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# HAYDOM LUTHERAN HOSPITAL

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Same Dance



Different Drums

*5-Year Strategic Plan 2002- 2006*

*Mbulu Diocese  
Evangelical Lutheran Church in Tanzania  
First Version - June 2001*

MAP OF TANZANIA

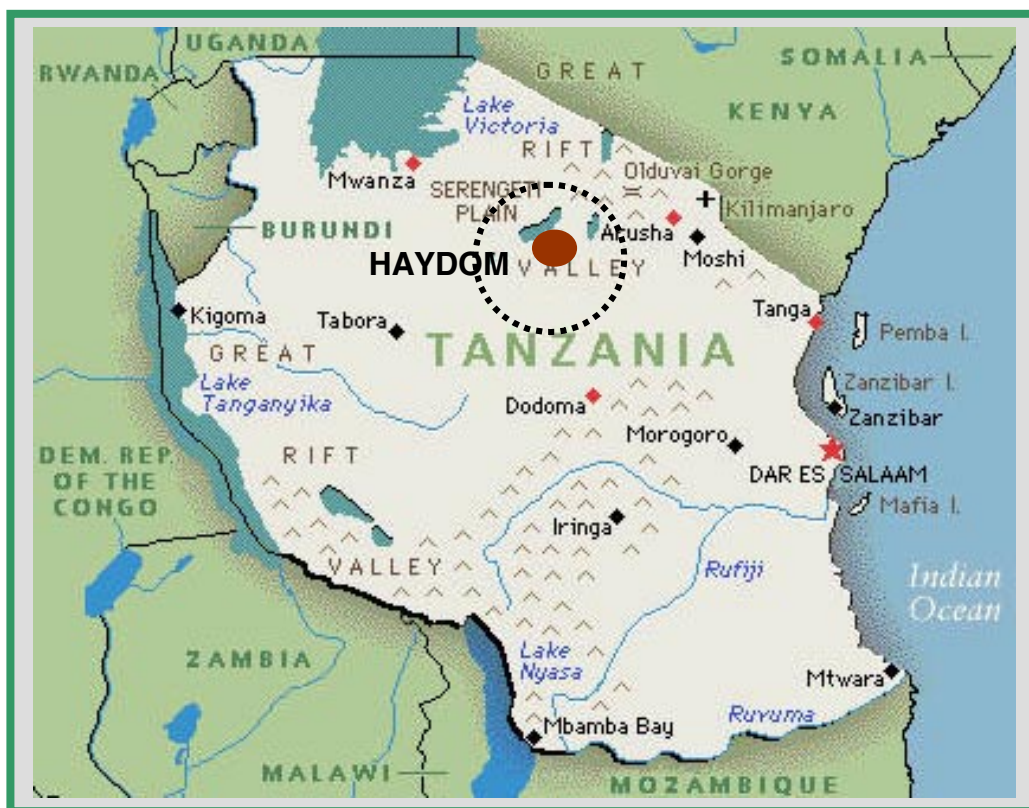


FIGURE 1. MAP OF TANZANIA SHOWING THE LOCATION AND APPROXIMATE CATCHMENT AREA OF HAYDOM LUTHERAN HOSPITAL

“If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away.”

*Henry David Thoreau (1817-1862)*

Quoted in “Different Drums”, a book about the life and times of Dr. Michael Wood. Late Founder of the Flying Doctors / AMREF, Nairobi, Kenya.



FIGURE 2. AERIAL PHOTO OF HAYDOM LUTHERAN HOSPITAL,  
HAYDOM SCHOOL OF NURSING AND HAYDOM VILLAGE.

See this Strategic 5-year Plan on HLH's website at:

[www.m-produksjon.net/haydom](http://www.m-produksjon.net/haydom)

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❁ LIST OF TABLES .....	6
❁ LIST OF FIGURES .....	7
❁ INTRODUCTION BY THE BISHOP .....	8
❁ EXECUTIVE SUMMARY .....	10
❁ INTRODUCTION .....	13
I. VISIONS AND OBJECTIVES .....	16
I.I. THE VISION OF THE MBULU DIOCESE HEALTH PROGRAMME.....	16
I.II. FUTURE OBJECTIVES FOR THE HAYDOM LUTHERAN HOSPITAL .....	16
I.II.I. GENERAL OBJECTIVES.....	16
I.II.II. SPECIFIC OBJECTIVES: .....	16
II. MAIN STRATEGIES .....	18
II.I. MEDICAL SERVICES .....	18
II.I.I. EXHAUSTED YET IMPORTANT “BUZZ –WORDS” AND CONCEPTS .....	18
II.I.II. CURRENT ACTIVITY AND TRENDS .....	19
II.I.III. FUTURE MEDICAL STRATEGIES.....	22
II.II. CAPACITY BUILDING AND AWARENESS .....	24
II.II.I. PRESENT ACTIVITIES.....	25
II.II.II. FUTURE CAPACITY BUILDING AND AWARENESS STRATEGIES .....	25
II.III. POVERTY ALLEVIATION .....	29
II.III.I. COMMUNITY CAPACITY DEVELOPMENT.....	30
II.III.II. ENVIRONMENTAL CRISIS – A SEVERE FOOD SHORTAGE FOR 4 YEARS .....	35
II.III.III. FUTURE POVERTY ALLEVIATION STRATEGIES.....	36
III. APPRAISAL OF RESOURCES: MANPOWER AND TECHNICAL INFRASTRUCTURE .....	37
III.I. HUMAN RESOURCES .....	37
III.I.I. TRAINING .....	37
III.I.II. STAFF .....	38
III.I.III. SALARY LEVEL.....	40
III.II. “TEAM SPIRIT” (MOTIVATION AS A RESOURCE) .....	40
III.III. TECHNICAL INFRASTRUCTURE .....	41
IV. APPRAISAL OF RESOURCES: FINANCIAL INPUT AND REVENUE STRATEGIES .....	42
IV.I. COST OF PROVIDING HEALTH SERVICES IN TANZANIA.....	42
IV.II. PERFORMANCE OF THE PAST .....	43
IV.II.I. THE HOSPITAL.....	43
IV.II.II. THE HAYDOM SCHOOL OF NURSING .....	47
IV.II.III. THE HAYDOM SECONDARY UPGRADING SCHOOL .....	47
IV.II.V. THE HEALTH CENTRES AND DISPENSARIES .....	47
IV.II.VI. THE PROJECTS .....	47
IV.III. PROJECTIONS FOR THE FUTURE .....	48
IV.III.I. PROJECTED EXPENDITURE .....	48
IV.III.II. PROJECTED INCOME.....	49
IV.III.III. SUMMARY OF INCOME AND EXPENDITURE.....	53

V. IMPLEMENTATION STRUCTURES.....	57
V.I.    RELATIONS TO THE MBULU DIOCESE AND THE ELCT.....	57
V.II.   THE HLH AND ITS STRUCTURE .....	57
V.II.I. COST-MANAGEMENT ROUTINES— A CHALLENGE FOR THE FUTURE .....	59
V.III.  INSTITUTIONAL COLLABORATION.....	59
VI. MONITORING AND EVALUATION .....	61
VI.I.   FRAMEWORK .....	61
VI.II.  STRATEGY OUTPUT AND INPUT INDICATORS.....	61
VI.III. MONITORING, REPORTING, EVALUATION AND REWARDS.....	61
VII ENDNOTE .....	63

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VIII. ANNEXES .....	64
VIII.I.   CHAPTER 2: SELECTED STATISTICS FROM THE HOSPITAL WORK .....	64
VIII.II.  CHAPTER 3: STAFF AND TRAINING PLAN.....	68
VIII.III. CHAPTER 3: TRAINING AND STAFF TABLES.....	69
VIII.IV.  CHAPTER 3: TECHNICAL INFRASTRUCTURE — A REVIEW OF ACHIEVEMENTS AND PLANNED ACTIVITIES FOR THE NEXT FIVE YEAR PERIOD .....	70
VIII.V.   STRATEGIES, ACTIVITIES AND ESTIMATED TOTAL COSTS FOR 2002 - 2006 - A 5 YEAR REHABILITATION AND INVESTMENT PLAN FOR HAYDOM LUTHERAN HOSPITAL.....	74
VIII.VI.  CHAPTER 4: ECONOMIC PERFORMANCE FOR 1996 — 2000 .....	77
VIII.VII. CHAPTER 4: TENTATIVE EXPENDITURE PROJECTIONS — TOTAL RUNNING COSTS .....	80
VIII.VIII. CHAPTER 4: TENTATIVE EXPENDITURE PROJECTIONS — TOTAL REHABILITATION AND INVESTMENT COSTS.....	81
VIII.IX.  CHAPTER 4: TENTATIVE INCOME PROJECTIONS 2001-2006 .....	82
VIII.X.   CHAPTER 4: SUMMARY OF EXPECTED INCOME AND EXPENDITURES .....	83
VIII.XI.  CHAPTER 4: INCOME AND EXPENDITURE PROJECTIONS — SOME COST CLUSTERS DEFINED .....	84
VIII.XII. CHAPTER 6: MONITORING AND EVALUATION — AN IN DEPTH OVERVIEW OF POSSIBLE OUTPUT AND INPUT INDICATORS.....	85
VIII.XIII. LIST OF PUBLICATIONS FROM HLH AND RELATED TO ITS CATCHMENT AREA.....	87
VIII.XIV. ABBREVIATIONS USED IN THE PLAN .....	91
VIII.XV.  PEOPLE CONSULTED .....	92
VIII.XVI. REFERENCE MATERIAL CONSULTED IN THE REPORT .....	93

## LIST OF TABLES

TABLE 1.	HISTORICAL OVERVIEW OF SELECTED MEDICAL STATISTICS.....	19
TABLE 2.	POVERTY AND WELFARE INDICATORS FROM TANZANIA AND THE HAYDOM AREA. ....	30
TABLE 3.	HISTORICAL OVERVIEW OF POVERTY ALLEVIATION AND COMMUNITY DEVELOPMENT PROGRAMS CONDUCTED BY HLH. ....	34
TABLE 4.	OVERVIEW OF NUMBER OF PEOPLE AND HOUSEHOLDS SURVEYED IN 1999. ....	35
TABLE 5.	SUMMARY OF THE FOOD DISTRIBUTION PROGRAMME.....	35
TABLE 6.	HISTORICAL OVERVIEW OF GOVERNMENT SALARY DEVELOPMENTS.....	40
TABLE 7.	SALARY EXPENDITURE AT HLH - 1996-2000. ....	45
TABLE 8.	EXPENDITURES ADJUSTED FOR INFLATION - 1996-2000. ....	47
TABLE 9.	EXPENDITURE PROJECTIONS - 2001-2006. ....	48
TABLE 10.	SUMMARY OF PROJECTED INCOME - 2001-2006.....	52
TABLE 11.	PROJECTED EXPENDITURE, INCOME AND NEED FOR ASSISTANCE. ....	55
TABLE 12.	MONITORING FRAMEWORK - AN EXAMPLE. ....	61
TABLE 13.	SELECTED HOSPITAL STATISTICS - 1996-2000. ....	66
TABLE 14.	STAFF AND TRAINING PLAN FOR THE NEXT 5-YEAR PERIOD. ....	68
TABLE 15.	HISTORICAL OVERVIEW OF TRAINING EXPENSES.....	69
TABLE 16.	HISTORICAL OVERVIEW OF STAFF LEVELS. ....	69
TABLE 17.	A 5 YEAR REHABILITATION AND INVESTMENT PLAN FOR HLH . ....	76
TABLE 18.	INFLATION AND EXCHANGE RATES FROM THE BANK OF TANZANIA - 1993-2000. ....	77
TABLE 19.	HLH "SUPERMARKET" INDICATORS FOR 1996-2000. ....	77
TABLE 20.	HISTORICAL OVERVIEW OF EXPENDITURES (US\$).....	77
TABLE 21.	HISTORICAL OVERVIEW OF INCOME (US\$).....	78
TABLE 22.	HISTORICAL OVERVIEW OF PERCENTAGE EXPENDITURE AND INCOME OF MOC. ....	78
TABLE 23.	HISTORICAL OVERVIEW OF "UNRECOVERABLE PATIENT DEBT". ....	78
TABLE 24.	TENTATIVE TOTAL RUNNING COST PROJECTIONS 2001 - 2006.....	80
TABLE 25.	TENTATIVE REHABILITATION AND INVESTMENT COSTS PROJECTIONS 2001-2006.....	81
TABLE 26.	TENTATIVE INCOME PROJECTIONS 2001-2006. ....	82
TABLE 27.	SUMMARY OF INCOME AND EXPENDITURE PROJECTIONS (PART 1).....	83
TABLE 28.	SUMMARY OF INCOME AND EXPENDITURE PROJECTIONS (PART 2).....	83
TABLE 29.	DEFINITIONS OF MAIN COST CLUSTERS. ....	84
TABLE 30.	LIST OF ABBREVIATIONS . ....	91
TABLE 31.	PEOPLE CONSULTED. ....	92
TABLE 32.	REFERENCE MATERIAL CONSULTED.....	95

## LIST OF FIGURES

FIGURE 1.	MAP OF TANZANIA SHOWING THE LOCATION AND APPROXIMATE CATCHMENT AREA OF HAYDOM LUTHERAN HOSPITAL.....	2
FIGURE 2.	AERIAL PHOTO OF HAYDOM LUTHERAN HOSPITAL, HAYDOM SCHOOL OF NURSING AND HAYDOM VILLAGE. ....	3
FIGURE 3.	PLANNING CYCLE OUTLINE FOR THE HLH 5-YEAR PLAN. ....	15
FIGURE 4.	HISTORICAL OVERVIEW OF AVERAGE BED STATE.....	19
FIGURE 5.	HISTORICAL OVERVIEW OF MCH WORKLOAD.....	20
FIGURE 6.	HISTORICAL OVERVIEW OF HOSPITAL DELIVERIES .....	21
FIGURE 7.	HISTORICAL OVERVIEW OF BED OCCUPANCY.....	21
FIGURE 8.	HISTORICAL OVERVIEW OF TRAINING EXPENSES.....	37
FIGURE 9.	HISTORICAL OVERVIEW OF TRAINING FUNDING SOURCES. ....	37
FIGURE 10.	STAFF DISTRIBUTION IN 2001. ....	38
FIGURE 11.	HISTORICAL OVERVIEW OF ACTUAL AND RECOMMENDED STAFF LEVELS. ....	38
FIGURE 12.	HISTORICAL OVERVIEW OF ACTUAL AND RECOMMENDED STAFF / ABS RATIO. ....	39
FIGURE 13.	MINIMUM OPERATIONAL COSTS PER AVERAGE BED STATE - 1996-2000.....	42
FIGURE 14.	MINIMUM OPERATIONAL COSTS PER PATIENT BED DAY - 1996 - 2000.....	42
FIGURE 15.	"SUPERMARKET" INDICATORS SHOWING ECONOMIES OF SCALE AT HLH. ....	43
FIGURE 16.	HISTORICAL OVERVIEW OF TOTAL RUNNING COSTS AND INCOME.....	43
FIGURE 17.	HISTORICAL OVERVIEW OF MOC AND LOCAL INCOME.....	44
FIGURE 18.	HISTORICAL OVERVIEW OF MOC BREAKDOWN.....	44
FIGURE 19.	HISTORICAL OVERVIEW OF "UNRECOVERABLE PATIENT DEBT". ....	45
FIGURE 20.	HISTORICAL OVERVIEW OF TOTAL INCOME BREAKDOWN.....	46
FIGURE 21.	HISTORICAL OVERVIEW OF INFLATION ADJUSTED, REGULAR INCOME. ....	46
FIGURE 22.	BREAKDOWN OF REHABILITATION, INVESTMENTS AND RUNNING COSTS - 2001-2006.....	49
FIGURE 23.	MOC AND TOTAL RUNNING COSTS - 2001-2006.....	49
FIGURE 24.	INCOME PROJECTIONS 2001-2006. ....	52
FIGURE 25.	PROJECTED INCOME AND MOC.....	53
FIGURE 26.	PROJECTED NATIONAL INCOME AND MOC.....	53
FIGURE 27.	PROJECTED INCOME AND TOTAL RUNNING COSTS. ....	54
FIGURE 28.	TOTAL PROJECTED INCOME AND TOTAL PROJECTED EXPENDITURE.....	54
FIGURE 29.	PAST PERFORMANCE AND FUTURE PROJECTIONS. ....	56
FIGURE 30.	THE MBULU DIOCESE OF THE ELCT STRUCTURAL DIAGRAM. ....	57
FIGURE 31.	HAYDOM LUTHERAN HOSPITAL ORGANIZATIONAL CHART.....	58
FIGURE 32.	HAYDOM LUTHERAN HOSPITAL'S GLOBAL COMMUNITY.....	60
FIGURE 33.	HISTORICAL OVERVIEW OF TOTAL INPATIENTS PER YEAR.....	66
FIGURE 34.	HISTORICAL OVERVIEW OF TOTAL OUTPATIENTS PER YEAR.....	67
FIGURE 35.	HISTORICAL OVERVIEW OF THE TOTAL ECONOMIC PERFORMANCE AND MAIN INCOME SOURCES OF THE HEALTH CENTRES AND DISPENSARIES.....	79

## INTRODUCTION BY THE BISHOP

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The Haydom Lutheran Hospital (HLH) has been serving the people of our country for more than forty-five years. A dedicated team of professionals composed by Tanzanians, missionaries and volunteers from many nations have been offering high quality and affordable health services at both the Hospital itself and at the health centres and dispensaries supervised from there.

But HLH is much more than a hospital. **HLH is an experiment in development!** Moved by the love of God, expressed to the world through His son Jesus Christ, and convinced that the human being is not just flesh but also soul and mind, the HLH seeks to serve not only the physical needs of the patients. HLH wants to be a living force in the community, initiating, facilitating and participating in various forms of development work. Thus has HLH been involved in poverty alleviation, food security programs and community capacity building through improvement of the infrastructure and construction of both churches and schools in the area. It has however, very often danced its dance to the beat of its own drums, not constantly changing its policies to immediately satisfy the needs of donors and external experts. To many this is a dilemma, while HLH feels it should rather be a challenge. HLH first and foremost serves the needs of the community, together with the community. It seeks to enable the community to combat poverty and enable development. It is the communities themselves however, that need to make this happen. HLH can only be a catalyst in this difficult process.

HLH and its owner the Mbulu Diocese (MD) of the Evangelical Lutheran Church in Tanzania (ELCT) today face many practical and conceptual challenges. A new health sector reform introduces new possibilities but perhaps also new threats. **The HLH is part of the Tanzanian national health structure, and has been for more than 35 years, but due to its character as a voluntary agency, with seemingly “plenty of resources”, can sometimes be relegated to a second line.** New migrations, the development of the country's infrastructure (as for example the new road planned in the area), and the economical and communication boom in the country are all parts of this ever-changing environment. In addition there is a constant need for continued dialogue and discussion with donors and partners on major issues such as the dilemma between sustainability and accessibility of services. To be able to react to these challenges it is necessary to invest in the strengthening of the institutional capacity of both the Mbulu Diocese and its departments and its partners.

**The experiment at Haydom has been made possible by the help of many individuals and organizations.** We are far from being able to raise enough resources in our close environment. We know that the funds poured into Tanzania have been huge: can we still expect the global community to continue caring? And on the other hand can they abandon us now when we still have a long road to walk?

In a world ripped apart by egoism, corruption and wars, the HLH represents almost an oasis. The staff are dedicated and trustworthy, the quality of care improves every day, new development ideas are put into practice and the people keep pouring into this district. But we still haven't arrived at our goal and we still need the help of the global community to strengthen our local community. There is still need for consolidation of our achievements. The HLH has to find at which level the balance between available resources and expected output can and should be held.

**We, the leaders of the Mbulu Diocese and the management of the Haydom Lutheran Hospital, wish to challenge you, our partners, to participate in this experiment.** How to participate is explained in this plan for the years 2002 to 2006.

This document has been prepared by the Five-Year Planning Committee, and on the 12<sup>th</sup> of June presented to the Executive Committee as well as the Medical Board of the Mbulu Diocese of the ELCT in a joint meeting. The Acting Bishop Rev. Daudi opened the meeting with a reminder from the book of John Chapter 4, verse 31 to 38 emphasizing the work of our Lord Jesus Christ in the whole man. After a thorough, in-depth discussion of each chapter in the strategic plan, it was passed and agreed to after minor corrections.

The following members of the respective committees were present to resolve the plan.

### **Executive Committee**

Rev. Zebedayo Daudi	Acting Bishop & Chairman
Mr. Israeli Saqhare	Acting Secretary General
Mr. Joseph Axwesso	Treasurer
Mr. Lazaro Ama	Diocesan recorder
Rev. Gabrieli N. Bayo	Leader, Dongobesh Division, Member
Rev. Stephano A. Mallange	Leader, Haydom Division, Member
Rev. Nicolas Nsangazelu	Leader, Hanang Division, Member
Rev. Samweli B. Sulle	Leader, Northern Division, Member
Mr. Petro E.N. Diyamet	Member
Mr. Hosea Naman	Member
Mr. Stanley Nyange	Member
Mr. Goma Gwaltu	Member
Mr. Golbert Eliezeri	Member

### **Medical Board**

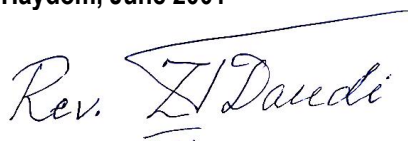
Rev. Stephano A. Mallange	Chairman
Dr. N.B.Naman	Medical Secretary Mbulu Diocese, ELCT
Dr. O.H.E. Olsen	Medical Director HLH, Member
Mr. Stanley Nyange	Medical Board Recorder
Rev. Yohana D. Baha	Member
Rev. John Giray	Member
Dr. J.W.Gurisha	District Medical Officer -Mbulu, Ministry of Health, Member
Rev. Atanasio Matiya	Hospital Chaplain, Member
Ms. Ulumbi Lyanga	Principal Haydom School of Nursing, Member
Mr. Joseph Suluo	Representative of Workers, Member
Mr. Paulo Tango	Assistant Nursing Officer in Charge, Member
Rev. Yotam Girgis	Medical Board Adviser
Mr. Thadeus Munuo	Medical Board Adviser

### **Specially Invited**

Mr. Samweli Simon	Administration Officer, HLH, Five-Year Plan committee
Dr. Øystein Evjen Olsen	Health Policy & Planning Consultant, Five-Year Plan committee
Mr. Yerima Lohay	Chief Accountant, HLH
Mr. Justine Masuja	Accountant, HLH

On behalf of the members of the Executive Committee and the Medical Board of the Mbulu Diocese of the ELCT, I hereby respectfully submit this plan.

**Haydom, June 2001**



**Pastor Zebedayo Daudi**  
**Acting Bishop, Mbulu Diocese, ELCT**

## EXECUTIVE SUMMARY

### SAME DANCE — DIFFERENT DRUMS

Haydom Lutheran Hospital (HLH) is an experiment in development. Throughout this experiment it has danced its developmental dance to the beat of its own concept of developmental drums. This has been a challenge but has proved to be a success. For some it might seem a dilemma, for others a challenge. It creates, however, a need for increased dialogue towards its partners and awareness of their concerns.

### STRATEGIC PLAN — NOT A PROJECT PROPOSAL

This 5-year strategic plan aims at providing the hospital, the Mbulu Diocese and its partners with a common understanding of visions and objectives. The document is an overall strategic outline for the next five years. It is not intended as a project proposal. Future specific Project Proposals will use tools such as the Logical Framework Approach (LFA), accompanied by this strategic outline documenting the integrated overall, long-term vision, objectives, strategies and resource assessments.

### VISION AND OBJECTIVES

HLH is based on its Christian foundation, exemplified by its motto – To His Praise and Glory. **From this basis comes its vision; to cater for the needs of the whole human being – physical, mental, spiritual and social.** This includes upholding important human values such as human rights and equity. The main objectives that spring from its vision include:

- Reducing the burden of disease
- Poverty alleviation,
- Building and maintaining institutional capacity of both HLH and its partners
- Improved collaboration with likeminded institutions

### SUBSEQUENT STRATEGIES

In achieving these objectives the hospital has decided upon a set of strategies for medical care, capacity building and poverty alleviation. The medical strategies incorporate close links between preventive, curative and palliative care. In addition the need for adequate physical support services, (mainly because of its remote location) is incorporated. Maintaining the high quality of medical care is of paramount importance to the hospital. This is both driven by the professional standards aspired to by the staff and by the need to generate adequate income to keep the hospital running. The hospital relies on the trust of the people it serves, and without quality and accessibility of medical services people will not use them. Apart from the maintenance of existing services the hospital sees the need to also include important services such as a mental health unit and proper eye care facilities.

### HAYDOM LUTHERAN HOSPITAL AS A CHANGE AGENT

Throughout its 46 years of existence the hospital has always had a strong focus on increasing the capacity of the population it serves. This includes establishing a pool of qualified personnel through own schools and continued training of its staff at other institutions. However, the hospital has also worked to increase the capacity of other health institutions in Tanzania by educating nurses and training other health professionals. In addition HLH has contributed significantly to capacity building among the general population in its catchment area. This community capacity building has been carried out through HLH's support for extensive construction of primary and secondary schools as well as vocational training. It is a priority to continue these activities to further enable the area to develop sustainably. HLH realizes however, that it is the community itself that must create change, but HLH aims at being a Change Agent through continued contribution towards community capacity development.

### POVERTY ALLEVIATION

Poverty alleviation is also one of the major concerns of the hospital. It sees the problem of poverty closely linked to the health status and community capacity of its population. An extensive list of past projects is provided in this report, and a short list includes roads, bridges, education, health and food aid projects. As HLH is not an island, but heavily integrated in a society burdened by poverty, it will always be its objective to contribute to alleviate the suffering and provide for development.

### AVAILABLE RESOURCES — FAMINE INDUCED ECONOMIC EMERGENCY

The resources available for implementing these strategies are of major concern to this report. It particularly assesses the availability and needs with regard to human, financial and technical resources. Human resources have been a major challenge

throughout the years, and in particular the supply of medical doctors and nurses trainers. Nevertheless HLH has managed to attain a level of staffing, which is both efficient, and of high quality. A total of 72 people have in the previous 5-year period been sent for upgrading and continued education, and this will be continued also in the next 5-year period. It is estimated that about 68 people will have to be trained in the next 5-year period. HLH has also continually improved its institutional layout and organisational structure and it is hoped that this will enable an even more efficient use of manpower in the future. Staff salaries are by far the largest expense on the hospital budget, requiring constant monitoring and evaluation of staff efficiency levels.

Although the economic performance is at a high level, the amount of resources available towards achieving the objectives are diminishing. The reductions of donor assistance, as well as the acute shortage of local monetary resources due to the persisting food-shortage, are among the most important factors contributing to this immediate lack of revenue. From the economic analysis it can be seen that the hospital until recently was getting a significant proportion of its revenues from local resources, partially from the Ministry of Health grants but mainly from the Patient Fees. This has drastically changed with the famine situation experienced by the people in this area. Until the household economy of the already poverty stricken population improves, this situation is not likely to change in the medium to long-term horizon. Costing studies performed by an external consultant to the ELCT in 1997 concluded that the aim of hospitals in Tanzania being financial self-reliant was unrealistic and severely in conflict with the objectives of affordability, quality and equity. The same study showed that the HLH was operating on minimum financial margins and was considered highly cost-efficient.

#### HEALTH SECTOR REFORMS — A CHALLENGE FOR THE FUTURE

Tanzania is currently undergoing major Health Sector Reforms with decentralisation of power to district authorities and Community Health Funds as some of the main components. It has already been seen that this process does not favour Voluntary Agencies (which provide more than 50% of the total health services in Tanzania), as the funds now available, through the established Basket Fund, is channelled mainly to Government facilities. The donors of the Basket Fund and the Voluntary Agencies are often the same. Hence the Voluntary Agencies now find themselves facing a lack of funds as donors channel their contribution directly, to the Basket Fund from where they are passed on to the District authorities, leaving the Voluntary Agencies in a financial vacuum. The Community Health Funds have yet to provide substantial amounts towards improved health care. However, despite being apprehensive about the amount of revenue these Funds will manage to gather, the hospital will continue to support the community towards this end and hopes it can contribute to a more sustainable and equitable health provision system.

#### EXPENDITURE AND INCOME — STILL NEED FOR EXTERNAL ASSISTANCE

The main cost items are the Total Running Costs and the Total costs of needed rehabilitation and investments. The total cost projections foresee a 3% increase in the Total Running Costs of the hospital due to proposed new investments. In addition it budgets for a 6% yearly inflation. Including the total costs of much needed rehabilitation and further investments there is still a large unfinanced portion of the budget needing external assistance. **This document estimates a total need for external assistance for covering the rehabilitation and investments to range from US\$ 640,000 the first year to US\$ 214,000 the fifth year, totalling US\$ 2.14 million. In addition to this assistance the Total Running Costs (the yearly running budget of the hospital) needs external assistance ranging from US\$ 111,000 in 2001 to US\$ 171,000 in 2006.** The past performance analysis shows that the Total Running Costs of the hospital (adjusted for inflation) have been reduced by 32% while the income has been reduced by 50% from 1997 to 2000. For only US\$ 3.50 or NOK 33 the hospital is able to provide full preventive, curative and physical support services for one patient for one day.

#### MONITORING AND EVALUATION — CONTINUED DEVELOPMENT OF MANAGEMENT TOOLS

This 5-year plan ends by focusing on the importance of persistent monitoring and evaluation of both outputs and inputs, and provides a framework within which the hospital administration and its departments can improve such management tools.

#### IN THE RIGHT DIRECTION

This document demonstrates how the HLH has managed to achieve substantial developments in the right direction within the past 5-year period. The good technical infrastructure, level of staff and management competence and quality of medical services, together with community capacity development and poverty alleviation activities, are all a product of work done by dedicated staff loyal to the vision of the hospital.

#### FUTURE CONCEPTUAL CHALLENGES — A NEED FOR CLARIFICATION

The document also describes some of the major challenges faced by the hospital. These include not only financial and technical challenges but also what concepts should guide planning and implementation activities in the next 5-year period. Some key

words alluding to these issues are: sustainability versus accessibility, accountability versus autonomy, nationalisation, the role of the community, Health Provision as a commodity or a Public Good, the role of Voluntary Agencies and Civil Society within the public sector. Will the Tanzanian state be able to sufficiently provide health services, or do donors still see the need for a strengthened civil society, with their role both as service providers and advocates of rights and demands, reinforced towards sustainable poverty alleviation? These are important issues that HLH needs to discuss and clarify with its partners and donors in particular, in order to enter the future together in mutual understanding and accountability.

#### **A CHALLENGE TO HLH AND ITS PARTNERS**

Issues such as these require an understanding of what drums HLH is dancing to. The setting – the beat of the drums – is a challenging one, with solutions and strategies often different from those of the “briefcase people”, but with the same developmental goals. Situated directly in the arena, the hospital often gains a different insight into the “there and then” problems and possible answers. HLH therefore challenges all its partners to join in its dance – a dance of equals – listen to its drums – and together work towards the realisation of common visions and objectives.

**“Who made the drum knows best what is inside”  
BURUNDI PROVERB**

#### **FINALLY — GRATITUDE AND OPTIMISM**

Haydom Lutheran Hospital and the people it serves have been through very difficult times these past 5 years. Never before have they been challenged with such rapid economic and social changes coupled with increasing disparity and need for help. Through times of food shortage, armed robbery, plane crash and the death of strategic and dedicated staff, they have learned to trust their own wisdom and find their own solutions to the many problems encountered. It is this wisdom that gives them the courage to stand firm and demand respect. At the same time they experienced an outstretched hand from friends around the world. From institutions such as NLM, NORAD, the Norwegian Ministry of Foreign Affairs, ELCA and NCA through to thousands of individuals they received heart-warming support. This help is not easily forgotten. But the difficult times are not over. The harvest this year seems to enable the people to start the slow process of recovery. This will take time. Nevertheless it gives hope. Hope that the people will gain enough strength to continue the difficult process of further improving their lives. And hope that the hospital will be able to continue to service the people with adequate health care and join them in their effort to reduce suffering and create a positive spiral out of poverty.

