Annual Report 2011
Ndala Hospital

Archdiocese of Tabora
Tanzania (East Africa)

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1. General review of the year 2011.

Staff.

- The Hospital management team didn't undergo any changes during the year and has been acting in full force with Thomas Madimilo in a dual capacity: Hospital Secretary and Assistant Administrator. Eight qualified staff left and nine took their places. It is worth mentioning that presently 35 qualified staff receive their salaries directly from the Government.
- 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.
- 7 "Student Doctors" from Groningen University in the Netherlands fulfilled a stage period in the hospital. Two medical students (STOLA) did research on acutely severely ill children including taking blood samples for culture. The results of this research are expected in 2012. One student-nurse came on her own initiative.

Patients.

In general the number of admissions and attendances in the different sectors of the hospital were about as high as in 2010. However the vaccination coverage in the area that is allocated to our Hospital did not increase and remains - assuming our data being reliable - rather below 70%. The few cases of measles reported in 2010 were followed by a few cases in February (2), April (4), May (5), June (6) and July (3) but then a **major outbreak of Measles** occurred in August (35), September (25), October (34), November (15) and December (15). Six deaths among the children. In the same months were altogether 20 adults admitted with measles of which 1 died.
Meningitis had its annual peak in April-May-June, mainly among children of whom at least 35% died.
In the Children ward 164 children died of whom ±25% died within a few hours after admission.
The recent moderate increase in '**Maternal Mortality**' has been caused by using a wider definition that includes all deaths during pregnancy, thus also the bad effects of 'criminal' abortions in early pregnancy. The percentage of **Caesarean Sections** remains relatively low (±11,5%); the percentage of 'fresh stillbirth) has gone down slightly but is still too high to be acceptable. The more frequent and earlier use of the vacuum-extractor might contribute to this aim.
The attendance in all the services for detecting, counselling and treating patients infected by **Hiv/Aids** has risen. From those who opted for being tested (VCT) 9% appeared positive. The percentage within the group of pregnant women that consented in being tested was 3,6%.
The theatre has again been very busy with about the same number of operations as in 2010.

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 tract infection (UTI)
7. Asthma
8. Peptic Ulcer
9. Hypertension
10. Intestinal worms.

Top Five of causes of death in the Children Ward:

1. Malaria
2. Anaemia
3. Malnutrition
4. Pneumonia
5. Acute Diarrheal Disease (ADD)

Installations/buildings.

- Within the year a beautiful renovation and extension took place of the **OPD** and **Pharmacy store**. Several 'plans for the future' of 2010 were fulfilled e.g. a much enlarged **Records-Office and Archive**. Better and more examination rooms, enlarged waiting bays and the morning-meeting-room is now large enough for presentations.
- The construction of a new **Theatre building** from funds from CSSC that started in 2009 by a contractor from Dar es Salaam has been making some progress. The **HIV-Aids Clinic building** (**CTC)** has been completed very nicely. Unfortunately the rainwater from the very beautiful all-around gutters doesn't go anywhere. Rainwater collection had not been included in the plan of 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** had 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 **Incinerator** - on a safer location! - has been operating better after better handling procedures had been introduced and explained to the responsible workers.
- The **Solar system** worked very reliably and gave even some extra electricity in the afternoon to staff, especially during the long dry season. Several damaged or defective panels were replaced or repaired. But in the battery pack of 24 large batteries one battery has still to be replaced to be able to use the full capacity of the installation. It is on its way from Europe via Mombassa to Kalwande.

Finances

- By careful 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 of salaries 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. The hospital as a whole remains very dependent of funds from abroad.

Thanks to all!

- Many official visitors entered their names into the Visitors Book, among them the Archbishop Paul Ruzoka, the District Commissioner of Nzega and Mrs Florence Horombe, the DC of Tabora and the Member op Parliament Mr. John Paul Shibuda. Representatives of many organizations visited the Hospital like WHO, CSSC, NSSF, Tughe, EGPAF, the Red Cross and the Hellen Keller Foundation.
- 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. The continuous backing by 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 the owners of the hospital on Archdiocesan land and 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. A new main road is presently under construction. 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 rains are few 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 will soon (2012) be connected to the National Grid of TANESCO.
Communications have improved a lot over the past years with the arrival of mobile telecommunication in 2003 and 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. Tanzania has been one of the poorest countries in the world, but fast economic progress is made possible by its policial stability and by grand-scale gold-mining in combination with a tremendous rise in the price of gold on the world market. The GDP per capita is estimated at 700 US$ per annum. Industry only contributes 17,2% to the GDP and services 39,6%. Not only gold-mining is increasing for natural resources like tin, diamonds, gas, phosphate, zinc and gemstones play an important role. Agriculture is responsible for almost half of the GDP. Agricultural products are responsible for 85% of the country's export and it uses 80% of the workforce, although only about 4% of the land is arable. The distribution of incomes and services is still 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 severe 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.
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 occurs at home, unassisted by a health professional.
The public health activities in the MCH clinic of Ndala Hospital is supposed to at least cover 20.000 people in 2010, of which 950 children under 1 year and ± 4000 below 5 year . At any moment ± 950 women are 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 3,1% (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 ± 20.000 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 1100 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, rice, groundnuts, livestock, tobacco and honey.

4. Health Infrastructure and External Relations.

4.1 Health Infrastructure.

Ndala Hospital is a private hospital on the border of Nzega district. Our official referral hospital is Kitete Regional Referral Hospital in Tabora, about 70 km, but in reality many patients are referred from Kitete Hospital to Ndala instead. At an equal distance to the north is Nzega District Hospital, the base of the District Medical Officer and the National Public Health office About 55 kilometres away is Nkinga Mission Hospital, which has an Ophthalmologist and a Orthopedic unit to which orthopedic patients are referred. The main referral option is Bugando Medical Centre in Mwanza, about 330 km to the north. Because of postal restrictions in sending pathology specimens by post it has become very difficult to use the services of its pathology Department. Great distances and poor transport facilities mean that most acute problems need to be solved in Ndala hospital. Every two months another specialist from AMREF "Flying Doctors" visited Ndala Hospital. In 2011 a two teams from Belgium (Medicins Sans Vacances). From the USA came a surgeon, a physician, a gynaecologist and an orthopedic surgeon for periods of 2 weeks.

4.2 External Relations

4.2.1 The Archdiocese of Tabora.

The owner of Ndala Hospital is the Congregation of St. Charles Borromeo. It was built in 1963 on Archdiocesan land. 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). Approximately once every month a medical officer from Ndala visits Igogo to give support.
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 a 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's secretary Fr. Paul Chobo has been succeeded by Fr. Alex Nduwayo. 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 MOiC 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. The regional laboratory technician visits on a regular basis for supervision.
The Ministry of Health (MOH) is supervising regularly and all members of the Hospital Management Team are visited regularly 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. For unqualified workers Ndala hospital has chosen to follow government salary scales in order to reduce the high turnover of staff. Communication with the MOH in Dar es Salaam concerning all issues remains difficult unless visited personally.

4.2.4 Technical Assistance

In the AMREF 'Flying Doctor' program, 6 visits were made by the following specialists: urologist , ENT surgeon, gynaecologist, a physician and an orthopaedic surgeon, 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 Vakantie, AZV) for technical assistance. Dr. Yoichi Miyao, surgeon from Japan Overseas Christian Services (JOCS) assisted in the theatre. Two American surgical teams visited the hospital in July. Management assistance is given by a group of Dutch doctors who have been MOiC in Ndala Hospital in the early years. Three of them have been visiting the Hospital for periods of several weeks in 2011.

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).The NOLET Foundation has supported the hospital already for many years in a big way.

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 Episcopal Conference) is responsible for the duty free clearing of imported goods and donations from abroad. Communication with TEC's secretariat 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 and EGPAF on matters of HIV/AIDS is good.

5. Management.

The Catholic Archdiocese of Tabora owns the plot but the Sisters of Charity of St. Charles Borromeo, a congregation with the motherhouse in Maastricht in The Netherlands ("Zusters Onder de Bogen") are the owners of Ndala Hospital. 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 5 people, namely the previously mentioned members and their assistants. The Archdiocese and the Board of Governors did official appoint the new members. This situation is in accordance with the organogram

The Board of Governors (BoG) met twice in 2011. 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.

Mr. Thomas Madimilo is responsible for "human resource management" although several specific tasks are shared by members of the daily management team. 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 paid 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 extent. 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.

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 2011.

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 2011 seven "student-doctors" from the University of Groningen in the Netherlands worked in the hospital. Two students did research on very sick children and the results of their research are eagerly awaited.

7. Finances.

The administrative and accounts department is headed by the administrator. As always the administrative department faced several problems. 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 to 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 (e.g. via the "basket Fund") are insufficient for that purpose.

