Annual Report 2010
Ndala Hospital

Archdiocese of Tabora
Tanzania (EA)

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Introduction

The annual report of 2010 will be 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 available. However, correct data collection on the performance of the various functions of the 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. This report is not identical to the data that are provided three monthly to be included into the National Health Information System (MTUHA).

Dr. Joseph Lugumila AMO
Medical Officer in Charge

March 2011

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1. General review of the year 2010.

Staff.

- 2010 has been an important year. Dr Reuben Nyaruga (AMO), who has been serving the hospital diligently for over 20 years, stepped down as MOiC because of reaching retirement age. Fortunately he will not terminate his work as a surgeon for special operations and be available for advice. Dr. Joseph Lugumila (AMO) with a long history of dedicated service in the Diocesan Health Services has taken over from him.
- Several workers took up new responsibilities after qualifying. Mr. Thomas Madimilo will take the post of Hospital Secretary and be Assistant Administrator. Mr. Peter Katinda will be in charge of the X-ray department after qualifying as Radiology Technologist; herewith the ban on operating the department has been lifted.

Merius Ordass reported back on duty but now as AMO. Mrs Agnes Elikana as Assistant Nursing Officer will take the post of Assistant 'Matron'/ Assistant Chief Nursing Officer. More qualified nursing staf were employed. It is worth mentioning that presently 38 qualified staff receive their salaries directly from the Government.

- The expatriate doctors, Mr. and Mrs. Wander & Erica Kars-Koopman ended there 2-year contract and left in June with their three small children. Dr. Rob Mooij and his partner Mrs Danielle van den Hamer (NO) took over in September.
- The Board of Governors met twice during the year and the hospital was represented in the Annual Meeting of the TEC and TCMA in Dar es Salaam.
- 11 "Student Doctors" from Groningen University in the Netherlands fulfilled a stage period in the hospital. Because of their much shorter stay (in the past student-doctors from Amsterdam University stayed 4 months!) they didn't rotate in the different departments, but had to express their preference.

Patients

- In general the number of admissions and attendances in the different sectors of the hospital was as high as in 2009 or even a bit higher (in MCH and AN Clinic). However the vaccination coverage in the area that is allocated to these Clinics did not increase and remains - assuming our data being reliable – just below 70%. Fortunately only two sporadic cases of Measles were reported and no other epidemics occurred.

An exception has been the reduction in the number of hospital deaths with more than 146 cases (from 443 to 297 = 33%). This needed some further explanation. It appears that **the number of admissions in de Children Ward has decreased dramatically in 2010** (from 3855 to 2241). The death-rate however did not change!! The explanation for this decrease is not immediately clear and will need some further study!

The reported increase in 'Maternal Death' has been caused by using a wider definition that includes all death during pregnancy, thus also the bad effects of 'criminal' abortions in early pregnancy. The percentage of Caesarian sections is relatively low (±11,5%); the percentage of 'fresh stillbirth) has gone down slightly but still too high to be acceptable.

The attendance in all the services for detecting, counseling and treating patients infected by Hiv/Aids has risen. From all the tests done (6491) 10% appeared positive. The percentage within the group of pregnant women that consented in being tested was 3,63%.

The theatre has again been very busy with some more major operations than 2009, of which ± 40% could be called 'emergencies'.

Top Ten Diseases diagnosed at the OPD (adults) in the National Health Recording System (MTUHA):

1. Malaria
2. Anaemia
3. Pneumonia
4. (Minor) complications of pregnancy. (e.g. abortion).
5. Acute Respiratory Infection (ARI)
6. Urinary track infection (UTI)
7. Asthma
8. Peptic Ulcer
9. Hypertension
10. Intestinal worms.

Installations/buildings

- The construction of a new Theatre building from funds from CSSC that started in 2009 by a contractor from Dar es Salaam has not been making much progress. A large part of a new fence around the hospital has been completed. The work stagnated regularly for unknown reasons. Much more progress has been made with the construction on the “Aids Clinic” with money from EGPAF.
- The TB Ward has long been completed and furnished but no patients have still been admitted because of the existing shortage of trained staff.
- The new large half underground rainwater-harvesting cistern has started to fill up and provided water at the end of the dry season, but it doesn't get all the rainwater it possibly could. Revision of collecting gutters and water-pipes has to be undertaken to take full advantage of its large capacity (± 450.000 liters).
- The construction of a new Incinerator on a safer location has been completed. Proper and effective procedures to handle (contaminated) hospital waste and plastic disposables (some of PVC!) has still to be done.
- 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 damaged panels have still to be replaced.

Finances

- By carefull but strict austerity the financial situation has stabilized. A regular supply of essential medicines and disposable items could not always be guaranteed. An important improvement in recent years has been the payment by the Government of 38 qualified staff! This arrangement is the result of many years of negotiations between the Ministry of Health and representatives of church hospitals (CSSC). The number of staff that is included is calculated on basis of the size of the hospital. They receive their salary on their bank accounts. It includes all pension rights and increments. The qualified workers remain employed by the hospital and can be dismissed.

Thanks to all!

- Many official visitors entered their names in the Visitors Book, among them the District Commissioner of Nzega. The Board of Governors met twice during the year.
- Our sincere gratitude goes to the many friends, benefactors, donor organizations 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,

Joseph Lugumila AMO
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 major supplies. Both towns are only reachable via unpaved 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 rains are few during, water remains a major 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! – 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.

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. Agriculture is responsible for almost half of the GDP. Agricultural products are 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 neighboring 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 infant mortality rate is 96 per 1000 (CIA World Fact book, 2006), largely attributed to the HIV/AIDS pandemic. Under-five mortality has improved 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 Africa. Nutritional status of the population is average, with 3% receiving one meal per 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. Two cases of measles were admitted in Ndala the first months of the year and reported to the DIstrict Health Authorities. 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 18750 people in 2010, of which 900 children under 1 year, 3817 below 5 year and 33 women between 15 and 49 with 900 being pregnant.

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 3,6% (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 ± 18.750 people in these villages are directly catered by Ndala Hospital, but its catchment area for more serious cases is much bigger, extending up to 7500 square kilometers, inhabited by 300.000 people. The majority belongs 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 €450 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 2010 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.

4.2 External Relations

4.2.1 The Archdiocese of Tabora.

The Archdiocese of Tabora is the owner of Ndala Hospital, thus 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 three health centres (Ussongo,Ipuli and Kaliua) and five dispensaries (Kipalapala,, Igoko, Lububu, Mwanzugi and a new one at Sikonge and Bukene). The ADHB convened 4 times in 2010. 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 organization JOCS (Japanese Overseas Christian (Medical) Cooperative Service). The very active Public Health nurse Naoko Shimizu ended her contract in Tabora and a Surgeon, dr. Mioya Yoichi has been operating in Ndala hospital for quite some weeks. The Archdiocesan Health Board has a new secretary, Fr. Paul Chobo who is very active indeed. It should be understood that the above mentioned smaller health facilities are not ‘outstations’ of Ndala Hospital.

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 visits regularly for supervision. The district supplies Ndala hospital with vaccines. Ndala is regularly invited to participate in meetings and seminars organized on district level.As a Voluntary Agency Hospital (VAH), Ndala hospital is entitled to receive 10-15% of the so-called 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, g, 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, 6 visits were made by the following specialists: Urologist 3x, ENT Surgeon 1x, Reconstructive Surgeon 1x and a Physician1x, 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 Holiday (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 2010.

4.2.5 Donors

As in previous years, Ndala Hospital has only been 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 receive an annual report and individual communication via email and telephone. Donations are transferred 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 many years 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 fund has 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. This foundation paid also for the construction of a very large underground "rainwater harvesting cistern" with a capacity of nearly half a million liters. Because it was not possible to get the dome-shaped cistern completely underground it has been nicknamed by the staf "The UFO" (Unidentified Foreign Object).

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.

The secretariat of the TEC (Tanzanian Epsicopal Conference) is responsible for the duty free clearing of imported goods and donations from abroad. Communication with TEC's secrtariat 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. This situation in accordance with the Organogram had not been functioning immediately but with the arrival of new staff in 2010 it has.

The Board of Governors (BoG) met twice in 2010. 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. See Appendix 10.2. 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 Chief Nursing Office (formerly called "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 and benefits to which the staffs are entitled have to be paid out at the end of the contract and this can't accumulate to amounts that are impossible to be payed by small stations after many years of service or at retirement. 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 fully reached (See Appendix 5)

Staffing levels have improved to some extend. Turnover of staff in these departments has been high, as especially qualified nurses and midwives leave after a short period looking for greener pastures. 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. The newly arrived Hospital Secretary will get in important role in Human Resource Management.

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 training is found through donors. 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. However changes for upgrading and new skills are preferably given to staff that has already shown their dedication and capabilities.

Appendix 4. Shows the number of staff in training in 2010.

In daily morning meetings the experiences of the staff 'on call' is communicated to all medical staff. On Fridays a 'mortality meeting' is held to evaluate the treatment of patients that died. A special meeting has been introduced to discuss all maternal deaths. In this meeting the midwives are invited as well.

