27
	45 - 59	37	21	*	13	34	26	30	48	60	42	28
	60+	11	8	3	8	23	15	16	40	9	19	15
	All	25	15	1	14	26	19	25	41	51	54	22
All	7 - 14	20	10	1	12	15	18	18	16	22	19	14
	15 - 19	21	15	1	17	24	18	22	23	37	30	18
	20 - 24	20	14	1	15	21	13	18	30	33	18	16
	25 - 44	20	12	1	10	22	13	20	32	38	58	18
	45 - 59	20	14	*	9	27	16	19	30	37	28	18
	60+	7	5	2	6	15	10	10	22	4	8	9
	All	19	12	1	12	20	15	19	25	29	31	16

Table A4.7 Distribution of population by hours per day spent fetching water, by age and sex

Percentages

		Hours per day fetching water								All
		0	< 1	1-	2-	3-	4-	6-	8+	
Age group										
Male	7 - 14	29.7	56.3	12.6	1.3	0.1	0.1	-	*	100.0
	15 - 19	34.7	52.2	11.1	1.5	0.2	0.3	-	-	100.0
	20 - 24	53.4	39.9	6.4	0.3	-	-	-	-	100.0
	25 - 44	76.0	22.0	1.9	0.1	-	-	-	-	100.0
	45 - 59	89.5	8.8	1.1	0.5	0.1	-	-	-	100.0
	60+	89.9	8.8	1.0	0.3	-	-	-	-	100.0
	All	55.1	36.9	7.0	0.8	0.1	0.1	-	*	100.0
Female	7 - 14	23.9	57.9	14.5	2.5	0.7	0.2	0.1	0.1	100.0
	15 - 19	24.6	53.0	17.9	3.2	0.8	0.5	-	-	100.0
	20 - 24	26.1	51.2	17.7	3.5	1.3	0.1	-	-	100.0
	25 - 44	30.5	47.9	15.4	4.0	1.6	0.5	0.1	-	100.0
	45 - 59	45.4	37.9	13.3	2.9	0.3	0.2	0.1	-	100.0
	60+	69.6	22.9	6.2	1.0	0.3	-	-	-	100.0
	All	32.3	48.6	14.7	3.1	1.0	0.3	0.1	*	100.0
All	7 - 14	26.9	57.1	13.5	1.9	0.4	0.1	*	0.1	100.0
	15 - 19	30.0	52.6	14.3	2.3	0.5	0.4	-	-	100.0
	20 - 24	38.7	46.0	12.5	2.0	0.7	0.1	-	-	100.0
	25 - 44	49.8	36.9	9.7	2.4	0.9	0.3	*	-	100.0
	45 - 59	64.8	25.1	7.9	1.8	0.2	0.1	0.1	-	100.0
	60+	79.8	15.8	3.6	0.7	0.2	-	-	-	100.0
	All	43.2	43.0	11.0	2.0	0.5	0.2	*	*	100.0

Table A4.8 Average minutes per day spent fetching water, by age, sex and region

Minutes per day

		Region										All
		Greater				Brong			Upper	Upper		
		Western	Central	Accra	Eastern	Volta	Ashanti	Ahafo	Northern	West	East	
Age group												
Male	7 - 14	32	22	19	41	45	42	43	24	22	48	35
	15 - 19	28	26	18	41	45	36	43	24	12	59	34
	20 - 24	19	15	13	29	19	15	25	12	8	61	20
	25 - 44	11	8	7	12	10	6	8	6	7	23	9
	45 - 59	5	1	4	3	9	2	1	3	2	31	5
	60+	2	2	2	3	5	3	1	3	-	27	5
	All	19	15	12	26	27	23	26	15	11	41	21
Female	7 - 14	29	26	19	39	69	42	47	53	50	75	42
	15 - 19	32	27	20	43	59	39	60	76	82	99	45
	20 - 24	41	30	16	44	61	36	58	68	81	114	44
	25 - 44	33	31	19	32	52	29	62	68	76	121	45
	45 - 59	26	22	11	18	39	17	29	52	65	104	33
	60+	5	11	12	11	25	9	14	38	6	50	16
	All	30	26	18	33	54	32	51	61	62	98	40
All	7 - 14	30	23	19	40	57	42	45	37	35	61	38
	15 - 19	30	27	19	42	51	38	51	45	41	76	39
	20 - 24	31	24	15	38	39	26	41	40	44	86	33
	25 - 44	23	21	14	24	32	19	38	41	48	89	30
	45 - 59	15	15	8	12	28	10	16	29	39	73	21
	60+	4	7	8	7	15	7	6	19	3	36	10
	All	24	21	15	30	40	28	38	37	37	71	31

Table A4.9 Distribution of population by hours per day spent cooking, cleaning etc., by age and sex

Percentages

Age group		Hours per day cooking, cleaning, etc.								All
		0	< 1	1-	2-	3-	4-	6-	8+	
		Male	7 - 14	27.8	46.8	18.3	4.7	1.4	1.1		-	-	100.0
	15 - 19	25.2	39.2	26.1	6.6	1.6	1.4	-	-	100.0
	20 - 24	30.8	40.8	21.5	5.5	0.8	0.6	-	-	100.0
	25 - 44	45.4	35.9	14.3	3.2	0.7	0.4	0.1	-	100.0
	45 - 59	65.5	22.3	8.4	2.4	1.1	0.3	-	-	100.0
	60+	68.2	18.6	9.6	2.9	0.3	0.2	-	0.2	100.0
	All	39.3	37.6	17.0	4.3	1.1	0.8	*	*	100.0
Female	7 - 14	15.4	42.8	27.7	9.2	2.5	1.9	0.3	0.1	100.0
	15 - 19	6.4	21.3	36.3	21.1	10.2	4.4	0.2	-	100.0
	20 - 24	3.3	12.5	35.9	26.7	11.4	9.4	0.5	0.3	100.0
	25 - 44	3.3	12.7	31.9	27.6	13.1	9.6	1.3	0.5	100.0
	45 - 59	8.8	13.6	31.5	26.4	12.1	7.1	0.5	0.1	100.0
	60+	29.3	18.3	27.7	14.7	6.1	3.1	0.5	0.3	100.0
	All	9.8	22.8	31.2	20.4	8.9	6.0	0.7	0.2	100.0
All	7 - 14	21.8	44.9	22.8	6.8	1.9	1.5	0.1	0.1	100.0
	15 - 19	16.4	30.8	30.9	13.4	5.6	2.8	0.1	-	100.0
	20 - 24	16.0	25.5	29.3	16.9	6.5	5.4	0.3	0.1	100.0
	25 - 44	21.2	22.6	24.4	17.3	7.8	5.7	0.8	0.3	100.0
	45 - 59	33.9	17.5	21.3	15.8	7.2	4.1	0.3	0.1	100.0
	60+	48.9	18.4	18.6	8.8	3.2	1.6	0.2	0.2	100.0
	All	23.9	29.9	24.4	12.7	5.2	3.5	0.4	0.1	100.0

Table A4.10 Average minutes per day spent cooking, cleaning etc., by age, sex and region

Minutes per day

Age group		Region										All
		Greater					Brong			Upper	Upper	
		Western	Central	Accra	Eastern	Volta	Ashanti	Ahafo	Northern	West	East	
Male	7 - 14	41	48	57	85	51	63	44	35	32	37	53
	15 - 19	48	57	80	96	66	71	50	47	19	39	63
	20 - 24	33	46	64	54	47	69	47	41	22	45	51
	25 - 44	28	33	43	43	24	53	42	30	28	46	38
	45 - 59	17	10	17	24	21	41	27	28	21	41	25
	60+	17	17	19	20	15	33	23	23	16	69	25
	All	33	39	50	62	40	58	42	35	25	44	45
Female	7 - 14	50	75	74	99	94	89	67	71	75	80	78
	15 - 19	116	128	114	145	137	121	115	107	130	120	123
	20 - 24	126	152	125	178	171	150	168	120	160	178	150
	25 - 44	121	172	159	171	183	161	158	133	153	141	156
	45 - 59	124	146	130	140	171	132	123	109	138	144	136
	60+	54	98	83	88	110	78	87	106	112	102	90
	All	96	127	120	137	142	125	117	107	123	121	122
All	7 - 14	45	61	65	92	72	75	55	51	52	58	65
	15 - 19	79	89	99	120	96	96	79	72	64	75	91
	20 - 24	82	110	98	129	107	114	106	81	91	108	104
	25 - 44	78	115	110	118	108	117	107	88	104	110	106
	45 - 59	68	99	74	90	115	92	77	71	89	100	87
	60+	36	62	52	54	64	58	50	61	58	82	57
	All	65	87	88	101	91	94	79	70	75	86	85

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

Percentages

Type of Dwelling	Locality								
	Accra		Other urban		Rural		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	All
	%	%	%	%	%	%	%	%	%
One Family house	10.9	8.7	10.1	7.8	13.6	7.4	12.5	7.7	11.0
Apartment/Flat	13.5	24.1	10.1	5.9	1.3	1.1	4.4	5.5	4.8
Room(s) (compound house)	63.5	59.5	68.0	73.6	45.0	55.4	52.0	61.0	54.9
Room(s) (others)	10.9	6.7	9.9	12.2	22.5	29.7	18.6	21.7	19.6
Huts/Buildings (same compound)	0.8	0.5	0.7	0.5	13.1	5.3	9.1	3.3	7.2
Huts/Building (different compound)	0.4	-	1.1	-	4.6	1.2	3.4	0.7	2.5
Other	-	0.5	0.1	-	-	-	*	0.1	*
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	266	195	715	409	2084	854	3065	1458	4523

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

Percentages

From whom they rented dwelling	Locality								
	Accra		Other urban		Rural		Country		
	Male	Female	Male	Female	Male	Female	Male	Female	All
	%	%	%	%	%	%	%	%	%
Relative	37.0	58.8	41.8	55.2	70.4	87.9	56.5	73.4	63.1
Private employer	2.9	1.1	5.3	0.9	1.8	0.5	3.1	0.7	2.2
Government	7.8	10.2	13.7	7.1	2.8	0.2	7.0	3.9	5.8
Private individual or agency	51.9	29.9	38.5	36.1	24.4	10.2	32.8	21.1	28.3
Other	0.4	-	0.7	0.6	0.6	1.2	0.6	0.8	0.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	243	177	548	324	928	587	1719	1088	2807

Table A6.3 Distribution of moving households by sex of household head, and (i) previous occupancy status, (ii) present occupancy status

Status	Sex of household head						All moving households	
	Male		Female		Previous status	Present status	Previous status	Present status
	Previous status	Present status	Previous status	Present status				
	%	%	%	%	%	%		
Owning	14.3	40.1	7.8	23.9	12.3	35.1		
Renting	30.8	26.3	27.3	23.5	29.7	25.5		
Rent free	49.4	33.1	54.4	51.1	50.9	38.7		
Perching	5.5	0.7	10.6	1.5	7.1	0.8		
All	100.0	100.0	100.0	100.0	100.0	100.0		
Sample size	2302	2302	1030	1030	3332	3332		

Table A6.4 Distribution of households by reason for moving from previous dwelling, locality and sex of head of household

Reason for moving	Localities									Country		
	Accra		Other urban		Rural		Country					
	Male	Female	Male	Female	Male	Female	Male	Female	All			
	%	%	%	%	%	%	%	%	%			
Family reasons	51.1	66.9	42.5	54.5	49.6	70.3	47.9	65.3	53.3			
Cost reasons	1.7	0.7	2.7	2.7	1.5	1.0	1.8	1.5	1.7			
Job reasons	25.5	21.1	30.9	16.2	30.8	10.3	30.3	13.5	25.1			
Ejected	16.0	5.6	9.2	10.4	3.7	3.2	6.3	5.6	6.1			
Other	5.6	5.7	14.7	16.2	14.5	15.2	13.7	14.1	13.8			
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
Sample size	231	142	590	297	1477	593	2298	1032	3330			

Table A8.1 Average value of reported household and per capita home consumption of food, by item and locality