The following overview of the income and expenditure, comparing 2010 and 2011 - together with the specifications in the Appendix 6 - gives further insight in the situation. The income from patient fees has remained the same since 2009(?) but the "running cost" has increased very much. The contribution from the government increased with only 10 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, **but is clear that the patient fees have to be increased considerably!**

Income/Expenditure Overview (Tanz. shilling)		2008	2009	2010	**2011**
INCOME	Hospital	323.069.159	386.131.990	354.300.760	**381.647.938**
	Government	79.000.000	67.979.150	90.581.261	**101.827.898**
	Donations	58.481.753	60.365.000	68.008.300	**137.004.962**
	Study Sponsors	19.176.294	24.262.500	35.980.044	**8.722.500**
	Total	479.727.206	538.738.640	548.870.365	**629.203.298**
	+ BANK	11.895.627	3.462.500	28.189.686	**700.000**
TOTAL INCOME		491.622.833	542.201.140	577.060.051	**629.903.298**
EXPENDITURE	Medicines/New Office Block (from St. PIUS XII)	9.291.300	32.898.950	76.779.840	**61.801.150**
	TB ward etc. (From St. Sonnevanck)	5.055.600	10.576.000	11.890.755	**10.737.750**
	Study / Training / Up-grading (from different sources)	21.585,103	28.544.059	47.118.344	**43.986.100**
	Basket Fund / MMAM	3.555.235	76.537.546	42.207.234	**63.768.940**
	Total	71.484.353	148.556.555	177.996.173	**180.293.940**
	RUNNING Cost (ad-ministrative)	37.850.842	421.460.364	387.707.337	**445.235.850**
TOTAL EXPEN-DITURE		449.992.773	570.016.919	565.703.510	**620.810.040**
BALANCE	INCOME Hospital	323.069.159	386.131.990	354.300.760	**381.647.938**
(versus running cost)	- Running Cost	378.508.420	421.460.364	387.707.173	**445.253.850**
	DEFICIT	-55.439.261	-35.328.374	-33.406.413	**63.605.912**
BALANCE	INCOME Hospital	323.069.159	386.131.990	354.300.760	**381.647.938**
(versus total exp.)	- Total Expenditure	449.992.773	570.016.919	565.703.510	**620.810.040**
	DEFICIT	-126.923.614	-183.884.929	-211.402.450	**239.162.102**
addendum					
NSSF sharing	income	588.672	3.117.870	2.652.000	**2.820.000**
EGPAF	income	2.638.850	-	3.567.830	**945.473**
	+ income	3.227.522	3.117.870	6.219.830	**3.765.473**
Treatment Employees	cost	4.992.155	3.307.650	40.000	**50.000**
Unpaid patient fees	cost	695.150	440.600	251.400	**375.700**
	+ expenditure	5.687.305	3.748.250	291.400	**425.000**

8. Hospital Activities.

8.1 Curative Services.

8.1.1 General Out Patient department (OPD)

OPD	2011	2010	2009	2008	2007	2006	2005
Total new cases OPD	**8418**	9.633	10.721	7.475	6.155	9.560	11.928
Re-attendances	**14045**	17.036	11.961	10.342	10.782	10.258	13.423
Re-attendances for dressing	**2559**	4.557	2.927	3.935	5.668	5.717	6.633
Referrals to other health facilities	?	?	?	?	-		
Total OPD patients*	**25022**	31.226	25.609	21.751	22.613	25.535	31.984
Special Clinics							
Registered TB/leprosy clinic	**149/20**	156	148	165	231	270	252
Registered Epilepsy/Mental Clinic	**201**	274	954	937	953	881	843
Attendance Eye-Clinic	**414**	391	287	333	281	203	274
Attendance Dental Clinic	**124**	126	144	125	109	96	114
(Total)	**908**	947	(1533)	(1560)	(1574)		

8.1.1.1 TB and Leprosy Clinic.

The cure rate in 2011 is much below the WHO target of 75%. The cure rate fluctuates over the years and is influenced mostly by the number of defaulters. It is generally unknown whether 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 on 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. The number of new Leprosy cases remains small.

NB. After recurring severe shortages in the supply of TB drugs the national TB coordinator visited Ndala Hospital in October. There after no shortages did occur.

Tuberculosis	**2011**	2010	2009	2008	2007	2006
Patients on 1-1	**51**	43	66	36	60	70
New Patients	**80**	88	72	111	130	88
Re-treatment	**1**	2	7	5	13	3
Transferred-in	**5**	3	3	3	4	6
Transf.-out	**2**	0	0	2	2	26
Total Registered	**139**	136	148	157	209	193
Sputum-positive	**70 (50%)**	79 (58%)	64 (43%)	69(44,5%)	82(39,2%)	102 (52.8%)
Sputum-negat.	**24 (17%)**	22 (16%)	40 (27%)	46(29,7%)	30(14,3%)	24 (12.4%)
Extra-pulmon.	**45 (33%)**	35 (26%)	44 (30%)	40(25,8%)	97(46.4%)	67 (34.7%)
Tested for HIV (positive)	**129 (52)**	127 (43)	117 (42!)	81 (32)	92(32)	14 (2)
Treatm. Results						
Completed	**39**	37	35	67	65	78
Cured(cure-rate)*	**47**	42 (53%)	48 (75%)	45 (65%)	55(67%)	41(50%)
Failed	**1**	0	0	0	0	3
Transferred	**2**	12	2	2	-	26
Died	**11**	3	1	3	2	11
Defaulted	**5**	10	23	17	7	9

*It is unclear how the 'cure rate' has been calculated in the past. Therefore no figure is given anymore.

Leprosy	**2011**	2010	2009	2008	2007	2006
Patients on treatm. per 01-01	**14**	6	4	6	16	5
New Patients	**6**	14	4	4	2	16
Re-treatment Cases	**0**	2	0	0	4	3
Patients transferred-in	**0**	0	0	0	0	0
Patients Transferred-out	**0**	0	0	0	0	4
Total Registered	**20**	20	**8**	**10**	**22**	**28**
Pauci-bacillary	**0**	?	0	0	0	0
Multi-bacillary	**20**	?	8	10	22	28
Treatment Results						
Completed	**15**	6	2	6	4	5
Failed	**0**	0	0	0	0	0
Transferred	**0**	0	0	0	0	4
Died	**0**	0	0	0	0	0
Defaulted	**0**	1	0	0	1	7
Patients on treatm. per 31-12	**5**	14	6	4		

8.1.1.3 Epilepsy and Psychiatry Clinic.
The special clinic for epileptic and psychiatric patients is open every Wednesday and is run by one psychiatric nurse. The treatment for the patients is free and subsidized by the Tabora Foundation:

Epi-lepsy/Mental Clinic 2011	Epilepsy	Psychiatric	on treat-ment
Male	94	4	98
Female	107	5	112
Total	201	9	210

8.1.1.4 Eye Clinic.
An ophthalmic nurse runs the eye clinic in the Radiology Department. This clinic should be housed better and the equipment is old and needs replacement and modernization. Some better equipment from MEDIC in the Netherlands has recently arrived. 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	2011	2010	2009	2008	2007
Conjunctivitis	**117**	117	66	67	67
Cataract	**96**	32	40	65	43
Trauma	**34**	42	40	30	23
Corneal ulcers	**14**	9	16	20	10
Cornea scars	**11**	7	5		
Foreign body	**10**	15	17	24	17
Refractive errors	**28**	45	7	14	10
Presbyopia	**29**	28	12	14	29
Glaucoma	**20**	18	21	18	24
Retina diseases	**3**	4	2	7	7
Eye lid	**1**	-	8	7	-
Xerophtalmia	**2**	8	7	5	10
Trachoma	**5**	3	6	2	-
Herpes	**2**	2	0	2	
Uveitis	**11**	9	6		
Others	**31**	48	31	32	22
No pathology	**2**	4	3	10	8
Total	**414**	391	287	335	281

8.1.1.5 Dental Clinic.
Presently only tooth extractions are done. A total of 124 (70% women) extractions were done (in 2010: 126), 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 paediatric ward and a maternity ward. There are semi-private rooms in each ward and there is a private wing with a few rooms. The Children Ward has an extension of 10 beds that has been completed and furnished in 2005. These beds are only used when the ordinary ward becomes overcrowded. The Children ward has five isolation rooms in which patients with meningitis and communicable diseases (measles !) are admitted. Male and female wards do not have separate isolation rooms. The TB ward has not yet been opened.

In-Patients	2011	2010	2009	2008	2007	2006	2005	2004
Total beds	**128**	128	128	128	128	128	128	131
Admissions for delivery (+BBA)	**2129**	2228	2218	1891	1914	1758	1727	1635
General admissions	**5255**	5425	6959	6434	6663	6570	6283	6403
Total Admissions	**7384**	7653	9177	8325	8577	8328	8010	8038
Average Length of Stay (ALS)	*	*			4,3	4,9	5,3	6.4
Bed Occupancy Rate (BOR)	*	*			62,7	69,5	71,6	79%
Number of hospital deaths	**373**	297	443	444	315	398	422	507
Death rate (/1000 general admissions)	**70**	55	63	69	47	60,6	67,2	79,2

* In 2011 an attempt has been made to monthly keep track of the total number of 'admission days' in every ward in order to calculate the ALS and BOR. Only in the Children Ward we got reliable results. See below.

Wards 2010	Beds	Admissions 2011	ALS	BOR	Death cases 2011	Death rate /1000	Adm. 2010	Death cases abs.	Death rate /1000 adm
Male Ward	**28**	**841**			**81**	**96‰**	1228	73	59‰
Female Ward	**28**	**1639**			**101**	**62‰**	1597	67	42‰
Children Ward	**45**	**2404**	**± 4 days**	**50-60%**	**164**	**68‰**	2241*	140	62‰
Obstetrics/Maternity	**20**	**314****			**16**	***	359**	11	***
Prematures (below 2000 g)	**4**	**56**			**10**	unreliable	{61}	18	±30%
Private Ward	**3**	**1**			**-**	-	6	0	
Total (officially)	**128**	**5255**			**372**	**70‰**	5425	309	40‰

* The temporary increase in admissions in the Children Ward in 2008 and 2009 (3536 and 3855) is not yet satisfactorily explained. The total number of admissions is now back at the level of 2007 and earlier.

