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

Daasebre Dr Oti Boateng
Government Statistician and
GLSS Project Co-ordinator

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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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 zne; 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 ecological zones.
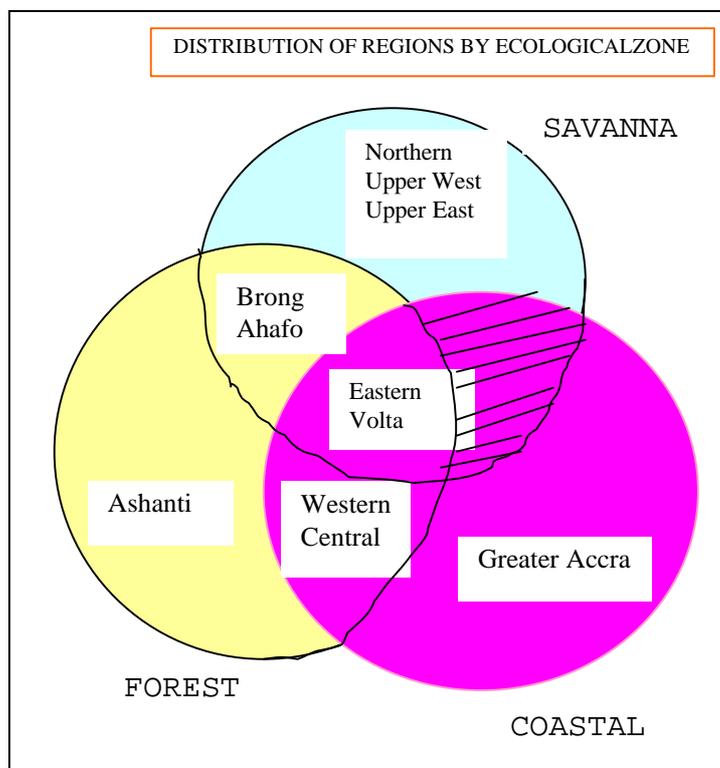
Figure 1

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 subaggregate[1].

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[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 Service[2]. 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 separately [3].

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[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 ublished 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).
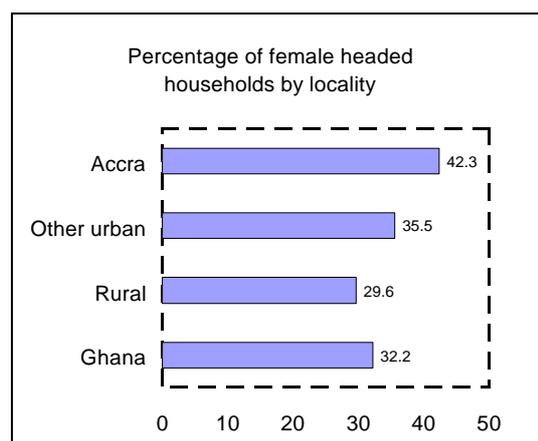
Figure 1.1

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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

          Sample size    3085  1465        4550
          -------------------------------------
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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.

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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.

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

--------------------------------------------------------------------------------------
                        Mean household size     Popn. in hhlds in March 1992*   Estimated
                     -------------------------   -----------------------------   no.of households
                     1984 Census     GLSS3        Projected     Based on         based on GLSS3
                     (March 1984)  (March 1992)  from Census   GLSS3 results    (March 1992)
--------------------------------------------------------------------------------------
                                                 (millions)    (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

	Accra		Other urban		Rural		All	
	Male	Female	Male	Female	Male	Female	Male	Female
Age group								
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

Percentages

| | Nationality | | | | | | | | | |
	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 x 730 x 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
------------------------------------------------------------------------------------
                        Primary language of household head
                -----------------------------------------------------------------
                Azan    Ewe  Ga/Adangbe  Dagbani  Hausa  Nzema  Other     All
------------------------------------------------------------------------------------
                  %      %       %          %       %      %      %         %
Region
------
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
        ------------------------------------------------------------------------
                            Other   Rural    Rural   Rural
                    Accra   urban   Coastal  Forest  Savannah     All
        ------------------------------------------------------------------------
        Religion
        ----------
        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	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*

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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+

    --------------------------------------------------------------------------
                              Percentages            Estimates (millions)
                          -----------------------   -----------------------
                          Males   Females   All     Males   Females   All
    --------------------------------------------------------------------------
                            %       %        %              (Millions)
    Highest level attained
    ----------------------
    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

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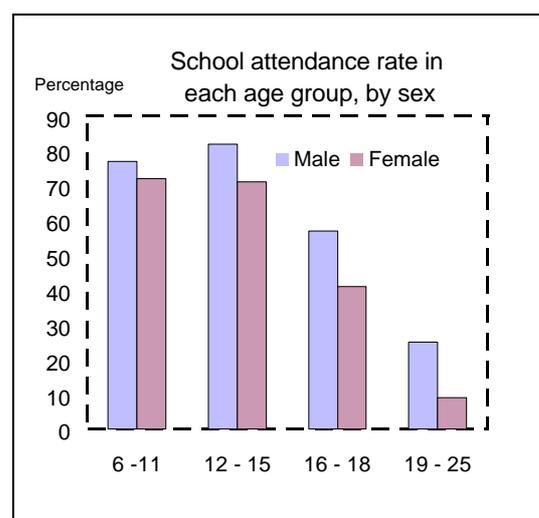
A similar pattern is noticeable in respect of school attendance among girls. However, on the whole, the proportion of females in school is significantly lower in all localities and for all ages when compared with their male counterparts.

Table 2.2   School attendance rate by age, locality and sex

Percentages

Age group	Accra Male	Accra Female	Other Urban Male	Other Urban Female	Rural Male	Rural Female	Country Male	Country Female	All
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

Percentages

Region	6 - 11 Male	6 - 11 Female	12 - 15 Male	12 - 15 Female	16 - 18 Male	16 - 18 Female	19 - 25 Male	19 - 25 Female	6-25 Male	6-25 Female	All
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

Cedis

	Locality			All	
	Accra	Other urban	Rural	Amount	Percentage
Type of expense	¢	¢	¢	¢	%
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*

		Urban		Rural	Percentages 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.

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

                                                                     Percentages
-------------------------------------------------------------------------------------
                             Literate in:
                     ------------------------------  Illiterate   Total   Sample
                     Ghanaian    Ghanaian    English                       size
                     languages   languages    only
                     only        and English
-------------------------------------------------------------------------------------
                                        (percentages)
Sex        Locality
---        --------
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.

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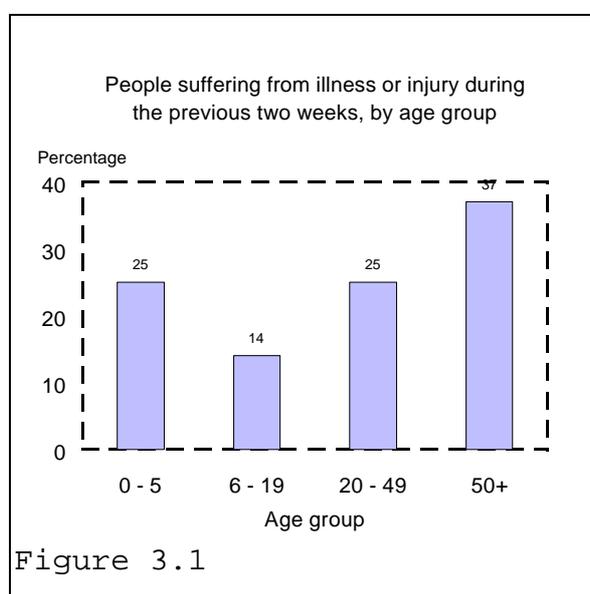
Figure 3.1

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

								Percentages
	Locality						Country	
	Accra		Other urban		Rural			
	Male	Female	Male	Female	Male	Female	Male	Female	All

Age group	Accra Male	Accra Female	Other urban Male	Other urban Female	Rural Male	Rural Female	Country Male	Country Female	All
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

Percentages

| | Locality | | | | | | | | |
| | Accra | | Other urban | | Rural | | Country | | |
	Male	Female	Male	Female	Male	Female	Male	Female	All
Age group									
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

Percentages

| | Locality | | | | | | | | |
| | Accra | | Other urban | | Rural | | Country | | |
	Male	Female	Male	Female	Male	Female	Male	Female	All
Age group									
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