Cedis

	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)	318	3437	2346	75	748	523
002	Maize - cob (fresh)	532	1680	1279	125	365	285
003	Maize - flour/dough	3734	13176	9874	875	2866	2203
004	Sorghum	42	32	36	10	9	8
005	Millet grain	29	585	391	7	127	87
006	Millet flour	526	6926	4688	123	1506	1046
007	Guinea corn	281	8179	5417	66	1779	1209
008	Other grains	-	*	*	-	*	*
009	Other flours	-	-	-	-	-	-
02 Roots and tubers							
010	Cassava - roots	12565	33619	26256	2945	7312	5858
011	Cassava - gari	11	735	482	3	160	108
012	Cassava - (other forms)	876	4180	3025	205	909	675
013	Yams	6603	21227	16113	1547	4617	3595
014	Cocoyams	5077	14533	11226	1190	3161	2505
015	Plantain	6436	21796	16424	1508	4740	3664
016	Sweet potato	11	286	190	3	62	42
017	Other roots & tubers	16	242	163	4	53	36
03 Pulses and nuts							
020	Banbara beans	519	1813	1360	122	394	304
022	Cowpeas	111	2301	1535	26	500	342
023	Groundnuts (roasted or raw)	1273	7287	5184	298	1585	1157
024	Other pulses or legumes	108	90	96	25	20	21
025	Palm nuts	1001	4984	3591	235	1084	801
026	Coconuts	78	353	257	18	77	57
028	Other nuts & seeds	1	144	94	*	31	21
04 Vegetables							
040	Tomatoes	441	2520	1793	103	548	400
041	Onions	68	758	517	16	165	115
042	Carrots	1	-	*	*	-	*
043	Okro	598	4227	2958	140	919	660
044	Garden eggs, cucumbers	496	1164	931	116	253	208
045	Pepper	895	5009	3570	210	1089	796
046	Cabbage or lettuce	69	-	24	16	-	5
047	Spinach/other leafy vegetables	272	2915	1991	64	634	444
048	Other vegetables	53	681	461	12	148	103
05 Fruit							
030	Bananas	313	861	669	73	187	149
031	Water melon	6	7	7	1	2	2
032	Oranges, tangerines	1592	891	1136	373	194	253
033	Mangoes	6	589	385	1	128	86
034	Pawpaw	122	460	342	29	100	76
035	Avocado pears	43	426	292	10	93	65
036	Pineapples	116	667	474	27	145	106
037	Other fruits	58	77	70	14	17	16
06 Oils and animal fats							
021	Palm oil	218	1765	1224	51	384	273
027	Coconut oil	6	19	14	1	4	3
07 Meat							
062	Game birds	*	194	126	*	42	28
063	Beef	*	47	30	*	10	7
064	Mutton	56	332	235	13	72	52
065	Pork	*	201	131	*	44	29
066	Goat	72	1581	1053	17	344	235
067	Other domestic meats	*	1085	706	*	236	158
068	Wild game	263	1071	789	62	233	176

Table A8.1 (continued)

		Cedis					
		Average value of annual household home consumption			Average value of annual per capita home consumption		
		Urban	Rural	Ghana	Urban	Rural	Ghana
	08 Poultry and poultry products						
060	Chicken	742	5572	3883	174	1212	866
061	Other domestic poultry	96	1147	780	22	249	174
070	Eggs	213	1677	1165	50	365	260
	09 Fish						
069	Fish and shellfish	89	1928	1284	21	419	286
	10 Milk and milk products						
071	Milk	-	153	100	-	33	22
	14 Non-alcoholic beverages						
091	Non-alcoholic beverages	-	24	16	-	5	4
	2. ALCOHOL & TOBACCO						
	21 Alcoholic drinks						
090	Alcoholic beverages	74	539	377	17	117	84
	Total value of home consumption	47,124	186,196	137,557	11,044	40,494	30,688

Table A8.2 Percentage of households reporting consumption of different home-produced food items during the last 12 months, by locality

		Percentages					
		Percentage of households reporting consumption of home-produced items during the previous 12 months					
		Ghana	Urban	Rural	Rural Coastal	Rural Forest	Rural Savannah
1. FOOD & BEVERAGES							
01 Cereals and cereal products							
001	Rice (paddy, grain)	7.1	1.8	9.9	0.4	4.7	25.8
002	Maize - cob (fresh)	44.8	16.6	60.0	47.6	71.5	51.8
003	Maize - flour/dough	48.5	19.0	64.3	58.2	64.8	68.5
004	Sorghum	0.6	0.3	0.8	-	0.1	2.5
005	Millet grain	5.2	0.6	7.7	-	0.1	26.0
006	Millet flour	9.3	2.6	12.8	-	0.1	43.7
007	Guinea corn	11.1	2.4	15.7	0.1	0.1	53.3
008	Other grains	*	-	*	0.1	-	-
009	Other flours	-	-	-	-	-	-
02 Roots and tubers							
010	Cassava - roots	50.7	22.2	66.1	66.2	83.6	38.5
011	Cassava - gari	5.1	0.3	7.7	8.6	7.9	6.6
012	Cassava - (other forms)	14.2	3.8	19.8	18.5	13.5	30.8
013	Yams	31.1	11.6	41.5	15.0	53.9	43.9
014	Cocoyams	32.5	13.4	42.8	21.6	70.2	17.2
015	Plantain	33.8	14.4	44.3	27.2	71.2	15.8
016	Sweet potato	2.3	0.4	3.2	3.6	1.3	6.0
017	Other roots & tubers	0.8	0.4	1.1	0.8	1.7	0.2
03 Pulses and nuts							
020	Banbara beans	7.0	1.6	9.9	3.1	0.9	29.8
022	Cowpeas	12.0	2.1	17.3	8.8	4.9	43.9
023	Groundnuts (roasted or raw)	15.6	3.4	22.1	8.2	6.3	58.6
024	Other pulses or legumes	0.9	0.7	1.1	1.5	0.4	1.7
025	Palm nuts	26.7	8.6	36.5	35.7	51.0	14.2
026	Coconuts	5.0	1.1	7.1	15.7	5.5	2.5
028	Other nuts & seeds	0.8	0.1	1.2	0.8	0.2	3.1
04 Vegetables							
040	Tomatoes	29.9	7.9	41.7	43.3	42.8	38.6
041	Onions	7.3	1.3	10.5	7.2	14.7	6.7
042	Carrots	-	-	-	-	-	-
043	Okra	34.4	8.7	48.2	28.8	45.7	68.1
044	Garden eggs, cucumbers	18.3	4.9	25.5	26.7	31.8	14.5
045	Pepper	45.7	12.7	63.4	52.6	72.6	57.6
046	Cabbage or lettuce	0.1	0.2	-	-	-	-
047	Spinach/other leafy vegetables	19.9	3.2	28.9	10.0	24.7	51.0
048	Other vegetables	3.6	0.7	5.2	0.4	4.7	10.0
05 Fruit							
030	Bananas	12.6	2.6	18.0	9.3	29.0	7.8
031	Water melon	0.2	0.1	0.3	0.6	0.2	0.1
032	Oranges, tangerines	10.2	1.7	14.8	9.6	24.5	3.7
033	Mangoes	11.2	2.2	16.0	11.4	22.9	9.0
034	Pawpaw	16.9	3.6	24.1	17.7	35.8	10.9
035	Avocado pears	12.6	2.4	18.1	7.1	33.6	2.6
036	Pineapples	9.9	2.8	13.6	15.5	17.9	5.4
037	Other fruits	0.8	0.5	1.0	2.5	0.7	0.1
06 Oils and animal fats							
021	Palm oil	10.7	2.0	15.3	12.0	22.8	6.2
027	Coconut oil	0.5	0.3	0.6	1.8	0.1	0.3
07 Meat							
062	Game birds	1.7	0.3	2.5	0.6	3.1	3.1
063	Beef	0.2	0.1	0.2	0.3	-	0.5
064	Mutton	4.3	0.9	6.2	4.6	7.0	6.2
065	Pork	1.2	0.1	1.8	1.8	0.5	3.8
066	Goat	10.5	3.0	14.5	14.5	13.1	16.8
067	Other domestic meats	0.7	0.1	1.0	0.6	1.5	0.8
068	Wild game	4.0	1.0	5.6	2.5	7.4	5.5

Table A8.2 (continued)

		Percentage of households reporting consumption of home-produced items during the previous 12 months					
		Ghana	Urban	Rural	Rural Coastal	Rural Forest	Rural Savannah
	08 Poultry and poultry products						
060	Chicken	33.2	8.5	46.5	35.2	45.4	57.6
061	Other domestic poultry	6.5	1.3	9.4	2.8	2.3	26.0
070	Eggs	22.1	3.7	31.9	23.1	35.4	33.6
	09 Fish						
069	Fish and shellfish	1.4	0.2	2.0	3.1	0.9	2.8
	10 Milk and milk products						
071	Milk	0.5	-	0.8	0.1	-	2.8
	14 Non-alcoholic beverages						
091	Non-alcoholic beverages	0.1	-	0.2	-	-	0.6
	2. ALCOHOL & TOBACCO						
	21 Alcoholic drinks						
090	Alcoholic beverages	1.7	0.3	2.5	2.1	1.2	5.0

Table A8.3 Average annual household consumption of home-produced food, by food subgroup and region

	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	3,137	7,398	1,179	10,899	27,401	6,830	13,508	78,980	111,368	178,900	24,030
Roots & tubers	88,449	101,355	3,564	107,888	80,086	78,961	111,056	64,466	29,987	84	73,878
Pulses & nuts	4,310	7,664	249	7,533	10,137	4,934	9,320	25,012	66,230	83,857	12,117
Vegetables	9,807	8,319	1,148	8,054	15,255	8,365	16,154	26,419	38,083	39,268	12,244
Fruit	4,181	3,653	200	4,443	4,539	3,324	2,668	145	21,444	2,106	3,375
Oils & animal fats	1,444	893	0	2,241	2,995	2,191	287	0	0	0	1,238
Meat	1,394	2,277	47	6,663	6,665	978	5,921	1,370	1,946	4,189	3,070
Poultry & poultry products	3,578	2,984	627	5,502	9,762	5,066	8,389	7,702	13,012	18,428	5,828
Fish	67	429	1,984	2,859	3,905	0	1,147	588	670	0	1,284
Milk & milk products	0	0	0	0	29	0	0	809	982	290	100
Non-alcoholic beverages	0	0	0	0	0	0	155	0	0	0	16
Alcoholic drinks	210	13	0	0	802	276	587	96	6,251	386	377
Total	116,577	134,985	8,998	165,080	161,576	110,925	169,192	205,587	289,973	327,508	137,557
<i>Sample size</i>	<i>485</i>	<i>515</i>	<i>638</i>	<i>662</i>	<i>419</i>	<i>734</i>	<i>455</i>	<i>343</i>	<i>111</i>	<i>190</i>	<i>4552</i>
<i>Households reporting consumption</i>	<i>356</i>	<i>374</i>	<i>65</i>	<i>482</i>	<i>314</i>	<i>504</i>	<i>402</i>	<i>286</i>	<i>99</i>	<i>188</i>	<i>3070</i>

Table A8.4 Average annual per capita consumption of home-produced food, by food subgroup and region

	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	738	1,812	314	2,745	6,159	1,556	2,560	13,864	19,225	30,081	5,361
Roots & tubers	20,804	24,821	949	27,177	18,002	17,994	21,046	11,316	5,177	14	16,482
Pulses & nuts	1,014	1,877	66	1,898	2,279	1,124	1,766	4,390	11,433	14,100	2,703
Vegetables	2,307	2,037	306	2,029	3,429	1,906	3,061	4,638	6,574	6,603	2,732
Fruit	983	895	53	1,119	1,020	758	506	25	3,702	354	753
Oils & animal fats	340	219	-	565	673	499	54	-	-	-	276
Meat	328	558	13	1,679	1,498	223	1,122	241	336	704	685
Poultry & poultry products	842	731	167	1,386	2,194	1,155	1,590	1,352	2,246	3,098	1,300
Fish	16	105	528	720	878	-	217	103	116	-	287
Milk & milk products	-	-	-	-	7	-	-	142	170	49	22
Non-alcoholic beverages	-	-	-	-	-	-	29	-	-	-	3
Alcoholic drinks	49	3	-	-	180	63	111	17	1,079	65	84
Total annual home consumption	27,421	33,058	2,396	39,318	36,319	25,278	32,062	36,088	50,058	55,068	30,688
<i>Sample size</i>	<i>2062</i>	<i>2103</i>	<i>2397</i>	<i>2628</i>	<i>1864</i>	<i>3221</i>	<i>2401</i>	<i>1954</i>	<i>643</i>	<i>1130</i>	<i>20403</i>

Table A8.5 Estimated total annual national consumption of home-produced food, by food subgroup and region

	thousand million cedis										
	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Ghana
Cereals & cereal products	1	3	1	5	8	4	4	20	9	25	80
Roots & tubers	31	38	2	52	24	42	37	16	2	*	245
Pulses & nuts	2	3	*	4	3	3	3	6	5	12	40
Vegetables	3	3	1	4	5	4	5	7	3	5	41
Fruit	1	1	*	2	1	2	1	*	2	*	11
Oils & animal fats	1	*	-	1	1	1	*	-	-	-	4
Meat	*	1	*	3	2	1	2	*	*	1	10
Poultry & poultry products	1	1	*	3	3	3	3	2	1	3	19
Fish	*	*	1	1	1	-	*	*	*	-	4
Milk & milk products	-	-	-	-	*	-	-	*	*	*	*
Non-alcoholic beverages	-	-	-	-	-	-	*	-	-	-	*
Alcoholic drinks	*	*	-	-	*	*	*	*	1	*	1
Total annual home consumption	41	51	4	80	49	59	56	51	23	45	457