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

*** 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. The number of maternal deaths has been stable throughout the years.

General Overview: Obstetric department	**2011**	2010	2009	2008	2007	2006	2005
Hospital deliveries	**2107**	2195	2209	1873	1877	1736	1709
Delivered before arrival (BBA)	**22**	33	9	18	37	22	18
Total deliveries	**2129**	2228	2218	1891	1914	1758	1727
Abnormal deliveries	**361**	318	267	243	277	316	259 (14,9%)
Caesarean sections	**246*** 11.6%)**	256 (11,7%)	215 (10%)	203 (10,9%)	193 (10,2%)	191 (11%)	174 (10%)
Maternal deaths	**14****	13**	5 (+5?)	6	5	4	5

Deliveries	**2011**	2010	2009	**Complications 2011:**	
Spontaneous Vertex Delivery	**1746**	1910	1936	**Ruptured uterus**	**9**
Caesarean Section	**246**	256 (11,2%)	215	**Placenta previa / APH**	**11**
Breech delivery	**69**	57	56	**Post partem hemorrhage (PPH)**	**14**
Vacuum extraction	**46**	15	11	**Abruptio of placenta**	**1**
Total:	**2107**	2228	2218	**(Pre-)Eclampsia***	**± 50**
Multiple pregnancies (twins, triplets)	**73 x 2 0 x 3**	100 x 2 3 x 3	62 x 2 1 x 3	**Total:**	**± 85**

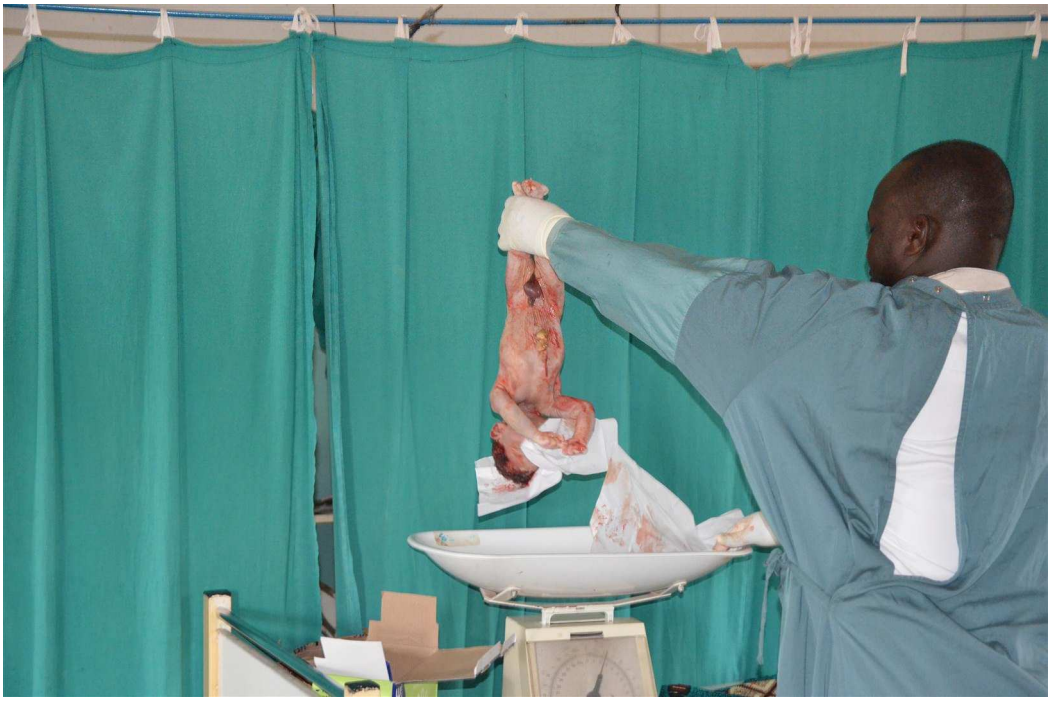
* From intern research it appeared that (pre)eclampsia is very much underreported in the ward register.

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

*** There is a discrepancy between the number of Caesarean Sections in the record of this department and the records of the theatre (227). It could be that some uterus extirpations after delivery were not recorded under CS; but the difference of 19 seems to be too large to cover for this explanation.

Births	2011	2010	2009	2008	2007	2006	2005	2004
In hospital	**2107**	2295	2275	1997	1877	1815	1798	1665
Before arrival	**22**	33	9	19	37	22	18	22
Total babies	**2195**	2328	2284	2016	1914	1837	1816	1687
Born alive	**1998**	2107	2149	1899	1809	1729	1717	1601
Fresh still-birth (per 1000! new-borns)*	74 (33‰)	73 (31‰)	77 (34‰)	76 (38‰)	51 (28‰)	48(26‰)	40(22‰)	(25‰)
Macerated stillbirths*	47	48	58	41	48	38	41	21
Multiple pregnancies (neonates)**	73 x 2	100 x 2 3 x 3	64x2 1 x 3	51x2 1 x 3		76	101	75

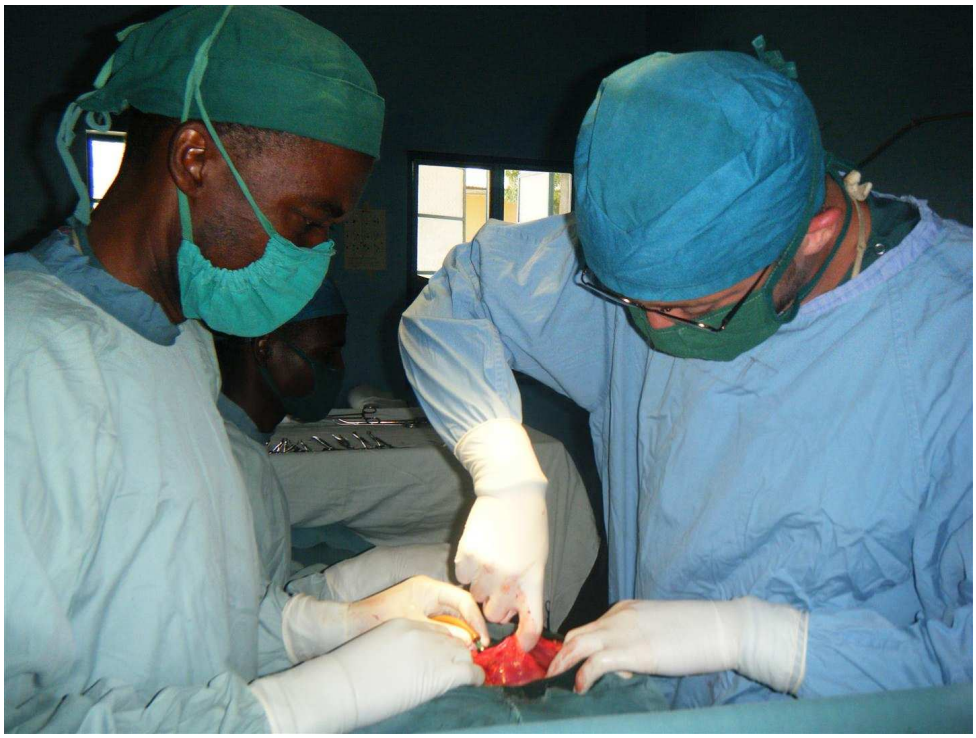
* some underreporting in the number of stillbirths is probable.



Maternal Death 2011

Adm.	Age	Gr.	P.	Diagnosis	Date	Cause of death	Type	Things to improve	Comments
31-12-11	39	7	5	Shock in pre-eclamptic patient	01-01	Pulmonary oedema?	dir.	Admit pregnant women > 28 weeks in LW, hypertension not recognized in MCH and BP not measured in LW.	Was admitted in FW, delevired small FSB in LW, then returned and died in FW. Unrecognized PIH.
1-1-12	36	5	4	Sudden death during second stage	02-01	Aorta dissection? Pulmonary emboli?	?		Para 5. Complained of backache during second stage and then collapsed. During VE died.
4-11	18	2	1	Septic shock	04-01	Septic shock	?	Recognize shock earlier, first stabilize then do surgery, midwives should call MO in case of infected placenta	G2P1. 24 wks. Came with fever and loss of apetite. In the ward cord prolapse. Induced abortion? After expelling smelly dead child went into septic shock.
13-2	18	1	0	Fever and convulsions post-partum	14-02	Septicaemia?	?	Start quinine directly?	BP normal, high fever, BS negative. Was started on X-pen and gentamicin
6-4	31	6	5	Eclampsia	07-04	Complication of eclampsia (brain hemorrhage, oedema)	dir.		1 previous scar, FH 20, decided to give misoprostol, but died before
25-9	22	4	2	Eclampsia	26-09	Shock after CS	dir.	Try to avoid CS in eclamptic patients, monitor post-op closely and warn doctor	CS done for fetal distress at 4cm dilatation, child was FSB, mother died 6hrs later
13-10	20	1	0	Eclampsia	14-10	Complication of eclampsia?	dir.	When diagnosing eclampsia at OPD admit and if possible induce asap	Delivered day before, was stable in morning, talking, in evening complained not feeling well, BP 160/130, then died
2-12	42	4	3	Eclampsia and HELPP	04-12	Liver- and kidneyfailure	dir.	Induce asap, don't overload patient	
2-12	35	6	5	Eclampsia, anemia, pneumonia	09-12	Pneumonia, anemia	indir.	Treat anemia in eclamptic patient earlier, give lasix if possible overload	
3-12	28	4	3	Coma post-partum	03-12	Unknown, sepsis?	?	Check RBG faster	
3-12	20	2	1	Eclampsia and retained placenta/PPH	03-12	Anemia	dir.	Tell doctor early about high BP, act more quick to prevent PPH/retained placenta in eclamptic patient, anestesist and blood should arrive quicker.	
6-12	28	4	3	Heart failure (dilated cardiomyopathy?)	06-12	Heart failure	indir.	Patient should go when referred. Don't give furosemide when BP is low	Was admitted month earlier with heart failure. Induced, delivered, then referred to Mwanza, but did not go.
6-12	25	4	3	Anemia post-partum	06-12	Anemia	dir.		delivered 28-11 in hospital, without much blood loss. 26-10 Hb 9.8. Lives nearby.

