EXECUTIVE SUMMARY

The theme for this second set of District Human Development Reports in Ghana is vulnerability and the attainment of the Millennium Development Goals (MDGs). The MDGs are internationally accepted targets that are to be achieved by 2015. It is anticipated that the setting of these goals will ensure improved aid effectiveness and their attainment will signify an improvement in the well-being of the mass of the population. The attainment of these goals requires an increase in resources from both domestic and international sources, an improvement in their allocation and a change in human behaviour. Vulnerability at the micro, meso and macro levels can slow down or reverse progress towards the attainment of the goals. Vulnerability of the macro-economy to commodity price shocks that reduce the revenue-generating capacity of the government can derail programmes and projects aimed at improving human development. Vulnerability of an individual or household to commodity price shocks or the vagaries of the weather can influence behaviour and choices that are made. The coping strategies adopted when there is a negative shock can, depending on the circumstances of the individual or household, reinforce poverty and deprivation.

Failure to attain many of the MDGs can compound the vulnerability of individuals, households and communities. To illustrate, unsafe sanitation and drinking water increase the risk of intestinal diseases that can reduce school attendance, increase household spending and compromise incomes of the self-employed in particular. Attaining the MDGs will reduce the sources of risk of individuals and households. This Report assesses human development and progress towards attaining the MDGs in Offinso District. It describes some of the risks households in the district face and how these impact on the attainment of the MDGs. The report does not calculate a human development index for the district. This is because of insufficient data to estimate per capita income. However, using data for 2003, it does estimate a human poverty index for the district. District human development reports can be a useful tool to assist district administrations in tracking progress or otherwise in their development efforts.

Data and Methodology

Both quantitative and qualitative methods were used to gather data from three different sources for the preparation of this report. Information was obtained from official documents, secondary data from various censuses conducted in Ghana and from household surveys and focal group discussions conducted in the district during March 2007.

Profile of Offinso District

Offinso is one of 21 districts in the Ashanti Region. It lies within the forest zone and has eight forest reserves. The forest cover, however, is being destroyed and some parts of the district are turning into grassland. The effect of the deforestation is the disappearance of some communal resources such as snails, mushrooms and wildlife. The district has two rainy seasons occurring in the months of April to June and September

and October. The rainfall pattern is variable within the year and over time. Agriculture in the district is rain dependent. The variability of the rainfall is a source of vulnerability to livelihoods.

Offinso District is ethnically diverse. Migrants move to the district to work, for example, on cocoa farms and for education. The population is made up largely of Christians and Muslims.

Public transportation has improved in the last five years although some rural communities remain disadvantaged. There has been an improvement in the provision of safe drinking water through the sinking of boreholes, electricity and safe sanitation facilities. However, some urban and peri-urban communities continue to obtain their drinking water from rivers, particularly during the dry season. The district has post offices, banks and police stations. There are very few fixed telephone lines in operation in the district. Access to telecommunication services has improved in the last five years with the extension of mobile phone services.

The District Assembly is the highest administrative and political authority. The Assembly has a membership of 48 elected officers, 21 appointed members and 2 Members of Parliament. The sub-structures are not functioning as they should because of inadequate logistics. Since 2002 the district has produced two Medium-Term Development Plans. These have been designed within the framework set out by Ghana's poverty reduction strategy papers. The current Medium-Term Development Plan was designed to have direct impact on the attainment of the MDGS in the district. Successful implementation of the plan could be hampered by revenue shortfalls. The poor revenue generation effort has been attributed to unwillingness to pay basic rates, the failure of revenue agents to pay in to the Assembly all monies collected and the absence of a database on economic activities in the district.

Economic Activity and Poverty

The main sector of employment in Offinso for both adult men and women is agriculture. Next in importance is the wholesale and retail trade sector. This sector is dominated by women. More than 70 percent of working adults are self-employed and are in the informal sector. One of the indicators of progress in attaining the third MDG is the share of women in wage employment in the non-agricultural sector. Between 2003 and 2007 there has been no change in the proportion of women in wage employment in the non-agricultural sector.

Crop prices are subject to variation within the year and over time. These variations are a potential source of vulnerability to farmers, depending on the mix of crops produced and their ability to store crops.

Unemployment in the district has been on the increase. Youth unemployment is

particularly high. The national youth unemployment programme is reported to have made some inroads to improve the situation.

Two indicators have been provided by the MDG secretariat to measure progress in eradicating extreme hunger and poverty. These are the proportion of underweight children and the proportion of the population below the minimum level of dietary energy consumption. The most recent data on the proportion of underweight children are for 2003. It is therefore not possible to discuss progress towards achieving this goal using this indicator. In 2003, more than half the children in the district were underweight. In the absence of district-level data on dietary energy consumption, the team developed a proxy measure. Households were asked if they had experienced any difficulty in meeting their food needs in the past 12 months. This is a very imprecise measure of hunger. However, it was found that compared to 2003, the proportion of households that often or sometimes had difficulty in meeting food needs was lower in 2007. For about 35 percent of households with difficulty in meeting food needs, this was because of a poor harvest. In the case of 18 percent of households, the difficulty arose because of illness of an income- earning member of the households. This was a particular problem for urban households. The death of an income-earning member of the household was the cause of food difficulties for a larger proportion of rural compared to urban households. Thus poor harvests, and the illness and/or death of members of the household are sources of vulnerability that can retard progress towards reduction in hunger, particularly in the absence of adequate safety nets and coping strategies.

Education and Literacy

There has been a significant decline since 2000 in the proportion of the population aged 3 years and above that has never attended school. The number of pre-, primary and junior secondary schools in the district has increased since 2000. However, not much progress has been made in terms of the supply of textbooks, seating and writing places and trained teachers.

Almost all children between the ages 8-14 years are enrolled in school. Gross primary enrolments have been on the increase and are estimated to have exceeded 100 percent in 2007. Gross junior secondary enrolment rates have also risen. The gender parity indices for both primary and junior secondary levels are below unity. However, late entry into primary 1 and a high dropout rate, particularly after junior secondary, translate into low net enrolment rates. Net primary enrolment rates have not increased between 2003 and 2007. In some rural communities, young children are not in school because of the distances they have to walk to the nearest school. Concerns about the quality of education are raised as reasons for the apathetic attitude of some parents and children to school. Ill-health is a reason why some children miss some days of school. Irregular school attendance can make it difficult to follow and understand lessons and can therefore increase the risk of such an affected pupil not completing a level of education, or failing to continue to a higher level.

The incidence of adult literacy has increased since 2007, and quite dramatically among the population of 15-24 year-olds. Women, however, are still at a disadvantage. The gap in literacy rates between men and women aged 15-24 years narrowed.

Health, Sanitation and Water

The district is served by 13 health institutions. Both the private and public sectors are involved in the provision of health care. Rural households remain disadvantaged in terms of physical access to health facilities. The doctor-patient and nurse-patient ratios in the district are estimated to have risen to 1:12,298 and 1:1,247 respectively in 2005.

There is insufficient information to estimate the life expectancy at birth for the district. Thus, the approach used in this report is to examine trends in the different variables that impact on life expectancy at birth. Several of the variables of interest are indicators of the fourth, fifth and sixth MDGs. The District Health Directorate did not have information on the infant, child and maternal mortality rates. Data were available on the number of infant, child and maternal deaths.

The available data on factors that may influence life expectancy at birth provide conflicting signals. Environmental hygiene and safety are important in reducing the incidence of disease. Hazards remain high in the district because of the unsafe waste disposal practices and the still high proportion of the households that do not have access to safe sanitation facilities. Thus, despite the increase in the number of boreholes that provide safe drinking water, the risk of diarrhoeal diseases for example, remains high. Indeed, diarrhoea is the third most frequently reported cause of morbidity in the district and is the cause of some deaths.

The practice of throwing liquid waste onto the compound and other outdoor spaces can create conditions favourable for the breeding of mosquitoes. Thus the risk of malaria in the district remains high, particularly among the third of the population that does nothing to protect themselves against malaria.

The district has made progress towards the tenth MDG target of halving by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. However, the evidence available suggests that not as much progress has been made in halting and beginning to reverse the spread of malaria and HIV/AIDS.

Vulnerability

The analysis of vulnerability is based on the reported shocks that households experienced over the 12-month period prior to the survey conducted in March 2007 and the reported coping strategies.

About 56 percent of households reported that they did not experience any negative shocks. Rural households were more likely than urban households to report multiple shocks over the period, as were households headed by men. Most of the reported shocks were idiosyncratic i.e. specific to the household. Less than 13 percent of households reported shocks that were due to acts of nature. Households headed by men were more likely to report having recovered from their reported shocks than were households headed by women. A higher proportion of rural households reported having recovered from the shocks compared to urban households.

The strategies adopted by households were those that protected their assets and levels of consumption. Thus, 44 percent of households reporting shocks stated that they sought assistance in the form of loans and gifts from friends and relatives. None reported withdrawing children from school and about 4 percent reported selling land, livestock or other property.

The strategies used by households in the face of shocks highlight the importance of social networks in their livelihood strategies and bring to the fore the limited use of formal mechanisms such as financial institutions, insurance and support from local government.

Policy Recommendations

The difficulties the district faces in generating the expected revenues must be resolved. A review must be taken of the incentive and supervising and monitoring structures that regulate revenue generation. Insufficient resources to finance development projects pose a major risk with regard to the attainment of the MDGs in the district. Many of the recommendations require an increase in spending as well as improved efficiency in resource use and allocation.

To increase the likelihood of achieving universal primary education by 2015, strategies must be developed to encourage parents and guardians to send their children to school at the recommended age. Parents send children to school to at least be able to read and write. More effort should be made to improve learning and teaching methods in the schools, particularly in the rural schools.

The monitoring and supervision system in the education sector must be strengthened to ensure that teachers are performing as they should. Strategies should be developed to make school an interesting place to go to and remain in, especially for rural children.

The district must undertake a careful review of its water and sanitation projects and plans. Available resources must be carefully utilised to reduce the incidence of waste, as seen in projects that are completed but not in use. Drainage and waste disposal facilities and mechanisms must be provided to reduce the incidence of health hazards.

The District Health Directorate must review its strategy to increase the use of insecticide-treated bed nets in the district. Working together with the environmental agency and sanitary inspectors, incentives and sanctions must be developed to encourage communities to maintain healthy surroundings in order to reduce the risk of disease.

The study has revealed that more information must be provided about the components of the National Health Insurance Scheme to ensure that all groups are able to fully participate in it. The District Health Directorate should review the current information strategy and its content.

Although the present tax base is not being efficiently and effectively exploited to generate revenues to finance the projects in the development plan, the district must be innovative in creating incentives for an increase in investment that will contribute to improving the employment opportunities and expand the revenue base.

Woodlot cultivation must be encouraged not only to provide alternative sources of income in the district, but also as part of a re-afforestation programme.

A current concern among some of the population in the district aged over 65 is the lack of opportunities to earn an income. This suggests that the extended family system may not be providing the traditional support to the elderly. The district administration should consider the introduction of measures to protect the well-being of the elderly in the communities. This is a group that is not targeted in the district's development plan. Micro-finance packages (a major component of the district's strategy to address vulnerability) may not be the right instrument to protect the well-being of elderly persons who are no longer able to participate in economic activity.

CHAPTER ONE

INTRODUCTION

Introduction

The traditional conceptualisation of well-being in Ghana does not focus only on the income of a person, but on what a person is capable of doing and also on the physical appearance of the person. Indeed, an increase in bodily weight is looked on with favour and seen as an indication of improvement in one's situation in life. The concept of human development, therefore, may be considered as being well-suited to the average Ghanaian's concept of welfare and standard of living. This is because UNDP's concept of human development aims to extend the measure of the standard of living or well-being beyond income to incorporate other important non-income dimensions of living or being. Although income is important in determining a person's access to food, clothing and the other basics of life, the correlation between well-being and the income level of a person is not perfect. This is because poor people in assessing their circumstances in life do not only focus on the purchasing power of their incomes. According to Sen, "income may be the most prominent means for a good life without deprivation, but it is not the only influence on the lives we can lead. If our paramount interest is in the lives that people can lead the freedom they have to lead minimally decent lives then it cannot but be a mistake to concentrate exclusively only on one or the other of the means to such Freedom."[1] Building on Sen's analysis of poverty and capability, UNDP defines human development as a process of enlarging people's choices. The most critical of these choices are: the option to lead a long and healthy life, to be knowledgeable and to enjoy a decent standard of living.

UNDP has since 1990 provided a quantitative measure of human development. The measure focuses on the three dimensions identified as critical to enlarging people's choices. Longevity is measured by life expectancy at birth. Knowledge is a composite of adult literacy and gross primary, secondary and tertiary enrolment rates. The standard of living is measured by income per capita in purchasing power parity dollars. The human development index is a composite of these three variables (Box 1.1). Ghana's human development index is estimated to have risen from 0.515 in 1990 to 0.537 in 1995. It rose to 0.560 and 0.568 in 2000 and 2002 respectively. It is estimated to have declined to 0.532 in 2004.

The national aggregate figures mask critical information on regional and district level disparities. They do not provide information on progress made, or the lack of it, by different groups in the country. The gender-related development index, also introduced by UNDP, aims to incorporate the gender dimensions of the three aspects of

[1] Sen, A. (2000) Social Exclusion: Concept, Application and Scrutiny, Social Development Papers No. 1. Asian Development Bank, Manila, p.3.

of human development.[2]

Ghana has produced national human development reports almost every year since 1997. Regional and district-level indicators of human development are needed to provide information critical for making decisions on how resources are to be allocated. District human development reports can be a useful tool to assist district administrations in tracking progress or otherwise in their development efforts. It was only in 2004 that the first set of district human development reports were prepared for three districts, the then Atwima District, Builsa District and Tema Municipality.

Box 1.1. Calculating the Human Development Index

Calculating the Human Development Index

The Human Development Index (HDI) is a summary measure of human development. It measures the average achievement in a country in thr ee basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge as measured by the adult literacy rate (two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (one-third weight).
- A decent standard of living, as measured by GDP per capita (PPP US$).

Before the HDI is calculated, an index needs to be created for each of the dimensions. To calculate these dimension indices, minimum and maximum values (goalposts) are chosen for each underlying indicator.

Performance in each dimension is expressed as a value between 0 and 1 applying the following general formula:

$$Dimension = \frac{actualvalue - \min imumvalue}{\max imumvalue - \min imumvalue}$$

The HDI is calculated as a simple average of the dimension indices.

Goalposts for calculating the HDI

Indicator	Maximum Value	Minimum Value
Life Expectancy at Birth	85	25
Adult Literacy Rate (%)	100	0
Combined Gross Enrolment Ratio (%)	100	0
Gross Domestic Product per capita (PPP US$)	40,000	100

Source: UNDP, *Human Development Report, 2004*, New York.

[2] This is a composite index that adjusts the average achievement of each country in life expectancy, educational attainment and income to take into account the disparity in achievement between women and men.

Theme of the Report

The theme for this second set of District Human Development Reports is vulnerability and the Millennium Development Goals (MDGs). Vulnerability was one of the five themes of Ghana's first poverty reduction strategy paper. The overall goal of Ghana's development agenda is to attain middle-income status by 2015. In addition, a social protection policy is being developed that is aimed at "empowering the vulnerable and excluded, especially women, to contribute to and share in the benefits of growth of the economy, thus ensuring sustained poverty reduction."[3] In contrast to the first poverty reduction strategy that included vulnerability as one of the five thematic areas, the second poverty reduction strategy mainstreams vulnerability into each of the thematic areas.[4]

This report assesses human development and progress towards attaining the MDGs in Offinso District. It describes some of the risks households in the district face and how these impact on the attainment of the MDGs. The report does not calculate a human development index for the district. This is because of insufficient data to estimate per capita income. It does, however, use data for 2003 to estimate a human poverty index for the district.

Preparing for the Implementation of the Study

The choice of Offinso District was determined by the UNDP. Prior to the start of the study, a visit was made to the district. The meeting essentially provided the officials of the District with background information on the study and a discussion of the needs of the research team. Present at the meeting were representatives of several of the decentralised ministries, departments agencies in the district.

Letters were sent out to the Chief Executive of the district and copied to the heads of several of the decentralised ministries, departments and agencies in the district informing them about the actual date when the data collection would begin. Attached to the letter were the data requirements that the team hoped the District Administration could assist it with.

Human Development and the MDGs

The adoption of the Millennium Declaration by Heads of State in September 2000 formally introduced the MDGs onto the development agenda. The MDGs were the result of the thinking that began in the mid-1990s on strategies to improve the effectiveness of aid. The MDGs consist of 8 goals, 18 targets and 48 indicators (Table 1.1). The MDGs

[3] Republic of Ghana (2005) Growth and Poverty Reduction Strategy (GPRS II) (2006-2009. Vol. I: Policy Framework, National Development Planning Commission, Accra, p. 5.
[4] The three thematic areas of GPRS II are private sector-led competitiveness, human resource development and good governance.

have become an integral part of Ghana's development strategy. The 2006-2009 Growth and Poverty Reduction Strategy (GPRS II) "...seeks to operationalise various international agreements which are relevant to the poverty reduction objectives and of which Ghana is signatory. Principal among these are the Millennium Development Goals (MDGs)..."[5] A synergy has been created between the Heavily Indebted Poor Countries initiative and the MDGs by the transformation of the latter "into the mandatory framework of domestic economic policy in return for the grant of debt relief."[6] As a result of this, in both GPRS II and the district development plans, there is a matrix indicating the link between identified priorities and the MDGs.

There is some overlap between the measures of human development, human poverty and the gender development indices on the one hand and the MDGs on the other. Neither the MDGs nor the human development index include dimensions such as human security and participation. The MDGs place great emphasis on targets while the human development concept, although concerned with improving well-being, does not have any explicitly stated goals or targets.

Vulnerability and the MDGs

The vulnerability of communities, households and individuals to negative shocks has adverse implications for the attainment of the MDGs and improvement in human development. Vulnerability is the interplay of shocks that the community, household or individual faces in connection with community, household or individual assets and the ability to manage those assets in order to prevent the occurrence of negative events or to mitigate or cope with the impact of shocks. Vulnerability of the macro economy to commodity price shocks that reduce the revenue generating capacity of government can derail programmes and projects aimed at improving human development. Vulnerability of an individual or household to commodity price shocks or the vagaries of the weather can influence behaviour and choices that are made. The desire of poor households to have security of income and to protect consumption levels from declining below the critical minimum influences their production and investment decisions. Being risk averse and lacking the means to manage risk, for example, access to credit, poor households will choose activities that have low but certain returns. Thus, vulnerability elicits from poor households actions that can keep them at low income levels and put the local and macro economy on a lower growth trajectory than otherwise would be the case if the poor households had more economic, political and social security. Growth is necessary though not sufficient if human development is to improve and the MDGs are to be attained. The coping strategies adopted when there is a negative shock can, depending on the circumstances of the individual or household, reinforce poverty and deprivation. The death of a breadwinner can result in a child being withdrawn from school, thus increasing the probability that the child will not complete school. Droughts or floods that destroy harvests can force households to reduce consumption to levels that compromise the growth and development of children thus making them vulnerable to illness, premature death and poor learning abilities that undermine their interest in attending school.

[5] Republic of Ghana (2005) Growth and Poverty Reduction Strategy (GPRS II) (2006-2009, Vol. I Policy Framework. National Development Planning Commission, Accra, p. 5.
[6] Ibid. p. iv.

Table 1.1: Millennium Development Goals and Targets

Goal 1: Eradicate Extreme Poverty and Hunger
- Target 1: Halve Between 1990 and 2015, the proportion of people whose income is less than one dollar a day
- Target 2: Halve between 1990 and 2015, the proportion of people who suffer from hunger.

Goal 2: Achieve Universal Primary Education
- Target 3: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Goal 3: Promote Gender Equality and Empower Women
- Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.

Goal 4: Reduce Child Mortality
- Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Goal 5: Improve Maternal Health
- Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

Goal 6: Combat HIV/AIDS, malaria and other diseases
- Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS
- Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

Goal 7: Ensure Environmental Sustainability
- Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
- Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
- Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Goal 8: Develop a Global Partnership for Development
- Target 12: Develop further an open, rule-based predictable, non-discriminatory trading and financial system
- Target 13: Address the special needs of the least developed countries.
- Target 14: Address the special needs of landlocked developing countries and small developing States
- Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term
- Target 16: In cooperation with developing countries, develop and implement strategies for decent work and productive work for youth
- Target 17: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.
- Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Failure to attain many of the MDGs can compound the vulnerability of individuals, households and communities. To illustrate, unsafe sanitation and drinking water increase the risk of intestinal diseases that can reduce school attendance, increase household spending and compromise incomes of the self-employed in particular. Attaining the MDGs will reduce the sources of risk of individuals and households.

Data and Methodology

Both quantitative and qualitative methods were used to gather data from three different sources for the preparation of this report. Information was obtained from official documents, secondary data from various censuses conducted in Ghana, and extracted data from the district-based Core Welfare Indicators Questionnaire (CWIQ) survey that was conducted in 2003. ISSER also conducted a socio-economic household survey in the district in March 2007 and consulted various stakeholders to ensure that their interests were addressed and technical omissions minimised.

Secondary data sources

Some aspects of the district's profile were obtained from documents that had been prepared by the District Assembly for its programmes. Particular reference was made to the Medium-Term District Development Plan prepared for the implementation of poverty reduction strategies in Offinso District.

In addition, various departments of the District Assembly provided information on their activities over the last five years. This gave the team insights into the economic and social conditions in the district and the strategies that have been adopted and implemented regarding issues of human development.

An important source for additional secondary data was the census report for 2000. Data from the 2000 Population and Housing Census were used extensively to obtain district- level information on population dynamics, housing characteristics, employment and education.

Primary data collection

Interviews conducted in the district involved qualitative and quantitative techniques, principally to gather information on various dimensions of the MDGs and also for the assessment of the vulnerability component of the report. Two main questionnaires were used for this purpose; community (a checklist of services and infrastructure available in addition to detailed discussion on development issues) and household questionnaires. The community questionnaire was completed during group discussions with traditional leaders of the communities, members of the District Assembly resident in a community and opinion leaders. The objective of the questionnaire was to obtain information about the socio-economic development of the communities visited, land tenure arrangements, trends in crime, shocks that the communities have experienced, and community-level actions employed to deal with shocks.

The household questionnaire is separated into different modules that are answered by different members of the household and was designed to obtain data to assess progress made towards the different targets of the measurable MDGs and human development at the district level. The questionnaire also covered information on the different types of shocks that households have been subjected to, the risk management strategies adopted by households and others, and the effect of the shocks on households.

Sampling techniques

For comparability with CWIQ 2003 data, a two-stage sampling procedure was employed with the objective of generating results that are representative of Offinso District. The approach was multi-stage probability sampling, clustered, and stratified with probability proportional to the size of the district's population. Sampling was independently done for each district.

Well-defined enumeration areas (EAs) within the district, obtained from the Ghana Statistical Service (GSS) database, were randomly selected. The enumeration areas were properly described by the cartography section of GSS and had well-defined boundaries, identified on maps, and were of relatively small sizes, with clusters of households. These clusters are demarcated along the lines of the proven process used by the GSS in its implementation of Ghana Living Standard Surveys (especially GLSS III, IV and V) and CWIQ I and II. The selected EAs were listed fully to know the total number of households that served as a sampling frame from which an appropriate sample size was selected systematically for each stratum in the district. This was done to facilitate a manageable interviewer workload within each sample area and also reduce the effects of intra-class correlation within a sample area on the variance of the survey estimates.

An enumeration team consisting of the lead researcher responsible for Offinso District, a supervisor and a number of interviewers chosen and hired from the district listed all households in each of the chosen enumeration areas. This was important because some of the enumeration areas had changed in size since the 2000 Population and Housing Census was conducted and the sampling approach at this stage did not consider their sizes before the selection. Twenty households were selected from the listed households in each enumeration area (Table 1.2). The listing information is needed to compute appropriate weights for proper estimation at the analysis stage.

Stratification

Stratification was employed in the sample design to enhance precision and reliability of the estimates. The stratification of the frame for the survey was based on the size of the locality the enumeration area was chosen from, that is, whether the locality is urban, semi-urban or rural. Sampling within each stratum was done independently of others and the approach of picking the number of enumeration areas in each stratum was proportional to the population size in each stratum. This was followed by systematic sample selection within each stratum. In all, a minimum of 200 households were chosen from 10 EAs in each district. In addition to the administration of the household survey in 10 enumeration areas in the district, focal group discussions were conducted in five of the communities.

