Annual Report 2009

Ndala Hospital

Archdiocese of Tabora

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Introduction

The annual report of 2009 will be slightly different from previous years mainly in order to make it easier to compose. To collect all data in detail is a very time consuming task for which only a few staff are equipped or available. However correct data collection on the performance of the various functions of a hospital is essential to follow up developments over time. Data that cannot be compared with previous years are of relatively little value. Therefore they are generally left out of this report.

Dr. Rueben Nyaruga
Ass. Medical Officer in Charge

March 2010

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1. General review of the year 2009.

2009 was a year of stabilization In the bathroom of the student-doctor part of the doctors house are **two sets** of **6 solar batteries** connected to the solar panels. The batteries should be checked by the TD and be topped-up with distilled water once per 6 months. The batteries are old and don't need much care but **if no 12 Volt lights are used for longer periods** in the doctors-students house the connection to the solar panels should be switched "off", to prevent overcharging.

and starting up old routines again. Because of the presence again of two university trained doctors the University of Groningen in the Netherlands started sending regularly "student doctors" as part of their training. Because the duration of their stay has been reduced to only two months their value for the hospital decreased and doesn't reduce the workload of the medical staff. This workload had become already quite heavy because many staffs went for further training. The presence of junior medical students from the same university for research on some relevant subjects was stimulating but did not relieve the workload either. Moreover the severe shortage of qualified nurses did not diminish during 2009.

With satisfaction we report increased attendance figures in almost all sections of the hospital. We are proud to report to have given more vaccinations to children and pregnant women than ever!

- The construction of a new office building has been completed, bringing the members of the management team closer together and offering very nice facilities for receiving day-visitors.
- Construction of a new Theatre building from funds from CSSC has started by a contractor from Dar es Salaam. The Hospital compound had therefore to be extended and newly fenced.
- The financial situation has not become more difficult. Income from patients has grown but only enough to compensate inflation. Deficits remain but have decreased somehow. Investment in a new income-generating project (2 "BAJAJ" taxicabs) looks promising.
- The new TB Ward was completed and furnished but no patients have been admitted yet because of the still existing severe shortage of trained staff.
- The newly built large half underground rainwater-harvesting cistern has started to fill up and should proof its usefulness in 2010.
- The only 2-year-old incinerator is already very defective and on its present location is a threat to the health of many workers of the hospital including their families. The construction of a new one on a safer place has begun.
- The Solar system worked very reliably and gave even some extra electricity in the afternoon to staff, especially during the long dry season. A few batteries and panels that had been damaged during transport were replaced.

Our sincere gratitude goes to the many friends, benefactors, donor organisations and the Tanzanian Government that continue to give professional, moral and financial support and advice to the hospital and its dedicated workers even in times of stress and insecurity about the future. The continuous backing by the Stichting PIUS XII in the Netherlands is again highly appreciated.

Our biggest thanks go to all dedicated workers who continue to keep the hospital going for the benefit of our patients. Thank you all!

On behalf of the Hospital Management Team,
Dr. Rueben Nyaruga
Ass. Medical Officer in Charge

2. The Hospital and its environment.

Tanzania is a large country measuring 945.087 square kilometers in East Africa, much of which consists of a large highland plateau between the eastern and western branches of the rift valley. On this central highland, in Tabora region Ndala Hospital was founded as a dispensary in the early thirties by the Missionary Sisters of Our Lady of Africa, The White Sisters. In 1965 Ndala Hospital was built on the site of the dispensary in the village of Uhemeli. Under the auspices of the Archdiocese of Tabora, the Sisters of Charity of St. Charles Borromeo are responsible for its present management.
Ndala is a Voluntary Agency Hospital and is situated on the border of Nzega District. The small village of Uhemeli relies on the bigger towns Tabora and Nzega (both approximately 70 km away) for all of its supplies. Both towns are only reachable via mud-roads that are in poor condition during the rainy season. The area around Ndala is very dry and the hospital gets its water from collecting rainwater and from one deep and two shallow wells. When the rainy season is poor, water remains a big problem for the people of Ndala. Electricity is obtained from 6 large Solar Panels connected to an enormous battery pack, providing – if the sun shines! – almost 24 hours of electric power to the hospital but not to the staff houses. Ndala village is not yet connected to the National Grid of TANESCO.
Communications have improved a lot over the past few years with the arrival of mobile telecommunication in 2003 and the arrival of a satellite disc for broadband Internet and E-mail in 2005. Other communications are still via radio transmitter but its usefulness is diminishing rapidly.

3. Community and Health Status.

3.1 Demographic and economic data.

Tanzania's population is estimated at 37,4 million in 2007, with 44% being under fourteen years of age. Women make up 51% of the population. Tanzania is one of the poorest countries in the world, although some economic progress has been seen in the last couple of years. 36% of the people live below the absolute poverty line. The GDP per capita is estimated at 700 US$ per annum. Industry only contributes 17,2% to the GDP and services 39,6%. Mining is increasing, with natural resources like tin, diamonds, gold, phosphate, zinc and gemstones. With 43%, agriculture is responsible for almost half of the GDP. Agriculture is responsible for 85% of the countries export and it uses 80% of the workforce, although only about 4% of the land is arable. The distribution of incomes and services is highly inequitable with a GINI-coefficient of 0,59. (The GINI coefficient is a measure of income distributions with 0,0 representing absolute income equality and 1,0 sever income inequality. Figures of neighbouring countries: Malawi: 0,62, Zambia 0,44 and Zimbabwe 0,57.)

3.2 Health Indicators.

Health indicators remain poor in Tanzania, although in some areas improvement is seen. Life expectancy is 45 years and falling and infant mortality rate is 96 per 1000 (CIA World Fact book, 2006), largely contributed to the HIV/AIDS pandemic. Under-five mortality has dropped in the last five years from 147 to 112 deaths per 1000 live births (Tanzanian Demographic and Health Survey 2005), one of the lowest mortality rates in East Africa. Nutritional status of the population is average, with 3% receiving one meal a day, 43% two meals a day and 54% receiving three meals a day. Only 11% of the population has electricity and 52% has access to safe water.

Vaccination coverage is stable with ± 70% of the children having received all recommended vaccinations. However, after about 15 years with only a sporadic case of measles **a small measles epidemic occurred in 2008 and in 2009 an outbreak was reported around the Nzega town. A few cases were admitted in Ndala the first months of the year.** No new cases of poliomyelitis and neonatal tetanus have been reported since many years. Incidental cases of rabies show that this serious public health problem still exists in Tanzania.

Maternal and reproductive health indicators show that Tanzania has one of the highest fertility rates of East Africa, with an average of 5,0 children per woman. More than 25% of the women aged 15-19 years have begun child bearing. (USAID) Family Planning figures show that 72% of the people use no method, 23% uses modern methods and 5% use traditional methods (DHS). Most women receive antenatal care, but many only after the first trimester. More than half of the births in Tanzania occur at home, unassisted by a health professional.

The public health activities in the MCH clinic of Ndala Hospital is supposed to at least cover 16000 people in 2009, of which 608 children under 1 year, 3089 below 5 year and 3039 women between 15 and 49.

3.3 AIDS Pandemic

The devastating effects of the HIV/AIDS pandemic can partly explain the poor health indicators. An estimated 10,9% of the urban population and 5,3% of the rural population has been infected with the virus, making a national prevalence of 7%. 7,7% of the women are infected, compared to 6,3% of the men. The peak of infections occurs at a younger age in women, indicating that women get infected at an earlier age. The prevalence differs greatly between districts, with in general a much higher rate in the south of the country (e.g. Mbeya 13,5%). The prevalence for Tabora region is 7,2%. (DHS) The prevalence in the catchment area of Ndala is probably a bit lower than the regional average; figures obtained from the PMTCT program reaching about 3,3% (percentage of pregnant women that consented to testing and were found positive), suggests this conclusion.

3.4 Community

Against this background we can place Ndala Hospital in a rural area on the central highlands of Tanzania. The hospital is situated on the boundary of Nzega district in Tabora region. Ndala consists of 5 villages, Uhemeli, Kampala, Wita, Chabutwa and Mabisilo. The ± 16.000 people in these villages are directly catered by Ndala Hospital, but its actual catchment area is much bigger, extending up to 7500 square kilometers, inhabited by 300.000 people. The majority belong to the ethnic groups of the Wanyamwezi and Wasukuma, both of Bantu origin. It is a rural area with arid land at an altitude of around 1200 meters, mostly consisting of woodland, bush

land and savannah. 15% of the land is cultivated and 90% of the people are farmers or cattle herders. Main products are maize, paddle, groundnuts, livestock, tobacco and honey. The average family earns about 600US$ per year by selling their products, which is just enough for subsistence.

4. Health Infrastructure and External Relations.

4.1 Health Infrastructure.

Ndala Hospital is a district hospital on the border of Nzega district. Our official referral hospital is Kitete Regional Referral Hospital in Tabora, about 70 km away via a dirt road, but in reality many patients are referred from Kitete to Ndala instead**.** It was recently learned that the last specialist doctor had left this regional referral hospital. At an equal distance to the north is Nzega District Hospital, the base of the District Medical Officer. About fifty kilometers away is Nkinga Mission Hospital, which has an Ophthalmologist and to which occasionally orthopaedic patients are referred. The main referral option is Bugando Medical Centre in Mwanza, about 330 km to the north. Samples for the pathologist are send there as well as the referred patient. The great distances and few transport facilities mean that most acute problems need to be solved in Ndala hospital itself. Every two months a specialist flying doctor from AMREF visits Ndala Hospital, enabling patients with conditions like VVF, contractures from burns, orthopaedic problems etc. to be helped here. In 2009 a team from Belgium (Medicins Sans Vacance) visited. Three nearby health-centres and dispensaries refer directly to Ndala. Communication is possible through mobile phone and satellite Internet (e.g “iPath”). Communication with other hospitals still mainly goes via radio, as does communication with AMREF ‘Flying Doctor’ Nairobi and Flying Medical Services, Arusha.

4.2 External Relations

4.2.1 The Archdiocese of Tabora.

The Archdiocese of Tabora is the owner of Ndala Hospital, so strictly speaking there are no external relations. The administrator and the AMO-i/c are members of the Archdiocesan Health Board, in which all health facilities under the responsibility of the Archdiocese are represented. Besides Ndala hospital, there are two health centres (Ussongo and Kaliua) and five dispensaries (Kipalapala, Ipuli, Igoko, Lububu, Mwanzugi and a new one at Sikonge). The ADHB convened 2 times in 2009. Regrettably supportive funding from Cordaid/MEMISA for the Archdiocesan Health Office had come to an end in January 2006, making it difficult for the Board to function as intended. Fortunately structural support has been received since 2008 from Japanese organisation JOCS (Japanese Overseas Christian (Medical) Cooperative Service). This organisation posted the very active Public Health nurse Naoko Shimizu in Tabora and a Surgeon, dr. Mioya Yoichi is been operating in Ndala hospital for quite some weeks. The Archdiocesan Health Board has a new secretary, Fr. Paul Chobo who together with nurse Naoko has been able to produce an extensive annual report.

4.2.2 CSSC

The Christian Social Services Commission is the joined body of all church related institutions in Tanzania, both for health and education. Ideally CSSC functions as a link between government and mission and should be

responsible for the formulation of joint policies. A CSSC officer has occupied the zonal office in Tabora since 2008. This functionary, Mr. Kasoga, has improved communications with CSSC on a variety of subjects like salaries, sponsorship opportunities for upgrading staff, new buildings and in particular the preparation of so called “Service Agreements” between the private health institutions and the (Local) Government. CSSC organizes an annual meeting in Dar es Salaam whereby all voluntary agencies are invited for several days. This annual meeting is organized in connection with the annual meeting of the TCMA, the Tanzanian Christian Medical Organization of medical professionals.

4.2.3 Government

Ndala Hospital participates in the curative, preventive and promotive health activities of Nzega district. The District (or Council) Health Management Team comes regularly for supervision. The district supplies Ndala hospital with vaccines. Ndala is regularly invited to participate in meetings and seminars organized on district level, although as in previous years invitations often come only a day before.