NB. Despite focusing on this type of mortality during "maternal mortality audits" with doctors and midwives and discussions with visiting gynecologists in 2011 we failed to reduce the number of maternal deaths. With complications of pregnancy presenting from a big catchment area some problems prove too difficult to handle in our hospital, despite big efforts of the staff. When analyzing this year's deaths some seem an unlucky combination of small adverse advents. Also eclampsia, especially in combination with other complications of childbirth, remains a danger to the women.



8.1.4 Theatre.

8.1.4.1 General overview Surgery:

THEATRE:	2011	2010	2009	2008	2007	2006	2005
Major proced. (emerg.)	**686 (?)**	697 (38.5%)	634 (?)	670 (?)	666 (37%)	751 (46%)	723 (42%)
Minor proce-dures	**2089**	2728	1694	1427	1122	998	1865
Anaesthesia general/local	**1504 747 / 757**	1728 893 / 835	1595 756/839	1606 790/816	1282 659/623	1452	1737

8.1.4.2 Major procedures:

General		Genito-Urinary	
Release bowel obstruction	**12**	Prostatectomy transvesical	**10**
Bowel resection and anastomosis	**10**	Prostatectomy transurethral	**15**
Colostomy (closure)	**2**	Nefrectomy	**-**
Adhesiolysis	**11**	Urethral / bladder stones removed	**16**
Cleaning abdomen (expl.&drainage)	**15**	Repair bladder lesion	**1**
Appendectomy	**33**	Orchidectomy (uni-/bilateral)	**15**
Expl. laparotomy non acute (biopsie)	**-**	Hydrocelectomy (uni-/bilateral)	**20**
Gastric outlet obstruction release	**4**	Urethro-cystoscopy (with procedure)	**-**
Cholecystectomy	**-**	Removal Bladder/Urethral Stones	**6**
Inguinal hernia (uni-/bilateral)	**60**	Re-implantation Urethra	**-**
Femoral hernia	**4**	**Obstetrical/Gynaecological**	
Other hernia	**-**	Caesarean Section (CS)	**135**
Burst abdomen, tension sutures	**12**	CS (3rd) and Bilateral Tuba Ligation	**60**
Splenectomy	**1**	CS due to foetal distress	**10**
Volvulus	**20**	CS due to placenta praevia	**10**
Mastectomy/Lumpectomy	**1**	CS due to arm /cord prolaps	**12**
Haemorrhoidectomy	**3**	Colporaphy	**3**
Fistulectomy	**2**	Bilateral Tuba Ligation	**41**
Abscess I and D	**12**	Abd.hysterectomy +or- adnexae	**20**
Excision tumour	**10**	Subtotal hysterectomy	**5**
Extensive wounds	**6**	Repair 3rd degree tear	**-**
Open fracture: cleaning and reposition	**-**	Removal ectopic pregnancy	**21**
Removal foreign body	**-**	Ovariectomy and/or Salpingectomy /myomectomy	**14**
Skin grafting	**4**	Pelvic abscess/pyosalpinx	**15**
Necrotomy	**-**	Repair vesico/recto vaginal fistula	**-**
Anal atresia	**-**	**Other Specialities**	
Stump repair	**2**	ENT: nasal polyp/adenoid hypertrophy	**3**
Sequestrectomy/scooping	**-**	Enucleating Eye	**=**
Re-laparotomy (complications)		Repair cleft lip/palate	**11**
Contracture release	**4**	Tonsillectomy/adenoidectomy	**4**
Other	**-**	Other Plastic Surgery	**-**
Amputation of limp	**1**	Clubfeet surgery	**-**
		Thyreoidectomy	**10**
		Other Orthopaedic, foot correction	**-**

8.1.4.3 Minor Procedures:

General		Orthopedic	
Abscess or septic arthritis I and D	**67**	Reduction dislocated joint/fracture	**70**
Exploration/Aspiration	**10**	Gallows traction	**-**
Cut wound, suturing	**115**	Femur, pin traction	**20**
Contracture release	**-**	Amputation finger/toe	**4**
Woundtoilet/necrotomy (incl. bites)	**58**	Circular POP	**115**
Removal of stitches	**295**	Back slab POP	**125**
Foreign body removal (eye, ear, nose, throat)	**25**	Osteomyelitis: drilling, Sequestrectomy, scooping	**2**
Crep. bandaging	**15**	Fistelectomy	**-**
Excision tumor/ulcer	**29**	Arm sling	**47**
Tongue tie	**8**	Clubfoot	**23**
Biopsy	**4**	Removal POP	**209**
Aspiration abdomen / Ascites tap.	**21**	**Obstetrical / Gynaecological**	
Aspiration chest	**3**	Speculum examination	**90**
Insertion thorax drain	**-**	Evacuation (incomplete abortion, molar)	**170**
Aspiration other	**18**	Dilatation and curettage (diagnostic, dys-functional bleeding)	**17**
Rectal examination/proctoscopy/fistula	**-**	Retained placenta (manual removal)	**5**
Anal fissure, dilatation of anus	**2**	Cervical and perinea tear repair	**10**
Reduction rectal prolapse	**-**	Opening imperforate hymen/Labia separation	**-**
Ear syringing/otoscopy	**24**	**Genitourinary**	
Eye proc. (cornea sutures, evisceration etc.)	**5**	Bugination	**3**
		Catheterization transurethral (excl. ward)	**90**
Other procedures	**5**	Catheterization supra-pubic	**15**
Wound dressing changes	**330**	Orchidectomy	**-**
		Circumcision (traditional & medical)	**40**
		Circumcision phimosis/dorsal slit	**-**

8.1.4.4 Anaesthesia:
Three Anaesthetic nurses are responsible for the anaesthesia and assist in resuscitation throughout the hospital. In the major theatre spinal anaesthesia 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 the minor theatre ketamine is used.

Anaesthesia 2011	**Major**				**Minor**				
Type	**Adult**		**Child**		**Adult**		**Child**		
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	
Ether + intubation	3	2							General Anaesthesia
Halothane + intubation	35	62	7	3					
Ketamine (with Diazepam)	62	142	9	3	114	190	54	61	
Diazepam									Local Anaesthesia
Pethidine					5	13			
Thiopental									
Spinal anaesthesia: Lidocaine in Dextrose	83	230							
Spinal anaesthesia: Bupivacaine	12	10							
Spinal anaesthesia > Lidocaine + Ketamine	1	16							
Saddle block		1							
Local anaesthesia Lidocaine plain	2	5			100	150	60	50	
Local anaesthesia Lidocaine + Adrenalin					9	10			
Biers Block									
	198	468	16	6	228	363	114	111	
Total: 1504 (2010:1507)	**666**		**22**		**591**		**225**		

8.2 Preventive and Health-Promotion activities.

8.2.1 The Primary Health Care department.

All RCH (MCH) activities, in the hospital as well as the mobile clinics, are considered to be primary health care (PHC). The same can be said of 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 and gives charitable support to approximately 200 poor households.

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. 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 two 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 incidentally 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.
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 2011: Dr. Herman Drewes, Dr. Gerard Haverkamp, Dr. Max Slenter and Dr. & Mrs Joosten were in the hospital for periods of more than one month.

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

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 responsible 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 20.000 people; 950 of them are below one year and therefore 950 are expected to be pregnant women of childbearing age (4200). 3800 of the total population are below 5 years.