Table 1.2: The Sample

Enumeration Area	2000 Population	Number of Houses	Number of Households	% of Households Selected	Type of Locality
Akomadan	1184	117	200	10.0	Urban
Antoa	499	35	113	17.7	Urban
Nkenkasu	1456	76	259	7.7	Urban
Abofour	2653	225	440	4.5	Urban
Namong	446	26	103	19.4	Semi-urban
Kobreso	613	67	124	16.1	Semi-urban
Ampabame	630	42	123	16.3	Semi-urban
Adukro	633	55	114	17.5	Rural
Odumase	490	78	98	20.4	Rural
Safokurom	236	45	58	34.5	Rural

CHAPTER TWO

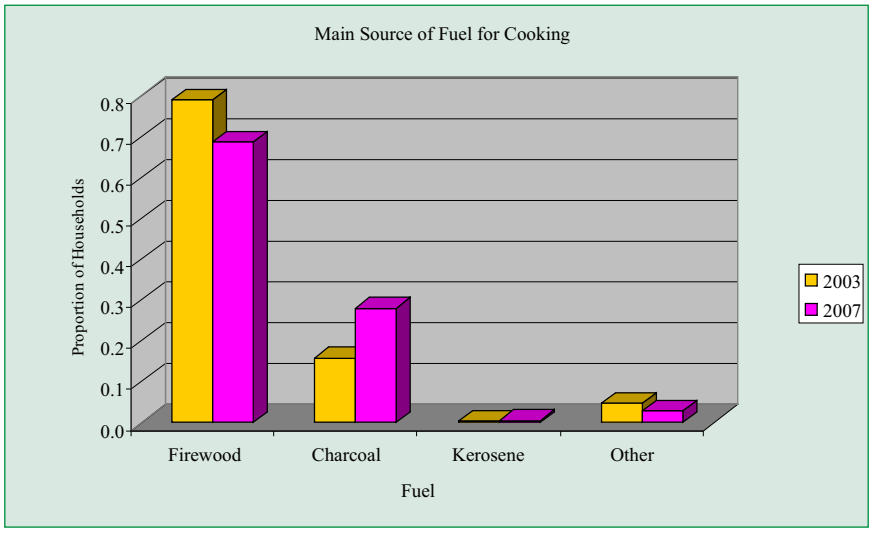
PROFILE OF THE DISTRICT

Picture: Offinso District Assembly

Physical Features

Offinso District is one of the 21 districts in the Ashanti Region of Ghana. The district is drained by five main rivers, Offin, Anyinasu, Ode, Pro and Mankram. It lies within the forest zone and has eight main forest reserves covering an area of 728.47 square kilometres, about 60 percent of the total land area of the district. Despite this, because of the rapid expansion in agriculture and the operation of timber firms, the forest is being decimated. The Medium-Term Development Plan for 2006-2009 states that "Offinso District happened to be a thick forest area but the vegetation has changed to that of savannah mainly due to the adverse effects of bush fires".[7] In some communities visited, it was reported that the forest cover was destroyed during the bush fires of 1983 and has not regenerated since. The traditional fallow periods are now shorter than they previously were. Thus, in some parts of the district the vegetation is rapidly changing into grassland. In addition, there has not been much change in the use of firewood and charcoal for cooking among households (Figure 2.1). As one drives along roads within the district, one cannot miss seeing the stacks of firewood lined up for sale. Among the effects of the deforestation is the disappearance of some communal resources such as snails, mushrooms and wildlife.

Figure 2.1: Main Fuels Used in Cooking



Source: Ghana Statistical Service, CWIQ 2003 and ISSER, Household Survey, 2007

[7] Government of Ghana (2006) Offinso District Assembly Medium-Term District Development Plan (2006-2009), District Planning Coordinating Unit, Offinso District, p. 12

Picture 2.2: Firewood for sale in Offinso District

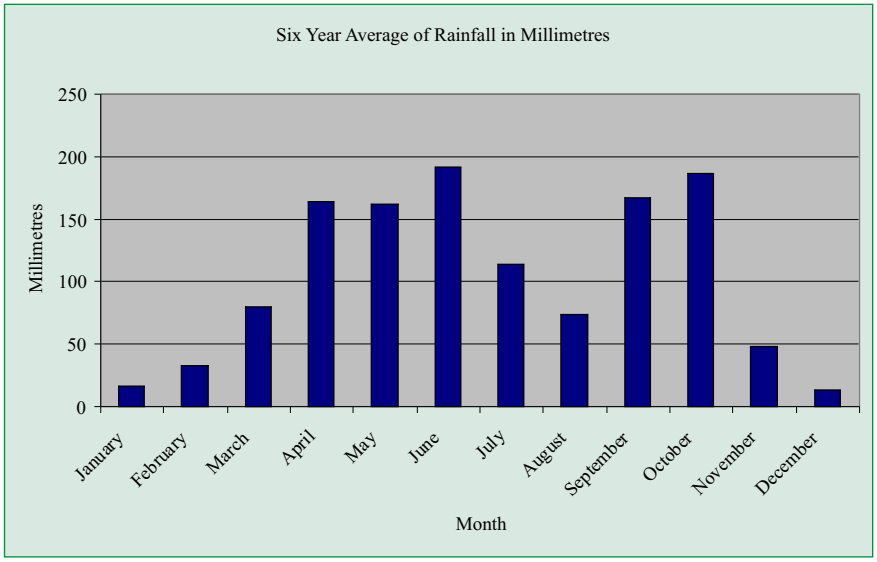
One of the targets of the seventh MDG is to reverse the loss of environmental resources. Thus, it would appear that not much progress has been made in Offinso District towards attaining this target.

Rainfall

The district has a bi-modal rainfall pattern (Figure 2.2). The rainy seasons occur during the months of April to June and in September and October. A feature of rainfall in the semi-equatorial zone is its variability within the year and over time. Mean annual rainfall between 2000 and 2006 ranged from 94.7 mm in 2000 to 112.8 mm in 2006. In some months of the dry season of November to March, there is little or no rain recorded. In 2006, the amount of rainfall in the district ranged from 258 mm in May to no rain recorded in November.

The variability in rainfall patterns can adversely affect agricultural activity since farming in the district is rain-dependent. Thus, livelihoods become threatened if rains arrive too early or too late. The years 2005 and 2006 appear to have been relatively favourable for rain. About 7 percent of the respondents in the survey employed in agriculture identified erratic weather conditions as a problem. During focal group discussions in the communities, the consensus was that the rainfall was adequate, although some were of the opinion that it arrived too early.

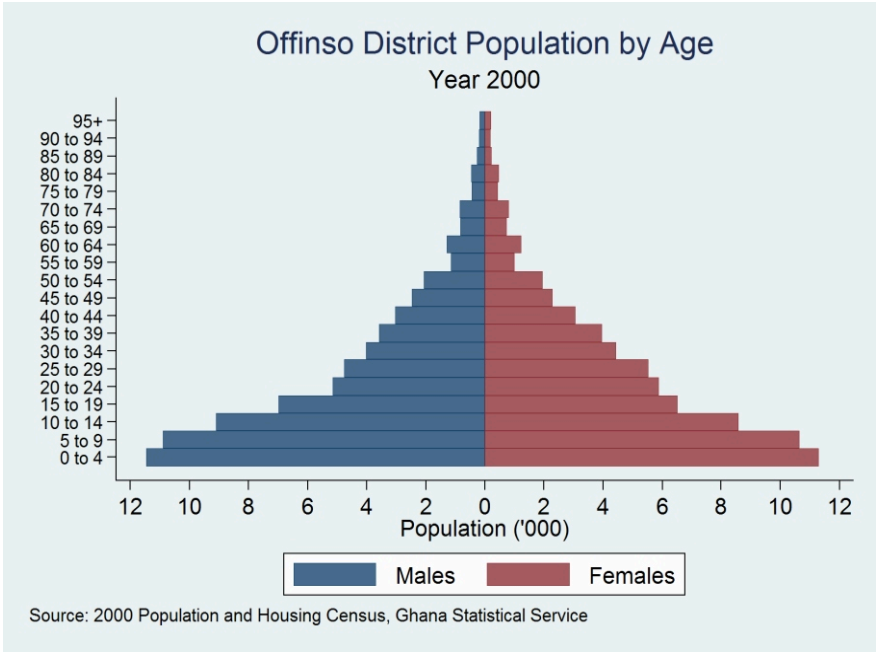
Figure 2.2: Average Monthly Rainfall 2000-2006



Source: Meteorological Office, Offinso

Population

Figure 2.3: Offinso District Population by Age, 2000

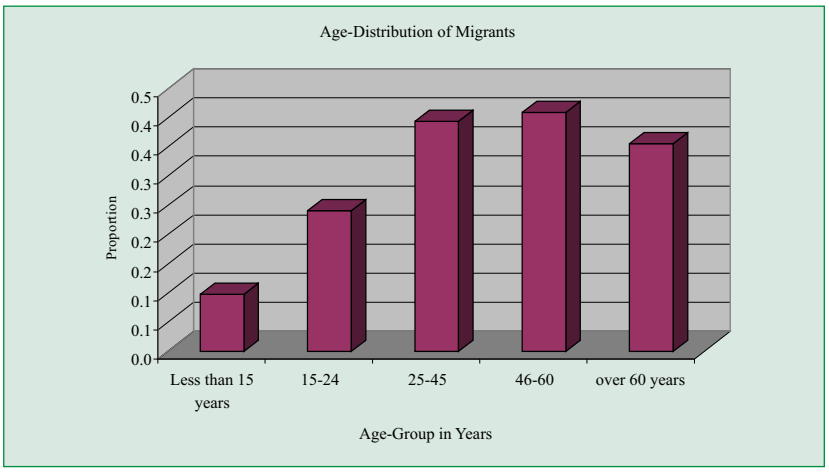


The district's population almost doubled between 1970 and 1984, rising from 56,319 to 104,815. The population is estimated to have grown at an annual rate of 5 percent between 1984 and 2000 to 138,190. The district's growth rate is higher than the average for the region over the same period.

Women constituted 50.1 percent of the district's population in 2000. Children aged 14 years and less made up about 47 percent of the district's population in 2000. About 47 percent of the households in 2007 are headed by women. Approximately 70 percent of the district's population in 2000 was rural.

In 2007, it is estimated that about a quarter of the district's population was not born at their place of residence. About 20 percent of women and 28 percent of men were not born in their current place of residence. Most of the migrant population are adults (Figure 2.4). Forty-four percent of those not residing in their place of birth had moved for employment reasons. Twenty-eight percent had moved with their parents or other family members and about 17 percent had moved with their spouse. Most of the movement occurred in the last five years. About 40 percent of the people not born in their place of residence had moved since 2002.

Figure 2.4: Age-Distribution of Migrants



Source: ISSER 2007 Household Survey

Infrastructure and Housing Conditions

Roads and Public Transport

A major highway linking Kumasi to the northern part of the country runs through the district. The district is criss-crossed with feeder roads, although the southern sector of the district is better endowed. Access to public transportation improved between 2003 and 2007. This is because of the improvement in road conditions and/or an increase in vehicular traffic. More than 90 percent of households report that they can access public transportation in less than

15 minutes (Table 2.1). In communities such as Sarfokrom, although road conditions have not improved, there has been an increase in vehicular traffic. In Namong, the residents stated that it is now possible to access some of their farms using vehicles. However, as is evident from Table 2.1, some communities in the district still face transportation difficulties. In Odumase, deep in the cocoa-growing area of the district, vehicles do not ply the road frequently. Access is difficult because a wooden bridge that connects the community to a larger town constantly has to be repaired.

Table 2.1: Access to Public Transportation

	2003			2007		
	All	Rural	Urban	All	Rural	Urban
Distance to nearest public transportation						
0-14 minutes	79.7	72.0	92.5	93.1	92.0	95.0
15-29 minutes	7.9	9.0	6.2	4.1	4.5	3.4
30-44 minutes	9.9	15.0	1.3	2.3	2.6	1.6
45-59 minutes	2.0	3.2	0.0	0.5	0.9	0.0
60 minutes and over	0.5	0.8	0.0	0.0	0.0	0.0
Distance to nearest supply of drinking water						
0-14 minutes	92.5	89.5	97.4	93.6	94.3	92.4
15-29 minutes	5.6	7.8	1.9	5.6	5.7	5.2
30-44 minutes	1.2	1.6	0.6	0.9	0.0	2.4
45-59 minutes	0.2	0.4	0.0	0.0	0.0	0.0
60 minutes and over	0.5	0.8	0.0	0.0	0.0	0.0

Source: Ghana Statistical Service, CWIQ 2003 and ISSER, 2007 Household Survey

Drinking Water

The proportion of households that drink from pipes in the house or in the compound has increased (Figure 2.5). The proportion of households that obtain their drinking water from boreholes nearly tripled, from 20 percent in 2000 to about 57 percent in 2007. Among urban households, the proportion increased from 5 to 25 percent over the same period. However, about 5 percent of households in 2007 get their drinking water from rivers and ponds. The proportion of urban households that get their drinking water from rivers, ponds, etc. is about 13 percent. This is an increase from about 2 percent in 2003. Access to piped water is being extended to an increasing number of towns. Piped water was installed in Akomadan and Namong in 1998 and 2000 respectively. However, within towns, the coverage of piped water is not extensive. Not all households have access to it. In some communities, although provision for piped water has been made, the water does not run continuously. When this happens, the alternative sources of water are boreholes, covered wells and rivers and springs, depending on what is available to the community. The slight increase in the proportion of urban households that are more than 15 minutes away from a source of drinking water suggests that urban communities are expanding faster than the rate of provision of drinking water facilities (Table 2.1).

Electricity

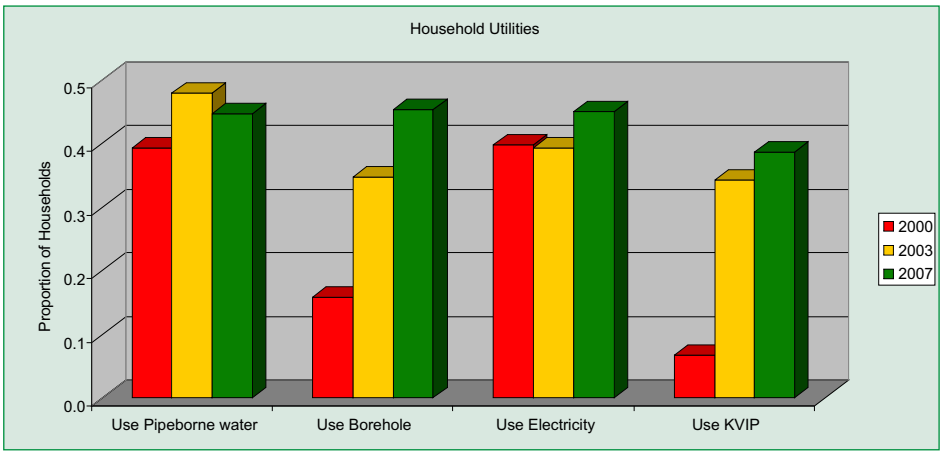
Access to electricity in the district is not as widespread as the provision of boreholes. Approximately 45 percent of households use electricity for lighting (Figure 2.4). Between 2000 and 2007, it is estimated that the proportion of rural households that use electricity for lighting increased while the proportion of urban households using electricity for lighting declined from 71 percent to 64 percent.

Sanitation Facilities

The toilet facilities used by most households are the KVIPs. Since 2000, the proportion of households in the district that use these facilities has increased quite rapidly (Figure 2.5). Less than 5 percent of households use flush toilets. This is largely because the coverage of pipe-borne water in the district is low. Rural households are still underserved in terms of safe sanitation. This poses health and environmental risks.

Despite the improvement in the provision of safe drinking water through boreholes in the district, health risks remain high because of the inadequate methods used for the disposal of liquid and solid wastes. About 70 percent of households report that liquid waste is disposed of on the street or in the compound. Less than 5 percent of households report that liquid waste is disposed of either through a sewage system or in gutters. About 64 percent of households dispose of their solid waste in public dumps.

Figure 2.5: Use of Utilities



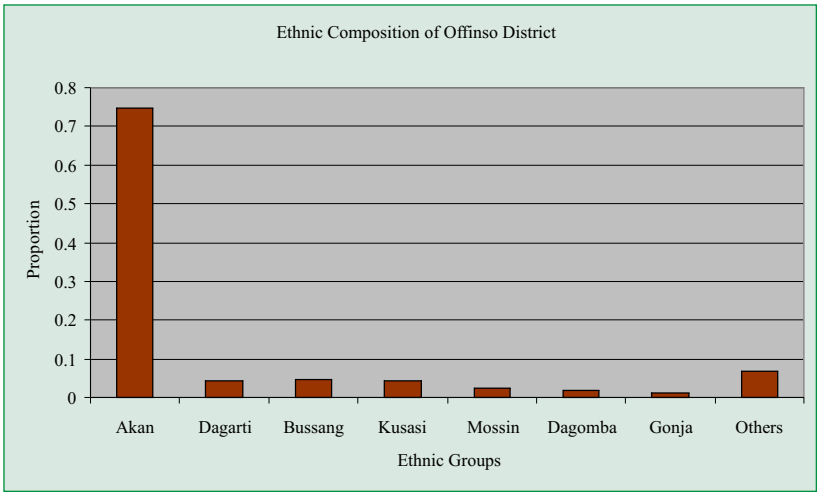
Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003
ISSER, Household Survey, 2007

The Social Environment

Ethnic Composition

It is estimated that in 2007, about 70 percent of the population in the district are Asante. Other Akan groups make up about 4 percent of the population. The other ethnic groups in the district consist largely of Dagarti, Kusasi, Mossi and Dagomba (Figure 2.6).

Figure 2.6: Ethnic Composition of Offinso District, 2007

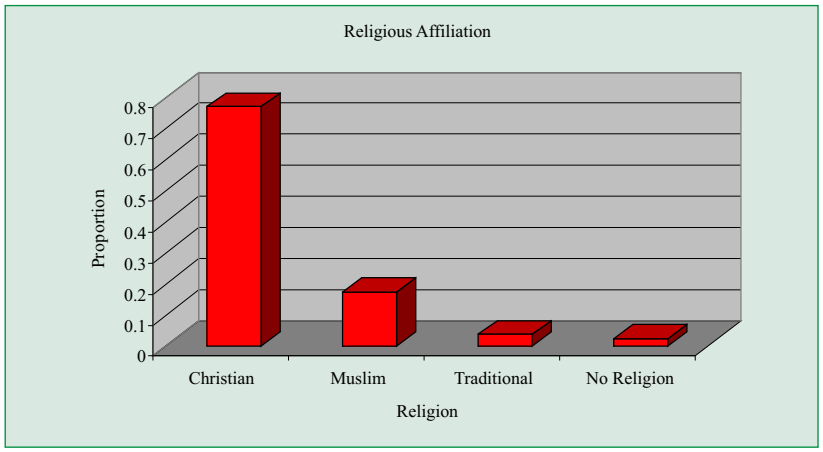


Source: ISSER, 2007 Household Survey

Religion

The population of Offinso is diverse in terms of religious affiliation. Christianity dominates, although the Muslim population is a significant minority (Figure 2.7).

Figure 2.7: Religious Affiliation of Population



Source: ISSER, 2007 Household Survey

Land Tenure

Fifty-one percent of households in the district report that at least one of their members owns land that is used for farming. Just over a quarter of households own land that is used for other purposes. Land ownership by women is not unusual although it is not widespread. About 26 Percent of households reported that female members of the household own land that is used for farming, while about 11 percent reported that female members owned land used for other purposes.

Land can be bought and sold in some parts of the district. Women may claim ownership of land either through purchase or inheritance. They may also be given land as a gift. This land, however, cannot be sold.

Migrant farmers can access land for farming once arrangements have been agreed upon with landowners. Land can either be rented or used under share-cropping arrangements, i.e. abunnu or abusa.

Access to land is not currently a major constraint to economic activity. About 7 percent of people employed in agriculture indicated that access to land was a problem. In some communities, the expansion in the area under cocoa has resulted in the unavailability of land for production of other crops. This was a particular concern in Odumase, a cocoa community.

Human Security and Conflict

The number of police personnel increased from 52 in 2000 to 63 in 2005.The district is served by six police stations. About 63 percent of households in the district can reach a police station in less than 30 minutes. Rural communities, however, are disadvantaged. About 45 percent of rural households are more than 30 minutes away from the nearest police station compared to about 21 percent of urban households (Table 2.2).

The number of reported crimes in the district rose from 456 in 2000 to 575 in 2001 and fluctuated around this number until 2005 (Table 2.3). The most frequently reported cases of crime in the district are assault, offensive conduct, fraud, stealing and causing damage (Table 2.3). There were reported cases of possession of narcotic drugs in the district. The use of drugs by the youth was raised as a concern in some of the communities.

Table 2.2: Distance to Nearest Police Station

Distance to nearest police station	All	Rural	Urban
Less than 15 minutes	36.1	24.3	56.6
15-29 minutes	27.4	30.2	22.7
30-44 minutes	20.2	19.8	20.7
45-59 minutes	4.9	7.8	0.0
60 minutes and over	11.4	17.9	0.0

Source: ISSER, 2007 Household Survey

None of the communities visited reported incidents of unrest in the last five years related to chieftaincy, land, religious, ethnic or election-based disputes. Petty crime was reported to be a problem in some communities, involving the theft of crops or of livestock. Although the incidence of crime is relatively low in the district, about 11 percent of households reported incidents of theft of assets. Depending on how much is stolen and the situation of the household, theft of harvest for example can render a severe blow to a household, compromising the ability to pay school fees and other essential items.

[8] The tenants share production with the landlord. Abunnu production is divided into two. Abusa the production is divided into Three parts.

Table 2.3: Reported Crimes in Offinso District

	2000	2001	2002	2003	2004	2005
Murder	1	1	3	2	2	3
Robbery	2	3	0	2	2	3
Defilement	1	2	3	2	2	2
Causing Harm	10	22	18	20	11	9
Threat of Death	29	30	41	32	43	37
Threat of Harm	10	15	13	19	14	9
Assault	60	69	81	70	63	67
Causing Damage	65	98	81	80	90	86
Offensive Conduct	60	70	90	69	73	38
Fraud	60	40	37	38	60	65
Trespassing	5	10	7	12	9	7
Stealing	60	99	81	91	74	95
Possessing Narcotic Drugs	2	3	0	2	2	3
Other offenses	91	113	122	107	114	148
Total Reported Cases of Crime	456	575	577	546	559	572
Number of Police Stations	6	6	6	6	6	6
Number of Police Personnel	52	50	55	54	61	63

Source: Ghana Police Service, Offinso District

Socio-economic Infrastructure

Prior to 2006, the district had six post offices. The post office in Abofour was shut down in 2006 because it was operating at a loss. The post offices are located in the urban and peri-urban communities. Thus, access to post office facilities is much lower in rural communities. About 80 percent of urban households are within half an hour's travel to the nearest post office. This contrasts with 55 percent of rural households (Table 2.4).

Fixed line telephone services are limited in the district. There is a telephone exchange at New Offinso. However, none of the households sampled reported having fixed line services. Telecommunication is facilitated by the services of the mobile phone companies. In those communities where there is coverage, private entrepreneurs provide access to mobile telephone services at a fee. Eighteen percent of the households surveyed had members who owned mobile phones. As a result of extended mobile phone coverage and the emergence of mobile phone service providers, there has been a near doubling of physical access to telecommunication services between 2003 and 2007. Almost 70 percent of rural households in the district can access mobile phone services within 15 minutes in 2007. In 2003, less than a third of rural households had access to telecommunication facilities (Table 2.4). The district does not have an internet café.

The district has two commercial banks and two rural banks. Rural communities have to invest much more time in accessing banks. About 56 percent of rural households were half an hour away from a bank compared to 80 percent of urban households (Table 2.4). Urban households spend less time reaching food markets than do the rural communities in the district (Table 2.4)

Table 2.4: Distance to Nearest Facilities

	All	Rural	Urban
Distance to nearest post office, 2007			
Less than 15 minutes	35.28	23.40	55.90
15-29 minutes	28.24	31.05	23.37
30-44 minutes	20.16	19.84	20.73
45-59 minutes	4.94	7.79	0.00
60 minutes and over	11.37	17.92	0.00
Distance to nearest telecommunication facility			
2003			
Less than 15 minutes	52.3	32.7	84.6
15-29 minutes	18.5	22.9	11.2
30-44 minutes	18.5	27.9	2.9
45-59 minutes	5.9	9.1	0.7
60 minutes and over	4.8	7.4	0.6
2007			
Less than 15 minutes	77.2	68.9	91.5
15-29 minutes	8.6	10.2	5.8
30-44 minutes	2.9	3.0	2.6
45-59 minutes	2.4	3.8	0.0
60 minutes and over	8.9	14.1	0.0
Distance to nearest bank, 2007			
Less than 15 minutes	40.60	24.51	68.51
15-29 minutes	23.63	31.05	10.76
30-44 minutes	19.46	18.73	20.73
45-59 minutes	4.94	7.79	0.00
60 minutes and over	11.37	17.92	0.00
Distance to nearest food market			
2003	All	Rural	Urban
Less than 15 minutes	72.5	64.7	85.1
15-29 minutes	12.8	13.1	12.4
30-44 minutes	11.3	17.1	1.9
45-59 minutes	1.4	2.2	0.0
60 minutes and over	2.0	2.9	0.6
2007			
Less than 15 minutes	70.5	66.8	77.1
15-29 minutes	7.6	3.6	14.4
30-44 minutes	7.5	6.9	8.5
45-59 minutes	4.0	6.3	0.0
60 minutes and over	10.5	16.5	0.0

Source: Ghana Statistical Service, CWIQ 2003 and ISSER, 2007 Household Survey

Local Governance

The District Assembly is the highest administrative and political authority in the district. Membership of the Assembly comprises 48 elected members, 21 appointed members and 2 Members of Parliament. The sub-structures of the district are made up of five Town Councils, four Area Councils and 119 Unit Committees. The substructures are not functioning as they ought to because there is no permanent staff and logistics are inadequate.

The weakness of the sub-structures adversely affects participation and the flow of information between the District Assembly and the citizens. Participation is an important aspect of the Heavily Indebted Poor Countries Initiative that Ghana is involved in. Plans and projects are expected to benefit from the input of the general public. About 53 percent of the population aged 18 years and above (56 percent of men and 50 percent of women) had been consulted prior to the start of community projects. However, none of the members of the households surveyed knew how much had been allocated to the district in 2006 through the District Assemblies Common Fund. In some instances, this lack of knowledge of the workings of the Assembly may be because of lack of interest on the part of the general public. On the other hand, it also reflects inadequate information flow between the district and the general public.

Participation

Participation in district and national elections in the district is quite high. About 85 percent of the population aged 18 years and over voted in the most recent national and district elections. The propensity to vote was almost the same among women and men and among the urban and rural electorate (Table 2.5).

Most of those who did not vote in the district elections did not do so because they were not in the constituency at the time of the elections (Table 2.6). About a third of those who did not vote in the district elections did not do so because they were not registered or eligible to vote at the time. A not insignificant proportion reported that they did not vote because they were too old. This probably means that they were not able to travel to the polling station. A higher proportion of men than women reported that they did not vote in the district elections because of lack of interest.