As a Voluntary Agency Hospital (VAH), Ndala hospital is entitled to receive 10-15% of the ceiling Basket Fund, which can be used for a variety of items like training, infrastructure, medicine and community health activities. The AMO-i/c of Ndala hospital is a member of the District Health Board. He is also involved in the compiling of the CCHP (Comprehensive Council Health Plan) together with the District Health Management Team and the district-planning officer. He is the appointed lead agent for all VAH’s (voluntary agency hospitals) in the district. Relations with the region are stable and good. The regional medical officer (RMO) is a member of the BoG of Ndala, and although he had to send someone to represent him at the meeting, communication is regular and easy. The regional laboratory technician visits on a regular basis for supervision. The Ministry of Health (MOH) also supervises regularly and all members of the Hospital Management Team are also regularly visited by the MOH to discuss matters of training, salaries and seconded staff. The Ministry of Health (MOH) supplies Ndala hospital with a staff grant, which assists in the payment of salaries for 38 qualified staff. Ndala hospital has chosen to follow government salary scales as opposed to those of the diocese in order to retain staff more easily. Communication with the MOH concerning all issues is extremely difficult unless visited personally. The government seconds two of the AMO’s.

4.2.4 Technical Assistance

In the AMREF ‘Flying Doctor’ program, 7 visits were made by the following specialists: Urologist 2x, Gynecologist, ENT Surgeon + Anesthetist, Reconstructive Surgeon and a Physician + Lab technician, altogether they saw hundreds of patients and did approximately 10% of all the major operations. Lectures and discussions with the medical and nursing staff present during the clinics were very important for improvement of medical practice.

Other specialists and residents visited the hospital on a personal basis, like in previous years, and, together with local staff, attended and operated patients and gave lectures. The hospital has made an agreement with the Belgian organization Doctors Without Holidays (Artsen Zonder Vacantie AZV) for technical assistance. Dr. Yoichi Miyao, surgeon from Japan Overseas Christian Services (JOCS) assisted in the theatre. Management

assistance is given by a group of Dutch doctors who have been MOiC in Ndala Hospital in the past. Three of them have been visiting the Hospital for periods of several weeks in 2009.

4.2.5 Donors

As in previous years, Ndala Hospital has been only able to continue with the help of numerous friends and donors who helped Ndala in a wide variety of activities. A list of names of all donors is given in appendix 7. All donors generally receive an annual report and individual communication via email and telephone. Donations are received either directly to the hospital euro account, through the motherhouse of the CB-sisters in Maastricht or via the Stichting Tabora. The **Stichting Pius XII** has been supporting Sengerema Hospital already since a long time and Ndala Hospital since 2004, e.g. it paid for the construction of a new Office Block in 2009 and assists in the purchase of Medicines in a big way. The foundation is a close cooperation between the Congregations of the Brothers of Johannes de Deo and the Sisters of Charity of St. Carolus Borromeo in the Netherlands. Via the Stichting Tabora a funds have been created to support hospital workers with children in schools for secondary education and a revolving fund out of which loans can be given to all workers.

4.2.6 Miscellaneous

The MOiC together with the Administrator attended the annual meeting of the TCMA in Dar es Salaam. It serves as a platform for church hospitals among themselves and talks with representatives from CSSC, MSD, NHIF and the MOH.

TEC is mostly responsible for the duty free clearing of imported goods and donations from abroad. Cooperation with TEC is difficult and delays in clearance are long.

Good relations exist with neighboring hospital “Nkinga”. Ndala and Nkinga regularly help each other in case of out-of-stock medicines or when technical assistance is needed. Cooperation with Nzega District Hospital on matters of HIV/AIDS is good.

5. Management.

The Catholic Archdiocese of Tabora is the owner of Ndala Hospital. Since 1962 the management of the hospital is in the hands of the Sisters of Charity of St. Charles Borromeo, a congregation with the motherhouse in Maastricht in The Netherlands (“Zusters Onder de Bogen”). The Hospital Management Team is the executive power in charge of the hospital. The Hospital Management Team is responsible for the day-to-day management and is supposed to meet every month. In reality of course, members of the daily board meet each other on a daily basis to discuss matters arising. By January 1st, 2007 the former Daily Board was called the Ndala Hospital Management Team and consisted of six people, namely the previously mentioned members and their assistants. The Archdiocese and the Board of Governors did official appoint the new members. However this new situation did not last long because of all the human resource changes that took place during that year. So the situation returned to the past and still exists in 2009: The Administrator, the AMOiC and Patron form the Hospital Management Team.

The Board of Governors (BoG) met twice in 2009. The aim is to meet a minimum of two times per year. The Board should set policies, approve budgets and generally supervise the activities of the Hospital Management Team. The Board consists of the Archbishop, the Vicar-General of the Archdiocese and also Parish Priest of Ndala, the Regional Medical Officer, the District Medical Officer of Nzega District, the acting medical officer in charge of Sengerema Hospital, who is also a CB sister, the regional superior of the CB sisters, the General Superior of the Congregation of Daughters of Mary, the chairman of Caritas Tabora. Plans have been made and approved to include the District Medical Officer and a representative from the local government in Ndala, but these plans have not yet been implemented. The MOiC is the secretary of the Board. The members of the Hospital Management Team (as it is still called) are no members, but are invited to attend the meetings. The constitution of the BoG, the implementation of the Organogram (see Appendix 3) and a Hospital Advisory Board consisting e.g. of representatives of the local community and a representation of the workers are still under discussion.

6. Human Resources.

The Patron mostly does human resource tasks although they are divided between members of the daily board. Financial staffing matters are the responsibility of the administrator. A new 'conditions of service' document was written by the Archdiocese in 2004, which has been followed by Ndala Hospital since a few years. The essential part of this document is staff being employed on contracts for a period of two years. This was done to increase flexibility. The annual gratuities (benefits) to which the staffs are entitled have to be paid out at the end of the contract and so can't accumulate to amounts that are impossible to be payed by small stations after many years of service or at retirement. All these small centres are not capable to administer and safeguard these amounts for their workers. The government has set a staff establishment for a hospital of the size of Ndala, but the officially required number of qualified staff is not reached by far. (See Appendix 5)
Staffing levels have improved to some extend. Shortage is especially felt in the administrative and nursing departments. Turnover of staff in these departments is very high, as especially qualified nurses and midwives leave after a short period looking for greener pastures. The reasons for this are not always easy to identify, especially since the hospital follows government salary scales. Government hospitals do generally have better secondary conditions however and in combination with the remoteness of Ndala, the lack of facilities like electricity and running water, the younger nurses tend to prefer working in bigger towns. No good written policy is in place for plans and hospital policy concerning Human Resource Management. There are no regular assessment meetings of individual staff members with their heads of sections. New staffs have a probation period according to their grade but this period is often not assessed.

6.1 Training and upgrading.

It is hospital policy to send staff on training whenever possible and where necessary to improve educational levels of staff. Funds for these trainings are found through donors or our own resources are being used. Staff should however have been working within the department for at least three years and there must be a

commitment to stay with the department after completing the course as well. A standard bondage contract is signed between the trainee and the hospital to ensure this.
Appendix 4. Shows the number of staff on training in 2009.
In principle every week a clinical lecture is given by one of the medical staff and the flying doctors often give presentations during their visit as well. The student-doctors program of the University of Amsterdam had been stopped after the departure of university trained medical officers. In 2009 student-doctors and research students from the University of Groningen in the Netherlands have arrived. The results of the research students have still to be communicated.

7. Finances.

The administrative and accounts department is headed by the administrator. As always the administrative department faced several problems. A severe shortage and high turnover of staff still made it difficult to allocate tasks to specific people. Fortunately with the help of the Pius XII Foundation the construction of a completely new and bigger office block was started and completed in 2009. Mr Ndaki, a senior accountant from Tabora assists for one day a week in keeping the books. The administrator continues modernizing the accounting and financial control systems, but further improvement will only be possible if the staff situation improves. A proper inventory of all the assets of the hospital had been done in 2008. The improvement of this department remains one of the highest priorities of the hospital. See Appendix 10.6 for details about the financial situation. From these figures it is clear that the overall financial situation has improved in comparison with previous years. But deficits remain and the hospital can hardly function without outside support. For investments and long overdue maintenance the hospital is completely dependent on donors. The contributions from the government are completely insufficient.
Income from patient fees had to be increased again and reduction of cost had to be achieved to survive. The present administrator, Sr. Reni Ngadi, has achieved these goals with admirable dedication. Slowly on there is more understanding and acceptance of the tight financial policy that the administrator maintains. However, to explain clearly for everybody the necessity of certain measures is not easy. It is not the main concern of medical staff to save money!
The following overview of the income and expenditure, comparing 2008 and 2009 - together with the specifications in the Appendix 6 – gives further insight in the situation. The income from patient fees has increased with more than 50 million shillings (= ± 20%), while the contribution from the government remained about the same. As the inflation of the Tanzanian shilling versus the Euro has been ± 12,5% the total cost of running the hospital in Euros remained more ore less equal.

Income/Expenditure Overview		2007	2008	**2009**
INCOME	Hospital	214,207,645	323,069,159	**386.131.990**
	Government	11,767,000	79,000,000	**67.979.150**
	Donations	113,112,762	58,481,753	**60.365.000**
	Study Sponsors	15,966,750	19,176,294	**24.262.500**
	Total	355,054,157	479,727,206	**538.738.640**
	+ BANK	34,720,159	11,895,627	**3.462.500**
TOTAL INCOME		**355,054,157**	**491,622,833**	**542.201.140**
EXPENDITURE	Medicines/New Office Block (St. PIUS XII)	56,681,050	9,291,300	**32.898.950**
	TB ward etc. (Stichting Sonnevanck)	17,964060	5,055,600	**10.576.000**
	Study / Training / Upgrading	12,993,880	21,585,103	**28.544.059**
	Basket Fund	21,712,461	35,552,350	**76.537.546**
	Total	109,351,451	71,484,353	**148.556.555**
	RUNNING Cost (administrative)	267,400,303	378,508,420	**421.460.364**
TOTAL EXPENDITURE		376,751,754	449,992,773	**570.016.919**
Balance	INCOME Hospital	214,207,645	323,069,159	386.131.990
(versus running cost)	- Running Cost	267,400,303	378,508,420	421.460.364
	DEFICIT	53,192,658	55,439,261	**35.328.374**
Balance	INCOME Hospital	214,207,645	323,069,159	386.131.990
(versus total exp.)	- Total Expenditure	376,751,754	449,992,773	570.016.919
	DEFICIT	162,544,109	126,923,614	**183.884.929**
Treatment Employees		4,659,720	4,992,155	**3.307.650**
Cost sharing	minus	500,000	1,190,000	**1.160.000**
NSSF sharing	minus	1,166,592	588,672	**3.117.870**
	Hospital sharing	2,993,128	3,213,483	**- 970.220**
Unpaid patient fees	+	835,950	695,150	**440.600**
	Total	3,829,078	3,908,633	**- 529.620**

EGPAF			2,638,850	-
	Profit / debt	3,829,078	6,547,483	**529.620**

7.1 Objectives.

The main goal is to keep hospital care accessible for everyone, even for the poorest people. The hospital continues to depend heavily on donations and patient fees. The aim is to achieve as much financial independence as possible. With the continuous rise of salaries this becomes more and more difficult and solutions need to be sought in closer partnership with government, possibly in the form of a **service agreements**. An important proposal of the Government has been put forward in 2008 and has been studied by the voluntary organisations involved in health care (CSSC) in 2008. Major decisions about this major issue were supposed to be taken in 2009. However the Government has no intention to include the salaries from not-qualified staff into the deals. Moreover it forces the hospital to charge the lowest possible price for the services within these agreements. As the running costs of the different services (e.g. maternity and MCH services) comprise for over 50% of salaries and emoluments of the qualified and unqualified staff, the voluntary hospitals with their high percentage of unqualified (but dedicated and often very experienced) staff are not eager to enter into these 'service agreements' as long as there are so few qualified workers available.
The main idea that the Government 'buys' (pays for **all** the cost) some of the most important 'services' offered by the voluntary hospital (e.g. MCH and Maternity services) has not been translated into concrete proposals until today!