Analysis of the vaccinations given in 2011 shows BCG a vaccination coverage of only 40%; the coverage for measles is only 66%. the coverage for a full series of 3 DPT vaccinations of 73% and a coverage of 3x Poliomyelitis vaccine of 47%. **Indeed a large epidemic of measles occurred in the last half of 2011 with deaths (even 1 adult) as the result. The first epidemic in 20 years!**

8.2.2.1 Under-five and Ante Natal Clinic 2011

MCH / RCH Under-five care antenatal care	2011		2010	2009	2008	2007	2006
	1st attendance	re-attend.					
In Ndala hospital:			16.391	13.095	12.059	14.049	13.404
below 12 months	**1.703**	**11.025**	13.612	10230	9.036	10.730	10.152
above 12 months	**0**	**1260**	2.779	2.865	3.023	3.319	3.252
Mobile Clinic: (Kigandu & Mabisilo)							
below 12 months	**179**	**987**	1106	992	1.115		
above 12 months	**82**	**365**		195	406		
Total under five visits:	**15.601**		17.908	14.282	13.580	14.049	13.404
Malnutrition seen in under fives*							
BWT 60-80th percentile	**9,8%**		13,2%	9,8%	1,2%??	4,6%	6,2%
BWT below 60th percentile	**9%**		0.2%?	0,8%?	0,2%??	0,52%	0,5%
Antenatal Care	1st attendance	re-attend.					
In Ndala hospital			9.269	8.483	7.121	6.877	6.780
Before 20 weeks pregnancy	**475**	**5584**					
After 20 weeks of pregnancy	**3129**						
Mobile Clinic			267	281	417	-	
Before 20 weeks pregnancy	**27**	**237**					
After 20 weeks of pregnancy	**142**						
Total antenatal visits	**9594**		9536	9.072	7.538	6.877	6.780
Risk factors at first* antenatal visit:							
below 16 yrs	**846 (22,4%)**		12,8%	10,4%	11%		
above 35 yrs	**328 (8,6%)**		7,3%	6,1%	7,1%		
multipara (gravida 5 or more)	**915 (24,2%)**		21,9%	18,3%	15,9%		
hypertension (>140/90)	**59 (1,5%)**		2,9%	2,8%	0,2%??		
anaemia (< 60%)	**114 (3,0%)**		3,8%	1,9%	5,9%??		
TOTAL under five + antenatal visits	**25.195**		27.444	23.354	21.118	20.926	20.184
Number of outstations (Kigandu & Mabisilo)	**2**		2	2	-	-	-
total number of visits	**12**		12	12	-	-	-

* Percentages are taken from the 1st attendees only!

8.2.2.2 Vaccinations

Vaccinations			2011	2010	2009	2008	2007	2006
TETANUS Toxoid (Antenatal)								
	I		**2.146**	2.026	2.561	1.968	1.794	1,778
	II		**1.169**	1.180	1.425	1.096	926	1,033
	III		**278**	163	188	226	280	157
	IV		**163**	104	111	153	151	148
	V		**124**	48	88	105	95	96
BCG								
	at birth		**1.054**	1.358	981	997	1.252	1.075
	at a later time		**954**	754	1.226	1.308	821	1.101
POLIO								
	at birth		**1.254**	1.370	1.132	1.204	1.467	1.251
	I		**1.437**	1,666	1.861	1.879	1.502	1.406
	II		**1.211**	1.839	1.741	1.828	1.385	1.317
	III		**1.051**	1.429	1.212	1.314	924	1000
DTP								
	I		**1.833**	1.577	1.739	1.789	1.223	1430
	II		**1.723**	1.323	1.551	1.486	1.063	1482
	III		**1.551**	1.090	1.268	1.133	854	1030
Measles			**1.400**	1.014	1.381	1.088	932	881
Total vaccinations			**17.348**	16.941	18.465	17.574	14.669	15.185
	vaccinations of children* allocated to Ndala hospital		**41%**	8848	9090	7632	8.537	7.110
	vaccinations of children* officially allocated elsewhere		**59%**	8093 (48%)	9375 (51%)	53%	46%	53%
Vitamin A supplement			**1400**	708	-			
Family Planning Clinic								
	New attendees		**138**	155	105			
	Total visits		**797**	540	450	269	515	

* The tetanus vaccinations of pregnant women could not be included in this calculation.

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 Counselling and Testing (VCT).

One important way to increase awareness and promote prevention is through free Voluntary Counselling and Testing (V.C.T.). In 2005 the hospital established a full time VCT office. There is a stable shift from provider initiated counselling (PICT) towards patient initiated counselling. 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 (± 12.200 people) 2.9% males and 4,2% females had been tested positive for HIV; average: ± 3.6% of the random population. A completely new Clinic has been built in the hospital compound behind the general OPD. The beautiful building will be officially opened in 2012.

VCT	Male clients counselled	Female clients counselled	Total	HIV +		HIV -	
				M	F	M	F
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
2011	**812**	**941**	**1753**	**64 (7,8%)**	**95 (10,1%)**	**748**	**846**
				159 (9%)		(0 tests were inconclusive)	

VCT Age group:	< 14 y.		15 – 24 y.		25 - 34		35 - 49		> 50 y.		2011 (2010)
gender	M	F	M	F	M	F	M	F	M	F	Total
counseled & tested	20	25	230	362	222	310	190	201	150	68	1753 - (2215)
positive HIV	3	4	8	26	26	31	15	24	12	10	159 (9%)

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 counselling 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 counselling 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. Counselling is ongoing.

At present there are two clinicians, three nurses, two counsellors, one laboratory assistant and one home-based-care nurse trained to work in the CTC. A new building, donated by the American People, was constructed and started being used since June 2011.

CTC Age group	**< 15 y**		**15-24 y**		**25->50 y**		**2011** (2010)
gender distr.	M	F	M	F	M	F	**Total**
Number enrolled patients	**92**	**87**	**25**	**247**	**816**	**1029**	**2297** (1967)
Number patients on ART	**29**	**45**	**8**	**39**	**305**	**417**	**975(42,4%)** (843 (42,8%))

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

Chron. sick 2011	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Total** (2010)
Visits	268	313	283	369	333	325	217	338	316	293	275	311	**3641** (2702)
Hiv/ Aids	192	233	211	261	223	216	143	243	236	216	214	203	**2591** (1761)

Twenty-two 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.

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 counselling. 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 has gone up again. Of those tested, (71 van 2283 tested in 2011) 3,1% is HIV positive, which might be an acceptable indication of the HIV/AIDS prevalence in our catchment area. This is lower than the regional average. 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 counselling - 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	2007	2008	2009	2010	**2011**
Pregnant mothers counselled	3314	3422	4189	4527	**3592**
Pregnant mothers tested (accepted %)	2616 (79%)	2644 (77%)	1946 (46,5%)	2272 (50,2%)	**2283(63,5%)**
Total mothers HIV positive (%)	114 (4,3%)	88 (3,33%)	69 (3,54%)	83 (3,7%)	**71 (3,1%)**
Mothers received NVP	114 (100%)	88(100%)	??	50(70%)	**38(53,5%)**
Babies received NVP	35	30	??	35 (42%)	**25 (35%)**
Babies coming for follow up	72	46	??	75	**68**

8.3 Supporting Services

8.3.1 Laboratory.

	2011	Total	Positive		Total	Positive
Parasitology				**Hematology**		
Blood slide (thick droplet)		**10113**		Hb in g/dl (below 7 g/dl = "pos.")	**11800**	**2348**
	Malaria		**4106**	White Blood Cell count	**370**	
	Borrelia		**0**	WBC differentiation	**342**	
Stool		**14141**		Platelets (below 40.000/mm)	**-**	
	Hookworm		**176**	Bleeding time	**-**	
	Ascaris		**0**	Red Blood Cell Morphology	**12**	
	Giardia Lamblia		**0**	ESR	**560**	
	Entamoeba Histolytica		**2**	Sickle Cell Test	**136**	**74**
	Strongyloides Stercolaria		**0**			
	Schistosoma Mansoni		**2**	**Biochemical tests**		
				SGOT (liver function test)	**69**	**7**
Urine		**2208**		Cholesterol	**-**	**-**
	Schistosoma Haematobium		**6**	Bilirubin (total)	**24**	**6**
	Trichomonas Vaginalis		**5**	Glucose blood (>10 mmol/l)	**1208**	**469**
	Granular casts		**26**	Glucose urine (dipstick)	**34**	**7**
				Albumen urine (dipstick)	**209**	**68**
				Pregnancy test urine	**296**	**126**
Bacteriology						
Ziehl-Neelsen colorization for AFB		**250**		**Other**		
	Sputum (Tuberculosis)	**243**	**44**	Sperm analysis	**6**	
	Skin smear (Leprosy)	**7**	**0**	Analysis other body fluids	**31**	
Gram stain				**Bloodgrouping&donation**		
Cervix/urethral smear		**15**		Blood grouping	**1207**	
	Gonococci		**4**	Number of units transfused	**837**	
	Candida Albicans		**4**	children	**296**	
	T. Vaginalis		**-**	adults	**541**	
Liquor / CSF		**238**				
	Meningococci		**3**	Cytology Burkitt's lymphoma	**-**	
	Pneumococci		**16**			
	Haemophilus influenzae		**14**	Serology		
	Cryptococci		**0**	PRP (Syphilis)	**239**	**31**
	Total bacterial meningitis		**41**	**TOTAL TESTS**	**44595**	
PMTCT (pregnant women)		**2283**	**71 (3.1%)**	**VCT** (Voluntary Counselling &Treatment)	**1753**	**159 (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 Irri-gation	Dextrose 50%	Other	TOTAL
2011	**bottles**	**4504**	**2359**	**7054**	**189 gallon**	**1220x 10cc**	**-**	
	litres	**2318**	**1175,5**	**3557**	**945**	**12**	**-**	**± 8000 ltr**
2010	bottles	?		?	1196 bottles			4394
	litres		3045 litres		5980 litres	15 litres		9040

8.3.3 Radiology

X-Rays	2011	2010*	2009	2008	2007	2006
Chest	**341**	136	310	339	239	289
Lower / Upper extremities	**361**	204	399	446	387	445
Skull	**19**	7	9	25	7	13
Shoulder	**19**	11	11	40	34	29
Pelvis and hip	**53**	19	53	98	68	75
Vertebral Column	**13**	11	15	42	17	38
Plain Abdomen *	**55**	11	7	3	12	19
Barium meal	**-**	-	-	-	-	0
Barium Swallow	**-**	-	-	-	-	4
Hystero-Salpingography	**-**		-	-	-	3
Intravenous Urography	**-**	-	-	-	-	1
Ureterogram	**-**	-	-	-	3	
Others	**-**	1	-	-	-	7
Total	**861**	400	804	993	767	923
Films used	**922**	516	1003	1046	789	

Ultrasound scans:						
	2011	2010	2009	2008	2007	2006
Obstetrical	**106**	78	142	110	68	196
Gynaecological (incl. ectopic/abortion)	**206**	160	202	127	111	224
Abdominal (liver, spleen, gallbladder, bladder,)	**188**	152	185	83	98	245
Urologic	**32**	21	40	36	33	33
Heart	**6**	1	3	-	3	3
Other	**1**	2	-	-	2	6
Total male / female	**539 104/435**	414 65/349	572 77/495	356 58/298	299	707

* The batteries that boost the power of the Philips X-Ray equipment are again a problem, preventing some procedures like 'plain abdomen' to give proper results. These batteries have been replaced already some years ago. It would be worthwhile to inquire at Philips DSM whether the equipment could not be connected directly to the mains instead of via the battery pack.