Table 2.5: Percent that Voted in National and District Elections

	District Elections	National Elections
All	85.4	86.4
Men	82.3	81.1
Women	87.4	90.0
Urban	84.6	83.4
Rural	85.8	88.2

Source: ISSER, 2007 Household Survey

Ineligibility was the main reason why about 60 percent of those who did not vote in the 2004 national elections were not able to. The incidence of apathy was less with respect to the national elections than the district elections.

Table 2.6: Reasons for Not Voting (%)

District Elections	Men	Women	Urban	Rural
Was not registered	16.7	19.3	7.5	24.9
Was not eligible	17.7	16.8	24.1	12.7
Was not in country	3.7	0.0	4.6	0.0
Was not in town	33.6	25.3	28.6	30.0
Do not care to vote	9.0	2.0	2.5	7.5
Religious beliefs	0.0	4.9	0.0	4.1
Ill or injured	11.1	10.6	5.0	14.6
Too old	3.7	9.6	11.7	3.4
Lost registration card	0.0	3.5	0.0	2.9
No reason	0.0	3.7	4.6	0.0
Work schedule	4.6	4.5	11.4	0.0
National Elections				
Was not registered	23.0	25.4	5.0	39.5
Was not eligible	71.0	65.6	90.0	51.4
Do not care to vote	2.0	0.0	2.5	0.0
Religious beliefs	0.0	6.4	0.0	5.0
Too old	0.0	2.6	2.5	0.0
Was not in town	4.0	0.0	0.0	4.1

Source: ISSER, 2007 Household Survey

The 2006-2009 Medium-Term Development Plan for the district contains strategies to address the problems of local governance. There are plans to improve and expand participation through building the capacity to participate, facilitating regular interaction between the Area Council and committees and increasing the participation of women in public life.

Revenue Generation

The major sources of revenue for the district are rates, lands and forestry, fees/fines and licences and the District Assemblies Common Fund. Fees/fines and licences account for more than 70 percent of the revenue generated by the Assembly. Revenues generated locally have increased rather erratically between 2003 and 2005 (Table 2.7). The Assembly was not able to attain its revenue target in the three-year period. Performance in revenue generation as measured by the ratio of actual revenues generated to budgeted revenues has been weak and worsened considerably in 2005 (Table 2.7). The poor revenue generation effort has been attributed to unwillingness to pay basic rates, the failure of revenue collectors to pay in all monies collected to the Assembly and the absence of a database on economic activities in the district.

The poor revenue performance compromises the ability of the district to implement its development plan successfully. Progress towards the attainment of MDGs such as ensuring environmental sustainability and improving maternal health care are dependent on increased investments by the district administration in sanitation, drainage, water and health infrastructure.

Table 2.7: Revenues, 2003 to 2005 (in Ghana cedis)

	2003		2004		2005	
	Actual	Actual/Estimates	Actual	Actual/Estimates	Actual	Actual/Estimates
Rates	18,000.00	2.00	17,921.80	0.83	3,988.06	0.21
Land/Forestry	26,350.00	0.66	66,202.50	2.76	32,430.05	0.60
Fees/Fines	18,154.72	1.30	24,648.70	0.89	17,540.95	0.62
Licences	5,463.95	0.84	3,890.85	0.23	11,184.95	0.72
Rent	1,363.00	0.26	169.50	0.01	1,420.90	0.12
Interest on Investment	26.29	0.40	21,931.87	54.83	169.03	0.89
Miscellaneous	4,898.92	4.85	3,500.23	0.35	216.00	0.07
Total	56,107.16	0.74	113,616.75	0.86	66,949.89	0.59

Source: Government of Ghana (2006) Offinso District Assembly. Medium-Term District Development Plan (2006-2009)

Development Goals

The preparation of the Medium-Term Development Plan for 2006-2009 was informed by the national Growth and Poverty Reduction Strategy (GPRS II). The district's development goals are classified under three headings, Private Sector-Led Competitiveness, Human Resource Development and Good Governance (Table 2.8). Tremendous effort has been made to ensure that district goals are compatible with the national development goals found in GPRS II, and with the Millennium Development Goals.

The goals of the development plan for 2006-2009 aim to address several of the development problems that exist in the district. These include increasing employment opportunities for the youth, reducing the incidence of HIV/AIDS and enhancing access to microfinance.

The development goals set out in the plan and the strategies intended to achieve them converge with the concerns of citizens in the district (Table 2.9).

Table 2.8: District Development Goals, 2006-2009.

Thematic Area	Development Goals
Private Sector Led Competitiveness	Ensure the effective and efficient utilisation of the District's resources (human and natural) for the improvement of the living conditions of the people. Increase production and productivity levels in all sectors of the District's economy through enhanced service delivery, improved marketing, roads and use of appropriate technology. Increase agricultural productivity, reduce post-harvest losses and improve marketing as a means for achieving food security and reducing rural poverty. Increase employment opportunities for the unemployed youth.
Human Resource Development and Basic Services	Increasing access and participation in basic education training Provision of adequate potable water To reduce the incidence of HIV/AIDS Provide capacity for environmental health officers Improving the health status of the people by ensuring access to affordable quality basic health care To ensure disaster prevention management Enhance access of the productive poor (vulnerable and the excluded) to financial services by increasing the availability of micro-finance and the capacity of financial services To support the physically challenged to acquire education and employable skills
Good Governance	Strengthening the sub-structures of the District Assembly Strengthening the financial capacity of the District Assembly Improving decision-making at the local level, by involving all sections of people in the district, especially women and other vulnerable and the excluded

Source: Government of Ghana (2006) Offinso District Assembly. Medium Term District Development Plan (2006-2009), p. 68

Table 2.9: Development Needs of Some Communities in the District

Community	Development Concerns
Adukro	Limited Job Opportunities Limited access to credit facilities for investment purposes Incomplete coverage of electricity supply to the town Erratic flow of water in taps in the town. The newly constructed highway must provide a place for passengers to embark and disembark safely from vehicles.
Odumase	Access to other towns is difficult because of poor condition of bridge There is no heath facility nearby There is no electricity
Akokrakrom	There is no electricity There is a need to widen source of cash income. Rely solely on cocoa
Namong	Erratic electricity supply Incomplete coverage of electricity supply to the town
Sarfokrom	Road needs to be rehabilitated Limited access to credit facilities for investment purposes There is no health facility nearby Require tractor services

Source: ISSER, 2007 Household Survey

CHAPTER THREE

ECONOMIC ACTIVITY AND POVERTY

Picture 3.1: Drying Cocoa Beans

Introduction

Employment is an important route out of poverty and can be instrumental in the improvement of well-being. However, whether these expected benefits of employment will be realised depends on productivity, remuneration and other conditions attached to employment. In countries such as Ghana, a significant proportion of the poor and people with low levels of human development have jobs of some kind. Low productivity and limited opportunities to translate output, particularly agricultural output, into income can explain this.

GPRS II is designed to "pursue an employment-centred cross-sectoral development strategy..."[9] This focus on employment is also captured in Offinso District's Medium-Term Development Plan for 2006-2009 where two of the goals are to:

"a) Ensure the effective and efficient utilisation of the District's resources (human and natural) for the improvement of the living conditions of its people.

b) Increase agricultural productivity, reduce post-harvest losses and improve marketing as the means for achieving food security and reducing rural poverty."[10]

Employment

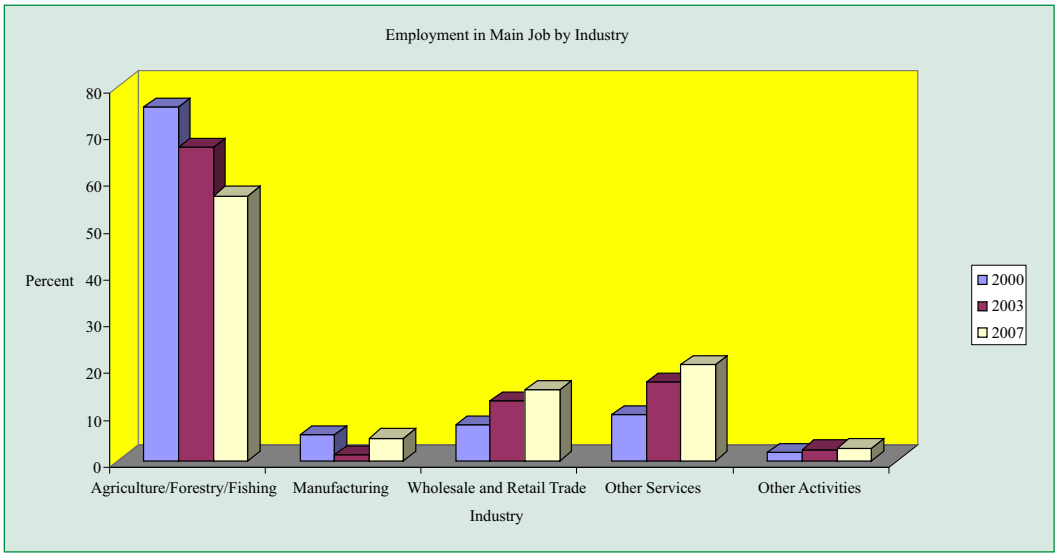
The main economic activity in Offinso District is agriculture. It employs the largest proportion of the population aged 15 years and above in their main job (Figure 3.1). Some diversification in economic activity in the district has occurred since 2000. The proportion of the working population aged 15 years and above employed in agriculture in their main job has declined steadily from about 75 percent in 2000 to 57 percent in 2007 (Figure 3.1).

The major crops produced in the district are vegetables, oil palm, yam, cocoa and some citrus. There has been an expansion in the area planted to food crops in the district. This largely explains the recorded increase in production in some food crops (Figure 3.2). Yield per hectare hardly changed in the period between 1997 and 2002. About 80 percent of workers employed in the agriculture sector complained that the main problem they faced during the past 12 months was that of finance. Agricultural prices tend to vary within the year and also vary from one year to the next. Intra-year and inter-year variability in commodity prices are sources of vulnerability, particularly for farmers who do not have alternative sources of income outside farming. The low price of output was a complaint expressed by about 9 percent of those employed in agriculture. Whether a farmer will perceive the price variability to be a problem depends on the mix of crops that is being cultivated. Whereas maize prices were lower in 2006 compared to 2005, the same cannot be said for the prices of yam (Figure 3.3)

[9] Republic of Ghana (2005) Growth and Poverty Reduction Strategy (GPRS II) (2006-2009), Vol. 1: Policy Framework, National Development Planning Commission, Accra. p. 39

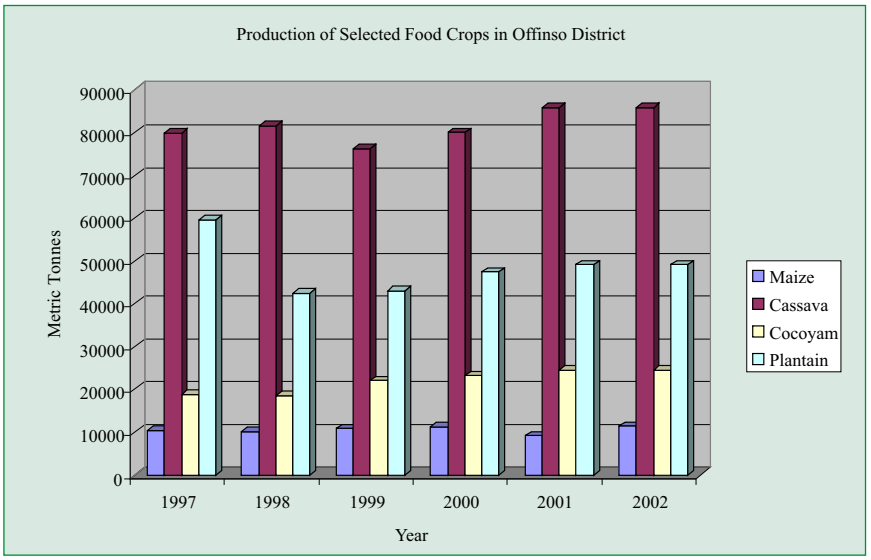
[10] Government of Ghana (2006) Offinso District Assembly Medium-Term District Development Plan (2006-2009), District Planning Coordinating Unit, Offinso District, p. 68

Figure 3.1: Distribution of Employment in Main Job by Sector



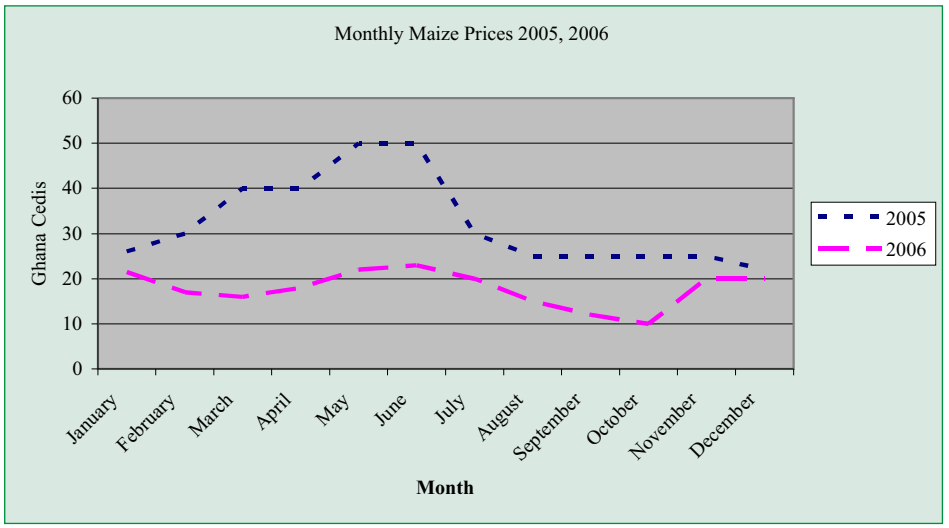
Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003; ISSER, Household Survey, 2007

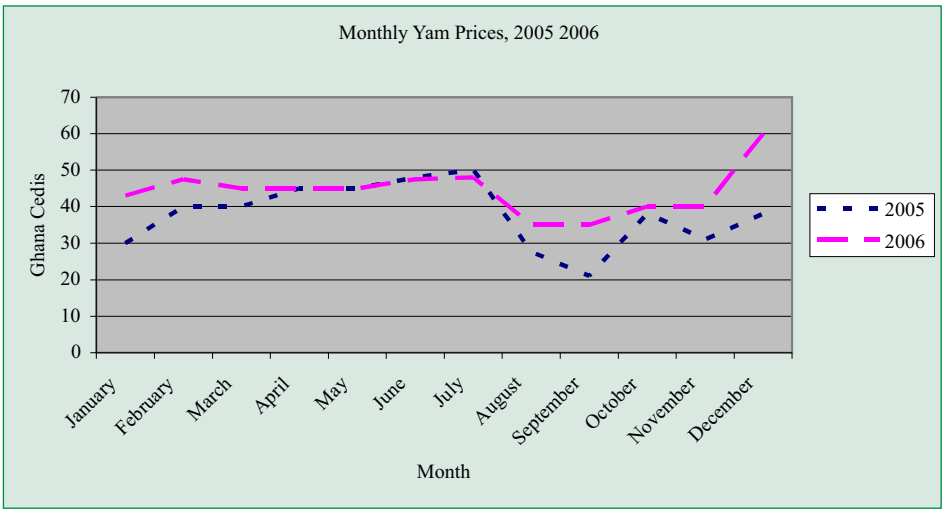
Figure 3.2. Production of Selected Food Crops in Offinso District



Source: Ministry of Food and Agriculture, Offinso

Figure 3.3: Price Trends 2005, 2006





Source: Ministry of Food and Agriculture, Offinso District

Employment in the services sector is rapidly expanding in the district. The proportion engaged in the services sector (excluding wholesale and retail trading) more than doubled between 2000 and 2007 (Figure 3.1). There has been a doubling of the proportion of the adult population employed in wholesale and retail trade (Figure 3.1).

Manufacturing activities are not as important in the district as agriculture. There has not been much growth in employment in the sector in the period since 2000. Less than 5 percent of the adult working population is employed in the sector in 2007 as their main job (Figure 3.1).

Distribution of Employment by Sex

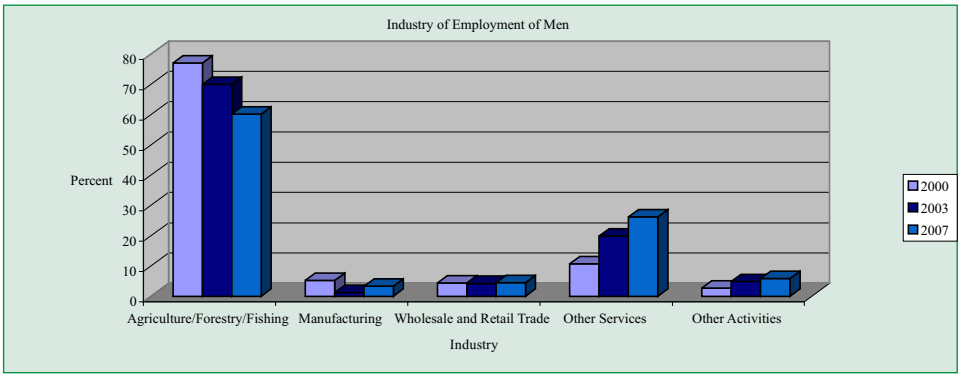
There is a decline in the proportion of both women and men aged 15 years and above employed in agriculture as their main job. There is a 17 percentage point decline in the proportion of men employed in agriculture and a 20 percentage point drop in the proportion of women employed in the sector (Figure 3.4).

The wholesale and retail sector is dominated by women. The proportion of women involved in the wholesale and retail trade as their main job almost doubled between 2000 and 2003. More than a fifth of adult working women are employed in this sector compared to less than 5 percent of men in 2007 (Figure 3.4).

Employment Status of Working Population

The incidence of self-employment in the district is high and has not changed significantly between 2000 and 2007 (Figure 3.5). About 80 percent of the working population aged 15 years and above is self-employed in 2007. Almost all are self-employed without employees. A higher proportion of adult working women (84 percent) is self-employed compared to men (71 percent). This is largely because over a fifth of men aged 15 years and above is in regular wage employment compared to about 6 percent of women.

Figure 3.4: Sectoral Distribution of Employment in Main Job, by Sex



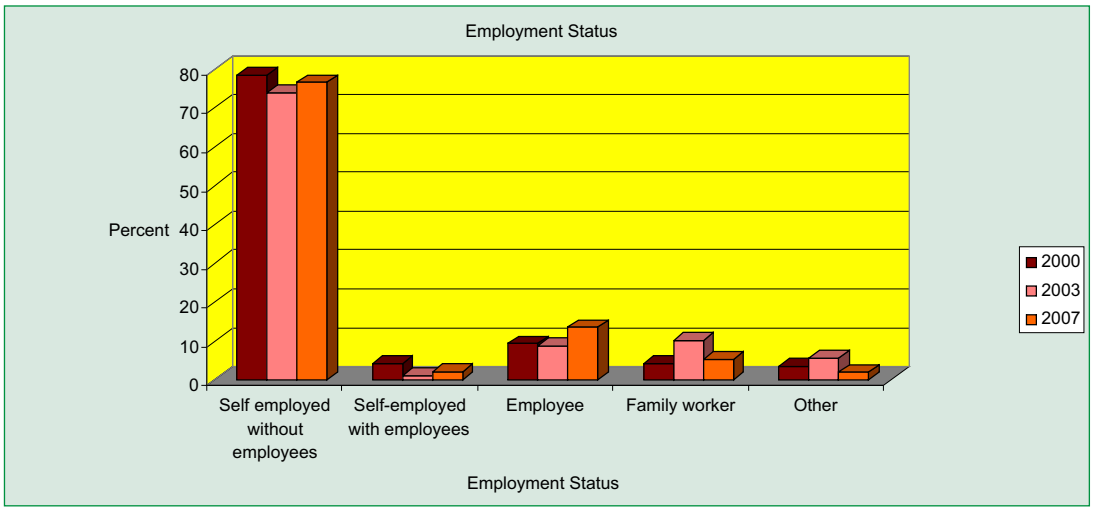
Source: Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003 ISSER, Household Survey, 2007

Picture 3.2: Offinso Market Scene

Regular wage employees are more likely to have wage contracts and benefit from social protection schemes such as sick allowance, maternity allowance, a pension plan and leave with pay. Although only 7.5 percent of the adult working population were regular wage employees in 2003, the proportion of men in this category is higher than the proportion of women.

The third MDG promotion of gender equality and empowerment of women has as one of its indicators the share of women in wage employment in the non-agriculture sector. Of those employed in wage employment in the non-agriculture sector in 2003, 35 percent were women. About 4.5 percent of women aged 15 years and above in 2003 were in wage employment in the non-agriculture sector compared to 9.7 percent of men. In 2007, it is estimated that the proportion of women in regular wage employment in the non-agriculture sector is 3 percent.

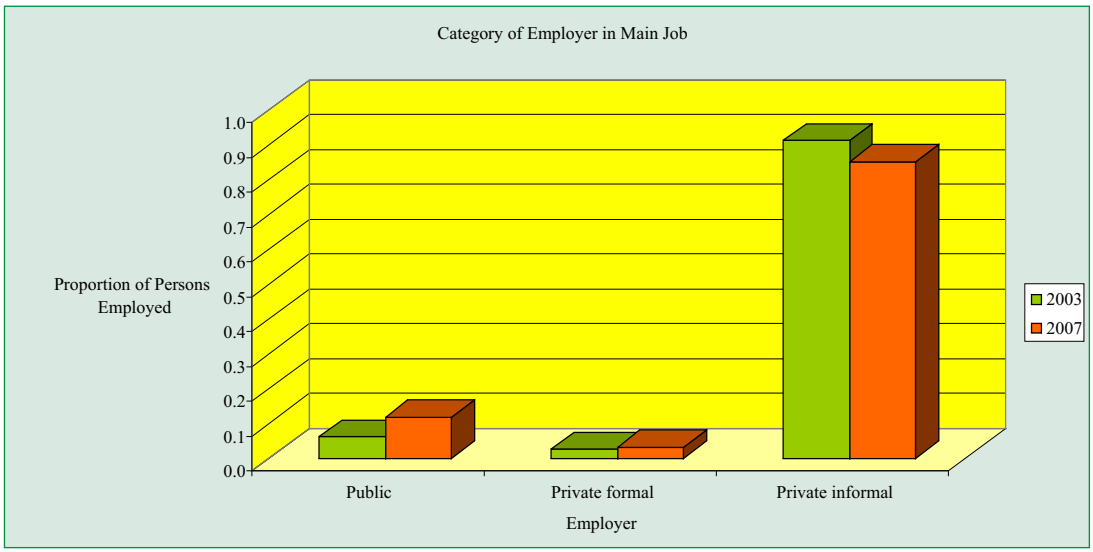
Figure 3.5: Employment Status in Main Job



Source: Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003 ISSER, Household Survey, 2007

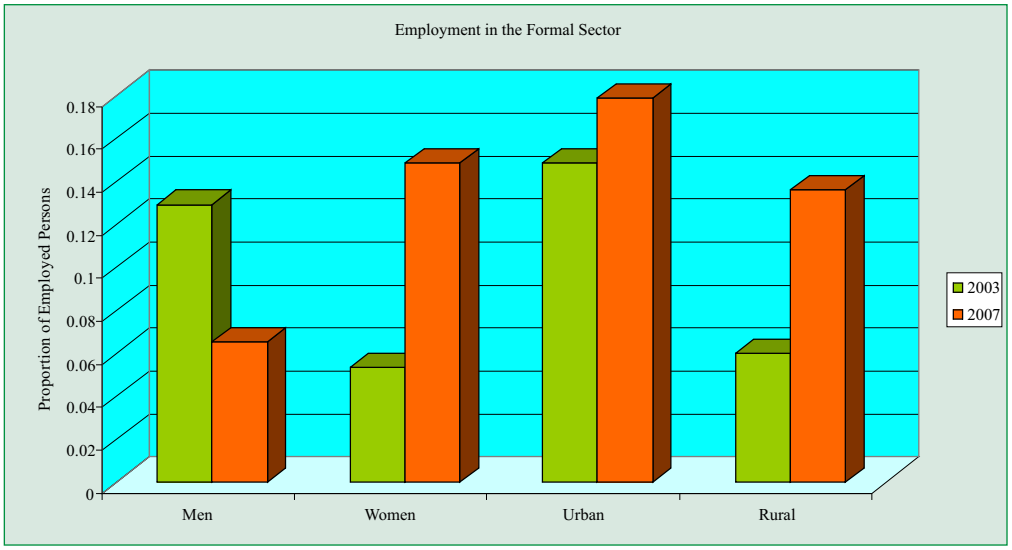
The informal sector remains the largest sector of employment of most workers in Offinso District. There has been a slight drop in the proportion employed in the informal sector between 2003 and 2007 (Figure 3.6). However, the public and private formal sector together employ less than a fifth of the workers in Offinso. The increase in the proportion employed in the formal sector is particularly significant among women and among workers in rural communities (Figure 3.7).

Figure 3.6: Employer in Main Job



Source: Source: Ghana Statistical Service, CWIQ 2003 and ISSER, Household Survey, 2007

Figure 3.7: Formal Sector Employment in Offinso District, by Sex



Source: Source: Ghana Statistical Service, CWIQ 2003 and ISSER, Household Survey, 2007

Unemployment and Underemployment

The high unemployment in the district emerged as a priority in the ranking of identified problems during the preparation of the district's Medium-Term Plan for 2006-2009.

Unemployment

The adult unemployment rate has increased between 2000 and 2007 to an estimated 13.4 percent. Unemployment is higher among women compared to men and is higher in the urban communities compared to the rural communities (Table 3.1).