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. In 2010 11 "student-doctors" from the University of Groningen in the Netherlands have arrived. The results of the research students in 2009 have still to be communicated to us.

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. The administrator continues modernizing the accounting and financial control systems,. 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.

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.

The following overview of the income and expenditure, comparing 2009 and 2010 - together with the specifications in the Appendix 6 gives further insight in the situation. The income from patient fees has decreased with more than 40 million shillings, while the contribution from the government increased with 20 million shillings. The total expenses on salaries has remained the same. Austerity in all other expenses, excluding medicines and medical supplies, has kept the balance in equilibrium.

Income/Expenditure Overview (Tanz. shilling)		2007	2008	2009	**2010**
INCOME	Hospital	214,207,645	323,069,159	386.131.990	**354.300.760**
	Government	11,767,000	79,000,000	67.979.150	**90.581.261**
	Donations	113,112,762	58,481,753	60.365.000	**68.008.300**
	Study Sponsors	15,966,750	19,176,294	24.262.500	**35.980.044**
	Total	355,054,157	479,727,206	538.738.640	**548.870.365**
	+ BANK	34,720,159	11,895,627	3.462.500	**28.189.686**
TOTAL INCOME		**355,054,157**	**491,622,833**	542.201.140	**577.060.051**
EXPENDITURE	Medicines/New Office Block (St. PIUS XII)	56,681,050	9,291,300	32.898.950	**76.779.840**
	TB ward etc. (Stichting Sonnevanck)	17,964060	5,055,600	10.576.000	**11.890.755**
	Study / Training / Upgrading	12,993,880	21,585,103	28.544.059	**47.118.344**
	Basket Fund / MMAM	21,712,461	35,552,350	76.537.546	**42.207.234**
	Total	109,351,451	71,484,353	148.556.555	**177.996.173**
	RUNNING Cost (administrative)	267,400,303	378,508,420	421.460.364	**387.707.337**
TOTAL EXPENDITURE		376,751,754	449,992,773	570.016.919	**565.703.510**
Balance	INCOME Hospital	214,207,645	323,069,159	386.131.990	**354.300.760**
(versus running cost)	- Running Cost	267,400,303	378,508,420	421.460.364	**387.707.173**
	DEFICIT	53,192,658	55,439,261	35.328.374	**33.406.413**
Balance	INCOME Hospital	214,207,645	323,069,159	386.131.990	**354.300.760**
(versus total exp.)	- Total Expenditure	376,751,754	449,992,773	570.016.919	**565.703.510**
	DEFICIT	162,544,109	126,923,614	183.884.929	**211.402.450**
Treatment Employees		4,659,720	4,992,155	3.307.650	**40.000**
Cost sharing	minus	500,000	1,190,000	1.160.000	**-**
NSSF sharing	minus	1,166,592	588,672	3.117.870	**2.652.000**
Hospital sharing		2,993,128	3,213,483	- 970.220	**------**
Unpaid patient fees	minus	835,950	695,150	440.600	**251.400**
	Total	3,829,078	3,908,633	- 529.620	**2.943.400**
EGPAF			2,638,850	-	**3.567.830**
		-3,829,078	-6,547,483	-529.620	**634.430**

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 had become ever more difficult and solutions need to be sought in closer partnership with government. An important proposal of the Government had been put forward in 2008 and has been studied by the voluntary organizations involved in health care (CSSC) in 2008. Major decisions about this major issue have been taken in 2009 and were effected in 2010: A certain number of qualified staff now receives a salary directly from the government.
The main idea that the Government 'buys' (pays for all the cost) of 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)

OPD	2010	2009	2008*	2007*	2006*	2005*	2004
Total new cases OPD*	**9.633**	10.721	7.475	6.155	9.560	11.928	13.776 (11.716)
Re-attendances	**17.036**	11.961	10.342	10.782	10.258	13.423	10.775
Re-attendances for dressing	**4.557**	2.927	3.935	5.668	5.717	6.633	6.634
Referrals to other health facilities	**?**	?	?	-			81
Total OPD patients*	**31.226**	25.609	21.751	22.613	25.535	31.984	31.266 (29.206)
Special Clinics							
Registered TB/leprosy clinic	**156**	148	165	231	270	252	209
Registered Epilepsy/Mental Clinic	**274**	954	937	953	881	843	554
Attendance Eye-Clinic	**391**	287	333	281	203	274	390
Attendance Dental Clinic	**126**	144	125	109	96	114	94
(Total)		(1533)	(1560)	(1574)			

8.1.1.1 TB and Leprosy Clinic.

The cure rate in 2010 (42 of 79 sputum+ patients) is much below 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	**2010**	2009	2008	2007	2006	2005
Patients on treatment per 01-01-	**43**	66	36	60	70	52
Newly Registered Patients	**88**	72	111	130	88	130
Re-treatment Cases	**2**	7	5	13	3	4
Patients transferred-in	**3**	3	3	4	6	12
Patients Transferred-out	**0**	0	2	2	26	5
Total Registered	**136**	148	155	209	193	203
Sputum-positive	**79 (58%)**	64 (43%)	69(44,5%)	82(39,2%)	102 (52.8%)	92(45%)
Sputum-negative	**22 (16%)**	40 (27%)	46(29,7%)	30(14,3%)	24 (12.4%)	50(25%)
Extra-pulmonary	**35 (26%)**	44 (30%)	40(25,8%)	97(46.4%)	67 (34.7%)	61(30%)
Tested for HIV (positive)	**127 (43)**	117 (42!)	81 (32)	92(32)	14 (2)	-
Treatment Results						
Completed	**37**	35	67	65	78	
Cured (cure-rate)	**42 (53%)**	48 (75%)	45 (65%)	55(67%)	41(50%)	56 60,8%)
Failed	**0**	0	0	0	3	0
Transferred	**12**	2	2	-	26	5
Died	**3**	1	3	2	11	5
Defaulted	**10**	23	17	7	9	23

Leprosy	**2010**	2009	2008	2007	2006	2005
Patients on treatment per 01-01	**6**	4	6	16	5	16
New Patients	**14**	4	4	2	16	27
Re-treatment Cases	**2**	0	0	4	3	3
Patients transferred-in	**0**	0	0	0	0	2
Patients Transferred-out	**0**	0	0	0	4	1
Total Registered	**20**	**8**	**10**	**22**	**28**	**49**
Pauci-bacillary	**?**	0	0	0	0	5(10%)
Multi-bacillary	**?**	8	10	22	28(100%)	44(90%)
Treatment Results						
Completed	**6**	2	6	4	5	10
Failed	**0**	0	0	0	0	0
Transferred	**0**	0	0	0	4	1
Died	**0**	0	0	0	0	0
Defaulted	**1**	0	0	1	7	2

8.1.1.2 STD Clinic.
The majority of patients with Sexually Transmitted Diseases (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 couseling 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 ordinary 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:

Mental Clinc 2010	**Epilepsy**	**Psychiatry**	**on treatment**
male	113	16	129
female	124	21	145
total	**237**	**37**	**274**

medicines in 2010	**tins**	**tablets/tin**	**price/tin**	**total**
Phenobarbiton à 100mg	28	1000	sh 8.900/-	sh 249.200/-
Phenobarbiton à 30mg	111	1000	sh 3.400/-	sh 377.400/-
Phenytoin à 100mg	4	1000	sh 6.000/-	sh 24.000/-
Carbamazepine à 200mg	5	500	sh 13.000/-	sh 65.000/-
Diazepam à 5mg	126	500	sh 1.300/-	sh 163.800/-
Chlorpromazine à 100mg	12	500	sh 6.000/-	sh 72.000/-
Chlorpromazine à 25mg	7	500	sh 6.600/-	sh 46.200/-
Halloperidol à 1,5 mg	15	100	sh 4.000/-	sh 60.000/-
Amitriptiline à 25mg	7	500	sh 5.600/-	sh 39.200/-
Chlorpromazine amp.	{30}	100mg/amp.	sh 8.900/-	sh 60.000/-
TOTAL				**sh 1.156.800/-**

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 modernization. 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	**2010**	2009	2008	2007	2006
Conjunctivitis	**117**	66	67	67	58
Cataract	**32**	40	65	43	41
Trauma	**42**	40	30	23	14
Cornea ulcers > scars	**9**	16	20	10	7
Cornea scars (trauma)	**7**	5			
Foreign body	**15**	17	24	17	11
Refractive errors	**45**	7	14	10	3
Presbyopia	**28**	12	14	29	16
Glaucoma	**18**	21	18	24	14
Retina diseases	**4**	2	7	7	1
Eye lid / leprosy lesions	**-**	8	7	-	1
Xerophtalmia	**8**	7	5	10	3
Trachoma	**3**	6	2	-	1
Herpes	**2**	0	2		
Uveitis	**9**	6			
Others	**48**	31	32	22	22
No pathology detected	**4**	3	10	8	3
Total	**391**	287	335	281	203

8.1.1.5 Dental Clinic.
Presently only tooth extractions are done. A total of 126 extractions were done (in 2009: 144), comparable to previous years. The Clinic should be renovated and a newly trained person should be attracted.

