CHAPTER FOUR

EDUCATION AND LITERACY

Introduction

In Ghana, the fundamental goal of the education sector is to provide quality and relevant education for all inhabitants to make them functionally literate and enable them to acquire employable skills and be productive in the economy. Education is one of the major pillars of the Millennium Development Goals (MDGs). The MDG on education is to ensure universal primary schooling, and equal enrolment for boys and girls at primary and secondary levels. Human development has as its indicators on education the adult literacy rate and the gross primary, secondary and tertiary enrolment rates. The Growth and Poverty Reduction Strategy (GPRS II) also seeks to ensure increased access of all children and youth to a defined minimum basic education regardless of the particular economic circumstances of their parents or guardians. This chapter assesses the progress made by Ahanta West District in the knowledge component of human development and in realizing the educational objectives of the MDGs and GPRS II.

The education system in Ghana has undergone restructuring and reform since independence. A major education reform occurred in 1987 that sought to introduce vocational and technical training at the basic level and also shorten the number of years spent in school. The system of formal education born out of the 1987 reform is based on a three-tier system six years of primary education, followed by three years of Junior Secondary School (JSS), and a further three years of Senior Secondary School (SSS) before admission into tertiary institutions (including university, polytechnic and other professional educational institutions). After 20 years of this system, another reform commenced in September 2007. The new reform makes compulsory two years of pre-school for all children before entering primary one and puts more emphasis on science, mathematics and information technology (IT) in the basic school curriculum. It also seeks to promote technical and vocational education and increases the number of years at senior secondary school (now, senior high school) from 3 to 4 years.

Box 4.1: The MDGs and Human Development Indicators on Education

Millennium Development Goals	*Human Development*
❖ *Achieve universal primary education* - *By ensuring that children everywhere, boys and girls, complete a full course of primary schooling by 2015* ❖ *Promote gender equality and empower women* - *Through elimination of gender disparity in primary and secondary education at all levels by 2015*	❖ *Adult Literacy Rate* ❖ *Gross Primary Enrolment Rate* ❖ *Gross Secondary Enrolment Rate* ❖ *Gross Tertiary Enrolment*

The system of formal education prior to the 1987 reform was based on six years of primary education after which pupils had the option of pursuing five years of secondary education upon passing the Common/Late Entrance Examination or going through at most four years of middle school. Successful candidates after the five-year secondary education were obliged to complete a two-year pre-university education before gaining admission to university. There were other alternative education opportunities such as vocational, technical, polytechnic and professional education available for those who were unable to make it to the university.

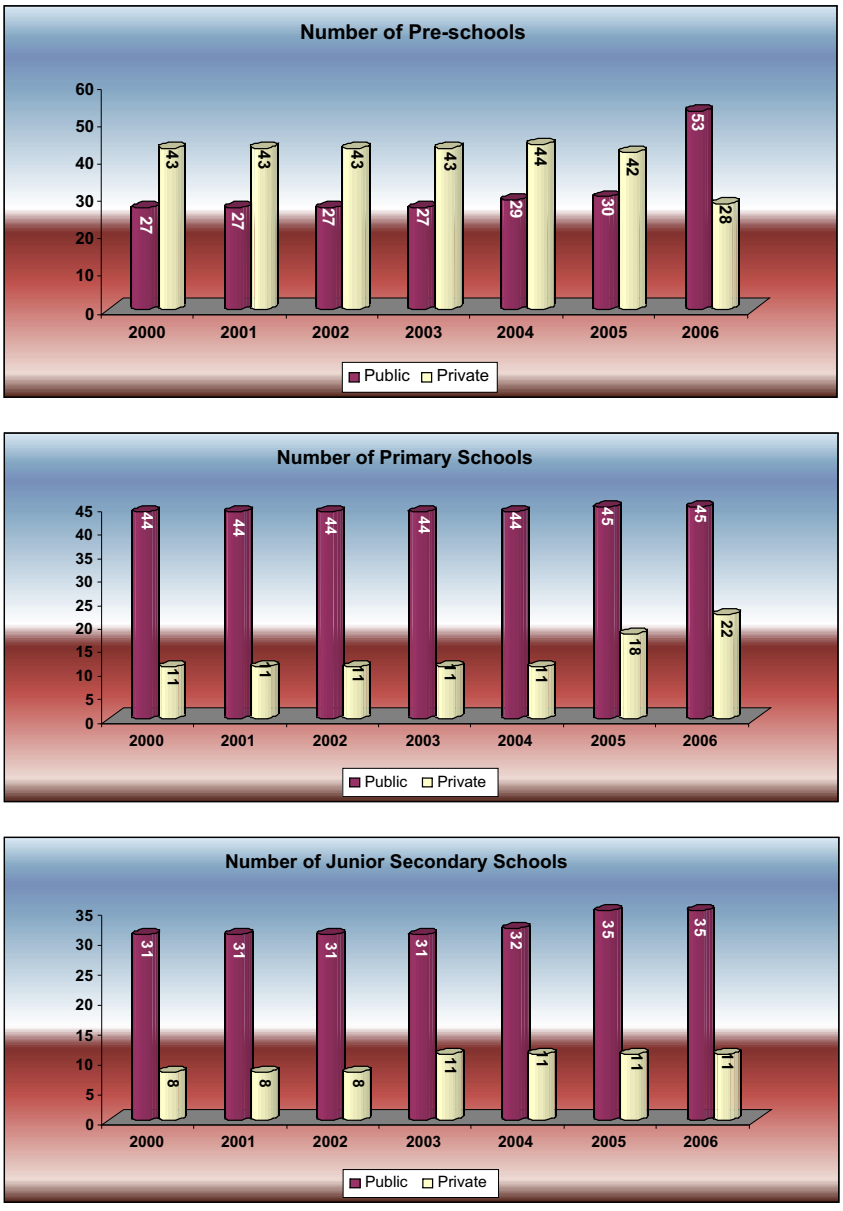
Number of Schools

One of the fundamental inputs towards the realisation of the MDG for education is children's access to education which depends largely on the number of schools available. The Ahanta West District has a number of basic and second-cycle institutions. Currently, there are 81 pre-schools, 67 primary schools, and 46 junior secondary schools. The district also has two senior secondary schools and one technical/vocational institute.

Picture 4.1: District Council Basic School, Agona Nkwanta

The rate of expansion of education provision by the private and public sectors has been generally slow at best. The number of pre-schools in the district remained at 70 from 2000 to 2003 before inching up to 73 in 2004 and 81 in 2006. The trend was similar in primary and JSS as shown in figure 4.1. The number of primary schools rose marginally from 55 for the period 2000-2004 to 63 and 67 in 2005 and 2006 respectively. Similarly, the number of junior secondary schools rose from 39 in 2000-2002 to 42 and 47 in 2003 and 2005-2006.

Figure 4.1: Number of Pre-schools, Primary and JSS in Ahanta West District



Source: District Education Directorate, Ahanta West

The contribution of private schools is most evident at pre-school level. The number of private pre-schools exceeded the number of public schools from 2000 until 2006 when the number of public pre-schools shot up significantly (Figure 4.1) as a result of the takeover of community pre-schools by the Ghana Education Service. At the primary and junior secondary level, however,, the number of public schools has remained higher than the number of private schools. Nonetheless, the contribution of the private sector in the establishment of primary and junior secondary schools has been quite impressive. This is evident in the increased number of private primary and junior secondary schools from 11 in 2000-2004 to 22 in 2006 and 8 in 2000-2002 to 11 in 2006 respectively.

School Quality

School quality depends greatly on the availability of basic tools and infrastructure such as textbooks, seating and writing places, access to safe drinking water and sanitation as well as the availability of quality teachers. GPRS II sets a target of three textbooks per pupil and Ahanta West is far from attaining that target. However, an assessment of pedagogical tools and basic utilities suggests improved provision of basic facilities and deterioration or at best stagnation in the provision of basic tools for schools.

Generally, junior secondary schools are better provided with toilet facilities than primary schools (Table 4.1). The proportion of primary schools with toilet facilities increased from 47 percent to 64 percent between the 2002/2003 and 2004/2005 academic years. There was, however, a dip the following academic year on account of new primary schools, most of which were without toilet facilities. The proportion of junior secondary schools with toilet facilities also increased from 66.7 percent in 2002/2003 to 69.8 percent the following academic year before dropping to 67.4 percent in the 2004/2005 and 2005/2006 academic years.

Table 4.1: Pedagogical Tools and Availability of Basic Utilities

Year	Proportion of Schools with Toilet Facilities			Drinking water	Core Textbooks per pupil	Chairs per pupil
	Prim.	JSS	All	Primary	All	All
2002/2003	47.3	66.7	55.7	52.7	3:1	1:1
2003/2004	61.8	69.8	65.3	65.5	3:1	1:1
2004/2005	63.5	67.4	65.1	63.5	1:1	1:1
2005/2006	59.7	67.4	62.8	59.7	1:1	1:1

Source: Author's calculation based on data from the District Education Directorate

The district has also witnessed an improvement in the proportion of primary schools with drinking water since the 2002/2003 academic year. The number with drinking water increased from 29 in 2002/2003 to 40 in 2005/2006, representing an improvement in the proportion of schools with drinking water from 53 percent to 60 percent. Every pupil in the district has a seating place, with one chair per pupil reported in Table 4.1. However, the number of core textbooks dropped significantly from 3:1 in 2002/2003 and 2003/2004 to 1:1 in 2004/2005 and 2005/2006. The observed decline in the number of core textbooks per pupil could adversely affect the quality of teaching and learning and hence the performance of school children in certificate examinations.

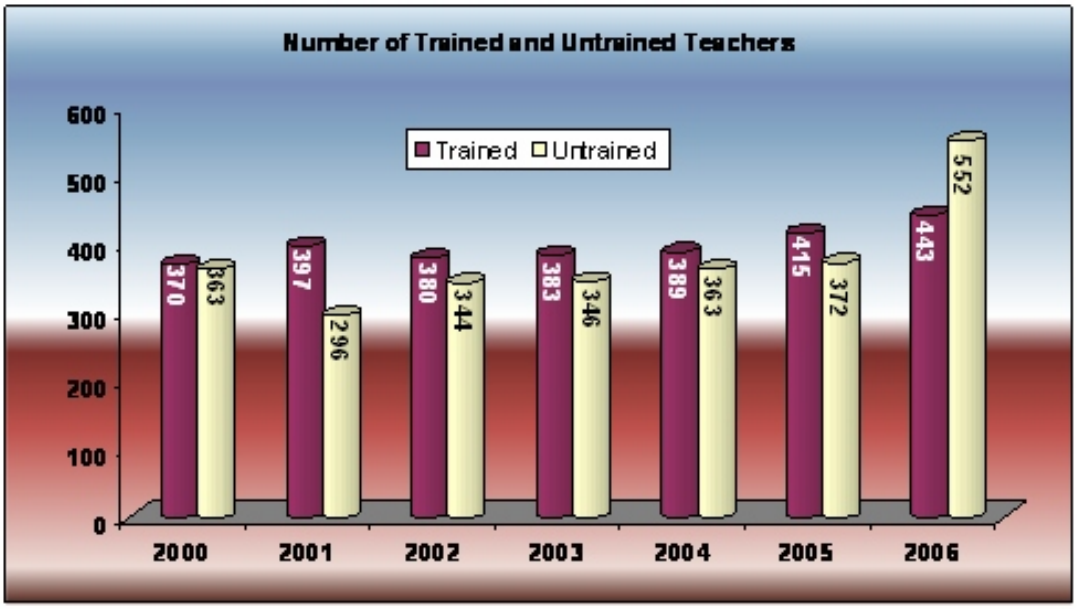
remaining 24 percent teaching in private schools. Of the 852 public school teachers, about 66 percent of them are professional teachers compared with 5 percent professional teachers in private schools. A total of 200 teachers (10 trained and 190 untrained) are in pre-schools, 486 (250 trained and 236 untrained) in primary schools, 309 (183 trained and 126 untrained) in junior secondary schools, 107 (105 trained and 2 untrained) in senior secondary schools and 15 (13 trained and 2 untrained) in technical and vocational institutions. The numerical strength of teaching staff in public schools has improved gradually since 2002 after dropping by 17 from the previous year (Figure 4.2). Similarly, after declining from 363 in 2000 to 296 in 2001, the staff strength of private schools has also improved consistently,

Picture 4.2: A Modern School Block at Agona Nkwanta

Number of Teachers

As of 2006, there were 1,117 teachers in the Ahanta West District made up of 561 trained and 556 untrained teachers. About 76 percent were in public schools, with the particularly in 2006 when the number of teachers rose by about 48.4 percent, thereby pushing the staff strength of private schools above public schools.