Table 3.1: Unemployment Rate (%) in Offinso District

	2000	2003	2007
Total	4.9	0.4	13.4
Male	4.2	0.9	9.4
Female	5.5	0.0	16.1
Urban			
Total	4.4	0.8	24.0
Male	3.6	1.8	19.2
Female	5.1	0.0	27.6
Rural			
Total	5.1	0.2	7.8
Male	4.5	0.5	3.8
Female	5.8	0.0	10.4

Notes: The unemployed are those persons who are without work and are looking and ready for work. The unemployment rate is measured as the ratio of the unemployed to the labour force. The latter is Measured as the sum of the unemployed and workers.

Source: Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003 ISSER, Household Survey, 2007

Youth Unemployment

One of the goals of the district development plan under the heading, Private Sector-Led Competitiveness, is increased employment opportunities for unemployed youth. The eighth MDG has as one of its targets cooperation between developed and developing countries to develop and implement strategies for decent and productive work for the youth. An indicator to measure progress towards achieving this goal is the unemployment rate of persons aged 15-24 years.[11]

In 2003, 44 percent of persons aged 15-24 years were working. The incidence of unemployment among the youth was minimal. The CWIQ survey of 2003 did not record persons who were not working and who were looking for work among the population aged 15-24 years.

In 2007, the situation appears to be quite different. About 40 percent of the persons aged 15-24 years are in the labour force, either working or not working but looking for a job. Of the proportion in the labour force, 30 percent are unemployed.

The incidence of unemployment is extremely high at 60 percent among the urban youth. Rural youth unemployment in 2007 is estimated at 16 percent. The incidence of unemployment was higher for young women at 35 percent compared to 23 percent for young men.

Underemployment

The incidence of underemployment in the district in 2003 was high at about 24 percent. The underemployed are those persons who are working and who were ready to take on additional work in the last seven days. The rate of underemployment is measured as the proportion of the labour force that is underemployed.

The incidence of underemployment is higher among men than among women and is higher among urban than among rural workers, although the difference does not appear to be significant. None of the workers in the mining, transport or utilities sectors indicated that they were looking to take on additional work. The underemployment rate was highest among workers in the construction industry and in the financial and insurance services sectors. Interestingly, the incidence of underemployment among workers in agriculture was relatively low compared to construction workers. Construction workers may go through periods of inactivity when the demand for their services is low. This may explain the high incidence of underemployment.

[11] A specific target is yet to be developed for this indicator.

Table 3.2: Percent of the Labour Force that is Underemployed in Offinso District

Underemployment rate	Mean
All	23.8
Male	26.0
Female	21.8
Rural	22.9
Urban	25.7
Agriculture	23.8
Mining and quarrying	0.0
Manufacturing	31.9
Construction	55.3
Transport/storage/communication	0.0
Wholesale/Retail trade	21.8
Financial services	42.0
Electricity, gas and water	0.0
Community/social services	22.2
Persons Aged 15-24 years	
All	15.8
Male	20.9
Female	11.6

Source: Ghana Statistical Service, CWIQ 2003

The incidence of underemployment among the youth is lower than among the entire population aged 15 years and above. Underemployment is significantly higher among young men than it is among young women.

Child Labour

There appears to be a decline in the proportion of children aged 7-14 years who work. In 2000, almost 10 percent of the children aged 7-14 years worked for payment in cash or in kind. Approximately 4 percent of the children aged 7-14 years worked in the seven days prior to the survey in 2003. Approximately 4 percent of boys and 5 percent of girls worked. The incidence of child labour was higher among rural children. It is estimated that in 2007 about 3 percent of children worked.

Table 3.3: Population Aged 7-14 Years that is Working (%)

	2000	2003	2007
All	9.8	4.7	2.9
Boys	9.6	4.0	2.8
Girls	9.9	5.2	3.1
Rural	11.8	3.9	4.3
Urban	10.1	6.4	0.0

Source: Source: Ghana Statistical Service, 2000 Population and Housing Census, CWIQ 2003
ISSER, Household Survey, 2007

The incidence of child labour is higher in rural communities. The proportion of girls that work tends to be higher than the proportion of boys.

The majority of working children are to be found in agriculture. In 2000, 82 percent were employed in this sector. The proportion is estimated to have declined to 66.7 percent in 2003. In 2007, it is estimated that 88 percent of working children were employed in agriculture. All the children were employed in the informal private sector. In 2003 and 2007, almost 60 percent and 53 percent respectively of children aged 7-14 years were unpaid family workers.

Perception of Developments in the Community

During focal group discussions, community members were asked if there had been an improvement in job opportunities. In all communities visited for focal group discussions the response was in the negative. In the small farming communities, the complaint was that there was not much additional opportunity outside agriculture. According to the participants in the community discussions in Namong, the major developments being undertaken on the Kumasi-Techiman road had not resulted in the creation of jobs for many of the youth.

There was a mixed response from the communities when they were asked whether life in the village or town was any better or worse than it had been 10 years ago.

Table 3.4: Perceptions of Circumstances of the Community

Community	Have Circumstances Improved in the Last Ten Years	Reason
Sarfokrom	Remained the same	This community has not recovered from the bush fires that destroyed cocoa farms. After the bush fires some farmers began to grow maize. This has discouraged a return to cocoa farming because maize farmers burn vegetation before planting and this is a hazard for cocoa farming.
Namong	Worsened	Sometimes the harvest cannot be sold and prices fall too low. It is also difficult to obtain loans for investing in farms or other businesses. The elderly would like to earn an income but the opportunities are limited. The pipes installed in the community are not enough and sometimes the water does not run. The town only has one KVIP
Odumase	Worsened	Residents are mainly cocoa farmers. Income is received only when cocoa is sold, which is about twice a year. Since the residents do not have options of different savings instruments they complain that inflation erodes the value of the income they earn from cocoa. The poor and unsafe condition of the bridge limits access to markets. The cocoa spraying exercise has not been that effective. Some cocoa trees are still infested with disease.
Akokrakrom	Improved	There has been an expansion in the acreage under cocoa trees. A borehole has been provided and the feeder road has been graded.
Adukro	Improved	There have been good harvests

Source: ISSER, Household Survey, 2007

Extreme Poverty and Hunger in Offinso District

The first Millennium Development Goal is the eradication of extreme poverty and hunger. The first target aims at halving the proportion of the population whose income is less than a dollar a day between 1990 and 2015. The second target aims at halving the proportion of the people living in hunger over the same period.

Neither GPRS II nor the district Medium-Term Development Plan contains specific targets for the reduction of poverty or the elimination of hunger. However, since both the GPRS and the district development plans adopt the MDGs as an important framework, it may be assumed that the MDG targets are the relevant targets.

The Incidence of Poverty

The most recent estimates of poverty in Offinso District are based on data from 2000 (the headcount index) and 2003 (a multi-dimensional poverty measure, the Human Poverty Index). Using data from the 2000 Housing and Population Census, the poverty headcount in Offinso District was estimated at 47 percent. The incidence of poverty was higher among the rural population (53 percent), than among the urban population (33 percent).

The Human Poverty Index

Poverty is multi-dimensional. A poverty assessment that focuses solely on the extent to which consumption expenditure or income may lie below a poverty line will not capture the different dimensions of poverty. The UNDP Human Poverty Index is one attempt to capture the multi-dimensionality of poverty in a single index (Box 3.1). The index focuses on three aspects of deprivation, the proportion of the population that will die before the age of 40 years, the proportion of the adult population that is illiterate and ability to have a decent standard of living. Ability to have a decent standard of living is measured using three variables. The first is the proportion of the population without access to safe or improved drinking water, the proportion of underweight children aged 5 years or less and the proportion of the population without access to health services. In estimating the Human Poverty Index, this study substitutes the regional under-5 mortality rate for the proportion of the population that will die before 40 years of age.

The Human Poverty Index for Offinso District in 2003 is not significantly different from the national average (Table 3.5). However, an examination reveals that the district performs worse than the national average in two of the components of the human poverty index - the adult illiteracy rate and the proportion of underweight children were higher than the national average.

Table 3.5: Human Poverty in Offinso District

	Offinso	Ghana
Human Poverty Index, 2003		
All	44.9	41.8
Rural	48.2	
Urban	39.6	
% Adult Illiterate		
All	52.7	46.6
Male	38.5	34.2
Female	65.3	57.7
% without access to health		
All	35.1	42.4
Rural	44.7	57.7
Urban	19.4	21.5
% without access to safe water		
All	12.3	25.9
Rural	18.4	37
Urban	2.2	12.7
% underweight children		
All	51.3	25.8
Boys	56.4	24.4
Girls	46.4	28.4

Source: Source: Ghana Statistical Service, CWIQ 2003

Box 3.1: Constructing the Human Poverty Index.

The constructed human poverty index for the preparation of the district human development report (HPI -G) is similar to the UNDP's HPI -1 for developing countries in terms of two co mponents i.e. capturing how the aspects of knowledge and decent standard of living are computed. However, the component that measures vulnerability to death at a relatively early age, the probability at birth of not surviving to age 40 is proxied with an index measuring regional under-five mortality. In addition to this modification, HPI -G includes an indicator of access to health care services in the measure of decent standard of living.A household has access to health care services if it is within 30 min utes of travel time to a modern health care provider (CWIQ, 2003).

The formula for calculating the HPI-G is as follows:

$$HPI - G = [1/3(P_1^{\alpha} + P_2^{\alpha} + P_3^{\alpha})]^{\alpha}$$

Where
P_1 = Probability at birth of not surviving to age 5, proxied by a normalized regional under-five mortality index (times 100)
P_2 = Un-weighted average of population without sustainable access to an improved water source, without access to modern health care service and children under weight for age
P_3 = Adult illiteracy rate
$\alpha = 3$

Subjective Poverty

Perceptions of poverty by households in the district are lower in 2007 than they were in 2003 (Figure 3.8). In 2003, none of the households considered themselves to be non-poor. In 2007 however, 8 percent of households classified themselves as non-poor. Rural households were much more optimistic, with a higher proportion classifying themselves as non-poor compared to urban households. Whereas 70 percent of households in 2003 considered themselves to be poor or very poor, in 2007 the proportion declined to 49 percent.

The Incidence of Extreme Poverty and Hunger

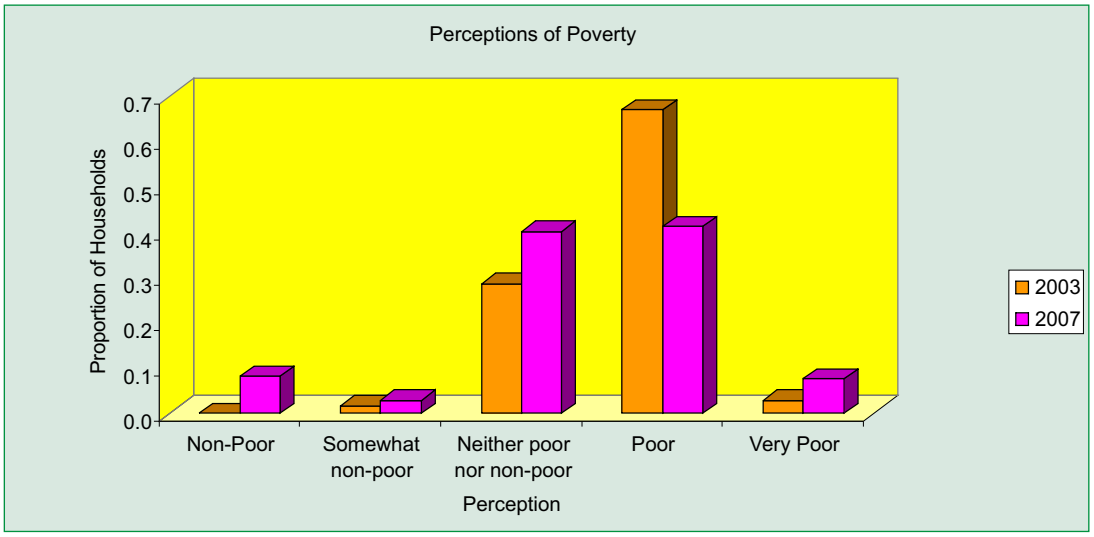
Unfortunately data are not available for directly measuring the proportion of the population in Offinso District that lives in extreme poverty. The indicators to measure progress made in reducing the incidence of hunger are the prevalence of underweight children and the proportion of the population below the minimum level of dietary energy consumption.

Child Nutrition

More than half the children in Offinso District in 2003 were underweight. The proportion of underweight children in the district is twice the national average. The incidence of underweight children was lower among girls, particularly in rural households. About 60 percent of boys in rural households were underweight compared to 46 percent of girls (Table 3.6).

Stunting among children is an indication of long-term nutritional deficits and, therefore, can be an indicator of chronic poverty. The incidence of stunted children in Offinso is lower than the national average. The incidence of stunting among girls is lower than among boys largely because girls in rural households are less likely to be stunted compared to boys (Table 3.6).

Figure 3.8: Perceptions of Poverty



Source: Ghana Statistical Service, CWIQ 2003 and ISSER, Household Survey, 2007

Table 3.6: Proportion of Stunted, Wasted and Underweight Children, 2003

	Total	Boys	Girls	National
Stunted	0.268	0.306	0.232	0.323
Rural	0.281	0.340	0.219	0.336
Urban	0.239	0.215	0.258	0.298
Wasted	0.481	0.500	0.463	0.155
Rural	0.518	0.541	0.494	0.129
Urban	0.395	0.390	0.399	0.204
Underweight	0.513	0.564	0.464	0.257
Rural	0.532	0.605	0.457	0.243
Urban	0.468	0.455	0.478	0.284

Source: Ghana Statistical Service, CWIQ 2003, Accra

The proportion of wasted children is almost five times the national average. As with other measures of child nutrition, girls have a lower incidence of wasting than do boys (Table 3.6).

The proportion of children aged less than 5 years that participated in nutrition programmes declined from 90 percent in 2003 to 74 percent in 2007. The high recorded incidence of underweight and wasted children in the district in 2003 raises issues about whether mothers understand the information that is provided them and the capacity of the household to make effective use of the information that has been received.

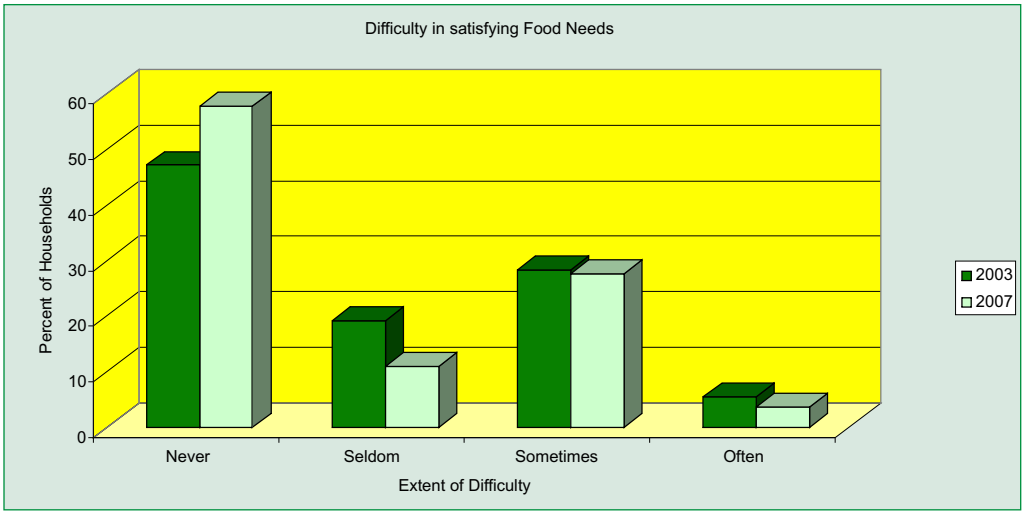
Difficulty in Meeting Food Needs

Data are not available on the proportion of the district's population that is below the minimum level of dietary energy consumption. An indirect indicator of the incidence of hunger used in this report is the proportion of households indicating that they normally have difficulties meeting their food needs. This is a rather imprecise proxy since the calorific value of what is consumed is not captured.

The relatively unfavourable child nutrition indicators in Offinso District would suggest that households have difficulty in meeting their food needs. However, in 2003 about 47 percent of households indicated that they had never experienced food difficulties in the preceding 12-month period. The proportion increased to 57 percent in 2007 (Figure 3.9). Indeed, the proportion that never or seldom experienced food difficulties in the preceding 12-month period did not change between 2003 and 2007. This raises questions about the household's perception of adequacy and the nutritional content of food provided children.

A disaggregation by sex of household head, however, reveals that there was an increase in the proportion of households headed by women that reported often experiencing difficulties in meeting their food needs (Table 3.7).

Figure 3.9: Difficulty in Satisfying Food Needs



Source: Ghana Statistical Service, 2000 CWIQ 2003 and ISSER, Household Survey, 2007

Rural households were less likely to experience difficulties in meeting food needs (Table 3.7). An elderly man in Akokrakrom mentioned that "we don't have a problem with food". The favourable rainfall quantities and pattern in 2005 and 2006 were important determinants of this optimism.

Of the households that mentioned they experienced difficulty in meeting their food needs, it was an annual event for about 52 percent of them, and for about the same proportion of rural and urban households. About 56 percent of these households that are headed by women reported that food difficulties were an annual event compared to 46 percent of these households that are headed by men.

A poor harvest was the reason why about 43 percent of rural households faced food difficulties. Next in importance were changes in the size of the household due to the death or the departure of a household member or an increase in the size of the household (Table 3.8). The death of a household member was cited by about a fifth of households as

Table 3.7: Households that Had Difficulty Satisfying Food Needs in the Preceding 12 Months (%)

	Year	Never	Seldom	Sometimes	Often
Location					
Rural	2003	49.5	16.7	28.3	5.5
	2007	62.2	8.2	25.8	3.9
Urban	2003	43.0	23.2	28.3	5.5
	2007	49.9	16.1	30.7	3.3
Sex of Household Head					
Men	2003	48.5	15.2	29.3	7.0
	2007	60.2	9.9	27.9	2.0
Women	2003	44.1	27.3	26.3	2.4
	2007	54.9	12.4	27.2	6.0

Source: Ghana Statistical Service, 2000 CWIQ 2003 and ISSER, Household Survey, 2007

a reason for the difficulties in meeting food needs. The illness of an income-earning member of the household and the loss of a job were also important reasons for difficulty in satisfying food needs. They were particular problems for urban households (Table 3.7).

Conclusion

Agriculture remains the sector where the largest proportion of the working population is employed in their main job. Irrigation in the district is low, thus exposing farmers to the vagaries of the weather. The seasonality in agricultural prices and the variation in prices from one year to the next is another source of risk that farmers face. Rainfall patterns and volumes in 2005 and 2006 were quite favourable, explaining why very few farmers raised weather problems as an issue. The recorded price variability would have a minimal effect on those farmers with a diversified crop mix. In many of the communities visited, a good harvest was reported. The favourable weather conditions can, therefore, explain to a large

Table 3.8: Reason Why Households Experienced Food Difficulties in the Preceding 12 Months (%)

	All	Urban	Rural
Household income earning member died	16.4	6.6	24.0
Household member left/additional member	6.2	0.0	11.0
Household member lost job	15.7	36.1	0.0
Income earning member of household ill	18.2	35.9	4.6
No longer receiving remittance	6.2	0.0	11.0
Poor Harvest	34.6	22.7	43.7
Storage Problems	5.7	0.0	10.1
Sold harvest early and did not receive good price	2.6	0.0	4.6
Food prices too high	12.3	0.0	21.8
Reduced access to land	7.5	17.3	0.0
Poor weather conditions	3.1	0.0	5.5
No demand for output/poor markets	3.4	0.0	6.0
Financial difficulties/low salary	16.1	21.5	12.0
Delay in receipt of payments	2.9	6.6	0.0
Invested all money in land	2.3	5.3	0.0

Source: ISSER, Household Survey, 2007

The Standard Living

One of the components of the Human Development Index is the standard of living. Unfortunately, due to the lack of district-level data, it is not possible to measure this variable. Two proxies the perceptions on poverty and the unemployment rate may be used as rather imprecise measures. The decline in the proportion of households that perceive themselves to be poor and the increase in the proportion of households that consider themselves to be non-poor would suggest an improvement in the standard of living and incomes in the district. However, the increase in the unemployment rate is indicative of a slowdown in economic activity. These two indicators may point to growing inequality in the district.

extent the low proportion of households that reported facing food difficulties in the 12-month period preceding the survey. Progress towards attainment of the first MDG the eradication of extreme poverty and hunger will be very much dependent on weather conditions in the district to the extent that agriculture remains solely rain-fed and more than half of the population depends on agriculture as a source of livelihood.

Poor harvests and the illness and/or death of members of the household are sources of vulnerability that can retard progress towards reduction in hunger, particularly in the absence of adequate safety nets and coping strategies.

The rise in the incidence of unemployment among the youth in the district is indicative of not much progress being made towards the achievement of one of the targets under the eighth MDG.[12]

[12] Implementation of the National Youth Employment Programme after the completion of the household survey has made some Inroads into unemployment in the district.

CHAPTER FOUR

EDUCATION AND LITERACY

Picture 4.1: A classroom block in Offinso District

Introduction

Education related issues feature prominently among the priorities of Offinso District's Medium-Term Development Plans for 2002-2004 and 2006-2009. Two out of the eight MDGs are education-specific. The focus of the second MDG is the attainment of universal primary education (Box 4.1). The third goal is the promotion of gender equality and the empowerment of women. The target under this goal is the elimination of gender disparity in primary and secondary education by 2005, and at all levels no later than 2015. Two of the indicators to monitor progress towards attaining the third MDG are education-specific and thus highlight the importance of education as a means of empowering women (Box 4.1).

There is overlap between the MDG indicators and the knowledge indicators of the Human Development Index (HDI). The knowledge component of the index is made up of adult literacy and the gross primary, secondary and tertiary enrolment rates.

Box 4.1: The MDGs and Human Development Indicators for Education

Millennium Development Goals	Human Development
Goal 2: Achieve Universal Primary Education Net enrolment in primary education Proportion of Pupils Starting Grade 1 who reach grade 5 Literacy Rate of 15-24 year olds Goal 3: Promote Gender Equality and Empower Women Ratios of girls to boys in primary, secondary and tertiary education Ratio of literate women to men, 15-24 year olds	Knowledge Adult Literacy Rate Gross Primary Enrolment Rate Gross Secondary Enrolment Rate Gross Tertiary Enrolment

Significant improvements have been recorded in the educational attainment of the population aged 3 years and above. The proportion of the population aged 3 years and above that had never attended school by 2007 is about a third of the proportion in 2000 (Table 4.1). An increasing proportion of the population has attained primary education, junior secondary/middle education and senior secondary education (Table 4.1). An increasing proportion of children are receiving pre-school education.

Table 4.1 includes persons who did not complete a level of education and does not reveal anything about the quality of education received. This is a missing dimension of both the MDG indicators and the HDI. GPRS II is concerned with not only increasing the numbers enrolled in school but is also improving the quality of education. The goal for education during the 2002-2004 plan period of Offinso District was to ensure quality teaching and learning. In the Medium-Term Development Plan for 2006-2009, it is expected that enrolment rates in basic schools will increase by 80 percent while the success rate in the Basic Education Certificate Examination (BECE) will improve by 60 percent by the end of the plan period.

Table 4.1: Level of Education Attained by Population Aged 3 years and Above

Level of Education Attained	2000	2003	2007
No education	41.7	28.9	15.8
Pre-school	4.1	7.6	13.4
Primary	22.1	23.5	28.8
Junior Secondary	24.2	13.0	19.2
Middle School		16.3	9.9
Senior Secondary	4.7	2.5	6.2
Secondary - Old System		2.5	0.8
Vocational/Technical/Commercial	0.9	2.8	1.1
Agriculture/Nursing/Teacher training	1.62	0.78	2.21
Tertiary	0.79	1.21	0.70

Notes: In 2000, the proportion that had attained junior secondary school level contains those who had attained middle school and the proportion that had attained senior secondary level contains those who had Attained 'O' Levels or 'A' Levels.
Source: Ghana Statistical Service: 2000 Population and Household Census, CWIQ Survey 2003, ISSER 2007 Household Survey

Both the MDG indicators and the knowledge indicators of the HDI are output and/or outcome indicators. The process of attaining these outputs or outcomes is fundamental to progress in achieving the MDGs or improving on the HDI. The next section provides information on some of the inputs that are important in influencing progress towards achieving the MDGs and in improving on the human development of the population.

Education Infrastructure

The 2006-2009 Medium-Term Development Plan for the district highlights two infrastructure issues that require attention. These are lack of accommodation for teachers and inadequate school infrastructure. The discussion on education infrastructure will focus on school buildings and the facilities within schools.

The Number of Schools

Offinso is endowed with schools providing education up to the teacher training level (Table 4.2). The number of kindergartens, primary and junior secondary schools in the district has increased since 2000/1 (Table 4.2). Two additional senior secondary schools were opened in the district in 2004/5 and the district had four technical/vocational schools.