8.1.2 In-Patients.

The hospital has four wards: a male ward, a female ward, a pediatric 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 2011.

In-Patients	2010	2009	2008	2007	2006	2005	2004	2003
Total beds	**128**	128	128	128	128	128	131	128
Amissions for delivery (+BBA)	**2228**	2218	1891	1914	1758	1727	1635	
General admissions*	**5425**	6959	6434	6663	6570	6283	6403	5860
Total Admissions	**7653**	9177	8325	8577	8328	8010	8038	
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	**297**	443	444	315	398	422	507	432
Death rate (/1000 admissions)	**58**	62	73	47	60,6	67,2	79,2	73,7

* Admissions without deliveries!

** In 2011 an attempt will be made to monthly keep track of the total number of 'admission days' in every ward in order to calculate the ALS and BOR.

Wards 2010	Beds	Admissions 2010	ALS	BOR	Death cases 2010	Death rate /1000	Adm. 2009	Death cases abs.	Death rate /1000 adm
Male Ward	**28**	**1228**			**73**	**59‰**	1108	94	84‰
Female Ward	**28**	**1597**			**67**	**42‰**	1616	76	47‰
Children Ward	**45**	**2241***			**140**	**62‰**	3855	255	66‰
Obstetrics/Maternity	**20**	**2228/359****			**11**	*******	2218/380**	19	±23%
Prematures (below 2000 g)	**4**	**{61}**			**18**	**±30%**	62	14	
Private Ward	**3**	**6**			**0**		8	0	
Total (officially)	**128**	**7659***			**309**	**40‰**	9185	458	49‰

* The dramatic decrease in admissions since 2009 is not yet satisfactorily explained. Improved facilities nearby the homes might give some explanation. The death rate decreased slightly.

** This number represents the number of very young baby's born outside but admitted in the Maternity instead of the Children Ward (CW) because of more appropriate attention.

*** See under Obstetric Department 'Maternal Mortality'.

8.1.3 Obstetric Department.

The number of deliveries is stabilizing 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 (246) is lower than that reported by the theatre (256)! The number maternal deaths has been stable throughout the years. This year we report a higher number and the explanation is given below. 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.

General Overview: Obstetric department	**2010**	2009	2008	**2007**	**2006**	**2005**	**2004**
Hospital deliveries	**2195**	2209	1873	**1877**	**1736**	**1709**	**1613**
Delivered before arrival (BBA)	**33**	9	18	**37**	**22**	**18**	**22**
Total deliveries	**2228**	2218	1891	**1914**	**1758**	**1727**	**1635**
Abnormal deliveries	**318**	267	243	**277**	**316**	**259 (14,9%)**	**13%**
Caesarean sections	**246* (11,2%)**	215 (10%)	203 (10,9%)	**193 (10,2%)**	**191 (11%)**	**174 (10%)**	**11,7%**
Maternal deaths	**13****	5 (+5?)	6	**5**	**4**	**5**	**10**

Deliveries 2010:		2009	2008	**Complications 2010:**	
Spontaneous Vertex Delivery	**1910**	1936	1648	**Ruptured uterus**	**2**
Caesarean section	**246* (11,2%)**	215	203	**Ante partum hemorrhage**	**15**
Breech delivery	**57**	56	27	**Post partum hemorrhage**	**19**
Vacuum extraction	**15**	11	13	**Solutio Placenta**	
Total:	**2228**	2218	1891	**(Pre-)eclampsia**	**15**
Multiple pregnancies (twins, triplets)	**100 x 2 3 x 3**	62 x 2 1 x 3	51x2 1x3	**Total:**	**51**

* The theatre report presents 256 (11,6%) Caesarian Sections which is probably more correct!

** This year a wider interpretation is given to 'Maternal Death" including mortality during early pregnancy but cause by complications of that pregnancy.

Births	2010	2009	2008	2007	2006	2005	2004	2003
In hospital	**2295**	2275	1997	1877	1815	1798	1665	1557
Before arrival	**33**	9	19	37	22	18	22	28
Total babies	**2328**	2284	2016	1914	1837	1816	1687	1585
Born alive	**2107**	2149	1899	1809	1729	1717	1601	1520
Fresh stillbirth (per 1000! newborns)	**73 (31)**	77 (34)	76 (38)	51 (28)	48(26)	40(22)	(25)	(24)
Macerated stillbirths	**48**	58	41	48	38	41	21	27
Multiple pregnancies (neonates)**	**100 x 2 3 x3**	64x2 1x3	51x2 1x3		76	101	75	60

After some tragic maternal deaths in September and the arrival of a new medical officer in the second half of 2010 there has been extra attention for the problem of maternal deaths. To improve care for our pregnant mothers some new measures have been implemented. Every week in the necrology meeting with the medical staff all deaths, including maternal, are discussed. In addition to this, a maternal mortality audit has been started where every three months maternal deaths are discussed with all the staff caring for pregnant women. Using the definitions of the ICD-10 also maternal deaths in early pregnancy and puerperium are recognized. The aim is to improve care by learning from these tragic deaths and to try to achieve Millennium goal 5 (to reduce maternal mortality with ¾ at 2015) in our area!

	Adm	A	G	P	Diagn.	†	Cause	Things to improve	Comments
1	18/1	21	3	2	Eclampsia, pueperal sepsis	21/2	Puerperal sepsis	Pt could have been stablized and labour induced	Got CS, 3 days later died with fever
2	22/3	30	6	5	Retained placenta, PPH	23/3	Hypovolemic shock	More aggressive resuscitation, to use oxytocin	Died while preparing for manual removal of placenta
3	19/8	40	10	8	Placenta previa/abruptio?	19/8	Hypovolemic shock	Could be observed more close post-op	Got CS, died few hours later.
4	06/9	20	1	0	Eclampsia	06/9	Hypovolemic shock	Could be observed more close post-op, better first stabilize eclamptic patient with Mg before CS	CS for eclampsia, died after CS with dropping BP.
5	07/9	16	1	0	Puerperal sepsis	28/9	Puerperal sepsis	Could have given Ceftriaxon instead of X-pen	Got fever after CS for CPD, treated with X-pen, CAD and quinine, but high fever remained
6	08/9	22	2	1	CPD	10/9	Unknown, anesthesia?	Closer monitoring during surgery	
7	17/9	18	1	0	Puerperal sepsis and PPH	25/9	Secondary PPH	Stablize more quickly	CS after labour for 3 days. 1 w. after surgery heavy PV bleeding, died before stabilized
8	12/10	23	3	2	Chorio-amnio-nitis	11/10	Unknown	?	Induced labour for chorioamnionitis, live child, fever, suddenly died.
9	03/11	24	5	4	Puerperal sepsis in HIV+	09/11	Puerp.sepsis /imm.suppr.		PMTCT before delivery negative?
11	24/11	39	?	?	Severe shock /crim. abortion	25/11	Hypovolemic shock	More aggressive resuscitation	Took local medicines
12	28/11	30	6	5	perforation /criminal abortion	29/11	Hypovolemic shock		Died after surgery, kidney damage?
13	18/12	33	?	?	Severe anemia PP	18/12	Pulm. oedema?	furosemide before BT	Delivered 5 days earlier
14	31/12	39	7	5	Shock in pre-eclamptic patient	01-Jan.	Pulmonary oedema?	Admit pregnant women > 28 weeks in LW, hypertension not recognized in MCH and BP not measured in LW.	delivered small FSB in LW, then returned and died in FW. Unrecognized PIH.

8.1.4 Theatre.

8.1.4.1 General overview Surgery:

THEATRE:	2010	2009	2008	2007	2006	2005	2004
Major procedures (emergencies)	**697** **(269)**	634 (?)	670 (?)	666 (37%)	751 (46%)	723 (42%)	684 (65%)
Minor procedures	**2728**	1694	1427	1122	998	1865	1471
Anaesthesia general/local	**1728** **893 / 835**	1595 756/839	1606 790/816	1282 659/623	1452	1737	1694