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

Expenditure group	Cedis										
	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Country
	¢	¢	¢	¢	¢	¢	¢	¢	¢	¢	¢
Food & beverages	237,801	303,842	365,773	231,674	266,329	298,072	209,824	283,392	121,146	334,941	276,511
Alcohol & tobacco	20,419	17,604	11,851	14,510	25,258	14,743	20,917	20,828	48,753	34,928	18,948
Clothing & footwear	52,669	43,969	74,748	47,297	36,251	61,383	54,763	33,758	24,107	31,757	51,107
Housing & utilities	37,439	41,273	94,928	37,461	38,053	51,693	39,504	49,807	29,723	23,373	48,652
Household goods, operation & services	36,585	39,630	53,706	30,208	34,731	49,037	36,821	29,024	22,714	26,273	38,924
Medical care & health expenses	20,437	23,291	19,184	15,091	22,965	35,901	27,798	18,692	8,465	16,726	22,691
Transport & communications	18,639	28,385	48,826	29,116	28,738	56,322	34,227	24,109	16,351	20,651	34,501
Recreation & education	18,615	31,598	38,968	23,333	25,297	29,500	22,670	22,764	6,927	9,777	26,057
Miscellaneous goods & services	18,576	17,615	36,401	11,469	15,233	59,798	45,096	35,750	3,706	7,648	29,397
All groups	461,180	547,207	744,385	440,159	492,855	656,449	491,620	518,124	281,892	506,074	546,788
Sample size	485	515	638	662	419	734	455	343	111	190	4552

Table A9.2 Percentage distribution of mean annual household cash expenditure by expenditure group, by region

	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Country
<u>Expenditure group</u>	%	%	%	%	%	%	%	%	%	%	%
Food & beverages	51.6	55.5	49.1	52.6	54.0	45.4	42.7	54.7	43.0	66.2	50.6
Alcohol & tobacco	4.4	3.2	1.6	3.3	5.1	2.2	4.3	4.0	17.3	6.9	3.5
Clothing & footwear	11.4	8.0	10.0	10.7	7.4	9.4	11.1	6.5	8.6	6.3	9.3
Housing & utilities	8.1	7.5	12.8	8.5	7.7	7.9	8.0	9.6	10.5	4.6	8.9
Household goods, operation & services	7.9	7.2	7.2	6.9	7.0	7.5	7.5	5.6	8.1	5.2	7.1
Medical care & health expenses	4.4	4.3	2.6	3.4	4.7	5.5	5.7	3.6	3.0	3.3	4.2
Transport & communications	4.0	5.2	6.6	6.6	5.8	8.6	7.0	4.7	5.8	4.1	6.3
Recreation & education	4.0	5.8	5.2	5.3	5.1	4.5	4.6	4.4	2.5	1.9	4.8
Miscellaneous goods & services	4.0	3.2	4.9	2.6	3.1	9.1	9.2	6.9	1.3	1.5	5.4
All groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean annual household cash expenditure	461,180	547,207	744,385	440,159	492,855	656,449	491,620	518,124	281,892	506,074	546,788
Sample size	485	515	638	662	419	734	455	343	111	190	4552

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

	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Country
Expenditure group	¢	¢	¢	¢	¢	¢	¢	¢	¢	¢	
Food & beverages	55,933	74,407	97,356	58,359	59,867	67,924	39,762	49,746	20,913	56,317	61,691
Alcohol & tobacco	4,803	4,311	3,154	3,655	5,678	3,360	3,964	3,656	8,416	5,873	4,227
Clothing & footwear	12,388	10,767	19,895	11,914	8,149	13,988	10,378	5,926	4,162	5,340	11,402
Housing & utilities	8,806	10,107	25,267	9,437	8,554	11,780	7,486	8,743	5,131	3,930	10,854
Household goods, operation & services	8,605	9,705	14,295	7,609	7,807	11,175	6,978	5,095	3,921	4,418	8,684
Medical care & health expenses	4,807	5,704	5,106	3,801	5,162	8,181	5,268	3,281	1,461	2,812	5,062
Transport & communications	4,384	6,951	12,996	7,334	6,460	12,835	6,486	4,232	2,823	3,472	7,697
Recreation & education	4,378	7,738	10,372	5,878	5,687	6,723	4,296	3,996	1,196	1,644	5,813
Miscellaneous goods & service	4,369	4,314	9,689	2,889	3,424	13,627	8,546	6,276	640	1,286	6,559
All groups	108,473	134,004	198,130	110,877	110,787	149,591	93,164	90,950	48,662	85,092	121,991
Sample size (persons)	2062	2103	2397	2628	1864	3221	2401	1954	643	1130	20403

Table A9.4 Estimated total annual national cash expenditure, by region and expenditure group

(Thousand million cedis)

	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Country
<u>Expenditure group</u>											
Food & beverages	84	114	170	112	81	160	70	71	10	46	919
Alcohol & tobacco	7	7	6	7	8	8	7	5	4	5	63
Clothing & footwear	19	17	35	23	11	33	18	8	2	4	170
Housing & utilities	13	16	44	18	12	28	13	12	2	3	162
Household goods, operation & services	13	15	25	15	11	26	12	7	2	4	129
Medical care & health expenses	7	9	9	7	7	19	9	5	1	2	75
Transport & communications	7	11	23	14	9	30	11	6	1	3	115
Recreation & education	7	12	18	11	8	16	8	6	1	1	87
Miscellaneous goods & services	7	7	17	6	5	32	15	9	0	1	98
Total	163	206	347	213	151	352	163	130	23	70	1817

Table A9.5 Mean annual household cash expenditure by locality (LOC3) and expenditure group

Expenditure group	Locality			Country	Locality			Country
	Accra	Other urban	Rural		Accra	Other urban	Rural	
	¢	¢	¢	¢	%	%	%	%
Food & beverages	367,575	348,198	234,925	276,511	48.5	48.8	52.2	50.6
Alcohol & tobacco	10,289	15,313	21,688	18,948	1.4	2.1	4.8	3.5
Clothing & footwear	82,921	56,948	43,903	51,107	10.9	8.0	9.7	9.3
Housing & utilities	82,189	70,161	35,201	48,652	10.8	9.8	7.8	8.9
Household goods, operation & services	57,815	43,900	34,071	38,924	7.6	6.2	7.6	7.1
Medical care & health expenses	18,664	26,032	22,046	22,691	2.5	3.7	4.9	4.2
Transport & communications	58,472	43,288	27,399	34,501	7.7	6.1	6.1	6.3
Recreation & education	37,657	42,392	18,012	26,057	5.0	5.9	4.0	4.8
Miscellaneous goods & services	42,356	66,818	13,097	29,397	5.6	9.4	2.9	5.4
All groups	757,938	713,050	450,342	546,788	100.0	100.0	100.0	100.0
<i>Sample size</i>	463	1129	2960	4552				

Table A9.6 Mean annual per capita cash expenditure, by locality (LOC3) and expenditure group

	Accra	Other urban	Rural	Country
Expenditure group	¢	¢	¢	¢
Food & beverages	101,181	76,916	51,093	61,691
Alcohol & tobacco	2,832	3,383	4,717	4,227
Clothing & footwear	22,826	12,580	9,548	11,402
Housing & utilities	22,624	15,498	7,656	10,854
Household goods, operation & services	15,915	9,697	7,410	8,684
Medical care & health expenses	5,138	5,750	4,795	5,062
Transport & communications	16,095	9,562	5,959	7,697
Recreation & education	10,366	9,364	3,917	5,813
Miscellaneous goods & services	11,659	14,760	2,849	6,559
All groups	208,635	157,510	97,943	121,991
Sample size	1682	5111	13610	20403

Table A9.7 Estimated total annual national cash expenditure, by locality (LOC3) and expenditure group

	(Thousand million cedis)			
	Accra	Other urban	Rural	Country
<u>Expenditure group</u>				
Food & beverages	124	287	508	919
Alcohol & tobacco	3	13	47	63
Clothing & footwear	28	47	95	170
Housing & utilities	28	58	76	162
Household goods, operation & services	20	36	74	129
Medical care & health expenses	6	21	48	75
Transport & communications	20	36	59	115
Recreation & education	13	35	39	87
Miscellaneous goods & services	14	55	28	98
Total	256	588	973	1817

Table A9.8 Mean annual household cash expenditure by locality (LOC4) and expenditure group

Expenditure group	Locality				Country	Locality				Country
	Accra	Other urban	Semi-urban	Small rural		Accra	Other urban	Semi-urban	Small rural	
	¢	¢	¢	¢		¢	¢	¢	¢	
Food & beverages	367,575	348,198	256,244	224,895	276,511	48.5	48.8	52.6	51.9	50.6
Alcohol & tobacco	10,289	15,313	20,028	22,469	18,948	1.4	2.1	4.1	5.2	3.5
Clothing & footwear	82,921	56,948	46,889	42,498	51,107	10.9	8.0	9.6	9.8	9.3
Housing & utilities	82,189	70,161	36,227	34,719	48,652	10.8	9.8	7.4	8.0	8.9
Household goods, operation & services	57,815	43,900	36,110	33,112	38,924	7.6	6.2	7.4	7.6	7.1
Medical care & health expenses	18,664	26,032	23,260	21,474	22,691	2.5	3.7	4.8	5.0	4.2
Transport & communications	58,472	43,288	31,669	25,390	34,501	7.7	6.1	6.5	5.9	6.3
Recreation & education	37,657	42,392	20,532	16,826	26,057	5.0	5.9	4.2	3.9	4.8
Miscellaneous goods & services	42,356	66,818	16,000	11,732	29,397	5.6	9.4	3.3	2.7	5.4
All groups	757,938	713,050	486,959	433,115	546,788	100.0	100.0	100.0	100.0	100.0
Sample size	463	1129	947	2013	4552					

Table A9.9 Mean annual per capita cash expenditure, by locality (LOC4) and expenditure group

	Accra	Other urban	Semi-urban	Small rural	Country
Expenditure group	¢	¢	¢	¢	¢
Food & beverages	101,181	76,916	62,429	46,561	61,691
Alcohol & tobacco	2,832	3,383	4,879	4,652	4,227
Clothing & footwear	22,826	12,580	11,424	8,799	11,402
Housing & utilities	22,624	15,498	8,826	7,188	10,854
Household goods, operation & services	15,915	9,697	8,798	6,855	8,684
Medical care & health expenses	5,138	5,750	5,667	4,446	5,062
Transport & communications	16,095	9,562	7,716	5,257	7,697
Recreation & education	10,366	9,364	5,002	3,484	5,813
Miscellaneous goods & services	11,659	14,760	3,898	2,429	6,559
All groups	208,635	157,510	118,638	89,670	121,991
<i>Sample size</i>	1682	5111	3887	9723	20403

Table A9.10 Estimated total annual national cash expenditure, by locality (LOC4)
and expenditure group

(Thousand million cedis)

	Accra	Other urban	Semi-urban	Small rural	Country
<u>Expenditure group</u>					
Food & beverages	124	287	177	330	919
Alcohol & tobacco	3	13	14	33	63
Clothing & footwear	28	47	32	62	170
Housing & utilities	28	58	25	51	162
Household goods, operation & services	20	36	25	49	129
Medical care & health expenses	6	21	16	32	75
Transport & communications	20	36	22	37	115
Recreation & education	13	35	14	25	87
Miscellaneous goods & services	14	55	11	17	98
Total	256	588	337	636	1817

Table A9.11 Mean annual household cash expenditure by locality (LOC5) and expenditure group

	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	Country	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	Country
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Food & beverages	367,575	348,198	299,527	212,301	217,297	276,511	48.5	48.8	55.9	47.9	55.5	50.6
Alcohol & tobacco	10,289	15,313	23,065	16,312	29,060	18,948	1.4	2.1	4.3	3.7	7.4	3.5
Clothing & footwear	82,921	56,948	39,984	52,820	33,028	51,107	10.9	8.0	7.5	11.9	8.4	9.3
Housing & utilities	82,189	70,161	44,111	33,207	30,989	48,652	10.8	9.8	8.2	7.5	7.9	8.9
Household goods, operations & services	57,815	43,900	39,149	35,856	27,047	38,924	7.6	6.2	7.3	8.1	6.9	7.1
Medical care & health expenses	18,664	26,032	24,730	23,998	16,735	22,691	2.5	3.7	4.6	5.4	4.3	4.2
Transport & communications	58,472	43,288	26,555	33,978	17,683	34,501	7.7	6.1	5.0	7.7	4.5	6.3
Recreation & education	37,657	42,392	24,897	18,759	11,134	26,057	5.0	5.9	4.6	4.2	2.8	4.8
Miscellaneous goods & services	42,356	66,818	13,792	15,782	8,273	29,397	5.6	9.4	2.6	3.6	2.1	5.4
All groups	757,938	713,050	535,810	443,013	391,246	546,788	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	463	1129	718	1374	868	4552						

Table A9.12 Mean annual per capita cash expenditure, by locality (LOC5) and expenditure group

	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Country
	¢	¢	¢	¢	¢	¢
<u>Expenditure group</u>						
Food & beverages	101,181	76,916	74,882	48,520	39,910	61,691
Alcohol & tobacco	2,832	3,383	5,766	3,728	5,337	4,227
Clothing & footwear	22,826	12,580	9,996	12,072	6,066	11,402
Housing & utilities	22,624	15,498	11,028	7,589	5,692	10,854
Household goods, operation & services	15,915	9,697	9,787	8,195	4,968	8,684
Medical care & health expenses	5,138	5,750	6,182	5,485	3,074	5,062
Transport & communications	16,095	9,562	6,639	7,766	3,248	7,697
Recreation & education	10,366	9,364	6,224	4,287	2,045	5,813
Miscellaneous goods & services	11,659	14,760	3,448	3,607	1,519	6,559
All groups	208,635	157,510	133,952	101,248	71,859	121,991
<i>Sample size</i>	1682	5111	2872	6012	4726	20403