8.3.4 Administration

The Administrator, her assistant the Hospital Secretary, 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. Most of the work is still done manually although financial reports are now made on the computer.

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. 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 records office behind the reception has been largely enlarged as part of the renovation of the whole Out-patient building.

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. 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 (19.00 – 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 Toyota Landcruisers with a hard top and one Landrover pick-up, the latter mostly used for local transports of goods. Of the two Toyota's, 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.

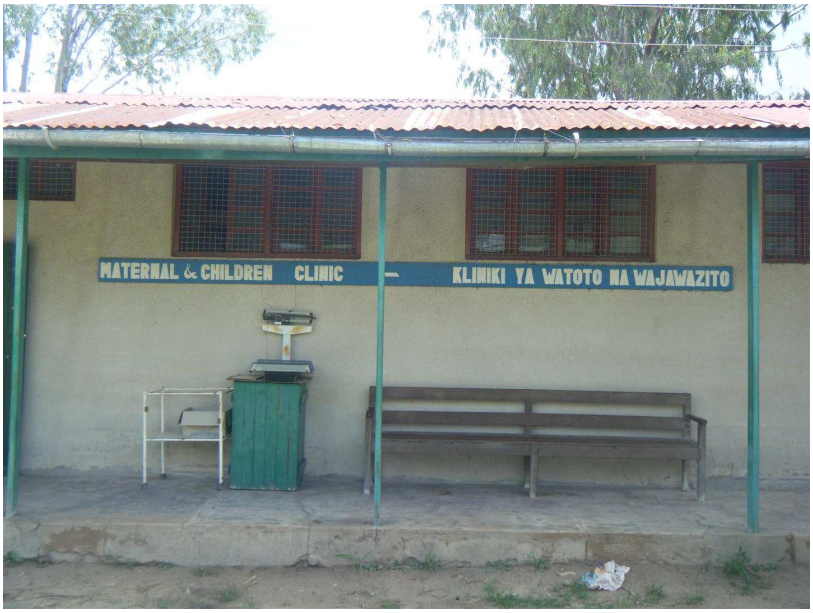
The hospital employs three drivers who are also working in the Technical Department.

8.3.4.3 Domestic Department

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

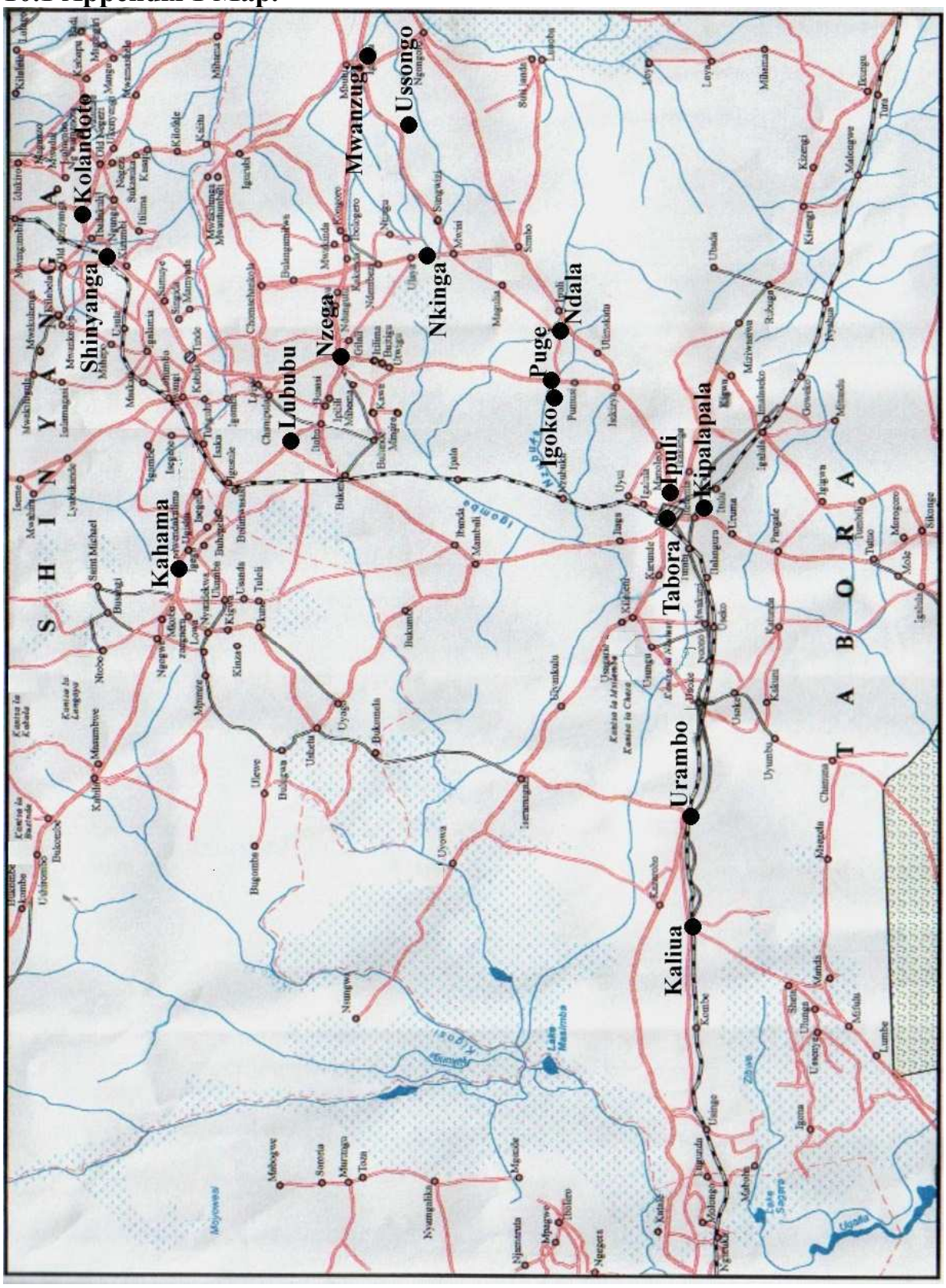
9. Plans for the future.

- To prepare celebrating **"NDALA HOSPITAL 50 YEARS !!!**
- To renovate the RCH building
- To improve the general care of patients.
- To improve the rainwater collection systems in all parts of the hospital by regular cleaning and maintenance of gutters and piping. > CONT. (e.g. cistern connected to the roof of the new CTC building.)
- To improve the secondary working conditions of the workers in order to retain good workers by:
    1. increasing loan facilities for workers. > CONT.
    2. rehabilitating and improving staff houses. > CONT.
    3. supporting secondary education of children of staff. STARTED in 2009 > CONT.
    4. connecting staff houses to the national grid (TANESCO)
- To further strengthen the financial administration and management. CONT.
- To recruit more qualified staff. CONT.
- To make the X-Ray Equipment fully usable again.
- A new Ultrasound machine.
- To make optimal use of the solar system. (to replace one battery) CONT.
- 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. (e.g. by constructing a placenta pit/biogaz producing unit)



10. Appendix.

10.1 Appendix 1 Map.



10.2 Appendix 2 Management.

10.2.1 Members of the Board of Governors in December 2011

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. Nicolas Bulabuza	Member	Parish Priest Ndala
Regional Medical Officer	Member	Tabora Region RMO
District Medical Officer	Member	Nzega District DMO
Rev. Fr. Alex Nduwayo	Member	Secretary Diocesan Medial Board
Mr. Festo Ndonde	Member	Caritas Tabora
Sr. Dr. Marie José Voeten CB	Member	Acting MOiC Sengerema Hospital
Re. Sr. Reni Ngadi	attendee	Hospital Administrator
Dr. Joseph Lugumila AMOic	attendee	Medical Officer in Charge Nodal
Mr. Thomas Madimilo	secretary/ attendee	Hospital Secretary

