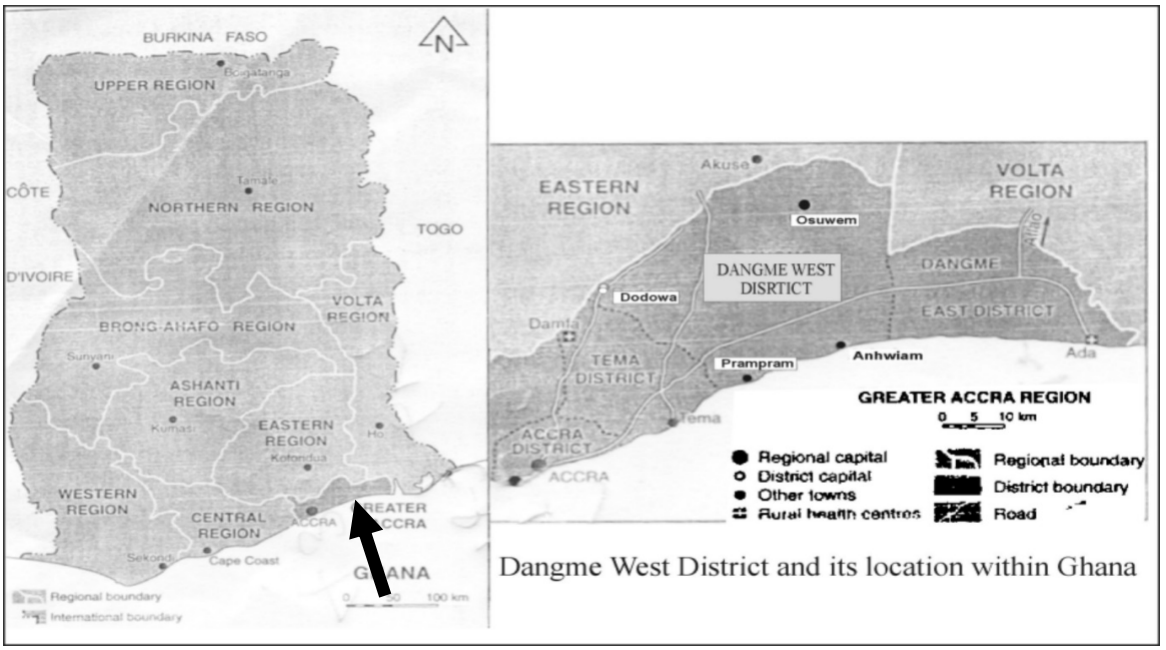
DODOWA DSS
Dodowa Health Research Centre,
Ghana Health Service

SITE MAP



Background .
The Dodowa DSS is housed within the Dodowa Health Research Centre which was set up as part of an agreement with the then Overseas Development Agency (ODA) to have Operations Research satellite stations in the early 1990's. Studies conducted in the centre have a focus on developing and evaluating community and district based health interventions and obtaining information to improve the process of health policy, planning, and service delivery in the Ghana Health Service. At the time, the Head of the Research and Health Management Team was vested in one person and as a result, staff whose primary work is health administration and staff whose work is health research worked closely together. This was critical to the success of the type of research conducted in the centre. Due to the growing nature of centre, the two functions were separated in May 2004 but very close links are still maintained with the District Health Management Team.

The Centre is one of the three health research centers of the Ghana Health Service tasked with the responsibility of conducting Research within the health sector but particularly within the Southern sector of the country to address problems in the health sector. It is sited as the name may suggest in Dodowa, the district capital of the Dangme West District of the Greater Accra Region. It has strong links with the District Health Management Team and the Local Government Authority

Physical Location of the Dodowa DSA
The Dangme West district one of the five districts in the greater Accra region of Ghana. It is purely rural but gradually catching up with the rapid urbanization of the peripheral areas surrounding the city of Accra and has the largest land surface area [about 1,700 square kilometres] in the region. The vegetation is mainly coastal savannah however there Dodowa boasts of a forest, which is popularly known as 'Dodowa Forest'.The district is divided into four administrative sub districts, which are:Dodowa [Shai], Prampram, Great Ningo (Formerly Old Ningo) and Osudoku.