8.1.4.2 Major procedures:

General		Genito-Urinary	
Release bowel obstruction	**14**	Prostatectomy transvesical	**30**
Bowel resection and anastomosis	**11**	Prostatectomy transurethral	**27**
Colostomy (closure)	**3**	Nefrectomy	**-**
Adhesiolysis	**2**	Urethral / bladder stones removed	**3**
Cleaning abdomen (exploration&drainage)	**15**	Repair bladder lesion	**3**
Appendectomy	**15**	Orchidectomy (uni-/bilateral)	**10**
Exploration laparotomy non/semi acute (biopsie)	**10**	Hydrocelectomy (uni-/bilateral)	**21**
Gastric outlet obstruction release	**-**	Urethro-cystoscopy (with procedure)	**9**
Cholecystectomy	**4**	Removal Bladder/Urethral Stones	**10**
Inguinal hernia (uni-/bilateral)	**71**	Re-implantation Urethra	**-**
Femoral hernia	**1**	**Obstetrical/Gynaecological**	
Other hernia (incision, para-umbilical, epigastric, scrotal)	**7**	Caesarean Section (CS)	**132**
Burst abdomen, tension sutures	**3**	CS (3rd) and Bilateral Tuba Ligation	**39**
Splenectomy	**2**	CS due to foetal distress	**40**
Volvulus	**5**	CS due to placenta praevia	**18**
Mastectomy/Lumpectomy	**5**	CS due to arm /cord prolaps	**27**
Haemorrhoidectomy	**4**	Colporaphy	**5**
Fistulectomy	**3**	Bilateral Tuba Ligation	**20**
Abscess I and D	**2**	Abdominal hysterectomy with/without adnexae	**23**
Excision tumour	**10**	Subtotal hysterectomy	**15**
Extensive wounds	**3**	Repair 3rd degree tear	**2**
Open fracture: cleaning and reposition	**2**	Removal ectopic pregnancy	**25**
Removal foreign body	**-**	Ovariectomy and/or Salpingectomy /myomectomy	**4**
Skin grafting	**4**	Pelvic abscess/pyosalpinx	**1**
Necrotomy	**3**	Repair vesico/recto vaginal fistula	**-**
Amputation of limp	**5**		
Anal atresia	**-**	**Other Specialities**	
Stump repair	**1**	ENT: nasal polyp / adenoid hypertophy	**1**
Sequestrectomy/scooping	**4**	Enucleating Eye	**-**
Re-laparotomy (complications)	**4**	Repair cleft lip/palate	**5**
Contracture release	**10**	Tonsillectomy/adenoidectomy	**5**
Other	**4**	Other Plastic Surgery	**2**
		Clubfeet surgery	**-**
		Thyreoidectomy	**5**
		Other Orthopaedic, foot correction	**-**

8.1.4.3 Minor Procedures:

General		Orthopedic	
Abscess or septic arthritis I and D	**157**	Reduction dislocated joint/fracture	**44**
Exploration/Aspiration	**52**	Gallows traction	**1**
Cut wound, suturing	**179**	Femur, pin traction	**20**
Contracture release	**6**	Amputation finger/toe	**5**
Woundtoilet/necrotomy (incl. bites)	**544**	Circular POP	**203**
Removal of stitches	**293**	Back slab POP	**114**
Foreign body removal (eye,ear,nose,throat)	**39**	Osteomyelitis: drilling, Sequestrectomy, scooping	**4**
Crep. bandaging	**23**	Fistelectomy	**-**
Excision tumor/ulcer	**31**	Arm sling	**29**
Tongue tie	**5**	Clubfoot	**13**
Biopsy	**-**	Removal POP	**217**
Aspiration abdomen / Ascites tap.	**71**	**Obstetrical / Gynecological**	
Aspiration chest	**8**	Speculum examination	**106**
Insertion thorax drain	**3**	Evacuation (incomplete abortion, molar)	**182**
Aspiration other	**14**	Dilatation and curettage (diagnostic, dysfunctional bleeding)	**15**
Rectal examination/proctoscopy/fistula	**1**	Retained placenta (manual removal)	**13**
Anal fissure, dilatation of anus	**1**	Cervical and perinea tear repair	**4**
Reduction rectal prolapse	**5**	Opening imperforate hymen/Labia separation	**3**
Ear syringing/otoscopy	**16**	**Genitourinary**	
Eye proc. (cornea sutures, evisceration etc.)	**7**	Bugination	**-**
		Catheterization transurethral (excl. ward)	**156**
Other procedures	**22**	Catheterization supra-pubic	**23**
		Orchidectomy	**-**
		Circumcision (traditional / medical)	**75/24**

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.

Anaesthesia 2010	Major				Minor			
Type	Adult		Child		Adult		Child	
	M	F	M	F	M	F	M	F
Ether + intubation	7	7	-	-	-	-	-	-
Halothane + intubation	83	100	40	25	-	-	-	-
Ketamine (with Diazepam)	35	31	18	14	90	202	70	64
Diazepam	-	-	-	-	9	12	-	-
Pethidine	13	28	-	-	-	9	-	-
Thiopental	14	13	-	-	-	9	-	-
Spinal anaesthesia: Lidocaine in Dextrose	112	178	-	-	-	-	-	-
Spinal anaesthesia: Bupivacaine	21	8	-	-	-	-	-	-
Spinal anaesthesia > Lidocaine + Ketamine	13	20	-	-	-	-	-	-
Saddle block	10	6	-	-	-	-	-	-
Local anaesthesia Lidocaine plain	1	-	-	-	112	80	27	8
Local anaesthesia Lidocaine + Adrenalin	-	6	-	-	-	-	4	5
Biers Block	1	-	-	-	2	-	-	-
	310	397	58	39	213	312	101	77
Total: 1507 (2009:1595)	**707**		**97**		**525**		**178**	

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 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.

The Tabora Foundation.

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 and his wife Mrs. Gon Joosten-Nienhuys initiated this foundation, based in the Netherlands. The activities of the foundation are in their 12th year and are managed by a local committee of 5 dedicated people and focuses on several goals:

1. 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. Over 3000 young people mainly 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.
2. Support of approx. 200 poor households with food, agricultural utensils and free medical care.
3. Supporting poor (often orphaned) primary schoolchildren (150) and sponsoring promising youths of poor families in different forms of secondary or postgraduate education.
4. Incidental donations to support small projects in Ndala Hospital and in the area of the Archdiocese of Tabora.
5. In 2010 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. The large cistern appeared to be leakproof but because of technocal problems it doesn't collect as much water as it could.
6. 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 2010: Dr. Herman Drewes, Dr. Gerard Haverkamp and Dr.& Mrs Joosten were in the hospital for periods of more tha one month.

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”!!!!

The official targets for vaccination of children and pregnant women are calculated on the basis of the official catchment area of the respective clinics. They should have a ‘coverage’ of over 70%!
The preventive clinics of Ndala Hospital are only resposible for the population of the Ward “Ndala” which consists of the following villages: Uhemeli, Mabisilo, Kampala, Wita and Chabutwa with a total population of approximately 18.850 people; 900 of them are below one year. and therefore 900 are expected to be pregnant women of childbaring age (4200).3800 of the total population are below 5 years.

Analysis of the vaccinations given in 2010 shows BCG with a vaccination coverage of 68%; the coverage for measles is 60%. the coverage for a full series of 3 DPT vaccinations of 60% and a coverage of 3x Poliomyelitis vaccin of 70%. Indeed two cases of measles were admitted in the hospital!

8.2.2.1 Under-five and Ante Natal Clinic 2010

MCH / RCH Under-five care antenatal care	2010		2009	2008	2007	2006	2005
	1st attendance	re-attendance					
In Ndala hospital:	**16391**		13.095	12.059	14.049	13.404	13.693
below 12 months	**1992**	**11620**	10230	9.036	10.730	10.152	
above 12 months	**0**	**2779**	2.865	3.023	3.319	3.252	
Mobile Clinic: (Kigandu & Misole*)							1.777
below 12 months	**150**	**956**	992	1.115			
above 12 months	**0**	**411**	195	406			
Total under five visits:	**17908**		14.282	13.580	14.049	13.404	15.470
Malnutrition seen in under fives**							
BWT 60-80th percentile	**284 (13,2%)***		9,8%*	1,2%??	4,6%	6,2%	6,5%
BWT below 60th percentile	**4 (0,2%)??***		0,8%?	0,2%??	0,52%	0,5%	0,7%
Antenatal Care	**1st attendance**	**re-attendance**					
In Ndala hospital			8.483	7.121	6.877	6.780	6.919
Before 20 weeks pregnancy	**604**	**5682**					
After 20 weeks of pregnancy	**2983**						
Mobile Clinic			281	417	-		463
Before 20 weeks pregnancy	**13**	**181**					
After 20 weeks of pregnancy	**73**						
Total antenatal visits	**9536**		9.072	7.538	6.877	6.780	7.382
Risk factors at first* antenatal visit:							
below 16 yrs	**471 (12.8%)**		10,4%	11%			
above 35 yrs	**269 (7.3%)**		6,1%	7,1%			
multipara (gravida 5 or more)	**806 (21,9%)**		18,3%	15,9%			
hypertension (>140/90)	**107 (2,9%)**		2,8%	0,2%??			
anemia (< 60%)	**139 (3,8%)**		1,9%	5,9%??			
TOTAL under five + antenatal visits	**27444**		23.354	21.118	20.926	20.184	22.852
Number of outstations (Kigandu & Misole)	**2**		2	-	-	-	
total number of visits	**12**		12	-	-	-	

* Percentages are taken from the 1st attenders only!