Figure 4.2: Number of Trained and Untrained Teachers in the Ahanta West District



Source: Ahanta West District Education Directorate

The pupil-teacher ratio and quality of teachers are critical in the assessment of school quality and the situation in Ahanta West District is reported in Table 4.2. The ratio is observed to be higher than the norm (i.e. 33:1) in primary schools, especially in public schools. The pupil-teacher ratio is reported to be higher in private schools at pre-school level than in public schools. The ratio in public pre-schools rose from 37:1 to 48:1 between 1999/2000 and 2004/2005 before dropping to 41:1 the following academic year (Table 4.2). In private pre-schools, however, the ratio rose significantly from 43:1 in 1999/2000 to 63:1 in 2001/2002 on account of a sharp rise in enrolment by about 50 percent as against a 2 percent increase in the strength of teaching staff. The trend was reversed in subsequent years to 34:1 and 43:1 in 2004/2005 and 2005/2006 respectively.

The ratio also rose substantially in private primary schools, from 30:1 in 1999/2000 to 71:1 the following year due to a drop in the number of teachers by 45 percent as against a 33 percent rise in enrolment. The trend was reversed with a consistent decline in the ratio to 10:1 in 2005/2006. In contrast the pupil-teacher ratio in public primary schools rose marginally from an average of 38:1 over a three-year period of 1999/2000-2002/2003 to 41:1 for the period 2003/2004-2005/2006.

The pupil-teacher ratio in public junior secondary schools increased gradually and consistently from 19:1 to 24:1 between 1999/2000 and 2005/2006, yielding an average of 22:1 compared to 26:1 in private junior secondary schools. Apart from 1999/2000 and 2005/2006 when the ratio was significantly lower in private schools, the pupil-teacher ratio has remained higher in private schools than in public schools in Ahanta West District.

Table 4.2: Teachers and Pupil -Teacher Ratio in Ahanta West District

Year	Level	% of Trained Teachers		Pupil-Teacher Ratio	
		Public	Private	Public	Private
1999/2000	Pre-School	3.4	2.4	36.6	42.9
	Primary School	68.7	4.6	39.4	29.7
	Junior Secondary	80.3	8.5	18.5	8.6
	Senior Secondary	97.1	---	16.5	---
	TVET	100.0	---	---	---
2000/2001	Pre-School	2.5	2.6	31.8	44.3
	Primary School	72.9	2.8	36.6	71.1
	Junior Secondary	81.9	13.8	19.5	38.0
	Senior Secondary	95.7	---	20.6	---
	TVET	91.7	---	---	---
2001/2002	Pre-School	3.9	2.3	43.6	62.8
	Primary School	74.7	5.8	37.7	31.2
	Junior Secondary	78.8	8.3	21.2	28.8
	Senior Secondary	97.1	---	24.3	---
	TVET	100.0	---	22.9	---
2002/2003	Pre-School	6.1	1.8	39.6	57.2
	Primary School	74.4	2.6	40.7	33.5
	Junior Secondary	81.0	11.8	20.8	28.5
	Senior Secondary	94.3	---	27.2	---
	TVET	100.0	---	23.2	---
2003/2004	Pre-School	1.4	1.5	46.4	47.5
	Primary School	73.3	2.5	40.4	28.9
	Junior Secondary	80.8	8.6	23.3	33.4
	Senior Secondary	92.2	---	26.6	---
	TVET	90.0	---	11.3	---
2004/2005	Pre-School	1.4	1.2	48.1	34.3
	Primary School	74.1	2.6	43.5	28.8
	Junior Secondary	87.8	10.5	24.1	30.6
	Senior Secondary	93.9	---	22.1	---
	TVET	54.5	---	11.0	---
2005/2006	Pre-School	7.5	0.0	41.4	43.3
	Primary School	66.1	5.1	39.6	10.4
	Junior Secondary	77.5	8.5	24.4	14.1
	Senior Secondary	98.1	---	19.6	---
	TVET	86.7	---	11.1	---

Source: Author's calculations based on data from the District Education Directorate

Generally, there are more trained teachers in public schools than private schools in the district. The proportion of trained teachers in public pre-schools increased from 3.4 percent in 2000 to 6.1 percent in 2002/2003 before dropping to 4.1 percent in 2003/2004 and 2004/2005. The proportion however rose remarkably to 7.5 percent the following year as a result of a substantial increase (by 72 percent) in the number of trained teachers in public pre-schools. In contrast, the proportion of trained teachers in private pre-schools declined consistently from 2.6 percent in 2000/2001 to less than 1 percent in 2005/2006 after rising from 2.4 percent in 1999/2000.

The proportion of trained teachers in public primary schools, which rose from 69 percent to 74 percent before dropping to 66 percent in 2005/2006, falls short of the GPRS I target of 83.1 percent. Similarly, the share of trained teachers in public JSS increased from 80 percent to 88 percent between 1999/2000 and 2004/2005 but dropped to 77.5 percent in 2005/2006.

In private primary and JSS however, the trend has been highly unstable. The proportion of trained teachers in private primary schools increased from 4.6 percent in 1999/2000 to 5.8 percent in 2001/2002 after dropping to 2.8 percent in 2000/2001. It again declined to 2.6 percent in 2002/2003 and remained at that level before inching up in 2005/2006. In private JSS, the proportion of trained teachers ranged from a low of 8.3 percent in 2001/2002 to a high of 13.8 percent in 2000/2001. The apparently low salaries and other conditions of service in private schools largely account for the low number and high turnover of trained teachers in that sector. This could have adverse implications for the quality of teaching and student performance in certificate examinations in private schools.

School Enrolment

In absolute terms, the district has witnessed an improvement in the number of children enrolled in basic schools, particularly at pre-school and junior secondary level, since the 1999/2000 academic year. Total enrolment in pre- and junior secondary schools increased remarkably by 3,409 and 2,877 (or by 68 percent and 76 percent) respectively between 1999/00 and 2005/06 (Table 4.3). There was a moderate increase in enrolment of 1,737 or 12 percent in primary schools over the same period. The gender dimension of enrolment shows that while girls outnumber boys at pre-school level, the opposite is the case at primary and junior secondary level. On average, girls constitute 51 percent of children in pre-schools against 48 percent and 46 percent in primary and junior secondary schools respectively. This seems to suggest a higher dropout rate of girls than boys thus raising concerns about gender disparity in basic schools.

A comparison of the population of primary and junior secondary schools indicates that over 50 percent of pupils in primary school fail to make it to junior secondary school. This could be linked to the relatively smaller number of junior secondary schools in the district. Evidence from the ISSER survey shows that about 35 percent of households are estimated to be at least 30 minutes away

from the nearest junior secondary school. This suggests that physical access to junior secondary school is a challenge in the district. In Agona Nkwanta, the district capital, enrolment has increased substantially according to some of the community members and therefore, some schools have been compelled to adopt a shift system. This appears to suggest that the capitation grant introduced by government in 2005 is yet to make an impact on primary enrolment in other parts of the district.

Gross and Net Enrolment Rates

The district has seen an improvement in both gross and net enrolment rates at all levels of education. Generally, the gross enrolment rate (GER) is always higher than the net enrolment rate (NER) because there are quite a number of children enrolled in the various stages of education with ages outside the prescribed age group. By definition, the NER for a particular education level is the number of children enrolled in

Table 4.3: Number of Pupils Enrolled at Various School Levels in Ahanta West District, by Sex

	Pre-school			Primary			JSS		
Year	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1999/00	2,453	2,535	4,988	7,333	6,768	14,101	2,122	1,673	3,795
2000/01	2,152	2,113	4,265	7,317	6,832	14,149	2,583	2,187	4,770
2001/02	2,983	3,027	6,010	7,318	6,822	14,140	2,616	2,221	4,837
2002/03	3,119	3,274	6,393	7,392	7,073	14,465	2,594	2,305	4,899
2003/04	3,180	3,205	6,385	7,500	7,055	14,555	3,294	2,486	5,780
2004/05	3,133	3,290	6,423	8,250	7,724	15,974	3,108	2,798	5,906
2005/06	4,072	4,325	8,397	8,196	7,642	15,838	3,319	3,353	6,672

Source: District Education Directorate

At focal group discussions, most parents applauded the introduction of the capitation grant which has provided them some leverage. They were, however, quick to add that the payment of examination and sports fees, as well as the cost of books and uniforms remain a major financial constraint to the education of their children. In addition, all the communities interviewed are yet to benefit from the school feeding programme which is one of the intended means of improving school enrolment and attendance.

That level of education who are within the prescribed age group as a proportion of the population of children in the prescribed age group. Therefore, by definition the NER cannot exceed 100 percent. In contrast, the GER may exceed 100 percent depending on the number of children enrolled at a particular level of education who are outside the prescribed age group for that stage of education because of starting school late or repeating a class for various reasons.

Table 4.4: Gross and Net Enrolment Rates (%)

Rates	Level	Year	Boys	Girls	GPI*	Rural	Urban	All
		2000	38.9	38.9	1.00	37.4	45.9	38.9
	Pre-school**	2003	49.9	59.9	1.20	56.1	42.2	54.6
		2007	69.4	73.2	1.05	71.1	67.9	70.6
		2000	68.5	67.7	0.99	66.5	74.8	68.1
	Primary	2003	70.9	67.0	0.94	69.1	67.9	69.0
NET		2007	83.2	72.5	0.87	78.7	73.2	77.6
ENROLMENT		2000	31.6	30.5	0.97	29.4	37.3	31.1
	JSS	2003	32.0	17.9	0.56	23.5	39.4	25.5
RATES		2007	47.2	35.8	0.76	33.8	67.1	41.8
(NER)		2000	13.5	10.8	0.80	10.8	16.9	12.1
	SSS	2003	10.4	10.5	1.01	11.4	---	10.4
		2007	17.5	7.7	0.44	11.3	14.2	12.3
		2000	0.31	0.13	0.42	0.12	0.54	0.21
	Tertiary	2003	---	2.33	---	1.52	---	1.32
		2007	3.10	0.73	0.02	---	7.07	1.83
		2000	50.2	49.8	0.99	48.3	57.9	50.0
	Pre-school	2003	79.9	96.8	1.21	91.0	63.0	87.9
		2007	82.3	150.7	1.83	98.3	137.9	104.0
		2000	91.4	88.1	0.96	87.6	99.1	89.7
	Primary	2003	110.7	103.8	0.94	107.8	102.5	107.2
GROSS		2007	119.6	106.7	0.89	98.9	103.0	112.5
ENROLMENT		2000	102.7	93.7	0.91	94.1	113.8	98.4
	JSS	2003	68.6	43.2	0.63	54.7	72.0	56.9
RATES		2007	143.9	123.3	0.86	122.9	169.7	134.3
(GER)		2000	38.0	28.0	0.74	28.4	50.0	33.0
	SSS	2003	27.4	22.7	0.83	26.6	11.0	25.2
		2007	76.5	35.0	0.46	57.4	49.2	54.5
		2000	1.84	1.03	0.56	1.28	1.88	1.42
	Tertiary	2003	1.37	2.33	1.70	2.20	---	1.91
		2007	3.12	0.92	0.29	2.03	1.84	1.98