The few tarred roads are in very poor condition and in the rainy seasons, some of the villages are inaccessible except with a four-wheel drive. At the same time, the scattered nature of the population

means that a lot of effort is needed to reach a few people. The commonest form of transportation in the district is the bicycle this is followed by a car and then motorbikes and cars in that order.

Even though the district is close to the capital city Accra, there are no fixed telephone lines and as a result there is no internet connectivity and communication is mainly by Mobile phone. The Centre has however applied for help to have a VSAT and that should be in place by the middle of July 2006.

Health care provision in the district

There are 4 health centers, one in each of the 4 sub districts, and 6 community clinics spread throughout the district. Currently, the district has 3 doctors and one pharmacist and the Nurse: population ratio is 1:1355. In the traditional sector, there are 300 traditional healers. A total of 92 trained traditional birth attendants (TBAs) & "wanzams"(local circumcisers) and an equal number of untrained TBAs who provide alternative medical services (About 44% of whom are women). In addition, there are approximately 20 Chemical sellers and an unknown number of drug peddlers operating throughout the district. The district has no hospitals. The inhabitants use surrounding hospitals for referral care as well as for some primary care. The same hospitals are the referral hospitals for the community health insurance scheme, which operates in the district.

Brief Introduction to Dodowa DSS

As part of work in the district, the first census was conducted in the early 1990's with national service personnel and health staff. This was done in only one of the 4 sub-districts because the study was focused in that area. In the year 2000 prior to setting up of the district wide health insurance scheme the census was re done. This time Assembly men, National service personnel were used to collect the data whilst DHMT members supervised the work. The aim was to generate community registers for the HI scheme. This activity was however wrought with a number of problems.

- The House numbering and enumeration was not done in a uniform order for easy identification.
- The registers printed were inaccurate due to problems with the computer program used.
- Some communities and houses were not covered.
- Several new communities had sprung up since the last census in the early 1990's
- The information could not be updated due to lack of
    - Funds
    - Technical Capacity

However, with the growing nature of the centre, there was the need to write good proposals and attract good partners to the centre. Having a population base and being able to detect and account for population changes, monitor health problems in the district and gather information that will contribute to policy decisions, would be a useful way of doing that and hence the need to have a proper demographic surveillance system in place.

Dodowa DSS data collection and processing

The baseline data collection started in February 2005 and ended in October 2005. Data was collected at household level with 12 field workers and 2 field supervisors. The information collected was basically name, age, sex, occupation, education, religion, ethnicity and relation to head of household. The team plans to conduct its first round of data collection in January 2006 and update bi-annually (Births, Deaths, Pregnancies, Migration,). Information on Education, ITN use, iodated salt use, IPT intake, Insurance registration status and Immunization status will be updated annually.

As part of the baseline data collection, houses were numbered according to the scheme

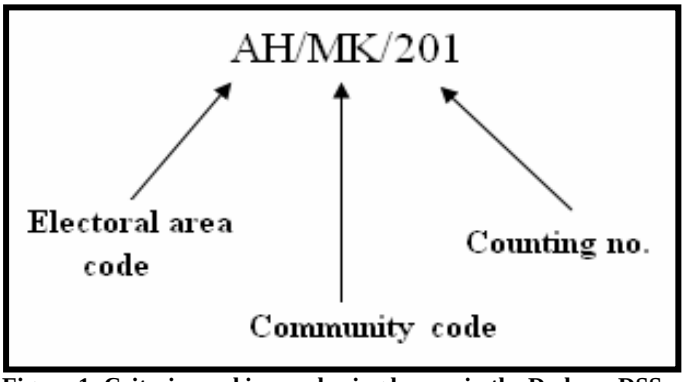


Figure 1: Criteria used in numbering houses in the Dodowa DSS

Presented in figure 3. This is the way the houses had been numbered in previous attempts at census in the district. The electoral area codes are however posing a problem since they change over time. All electoral area codes are therefore going to be replaced with area council codes (there are 7 fixed area councils in the district). With help from the Navrongo Health Research Centre, the database was corrected to take care of these changes.

Data management

All forms were printed from the computer centre using the old census information as a basis. The forms were logged out according to communities in each of the sub districts. The completed forms are checked in the field by a supervisor before they are brought into the filing office and then entered by a data entry clerk. Any discrepancies are returned to the field and resolved before it is brought back to the computer centre for entry.