Table 4.2: Educational Institutions in Offinso District

Total	Pre-School	Primary	Junior Secondary	Senior Secondary	Technical & Vocational	Teacher Training
2000/1	60	103	50	5	4	1
2001/2	62	108	53	5	4	1
2002/3	63	112	55	5	4	1
2003/4	67	111	56	5	4	1
2004/5	77	118	64	5	4	1
2005/6	77	119	66	5	4	1
2006/7	77	119	67	5	4	1

Source: Offinso Education Directorate

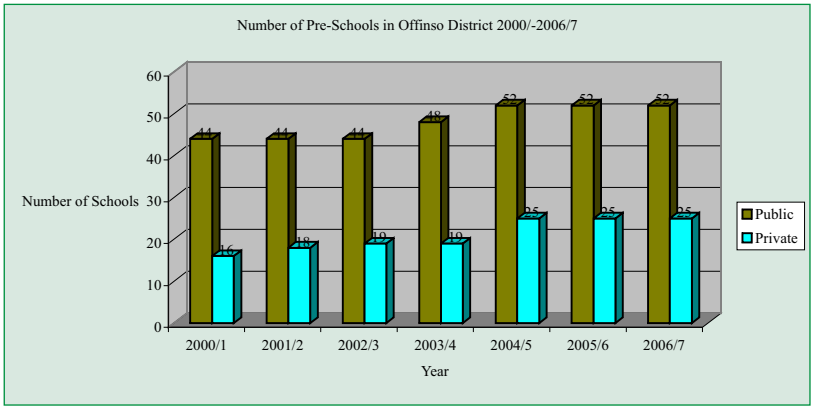
Both the private and public sector are involved in the provision of basic education in Offinso District. There has been a faster expansion in the number of private schools compared to public schools in the period since 2000/1 (Figure 4.1). The ratio of public to private primary schools declined from about 7:1 in 2000/1 to 4:1 in 2006/7 whilst the ratio for junior secondary schools declined from 9:1 to 3:1 during the same period. Private sector participation is most pronounced in the provision of kindergartens, where the ratio of public to private schools declined from 3:1 in 2000/1 to 2:1 in 2006/2007.

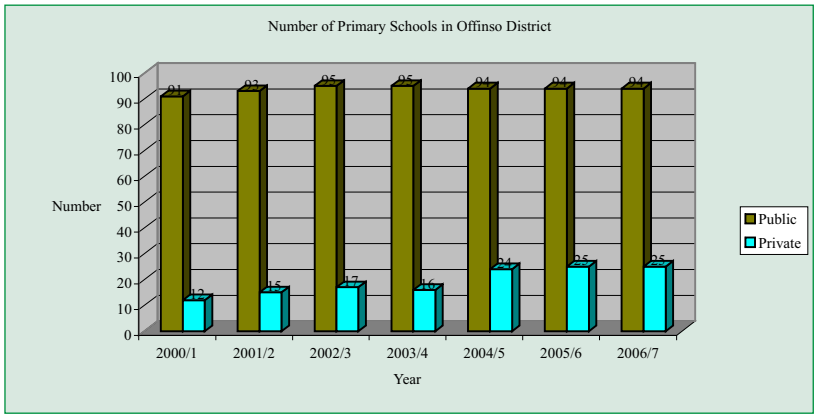
The relative importance of the private sector in the provision of pre-school education compared to other levels of basic education is also evident in the private school share of enrolment (Figure 4.2). There was a three percentage point decline in the share of private schools in primary enrolment in 2005/2006 when the capitation grant was introduced. This was due largely to a relatively greater increase in enrolment in public schools that year.

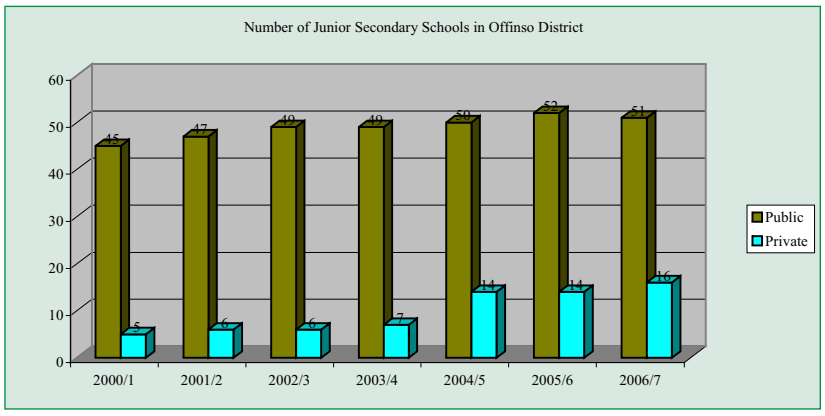
Provision of School Inputs

The availability of toilet facilities and clean drinking water in schools is important in providing a comfortable learning environment for the child. Lack of toilet facilities within the school may mean that the child and teachers will have to leave the school premises when the need arises. This can provide the opportunity for truancy in the case of children and reduce the number of teacher contact hours. In addition, the cleanliness of the school's environs could be compromised. Not all the public primary or junior secondary schools in the Offinso District have toilet facilities or clean drinking water (Table 4.3). The proportion of primary and junior secondary schools with toilets did not improve between 2001 and 2006. There was an increase, however, in the number of schools with clean drinking water.

Figure 4.1: Number of Private and Public Schools in Offinso District

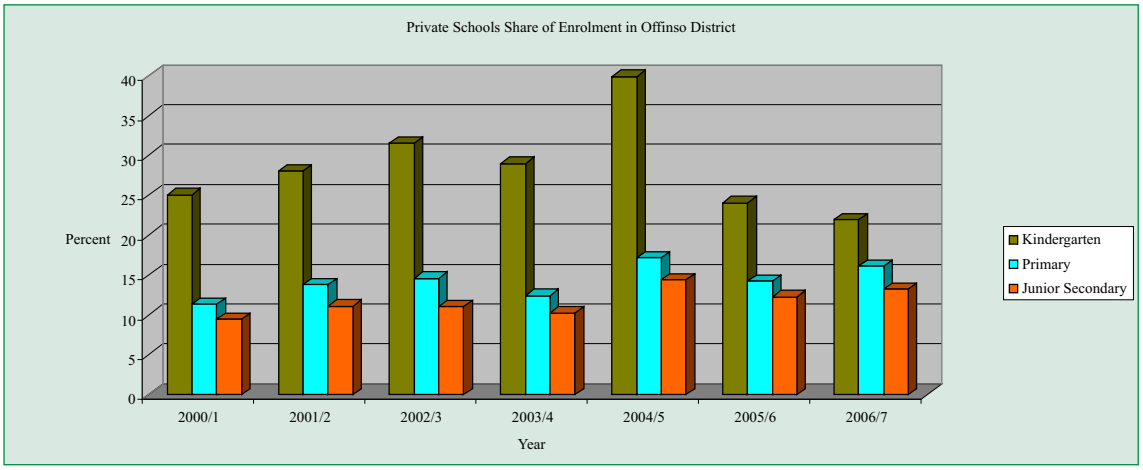






Source: Offinso Education Directorate

Figure 4.2: Share of Private Schools in Enrolment in Offinso District



Source: Offinso Education Directorate

The Quality of Education

The quality of education in Offinso District can be assessed by examining trends in education sector inputs and outputs. Inadequate school furniture was identified as a priority issue in the 2002-2004 Medium-Term Development Plan of the district and remains a priority during the plan period of 2006-2009.

Table 4.3: School Facilities in Offinso District.

PUBLIC-PRIMARY

Year	Percent of Schools with toilets	Percent of Schools with Potable Water	Core Textbook Ratio	Ratio of students to seating/writing places
2001/2002	79.6	35.5	1.8	1.4
2002/2003	70.5	58.9	1.4	1.1
2003/2004	68.4	65.3	1.3	1.9
2004/2005	70.2	61.7	1.0	1.5
2005/2006	70.2	63.8	1.3	3.1

PUBLIC-JUNIOR SECONDARY

Year	Percent of Schools with toilets	Percent of Schools with Potable Water	Core Textbook Ratio	Ratio of students to seating/writing places
2001/2002	80.9	40.4	3.1	0.9
2002/2003	75.5	65.3	2.7	1.3
2003/2004	73.5	73.5	2.5	2.4
2004/2005	72.0	60.0	2.1	2.0
2005/2006		59.6	1.4	1.2

Source: Offinso Education Directorate

School Learning Materials

The target ratio for core textbooks per pupil for primary schools is 3:1. The district has been moving away from this target since 2001/2 academic year (Table 4.3). In addition, the provision of seating and writing places in public primary and junior secondary schools is inadequate. In 2005/2006, with the almost 9 percent increase in enrolment that accompanied the introduction of the school capitation grant, the ratio of pupils to seating and writing places in primary school deteriorated.

Teaching Staff

One of the strategies of the 2002-2004 Medium-Term Development Plan was to ensure that all levels of education were provided with qualified teachers. Very little progress has been made in improving the proportion of trained teachers in public pre-schools or primary schools (Table 4.4). The increases in the number of trained teachers in the public primary schools in the district between 2002 and 2004 were not maintained. The proportion of trained teachers in public schools dropped in 2006/2007 academic year. This is due to the relatively larger intake of untrained teachers compared to trained teachers that year. Public schools have a higher proportion of trained teachers than private schools at all levels of basic education (Table 4.4). There has been no significant improvement in the proportion of trained teachers in private schools since 2000/1 academic year. The target set for the share of trained teachers at primary level was set at 83.1 percent in GPRS I. This target had been exceeded in public schools in the district even prior to the onset of the GPRS. However, a slippage occurred in 2006/7 academic year. Private schools are far below this target.

Table 4.4: Teaching Staff in Offinso District

	Public					Private				
Kindergarten	Number Trained	Number Untrained	Total	Trained as % of Total	Pupil teacher ratio	Number Trained	Number Untrained	Total	Trained as % of Total	Pupil teacher ratio
2000/1	40	98	138	29.0	21					
2001/2	49	96	145	33.8	19	2	31	33	6.06	33
2002/3	49	97	146	33.6	20	2	61	63	3.17	21
2003/4	53	37	90	58.9	38	4	37	41	9.76	34
2004/5	55	96	151	36.4	22	8	73	81	9.88	27
2005/6	67	103	170	39.4	31	2	40	42	4.76	40
2006/7	84	160	244	34.4	30	2	49	51	3.92	40
Primary										
2000/1	541	92	633	85.5	29					
2001/2	523	108	631	82.9	29	8	81	89	8.99	33
2002/3	529	102	631	83.8	30	15	103	118	12.71	28
2003/4	525	93	618	85.0	31	13	80	93	13.98	29
2004/5	504	99	603	83.6	32	10	124	134	7.46	30
2005/6	510	104	614	83.1	36	13	113	126	10.32	29
2006/7	872	238	1110	78.6	22	8	145	153	5.23	30
Junior Secondary										
2000/1	317	23	340	93.2	17					
2001/2	333	29	362	92.0	16	6	27	33	18.18	23
2002/3	343	28	371	92.5	17	2	36	38	5.26	20
2003/4	335	26	361	92.8	18	8	45	53	15.09	14
2004/5	342	26	368	92.9	17	13	68	81	16.05	13
2005/6	363	22	385	94.3	19	11	57	68	16.18	16
2006/7	366	97	463	79.0	17	7	78	85	8.24	14

Source: Offinso Education Directorate

The number of teachers in the district has increased since 2000/1 academic year in both the public and private schools. The pupil-teacher ratio in both public and private primary schools in 2006/7 is below the national target ratio of 33:1 (Table 4.4).

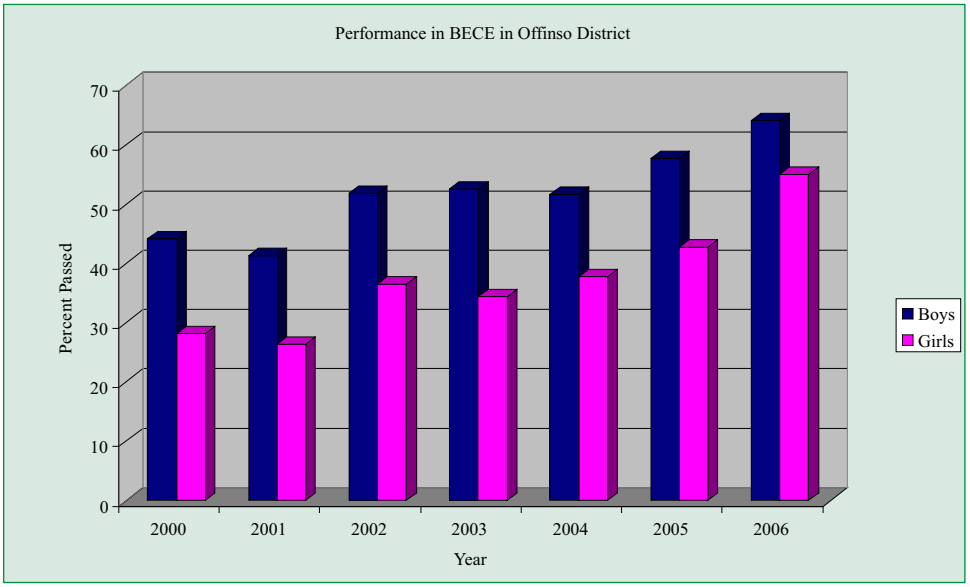
Performance in Basic Education Certificate Examination (BECE)

Performance in external examinations will be used as another measure of the quality of education. The performance of students in Offinso District in the Basic Education Certificate Examination (BECE) improved between 2000 and 2006. From a pass rate of 37.3 percent in 2000, the proportion of pupils that passed the BECE in 2006 increased to 60.4 percent.

compared to girls, the gap between boys and girls has narrowed from 16.1 percentage points in 2000 to 9.1 percentage points in 2006 (Figure 4.3).

The analysis of the 2006 results by type of school reveals that the performance of private schools (88.9 percent pass rate) was much better than that of public schools (55.7 percent pass). This raises questions about the quality of education provided in the public schools. In some rural communities, parents are unhappy about the quality of education. They complain that the children do not do well in examinations. The public schools have a higher proportion of trained teachers than the private schools. This does not translate into better performance of public school candidates in the BECE. However, students in private schools in the

Figure 4.3: Performance in Basic Education Certificate Examination, 2000-2006



Source: Offinso Education Directorate

The performance of girls, as measured by the proportion of girls that pass the BECE, is quite encouraging. Although a larger proportion of boys pass the examination

period 2000-2006 have tended to have more access to core textbooks than pupils in public schools.

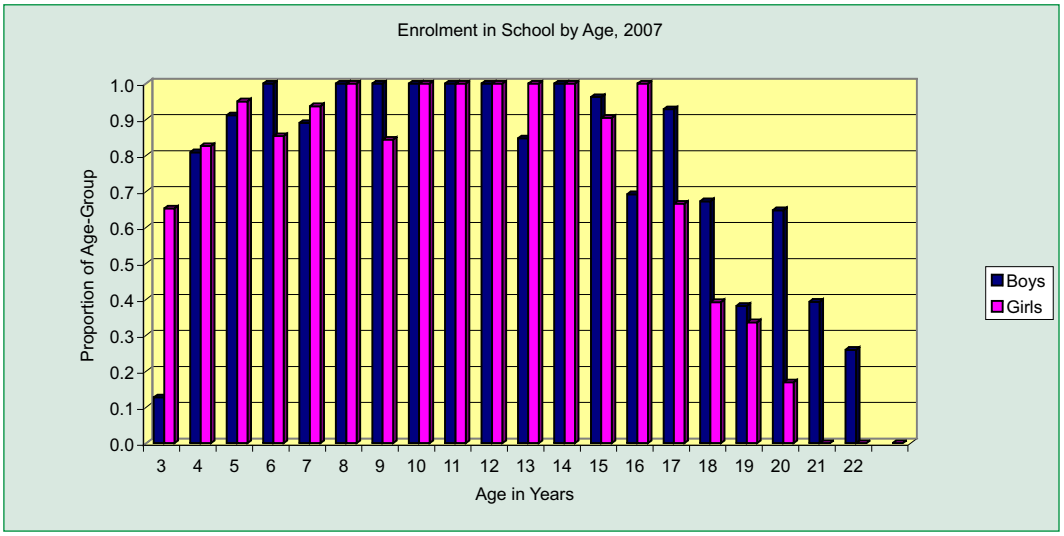
Enrolment

Enrolment in school among children aged 3 - 14 years is high in 2007. Indeed, almost all children between the ages of 8 and 14 years are in school (Figure 4.4). Attendance in school drops sharply after 16 years for girls and 17 years for boys (Figure 4.4).

Despite the high incidence of enrolment in schools in Offinso, the discussion below on gross and net enrolment rates at the different levels of education will show that these rates tend to be relatively lower than expected. This is largely because of the late entry into school. The average age of children in pre-school in 2007 is 5 years, whilst the average age of pupils in primary school is 10.5 years. About 36 percent of pupils enrolled in primary school in 2007 are more than 11 years old. The average ages of students in junior secondary and senior secondary in 2007 are 15 years and 18.5 years respectively. Thus the average age of students in junior and senior secondary in the district exceeds the officially recommended maximum ages of 14 and 17 years respectively.

Children are likely to start school late if they have to travel long distances to school. In one of the villages visited, parents complained about the long distances children had to walk and explained that this was one of the reasons the children were not in school. They felt more comfortable sending the children to school when they are older and can look after themselves better.

Figure 4.4: Enrolment in School, by Age

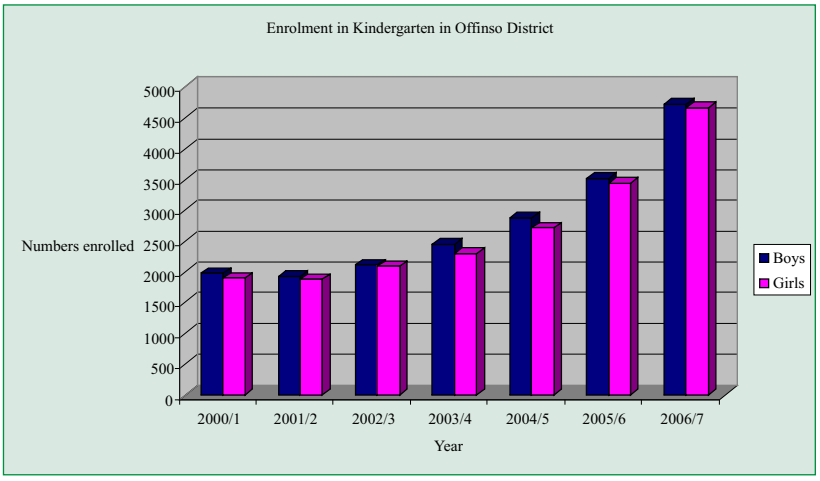


Source: ISSER Household Survey, 2007

Pre-School

Enrolment of both boys and girls in kindergartens in the district has risen at an accelerating rate (Figure 4.5). The gap between the numbers of boys and girls is relatively insignificant and has remained fairly stable in the period 2000/1 to 2006/7 (Figure 4.5). The pre-school gross enrolment rate increased between 2003 and 2007 and is estimated at 120 percent in 2007.

Figure 4.5: Enrolment in Pre-School



Source: Offinso Education Directorate

Primary School

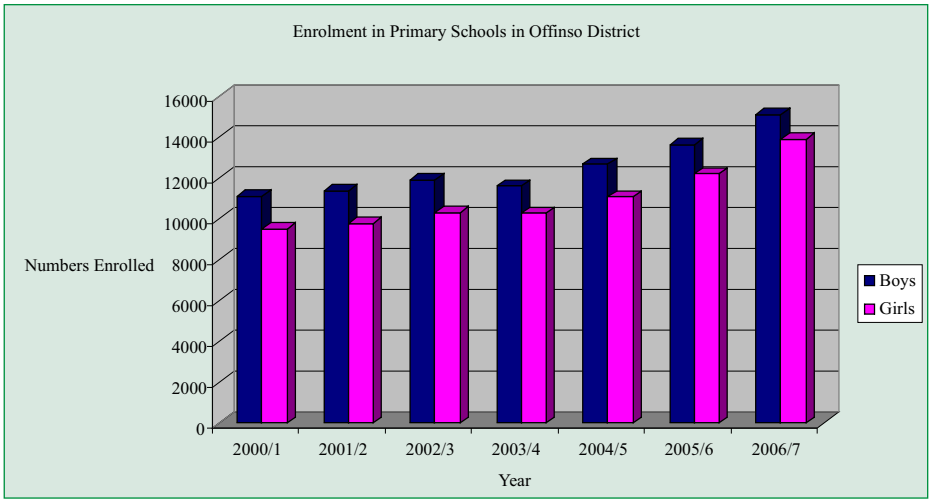
There has been an accelerating rate of increase in primary school enrolment in the district from 2000/1 to 2006/7 (Figure 4.6).[13] However, the rate of increase in primary school enrolment is not as rapid as in kindergarten. The gap between the number of enrolled girls and boys is wider than in kindergarten, but has narrowed over time. Data on enrolment from the District Education Directorate show that gross enrolment rates rose between 2000 and 2006 for both boys and girls (Table 4.5). The GPRS I 2004/2005 target of 88.5 percent was overshot in 2006/7 as was the GPRS I target of 88.5 for gross enrolment rates for girls. The gender parity index that measures the ratio of the gross enrolment rate of girls to boys has risen since 2000/1 academic year and is estimated at 0.941 in 2006/2007 (Table 4.5). It still falls short of the GPRS I target of unity by 2004/2005.

Data from the household surveys conducted by the Ghana Statistical Survey in 2003 and ISSER in 2007 suggest that gross primary enrolment rates increased among the urban population but declined in the rural areas.

Net enrolment rates in the district are still low and not much progress appears to have been made towards universal primary enrolment (Table 4.6). In 2007, approximately 4 percent of the children aged 6-11 years had never attended school at the time of the survey and 27 percent of them were in pre-school.

[13] The academic year 2003/4 was the exception to this upward trend when enrolment declined

Figure 4.6: Enrolment in Primary Schools



Source: Offinso Education Directorate

Table 4.5: Gross Enrolment Rates (%)

	Primary				Junior Secondary			
	All	Boys	Girls	Gender Parity Index	All	Boys	Girls	Gender Parity Index
2000	83.9	89.5	78.3	87.5	62.1	66.8	57.6	86.1
2001	83.7	89.1	78.3	87.9	63.7	68.3	58.8	86.1
2002	85.9	90.9	80.4	88.5	64.2	69.1	60.2	87.0
2003	82.0	86.3	78.1	90.4	63.6	68.3	59.0	86.4
2004	86.6	91.8	82.0	89.3	65.1	71.0	59.4	83.6
2005	92.1	96.0	87.9	91.5	76.3	76.7	67.1	87.4
2006	99.9	103.6	97.4	94.1	74.7	80.5	69.4	86.2

Source: Offinso Education Directorate

Junior Secondary

Expansion in enrolment in junior secondary schools in the district has not been as rapid as at the lower levels of basic education. The gap between the numbers of enrolled boys and girls is wider at this level of education than at primary and kindergarten level (Figure 4.7). Data from the Offinso Education Directorate shows that gross enrolment rates increased between 2000 and 2007 for both boys and girls. The gender parity index has remained fairly constant over the period (Table 4.5). Most if not all children between the ages of 8 and 14 years are in school. Thus, the gross junior secondary enrolment rates are lower than gross primary enrolment rates largely because of the late entry into primary school. The difference between net and gross junior secondary enrolment rates can also be explained largely by late entry into school (Table 4.6).

Household-level data reveal lower gross and net enrolments in rural communities compared to the urban communities.

Table 4.6: Gross and Net Enrolment Rates (%)

Gross Enrolment Rates

	Pre-School		Primary		Junior Secondary		Senior Secondary		Tertiary	
	2003	2007	2003	2007	2003	2007	2003	2007	2003	2007
All	76.9	122.2	111.2	101.3	76.2	81.6	31.8	46.4	3.0	3.8
Boys	75.8	114.2	120.7	108.3	89.8	78.1	32.4	53.1	4.6	3.0
Girls	77.9	130.1	103.9	94.8	61.3	84.2	31.1	38.7	1.6	4.5
Urban	86.2	149.3	110.4	114.4	84.3	127.3	62.5	64.2	2.3	2.7
Rural	72.2	111.7	112.9	95.9	72.7	54.0	16.9	36.3	3.5	4.8

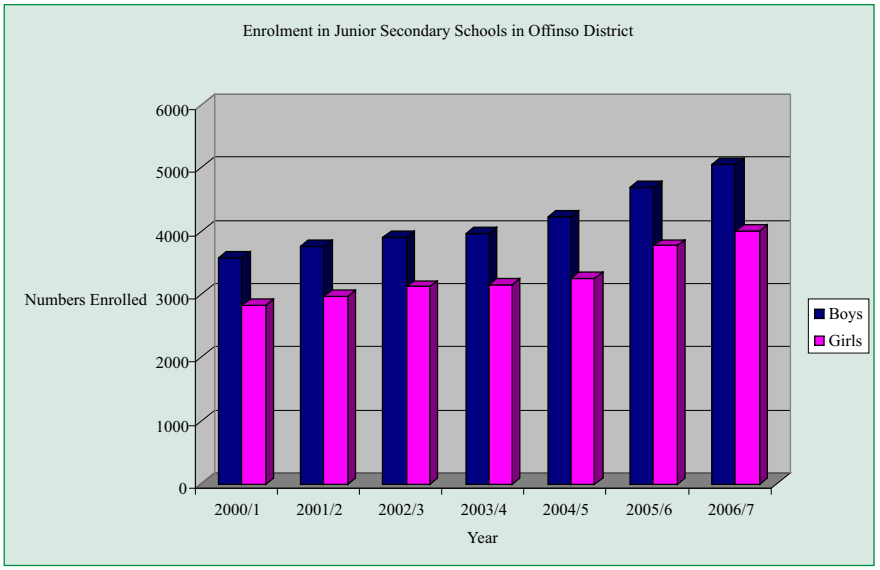
Net Enrolment Rates

	Pre-School		Primary		Junior Secondary		Senior Secondary		Tertiary	
	2003	2007	2003	2007	2003	2007	2003	2007	2003	2007
All	44.5	71.0	70.8	64.3	25.8	31.3	10.3	14.7	1.0	2.7
Boys	45.0	63.5	66.9	66.0	28.8	11.9	6.3	8.8	2.0	3.0
Girls	44.0	74.9	74.9	62.8	22.6	45.6	15.0	18.0	0.0	2.4
Urban	58.6	79.7	81.3	65.3	28.1	40.7	20.2	16.8	0.0	2.7
Rural	37.3	67.6	66.1	63.9	24.9	24.5	5.5	12.2	1.6	2.6

Pre-school enrolment rates are calculated for the population aged 3-5 years
Primary enrolment rates are calculated for the population aged 6-11 years
Junior secondary enrolment rates are calculated for the population aged 12-14 years
Senior secondary enrolment rates are calculated for the population aged 15-17 years
Tertiary enrolment rates are calculated for the population aged 18 -24 years

Source: Ghana Statistical Service, Core Welfare Indicators Questionnaire 2003, Accra and ISSER, Household Survey 2007, Accra

Figure 4.7: Enrolment in Junior Secondary



Source: Offinso Education Directorate

Senior Secondary

Gross senior secondary enrolment rates are estimated to have risen from 32 percent in 2003 to 46 percent in 2007 (Table 4.6). The gross enrolment rates of boys and girls were almost equal at 32.4 percent and 31.1 percent respectively in 2003, but appear to have widened in 2007 (Table 4.6). Rural enrolment in senior secondary schools rose quite sharply between 2003 and 2007. During focal group discussions in some of the communities, it was established that the opening of two senior secondary schools in the district had encouraged enrolment.