                                                                  Percentages
-------------------------------------------------------------------------------
                             Locality
            -----------------------------------------
             Accra       Other urban      Rural          Country
            -----------   -----------   -----------   -----------------
            Male Female   Male Female   Male Female   Male Female   All
-------------------------------------------------------------------------------
Person consulted  %     %      %     %      %     %      %     %      %
----------------
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.
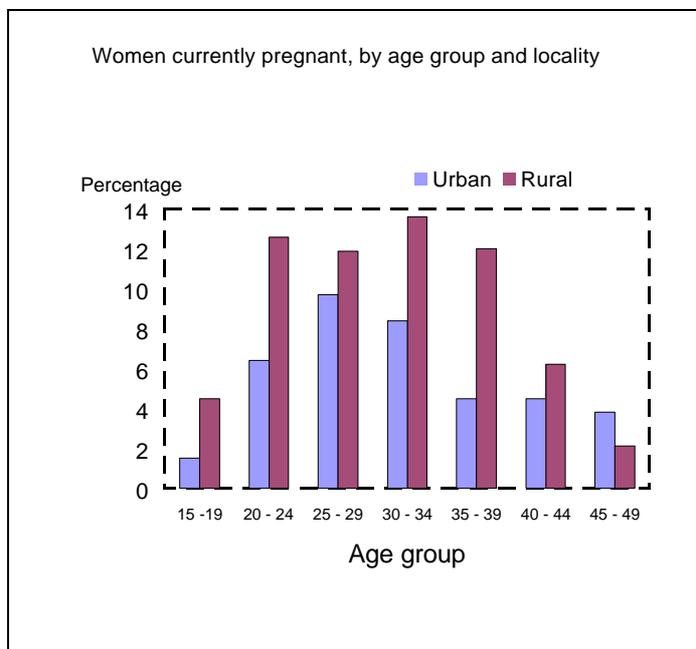
Figure 3.2

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

Percentages

	Ever Pregnant			Pregnant during previous 12 months[1]			Currently pregnant		
	Locality			Locality			Locality		
	Urban	Rural	Country	Urban	Rural	Country	Urban	Rural	Country
Age group									
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

Percentages

	Age of woman		All
	Under 35	35 or over	
Locality			
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

Percentages

	Locality			Country
	Accra	Other urban	Rural	
Age group				
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.

Contraceptive method used by women in each age group

Figure 3.3
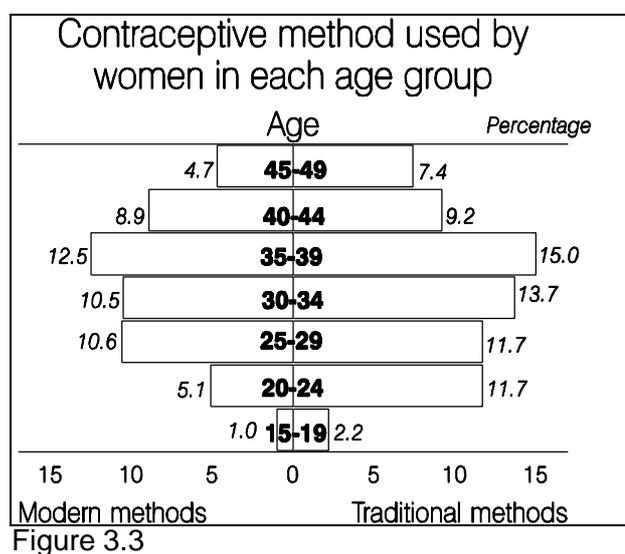
Table 3.8   Percentage distribution of women aged 15-49 years

(or their partners), by age group and contraceptive method used

Percentages

	Age group	
Contraceptive method	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Country
	%	%	%	%	%	%	%	%
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
                                                    Percentages
         -------------------------------------------------------
                          Locality
                      -----------------------
                      Accra    Other    Rural     Country
                               urban
         -------------------------------------------------------
Contraceptive method    %        %        %          %
--------------------
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
                                        Percentages
         -----------------------------------------------
                          Locality
                      ----------------------
                      Accra    Other    Rural    Country
                               urban
         -----------------------------------------------
  Age
  ---------
  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
         -----------------------------------------------
```

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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			
	Accra	Other urban	Rural	Country
	%	%	%	%
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

Percentages

	Not breast-fed	Age at weaning (in months)				Total	*Sample size*
		< 12	12-17	18-23	24+[*]		
Age							
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
```

				Percentages
		Locality		
	Accra	Other Urban	Rural	Country
Age				
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.

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.
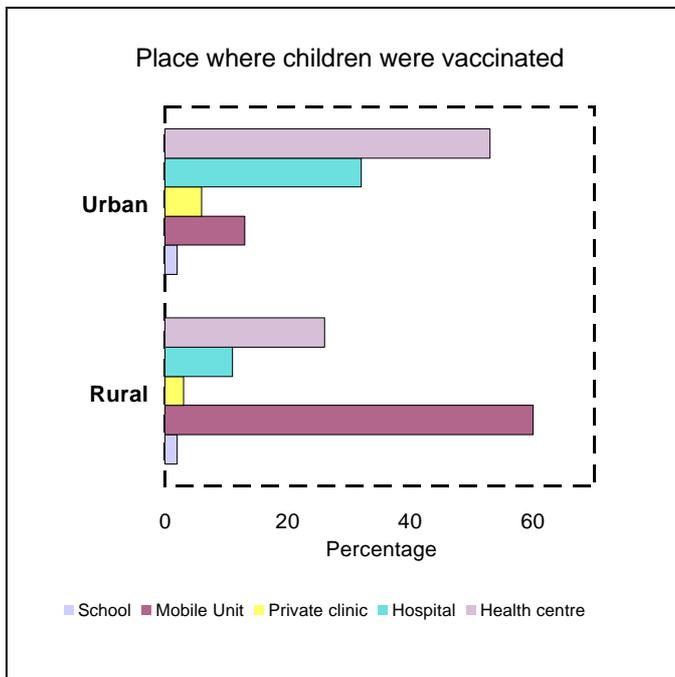
Figure 3.4

Figure 3.5

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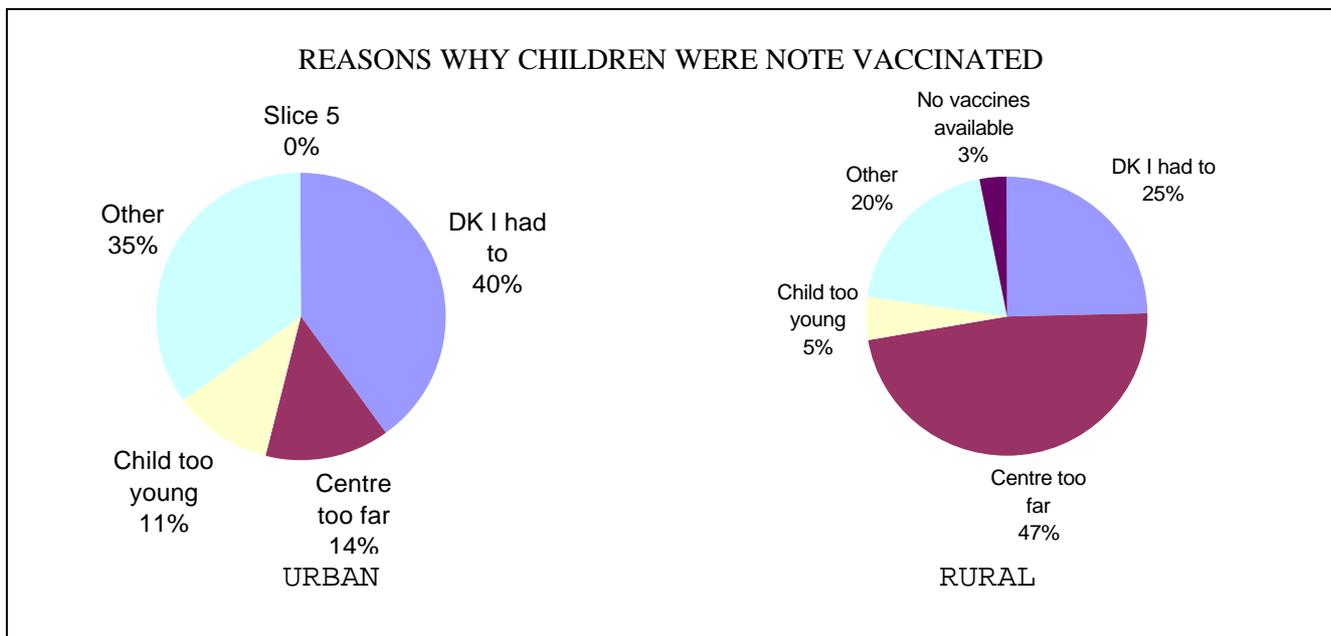
4. EMPLOYMENT

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.

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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 jobs[4] . 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

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[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
             -----------------    ---------------------------
             Accra  Other  All    Coastal Forest Savannah  All    Country
--------------------------------------------------------------------------
 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

Employment status	Urban areas			Rural areas			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
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
Sample size	*1726*	*2081*	*3807*	*3271*	*3754*	*7025*	*4997*	*5835*	*10832*

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.