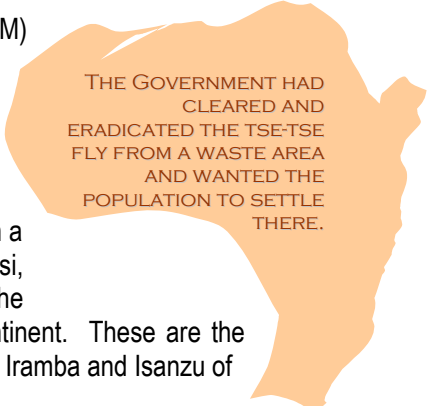
**“Remember that you can learn to delight in every  
obstacle God places in your path. Limitations force us  
to yield, to abandon ourselves to our creator, God.  
And when we do, His creativity flows.”  
JONI EARECKSON TADA**



## INTRODUCTION

### HISTORICAL BACKGROUND

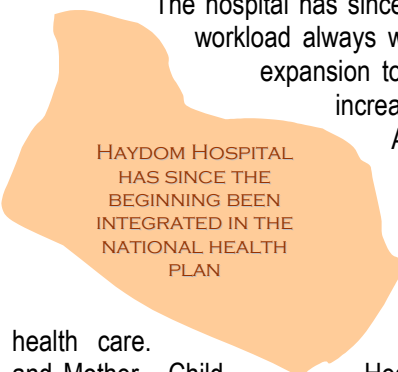
In 1954 the Government of Tanzania granted the Norwegian Lutheran Mission (NLM) permission to build a hospital and requested it to be located in the southern part of Mbulu District on the highlands 300 km southwest of Arusha and 150 km south of Ngorongoro Crater. The Government had cleared and eradicated the tse-tse fly from a waste area and wanted the population to settle there. Haydom was chosen and a hospital with 50 beds initiated its work in 1955. The hospital was in 1963 transferred to the local Evangelical Lutheran Church of Tanzania, (ELCT), Mbulu Diocese. Situated in a fascinating geographical area, on the Mbulu Highlands between the Lake Eyasi, Ngorongoro Crater, Lake Manyara, Mount Hanang and the Singida Bushlands, the hospital lies within four of the main language groups and peoples of the African continent. These are the Hadza hunters and gatherers, the Datoga pastoralist, the Iraqw agropastoralists and the Iramba and Isanzu of Bantu origin.



THE GOVERNMENT HAD  
CLEARED AND  
ERADICATED THE TSE-TSE  
FLY FROM A WASTE AREA  
AND WANTED THE  
POPULATION TO SETTLE  
THERE.

### MEDICAL ACTIVITIES IN BRIEF

The hospital has since the beginning been integrated in the national health plan and expanded with increasing workload always with the permission of the Government. The late President Nyerere inaugurated the first expansion to 250 beds in January 1967. A new ward for children and laboratory was built in 1981, increasing the bed capacity to the present 350, but average daily occupancy rate is 380 beds. Additionally, around 60 000 outpatients are treated annually coming from Mbulu as well Hanang, Singida, Iramba, Meatu and Babati Districts serving a population of over 580 000 (PHC 1990 Regional Report; 390 000, 3.8% annual population growth).



HAYDOM HOSPITAL  
HAS SINCE THE  
BEGINNING BEEN  
INTEGRATED IN THE  
NATIONAL HEALTH  
PLAN

health care.

and Mother - Child

the hospital among the most cost-effective in Tanzania. (Flessa, 1997)

Ambulance services are provided with two cars averaging trips of 45 km. Preventive health care is provided through 23 Mobile Health Clinics with special mother and child

In addition there are 3 Health Centres each with approximately 30 beds, outpatients clinics Health (MCH) clinics. The hospital also runs two dispensaries. Earlier assessments have rated

A Nursing School approved by the Ministry of Health (MOH) and financed by NORAD was started in 1982 and officially opened by the late President Nyerere in 1984. The school today has 120 students and provides qualified staff to the hospital. A school for 14 pupils for upgrading the often-insufficient secondary education in rural areas was started in 1971. Training of medical, administrative and technical personnel is seen important for sustainability of the hospital services.

The medical records collected are found of unique importance and have formed basis for scientific work of rural health conditions among which malaria is of particular significance. Because of its holistic vision of the human being, HLH has administered many projects for water supply, road access with bridges, primary and secondary schools as well as coordinated emergency projects.

### ECONOMIC AND POLITICAL CHALLENGES

Some of the main challenges facing the HLH today are of financial character. The last years have been hard for the population of the region and this is reflected in the income of the HLH. A new Health Sector Reform is being implemented by the Government aiming at decentralizing the responsibility for the health care down to the district level. This reform represents a challenge for all voluntary hospitals in Tanzania. In addition Tanzania has been accepted as a country eligible for debt relief under the constraint that the money released should be channeled to the health and education sectors. It is therefore a further challenge to assist the country in utilizing these funds properly towards poverty alleviation and better health for the people. All of these new sources of funds from the Basket Fund through to the debt relief funds are yet to be distributed to all of the institutions providing health for the Tanzanian people, and there are uncertain times ahead concerning the distribution of these funds between government and voluntary agency institutions.



THIS REFORM  
REPRESENTS A  
CHALLENGE  
FOR ALL  
VOLUNTARY  
HOSPITALS IN  
TANZANIA.

Donors should realize that although they contribute to the basket fund, the allocation of these funds to existing voluntary agency health services does not automatically follow.

In times of change it is important to regularly assess the situation and to make detailed plans for the institution. The last 5-year plan was elaborated in 1996 and this period ends in the year 2001. A new plan for the next period was required for the management of the hospital and as a basis for continued contact with our donors.

#### WHICH DANCE — WHAT DRUMS?

Haydom Lutheran Hospital has from the start had the objective of serving the whole human being – a holistic view of aid and development – emphasized through its many projects ranging from medical and technical through to educational and spiritual.

So this developmental dance is not really very different from most other projects and initiatives throughout the developing world. Many of the favorite developmental concepts have been incorporated, from HIV/AIDS and Gender through to Water, Sanitation, Capacity Building and local Sustainability. The hospital has not always however danced to the same beat – listened to the same drums - as others. Many project-leaders, consultants and experts would more often rather have seen HLH following the beaten path. HLH has often seen its own solutions, its own models and followed “the road less traveled” - most of the time with great success. This is because of their local knowledge of the problems and the possible solutions – or the knowledge of “the there and then”. It is hoped therefore, that this 5-year plan will contribute to the illumination of this concept of the possibility of “same objectives – different methods” being successful, and enable the education of donors, as well as HLH, to the importance of reaching the objectives while learning from each other. This mutual learning process, and mutual accountability towards the same objectives, is of great importance in any future dialogue between institutions implementing at the ground level in developing countries, and the theories and methods spelled out by donors.

#### THE 5-YEAR PLAN PROCESS

A team was elected by the Executive Council of ELCT Mbulu Diocese to assess the achievements in the perspective of the former 5-year plan and write a new 5-year plan including a 10-year perspective. The members elected were:

Reverend Zebedayo Daudi, Acting Bishop Mbulu Diocese  
Dr Naftali B Naaman, Medical Secretary Mbulu Diocese Medical Board  
Dr. Ole Halgrim Evjen Olsen, Medical Director HLH.  
Mr. Samweli S Mshashi, Hospital Administrative Officer  
Dr. Øystein Evjen Olsen, Medical Doctor, Health Policy and Public Health Consultant

As assistance to the team NLM provided two external consultants. The consultants joined the team in Haydom from the 14<sup>th</sup> to the 26<sup>th</sup> of January and participated in the initial phase of the process. The consultants were:

Mr. Pablo Sbertoli, Administration Manager  
Mr. Åsbjørn Skaaland, Senior Engineer and Economist.

At the hospital the planning process started with discussions among all staff of the different wards. Each department was asked to discuss and present the major and minor objectives for each unit. The Executive Committee and the Health Board of Mbulu Diocese, as well as the Management of the hospital, helped develop the principles for the new plan. The Ministry of Health as well as its representatives at the Regional and District Level, NORAD, the Christian Social Service Commission, the National Institute for Medical Research and others were consulted in Dar es Salaam. A list of the people consulted in relation to the work is presented in the annex.

The following report describes the principals guiding the institution in the nearest future based on the **present achievements, future objectives, assessment of needs and major challenges**. It is hoped that this 5-year plan can function as a valuable tool towards the realization of

“SAME  
OBJECTIVES –  
DIFFERENT  
METHODS”

than  
made  
Often

#### THE PURPOSE OF THIS DOCUMENT:

THIS DOCUMENT IS AN OVERALL STRATEGIC OUTLINE FOR THE NEXT FIVE YEARS. IT IS NOT INTENDED AS A PROJECT PROPOSAL.

FUTURE SPECIFIC PROJECT PROPOSALS WILL USE TOOLS SUCH AS THE LOGICAL FRAMEWORK APPROACH (LFA), ACCOMPANIED BY THIS STRATEGIC OUTLINE DOCUMENTING THE INTEGRATED OVERALL, LONG-TERM VISION, OBJECTIVES, STRATEGIES AND RESOURCE CONSTRAINTS.

the vision of both the Mbulu Diocese and the Haydom Lutheran Hospital.

The general layout of the report is adapted on A. Greens planning cycle as drawn below:

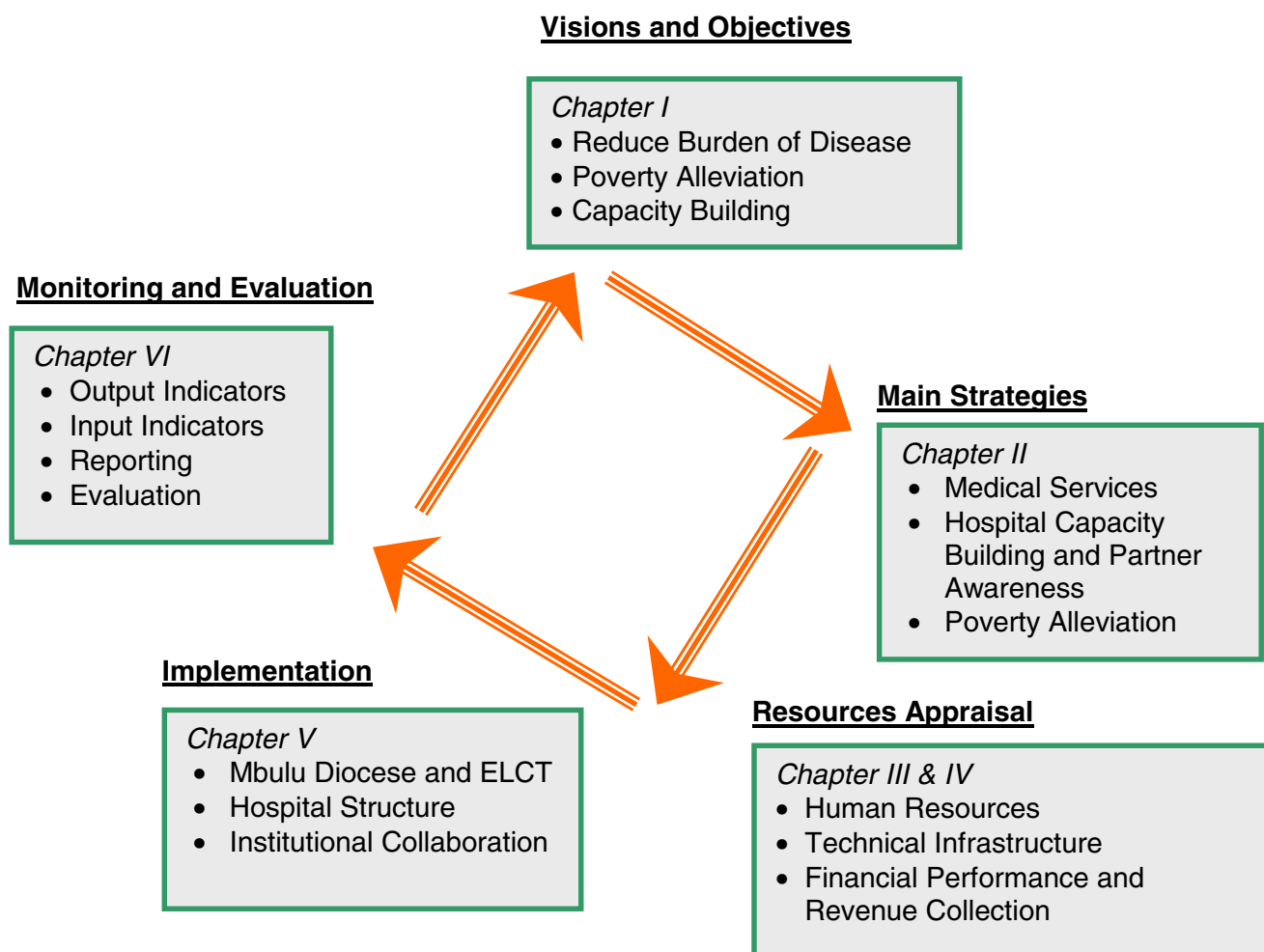


FIGURE 3. PLANNING CYCLE OUTLINE FOR THE HLH 5-YEAR PLAN.

# I. VISIONS AND OBJECTIVES

## I.I. THE VISION OF THE MBULU DIOCESE HEALTH PROGRAMME

**The health work of the Mbulu Diocese of the ELCT aims at improving the health status of the people, rich or poor, regardless of gender, faith and race through the work of the Haydom Lutheran Hospital as expressed in its motto: "To His Praise and Glory" Eph. 1:14.**

**Every human being is valuable and has the right to good health, defined as physical, mental, spiritual, and social well-being. Therefore the activities are not only focused on the provision of health care services but also on poverty alleviation in our local community.**

## I.II. FUTURE OBJECTIVES FOR THE HAYDOM LUTHERAN HOSPITAL

### I.II.I. GENERAL OBJECTIVES

HLH is a first-referral hospital, and largely also functions as a secondary referral hospital. It receives patients from all levels of the health care pyramid, including first contact of patients to referral from district hospitals and other health institutions. This is because HLH has maintained quality service despite having been affected by the famine situation that during the last 4 years has impoverished the community. HLH therefore aims to maintain and improve the ideals of equity, efficiency and quality in health care delivery.

HLH is part of the Mbulu District health plan, following both in medical and administrative matters the guidelines laid down by the Ministry of Health (MoH), and at the same time maintaining its identity as a general church hospital.

HLH shall continue to develop its relation to governments and other stakeholders, both nationally and internationally.

**HLH will seek to achieve its goals through the use of appropriate health care strategies, hospital and community capacity building, improved monitoring and evaluation, efficient use of resources as well as increased fundraising and income generating activities.**

In order to provide the hospital with specific objectives all departments were asked to engage in a process describing their main objectives. The following section provides a summary of the main objectives as described by the departments, the leadership of the hospital and the Mbulu Diocese.

### I.II.II. SPECIFIC OBJECTIVES:

#### I. REDUCE THE BURDEN OF DISEASE

- Maintain the quality of health delivery both in preventive, primary and secondary curative services for all according to the vision.
- Reduce deaths and disability, by reducing the mortality rate and morbidity rate of avoidable diseases in the community.
- Improve maternal and child health through MCH programs, ambulance and obstetrical services.
- Continue preventing the escalation of AIDS from the low level prevalence in this area, in accordance with the National Aids Control Programme (NACP) strategies.

- Maintain adequate specialist care at HLH – including surgical, internal medicine, orthopaedic, ophthalmologic, paediatric, mental health, gynaecologic, obstetric and ENT services.
- Continued emphasis on special preventive and curative programmes such as TB, Malaria, EPI and Nutrition programmes.

## **II. PARTICIPATE IN POVERTY ALLEVIATION ACTIVITIES**

- Improve health related poverty measures such as malnutrition and infant mortality.
- Participate in community capacity developmental activities such as provision of clean water, capacity building and construction of roads, dams and schools.

## **III. INSTITUTIONAL CAPACITY AND AWARENESS BUILDING WITHIN HLH AS WELL AS TOWARDS PARTNERS**

- Education and training of health and health-support professionals for HLH and other national health institutions.
- Improve the quality of the nursing care in all wards.
- Secure qualified teaching staff to the Haydom School of Nursing (HSN) in order to supply qualified nursing staff both for the HLH and the ELCT health institutions as well as for the country in general.
- Upgrade and train the necessary staff (Doctors, Technicians, Nurses, etc) according to the upgrading plans, to maintain the quality of care.
- Strengthen the administrative capacity of the HLH.
- Improve awareness and understanding within national and international stakeholders on the challenges facing the HLH and the strategies being used.
- Explore possibilities for internship and postgraduate studies at HLH for Tanzanian and international health science students.
- Continue to develop HLH as a research institution in cooperation with national and international research institutions.

## **IV. ACCESS TO INFORMATION, RESOURCES AND DECISION MAKING FORUMS**

- Establish collaboration with e.g. Muhimbili University College of Health Science (MUCHS), Tumaini University, Kilimanjaro Christian Medical Centre (KCMC), National Institute of Medical Research (NIMR), Centre for International Health (CIH),
- Investigate the possibilities for closer co-operation at all levels with government health facilities and health administration.
- Develop a library as a resource centre for the whole community as well as all health facilities in the area.

## **V. SECURE AND INCREASE THE FINANCIAL INPUT**

- Explore income generating projects e.g. farms.
- Explore the HLH's participation in insurance schemes, community-based, provider-based or as a combination of both.
- Mobilise national and international resources through fundraising activities and stable long-term donor support.
- Continue securing funds for the Haydom Trust Fund (HTF)

## **VI. MAINTAINING THE FUNCTIONAL HOSPITAL AND TECHNICAL INFRASTRUCTURE**

- Build a ward with single rooms offering better accommodation at higher charges to improve the cost recovery rate.
- Maintain the hospital infrastructure at an adequate level of function.
- Continued emphasis on Garage and Maintenance facilities.
- General rehabilitation and improvement of the hospital facilities, in particular the sanitary installations, the laundry and the paediatric ward.
- Improved physical and infrastructural conditions for specialist care units such as Ophthalmology and Mental Health.

## II. MAIN STRATEGIES

### II.1. MEDICAL SERVICES

#### II.1.1. EXHAUSTED YET IMPORTANT “BUZZ –WORDS” AND CONCEPTS

Haydom Lutheran Hospital has decided upon a set of strategies and activities in order to reach the objectives and fulfilling the vision. These are strategies adopted throughout the developing world to reach basic health services, specifically that which is outlined through the Primary Health Care concept as defined in Alma Ata. The hospital will base its activities around the principles of Equity, Community Participation, Inter-Sectoral Collaboration and Appropriate Technology. Through health promotion, prevention, cure and rehabilitation these elements can be incorporated appropriately. H.L.H. agrees with the WHO global strategy emphasising the principles of primary health care in the development of a total health system capable of meeting the needs for the whole population, as preventive and curative services together have been recognised as cost-effective and important in improving the health of the population. In this respect H.L.H. has taken seriously all components of the Primary Health Care concept, specifically including Inter-Sectoral Collaboration, in which the infrastructure, education, water and sanitation are among the sectors involved within the Hospital's strategy. Furthermore the hospital acknowledges the difficulty of defining the different concepts of Primary Health Care such as Participation, Sustainability, Empowerment and Community, and it should be noted that there is no common definition of either of these within the public health literature, making it difficult also for the hospital to use other actors' definitions, thus striving for its own understanding of the same concepts.

Misperceptions	Clarification
<ul style="list-style-type: none"> <li>• PHC is community based care only</li> <li>• PHC is first level contact only</li> <li>• PHC is only for developing countries</li> <li>• PHC is a core set of activities</li> <li>• PHC is low level technical interventions and uses only low level workers</li> </ul>	<ul style="list-style-type: none"> <li>• PHC concerns everybody, and is different from Preventive Health Care</li> <li>• PHC includes secondary and tertiary medical care</li> <li>• PHC is global</li> <li>• PHC is concerned with all health activities</li> <li>• PHC is for all technical and educational levels</li> </ul>

#### PRIMARY HEALTH CARE IN PARTICULAR

There are many misperceptions and limitations of Primary Health Care, and Haydom Lutheran Hospital strives to be aware and respond to these. Throughout the years the hospital has found itself caught in the middle of use and abuse of the Primary Health Care concept, in which actors within the development sector have defined it to support their own specific political and ideological views. Fortunately WHO set down a commission in 1994 to identify the most common misperceptions of the primary health care concepts, and are summarised in the box above.

HLH HAS FOUND ITSELF CAUGHT IN THE MIDDLE OF USE AND ABUSE OF THE PRIMARY HEALTH CARE CONCEPT

they

#### QUALITY, CREDIBILITY AND APPROPRIATE TECHNOLOGY – A FINE BALANCE

H.L.H. therefore strives to find the right balance between preventive, curative and palliative care realizing that one cannot be credible without the

other. The hospital emphasizes the need for a properly functioning referral system between all levels of the health care pyramid, in which resources can be used efficiently and the flow of patients, information and resources is a two-way

system. H.L.H. contributes to the *medical* referral pyramid by its MCH work, dispensaries, health centres, hospital, the Outreach programme and its referral of patients to KCMC. These facilities contribute to the medical referral system in the area, but the H.L.H. is not an *administrative* referral hospital in the Tanzanian health care system, as this function is the responsibility of Mbulu Hospital in the district capital approximately 80 kilometres north of Haydom.

QUALITY IS PARAMOUNT FOR THE HOSPITAL TO SURVIVE AS A CREDIBLE HEALTH FACILITY

In this context it is important to be aware of the interpretations of the term appropriate technology and its implications. As mentioned appropriate technology does not mean low-level technical input only. Within its context as a hospital functioning as a both primary and secondary referral hospital it is important to keep an adequate clinical standard both with respect to human and technical resources. H.L.H. cannot be expected to supply a lower level of services than national standards imply, and can neither be expected not to continually strive to give their patients

the best available treatment. Quality, and thus a level of clinical services adequately corresponding to its patient load, is paramount to the survival of the hospital as a credible health care facility within the Tanzanian health care system.

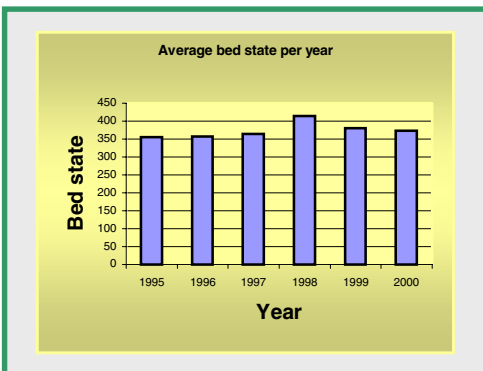
With the major aim of reducing the Burden of Disease in the population surrounding and accessing the hospital, the strategy implies not only the reduction of mortality and morbidity, but also the disability caused by diseases and injuries.

#### HLH AS A FIRST REFERRAL HOSPITAL — A HEAVY RESPONSIBILITY

HLH is a First Referral Hospital with additional Secondary Referral functions. Being a First Referral Hospital involves responsibility of a certain set of functions. According to the WHO these include: Being part of the national system of health services, providing 24 hour clinical care; relating effectively to the district health system; supporting preventive and primary health care; relating effectively to the communities; perform referral functions; relating to other sectors of development and being a problem-solving resource centre. **It further implies a Comprehensive approach to the supply of health service, although a selective approach often attracts more financial support.**

### II.I.II. CURRENT ACTIVITY AND TRENDS

Apart from the hospital itself, its static MCH clinic and 23 Mobile MCH clinics, the hospital currently runs 3 Health Centres and 2



Dispensaries at varying distances from the hospital. These are Gendabi Health Centre (60 kms), Balangda Lalu Health Centre (100 kms), Kansay Health Centre (120 kms), Harbangeid Dispensary (75 kms) and Bugeir Dispensary (140 kms). The activity in all of these institutions can be divided into *Preventive Services* (MCH, Ambulance / Radio Call and Community Capacity), *Curative Services* (Clinical and Clinical Support) and *Physical Support Services*. The following statistics give an indication of the activities at the hospital. It should be noted that the Bed Occupancy Rate is calculated according the number of beds existing in 1996 (300), while the number in 2000 has been adjusted to 350 to more accurately describe the number of beds used in the hospital. For a full overview of the statistics see the appendix.

FIGURE 4. HISTORICAL OVERVIEW OF AVERAGE BED STATE

Selected Hospital Statistics						
Hospital	1995	1996	1997	1998	1999	2000
Total no. of IPD	11685	10334	10007	11072	9106	10364
Average bed state	356	358.13	365.4	414	380	373.06
Bed occupancy rate	119%	119%	122 %	138 %	126 %	107 %
Total patient stay days	130,125	131,074	133,395	151,113	138,692	136,168
Total OPD attendances (all ages)	64,307	60,750	52,347	50,791	57,595	56,325
Total deliveries	2190	2468	2627	2199	2162	2744
HIV blood donor positive / Total donors		6/678	10/617	14/694	16/676	40/1010
<b>MCH</b>						
Total Mothers examined	20553	24377	25326	22821	25014	28312
Total Children examined	38694	55937	61863	61411	64755	69321
Total Vaccinations	28589	39656	45837	45279	42886	40988

TABLE 1. HISTORICAL OVERVIEW OF SELECTED MEDICAL STATISTICS.

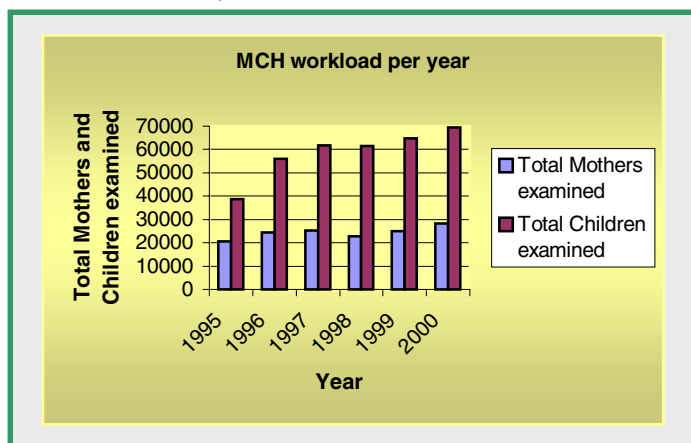
#### II.I.I.I. PREVENTIVE SERVICES

The preventive services of the hospital can roughly be divided into the Mother and Child Health Care system (MCH), the Ambulance and radio call services and the Community Capacity Building activities. Community Capacity Building strategies are described in detail later in this chapter.

#### MOTHER AND CHILD HEALTH CARE

To effectively reduce the avoidable deaths and diseases of mothers and children one has to address three main obstacles. First the mother needs to be aware of her problem and the possibility of receiving help. Secondly she needs to be able to get there. Finally she needs to receive adequate treatment once she has arrived. H.L.H. has taken all three of these barriers into account when combating this problem. Evidence from research suggests that the main solutions to these problems include effective antenatal care, appropriate emergency treatment of complications, access to transportation and competent referral level care with adequate equipment.

The hospital currently runs 23 monthly Mobile Health Clinics and 1 Static Clinic at the Of these 6 are serviced by air in co-operation with the Missionary Aviation Fellowship (MAF). The MCH work focuses heavily on health education, both towards women and men. For every clinic there is a lecture on a specific health prevention topic. The



clinics perform standard antenatal care and give both mothers and children standard vaccinations according to the National Health Plan as well as a general clinical examination. Identified patients needing further treatment are referred to the hospital for treatment. Child monitoring is furthermore an important task of the MCH teams. The programs extend however, to also include strategic intervention

FIGURE 5. HISTORICAL OVERVIEW OF MCH WORKLOAD

protocols including treatment of malaria, urinary tract infections and anaemia in pregnancy. This has shown to have a profound effect on both the mortality and morbidity and has been introduced through the dissemination of results of the research conducted at the hospital. Several new clinics have also been established as a result of this research. The rate of urinary tract and lower genital infections has been shown to be extremely high. With the high correlation between these types of infections and HIV transmission the area surrounding the hospital is in grave danger of becoming a high prevalence HIV area. At present the prevalence is low with only 2 (0.4%) of the 467 pregnant women examined in this study being HIV positive. The area is identified through the National AIDS Control Programme as **“an area needing vigorous HIV prevention programmes to prevent further escalation.”**

Research by PhD candidates from the Centre for International Health at the University of Bergen showed prevalence as high as 60% of Urinary Tract Infections and Lower Genital Infections among pregnant women illustrating the extreme importance of preventing the spread of HIV as the area presents fertile ground for rapid HIV/AIDS escalation.

Although the Global Alliance for meant to boost the Tanzanian programme, Haydom Lutheran Hospital facilities in that the EPI programme in commitment and resources due to the proposed introduction of self-equipment. Because the EPI

GAVI LEAVES THE CURRENT EPI SYSTEM IN A POLICY AND RESOURCE VACUUM

Vaccines and Immunization (GAVI) in theory is Expanded Programme of Immunization (EPI) has experienced the same as many other fact has been deteriorating because of lack of new initiative. Some examples include the destroying needles and the supply of sterilization currently uses re-usable equipment, it has also been

supplied with sterilization equipment. Because the GAVI initiative relies on non-sterilizable equipment, the supply of sterilizable equipment and sterilizers has deteriorated without the supply of non-sterilizable equipment in place, thus leaving the current EPI system in a vacuum with the effect being that many children around the country are not being vaccinated. H.L.H. has up to now filled this gap with own resources although this is the Ministry of Health responsibility.

#### AMBULANCE AND RADIO CALL SERVICES

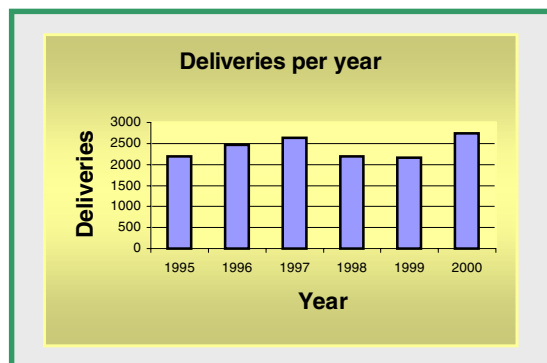


FIGURE 6. HISTORICAL OVERVIEW OF HOSPITAL DELIVERIES

The ambulance services and radio call facilities are also an important part of the preventive services. Radios have been placed in 10 villages enabling the villagers to call for an ambulance when needed. **This service has proved to be both of great importance in reducing the deaths due to maternal complications** (See statistics in section 2.3) and have shown to reduce the time taken to adequately treat other diseases such as cerebral malaria, thus increasing the chances of survival. Between 30 – 40 percent of all medical ambulance trips are annually requested for by the radio call services.

### II.I.II.II. CURATIVE SERVICES

The curative services can be divided into two main components – the clinical services and the clinical support services.

#### II.I.II.II. CLINICAL SERVICES

The following departments supply the clinical services:

- |                                                                                                                                                                                                   |                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Medical ward</li> <li>• Surgical ward</li> <li>• Operating Theatre department</li> <li>• Intensive Care Unit (ICU)</li> <li>• Paediatric ward</li> </ul> | <ul style="list-style-type: none"> <li>• Maternity ward</li> <li>• Tuberculosis (TB) ward</li> <li>• Dental unit</li> <li>• Outpatient department</li> <li>• Outreach / Specialist services through the Flying Medical Services / AMREF.</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The curative services offered at H.L.H. have been described as being of very high quality both nationally and internationally.