8. Hospital Activities.

8.1 Curative Services.

8.1.1 General Out Patient department (OPD)

Attendance at OPD increased again in 2009. Again data of the 'old' recording system were used. Because of several reasons the MTUHA (National Hospital Information System) data are underreporting the actual attendance. No firm conclusions can thus be drawn from these data in comparison with previous years.

OPD	2009	2008*	2007*	2006*	2005*	2004
Total new cases OPD*	**10.721**	7.475	6.155	9.560	11.928	13.776 (11.716)
Re-attendances	**11.961**	10.342	10.782	10.258	13.423	10.775
Re-attendances for dressing	**2.927**	3.935	5.668	5.717	6.633	6.634
Referrals to other health facilities	**?**	?	-			81
Total OPD patients*	**25.609**	21.751	22.613	25.535	31.984	31.266 (29.206)
Special OPD Clinics						
Attendance TB/leprosy clinic	**148**	165	231	270	252	209
Attendance Eye-Clinic	**287**	333	281	203	274	390
Attendance Epilepsy/Mental Clinic	**954**	937	953	881	843	554
Attendance Dental Clinic	**144**	125	109	96	114	94
(Total)	**(1533)**	(1560)	(1574)			

* The data from the reception were used, **and therefore excluding the antenatal women and children under 5 years (MCH) who go directly to the clinics!**

We do not record here the data for MTUHA, the national information system. Data for MTUHA are generally lower and collected under different headings and definitions. The attendance figures under MCH (see 8.2.2) are quite reliable: total number of attendees is **23354. Thus the total number of visits is nearing 50000 per year.**

8.1.1.1 TB and Leprosy Clinic.

The cure rate in 2009 (48 of 64 sput. pos. patients) is the WHO target of 75%. The cure rate fluctuates a lot over the years and is influenced mostly by the number of defaulters. It is mostly unknown if these patients really defaulted, continued elsewhere or died. As in previous years, the district took care of a continuous supply of drugs. The TB clinic is held Wednesday and is run by two Clinical Officers. All TB activities and patients are subsidized by the Sonnevanck foundation, enabling us to provide free services to all patients suffering from TB. The TB ward was ready to admit patients in 2009, but because of extreme shortage of qualified staff it has not been used till the end of the year. 4 new cases of Leprosy were diagnosed and put on treatment.

Tuberculosis	**2009**	**2008**	**2007**	**2006**	**2005**	**2004**
Patients on treatment per 01-01-	66	36	60	70	52	55
Newly Registered Patients	72	111	130	88	130	112
Re-treatment Cases	7	5	13	3	4	9
Patients transferred-in	3	3	4	6	12	4
Patients Transferred-out	0	2	2	26	5	
Total Registered	**148**	**155**	**209**	**193**	**203**	**180**
Sputum-positive	64 (43%)	69(44,5%)	82(39,2%)	102 (52.8%)	92(45%)	87(48%)
Sputum-negative	40 (27%)	46(29,7%)	30(14,3%)	24 (12.4%)	50(25%)	39(22%)
Extra-pulmonary	44 (30%)	40(25,8%)	97(46.4%)	67 (34.7%)	61(30%)	54(30%)
Tested for HIV (positive)	117 (42!)	81 (32)	92(32)	14 (2)	-	-
Treatment Results						
Completed	35	67	65	78		105
Cured (cure-rate)	48 (75%)	45 (65%)	55(67%)	41(50%)	56 60,8%)	82%???
Failed	0	0	0	3	0	0
Transferred	2	2	-	26	5	2
Died	1	3	2	11	5	8
Defaulted	23	17	7	9	23	9

Leprosy	**2009**	**2008**	**2007**	**2006**	**2005**	**2004**
Patients on treatment per 01-01	4	6	16	5	16	13
New Patients	4	4	2	16	27	12
Re-treatment Cases	0	0	4	3	3	3
Patients transferred-in	0	0	0	0	2	1
Patients Transferred-out	0	0	0	4	1	
Total Registered	**8**	**10**	**22**	**28**	**49**	**29**
Pauci-bacillary	0	0	0	0	5(10%)	21%
Multi-bacillary	8	10	22	28(100%)	44(90%)	79%
Treatment Results						
Completed	2	6	4	5	10	17
Failed	0	0	0	0	0	0
Transferred	0	0	0	4	1	0
Died	0	0	0	0	0	0
Defaulted	0	0	1	7	2	5

8.1.1.2 STD Clinic.

The majority of patients with sexually transmitted disease (STD) are seen in the regular OPD. Therefore this former weekly clinic was closed already in 2007. All patients diagnosed with an STD are encouraged to come with their partners to receive treatment and ling to the VCT clinic. Like the HIV test kits, all STI drugs are supposed to be donated by government and given to the patient free of charge. But the normal STD medicines (not the antiviral) are not supplied free by the government; the patients have to pay for them.

8.1.1.3 Epilepsy and Psychiatry Clinic.

The special clinic for psychiatric and epileptic patients is open every Wednesday and is run by one psychiatric nurse. Ideally, the clinic should open more than once a week, but staffing levels do not allow that at present. The treatment for the patients is free and subsidized by the Tabora Foundation. A total of **954** (2008: 937; 2007: 953) patients are receiving treatment. The majority of patients seen are epileptic patients (90%). About 30% of them are below 16 years. The main psychiatric problem presented was again schizophrenia. Many psychiatric patients are known not to come to the hospital. Also, many psychiatric diseases like depression are not properly recognized at OPD and seldom in the wards, where emphasis is on treating somatic conditions.

8.1.1.4 Eye Clinic.

An ophthalmic nurse runs the eye clinic in the Radiology Department and should be housed better and the equipment is old and needs replacement and modernisation. Some better equipment is underway from MEDIC in the Netherlands. More modern facilities for testing and cataract operation exist in Nkinga Hospital (55 km). Thus patients are referred to Nkinga Hospital if they need glasses or operation.

Eye Diseases	**2009**	2008	2007	2006
Conjunctivitis	**66**	67	67	58
Cataract	**40**	65	43	41
Trauma	**40**	30	23	14
Cornea ulcers and scars	**16**	20	10	7
Cornea scars	**5**			
Foreign body	**17**	24	17	11
Refractive errors	**7**	14	10	3
Presbyopia	**12**	14	29	16
Glaucoma	**21**	18	24	14
Retina diseases	**2**	7	7	1
Eye lid / leprosy lesions/	**8**	7	-	1
Xerophtalmia	**7**	5	10	3
Trachoma	**6**	2	-	1
Herpes	**0**	2		
Uveitis	**6**			
Others	**31**	32	22	22

No pathology detected	**3**	10	8	3
Total	**287**	335	281	203

8.1.1.5 Dental Clinic.

Two Dental Assistants are supposed to run the small Dental Clinic. One had gone for upgrading but returned shamefully without diploma or certificate because he failed already the examination of the first semester and had been send home. Presently only tooth extractions are done. A total of **144** (52 men/ 92 women) extractions were done (in 2008: 125), comparable to previous years.

8.1.2 In-Patients.

The hospital essentially has four wards: a male ward, a female ward, a paediatric ward and a maternity ward. There are semi-private rooms in each ward and there is a private wing with a few rooms. In the children department the new ward was completed and furnished in 2005, and has about 10 beds at present. They are not counted as an increase in the total number of beds because they are considered a 'transplant' from the regular wards. The Children ward has five isolation rooms in which patients with meningitis are admitted. Male and female wards do not have separate isolation rooms and a TB ward will be opened in 2009.

In-Patients	**2009**	2008	2007	2006	2005	2004	2003
Total beds	**128**	128	128	128	128	131*	128
Total admissions	**6959**	*6,048**	6,663	6,570	6,283	6,403	5,860
Average Length of Stay (ALS)			4,3	4,9	5,3	6.4	6.1
Bed Occupancy Rate (BOR)			62,7	69,5	71,6	79%	76%
Number of hospital deaths	**443**	444	315	398	422	507	432
Death rate (/1000 admissions)	**62**	73	47	60,6	67,2	79,2	73,7

NB. The total number of admissions is without the number of admissions for delivery!

* Correction: The total number of admissions in the wards (excluding deliveries!!!) in 2008 was **6434**.

Wards 2009	**Beds**	**Admissions**	**ALS *****	**BOR*****	**Death cases abs.**	**Death rate (/1000 adm)**
Male Ward	**28**	**1108**			**94**	**84**
Female Ward	**28**	**1616**			**76**	**47**
Children Ward	**45**	**3855**			**255**	**66**
Maternity	**20**	**380****	***	***	**19***	-
Prematures (below 2000 g)	**4**	**62**			**14**	****
Private Ward	**3**	**8**			**0**	

Total (officially)	**128**					

* Excluding maternal mortality (see text under Obstetrics). These deaths are mainly newborn children that died after a few days and/or were admitted in the ward for intensive care after being born at home.

** Mothers (380) admitted with their newborns that were born at home some days earlier.

*** No Average Length of Stay (ALS) and Bed Occupancy Rate (BOR) calculations were done.

**** The data about the survival of premature children born or admitted shortly after delivery are discussed below (see 8.1.3). The recording is too incomplete to draw any definite conclusions.

8.1.3 Obstetric Department.

The number of deliveries is increasing every year and has reached an average of 6 per day. The number of Caesarean Sections as a percentage of the annual number of deliveries remains about the same. Every year the number of CS's reported by the department (200) is lower than that reported by the theatre (215)! The number maternal deaths have been stable throughout the years. This year we report a higher number (see list below). Faster transport and mobile communication from the homesteads to the hospital (mothers on the point of delivering arrive on the back of motorcycles and seldom on oxcarts any longer!) from far away locations will for time being enlarge the radius from which mothers will arrive to deliver, including the complications after trying to deliver at home in vain. More serious is the higher percentage of fresh stillbirth now for the second year in succession. Our care and diligence in handling mothers who come to deliver is far from optimal. Shortage of well-trained qualified staffs is the main cause! Lack of proper supervision of the still inexperienced midwives as well as lack of discipline has influenced this negative development also.

General Overview: Obstetric department	2009	2008	2007	2006	2005	2004
Hospital deliveries	**2209**	1873	1877	1736	1709	1613
Delivered before arrival (BBA)	**9**	18	37	22	18	22
Total deliveries	**2218**	1891	1914	1758	1727	1635
Abnormal deliveries	**267**	243	277	316	259(14,9%)	13%
Caesarean section	**215 (10%)**	203 (10,9%)	193 (10,2%)	191 (11%)	174 (10%)	11,7%
Maternal deaths	**5(+5?)***	6	5	4	5	10

Deliveries 2009:		2008	Complications 2009:	
Spontaneous Vertex Delivery	**1936**	1648	Ruptured uterus	**2**
Caesarean section	**215**	203	Ante partum hemorrhage	**4**
Breech delivery	**56**	27	Post partum hemorrhage	**13**
Vacuum extraction	**11**	13	Solutio Placenta	**2**
Total:	**2218**	1891	Pre-eclampsia	**8**
Multiple pregnancies (twins, triplets)	**62 x 2** **1 x 3**	51x2 1x3	Eclampsia	**13**

Births / Babies born before arrival	2009	2008	2007	2006	2005	2004	2003
In hospital	**2275**	1997	1877	1815	1798	1665	1557
Before arrival	**9**	19	37	22	18	22	28
Total babies	**2284**	2016	1914	1837	1816	1687	1585
Born alive	**2149**	1899	1809	1729	1717	1601	1520
Fresh stillbirth (per 1000! newborns)	**77(34)**	76(38)	51(28)	48(26)	40(22)	(25)	(24)
Macerated stillbirths	**58**	41	48	38	41	21	27
Multiple pregnancies (neonates)**	**64x2** **1x3**	51x2 1x3		76	101	75	60

Poor recording in the Maternity Department prevents giving reliable data about the chance of premature children to survive under our care. The death rate among children born at home (or on the way to the hospital!) and brought to the hospital for treatment is very high.

***Maternal Deaths:** (a better search through the files and including some cases that fall out of a strict definition, explains the higher number this year).