The information gathered has been fed into the annual report of the district and presented at the annual review conference of the Regional health administration.

Funding for the DSS

When the team embarked on the task of conducting the Baseline, it did not have money from any source apart from 2 studies running in the centre and some support for running cost from the Ghana Health Service. The team conducted the baseline with 10 field workers, and 2 supervisors. We covered the whole district sub-district by sub-district so that the team could be together all the time and supervision would be easy. Two motorbikes were borrowed from the District Health Management Team and as much as possible they helped in making announcements and contacts to the various communities. At the end of Last year, the Ghana Health Service made available about $50,000 to support the DSS and it is hoped that this will continue. With the baseline in Place and round 1 which begun in January this year on going, the Dodowa DSS has already attracted some attention through being associated with the INDEPTH Network and it is hoped that we can find some core funding for the DSS even as we look out for the most innovative approaches to make the running of the DSS cheaper.

Demographic Indicators

The 2005 population of the district was estimated to be 120,000 however the DSS baseline information indicates a population of 98,165 with 22,981 households, 13,496 houses all in 381 communities and 7 Area councils. The main occupation is farming or fishing and 38% of the population have never been to school. They are a predominantly Christian population (88%) and are mainly of the Dangme Ethnic group.

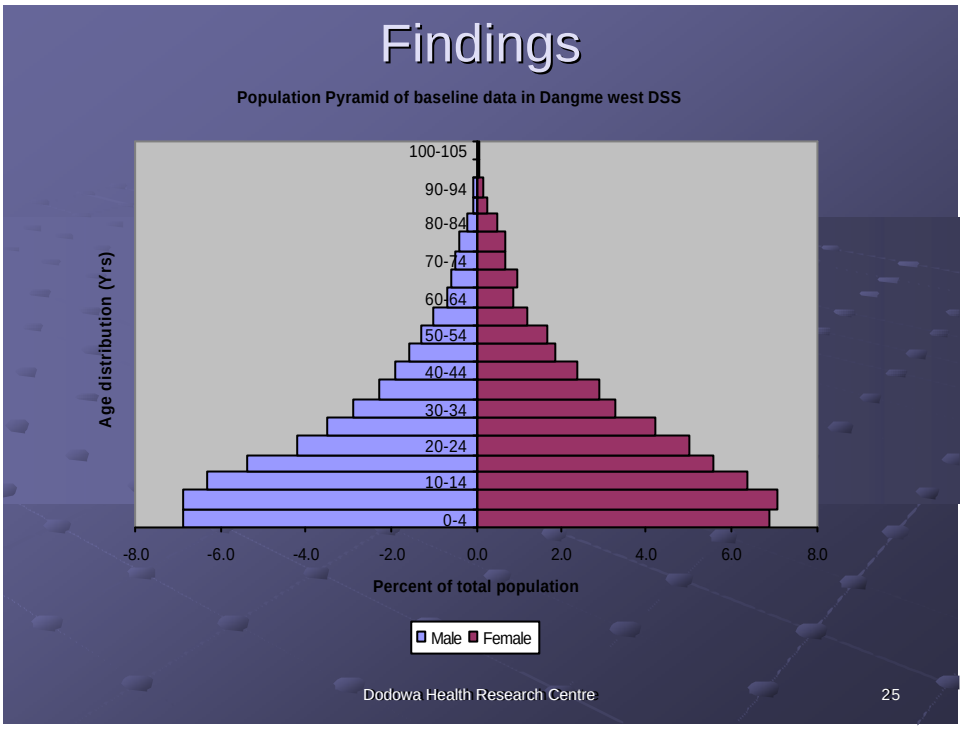


Figure 2 Population pyramid of the Dodowa DSS

The data gathered at baseline indicates that 1.3% of the population is <1yr, 13% of the population is 0-4yrs old, 5-14 years old 27%, 15-64 years old 54% and above 65 years old 5%. The age dependency ration is 82.2% and 53% of the population is female. The male female ratio is 97 men to 100 women. Heads of household form about 22% of the population with 38% of them being females.