Net enrolment rates cover enrolment for people of the appropriate age group (15-17 years) in senior secondary. Net enrolment rates in senior secondary schools in the district are low but increased between 2003 and 2007 (Table 4.6). Net enrolment rates are higher among girls than among boys and this is largely because of the significantly high net enrolment rates among urban girls.

Net enrolment rates are higher among the urban population than among the rural population and this holds true for both boys and girls. The low enrolment rates at this level are explained largely by children failing to continue their schooling after the BECE and late entry into school.

Tertiary Education

The estimate of tertiary enrolment rates includes enrolment in teacher training and nursing colleges. Gross enrolment rates in 2003 were low at 3 percent and are estimated to have risen slightly to about 4 percent in 2007 (Table 4.6). The gross enrolment rate of women increased between 2003 and 2007 whereas there was a slight drop in the gross enrolment rate of men. The gross enrolment rate of the rural population was higher than that of the urban population in both 2003 and 2007 (Table .46).

The net tertiary enrolment rate in the district is low, rising from 1 percent in 2003 to 2.7 percent in 2007 (Table 4.6). The increase in net enrolment rates is due largely to an increase in the net enrolment rates of women. Apart from measurement errors, the zero net enrolment rate for women in 2003 may be because residents in the district who are enrolled in tertiary institutions may be above the target age group.

Adult Literacy

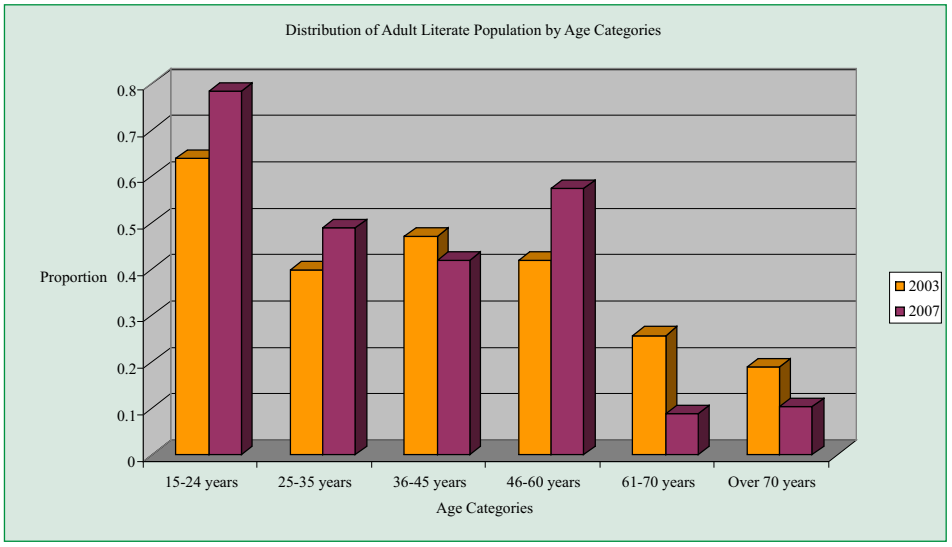
Adult literacy programmes are run by the Non-Formal Education Unit. Several of the communities visited reported functioning programmes. In some communities, about three such programmes had been held in the past 12 months. In other communities visited, however, adult literacy programmes do not function very well. In Namong, this was attributed to lack of interest from the residents. The programme is in the process of being reorganised. In Akokrakrom, the adult literacy programme collapsed largely due to dissatisfaction with the programme.

The proportion of the population aged 15 years and above that can read and write in any language has increased since 2000. Approximately 55 percent of the adult population is literate in 2007 compared to 48 percent in 2003. The gap in the literacy rate between men and women widened between 2000 and 2007 (Table 4.7). Most of the improvement in literacy occurred among the population aged 15-24 years and 25-35 years (Figure 4.8).

The literacy rate is higher among the urban population. However, between 2003 and 2007 larger improvements in literacy are recorded among the rural population than among the urban population.

The literacy rate among the population aged 15-24 years is higher than it is for the entire adult population. In contrast to the total adult population, the gap in the literacy rate between women and men has narrowed (Table 4.7).

Figure 4.8: Trends in Adult Literacy



Source: Ghana Statistical Service: CWIQ Survey 2003 and ISSER 2007 Household Survey

Table 4.7: Adult Literacy Rates (%)

	All Adults			15-24 year olds		
	2000	2003	2007	2000	2003	2007
All	49.1	47.7	55.3	62.9	64.1	78.4
Men	56.9	61.6	71.5	69.0	71.9	83.2
Women	41.6	35.3	43.8	57.0	56.0	74.1
Rural	46.7	43.0	53.1	60.9	60.3	74.3
Men	53.9	57.4	71.2	67.4	67.3	84.3
Women	39.7	29.5	41.0	54.4	52.5	65.8
Urban	54.2	56.8	58.9	67.2	70.6	83.8
Men	63.5	70.1	71.9	72.2	81.5	81.9
Women	45.6	45.7	49.0	62.4	61.4	85.5

Source: Ghana Statistical Service: 2000 Population and Household Census, CWIQ Survey 2003, ISSER 2007 Household Survey

Vulnerability and Education

Interruptions in school attendance can disrupt the child's ability to understand his or her lessons and can increase the likelihood of a child dropping out of school. In Offinso District about 47 percent of pupils in school aged between 3 and 24 years missed school at least once during the 2006/2007 academic year. A not insignificant proportion of children in the district may be described as having a high risk of not completing school.

About half the girls in this age group had missed some school days compared to 44 percent of the boys. Almost half the children aged 6 to 11 years and 12 to 17 years missed some school days (Table 4.8). The incidence was higher among rural children than it was among urban children.

Of those who had missed some school days during the last term the frequency was highest among children aged 6 to 11 years and 12 to 14 years. Urban children were less likely to miss a day of school and when they did, the frequency was lower than that of rural children (Table 4.8). Boys were more likely to miss a school day than were girls.

Most children missed some days at school because of ill-health (Table 4.9). In less than 20 percent of cases were financial reasons used to explain children missing some days of school. In no instance was it reported that a child was not able to attend school because he or she was needed at the farm or at the shop or to work in the home. About 10 percent of children missed some days from school because they found school uninteresting. In one of the rural villages, parents were disillusioned with the poor quality of education services and poor performance of their children at examinations.

Table 4.8: School Attendance (%)

Age	Percent that missed	Once	Twice	Thrice	Several Times
3 to 5 years	45.8	10.7	29.4	15.9	44.0
6 to 11 years	49.0	15.9	17.5	34.3	32.3
12 to 14 years	49.8	20.8	15.6	36.3	27.3
15 to 17 years	43.6	28.0	26.0	31.1	14.9
18 to 24 years	41.8	57.9	23.7	0.0	18.4
Rural	51.6	19.8	20.9	26.8	32.5
Urban	38.9	26.1	24.0	29.2	20.7
Boys	44.0	13.5	26.1	23.8	36.7
Girls	50.1	27.2	16.3	32.5	24.0
Total	47.1	20.8	20.9	28.4	29.9

Source: ISSER, 2007 Household Survey

Table 4.9: Reason for Not Attending School (% of Children Who Missed School)

	6 to 11 years			12 to 17 years		
	All	Rural	Urban	All	Rural	Urban
Ill health	63.7	61.8	71.3	73.7	73.2	75.0
No money to pay fees and other fines	17.7	18.1	16.2	19.9	17.7	25.0
Child not interested	10.2	9.6	12.5	6.4	9.2	0.0
Bad weather	4.4	5.5	0.0	0.0	0.0	0.0
Could not get transport	2.2	2.7	0.0	0.0	0.0	0.0
No furniture	1.8	2.3	0.0	0.0	0.0	0.0

Source: ISSER, 2007 Household Survey

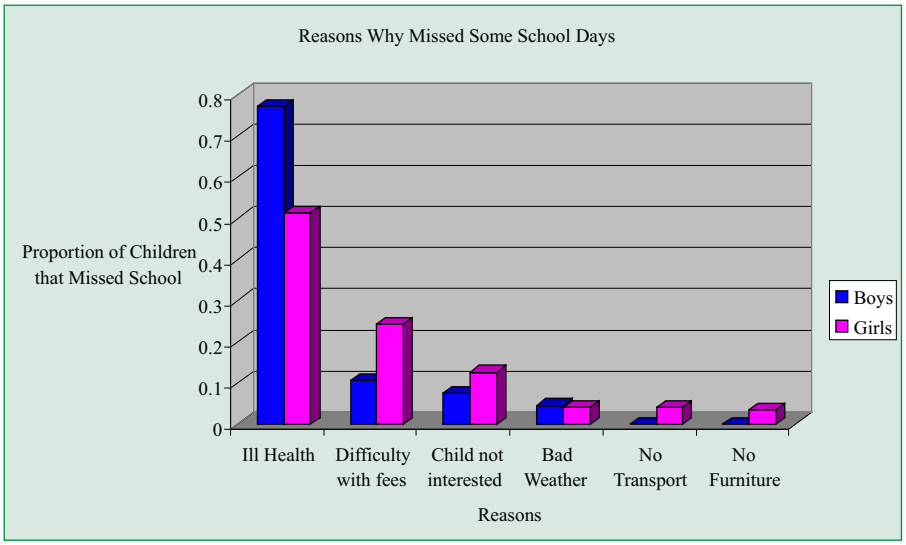
Boys aged 6-11 years are more likely than girls to have missed some school days because of ill-health (Figure 4.9). A significantly higher proportion of girls in that age group missed some days of school because of some difficulty in paying fees and other school expenses and because they were not interested in attending school.

Less than 4 percent of children who are reported to have missed some days at school were not back in school. Three of them were aged 6 to 11 years, one was 3 to 5 years old and the other was over 17 years old.

Conclusion

Almost all the knowledge components of the human development index (i.e. adult literacy and the gross primary, secondary and tertiary enrolment rates) have improved in Offinso District since 2000. Gross primary and junior secondary enrolment in rural communities declined between 2003 and 2007. The gap between the adult literacy rate of women and men widened in 2007 to 27 percentage points compared to 15 percentage points in 2000.

Figure 4.9: Reasons for Missed School Days: Children Aged 6-11 Years



Source: ISSER, 2007 Household Survey

Progress towards attaining the education-specific MDGs is mixed. Although the primary gross enrolment rate is high, not much progress has been made towards attaining universal primary education as measured by the net enrolment rates. This is largely because of late entry into primary 1 in the district by more than half of the children. More progress has been made under the other indicator of universal primary education, namely the literacy rates among the population of 15-24 year olds.

The third MDG set 2005 as the target date for the attainment of gender parity in primary and secondary education. This has not been achieved. However, gender empowerment as measured by the gender parity index at the primary level of education has increased while the gender parity index at junior secondary level has not changed. The constancy of the ratio, however, masks improvements in the female junior secondary gross enrolment rate since 2000.

The high incidence of irregular school attendance because of illness introduces the risk of children not completing school. The environment in the district may be described as creating health hazards because of the unsafe methods of waste disposal. About a third of the households in the district do not take any particular measures to protect themselves against malaria. It is, therefore, not surprising that ill-health is the most frequently given reason why children miss some days at school. Thus, failure to make progress on other MDGs can create conditions to compromise the attainment of the MDGs on education.

Almost all children in Offinso District can now expect to have attended school during some time of their lives. The challenge the district faces is to ensure that children complete at least nine years of basic education and receive quality education.

CHAPTER FIVE

HEALTH, SANITATION AND WATER

Picture 5.1: A bolehole water pump

Introduction

In the prioritisation of problems in the Offinso District during the preparation of the Medium-Term District Development Plan (2006-2009), several health, sanitation and water issues were raised and several of them received the highest ranking in terms of importance. The high priority issues of health and sanitation identified in the plan are inadequate supply of potable water, poor access to affordable health care, inadequate toilet facilities and inadequate health facilities. On the basis of these identified priorities, the plan has four goals that address health and sanitation issues. These are: to improve access to quality health care by 90 percent, reduce the incidence of malaria by 95 percent, reduce the incidence of HIV/AIDS by 80 percent, expand the coverage of potable water and improve on the capacity to implement environmental projects.

These goals of the Medium-Term Development Plan, if achieved, will contribute to improving life expectancy at birth in the district as well as accelerating progress towards achieving the health-related Millennium Development Goals (Box 5.1). The MDGs include six targets that involve health, water and sanitation. Achievement of these targets will improve life expectancy at birth in the district.

Health Infrastructure

The district in 2007 is served by13 health institutions. Both the private and public sector are involved in the provision of health care in the district. The district has a government and a mission hospital. In addition, there are three health centres and nine clinics. In 2006, a government clinic was upgraded to a health centre and a private clinic was established.

There has therefore been no significant change in the number of health institutions in the district since 2000. This suggests that physical access to modern health care has not improved in the district. In the absence of health facilities, some communities have improvised their own. The nearest hospital to Sarfokrom, a rural community in the district, is 25 kilometres away and the road needs rehabilitation. Thus the residents of the village have created a makeshift maternity ward out of an abandoned cocoa shed. The traditional birth attendant who lives in the village supervises deliveries.

Table 5.1: Health Institutions in Offinso District

	2000	2001	2002	2003	2004	2005	2006
Health Institutions							
Hospitals	2	2	2	2	2	2	2
Health Centres	2	2	2	2	2	2	3
Clinic	7	7	8	8	8	8	8
Health Workers							
Doctors	6			3	4	10	10
Nurses	71			83	85	96	
Pharmacists	2			2	2	2	2

Source: Offinso Health Directorate

Box 5.1: The Millennium Development Goals and Human Development Indicator for Health

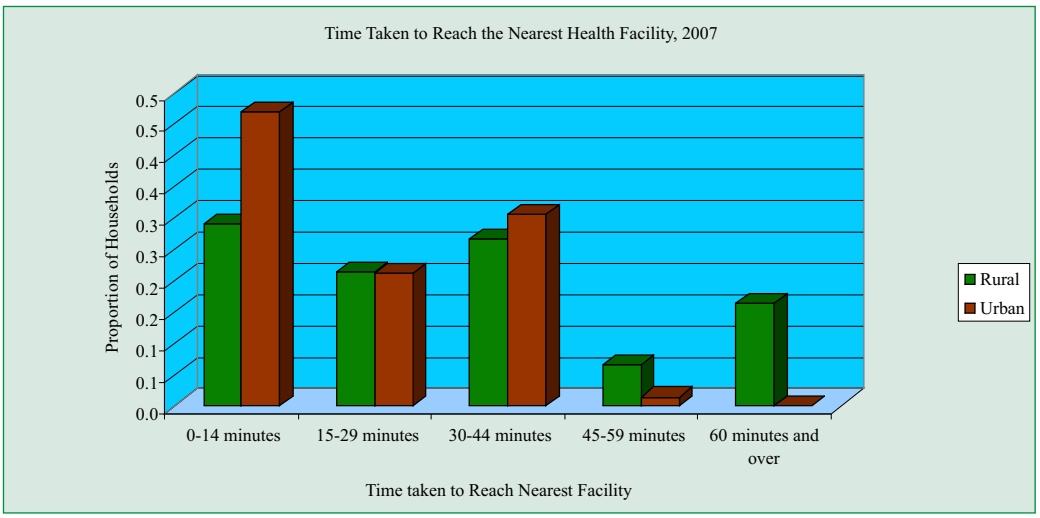
Human Development	Millennium Development Goals
Longevity Improving upon the life expectancy at birth	*Goal 4: Reduce Child Mortality* Target: Reduce by two-thirds, between 1990 and 2015 the under-five mortality rate Indicators: Under -five mortality rate Infant Mortality Rate Proportion of 1 year olds immunised against measles *Goal 5: Improve Maternal Mortality* Target: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio Indicators: Maternal Mortality ratio Proportion of births attended by skilled personnel *Goal 6: Combat HIV/AIDS, malaria and other diseases.* Target: Have halted by 2015 and begun to reduce the spread of HIV/AIDS Indicator :HIV Prevalence among prevalent women aged 15-24 years Condom use rate of the contraceptive prevalence Condom use at last high-risk sex Contraceptive Prevalence Rate Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 year Target: Reduction in prevalence and death rates associated with malaria Indicator : Proportion of population in malaria-risk areas using effective prevention and treatment measures Prevalence and death rates associated with tuberculosis Proportion of tuberculosis cases detected and cured under directly observed treatment short course DOTS *Goal 7: Ensure environmental sustainability* Target: Halve, by 2015, the proportion of the population without access to sustainable access to safe drinking water and basic sanitation Indicator : Proportion of the population with sustainable access to an improved water source, urban and rural. Target: Halve, by 2015, the proportion of the population without access to sustainable access to safe drinking water and basic sanitation Indicator: Proportion of population with access to improved sanitation, urban and rural.

Rural households remain disadvantaged in terms of physical access to health facilities (Figure 5.1). Whereas 67 percent of urban households could reach the nearest health facility in less than half an hour, only 50 percent of rural households could do the same. The economic cost of reaching health facilities is higher for rural households. Eighty-one percent of urban households indicated the nearest health facility could be reached by walking. In contrast, the same proportion of rural households said they reached health facilities by vehicular transport. In two of the communities visited one was a hamlet of cocoa farmers several kilometres from a main road and the other a small town located on the Kumasi-Sunyani road the complaint was that if a person fell ill during the night, access to a health facility was almost impossible if there was no transport.[14]

[14] During the four hours that the team visited Odumase in the Offinso District, only one vehicle drove past the Village. None of the people interviewed in the village owned a vehicle.

Picture 5.2: A Hospital in Offinso

Figure 5.1: Time Taken to Reach Nearest Health Facility



Source: ISSER, Household Survey, 2007

The number of doctors and nurses employed in health facilities in the district has increased. As a result, doctor-patient and nurse-patient ratios have declined. It is estimated that the doctor-patient ratio in 2006 stood at 1:12,298 and the nurse-patient ratio was 1: 1247.[15]

Child and Infant Mortality

Child and infant mortality are critical determinants of life expectancy at birth. Unfortunately the district has limited information on child and infant deaths. The fourth MDG is to reduce child mortality by two-thirds between 1990 and 2015. There are inadequate data to estimate the progress being made towards this goal. The available data suggests that most of the deaths that occur among children are among infants, namely children less than a year old. In 2002, of the 87 deaths recorded by the Offinso District health directorate, 64 were infant deaths. In 2003, 37 of the 68 reported deaths were infant deaths. The household survey conducted in 2007 reveals a similar pattern. Of the 10 deaths that were reported in the 12 months preceding the survey, seven were infant deaths. This brings to the fore the importance of post-natal attendance and the need for parents to provide a hygienic environment for their children that is also free of mosquitoes.

Immunisation coverage improved between 2000 and 2005 in Offinso District. However, in 2005, about 20 percent of the children had not received their DPT (Penta) 3 and OPV 3 shots. Immunisation coverage in the district in 2005 had not attained the GPRS I target of 90 percent.[16]

In addition to mortality rates, another indicator to track progress towards reducing child mortality is the proportion of 1 year-old children immunised against measles. Immunisation coverage for measles did not increase continuously over the period. In 2005, a little fewer than 20 percent of the children who should have been vaccinated were not (Figure 5.2).

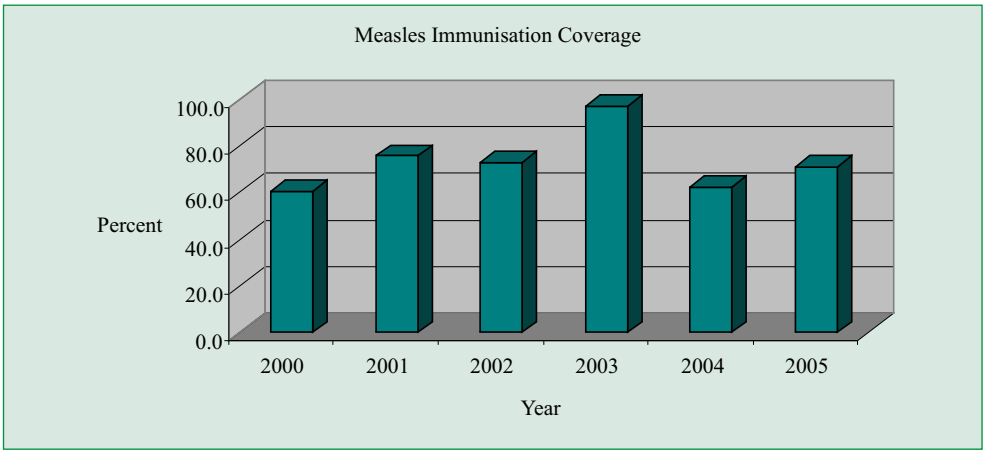
Table 5.2: Immunisation Coverage (%)

Immunisation	2000	2001	2002	2003	2004	2005
BCG	88.8	103.8	107.8	122.0	81.7	100.3
DPT (Penta) 3	66.3	79.0	85.4	101.0	72.0	81.8
OPV 3	66.4	74.4	84.2	101.0	70.6	80.0

Source: Offinso District Health Directorate

[15] This assumes a population growth rate of 2.75 percent since 2000 when the census was conducted.
[16] Republic of Ghana (2005) Implementation of the Ghana Poverty Reduction Strategy, 2004 Annual Progress Report, National Development Planning Commission, Accra, p.105

Figure 5.2: Measles Immunisation Coverage, 2000-2005



Source: Offinso District Health Directorate

Table 5.3: Immunisation Coverage by Location

		Vaccinated against Polio	Vaccinated against Measles
	2003 Urban	91.7	82.9
	Rural	90.7	79.1
	Total	91.0	80.2
	2007 Urban	100.0	100.0
	Rural	97.0	91.1
	Total	97.9	93.5

Source: Ghana Statistical Service: CWIQ Survey 2003 and ISSER 2007 Household Survey

In 2007, measles immunisation coverage is estimated at 100 percent for urban children aged below 5 years, and 91 percent for rural children (Table 5.3). The immunisation campaign teams visited all five communities where focal group discussions had been held.

Maternal Health

Maternal Mortality

An indicator of progress towards achieving the fifth MDG of improving maternal health is the maternal mortality ratio. The incidence of maternal mortality in the district is low. The survey of 200 households in the district in 2007 did not yield any information on deaths during pregnancy or child birth in the preceding 12 months. The number of reported deaths of pregnant mothers was 28 between 2000 and 2004 (Table 5.4).

Table 5.4: Maternal Mortality

	2000	2001	2002	2003	2004
Number	7	6	6	8	1

Source: Offinso Health Directorate

Supervised Deliveries

A second indicator of progress made in improving maternal health is the proportion of births attended by skilled health personnel, namely doctors, nurses or midwives. The proportion of mothers attended to by skilled health professionals during childbirth increased between 2003 and 2007. Indeed, the proportion of supervised births in the district exceeds the 55 percent national target (Table 5.5). There was a substantial increase in the proportion of mothers reporting that their child had been delivered by a doctor. At the same time, there was a drop in the number of mothers attended to by traditional birth attendants. None of the mothers residing in urban areas in 2007 reported being attended to by traditional birth attendants. By 2007, the proportion of rural mothers attended to by skilled health professionals rose from 41 percent to 66 percent.

Attendance at Ante- and Post-Natal Clinics

The health of the mother and access to medical care during pregnancy and childbirth are important determinants of the incidence of infant and maternal mortality. In Offinso District, attendance of mothers at ante-natal clinics is high. About 95 percent of women who had live births in the 12-month period prior to the surveys in 2003 and 2007 had attended ante-natal clinic (Table 5.5). However, when coverage is extended to women who were pregnant in the last 12 months (thus including women who were yet to deliver and women who had had stillbirths or lost the pregnancy), the proportion that had attended ante-natal clinic declines to 81 percent in 2007. The incidence of ante-natal clinic attendance is higher among urban women.

Table 5.5: Proportion of Women Who Attend Pre- and Post-Natal Care

	Women with live births		Pregnant women
	2003	2007	2007
Pre-natal care	95.5	94.6	80.9
Rural	97.2	93.5	80.1
Urban	91.3	100.0	82.9
Post-natal care	68.6	89.1	
Rural	62.2	86.7	
Urban	84.1	100.0	
Child delivered by:			
Doctor	3.3	16.6	
Rural	0.0	10.1	
Urban	11.7	46.8	
Nurse	50.8	55.3	
Rural	40.6	55.7	
Urban	76.3	53.2	
Traditional birth Attendant	36.5	28.1	
Rural	46.3	34.1	
Urban	12.0	0.0	
Other/self	9.3		
Rural	13.1		

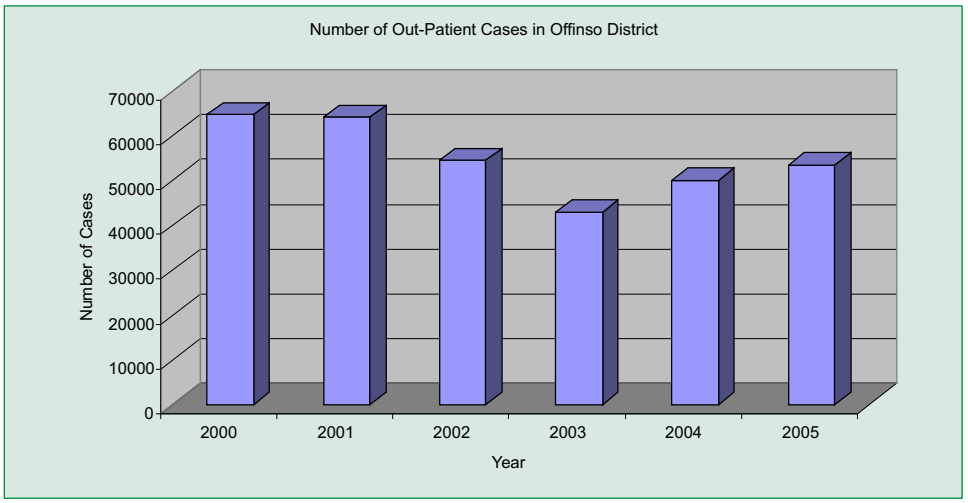
Source: Ghana Statistical Service: CWIQ Survey 2003 and ISSER 2007 Household Survey.