1. Gravid 3, Para 1, 25 years, previous scar, living nearby the hospital! died on the operation table after delivering a dead fetus. She bled massively.
2. Gravida 11, Para 9, 38 years, living a bit far, delivered spontaneously in maternity a live baby with a good Apgar and a weight of 3.9kg. After 45 minutes she started sweating, restless without measurable BP without external bleeding. Hb was unknown but the blood sugar was 20 mmol/l.
3. Gravida 4, Para 3, 24 years, started labor at home (a bit far); started bleeding a lot during transport. CS was done because of placenta praevia. Died a few hours after operation apparently because of massive blood loss. The amount of IV blood given was not recorded.
4. Gravida 1, Para 0, age unknown, delivered spontaneously, but had a PPH for which 500ml of blood was given. She got fever next day and was adequately treated as puerperal septicemia. She went home after one week in apparent good health, but came back after again one week with a very low Hb (2,7 mmol/l) when she died during blood transfusion.
5. Gravida 2, Para 1, age unknown, got an uncomplicated CS because of previous scar. Developed an abdominal abscess and died in septic shock after laparotomy on the 8th day after CS.
6. Gravida 11, Para 9, age unknown, delivered healthy twins and had been discharged in good health 3 days after delivery. She was admitted ± 8 weeks later and died with signs of heart failure.
7. Only the name recorded. Died from **Eclampsia.**
8. Only name recorded. Died with a history of **Solutio placenta.**
9. + 10. Two more admissions in the Maternity died with only their names recorded!

****Multiple Pregnancies and Premature babies:**

- Of the 64 reported multiple pregnancies 13 ended with the delivery of live premature (dysmature?) babies (below 2000 g). It is sure that of these 26 children 8 died some days later in the hospital.
- From all 62 recorded premature children that were cared for: 14 were recorded as having died in the hospital: 6 (of 29) < 1500 g and 8 (of 33) between 1500 and 2000 gr. Their average weight was 1570 gr. This didn't differ from the average weight of the ones that were recorded as 'discharged home' (32 of average 1560 g.) and those babies whose fate was not recorded (17 of average 1620 gram.), but probably most of them went home all right. Because the records don't specify whether premature babies were born in hospital or before arrival, nothing definite can be said about the survival rate of hospital-born premature babies per weight group! Moreover the total numbers are too small. There are no incubators in the hospital, the 'Kangaroo method' is used generally and frequent feeding with expressed breast milk.

8.1.4 Theatre.

There were three trained nurses in anesthesia and one nurse returned after a two-year training in theatre management. Four staff members are involved in other activities like the eye-clinic, the psychiatric clinic and the dental room. Most dressings are done in a separate dressing room to avoid contamination, although complicated dressings that require anesthesia are done in minor theatre.

The number of major operations more or less remained stable at **625** (2008: 670) (2007: 666) major procedures. The differentiation between 'elective' and 'emergency' is no longer made, because of the lack of strict criteria. The general distribution of types of procedures remained the same and as in previous years around 10% of the operations were performed by or assisting a visiting specialist. The remainder of the operations are done by the (A)MO's of Ndala Hospital. A new theatre complex is now under construction by a registered contractor from Dar es Salaam and is paid from funds from CSSC. Completion is expected in 2010.

8.1.4.1 General overview Surgery:

THEATRE:	**2009**	2008	2007	2006	2005	2004
Major procedures (emergencies%)	**634**	670	666 (37%)	751 (46%)	723 (42%)	684 (65%)
Minor procedures	**1694**	1427	1122	998	1865	1471
Anesthesia general/local	**1595 756/839**	1606 790/816	1282 659/623	1452	1737	1694

8.1.4.2 Major procedures:

General		**Genito-Urinary**	
Release bowel obstruction	**5**	Prostatectomy transvesical	**31**
Bowel resection and anastomosis	**11**	Prostatectomy transurethral	**17**
Colostomy (closure)	**0**	Nefrectomy	**-**
Adhesiolysis	**-**	Urethral / bladder stones removed	**6**
Cleaning abdomen (exploration&drainage)	**20**	Repair bladder lesion	**2**
Appendectomy	**15**	Orchidectomy (uni-/bilateral)	**14**
Exploration laparotomy non/semi acute (biopsie)	**17**	Hydrocelectomy (uni-/bilateral)	**13**
Gastric outlet obstruction release	**-**	Urethro-cystoscopy (with procedure)	**-**
Cholecystectomy	**-**	Removal Bladder/Urethral Stones	**5**
Inguinal hernia (uni-/bilateral)	**87**	Re-implantation Urethra	**-**
Femoral hernia	**2**	**Obstetrical/Gynaecological**	
Other hernia (incision, para-umbilical, epigastric, scrotal)	**18**	Caesarean Section (CS)	**166**
Burst abdomen, tension sutures	**-**	CS (3rd) and Bilateral Tuba Ligation	**23**

Splenectomy	-	CS due to foetal distress	**15**
Volvulus	**2**	CS due to placenta praevia	**8**
		CS due to cord prolaps	**3**
		Colporaphy	**1**
Mastectomy/Lumpectomy	**4**	Bilateral Tuba Ligation	**25**
Haemorrhoidectomy	**1**	Abdominal hysterectomy with/without adnexae	**29**
Fistulectomy	**3**	Subtotal hysterectomy	**10**
		Repair 3rd degree tear	**2**
Abscess I and D	**3**	Removal ectopic pregnancy	**28**
Excision tumour	**19**	Ovariectomy and/or Salpingectomy /myomectomy	**21**
Extensive wounds	**1**	Pelvic abscess/pyosalpinx	-
Open fracture: cleaning and reposition	**1**	Repair vesico/recto vaginal fistula	-
Removal foreign body	-	Colporrhaphy	-
Skin grafting	**3**	**Other Specialities**	-
Necrotomy	-	ENT: nasal polyp / adenoid hypertophy	**6**
Amputation of leg	**2**	Enucleating Eye	-
Anal atresia	-	Repair cleft lip/palate	**3**
Stump repair	-	Tonsillectomy/adenoidectomy	**5**
Sequestrectomy/scooping	**4**	Other Plastic Surgery	**5**
Re-laparotomy (complications)	**2**	Clubfeet surgery	**3**
Contracture release	**2**	Thyreoidectomy	**2**
Other	-	Other Orthopaedic, foot correction	**1**

8.1.4.3 Minor Procedures:

General		**Orthopaedic**	
Abscess or septic arthritis I and D	**111**	Reduction dislocated joint/fracture	**67**
Exploration/Aspiration	**30**	Gallows traction	**CW**
Cut wound, suturing	**139**	Femur, pin traction	**17**
Contracture release	**1**	Amputation finger/toe	**6**
Woundtoilet/necrotomy (incl. bites)	**277**	Circular POP	**95**
		Back slab POP	**79**
Removal of stitches	**58**	Osteomyelitis: drilling, Sequestrectomy, scooping	**8**
Foreign body removal (eye,ear,nose,throat)	**28**	Fistelectomy	-
Crep. bandaging	**34**	Arm sling	**28**
Excision tumour/ulcer	**24**	Clubfoot	**9**

		Removal POP	**24**
Tongue tie	**5**	**Obstetrical/Gynaecological**	
Biopsy	**5**	Speculum examination	**62**
Aspiration abdomen / Ascites tap.	**20**	Evacuation (incomplete abortion, molar)	**232**
Aspiration chest	**2**	Dilatation and curettage (diagnostic, dysfunctional bleeding)	**0**
Insertion thorax drain	**4**	Retained placenta (manual removal)	**4**
Aspiration other	**33**	Cervical and perinea tear repair	**3**
Rectal examination/proctoscopy/fistula	**2**	Opening imperforated hymen/Labia separation	**7**
Anal fissure, dilatation of anus	**0**	**Genito-Urinary**	
Reduction rectal prolaps	**2**	Bugination	**1**
Ear syringing/otoscopy	**18**	Catheterization transurethral (excl. ward)	**55**
		Catheterization suprapubic	**7**
Eye proc. (cornea sutures, evisceration etc.)	**6**	Orchidectomy	**2**
Other procedures	**52**	Circumcision (traditional)	**38**
		Circumcision phimosis/dorsal slit	**7**

8.1.4.4 Anesthesia:

Three Anesthetic nurses are responsible for the anesthesia and assist in resuscitation throughout the hospital. In the major theatre spinal anesthesia is most frequently used, followed by ketamine and halothane. The number of operations in which ether was used decreased, whilst the number of times halothane was used increased. In minor theatre ketamine is mostly used, with a slight increase in local anesthesia.

Anesthesia 2009	**Major**				**Minor**			
Type	**Adult**		**Child**		**Adult**		**Child**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Ether + intubation	**3**	**4**	**-**	**-**	**-**	**-**	**-**	**-**
Halothane + intubation	**40**	**35**	**10**	**5**	**-**	**-**	**-**	**-**
Ketamine (with Diazepam)	**85**	**60**	**29**	**26**	**135**	**252**	**98**	**72**
Diazepam	**-**	**-**	**-**	**-**	**10**	**2**	**-**	**-**
Pethidine	**-**	**-**	**-**	**-**	**23**	**54**	**-**	**-**
Thiopental	**3**	**9**						
Spinal anaesthesia: Lidocaine in Dextrose	**120**	**215**	**-**	**-**	**-**	**-**	**-**	**-**
Spinal anaesthesia: Bupivacaine	**35**	**40**	**-**	**-**	**-**	**-**	**-**	**-**
Spinal anaesthesia > Lidocaine + Ketamine	**12**	**13**	**-**	**-**	**-**	**-**	**-**	**-**
Saddle block	**8**	**4**		**-**	**-**	**-**	**-**	**-**
Local anaesthesia Lidocaine plain	**-**	**-**	**-**	**-**	**102**	**74**	**5**	**10**

Local anaesthesia Lidocaine + Adrenalin	-	-	-	-	-	-	-	-
Biers Block	-	-	-	-	-	-	-	-
Total: 1595 (2008:1606)	**306**	**380**	**39**	**31**	**272**	**382**	**103**	**82**

8.2 Preventive and Health-Promotion activities.

8.2.1 The Primary Health Care department.

All MCH (RCH) activities, in the hospital as well as the mobile clinic, are considered to be primary health care (PHC). The same can be said from the HIV/AIDS and nutrition activities of the hospital. The hospital employs one senior public health nurse who has not been able to focus much on public health due to her other responsibilities for the Aids program (CTC and VTC) starting from January 2007, however, she is in charge of the public health department. The hospital offers a malnutrition program, where mothers are taught to prevent malnutrition and prepare high-energy foods. It also offers several HIV/AIDS related services. Other community based health care activities are organized by the catholic parish, which organizes seminars on reproductive health and HIV/AIDS. The Tabora Foundation continued its Reproductive Health and Aids Awareness Program in the Primary and Secondary Schools.

<u>The Tabora Foundation.</u>

In the absence of a large-scale PHC department, the hospital counts amongst its neighbors the Tabora Foundation ('Stichting Tabora'). Colleagues of former MOiC Dr. George Joosten and his wife Mrs. Gon Joosten-Nienhuys initiated this foundation, based in the Netherlands. The activities of the foundation are in their 9th year and are managed by a local committee of 5 dedicated people and focuses on several goals:

- A Reproductive Health and HIV/AIDS awareness educational program for 40 primary, 10 secondary schools and one TTC. The program consists of a series of 4 lessons/group discussions. 3500 young people (2800 primary school kids of class 6 and 7) participated in this program in the year under review. In principle school kids follow these lessons 2 times during their primary education. NB: The lower incidence of aids-positive mothers in the catchment area of the hospital might be at least partly due to the teaching of the senior clinical officer, Mr. Theodori Kulinduka since he started in 2000! He continues teaching despite being retired already for some years.
- Support of approx. 200 poor households with food, agricultural utensils and medical care.
- Supporting poor (often orphaned) primary schoolchildren (200) and sponsoring promising youths of poor families in different forms of secondary (72) or postgraduate education. (3)
- Incidental donations to support small projects in Ndala Hospital and in the area of the Archdiocese of Tabora.
- In 2008 the foundation started financing the construction of a large dome shaped underground rainwater collecting cistern, catching the water of the roof of the large social hall of the hospital. It will contain almost a half million liters of water for use in the hospital. In 2009 the tank was completed, but still has to fill up. The cistern should proof itself to be indeed leak-proof.
- The foundation acts as an intermediate to transfer funds from different donors in the Netherlands for training and upgrading hospital staff. A group of ex-Ndala doctors provides management support to the hospital via the Tabora Foundation. These senior doctors are visiting the hospital for longer periods per year. In 2009: Dr. Herman Drewes and Dr. Gerard Haverkamp.