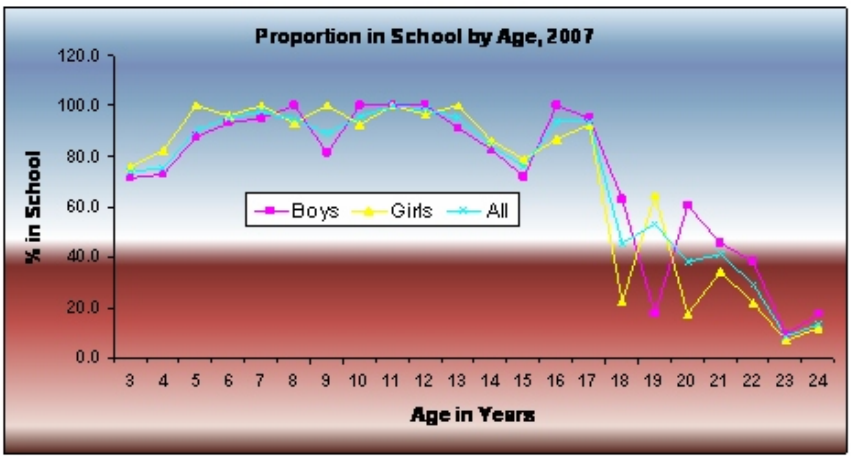
**GPI = Gender Parity Index*
***Pre-school enrolment rates are calculated for the population aged 3-5 years; primary for 6-11 years; junior secondary for 12-14 years; senior secondary for ages 15-17 years; and tertiary for ages 18-24 years for 2003 and 2007 and 15-24 for 2000*
Source: 2000 Population and Housing Census & CWIQ 2003 (GSS) and 2007 ISSER Household Survey

Table 4.4 presents net enrolment rates (NER) and gross enrolment rates (GER) for various levels of education in the district. Both NER and GER improved considerably at almost all levels and for both sexes between 2000 and 2007. The only slip occurred in urban areas where the GER at SSS and tertiary level dropped marginally by 0.8 and 0.04 percentage point. There was also a marginal decline in NER at primary and SSS in urban areas and amongst girls at the SSS. The observed increase in gross primary enrolment since 2000 in Table 4.4 in contrast with the apparent decline reported in Table 4.3 could be explained by the possibility of some children attending school outside the district which would not be captured by the District Education Directorate.

Though there was improvement in the GER and NER among both sexes, greater improvement was recorded among boys, resulting in a general decline in the Gender Parity Index (GPI) over the period for primary and junior secondary levels. Related to this development is the inability to sustain the observed higher enrolment rates amongst girls than boys beyond the pre-school level. Both gross and net enrolment rates are observed to be higher among girls than boys in pre-school but the reverse is the case beyond pre-school level (Table 4.4). This appears to suggest a higher dropout rate among girls compared with boys. This tends to undermine the progress towards gender equality and women's empowerment advocated in the MDGs. Clearly, the district has failed to attain the GPRS target for gender equality in primary education by 2004/2005.

Comparing the NER with the GER reveals that a considerable number of pupils and students are outside the prescribed age brackets. This occurs mostly at junior and senior secondary levels where average ages of 15.7 years and 20.1 years are outside the prescribe ranges of 12-14 years and 15-17 years respectively. The mean age of children in pre- and primary schools of 4.9 years and 9.9 years indicates that a considerable proportion enrolled at this level of education is also outside the prescribed ages of 3-5 years and 6-11 years. Estimates from the ISSER survey reveals that about 32 percent and 31 percent of children in pre- and primary schools respectively are outside the prescribed ages of 3-5 years and 6-11 years.

Figure 4.3: Enrolment in 2007, by Age



Source: 2007 ISSER Household Survey

Enrolment rates in school among children aged 3-17 years in the district is high in 2007. At least 90 percent of children between the ages of 5 and 13 years and 16 and 17 years are in school (Figure 4.3). Between the ages of 3 and 7 years, enrolment among girls is higher than boys and fluctuates between the two sexes up to age 15 years, beyond which enrolment among boys is higher than that of girls throughout. There is high enrolment among children between 5 and 13 years old in primary and junior secondary.

Using data from the EMIS project of the Ministry of Education, Science and Sports, the district's gross and net primary enrolment rates were higher than the national average for 2002/2003 and 2003/04 but dropped below the national average in 2004/05 academic year (Table 4.5). However, the rates were lower than the regional average for the three academic years except in 2003/04.

Gross enrolment rates at JSS level in the district remained higher than the regional and national rates over the three years. However, the district failed to realise the GPRS I target of a GER of 88.5 percent by 2004/2005 (Table 4.5). The net enrolment rate at JSS in the district was the same as the national rate in 2002/2003, but dropped below the national rate in 2003/2004 before rising above both the national and regional rates the following academic year. Clearly, the performance of the district in terms of enrolment appears to be better than the national effort. Nonetheless, more is required of the district to attain the goal of universal primary education as contained in the MDGs. During community discussions, members cited the inability of parents to

Table 4.5: Comparing District Enrolment Rates with Western Region and National

Year	Enrolment	Ahanta West	Western Region	National
	GER			
	Primary	76.1	77.7	75.7
2002/2003	JSS	68.2	58.6	63.4
	NER			
	Primary	58.8	58.9	55.9
	JSS	36.9	34.8	36.9
	GER			
	Primary	81.9	79.7	78.4
2003/2004	JSS	68.1	64.3	65.6
	NER			
	Primary	56.4	59.2	55.6
	JSS	27.5	29.1	29.5
	GER			
	Primary	80.8	87.2	83.3
2004/2005	JSS	73.5	70.7	70.2
	NER			
	Primary	57.5	65.4	59.1
	JSS	32.8	32.6	31.6

Source: EMIS Project, Ministry of Education, Science and Sports

fund children's education as the major reason why some children in the community do not attend primary school. Other reasons include lack of parental interest and lack of interest in schooling among some children.

School Attendance

School attendance is quite regular in Ahanta West for most children. This is based on the 2007 ISSER Household Survey which found that 76.2 percent of schoolchildren never missed classes in the 12 months prior to the survey. The rate of school attendance was marginally higher for boys than girls as a higher proportion of girls missed classes at least once (Table 4.6). School attendance was also reported to be better among rural school children compared with urban schoolchildren. Of those who missed some school days during the academic year, the frequency was highest among children aged 15-17 years followed by those aged 3-5 years. Those within the age group of 18-24 years who are supposed to be pursuing tertiary education were most regular, followed by children aged 6-11 years.

A higher proportion of those who missed school did so several times compared with those who were absent once, twice or thrice. Indeed, about 14 percent were absent from school once, 31 percent twice, and 21 percent thrice. The children were absent from classes for an average of nine days, with girls and/or rural children being the worse culprits (Figure 4.4). Girls stayed away from school for an average of 13 days compared with six days for boys while rural children did so for an average of 10 days against eight days for urban children.

Table 4.6: School Attendance

Age	% that missed	Once	Twice	Thrice	Several times
3-5	30.5	10.0	5.2	40.1	44.8
6-11	20.5	14.1	43.4	32.2	10.3
12-14	22.0	---	36.5	3.3	60.2
15-17	34.7	26.0	38.2	3.3	32.4
18-24	16.7	11.7	16.0	17.6	54.7
Boys	23.4	17.8	23.0	22.3	36.9
Girls	24.2	9.4	39.6	18.5	32.6
Rural	21.8	14.0	32.2	22.3	31.5
Urban	30.3	13.2	27.8	16.1	42.9
All	23.8	13.8	30.9	20.5	34.8

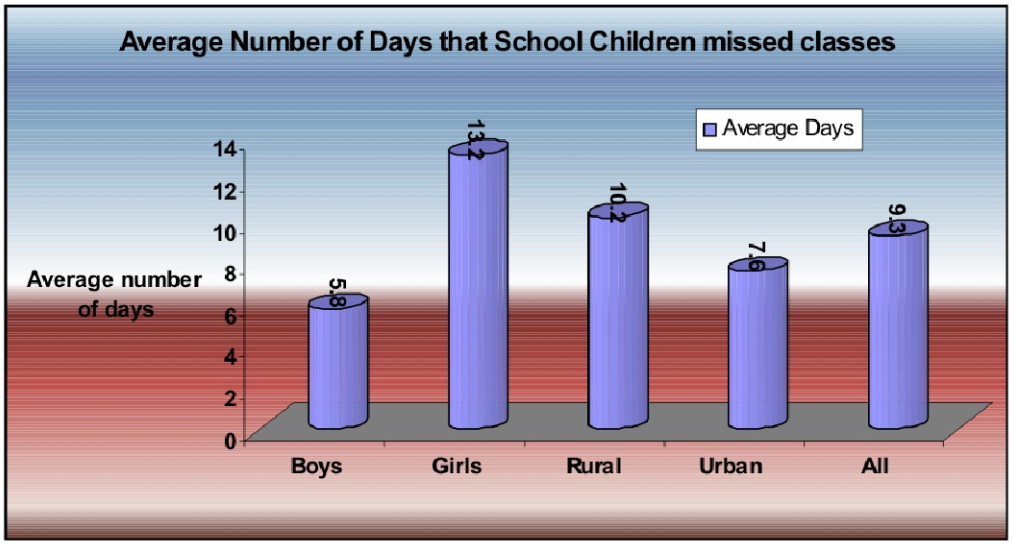
Source: 2007 ISSER Household Survey

On top of the list of reasons for the children's absence from school is ill-health, which was cited by about 46 percent of children who missed school. About 26 percent missed some classes due to financial problems while about 6 percent missed a number of school days because of bad weather.

absent from school because they were needed on the farm, while caring for new-born babies affected school attendance of boys more than girls (Table 4.7).

Although, about 98 percent of them returned to school, it is clear that longer days

Figure 4.4: Average Number of Days that Children Stayed out of School



Source: 2007 ISSER Household Survey

Pregnancy caused about 3 percent of girls to stay out of school and this was recorded in the rural areas. In one of the communities, however, the use of children for farming and fishing was cited as the first reason for low school attendance. Ill-health affected school attendance of children more in rural than in urban areas while financial constraints caused a higher proportion of urban children to stay out of school compared to rural children. A higher proportion of boys than girls stayed out school due to ill-health while financial problems adversely affected school attendance of girls proportionately more than boys. A greater proportion of girls were

of absence may contribute to children losing interest in school due probably to the difficulty to follow lessons and might adversely affect their performance. None of the urban children dropped out of school due to irregular school attendance compared with 4 percent of rural children. The proportion of boys who returned to school after days of absence was not significantly different from girls. About 17 percent of children who missed some days of classes suffered repetition in class with urban children being the worse affected. A higher proportion of boys than girls who were out of school for some days repeated a class.