8.2.2.2 Vaccinations

Vaccinations			2010	2009	2008	2007	2006	2005
TETANUS Toxoïd (Antenatal)								
	I		**2026**	2.561	1.968	1.794	1,778	2.208
	II		**1180**	1.425	1.096	926	1,033	1.259
	III		**163**	188	226	280	157	153
	IV		**104**	111	153	151	148	163
	V		**48**	88	105	95	96	148
BCG								
	at birth		**1358**	981	997	1.252	1.075	230
	at a later time		**754**	1.226	1.308	821	1.101	497
POLIO								
	at birth		**1370**	1.132	1.204	1.467	1.251	362
	I		**1666**	1.861	1.879	1.502	1.406	962
	II		**1839**	1.741	1.828	1.385	1.317	831
	III		**1429**	1.212	1.314	924	1000	734
DTP								
	I		**1577**	1.739	1.789	1.223	1430	984
	II		**1323**	1.551	1.486	1.063	1482	910
	III		**1090**	1.268	1.133	854	1030	708
Measles			**1014**	1.381	1.088	932	881	697
Total vaccinations			**16941**	18.465	17.574	14.669	15.185	10.846
	vaccinations of people allocated to Ndala hospital		**8848**	9090	7632	8.537	7.110	
	vaccinations of patients officially allocated elsewhere		**8093** (48%)	9375 (51%)	53%	46%	53%	
Vitamin A supplement			**708**	-				
Family Planning Clinic								
	New attendees		**155**	105				34
	Total visits		**540**	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 Program is a government program, which aims at servicing all government and private/mission hospitals in the country. Ndala Hospital is depending on the DHO to receive supplies of HIV test kits, STI drugs and Family planning products, but supplies are much 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. There is a stable shift from provider initiated counseling (PITC) 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 (± 16.200 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
2010	**1129**	**1086**	**2215**	**96 (8,5%)**	**170(15,6%)**	**1033**	**916**
			Total			(0 tests were inconclusive)	

VCT Age group:	< 14 y.		15 – 24 y.		25 - 34		35 - 49		> 50 y.		2010 (2009)
gender	M	F	M	F	M	F	M	F	M	F	Total
counseled & tested	21	28	298	418	366	317	274	227	170	96	2215 - (1954)
positive HIV	2	5	5	34	26	68	45	45	18	18	266 (12,0%)

8.2.3.2 Care and Treatment Clinic (CTC)

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 Glaser 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.

CTC Age group	**< 15 y**		**15-24 y**		**25->50 y**		**2010** (2009)
gender distr.	M	F	M	F	M	F	**Total**
Number enrolled patients	**72**	**76**	**21**	**203**	**698**	**897**	**1967 (1433)**
Number patients on ART	**29**	**45**	**8**	**39**	**305**	**417**	**843 (42,8%) (572 (40%))**

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

Chron. sick 2010	**Jan**	**Febr**	**Mar**	**Apr**	**May**	**June**	**July**	**Aug.**	**Sept**	**Oct**	**Nov**	**Dec**	**Total ['09]**
Visits	242	203	235	203	170	250	186	246	277	197	259	234	2702 [2393]
Hiv/ Aids	129	122	116	141	131	155	110	155	171	171	193	167	1761 [1211]

22 Village Health Workers called 'Home based Care Service Providers' are actively involved in this program since 2006. They have been provided with bicycles and receive shs 10.000/- per month for keeping this bicycle in good order. They do not get any salary. Since the start of the program they have been after a total of 817 defaulters. Within the last 3 month of 2010 they traced again 72 of them. 30 could be convinced to return to the CTC clinic, 28 appeared to have died and 14 moved to another location.

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 Nevirapine when labor starts and the children get a single dose of Nevirapine 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	2010
Pregnant mothers counseled	2377	3314	3422	4189	**4527**
Pregnant mothers tested (accepted %)	2267 (95,4%)	2616 (79%)	2644 (77%)	1946 (46,5%)	**2272 (50,2%)**
Total mothers HIV positive (%)	86 (3,8%)	114 (4,3%)	88 (3,33%)	69 (3,54%)	**83 (3,7%)**
Mothers received NVP	75	114	88	??	**50**
Babies received NVP	31	35	30	??	**35**
Babies coming for follow up	5	72	46	??	**75**

8.3 Supporting Services

8.3.1 Laboratory.

	2010	Total	Positive		Total	Positive
Parasitology				**Hematology**		
Blood slide (thick droplet)		**9639**		Hb in g/dl (below 7 g/dl = "pos.")	**10167**	**2456**
	Malaria		**3919**	White Blood Cell count	**363**	
	Borrelia		**0**	WBC differentiation	**331**	
Stool		**1341**		Platelets (below 40.000/mm)	**-**	
	Hookworm		**167**	Bleeding time	**-**	
	Ascaris		**1**	Red Blood Cell Morphology	**8**	
	Giardia Lamblia		**1**	ESR	**505**	
	Entamoeba Histolytica		**5 ?**	Sickle Cell Test	**127**	**66**
	Strongyloides Stercolaria		**1**			
	Schistosoma Mansoni		**2**	**Biochemical tests**		**Abnormal**
				SGOT (liver function test)	**25**	**5**
Urine		**2189**		Cholesterol	**-**	**-**
	Schistosoma Haematobium		**12**	Bilirubin (total)	**52**	**11**
	Trichomonas Vaginalis		**10**	Glucose blood (>10 mmol/l)	**1168**	**512**
	Granular casts		**21**	Glucose urine (dipstick)	**29**	**8**
				Albumen urine (dipstick)	**104**	**49**
				Pregnancy test urine	**236**	**116**
Bacteriology						
Ziehl-Neelsen colorization for AFB		**338**		**Other**		
	Sputum (Tuberculosis)	**333**	**48**	Sperm analysis	**8**	
	Skin smear (Leprosy)	**5**	**0**	Analysis other body fluids	**25**	
Gram stain				**Bloodgrouping&donation**		
Cervix/urethral smear		**12**		Blood grouping	**1193**	
	Gonococci		**3**	Number of units transfused	**943**	
	Candida Albicans		**2**	children	**339**	
	T. Vaginalis			adults	**604**	
Liquor / CSF		**216**				
	Meningococci		**2**	Cytology Burkitt's lymphoma	**2**	
	Pneumococci		**15**			
	Haemophilus influenzae		**17**	Serology		
	Cryptococci		**0**	PRP (Syphilis)	**563**	**60**
	Total bacterial meningitis		**34**	**TOTAL TESTS**	**32031**	
PITC for diagnosis HIV in hospital		**2004**	**298 14,9%**	**VCT** (Voluntary Counseling&Treatment)	**2215**	**266 12,5%**
PMTCT (pregnant women)		**2272**	**83 3,65%**	**Total HIV tests done**	**6491**	**647 9,9%**

* 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.

IV UNIT		N.Sal. 0,9%	Dextrose 5%	Ringer's Solution	Saline Irrigation	Dextrose 50%	Other	TOTAL
2010	**bottles**	**from outside sources**	**141 x 5 ltr 705 x 1 ltr 2271x ½ ltr**	**from outside sources**	**1196 bottles**	**59 x 240cc 22 x 10cc**	**-**	**4394**
	liters		**3045 liters**		**5980 liters**	**15 liter**	**-**	**9040**
2009	bottles	216	4060	2400		64		
	liters	108 ltr.	2160 litres	1200 litres	2500 litre	1,2 ltr	149	6118
2008	Total bottles	1891	2269			641		4801
	Total liters	893	686			10,6		1579
2007	Total bottles	3,789	3,125		-	333	?	7884
	Total liters	1,718	864		1898	7,4	?	
2006	Total bottles	5,315	4,060		-	157	2.5	
	Total liters	2,682	1,023		1920	4.6	4.6	

8.3.3 Radiology

X-Rays	2010*	2009	2008	2007	2006	2005
Chest	**136**	310	339	239	289	517
Lower / Upper extremities	**204**	399	446	387	445	527
Skull	**7**	9	25	7	13	27
Shoulder	**11**	11	40	34	29	34
Pelvis and hip	**19**	53	98	68	75	98
Vertebral Column	**11**	15	42	17	38	62
Plain Abdomen	**11**	7	3	12	19	39
Barium meal	**-**	-	-	-	0	3
Barium Swallow	**-**	-	-	-	4	2
Hystero-Salpingography		-	-	-	3	29
Intravenous Urography	**-**	-	-	-	1	1
Ureterogram	**-**	-	-	3		
Others	**1**	-	-	-	7	1
Total	**400**	804	993	767	923	1340
Films used	**516**	1003	1046	789		

* The Departement had temporarily been closed down by the government because of the absence of a qualified Radiology Technologist. Mr. Peter Katinda has successful completed his training and has taken up the responsibility.

Ultrasound scans:						
	2010	2009	2008	2007	2006	2005
Obstetrical	**78**	142	110	68	196	201
Gynaecological (incl. ectopic/abortion)	**160**	202	127	111	224	175
Abdominal (liver, spleen, gallbladder, bladder,)	**152**	185	83	98	245	200
Urologic	**21**	40	36	33	33	33
Heart	**1**	3	-	3	3	7
Other	**2**	-	-	2	6	18
Total male / female	**414 65/349**	572 77/495	356 58/298	299	707	634
Ultrasound scans:						
	2010	2009	2008	2007	2006	2005

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.This room has been completely overfilled with old patient records that have to be stored for 7 years! A solution for this storage problem has to be found soon!

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, water collection and storage and equipment as well as the hospital vehicles. The level of staff remained the same compared to previous years. The senior and experienced Technician

The installation of “the SOLAR” that had started in February 2007 under the supervision of Rev. Fr. Alain Bedel and his assistant Mr. 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. Only in clouded days the large 100KW generator has to be started to provide all connected parties with electricity in the evenings.