Table A9.13 Estimated total annual national cash expenditure, by locality (LOC5)
and expenditure group

(Thousand million cedis)

	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	Country
<u>Expenditure group</u>						
Food & beverages	124	287	157	213	138	919
Alcohol & tobacco	3	13	12	16	18	63
Clothing & footwear	28	47	21	53	21	170
Housing & utilities	28	58	23	33	20	162
Household goods, operation & services	20	36	21	36	17	129
Medical care & health expenses	6	21	13	24	11	75
Transport & communications	20	36	14	34	11	115
Recreation & education	13	35	13	19	7	87
Miscellaneous goods & services	14	55	7	16	5	98
Total	256	588	281	444	248	1817

Table A9.14 Mean annual household cash expenditure by ecological zone and expenditure group

Expenditure group	Ecological zone			Country	Ecological zone			Country
	Coastal	Forest	Savannah		Coastal	Forest	Savannah	
	¢	¢	¢	¢	%	%	%	%
Food & beverages	327,331	248,848	247,632	276,511	52.9	46.6	53.8	50.6
Alcohol & tobacco	16,744	16,379	26,782	18,948	2.7	3.1	5.8	3.5
Clothing & footwear	54,401	56,732	36,276	51,107	8.8	10.6	7.9	9.3
Housing & utilities	63,958	40,941	38,868	48,652	10.3	7.7	8.5	8.9
Household goods, operation & services	43,209	40,426	29,791	38,924	7.0	7.6	6.5	7.1
Medical care & health expenses	20,171	27,201	18,640	22,691	3.3	5.1	4.1	4.2
Transport & communications	34,691	40,571	23,607	34,501	5.6	7.6	5.1	6.3
Recreation & education	33,684	24,559	17,088	26,057	5.4	4.6	3.7	4.8
Miscellaneous goods & services	24,426	38,426	21,179	29,397	3.9	7.2	4.6	5.4
All groups	618,615	534,083	459,863	546,788	100.0	100.0	100.0	100.0
Sample size	1621	1864	1067	4552				

Table A9.15 Mean annual per capita cash expenditure, by ecological zone and expenditure group

	Coastal	Forest	Savannah	Country
	¢	¢	¢	¢
<u>Expenditure group</u>				
Food & beverages	83,996	56,265	45,228	61,691
Alcohol & tobacco	4,297	3,703	4,892	4,227
Clothing & footwear	13,960	12,827	6,625	11,402
Housing & utilities	16,412	9,257	7,099	10,854
Household goods, operation & services	11,088	9,140	5,441	8,684
Medical care & health expenses	5,176	6,150	3,404	5,062
Transport & communications	8,902	9,173	4,312	7,697
Recreation & education	8,644	5,553	3,121	5,813
Miscellaneous goods & services	6,268	8,688	3,868	6,559
All groups	158,742	120,757	83,991	121,991
<i>Sample size</i>	6317	8244	5842	20403

Table A9.16 Estimated total annual national cash expenditure,
by ecological zone and expenditure group

	(Thousand million cedis)			
	Coastal	Forest	Savannah	Country
<u>Expenditure group</u>				
Food & beverages	387	339	193	919
Alcohol & tobacco	20	22	21	63
Clothing & footwear	64	77	28	170
Housing & utilities	76	56	30	162
Household goods, operation & services	51	55	23	129
Medical care & health expenses	24	37	15	75
Transport & communications	41	55	18	115
Recreation & education	40	33	13	87
Miscellaneous goods & services	29	52	16	98
Total	732	727	358	1817

Table A9.17 Mean annual household cash expenditure, by quintile and expenditure group: Accra

Expenditure group	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					All Accra	Quintile group					All Accra
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Food & beverages	225,644	256,872	341,932	408,348	418,558	367,575	62.0	56.0	57.4	52.3	42.2	48.5
Alcohol & tobacco	479	3,648	4,257	7,181	18,924	10,289	0.1	0.8	0.7	0.9	1.9	1.4
Clothing & footwear	28,847	40,537	59,929	89,557	113,929	82,921	7.9	8.8	10.1	11.5	11.5	10.9
Housing & utilities	58,142	64,327	69,694	85,857	96,374	82,189	16.0	14.0	11.7	11.0	9.7	10.8
Household goods, operation & services	12,421	30,875	36,747	53,692	87,408	57,815	3.4	6.7	6.2	6.9	8.8	7.6
Medical care & health expenses	2,865	10,032	13,164	17,749	27,532	18,664	0.8	2.2	2.2	2.3	2.8	2.5
Transport & communications	10,512	16,259	23,783	41,014	107,638	58,472	2.9	3.5	4.0	5.3	10.8	7.7
Recreation & education	20,654	29,034	33,080	45,164	41,541	37,657	5.7	6.3	5.6	5.8	4.2	5.0
Miscellaneous goods & services	4,386	7,255	12,930	32,070	80,793	42,356	1.2	1.6	2.2	4.1	8.1	5.6
All groups	363,950	458,839	595,516	780,632	992,697	757,938	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	33	58	89	102	181	463						

Table A9.18 Mean annual per capita cash expenditure, by quintile and expenditure group: Accra

Accra	Mean annual per capita cash expenditure						Percentage distribution					
	Quintile group					All Accra	Quintile group					All Accra
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
	¢	¢	¢	¢	¢	%	%	%	%	%	%	
<i>Expenditure group</i>												
Food & beverages	38,783	52,645	80,508	102,843	178,677	101,181	62.0	56.0	57.4	52.3	42.2	48.5
Alcohol & tobacco	82	748	1,002	1,808	8,078	2,832	0.1	0.8	0.7	0.9	1.9	1.4
Clothing & footwear	4,958	8,308	14,110	22,555	48,635	22,826	7.9	8.8	10.1	11.5	11.5	10.9
Housing & utilities	9,993	13,184	16,409	21,623	41,141	22,624	16.0	14.0	11.7	11.0	9.7	10.8
Household goods, operation & services	2,135	6,328	8,652	13,523	37,313	15,915	3.4	6.7	6.2	6.9	8.8	7.6
Medical care & health expenses	492	2,056	3,099	4,470	11,753	5,138	0.8	2.2	2.2	2.3	2.8	2.5
Transport & communications	1,807	3,332	5,600	10,329	45,949	16,095	2.9	3.5	4.0	5.3	10.8	7.7
Recreation & education	3,550	5,950	7,789	11,375	17,733	10,366	5.7	6.3	5.6	5.8	4.2	5.0
Miscellaneous goods & services	754	1,487	3,044	8,077	34,489	11,659	1.2	1.6	2.2	4.1	8.1	5.6
All groups	62,554	94,038	140,213	196,603	423,768	208,635	100.0	100.0	100.0	100.0	100.0	100.0
<i>Sample size</i>	192	283	378	405	424	1682						

Table A9.19 Mean annual household cash expenditure by quintile group: Other urban areas

Other urban areas

Expenditure group	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					All other urban	Quintile group					All other urban
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	212,970	305,309	365,245	409,546	379,271	348,198	54.7	55.8	53.9	50.8	40.3	48.8
Alcohol & tobacco	7,441	8,360	10,577	17,172	26,612	15,313	1.9	1.5	1.6	2.1	2.8	2.1
Clothing & footwear	32,412	44,273	55,619	65,377	72,076	56,948	8.3	8.1	8.2	8.1	7.7	8.0
Housing & utilities	63,607	58,649	67,604	76,954	77,981	70,161	16.3	10.7	10.0	9.5	8.3	9.8
Household goods, operation & services	18,961	33,071	39,867	49,508	62,637	43,900	4.9	6.0	5.9	6.1	6.7	6.2
Medical care & health expenses	11,730	18,460	23,229	33,230	34,829	26,032	3.0	3.4	3.4	4.1	3.7	3.7
Transport & communications	8,616	20,834	28,497	43,940	88,403	43,288	2.2	3.8	4.2	5.4	9.4	6.1
Recreation & education	22,792	36,173	42,859	46,427	52,687	42,392	5.9	6.6	6.3	5.8	5.6	5.9
Miscellaneous goods & services	10,864	22,145	43,885	64,830	147,229	66,818	2.8	4.0	6.5	8.0	15.6	9.4
All groups	389,393	547,274	677,382	806,984	941,725	713,050	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	144	202	251	242	290	1129						

Table A9.20 Mean annual per capita cash expenditure, by quintile and expenditure group: Other urban areas

Other urban areas

Expenditure group	Mean annual per capita cash expenditure						Percentage distribution					
	Quintile group					Urban areas excluding Accra	Quintile group					Urban areas excluding Accra
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	31,293	52,847	73,814	99,708	151,083	76,916	54.7	55.8	53.9	50.8	40.3	48.8
Alcohol & tobacco	1,093	1,447	2,137	4,181	10,601	3,383	1.9	1.5	1.6	2.1	2.8	2.1
Clothing & footwear	4,763	7,663	11,240	15,917	28,712	12,580	8.3	8.1	8.2	8.1	7.7	8.0
Housing & utilities	9,346	10,152	13,662	18,735	31,064	15,498	16.3	10.7	10.0	9.5	8.3	9.8
Household goods, operation & services	2,786	5,724	8,057	12,053	24,951	9,697	4.9	6.0	5.9	6.1	6.7	6.2
Medical care & health expenses	1,724	3,195	4,694	8,090	13,874	5,750	3.0	3.4	3.4	4.1	3.7	3.7
Transport & communications	1,266	3,606	5,759	10,698	35,216	9,562	2.2	3.8	4.2	5.4	9.4	6.1
Recreation & education	3,349	6,261	8,661	11,303	20,988	9,364	5.9	6.6	6.3	5.8	5.6	5.9
Miscellaneous goods & services	1,596	3,833	8,869	15,784	58,649	14,760	2.8	4.0	6.5	8.0	15.6	9.4
All groups	57,216	94,728	136,893	196,469	375,138	157,510	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	980	1167	1242	994	728	5111						

Table A9.21 Mean annual household cash expenditure by quintile and expenditure group: Rural coastal

Expenditure group	Rural coastal											
	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					All rural coastal	Quintile group					All rural coastal
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	160,327	236,669	291,785	353,274	418,482	299,527	57.2	57.9	56.5	60.1	52.5	55.9
Alcohol & tobacco	10,656	21,065	19,470	26,256	34,806	23,065	3.8	5.1	3.8	4.5	4.4	4.3
Clothing & footwear	26,371	37,664	41,824	40,227	50,457	39,984	9.4	9.2	8.1	6.8	6.3	7.5
Housing & utilities	27,205	31,981	41,512	46,977	69,242	44,111	9.7	7.8	8.0	8.0	8.7	8.2
Household goods, operation & services	22,294	27,504	36,747	42,559	62,897	39,149	8.0	6.7	7.1	7.2	7.9	7.3
Medical care & health expenses	10,978	12,546	22,411	29,296	45,307	24,730	3.9	3.1	4.3	5.0	5.7	4.6
Transport & communications	10,301	15,415	26,232	24,935	52,775	26,555	3.7	3.8	5.1	4.2	6.6	5.0
Recreation & education	8,439	18,690	22,908	33,340	36,459	24,897	3.0	4.6	4.4	5.7	4.6	4.6
Miscellaneous goods & services	3,527	7,549	13,649	15,296	26,589	13,792	1.3	1.8	2.6	2.6	3.3	2.6
All groups	280,098	409,083	516,538	588,160	797,014	535,810	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	108	151	154	162	143	718						

Table A9.22 Mean annual per capita cash expenditure, by quintile and expenditure group: Rural coastal

Rural coastal

Expenditure group	Mean annual per capita cash expenditure						Percentage distribution					
	Quintile group					All rural coastal	Quintile group					All rural coastal
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	29,398	47,649	67,268	104,245	189,376	74,882	57.2	57.9	56.5	60.1	52.5	55.9
Alcohol & tobacco	1,954	4,241	4,488	7,748	15,751	5,766	3.8	5.1	3.8	4.5	4.4	4.3
Clothing & footwear	4,835	7,583	9,642	11,870	22,833	9,996	9.4	9.2	8.1	6.8	6.3	7.5
Housing & utilities	4,988	6,439	9,570	13,862	31,334	11,028	9.7	7.8	8.0	8.0	8.7	8.2
Household goods, operation & services	4,088	5,537	8,472	12,558	28,463	9,787	8.0	6.7	7.1	7.2	7.9	7.3
Medical care & health expenses	2,013	2,526	5,167	8,645	20,503	6,182	3.9	3.1	4.3	5.0	5.7	4.6
Transport & communications	1,889	3,104	6,048	7,358	23,882	6,639	3.7	3.8	5.1	4.2	6.6	5.0
Recreation & education	1,547	3,763	5,281	9,838	16,499	6,224	3.0	4.6	4.4	5.7	4.6	4.6
Miscellaneous goods & services	647	1,520	3,147	4,514	12,032	3,448	1.3	1.8	2.6	2.6	3.3	2.6
All groups	51,359	82,362	119,083	180,638	360,673	133,952	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	589	750	668	549	316	2872						

Table A9.23 Mean annual household cash expenditure by quintile and expenditure group: Rural forest