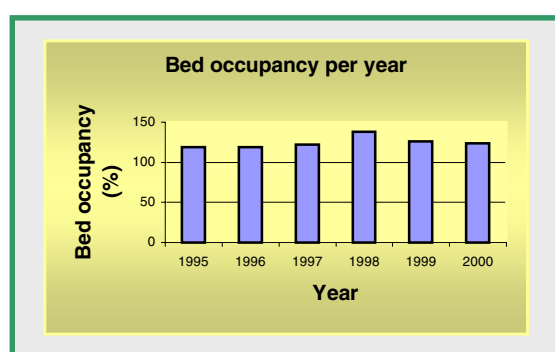


FIGURE 7. HISTORICAL OVERVIEW OF BED OCCUPANCY

Because of its medical expertise and well functioning equipment it attracts patients and receives referral cases from all over northern Tanzania. It relies on its competent staff and basic equipment to provide quality care, but in addition receives monthly visits from specialists through the Flying Medical Doctors Services. The area furthermore has one of the world's highest prevalence of TB of which extra pulmonary TB is very common. The Tanzanian TB research community is undertaking interesting research in the area. HLH has only recently started its dental services and this has proven to be a great help both to the adult and child population in the area. Another special event of clinical importance was the help received from Haukeland Hospital in Bergen, Norway, towards the surgical care of 3 heart patients

from Haydom in 1999. Patients with Rheumatic heart diseases and Pericardial TB were effectively treated at the surgical unit in Bergen. The co-operation was paid for by gifts and donations, and proved to be of great value not only to the patients, but also to the accompanying medical staff from Haydom and the medical staff at Haukeland Sykehus for whom these cases presented new and demanding challenges. A summary of the departments and the hospital clinical activities is presented in the annex.

### II.I.II.III. CLINICAL SUPPORT SERVICES

The hospital relies heavily upon its own clinical support services. Although it has some secondary support from KCMC regarding pathological examinations, its diagnostic and clinical support capacity is largely dependant on own resources. These facilities includes the following:

- |                                                                                                                                                                     |                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Laboratory services</li> <li>• Radiology services</li> <li>• Physiotherapy</li> <li>• Medical Stores department</li> </ul> | <ul style="list-style-type: none"> <li>• Intravenous Unit</li> <li>• Medical Records department</li> <li>• Library</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|

Again the activities can best be described by the statistics presented in the

annex:

It should be noted that the hospital has a unique medical record including its very first patient in 1954. Of particular interest is also the prosthesis work now carried out by specialists from Kikuyu Hospital in Kenya, with one technician currently being trained to establish this service permanently at the HLH.

...A UNIQUE MEDICAL  
RECORD INCLUDING ITS  
VERY FIRST PATIENT IN  
1954

### II.I.II.IV. PHYSICAL SUPPORT SERVICES

Haydom Lutheran Hospital has from the start been largely self-reliant on physical support services. Beds, furniture, I.V. racks etc are all made and maintained in the Technical Department of the hospital. Carpentry, welding, mechanical, agricultural, electrical and activities are all carried out in the Garage. Being located more than 300 kms from Arusha necessary in order to survive.

plumbing  
this has been

As the hospital in general does not cater for the patients' food, there is a relatives house in which the patients relatives can stay and prepare food for the patient. An overview of all Physical Support facilities at the hospital is as follows:

- |                                                                                                                                                  |                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Technical Department (Garage)</li> <li>• Laundry</li> <li>• Communications</li> <li>• Morgue</li> </ul> | <ul style="list-style-type: none"> <li>• Tailoring department</li> <li>• Waist handling</li> <li>• Relatives House</li> <li>• Administration / Offices</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

For a more detailed description of major rehabilitation and construction projects carried out the past 5 years see the appendix.

### II.I.III. FUTURE MEDICAL STRATEGIES

In general one of the major aims of the next 5-year period is to focus on quality improvement, in particular clinical management, but also on the physical and technical infrastructure in order to proved the best possible health services and contribute to reducing the Burden of Disease in the area.

The main strategy towards reducing the burden of disease goal will be to continue the focus on medical strategies through **integrated preventive, curative and physical support services** by the hospital. It does however, heavily integrate with other major objectives mentioned later, such as poverty alleviation and capacity building strategies.

#### II.I.III.I. PREVENTIVE SERVICES

##### HIV / AIDS

The preventive services, through the MCH work, in line with the National AIDS Control Programmes suggestions, will seek to establish a protocol for preventing the escalation of HIV transmission in the area. The low prevalence currently found is a potential time bomb as the prevalence of lower genital tract infections has been found to be very high, as described earlier.

...PREVENTING THE  
ESCALATION OF  
HIV

#### VITAMIN A SUPPLEMENTATION AND BED NETS

In addition it should be of importance to introduce Vitamin A supplementation as this has been found to have a profound effect on the nutritional status. Recent research from the area (CIH, UIB, Hinderaker & Olsen) shows that there is considerable Vitamin A deficiency among non-anaemic pregnant women. 22% of participants in the study had severe lack of Vitamin A ( $<0.7\mu\text{mol/l}$ ). (More than 15% indicates a severe public health problem). Introducing treated bed nets to pregnant women to prevent malaria has also been considered a possible intervention through the MCH programme. An important intervention will be to provide impregnated bed nets to all hospital beds as the transmission of malaria within the hospital is an increasing problem.

#### OBSTETRIC SERVICES

As for the ambulance and radio call services the aim is to continually improve these services, and in particular increase the number of villages with a radio call service. The possibility of providing a maternal waiting home for pregnant women, found to have a profound effect on maternal mortality, is interesting, but requires further investigation and resource mobilization.

#### IMMUNIZATION SERVICES

The introduction of the GAVI initiative will also present a challenge as it introduces a new methodology as well as a limited time span of support. It is hoped that the MCH work will not suffer from these changes, but that it rather is improved as intended in the GAVI initiative. The hospital cannot be expected to cover the financial gap left between these two policies. Nonetheless the MCH work of the hospital will have to continue to secure adequate equipment and drugs supply.

### II.I.III.II. CLINICAL SERVICES

#### ADEQUATE SPECIALIST CARE

HLH attributes most of its credibility and high influx of patients from its quality medical diagnostic services and care. It is an objective to maintain this service. An important factor is therefore maintaining adequate specialist care within the most important medical fields in order to serve the population according to its needs. Of the present specialities it is important to continue to provide surgical, internal medicine, paediatric and gynaecological care.

.MAINTAINING  
ADEQUATE  
SPECIALIST CARE  
— TO SERVE THE  
POPULATION  
NEEDS

In addition however, experience has shown that it is also important to cater for the needs within orthopaedics, ophthalmology, ENT and mental health. It will therefore be an objective for the hospital also to find adequate resources to provide these specialist services. Some of these are already provided through the Outreach programme of the Flying Doctors Services and this cooperation could be strengthened. It is believed however, that the massive need for eye and mental health services might require a permanent specialist at the hospital. The closest institutions providing eye and mental health services are at KCMC in Moshi and Mt. Meru Regional Hospital in Arusha, respectively. HLH have been in contact with Dr. Sheila Devane at the Mt. Meru Mental Health OPD providing high quality mental health services to the community. This institution has expressed sincere requests for cooperation and partnership within this important field, and HLH, with its outreach capacity, could benefit greatly from such a venture. A mental health unit, with an adequate neurological component, will consolidate the hospitals position within the National Health Plan of Tanzania, representing a required clinical speciality also for the Diploma at the Haydom School of Nursing. It is a medical field often overlooked and proper intervention is severely overdue. Burden of Disease estimates conducted by the WHO concludes with mental health problems ranking as the fourth largest burden in developing countries.

...MENTAL  
HEALTH  
PROBLEMS  
RANKING AS THE  
FOURTH  
LARGEST  
BURDEN IN  
DEVELOPING  
COUNTRIES

A recent visit by an eye specialist from Norway concluded in the immediate need for further specialist care within the field. There are many patients with neglected glaucomas and tuberculous keratitis, as well as a range of other severe both congenital and acquired eye diseases representing a massive burden on the community as a whole. It is an objective to continue the cooperation with the specialist services provided at KCMC, expanding the equipment available for their visits, and perhaps establishing a permanent eye clinic at the hospital.

Furthermore there is a need for increased awareness towards the services provided by the Dental office. The present cooperation with the primary and secondary schools in the area should be strengthened to include regular examination and treatment of school children.

## **TUBERCULOSIS**

Because the area is severely plagued by Tuberculosis the TB programme is continually strained. Resources should be found to enable the Directly Observed Treatment Schedule (DOTS) regime to be continually expanded to include home visits and perhaps mobile TB units as well as to continue to care for the many cases representing severe clinical illness and disease burden. The rate of transmission is still far too high and needs adequate attention.

Finally the Outreach programme provided by Flying Doctors Services and AMREF could be expanded into including other specialities in which a psychiatric service would be of great importance.

## **II.I.III.III. CLINICAL SUPPORT SERVICES**

### **ANTIBIOTICS RESISTANCE AND HIV TESTS**

One of the main priorities within the clinical support services is an improvement of the Laboratory services to include bacteriological cultures and tests. The increasing problem of antibiotic resistance in the area is alarming. Furthermore there is an urgent need to secure an adequate and stable supply of HIV test-kits for the blood bank and for surgical procedures.

TO SECURE AN  
ADEQUATE AND STABLE  
SUPPLY OF HIV TEST-  
KITS

### **FROM ULTRASOUND TO LIBRARY FACILITIES — IMPORTANT TOOLS**

The Radiology department will need Ultrasound for general examinations and obstetric cases, in particular for instalment at the Health Centres. This has proved to be a cost-effective tool towards identifying complications and reducing the maternal deaths. Space is becoming a serious limitation to the Physiotherapy department as both people and clinical departments experience the value of their services. It will be paramount to secure the medical records from fire and theft and a fireproof room has therefore been proposed. The drug store, with its stores, quality testing and drugs production unit and administration, is now situated in many separate buildings.

PROVIDE A  
MEDICAL  
RESOURCE  
CENTRE TO THE  
COMMUNITY

Getting them under the same roof will be a priority. Finally it will be a priority to continually improve the quality and content of the Library to facilitate the further education of the clinical officers in particular, but also to provide a medical resource centre to the community and to other health facilities in the area. Cooperation with the Centre for International Health at the University of Bergen and Høgskolen i Bergen in Norway has already been established in this area, and

hopefully funds will be secured to see it through. The already existing e-mail and Internet services should be expanded exploring the free options available through cyberspace.

## **II.I.III.IV. PHYSICAL SUPPORT SERVICES**

The objectives and needs for the Physical Support Services for the next 5-10 years are described in detail in Chapter III and the annex.

## **II.II. CAPACITY BUILDING AND AWARENESS**

As with the Technical input H.L.H. has focused on self-reliance also with regard to Human Resources and Institutional Capacity building. Because of its location few trained personnel are willing to stay at Haydom for a long time. It has been a great success to educate and train people from the area as they are both motivated to stay and to provide a good service for their own people. As with many developing countries it is however a great challenge to maintain an adequate number of trained staff. This is not so much from lack of personnel as from lack of educational capacity in the country itself. Nevertheless the hospital has until now managed to upgrade nurses, train one doctor and several Assistant Medical Officers as well as several accountants, administrators and technical personnel. H.L.H. educates and trains in close co-operation with the Ministry of Health and according to their curricula and guidelines. As mentioned earlier H.L.H. believes in the importance of maintaining and improving its institutional capacity and quality of clinical, clinical support and physical support work both in order to give the population the best available services, but also to survive economically. The hospital is totally dependent on the patients' trust in quality of the treatment and availability of drugs. Together with the cost of treatment and access to services, these are among the main determinants of patient flow and thus income.

THERE IS A MARKED  
IMPROVEMENT IN  
THE CAPACITY OF  
THE STAFF DURING  
THE PAST 5 YEARS

the

### **II.II.I. PRESENT ACTIVITIES**

The capacity building activities can best be divided into two major components, Hospital based and Institutional collaboration.

#### **II.II.I.I. HOSPITAL BASED CAPACITY BUILDING**

##### **HAYDOM SCHOOL OF NURSING**

The largest and most important part of the hospital capacity building program is its own school of nursing. From its beginning in 1982, established with the accreditation of the Ministry of Health, it has aimed at both educating high quality nurses for Tanzania in general and to provide the Hospital with competent staff. It receives students from the whole country and is proud of its quality staff and management. It has developed from educating nurses at Nurse B level to now take them through to Diploma of Nursing and Midwifery. The students play an active part in the running of the school with their own agricultural projects. In addition they continually receive in-service training at the hospital. They are also trained in research methodology and spend 6-8 weeks in the field, living in the villages, gathering information for their protocols at the same time providing preventive health care to the people. This information is systematically disseminated back to village leaders in an effort to continually improve the health of the people.

##### **UPGRADING OF STAFF**

H.L.H. has an extensive upgrading program for its staff. Both through awards and planned training many receive grants from the hospital for further education. A total of 72 persons have received training through these programmes throughout the previous 5-year period. The fields range from administration, accounting, clinical officers training and technical specialities. For a full list of trained personnel see the annex. There is a marked improvement in the capacity of the staff during the past 5 years, particularly in the fields of administration, pharmacy nursing, assistant medical officers, clinical officers and accounting.

#### **II.II.I.II. INSTITUTIONAL COLLABORATION**

A gradually increasing part of the hospitals capacity building programme is its growing collaboration with external institutions. Throughout the past 5 years institutions like Centre for Educational Development and Health, Arusha (CEDHA), National Institute of Medical Research (NIMR) and Centre for International Health, University of Bergen, Norway (CIH) have played an important role in continued education of staff and research. 4 PhD students from Norway have conducted their fieldwork in connection with the hospital, and more than 150 medical students, nursing students and students from other development fields from institutions in Norway have conducted their fieldwork at H.L.H. These institutions include the Medical Faculty at University of Bergen and Oslo, Diakonissehjemets Sykepleierhøgskole, Haraldsplass, Betanien Sykepleierhøgskole, Høgskolen i Bergen, Haukeland Sykepleierhøgskole and Agder Distrikt Høgskole. This experience has been of great interest and has led to an exchange programme between Høgskolen i Bergen and Haydom School of Nursing in which 4 students from Haydom travel to Norway and 10 students with a teacher come from Norway. There is also research currently undertaken at Haydom by NIMR on the possible links between bovine and human Tuberculosis.

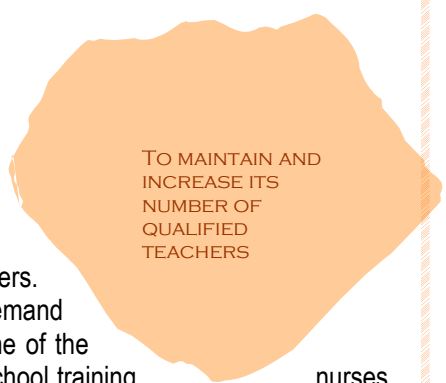
Apart from these new developments there is still the collaboration between H.L.H. and institutions such as the Kikuyu Hospital and the African Medical and Research Foundation (AMREF) in Kenya and Kilimanjaro Christian Medical Centre (KCMC) in Moshi, Tanzania towards training of clinical officers and laboratory personnel. The Outreach programme described earlier also includes a component of training when the specialist doctors visit Haydom.

### **II.II.II. FUTURE CAPACITY BUILDING AND AWARENESS STRATEGIES**

#### **II.II.II.I. HOSPITAL BASED**

##### **HAYDOM SCHOOL OF NURSING**

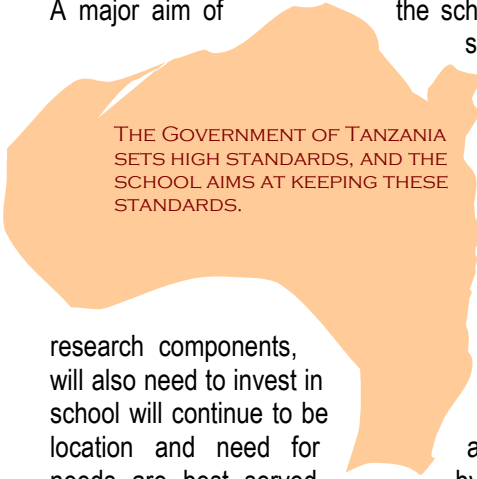
The main challenge for the school is to maintain and increase its number of qualified teachers. Throughout the past years the number of teachers has varied from 3 – 5. The guidelines demand a total of 10 teachers, but this has until now not been possible. As mentioned earlier one of the main constraints is the Tanzanian nurse's teachers training capacity. There is only one school training teachers, with 24 places, serving the 26 nurses training schools in the country. It is therefore very difficult to get access to



TO MAINTAIN AND  
INCREASE ITS  
NUMBER OF  
QUALIFIED  
TEACHERS

enough places for an adequate supply of teachers. The aim of the school is to have an adequate number of staff employed through its own system, but with the present situation in Tanzania it seems inevitable that there will be a need for external teaching assistance for a very long period ahead. HLH would like to pursue other possibilities of educating local teachers through national institutions and one such possibility could have been a combination of Master of Nursing units at Tumaini University / KCMC and Diploma of Teaching units at CEDHA. This combination does not yet exist, but the request extends to these two institutions to create an opportunity in which more nurse's teachers can be trained.

A major aim of



THE GOVERNMENT OF TANZANIA  
SETS HIGH STANDARDS, AND THE  
SCHOOL AIMS AT KEEPING THESE  
STANDARDS.

research components, will also need to invest in school will continue to be location and need for needs are best served relationship between the hospital and the school. A further overview of infrastructural improvements to the school is listed in the appendix.

the school is to maintain its high quality teaching. The Government of Tanzania sets high standards, and the school aims at keeping these standards to ensure good quality nurses for the Tanzanian Health Care System. An important component towards achievement of this aim is to maintain a high quality of its clinical instructors. It is difficult however to secure an adequate number of qualified teachers as the hospital is situated far away from major towns, provides low incentives and is under Mbulu Diocese regulations concerning staff attitudes and behaviour.

On of the main concerns for the future is also to maintain an adequate supply of teaching material and equipment. This includes books to follow the curriculum and and equipment such as copying machines for the students and teachers. The school some support staff, and has in particular identified kitchen and service personnel. The an integral part of the HLH institution. This is due to many factors including its remote administrative, economic and clinical support. The present administration believes these by the present organisational structure. It is also a natural result of the symbiotic relationship between the hospital and the school. A further overview of infrastructural improvements to the school is listed in the appendix.

#### STAFF UPGRADING

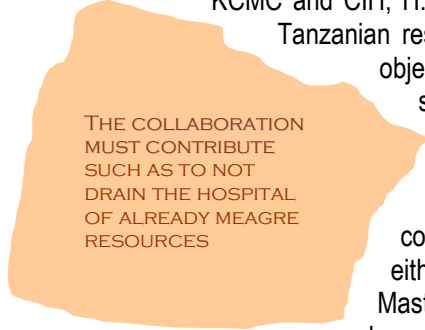
This programme will continue as one of the most important capacity building programmes outside the nurses' training school. It has been very successful and proved to be an important tool in improving human resource sustainability for the hospital.

#### LABORATORY ASSISTANT TRAINING

H.L.H. has developed plans for establishing a laboratory assistant training school as this is in great demand both at the hospital and in Tanzania in general. AMREF are close collaborators in this project, although resources have not yet been secured.

#### II.II.II.II. INSTITUTIONAL COLLABORATION

The many years of good co-operation with institutions such as KCMC, AMREF and CEDHA will definitely continue also into the future. In addition however the hospital aims at institutionalising its co-operations with other institutions engaged in capacity building and training activities.



The research currently undertaken at Haydom could benefit from a formal link. With the link already established between NIMR, KCMC and CIH, H.L.H. is well known in all of these institutions and believes it can contribute greatly to the Tanzanian research community through its extensive clinical and preventive work. There are several objectives for this collaboration including increased quality of work at H.L.H., establishing a scientific expression of the work already undertaken, use and implementation of existing, proven interventions, flow of students and doctors to Haydom for training and to train, the formalization of the work of foreign students, and flow of resources both to intervention programs but also to the general running of the hospital. If successful this collaboration could also include a component in which H.L.H. contributes with training of Clinical Officers either through Muhimbili University, Dar es Salaam, or Tumaini University, KCMC, through its Master of Medicine programme. It is important that this type of collaboration contributes both with human, technical and financial resources such as to not drain the hospital of already meagre resources. Through preliminary discussions with the possible collaborators this seems to be well understood.

Establishing a Mental Health unit will also provide the opportunity towards increased collaboration between institutions nationally and internationally within this field. As mentioned contact has already been established with the Mental Health unit at Mt. Meru

Regional Hospital in Arusha, and this could be expanded. Cooperation with related institutions internationally will also be a priority. Regarding the eye unit preliminary contacts have been made with Christopher Blinden Mission and KCMC.

### II.II.II.III. SENSITISATION AND AWARENESS OF PARTNERS

As spelled out in the minor objectives in chapter 1 H.L.H. also aims at improving the awareness of the national and international stakeholders with regard to the challenges facing the hospital and the strategies used. It believes in the importance of mutual understanding of the problems and solutions facing the hospital within both the national and the international community as an important tool in improving the capacity of the project as a whole.

There are many reasons for this. With its location in the periphery the hospital faces a great challenge simply communicating with government and international institutions. In addition the link to church activities and its place outside the administrative health care pyramid of the Tanzanian Health Care system, yet an integral part of its National Health Plan, gives ample room for misunderstanding and presents a challenge to explain to collaborating partners. The same applies for its understanding of the Primary Health Care principles, striving to find a proper balance between both preventive and curative strategies, Institutional and Administrative organisation evolved through experience to comply with the sentiment of the people over many years.

Following the recommendations of Alan Fowler Haydom Lutheran Hospital has a great challenge ahead in setting clearer priorities towards collaborators and partners demanding mutual accountability and respect. The hospital is in a position, providing high quality medical services and community capacity development, to be able to negotiate own development and medical strategies following long-term visions and objectives with the aim of providing stable and working relationships in which both partners and H.L.H. understand each others challenges and respect their decisions. Partnerships are about trust, respect, integrity, mutual accountability, shared information, long-term involvement and equality.

In this context it is important to reach a common understanding with collaborating partners, donors in particular, of the many issues facing the hospital. This does not only involve scarcity of all types of resources, but conceptual challenges ahead. Without deliberating in detail in this report some of the most important should be briefly mentioned.

### COMMUNITIES: CLIENTS OR PARTNERS IN HEALTH?

One of the principles of primary health care- as laid down in the Alma Ata declaration – is increased ownership of health services by communities. This requires community involvement in priority setting, management and monitoring of health services. At the same time the church health services owned by the Dioceses have to be run as efficient organisations, under the leadership of the church. The obvious answer to the question posed in the headline is of course that communities are both recipients of health care and partners in health. There are times however, that it is not obvious that this is for

the benefit of the population as it often is difficult to know who actually represents the community and to whose benefit is the activity undertaken. It is therefore important to bear in mind that a community is not

a single entity but a multitude of groupings with their own agendas and conflicts. Various commentators on community will describe it ranging from a medical professional view as the aggregation of the sick, to “groups with shared needs living in a defined geographic area” (Schmidt and Rifkin 1996). Community participation can be approached from three different

angles. The medical approach, health services approach and the community development approach. These approaches are derived from the planner's perspective, when implementing a PHC project. The medical approach relies heavily on the medical profession to lead the way, and the community to follow, also described as a top down model. The health services approach relies on the community to take an active part in delivering the health services, but does not extend to the level of the community development approach, in which there is a social, economic and political development and the community are not only actively involved in delivering but also planning and

evaluating their own condition, a bottom up model. The latter approach assumes that people are aware of their own situation, and that they are motivated for change. It also assumes full empowerment as the ultimate goal of the community and its individuals. It is important to find a balance between community participation as a means to an end and an end in itself, regardless of outcome.

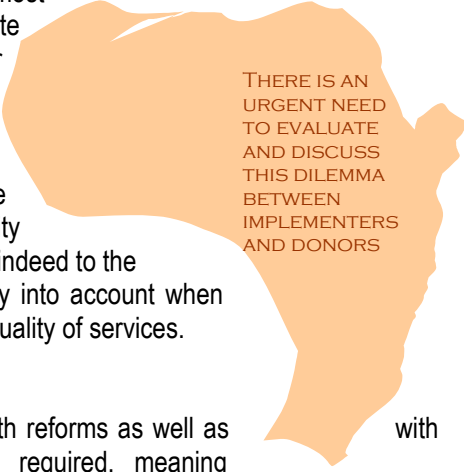
HLH AIMS AT  
IMPROVING THE  
AWARENESS OF  
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AND  
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#### ACCESSIBILITY VERSUS SUSTAINABILITY

The general vision of social services of the church is to alleviate the suffering of the poor and most vulnerable in society. Increasingly however, there is pressure on the church to achieve financial sustainability and self-reliance. External contributions from governments and donors are redirected and dwindling. This requires considerable financial contributions from patients and clients ultimately leading to the exclusion of the poorest, by some regarded as the most important beneficiary of the same social services. There is an urgent need to evaluate and discuss this dilemma between implementers and donors. Is there really scope for financial sustainability, at the same time ensuring equity and accessibility, within the economies of the Tanzanian households? Are there in fact any social services around the globe, with the vision of accessible and equitable health service provision, that are not being subsidized by governments or external donors? The HLH believes the strong, often immediate and short-term focus on self-reliance and financial sustainability by donors, because of its non-achievability, is detrimental to the planning process and indeed to the partnerships in general. HLH needs to take several more elements of sustainability into account when deciding upon its strategies including good management, credibility, accessibility and quality of services.




THERE IS AN URGENT NEED TO EVALUATE AND DISCUSS THIS DILEMMA BETWEEN IMPLEMENTERS AND DONORS

#### ACCOUNTABILITY VERSUS AUTONOMY

Increasingly, in the process of collaboration with government health services in health reforms as well as with varying health and development policies of different donors, transparency is required, meaning accountability regarding financial and technical health activities performed. Participating in partnerships, whether with government or external donors, means setting priorities together. At the same time, church health services want to maintain their autonomy, taking decisions about medical and financial activities within the church organization, according to their own visions and objectives. Within this context it is important to be aware of, and respect, cultural and religious differences, without losing sight of the overall objective, serving the people providing equitable health services. In participation inevitably some degree of freedom is lost. This should be reflected both ways however, in that the partners in health all are willing to sacrifice some freedom towards the common goal. Too often this partnership becomes one of unequals in which the "briefcase people" demonstrate their power dictating planning and implementation procedures. Accountability is much more than only financial accountability. An institution like the Haydom Lutheran Hospital needs to be accountable also to its technical and medical strategy, its visions and its institutional ethics and norms.

#### VOLUNTARY AGENCIES AND THE PUBLIC SECTOR

There seems to be an increased attention among major donors towards the importance of Civil Society. Its role as advocates for basic rights and demands, as well as important service providers has been identified as increasingly important towards sustainable poverty alleviation. Nevertheless there remains policy confusion when it comes to resource allocation towards the same Civil Society. On the one hand Voluntary Agencies are encouraged to provide health services and community capacity development, but on the other they are accused of competing with and overlapping Government services. In the Tanzanian context Voluntary Agencies provide more than 50% of the total health services. They are repeatedly regarded by the Government to be invaluable towards adequate health provision for the Tanzanian people. Voluntary Agency hospitals are in several districts Designated District Hospitals functioning in a dual role, assisting the Government not only with service provision but also with public health administration. The argument that Voluntary Agency hospitals such as Haydom Lutheran Hospital are competing with Government services is at best misguided and at worst misleading. The Government's role as policy maker and financier of health services should not be confused with the use of Voluntary Agencies as service providers. The Public – Private mix of service provision is part of a constant efficiency evaluation process carried out by the Government. A future role of the Tanzanian Government as sole provider of the needed resources towards adequate health services seems still very far away given the country's immense poverty.



HLH DOES NOT COMPETE WITH BUT COMPLEMENTS AND WORKS WITH GOVERNMENT SERVICES

## II.III. POVERTY ALLEVIATION

Mbulu and Hanang Districts are among the poorest areas in Tanzania. Tanzania is according to United Nations reports, one of the poorest countries in the world. It is important to alleviate poverty not only to reduce suffering and improve development, but also to maintain an adequate supply of resources to the community in the form of trained personnel and financial sustainability of public services such as education and health. In addition the Church ethical and religious imperative demands that help is given wherever it is needed according to the vision of the church - that every human being valuable. The World Bank recommends action in three specific areas – *Promoting opportunity*, *Facilitating empowerment* and *Enhancing security*. HLH have for past 45 years in particular focused on *enhancing security* trying to reduce the population's vulnerability to ill health, crop failures and natural disasters. In addition the institution has emphasized *promoting opportunity* through improving community assets through strategies aimed at education, clean water, sanitation, roads and community infrastructure.

### What do the words mean?

#### Promoting opportunity:

Expanding economic opportunity for poor people by stimulating overall growth and by building up their assets (such as land and education) and increasing the returns on these assets, through a combination of market and non-market actions

#### Facilitating empowerment:

Making state institutions more accountable and responsive to poor people, strengthening the participation of poor people in political processes and local decision-making, and removing the social barriers that result from distinctions of gender, ethnicity, race, religion, and social status.

#### Enhancing security:

Reducing poor people's vulnerability to ill health, economic shocks, crop failure, policy-induced dislocations, natural disasters, and violence, as well as helping them cope with adverse shocks when they occur. A big part of this is ensuring that effective safety nets are in place to mitigate the impact of personal and national calamities.

James D. Wolfensohn, President,  
WB August 2000. *Attacking Poverty*.

45 YEARS OF  
POVERTY  
ALLEVIATION  
THROUGH HLH  
(TABLE 2)

The following table gives a brief introduction to the challenges facing the Haydom community:

Indicator	Tanzania (Source)		Haydom area (Source)	
• Pop. Below 1 USD per day	16.4%	(WB WDR, 1997)		
• Pop below USD 2 per day	59.7%	(WB. WDR, 2000)		
• GDP per capita	USD 120	(WB WDR, 1997)		
• Public expenditures on health	3% of GDP	(WB HNP Strategy, 1997)		
• Average household size	6.1	(NBS DPBT, 2000)	6.3	(H&O, 1996)
• Female headed households	12.3%	(NBS DPBT, 2000)	12.0%	(H&O, 1996)
• Percentage of households with severe food-shortage (1999)			33	HMFRP MFA 1999
• Access to health services	42%	(UNICEF SWC, 1997)		
• Access to Safe Water	66%	(UNICEF SWC, 1999)		
• Life Expectancy	51 years	(UNICEF SWC, 1999)		
• Pop. Per hospital bed	1123	(MOH HSA 1997)		
• Pop per doctor	23188	(MOH HAS, 1997)		
• Human Poverty Index	39.8	(UNDP Report, 1998)		
• Adult Literacy Rate	68% )	(UNICEF SWC, 1999)	61% Male 39% Female	(H&O, 1996)
• Primary School Enrolment	36.9% Male	(UNICEF SWC,	52% Male	(H&O, 1996)

	39.6% Female	1999)	36% Female	
• Secondary School Enrolment	6% Male 5% Female	(UNICEF SWC, 1999)	1.4% Male 1% Female	(H&O, 1996)
• Perinatal Mortality Rate	58.7/1000 births	(NBS RCHS, 1999)	26/1000 births	(H&O, 1996)
• Infant mortality rate	99.1/1000	(NBS RCHS, 1999)	58/1000	(H&O, 1996)
• Under 5 mortality rate	146.6/1000	(NBS RCHS, 1999)	89/1000	(H&O, 1996)
• Maternal Mortality Ratio	529/100.000 live births	(Tanzania DHS, 1996)	382/100.00 live births	(H&O, 1996)
• Crude Birth Rate	42.6/1000	(UNDP Report, 1997)	47.7/1000	
• Births attended by trained health personnel	46.7%	(Tanzania DHS, 1996)	39%	(H&O, 1996)
• Percentage of children with poor or at risk Nutritional status	29	(NBS RCHS, 1999)	21	HLH HSN, 1999
• Vitamin A deficiency among pregnant non-anemic women (<0.7µmol/l)			22%	(H&O, 1996)

TABLE 2. POVERTY AND WELFARE INDICATORS FROM TANZANIA AND THE HAYDOM AREA.