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```
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
         ------------------------------------------------------------------------
                         %       %        %            %       %        %
Employment status

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

Sample size             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
         --------------------------------------------------------------------------
                           %       %        %
Type of work

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

Sample size               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
--------------------------------------------------------------------------
                           %        %      %
Main employer

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

Sample size              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 agricultural[5]. 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
-------------------------------------------------------------------------------
                           %       %       %
Occupation

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

Sample size              3561    4337    7898
-------------------------------------------------------------------------------
```

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[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)
```

	Urban			Rural		
	Male	Female	Total	Male	Female	Total
Occupation						
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

		Educational attainment					
		Never been to school	Less than MSLC[*]	MSLC[*]	Secondary or higher	Total	*Sample size*
	Occupation						
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

     ------------------------------------------------------------------------------
                                   Percentages              Estimate (millions)
                             ----------------------      ----------------------
                             Males   Females   All       Males   Females   All
     ------------------------------------------------------------------------------
                               %        %       %
     Industry

     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.
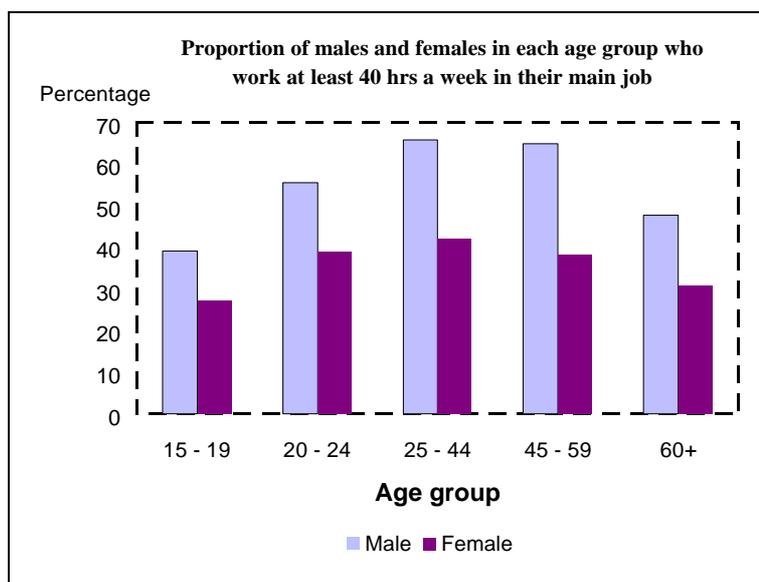
Figure 4.1

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)

                                                                   Percentages
----
                          Hours worked per week
                  ---   Sample
                  1-9 10-19 20-29 30-39 40-49 50-59 60-69 70+   ALL   size
----
                                   (percentages)
Age

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)

                                                                   Percentages
----
                          Hours of work per week in main job
                  ---   Sample
                  1-9 10-19 20-29 30-39 40-49 50-59 60-69 70+   All   size
----
                                   (percentages)
Industry

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
---------------------------------------------------------------------------------
Industry                                 Occupation
---------                                ----------
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.

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```
        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
                                    +-------------+
                                    ¦   Adults    ¦
                                    ¦   100 %      ¦
                                    +-------------+
                +-------------------------------------------------+
       +-------------+                                     +---------------+
       ¦  Working in ¦                                     ¦ Not working in¦
       ¦ last 7 days ¦                                     ¦  last 7 days  ¦
       ¦    76 %     ¦                                     ¦     24 %       ¦
       +-----------+                                       +---------------+
     +---------------------+                         +-----------------+
     ¦                     ¦                         ¦                 ¦
 +-----------+     +-------------+           +-------------+     +-------------+
 ¦ > 40 hours ¦     ¦ <= 40 hours ¦           ¦ Unemployed  ¦     ¦  Inactive   ¦
 ¦   23 %     ¦     ¦    53 %     ¦           ¦    4 %      ¦     ¦    20 %      ¦
 +-----------+     +-------------+           +-------------+     +-------------+
            +-------------------+
            ¦                   ¦
     +---------------+   +-----------------+
     ¦ Wanted to work ¦   ¦ Did not want to ¦
     ¦   more hours    ¦   ¦ work more hours ¦
     ¦      8 %        ¦   ¦     45 %        ¦
     +---------------+   +-----------------+
```

38
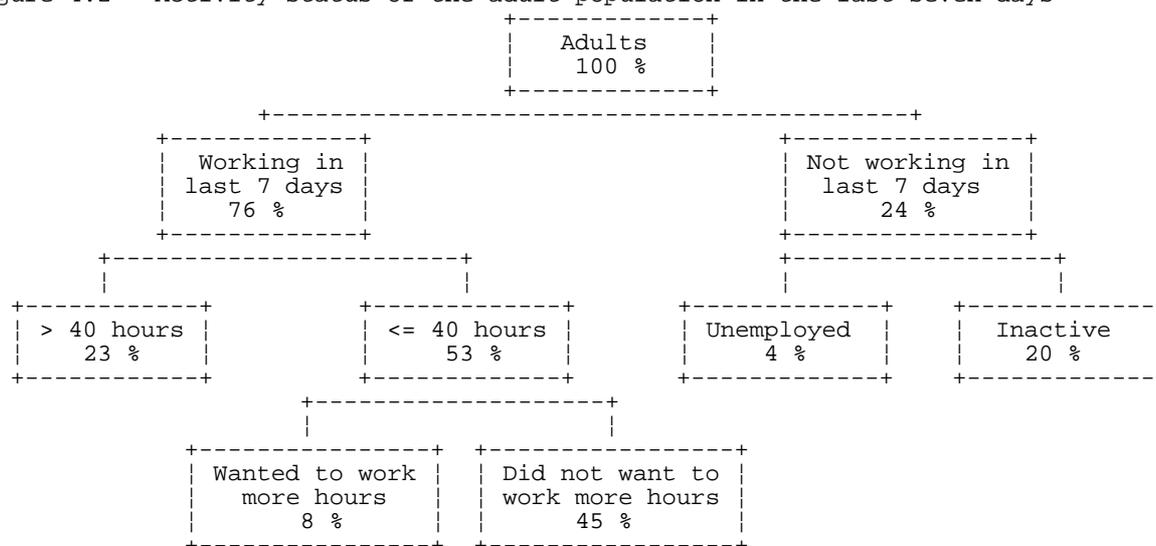
```
Table 4.15   Activity status of the adult population in the last seven days,
             by sex and locality

-------------------------------------------------------------------------------
                             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+)

     --------------------------------------------------------------------------
                                        Average time spent   Estimated
                               Proportion ------------------- total time
                               doing that By those   By all  spent per
                               activity   doing that those   day by all
                                          activity   aged 7+ aged 7+
     --------------------------------------------------------------------------
                                          (minutes per day)  (million hours)
       Activity

     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   Males     70 %       108       76        7.0
     activities         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

Activity		Urban			Rural				Country
		Accra	Other	All	Coastal	Forest	Savannah	All	
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	Males	63	84	79	64	83	70	74	76
activities	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

Age	Fetching wood		Fetching water		Other housekeeping		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
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

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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	
Fetching wood								
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
Fetching water								
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
Other housekeeping activities								
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
All housekeeping activities								
Average hours per week	35.7	56.6	50.5	43.6	49.3	71.8	54.5	53.1
Sample size	*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

					Percentages
	In Migrants	Return Migrants	Non Migrants	Total	Sample size
Region					
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

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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

                                               Percentages of total
               ----------------------------------------------------------
                            Locality of current residence
                            ------------------------------
                            Accra   Other urban    Rural      Total
               ----------------------------------------------------------
      Locality of
      previous residence
      ------------------
                            +----------------+    +------+
      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
                                                    Percentages
            -----------------------------------------------------------
                               Current locality
                               -------------------------
                                        Other
                               Accra    urban    Rural       All
            -----------------------------------------------------------
                                %        %        %          %
      Reason for migrating
      --------------------
      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
            -----------------------------------------------------------
```

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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
   ------------------------------------------------------------------
                                     Urban areas
                                  ------------------  Rural   Country
                                  Accra  Other   All
                                         urban  urban
   ------------------------------------------------------------------
   Type of Dwelling                 %      %      %      %       %
   ----------------
   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
        -------------------------------------------------------
                            Urban areas
                         ------------------  Rural   Country
                         Accra  Other   All
                                urban  urban
        -------------------------------------------------------
        Occupancy status   %      %      %      %       %
        ----------------
        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
        -------------------------------------------------------
```

45

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     All
                          urban     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

     Sample size        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 Present  Previous Present  Previous Present  Previous Present
             status   status   status   status   status   status   status   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
                                                           Percentages
              ------------------------------------------------------------
                                Present locality
                         ----------------------------    Country
                         Accra   Other    All    Rural
                                 urban    urban
              ------------------------------------------------------------
                           %       %       %       %       %
Reason for moving
-----------------
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

                                                                       Percentages
     -------------------------------------------------------------------------------
                           Urban                         Rural
                     -------------------   ----------------------------------  Country
                     Accra   Other   All   Coastal  Forest  Savannah   All
     -------------------------------------------------------------------------------
                       %       %      %       %        %        %        %         %
     No. of rooms
       occupied
     ------------
          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

                                                                       Percentages
     -------------------------------------------------------------------------------
                           Urban                         Rural
                     -------------------   ----------------------------------  Country
                     Accra   Other   All   Coastal  Forest  Savannah   All
     -------------------------------------------------------------------------------
                       %       %      %       %        %        %        %         %
     Household
       size
     ----------
          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.