8.2.2 Mother and Child Health Care (MCH) now: RCH

NB. Since 2008 the name "Mother & Child Health" (MCH) has been changed in RCH = "Reproductive & Child Health"!!!!

8.2.2.1 Under-five and Ante Natal Clinic 2009

More than 50% of the RCH (MCH) clinic attendees in Ndala Hospital are from outside the official service area of Ndala Hospital. The total number of visits to these clinics has risen considerably and this resulted in also more vaccinations given. The provision of vaccines by the government has been quite regular. Even the cold chain equipment is maintained and supplied with gas for the fridges very well!

Mobile clinics that were stopped in 2007 were started up again in two faraway villages in 2008: MISOLE and KIGANDU. They were both visited again only 6 x during 2009 because during the rainy season and some months afterwards these villages cannot be reached by car.

MCH / RCH Under-five care	**2009**		**2008**	**2007**	**2006**	**2005**
	1st attendance	re-attendance				
In Ndala hospital:	**1.741**	**11.354**	12.059	14.049	13.404	13.693
below 12 months	**1.741**	**8.489**	9036	10.730	10.152	
above 12 months	**0**	**2.865**	3023	3319	3252	
Mobile Clinic: (Kigandu & Misole)						1777
below 12 months	**235**	**757**	1115			
above 12 months	**16**	**179**	406			
Total under five visits:	**14.282**		13.580	14.049	13.404	15.470
Malnutrition seen in under fives						
BWT 60-80th percentile	**(between 8,0% – 11,6%)**		1,2%??	4,6%	6,2%	6,5%
BWT below 60th percentile	**(between 0,5% - 1,1%)**		0,2%??	0,52%	0,5%	0,7%
Antenatal Care	**1st attendance**	**re-attendance**				
In Ndala hospital	**3733**	**4750**	7.121	6.877	6.780	6.919
Before 20 weeks pregnancy	**462**					
After 20 weeks of pregnancy	**3271**					
Mobile Clinic			417	-		463
Before 20 weeks pregnancy	**67**	**308**				
After 20 weeks of pregnancy	**214**					
Total antenatal visits	**9.072**		7.538	6.877	6.780	7.382
Risk factors at <u>first*</u> antenatal visit:						
below 16 yrs	**389 (10,4%)***		11%			
above 35 yrs	**228 (6,1%)***		7,1%			
multipara (gravida 5 or more)	**682 (18,3%)***		15,9%			
hypertension (>140/90)	**104 (2,8%)***		0,2%??			
anemia (< 60%)	**71 (1,9%)***		5,9%??			
TOTAL under five +	**23.354**		21.118	20.926	20.184	22.852

antenatal visits					
Number of outstations (Kigandu & Misole)	**2**	-	-	-	
total number of visits	**12**	-	-	-	

8.2.2.2 Vaccinations

Vaccinations	**2009**	**2008**	**2007**	**2006**	**2005**	
TETANUS Toxoïd (Antenatal)						
I	**2.561**	1.968	1.794	1,778	2.208	
II	**1.425**	1.096	926	1,033	1.259	
III	**188**	226	280	157	153	
IV	**111**	153	151	148	163	
V	**88**	105	95	96	148	
BCG						
at birth	**981**	997	1.252	1.075	230	
at a later time	**1.226**	1.308	821	1.101	497	
POLIO						
at birth	**1.132**	1.204	1.467	1.251	362	
I	**1.861**	1.879	1.502	1.406	962	
II	**1.741**	1.828	1.385	1.317	831	
III	**1.212**	1.314	924	1000	734	
DTP						
I	**1.739**	1.789	1.223	1430	984	
II	**1.551**	1.486	1.063	1482	910	
III	**1.268**	1.133	854	1030	708	
Measles	**1.381**	1.088	932	881	697	
Total vaccinations	**18.465**	17.574	14.669	15.185	10.846	
vaccinations of people allocated to Ndala hospital	**9090**	7632	8.537	7.110		
vaccinations of patients officially allocated elsewhere	**9375 (51%)**	53%	46%	53%		
Vitamin A supplement	-					
Family Planning Clinic						
New attendees	**105**				34	
Total visits	**450**	269	515			

8.2.3 HIV/AIDS Control

As Aids continues to grow as a problem, the AIDS control program aims at prevention of transmission as well as care for the already affected patients. The National Aids Control Programme is a government programme, which aims at servicing all government and private/mission hospitals in the country. Ndala Hospital is so far depending on the DHO to receive supplies of HIV test kits, STI drugs and Family planning products, but supplies far better than in the past. In 2006 Ndala Hospital started supplying ARV treatment to HIV positive patients in its catchment area. It then also started providing PMTCT services.

8.2.3.1 Voluntary Counseling and Testing (VCT).

One important way to increase awareness and promote prevention is through free Voluntary Counseling and Testing (V.C.T.). In 2005 the hospital established a full time VCT office. In contrast the PMCTC program regularly borrowed supplies from the VCT room to ensure continuity. There is a stable shift from provider initiated counseling towards patient initiated counseling. Blood samples are sent for confirmation to Bugando Teaching and Referral Hospital in Mwanza by Post on special blotting paper.

A survey in 2007 had shown that of the population of Ndala (± 16.300 people) 2.9% males and 4,2% females had been tested positive for HIV; average: ± 3.6% of the random population.

VCT	Male clients counseled	Female clients counseled	Total	HIV+		HIV-	
				M	F	M	F
2005	123	89	212	71(58%)	45(50%)	43(35%)	36(40%)
2006	229	297	526	85(37%)	127(43%)	144(63%)	170(57%)
2007	1632	1628	3260	230(14%)	246(15%)	1402	1382
2008	1069	1000	2069	261(24%)	224(22%)	798	766
2009	**1024**	**930**	**1954**	**112(11%)**	**131(14%)**	**908**	**795**
			Total	**243 (12,5%)**		(8 tests were inconclusive)	

VCT age group:	**< 14 y.**		**15 – 24 y.**		**25 - 34**		**35 - 49**		**> 50 y.**		**2009** (2008)
gender	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**Total**
counseled & tested	**34**	**33**	**293**	**353**	**355**	**264**	**231**	**214**	**111**	**66**	**1954** (2069)
positive HIV	**4** **11,7%**	**8** **24%**	**8** **2,7%**	**27** **7,6%**	**33** **9,3%**	**45** **17,0%**	**55** **23,8%**	**36** **16,8%**	**12** **10,8%**	**15** **22,7%**	**243** **12,5%**

											(23,5%)

8.2.3.2 Care and Treatment Clinic (CTC)

CTC Age Group	**< 15 y**		**15-24 y**		**25-34 y**		**35-49**		**> 50 y**		**2009**
gender distr.	M	F	M	F	M	F	M	F	M	F	**Total**
Number enrolled patients	54	60	12	134	433	448	93	168	9	22	**1433**
Number patients on ART	19	35	4	28	182	238	20	28	4	14	**572 (40%)**

As part of the national program to provide care and treatment for patients living with HIV/AIDS, Ndala Hospital opened a CTC clinic in August 2006, providing counseling and antiretroviral treatment. Government supplies all drugs as well as training and recording materials. The Elizabeth Glacer Pediatric Aids Foundation (EGPAF) is assisting the government in implementing the program in Tabora region. Attendance to the clinic and the ARV-drugs are free of charge.

Once enrolled in the clinic, patients are staged according to the WHO stages for HIV/AIDS, since a CD4 counter is not always available. If patients are eligible they will start ARV-treatment after receiving a minimum of three counseling sessions together with a treatment partner (usually a relative) and after showing good understanding. If patients are not yet eligible, they will be seen every two to three months until eligible. Counseling is ongoing.

At present there are two clinicians, three nurses, two counselors, one laboratory assistant and one home based care nurse trained to work in the CTC.

8.2.3.3 Care for Chronically ill patients visited under CTC (Home based care):

Chronically ill patients are visited by Village Health Workers/Volunteers. They visited many chronically ill patients. 23 VHW's remained very active in their respective villages. One dropped out because his activities were not well received by the villagers to such extend that his house was burnt three times! The VHW reported 21 patients as having died. They were no 'defaulters' as had been presumed. Again 28 (9 boys / 19 girls) children were found who should be considered 'exposed' and should be treated as such. (In 2008 there was not such an enormous difference between boys and girls being exposed: 10 boys/ 11 girls).

Chronsick 2009	Jan	Febr	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec	Total ('08)
Visits	213	199	215	203	155	192	203	193	209	179	229	203	**2393** (2028)
Hiv/ Aids	83	94	96	86	92	93	101	111	117	98	122	118	**1211** (754)

8.2.3.4 Prevention of Mother To Child Transmission (PMTCT).

The PMTCT program in Ndala Hospital started in March 2006 as part of the national program. It is funded by EGPAF, through the District Health Office. 16 people mostly from MCH and Maternity have been trained and provide PMTCT services on a daily basis. Every morning a health education talk is given to all pregnant mothers attending MCH. The mothers can then opt in or out for counseling. If tested HIV positive, mothers should receive a single dose of Niverapine when labor starts and the children get a single dose of Niverapine syrup within 72 hours after birth. One month after delivery the children are tested. The percentage of women that agreed to be tested goes down. Of those tested, (69 van 1946 tested in 2009) 3,54% is HIV positive, which might be an acceptable indication of the HIV/AIDS prevalence in our catchment area. This is considerably lower than the regional average of 7,2%. This is probably because the hospital stands in a rural area. Ideally, all positive women are referred to the CTC to assess if they are eligible for full scale ARV treatment. In reality however only a minority arrives. This is probably due to the fact the CTC only has two clinic days a week. Other problems faced are the low number of babies receiving NVP. This is mostly because - in spite of counseling - many mothers end up delivering at home. All HIV positive pregnant women get their NVP during antenatal check up, so they can take the medicine at home. For children this is not possible, because the syrup has to be stored in a cool place. Follow-up of babies born from positive mothers is in general poor.

PMTCT	2006 (March-December)	2007	2008	2009
Pregnant mothers counseled	2377	3314	3422	**4189**
Pregnant mothers tested (accepted %)	2267 (95,4%)	2616 (79%)	2644 (77%)	**1946 (46,5%)**
Total mothers HIV positive (%)	86 (3,8%)	114 (4,3%)	88 (3,33%)	**69 (3,54%)**
Mothers received NVP	75	114	88	**??**
Babies received NVP	31	35	30	**??**
Babies coming for follow up	5	72	46	**??**

NB: 23 of these 69 positive women were already on ARV treatment.