### II.III.I. COMMUNITY CAPACITY DEVELOPMENT

In accordance with the vision of the Mbulu Diocese, community capacity development has always been an important part of the work of Haydom Lutheran Hospital. **The Hospital is not an island but part of the community.** It has therefore initialised and participated in many community development activities. The table below provides a summary of the projects involved, in chronological order:

**Overview of Poverty Alleviation and Community Development Programs conducted through the HLH. All the project implementation, monitoring and reporting has been done through the Haydom Lutheran Hospital Technical and Financial Departments.**

Year	Project	Activity	Main effect	Donor(s)	Local contribution
1964	Farmers Association	Purchased tractor, plough, harrow and trailer	Increased and improved farming activities - enhancing security and promoting opportunity	Oxfam	Formed an association with a small payment for use of equipment
1964	Primary School Construction	Construction of the Haydom Primary School	Improved public education – promoting opportunity and facilitating empowerment	Tjølling Lærerlag (Norwegian Teachers Group).	Labour contribution towards school construction
1966 – 1970	Water project	Drilled 18 bore holes for clean drinking water	Improved quality and quantity of water – enhanced security	Lutheran World Federation (LWF) with contributions from Lutherhjelpen (Sweden), Norwegian Church Aid (Norway) and Brot fur die Welt (Germany).	Small cash contribution from the community as well as administration and maintenance of each bore hole by a designated community group
1970 – 1980	Housing project	Advice, drawings and small interest free housing loans for improved housing in the community	Improved quality of housing – enhanced security	Haydom Lutheran Hospital	Building of houses as well as repayment of loans
1977	Agricultural project	Distribution of ox ploughs.	Improved farming enhanced security and promoting opportunity	Haydom Lutheran Hospital	Bought by the households at cost price.
1985 - 1988	Community and Hospital Water Supply	Construction of a 17 km pipeline from an artesian well. Instalment of pumping, pipeline and water storage facilities supplying water to the hospital and the villages along the pipeline to approximately 20.000 people	Improved quantity and quality of water – enhancing security and promoting opportunity	NORAD (Norway) and Norwegian Lutheran Mission.	Cost sharing of the water supply by the District Council.

1992 – 1996	Road project	Construction of all year roads and bridges to 10 villages, totalling 130 km. This enabled all year MCH and ambulance services to these villages.	Improved communication, trading and infrastructure – promoting opportunity and enhancing security	LWF with contributions from Brot fur die Welt (Germany) and Norwegian Church Aid.	All construction done by hand by the villagers involved, through the Village Councils
1998	Bridge construction	Construction of 2 major bridges along main roads.	Improved communication, trading and infrastructure - promoting opportunity and enhancing security	Ministry of Foreign Affairs, Norwegian Government.	Contribution from Tanzanian Regional Road Authorities.
1960 – 2001	Ambulance services and VHF radio communication	Instalment of VHF radios in 10 villages run by solar and car batteries. Supply of ambulance services with 2 4WD ambulances.	Improved communication and infrastructure with particular health benefits - promoting opportunity and enhancing security	Haydom Lutheran Hospital with contributions from private friends of the hospital as well as initial help from CIDA (Canada).	Village councils pay for the car batteries.
1973 – 2001	Mother and Child Health Care	Continually expanded, now including 1 static and 23 mobile clinics (of which 5 served by MAF flights and 18 by 4WD, monthly)	Improved health benefits - promoting opportunity and enhancing security	Haydom Lutheran Hospital pays all expenses except for one vehicle contributed by NORAD, Dar es Salaam.	Free of charge.
1990 – 2001	Primary School Construction	Contribution towards completion of 6 Primary Schools in surrounding villages.	Improved public education – promoting opportunity and facilitating empowerment	Haydom Lutheran Hospital through supply of transport of building materials.	All labour and material supplied by the Village Councils.
1995 – 2001	Secondary School Construction	Construction of the Haydom Secondary School, with continuous improvements and expansion	Improved public education – promoting opportunity and facilitating empowerment	Stromme Memorial Foundation (Norway) and private donations from a group of people in Søgne, Norway.	Household contribution of total costs from Haydom and neighbouring villages amounting to approximately 30%.

1992 - 2001	Water project	Two bore holes and one water storage tank, supplying 14 distribution points (kiosks) in Haydom and neighbouring villages.	Improved quantity and quality of water – enhancing security and promoting opportunity	LWF and Dutch Development Aid.	All labour and cash contribution towards construction costs (approximately 30% of total costs), from each household. Full payment of running costs by the households.
1999 - 2001	Famine relief	Distribution of seeds and more than 6000 Metric Tonnes of Maize*	Decreased household vulnerability, maintaining purchasing power and reducing long term famine effects – enhancing security and promoting opportunity	Ministry of Foreign Affairs, Norway. Private donations mainly from the people of Norway with private contributions also from USA, Denmark, and Germany. Global Mission – Evangelical Lutheran Church of America (ELCA). Norwegian Church Aid through Action of Churches Together.	Food for work building roads, dams and schools.
2000	Community Dispensaries	2 community dispensaries supplying preventive and outpatient care	Provides basic community health services – enhancing security and promoting opportunity	Haydom Lutheran Hospital provides medical services, staff and inventory.	Buildings provided by Village Councils. Services subsidised by cost sharing.
1950 - 2001	Health Centres	3 Health Centres providing limited inpatient services (approx. 30 beds per Health Centre), outpatient and MCH services.	Provides basic and extended community health services – enhancing security and promoting opportunity	Construction of Kansay Health Centre supported by the Norwegian Lutheran Mission, run by Haydom Lutheran Hospital and rehabilitated by Lutheran Coordination Services and NORAD. Balangda Lalu and Gendabi Health Centres originally built and run by the Evangelical Lutheran Church of America. They are now rehabilitated and run by Haydom Lutheran Hospital. The rehabilitation has been funded partially by CIDA (Canada) and private donations from Norway.	Services subsidised by cost sharing.

1954	First Referral Hospital	Construction of Haydom Lutheran Hospital. Originally 50 beds, expanded in 1967 to 300 beds. Later to 350 beds. Full capacity of 400 beds. Services include all first referral hospital as well as extensive secondary referral hospital activities.	Provides basic and extended community and referral health services as well as expanded capacity development – enhancing security, facilitating empowerment and promoting opportunity	First phase by NLM. Second phase by LWF, Brot fur die Welt, Oxfam. Third phase by Evangelische Zentral Stelle (EZE) (Germany). Other donors contributing to rehabilitation and continuous expansion include NORAD, CIDA and private donations. Contributions to running expenses include NLM, NORAD, FINNIDA, private donations and grants from the Tanzanian Government. Staff contributed by NLM, DLM, the Norwegian Peace Corps, VSO, VSA and ELCA.	Services subsidised by cost sharing.
1982	Nurses Training School	Haydom School of Nursing established to provide 4-year diploma course of nursing.	Providing trained health personnel and career possibilities for the community, both locally and nationally – promoting opportunity, facilitating empowerment and enhancing security	Buildings donated by NORAD. Running expenses covered by Haydom Lutheran Hospital and income generating projects. Staff contributed by NLM, DLM, VSO, VSA, ELCA and the Tanzanian Government.	Student school fees.
1972	Secondary upgrading school	Improvement of secondary school students' grades and capacity, enabling further studies.	Providing career possibilities for the community, both locally and nationally – promoting opportunity, facilitating empowerment and enhancing security	Haydom Lutheran Hospital. Teaching capacity supplied by voluntary agencies such as Voluntary Services Overseas (VSO)(England), Voluntary Services Agency (VSA)(New Zealand), and Evangelical Lutheran Church of America (ELCA).	Student school fees.
	Community Capacity Building	Continuous education and upgrading of local medical, administrative and technical staff.	Providing trained health, technical and administrative personnel and career possibilities for the community–promoting opportunity, facilitating empowerment and enhancing security	Haydom Lutheran Hospital, NORAD/NLM, the Finnish Christian Medical Society and private donations.	

TABLE 3. HISTORICAL OVERVIEW OF POVERTY ALLEVIATION AND COMMUNITY DEVELOPMENT PROGRAMS CONDUCTED BY HLH.

Through the MCH work continuous health education and primary health care has been given to the people in the remote rural areas. By constructing roads and bridges the hospital has contributed to improved communication, trading and access to health services. The hospital has facilitated the construction and extension of primary schools and also organised and supervised the building of a Government run Secondary school. This has again created a big improvement of the primary schools lifting the education and provided secondary school education for many young people. The capacity building of the community has contributed to raising the economy of the people and enabled the community to maintain standards with their own resources. Further it has helped the Hospital to get students for the Nursing School and students for other medical education and thus built the medical and nursing capacity of the Hospital. Finally the hospital has played an active role in improving agricultural methods and helping the people through periods of crop failures and food shortages. One of these projects is the major food distribution project started in 1999, because of the environmental crisis experienced in the area.

- 
- IMPROVING HEALTH
  - HEALTH EDUCATION
  - BRIDGES
  - ROADS
  - COMMUNICATION
  - PUBLIC SCHOOLS
  - CAPACITY BUILDING
  - RAISING THE ECONOMY
  - MAINTAIN STANDARDS
  - AGRICULTURE
  - CROP FAILURE
  - FOOD SHORTAGE

## II.III.II. ENVIRONMENTAL CRISIS — A SEVERE FOOD SHORTAGE FOR 4 YEARS

### THE BACKGROUND

Since the hospital started in 1955 only minor food shortages were registered until the real problem started in 1997. This was a dry year with severe crop failure. In 1998 the area experienced the effects of El Nino with too much rain again causing a flooding and a very poor harvest. 1999 was again a very dry year with subsequent continued crop failure and a very poor harvest. Again in 2000 the rain lasted only two months and most of the people did not get any harvest.

<u>Total</u>		<u>Without means</u>		<u>With some means</u>		<u>With adequate means</u>	
<u>People registered</u>	<u>Households registered</u>	<u>People</u>	<u>Households</u>	<u>People</u>	<u>Households</u>	<u>People</u>	<u>Households</u>
451.970	72.289	106.558	23.475	227.518	37.475	80.683	11.212

TABLE 4. OVERVIEW OF NUMBER OF PEOPLE AND HOUSEHOLDS SURVEYED IN 1999.

### THE INTERVENTION

In 1999 we got help from the Norwegian Government and the Mbulu Diocese launched a food relief program securing food to more than 150 000 people over a period of 5 months. A thorough need assessment was conducted with more than 450 thousand

people in about 72 thousand households were surveyed. Through a set of criteria, assessed by 42 village committees, the households were divided into those without means, those with some means and those with adequate means. Through a community based, decentralized distribution system, food was given to all households without means. (A complete account of the project protocol and end report is available from HLH administration) In the year 2000 we again had to start a food distribution program. This program has continued in

<b>Metric Tons of Maize Distributed:</b>	<b>More than 6000</b>	
<b>Number of people helped:</b>	150.289	(33.25% of total registered)
<b>Number of households helped:</b>	30.082	(41.41% of total registered)
<b>Number of villages helped:</b>	162	
<b>Number of districts involved:</b>	5	
<b>Number of regions involved:</b>	2	
<b>Number of distribution committees:</b>	42	
<b>Number of voluntary employees:</b>	Approximately 1200	
<b>Revolving fund / income:</b>	Approximately 11% of total income	

**Table Maize distribution profile**

TABLE 5. SUMMARY OF THE FOOD DISTRIBUTION PROGRAMME.

several phases to May 2001 with the total distribution of more than 60.000 bags of maize (6000 Metric Tons). This food has been distributed as Food for Work and about 40 water dams have been made collecting rainwater for the villages. Further one new

road has been made and many other roads have been repaired. Through this food program, distributing food, advising people on different food crops and distributing seeds, we are encouraging the community to increase food security and crop diversification. This program has reduced the adverse consequences towards the household economy, enabling households to maintain a sustainable purchasing power, thus alleviating a chronic food shortage and famine situation. It has also averted the deterioration of the nutritional status of children in the area. The aim of this food program is not to drain the hospital resources, but on the contrary to encourage community development. It is believed that a secure community provides a secure setting for the hospital work through a stable flow of resources both human and financial.

### II.III.III. FUTURE POVERTY ALLEVIATION STRATEGIES

The main objective of the HLH community capacity building and poverty alleviation strategies is of course to continue promoting opportunity, facilitating empowerment and enhancing security in the area. This will be done through close collaboration with the community itself as it is up to the community itself to define areas of need and intervention. There is room for cooperating partners in all of these three main areas including micro finance initiatives and community health funds, but *facilitating empowerment* needs special attention in order to sustainably alleviate poverty. The hospital seeks to continue to improve the health and well-being of the population, in particular through improved nutrition and reduced burden of disease, as well as provide the possibilities for education, communication and general development. It will continue to provide relief and food aid if the environmental crisis persists.

IT IS UP TO THE COMMUNITY  
ITSELF TO DEFINE THE AREAS  
OF NEED AND  
INTERVENTIONS

#### VOCATIONAL TRAINING SCHOOL

The need for a Vocational Training School is also great in the Haydom area. This is not only because of the need for qualified personnel at the hospital, but also in order to contribute to the community capacity development and poverty alleviation. Apart from this there is now also a growing problem of unemployment and need for training of young people in practical disciplines. The need for a Vocational Training School is only a realization of the fact that Haydom has grown to become a thriving society with many opportunities but lacking the qualified technical capacity to continually develop.

#### ROAD MAINTENANCE

The roads to and from Haydom, providing access to markets, health care and education, are a constant challenge with the heavy rains and traffic taking its toll year by year. The hospital will therefore continue to be a catalyst, in close cooperation with government authorities and the community in general, towards maintaining and improving the roads in the area.

### III. APPRAISAL OF RESOURCES: MANPOWER AND TECHNICAL INFRASTRUCTURE

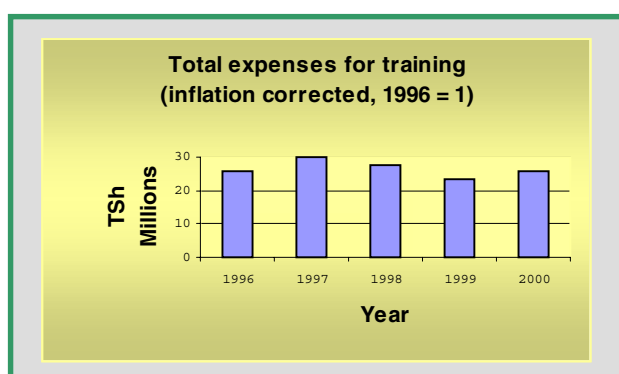
#### III.1. HUMAN RESOURCES

Manpower planning is an attempt to forecast how many and what kind of employees will be required in the future and to what extend this demand is likely to be met. The purpose of manpower planning for HLH is:

- To assist management in estimating labour cost.
- To determine training needs for those qualities that are needed in the organization.
- To determine recruitment needs so as to avoid problems of unexpected shortages and redundancies.

A project group reporting to the CSSC and assisted by CORAT AFRICA has produced guidelines for management systems and policies for Church Health Care Facilities. These are well adapted to the realities in Tanzania and give good support to the structural revision process at the HLH. These issues are discussed later under chapter 5.

#### III.1.1. TRAINING



The last 5-year plan elaborated in 1996 raised the issue of the difficulties in training new medical doctors and other health professionals locally. The situation has not changed and it is still hard to get opportunities for upgrading. Despite this situation the HLH has managed to train 46 persons in different capacities, excluding 26 under training, totalling 72 persons trained in the last 5-year period. The manpower-planning table elaborated in 1996 has been revised and is presented in the annex. This shows a need for the next 5-year period for training of around 68 employees in addition to those currently in training. See the personnel plan in the annex. This training is financed partly through the grant given by NLM/NORAD and the Finnish Mission, the rest being covered by the HLH from their running

FIGURE 8. HISTORICAL OVERVIEW OF TRAINING EXPENSES.

budget. The students benefit from the grants and sign a contract for three to six years of service to the HLH according to the length of the study. A scheme has been started where the student is required to repay a part of her/his grant in order to build a revolving fund for grants. This scheme will represent an important part of the future training activities at the HLH. The expenses and funding are described in the adjacent graphs. (Details of these graphs are supplied in the tables in the annex)

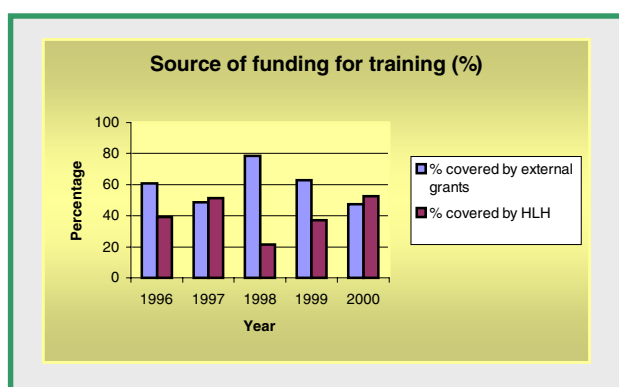
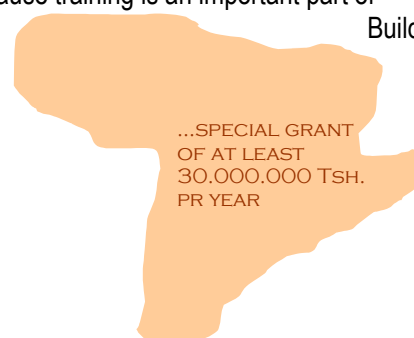


FIGURE 9. HISTORICAL OVERVIEW OF TRAINING FUNDING SOURCES.

To achieve the goals expressed in the personnel plan in the annex, the HLH will require a special grant of at least 30.000.000 Tsh. pr year for the next five years. Because training is an important part of Community Capacity Building, it is given priority to the training

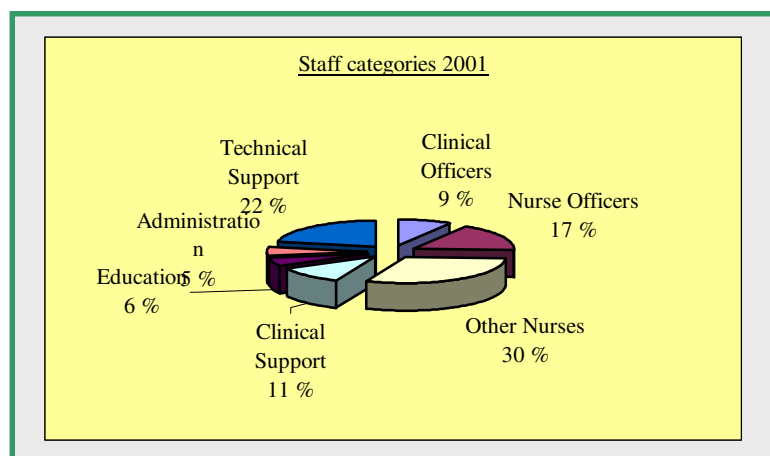


of the personnel with roots in the Mbulu area. This has proven also to increase human resource sustainability for the hospital. Establishing this pool of trained personnel in the community is also the reason why the HLH has to train more persons than essentially required.

In addition to the persons trained externally, the Haydom School of Nursing (HSN) every year admits approx. 30 students for a 4-years Nursing Diploma course. The HSN has trained more than 200 students since its foundation in 1982. All students have to work for the HLH at least two years after the completion of their studies, except those sponsored by other institutions.

### III.I.II. STAFF

#### STAFF AND WORKLOAD RATIOS — WHAT ARE EFFICIENT LEVELS?



At the beginning of the year 2001 the HLH employed 317 persons, including expatriate personnel. After recent retrenchments the number now is 303. This gives an average of 0.86 employees pr. bed, or alternatively 0.81 employees per bed-state (373 in 000). Compared to the ELCT official standard of 1,1 employees pr bed, the HLH is running on an efficient basis. This standard does not however consider the economies of scale. In his studies of seven ELCT Hospitals in 1996-97, Dr. Steffen Flessa proposes a corrected standard based on his findings. The equation being:

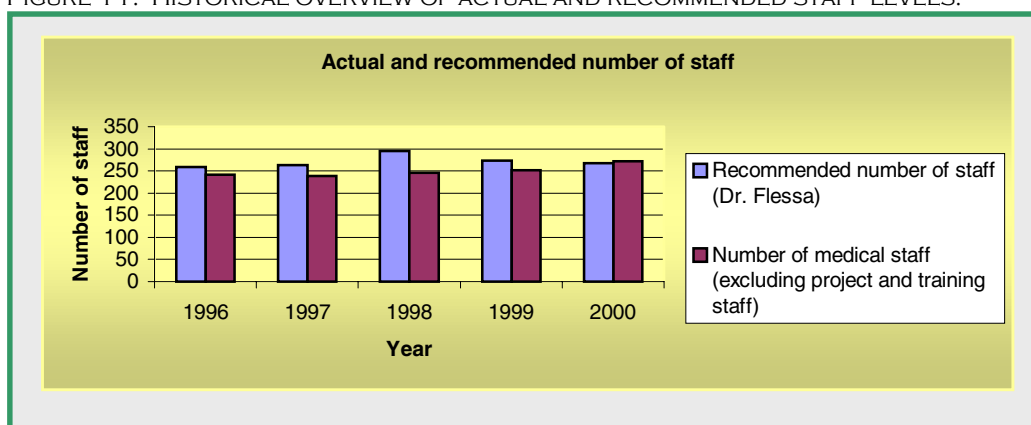
$$\text{Number of staff} = 25,785 + (0,650 * \text{no. of beds})$$

FIGURE 10. STAFF DISTRIBUTION IN 2001.

This would represent for HLH a total of 254 employees for 350 beds. Because the hospital has an average bed state above 350, averaging 373 per year in 2000, the following equation is used in this 5-year plan to determine the number of staff needed in accordance with the actual workload:

$$\text{Number of staff} = 25,785 + (0,650 * \text{average bed state})$$

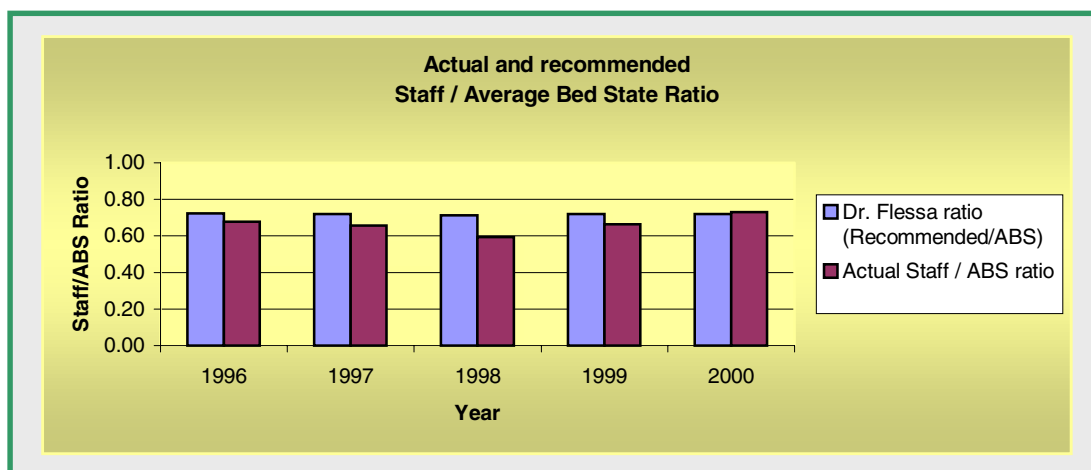
FIGURE 11. HISTORICAL OVERVIEW OF ACTUAL AND RECOMMENDED STAFF LEVELS.



Applied to HLH over the past 5 years, and after deducting the staff working in other projects not linked directly with the core activities (13 in education and approximately 17 in development projects), this equation gives the graph above.

Accounting for the economy of scale effect HLH in 2000 therefore has a staff / bed state ratio of 0.73. This is not considered to be high neither in developing countries and in particular not high compared to developed countries standards. Nevertheless the amount of resources from the running budget towards salaries and personnel costs remains high. (See next section) The graphs show a historical trend with highly efficient staffing levels. In 2000 the actual staffing number exceeded that recommended by Dr. Flessa.

FIGURE 12. HISTORICAL OVERVIEW OF ACTUAL AND RECOMMENDED STAFF / ABS RATIO.



#### RETRENCHMENTS AND STAFFING LEVELS

Last year the HLH stopped recruiting staff except for the Nurses graduating from the HSN. This year 14 employees were retrenched and the hospital management has plans of reducing the number of employees further by giving compensation to some of the staff getting close to their retirement age. Funds are being reserved to cover these compensations. In addition to the regular employees, HLH benefits from the work of the nurse-students from the HSN in the wards and from several volunteers helping in different capacities. The help from the nurse students has decreased in the recent years as the demand for theoretical training has increased. As this is normally for short periods of time their input is not counted here, even if it represents an extremely appreciated help to the activities.

The number of employees has increased from 282 in 1996 to 303 at the beginning of 2001. This represents a 7% increase in five years. Factors that influence this rate are the fact that all nurses graduating from the HSN are offered a job at the HLH and the need to

be able to provide replacements in case of dismissal, illness or decease. HLH also realizes that in order to maintain a pool of professionals in a remote area the need for employment of these personnel will be greater. From the statistics, in particular of 1998, it is also shown that HLH needs to be able to meet the extra demand created by epidemics. The graph above shows that HLH probably was understaffed in 1998 with a very high average patient load due to a malaria epidemic.

#### NATIONALIZATION

As for the question of nationalization the HLH considers only the posts being held by expatriates paid by external partners as not nationalized. Nationalisation and Sustainability are both concepts needing careful debate as a sustainable moment it is unrealistic, as with the economic self-reliance of the hospital, to assume that all personnel categories will be found within the local community, or even within Tanzania. It is further a curious debate when some parts of the international community push for "nationalization" while others seem more occupied by the blessings of globalisation and the flow of human resources across countries. The HLH finds it useful to keep its mind open as to where the qualified personnel come from, as long as they commit to the Mbulu Diocese vision and work. At the moment there are four posts not nationalized and covered by missionary personnel from Finland and Norway: These are 2 medical doctors and 2 teachers at the HSN. A period of three years must be expected before the first additional local teacher is finished with the necessary training. This means that the hospital will need expatriate help for the school for at least 4 – 7 years.

A CRITICAL NEED  
FOR CONTINUED  
EXPATRIATE  
DOCTORS AND  
NURSES TEACHERS.

Medical doctors are also being recruited whenever possible. The hospital has found it very useful to continually upgrade Medical Assistants to the level of Assistant Medical Officers, able to undertake all the normal duties of a Medical Doctor. One Medical Doctor is currently specializing at KCMC within the field of orthopaedics. Both Nursing Teachers and Medical Doctors remain however, as two critical staff categories with an immediate need of supplementation.

### III.I.III. SALARY LEVEL.

The staff is basically paid according to Government regulations and scales, with some adjustments due to the economical constraints. The staff regulations follow the Labour Union in the country who has its own committee at the HLH. The administration works in close cooperation with this committee. The salary level has had an accumulated increase of 9% when adjusted to the headline inflation rate. (The actual figures are presented in a table in the next chapter) As long as the Government mainly decides the salary scales, this issue is out of the hands of the management and they have to accept, assuming efficient staffing levels as discussed above, that the salary charges represent a growing part of the minimum running budget (46,2% of MOC in 1996 and 58,6% in 2000). The following table shows the average nurse salary development over the past years. It shows a partly regressional trend from 1997 to 1999 with a substantial increase in 2000 and 2001.

GOVERNMENT SCALE INCREASE					
<i>based on the salary of a nurse (GS1) in Tanzanian Shillings</i>					
	Basic salary	% Yearly Increase	Adjusted for inflation (1996=1)	Yearly increase adjusted for inflation	Accumulated increase adjusted for inflation
1996	25,235		25,235		
1997	32,270	28	27,075	7	7
1998	36,940	14	26,003	-4	3
1999	39,610	7	24,313	-6	-3
2000	47,310	19	26,746	10	7
2001	57,009	21	30,545	14	21

TABLE 6. HISTORICAL OVERVIEW OF GOVERNMENT SALARY DEVELOPMENTS.

### III.II. "TEAM SPIRIT" (MOTIVATION AS A RESOURCE)

The hospital has from its start realized the importance of maintaining a motivated staff. The level of inputs through human, technical and financial resources are greatly dependent on the level of motivation towards efficiently utilising these inputs. The H.L.H. strategy is universally accepted. As one of the essential building blocks of effective implementation, the others being the capacity to formulate a vision and objectives and a basic supply of financial, technical and human resources, Haydom Lutheran Hospital puts great emphasis on creating a good team spirit through many initiatives. In addition to its focus on the Christian ethics of honest and dedicated work, fair hiring and firing policies and just wage and career development policies, the hospital has several occasions in which it honours its workers through celebrations and awards. Four workers are chosen to be the workers of the year and receive a gift from the hospital. There is also a substantial award to those workers with 25 years within the institution as well as a trophy for the winners of the cleanest and best run department twice per year. In addition the hospital arranges a yearly Christmas and First of May celebration in which the departments contribute with entertainment.

HAYDOM HOSPITAL PUTS GREAT EMPHASIS ON CREATING A GOOD TEAM SPIRIT AMONG THE STAFF.

The staff meetings every morning also represents a useful meeting place in which the staff is continually informed about the challenges facing the hospital, providing a forum for questions and comments. Guests to the hospital are also introduced in these

meetings involving the staff in the hospitals institutional collaboration and international activities. Another highly motivational factor in the Tanzanian context is the fact that the salaries are stable and paid on time. In addition the administration is flexible towards its workers with regard to limited pre-payments of salaries in times of household crisis. Finally the staff has a personal commitment towards the running of the hospital because of their attachment to the area, knowing that their families and friends all benefit from a well run institution.

### **III.III. TECHNICAL INFRASTRUCTURE**

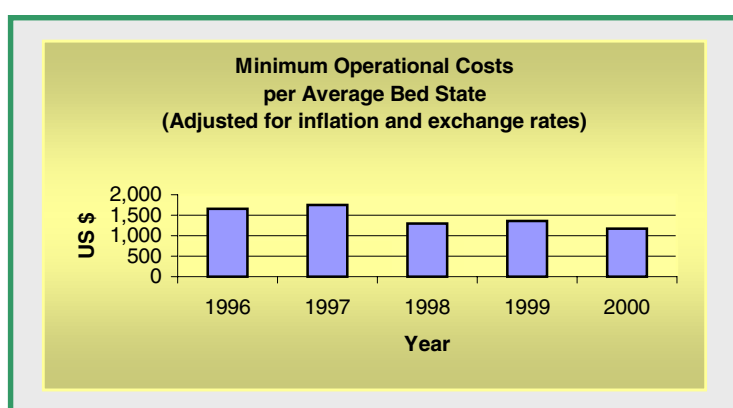
As mentioned in chapter 2, Haydom Lutheran Hospital has since its very beginning been largely self reliant on physical support services. Within the Technical Department several major activities have been carried out during the past 5 years, and there are plans for several more major rehabilitation and construction projects for the coming 5-10 year period. Short descriptions of the major projects, conducted and planned, are briefly described in the annex: **This annex is important as it gives the technical background information and determines the size of the investment costs for the next 5-10 year period.** A table showing the technical investments and rehabilitation needed. The estimated cost is also presented in the annex.

## IV. APPRAISAL OF RESOURCES: FINANCIAL INPUT AND REVENUE STRATEGIES

### IV.1. COST OF PROVIDING HEALTH SERVICES IN TANZANIA

In the study COSTING OF HEALTH SERVICES (ELCT 1997, Dr. S.Flessa) of ELCT hospitals (which at the time of the study was managing 16 hospitals), one of the major findings was that the cost of providing hospital services was much higher than expected. The 7 hospitals surveyed had an average annual marginal cost per bed of USD 1 120. The marginal cost is defined to be the absolute minimum financial input required for keeping the hospital running for the next year. This amount does not include any maintenance, Income Generating expenses, training, depreciation or salaries for foreign staff. In this chapter the term **Minimum Operation Costs (MOC)** will be used to mean "annual marginal cost" as defined above but adding maintenance. **Total Running Costs (TRC)** is used to express the total annual running budget of the hospital including Income Generating expenses and training.