Objectives

- To take part in identifying and carrying out priority research to help address policy, planning and implementation needs of the GHS.
- To help build the capacity to undertake research and find more efficient/cost effective solutions and implementation alternatives to identified need and problems.
- To disseminate results of research findings to key people, policy makers and anyone responsible for health care in a meaningful way.
- Have a functioning DSS and be part of the INDEPTH Network
- Be African/International Resource Centre for building capacity in applied Social Science Research

Priority Research Areas

The main areas of focus have been the Epidemiological, social, economic and cultural aspects of malaria. More recently the centre has also focused on equity and health care financing issues through the implementation of a community based health Insurance scheme. Setting up of the DSS has opened the opportunity to engage in other communicable and Non communicable diseases.

Completed Key Projects (Up to 10)

Project Name	Funder	Grant Period
Ethnographic studies on malaria	WHO	1990
Developing and evaluating appropriate community based educational interventions	WHO	1996-1998
Evaluating the impact of patient education on	WHO	1996-1998

adherence to anti- malarial therapy		
Designing and field testing an implementation model for applying CQI to Primary Health Care.	WHO	1997-2000
Designing Implementing and evaluating a community health insurance scheme	DANIDA European Union Ghana Health Service	2000-2004
Impact of improved access to primary care on morbidity due to severe malaria and primary care utilization	Gates Malaria Partnership	2003-2006
Assessment of Male involvement in family planning	Ghanaian Dutch Collaboration	2004-2005
Impact of Stigma on spread of HIV in the Dangme West District	Ghanaian Dutch Collaboration	2004-2005

Ongoing Key Projects (Up to 10)

Project Name	Funder	Grant Period
Deployment of Rectal Artesunate for severely ill under 5 children	WHO	2004-2007
Annual 10 week International course on Health Social Sciences for Implementation Research	WHO	2004 and ongoing

Planned Projects

Project Name:
1. Social, Cultural and Environmental Context of Health and Disease: Exploring Methods and Evidence for Implementation Research

2**.** Tobacco use in sub Saharan Africa: Prevalence, and forecast on health effects with emphasis on chronic diseases (cancer and cardiovascular deaths)

Human Resource at the site (Grouped by Major Categories)

CATEGORIES	NUMBER
Research Scientists (Phd)	3
Clinical Staff	0
Statisticians / Bio-Statisticians (Part Time)	1
Field Supervisors (including Verbal Autopsy team)	6
Database and ICT	2
Field Workers	14
Administrative staff	4
Social Scientists	5
GIS Specialist	0
Technicians (Lab, …)	0
Voluntary Counsellors / Trainers (several depending on the study)	

Funders
Ghana Health Service
Dutch Government
WHO through funded projects

Collaborators
WHO
Ghana Health Service
Ghanaian Dutch Collaboration for health Research
Noguchi Memorial Institute for Medical Research
Navrongo Health Research Centre
Kintampo Health Research Centre
School of Public Health University of Ghana
Brunel University Department of Public Health
Regional Institute for Population Studies (RIPS)
INDEPTH Network

Key Publications

1. Agyepong IA (1992). Malaria: ethnomedical perceptions and practice in an Adangbe farming community and implications for control. *Social Science and Medicine*, 35:131–137.
2. Agyepong I, Ansah E, Gyapong M**,** Adjei S, Evans D.(2002). Strategies to improve adherence to recommended chloroquine treatment regimens: a quasi experiment in the context of integrated primary health care delivery in Ghana. *Social Science and Medicine vol 55(12) pp 133-144.*
3. Chinbuah MA, Gyapong JO, Pagnoni F, Wellington EK, Gyapong M. *Tropical Medicine and international Health 2003* Feasibility and Acceptability of the use of artemether-lumefantrine in the Home-management of uncomplicated malaria in children 6-59 months old in Ghana. Trop Med Int Health. 2006 Vol. 11 (in press)
4. The gender agenda in the control of tropical diseases: A review of current evidence. Social, Economic and Behavioural Research. Special Topics No.4
   Pascale Allotey and Margaret Gyapong. *TDR/STR/SEB/ST/05.01*
5. Agyepong I, Bruce E, Narh-Bana Solomon, Ansah Evelyn, Gyapong Margaret (2006). Making Health Insurance equitable and pro poor financing mechanisms in Ghana. Some Reflections. Ghana Health Bulletin Vol 1(4)

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