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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

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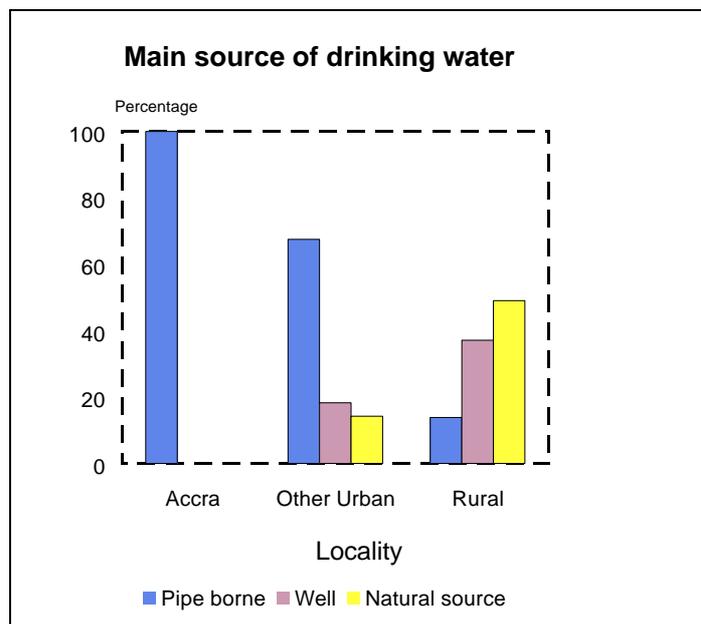
In Accra a fifth of households benefit from indoor plumbing, and a further two-fifths have an inside standpipe; the remainder rely mainly on water from neighbours and private standpipes, but a few use public standpipes or water vendors. In other urban areas two-thirds of households have pipe-borne water, 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

                                                        Percentages
            -----------------------------------------------------------------
                            Urban areas
                            ----------------------   Rural     Country
                            Accra    Other    All
                                     urban    urban
            -----------------------------------------------------------------
                              %        %        %        %         %
Source of drinking water
------------------------
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

	Accra	Other urban	All urban	Rural	Country
	%	%	%	%	%
Source of lighting					
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
Source of fuel					
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
Method of rubbish disposal					
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
Sample size	*461*	*1123*	*1584*	*2935*	*4519*

* 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

                                                        Percentages
                 ----------------------------------------------------------
                             Urban areas
                         ----------------------    Rural      Country
                   Accra    Other      All
                            urban      urban
                 ----------------------------------------------------------
                     %        %          %          %            %
    Type of toilet
    -------------
    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

    Sample size     461     1123       1584       2938         4522
                 ----------------------------------------------------------
```

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.

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

| | Urban areas | | | Rural | Country |
	Accra	Other urban	All urban		
	%	%	%	%	%
Outside wall material					
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
Main flooring material					
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
Main roofing material					
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
Sample size	*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 3 [6]. 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

	Mean annual household expenditure	Mean annual per capita expenditure*	Percentage shares			Mean household size	Sample size	
			Hhlds	Persons	Exp.		Hhlds	Persons
Quintile group	(cedis)	(cedis)	%	%	%			
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.

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

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[6] See also the footnote on page 4.

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 regions[7] .

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

	Quintile						Mean annual household expenditure	Mean annual per capita expenditure	Sample size	
	1	2	3	4	5	All			Hhlds	Persons
	(Percentages)						(cedis)	(cedis)		
Region										
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				

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[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.

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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 represents 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 cedis[8].

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[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).

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

--------------------------------------------------------------------------
                          Mean annual   Per capita   Estimated    Percentage
                           household      annual    total annual  distribution
                          expenditure   expenditure  expenditure
--------------------------------------------------------------------------
                           (cedis)       (cedis)     (thousand        %
Component                                            million cedis)
----------
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
                                                                      Percentages
```

	Food (actual)	Food (imputed)	Housing (actual & imputed)	Other non-food (actual)	Other non-food (imputed)	Remittances (actual)	Total (100%)	Food (actual & imputed) as percentage of total
Region								
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
-------------------------------------------------------------------------------------
                         Component of expenditure                              Food
             ---------------------------------------------------- Total     (actual &
              Food     Food     Housing   Other    Other  Remittances       imputed) as
             (actual) (imputed) (actual  non-food  non-food (actual)        percentage
                               & imputed) (actual) (imputed)                 of total
-------------------------------------------------------------------------------------
Quintile group
--------------
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

	Mean annual household income	Mean annual per capita income*	Percentage shares			Mean household size	Sample size	
			Hhlds	Persons	Inc.		Hhlds	Persons
Quintile group	(cedis)	(cedis)	%	%	%			
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

	Mean annual household income	Mean annual per capita income	Sample size	
			Hhlds	Persons
Region	(cedis)	(cedis)		
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

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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 |
	Wage income from employment	Household agricultural income	Non-farm self-employment income	Rental income	Income from remittances	Other income	(100%)
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

cedis

	Expenditure		Income	
	Decile boundaries	Mean	Decile boundaries	Mean
Decile group				
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.

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Table 7.13 Comparison of per capita income and per capita expenditure

			Expenditure decile groups								Share of total sample	Share of total %	Share of income cum %
	1	2	3	4	5	6	7	8	9	10			

Income
decile groups   Percentage share of total sample

	1	2	3	4	5	6	7	8	9	10	Share of total sample	Share of total %	Share of income cum %
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 .

Inequalities in the distribution of income and expenditure
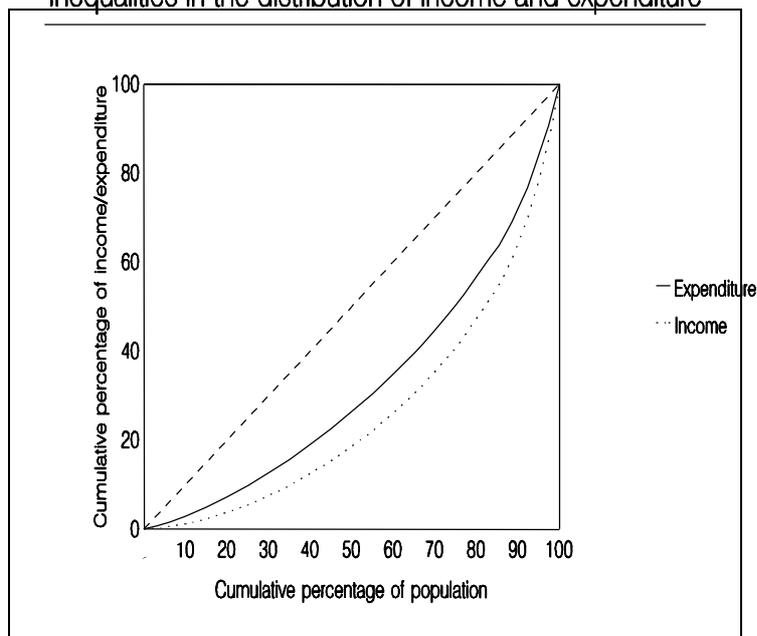
Figure 7.1

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 agriculture[9].

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

	Households owning or operating a farm or keeping livestock		Women's share of responsibility for agricultural activities
	Percentage	Estimated number	
Locality/ecological zone			
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

			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
Type of livestock			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

	Locality				Country
	Urban areas	Rural coastal	Rural forest	Rural savannah	
Type of livestock					
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 1¾ 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
                                          Estimated number of households
             -----------------------------------------------------------------
                                       Ecological zone
                             ------------------------------------    Ghana
                              Coastal       Forest      Savannah
             -----------------------------------------------------------------
             Crop
             -----
             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

      ---------------------------------------------------------------------
                      Estimated number    Percentage selling    Estimated annual value of
                       of households       any unprocessed    ---------------------------
                      harvesting crop        crop in the          total      sales
                      in last 12 months    last 12 months        harvest
      ---------------------------------------------------------------------
                                                               thousand million cedis
      Crop
      -----
      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

------------------------------------------------------------------------------------
                  Estimated annual value of harvest    Estimated annual value of sales
               -------------------------------------   -------------------------------------
                        Ecological zone                       Ecological zone
               --------------------------   Total      --------------------------   Total
               Coastal  Forest  Savannah               Coastal  Forest  Savannah
------------------------------------------------------------------------------------
                   (thousand million cedis)                (thousand million cedis)
Crop
-----
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

                                                      Number of households
----
                            Ecological zone
                 -------------------------------------   Ghana
                   Coastal   Forest   Savannah

Crop

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

                  Estimated number   Percentage of these households: Est. annual value of:
                  of households   ------------------------------- -------------------
                  harvesting crop   harvesting in   selling crop in   total   sales
                  in last 12 months last two weeks   last two weeks   harvest
----
                                                                     (thousand million cedis)
Crop

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

	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)			
Crop								
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

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[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