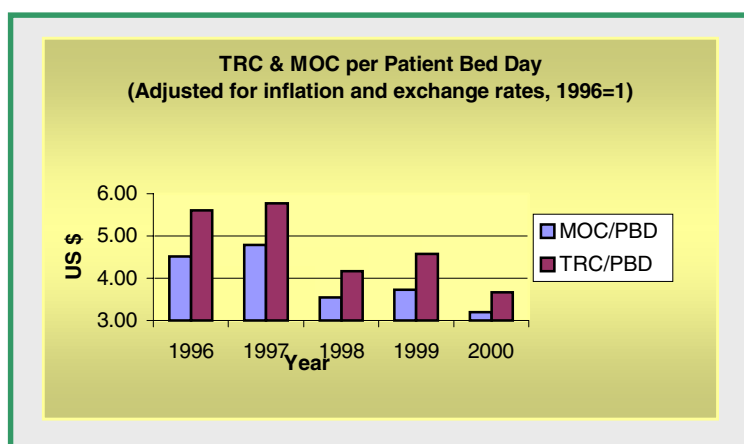
THE COST OF PROVIDING HOSPITAL SERVICE WAS MUCH HIGHER THAN EXPECTED



The report defined as sustainable local costs the MOC with the addition of training and local equivalent salaries for expatriate staff, but excluding depreciation. In 1997 this cost was on average USD 1215 per bed. With this income the hospital can cover its costs as long as all buildings and equipment are financed from external sources. The study showed that the average full cost per bed per year including depreciation at HLH was US\$ 2634. It is ELCT policy not to include depreciation in the accounts.

Retrospective analysis allows for a more accurate cost estimate when using Average Bed State (ABS) instead of number of beds in the hospital. The Average Bed State is

FIGURE 13 . MINIMUM OPERATIONAL COSTS PER AVERAGE BED STATE - 1996-2000.



the average number of beds occupied per day throughout the year. (See Strategy section for details). This better portrays the actual workload of the hospital. The above graph shows MOC per ABS in US Dollars at HLH (adjusted for inflation) from 1996 – 2000.

Another way of providing a costing overview is to divide the MOC into the total

COST OF FULL HEALTH SERVICES FOR ONE PATIENT ONE DAY AT HLH:

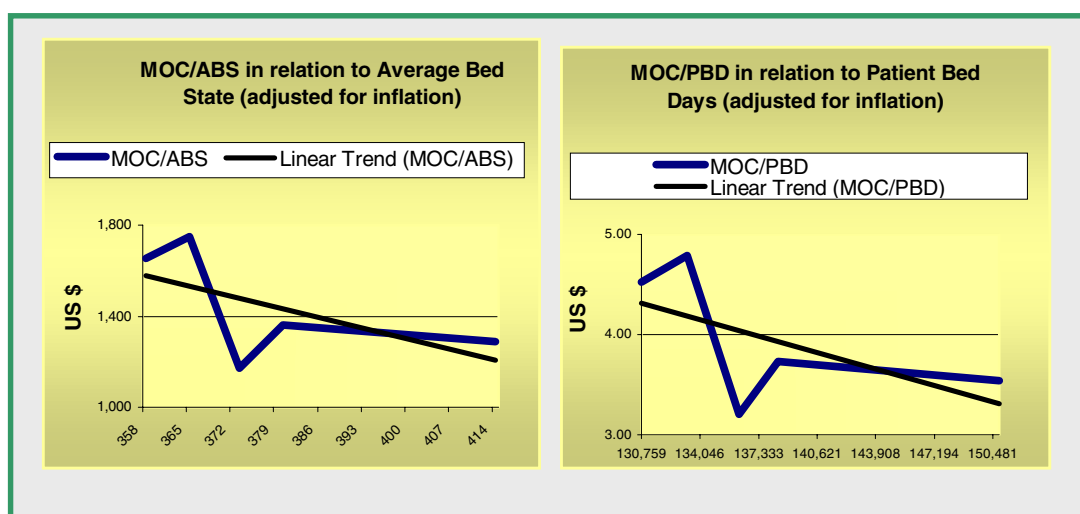
US\$ 3.50  
NORWEGIAN KRONER 33

FIGURE 14. MINIMUM OPERATIONAL COSTS PER PATIENT BED DAY - 1996 - 2000.

number of Patient Bed Days (PBD) per year, giving an estimate of daily costs per bed. Both ABS and PBD are in this

context expressions of the costs of the total health service to the population surrounding the hospital. This is because **MOC and TRC include the cost of all services** including Preventive (MCH and Ambulance services) and Clinical Services (including Clinical Support and Physical Support) Figure 13 shows the result.

Under pressure to increase the local income the hospitals have increased the patients fees. The effect has been that many poor with scarce resources have been excluded from hospital services. **Affordability of hospital services for the majority of rural people is in conflict with the goals of "self-sustainability"**. The first action recommended in the Flessa study was cost cutting and focus on efficiency. In addition the strategy of HLH has been to lower the cost of the service by establishing an efficient institution and a size of the institution and volume of patients allowing "supermarket" pricing. Reducing the cost to the patients gives increased flow of patients, which in turn increases income and cash flow. HLH seeks to utilize the economy of scale represented by its activities in order to maximize efficiency. The following graphs illustrate the falling costs at HLH per Patient Bed Day and per Average Bed State as the workload increases. (Trend lines have been added for better illustration).



In addition it is vital to stress the close link between quality and accessibility of services, patient flow and thus income. Reducing the quality of services, or the level of services below a level anticipated by the community, will in turn lead to low flow of patients and reduced income. It is important to keep this spiral pointing upwards at all times.

FIGURE 15. "SUPERMARKET" INDICATORS SHOWING ECONOMIES OF SCALE AT HLH.

## IV.II. PERFORMANCE OF THE PAST

### IV.II.I. THE HOSPITAL

#### IV.II.I.I. EXPENDITURE PERFORMANCE

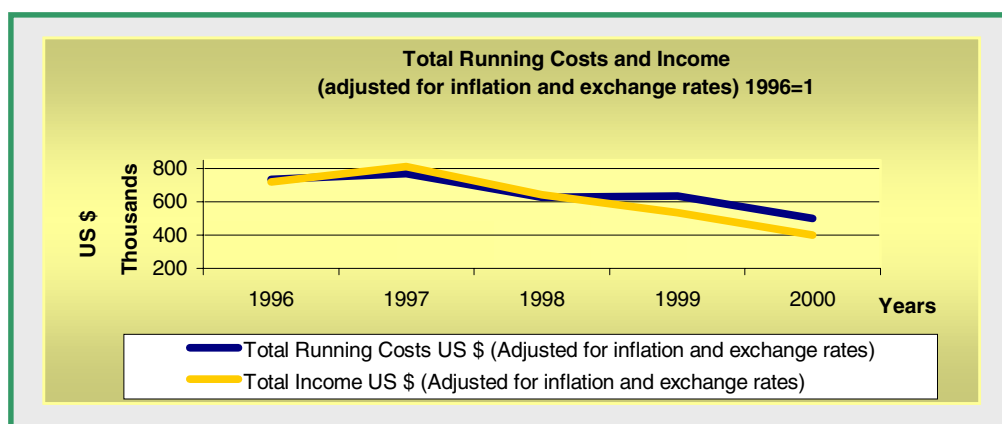


FIGURE 16. HISTORICAL OVERVIEW OF TOTAL RUNNING COSTS AND INCOME.



Haydom is located in an area of Tanzania where the rural local economy is very weak, and mobilizing funds to run the hospital has been a continuous battle. The present administration has however, demonstrated that securing means for expansion and operations in order to meet some of the observed needs is possible. The graphs below show the development of costs and income

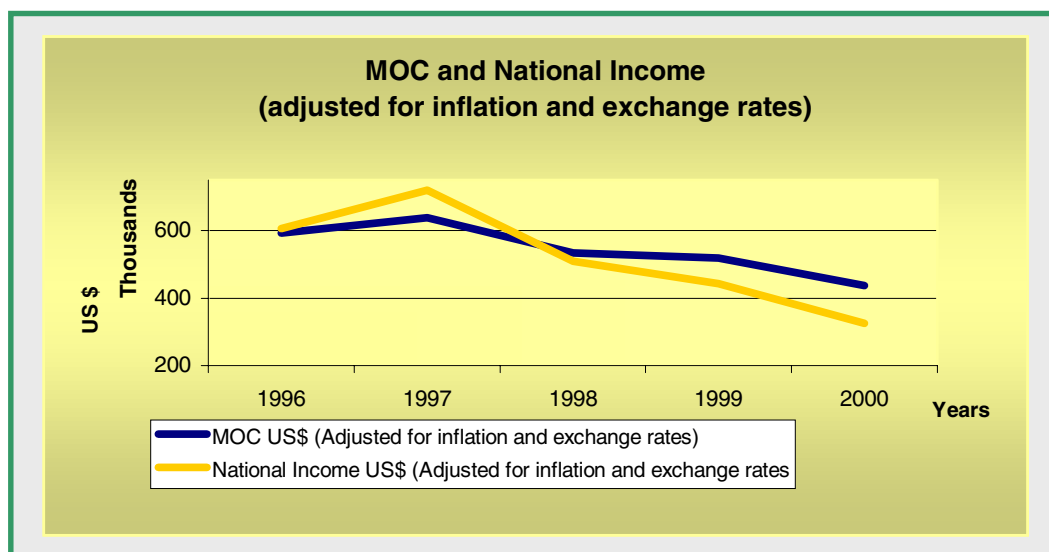


FIGURE 17. HISTORICAL OVERVIEW OF MOC AND LOCAL INCOME.

over the last 5-year period and demonstrate that HLH up to 1999 succeeded well in covering its cost from local and external resources and at the same time maintained an impressive productivity as demonstrated earlier in this report. With the famine situation hitting the local community hard in 1998, the income of the hospital dropped sharply with the dramatic drop in the patient's ability to pay. The graphs also illustrate the ability of the hospital to gain its revenue from national resources (Tanzanian Government Grant and Patient Fees) over the years. It shows the relation between national income and MOC, as an attempt to illustrate what situation the hospital would be in without external resources. It can be seen from the graph that although the hospital is able to gain substantial revenue towards the MOC, there is still a large gap to be filled. A graph showing the full costs of the hospital in relation to national income would show a much more critical situation.

Inflation was very high in the beginning of the 5-year period, but has over the last few years come under better control. The exchange rates used in this report (Bank of Tanzania figures) are presented in the annex. The operations of 23 MCH (Mother and Child Health) clinics that primarily provide preventive care have the financial disadvantage that the service has to be provided free of charge, but operate presently without any compensation from the Government.

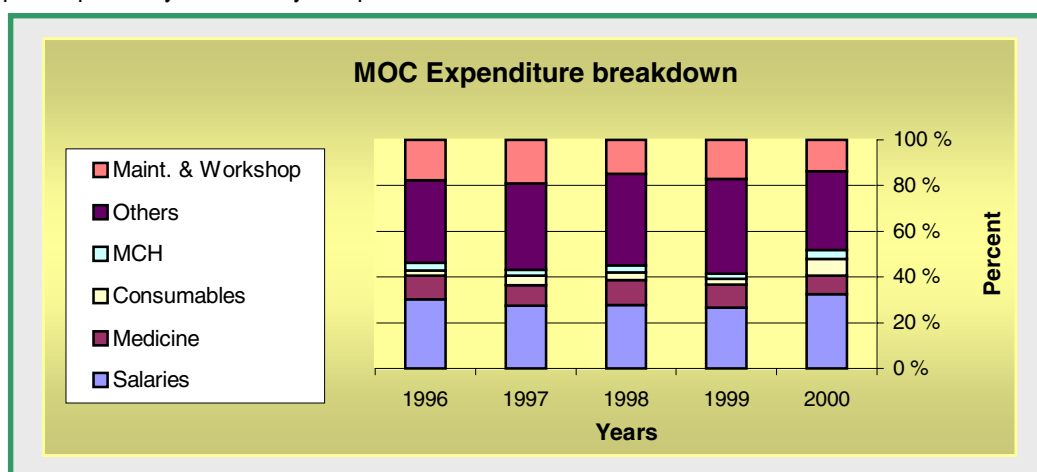


FIGURE 18. HISTORICAL OVERVIEW OF MOC BREAKDOWN

Salaries represent the biggest cost item of MOC. MOC does not include depreciations, training, investments, rehabilitation or expatriate doctors. In 2000 salaries represented 38% of MOC and has since 1999 increased from 32% (adjusted for inflation). **This is the only cost line that has shown significant increase.** Some is due to adjusting salaries according to Government scale as mentioned in the previous section, but it is also because of increased number of staff. The table below illustrates the salary developments over the past 5 years:

Salary development from 1996 – 2000. All figures in 1000 TSh.

Year	Salaries expenditure	Salaries expenditure (adjusted for inflation)	% of salaries of MOC (adjusted for inflation)	Average cost per employee (adjusted for inflation)	% Yearly increase (adjusted for inflation)	% Accumulated increase (adjusted for inflation)
1996	126,323,300	126,323,300	36.62	473120.97		
1997	159,068,745	133,458,677	33.80	499845.23	6	6
1998	163,500,889	115,091,709	32.37	431055.09	-14	-8
1999	202,112,801	124,060,700	32.11	464646.82	8	0
2000	233,525,513	132,018,372	37.64	494450.83	6	6

TABLE 7. SALARY EXPENDITURE AT HLH - 1996-2000.

#### IV.11.1.11 INCOME PERFORMANCE

##### PATIENT FEES - EXEMPTION POLICIES AND THE ABILITY TO PAY

In the survey referred to above, it was also found that local income of hospitals is critically insufficient to cover even annual marginal costs. On average only 27% of cost coverage was found to be coming from patients' fees. Frequent over-staffing and over-prescription of drugs among the church hospitals can be reduced, but it was found that **self-reliance is an unrealistic goal for the medium term horizon**. Patient Fees represents the largest single source of income towards covering the Total Running Costs. The Tanzanian authorities introduced cost-recovery mechanisms in order to enable health facilities to increase financial sustainability. It leaves however, a great challenge towards continued equitable distribution of health services across different economic population strata. HLH has strived to charge the patients without stopping those who do not have means to pay. The exemption policies are based on detailed knowledge about the community and close cooperation with the

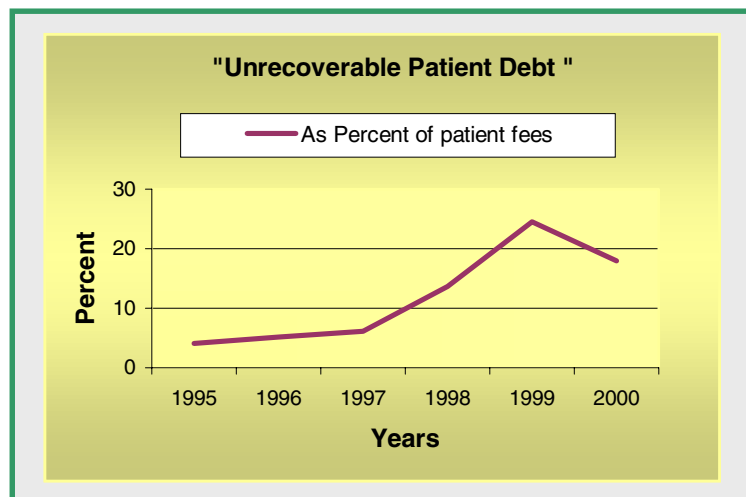


FIGURE 19. HISTORICAL OVERVIEW OF "UNRECOVERABLE PATIENT DEBT".

village authorities. Because the hospital has a policy to provide service for all, some are not able to pay their bills. The write off ("unrecoverable patient debt") used to be 5% or less annually. This indicator is also found to be useful in setting the fee level. However, a draught period struck the area in 1997, 1998 (El Nino), 1999 and 2000 resulting in significant loss of crop and cattle. Even with lowered fee levels the patients' reduced ability to pay reduced the income to 34% of MOC in 1999 and 36,5% in 2000. The same year 15% of the fees (TSH 23,7 million) had to be written off altogether, representing a large increase in lost revenue from patients' lack of ability to pay. This indicates that it is still too early to revert to higher fees. The graph shows the percentage of unrecoverable debt as percentage of the total patient income rising sharply in 1999. Adjusted pricing policies in 1999 reduced the number of high bills, thus improving the situation somewhat. **A special NORAD grant of NOK 2.8 mill has compensated for the shortfall of in income for 1999 and partly for 2000, but for the current year there is no such support.** A continued shortfall, or at best a leveling out of fee income is expected due to the reduced purchasing power of the patients.

ADJUSTED PRICING POLICIES IN 1999, REDUCING THE PRICE BY ALMOST 50%, IMPROVED THE SITUATION SLIGHTLY

# GOVERNMENT AND DONOR GRANTS

The hospital receives Government Staff and Bed grant that in 2000 amounted to 9.8% of the MOC. The bed grant is and has for years remained at TSH 7 500 or around NOK 80 per bed **per year**. The total sum received from this grant each year is therefore very small. This is also due to the fact that the Ministry of Health supports only 250 beds of the 350 beds in the hospital. There is hence no relation between the bed grant and the actual cost of providing a hospital bed. The staff grant has varied erratically in timing and size. In 1996 it represented 9.7% of MOC, in 1997 15.1%, in 1998 6.3 and

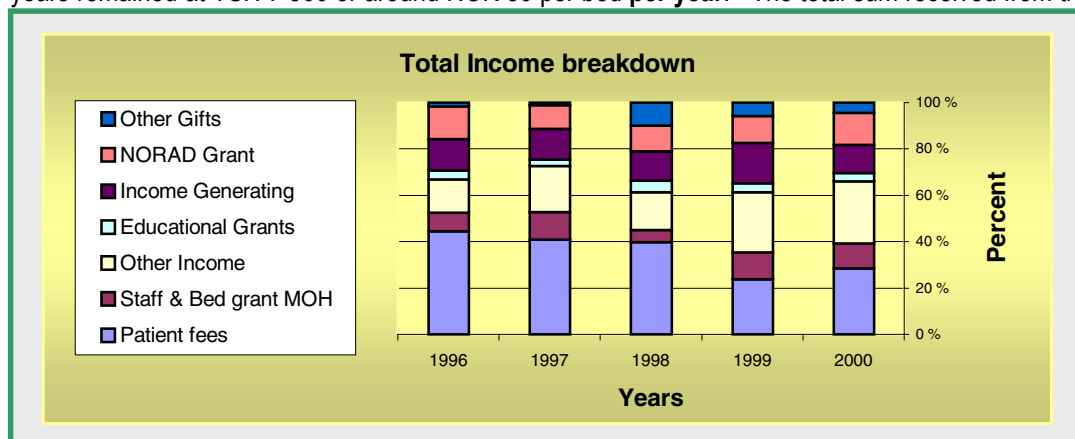


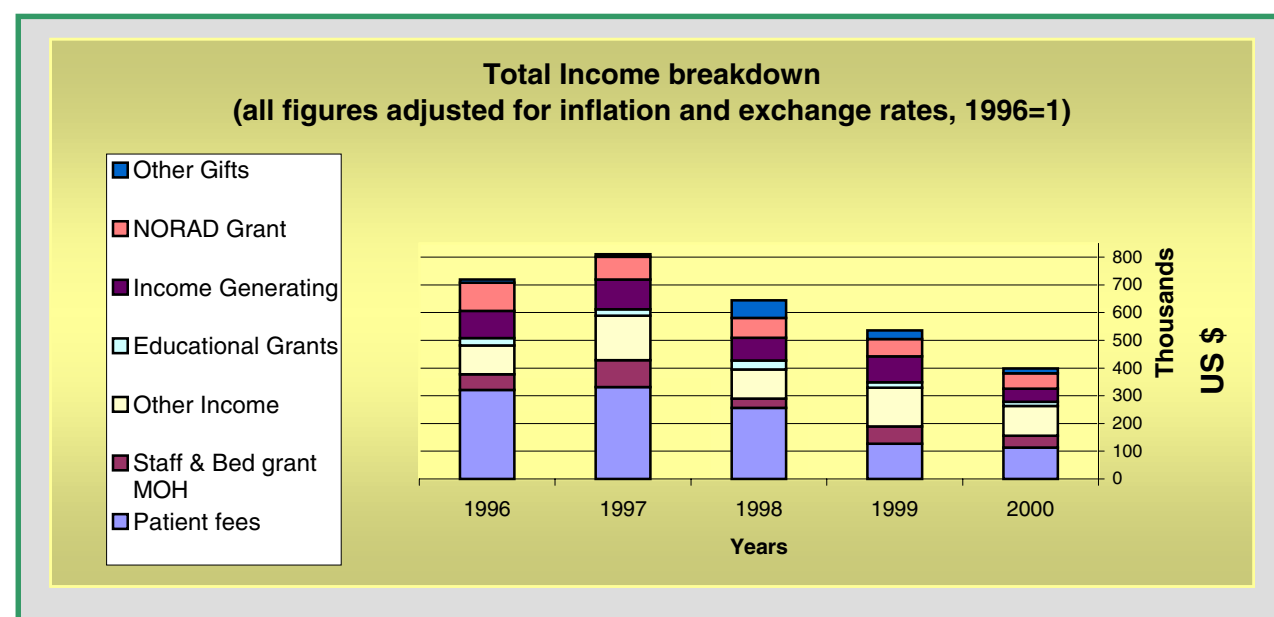
FIGURE 20. HISTORICAL OVERVIEW OF TOTAL INCOME BREAKDOWN.

12.2% in 1999. The future of this grant is however uncertain due to the decentralization and reform. The financial support from NORAD has dropped from 17.2% of the MOC in 1996 2000. This grant has also partly financed expatriate doctors seconded to the hospital.

# FAMINE INDUCED ECONOMIC EMERGENCY

The graph below intends to show the breakdown of the hospital's **regular, yearly actual income adjusted for headline inflation**. The graph shows that the total income has dropped drastically from 1998 to 2000. As mentioned several times in the report the main reason for this drop is the famine situation, leading to loss of patient income. (The special grant donated by NORAD to counter the drop in patient fees in 1999 and 2000 has not been included in this graph) In addition total amount of gifts to the running of the hospital has also reduced. This is mainly due to the fact that almost all donations were channeled towards providing food-aid to the people, as this has been the first priority. **Figure 20 shows that the income of the hospital has dropped by about 50% from 1997 to 2000.**

FIGURE 21. HISTORICAL OVERVIEW OF INFLATION ADJUSTED, REGULAR INCOME.



#### IV.II.II. THE HAYDOM SCHOOL OF NURSING

The students come from areas far from Haydom and have to be housed and fed. The cost of providing the food represents the biggest cost item and represents near 50% of the total costs. The income from student fees represents more than 60% but some have insufficient own resources and a student credit arrangement is being started. "Self-reliance" is income-generating activities performed by the students, for example learning to grow and selling vegetables or raising pigs. Profits are shared between the students and the nursing school. The grant from Ministry of Health has been erratic and represents on average 2.2% although some years the contribution has been as high as 5.8% while in others none.

Expenditures adjusted for inflation (1000 TSh, 1996=1)											
	2000	1999	1998	1997	1996	%	2000	1999	1998	1997	1996
Salaries	2,261	1,919	1,861	1,930	2,139		11.4	12.5	10.4	9.0	11.4
Adm & Teaching	4,850	2,860	2,957	2,178	2,758		24.6	18.6	16.6	10.1	14.8
Student expenses	3,500	4,448	2,971	6,680	4,843		17.7	29.0	16.7	31.1	25.9
Food	9,135	6,116	10,037	10,712	8,947		46.3	39.9	56.3	49.8	47.9
<b>SUM</b>	<b>19,746</b>	<b>15,343</b>	<b>17,827</b>	<b>21,499</b>	<b>18,686</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Income adjusted for inflation (1000 TSh)											
	2000	1999	1998	1997	1996	%	2000	1999	1998	1997	1996
Fees	11,565	11,514	11,874	14,534	7,399		58.8	75.0	66.6	67.6	39.6
Self Reliance	606	490	769	904	667		3.1	3.2	4.3	4.2	3.6
Other Income	520	2,285	648	865	2,074		2.6	14.9	3.6	4.0	11.1
MOH grant	572	0	0	1,253	459		2.9	0.0	0.0	5.8	2.5
<b>SUM</b>	<b>13,300</b>	<b>14,289</b>	<b>13,292</b>	<b>17,555</b>	<b>10,599</b>		<b>67.4</b>	<b>93.1</b>	<b>74.6</b>	<b>81.7</b>	<b>56.7</b>
HLH Grant	6,483	1,054	4,535	3,944	8,087		32.6	6.9	25.4	18.3	43.3
<b>TOTAL</b>	<b>19,746</b>	<b>15,343</b>	<b>17,827</b>	<b>21,499</b>	<b>18,686</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

TABLE 8. EXPENDITURES ADJUSTED FOR INFLATION - 1996-2000.

Source: Audited HLH financial reports.

#### IV.II.III. THE HAYDOM SECONDARY UPGRADING SCHOOL

Most of the students to the nursing school come from rural areas where the education very often has been incomplete. In order to upgrade the grades or complete missing subjects required for the nursing school, instruction is provided and exams facilitated. This year 14 pupils attend the school.

Again since the students come from far away food and lodging has to be provided. Food accounts for the major cost at around 60%. The fees have been adjusted recently and cover for the year 2000 about 95% of the direct costs of the school. The budget for the same year totaled about 2.9 million Tanzanian Shillings, or about 3240 US \$.

#### IV.II.V. THE HEALTH CENTRES AND DISPENSARIES

A brief overview of the past performance of the Health Centres (Kansay, Gendabi and Balangda Lalu) and Dispensaries (Harbangeid and Bugeir) show that they for the most part suffer from the same problems as the hospital with regard to reduced patient fee income. Nevertheless they have managed to cover their expenses, partly with the help of grants from the LMC. A graph illustrating their total performance is included in the annex of Chapter 4.

#### IV.II.VI. THE PROJECTS

The poverty alleviation and community capacity development projects undertaken by the hospital each have separate accounts, and are financially administered through the hospital accounting office. Services towards the completion of the projects are contracted out to the workshop and other hospital departments involved. In addition, services such as transport, labor and materials are bought from the community when available and when needed. Administration overhead costs have been minimal

representing a variation from 0% to less than 5% for each project. This 5-year plan does not include an extensive overview of each of the projects, but audited accounts and reports are available upon interest.

## IV.III. PROJECTIONS FOR THE FUTURE

### IV.III.I. PROJECTED EXPENDITURE

#### THE HOSPITAL

The hospital has set up a tentative budget proposal for the expenditures within the next 5 years. This budget has principally three components:

- Total Running Costs (Including MOC, School Grants and Scholarships)
- Needed Rehabilitation
- Proposed Investments

The following table gives an overview of the figures. (Details are included in the appendix) Investment and rehabilitation costs are estimated yearly distributing the total estimated costs into 30% the first year, 20% the two next years, and 10% the following 3 years.

**All figures in US \$ with 2001=1, and TSH/US\$ = 900. (MOC is included in the Total Running Costs.)**

Year	Total Running Costs		Total Rehabilitation expenses	Total Investment expenses	Total Expenses Projected
	MOC				
2001	871,021	676,389	365,945	276,000	1,512,966
2002	949,413	737,264	243,964	184,000	1,377,377
2003	1,034,860	803,618	243,964	184,000	1,462,824
2004	1,127,998	875,943	121,982	92,000	1,341,979
2005	1,229,517	954,778	121,982	92,000	1,443,499
2006	1,340,174	1,040,708	121,982	92,000	1,554,156

TABLE 9. EXPENDITURE PROJECTIONS - 2001-2006.

#### REHABILITATION AND INVESTMENTS:

2001 = 30%  
2002 = 20%  
2003 = 20%  
2004 = 10%  
2005 = 10%  
2006 = 10%

The Total Running Costs are derived from a continuation of the expenses from 2000, only adjusted with 6% inflation and 3% real increase per year. The 3% are included to accommodate increased costs due to the planned investments. As discussed previously these expenses already operate on a tight margin in which the salaries constitute a major component. HLH finds little scope for cutting the Total Running Costs, as this would jeopardize quality and accessibility of the services. The Total Running Costs have already been reduced by 32% from 1996 to 2000. The costs projected are a derivation of the costs incurred towards a realization of the vision and objectives of the hospital as discussed previously in the document. The same applies for the MOC. The table assumes constant focus on efficient use of resources, including staff.

The rehabilitation and investment expenses follow from the outline provided in the appendix to the chapter on Technical Infrastructure as well as from cost estimates of new investments and activities from all of the main strategies – medical, capacity development and poverty alleviation. The projects and activities are summarized in the table in the appendix. The following graph shows the breakdown of the expected expenditure:

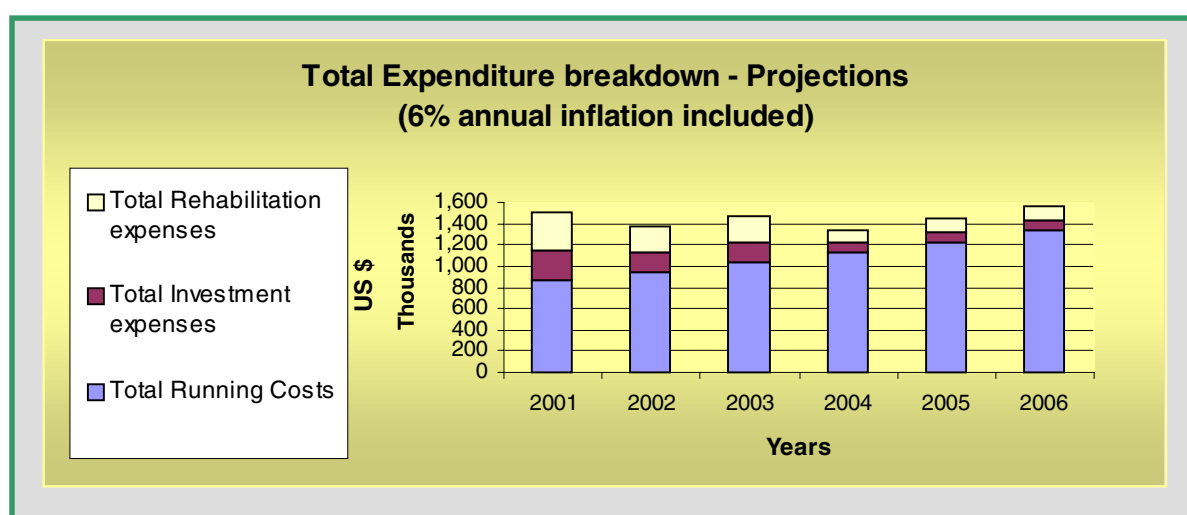


FIGURE 22. BREAKDOWN OF REHABILITATION, INVESTMENTS AND RUNNING COSTS - 2001-2006.