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

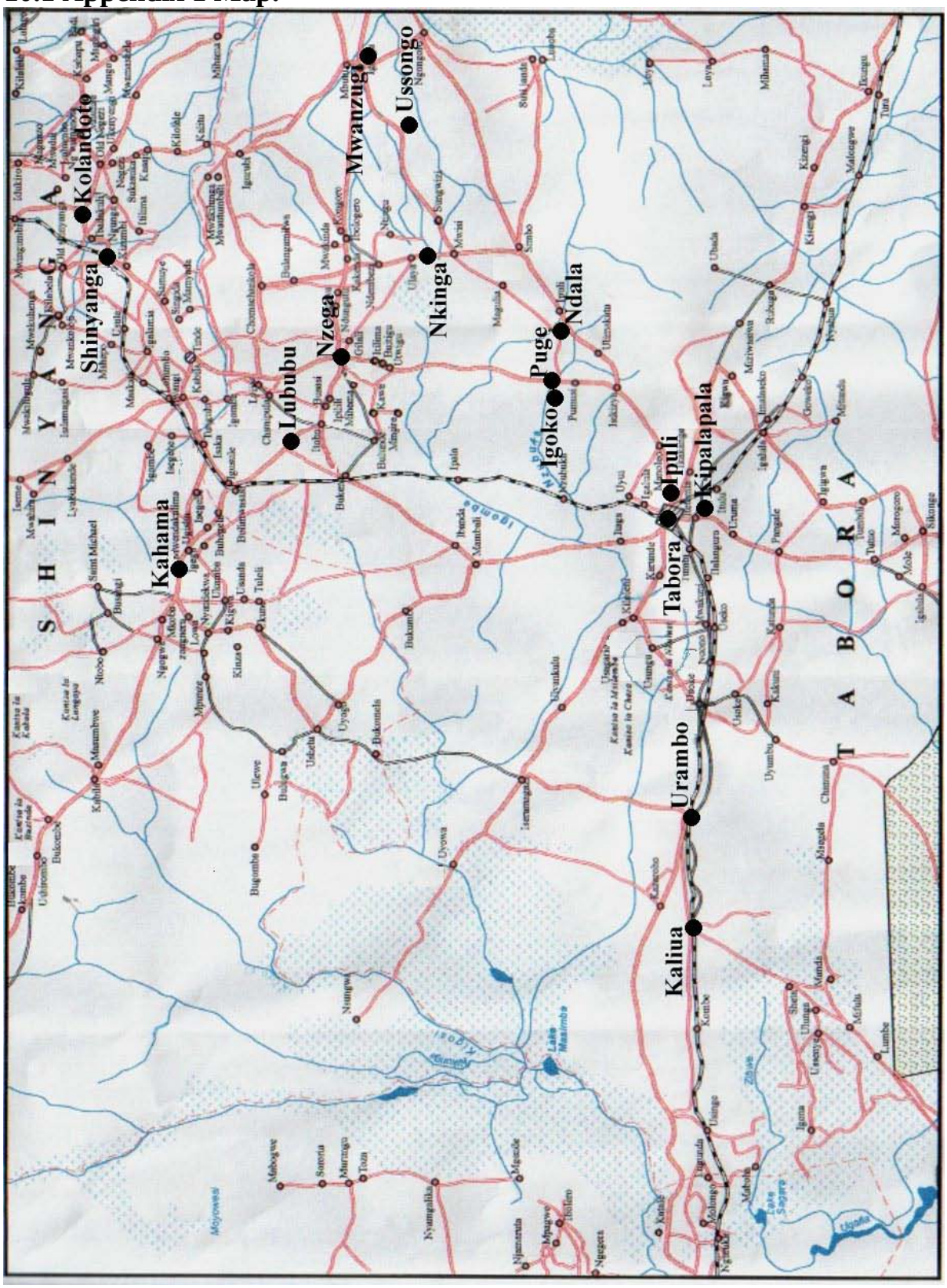
This department is responsible for the storage of all non-pharmaceutical goods, laundry, the bicycle shed and the guesthouses. These guesthouses are frequently used to accommodate visitors like medical specialists, consultants, donors and friends of the hospital.

9. Plans for the future.

- To find extra room for the archive of patient records.
- To improve the rainwater collection systems in all parts of the hospital by regular cleaning and maintenance of gutters and piping.
- 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 CONT.
- To open the TB Ward and complete the fencing.
- To complete the construction of a new Theatre Complex and Mortuary (by CSSC). STARTED in 2009
- To Implement the MASTER PLAN of the whole hospital compound as preparation in view of future extensions and a comprehensive hospital waste disposal system.
- To construct a CTC Clinic complex (by EGPAF) CONT.
- **To prepare the celebration of " NDALA HOSPITAL 50 YEAR !!!" (Renovation of the OPD?)**

10. Appendix.

10.1 Appendix 1 Map.



10.2 Appendix 2 Management.

10.2.1 Members of the Board of Governors in December 2010

His Grace Paulo Ruzoka	Chairman	Archbishop Tabora Archdiocese
Rev. Sr. Regina Sumiyatni CB	Member	Regional Superior Sisters of CB.
Sister Eustella Josaphat	Member	General Superior Mabinti wa Maria
Rev. Fr. Nicolas Bulabuza	Member	Parish Priest Ndala Parish
Rev. Fr. Paul Chobo	Member	Secretary Diocesan health Board
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
Rev. Sr. Reni Ngadi	(attendee)	Hospital Administrator
Dr. Joseph Lugumila AMOic	(attendee)	Medical Officer in Charge
Mr. Thomas Madimilo	secretary (attendee)	Hospital Secretary

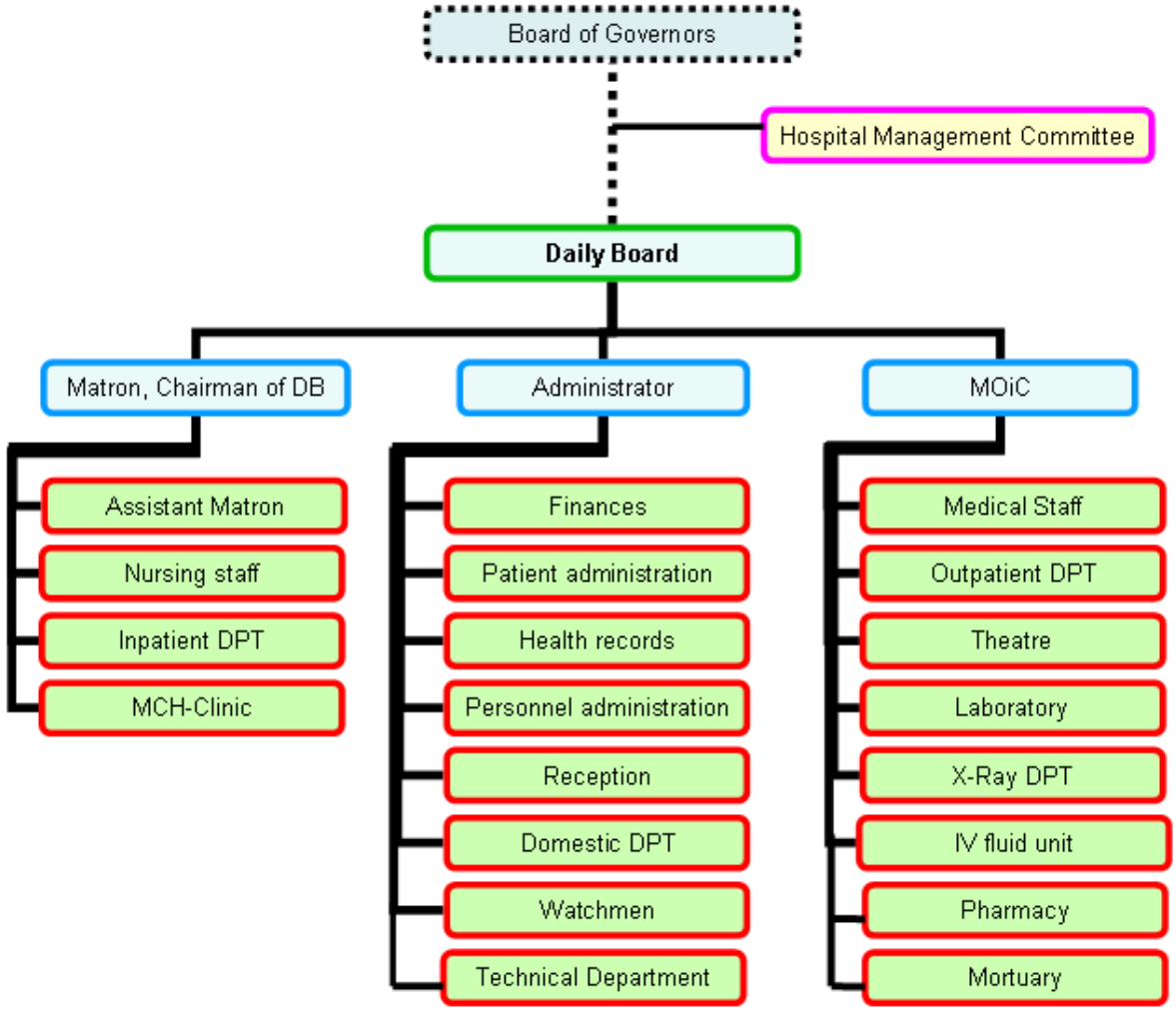
10.2.2 Members of the Hospital Management Team.