8.3 Supporting Services

8.3.1 Laboratory.

The laboratory remains one of the busiest departments in the hospital. For Hemoglobin measurements fortunately standard reagents were obtained and the calorimeter remained functioning, securing the reliability of these tests. The expected liver and kidney function tests were done in 2009, but were not very reliable. The total number of tests performed was **36.308!**

	2009	Total	Positive		Total	Positive
Parasitology				**Hematology**		
Blood slide (thick droplet)		**12271**		Hb in g/dl (below 7 g/dl = "pos.")	**9531**	**3319**
	Malaria		**6643**	White Blood Cell count	**221**	
	Borrelia		**1**	WBC differentiation	**160**	
Stool		**1109**		Platelet count (below 40.000/mm)	**-**	
	Hookworm		**128**	Bleeding time	**2**	
	Ascaris		**2**	Red Blood Cell Morphology	**-**	
	Giardia Lamblia		**6**	ESR	**520**	
	Entamoeba Histolytica		**6**	Sickle Cell Test	**317**	**125**
	Strongyloides Stercolaria		**1**			
	Schistosoma Mansoni		**0**	Biochemical tests		
				SGOT (liver function test)	**40**	
Urine		**3005**		Cholesterol	**-**	
	Schistosoma Haematobium		**12**	Bilirubin (total)	**43**	**8**
	Trichomonas Vaginalis		**13**	Glucose blood (>10 mmol/l)	**1109**	**396**
	Granular casts			Glucose urine (dipstick)	**64**	
				Albumen urine (dipstick)	**112**	
			14	Pregnancy test urine	**397**	**176**
Bacteriology						
Ziehl-Neelsen colorization for AFB				**Other**		
	Sputum (Tuberculosis)	**351**	**41**	Sperm analysis	**12**	
	Skin smear (Leprosy)	**12**	**0**	Analysis other body fluids	**38**	**6**
Gram stain				Bloodgrouping&donation	**	
Cervix/urethral smear		**84**		Blood grouping	**1530**	
	Gonococci		**1**	Number of units transfused	**1530**	**('08: 960)**
	Candida Albicans		0	children	**1200**	
	T. Vaginalis		13	adults	**330**	
Liquor / CSF		**217**				
	Meningococci		**2***	Cytology Burkitt's lymphoma	**-**	

	Pneumococci		**10***			
	Haemophilus influenzae		**33***	**Serology**		
	Cryptococci		**-**	PRP (Syphilis)	**364**	**18**
	Total bacterial meningitis		**45***			
PITC for diagnosis HIV in hospital		**974**	**234 (24%)**	**VCT (**Voluntary Counseling&Treatment)	**1954**	**243 (12,5%)**
PMTCT (pregnant women)		**1955**	**69 (3,5%)**	**Total HIV tests done**	**4883**	**546 (11.2%)**

* Positive results based on gram stain only, not on culture.

** Since 2007 all the donor blood taken and given goes via the new Zonal blood bank in Tabora and is tested for HIV, hepatitis and malaria etc.

*** HIV testing after counseling is done in the specific programs: PMTCT and VCT.

8.3.2 Pharmacy and IV fluid production unit.

A branch MSD (the privatized national Medical Supplies Department) is the first supplier but many essential items are often unavailable and have to be purchased elsewhere in smaller pharmaceutical companies in Tabora or Mwanza (320km). The regular supply of essential medicines and basic ingredients remains a hot item.
The IV unit made over 6000 litres of different sterile fluids. The production is restricted by the availability of bottles and ingredients needed. Ready-made bottles or bags with IV fluids were more often bought than in 2009 and at the end of the year the ingredients (like pure glucose and salt) became unavailable from the normal suppliers (MSD) because of unknown reasons. The local production of IV fluids is not cheap because of the very high electricity consumption of the distilling and sterilization process. (In total ± 15 KW/h!!!), often exceeding the capacity of the solar installation. However PVC bags in which fluids are often available cause a serious problem; they shouldn't be disposed by burning (in the incinerator) for other hospital waste because very toxic dioxin and furan vapours are emitted in the environment causing an acute threat for workers, staff and villagers around the hospital.

IV UNIT		**N.Sal. 0,9%**	**Dextrose 5%**	**Ringer's Solution**	**Saline Irrigation**	**Dextrose 50%**	**Other**	**TOTAL**
2009	**bottles**	**216**	**4060**	**2400**		**64**		
	litres	**108 ltr.**	**2160 litres**	**1200 litres**	**2500 litre**	**1,2 ltr**	**149**	**6118,2**
2008	Total bottles	1891	2269			641		4801
	Total litres	893	686			10,6		1579
2007	Total bottles	3,789	3,125		-	333	?	7884
	Total litres	1,718	864		1898	7,4	?	
2006	Total bottles	5,315	4,060		-	157	2.5	
	Total litres	2,682	1,023		1920	4.6	4.6	

8.3.3 Radiology

The radiology department is responsible for making x-rays during electricity hours and occasionally on emergency indication. A radiology attendant operates the machine. A radiology assistant is presently being trained to become a fully qualified radiographer and will be available only in 2010. For time being the X-Ray department is only functioning for emergencies. The equipment consists of a rather new Philips installation and an old mobile x-ray machine that has some voltage problems, which makes the quality differ. Results of the thermo luminescent dosimeters remained good throughout the year, indicating that the radiology-room functions well within safety limits. Unavailability of staff with enough qualifications contributed to the absence of barium contrast x-rays, IVP's and HSG's.

The total number of Ultrasound examinations increased quite much, because the number of staff able to use the ultrasound has increased again since the arrival of two qualified doctors in September 2008.

X-Rays	**2009**	2008	2007	2006	2005
Chest	**310**	339	239	289	517
Lower and Upper extremities	**399**	446	387	445	527
Skull	**9**	25	7	13	27
Shoulder	**11**	40	34	29	34
Pelvis and hip	**53**	98	68	75	98
Vertebral Column	**15**	42	17	38	62
Plain Abdomen	**7**	3	12	19	39
Barium meal	**-**	-	-	0	3
Barium Swallow	**-**	-	-	4	2
Hystero-Salpingography	**-**	-	-	3	29
Intravenous Urography	**-**	-	-	1	1
Ureterogram	**-**	-	3		
Others	**-**	-	-	7	1
Totals	**804**	993	767	923	1340
Films used	**1003**	1046	789		

Ultrasound scans:					
	2009	2008	2007	2006	2005
Obstetrical	**142**	110	68	196	201
Gynaecological (incl. ectopic/abortion)	**202**	127	111	224	175
Abdominal (liver, spleen, gallbladder, bladder, tumour etc)	**185**	83	98	245	200

Urologic	**40**	36	33	33	33
Heart	**3**	-	3	3	7
Other	**-**	-	2	6	18
Total	**572** **M/F** **77/495**	356 M/F 58/298	299	707	634

8.3.4 Administration

The Administrator, her assistant, two assisting sisters and several clerical staff are responsible for the finances and control. The General Office has been completely rebuilt and extended in 2009. It has become a very presentable part of the hospital! Most of the work is still done manually although financial reports are now made on the computer. After the completion of this Office Block room could be given for **a small library** with a computer with Internet connection.

8.3.4.1 Medical Records and Statistics

A medical records office is located in the general office and several of the clerical staff work partly in the medical records archive. The medical records clerk falls under the MOiC, and is responsible for statistics. Because the clerical staffs also have reception and financial responsibilities, the office and archive are severely understaffed. Medical data are collected on a monthly basis and send to the District Health office. Two systems are used: the national health information system "MTUHA" and some data are still collected in the old recording system. Each patient gets his or her personal file and identification number. The files are stored in an archive behind the reception room.

8.3.4.2 Technical Department and Transport

The administrator supervises the TD. It is responsible for general maintenance of the hospital buildings, staff houses and equipment as well as the hospital vehicles. The level of staff remained the same compared to previous years. The senior and experienced Technician Mr. Constantino Salun who had suffered severe burns of his right arm in 2008 has sufficiently recovered to start his normal duties again. Extensive hospital treatment and plastic surgery had been needed to reduce the damage.

The installation of "**the SOLAR"** that had started in February 2007 under the supervision of Rev. Fr. Alain Bedel and his assitant Josaphat has been functioning well continuously during the year. A considerable reduction in the consumption of diesel has been achieved. The most effective and efficient use of the system requires a very disciplined use of the sterilizers, boilers and distillation equipment in Theatre and IV-fluids department. It is still necessary to learn how to take full advantage of the power provided by the sun! During the dry season and other days with plenty of sunshine the staff houses get electricity outside the three evening hours to prevent overcharging the batteries. They regularly receive 3 hours (17.00 – 22.00) per day from the small generator at the entrance of the hospital.

The hospital owns three vehicles, two Landcruisers with a hard top and one Landrover pick-up, the latter mostly used for local transports of goods. Of the two Landcruisers, the engine of the old one has been overhauled and will need to be replaced in the near future. All vehicles are mostly used for transport of goods, supplies and staff. Occasionally a car is used for the referral of patients, although since referral hospitals are far a way, patients can usually not afford to hire the car. The hospital has also started offering the Landrover to relatives for the transport of deceased patients.
The hospital employs two drivers who are also working in the Technical Department.

8.3.4.3 Domestic Department

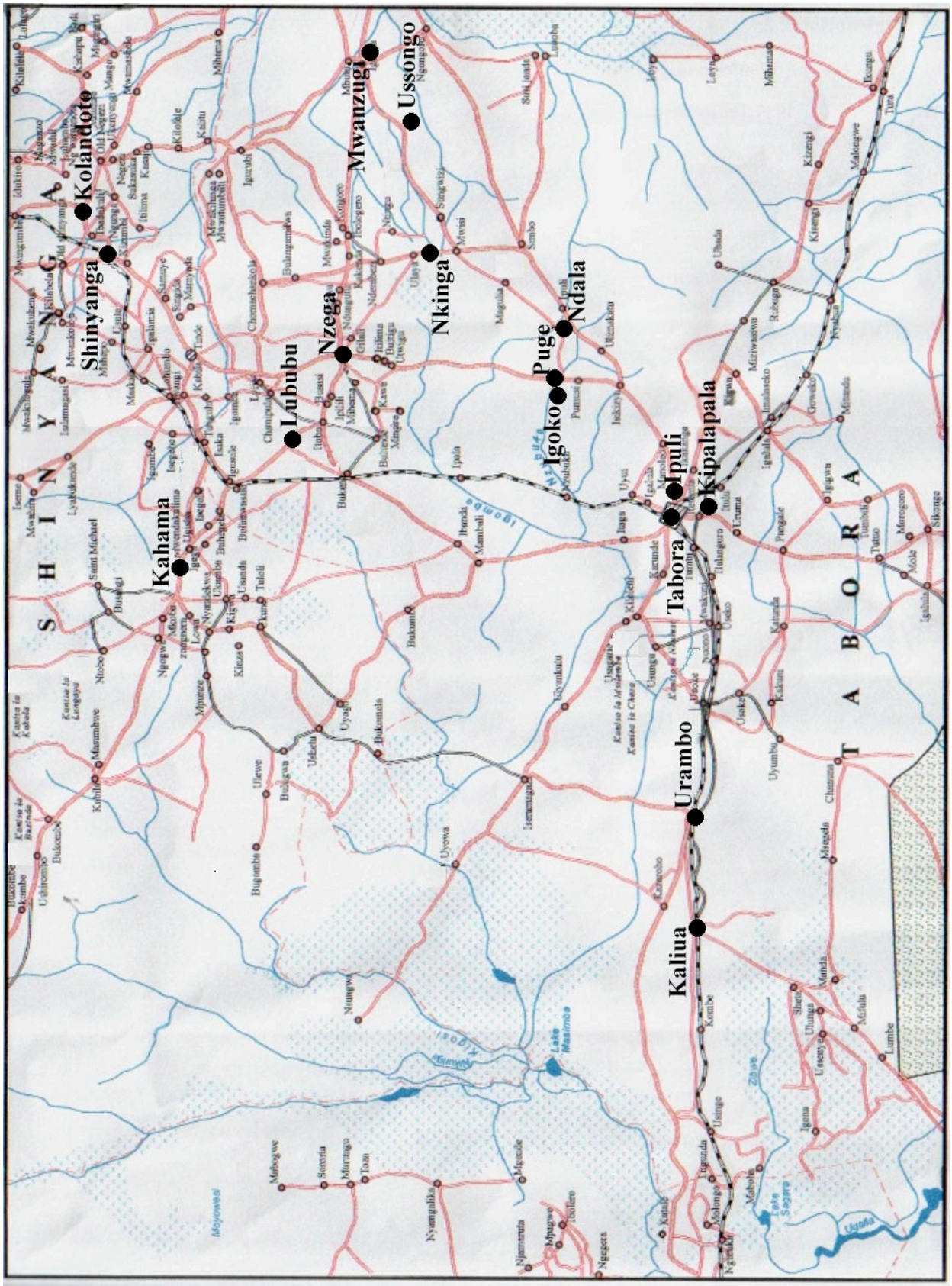
This department is responsible for the storage of all non-pharmaceutical goods, laundry, day labourers, the bicycle shed and the guesthouses. These guesthouses are frequently used to accommodate visitors like medical specialists, consultants, donors and friends of the hospital. A continuous group of day labourers takes care of the compound, giving the hospital its pleasant and green appearance.