The proportion of the MOC of the Total Running Costs is illustrated in the following graph:

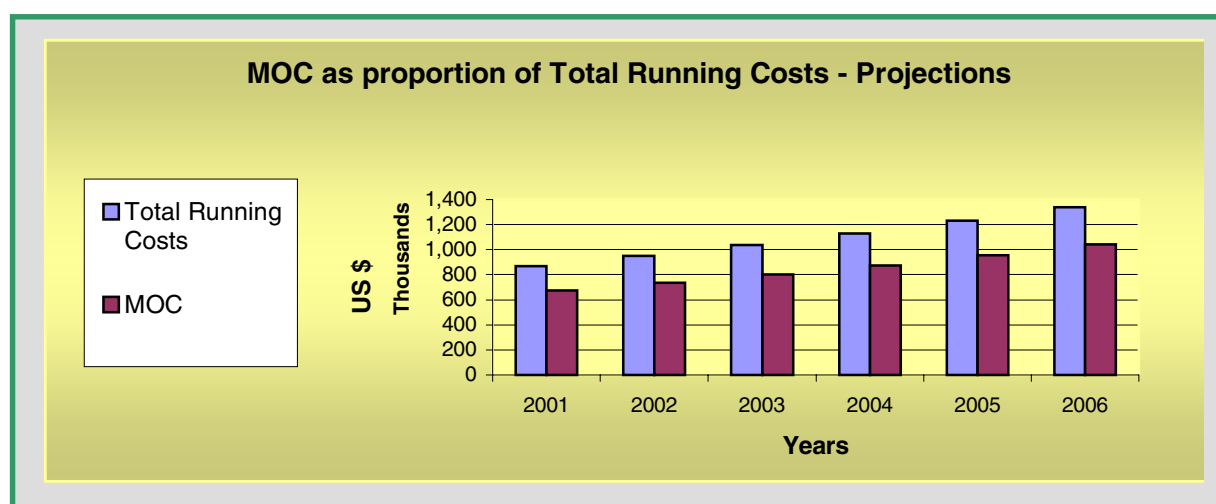


FIGURE 23. MOC AND TOTAL RUNNING COSTS - 2001-2006.

#### IV.III.II. PROJECTED INCOME

##### BUDGET CONSIDERATIONS

The budget, as shown in the appendix, does not account for different possible scenarios of which higher patient fees and government grants might be one. There are no signals, neither considering past experience nor from discussions with government authorities and surveyors of household economies, indicating any such rise at the moment. The Mbulu Diocese and the hospital administration have found it only useful to budget with 6% expected inflation and 3% total increase in revenue to cover the same projected cost increase. Any other adjustments of the patient fees or other income will have to be dealt with on a year-to-year basis. There are no major changes incorporated in the expenditures or incomes.

Currently the Nursing school students undertake the practical training in the hospital without compensation. The deficit at the end of the year is then absorbed by the hospital. More cost consciousness and motivation and less frustration could possibly be obtained if the service provided by the students is compensated and that the school then use these funds in the most needed way. The schools could then possibly cover its marginal operational costs, while investments and rehabilitation would rely on donations. As mentioned previously however, the amount of work contribution by students has decreased due to an increased theoretical load. In addition their work time is regulated by the school and not by the hospital, and is therefore difficult to include in the hospital work force. Apart from needed rehabilitation and investments there are no budgeted changes in the running budgets of the schools.

THE CHARGES ARE STILL  
HIGH FOR MANY PATIENTS

#### IV.III.II.I POSSIBLE REVENUE SOURCES

##### PATIENT FEES

As demonstrated earlier the Patients fees dropped from US\$ 331 thousand in 1997 to US\$ 113 thousand (adjusted for inflation) in 2000, due to the drought and the subsequent reduction of purchasing power of the patients. Since none are stopped when seeking hospital care, the annual amount of unpaid bills that has to be written off is used as indicator for the ability to pay for services rendered and an indirect guide to the level of rates charged. This indicator shows that the halved rates introduced in 1999 are still relatively higher than earlier compared with the ability of the patients to pay. It also indicates that the total amount of fees collected will for some time still be lower than earlier. Apart from the overall 3% increase, the budget for the next five years has not anticipated any increase in the amount recovered from the patients until the "unrecoverable debt" percentage shows a considerable improvement. The possibility of adjusting the pricing policy is nevertheless constantly evaluated.

##### INCOME GENERATING ACTIVITIES.

A wheat and maize farm of 1 300 acres has been developed with the support of donations, but the earlier described droughts and floods have also ruined the crop and the contribution has not yet been realized. HLH still expects revenue contribution to come from this activity. As indicated in the budget for the next 5 years, the net revenue from Income Generating projects is expected to reach about US\$ 40 thousand, (a 32% return on investment), or about 5 % of the total income. The transport fleet including the new Scania lorry, the tractor and the old Unimog generates much of this revenue.

##### GIFTS

Because the hospital has an open door policy and many friends around the world, it is blessed with personal gifts in many denominations and differing amounts. Although these gifts are difficult to budget for the future, they have shown to range between 3 and 10 percent of the total income. The budget in the appendix includes them as a source of income at a rate of 3.2% per year. Hopefully the gifts can be channeled back to the hospital as the food shortage situation improves with improved harvests.

##### HAYDOM TRUST FUND

A board of trustees has been founded to establish a trust fund located in Mandal, Norway with members including a retired bank manager, the former mayor of Mandal town, the general secretary of Strømme Memorial Foundation, a business manager and the medical director of HLH. It is hoped that it will contribute to the annual operational costs at HLH with part of the interest earned from investments. HLH will during the next five-year period seek contributions to the fund in order to secure the financial sustainability of its services. At the moment no income is budgeted from this source. The trust will seek a capital base of about US\$ 15 million.

THE TRUST FUND IS  
AN IMPORTANT STEP  
TOWARDS FINANCIAL  
SUSTAINABILITY

##### COMMUNITY HEALTH FUND / INSURANCE SCHEMES

Establishment of a local health insurance program is by ELCT seen as one way of securing payment for health service rendered. A committee has been elected at HLH to study what structure such an institution should have. The main concept is co-ownership between the provider and the community. Another type of Community Based Health Fund is part of the national Health Reform with planned indirect support from the World Bank. It is still unclear which structure will be the most beneficial, but it is evident that the Health Reform initiative, in which the Community Health Fund is totally owned by the community, will commence. It is not clear however, how effective this fund will be towards securing revenue towards public health expenditures. Preliminary evaluations, and results from other parts of the world, show that the amount of revenue that can be expected at facility level from such

initiatives is very limited. (Abel-Smith1994) Unless there is a strong system of recourse in which the contractors (the CHF) is held financially accountable for the services rendered, the system will not survive. There are already agreements between the hospital and some government and civil society institutions, in which the hospital still has not received remuneration for services rendered several years back. **As a health finance initiative the hospital will however support it fully in the hope that it can generate revenue and contribute to a more equitable health care system.** As with the Trust Fund, no income is budgeted from this source within the next 5-year period.

There are several factors that need careful consideration within the Haydom community context. Risk sharing involves a large pool of people in which some are ill, but most are well. Those that are well need to accept a fractional payment of services they might not need. In the cultures of the peoples surrounding Haydom it seems very difficult to introduce the idea of paying for something you might not need. In particular in times of food shortage and environmental crisis this concept is very far from being accepted. It furthermore represents great challenges in registering households with names and pictures, as well as payment procedures and revenue collection. The obvious challenges regarding Moral Hazard and Adverse Selection will also have to be met, but could include a small co-payment and enrolment of whole villages. There are further legal challenges in that services pre-paid for might not be available due to lack of drugs, equipment or human resources.

THE HOSPITAL FULLY  
SUPPORTS THE  
GOVERNMENTS REFORM,  
AIMING TOWARDS A MORE  
EQUITABLE AND RATIONAL  
HEALTH CARE SYSTEM.

#### GOVERNMENT SUPPORT

As mentioned earlier the hospital now sporadically receives a bed grant and a staff grant from the Ministry of Health. With the introduction of the Health Reforms in Tanzania most of the major donors, through the Sector Wide Approaches, have introduced a Basket Grant channeling donor support directly to the District authorities. The amount has been set to 0.5 USD per capita, and for the entire Mbulu District this amounts to about 99 million TSh. (US \$ 110,000) Of these voluntary agency hospitals are supposed to receive about 10%. According to the Basket Grant policy documents they are also supposed to receive grants for their health centers and dispensaries, but this has so far not been the case. HLH has health centres also in Hanang District, but has not received funds from the Basket Fund in this district. The health authorities in this district are quite clear about these funds being allocated to Government facilities only.

The money allocated to the voluntary agencies is again divided between all of the agencies within the district, potentially leaving very little left to each facility. With voluntary agencies supplying more than 50% of the total health services in Tanzania there is much criticism of the small amount of money actually reaching the same services. It seems that the argument is that these facilities will receive donor funding anyway, and does not need further funding. If however, the same donors now support the Basket Grant instead of funding the facilities directly, obviously the facilities will receive much less support, jeopardizing quality of services and in the short run consequently deteriorating the health service provided to the Tanzanian people. It should therefore be in the interest of both the Tanzanian government and the major donors to allocate according to services rendered, alternatively to burden of disease encountered, in order to secure adequate services to the people. Within the same context the Tanzanian Government and its major donors encourage the expansion of Civil Society, implying increased use of their services. There is a policy discrepancy between the increased focus on Civil Society, such as through the Poverty Reduction Strategy Paper (PRSP) process, and the actual flow of funds and resources towards the same group. The HLH believes that poverty alleviation needs a strong Civil Society to ensure and advocate people's rights and demands towards Public Goods.

**HLH anticipates however, the introduction of decentralization because it gives an opportunity for closer contact with the national decision makers.** The hospital accepts the need for closer cooperation with the district authorities and looks forward to a continued dialogue. The Health Reform Process and its expanded focus on Voluntary Agency delivery of services encourage HLH. Voluntary Agencies work hand in hand towards the improved health of the Tanzanian people, and are not competitors as often perceived.

VOLUNTARY AGENCIES AND THE  
TANZANIAN GOVERNMENT ARE  
NOT COMPETITORS, AS OFTEN  
PERCEIVED.

In addition to the Health Reform process Tanzania has been found eligible for debt relief through their Poverty Reduction Strategy Paper. This strategy involves increased spending on health and education and HLH further anticipates the increased flow of national funds towards the health sector. It is yet to be seen however, if these funds will reach the voluntary agency health sector, or if they indeed will increase the amount of funds spent on health in the rural communities. Haydom Lutheran Hospital does not anticipate increased funds from these Government sources within the next 5-year period.

#### DONOR SUPPORT

HLH lost much of the local contributions in covering the MOC due to the drought. The effect is anticipated to last several additional years and external support is required in addition to HLH' own effort to consolidate its financial capacity. Support from NORAD/BN/NLM has in the past period consisted of about 16.8% of the total income. In this 5-year period there has been constant pressure towards the reduction of this support. It is hoped however, that this report realistically portrays the critical need for further support. Therefore the budget in the appendix allows for a constant percentage of 16.8% support, although both the Mbulu Diocese and the hospital administration hopes for an increase, both towards needed rehabilitation and investments, and towards the total running costs. HLH and the Mbulu Diocese extend their gratitude towards the assistance given from these donors, and confirm the need for continued support.

HLH IS NEEDS PARTNERS  
WITH A SERIOUS AGENDA  
AND LONG-TERM  
COMMITMENTS.

Because HLH and the Mbulu Diocese still have a job to do, visions to pursue and objectives to reach, they will have to continue seeking support for their work. This 5-year plan constitutes the framework for the work to be done in the near future and the resources will have to be sought wherever they are found. HLH strongly believes the work done at the hospital is of high quality with high levels of dedication. It is therefore confident that donors with a serious agenda, pursuing the same visions and objectives, will find it worthwhile to support it into the future. Nevertheless the budget in the appendix does not include any other donor input than that of NORAD/BN/NLM. From the table and graphs below however, it is seen that there is a large unfinanced proportion needing immediate coverage for sustainable activity within the project. HLH extends its appeal to all donors willing to engage in the important work done within and by the hospital.

#### IV.III.II. II REVENUE PROJECTIONS

The following table gives a summary of the projected income for the next 5-year period: (Details are included in the appendix) (A detailed discussion on the background of each of these figures are included in the text above.)

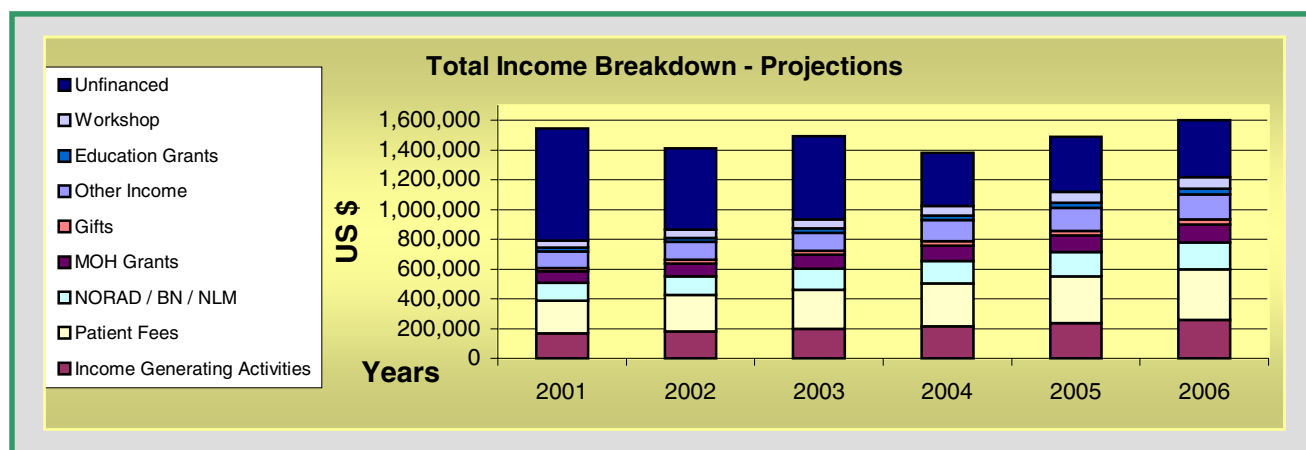
All figures in US \$ (2001=1, TSh/US\$ = 900)

Year	Patient Fees	MOH Grants (Including Basket Fund)	NORAD / BN / NLM	Gifts	Income Generating Activities (Not surplus)	Total Income projected
2001	222,222	79,864	116,959	22,222	167,043	760,132
2002	242,222	86,482	127,485	24,222	182,077	828,544
2003	264,022	93,672	138,959	26,402	198,464	903,113
2004	287,784	101,488	151,465	28,778	216,326	984,393
2005	313,685	109,984	165,097	31,368	235,795	1,072,989
2006	341,916	119,220	179,956	34,192	257,017	1,169,558

TABLE 10. SUMMARY OF PROJECTED INCOME - 2001-2006.

As will be discussed later the projected income does not cover the projected expenses. There is therefore scope for a discussion around the sources of income, including increased donor support, and the projected expenditure.

FIGURE 24. INCOME PROJECTIONS 2001-2006.



### IV.III.III. SUMMARY OF INCOME AND EXPENDITURE

From the discussion above a summary of the projected expenditures and income can be presented. Three main clusters of projections can be derived:

- Total Income related to Minimum Operational Costs (MOC)  
A separate discussion on National Income (Patient Fees and MoH Grants) related to MOC can be derived from this.
- Total Income related to Total Running Costs
- Total Income related to Total Projected Expenses including rehabilitation and investments

From the tables provided in the appendix, all of these graphs can be made. The following graphs illustrate each of the above combinations.

#### IV.III.III.I. TOTAL INCOME RELATED TO MINIMUM OPERATIONAL COSTS

The first graph illustrates the relationship between the Total Projected Income and MOC.

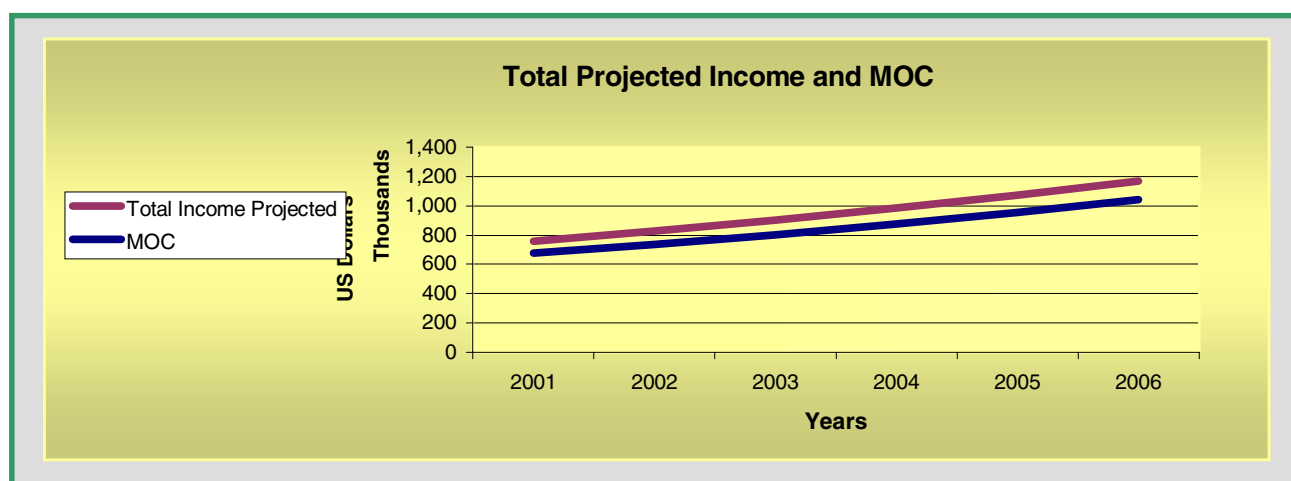


FIGURE 25. PROJECTED INCOME AND MOC.

In addition it is worthwhile to examine the projections of the National Income (Patient Fees and MoH Grants) as proportion of the

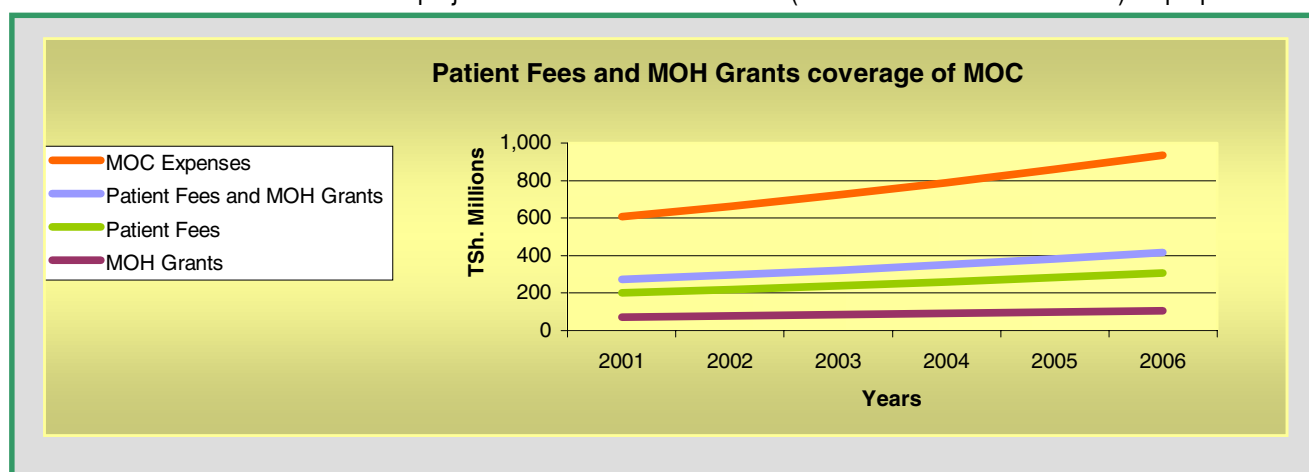


FIGURE 26. PROJECTED NATIONAL INCOME AND MOC.

projected MOC. While Figure 24 shows that the total budgeted income barely covers MOC, figure 25 shows that income from national sources will not be able to meet the MOC.

#### IV.III.III.II. TOTAL INCOME RELATED TO THE TOTAL RUNNING COSTS

To further examine the projection we take a look at the Total Income related to the Total Projected Running Costs.

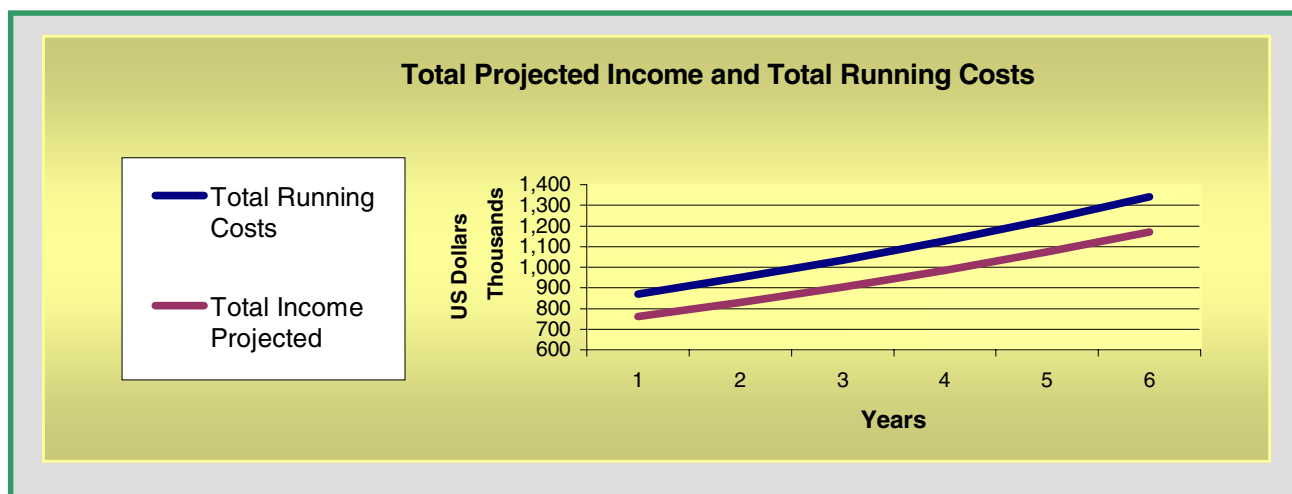


FIGURE 27. PROJECTED INCOME AND TOTAL RUNNING COSTS.

This graph shows that there is a deficit of about US \$ 110,000 in 2001 that has not been covered in order to meet the ordinary running costs of the hospital. (Again, the actual figures are included in the Annex)

#### IV.III.III.III. TOTAL PROJECTED INCOME RELATED TO THE TOTAL PROJECTED EXPENDITURE

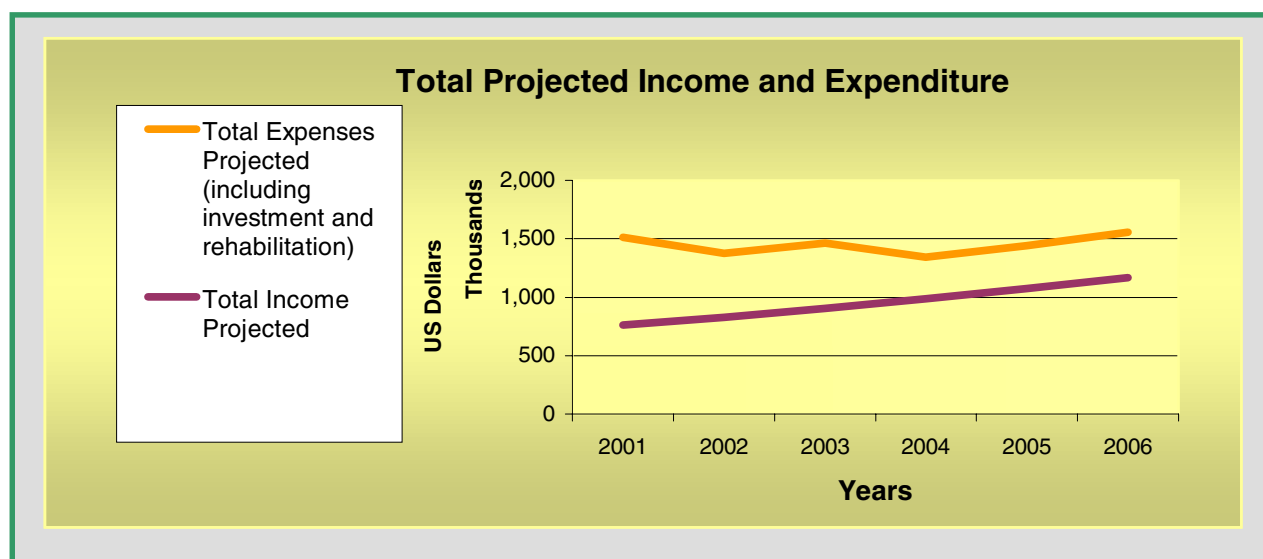


FIGURE 28 . TOTAL PROJECTED INCOME AND TOTAL PROJECTED EXPENDITURE.

Finally the Total Projected Income is related to the Total Projected Expenditure, including needed rehabilitation and investments.

From these three graphs it is shown that the total projected income barely covers MOC, but not quite Total Running Costs. It further shows the inadequacy of National Income to cover even MOC. The need for external assistance even for MOC and Total Running Costs is therefore imminent. Because the Rehabilitation and Investment costs are set higher the first years, the graphs seem to converge towards the end of the 5-year period. A detailed summary in table form (below) illustrates the breakdown of the total expenditure and income projected for the coming 5-year period: (MOC, School grants and Scholarships are included in the Total Running Costs, but are included in the table for enhanced overview)

<b>Projected Expenditures</b>						
All numbers in 2001 US Dollars (TSh / USD = 900) (Estimated inflation rate 6%)						
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
<b>Rehabilitation &amp; Investments</b>						
Needed Rehabilitation	365,945	243,964	243,964	121,982	121,982	121,982
New Investments	276,000	184,000	184,000	92,000	92,000	92,000
<b>Operational Costs</b>						
Total Running Costs	871,021	949,413	1,034,860	1,127,998	1,229,517	1,340,174
MOC	676,389	737,264	803,618	875,943	954,778	1,040,708
School Grants	13,000	14,170	15,445	16,835	18,351	20,002
Scholarships	35,333	37,453	39,700	42,082	44,607	47,283
<b>Total Projected Expenditures</b>	<b>1,512,966</b>	<b>1,377,377</b>	<b>1,462,824</b>	<b>1,341,979</b>	<b>1,443,499</b>	<b>1,554,156</b>
<b>Projected Income</b>						
Other Income	185,019	201,670	212,126	239,605	261,169	284,674
Patient Fees	222,222	242,222	264,022	287,784	313,685	341,916
MOH Grants	68,889	75,089	81,847	89,213	97,242	105,994
Income Generating Activities	167,043	182,077	198,464	216,326	235,795	257,017
NORAD / BN / NLM	116,959	127,485	138,959	151,465	165,097	179,956
Other Donors						
<b>Total Projected Income</b>	<b>760,132</b>	<b>828,544</b>	<b>895,419</b>	<b>984,393</b>	<b>1,072,989</b>	<b>1,169,558</b>
<b>Projected Need for Assistance</b>						
Unfinanced towards coverage of Total Running Costs	110,889	120,869	139,441	143,604	156,529	170,616
Unfinanced towards coverage of Rehabilitation and Investments	641,945	427,964	427,964	213,982	213,982	213,982
<b>Total Unfinanced</b>	<b>752,834</b>	<b>548,832</b>	<b>567,405</b>	<b>357,586</b>	<b>370,510</b>	<b>384,598</b>

TABLE 11. PROJECTED EXPENDITURE, INCOME AND NEED FOR ASSISTANCE.

Both the graphs and table above illustrate that the hospital will need to receive external assistance, in addition to that projected covered by NORAD/BN/NLM, varying from about US \$ 750,000 in 2001 to about US \$ 385,000 in 2006 to cover the costs of running the hospital as well as for the much needed rehabilitation and investments. To only cover the costs of running the hospital the need for external assistance is US\$ 111,000 in 2001, rising to US\$ 171,000 in 2006.

The figure below shows an overview of the past and future projections of Total Income and Total Running Costs, not including Rehabilitation and Investments, for the whole 10-year period from 1996 to 2006. All figures are set to 1996 = 1. It shows that both the Total Running Costs and Income have dropped substantially over the past 5 years. It serves to illustrate that the hospital is now at its limit as far as continued drop of income and cost cutting.

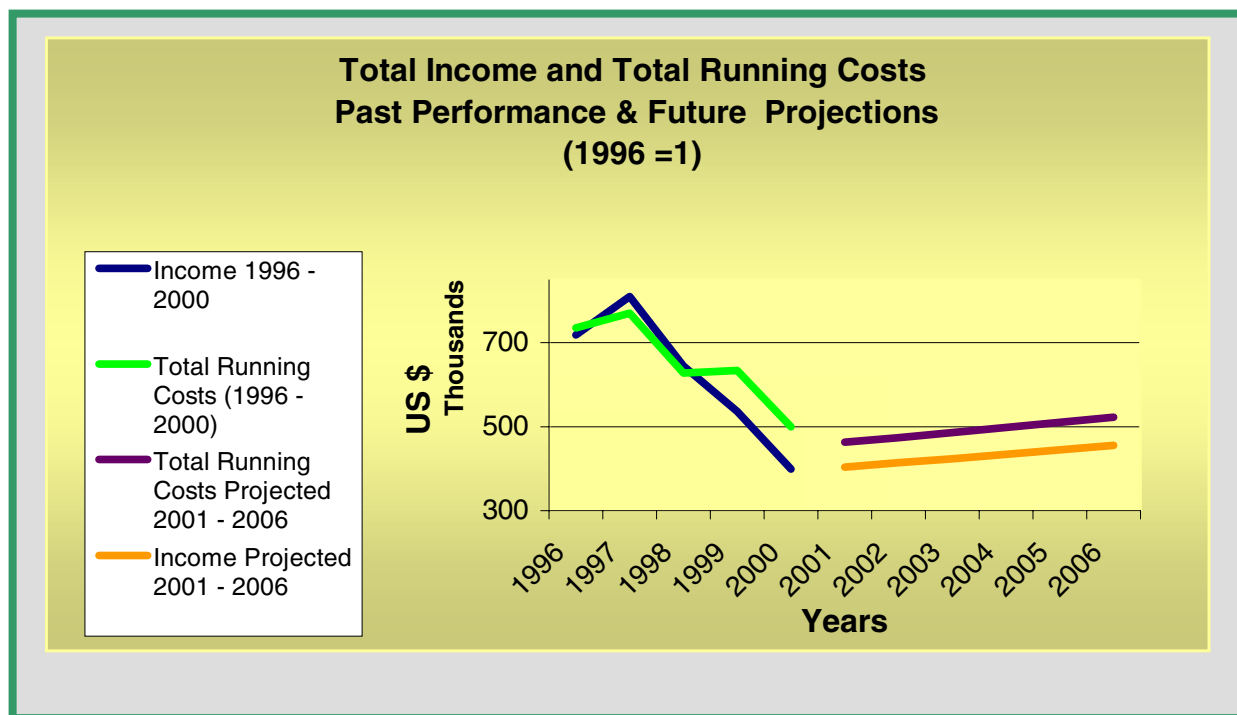


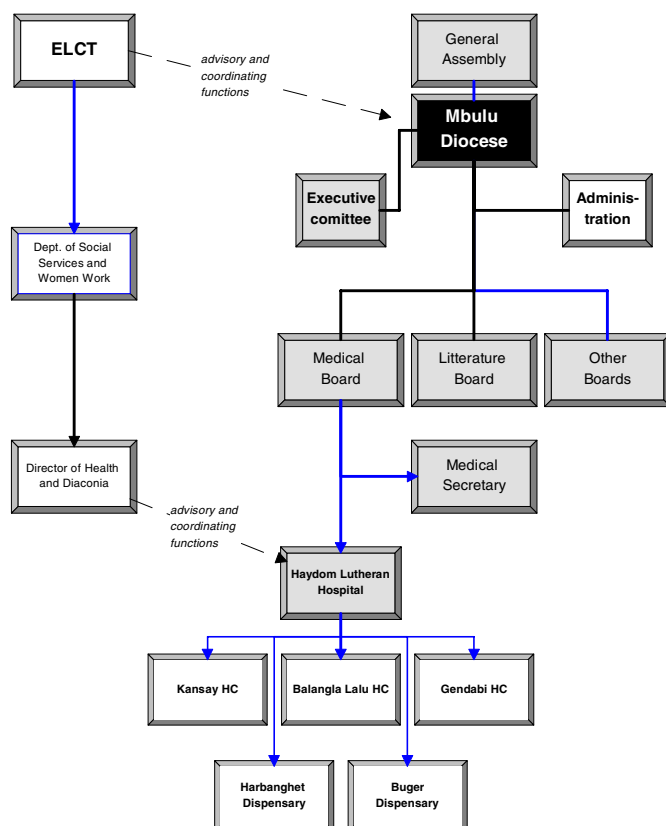
FIGURE 29. PAST PERFORMANCE AND FUTURE PROJECTIONS.