Rural forest

Expenditure group	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					All rural forest	Quintile group					All rural forest
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	137,575	185,809	219,014	244,500	312,042	212,301	49.2	49.8	47.3	50.4	44.1	47.9
Alcohol & tobacco	10,213	10,753	18,109	19,507	26,916	16,312	3.7	2.9	3.9	4.0	3.8	3.7
Clothing & footwear	37,811	50,151	62,545	57,472	61,601	52,820	13.5	13.4	13.5	11.8	8.7	11.9
Housing & utilities	25,623	29,910	32,792	33,640	49,067	33,207	9.2	8.0	7.1	6.9	6.9	7.5
Household goods, operation & services	21,762	30,082	35,333	40,268	59,965	35,856	7.8	8.1	7.6	8.3	8.5	8.1
Medical care & health expenses	16,404	22,479	28,459	24,480	31,597	23,998	5.9	6.0	6.1	5.0	4.5	5.4
Transport & communications	11,956	17,668	27,002	26,339	107,441	33,978	4.3	4.7	5.8	5.4	15.2	7.7
Recreation & education	11,823	15,242	23,488	21,880	24,441	18,759	4.2	4.1	5.1	4.5	3.5	4.2
Miscellaneous goods & services	6,339	11,027	16,384	17,183	34,005	15,782	2.3	3.0	3.5	3.5	4.8	3.6
All groups	279,506	373,121	463,126	485,269	707,075	443,013	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	326	298	257	276	217	1374						

Table A9.24 Mean annual per capita cash expenditure, by quintile and expenditure group: Rural forest

Rural forest

Expenditure group	Mean annual per capita cash expenditure						Percentage distribution					
	Quintile group					All rural forest	Quintile group					All rural forest
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	21,974	36,214	48,398	78,014	163,558	48,520	49.2	49.8	47.3	50.4	44.1	47.9
Alcohol & tobacco	1,631	2,096	4,002	6,224	14,108	3,728	3.7	2.9	3.9	4.0	3.8	3.7
Clothing & footwear	6,039	9,774	13,821	18,338	32,289	12,072	13.5	13.4	13.5	11.8	8.7	11.9
Housing & utilities	4,093	5,829	7,246	10,734	25,719	7,589	9.2	8.0	7.1	6.9	6.9	7.5
Household goods, operation & services	3,476	5,863	7,808	12,848	31,431	8,195	7.8	8.1	7.6	8.3	8.5	8.1
Medical care & health expenses	2,620	4,381	6,289	7,811	16,562	5,485	5.9	6.0	6.1	5.0	4.5	5.4
Transport & communications	1,910	3,443	5,967	8,404	56,315	7,766	4.3	4.7	5.8	5.4	15.2	7.7
Recreation & education	1,888	2,971	5,190	6,981	12,811	4,287	4.2	4.1	5.1	4.5	3.5	4.2
Miscellaneous goods & services	1,013	2,149	3,620	5,483	17,824	3,607	2.3	3.0	3.5	3.5	4.8	3.6
All groups	44,644	72,720	102,341	154,837	370,617	101,248	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	2041	1529	1163	865	414	6012						

Table A9.25 Mean annual household cash expenditure by quintile and expenditure group: Rural savannah

Rural savannah

Expenditure group	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					All rural savannah	Quintile group					All rural savannah
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
Food & beverages	134,254	186,934	234,059	343,160	369,980	217,297	54.2	51.4	54.5	58.2	61.2	55.5
Alcohol & tobacco	19,761	31,658	26,954	36,183	50,217	29,060	8.0	8.7	6.3	6.1	8.3	7.4
Clothing & footwear	22,481	35,969	39,680	42,843	36,012	33,028	9.1	9.9	9.2	7.3	6.0	8.4
Housing & utilities	23,010	27,657	36,549	40,197	43,482	30,989	9.3	7.6	8.5	6.8	7.2	7.9
Household goods, operation & services	17,843	26,788	32,042	36,305	37,371	27,047	7.2	7.4	7.5	6.2	6.2	6.9
Medical care & health expenses	10,721	18,579	18,949	24,212	18,117	16,735	4.3	5.1	4.4	4.1	3.0	4.3
Transport & communications	8,614	18,166	20,065	34,334	18,791	17,683	3.5	5.0	4.7	5.8	3.1	4.5
Recreation & education	6,907	10,718	11,099	19,315	14,905	11,134	2.8	2.9	2.6	3.3	2.5	2.8
Miscellaneous goods & services	4,295	7,089	9,917	12,963	15,384	8,273	1.7	1.9	2.3	2.2	2.5	2.1
All groups	247,886	363,558	429,314	589,512	604,259	391,246	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	299	202	159	129	79	868						

Table A9.26 Mean annual per capita cash expenditure, by quintile and expenditure group: Rural savannah

Rural savannah

Expenditure group	Mean annual per capita cash expenditure						Percentage distribution						
	Quintile group					All rural savannah	Quintile group					All rural savannah	
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest		
¢	¢	¢	¢	¢	¢	%	%	%	%	%	%		
Food & beverages	19,853	32,665	45,385	80,780	162,380	39,910	54.2	51.4	54.5	58.2	61.2	55.5	
Alcohol & tobacco	2,922	5,532	5,226	8,517	22,040	5,337	8.0	8.7	6.3	6.1	8.3	7.4	
Clothing & footwear	3,324	6,285	7,694	10,085	15,805	6,066	9.1	9.9	9.2	7.3	6.0	8.4	
Housing & utilities	3,403	4,833	7,087	9,462	19,084	5,692	9.3	7.6	8.5	6.8	7.2	7.9	
Household goods, operation & services	2,639	4,681	6,213	8,546	16,402	4,968	7.2	7.4	7.5	6.2	6.2	6.9	
Medical care & health expenses	1,585	3,246	3,674	5,700	7,952	3,074	4.3	5.1	4.4	4.1	3.0	4.3	
Transport & communications	1,274	3,174	3,891	8,082	8,247	3,248	3.5	5.0	4.7	5.8	3.1	4.5	
Recreation & education	1,021	1,873	2,152	4,547	6,542	2,045	2.8	2.9	2.6	3.3	2.5	2.8	
Miscellaneous goods & services	635	1,239	1,923	3,052	6,752	1,519	1.7	1.9	2.3	2.2	2.5	2.1	
All groups	36,656	63,528	83,245	138,771	265,204	71,859	100.0	100.0	100.0	100.0	100.0	100.0	
Sample size	2022	1156	820	548	180	4726							

Table A9.27 Mean annual household cash expenditure by quintile and expenditure group: Ghana

Ghana	Mean annual household cash expenditure						Percentage distribution					
	Quintile group					Ghana	Quintile group					Ghana
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
<u>Expenditure group</u>												
Food & beverages	154,308	225,510	286,314	340,002	376,409	276,511	53.3	53.6	53.2	53.0	44.6	50.6
Alcohol & tobacco	12,611	16,114	16,452	21,068	28,492	18,948	4.4	3.8	3.1	3.3	3.4	3.5
Clothing & footwear	30,237	43,021	52,877	58,026	71,375	51,107	10.4	10.2	9.8	9.1	8.5	9.3
Housing & utilities	32,142	38,317	48,135	54,292	70,376	48,652	11.1	9.1	8.9	8.5	8.3	8.9
Household goods, operation & services	19,756	29,638	36,386	44,072	64,774	38,924	6.8	7.0	6.8	6.9	7.7	7.1
Medical care & health expenses	12,662	18,284	22,835	26,869	32,803	22,691	4.4	4.3	4.2	4.2	3.9	4.1
Transport & communications	10,081	18,018	25,757	33,540	85,127	34,501	3.5	4.3	4.8	5.2	10.1	6.3
Recreation & education	11,862	20,330	27,506	32,682	37,904	26,057	4.1	4.8	5.1	5.1	4.5	4.8
Miscellaneous goods & services	5,979	11,803	22,039	30,574	76,611	29,397	2.1	2.8	4.1	4.8	9.1	5.4
All groups	289,638	421,035	538,301	641,125	843,871	546,788	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	910	911	910	911	910	4552						

Table A9.28 Mean annual per capita cash expenditure, by quintile and expenditure group: Ghana

Ghana	Mean annual per capita cash expenditure						Percentage distribution						
	Quintile group					Ghana	Quintile group					Ghana	
	Lowest	2	3	4	Highest		Lowest	2	3	4	Highest		
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%	
<u>Expenditure group</u>													
Food & beverages	24,111	42,055	61,003	92,158	166,116	61,691	53.3	53.6	53.2	53.0	44.6	50.6	
Alcohol & tobacco	1,971	3,005	3,505	5,711	12,574	4,227	4.4	3.8	3.1	3.3	3.4	3.5	
Clothing & footwear	4,725	8,023	11,266	15,728	31,499	11,402	10.4	10.2	9.8	9.1	8.5	9.3	
Housing & utilities	5,022	7,146	10,256	14,716	31,058	10,854	11.1	9.1	8.9	8.5	8.3	8.9	
Household goods, operation & services	3,087	5,527	7,753	11,946	28,586	8,684	6.8	7.0	6.8	6.9	7.7	7.1	
Medical care & health expenses	1,978	3,410	4,865	7,283	14,476	5,062	4.4	4.3	4.2	4.2	3.9	4.1	
Transport & communications	1,575	3,360	5,488	9,091	37,568	7,697	3.5	4.3	4.8	5.2	10.1	6.3	
Recreation & education	1,853	3,791	5,861	8,859	16,728	5,813	4.1	4.8	5.1	5.1	4.5	4.8	
Miscellaneous goods & services	934	2,201	4,696	8,287	33,810	6,559	2.1	2.8	4.1	4.8	9.1	5.4	
All groups	45,256	78,518	114,693	173,779	372,415	121,989	100.0	100.0	100.0	100.0	100.0	100.0	
Sample size	5824	4885	4271	3361	2062	20403							

Table A9.29 Average annual household and per capita cash expenditure on different items, in urban and rural areas

		cedis					
		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	494	3252	2288	116	707	510
002	Maize	7191	11062	9709	1685	2406	2166
003	Millet	613	2925	2117	144	636	472
004	Rice	20257	10871	14154	4747	2364	3158
005	Maize flour etc.	5051	880	2338	1184	191	522
006	Bread, buns	14979	8554	10801	3510	1860	2410
007	Biscuits	894	669	747	209	145	167
008	Flour & other cereal products	1246	794	952	292	173	212
02 Roots and tubers							
009	Cassava	15124	6396	9448	3544	1391	2108
010	Cocoyam	3580	1289	2090	839	280	466
011	Plantain	12921	4356	7352	3028	947	1640
012	Yam	17930	5496	9845	4202	1195	2196
013	Other starchy roots/tubers	135	102	113	32	22	25
014	Kokonte	2021	2932	2613	474	638	583
015	Gari	3244	4901	4322	760	1066	964
016	Cassava dough	2045	1872	1933	479	407	431
017	Other starchy products	581	23	218	136	5	49
03 Pulses and nuts							
018	Small beans	2943	1995	2327	690	434	519
019	Bambara beans	191	706	526	45	154	117
020	Broad beans	122	76	92	29	17	21
021	Groundnuts	3480	4214	3957	816	916	883
022	Other pulses	368	144	222	86	31	50
023	Dawadawa	545	994	837	128	216	187
024	Kolanut	882	1710	1421	207	372	317
025	Palmnut	4104	2741	3218	962	596	718
026	Other oil seeds & nuts	101	604	428	24	131	96
04 Vegetables							
043	Cocoyam leaves (kontomire)	1570	372	791	368	81	177
044	Garden eggs	4589	3194	3682	1075	695	821
045	Okro	3372	2352	2708	790	511	604
046	Onions & shallots	7181	5286	5949	1683	1150	1327
047	Pepper (green)	2673	1999	2235	627	435	499
048	Tomato	14460	7721	10078	3389	1679	2248
049	Other vegetables (not canned)	1441	76	553	338	17	123
050	Tomato puree (canned)	675	425	513	158	93	114
051	Other canned vegetables	87	3	32	20	1	7
05 Fruit							
035	Avocado pear	202	83	125	47	18	28
036	Banana	910	539	669	213	117	149
037	Mango	143	367	288	34	80	64
038	Orange	1128	714	859	264	155	192
039	Pineapple	466	259	331	109	56	74
040	Other fruits (not canned)	464	36	186	109	8	41
041	Canned fruit	23	-	8	5	-	2
042	Canned fruit juices	135	-	47	32	-	11
06 Oils and animal fats							
027	Animal fats	95	593	419	22	129	93
028	Coconut oil	1569	1295	1391	368	282	310
029	Groundnut oil	1503	910	1117	352	198	249
030	Palm kernel oil	732	1147	1002	172	249	224
031	Red palm oil	7608	4887	5839	1783	1063	1303
032	Shea butter	351	2291	1613	82	498	360
033	Margarine	741	172	371	174	37	83
034	Other vegetable oil & fats	3527	338	1453	827	73	324