9. Planning for the future.

- To improve the secondary working conditions of the workers in order to retain good workers. CONT.
- To increase loan facilities for workers. CONT.
- To rehabilitate staff houses. CONT.
- To further strengthen the financial administration and management. CONT.
- To recruit more qualified staff. CONT.
- To recruit at least one Tanzanian Medical Officer. CONT.
- To make optimal use of the solar system. (by introducing more power saving routines) CONT.
- To increase the supply of electricity to staff houses. (Connection to the National Grid of TANESCO will be the final answer.)
- To support secondary education of children of staff. STARTED in 2009
- To open the TB Ward and complete the fencing.
- To relocate the Incinerator to a less dangerous site and reorganizing the disposal of HOSPITAL WASTE containing PVC.
- To complete the construction of a new Theatre Complex and Mortuary (by CSSC). STARTED in 2009
- To DRAFT A MASTER PLAN of the whole hospital as preparation in view of future extensions and a comprehensive hospital waste disposal system.
- To construct a CTC Clinic complex (by EGPAF)
- To implement the Organogram. -

10. Appendix.

10.1 Appendix 1 Map.



10.2 Appendix 2 Management.

10.2.1 Members of the Board of Governors in December 2009

His Grace Paulo Ruzoka	Chairman	Archbishop Tabora Archdiocese
Rev. Sr. Regina Sumiyatni CB	Member	Regional Superior Sisters of CB
Rev. Sister Eustella Josaphat	Member	General Superior Mabinti wa Maria
Rev. Fr. Daniel Malingumu	Vice Chairman	Parish Priest Ndala / Vicar General
Rev. Fr. Cleophas Mabula	Member	Treasurer Archdiocese Tabora
Regional Medical Officer	Member	Tabora Region RMO
District Medical Officer	Member	Nzega District DMO
Mr. Festo Ndonde	Member	Caritas Tabora
Sr. Dr. Marie José Voeten CB	Member	Acting MOiC Sengerema Hospital
Dr Reuben Nyaruga AMOic	Secretary (no member)	Medical Officer in Charge Ndala

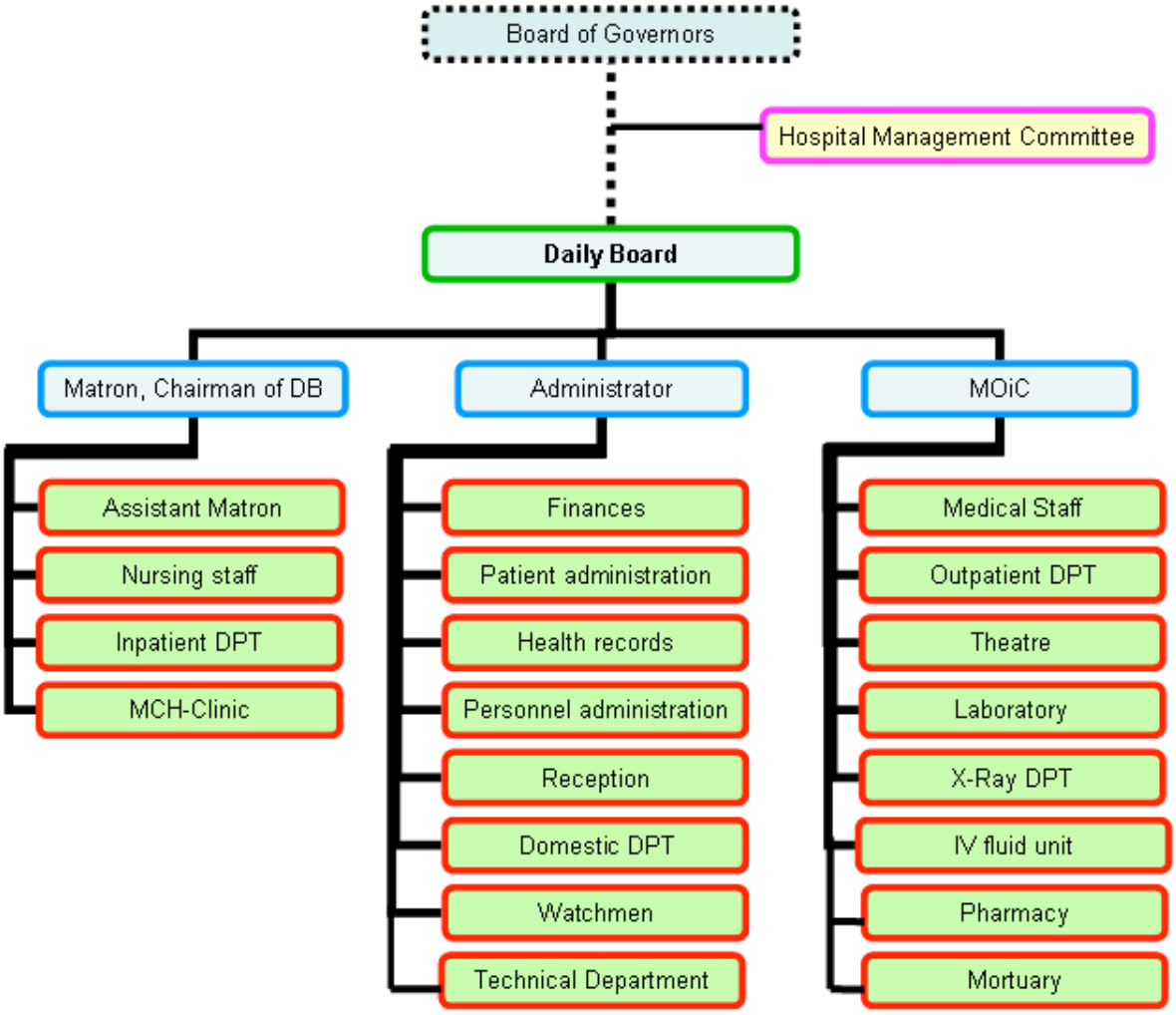
10.2.1 Members of the Hospital Management Team.

Sr. Reni, Ngadi CB	Administrator Chairperson
Dr. Rueben Nyaruga AMO	Assistant Medical Officer in Charge
Mr. Thomas Mtilimbanya NO	Patron

10.2.2 In Charge Positions.

Medical Officer i/c	Dr. Rueben Nyaruga, A.M.O.
Patron	Mr. Thomas Mtilimbanya, R.N.
Administrator	Rev. Sr. Reni Ngadi CB
In Charge domestic dpt.	Mrs. Mary Aloyce (acting)
In Charge compound/technical dpt.	Rev. Sr. Reni Ngadi / Mr. Salun Constantino
In Charge Male Ward	Mr. Thomas Mtilimbanja R.N.
In Charge Female Ward	Rev. Sr. Florida
In Charge Maternity/Labour Ward	Mrs. Neema Malembeke E.N (acting)
In Charge Children Ward	Mr. Obed Edward E.N.
In Charge Laboratory	Mr. Elisha Maige , Laboratory Technician
In Charge OPD	Mrs. Dorothy Massy, R.N.
In Charge Pharmacy	Mr. Solomon Kitundu, Pharmacy Technician
In Charge Theatre	Mrs. Grace Mlay, R.N.
In Charge Radiology	(Peter Katinda in training))
In Charge Clinical Officers	Mr. Patrick Chubwa, C.O.
In Charge CTC	Dr. Joseph Lugumila, A.M.O.
In Charge VCT	Mrs. Symphorose Crispin R.N.
In Charge PMTCT	Mr. Thomas Mtilibanya . R.N.
In Charge Health Records Dept.	Mr. Godfrey Silas (acting)
In Charge Walinzi /Security	Mr. Adriano Daudi
In Charge Laundry	Mr. Ernesto Daudi
In Charge MCH Clinic	Mrs. Agnes James Erikana R.N.
Chairman Tughe	Mr. Matthew Ndungulu.

10.3 Appendix 3 Organogram.



10.4 Appendix 4 Staff Mutations 2009

10.4.1 Staff that joined in 2009:

Name	Designation	Department
1. Abdallah Ramadhani	Clinical Officer	Medical
2. Isaya Mwita	Clinical Officer	Medical
3. Joyce Shitindi	Registered Nurse	Ward
4. Asumpta Kisusi	Enrolled Nurse	Ward
5. Deogratias Kagindu	Enrolled Nurse	Ward
6. Paulo XXXX	Mlinzi	Security
7. Oliva Metusela	Nurse attendant	Ward
8. Evetha Shayo	Nurse attendant	Ward
9. Laurentia Alex	nurse attendant	Ward

10.4.2 Staff that left in 2009:

Name	Designation	Department
1. Rashid Abdallah	Enrolled Nurse	Ward
2. Tobias Boras	Clinical Officer	Medical
3. Daniel Luhemeja	Clinical Officer	Medical
4. Maria Mkankule	Nursing officer	Ward
5. Aloyce Masanja	Attendant	Laundry
6. Suzanne Mtirio	Attendant	
7. Egid Sinziwe	Attendant	
8. Grace Oskar	Attendant	

10.4.3 Staff on training / upgrading 2009:

Name	Qualification	Traning Institute	Sponsor	available
1. George Mgalega	Medical Officer	Kariuki College DSM	Nolet Foundation	2012
2. Sr. Christina CB	Medical Officer	Kariuki College DSM	JOCS	2013
3. Sr. Peter Katinda	Radiographer	Muhimbili Univ. DSM	JOCS	2010
4. Thomas Madimilo	Mzumbe Un. Morog.	Postgr. Hosp. Adm.	GEON > St. Tabora	2010
5. Sharifa Shabani	Medical Officer	Bugando Univ. Mwanza	CORDAID	2013
6. Mary Mgalega	Ass. Medical Off.	Ifakara med. School		2011
7. Samwel Nkilijiwa	Nursing Officer	St. Gaspari		2011
8. Merius Ordas	Ass. Medical Off.	Ifakara Med. School.	Tabora Foundation	2010
9. Monica Andrea	Nursing Officer	Kolandoto Dipl. Nursing	CSSC + Nolet F.	2011

10. Teddy Calpophore	Nursing Officer	Tanga Sch. Dipl. Nursing	CSSC + Nolet F.	2010

10.5 Appendix 5. Staff Establishment.

	2009			2008	2007	2006
	Pres.	**Req.**	**Def.**			
Medical Officer	**2 (expat)**	2	0	**2 (expat)**	-	2 (expat)
Assistant Medical Officer	**4**	3	0	**3**	2	3 (2 sec.)
Clinical Officer	**3+(1)**	7	2	**5**	6	7
Registered Nurse	**10**	14	2	**12**	12	19
Nurse/Midwife/Enrolled N.	**11**	15	2	**13**	8	8
(Trained Nurse)		-	-	**-**	3	3
Nurse Assistant (1yr course)	**46**	46	46	**23**	22	19
Nursing Attendant				**21**	22	19
MCH-Aid	**-**	-	-	**-**	1	1
Laboratory Technician	**1**	2	1	**1**		
Lab-assistant (2 yr course)	**5**	3	- 2	**2**	2	5
Lab-attendant (1 yr course)	**2**	4	2	**3**	4	3
Pharmaceutical Technician	**1**	1	0	**1**	-	1
Pharmaceutical Assistant	**-**	1	1	**0**		
Radiographer	**-**	1	1	**0**		
Radiographic assistant	**-**	1	1	**0**	1	1
Administrator	**1 (expat)**	1	0	**1 (expat)**	1 (expat)	1 (expat)
Ass. Administrator	**-**	1	1	**0**	-	1
Hospital Secretary	**-**	1	1	**0**		
Health Recorder	**-**	1	1	**0**	1	1
Office attendant	**4**	4	0	**4**	3	3
Receptionist		-	-	**-**	3	3
Domestic dpt.	**13**	13	0	**10**	11(1expat)	11(1 expat)
Driver/Technician	**4**	4	0	**4**	4	3
Security Guards	**8**	11	3	**11**	11	11
TOTAL	**116**	136	20	**116**	**117**	**125**
in training/upgrading	**10**			10	9	6