Table 4.7: Reasons for Missing Classes & Those That Returned (%)

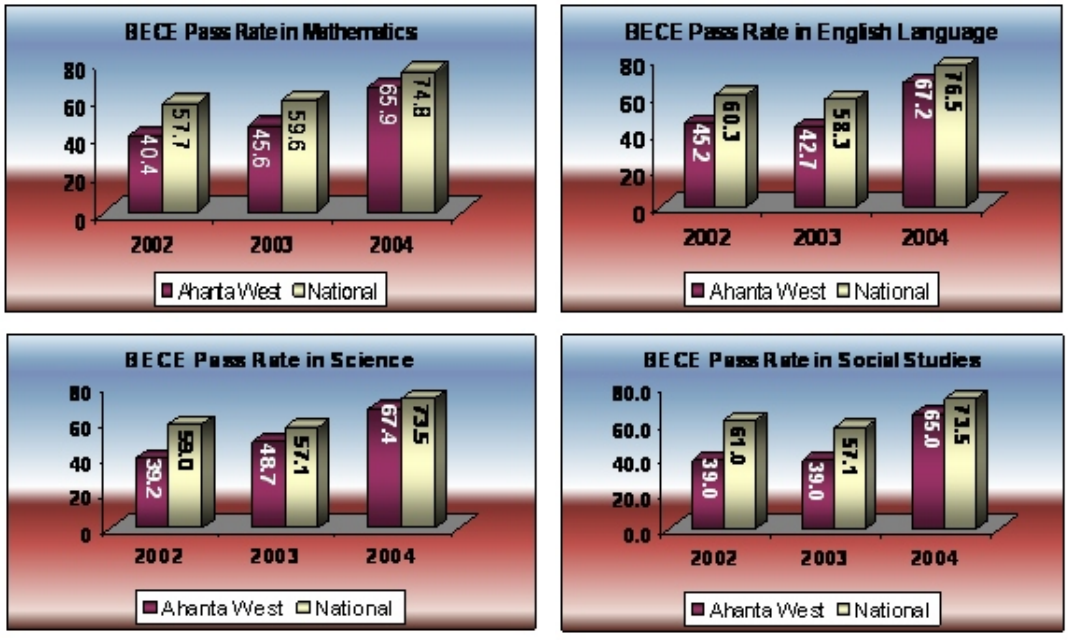
Reasons	Boys	Girls	Rural	Urban	All
Ill-health	50.7	40.9	47.7	42.4	46.1
Needed on farm/store	1.5	5.2	4.7	---	3.2
Financial	17.6	36.1	20.0	41.0	26.4
Child not interested	12.6	1.6	10.6	---	7.4
Bad weather	5.1	6.0	7.0	2.2	5.5
Madam delivers	12.5	4.6	6.3	14.4	8.7
Travelled	---	2.8	1.9	---	1.3
Pregnancy	---	2.8	1.9	---	1.3
% Returned	97.6	97.3	96.1	100	97.5
% absentees who repeated class	18.1	15.1	12.8	25.7	16.7

Source: 2007 ISSER Household Survey

Performance of Pupils in Competitive Examination

The performance of Ahanta West children in the Basic Education Certificate Examination was significantly lower than the national and regional average in 2002, but improved remarkably in 2003 and 2004. The pass rate in mathematics rose consistently from 40 percent in 2002 to 66 percent in 2004 while the rate in English language also increased from 45 percent to 67 percent over the same period (Figure 4.5).

Figure 4.5: Performance of Pupils of Ahanta West District in BECE, 2003-2005



Source: EMIS Project, Ministry of Education and Sports

The improved performance of pupils in the district narrowed the pass rate gap between the district and national from 17.3 to 8.9 percentage points in mathematics and 15.1 to 9.3 percentage points in English language. A similar trend in the performance of pupils at BECE was observed in science and social studies. Boys perform better than girls in the BECE judging by their pass rates in all the four major subjects over the period.

Overall, the performance of pupils at BECE improved considerably between 2003 and 2005. After experiencing an increase from 40 percent in 1998 to about 50 percent in 2000 in the proportion of candidates that passed in six subjects with aggregate 6-30, the district witnessed a continuous decline to about 32 percent in 2003 (Figure 4.6). Clearly, despite the improvement in the performance of pupils at BECE in recent times, more needs to be done to ensure that this positive trend is sustained.

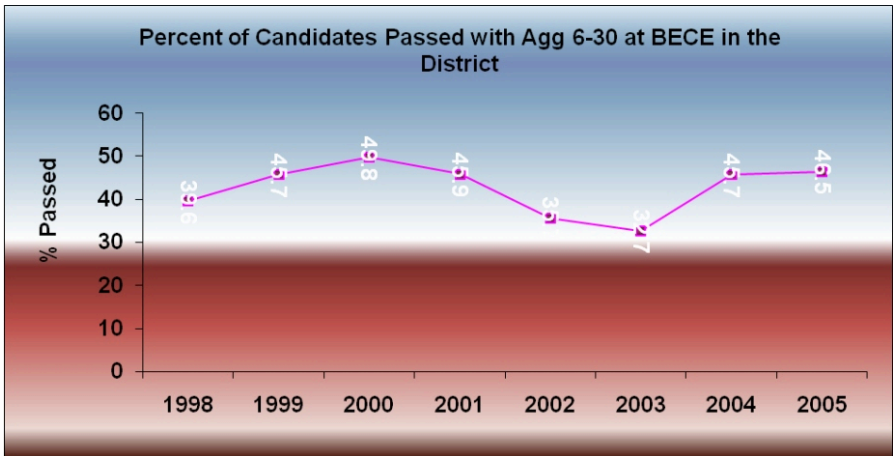
Educational Attainment

One major determinant of the distribution of economic activity of the labour force and, for that matter, income distribution and poverty incidence, is the educational attainment of the adult population. Table 4.8 shows the distribution of the population aged 3 years and above by highest level of education completed. Over 30 percent of the population aged 3 years and above have no education while 11 percent have some or completed primary education. About 38 percent have some or completed middle school or JSS compared with 9 percent and 3.5 who completed or have some secondary and tertiary education respectively.

The district witnessed a marginal decline in the proportion of the population aged 3 years and above that has never attended school and those who have attended or completed primary school by 0.5 percentage and 13 percentage points respectively between 2000 and 2007. The fact of an increasing proportion of the population who have gone beyond primary education is an indication of progress in knowledge acquisition and improvement in human development in the district.

Indeed, the declining proportion of population at the lower level education and

Figure 4.6: Proportion of Candidates Passing with Aggregate 6-30 at BECE



Source: Ahanta West District Education Directorate

Table 4.8: Educational Attainment of Population aged 3 years and above (%)

Level	2000	2003	2007
No education	31.0	29.5	30.5
None	---	7.9	---
Pre-school	5.3	4.1	---
Primary	23.4	24.5	11.4
Junior secondary	28.4	12.3	21.4
Middle school	---	15.1	16.8
Senior secondary	4.9	3.1	6.4
Secondary old system	---	1.1	2.5
Vocational/Technical/Commercial	2.3	1.2	3.3
Agriculture/Nursing/Teacher training	1.7	0.7	4.1
Tertiary	1.8	0.5	3.5

Note: In 2000, the proportion that had attained junior secondary school level includes those with middle school education and the proportion that had attained senior secondary level contains those who had attained secondary level (old system).
Source: 2000 Population and Housing Census & 2003 CWIQ (GSS) and 2007 ISSER Household Survey

increasing proportion at the higher level of education suggests that more people are now striving for higher education than before, which could translate into improved literacy rates and productive skills of the population. However, the indicators of educational attainment do not provide information on the quality of education received, which is a missing ingredient in the MDG indicators and the HDI.

Adult Literacy

The adult literacy rate in English, a local language or both, improved remarkably between 2000 and 2007, indicating some improvement in the education component of human development. The literacy rate is generally higher in English than in the local languages. A higher proportion of the urban population is observed to be literate than the rural population. In terms of gender, Table 4.9 shows that a greater proportion of men than women is literate in English, a local language or both in 2000 and 2007, and the gap seems to have widened between. This has the potential of undermining the realisation of the third MDG which seeks to promote gender equality and empower women. However, estimates from the 2000 Population and Household Census and the 2007 ISSER Household Survey indicate that the gender gap in the literacy rate among the youth aged 15-24 years has narrowed considerably over the period, thereby putting the district on track to achieve MDG 3.

Table 4.9: Adult (15 years and over) Literacy Rates (%)

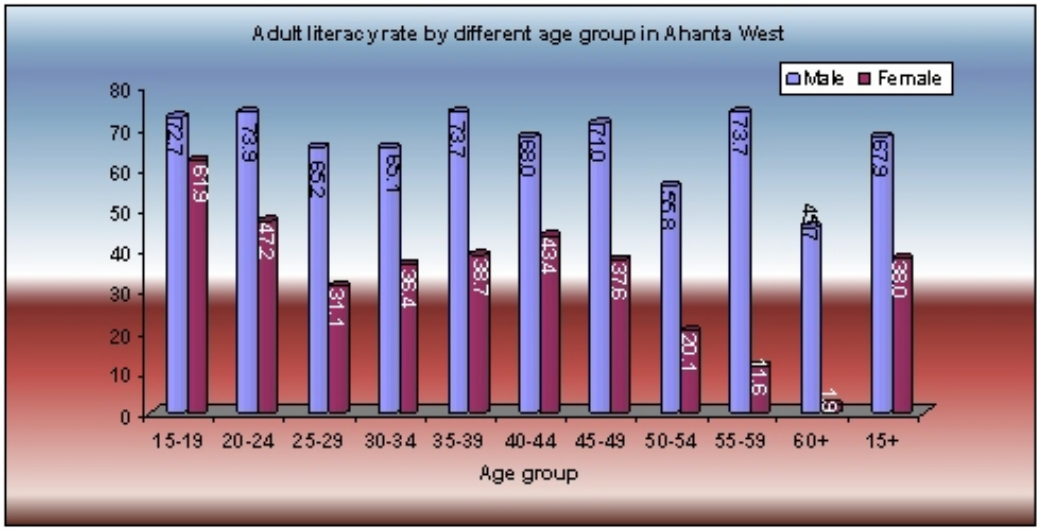
Type	2000 All	Male	Female	Rural	Urban	2007 All	Male	Female	Rural	Urban
Literate in										
- English	20.3	24.3	16.7	19.4	23.3	68.6	78.6	59.2	60.6	86.5
- Local Language	1.3	1.3	1.2	1.3	1.0	51.0	60.5	42.3	44.1	66.0
- English & Local Lang.	29.0	38.5	20.5	25.6	41.8	49.4	58.8	40.6	41.5	67.0

Source: 2000 Population and Housing Census (GSS) and 2007 ISSER Household Survey

The classification of the literacy rate by age group also reveals that a greater proportion of adult men than of women are literate across all age groups (Figure 4.7). The gender gap is wider among those who are above 50 years old and narrower among the youth in the 15-24 age category. This shows that if education of the girl child is taken seriously and fewer girls drop out, women will catch up with men over time in terms of adult literacy.

the district's functional literacy programmes have collapsed or are not functioning properly. Available data from the District Education Directorate, however, show that the number of adults enrolled in the functional literacy programme dropped from 235 in 2003 to 225 in 2004. The number rose to 241 the following year and to 461 in 2006. While there has been an improvement in enrolment since 2004, the

Figure 4.7: Adult Literacy Rates, by Age Group



Source: 2003 CWIQ, Ghana Statistical Service

Non-Formal Education

Information gathered from community members and opinion leaders suggests that

number is still low considering the level of illiteracy in the district.

Attaining the MDGs and Improving Human Development

The gross and net enrolment rates in the Ahanta West District have improved considerably since 2000, implying that the district has made remarkable progress towards universal primary education by 2015. This, coupled with a considerable rise in adult literacy rates and gross enrolment rates at all levels, suggests an improvement in human development in the district. The gender gap in terms of enrolment varies from one level of education to the other. The gender gap is observed to widen as one climbs the educational ladder due partly to high dropout rates among girls. In terms of adult literacy, women remain disadvantaged though the trend has improved since 2000. The challenge for the district is to ensure equal enrolment rates among the sexes at all levels of education, and to close the literacy gap between the sexes by instituting measures to reduce the dropout rate among girls.