Attendance at post-natal clinics is lower than attendance at ante-natal clinics (Table 5.4). The household survey data suggests that post-natal clinic attendance has increased significantly since 2003.

Morbidity and Mortality in the District

Out-patient attendance at health facilities in the district declined from 2000 until 2003 (Figure 5.3). The numbers attending the facilities increased in 2004 and 2005 but remained below the 2000 figures. It may be hasty to conclude that the drop in attendance implies a decline in morbidity. The decline in out-patient cases in district health facilities may be the result of the decision to by-pass these facilities and access facilities in Kumasi, the regional capital, which is an hour's drive away from the district capital.

Figure 5.3: Out-Patient Attendance in Offinso District



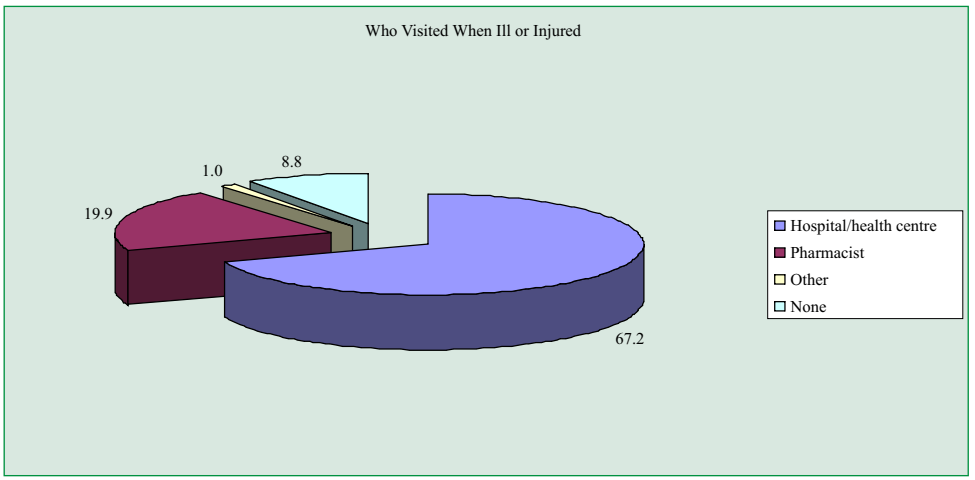
Source: Offinso Health Directorate

Approximately 31 percent of the population reported that they had suffered from some form of illness or injury in the three months preceding the interview in 2007. Approximately 8 percent indicated that they did not consult any health personnel when ill. The majority visited a hospital or health centre (Figure 5.4).

Malaria

HIV/AIDS, malaria and other diseases are the focus of the sixth MDG. With respect to malaria, the target is to have halted the spread by 2015 and begun to reduce the incidence. The most frequently reported reason for ill-health during the 2007 household survey was

Figure 5.4: Who Visited When ill or Injured, 2007



Source: ISSER, Household Survey, 200

malaria or fever. The records of the District Health Directorate show that more than half the out-patient cases in the district health facilities involve malaria (Table 5.6). The absolute number of reported cases of malaria in the district has increased.

The number of reported deaths in the district due to malaria is high. The number of deaths rose from 14 in 2002 to 24 in 2003 and 28 in 2005 (Table 5.7).

Both the morbidity and mortality statistics suggest that the district has not made significant progress in the last five years in halting and/or reducing the incidence of malaria.

About three-quarters of households take measures to protect themselves against mosquitoes (Figure 5.5). Urban households are more likely not to take any particular action to prevent malaria compared to rural households. One of the strategies being pursued by the District Health Directorate to reduce the incidence of malaria is the use of insecticide-treated bed nets. Consequently, one of the most frequently used measures to protect against malaria in the district is the use of treated bed nets for adults and children. However, the proportion of households that provide treated bed nets for children is just under a third. Adults in about 30 percent of households sleep under treated bed nets. The incidence of the usage of treated bed nets for adults and children is higher in rural households than in urban ones. The evidence suggests that more effort is needed to ensure more widespread use of insecticide-treated bed nets for children. Next in frequency among households as a means to protect against malaria is the use of mosquito coil.

Table 5.6: The Major Causes of Morbidity in Offinso District

	2001		2004		2005	
	Number	Percent	Number	Percent	Number	Percent
Malaria	22526	35.13	28838	57.57	29335	54.90
Upper Respiratory Tract Infection	5744	8.38	2513	5.01	2794	4.81
Diarrhoea	3025	4.41	2787	5.56	2730	4.70
Rheumatism	1759	2.57			1133	1.95
Acute Eye Infection			1481	2.95	1279	2.20
Home Accidents					1628	2.80

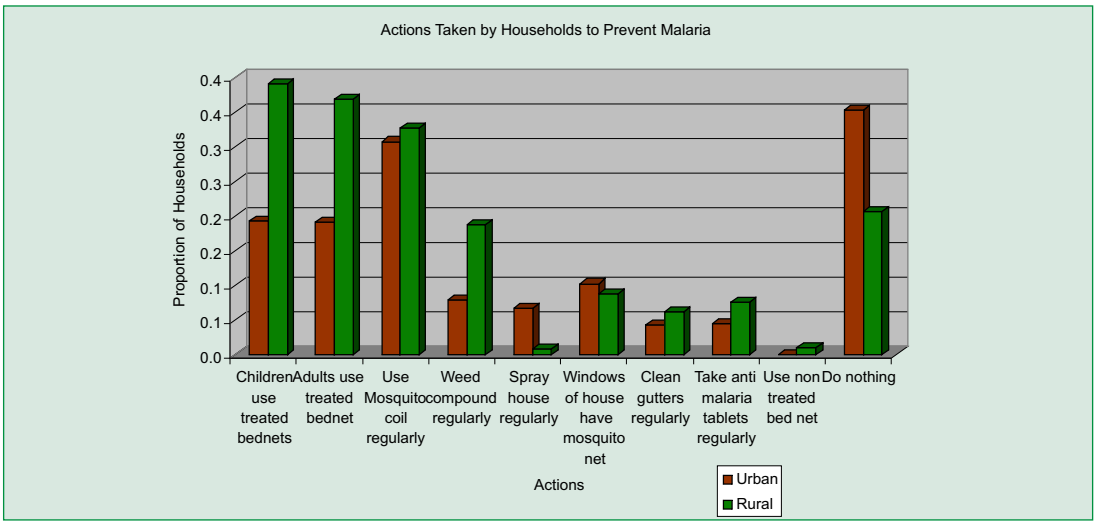
Source: Offinso Health Directorate

Table 5.7: Mortality in Offinso District

Causes of Death	2002	2003	2004	2005
Malaria	14	24	19	28
Anaemia	16	30	10	16
Diarrhoea	15	22		
HIV/AIDS		15	11	15
Hypertension	12	12	12	
Septicimea		23		
Typhoid Fever		38		

Source: Offinso Health Directorate

Figure 5.5: Actions Taken by Households to Prevent Malaria



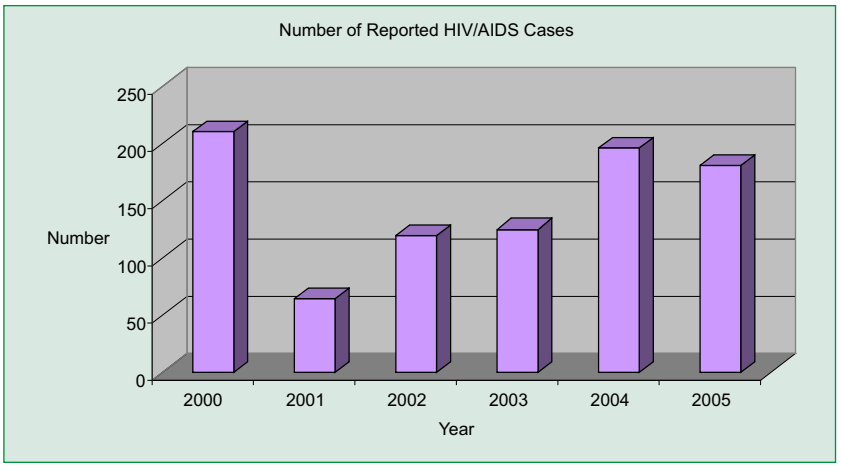
Source: ISSER, Household Survey, 2007

HIV/AIDS

The target for HIV/AIDS under the sixth MDG is to have halted it by 2015 and begun to reverse its spread. The reported cases of HIV/AIDS in the district have been rising since 2001 (Figure 5.6).

Publicity campaigns are a major strategy that the Health Directorate intends to use to reduce the incidence of HIV/AIDS. Some of the communities visited in 2007 during the survey for the study reported that publicity campaigns had been held. An NGO based in one of the towns in the district had conducted house-to-house visits to educate residents on the virus.

Figure 5.6: Reported HIV/AIDS Cases in Offinso District



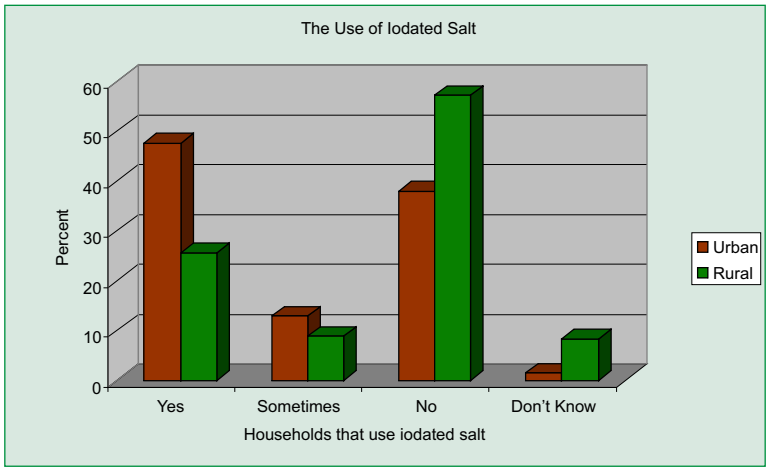
Source: Offinso Health Directorate

Use of Iodated Salt

Iodated salt is recommended in foods to reduce the incidence of iodine deficiency that can result in the enlargement of the thyroid gland. Iodine deficiency can affect the development of the foetal brain and subsequent cognitive development. Where the incidence of iodine deficiency is high in a population, it has been found to reduce the average IQ by 10-15 percent. Thus, iodine deficiency can have an adverse impact on national development.

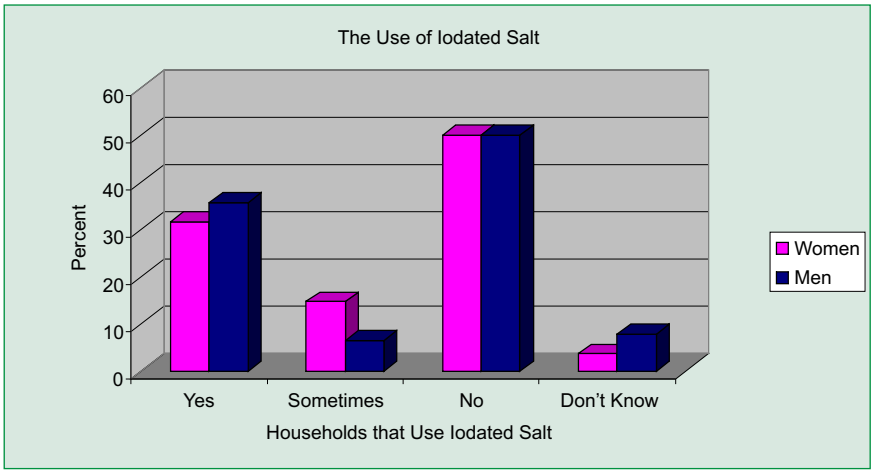
The use of iodated salt in the district is limited. Only 34 percent of households report using iodated salt in their cooking. About half of them indicated that they did not use it and 10 percent used it sometimes. The use of iodated salt is higher among urban than among rural households (Figure 5.7). A greater proportion of households headed by women compared to households headed by men are likely to use iodated salt regularly or sometimes, although an almost even proportion of them do not use it at all.

Figure 5.7: Use of Iodated Salt by Urban and Rural Households, 2007



Source: ISSER, 2007 Household Survey

Figure 5.8: Use of Iodated Salt, by Sex of Household Head



Source: ISSER, 2007 Household Survey

Health Insurance

The National Health Insurance Scheme is a mechanism to increase access to health services. The scheme is designed to reduce the cost of access to quality health service, particularly for the poor and deprived. Registration with health insurance schemes in the district is low. About 32 percent of the population is registered with or covered by a health insurance scheme (Table 5.8). A larger proportion of women and girls are registered or covered compared to men and boys. The difference between the urban and rural population is not significant (Table 5.8).

The exception to the low incidence of registration with the district health insurance scheme is the category of people aged over 70 years. SSNIT contributors, the elderly, people aged under 18 years whose parents (or parent, in the case of a single parent) are members of the scheme, and the indigent are all exempt from paying the premium to register for health insurance under the district scheme. It is, therefore, not surprising that more than half the people aged 70 years and more are registered with or covered by the scheme. The low proportion of people under the age of 18 who are registered with or covered by the scheme may be because their parents are not registered. In addition, the exemption of children under 18 is limited to two children per parent. Thus, some children in large families may not be covered or registered.

Picture 5.2: The Offinso District Health Insurance Scheme Office within the District Council Building

The main reason provided by respondents as to why many have not registered with a health insurance scheme is that the premiums are considered to be too high (Table 5.9). About 18 percent report that they cannot afford to pay the premium. Children under 18 years must be registered even though they are part of the exempt group. The reason about 7 percent of the population is not registered is because they are under 18 years old. This suggests that even though knowledge of the existence of the scheme is widespread, more information needs to be provided on how the scheme works.

The need for more information on how the scheme works is evident from an examination of the payment status of current participants in the scheme. Children under 18 years and people over 70 years are exempt from paying the premium. However, about 40 percent of people aged 70 years and above claim to have either fully or partly paid their premium for 2007 (Table 5.10).

Table 5.8: Current Health Insurance Registration Status (%)

	Registered	Covered	Never registered
Entire sample	19.15	17.74	63.10
Sex			
Men	13.68	15.85	70.47
Women	23.61	19.29	57.10
Location			
Urban	25.75	16.29	57.95
Rural	15.70	18.50	65.80
Age			
Below 18 years	6.79	31.86	61.36
18-70 years	30.93	3.19	65.88
Over 70 years	42.39	9.64	47.97

Source: ISSER, Household Survey, 2007

Table 5.9: Reasons for Never Registering with a Scheme

	Percent
Premium is too high	57.81
Don't have the Money	17.22
Parents Did not Register	7.56
Don't know about the Scheme	1.47
Do not understand the scheme	0.22
Do not have confidence in Operators	2.34
No need/Don't get ill	1.33
Will register	2.35
Under 18 years	6.38
Other	3.32

Source: ISSER, Household Survey, 2007

Table 5.10: Current Payment Status with Health Insurance Scheme (%)

	Full Payment	Part Payment	Exempted	not applicable
Entire Sample	60.55	2.61	21.82	15.01
By Age				
Below 18 years	32.50	1.03	36.36	30.11
18-70 years	88.76	3.85	4.82	2.57
Over 70 years	36.40	4.80	58.50	0.00

Source: ISSER, Household Survey, 2007

All of those registered are with the District Mutual Health Scheme. About 95 percent claim to be able to benefit from both in-patient and out-patient services, while the remainder who are registered claim to benefit only from out-patient services.

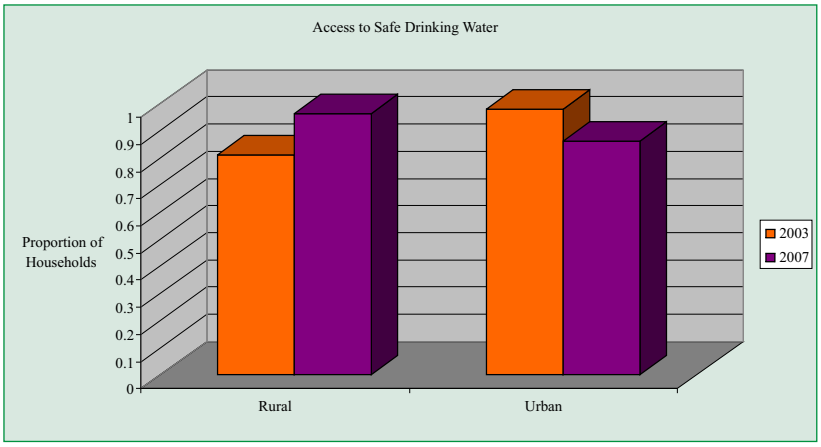
About half of those registered with the scheme have benefited from it. The concept of the scheme is favourably considered by everyone. It was believed to be a definite improvement over the former "cash and carry" system. The exemption of the elderly from the payment of the premium was lauded because "old people don't have money". However concerns were expressed about its implementation. Some people were unhappy about having to pay registration costs. The long delay between registration with the scheme and receipt of a registration card was considered to be problematic because it is not possible to benefit from the provisions of the scheme without the card. Another complaint raised was that card holders had to pay for their prescribed drugs.

Access to Safe Water and Safe Sanitation

Access to safe water and sanitation are critical to reducing the incidence of morbidity and mortality, and therefore improving life expectancy. Improvements in access to safe water and sanitation are two of the eight indicators for monitoring progress towards the achievement of the seventh MDG ensuring environmental sustainability.

The lack of safe sanitation and the inadequate supply of potable water were identified a priority problems during the preparation of the Medium-Term Development Plans for the period 2002-2004 and 2006-2009. In the plan for 2002-2004, the provision of safe water was aimed, among other things, at reducing the incidence of diarrhoea and other water-borne diseases by 95 percent. It was planned that 95 percent of the population would have access to safe water by 2004. Ninety-two percent of households in the district are

Figure 5.9: Access to Improved Water Sources in Offinso District



Source: Ghana Statistical Service: CWIQ Survey 2003 and ISSER 2007 Household Survey

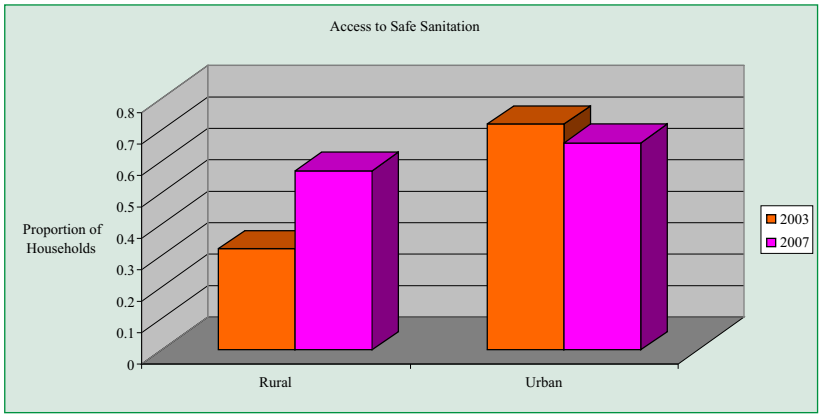
estimated to have access to drinking water from an improved water source in 2007.[17] There was an increase in coverage among the rural population between 2003 and 2007, while there was a decline in the coverage of the urban population (Table 5.9). This suggests that urbanisation is increasing at a faster than the ability to supply safe drinking water. Small rural communities such as Odumase and Akokra Krom have boreholes. Some households in larger urban and peri-urban communities such as Akomadan and Namong obtain their drinking water from rivers and streams. Abofour, for example, experiences severe water problems during the dry season. In those parts of Abofour where the water table is high, water is obtained from wells, otherwise some households get water from rivers, streams and so on. Communities that do not have sources of safe drinking water complain of a high incidence of diarrhoeal diseases and typhoid.

Access to safe sanitation in the district improved between 2003 and 2007.[18] However, the improvement occurred largely among rural households (Figure 5.10). Despite this, only 60 percent of households use safe sanitation facilities

Conclusion

There is insufficient data to make a categorical statement about the trend in life expectancy at birth in the district. The available data on factors that may influence life expectancy at birth provide conflicting signals. Environmental hygiene and safety are important in reducing the incidence of disease. However, health hazards are numerous in the district because of the unsafe waste disposal practices and the still high proportion of the households that do not have access to safe sanitation facilities. Thus, despite the increased provision of safe drinking water from boreholes, the risk of diarrhoeal diseases, for example, remains high. Indeed, diarrhoea is the third most frequently reported cause of morbidity in the district and is the cause of some deaths.

Figure 5.10: Access to Safe Sanitation



Source: Ghana Statistical Service: CWIQ Survey 2003 and ISSER 2007 Household Survey

[17] An improved water source is either piped water inside the dwelling of the household, a public outdoor tap, borehole or Protected well

[18] A household uses safe sanitation when it uses flush toilet facilities, covered pit latrine or VIP/KVIP

The practice of throwing liquid waste onto the compound and other outdoor spaces can create conditions favourable for the breeding of mosquitoes. Thus, the risk of malaria in the district remains high, particularly among the third of the population that does nothing to protect itself against malaria.

The district has made progress towards the tenth MDG target of halving by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. However, the evidence available suggests that not as much progress has been made in halting and beginning to reverse the spread of malaria and HIV/AIDS.

CHAPTER SIX

VULNERABILITY AND THE MILLENNIUM DEVELOPMENT GOALS

Introduction

Vulnerability may be conceptualised as the likelihood that a person's well-being may change for the worse in the future. This is a very broad conceptualisation of vulnerability because it is a multi-dimensional phenomenon. A person may be vulnerable to illness, unemployment, a decline in income or to sexual abuse. Although there is a close link between vulnerability and poverty, vulnerability is independent of the current poverty status of an individual or community. Thus, as evidence from Ghana has shown, a household that is not poor in the present may have a high likelihood of becoming poor in the future. Vulnerability and exclusion have been identified as important dimensions of poverty and well-being in Ghana's second poverty reduction strategy paper. It is observed that "although general poverty levels decreased in the 1990s, certain areas of Ghana experienced growing and deepening incidence of poverty, with evidence of intensification of vulnerability and exclusion among certain social groups".[19] Vulnerability in GPRS II is defined as "a state of deprivation based on poverty or lack of enjoyment of other rights and entitlements".[20] According to GPRS II, vulnerability leads to the exclusion of disadvantaged groups of men, women and children and people with disability from active participation in different aspects of society's activities and results in them being unable to protect themselves against exploitation and risks.

The Medium-Term Development Plans for Offinso District both contain goals and strategies to address issues of vulnerability. In the development plan of 2002-2004, the major problems identified under the heading of vulnerability during the preparation of the plan were the insufficiency of available resources for the district's rehabilitation centres and inadequate financial support for rural women. The plan's objectives were to increase financial support to the vulnerable and excluded by 30 percent and to support the training of 70 percent of women entrepreneurs. In the district's 2006-2009 Medium-Term Development Plan, the groups identified as vulnerable were extended to include people living with HIV/AIDS and orphans. The problems identified in the previous development plan remained active.

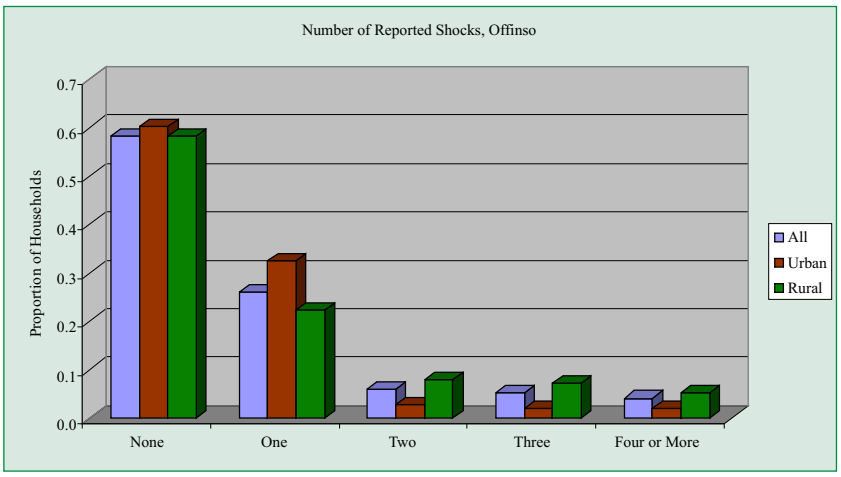
[19] Republic of Ghana (2005) Growth and Poverty Reduction Strategy (GPRS II) (2006-2009), Vol. I: Policy Framework, National Development Planning Commission, Accra, p. 1
[20] Republic of Ghana (2005), p.1

The analysis of vulnerability in this chapter will identify shocks that households face and assess how households have responded to these shocks.