Maize

Rice

Sorghum/Millet/Guinea corn
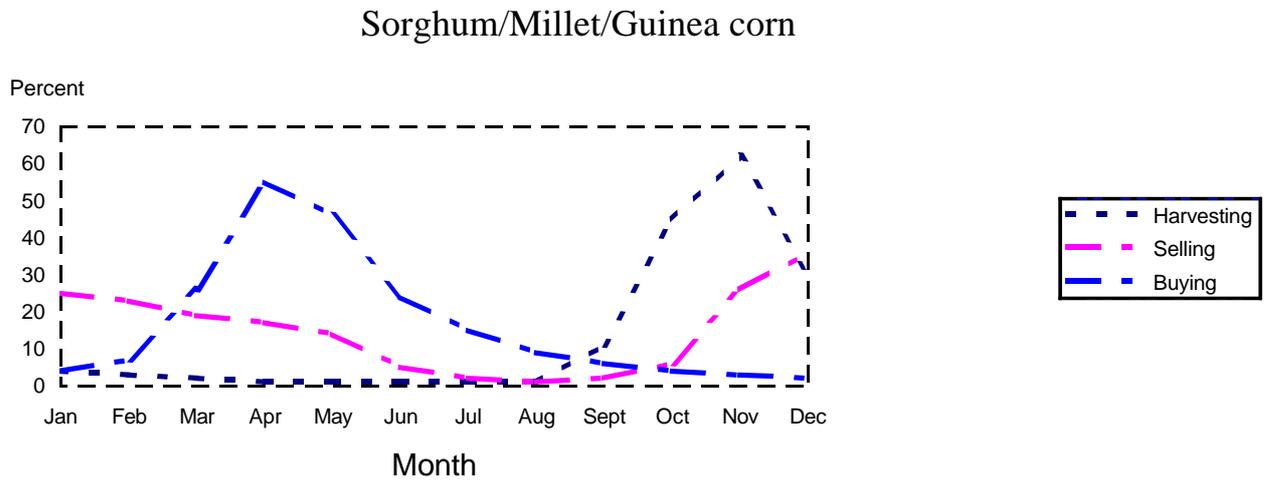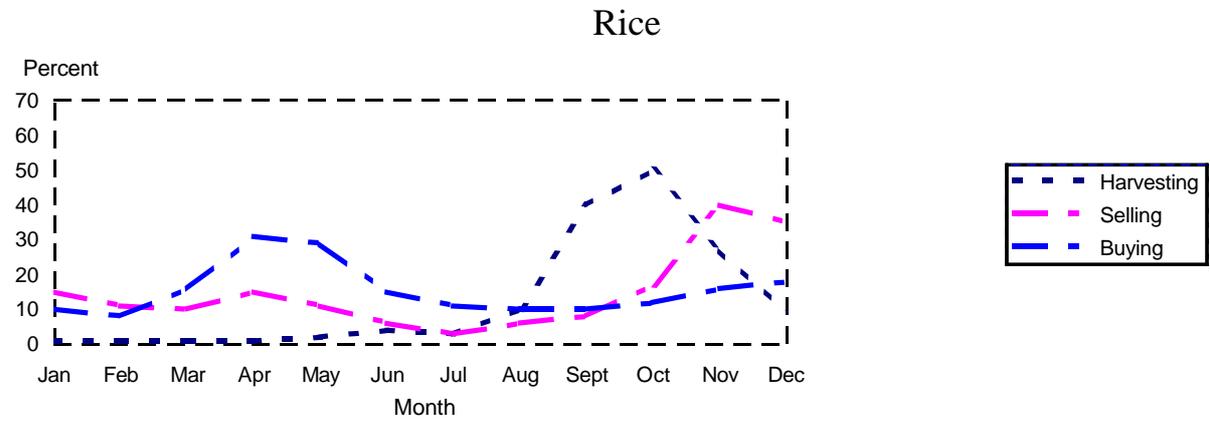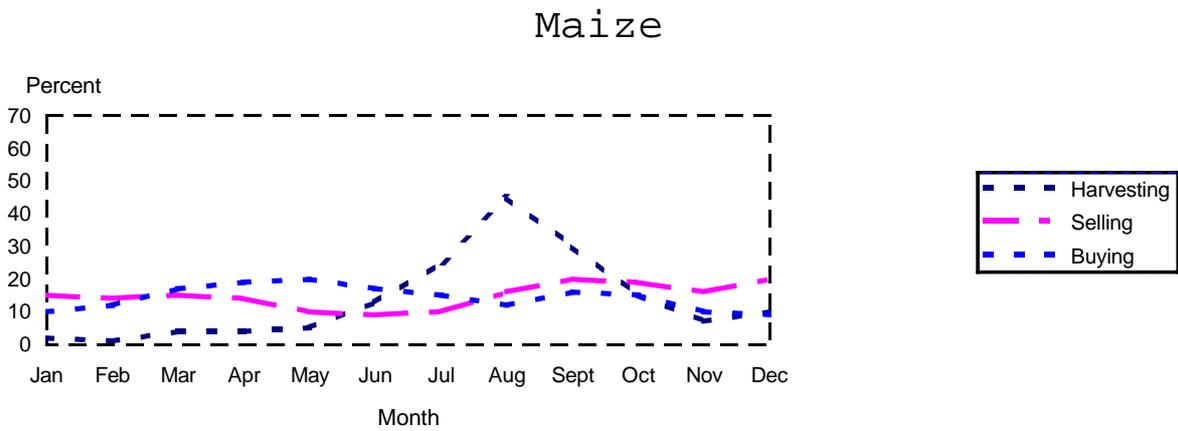
Figure 8.2   Seasonal pattern of harvesting, selling and buying other crops,
amongst those households which grow that crop

Yam

Plantain

Cassava

74
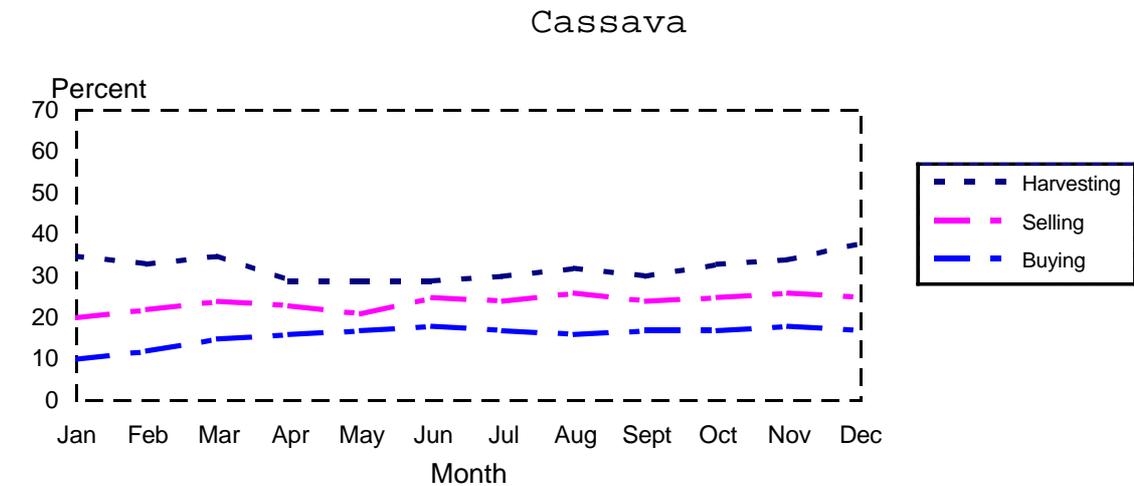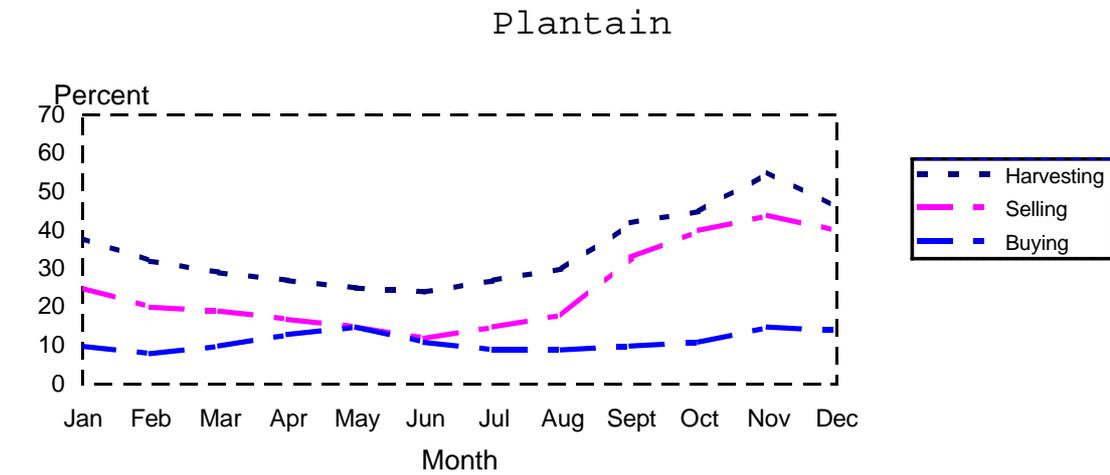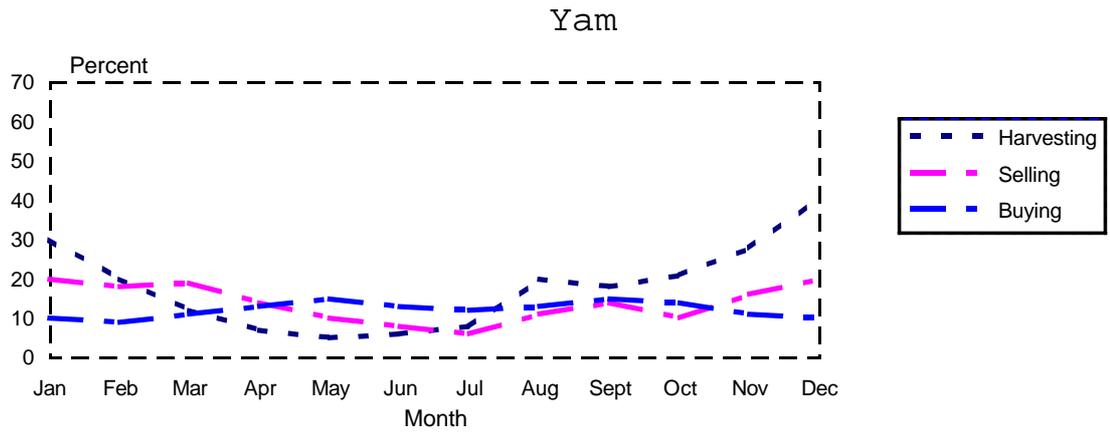
8.4 Other agricultural income

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.