In the Medium-Term Development Plan of the district, the adult illiteracy rate is expected to fall by 20 percent while 60 percent of children of school-going age in the district must be in school by 2009. The Plan also seeks to promote gender equality and reduce gender disparity in basic and secondary schools by 70 percent. While these targets are laudable, it is also important to ensure quality of education to avoid a situation where schools produce illiterate school-leavers who may not be economically productive and may become a burden on society. In addition, a lot more schools need to be established and more teachers attracted to and retained in the district to meet the increased enrolment at all levels.

Conclusion

Essentially, education is one of the solutions to the problem of poverty and deprivation. The reported increase in adult literacy rates and increased proportion of the population attaining higher education is an indication of improvement in HDI and puts the district on the path to realising the MDGs. In addition, the reported improvement in the gross and net enrolment rates at all levels of education is a positive sign of improvement in the knowledge component of human development. However, there has not been a commensurate increase in school infrastructure and numbers of teachers and this could have adverse effects on the quality of education and performance of pupils in examinations in the district.

An increased proportion of people with some education implies some improvement in the skills of the labour force and a possible shift from primary and informal economic activity (which is not well remunerated) to more rewarding economic activity such as manufacturing, finance and commercial farming. This could also help shift farmers and fishermen away from traditional methods to modern techniques, improve their earnings and reduce their level of vulnerability such that they can break the cycle of poverty.

The basic challenge however is the widening gender gap in school enrolment at all levels and in the adult literacy rates. This trend could undermine the progress of the district in realising the MDGs of promoting gender equality and ensuring women's empowerment. In addition, the problem of ill-health and finance that caused some children to miss classes brings to light the effect of the level of vulnerability to ill-health on the knowledge component of human development and the attainment of the MDGs.

CHAPTER FIVE

HEALTH, WATER AND SANITATION

Introduction

The main goal of the Ahanta West District Assembly as contained in the Medium-Term Development Plan for the period 2006-2009 is to ensure improvement in the performance of the health system in the district. This is in line with the medium-term framework of the government (GPRS II) which seeks to ensure, among other things, improved access to health care, malaria control and HIV/AIDS prevention. Health Issues also feature in the MDGs to the extent that almost half of the goals focus on health improve maternal mortality rates, reduce child mortality rate, combat HIV/AIDS and other diseases (Box 5.1). In the seventh goal of ensuring environmental sustainability, the MDGs also seeks to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.

Picture 5.1: The Antenatal/OPD Block of the Agona Nkwanta Health Centre

The human development index focuses fundamentally on longevity i.e. improving the life expectancy at birth. In the Medium-Term Development Plan, the district seeks to improve access to health services by 50 percent and quality of health care and efficiency in the health system by 30 percent. Some of the strategies outlined in the plan to attain these targets include capacity building, skills upgrading of personnel, promoting public-private partnership and organizing more immunization programmes.

Health Infrastructure and Personnel

Health services in the district are provided by both the public and private sector. Table 5.1 shows the number of health institutions in Ahanta West. The district has a total of 12 health institutions made up of one public hospital located at Dixcove, five public health centres, two public Community Health Planning Services (CHPS) and four clinics (one public, two private, and one mission). There are also 82 outreach points and a number of drug stores that are highly patronised by members of the community. The number of health institutions increased from seven in 2000 to 12 in 2006. The proximity of the district to Takoradi enables many inhabitants, particularly those living in Apowa and New Amanful, to patronise health facilities in the Sekondi-Takoradi metropolis.

Box 5.1: Health Component of MDGs and Human Development

Millennium Development Goals

- *Reduce child mortality by two-thirds between 1990-2015*
- *Improve maternal mortality*
- *Combat HIV/AIDS, malaria and other major diseases*

Human Development

- *Longevity – improving upon the life expectancy at birth*

Table 5.1: Number of Health Facilities in Ahanta West District, 2000-2006

Facility	2000	2001-03	2004-05	2006
Number of Public Health Institutions	***7***	***7***	***7***	***9***
- Hospital	1	1	1	1
- Health Centre	5	5	5	5
- Clinic	1	1	1	1
- CHPS	---	---	---	2
Number of Private Health Institutions	***---***	***1***	***3***	***3***
- Clinic	---	1	2	2
- Clinic (Mission)	---	---	1	1
Total Number of Health Institutions	**7**	**8**	**10**	**12**

Source: Ahanta West District Health Directorate

There is only one medical doctor for a population of about 100,000. The brain drain that has characterised the health sector of the country over the years may be making it difficult to supply all health facilities with doctors. There are two medical assistants, 24 nursing officers including midwives, and 60 trained traditional birth attendants (Table 5.2). The district also has six technical officers for community health, two dispensary technicians and two laboratory technicians.

Table 5.2: Number of Health Workers in Ahanta West District

Personnel	2000-03	2004-05	2006
Doctors	---	---	1
Medical Assistants	2	2	2
Pharmacists	---	---	---
Dispensary Technicians	2	2	2
Dispensary Assistants	---	---	---
Nurses	24	24	24
Traditional Birth Attendants	45	60	60
Technical Officers (Community Health)	6	6	6
Laboratory Technicians	2	2	2

Source: Ahanta West District Health Directorate

Access to Health Services

The location of health infrastructure in the district is an important factor in determining physical access. Physical access defined as the ability of an individual to reach a health facility in less than 30 minutes is quite high compared to other districts in the region. In 2007, about 30 percent of households claim to be less than 30 minutes away from the nearest health facility as against 30 percent and 40 percent that claim to take 30-60 minutes and over one hour to reach the nearest health facility. About 55 percent of households get to the nearest health facility by means of a vehicle while 44 percent walk and about 1 percent travel by boat or canoe. This definition of access, however, does not consider the range of quality of health services provided and affordability to the patient as well as the time it takes to obtain transport to reach the health facility.

There are a number of factors that influence the decision to patronise health facilities. These include the income of the person or household relative to the cost of consultation and drugs as well as the cost of travelling to the health facility, the nature of the health need, and the level of education of the Person. Table 5.3 presents different kinds of health facilities or health provider visited by inhabitants in times of sickness. In 2007, about 89 percent of those who had fallen sick sought medical attention.

The most heavily patronised health facility is the public clinic or hospital, which accounted for 37 percent in 2007 (Table 5.3). About 10 percent of those who were ill visited a private clinic or hospital while at least 14 percent sought medical attention at the community health centre. Over a quarter of the sampled population in 2007 who had fallen ill within the three months prior to the survey bought drugs from a pharmacy or drug store.

Table 5.3: Type of Health Facility/Provider Visited in Times of Illness (%)

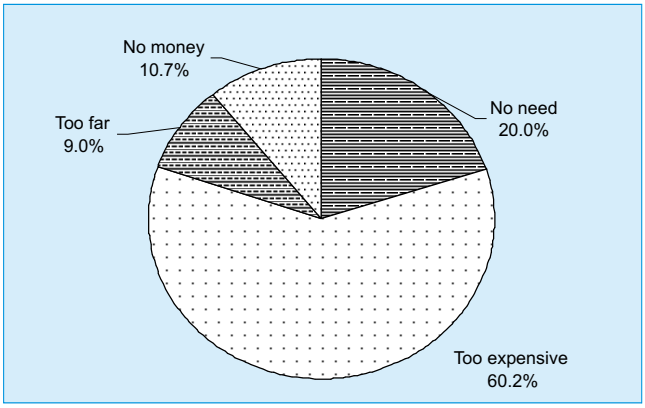
Health Facility/Provider	Total	Rural	Urban
Private Clinic/Hospital	10.1	6.0	22.4
Public Clinic/Hospital	36.7	40.1	26.4
Community Health	14.4	11.5	23.4
Private Doctor/Dentist	0.2	0.3	---
Traditional Healer/Herbs	0.9	1.1	---
Pharmacy/Drug store	26.7	31.4	12.5
None	11.0	9.6	15.5

Source: 2007 ISSER Household Survey

Traditional healers or local herbs and private doctors are the least patronised health providers. The services of pharmacists or chemical sellers were patronised more by the rural population than urban dwellers while a higher proportion of the urban population used community health services. A higher proportion of people in the urban areas failed to seek medical attention during times of sickness compared with rural dwellers. This suggests higher patronage of health services by rural people compared with the urban population.

According to the ISSER survey, of those who fell ill but did not seek medical attention, about 60 percent did not do so because they found medical care too expensive while 20 percent considered it unnecessary to seek medical attention. About 9 percent considered the location of the health facility too far, with 11 percent attributing their inability to visit the hospital to lack of finance (Figure 5.1). Clearly, the inability of over 70 percent of people who fell sick but did not seek medical attention on the basis of affordability is an indication of the effect of financial constraint on access to medical care.

Figure 5.1: Reasons for not seeking medical attention

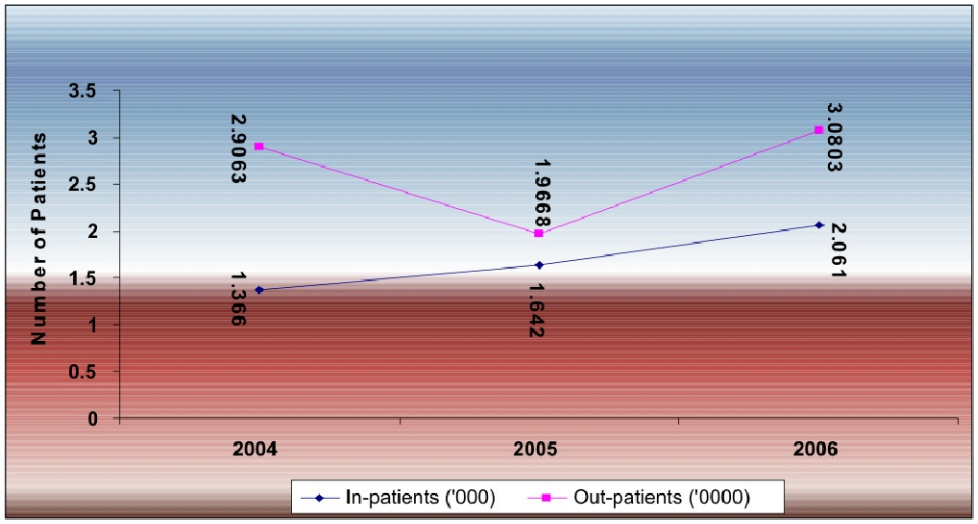


Source: 2007 ISSER Household Survey

The number of in- and out-patients in hospitals and clinics increased considerably in 2006. After a drop in 2005, the number of out-patients rose by 57 percent in 2006 (Figure 5.2). At the same time, the number of in-patients rose by 26 percent. This gives an indication of the pressure on the limited health facilities in the district in recent times.

The assessment of satisfaction levels of patients during their visits to health facilities was captured in the CWIQ 2003. According to survey results, the level of satisfaction was quite high, to the extent that at least 87 percent saw no problem with the services received. Approximately 5 percent complained about a long waiting time while 7 percent found the services rendered to be too expensive.