Sr. Reni, Ngadi CB	Administrator (Chairperson)
Dr. Joseph Lugumila AMO	Medical Officer in Charge
Mr. Thomas Mtilimbanya NO	Nursing Officer in Charge
Mrs. Agnes Elikana	Ass. Nursing Officer
Mr. Thomas Madimilo	Hospital Secretary

10.2.3 In Charge Positions 2010

Medical Officer in Charge	Dr. Joseph Lugumila, A.M.O.
Nursing Officer in Charge	Mr. Thomas Mtilimbanya, Nursing Officer
Ass. Nursing Offices in Charge	Mrs. Agnes Elikana, Ass.Nursing Officer
Administrator	Rev. Sr. Reni Ngadi CB
In Charge domestic dpt.	Mrs. Mary Aloyce (acting)
In Charge compound/technical dpt.	Rev. Sr. Reni Ngadi / Mr. Salum Constantino
In Charge Male Ward	Mrs. Teddy Calpophore, Ass. Nursing Officer.
In Charge Female Ward	Rev. Sr. Florida, Ass. Nursing Officer
In Charge Maternity/Labour Ward	Mrs. Gertruda Emmanuel, Ass. Nursing Officer
In Charge Children Ward	Mr. Obed Edward, Nurse
In Charge Laboratory	Mr. Elisha Maige, Laboratory Technologist
In Charge OPD	Mrs. Dorothy Massy, Ass. Nursing Officer
In Charge Pharmacy	Mr. Solomon Kitundu, Pharmacy Technologist
In Charge Theatre	Mrs. Grace Mlay, Ass. Nursing Officer
In Charge Radiology	Mr. Peter Chatting, Radiology Technologist
In Charge Clinical Officers	Mr. Patrick Chubwa, Clinical Officer
In Charge CTC	Dr. Joseph Lugumila / Adriano Michael CO (per 1-2-'11)
In Charge VCT	Mrs. Symphorose Crispin, Ass.Nursing Officer
In Charge PMTCT	Mr. Thomas Mtilibanya, Nursing Officer
In Charge Health Records Dept.	Mr. Godfrey Silas (acting)
In Charge Walinzi /Security	Mr. Cypriano Emmanuel
In Charge Laundry	Mr. Ernesto Daudi
In Charge MCH Clinic	Mrs. Agnes Elikana, Ass. Nursing Officer
Chairman Tughe	Mr. Matthew Ndunguru.

10.3 Appendix 3 Organogram.



10.4 Appendix 4 Staff Mutations 2010

10.4.1 Staff that left in 2010:

	Name	Designation	Department
1.	Theresia Lucas	Nurse	Nursing
2.	Justina Kolaso	Medical Attendant	Nursing
3.	Fabian Maganga	Medical Attendant	Nursing
4.	Rosalia Martin	Nurse	Nursing
5.	David Petter	Nurse	Nursing
6.	Joel Jeremiah	Nurse	Nursing
7.	Asumpta Kisusi	Nurse	Nursing
8.	Shija Mahoyogo	Nurse	Nursing
9.	Martha Nkata	Nurse (retired)	Nursing
10.	Dr. Wander Kars	Medical Officer	Medical
11.	Dr. Erica Kars-Koopman	Medical Officer	Medical
12.	Jackson Siluherus	Clinical Officer	Medical

10.4.2 Staff that joined in 2010:

	Name	Designation	Department
1.	Lucy Dyson	Medical attendant	Nursing
2.	Shija Mahoyogo	Nurse	Nursing
3.	Esther Lazaro	Medical attendant	Nursing
4.	Edina Lobule	Medical attendant	Nursing
5.	Wyclif Osongo	Ass. Nursing Officer	Nursing
6.	Benson Marrita	Ass. Nursing Officer	Nursing
7.	Chitegetse Rushatsi	Ass. Nursing Officer	Nursing
8.	Danielle van den Hamer	Nursing Officer	Nursing
9.	Rose Sabot	Nurse	Nursing
10.	David Petter	Nurse	Nursing
11.	Joel Jeremiah	Nurse	Nursing
12.	Fedric Outlier	Nurse	Nursing
13.	Geoffrey Kapalata	Clinical Officer	Medical
14.	Godfrey Masele	Clinical Officer	Medical
15.	Lazaro Ernest	Clinical Officer	Medical
16.	Dr. Rob Mooij	Medical Officer	Medical

10.4.3 Staff on training / upgrading 2010:

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	**Radiography Technologist**	**Muhimbili Univ. DSM**	**JOCS**	**2010**
4. Thomas Madimilo	**Postgr. Hosp. Adm.**	**Mzumbe Un. Morog.**	**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 Ordass	**Ass. Medical Off.**	**Ifakara Med. School.**	**Tabora Foundation**	**2010**
9. Monica Andrea	Nursing Officer	Kolandoto Dipl. Nursing	CSSC + Nolet F.	2011
10. Teddy Calpophore	**Ass. Nursing Off.**	**Tanga Sch. Dipl. Nursing**	**CSSC + Nolet F.**	**2010**
11. James Zachayo	N.O. > Anaesthesia	Bugando Univ. Mwanza	Tabora Foundation	2011

10.5 Appendix 5. Staff Establishment.

	2010			2009	2008	2007	2006
	Present	**Req.?**	**Def.**				
Medical Officer (MO)	**1(expat)**	2	1	2 > 1 (expat)	2 (expat)	-	2 (expat)
Assistant Medical Officer (AMO)	**3**	3	0	4	3	2	3 (2 sec.)
Clinical Officer (CO)	**6**	7	1	3+(1)	5	6	7
Nursing Officers (NO)	**1**	4	3				
Registered Nurse > **Ass. Nursing Officers (ANO)**	**14**	14	0	10	12	12	19
Nurse/Midwife/Enrolled N >**. NURSE**	**11**	15	4	11	13	8	8
Nurse Assistant > **Medical Attendant**	**46**	46	-	46	23	22	19
Nursing Attendant > **Medical Attendant**					21	22	19
Technologist Officer (Lab. / Pharm./ Radiol.	**-**						
Laboratory Technician > **Lab. Technologist**	**1**	2	1	1	1		
Lab-assistant > **Ass. Lab. Technologist**	**4**	4	0	5	2	2	5
Lab-attendant >	**-**	-	-	2	3	4	3
Pharmaceutical Technician > **Pharm. Technologist**	**1**	1	0			-	
Pharmaceutical Assistan**t** > **Ass. Pharm. Technologist**	**0**	1	1	1	1	-	1
Radiographer > **Radiol0gy Technologist**	**1**	1	0				
Radiographic assistant > **Ass. Radiol. Technologist**	**0**	1	1		0	1	1
Administrator	**1(expat)**	1	0	1 (expat)	1 (expat)	1 (expat)	1 (expat)
Ass. Administrator	**1**	1	0		0	-	1
Hospital Secretary	**1**	1	0		0		
Health Recorder	**0**	1	1		0	1	1
Office attendant	**4**	4	0	4	4	3	3
Receptionist	**-**	-	-		-	3	3
Domestic dpt.	**12**	13	1	13	10	11(1expat)	11(1 expat)
Driver/Technician	**4**	4	0	4	4	4	3
Security Guards	**8**	11	3	8	11	11	11
TOTAL*	**120**	137	17	116	116	**117**	**125**
in training/upgrading	**9**			10	10	9	6

* 38 qualified staff are receiving their salaries from the government.