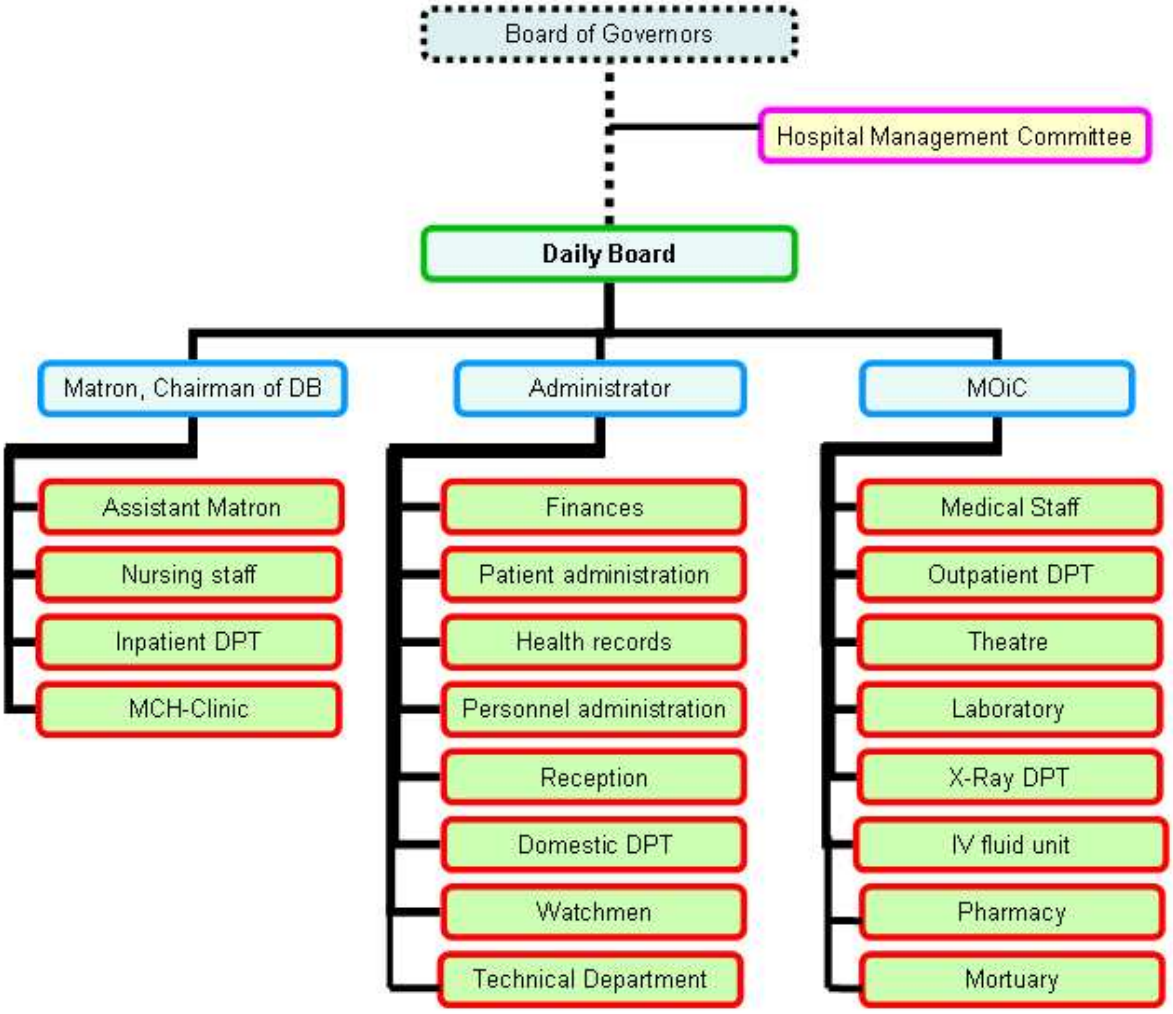
10.2.2 Members of the Hospital Management Team in 2011.

Sr. Reni, Ngadi CB	Administrator (Chairperson)
Dr. Joseph Lugumila AMO	Medical Officer in Charge
Mr. Thomas Mtilimbanya ANO	Nursing Officer in Charge
Mrs. Agnes Elikana	Ass. Nursing Officer
Mr. Thomas Madimilo	Hospital Secretary/ Ass. Administrator

10.2.3 In Charge Positions 2011

Medical Officer i/c	Dr. Joseph Lugumila, A.M.O.
Nursing Officer in Charge	Mr. Thomas Mtilimbanya, Ass. Nursing Officer
Ass. Nursing Officer in Charge	Mrs. Agnes Elikana, Ass. Nursing Officer
Administrator	Rev. Sr. Reni Ngadi CB
Hospital Secretary / Ass. Administrator	Mr. Thomas Madimilo
In Charge domestic dpt.	Rev. Sr. Fabiola
In Charge compound/technical dpt.	Rev. Sr. Reni Ngadi / Mr. Bruna Matalu
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. Grace Mlay, Ass. Nursing Officer
In Charge Pharmacy	Mrs. Dorothy Massy, Ass. Nursing Officer
In Charge Theatre	Mr. James Zakayo
In Charge Radiology	Mr. Peter Katinda, Radiology Technologist
In Charge Clinical Officers	Mr. Patrick Chubwa, Clinical Officer
In Charge CTC	Adriano Michael, Clinical Officer
In Charge VCT	Mr. Elisha Maige, Laboratory Technologist
In Charge PMTCT	Mr. Thomas Mtilibanya, Ass. 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. Joyce Shitindi, Ass. Nursing Officer
Chairman Tughe	Mr Peter Katinda

10.3 Appendix 3 Organogram.



10.4 Appendix 4 Staff Mutations 2011

10.4.1 Staff that left in 2011:

	Name	Designation	Department
1.	Lazaro Ernest	Clinical Officer	OPD
2.	Solomon Kitundu	Pharmaceutical Technician	Pharmacy
3.	Rosse Urrasa	Medical Attendant	Female ward
4.	Symphorose Crispine	Ass. NO	Chronically sick patients
5.	Mary Aloyce	Domestic Attendant	Domestic Store
6.	Godfrey Masele	Clinical Officer	OPD
7.	Kulwa Jinasa	Mlinzi	Ulinzi/Security
8.	Stephano Fema	Mlinzi	Ulinzi/Security
9.	Michael Shija	Domestic Attendant	Mazingira/Environment
10.	Wycliff Onsongo	Ass. NO	Maternity Ward
11.	Benson Marrita	Ass. NO	Maternity Ward
12.	Boaz Masamaki	RMA	OPD
13	Shabani Said	Laundry Attendant	Laundry
14	Martha Nkhata	Enrolled nurse	RCH/MCH

10.4.2 Staff that joined in 2011:

	Name	Designation	Department
1.	Regina Mahendeka	Medical Attendant	Female ward
2.	Shabani Said	Laundry Attendant	Laundry
3.	Peter Miyye	Ass. NO	Theatre
4.	Edwin Mose	Clinical Officer	OPD
5.	Winifrida Matthew	Data Clerk	CTC
6.	Saulo G. Liho	Lab. Technician	Maabara/Laboratory
7.	Mary Paulo	Ass. NO	Maternity
8.	Erastus Omolo	Ass. NO	Maternity
9.	Nasra Mohammed	Enrolled Nurse	Female ward
10.	Charles Makongoro	Mlinzi	Ulinzi/Security
11.	Zakaria Makumba	Mlinzi	Ulinzi/Security
12.	Salome E. Sangari	Enrolled Nurse	Female ward
13.	Lydia C. Mbembe	Ass. NO	Maternity
14.	Lydia R. Shoo	Ass. NO	Female ward

10.4.3 Staff on training / upgrading 2011:

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. Sharifa Shabani	Medical Officer	Bugando Univ. Mwanza	CORDAID/Nolet F.	2013
4. Sr. Veneranda CB	Ass. Med. Officer	Ifakara College	PORTICUS	2013
5. Sr. Beatrice Ekisa CB	Accountant	SAUT Univ.	PORTICUS	2016
6. Leticia Stephen	Ass. Nursing Officer	St.Gaspari Hosp. Itigi	Fam. Lips	2012
7. Sr. Beatrice Mroso CB	Ass.Pharm.Techn.	KCMC in Moshi	PORTICUS	2011
8. Maria Salome Nuimbo	Nurse	Kolandoto Hosp.	JOCS	2013
9. Japhet Lemi	Clinical Officer	Sengerema Hosp.	St. Bijz. Noden	2012

10.5 Appendix 5. Staff Establishment.

	2011			2010	2009	2008	2007
	Present	**Req.?**	**Def.**				
Medical Officer (MO)	**1(expat)**	2	1	1(expat.)	2 > 1 (expat)	2 (expat)	-
Assistant Medical Officer (AMO)	**3**	4	1	3	4	3	2
Clinical Officer (CO)	**5**	7	2	6	3+(1)	5	6
Nursing Officers (NO)	**1(expat)**	2	1	1(expat.)			
Registered Nurse > **Ass. Nursing Officers (ANO)**	**12**	17	5	14	10	12	12
Nurse/Midwife/Enrolled N **>. NURSE**	**6**	12	6	11	11	13	8
Nurse Assistant > **Medical Attendant**	**27**	25	+2	46	46	23	22
Nursing Attendant > **Medical Attendant**	**20**	15	+5			21	22
Technologist Officer (Lab. / Pharm./ Radiol.	**-**			-			
Laboratory Technician > **Lab. Technologist**	**2**	2	0	1	1	1	
Lab-assistant > **Ass. Lab. Technologist**	**3**	4	1	4	5	2	2
Lab-attendant >	**2**	2	0	-	2	3	4
Pharmaceutical Technician > **Pharm. Technologist**	**0**	1	1	1			-
Pharmaceutical Assistant > **Ass. Pharm. Technologist**	**0**	1	1	0	1	1	-
Radiographer > **Radiology Technologist**	**1**	1	0	1			
Radiographic assistant > **Ass. Radiol. Technologist**	**0**			0		0	1
Administrator	**1(expat)**			1(expat)	1 (expat)	1 (expat)	1 (expat)
Ass. Administrator	**1**	1	0	1		0	-
Hospital Secretary	**1**	1	0	1		0	
Health Recorder	**0**	1	1	0		0	1
Office attendant	**4**	4	0	4	4	4	3
Receptionist	**6**	6	0	-		-	3
Domestic dpt.	**12**	14	2	12	13	10	11(1expat)
Driver/Technician	**4**	4	0	4	4	4	4
Security Guards	**8**	8	0	8	8	11	11
TOTAL	**119**	132	23	120	116	116	**117**
in training/upgrading	**9**			9	10	10	9