Figure 5.2: Hospital Attendance in Ahanta West



Source: Ahanta West District Health Directorate

Box 5.2: Health Exemption Programme

- *Exemption for diseases of public health importance (should include all 24 conditions in L.I1313). This includes meningitis, cholera, malnutrition, typhoid, venereal disease, rabies, leprosy, and tuberculosis.*
- *Exemption for antenatal services (first four antenatal clinic visits)*
- *Exemption for children under 5 years (immunization services at child welfare clinics, malaria, measles, diarrhoea, and upper respiratory infection)*
- *Exemption for the elderly, defined as people above 70 years (malaria, diarrhoea, degenerative joint pain, upper respiratory infection, and urinary tract infection)*
- *Exemption for paupers and indigents*
- *Exemption for snake bites and bites by dogs suspected or confirmed to be rabid.*

Source: *January 1997 Presidential Announcement and November 1997 Ministry of Health guidelines*

The apparent high hospital attendance, particularly at public hospitals and clinics, could be linked to health exemption programmes introduced by the government (Box 5.2). The introduction of National Health Insurance to replace the "cash-and-carry" system has also partly contributed to higher health attendance, especially at public health institutions and particularly between 2005 and 2006.

incidence of malaria and other major diseases. Malaria remains the leading cause of morbidity in the district, followed by upper respiratory tract infection (URTI). In 2006, over 15,700 malaria cases were reported at the hospital and clinics and this figure far exceeds the total number of reported cases of the other three leading causes of morbidity, namely URTI, skin disease and gastroenteritis (Table 5.4). Cholera, which

Picture 5.2: A Nurse on duty addressing patients at Agona Nkwanta Health Centre

Morbidity

The sixth MDG is concerned with combating HIV/AIDS, malaria and other diseases such as tuberculosis. The main target is to halt and reverse the spread of HIV/AIDS and the

Used to be one of the major diseases in the district, has declined drastically on account of improved sanitation (see District Medium-Term Plan)

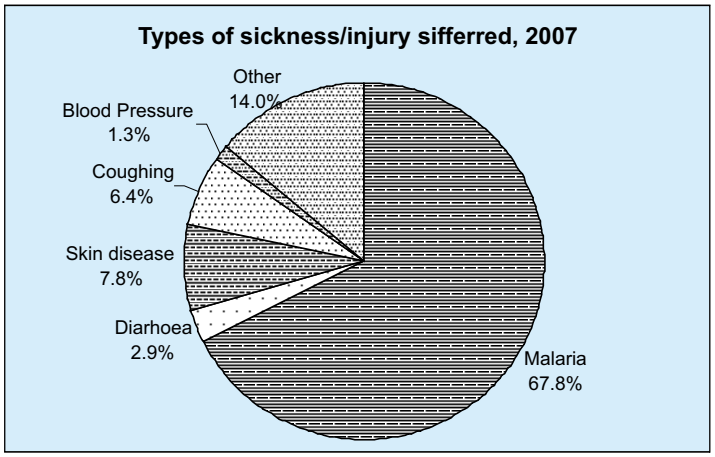
Table 5.4: Four Leading Causes of Death and Morbidity in Ahanta West District

	Disease	2004	2005	2006
Death	Malaria	21	19	31
	Anaemia	13	---	8
	Cardiovascular Accidents (CVA)	11	10	9
	Gastroenteritis	7	---	7
	Hepatitis	---	6	---
	HIV/AIDS	---	6	---
Morbidity	Malaria	18,478	10,351	15,787
	Upper Respiratory Tract Infection	2,625	2,455	4,281
	Skin Disease	2,045	2,455	3,286
	Gastroenteritis	1,536	---	2084
	Home/Road Traffic Accidents	---	1,694	---

Source: Ahanta West District Health Directorate

The results of the ISSER survey confirm the high incidence of malaria in the district, to the extent that of the 38.2 percent who fell sick during the last three months prior to the survey, malaria fever accounted for at least two-thirds of the diseases reported (Figure 5.3). According to the CWIQ 2003, about 55 percent of those who reported sick suffered from malaria. The high incidence of reported malaria cases appears to suggest that the anti-malaria campaign in many communities in the district has not made any positive impact. Indeed, all communities visited during the ISSER survey reported that there had been a series of anti-malaria campaigns to reduce the incidence of malaria cases.

Fig. 5.3: Types of sickness/injury suffered during last 3 months before the survey



Source: 2007 ISSER Household Survey

Malaria Prevention Strategies

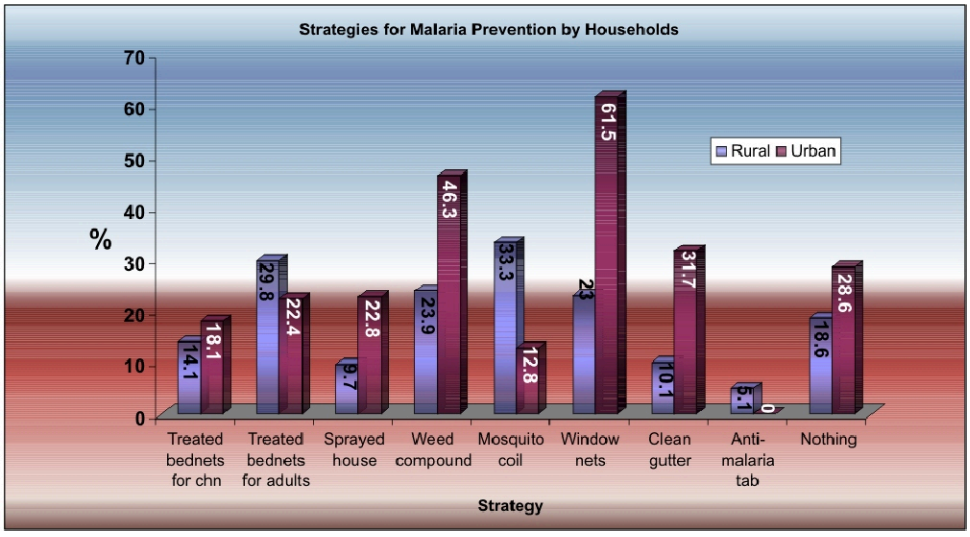
Households adopted various strategies to protect themselves from mosquitoes and avoid malaria infections. The most popular strategy in 2007 varies according to the location of households. While the strategy of covering windows with mosquito nets is popular among urban households, the regular use of mosquito coil is the common strategy adopted by rural households. The two main strategies adopted by urban households to prevent malaria infection besides window netting, were regular clearing of weeds on the compound and regular house spraying.

households aware of the need to adopt some measures to prevent the illness and minimize the incidence of malaria-related deaths.

HIV/AIDS

Data on HIV/AIDS in the district is scanty and difficult to obtain. Nonetheless, available information gathered from the District Health Directorate indicates that six HIV/AIDS- related deaths were recorded in the district in 2005 (Table 5.5). This is against the backdrop of the HIV/AIDS campaigns that had taken place a number of times in the district. During community

Figure 5.4: Strategies Adopted by Households for Malaria Prevention (%)



Source: ISSER Household Survey 2007

In rural areas, the use of insecticide treated bed nets for adults and clearing the compound of weeds regularly were the two major strategies adopted in preventing malaria infection. Meanwhile, about 29 percent of urban and 19 percent of rural households did nothing to prevent malaria infection. More malaria prevention campaigns are important to make all

discussion, all communities confirmed that HIV/AIDS campaigns had been carried out in communities. Considering the proximity of the district to the Shama Ahanta East Metropolis, and lack of adequate facilities in the district to diagnose the disease, it is quite possible that most of the cases are diagnosed in well- endowed health facilities in Sekondi-Takoradi.

Maternal Mortality

Ensuring improved maternal mortality is the fifth MDG. The two indicators for this goal are the maternal mortality ratio and the proportion of births attended by skilled health personnel. The pattern of maternal mortality in the district has fluctuated over the past four years. The ratio increased from 7 per 100,000 live births in 2003 to 9 per 100,000 in 2004 (Table 5.5). The decline of the rate to 5 per 100,000 live births in 2005 was quite remarkable but could not be sustained as it rose to 8 per 100,000 live births in 2006.

deliveries from 854 to 996, with a corresponding increase in the proportion of supervised deliveries from 19.2 percent to 21.6 percent over the period.

The ISSER Household Survey estimates that 42.5 percent of deliveries were done by nurses while traditional birth attendants handled 34.7 percent of deliveries. The remaining 22.8 percent of deliveries was supervised by doctors (Figure 5.5). A higher proportion of deliveries in urban areas were supervised by doctors and traditional birth attendants than in rural areas. While none of

Table 5.5: Infant, Child and Maternal Mortality Rates

Indicators	2003	2004	2005	2006
Infant Mortality Rate*	3	4	3	4
Infant Deaths (< 12 months)	---	17	12	14
Child Mortality Rate*	10	7	4	8
Number of children deaths (1 – 5 years)	---	27	19	22
Maternal Death	---	2	1	4
Maternal Mortality Ratio**	7	9	5	8
Number of Supervised Deliveries	---	854	867	996
Proportion of Supervised Deliveries (%)	---	19.2	19.6	21.6
Number of reported HIV/AIDS deaths	---	---	6	---

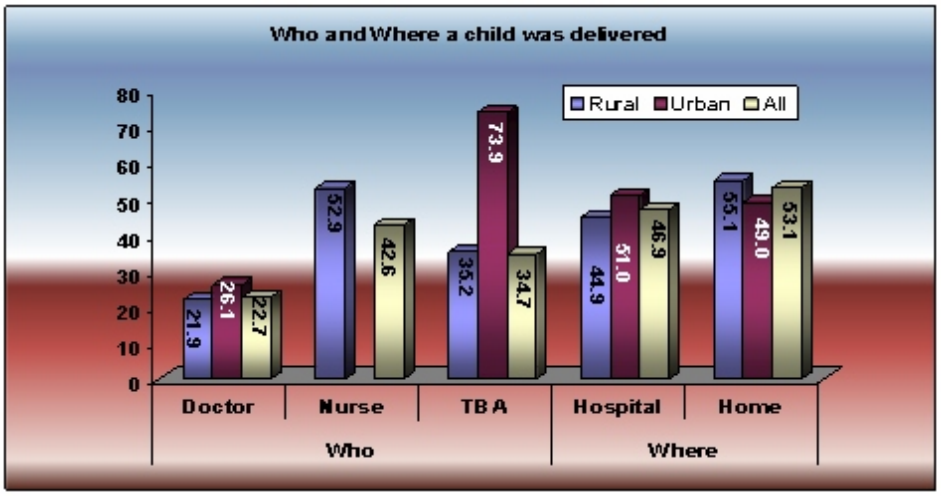
* Per 1,000 live births ** Per 100,000 live births
Source: Ahanta West District Health Directorate

Supervised Deliveries

A second indicator of progress made in improving maternal health is the proportion of births attended by skilled health personnel. The apparently high maternal mortality ratios do not seem to reflect the consistent increase in the number of supervised deliveries between 2004 and 2006. Table 5.5 shows a continuous increase in the number of supervised

the urban deliveries was performed by a nurse, most of the deliveries in the rural areas were performed by nurses. About 53 percent of children under 5 years old were delivered at home compared with 47 percent delivered at a hospital (Figure 5.5). A larger proportion of urban than rural children were delivered at a hospital. During community discussion, it was observed that most of the deliveries at home were done by trained traditional birth attendants.

Figure 5.5: Place of Child Deliveries and by Whom Delivered



Source: 2007 ISSER Household Survey

Pre- and Post-natal Attendance

The survival of mothers and babies during pregnancy and after delivery is largely influenced by the regularity or otherwise of ante-natal and post-natal care received by pregnant and lactating mothers at clinics. Attendance of pregnant women at pre-natal clinics is quite high compared with post-natal attendance. In 2003, about 97 percent of pregnant women attended ante-natal care compared with 95 percent in 2007 while 79 percent of lactating mothers visited the clinic for post-natal care in 2003 as against 87 percent in 2007 (Table 5.6). All the ante-natal attendance occurred in rural areas as there was no pregnancy reported during the last 12 months preceding the 2007 ISSER Household Survey in the sampled urban communities.