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Table 8.10   Estimates of number of agricultural households selling various
             types of agricultural produce, and estimated value of sales
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	National estimates	
	Number of households	annual sales
		(thousand million cedis)
Source of sales		
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: Private sector	Min. of Agric	Percent reporting item sometimes unavailable
		(million cedis)			
Crop inputs		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			
Livestock inputs		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

	Households processing crops or fish for sale or use by the household		Women's share of responsibility for processing
	Percentage	Estimated number	
Locality/ecological zone			
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.

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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

	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)
Item processed/transformed					
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 GLSS[11]. 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.

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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

----------------------------------------------------------------------------------------
                             Consumption of food produced by the household itself
                          --------------------------------------------------------------
                          Average annual  Average annual   Estimated value    Percentage
GROUP                        household       per capita      of national       distrib-
  Subgroup                  consumption     consumption   annual consumption     ution
----------------------------------------------------------------------------------------
                             (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


Sample size                             4552            20403
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[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

	Consumption of food produced by the household itself							
	Urban areas				Rural areas			
GROUP Subgroup	Average annual household consumption	Average annual per capita consumption	Estimate of total annual consumption	Percentage distrib- ution	Average annual household consumption	Average annual per capita consumption	Estimate of total annual consumption	Percentage distrib- ution
	(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**
Sample size	*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

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| | Consumption of food produced by the household itself | | | | | | | | | | | |
| GROUP | Average annual household consumption | | | | Average annual per capita consumption | | | | Percentage distribution | | | |
Subgroup	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**
Sample size	*1621*	*1864*	*1067*	*4552*	*6317*	*8244*	*5842*	*20403*				

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

	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**
Sample size	*485*	*515*	*638*	*662*	*419*	*734*	*455*	*343*	*111*	*190*	*4552*
Households reporting consumption	*356*	*374*	*65*	*482*	*314*	*504*	*402*	*286*	*99*	*188*	*3070*

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%).

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Table 9.1    Average annual household and per capita cash expenditure, and
             estimated total national expenditure, by expenditure group

---------------------------------------------------------------------------------
                                 Average annual  Average annual  Estimated total    Percent
                                 household cash    per capita     annual cash      distrib-
                                  expenditure     expenditure     expenditure        ution
---------------------------------------------------------------------------------
                                    (cedis)         (cedis) (thousand million cedis) %
Expenditure group
-----------------
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
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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 arger 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

	Mean annual household cash exp.			Percentage distribution		
	Urban	Rural	Country	Urban	Rural	Country
	¢	¢	¢	%	%	%
Expenditure group						
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).

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Table 9.3   Mean annual per capita cash expenditure, and estimated total annual cash expenditure,
             by locality and 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	
Expenditure group	¢	¢	¢	(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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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 x 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 x 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).

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[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	Food budget shares
	Cash expenditure	Home-produced	Total	Cash expenditure	Home-produced	Total		
	¢	¢	¢	¢	¢	¢	(thousand million cedis)	%
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 | Urban areas - Household consumption | | | | Rural areas - Household consumption | | | |
Subgroup	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**

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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

Percentages

Item	Accra	Other urban	Rural coastal	Rural forest	Rural savannah	Ghana
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

	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	
Locality							
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

	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			
Expenditure item								
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			
Sources of revenue								
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
Allocation of income								
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

	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			
Asset								
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

	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
Locality						
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
```

	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)			
Locality								
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
                                     Urban    Rural     All      income
        ----------------------------------------------------------------------
                                       ¢        ¢        ¢      thousand
                                                                million
                                                                 cedis
                 Source of income
                 ----------------
                 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
                                            Urban     Rural      All      expenditure
        ----------------------------------------------------------------------------
                                              ¢         ¢         ¢      thousand
                                                                         million
                                                                          cedis
        Purpose of expenditure
        ----------------------
        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
        ----------------------------------------------------------------------------
```

2. 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

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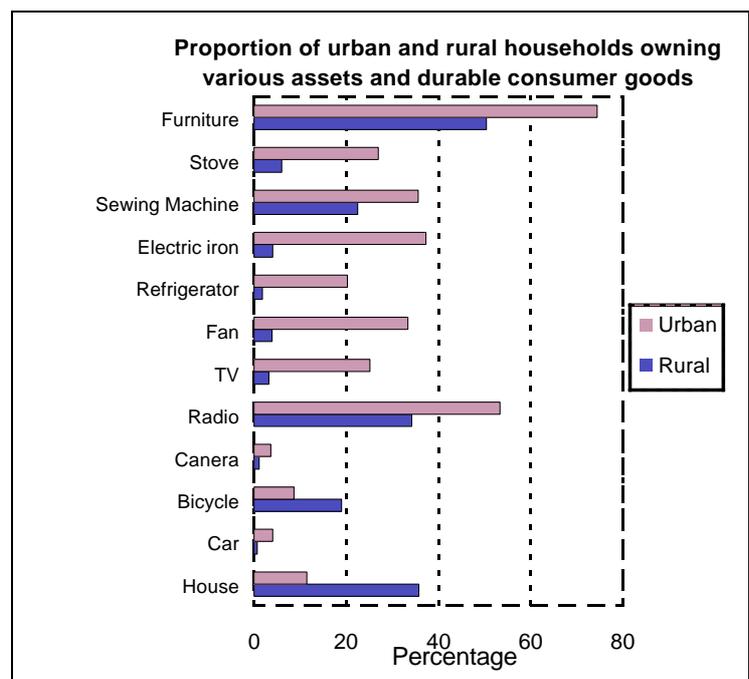
Also shown in the right hand columns of Table 12.1 are estimates, for the country as a whole, of the number of households owning each asset or good, and of the total numbers of each asset or good which are owned. The national estimates obtained by grossing up the sample figures indicate, for instance, 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

	Urban			Rural				National estimates		
	Accra	Other urban	All	Coastal	Forest	Savannah	All	%	Hhlds owning	Total owned
	(percentages)								(millions)	
Asset/consumer durable										
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

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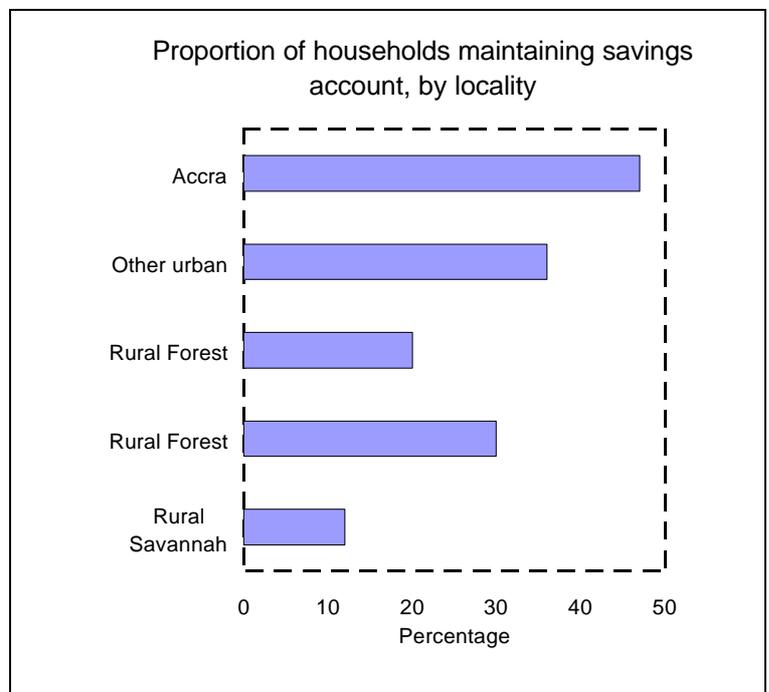
Appendix 1

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 discussed[13]. 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 procedure[14] 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.

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[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 required[15].

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 items[16].

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.

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[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 x 2), and for urban areas 30 days (ie. 10 x 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.

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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 x 15 =) 1485 households in urban areas, and (308 x 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 (1485/45650 x 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 x 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

| | EAs selected | EAs after reallocation | No. of workloads after listing | | | |
			0	1	2	Total
Type of EA						
Urban allocated to urban team	100)	100	11	79	10	99
	) 113					
Urban allocated to rural team	13)	13)	2	11	–	11
		) 307				
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

| | | | No. of households | |
Area	Covered by	No. of Workloads	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

Section	Topic	Contents
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

Section	Topic	Contents
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

Section	Topic	Contents
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.