10.6 Appendix 6. Income and Expenditure.

10.6.1 Income

INCOME in Tanzanian Shilling		
2009		**2010**
1.	**Income from Patients**	
242.501.750	Payments from In-Patients	**220.851.200**
95.810.800	Payment from Out-Patients	**78.867.250**
23.924.600	Payments at the reception	**22.326.500**
362.237.150	**Subtotal:**	**322.044.950**
2.	**Contributions from Government**	
67.979.150	Government	**88.077.700**
67.979.150	**Subtotal:**	**88.077.700**
3.	**Donations**	
	For Study/Training	**37.630.044**
	For Special Groups of Patients	**4.814.500**
62.280.000	Institutions	**58.543.800**
1.449.000	Fund for non-paying patients/ EGPAF	**3.567.830**
81.165.000	**Subtotal:**	**104.556.164**
4.	**Income Generating Projects**	
6.733.615	Renting out Car	**3.569.000**
928.000	Renting out Hall	**661.350**
2.154.700	Canteen/Guesthouse	**5.474.800**
9.816.315	**Subtotal:**	**9.705.150**
5.	**Other Income**	
9.806.500	'other sources': house rent etc.	**5.750.930**
1.085.625	Refunds /Loan Interest	**15.820.700**
703.900	Mobile clinics	**382.200**
2.482.500	miscellaneous	**2.523.561**
3.462.500	From Bankaccount etc	**28.189.686**
17.541.025	**Subtotal:**	**52.676.077**
538.738.640	**TOTAL INCOME**	**577.060.051**

10.6.2 Expenditure.

EXPENDITURE		
2009		**2010**
1.	**Salary and Adjacent Costs**	
233.073.993	Salary, allowances	**281.849.837**
12.493.773	NSSF Contribution	**37.963.752,5**
3.307.650	Medical Treatment (staff)	**6.606.418**
	Terminal benefits!!!!!	**17.480.255**
248.875.416	**Salary and Adjacent Costs**	**343.900.262,5**
2.	**Medical Supplies**	
62.678.945	Medicines	**65.285.295**
6.456.375	Medical Supplies	**11.223.500**
69.135.320	**Subtotal:**	**76.508.795**
3.	**Other Materials**	
76.537.546	Non-Pharmaceutical Medical materials (Basket Fund)	**42.207.234**
3.122.500	Technical Department	**1.069.940**
5.834.700	Domestic Department (Food, Textiles)	**7.345.975**
17.367.415	Office supplies/stationary/Administration	**12.232.875**
423.600	Refund	**618.000**
103.285.761	**Subtotal**	**61.474.024**
4.	**Transport**	
4.496.550	Transport	**2.398.700**
1.395.700	Accommodation	**920.900**
5.892.250	**Subtotal:**	**3.319.600**
5.	**Water/Power/Light/Commun.**	
-	Water Supply	-
3.467.621	Communication	**3.845.189**
12.145.000	Costs Solar /Gener. System	**6.992.000**
1.305.250	Diesel for Generator/Car	**1.761.400**
190.000	Kerosene	**177.500**
17.107.871	**Subtotal**	**12.776.089**
6.	**Maintenance**	
-	Airstrip	**1.020.500**
4.195.100	Hospital Car	**1.086.600**
20.036.500	Buildings / Equipment	**6.099.500**
3.063.740	IGP (cost)	**2.749.000**
27.295.340	**Subtotal:**	**10.937.600**
7.	**Upgrading Infrastructure and Equipment**	
32.898.950	Pharmacy (PIUS XII)	**25.173.800**
10.576.000	New buildings (Fence)	**15.037.600**
4.407.700	Equipment (Incinerator)	**4.000.000**
47.882.650	**Subtotal:**	**44.211.400**
8.	**Training and Upgrading of Staff**	

28.544.059	Training and Education/Study	**39.440.344**
28.544.059	**Subtotal:**	**39.440.344**
9.	**Contributions and Charity**	
102.000	CSSC/TEC	**42.000**
1.740.850	X-mass presents	**2.475.800**
8.665.000	Gifts	**1.870.800**
2.491.393	misc. Worker Day etc.	**2.243.000**
440.600	Debts of patients	**291.400**
-	EGPAF	-
13.439.843	**Subtotal:**	**6.923.000**
10.	**Miscellaneous**	
1.007.000	Biopsy	**165.000**
700.000	Credit	**1.000.000**
6.706.860	Inventory	**1.323.000**
3.615.000	Investments	**3.980.000**
3.892.800	Petty cash	**3.381.907**
15.921.660	**Subtotal:**	**9.849.907**
577.380.170		
577.380.170	**TOTAL EXPENDITURE**	**565.129.621,5**
2009		**2010**
538.738.640	**Income**	**577.060.051**
- 38.641.530	**BALANCE (INCOME minus EXP.)**	**+11.930.429,5**
11.	**Depreciations***	

*The depreciations are not included in these balance sheets. There has been no new assessment in 2010.

10.6.3 Receipts & payments at the hospital.

Receipts (in Tanzanian shs)	2009	**2010**
Balance B/F	60.082.967	**28.189.686**
In-patients	362.237.150	**220.851.200**
Out-Patients		**78.867.250**
Reception	-	**22.326.500**
Other Receipt	12.078.525	**19.902.660**
Income Generating Projects	9.816.315	**12.353.150**
Cash drawings	-	**62.081.261**
Donation / Loan	81.165.000	**68.008.300**
Refund / Study	-	**35.980.044**
Basket Fund	73.441.650	**28.500.000**
TOTAL in	598.821.607	**577.060.051**
Payments	2009	**2010**
Staff cost	233.073.995	**280.359.987**
Medicines	69.135.320	**88.670.595**
Administration Cost	145.422.228	**86.817.095**
Study	28.844.059	**39.440.344**
Terminal Benefits	12.493.773	**17.480.255**
B/F	76.527.546	**42.207.234**
Miscellaneous/Contributions	8.425.000	**10.728.000**
TOTAL out	573.631.921	**565.703.510**
Balance:	25.189.686	**-11.356.541**

10.6.4 Bank Deposits and Payments 2010:

DEPOSITS	2009	2010
Balance B/F	110.434.153	**66.175.996**
NHIF (Nat. Insur. Fund)	16.562.550	**33.802.665**
MOH Salaries	186.203.200	**203.741.600**
MOH Bedgrant	4.432.025	**4.893.627**
NSSF (Nat. Pension Fund)	3.117.870	**8.517.557**
Inc. Gen. Projects	9.816.315	**-**
Donation Fr. F. Nolan	600.000	**-**
Sale generator	4.000.000	**-**
other resources	12.078.525	**1.855.950**
Refund	9.867.710	**9.787.784**
TOTAL DEPOSITS	340.709.168	**328.775.179**
PAYMENTS	2009	**2010**
Staff salary*	113.237.076	**119.398.087**
NSSF*	60.864.989	**75.927.505**
TRA*	9.226.475	**10.523.521**
Draw from Bank*	26.475.000	**2.932.778**
Bank charges	409.875	**490.550**
TMP	560.000	**3.000.000**
Staff Loans	15.451.799	**14.158.803**
L. Print / B.statements/ Dep. Temp.	-	**3.600.000**
Kayonza /J & K Medicks/ Dosaji	-	**800.000**
NHIF	2.835.789	**12.630.036**
Ngacha / Fortes Garage/Toyota	3.462.500	**1.314.072**
Caritas Tabora	8.000.000	**-**
Arrears	23.663.178	**4.516.538**
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	**249.291.890**
Balance:	- 2.999.998	**+79.483.289**

10.7 Appendix 7. Donations 2010

NO	
1	Stichting PIUS XII (Renovation Pharmacy + Medicines + upgrading staff)
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)
6	Arnhemse Stichting Bijzondere Noden (via Dr. Gerard Haverkamp)
8	G.J Knijn, Kadijk 2, 1602BZ Venhuizen
9	Stichting Rentebestemming (Sr. Jeane d'Arc)
10	Stichting Missie-Zending 40 MM
11	Prof Dr. J.A. Oosterhuis, Wethouder Koniglaan 17, 1412GT Naarden
12	KWF (Germany) via CSSC Dar es Salaam (construction New Theatre Block and Mortuary)
13	Mr & Mrs ACHM van de Kar - Kortman
14	Dr. G. van der Ley, Schiedam
15	Cordaid / MEMISA (sponsoring training/upgrading medical staf)
16	Evangelical Church Koekange, the Netherlands
17	Family Dr. Paulus Lips (upgrading 7 training)
18	Stichting Tabora c/o Oostkapelle the Netherlands
19	Stichting Franje via Stichting Tabora: (e.g. construction rainwater harvesting cistern & incinerator)
20	"Dokters zonder vacantie", Antwerp, Belgium (visiting team of medical specialists)
21	Dr. Herman Drewes, Elegastgaarde 22, 7329AH Apeldoorn (staff children sponsor fund)
22	Family Dr. Max Slenter (Poor patient fund)
23	Stichting Bijzondere Noden, Arnhem via Mr & Mrs Haverkamp (training &upgrading staff)
24	Normbeheer Ommen BV, Ommen, the Netherands
25	Charlotte Simons & Kirsten Schlink (student doctors); several important medical instruments

10.8 Appendix 8. Abbreviations:

AD	Archdiocese	MEMS	Mission for Essential Med. Supplies
AIDS	Acq. Immuno-Deficiency Syndrome	MO	Medical Officer
ADHB	Archdiocesan Health Board	MOH	Ministry Of Health
AFB	Acid Fast Bacilli	MOiC	Medical Officer in Charge
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	People Living with Hiv / Aids
CB	Charles Borromeo	PMTCT	Prevention 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
EGPAF	Elizabeth Glacer Pediatric Aids Found.	TT	Tetanus Toxoïd
ENT	Ear-Nose-Throat	TTC	Teachers Training College
Expat.	Expatriate	UvA	University of Amsterdam
FW	Female Ward	VAH	Voluntary Agency Hospital
Hb	Haemoglobin	VCT	Voluntary Counseling and Testing
I&D	Incision and Drainage	VHW	Village Health Worker
IV	Intravenous	VVF	Vesico-Vaginal Fistula
JOCS	Japan Overseas Christian Services.	WHO	World Health Organisation
MCH	Mother and Child Health		