Table 5.6: Pre - and post-natal care

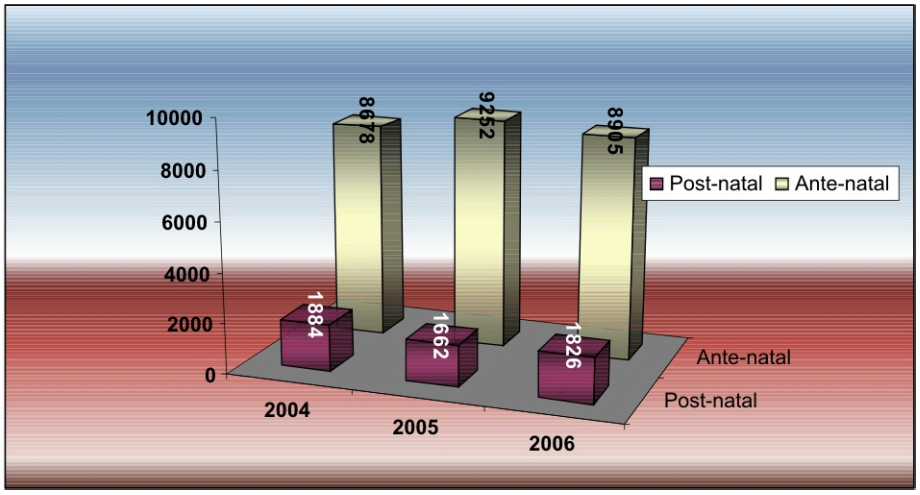
	2003			2007		
	Rural	Urban	All	Rural	Urban	All
Pre-natal care	96.4	---	96.8	92.7	---	94.8
Post-natal care	76.4	---	79.2	86.5	87.0	86.6
Live birth	---	---	---	81.8	47.9	71.9
Still pregnant	---	---	---	18.2	52.1	28.1

Source: 2003 CWIQ, GSS and 2007 ISSER Household Survey

Information gathered from the District Health Directorate also shows a lower post-natal attendance at clinics and hospitals of less than 2,000 women compared with about 9,000 pregnant women who attended an ante-natal clinic (Figure 5.6).

between 1990 and 2015. The child mortality rate in Ahanta West District was in decline since 2003 before it doubled in 2006 (Table 5.5). The infant mortality rate has, however, ranged between 3 and 4 per 1,000 live births since 2003. In absolute terms, the number of

Figure 5.6: Pre- and Post-natal Attendance at Clinic, 2004-2006



Source: Ahanta West District Health Directorate

Infant and Child Mortality

Life expectancy at birth which is an important indicator of HDI is determined by infant and child mortality and in some countries HIV/AIDS. The fourth MDG is to reduce child mortality by two-thirds

reported infant and child deaths declined between 2004 and 2005 but rose again in 2006. Results from the 2007 ISSER survey indicate three reported cases of child death within the 12 months preceding the survey period.

Table 5.7: Number of Children Immunized against Childhood Killer Diseases

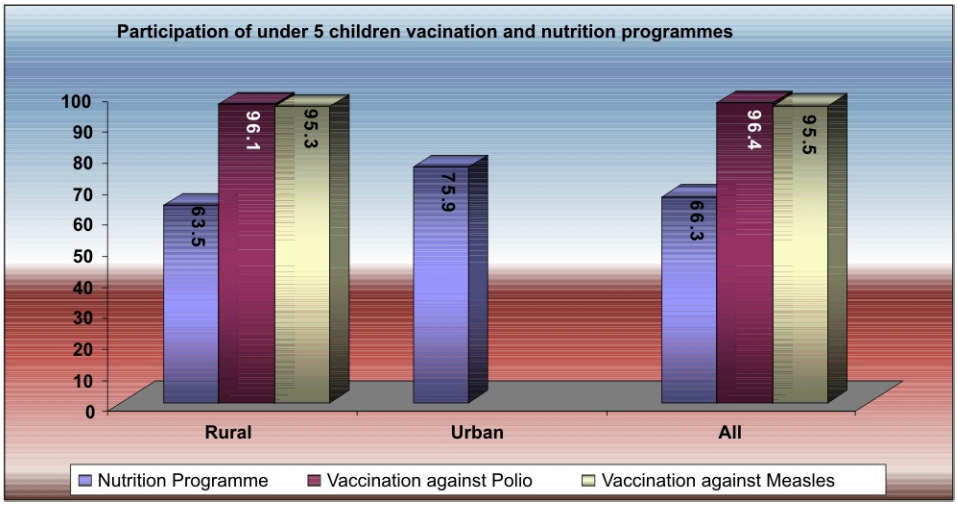
ANTIGENS	2004		2005		2006	
	Number	%	Number	%	Number	%
BCG	3,057	70.6	3,416	76.6	3,852	83.7
PENTA – 3	2,675	61.8	3,509	78.8	3,455	75.2
OPV – 3	2,693	62.3	3,506	78.7	3,443	74.9
Measles	2,439	59.3	2,666	59.8	3,112	67.6
Yellow Fever	2,349	54.3	2,662	59.8	3,055	66.1
TT2+	2,359	54.5	2,074	46.6	2,350	51.1

Source: Ahanta West District Health Directorate

Mortality rates for infants and under-5s are not the only indicators for the goal of reducing child mortality in the MDGs. The other indicator is the proportion of 1 year-old children immunized against measles. The proportion of children immunized against measles rose continuously from 59.3 percent in 2004 to 59.8 percent and 67.6 percent in 2005 and 2006 respectively (Table 5.7). Indeed the proportion of children immunised against all the six childhood killer diseases improved consistently over the period, with the exception of TT2 which declined in 2005 before recovering in 2006.

carried out in the district. Indeed, all the communities covered by the survey state that immunisation campaigns took place in the community during the last five years preceding the survey. It is expected that the improved vaccination coverage of children against childhood killer diseases will translate into lower infant and child mortality in the district.

Figure 5.7: Vaccination and Nutrition Programmes for Children under 5 years



Source: 2007 ISSER Household Survey

The 2007 ISSER Household Survey assessed the rate of participation of children under 5 years old in vaccination and nutrition programmes. The results gave a very impressive picture of immunisation of children against the childhood killer diseases. At least 96 percent of children under-5 had been vaccinated against polio while vaccination against measles was 95.5 percent (Figure 5.7). This could be largely attributed to the immunization campaign

Child Health and Nutrition

Adequate food and good nutrition are undoubtedly essential determinants of good health and human survival. Poor nutrition of the child not only causes morbidity and mortality but also has adverse implications for education outcomes and natural growth of the child. Sachs (1999) provides econometric evidence to suggest a direct relationship between life expectancy and

poverty and nutrition. Essentially, three indicators are used to assess child health in the district. Each of these indices gives different information about growth and body composition used to assess nutritional status. The indicators are presented in Table 5.8.

The height-for-age index indicates a linear growth radiation. Children whose height-for-age Z-score falls below minus two standard deviation (-2 SD) from the median of a reference population are considered stunted, i.e. short for their age, and are chronically malnourished. Stunting reflects inadequate nutrition over a long period of time and is also associated with recurrent and chronic illness. Therefore, height-for-age represents the long-term effect of malnutrition in a population and does not vary according to recent dietary intake. The incidence of stunting or chronic malnutrition is observed to be worse than the national average and worse in urban than rural areas in the district (Table 5.8).

minus two standard deviation (-2 SD) from the median of the reference population are considered thin (wasted) for their height and are acutely malnourished. Wasting reflects inadequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or recent episodes of illness causing loss of weight and the onset of malnutrition. The incidence of wasting is worse among urban than among rural children.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic malnutrition. Children whose weight-for-age is below minus two standard deviation (-2 SD) from the median of the reference population are classified as underweight. The district had a lower proportion of underweight children compared with the national average, suggesting better child health compared to the national situation. In this instance, however, the situation was better in urban than in rural areas. Generally,

Table 5.8: Child Health Indicators, 2003

	Ahanta West			National		
Indicator	Total	Rural	Urban	Total	Rural	Urban
Stunted	37.2	36.9	41.0	34.3	35.4	32.2
Wasted	8.1	7.6	12.9	19.3	16.5	24.6
Underweight	18.4	19.5	7.7	35.8	34.5	38.2

Source: CWIQ 2003 (GSS)

The incidence of wasting is, however, better in the district, at 8.1 percent, compared with 19.3 percent at national level. The weight-for height index measures body mass in relation to body length describes current nutritional status. Children whose Z-scores are below

Based on the three indicators discussed, it is quite clear that Ahanta West District is relatively better off in terms of child health than the national situation. Within the district, rural children are generally healthier than their counterparts in urban areas.

Use of Iodated Salt

The use of iodated salt by households influences child health and growth. Indeed, the use of iodated salt in cooking helps reduce the incidence of iodine deficiency. This deficiency can cause an enlargement of the thyroid and adversely 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 intelligence quotient (IQ) by 10-15 percent. By implication therefore, iodine deficiency can have an adverse impact on national development.

National Health Insurance Scheme

The National Health Insurance Scheme (NHIS) is a mechanism designed to improve access to health services by reducing, particularly for the poor and deprived, the cost of obtaining quality health services. Registration with health insurance schemes

Table 5.9: Proportion of Households that Use Iodated Salt for Cooking

Household	Rural	Urban	Total
Male-Headed	34.6	67.3	44.3
Female-Headed	45.7	84.2	52.6
Ever been to school	43.7	70.1	52.9
Never been to school	29.4	76.9	33.3
All	38.3	70.8	46.8

Source: 2007 ISSER Household Survey

The use of iodated salt in the Ahanta West District is low, with only 47 percent of sampled households reporting its use in their cooking (Table 5.9). The use of iodated salt is higher amongst households headed by women than those headed by men. A greater proportion of urban households use iodated salt compared with rural households. The educational status of the head of the household also influences the use of iodated salt. About 53 percent of households headed by someone who has had some education use iodated salt compared with 33 percent of households headed by an uneducated person. In urban areas, however, iodated salt is used in a greater proportion of households headed by a person who has never been to school than in households headed by a person who has had some kind of education.

in Ahanta West District is low. About one-third of the population is registered or covered by the scheme which was established to replace the "cash-and-carry" system (Table 5.10). The district mutual scheme accounts for over 95 percent while the remaining 5 percent are members of private mutual schemes. The elderly (aged 70 years and above), persons aged under 18 years and the indigent are exempt from paying the premium to register for health insurance under the district scheme. This may explain why over 56 percent of the elderly aged 70 years and above are registered or covered.

It is surprising, however, that only 34 percent of people yet to attain the age of 18 years are registered or covered. A large proportion of the urban population are registered or covered compared with the rural population. Over 72 percent and 80 percent of people engaged in agriculture and fishing respectively, both of which are predominantly rural activities, are neither registered nor covered, compared with about 65 percent engaged in other economic activities (Table 5.10). The proportion of boys and men registered or covered is higher than that of women and girls.

percent of those who are no longer members of a health insurance scheme, compared with 18.3 percent who expressed no confidence in the operators of the scheme. About 32 percent are yet to re-register while 18 percent blame their status on the fact that they do not know where to find a registration centre.