10.6 Appendix 6. Income and Expenditure.

10.6.1 Income

INCOME in Tanzanian Shilling		
2010		**2011**
1.	**Income from Patients**	
220.851.200	Payments from In-Patients	245.813.450
78.867.250	Payment from Out-Patients	80.214.200
22.326.500	Payments at the reception	28.604.150
322.044.950	**Subtotal:**	**354.631.800**
2.	**Contributions from Government**	
88.077.700	Government	71.539.493
88.077.700	**Subtotal:**	**71.539.493**
3.	**Donations**	
-	Group	63.637.962
37.630.044	For Study/Training	8.722.500
4.814.500	For Special Groups of Patients	14.067.000
58.543.800	Institutions	90.288.405
3.567.830	Fund non-paying-pts (EGPAF)	310.000
104.556.164	**Subtotal:**	**177.025.867**
4.	**Income Generating Projects**	975.350
3.569.000	Renting out Car / Sowing/etc.	169.000
661.350	Renting out Hall	1.132.000
5.474.800	Canteen/Guesthouse	5.775.050
9.705.150	**Subtotal:**	**8.051.400**
5.	**Other Income**	
5.750.930	'other sources': house rent etc.	2.493.500
15.820.700	Refunds /Loan /Internet	1.178.850
382.200	Mobile clinics	546.200
2.523.561	miscellaneous (bicycle-shed etc)	2.689.320
28.189.686	From Bank account etc	700.000
52.676.077	**Subtotal:**	**7.607.870**
577.060.051	**TOTAL INCOME**	**618.856.430**

10.6.2 Expenditure.

EXPENDITURE		
2010		**2011**
1.	**Salary and Adjacent Costs**	
281.849.837	Salary, allowances	**324.264.348**
37.963.752,5	NSSF Contribution	**4.390.873**
4.965.555	Medical Treatment (staff)	
17.480.255	Terminal benefits!!!!!	**19.107.427**
343.900.262,5	**Salary and Adjacent Costs**	**347.762.648**
2.	**Medical Supplies**	
65.285.295	Medicines	**112.461.288**
11.223.500	Medical Supplies	**4.083.000**
76.508.795	**Subtotal:**	**116.544.288**
3.	**Other Materials**	
42.207.234	Non-Pharmac. Medical materials	**41.250.208**
1.069.940	Technical Department	**2.953.100**
7.345.975	Domestic Dep. (Food, Textiles)	**8.740.827**
12.232.875	Office supplies/Administration	**15.974.100**
618.000	Refund	**10.000**
61.474.024	**Subtotal**	**68.928.235**
4.	**Transport**	
2.398.700	Transport	**1.995.200**
920.900	Accommodation	**913.700**
3.319.600	**Subtotal:**	**2.908.900**
5.	**Water/Power/Light/Commun.**	
3.845.189	Communication	**4.015.862**
6.992.000	Costs Solar /Generator System	**2.953.100**
1.761.400	Diesel for Generator/Car	**4.339.340**
177.500	Kerosene	**218.000**
12.776.089	**Subtotal**	**11.526.302**
6.	**Maintenance**	
1.020.500	Airstrip	**25.000**
1.086.600	Hospital Car	**895.400**
6.099.500	Buildings / Equipment	**1.808.900**
2.749.000	IGP (cost)	**723.320**
10.937.600	**Subtotal:**	**3.452.620**
7.	**Infrastructure and Equipment**	
25.173.800	Pharmacy /OPD (PIUS XII)	**53.253.000**
15.037.600	New buildings (Fence)	**-**
4.000.000	Equipment (Incinerator)	**555.400**
44.211.400	**Subtotal:**	**53.808.400**
8.	**Training and Upgrading of Staff**	
39.440.344	Training and Education/Study	8.879.000
39.440.344	**Subtotal:**	**8.879.000**
9.	**Contributions and Charity**	
42.000	CSSC/TEC	
2.475.800	X-mass presents	**2.743.800**
1.870.800	Gifts	**403.650**

2.243.000	misc. Worker Day etc.	**783.200**
291.400	Debts of patients	**375.700**
-	EGPAF	**945.473**
6.923.000	**Subtotal:**	**5.251.823**
10.	**Miscellaneous**	
165.000	Biopsy	-
1.000.000	Credit	-
1.323.000	Inventory	**27.000**
3.980.000	Investments	**1.775.500**
3.381.907	Petty cash	**3.216.198**
9.849.907	**Subtotal:**	**5.018.698**
565.129.621,5	**TOTAL EXPENDITURE**	**624.080.914**
2010	**Income (+B/F)**	**2011**
577.060.051		**629.903.298**
+11.930.429,5	**BALANCE (Income minus Expenditure.)**	**+ 5.822.384**
11.	**Depreciations***	

* Depreciations are not included in these balance sheets. There has been no new assessment in 2011.

10.6.3 Receipts & payments at the hospital.

Receipts (in Tanzanian shs)	2010	**2011**
Balance B/F	28189686	**11356541**
In-patients	220851200	**245813950**
Out-pts/medicines=cash sales	78867250	**80214200**
Reception	22326500	**28604150**
Other Receipt	19902660	**3713710**
IG projects + House Rent	12353150	**11245360**
Cash drawings	62081261	**700000**
Donations / EGPAF	68008300	**137704962**
Refund / Study	35980044	**8722500**
Basket Fund	28500000	**101827898**
TOTAL in	577060051	**629903271**
Payments	2010	**2011**
Staff cost (+ arrears)	280359987	**324040028**
Medicines/ Medical supplies	88670595	**118284090**
Administration Cost	86817095	**95954395**
Study	39440344	**6587000**
Terminal Benefits	17480255	**25259427**
Basket Fund MAM/CHF	42207234	**7286000**
Renovations	10728000	**43399100**
TOTAL out	565703510	**620810040**
Balance:	11356541	**9093231**

10.6.4 Bank Deposits and Payments 2011:

DEPOSITS	2010	2011
Balance B/F	66175996	**79483289,78**
NHIF (Nat. Insur. Fund)	33802665	**32254490**
MOH Salaries	203741600	**189539600**
MOH Bedgrant	4893627	**5669621,96**
NSSF (Nat. Pension Fund)	8517557	**2820000**
TMP	-	**219000**
SONNEVANCK	-	**10737750**
other resources	1855950	
Refund	9787784	**1217965**
TOTAL DEPOSITS	328775179	**321941716,74**
PAYMENTS	2010	**2011**
Staff salary*	119398087	**150525094**
NSSF*	75927505	**78258620**
TRA*	10523521	**9008838**
Draw from Bank*	2932778	**7000000**
Bank charges	490550	**342995**
TMP	3000000	**5000000**
Staff Loans	14158803	**6696229**
L. Print / B.statements/ Dep. Temp.	3600000	-
Kayonza /J & K Medicks/ Dosaji	800000	-
NHIF	12630036	**9831109**
Ngacha / Fortes Garage/Toyota	1314072	-
Arrears	4516538	**2993113**
Processing Salary	-	**225614**
Refunded	-	**144552**
TOTAL PAYMENTS	249291890	**270026164**
Balance:	79483289	**51915552,74**

* 35 qualified staff-members received their salary directly via their bank.

10.7 Appendix 7. Donations 2011

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	"Dokters zonder vacantie", Antwerp, Belgium (visiting team of medical specialists)
6	KWF (Germany) via CSSC Dar es Salaam (construction New Theatre Block and Mortuary)
8	Stichting Rentebestemming (Sr. Jeane d'Arc)
9	Cordaid / MEMISA (sponsoring training/upgrading medical staf)
10	Stichting Tabora c/o Oostkapelle the Netherlands
11	Stichting Franje via Stichting Tabora: (e.g. construction rainwater harvesting cistern & incinerator)
12	Stichting Bijzondere Noden, Arnhem via Dr & Mrs Haverkamp (training & upgrading staff)
13	Dr. Herman Drewes, Elegastgaarde 22, 7329AH Apeldoorn (staff children sponsor fund)
14	Dr. G. van der Ley, Schiedam
15	Family Dr. Max Slenter (Poor patient fund)
16	JOCS Japan (Japan Overseas Christian Services)
17	Family Dr. Paulus Lips (upgrading & training)
18	Normbeheer Ommen BV, Ommen, the Netherands
19	Family Arianna Dekker .

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 Hemorrhage	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 Hemorrhage
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 Toxoid
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 Counselling 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 Organization
MCH	Mother and Child Health		