10.6 Appendix 6. Income and Expenditure.

10.6.1 Income

INCOME in Tanzanian Shilling		
2008		**2009**
1.	**Income from Patients**	
214.322.235	Payments from In-Patients	242.501.750
71.683.750	Payment from Out-Patients	95.810.800
21.258.800	Payments at the reception	23.924.600
307.264.785	**Subtotal:**	**362.237.150**
2.	**Contributions from Government**	
79.000.000	Government	67.979.150
79.000.000	**Subtotal:**	**67.979.150**
3.	**Donations**	
19.116.294	For Study/Training	-
41.201.009	For Special Groups of Patients	17.436.000
-	Institution	62.280.000
17.280.744	Fund for non-paying patients	1.449.000
77.598.047	**Subtotal:**	**81.165.000**
4.	**Income Generating Projects**	
4.758.500	Renting out Car	6.733.615
1.990.825	Renting out Hall	928.000
414.000	Canteen/Guesthouse	2.154.700
7.163.325	**Subtotal:**	**9.816.315**
5.	**Other Income**	
4.964.628	'other sources': house rent etc.	9.806.500
2.736.400	Refunds /Loan Interest	1.085.625
393.200	Mobile clinics	703.900
606,820	miscellaneous	2.482.500
11.895.627	From Bankaccount etc	3.462.500
20.596.675	**Subtotal:**	**17.541.025**
491.622.832	**TOTAL INCOME**	**538.738.640**

10.6.2 Expenditure.

EXPENDITURE		
2008		**2009**
1.	**Salary and Adjacent Costs**	
203.570.842	Salary, allowances	233.073.993
617.630	NSSF Contribution	12.493.773
3.213.483	Medical Treatment (staff)	3.307.650
	Terminal benefits!!!!!	
207.401.955	**Subtotal:**	**248.875.416**
2.	**Medical Supplies**	
86.920.600	Medicines	62.678.945
11,281,650	Medical Supplies	6.456.375
98.202.250	**Subtotal:**	**69.135.320**
3.	**Other Materials**	
35.552.350	Non-Pharmaceutical Medical materials (Basket Fund)	76.537.546
5.296.900	Technical Department	3.122.500
5.585.550	Domestic Department (Food, Textiles)	5.834.700
7.122.300	Office supplies/stationary/Administration	17.367.415
159.500	Refund	423.600
53.716.600	**Subtotal**	**103.285.761**
4.	**Transport**	
2.511.000	Transport	4.496.550
1.053.900	Accommodation	1.395.700
3.564.900	**Subtotal:**	**5.892.250**
5.	**Water/Power/Light/Commun.**	
-	Water Supply	-
2.669.618	Communication	3.467.621
12.067.000	Costs Solar /Gener. System	12.145.000
12.896.900	Diesel for Generator/Car	1.305.250
1.161.150	Kerosene	190.000
28.794.668	**Subtotal**	**17.107.871**

6.	**Maintenance**	
261.000	Airstrip	-

4.934.065	Hospital Car	4.195.100
3.689.450	Buildings / Equipment	20.036.500
2.581.950	IGP (cost)	3.063.740
11.466.465	**Subtotal:**	**27.295.340**
7.	**Upgrading Infrastructure and Equipment**	
9.291.300	Office Block (PIUS XII)	32.898.950
5.055.600	New buildings (TB ward)	10.576.000
1.910.900	Equipment (Pump)	4.407.700
16.257.800	**Subtotal:**	**47.882.650**
8.	**Training and Upgrading of Staff**	
21,583,103	Training and Education/Study	28.544.059
21.583.103	**Subtotal:**	**28.544.059**
9.	**Contributions and Charity**	
122.000	CSSC/TEC	102.000
876.400	X-mass presents	1.740.850
2.674.770	Gifts	8.665.000
6.232.730	misc. Worker Day etc.	2.491.393
695.150	Debts of patients	440.600
2.638.850	EGPAF	-
13.239.900	**Subtotal:**	**13.439.843**
10.	**Miscellaneous**	
-	Biopsy	1.007.000
-	Credit	700.000
-	Inventory	6.706.860
-	Investments	3.615.000
2.312.615	Petty cash	3.892.800
2.312.615	**Subtotal:**	**15.921.660**
456.540.256		**577.380.170**
456.540.256	**TOTAL EXPENDITURE**	**577.380.170**
2008		**2009**
491.622.832	Income	**538.738.640**

+ 35.082.576	**BALANCE (INCOME minus EXP.)**	**- 38.641.530**
11.	**Depreciations***	
161.800.000	Buildings	161.800.000
27.390.000	Installations	27.390.000
3.800.000	Means of Transport	3.800.000
4.000.000	Generator	4.000.000
196.990.000	**Subtotal:**	**196.990.000**

*The depreciations are not included in these balance sheets. There has been no new assessment in 2009. These figures are just for orientation purposes.

10.6.3 Receipts & payments at the hospital.

Receipts (in Tanzanian shs)	**2009**	2008
Balance B/F	**60.082.967**	18.452.908
In-patients	**362.237.150**	214.322.235
Out-Patients		71.683.750
Reception	**-**	21.258.800
Other Receipt	**12.078.525**	6.015.648
Income Generating Projects	**9.816.315**	7.112.325
Cash drawings	**-**	20.146.628
Donation / Loan	**81.165.000**	59.403.664
Refund / Study	**-**	12.679.784
Basket Fund	**73.441.650**	79.000.000
TOTAL in	**598.821.607**	510.075.741
Payments	**2009**	2008
Staff cost	**233.073.995**	203.159.992
Medicines	**69.135.320**	98.202.250
Administration Cost	**145.422.228**	90.466.598
Study	**28.844.059**	21.583.103
Terminal Benefits	**12.493.773**	1.028.480
B/F	**76.527.546**	35.552.350
Miscellaneous/Contributions	**8.425.000**	
TOTAL out	**573.631.921**	449.992.773
Balance:	**25.189.686**	60.082.986

10.6.4 Bank Deposits and Payments 2009:

DEPOSITS	2009	2008
Balance B/F	**110.434.153**	61.282.846
NHIF (Nat. Insur. Fund)	**16.562.550**	16.524.063
MOH Salaries	**186.203.200**	185.560.826
MOH Bedgrant	**4.432.025**	3.547.868
NSSF (Nat. Pension Fund)	**3.117.870**	588.672
Inc. Gen. Projects	**9.816.315**	-
Donation Fr. F. Nolan	**600.000**	-
Sale generator	**4.000.000**	-
other resources	**12.078.525**	-
TMP/St.Sonnevanck./Dep.Temp.	**-**	94.124.602
Refund	**9.867.710**	93.018
TOTAL DEPOSITS	**340.709.168**	361.721.895
PAYMENTS	**2009**	2008
Staff salary*	**113.237.076**	83.949.509
NSSF*	**60.864.989**	44.204.568
TRA*	**9.226.475**	16.261.838
Draw from Bank*	**26.475.000**	811.700
Bank charges	**409.875**	691.059
TMP	**560.000**	7.570.000
Staff Loans	**15.451.799**	10.981.604
L. Print / B.statements/ Dep. Temp.	**-**	76.219.902
Kayonza /J & K Medicks/ Dosaji	**-**	8.246.250
NHIF	**2.835.789**	659.112
Ngacha / Fortes Garage	**3.462.500**	1.710.000
Caritas Tabora	**8.000.000**	-
Arrears	**23.663.178**	-
Processing Salary	**231.000**	-
CHF	**66.175.996**	-
Funds	**3.000.000**	-
TUGHE (Lab. Union) arrears	**1.665.490**	-
Bajaj (3-wheeled taxicab) x2	**8.450.000**	
TOTAL PAYMENTS	**343.709.167**	251.287.742
Balance:	**- 2.999.998**	110.434.153

10.7 Appendix 7. Donations 2009

NO	
1	**Stichting PIUS XII (Construction New Office Block + Medicines)**
2	**Congregation of St.Charles Borromeo Sisters General Board Maastricht**
3	**The Sonnevanck Foundation (facilitating treatment of TB patients)**
4	**Stichting Nolet, Schiedam (expatriate doctors & sponsoring upgrading qualified staff)**
5	**JOCS Japan (Japan Overseas Christian Services) (sponsoring upgrading and training qualified staf)**
5	**Arnhemse Stichting Bijzondere Noden (via Dr. Gerard Haverkamp)**
6	**Rentebestemming Zr. Guido Kooter CB**
7	**G.J Knijn, Kadijk 2, 1602BZ Venhuizen**
8	**Mrs. G.A.W. Berndt, Haren**
9	**Mrs L.C. Ruk and** Mr J. van der XXXXX
10	**Stichting Rentebestemming (Sr. Jeane d'Arc)**
11	**Stichting Missie-Zending.**
12	**Prof Dr. J.A. Oosterhuis, Naarden**
13	**Christian Social Services Commission (CSSC) Dar es Salaam (construction New Theatre Block)**
14	**Stichting JFT**
15	**Parochie Kaatsheuvel**
16	**Dr. G. van der Ley, Schiedam**
17	**Stichting GEON (via Dr. Laurens van Boven)**
18	**Dr. Gerard van der Leij, Schiedam**
19	**Evangelical Church Koekange, the Netherlands**
20	**Family Dr. Paulus Lips**
21	**Stichting Tabora**
22	**Stichting Franje via Stichting Tabora: (e.g. construction rainwater harvesting cistern & incinerator)**
23	**"Dokters zonder vacantie", Antwerp, Belgium (visiting medical specialists)**
24	**Dr. Herman Drewes, Elegastgaarde 22, 7329AH Apeldoorn**
25	**Family Dr. Max Slenter**
26	**Deurman Stichting (via Mrs. Haverkamp): cutains, bedsheets, pillows etc)**
27	**Caritas Parochie Ommen, Haven Oost 4, 7731GT Ommen**
28	**Liliane Fonds for handicapped youths.**
29	**Cordaid / MEMISA (sponsoring training/upgrading medical staf)**
29	**Stichting SINTAN (facilitate student doctors program of Groningen University)**
30	**Rev. Fr. Frank Nolan**
31	

10.8 Appendix 8. Abbreviations:

AD	Archdiocese	MEMS	Mission for Essential Med. Supplies
ADHB	Archdiocesan Health Board	MOH	Ministry Of Health
AFB	Acid Fast Bacilli	MOiC	Medical Officer in Charge
AIDS	Acq. Immuno-Deficiency Syndrome	MO	Medical Officer
ALS	Average Length of Stay	MSD	Medical Stores Department
APH	Ante-Partum Haemorrhage	MTUHA	National Hospital Information System
AMO	Assistant Medical Officer	MW	Male Ward
ARV	Anti-RetroViral	NHIF	National Health Insurance Fund
ART	Anti-Retroviral Therapy/Treatment	NMW	Nurse Midwife
BCG	Bacille Calmette-Guérin	NO	Nursing Officer
BoG	Board of Governors	NSSF	National Social Security Fund
BOR	Bed Occupancy Rate	OPD	Out Patients Department
BTL	Bilateral Tuba Ligation	PHC	Primary Health Care
BWT	Bodyweight	PLHA	?
CB	Charles Borromeo	PMTCT	Prev. Mother To Child Transmission
CHF	Community Health Fund	POP	Plaster of Paris
CCHP	Comprehensive Council Health Plan	PPH	Post-Partum Haemorrhage
CO	Clinical Officer	RCH	Reproductive & Child Health
CS	Caesarean Section	RMO	Regional Medical Officer
CSSC	Christ. Soc. Services Commission	STD	Sexually Transmitted Disease
CW	Children's Ward	STI	Sexually Transmitted Infections
D&C	Dilatation and Curettage	TB	Tuberculosis
DB	Daily Board	TBA	Traditional birth Attendant
DHS	Tanz. Demogr. & Health Survey 2005	TCMA	Tanz. Christian Medical Association
DTP	Diphtheria, Tetanus, Pertussis	Tsh	Tanzanian Shilling
ENT	Ear-Nose-Throat	TT	Tetanus Toxoïd
Expat.	Expatriate	TTC	Teachers Training College
FW	Female Ward	UvA	University of Amsterdam
Hb	Haemoglobin	VAH	Voluntary Agency Hospital
I&D	Incision and Drainage	VCT	Voluntary Counseling and Testing
IV	Intravenous	VHW	Village Health Worker
JOCS	Japan Overseas Christian Services.	VVF	Vesico-Vaginal Fistula
MCH	Mother and Child Health	WHO	World Health Organisation