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

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

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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.

	9B Food Exp	8H Home Con
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	

	9A1 Less Freq	9A2 More Freq
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)	

		9A1 Less Freq	9A2 More Freq

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

SUPPLEMENTARY TABLES

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

Percentages

	Primary language of household head									*Sample size*
	Akan	Ewe	Ga/Adangbe	Dagbani	Hausa	Nzema	Other	All		
Region										
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

Percentages

	Religion of household head								*Sample size*
	Protestant	Catholic	Other Christian	Muslim	Animist/ Traditional	Other	All		
Region									
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*

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Table A2.1  Proportion of adults in each region who have been to school,
            by sex and locality
                                                                  Percentages
--------------------------------------------------------------------------------
                  Urban                   Rural                     All
             -------------------     -------------------     -------------------
             Male  Female  All       Male  Female  All       Male  Female  All
--------------------------------------------------------------------------------
Region
--------
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
                                                              Percentages
--------------------------------------------------------------------------------
                              Locality
             ----------------------------------------
              Accra        Other urban    Rural            Country
             -----------   -----------   -----------     -------------------
             Male Female   Male Female   Male Female     Male Female  All
--------------------------------------------------------------------------------
Reason for
consultation   %    %       %    %        %    %          %    %      %
------------
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

Percentages

| | Locality | | | |
	Accra	Other urban	Rural	Country
Agegroup				
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

Percentages

| | Locality | | |
Reason for no pre-natal care	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

Percentages

| | Locality | | | | | | Country | | |
| | Accra | | Other Urban | | Rural | | | | |
Age	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
                    -- *Sample*
                    1-9   10-19 20-29 30-39 40-49 50-59 60-69 70+   ALL   *size*   40+

Age

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

                      1-9   10-19 20-29 30-39 40-49 50-59 60-69   70+   ALL

    Industry

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/   Male   -   1.9   0.6   1.9   27.8   14.8   17.9   35.2   100.0
communication Female   -   10.0   -   10.0   70.0   10.0   -   -   100.0

Financial   Male   -   3.2   -   6.5   61.3   -   6.5   22.6   100.0
services   Female   -   -   -   11.1   77.8   -   11.1   -   100.0

Community &   Male   1.9   1.1   16.1   16.5   42.3   6.6   4.9   10.8   100.0
other services 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

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```
Table A4.3    Distribution of population aged 7+ by hours of housekeeping
              per day, by age and sex
                                                                    Percentages
--------------------------------------------------------------------------------
              Hours per day for all housekeeping activities
              ------------------------------------------------------------------
              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
                                                                 Minutes per day
--------------------------------------------------------------------------------
                                       Region
              ------------------------------------------------------------------
                           Greater                     Brong            Upper  Upper
              Western Central Accra Eastern Volta Ashanti Ahafo Northern West  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

Percentages

                              Hours per day fetching wood
            ----
            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

Minutes per day

                                    Region

                      Greater   Brong   Upper Upper
        Western Central Accra Eastern Volta Ashanti Ahafo Northern West 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

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

<div align="right">Percentages</div>

| | | Hours per day fetching water | | | | | | | | |
		0	< 1	1-	2-	3-	4-	6-	8+	All
	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

<div align="right">Minutes per day</div>

| | | Region | | | | | | | | | |
		Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	All
	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
-------------------------------------------------------------------------------
                       Hours per day cooking, cleaning, etc.
                  -------------------------------------------------------------
                    0      < 1     1-      2-      3-      4-      6-      8+      All
-------------------------------------------------------------------------------
        Age group

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
-------------------------------------------------------------------------------
                                            Region
              -----------------------------------------------------------------
                            Greater                         Brong          Upper Upper
              Western Central Accra Eastern Volta Ashanti Ahafo Northern West  East    All
-------------------------------------------------------------------------------
        Age group
        ---------
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
-------------------------------------------------------------------------------
```

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```
Table A6.1    Distribution of households by type of dwelling,
              locality and sex of head of household
                                                                        Percentages
----------------------------------------------------------------------------------
                                            Locality
              --------------------------------------------------------------------
                    Accra        Other urban      Rural             Country
                 -----------    ------------    -----------    ----------------
                 Male Female    Male Female     Male Female     Male Female   All
----------------------------------------------------------------------------------
Type of Dwelling    %     %       %     %         %     %         %     %      %
-----------------
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
--------------------------------------------------------------------------------
                                    Locality
             ------------------------------------------------
                 Accra        Other urban     Rural              Country
             -----------    -----------    -----------    -------------------
             Male Female    Male Female    Male Female    Male Female    All
--------------------------------------------------------------------------------
From whom they
rented dwelling
----------------
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
                                                                   Percentages
-------------------------------------------------------------------------------
                      Sex of household head
              -----------------------------------------
                    Male                Female          All moving households
              ------------------  ------------------    ---------------------
              Previous  Present   Previous  Present     Previous    Present
               status    status    status    status      status      status
-------------------------------------------------------------------------------
                 %        %         %        %             %          %
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
                                                                   Percentages
-------------------------------------------------------------------------------
                             Locality
             -------------------------------------------
               Accra        Other urban    Rural              Country
             ----------     ----------    ----------       ------------------
             Male Female    Male Female   Male Female      Male Female   All
-------------------------------------------------------------------------------
Reason for
moving        %     %        %     %       %     %          %     %       %
--------------
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        Average value of
                                 annual household        annual per capita
                                 home consumption        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
```

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```
                                                                              Cedis
-------------------------------------------------------------------------------------
                                        Average value of        Average value of
                                        annual household        annual per capita
                                        home consumption        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
-------------------------------------------------------------------------------------
```

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

<div align="right">Percentages</div>

			Ghana	Urban	Rural	Rural Coastal	Rural Forest	Rural Savannah
			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)

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--------------------------------------------------------------------------------
                                    Percentage of households reporting consumption of
                                    home-produced items during the previous 12 months
                                    --------------------------------------------------
                                                       Rural     Rural    Rural
                          Ghana    Urban   Rural   Coastal   Forest  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
--------------------------------------------------------------------------------
```

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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**
Sample size	*485*	*515*	*638*	*662*	*419*	*734*	*455*	*343*	*111*	*190*	*4552*
Households reporting consumption	*356*	*374*	*65*	*482*	*314*	*504*	*402*	*286*	*99*	*188*	*3070*

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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**
Sample size	*2062*	*2103*	*2397*	*2628*	*1864*	*3221*	*2401*	*1954*	*643*	*1130*	*20403*

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	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
	%	%	%	%	%	%	%	%	%	%	%
Expenditure group											
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)

Expenditure group	Western	Central	Greater Accra	Eastern	Volta	Ashanti	Brong Ahafo	Northern	Upper West	Upper East	Country
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

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

	Locality			Country	Locality			Country
	Accra	Other urban	Rural		Accra	Other urban	Rural	
	¢	¢	¢	¢	%	%	%	%
Expenditure group								
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
Sample size	*463*	*1129*	*2960*	*4552*				

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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
Expenditure group				
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

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

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| | | Locality | | | Country | | Locality | | | Country |
	Accra	Other urban	Semi- urban	Small rural		Accra	Other urban	Semi- urban	Small rural	
	¢	¢	¢	¢	¢	%	%	%	%	%
Expenditure group										
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
Sample size	*1682*	*5111*	*3887*	*9723*	*20403*

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

(Thousand million cedis)

Expenditure group	Accra	Other urban	Semi-urban	Small rural	Country
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

Expenditure group	Accra ¢	Other urban ¢	Rural coastal ¢	Rural forest ¢	Rural savannah ¢	Country ¢
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
Sample size	*1682*	*5111*	*2872*	*6012*	*4726*	*20403*

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

(Thousand million cedis)

Expenditure group	Accra	Other urban	Rural Coastal	Rural Forest	Rural Savannah	Country
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

	Ecological zone			Country	Ecological zone			Country
	Coastal	Forest	Savannah		Coastal	Forest	Savannah	
	¢	¢	¢	¢	%	%	%	%
Expenditure group								
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*				

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

                                          Coastal   Forest   Savannah   Country
----
                                             ¢   ¢   ¢   ¢
Expenditure group

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

Sample size   6317   8244   5842   20403

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

                                                          (Thousand million cedis)

                                        Coastal   Forest   Savannah   Country
----
Expenditure group

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

Accra

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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   Quintile group
                                 --   All   ------------------------------------   All
                                 Lowest   2   3   4   Highest   Accra   Lowest   2   3   4   Highest   Accra
----
                                   ¢   ¢   ¢   ¢   ¢   %   %   %   %   %   %
Expenditure group

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

Sample size   192   283   378   405   424   1682

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

Other urban areas

	Mean annual household cash expenditure		Percentage distribution	
	--	All		--------------------------------------	All	
	Quintile group	other		Quintile group	other	
	--			--------------------------------------		
	Lowest	2	3	4	Highest	urban		Lowest	2	3	4	Highest	urban

| | ¢ | ¢ | ¢ | ¢ | ¢ | ¢ | % | % | % | % | % | % |

| Expenditure group | | | | | | | | | | | | |
| ----------------- | | | | | | | | | | | | |