Table A9.29 (continued)

cedis

	Average annual household expenditure			Average annual per capita expenditure		
	Urban	Rural	Ghana	Urban	Rural	Ghana
07	Meat					
052	421	103	214	99	22	48
053	22213	7286	12507	5206	1585	2790
054	1789	2346	2151	419	510	480
055	898	770	815	211	167	182
056	1859	505	978	436	110	218
057	935	873	894	219	190	200
058	878	238	462	206	52	103
059	1150	367	641	270	80	143
08	Poultry and poultry products					
060	3387	2327	2697	794	506	602
061	119	147	138	28	32	31
062	141	866	612	33	188	137
063	308	227	255	72	49	57
064	4558	2001	2895	1068	435	646
065	49	205	151	11	45	34
09	Fish					
071	34735	43960	40734	8140	9561	9088
072	834	414	561	195	90	125
073	8599	4084	5663	2015	888	1263
074	3825	5702	5045	896	1240	1126
075	5874	4148	4752	1377	902	1060
076	2169	1094	1470	508	238	328
077	523	1128	916	122	245	204
10	Milk and milk products					
066	149	292	242	35	64	54
067	710	135	336	166	29	75
068	320	64	154	75	14	34
069	7946	2193	4205	1862	477	938
070	383	36	157	90	8	35
11	Spices					
079	4881	3251	3822	1144	707	853
080	1972	4061	3331	462	883	743
081	1680	547	944	394	119	211
12	Miscellaneous foods					
078	6954	5339	5904	1630	1161	1317
093	19	5	10	5	1	2
094	168	196	186	39	43	42
095	225	101	144	53	22	32
096	730	321	464	171	70	103
097	690	205	375	162	45	84
13	Prepared meals					
086	9473	6562	7580	2220	1427	1691
087	5668	1897	3216	1328	413	717
088	1825	625	1045	428	136	233
089	5263	2690	3590	1234	585	801
090	10287	5410	7116	2411	1177	1588
091	3614	1747	2400	847	380	535
092	9050	2080	4518	2121	452	1008
14	Non-alcoholic beverages					
082	225	199	208	53	43	46
083	4401	2075	2889	1031	451	644
084	1675	256	752	393	56	168
085	328	18	126	77	4	28
15	Soft drinks					
098	3241	1211	1921	760	263	429

Table A9.29 (continued)

cedis

	Average annual household expenditure			Average annual per capita expenditure			
	Urban	Rural	Ghana	Urban	Rural	Ghana	
2. ALCOHOL & TOBACCO							
21 Alcoholic drinks							
099							
	Local & imported beer & Guinness	5145	2162	3205	1206	470	715
100	Palm wine	465	1022	827	109	222	184
101	Pito	776	3044	2251	182	662	502
102	Akpeteshie & other local spirits	3249	9499	7313	762	2066	1632
103	Gin	770	816	800	180	177	178
104	Other alcoholic beverages	193	346	293	45	75	65
22 Cigarettes and tobacco							
105	Cigarettes	3038	3817	3544	712	830	791
106	Tobacco (processed)	167	779	565	39	169	126
107	Other tobacco products	48	204	150	11	44	33
3. CLOTHING & FOOTWEAR							
31 Clothing materials							
201	Cotton	15978	11725	13212	3745	2550	2948
202	Silk	887	712	773	208	155	173
203	Handloomed (inc. Kente)	730	643	673	171	140	150
204	Adinkra	1489	834	1063	349	181	237
205	Polyester material	3193	1633	2179	748	355	486
206	All other clothing material	5629	3680	4362	1319	800	973
32 Tailoring charges							
207	Tailoring charges	5408	2611	3589	1267	568	801
214	Repairs to clothing	555	2069	1539	130	450	343
33 Ready made clothes							
208	Suit	1216	560	790	285	122	176
209	Smock or other handwoven garment	630	669	655	148	145	146
210	Dress (ladies/girls)	4205	2425	3048	985	527	680
211	Trousers, slacks, shorts, blouse, shirt	5700	3728	4418	1336	811	986
212	Underwear	4522	2627	3290	1060	571	734
213	Other readymade clothes	1552	1889	1771	364	411	395
34 Footwear							
215	Shoes (leather)	6082	2345	3652	1425	510	815
216	Sandals (leather)	2333	1111	1539	547	242	343
217	Shoes (canvas)	1422	874	1066	333	190	238
218	Sandals (rubber)	1637	1965	1850	384	427	413
219	Other footwear	771	554	630	181	121	141
220	Repairs to footwear	564	1246	1008	132	271	225
4. HOUSING AND UTILITIES							
41 Rent and housing charges							
303	House rates (property rates)	377	29	151	88	6	34
304	Basic rates	196	265	241	46	58	54
307	Other charges (exc. utilities)	522	54	218	122	12	49
7Q13	Rental payment	11166	896	4488	2617	195	1001
7Q19	Mortgage payment	1	39	26	*	9	6
7Q21	Construction & repairs	15785	8977	11358	3699	1952	2534
42 Fuel and power							
7Q30	Electricity	8235	766	3378	1930	167	754
310	Gas for cooking	688	34	263	161	7	59
311	Kerosene & other liquid fuel	6541	17110	13414	1533	3721	2993
312	Charcoal	15932	3279	7704	3734	713	1719
313	Firewood & other solid fuel	3765	1891	2546	882	411	568
43 Other utilities							
7Q25	Water	10156	1860	4761	2380	405	1062
7Q33	Garbage disposal	294	-	103	69	-	23

Table A9.29 (continued)

cedis

	Average annual household expenditure			Average annual per capita expenditure			
	Urban	Rural	Ghana	Urban	Rural	Ghana	
5. HOUSEHOLD GOODS, OPERATIONS & SERVICES							
51 Soft furnishings							
401	Bedsheets, blanket, curtains, etc.	2961	2225	2482	694	484	554
402	Mattress, pillow, sleeping mats	1892	1254	1477	444	273	330
403	Other soft furnishings	210	79	125	49	17	28
404	Repairs to soft furnishings	20	25	23	5	5	5
52 Furniture and floor coverings							
405	Bed	810	783	793	190	170	177
406	Chair	801	499	605	188	109	135
407	Table	171	96	122	40	21	27
408	Carpet & other floor coverings	765	97	331	179	21	74
409	Other furniture & fixtures	342	77	170	80	17	38
410	Repairs to furniture & fittings	280	265	270	66	58	60
53 Glassware, utensils, etc.							
421	Glassware, chinaware, plasticware	1529	730	1010	358	159	225
422	Cutlery & other tableware	237	135	171	56	29	38
423	Pots, pans & other kitchen utensils	1267	1479	1405	297	322	313
424	Other household utensils & tools	391	288	324	92	63	72
54 Electrical and other appliances							
411	Electric fan	937	135	415	220	29	93
412	Airconditioner, air cooler	-	-	-	-	-	-
413	Fridge, freezer	3882	170	1468	910	37	328
414	Electric iron	510	37	202	120	8	45
415	Washing machine, dryer	8	-	3	2	-	1
416	Electric kettle	36	2	14	8	*	3
417	Gas or electric stove	1162	14	416	272	3	93
418	Coalpot & other non-elec cooker	397	119	217	93	26	48
419	Other appliances	218	45	105	51	10	23
701	Radio, wireless & cassette/radio	2648	1172	1688	620	255	377
702	TV set, video, video camera	5328	312	2066	1249	68	461
703	Other (CD player, music systems, etc.)	189	14	75	44	3	17
420	Repairs to appliances	1047	878	938	245	191	209
55 Non-durable household goods							
425	Soap & washing powder	14817	18044	16915	3473	3924	3774
426	Insecticides & household cleaners	1219	1493	1397	286	325	312
427	Matches	550	1384	1092	129	301	244
428	Toilet paper	1024	492	678	240	107	151
429	Light globes/bulbs	632	921	820	148	200	183
430	Candles	65	218	165	15	47	37
431	Other non-durable goods	716	529	594	168	115	133
56 Household services							
432	Domestic staff wages	774	26	287	181	6	64
433	Household services (lawnsboy, etc.)	111	34	61	26	7	14
6. MEDICAL CARE & HEALTH EXPENSES							
61 Medical products and appliances							
501	Pain-killers (e.g. aspirin)	1562	5456	4094	366	1187	913
502	Antibiotics	896	1748	1450	210	380	323
503	Anti-malaria medicines	532	1245	996	125	271	222
504	Other medical & pharmaceutical prods	5679	3453	4231	1331	751	944
505	Therapeutic appliances & equipment	86	-	30	20	-	7
62 Hospital services							
511	Hospital expenditure	927	1195	1101	217	260	246
512	Other medical services & supplies	4450	2672	3294	1043	581	735
63 Other medical services							
506	Doctors & outpatient consulting fee	3498	2106	2593	820	458	578
507	Dentist	104	25	52	24	5	12
508	Nurses, midwives, etc.	338	345	343	79	75	76
509	Native doctors & spiritual healers	497	747	659	116	162	147
510	Other practitioners	80	85	83	19	18	19
513	Other medical services	5240	2969	3763	1228	646	840

Table A9.29 (continued)

cedis

		Average annual household expenditure			Average annual per capita expenditure		
		Urban	Rural	Ghana	Urban	Rural	Ghana
7. TRANSPORT & COMMUNICATIONS							
601	71 Purchase of personal transport						
	Car, other motor vehicle	6508	2099	3641	1525	457	812
602	Motor cycle	227	109	150	53	24	34
603	Bicycle	730	952	874	171	207	195
604	72 Operation of personal transport						
	Tyres	1866	580	1030	437	126	230
605	Spares & motor vehicle tools	3287	1908	2391	770	415	533
608	Petrol	8415	2186	4365	1972	475	974
609	Oil, grease, etc.	879	330	522	206	72	116
610	73 Purchased fares						
	Intercity bus (STC, City Express etc)	6973	4020	5053	1634	874	1127
611	City bus (omnibus, trotro), taxi etc	18136	14923	16047	4250	3246	3580
612	Other (rail, air, boat) & storage charge	21	104	75	5	23	17
613	74 Communications						
	Postal charges (inc. courier services)	327	152	213	77	33	48
614	Telegrams, telephones, fax, etc.	334	37	141	78	8	31
8. RECREATION & EDUCATION							
704	81 Recreation equipment						
	Camera & photographic equipment	184	17	75	43	4	17
705	Sports equipment	63	10	29	15	2	6
706	Musical equipment	29	20	23	7	4	5
707	Other recreational goods (eg. cassettes)	1284	962	1074	301	209	240
708	82 Entertainment						
	Cinema, video house	348	189	245	81	41	55
709	Video cassette hire	30	6	14	7	1	3
711	Others (inc. concerts)	219	130	161	51	28	36
710	83 Gambling						
	Gambling, lotto, raffles, etc.	6366	8857	7986	1492	1926	1782
712	84 Newspapers, books and magazines						
	Newspapers	1298	546	809	304	119	180
713	Books, magazines, etc.	988	92	405	232	20	90
718	85 Education						
	Educ. transport, pocket money, etc.	30209	7183	15236	7080	1562	3399
9. MISCELLANEOUS GOODS & SERVICES							
801	91 Personal care services						
	Barber, beauty shop, etc.	4655	3559	3942	1091	774	879
803	92 Jewellery, watches, etc.						
	Jewellery, watches, rings, etc.	4637	1618	2674	1087	352	597
804	93 Personal care goods						
	Personal goods (eg. suitcase, comb)	1631	814	1100	382	177	245
802	Goods (eg. toothpaste, cosmetics)	12036	4735	7288	2821	1030	1626
805	94 Writing and drawing equipment						
	Writing & drawing equipment/supplies	126	92	104	29	20	23
806	95 Expenditure in restaurants and hotels						
	Expenditure in restaurants & hotels	810	147	379	190	32	85
807	96 Financial and other services						
	Financial services (n.e.s.)	20199	1264	7886	4734	275	1759
808	Other services (n.e.s.)	15611	868	6025	3659	189	1344
Total expenditure		726106	450342	546788	170169	97943	121991

Table A9.30 Proportion of urban and rural households reporting expenditure on different items, within the stated reference period