The non-membership status of approximately two-thirds of people aged under 18 years could be linked with the non-membership status of their parents. This is

Table 5.10: Health Insurance Registration Status

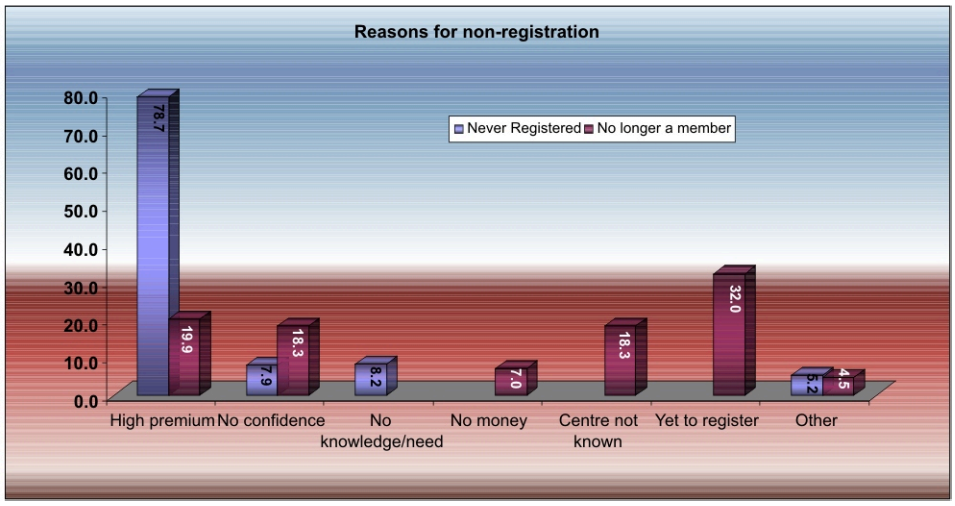
	Registration	Covered	Non-members	Total
Sex				
Male	20.9	15.4	63.7	100
Female	17.6	13.3	69.1	100
Location				
Rural	15.0	11.7	73.3	100
Urban	31.0	21.7	47.3	100
Age				
Under 18 years	2.2	32.1	65.7	100
18 to 69 years	32.2	0.08	67.7	100
70 years and above	13.8	42.7	43.5	100
Type of Work				
Agriculture	27.2	0.34	72.5	100
Fishing	19.6	---	80.4	100
Others	17.9	17.0	65.1	100
All	19.2	14.3	66.5	100

Source: 2007 ISSER Household Survey

Of those who have never registered with the scheme, over 79 percent consider the premium to be too high while 8 percent claim to have no confidence in the operators of the scheme. About 8 percent either find it unnecessary to register or have no knowledge of the scheme (Figure 5.8). The high premium was given as a reason by 20

because, under the scheme, people under 18 years are only covered when both parents are registered. An examination of the reasons accounting for non-registration by people aged below 18 years reveals that about 80 percent considered the premium to be too high, implying that they are unaware of the exemption facility for which they are eligible.

Figure 5.8: Reasons Provided for Non-Registration with the Scheme (%)



Source: 2007 ISSER Household Survey

One major problem that was mentioned in relation to the scheme is the delay in issuing cards after registration. This makes it difficult for newly registered members to benefit from the scheme, which makes some people lose confidence in the scheme. However, information gathered from the NHIS secretariat in the district indicated that the scheme requires members to wait for a minimum of three months after registration and issuing of card before they are allowed to access the scheme. This vital information does not seem to have reached the public, causing many newly registered members to complain about the difficulty in accessing the scheme after registration. At least 70 percent of those registered with the NHIS have benefited from the scheme at least once (Table 5.11).

Table 5.11: Number of Times Individuals Have Benefited from the Scheme

	None	Once	Twice	Thrice	4 times	Unknown
Sex						
Male	3.1	39.9	17.3	7.4	4.6	27.7
Female	3.2	39.1	15.0	8.4	8.7	25.5
Location						
Rural	2.2	50.7	13.9	6.2	7.1	19.6
Urban	4.1	28.3	18.4	9.5	6.2	33.5
All	3.2	39.5	16.2	7.9	6.6	26.6

Source: 2007 ISSER Household Survey

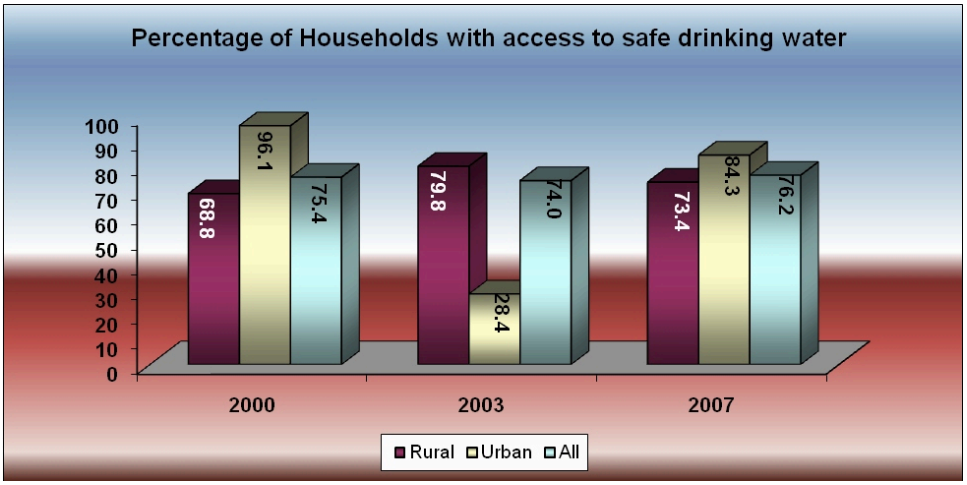
During community discussions, everyone considered the scheme to be favorable and better than the "cash-and-carry" system. They consider the exemption of the elderly and children as laudable. However a lot of concerns were raised about implementation, particularly the long delay in issuing registration cards since without the card, members cannot benefit from the scheme. Others also complained about lack of medication at the hospital/clinics, compelling them to buy medication at pharmacies or chemical shops with their own money.

Access to Safe Drinking Water and Sanitation

One of the targets of the seventh MDG of ensuring environmental sustainability is access to safe drinking water and basic sanitation. Under this goal, countries are expected to ensure an increase in the proportion of the population with sustainable access to an improved water source and sanitation. Enhancing household access to safe drinking water and basic sanitation reduces their level of vulnerability to health hazards. Obviously, the best means of preventing the outbreak of diseases such as malaria, diarrhoea and other related diseases is to enhance access to safe drinking water and promote good environmental practices to ensure a clean environment.

Improved access to safe drinking water refers to the increased proportion of households that draw water from pipes located in dwellings or in compounds, and from boreholes and protected wells. By this definition, about 24 percent of households were without access to safe water in 2007 compared with about 26 percent in 2003 (Figure 5.9). This indicates a marginal improvement between 2003 and 2007. A substantial improvement of access to safe drinking water was recorded in the urban areas where the proportion of households with access to safe drinking water rose from 28.4 percent in 2003 to 84.3 percent in 2007. In 2003, about 72 percent of urban households relied on water tankers or vendors as their main source of water, which is not captured in the definition of improved access to safe water.

Figure 5.9: Proportion of Households with Access to Safe Drinking Water



Source: 2000 Population & Housing Census & 2003 CWIQ, 2007 ISSER Household Survey,

Generally, availability of and access to good drinking water in Ahanta West does not seem to pose a big challenge and this is confirmed by the absence of waterborne diseases in the district. The district currently has about 135 boreholes in 89 communities and 49 hand-dug wells fitted with pumps in 39 communities with over 500 unprotected wells. This suggests that the level of risk or vulnerability in terms of lack of access to safe drinking water is quite low. Nonetheless, more effort must be made by local and national policy makers to reduce the proportion of households that draw water from uncovered wells by increasing provision of pipe-borne water and/or boreholes in the district.

The sanitary conditions and unorthodox environmental practices of many households in the district are quite worrying due to their adverse environmental and health implications. Clearly, the availability of toilet facilities and the mode of disposal of liquid and solid waste have a direct bearing on the health of citizens. The mode of liquid waste disposal by households in the district is not environmentally friendly. Over 96 percent of sampled households in 2007 resort to throwing liquid waste onto the street, compound or into the gutter without regard for environmental consequences.

Picture 5.3: A HIPC toilet facility and refuse container located at Agona Nkwanta

The District Medium-Term Development Plan states that about 62 percent of the population has access to toilet facilities. In 2007, over 14 percent of households reported defecating in the bush or at the beach largely as a result of lack of toilet facilities, though this figure has declined from about 48 percent in 2000. This unorthodox practice of human waste disposal came out strongly during discussions with opinion leaders in Beahu. The Chief and his elders expressed concern about the lack of adequate places of convenience in the community which compels people to resort to this unorthodox practice with its adverse health consequence. This unorthodox means of disposing of human waste would only be discouraged if adequate toilet facilities are provided.

The methods of solid waste disposal of many households could also be seen as environmentally unfriendly on the grounds that about 80 percent of households dump solid waste elsewhere or at public dumps which are not well managed. This provides breeding grounds for mosquitoes and other dangerous insects. In all, access to basic sanitation in many communities needs to improve to minimise the risk of outbreaks of diseases.

Health and Vulnerability

A clean environment and improved access to safe drinking water are important factors in reducing the incidence of disease. Clearly, one major health challenge confronting the district is the high incidence of malaria infection and this may be traced to the unsafe means of liquid and solid waste disposal by many households in the district. The practice of throwing liquid waste onto the compound and other outdoor spaces can create conditions favourable for the breeding of mosquitoes. Many households are therefore highly vulnerable to malaria infection which undermines the productivity of the workforce. The problem of affordability coupled with the high proportion of the population who are non-members of the health insurance scheme also constitutes a major constraint to accessing health services in the district. A considerable number of patients are therefore compelled to resort to buying from chemical shops drugs that have not been prescribed by medical professionals, which can have serious implications for their health.

Conclusion

The probability of attaining the MDGs in the district in relation to access to safe water is quite bright if there is a continuation of the rising trend since 2000 in the proportion of households with access to pipe-borne water. In the Medium-Term Development Plan, the district plans to increase access to potable water from 81 percent to 90 percent between 2006 and 2009. However, access to safe sanitation remains a challenge as a significant proportion of households are still without access to toilet facilities, compelling them to resort to unorthodox means of disposing of human waste. Access to sanitation therefore needs to improve through the provision of toilet facilities and adoption of efficient means of managing

solid and liquid wastes. Consequently, the adoption of measures by the District Assembly to promote household toilet facilities, strengthen the capacity of environmental health officers and enhance aesthetic and environmental sanitation services contained in the Medium-Term Development Plan is laudable.

The performance of the district in the area of child immunisation is very impressive. In addition, attendance of pregnant women at pre-natal and lactating mothers at post-natal clinics in the district is high. This has contributed significantly to improved child health which is reported to be better in the district than the national average. Child mortality has consequently been in general decline (until 2006). This has positive implications for life expectancy which is an indicator of human development. Maternal mortality, however, remains a threat to the realisation of the MDGs and undermines progress in the HDI through a reduction in longevity. In addition, the recently reported marginal increase in infant mortality rate raises some concerns. The observed increase in the proportion of supervised deliveries by health personnel and hospital attendance, including both ante-natal and post-natal attendance, has not made a significant impact on the maternal mortality ratio, which rose from 5 to 8 per 100,000 live births between 2005 and 2006.

The relatively low proportion of people enrolled in the National Health Insurance Scheme, coupled with the problem of affordability, makes it difficult for a considerable number of patients to access health services in the district. The officials of the NHIS in the district therefore need to step up the educational campaign to encourage people to register with the scheme in order to reach the 60 percent target set for 2007.

The biggest obstacle to the realisation of the sixth MDG is the high incidence of malaria. Malaria tops the list of the leading causes of morbidity and mortality in the district and, coupled with the unorthodox sanitation practices, makes the district highly vulnerable. Ahanta West District therefore needs to commit human, material and financial efforts to combating malaria through intensive education on its prevention and the adoption of better sanitation practices.