The above graph also shows the rationale behind the discrepancy between projected running costs and income for the next 5-year period. It might be considered unrealistic to budget costs and revenue at different levels, but the hospital management and the Mbulu Diocese have found it more useful to show the actual need for external assistance in order to cover the costs of basic health services to the people, rather than portraying a budget line that would not enable the hospital to meet its vision and objectives. It is hoped that this budget philosophy is appreciated among the friends and donors of HLH, enabling them to determine realistic levels of possible support into the future.

## V. IMPLEMENTATION STRUCTURES

### V.I. RELATIONS TO THE MBULU DIOCESE AND THE ELCT

The Mbulu Diocese of the ELCT owns the HLH. The Diocese's health work is organized in the following way:



The ELCT is organized as a group of independent Dioceses reporting to their own General Assemblies. The General Assembly is responsible for the running of the Diocese and chooses the members of the different boards. The Medical Board of the Mbulu Diocese is supposed to discuss the health strategy of the Diocese. The Medical Secretary is administratively responsible for the coordination of all health work and assures the communication with the other boards and with the Executive Committee.

The Mbulu Diocese owns and runs 1 hospital (HLH), three health centres and two dispensaries. All six institutions are run under the medical supervision of the Medical Director of the HLH, as dictated by Tanzanian laws.

The structures of the ELCT's Dept. of Social Services and Women Work holds advisory and coordinating functions towards the Medical Board and the institutions owned by the Diocese.

FIGURE 30. THE MBULU DIOCESE OF THE ELCT STRUCTURAL DIAGRAM.

### V.II. THE HLH AND ITS STRUCTURE

The administrative structure of the hospital and the management lines are shown here in the following drawing. A lot of effort is being put towards the revision of the lines of responsibility. As an example a new system of "in-charges" has been implemented at the ward-level. There is still some work to be done in order to provide all the employees of the HLH with adequate job description and job specifications in order to prepare for future recruitment.

The diagram on the next page shows the results of the organisational revision:

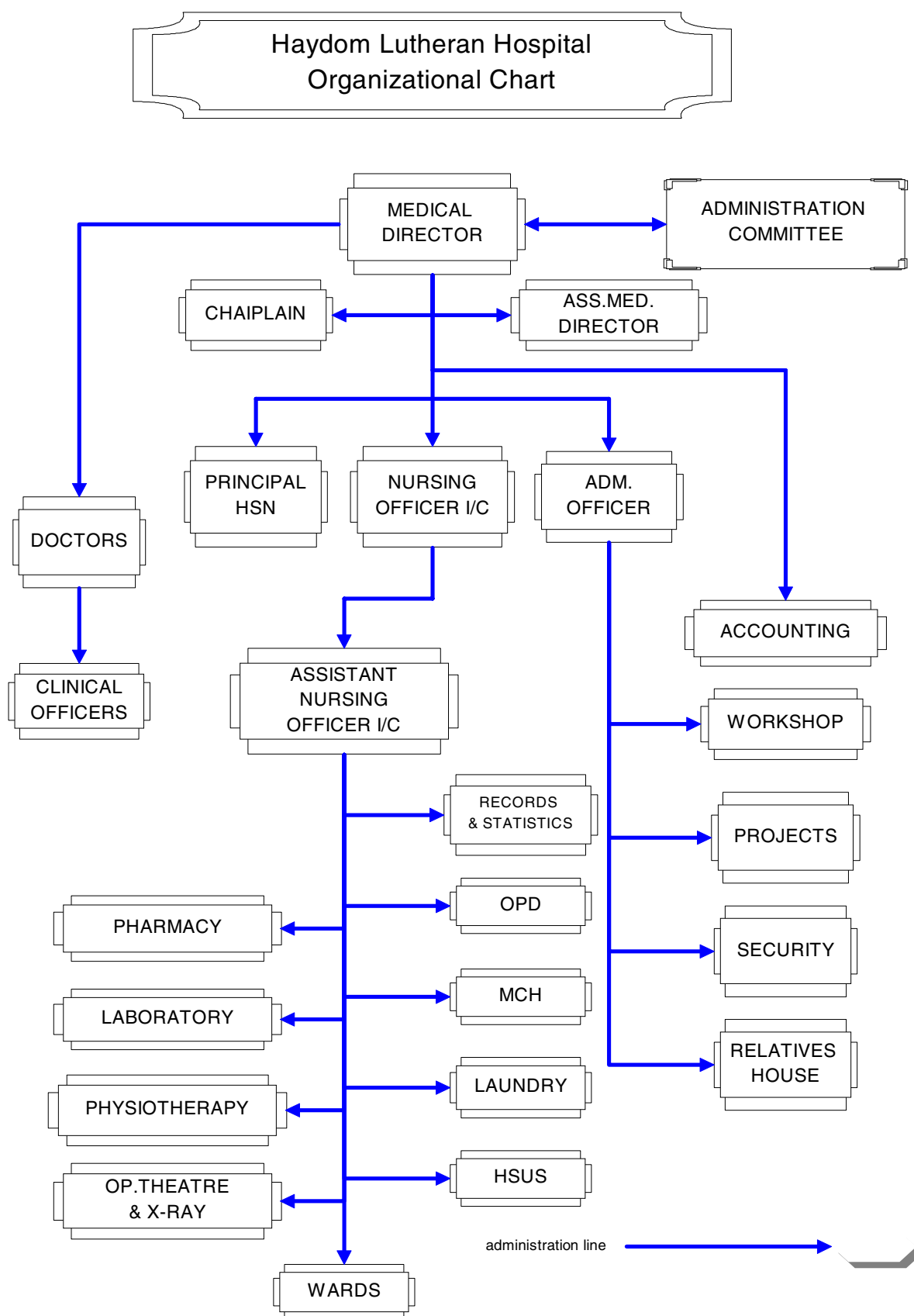



FIGURE 31. HAYDOM LUTHERAN HOSPITAL ORGANIZATIONAL CHART.

### **V.II.I. COST-MANAGEMENT ROUTINES— A CHALLENGE FOR THE FUTURE**

Use of the financial data collected at HLH has been mentioned as a weak point in earlier reports. The general situation for the hospitals of ELCT is that accounting is poor disabling financial decision making. HLH has, however, with simple means and basic routines provided transparent accounting for the hospital as well as the large development projects. Recent strengthening of the staff of the accounting department has over the last years improved the capacity, but the accounting has not yet been developed as a tool where the data is regularly used to assist in cost-management, monitoring and decision-making. It should be noted that the accounting office has been through a period of great change and challenges. The office was demolished by the bomb attack in 1997, and it has been a meticulous process rebuilding the offices and infrastructure, of which the introduction of computers and accounting software have been one of the major developments in the past 5-year period. In addition the accounting office has been responsible for large community capacity building and famine relief projects. Evaluations of the work of the accounting office by the ELCT auditors have shown excellent achievements with procedures and products to be desired across the country.

Nevertheless there are several challenges ahead, of which efficient cost-management procedures are among the most important. The schools have their own accounts but the hospital is still one cost center. The planned improvements described under monitoring and evaluation in this report will make HLH a pioneer with the potential of functioning as a model for other church hospitals. Some church hospitals, Selian Lutheran Hospital in Arusha in particular, have come a long way towards effective cost-management procedures, and HLH will seek to gain from their experience. From a situation where data is still very limited and most staff in leading positions does not have an economic overview of their departments, future plans include introducing cost centers with quality and cost control procedures. For the process of seeking increased sustainability wider participation and distribution of responsibility among the departmental leaders is seen necessary, albeit experience over the past 10 years has shown that it is a difficult and time consuming process. Regular reports from the accounts should help the delegated staff monitor the developments each one is responsible for. Non-monetary donations are still not entered into the accounts and the hospital contemplates functional methods towards their inclusion in close cooperation with the ELCT auditors. Including them in the accounts is a very difficult costing and administrative process. Only current assets are registered such as stock of drugs and spares.



A USEFUL TOOL FOR  
EMPOWERMENT,  
MANAGEMENT, MOTIVATION  
AND AWARENESS

### **V.III. INSTITUTIONAL COLLABORATION**

An attempt to draw the different partners relating to the HLH shows us the complexity of this organization. There are many stakeholders both at the national and international level. It can be concluded that the HLH has a wide network and this is one of the factors that has made the hospital what it is today. The strengthening of this network will be an important aim in the next 5-year period. The “global community” surrounding HLH is invaluable to its existence. The two-way flow of ideas, experiences, insights, resources – sharing each others achievements and challenges – has been one of the major motivational factors encouraging the staff through very difficult times.

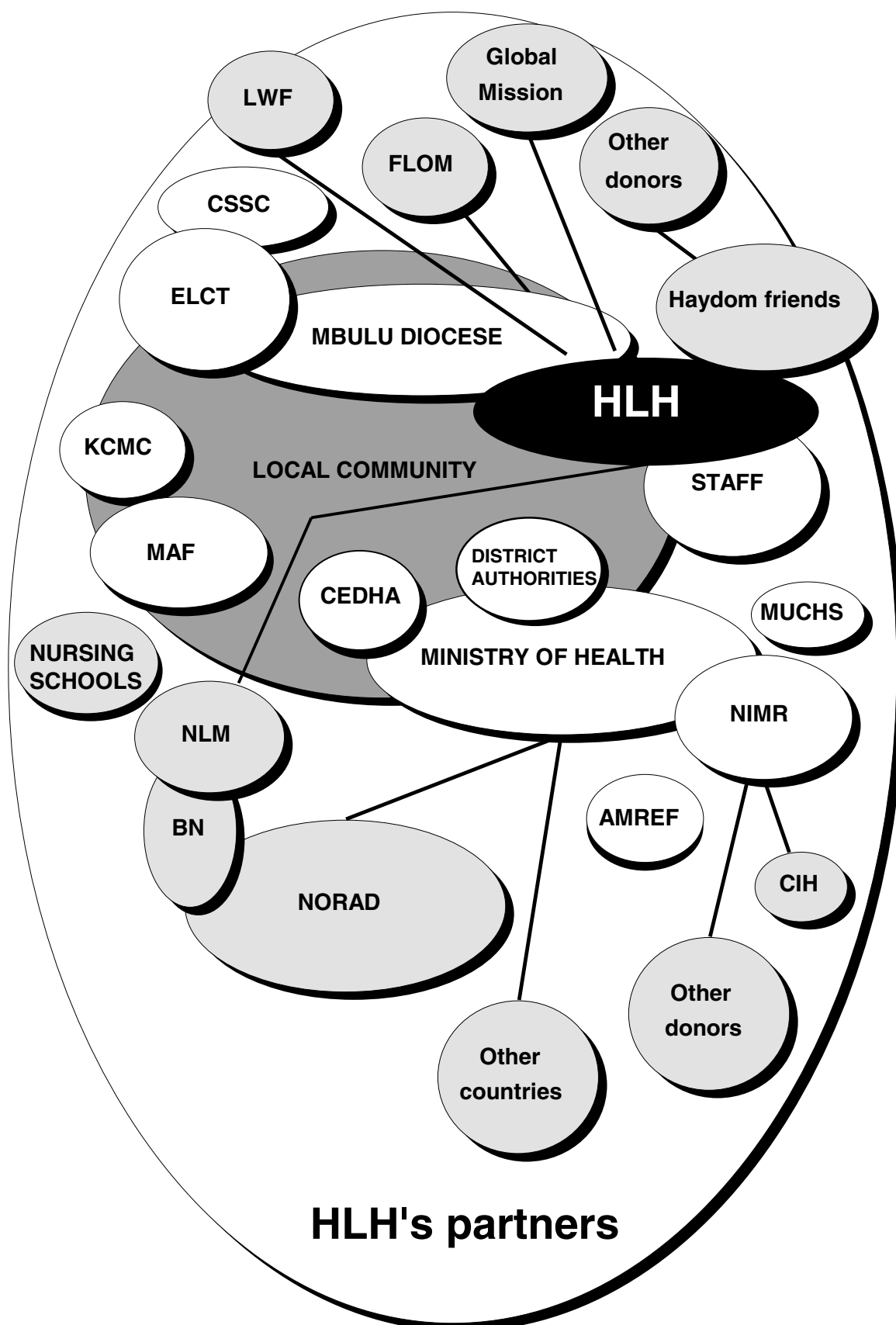


FIGURE 32. HAYDOM LUTHERAN HOSPITAL'S GLOBAL COMMUNITY.

## VI. MONITORING AND EVALUATION

### VI.I. FRAMEWORK

In fulfilling the planning cycle established in this 5-year plan the issues of monitoring and evaluation are left as tools for constant evaluation of the level of achievement of the objectives. Using the model as described by Green, the hospital aims at producing a framework as a tool to assist in monitoring the quality, efficiency and sustainability of the project. This is also in line with the recommendations of the ELCT guidelines. The aim is to assist the department managers, the administration of the hospital, the District and National Health Authorities as well as the stakeholders in keeping track of activities both related to outputs and inputs. The Haydom Lutheran Hospital Health Management Information System (HMIS) will therefore aim at producing a useful set of indicators to monitor the Medical Strategies, Capacity Building Strategies, Community Capacity Building Strategies as well as the Technical, Human Resource and Financial resources and inputs. The main responsibility for compiling the indicators and disseminating the results will be left with the already established Quality Control Committee at the hospital. It is important that the number of indicators is limited so as to give a useful tool for empowerment, management, motivation and awareness. The hospital has therefore for the past 2 years been working on quality improvement through its established Quality Control Committee with the finding appropriate indicators for each department and activity, enabling the management of both the hospital to keep track of and continually improve the quality of the work through a focus on planning cycle. The objective is to continue this task including an improvement of the Health Management Information Systems (HMIS). This will require both dedication and added resources.

A TOOL CAPABLE OF  
INCREASING THE  
AWARENESS OF PARTNERS

The HMIS is defined according to three different needs:

1. Departmental indicators
2. Administrative indicators
3. National (MTUHA) / International indicators

The following is an example of the basic framework for the monitoring procedure:

Department	Objective	Indicator	Definition	Baseline	Target	Achievement	Report frequency and dissemination of results
MCH	Improve Obstetric Care	Proportion of clients attending ANC	No. of ANC clients with one visit as proportion of total expected birth rate	86%	100%		Quarterly & Annual Report Publications

TABLE 12. MONITORING FRAMEWORK - AN EXAMPLE.

### VI.II. STRATEGY OUTPUT AND INPUT INDICATORS

A comprehensive list of the proposed indicators to be used for the monitoring and evaluation of achievements and possibilities is presented in the annex.

### VI.III. MONITORING, REPORTING, EVALUATION AND REWARDS

The frequency of reporting and dissemination of results to the appropriate user of the indicators is of vital importance. This includes the staff in general, the department heads, the administration as well as the National Health System and International Stakeholders. The types of reports is planned to include:

- Hospital monthly leaflet
- Quarterly report
- Half yearly report
- Annual report
- Departmental meetings orientation
- Special reports / donor reports
- The National Health Management Information System (MTUHA)
- National and International Scientific Publishing
- National and International Press

With this system in place, albeit continually developing, it is hoped that the hospital will continue to improve its quality, efficiency and sustainability, as well as contribute to the sensitisation and awareness of its challenges and chosen strategies towards all stakeholders, national and international.

## VII ENDNOTE

It is hoped that this 5-year plan has explained the Haydom Lutheran Hospital visions and objectives. Furthermore the hospital strategies towards the fulfilment of these objectives have been spelled out in detail. Through an appraisal of available resources, human, technical and financial, the report further tries to realistically portray the difficult situation faced by the hospital in the immediate future. The different possible actions are also described, staking out the future options of the hospital within the next five to ten year period. The report shows the strengths and successes of the hospital activities as well as the weaknesses in terms of lack of financial sustainability and need for further substantial external support in the medium to long-term horizon. The document is a strategic outline, not a project proposal.

In addition the report lays the foundation for continued improvement and perfection of the hospital implementational strategies and institutional capacity.

Finally however, the report also aims at providing the reader with an additional insight into the dilemmas facing the hospital, not only concerned with scarcity of resources, but also to the many conceptual challenges needing continued debate and dialogue between itself and its partners.

So what does the future hold for hospitals providing services to poor and marginalized people? According to WHO, public funding of health services through general or earmarked tax is the most equitable and efficient system of financing. In the Tanzanian context this still seems far away. Planning the role of hospitals has to be based on the fact that primary health care and hospitals are both links in one chain, albeit a weak one in many developing countries. Bringing services nearer to people and responding to their needs requires a shift to planning services based on principles of: of health as a fundamental human right, not a commodity; solidarity in public-health across borders; participation of women and men in planning; mutual accountability evidence-based policies – not constantly changing “buzz-words”. But to construct an services perhaps the most important challenge is to constructively attack poverty and cooperation with those that have the knowledge of the “there and then”.

PUBLIC FUNDING  
OF HEALTH  
SERVICES IN  
TANZANIA IS STILL  
FAR AWAY.

PRIMARY HEALTH  
CARE AND  
HOSPITALS ARE  
BOTH LINKS IN ONE  
CHAIN

HEALTH IS A  
FUNDAMENTAL  
HUMAN RIGHT, NOT  
A COMMODITY

recognition  
financing – also  
among partners and  
effective chain of health  
marginalization in close

Dancing to its own beat – listening to its own drums – with the aim of fulfilling its own vision and objectives - is what Haydom Lutheran Hospital has done throughout its 46 years of existence. It will continue to strive for its visions and objectives, without compromising its local knowledge, identity and integrity, also into the future.

Haydom Lutheran Hospital and the people it serves have been through very difficult times these past 5 years. Never before have they been challenged with such rapid economic and social changes coupled with increasing disparity and need for help. Through these times however, they have learned to trust their own wisdom and find their own solutions to the many problems encountered. It is this wisdom that gives them the courage to stand firm and demand respect. At the same time they experienced an outstretched hand from friends around the world. From institutions such as NORAD, the Norwegian Ministry of Foreign Affairs, ELCA and NCA through to thousands of individuals they received heart-warming support. This help is not easily forgotten. But the difficult times are not over. The harvest this year seems to enable the people to start the slow process of recovery. This will take time. Nevertheless it gives hope. Hope that the people will gain enough strength to continue the difficult process of further improving their lives. And hope that the hospital will be able to continue to service the people with adequate health care and join them in their effort to reduce suffering and create a positive spiral out of poverty.

“Life can only be understood backwards,  
though it must be lived forwards.”  
SØREN KIERKEGAARD

## VIII. ANNEXES

### VIII.I. CHAPTER 2: SELECTED STATISTICS FROM THE HOSPITAL WORK

#### SELECTED HOSPITAL STATISTICS

Curative	1995	1996	1997	1998	1999	2000
Total no. of IPD	11685	10334	10007	11072	9106	10364
Average bed state	356	358.13	365.4	414	380	373.06
Bed occupancy rate	118%	119%	122 %	138 %	126 %	107 %
Total patient stay days	130,125	131,074	133,395	151,113	138,692	136,168
Average stay days excl. Tb patients and patients waiting after treatment completion		9.36	10.33	9.85	9.49	9.03
TB patients started on treatment	762	413	601	568	627	595
Sputum positive	83	117	161	95	161	167
Sputum negative	328	222	191	287	191	129
Total Tb lungs	411	339	352	382	352	296
Other TB	158	172	275	186	275	299
OPD TB patients	193	217	425	425	502	
Total OPD attendances (all ages)	64,307	60,750	52,347	50,791	57,595	56,325
Total OPD attendances < 5 years			6,709	7,940	5,957	6,414
Work load Tb ward	23929	24111	25403	26886	26943	27221
Work load Paediatric ward	23780	26303	24866	36743	33067	30743
Work load ICU	4988	4955	4729	5528	5025	5293
Work load Surgical ward	20976	19958	22866	21512	20308	19424
Work load Medical ward	28138	25229	25939	29100	25569	23642
Work load Maternity Ward	25217	30615	29592	31086	27875	29936
Total deliveries	2190	2468	2627	2199	2162	2744
Caesarean sections	221(10.0%)	334(13.5%)	386(14.7%)	385(17.5%)	307(14.1%)	280(10.2%)
Maternal Deaths						
Direct	6	7	3	0	1	3
Indirect	0	11	5	7	5	3
Theatre work - major	983	1045	1149	994	1024	1233
- minor	2300	1930	2338	2333	2407	2510
- examinations	4032	3923	3829	7103	3288	3712
Total	7315	9835	10919	10430	10168	11468
Lab.work B/slide for Malaria	37269	26163	29414	34839	30244	30249
Sputum for TB	2053	1085		627	719	817
Total haematology	34283	27513	1133	30793	29847	23460
Total Biochemistry	305	369	1094	1708	1624	1834
HIV blood donor positive		6/678	10/617	14/694	16/676	40/1010
Other HIV positive		71	73	34	110	157

other laboratory work	19310	19134		18805	20632	56557
Total Laboratory work	93220	74341	86621	86820	83176	
Radiology X ray	5360	4648	5164	4618	4759	4628
Ultrasound		1371	1315	1859	2641	2575
Infusion unit total production litres	49684	39466	44093	50861.5	40397	47804
Physiotherapy attend days			2456	3977	6426	6331
<b>PREVENTIVE</b>						
MCH Mothers	20553	24377	25326	22821	25014	28312
Children	38694	55937	61863	61411	64755	69321
Vaccination BCG	3396	4176	5085	5206	5340	5872
Measles	2445	3398	3860	3776	3753	3978
Polio 0 - 3	9131	11752	14031	14664	13586	8354
Tetanus toxoid	6004	8548	9204	7555	5966	5985
Others	5735	11782		14078	14241	16799
Total Vaccinations	28589	39656	45837	45279	42886	40988
Ambulance no of trips			1642	3817	1536	1583
total km			64011	165323	65423	66815
average km per trip			49	51	57	42.2
obstetrical trips			370	372	312	332
Percentage of medical trips called by radio				32.2	41.2	34.4
Health ed. in MCH-topics	580-600 annually					
Total TBAs trained	Total no. trained between 1995 to 1998 =			74		

**COMMON HEALTH EDUCATION TOPICS**

Malaria	Vaccines and immunization
Pneumonia	Home delivery vs. Hospital Delivery
AIDS	Gastroenteritis
Sanitation	Preparations before delivery
Family Planning	Nutrition

Out reach AMREF 10-12 visits annually

Eye specialist 3-4 visits annually

**TOP TEN DISEASES/CAUSES OF HOSPITAL ADMISSIONS**

Malaria	Delivery	Malaria	Malaria	Malaria	Delivery
Deliveries	Malaria	Delivery	Delivery	Delivery	Malaria
Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	TB
Amoeba	TB	TB	Anaemia	Diarrhoea	Diarrhoea
TB	Diarrhoea	Amoeba	TB	Urinary tract	Pneumonia
Anaemia	Amoeba	Accidents	Amoeba	Eye disease	Fracture/injuries
Diarrhoea	ARI	Diarrhoea	Diarrhoea	Animal bite	Neoplasms
					Pregnancy related problems
Abortions	Malignancy	Abortions	Heart dis	Anaemia	Anaemia
Prematurity	Giardiasis	Heart disease	Fractures	ARI	Heart diseases
Malignancies	Prematurity	Anaemia	Prematurity	Bronchitis	

**TOP TEN CAUSES OF HOSPITAL DEATHS**

Malaria	Malaria	Malaria	Malaria	Malaria	TB
TB	TB	TB	Pneumonia	TB	Malaria

Prematurity	Pneumonia	Pneumonia	TB	Pneumonia	Heart diseases
Pneumonia	Heart diseases	Heart diseases	Prematurity	Meningitis	Neoplasms
Heart diseases	Prematurity	Malignancy	Meningitis	Heart diseases	Diarrhoea
Malignancy	Malignancy	Amoeba	Heart diseases	Prematurity	A.I.D.S.
Amoeba	Meningitis	Anaemia	Malignancy	Anaemia	Pneumonia
Meningitis	AIDS	AIDS	Anaemia	Septicaemia	Anaemia
Malnutrition	Malnutrition	Accidents	Amoeba	Malignancy	Fracture/injuries
AIDS	Amoeba	Meningitis	Septicaemia	Amoeba	C.O.L.D.

**TOP TEN DISEASES  
OUT PATIENT ATTENDANCE**

Malaria	Malaria	Malaria	Malaria	Malaria	Malaria
Pneumonia	Pneumonia	Injuries	Pneumonia	Pneumonia	Pneumonia
Amoeba	UTI	UTI	Ill defined	Diarrhoea	Minor Injuries
Bronchitis	Amoeba	Pneumonia	Amoeba	UTI	Eye diseases
Eye diseases	Animal bite	Ill defined	Animal bite	Animal bite	Diarrhoeal diseases
Giardiasis	Scabies	ARI	Bronchitis	Eye diseases	Acute Respiratory Infections (ARI)
Animal bite	Ill defined	Bronchitis	UTI	ARI	Urinary Tract Infections (UTI)
Ear diseases	Wounds	Eye dis	Eye diseases	Bronchitis	Pelvic Inflammatory Diseases (PID)
Sore throat	Eye diseases	Animal bite	Wounds	PID	Chronic Obstructive Lung Diseases (COLD)
Diarrhoea	PID	Amoeba	Gastric symptoms	Gastric symptoms	Gastritis / Peptic ulcers

TABLE 13. SELECTED HOSPITAL STATISTICS - 1996-2000.

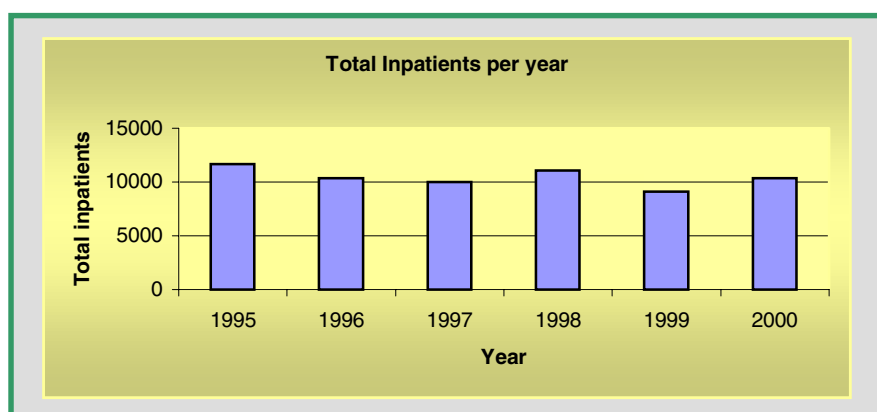


FIGURE 33. HISTORICAL OVERVIEW OF TOTAL INPATIENTS PER YEAR.

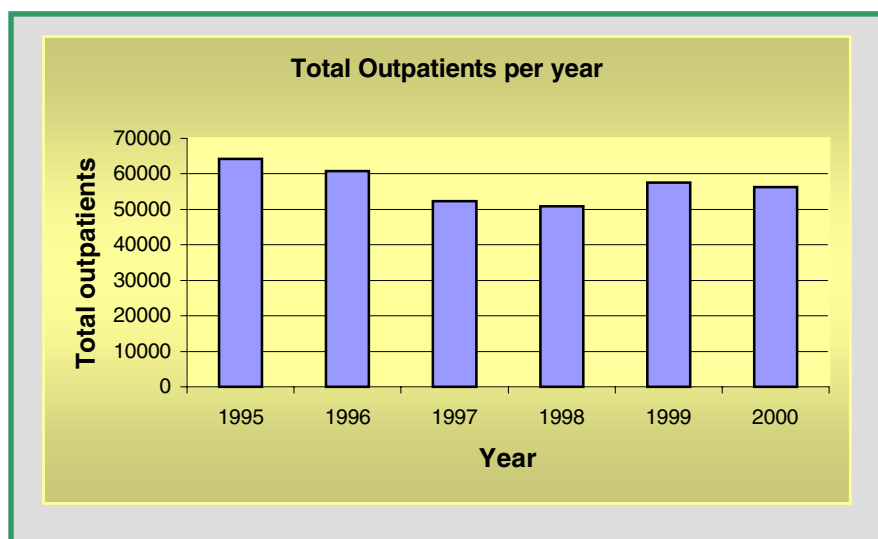


FIGURE 34. HISTORICAL OVERVIEW OF TOTAL OUTPATIENTS PER YEAR.

This graph includes all patients including children less than 5 years of age.

## VIII.II. CHAPTER 3: STAFF AND TRAINING PLAN

Position / function	Goals fixed in 1996	Status 1996	Trained since 1996	Other changes 1996-2000	Status May 2001	Under training in 2001	Proposed further training
Medical Director	1	1	0		1		
Medical Officer	4	2	0		2	1	3
Orthopaedist	0	0	0		0	1	
Paediatrician	1	1	0	-1	0		
AMO Specialist.	1	0	1		1		2
Ass. Medical Officer	4	1	2	-1	2	3	5
Clinical Officer	10	6	17	-8	14	7	2
Dental Officer							1
Rural Medical Aide	0	4	0	-4	0		2
<b>Total medical body</b>	<b>21</b>	<b>15</b>	<b>20</b>	<b>-14</b>	<b>20</b>	<b>12</b>	<b>15</b>
Matron	1	1	0		1		
Assistant Matron	2	1	0		1		
Nursing officer	82	8	8	24	44	6	15
Trained nurse / Upgrading	0	69	0	3	67		
Nurse Auxiliary	18	18	0	-13	5		
Nurse Attendant	71	71	0	-1	64		
MCHA	0	0	0	1		1	
<b>Total nurses</b>	<b>174</b>	<b>168</b>	<b>8</b>	<b>14</b>	<b>182</b>	<b>7</b>	<b>15</b>
Laboratory Technician	2	0	1	1	2	2	3
Laboratory Assistant	10	8	4	-4	8	1	4
Laboratory Attendant	5	7	0	-4	3		
Pharmacist	0	0.5	0		0.5		2
Pharmacy Technician	2	0	1		1		2
Pharmacy Assistant	3	0	2		2		1
Physiotherapists	2	1	1		2		1
Evangelist				3	3		1
Radiographer	2	0	0		0		2
Radiographic Assistant	1	1	2		3	1	1
Radiographic Attendant	0	1	0		1		
<b>Total Clinical support</b>	<b>25</b>	<b>17.5</b>	<b>10</b>	<b>-4</b>	<b>23.5</b>	<b>4</b>	<b>17</b>
Administrative Officer	1	0	1		1		1
Assistant Administrative Officer	1	0	0		0		1
Typist / Secretary / Store	2	1.5	1	-1.5	1		2
Computer Technician	0	0	0		0	1	
Medical Recorder / Radio	5	5	0		5		1
<b>Total Administration</b>	<b>9</b>	<b>6.5</b>	<b>2</b>	<b>-1.5</b>	<b>7</b>	<b>1</b>	<b>5</b>
Principal HSN	1	1	0		1		
Teacher HSN	6	3	0	-1	2		5
Clinical Instructor	2	2	0	3	5		3
Employee HSN	6	5.5	0	-1.5	4		
Principal HSUS	1	1	0		1		
<b>Total Education</b>	<b>16</b>	<b>12.5</b>	<b>0</b>	<b>0.5</b>	<b>13</b>	<b>0</b>	<b>8</b>
Chief Accountant	1	0.5	0		0.5		
Accountant	3	3	4	-2	5		3
Cashier	5	4	0	2	6		1
Driver	2	2	0		8		1
Watchman	13	11	0	2	11		
Cleaner	10	10	0	-1	9		
Laundry	8	8	0	-4	4		
Tailor	1	1	0	1	2		
Workshop Manager	1	1	0		1		
Carpenter	3	3	0		3		
Mechanic	2	2	1	-1	2	2	
Electrician / Electronics	1	1	0		1		2
Plumber	1	1	0		1		1
Maintenance worker	9	9	0		0		
Other worker	4	4	0		2		
Mortuary Attendant	1	1	0		1		
<b>Total Technical support</b>	<b>65</b>	<b>61.5</b>	<b>5</b>	<b>-3</b>	<b>56.5</b>	<b>2</b>	<b>8</b>
<b>Total staff</b>	<b>312</b>	<b>282</b>	<b>46</b>	<b>-8</b>	<b>304</b>	<b>26</b>	<b>68</b>

TABLE 14. STAFF AND TRAINING PLAN FOR THE NEXT 5-YEAR PERIOD.