Item code	Group, subgroup and item	Proportion of households reporting expenditure, and reference period (days)					
		Urban		Rural		Ghana	
		%	days	%	days	%	days
1.	FOOD & BEVERAGES						
01	Cereals and cereal products						
001	Guinea corn/sorghum	2.3	30	5.4	14		
002	Maize	27.4	30	21.4	14		
003	Millet	2.2	30	5.6	14		
004	Rice	80.5	30	48.6	14		
005	Maize flour etc.	39.7	30	9.7	14		
006	Bread, buns	85.7	30	67.2	14		
007	Biscuits	17.3	30	10.6	14		
008	Flour & other cereal products	22.2	30	14.6	14		
02	Roots and tubers						
009	Cassava	73.9	30	24.7	14		
010	Cocoyam	37.1	30	9.5	14		
011	Plantain	74.5	30	25.2	14		
012	Yam	75.3	30	25.5	14		
013	Other starchy roots/tubers	3.9	30	1.8	14		
014	Kokonte	21.0	30	13.0	14		
015	Gari	53.6	30	45.5	14		
016	Cassava dough	33.5	30	8.4	14		
017	Other starchy products	9.1	30	0.7	14		
03	Pulses and nuts						
018	Small beans	41.7	30	16.6	14		
019	Bambara beans	2.4	30	3.0	14		
020	Broad beans	5.7	30	2.1	14		
021	Groundnuts	62.5	30	44.2	14		
022	Other pulses	11.3	30	2.3	14		
023	Dawadawa	8.4	30	12.2	14		
024	Kolanut	9.5	30	18.8	14		
025	Palmut	58.7	30	26.1	14		
026	Other oil seeds & nuts	4.6	30	2.1	14		
04	Vegetables						
043	Cocoyam leaves (kontomire)	50.8	30	8.0	14		
044	Garden eggs	75.1	30	45.3	14		
045	Okro	61.5	30	34.9	14		
046	Onions & shallots	89.6	30	81.6	14		
047	Pepper (green)	44.4	30	32.5	14		
048	Tomato	91.0	30	74.3	14		
049	Other vegetables (not canned)	24.7	30	2.5	14		
050	Tomato puree (canned)	18.1	30	5.7	14		
051	Other canned vegetables	1.1	30	0.1	14		
05	Fruit						
035	Avocado pear	8.7	30	2.1	14		
036	Banana	31.3	30	11.8	14		
037	Mango	6.8	30	6.4	14		
038	Orange	34.3	30	15.3	14		
039	Pineapple	14.7	30	3.7	14		
040	Other fruits (not canned)	15.3	30	1.4	14		
041	Canned fruit	0.3	30	0.0	14		
042	Canned fruit juices	1.1	30	0.0	14		
06	Oils and animal fats						
027	Animal fats	1.3	30	4.9	14		
028	Coconut oil	28.8	30	13.5	14		
029	Groundnut oil	18.7	30	7.5	14		
030	Palm kernel oil	15.9	30	17.4	14		
031	Red palm oil	75.9	30	47.1	14		
032	Shea butter	12.4	30	42.6	14		
033	Margarine	15.6	30	2.9	14		
034	Other vegetable oil & fats	33.5	30	5.0	14		

Table A9.30 (continued)

Item code	Group, subgroup, and item	Proportion of households reporting expenditure, and reference period (days)					
		Urban		Rural		Ghana	
		%	days	%	days	%	days
	07 Meat						
052	Corned beef	3.6	30	0.7	14		
053	Fresh beef (cattle)	75.1	30	31.0	14		
054	Bushmeat	9.1	30	12.5	14		
055	Goat (fresh)	8.1	30	7.5	14		
056	Fresh mutton	10.2	30	3.6	14		
057	Pork	10.0	30	6.9	14		
058	Snail	11.7	30	2.7	14		
059	Other meat (except poultry)	18.2	30	3.8	14		
	08 Poultry and poultry products						
060	Chicken	12.9	30	7.5	14		
061	Duck	0.6	30	0.6	14		
062	Guinea fowl	1.1	30	3.2	14		
063	Other poultry	3.1	30	0.9	14		
064	Chicken eggs	53.3	30	18.8	14		
065	Other eggs (not chicken)	0.9	30	1.7	14		
	09 Fish						
071	Smoked fish	89.8	30	90.2	14		
072	Crustaceans (prawns, etc.)	14.6	30	4.6	14		
073	Fish (fresh & frozen)	46.5	30	22.6	14		
074	Fish (dried)	56.1	30	50.5	14		
075	Fish (fried)	67.1	30	38.7	14		
076	Canned fish	26.9	30	9.0	14		
077	Other fish	12.3	30	13.4	14		
	10 Milk and milk products						
066	Fresh milk	3.0	30	4.3	14		
067	Milk powder	8.9	30	1.4	14		
068	Baby milk	2.3	30	0.4	14		
069	Tinned milk (unsweetened)	51.3	30	13.7	14		
070	Other products (e.g. butter, cheese)	5.4	30	0.5	14		
	11 Spices						
079	Pepper (dry)	60.4	30	36.8	14		
080	Salt	75.3	30	85.1	14		
081	Other condiments & spices	41.1	30	17.2	14		
	12 Miscellaneous foods						
078	Sugar	83.3	30	71.2	14		
093	Jam	0.5	30	0.0	14		
094	Honey	2.3	30	1.6	14		
095	Confectionery (not frozen)	6.3	30	4.1	14		
096	Ice cream, ice lollies, etc.	19.7	30	7.5	14		
097	Other miscellaneous food items	11.9	30	4.6	14		
	13 Prepared meals						
086	Cooked rice & stew	65.4	30	54.5	14		
087	Fufu & soup	35.0	30	12.5	14		
088	Tuo & soup	17.5	30	8.4	14		
089	Banku & stew	46.2	30	25.6	14		
090	Kenkey	78.2	30	55.9	14		
091	Koko	52.3	30	31.4	14		
092	Other prepared meals	62.6	30	27.4	14		
	14 Non-alcoholic beverages						
082	Coffee	7.7	30	3.1	14		
083	Chocolate drinks (eg. milo)	45.6	30	19.4	14		
084	Tea	38.4	30	4.2	14		
085	Other non-alcoholic beverages	4.5	30	0.3	14		
	15 Soft drinks						
098	Soft drinks & minerals	28.0	30	7.1	14		

Table A9.30 (continued)

Item code	Group, subgroup, and item	Proportion of households reporting expenditure, and reference period (days)					
		Urban		Rural		Ghana	
		%	days	%	days	%	days
2. ALCOHOL & TOBACCO							
21 Alcoholic drinks							
099	Local & imported beer & Guinness	16.7	30	6.0	14		
100	Palm wine	5.3	30	10.2	14		
101	Pito	5.2	30	14.2	14		
102	Akpeteshie & other local spirits	17.3	30	37.5	14		
103	Gin	5.5	30	3.0	14		
104	Other alcoholic beverages	1.5	30	0.8	14		
22 Cigarettes and tobacco							
105	Cigarettes	10.4	30	14.4	14		
106	Tobacco (processed)	1.7	30	8.2	14		
107	Other tobacco products	0.5	30	3.5	14		
3. CLOTHING & FOOTWEAR							
31 Clothing materials							
201	Cotton	66.6	365	64.0	365	64.9	365
202	Silk	13.6	365	19.2	365	17.2	365
203	Handloomed (inc. Kente)	4.9	365	3.8	365	4.2	365
204	Adinkra	9.5	365	7.5	365	8.2	365
205	Polyester material	46.7	365	31.1	365	36.6	365
206	All other clothing material	32.5	365	29.8	365	30.7	365
32 Tailoring charges							
207	Tailoring charges	73.1	365	73.3	365	73.2	365
214	Repairs to clothing	13.4	30	36.1	14		
33 Ready made clothes							
208	Suit	5.5	365	7.5	365	6.8	365
209	Smock or other handwoven garment	4.5	365	6.1	365	5.5	365
210	Dress (ladies/girls)	45.4	365	42.7	365	43.7	365
211	Trousers, slacks, shorts, blouse, shirt	60.1	365	68.6	365	65.7	365
212	Underwear	77.3	365	80.0	365	78.9	365
213	Other readymade clothes	34.0	365	44.8	365	41.0	365
34 Footwear							
215	Shoes (leather)	52.0	365	32.5	365	39.3	365
216	Sandals (leather)	43.0	365	30.5	365	34.9	365
217	Shoes (canvas)	28.5	365	22.7	365	24.7	365
218	Sandals (rubber)	72.0	365	86.2	365	81.3	365
219	Other footwear	34.2	365	30.2	365	31.6	365
220	Repairs to footwear	19.3	30	34.9	14		
4. HOUSING AND UTILITIES							
41 Rent and housing charges							
303	House rates (property rates)	5.3	365	1.8	365	3.0	365
304	Basic rates	56.8	365	71.5	365	66.3	365
307	Other charges (exc. utilities)	3.1	365	2.6	365	2.8	365
7Q13	Rental payment	40.1	-	8.8	-	19.8	-
7Q19	Mortgage payment	0.1	-	0.3	-	0.2	-
7Q21	Construction & repairs	49.6	365	45.5	365	47.0	365
42 Fuel and power							
7Q30	Electricity	59.6	-	6.9	-	25.4	-
310	Gas for cooking	2.6	30	0.1	14		
311	Kerosene & other liquid fuel	55.7	30	92.2	14		
312	Charcoal	64.5	30	13.9	14		
313	Firewood & other solid fuel	18.0	30	9.5	14		
43 Other utilities							
7Q25	Water	31.0	-	2.3	-	12.4	-
7Q33	Garbage disposal	4.3	-	0.0	-	1.5	-

Table A9.30 (continued)

Item code	Group, subgroup, and item	Proportion of households reporting expenditure, and reference period (days)					
		Urban		Rural		Ghana	
		%	days	%	days	%	days
5. HOUSEHOLD GOODS, OPERATIONS & SERVICES							
51 Soft furnishings							
401	Bedsheets, blanket, curtains, etc.	46.9	365	48.8	365	48.1	365
402	Mattress, pillow, sleeping mats	28.0	365	39.6	365	35.5	365
403	Other soft furnishings	1.6	365	1.8	365	1.7	365
404	Repairs to soft furnishings	0.4	30	0.5	14		
52 Furniture and floor coverings							
405	Bed	6.5	365	7.5	365	7.1	365
406	Chair	3.9	365	4.0	365	4.0	365
407	Table	3.4	365	4.8	365	4.3	365
408	Carpet & other floor coverings	8.4	365	2.2	365	4.4	365
409	Other furniture & fixtures	0.9	365	0.6	365	0.7	365
410	Repairs to furniture & fittings	1.3	30	1.8	14		
53 Glassware, utensils, etc.							
421	Glassware, chinaware, plasticware	39.8	365	36.0	365	37.3	365
422	Cutlery & other tableware	13.9	365	19.3	365	17.4	365
423	Pots, pans & other kitchen utensils	34.2	365	47.3	365	42.7	365
424	Other household utensils & tools	15.0	365	24.4	365	21.1	365
54 Electrical and other appliances							
411	Electric fan	7.2	365	0.6	365	2.9	365
412	Airconditioner, air cooler	0.0	365	0.0	365	0.0	365
413	Fridge, freezer	2.8	365	0.3	365	1.2	365
414	Electric iron	6.8	365	0.6	365	2.8	365
415	Washing machine, dryer	0.1	365	0.0	365	0.0	365
416	Electric kettle	0.3	365	0.1	365	0.1	365
417	Gas or electric stove	3.3	365	0.1	365	1.2	365
418	Coalpot & other non-elec cooker	24.2	365	9.1	365	14.4	365
419	Other appliances	4.0	365	0.5	365	1.8	365
701	Radio, wireless & cassette/radio	10.6	365	7.8	365	8.8	365
702	TV set, video, video camera	6.1	365	0.7	365	2.6	365
703	Other (CD player, music systems, etc.)	0.3	365	0.1	365	0.2	365
420	Repairs to appliances	3.3	30	0.8	14		
55 Non-durable household goods							
425	Soap & washing powder	91.0	30	95.4	14		
426	Insecticides & household cleaners	17.3	30	18.6	14		
427	Matches	48.2	30	77.5	14		
428	Toilet paper	21.0	30	8.2	14		
429	Light globes/bulbs	12.3	30	12.2	14		
430	Candles	2.4	30	2.4	14		
431	Other non-durable goods	7.9	30	4.3	14		
56 Household services							
432	Domestic staff wages	0.6	365	0.0	365	0.2	365
433	Household services (lawnsboy, etc.)	1.6	30	0.3	14		
6. MEDICAL CARE & HEALTH EXPENSES							
61 Medical products and appliances							
501	Pain-killers (e.g. aspirin)	41.5	30	74.2	14		
502	Antibiotics	18.0	30	35.7	14		
503	Anti-malaria medicines	13.3	30	24.8	14		
504	Other medical & pharmaceutical prods	32.3	30	19.1	14		
505	Therapeutic appliances & equipment	0.4	365	0.0	365	0.2	365
62 Hospital services							
511	Hospital expenditure	7.6	365	7.3	365	7.4	365
512	Other medical services & supplies	38.8	365	30.9	365	33.7	365
63 Other medical services							
506	Doctors & outpatient consulting fee	42.1	365	39.2	365	40.3	365
507	Dentist	2.4	365	1.0	365	1.5	365
508	Nurses, midwives, etc.	5.0	365	8.3	365	7.1	365
509	Native doctors & spiritual healers	9.9	365	11.2	365	10.8	365
510	Other practitioners	0.6	365	0.9	365	0.8	365
513	Other medical services	19.3	30	8.1	14		

Table A9.30 (continued)