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						

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

Other urban areas

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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*						

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

Rural forest

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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

	Mean annual per capita cash expenditure		Percentage distribution	
	---		--------------------------------	
	Quintile group	All	Quintile group	All
	---	rural	--------------------------------	rural
	Lowest	2	3	4	Highest	forest	Lowest	2	3	4	Highest	forest

	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												

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

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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

	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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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	
	¢	¢	¢	¢	¢	¢	%	%	%	%	%	%
Expenditure group												
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

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                                                     cedis
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                                          Average annual        Average annual per
                                        household expenditure   capita expenditure
                                        ---------------------   --------------------
                                        Urban  Rural  Ghana     Urban  Rural  Ghana
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     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
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                                      Average annual      Average annual per
                                   household expenditure   capita expenditure
                                   ---------------------  --------------------
                                   Urban   Rural   Ghana  Urban  Rural  Ghana
-------------------------------------------------------------------------------
        07  Meat
052         Corned beef              421     103     214     99     22     48
053         Fresh beef (cattle)    22213    7286   12507   5206   1585   2790
054         Bushmeat                1789    2346    2151    419    510    480
055         Goat (fresh)             898     770     815    211    167    182
056         Fresh mutton            1859     505     978    436    110    218
057         Pork                     935     873     894    219    190    200
058         Snail                    878     238     462    206     52    103
059         Other meat (except poultry) 1150 367    641    270     80    143

    08  Poultry and poultry products
060         Chicken                 3387    2327    2697    794    506    602
061         Duck                     119     147     138     28     32     31
062         Guinea fowl              141     866     612     33    188    137
063         Other poultry            308     227     255     72     49     57
064         Chicken eggs            4558    2001    2895   1068    435    646
065         Other eggs (not chicken)  49     205     151     11     45     34

    09  Fish
071         Smoked fish            34735   43960   40734   8140   9561   9088
072         Crustaceans (prawns, etc.)  834 414     561    195     90    125
073         Fish (fresh & frozen)   8599    4084    5663   2015    888   1263
074         Fish (dried)            3825    5702    5045    896   1240   1126
075         Fish (fried)            5874    4148    4752   1377    902   1060
076         Canned fish             2169    1094    1470    508    238    328
077         Other fish               523    1128     916    122    245    204

    10  Milk and milk products
066         Fresh milk               149     292     242     35     64     54
067         Milk powder              710     135     336    166     29     75
068         Baby milk                320      64     154     75     14     34
069         Tinned milk (unsweetened) 7946   2193    4205   1862    477    938
070         Other products (e.g. butter,cheese) 383 36   157     90      8     35

    11  Spices
079         Pepper (dry)            4881    3251    3822   1144    707    853
080         Salt                    1972    4061    3331    462    883    743
081         Other condiments & spices 1680   547     944    394    119    211

    12  Miscellaneous foods
078         Sugar                   6954    5339    5904   1630   1161   1317
093         Jam                       19       5      10      5      1      2
094         Honey                    168     196     186     39     43     42
095         Confectionery (not frozen) 225   101     144     53     22     32
096         Ice cream, ice lollies, etc. 730 321     464    171     70    103
097         Other miscellaneous food items 690 205   375    162     45     84

    13  Prepared meals
086         Cooked rice & stew      9473    6562    7580   2220   1427   1691
087         Fufu & soup             5668    1897    3216   1328    413    717
088         Tuo & soup              1825     625    1045    428    136    233
089         Banku & stew            5263    2690    3590   1234    585    801
090         Kenkey                 10287    5410    7116   2411   1177   1588
091         Koko                    3614    1747    2400    847    380    535
092         Other prepared meals    9050    2080    4518   2121    452   1008

    14  Non-alcoholic beverages
082         Coffee                   225     199     208     53     43     46
083         Chocolate drinks (eg. milo) 4401 2075   2889   1031    451    644
084         Tea                     1675     256     752    393     56    168
085         Other non-alcoholic beverages 328  18    126     77      4     28

    15  Soft drinks
098         Soft drinks & minerals  3241    1211    1921    760    263    429
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                                 Average annual      Average annual per
                                household expenditure  capita expenditure
                                --------------------   --------------------
                                Urban  Rural  Ghana   Urban  Rural  Ghana
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      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
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                                Average annual        Average annual per
                              household expenditure    capita expenditure
                              ---------------------   ---------------------
                              Urban   Rural   Ghana   Urban   Rural   Ghana
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         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
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Table A9.29 (continued)

			Average annual household expenditure			Average annual per capita expenditure		
			Urban	Rural	Ghana	Urban	Rural	Ghana
	7.	TRANSPORT & COMMUNICATIONS						
	71	Purchase of personal transport						
601		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
	72	Operation of personal transport						
604		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
	73	Purchased fares						
610		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
	74	Communications						
613		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						
	81	Recreation equipment						
704		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
	82	Entertainment						
708		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
	83	Gambling						
710		Gambling, lotto, raffles, etc.	6366	8857	7986	1492	1926	1782
	84	Newspapers, books and magazines						
712		Newspapers	1298	546	809	304	119	180
713		Books, magazines, etc.	988	92	405	232	20	90
	85	Education						
718		Educ. transport, pocket money, etc.	30209	7183	15236	7080	1562	3399
	9.	MISCELLANEOUS GOODS & SERVICES						
	91	Personal care services						
801		Barber, beauty shop, etc.	4655	3559	3942	1091	774	879
	92	Jewellery, watches, etc.						
803		Jewellery, watches, rings, etc.	4637	1618	2674	1087	352	597
	93	Personal care goods						
804		Personal goods (eg. suitcase, comb)	1631	814	1100	382	177	245
802		Goods (eg. toothpaste, cosmetics)	12036	4735	7288	2821	1030	1626
	94	Writing and drawing equipment						
805		Writing & drawing equipment/supplies	126	92	104	29	20	23
	95	Expenditure in restaurants and hotels						
806		Expenditure in restaurants & hotels	810	147	379	190	32	85
	96	Financial and other services						
807		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

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


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                                             Proportion of households reporting
                                             expenditure, and reference period (days)
                                             ---------------------------------------------
                                               Urban         Rural          Ghana
Item                                         ----------    ----------    ------------
code    Group, subgroup and item              %    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         Palmnut                          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
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                                        Proportion of households reporting
                                        expenditure, and reference period (days)
                                        ----------------------------------------
                                         Urban        Rural        Ghana
Item                                    ----------   ----------   ------------
code   Group, subgroup, and item          %   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
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Table A9.30   (continued)

		Proportion of households reporting expenditure, and reference period (days)					
Item code	Group, subgroup, and item	Urban		Rural		Ghana	
		%	days	%	days	%	days
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	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	–

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                                          Proportion of households reporting
                                          expenditure, and reference period (days)
                                          --------------------------------------------
Item                                      Urban         Rural         Ghana
code    Group, subgroup, and item         ----------    ----------    -----------
                                          %    days     %    days     %    days
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        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
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                                           Proportion of households reporting
                                           expenditure, and reference period (days)
                                           ------------------------------------------
Item                                       Urban        Rural         Ghana
                                           ----------   ----------    -----------
code     Group, subgroup, and item         %    days    %    days     %    days
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         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
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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

Accra

GROUP Subgroup	Accra - Household consumption			Accra - 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	**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
	Cash expenditure	Value of home- produced food	Total	Cash expenditure	Value of home- produced food	Total		
	¢	¢	¢	¢	¢	¢	%	(thousand million cedis)
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**

183

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
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Dr K. A. Twum-Baah, Project Director
Mr Moses K. Awoonor-Williams, Head, GLSS Project Secretariat
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Mr Samuel Amoafo, Senior Programmer
Mr Emmanuel Ofosu, Assistant Programmer
Mr Daniel Aboagye Oduro, Assistant Programmer
Mr Sam R. Bannerman, Assistant Chief Technical Officer
Mr Kagya Agyemang, Deputy Financial Controller
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Advisers
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Mr Harold Coulombe, ODA consultant, University of Warwick
Dr Chris Scott, Sampling Consultant (World Bank)
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Salifu Amadu	Mark Aryeetey	Patrick Djangba	Paul Interkudjie
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Interviewers

Benoni Ade	E. K. Adjetey	Charles Adounum	Ernest Afful
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A. A. Alloye	Paul Amoo	Enock Annan	Eric Antwi
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
Opare Mintah	I. K. Mustapha	Isaac Offei	Emmanuel Osafo
George Owusu	Emmanuel Quansah	Daniel Quaye	F. Akuffo Twum

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Emelia Acquaye	Beatrice Aryee	Juliana Damfo	Samuel Dosserh
Doris Kessey	Jonathan Larbi	Justice Mingle	Sophia Nyan
Doris Osei-Bonsu	Gertrude Pennin	Victoria Sottie	Rosemary Wamdaogo

Drivers

Edward Abrokwah	E. A. Anthony	Saka Boateng	Samuel Dam
Frimpong Dickson	Kwesi Donkor	Stephen Eshun	Jonathan Lawluvi
Solomon Nketia	Andrew Obeng	E. Oduro	Emmanuel Quarshie
Sowah Tetteh	Robert Yeboah	Sampson Yibor	

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