Shocks Reported by Households

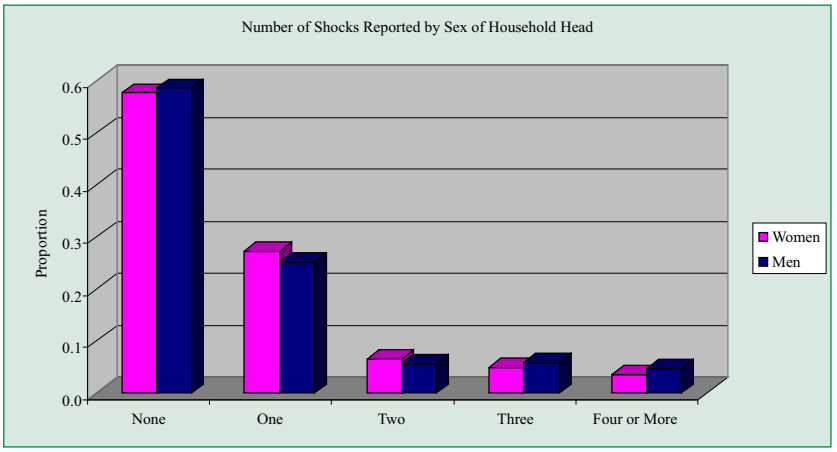
About 56 percent of households reported that they did not experience any shocks that adversely affected their well-being in the twelve-month period preceding the survey (Figure 6.1). About 26 percent of households reported experiencing a single negative event in the reference period. Rural households were more likely to report multiple shocks than were urban households. An almost similar proportion of households headed by women and men reported experiencing shocks during the reference period. Households headed by men were more likely to report multiple shocks (Figure 6.2).

Figure 6.1: Number of Shocks Reported by Households over a 12-Month Period



Source: ISSER, Household Survey, 2007

Figure 6.2.: Number of Shocks Reported, by Sex of Household Head

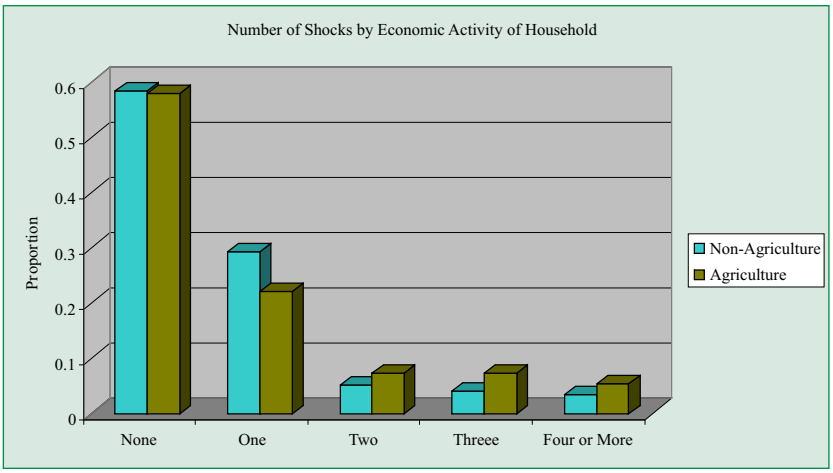


Source: ISSER, Household Survey, 2007

Agricultural households, namely households in which 50 percent of more of the adults are employed in agriculture, were no less likely to report shocks than non-agricultural households (Figure 6.3).

Various types of events affected households over the 12-month period (Figure 6.4). The event reported by the greatest proportion of households (9 percent) was poor rains that caused harvest failure. The next most frequently reported shock was an increase in the price of petroleum products (Figure 6.4). The shocks may be classified on the basis of whether they are specific to the household, that is, idiosyncratic, or whether they are covariate and affect the community or groups of households simultaneously (Box 6.1). A classification of shocks using this criterion reveals that about a third of households reported idiosyncratic shocks while a third reported covariate shocks (Table 6.1).

Figure 6.3: Shocks Reported by Agricultural and Non-Agricultural Households

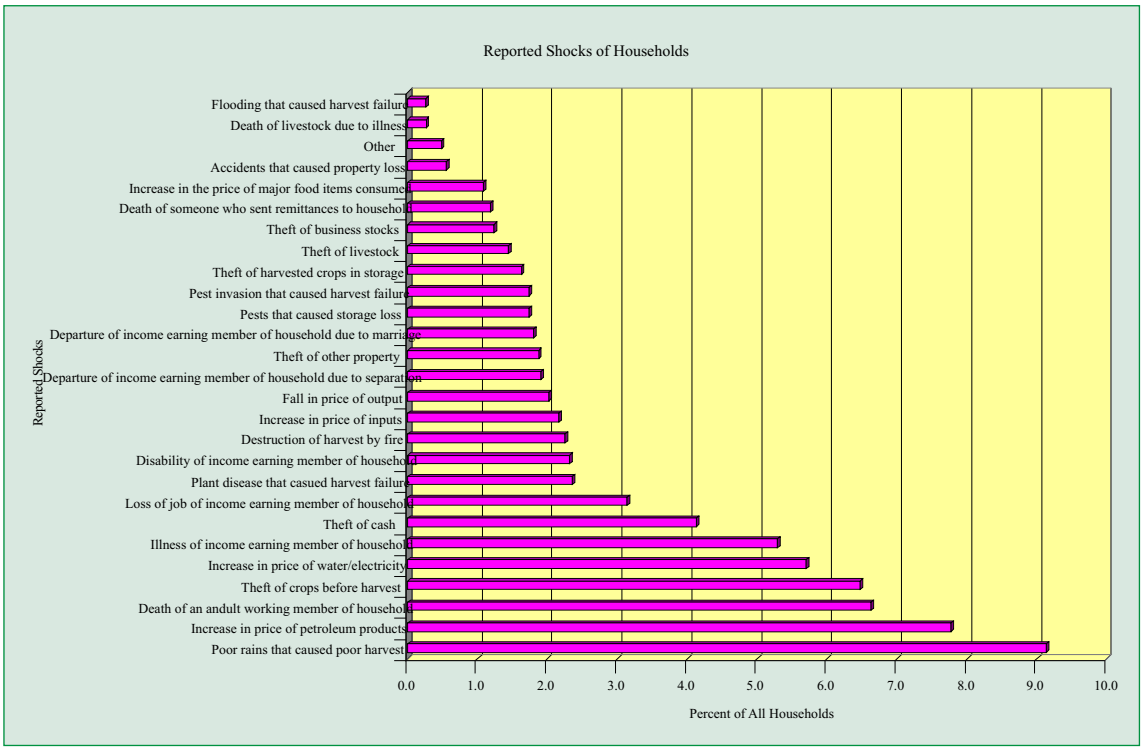


Source: ISSER, Household Survey, 2007

Box 6.1.: Classification of Shocks

Shocks due to Acts of Nature	**Human -Related Shocks**
Poor rains that cause harvest failure	Death of a working member of the household
Flooding that causes harvest failure	Death of someone who sends remittances to household
Pests	Illness of income earning member of household
Plant disease	Divorce, Separation, Marriage that causes a member
Flooding	the household to move
	Theft of assets
	Fire
	Price Shocks
	Civil Unrest
Covariate Shocks	**Idiosyncratic Events**
Weather related events, i.e. drought, flooding	Death of a working member of the household
Pests	Death of someone who sends remittances to household
Plant disease	Illness of income earning member of household
Civil unrest	Divorce, Separation, Marriage that causes a member
Price Shocks	the household to move
	Theft of assets

Figure 6.4: Reported Shocks of Households



Source: ISSER, Household Survey, 2007

It is interesting to note that covariate shocks, such as an increase in utility or petroleum prices, were not reported by all households. This shows that even though an event may occur that will have an effect on several households, the impact on the individual or household will depend on the exposure of the household or individual to the event, the effect the event had on the individual or household's well-being and resources and the ability of the household or individual to respond to the negative effect.

Shocks may also be classified on the basis of whether they are due to acts of nature or the direct result of human action (Box 6.1). Poor rains that affected the harvest are an example of a shock due to an act of nature. The theft of crops before they are harvested is an example of a shock that is the direct result of human action. More households reported experiencing shocks that were the direct result of human action (Table 6.1).

Alternatively, shocks may be classified on the basis of whether they are price changes, changes in household composition or impact on production, assets, or income of the households. The shocks reported by the largest proportion of households are shocks that resulted in asset loss (for example, theft of cash) and production shocks (for example, low harvest because of poor rains).

Table 6.1: Shocks that Affected Households Over a 12-Month Period

	Percent of Households
Covariate	17.48
Idiosyncratic	33.17
Human-related	34.91
Natural Event	12.84
Price shock	9.53
Production	13.65
Asset	14.30
Household Structure	10.33
Income Loss	11.37
No Shock	58.19

Source: ISSER, Household Survey, 2007

Identifying Vulnerable Groups

Households headed by women are no more likely to report being adversely affected by price shocks than are households headed by men. However, households headed by women are more likely to report shocks due to the departure of a member of the household either through marriage, death or divorce (Table 6.2). Indeed, these shocks may be the reason why the household is headed by a woman. These changes in the household composition result in a loss of income and/or assets and thus make the members of the household vulnerable to other shocks.

Rural households are more likely to experience shocks that affect production and assets than shocks that are due to loss of income (Table 6.2). Households in which more than half of the adult population is employed in agriculture are likely to report losses that affect production (Table 6.2).

Table 6.2: Shocks and Household Characteristics (%)

	Price Shock	Production Shock	Asset Shock	Change in HH Structure	Income Loss
Sex of Household Head					
Women	8.09	12.00	12.67	14.97	14.13
Men	10.81	15.10	15.74	6.23	8.93
Location of Household					
Urban	7.22	9.09	3.80	4.58	17.32
Rural	10.87	16.27	20.35	13.65	7.94
Main Economic Activity of HH					
Non-Agriculture HH	7.28	7.16	12.39	13.10	11.30
Agriculture HH	12.52	22.24	16.82	7.93	11.46

Source: ISSER, 2007 Household Survey

Are households that reported shocks able to revert to the situation that existed prior to the shock? The answer depends on the nature of the shock and the characteristics of the households. Over half the households that reported shocks indicated that they had recovered from the shock (Table 6.3). Households that reported shocks are more likely to have recovered from asset shocks than they are to have recovered from price shocks (Table 6.3). Households headed by men are more likely than households headed by women to report that circumstances had recovered to the situation that existed prior to the shock.

Household Response to Risk and Shocks

Households may respond by taking some form of action or inaction when they are hit by shocks. In Offinso District more than half the households that reported that they were hit by a shock reported that they did nothing (Table 6.4). This suggests that assets were not sold and consumption was not reduced. Alternatively, households could have changed their behaviour in a manner that was not considered to be unusual and therefore was described as "doing nothing".

Apart from doing nothing, the strategies adopted by households or individuals in response to a shock may be classified into five groups (Table 6.4). The most frequently reported strategy used by households in Offinso is the informal insurance strategy. This covers measures such as receiving assistance from friends, borrowing from friends and delaying payment on purchases. The ability to use this strategy when difficulties or hardships emerge is dependent on the quality and strength of the social network of the household or individual. The next most frequently reported set of strategies used in the district is the market insurance strategy. This involves making use of market-based instruments, such as insurance and loans from a financial institution, to deal with risk. About 9 percent of households used these instruments to deal with risk (Table 6.4). Next in importance is what has been classified as self-help mechanisms. These are informal insurance measures used by households and involve the sale of assets and engaging in additional income-earning activities. The disadvantage associated with the sale of assets to deal with risk is that the sale can begin a downward trajectory in well-being if the asset base cannot be restored before another shock hits the household. Very few households resorted to this type of strategy (Table 6.5). The market and informal insurance strategies

Table 6.3: Recovery From Shocks (%)

Shock	Entire Sample	HH Headed by Women	HH Headed by Men	Urban	Rural	Agriculture	Non-Agriculture
Price Shock	27.59	14.13	36.52	10.00	34.32	33.94	19.33
Production Shock	56.09	45.88	63.28	61.74	54.27	55.21	58.17
Asset Shock	68.10	66.00	69.60	43.00	70.80	77.24	58.73
Change in HH Structure	36.99	26.78	58.74	28.65	38.61	0.00	51.25
Income Loss	33.23	19.56	52.39	35.85	29.93	28.44	36.89
All Shocks	52.30	40.72	62.79	42.29	57.64	58.59	47.50

Source: ISSER, 2007 Household Survey

are measures that can protect the level of consumption of the household and can, depending on how the acquired resources are utilised, protect the asset base of the household. Very few households reported that food consumption had to be reduced in response to a shock that hit the household.

None of the households reported that they had received assistance from the District Assembly, central government or non-governmental agencies.

Conclusion

The strategies adopted by households when they experienced shocks were those that protected their assets and levels of consumption. The strategies used by households in the face of shocks highlights the importance of social networks in their livelihood strategies and bring to the fore the limited use of formal mechanisms such as financial institutions, insurance and support from local government.

There has been a decline in the proportion of households that believe that they would not be able to survive in times of need or crises (Figure 6.5). Indeed, comparing 2003 with 2007, an increasing proportion of households are more confident that they would be able to survive a crisis. However, about 36 percent of households believe that they are

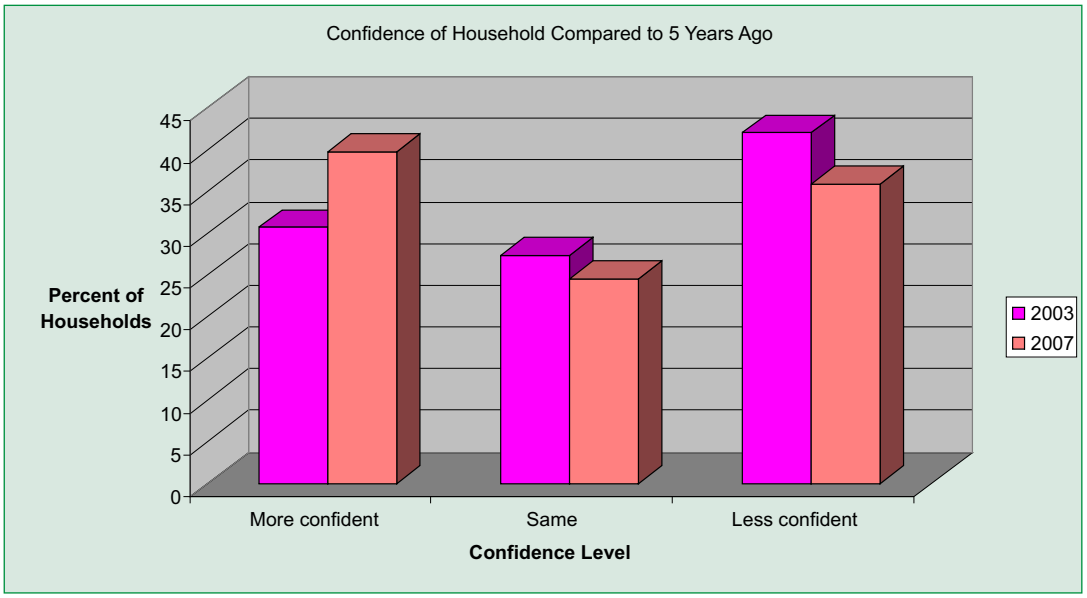
Table 6.4: Strategies Adopted by Households

Strategy	Percent of Households
Informal Insurance Strategies	*44.4*
Assistance from Friends	35.7
Borrowed from friends	23.3
Delayed Payment	1.3
Market Insurance	*8.9*
Loan from Finance Institution	1.1
Credited Purchases	2.4
Sold harvest in advance	1.3
Relied on Savings	2.9
Coverd by Insurance	1.1
Self Help	*4.1*
Sold Livestock	1.8
Sold Land	1.2
Sold other property	2.7
Engaged in additional income earning	2.3
Reduced Food Consumption	*3.0*
Other	
Advance Payment from Employer	1.1
Other	2.2
Did Nothing	*54.2*

Source: ISSER 2007 Household Survey

unlikely to survive a crisis. About half the households that reported shocks in the 12-month period preceding the survey mentioned that they had not yet recovered from the shock. Many households used strategies to minimise the impact of the shock on their asset base and level of consumption.

Figure 6.5: Level of Confidence in Surviving a Crisis



Source: Ghana Statistical Service, CWIQ Survey 2003 and ISSER 2007 Household Survey

CHAPTER SEVEN

SUMMARY AND POLICY RECOMMENDATIONS

Progress towards Improved Human Development

The district has recorded progress in some of the components of the human development index. The knowledge component of the index has improved. Gross enrolment rates at all levels of education (except primary) in the district are better in 2007 than they were four or five years ago. Adult literacy rates improved for both men and women.

It was not possible to measure life expectancy at birth directly. The report therefore examined some of the factors that can influence life expectancy at birth such as sanitation, use of ante-natal and post-natal clinics, the proportion of supervised births, immunisation against measles and other diseases and actions households take to protect themselves against malaria. An increasing proportion of mothers report having attended post-natal clinics and being supervised during childbirth by a skilled health professional. However, health risks persist because the drainage system in the district does not ensure the safe disposal of liquid waste and about a third of households do not take any specific measures to protect themselves against malaria.

Cocoa is grown in the district. The increase in Cocoa prices in recent years and the cocoa-spraying exercise leading to increased yields suggests rising incomes for cocoa farmers. The district's economy is going through a process of diversification as a growing proportion of the workforce is employed in non-agriculture activities in their main job. However, the incidence of unemployment has risen, suggesting that even if per capita incomes (the measure of the standard of living used in the human development index) are growing, this may be accompanied by growing inequality.

Progress towards the MDGs

An evaluation of trends in the MDG indicators also presents a mixed picture (Table 7.1). Data were not available for an adequate assessment of progress towards the first MDG, eradicating extreme poverty and hunger. An indirect indicator is the increase in the proportion of households that reported never experiencing difficulty in satisfying their food needs in the last 12 months. However, for many of the farming households, this is largely determined by the relatively good weather conditions experienced during the period.

Table 7.1: Millennium Indicators in Offinso District

Millennium Development Goals	Situation in Offinso District
Goal 1. Eradicate Extreme Poverty	Proportion of households in the district that report never experiencing difficulties with food has risen in 2007 compared to 2003
Goal 2. Achieve Universal Primary Education	No progress in improving net enrolment rates between 2003 and 2007 There is improvement in literacy rates of 15-24 year olds of both sexes
Goal 3. Promote Gender Equality and Empower Women	The primary Gender Parity Index improved between 2000 and 2006. The Gender Parity Index for Junior Secondary remains constant within the context of rising gross enrolment rates for both boys and girls. There is no significant change in the share of women in wage employment in the non-agriculture sector between 2003 and 2007.
Goal 4. Reduce Child Mortality	The proportion of children immunised against measles increased between 2003 and 2007 to about 94 percent
Goal 5. Improve Maternal Health	Proportion of supervised deliveries in 2007 is higher than in 2003
Goal 6. Combat HIV/AIDS, malaria and other diseases	Reported cases of HIV/AIDS on the increase between 2000 and 2005. No evidence of decline in malaria's share of reported cases of morbidity. About a third of households do not use effective measures to protect against malaria
Goal 7. Ensure Environmental Sustainability	Forest area giving way to grassland. Communal resources such as snails becoming difficult to get. Increase in 2007 compared to 2003 in the proportion of households using solid fuels for cooking Increase in 2007 compared to 2003 in the proportion of rural households with access to safe drinking water. Decline in the proportion of urban households with access to safe drinking water. Increase (decrease) in proportion of rural (urban) households in 2007 compared to 2003 that use safe sanitation.
Goal 8. Develop a Global Partnership for Development	Increase in the proportion of households that have a member that owns a mobile phone. Unemployment amongst the youth is higher in 2007 compared to 2003

The district should be able to achieve universal primary education by 2015 despite the fact that not much progress was made in improving net primary enrolment rates between 2003 and 2007. This optimism is based on the fact that almost all children between the ages of 6 and 11 years are in school. Other risks regarding the attainment of universal primary education involve the uneven quality of education in the public schools and the evident difficulty in providing adequate school furniture. These are particular concerns in rural communities and must be addressed if children are to attend school regularly.

Although the district has not yet been able to attain the 2005 gender parity target at primary and secondary levels, it is likely to reach this target for primary and junior secondary schools by 2015. Improvements in the quality of education and the attainment of the universal primary education target will make it possible to significantly improve the literacy rates of 15-24 year-olds by 2015.

Without statistics on child and infant mortality rates, it is difficult to assess the extent of progress made towards the fourth MDG. An examination of some of the indicators suggests some progress. The proportion of infants immunised against measles increased between 2003 and 2007. However, in addition to immunisation against measles, significant progress will be made if children are adequately protected against malaria and diarrhoea.

Almost all pregnant women attend ante-natal clinics, although there is not enough information to determine whether the prescribed number of visits is made by all expectant mothers. An increasing proportion of births are supervised by skilled personnel. Urban women have a particular advantage because of their greater proximity to health centres compared to the situation of rural women.

Available evidence suggests that not much progress has been made in halting and/or reversing the incidence of HIV/AIDS and malaria.

Another challenge for the district is to make significant progress in improving its indicators of environmental sustainability under the seventh MDG. Some parts of the district may be described as under environmental stress because communal natural resources such as snails and mushrooms are no longer available due to deforestation. There has been no significant decline in the use of solid fuels for cooking. The growing urbanisation and the relatively slower expansion in utilities, in particular safe drinking water, drainage systems and safe sanitation, pose risks that can compromise not only the attainment of the seventh goal, but also the attainment of goals 4 and 6.

The focus of the eighth MDG is on developing a global partnership for development and many of the targets and goals are outside the mandate of the district. However, indicators under targets 16 and 18 can be influenced by actions within the district. The unemployment rate among the youth has worsened. The benefits of information technology are being realised by residents of Offinso District with the introduction and use of mobile telephones.

Even though a growing proportion of the population is working mainly outside the agriculture sector, the sector remains a major source of income for more than half of the working population in the district. Agriculture in the district is rain-fed thus exposing livelihoods to the vagaries of the weather. Favourable weather conditions in most parts of the district in 2005 and 2006 meant that very few households reported shocks due to inadequate rains or excessive rainfall. The circumstances of several households could have been very different if the weather conditions in these two years had been adverse. Deforestation can affect climatic conditions in the district adversely. This will pose increased risks for farming households, especially if no progress is made in water conservation practices and irrigation.

Policy Recommendations

The Medium-Term Development Plan for 2006-2009 contains strategies which, if effectively implemented, can increase the speed with which the district moves towards the MDGs and improves human development levels.

The difficulties the district faces in generating the expected revenues must be resolved. A review must be taken of the incentive and supervising and monitoring structures that regulate revenue generation. Insufficient resources to finance development projects pose a major risk to the attainment of the MDGs in the district. Many of the recommendations require an increase in spending as well as improved efficiency in resource use and allocation.

Although the present tax base is not being efficiently and effectively exploited to generate revenues to finance the projects in the development plan, the district must be innovative in creating incentives for an increase in investment that will contribute to improving employment opportunities and expand the revenue base.

Agriculture is the main sector of employment for more than two-thirds of working adults in the district. However, agriculture is rain-fed. This is a major source of vulnerability for those whose livelihoods are based on agriculture because of the vagaries of the weather. The District Assembly should investigate the possibility and feasibility of partnerships with the private sector and communities to develop water conservation and irrigation projects.

To increase the likelihood of achieving universal primary education by 2015, strategies must be developed to encourage parents and guardians to send their children to school at the recommended age. The school feeding programme that is being implemented in some schools in the district is probably one such incentive that may encourage enrolment at the recommended age. Parents send children to school to at least be able to read and write. If this does not happen early enough, both the parent and the child will be disillusioned with schooling and this creates the conditions for irregular attendance and the child not completing a level of education. Thus, more effort should be made to improve learning and teaching methods, particularly in rural schools. The monitoring and supervision system in the education sector must be strengthened to ensure that teachers are performing as they should.

About half the 18 year-olds in 2007 are no longer in school, despite the fact that almost all children between 6 and 11 years are in school. The relatively lower gross and net senior secondary enrolment rates suggest that several children do not continue with their education after completing the BECE. This is particularly so for rural children. This trend must be reversed if improvements in human development are to be recorded. Strategies should be developed to make school an interesting place to go to and remain in, especially for rural children. Investment in additional years of education by the household or individual will only be undertaken if further education is perceived to generate higher returns than the alternative of less education. The high unemployment rate and limited job opportunities for school leavers in the district have been identified as disincentives

to invest in further education after the completion of junior secondary school. Thus, the creation of job opportunities outside the agriculture sector will be important for ensuring an increase in the average number of years that children spend in school.

The district must undertake a careful review of its water and sanitation projects and plans. Available resources must be carefully utilised to reduce the incidence of waste, as seen in projects that are completed but not in use. Much progress has been made in providing safe water in the district. Less than 15 percent of the district's population does not have access to safe drinking water. This is a particular problem in some urban communities that the district should be able to address in the near future. Access to safe sanitation is lower in urban compared to rural communities. Drainage and waste disposal facilities must be provided to reduce the incidence of health hazards.

The District Health Directorate must review its strategy to increase the usage of insecticide-treated bed nets in the district. Working with the environmental agency and sanitary inspectors, incentives and sanctions must be developed to encourage communities to maintain healthy environs to reduce the risk of disease.

This study has revealed that more information must be provided about the components of the National Health Insurance Scheme to ensure that the elderly are able to fully participate in it. The Dstrict Health Directorate should review the current information strategy and its content.

Woodlot cultivation must be encouraged, not only as a provider of alternative sources of income in the district, but also as part of a reafforestation programme.

People over 65 years of age made up about 4 percent of the district's population in 2000. It is expected that improvements in health will increase life expectancy in the district. A current concern among some of the over-65 population is the lack of opportunities to earn an income. This suggests that the extended family system may not be providing the traditional support to the elderly. The district administration should consider introducing measures to protect the well-being of the elderly in the communities. This is a group that is not targeted in the district's development plan. Micro-finance packages a major component of the district's strategy to address vulnerability may not be the right instrument to protect the well-being of elderly people who are no longer able to participate in economic activity.