Item code	Group, subgroup, and item	Proportion of households reporting expenditure, and reference period (days)					
		Urban		Rural		Ghana	
		%	days	%	days	%	days
	7. TRANSPORT & COMMUNICATIONS						
	71 Purchase of personal transport						
601	Car, other motor vehicle	1.1	365	0.4	365	0.7	365
602	Motor cycle	0.4	365	0.2	365	0.2	365
603	Bicycle	4.1	365	7.1	365	6.0	365
	72 Operation of personal transport						
604	Tyres	3.7	365	5.6	365	4.9	365
605	Spares & motor vehicle tools	2.7	30	1.6	14		
608	Petrol	3.0	30	0.4	14		
609	Oil, grease, etc.	2.1	30	0.5	14		
	73 Purchased fares						
610	Intercity bus (STC, City Express etc)	20.0	30	9.5	14		
611	City bus (omnibus, trotro), taxi etc	58.7	30	43.7	14		
612	Other (rail, air, boat) & storage charge	0.5	30	0.6	14		
	74 Communications						
613	Postal charges (inc. courier services)	6.0	30	3.1	14		
614	Telegrams, telephones, fax, etc.	0.9	30	0.3	14		
	8. RECREATION & EDUCATION						
	81 Recreation equipment						
704	Camera & photographic equipment	1.0	365	0.1	365	0.4	365
705	Sports equipment	1.6	365	0.6	365	0.9	365
706	Musical equipment	0.5	365	0.0	365	0.2	365
707	Other recreational goods (eg. cassettes)	4.1	30	3.6	14		
	82 Entertainment						
708	Cinema, video house	5.1	30	3.2	14		
709	Video cassette hire	0.2	30	0.1	14		
711	Others (inc. concerts)	1.6	30	1.4	14		
	83 Gambling						
710	Gambling, lotto, raffles, etc.	19.7	30	35.6	14		
	84 Newspapers, books and magazines						
712	Newspapers	12.6	30	6.1	14		
713	Books, magazines, etc.	6.8	30	1.2	14		
	85 Education						
718	Educ. transport, pocket money, etc.	50.9	30	22.3	14		
	9. MISCELLANEOUS GOODS & SERVICES						
	91 Personal care services						
801	Barber, beauty shop, etc.	24.2	30	19.3	14		
	92 Jewellery, watches, etc.						
803	Jewellery, watches, rings, etc.	55.2	365	56.8	365	56.2	365
	93 Personal care goods						
804	Personal goods (eg. suitcase, comb)	34.9	365	39.1	365	37.6	365
802	Goods (eg. toothpaste, cosmetics)	46.7	30	54.4	14		
	94 Writing and drawing equipment						
805	Writing & drawing equipment/supplies	4.1	30	1.2	14		
	95 Expenditure in restaurants and hotels						
806	Expenditure in restaurants & hotels	1.8	30	0.3	14		
	96 Financial and other services						
807	Financial services (n.e.s.)	29.1	30	4.8	14		
808	Other services (n.e.s.)	32.9	30	7.1	14		

Table A9.31 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by food subgroup: Accra

GROUP Subgroup	Accra - Household consumption			Accra - Per capita consumption			Percentage	Estimated total annual value (thousand million cedis)
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢		
1. FOOD & BEVERAGES	367,575	2,409	369,984	101,182	662	101,844	97.3	125
Cereals and cereal products	55,950	96	56,046	15,401	26	15,427	14.7	19
Roots and tubers	48,032	1,529	49,561	13,222	421	13,643	13.0	17
Pulses and nuts	9,222	261	9,483	2,539	72	2,611	2.5	3
Vegetables	34,815	67	34,882	9,583	18	9,601	9.2	12
Fruit	4,503	252	4,755	1,240	69	1,309	1.3	2
Oils and animal fats	16,925	-	16,925	4,659	-	4,659	4.5	6
Meat	31,801	-	31,801	8,754	-	8,754	8.4	11
Poultry and poultry products	9,527	204	9,731	2,622	56	2,678	2.6	3
Fish	54,505	-	54,505	15,003	-	15,003	14.3	18
Milk and milk products	14,709	-	14,709	4,049	-	4,049	3.9	5
Spices	5,621	-	5,621	1,547	-	1,547	1.5	2
Miscellaneous foods	9,623	-	9,623	2,649	-	2,649	2.5	3
Prepared meals	57,990	-	57,990	15,963	-	15,963	15.2	20
Non-alcoholic beverages	8,787	-	8,787	2,419	-	2,419	2.3	3
Soft drinks	5,566	-	5,566	1,532	-	1,532	1.5	2
2. ALCOHOL & TOBACCO	10,289	-	10,289	2,832	-	2,832	2.7	3
Alcoholic drinks	9,234	-	9,234	2,542	-	2,542	2.4	3
Cigarettes and tobacco	1,055	-	1,055	290	-	290	0.3	*
TOTAL FOOD CONSUMPTION	377,864	2,409	380,273	104,014	662	104,676	100.0	129

Table A9.32 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by food subgroup: Other urban areas

Other urban

GROUP Subgroup	Other urban - Household consumption			Other urban - Per capita consumption			Percentage	Estimated total annual value (thousand million cedis)
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢	%	
1. FOOD & BEVERAGES	348,198	65,356	413,554	76,916	14,438	91,354	96.4	341
Cereals and cereal products	48,582	7,663	56,245	10,732	1,693	12,425	13.1	46
Roots and tubers	61,495	43,923	105,418	13,584	9,702	23,286	24.6	87
Pulses and nuts	14,180	4,251	18,431	3,132	939	4,071	4.3	15
Vegetables	36,553	4,051	40,604	8,074	895	8,969	9.5	33
Fruit	3,047	3,077	6,124	673	680	1,353	1.4	5
Oils and animal fats	15,801	316	16,117	3,490	70	3,560	3.8	13
Meat	29,465	551	30,016	6,509	122	6,631	7.0	25
Poultry and poultry products	8,166	1,399	9,565	1,804	309	2,113	2.2	8
Fish	57,399	125	57,524	12,679	28	12,707	13.4	47
Milk and milk products	7,375	-	7,375	1,629	-	1,629	1.7	6
Spices	9,728	-	9,728	2,149	-	2,149	2.3	8
Miscellaneous foods	8,444	-	8,444	1,865	-	1,865	2.0	7
Prepared meals	39,928	-	39,928	8,820	-	8,820	9.3	33
Non-alcoholic beverages	5,745	-	5,745	1,269	-	1,269	1.3	5
Soft drinks	2,288	-	2,288	505	-	505	0.5	2
2. ALCOHOL & TOBACCO	15,313	105	15,418	3,383	23	3,406	3.6	13
Alcoholic drinks	11,158	105	11,263	2,465	23	2,488	2.6	9
Cigarettes and tobacco	4,155	-	4,155	918	-	918	1.0	3
TOTAL FOOD CONSUMPTION	363,511	65,461	428,972	80,299	14,461	94,760	100.0	354

Table A9.33 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by food subgroup: Rural coastal

Rural coastal

GROUP Subgroup	Rural coastal - Household consumption			Rural coastal - Per capita consumption			Percentage	Estimated total annual value
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢	%	(thousand million cedis)
1. FOOD & BEVERAGES	299,527	118,330	417,857	74,881	29,583	104,464	94.7	219
Cereals and cereal products	44,016	15,942	59,958	11,004	3,986	14,990	13.6	31
Roots and tubers	37,992	72,173	110,165	9,498	18,043	27,541	25.0	58
Pulses and nuts	11,850	8,026	19,876	2,962	2,006	4,968	4.5	10
Vegetables	28,243	8,896	37,139	7,061	2,224	9,285	8.4	19
Fruit	3,216	3,417	6,633	804	854	1,658	1.5	3
Oils and animal fats	14,182	1,215	15,397	3,545	304	3,849	3.5	8
Meat	8,648	1,747	10,395	2,162	437	2,599	2.4	5
Poultry and poultry products	5,317	4,359	9,676	1,329	1,090	2,419	2.2	5
Fish	90,361	2,538	92,899	22,590	635	23,225	21.1	49
Milk and milk products	3,795	17	3,812	949	4	953	0.9	2
Spices	7,319	-	7,319	1,830	-	1,830	1.7	4
Miscellaneous foods	7,248	-	7,248	1,812	-	1,812	1.6	4
Prepared meals	31,872	-	31,872	7,968	-	7,968	7.2	17
Non-alcoholic beverages	3,877	-	3,877	969	-	969	0.9	2
Soft drinks	1,591	-	1,591	398	-	398	0.4	1
2. ALCOHOL & TOBACCO	23,065	327	23,392	5,767	82	5,849	5.3	12
Alcoholic drinks	18,755	327	19,082	4,689	82	4,771	4.3	10
Cigarettes and tobacco	4,310	-	4,310	1,078	-	1,078	1.0	2
TOTAL FOOD CONSUMPTION	322,592	118,657	441,249	80,648	29,665	110,313	100.0	231

Table A9.34 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by food subgroup: Rural forest

Rural forest

GROUP Subgroup	Rural forest - Household consumption			Rural forest - Per capita consumption			Percentage	Estimated total annual value
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢	%	(thousand million cedis)
1. FOOD & BEVERAGES	212,301	172,625	384,926	48,520	39,452	87,972	95.9	386
Cereals and cereal products	24,456	10,106	34,562	5,589	2,310	7,899	8.6	35
Roots and tubers	24,054	118,415	142,469	5,497	27,063	32,560	35.5	143
Pulses and nuts	7,512	7,820	15,332	1,717	1,787	3,504	3.8	15
Vegetables	21,727	13,260	34,987	4,966	3,030	7,996	8.7	35
Fruit	1,385	5,741	7,126	316	1,312	1,628	1.8	7
Oils and animal fats	10,836	2,686	13,522	2,477	614	3,091	3.4	14
Meat	15,695	5,475	21,170	3,587	1,251	4,838	5.3	21
Poultry and poultry products	4,991	7,449	12,440	1,141	1,703	2,844	3.1	12
Fish	63,165	1,673	64,838	14,436	382	14,818	16.1	65
Milk and milk products	2,575	-	2,575	589	-	589	0.6	3
Spices	6,081	-	6,081	1,390	-	1,390	1.5	6
Miscellaneous foods	5,458	-	5,458	1,247	-	1,247	1.4	5
Prepared meals	20,267	-	20,267	4,632	-	4,632	5.0	20
Non-alcoholic beverages	2,670	-	2,670	610	-	610	0.7	3
Soft drinks	1,429	-	1,429	327	-	327	0.4	1
2. ALCOHOL & TOBACCO	16,312	265	16,577	3,728	61	3,789	4.1	17
Alcoholic drinks	12,389	265	12,654	2,832	61	2,893	3.2	13
Cigarettes and tobacco	3,923	-	3,923	896	-	896	1.0	4
TOTAL FOOD CONSUMPTION	228,613	172,890	401,503	52,248	39,513	91,761	100.0	403

Table A9.35 Value of average household and per capita food consumption (both cash expenditure and home-produced), and estimated total annual value, by food subgroup: Rural savannah

Rural savannah

GROUP Subgroup	Rural savannah - Household consumption			Rural savannah - Per capita consumption			Percentage	Estimated total annual value
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢	%	(thousand million cedis)
1. FOOD & BEVERAGES	217,297	261,971	479,268	39,909	48,115	88,024	94.1	304
Cereals and cereal products	57,898	86,814	144,712	10,634	15,945	26,579	28.4	92
Roots and tubers	23,825	82,340	106,165	4,376	15,123	19,499	20.8	67
Pulses and nuts	23,268	38,858	62,126	4,274	7,137	11,411	12.2	39
Vegetables	15,319	30,560	45,879	2,814	5,613	8,427	9.0	29
Fruit	1,961	1,649	3,610	360	303	663	0.7	2
Oils and animal fats	10,786	826	11,612	1,981	152	2,133	2.3	7
Meat	10,584	5,273	15,857	1,944	968	2,912	3.1	10
Poultry and poultry products	7,387	13,236	20,623	1,357	2,431	3,788	4.0	13
Fish	31,683	1,825	33,508	5,819	335	6,154	6.6	21
Milk and milk products	2,061	509	2,570	379	93	472	0.5	2
Spices	11,124	-	11,124	2,043	-	2,043	2.2	7
Miscellaneous foods	6,394	-	6,394	1,174	-	1,174	1.3	4
Prepared meals	13,205	-	13,205	2,425	-	2,425	2.6	8
Non-alcoholic beverages	1,253	81	1,334	230	15	245	0.3	1
Soft drinks	550	-	550	101	-	101	0.1	*
2. ALCOHOL & TOBACCO	29,060	1,148	30,208	5,338	211	5,549	5.9	19
Alcoholic drinks	22,468	1,148	23,616	4,127	211	4,338	4.6	15
Cigarettes and tobacco	6,592	-	6,592	1,211	-	1,211	1.3	4
TOTAL FOOD CONSUMPTION	246,357	263,119	509,476	45,247	48,326	93,573	100.0	323

Appendix 7

GLSS3 PROJECT PERSONNEL

Directorate

Daasebre Dr Oti Boateng, National Project Coordinator
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Dr Chris Scott, Sampling Consultant (World Bank)
Mr Christopher Hill, Statistical Adviser, World Bank

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Berko Asante	Matthew Atsu	D. K. Baah	Napoleon Beecham
Seth D. Darku	Ben Donkor	Edward Dorgbor	C. N. Dowuonah
Erasmus Dowuonah	J. R. Evans	A. L. A. Koomson	Samuel Koomson
Gladys Larbi	Stephen Larbi	John Lewis	J. K. Mensah
Opere Mintah	I. K. Mustapha	Isaac Offei	Emmanuel Osafo
George Owusu	Emmanuel Quansah	Daniel Quaye	F. Akuffo Twum

Data Entry Clerks

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Doris Kessey	Jonathan Larbi	Justice Mingle	Sophia Nyan
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Drivers

Edward Abrokwah	E. A. Anthony	Saka Boateng	Samuel Dam
Frimpong Dickson	Kwesi Donkor	Stephen Eshun	Jonathan Lawlivi
Solomon Nketia	Andrew Obeng	E. Oduro	Emmanuel Quarshie
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