### VIII.III. CHAPTER 3: TRAINING AND STAFF TABLES

Training tables								
Year	Training expenses				Funding sources			
	Support to HSN	Scholarships	Yearly total	Total corrected for inflation	External grants	% covered by external grants	Covered by HLH	% covered by HLH
1996	10,593,188	14,994,000	25,587,188	25,587,188	15,572,000	61	10,015,188	39
1997	9,482,709	26,085,000	35,567,709	29,841,308	17,410,000	49	18,157,709	51
1998	7,323,897	31,830,000	39,153,897	27,561,250	30,758,000	79	8,395,897	21
1999	2,577,474	35,589,000	38,166,474	23,427,311	24,023,000	63	14,143,474	37
2000	11,620,270	33,572,000	45,192,270	25,548,429	21,547,172	48	23,645,098	52

TABLE 15. HISTORICAL OVERVIEW OF TRAINING EXPENSES.

Staff tables											
Year	Number of medical staff (excluding project and training staff)	Average Bed State (ABS)	Actual Staff / ABS ratio	Dr. Flessa ratio	Recommended number of staff (Dr. Flessa)	Total medical doctor capacity (Expatriate Doctors and AMO's)	Medical Assistants	Nurses	Other medical staff	Project and Training Staff	Total Staff (all categories)
1996	242	358	0.68	0.72	258	4	7	94	140	25	267
1997	239	365	0.65	0.72	263	6	7	103	128	27	266
1998	246	414	0.59	0.71	295	6	8	101	135	33	279
1999	252	380	0.66	0.72	273	8	12	115	123	31	283
2000	272	373	0.73	0.72	268	7	14	114	141	35	307

TABLE 16. HISTORICAL OVERVIEW OF STAFF LEVELS.

## **VIII.IV. CHAPTER 3: TECHNICAL INFRASTRUCTURE — A REVIEW OF ACHIEVEMENTS AND PLANNED ACTIVITIES FOR THE NEXT FIVE YEAR PERIOD**

### **Water**

As described in the previous 5 year plan HLH has made efforts to rehabilitate the water piping system to the Hospital. New external pipes have been put in to all wards. A new water distribution central has been constructed making it possible to control the water supply to each department. The sub-mercible pump and electrical supply to one of the boreholes has been repaired and is now functioning. Several rainwater tanks have been replastered on the inside. The main water supply coming from Binja Hills needs a lot of maintenance. During this period we have secured the area around the generators and water tanks by building a big wall with a steel door. In the Endagulda valley, in which the spring well is situated, we have also secured the area by building a big wall.

The coming five years.

The hot water system in the Hospital needs repair and improvement in order to give hot water to the hospital wards and departments. Every ward will need a separate hot water tank. In order to secure a good and reliable water supply even in dry years the old water supply from wells in the valley must be repaired. The water pipe leading to the Hospital must also be repaired and proper pumps put in. In addition it is necessary to replace the generators and submercible pumps at the main water supply at Binja Hills.

### **Sanitation system.**

During the last 5 years replastering them on the inside has repaired most of the septic tanks. During the last years we have continuously repaired the toilets, bathrooms and sluice rooms.

The coming five years.

Major repairs of the bathrooms, sluice rooms and toilets are now necessary over the whole Hospital as well as in the Nursing School. Further repair of the main sewage system including drainage to the lagoons in the valley is also necessary.

### **Laundry**

The laundry equipment is very old. Some of the laundry machines are 40 years old while others are more than 10 years old. We are daily washing about 900 kg of dry cloths and it is an enormous challenge to keep the cloths clean and safe for use for the patients. During the last five years we have kept on repairing the laundry equipment at big expenses. Even so the hospital has managed to buy one new machine during this last five-year period. The energy sources used are firewood, solar power and electricity from the main grid.

We are worried about the firewood situation and the damage we could cause to the environment. We succeeded in buying a locally made hot water boiler that has reduced the consumption of firewood to about the half. At the same time we have connected this to a solar system, which also reduces the firewood consumption. A new steam boiler has been installed, but because of the very hard water in this area unfortunately this has caused some problems and adjustments are still being made to have it work properly,

The coming five years.

A complete rehabilitation and modernisation of the laundry buildings and equipment is necessary

### **Workshop**

During the past five years the workshop has been very busy with several large projects: Balangda Lalu Health centre, Gendabi Health Centre and Kansay Health Centre have all involved large rehabilitation projects. The workshop has made furniture for the two new dispensaries that have been opened at Bugeir and Harbangeid. In addition the workshop has been busy producing tables, chairs, windows doors etc. to the new Secondary School built for the Government under the supervision of the Workshop. This school has been a big help to the young people in this area. Major road rehabilitation and bridge construction projects have also been supervised by the Workshop. These projects have enabled the workshop to run with a surplus.

Further we have during this period modernised the workshop spare parts store by extending it and putting in proper recording systems with bin cards and computer records. This has enabled us to have a better control of the stock. In addition to this the workshop has been responsible for all maintenance in the hospital and the Health Centres. The workshop has also been responsible for all maintenance and repair of the cars, generators and other equipment.

The coming five years

The role of the workshop will be the same. The maintenance work is very important, in fact vital, for the running of the Hospital. In order to fulfil its task it needs to renew its equipment and maintain an adequate number of qualified personnel.

### **Transport**

The fleet now includes Land Cruisers for the ambulance service, administration and other activities, tractors for the farm and most importantly a lorry for the transport of all goods and supplies to the Hospital since no other transport is available in this remote area.

During the last five years we have received a new 18-ton lorry as a gift from friends in Norway. Through the donor budget we have been granted 2 new ambulance cars. When NORAD closed down the Peace Corps services, we in addition received two used Land Cruisers as gifts.

The coming five years

To maintain the fleet and when necessary replace the cars that are too old.

### **Garbage disposal.**

The Hospital has an Incinerator burning all dangerous garbage. Furthermore it has a designated pit for all ordinary garbage.

The coming five years

We need to replace the Incinerator and keep the garbage place in proper order.

### **Electricity**

Since 1993 the Hospital has been connected to the TANESCO (National grid) power supply. We succeeded in getting a meter for each ward and department. This cut our expenses by 40 % as the charges increase with increased consumption per meter. However the supply is still very expensive. Furthermore the supply has been irregular with a lot of power cuts. This has been very difficult, especially for the surgical work when the power cuts in the middle of an operation. However we have succeeded in buying a 120 KW generator that starts automatically when TANESCO cuts. This has been a big help and has also reduced some labour expenses. However, due to the high prices, we have not been able to utilise some equipment that would have been of big value for the standard in the Hospital. The TANESCO price pr KWH is Tshs 40, - to 50, -

The coming five years

Maintain and keep the electricity from TANESCO in good order. If possible increase the use of electricity in order to reduce the firewood consumption and save the forest environment.

A further aim is to maintain the generator securing reliable electricity supply through power cuts on the national grid.

### **Communication**

Internal communication .

We have during the last 5 years received a telephone central as a gift from friends in Norway. A technician came out from Norway at his own expense and mounted the central. Due to fluctuations in the TANESCO power however, the central is now not properly functioning.

External communication

Lately we have been connected to the national telephone communication system (TTCL) and this has made communication much easier. We also have e - mail and fax which is a big advantage. This system is however based on wireless communication radio links with low capacity. It is therefore not able to support full Internet services yet.

The coming five years

We hope to maintain this communication and possibly expand in order to facilitate Internet connection. We hope to have the internal telephone system repaired and at the same time connect this to the external telephone. Haydom Lutheran Hospital has already got its Web side on Internet, but we are not yet able to see it here at Haydom. The hospital has found it very useful to develop a website, and this service will be expanded in the future. With the large amount of visitors coming to Haydom, as well as the substantial interest towards the well-being of the area and the work from all the hospital friends, it is important to further develop a forum for continued contact and interaction.

#### **Morgue.**

During the past five-year period we have built a new mortuary with a cooling room keeping around 6 degrees Celsius with a capacity of 18 bodies. This has been very useful, in particular because of the very long distances many of the patients travel.

The coming five years

To maintain the mortuary in a good condition as well as improve the hygiene and security procedures.

#### **Haydom School of Nursing**

During the previous five-year period the physical facilities of the school have been improved. 2 new stores, 3 new offices and 3 new rooms for boarding students have been built. Furthermore the kitchen has been modernised including the construction a freezing room keeping minus 19 degrees and a cooling room keeping plus 5 degrees Celsius. The extension has made it possible for the school to increase the intake by 12 students thus making the school more efficient.

The coming five years

The kitchen still needs some more improvements in order to keep it up to standard. Furthermore good maintenance of the school buildings is important. One new classroom, three teacher's offices and a dormitory accommodating 42 male students are also needed.

#### **Relatives house**

Normal maintenance has been undertaken.

The coming five years

Many mothers come from far away to deliver. In order to make the Maternity ward more efficient it will be necessary to build a waiting house for the mothers who are going to deliver. This will increase the standard and according to research done also reduce the Maternal Mortality by helping the mothers to come early to the Hospital for help.

#### **Administration / Treasury department.**

Robbers attacked the old administration building in November 1997. They used dynamite and destroyed the building. By the good will of the Norwegian Government we were given help to build a new building containing offices for the Treasury and the Administration. These offices are now slowly being equipped.

The coming five years

Maintaining the buildings and installing telephones and computer equipment enabling a proper office environment will be the priority in the coming years.

#### **Operation theatre / Intravenous unit**

The operation theatre every year conducts about 10 000 procedures with about 3000 operations. Within the department there is the unit for making intravenous fluids. In the year 2000, 95 000 bottles with i.v. fluid of different types was made.

The coming five years

The Theatres needs some rehabilitation. The Intravenous unit needs extensive rehabilitation with total repair of the building to maintain an acceptable standard.

#### **General rehabilitation of the Hospital**

The Hospital has not been painted for the last 10 - 12 years and needs a thorough general rehabilitation. All the wards have to be rehabilitated and painted.

### **Private Ward**

A new ward with private rooms should be built to improve the cost recovery. Such a unit will not improve cost recovery unless it generates sufficient amount of income to meet the costs. Preliminary calculations show that the ward should extend services to 5 doubles with shared bathrooms and 5 single self-contained rooms, totalling 15 beds for the ward altogether.

### **Medical Records**

Haydom Lutheran Hospital has a great potential for research. There has already been done a lot of research from this Hospital. HLH has a unique collection of History sheets from the first patient in January 1955 till this day. Unfortunately the present storage capacity is not safe enough. HLH has the plans ready for a fireproof house close to the reception, but there are currently no funds for this purpose.

### **Paediatric Ward**

As mentioned in Chapter 2 the Paediatric Ward is now severely overcrowded and in need of rehabilitation. The number of children admitted to the hospital is rising and to provide adequate health care for them is a priority area of concern.

### **Radiology Department**

As mentioned earlier there is a great need for increased Ultrasound capacity both at the hospital and at the health centres. In addition the present equipment needs to be maintained and some of it replaced. Finally there is a need for 2 separate new rooms for TB reassessment procedures.

### **Outpatient Department**

The outpatient department was built when the number of outpatients was much less than now. At present the hospital treats about 60.000 patients per year. There is an urgent need for rehabilitation and increased capacity.

### **Mental Health**

As mentioned in chapter 2 psychiatry and mental health is a neglected but much needed, and also required, service within the Tanzanian context. The hospital intends to establish a small, separate mental health unit with both outpatient and inpatient capacity. Preliminary plans aim at constructing an annex for these purposes.

### **Eye Unit**

HLH services 5 districts without any other eye treatment facilities. The current visits by an eye specialist from KCMC have shown that there is a need for a permanent eye clinic at the hospital. See chapter 2.

### **Staff Housing**

The staff houses for the nurses need a thorough rehabilitation including outdoor kitchens.

### **Title Deed**

Within the next five-year period the hospital will need to extend the lease on the hospital and health centre compounds. Expenses towards lawyers' fees will have to be met.

For a total overview of the projected needs and plans both regarding medical and technical strategies as described in this document so far, including rough estimates of costs, please consult the following table:

## VIII.V. STRATEGIES, ACTIVITIES AND ESTIMATED TOTAL COSTS FOR 2002 - 2006 - A 5 YEAR REHABILITATION AND INVESTMENT PLAN FOR HAYDOM LUTHERAN HOSPITAL

Strategy	Activity	Aim of activity	Rehabilitation = R Investment = I	Estimated costs (Tanzanian Shillings – in millions)
Technical resources / Infrastructure	Water rehabilitation –	Secure water supply to the hospital.	R	20
	Sanitation – hospital	Rehabilitation, baths – sluice- toilets – sewage	R	23
	Laundry –	Rehabilitation, new equipment	R	78
	Workshop –	New equipment, rehabilitation	R	30
	Transport	– Maintenance, replacement of old vehicles	R	45
	Garbage –	New incinerator	R	5
	Electricity –	Maintenance and repair	R	10
	Communication	– repair internal telephone system, external expert from Norway	R	10
	Morgue –	Replace refrigerator	R	5
	Haydom School of Nursing –	Maintenance, new classrooms and offices, sanitation	R	34
	Relatives house	Rehabilitation	R	4
	Administration / Treasury	– Maintenance and repair, computers and software	R	12
	Operation Theatre / IV unit –	Rehabilitation	R	6
	Radiology department –	Maintenance, new facilities for TB reassessment, replace Ultrasound equipment	R	18
	All wards	General rehabilitation	R	28
	Small private ward	Construction	I	25
	Staff houses	Rehabilitation	R	20
	Title deed for hospital and health centre compounds	Consultancy costs	R	22

<b>Preventive services</b>	Ambulance / radio	Maintenance, vehicle and radio replacements	R	45
	MCH	New equipment	R	3
<b>Special projects</b>	HIV prevention project	Health information and prevention	I	240
	MCH based - Vit A intervention project	Health information and vitamin A supplementation	I	12
	MCH based - Impregnated bed nets – malaria control among pregnant women	Health information and subsidised supply of bed nets and repellent	I	120
	Impregnated bed nets – malaria control among inpatients	Bed nets and repellent to all wards	I	20
	Maternity waiting home	Construction of building	I	15
<b>Curative Services</b>				
<b>Clinical services</b>	Medical equipment	Maintenance and procurement of adequate equipment	R	77
	Psychiatric unit	Construction of building and office equipment	I	30
	Paediatric ward	Rehabilitation and extension of existing ward	R	33
	Ophthalmologic unit	Construction of building and procurement of adequate equipment	I	45
	Outpatient department	Rehabilitation of existing department	R	28
<b>Clinical support services</b>				
	Laboratory	Enable bacteriology capacity - equipment	I	5
	Radiology	Rehabilitation and equipment	R	29
	Drug store	Construction / expansion	I	24
	Medical record storage	– Fireproof room	I	26
<b>Hospital Capacity Building</b>				
	Train Nurses Teachers for the HSN	Increase the teachers capacity at the HSN	R	18
	Haydom School of Nursing	Provide improved educational material and equipment	R	10
	Haydom School of Nursing	Provide dormitory for male students	R	15
	Staff upgrading	Continued upgrading of staff	R	150
	Quality Control Project /	Administrative, computing and printing costs	R	6

	Cost Management / Monitoring / HMIS			
	School grants (the whole 5 year period)	Continued support to the Haydom School of Nursing and Upgrading School	R	55
	Scholarships	Continued support to students seeking secondary and upgrading education nationally	R	12
	Internal education	Arrangement of special courses and seminars as well as maintenance of educational equipment	R	4
	Library	Recurrent and investment costs towards training, books and computers	I	63
	Laboratory Assistant Training School	Construct necessary infrastructure	I	32
	Institutional collaboration	Funds for continued contact with national and international institutions	I	5
	Partner awareness	Develop 5-year plan and other documents as well as improve the website	I	2
<b>Community Capacity Building</b>				
	Vocational Training School	Construct necessary infrastructure	I	58
	Road Maintenance	Ensure access to the hospital	I	20
	Secondary School Upgrading	Install Laboratory and new classrooms	I	31

TABLE 17. A 5 YEAR REHABILITATION AND INVESTMENT PLAN FOR HLH .

## VIII.VI. CHAPTER 4: ECONOMIC PERFORMANCE FOR 1996 – 2000

Inflation and Exchange Rate Table Bank of Tanzania (BoT) Figures					
Year	Headline inflation	Price index – food items	Price index – non-food items	Exchange rate USD – weighted average	Exchange rate NOK – HLH accounts BoT figures will follow in the next edition
	Percentage change on previous year				
1993	25.2	20.1	33.8	407.8	
1994	33.1	39.1	23.9	512.4	
1995	29.8	29.7	26	581.3	
1996	21.1	20.4	22	582.2	78
1997	16.1	17.5	13	618.3	82
1998	12.8	14.7	8.1	665.5	85
1999	7.9	8.8	5.6	745.9	90
2000	5.5	5.9	4.3	803.3	91

TABLE 18. INFLATION AND EXCHANGE RATES FROM THE BANK OF TANZANIA - 1993-2000.

Supermarket indicators										
	MOC	ABS	PBD	TSh 1000	TSh (1000)	TSh (1000)	US\$	US\$	US\$	NOK
Year	(1000 TSh)	Average Bed State (ABS)	Patient Bed Days	MOC adjusted for inflation	MOC/PBD adjusted for inflation	MOC/ABS adjusted for inflation	MOC adjusted for exchange rates	MOC/PBD adjusted for exchange rates	MOC/ABS adjusted for exchange rates	MOC/PBD adjusted for exchange rates
1996	344,944	358	131,074	344,944	2,632	964	592,483	4.52	1,655	34
1997	470,572	365	133,395	394,810	2,960	1,082	638,542	4.79	1,749	36
1998	505,093	414	150,855	355,546	2,357	859	534,254	3.54	1,290	28
1999	629,457	380	138,787	386,373	2,784	1,017	517,995	3.73	1,363	31
2000	620,451	373	136,259	350,758	2,574	940	436,647	3.20	1,171	28

TABLE 19. HLH "SUPERMARKET" INDICATORS FOR 1996-2000.

Expenditures (US \$) (Adjusted for inflation and exchange rates)					
	2000	1999	1998	1997	1996
Upgrading	23,697	29,287	33,668	35,396	25,755
Medical Equipment	9,052	41,535	61,034	27,350	20,952
Salaries & NPF	164,345	166,324	172,940	215,848	216,976
Medicine	41,181	61,727	68,810	71,653	74,499
Consumables	37,280	17,448	22,271	33,149	16,737
Transport & Travel	37,336	34,010	29,072	32,120	26,381
Energy & Water	24,575	31,755	22,570	37,757	40,871
Maint. & Workshop	69,933	105,815	92,299	150,018	126,784
Adm. Consumables	9,048	16,532	12,503	14,922	18,946
MCH	20,199	13,562	19,086	20,329	24,583
<b>SUM MOC</b>	<b>436,647</b>	<b>517,995</b>	<b>534,254</b>	<b>638,542</b>	<b>592,483</b>
IG Act & Trans	54,524	114,201	86,315	119,295	124,753
Grants to Schools	8,178	2,121	7,747	12,868	18,195
<b>TOTAL</b>	<b>499,348</b>	<b>634,318</b>	<b>628,315</b>	<b>770,704</b>	<b>735,432</b>

TABLE 20. HISTORICAL OVERVIEW OF EXPENDITURES (US\$)

Income (US \$) (Adjusted for inflation and exchange rates)					
	2000	1999	1998	1997	1996
Income Generating Projects	47,652	93,671	82,306	107,021	97,856
Educational Grants	15,178	19,769	32,534	23,624	26,746
Other Income	106,632	139,371	104,283	160,258	103,498
Patient fees	113,377	126,630	256,623	331,878	320,652
Staff & Bed grant MOH	42,908	63,159	33,600	96,370	57,503
<b>SUM (National Income)</b>	<b>325,748</b>	<b>442,600</b>	<b>509,346</b>	<b>719,152</b>	<b>606,256</b>
NORAD Grant	55,369	62,395	71,243	81,892	101,632
Other Gifts	17,816	30,573	63,310	9,412	11,370
<b>TOTAL</b>	<b>398,933</b>	<b>535,568</b>	<b>643,899</b>	<b>810,456</b>	<b>719,257</b>

TABLE 21. HISTORICAL OVERVIEW OF INCOME (US\$)

Percentage expenditure of MOC					
2000	1999	1998	1997	1996	
5.4	5.7	6.3	5.5	4.3	Ungrading
2.1	8.0	11.4	4.3	3.5	Medical Equipment
37.6	32.1	32.4	33.8	36.6	Salaries & NPF
9.4	11.9	12.9	11.2	12.6	Medicine
8.5	3.4	4.2	5.2	2.8	Consumables
8.6	6.6	5.4	5.0	4.5	Transport & Travel
5.6	6.1	4.2	5.9	6.9	Energy & Water
16.0	20.4	17.3	23.5	21.4	Maint. & Workshop
2.1	3.2	2.3	2.3	3.2	Adm. Consumables
4.6	2.6	3.6	3.2	4.1	MCH
100.0	100.0	100.0	100.0	100.0	<b>SUM MOC</b>
12.5	22.0	16.2	18.7	21.1	IG Act & Trans
1.9	0.4	1.5	2.0	3.1	Grants to Schools
114.4	122.5	117.6	120.7	124.1	<b>TOTAL</b>
Percentage income of MOC					
2000	1999	1998	1997	1996	
10.9	18.1	15.4	16.8	16.5	Income Generating Projects
3.5	3.8	6.1	3.7	4.5	Educational Grants
24.4	26.9	19.5	25.1	17.5	Other Income
26.0	24.4	48.0	52.0	54.1	Patient fees
9.8	12.2	6.3	15.1	9.7	Staff & Bed grant MOH
<b>74.6</b>	<b>85.4</b>	<b>95.3</b>	<b>112.6</b>	<b>102.3</b>	<b>SUM</b>
12.7	12.0	13.3	12.8	17.2	NORAD Grant
4.1	5.9	11.9	1.5	1.9	Other Gifts
<b>91.4</b>	<b>103.4</b>	<b>120.5</b>	<b>126.9</b>	<b>121.4</b>	<b>TOTAL</b>

TABLE 22. HISTORICAL OVERVIEW OF PERCENTAGE EXPENDITURE AND INCOME OF MOC.

"Unrecoverable Patient Debt"				
	Unrecoverable Patient Debt Total amount (Million TSh)	Patient Fees (Million TSh, adjusted for inflation)	Unrecoverable Patient Debt (Million TSh adjusted for inflation)	As Percent of patient fees
1995	5.645	137.567		4.10
1996	9.678	186.684	9.678	5.18
1997	15.022	244.577	12.603	6.14
1998	33.210	242.616	23.377	13.69
1999	37.684	153.878	23.131	24.49
2000	28.986	161.102	16.387	17.99

TABLE 23. HISTORICAL OVERVIEW OF "UNRECOVERABLE PATIENT DEBT".

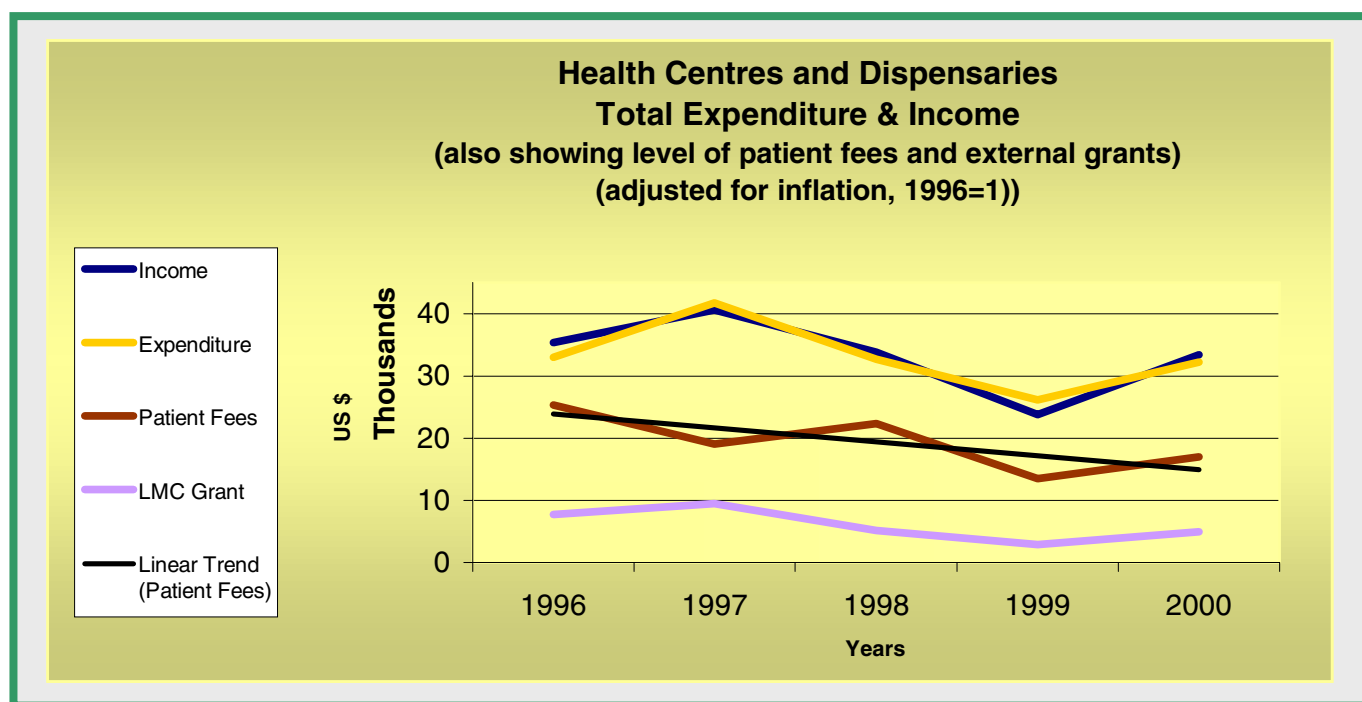


FIGURE 35. HISTORICAL OVERVIEW OF THE TOTAL ECONOMIC PERFORMANCE AND MAIN INCOME SOURCES OF THE HEALTH CENTRES AND DISPENSARIES.

## VIII.VII. CHAPTER 4: TENTATIVE EXPENDITURE PROJECTIONS – TOTAL RUNNING COSTS

Tentative Budget Allocations for 2001 – 2006 (All figures in Tanzanian Shillings)												
Description	Budget 2001	%	Budget 2002	%	Budget 2003	%	Budget 2004	%	Budget 2005	%	Budget 2006	%
Salaries/Wages/Allowances	260,000,000.00	34.57 %	283,400,000.00	34.57 %	308,906,000.00	34.57 %	336,707,540.00	34.57 %	367,011,218.60	34.57 %	400,042,228.27	34.57 %
Adminstration & Representation	9,500,000.00	1.26 %	10,355,000.00	1.26 %	11,286,950.00	1.26 %	12,302,775.50	1.26 %	13,410,025.30	1.26 %	14,616,927.57	1.26 %
NPF Employer's Contribution	26,000,000.00	3.46 %	28,340,000.00	3.46 %	30,890,600.00	3.46 %	33,670,754.00	3.46 %	36,701,121.86	3.46 %	40,004,222.83	3.46 %
Bedding/Clothes	3,500,000.00	0.47 %	3,815,000.00	0.47 %	4,158,350.00	0.47 %	4,532,601.50	0.47 %	4,940,535.64	0.47 %	5,385,183.84	0.47 %
Staff & Relatives Treatment	4,000,000.00	0.53 %	4,360,000.00	0.53 %	4,752,400.00	0.53 %	5,180,116.00	0.53 %	5,646,326.44	0.53 %	6,154,495.82	0.53 %
Education/Upgrading	21,250,000.00	2.83 %	23,162,500.00	2.83 %	25,247,125.00	2.83 %	27,519,366.25	2.83 %	29,996,109.21	2.83 %	32,695,759.04	2.83 %
Medical Equipment	12,800,000.00	1.70 %	13,952,000.00	1.70 %	15,207,680.00	1.70 %	16,576,371.20	1.70 %	18,068,244.61	1.70 %	19,694,386.62	1.70 %
Medicine	68,000,000.00	9.04 %	74,120,000.00	9.04 %	80,790,800.00	9.04 %	88,061,972.00	9.04 %	95,987,549.48	9.04 %	104,626,428.93	9.04 %
Medical-Daily use items	20,000,000.00	2.66 %	21,800,000.00	2.66 %	23,762,000.00	2.66 %	25,900,580.00	2.66 %	28,231,632.20	2.66 %	30,772,479.10	2.66 %
IV-Fluids	14,000,000.00	1.86 %	15,260,000.00	1.86 %	16,633,400.00	1.86 %	18,130,406.00	1.86 %	19,762,142.54	1.86 %	21,540,735.37	1.86 %
Other expenses	6,500,000.00	0.86 %	7,085,000.00	0.86 %	7,722,650.00	0.86 %	8,417,688.50	0.86 %	9,175,280.47	0.86 %	10,001,055.71	0.86 %
Food/tea for staff	6,000,000.00	0.80 %	6,540,000.00	0.80 %	7,128,600.00	0.80 %	7,770,174.00	0.80 %	8,469,489.66	0.80 %	9,231,743.73	0.80 %
Soap and Cleaning	2,200,000.00	0.29 %	2,398,000.00	0.29 %	2,613,820.00	0.29 %	2,849,063.80	0.29 %	3,105,479.54	0.29 %	3,384,972.70	0.29 %
Electricity	24,000,000.00	3.19 %	26,160,000.00	3.19 %	28,514,400.00	3.19 %	31,080,696.00	3.19 %	33,877,958.64	3.19 %	36,926,974.92	3.19 %
Water	14,000,000.00	1.86 %	15,260,000.00	1.86 %	16,633,400.00	1.86 %	18,130,406.00	1.86 %	19,762,142.54	1.86 %	21,540,735.37	1.86 %
Travel & transport	15,000,000.00	1.99 %	16,350,000.00	1.99 %	17,821,500.00	1.99 %	19,425,435.00	1.99 %	21,173,724.15	1.99 %	23,079,359.32	1.99 %
Hospital Cars	12,000,000.00	1.60 %	13,080,000.00	1.60 %	14,257,200.00	1.60 %	15,540,348.00	1.60 %	16,938,979.32	1.60 %	18,463,487.46	1.60 %
Ambulance Cars	10,000,000.00	1.33 %	10,900,000.00	1.33 %	11,881,000.00	1.33 %	12,950,290.00	1.33 %	14,115,816.10	1.33 %	15,386,239.55	1.33 %
Maintenance HLH	20,000,000.00	2.66 %	21,800,000.00	2.66 %	23,762,000.00	2.66 %	25,900,580.00	2.66 %	28,231,632.20	2.66 %	30,772,479.10	2.66 %
Office Equipment & Paper	6,000,000.00	0.80 %	6,540,000.00	0.80 %	7,128,600.00	0.80 %	7,770,174.00	0.80 %	8,469,489.66	0.80 %	9,231,743.73	0.80 %
Workshop ( Excluding Salaries)	35,000,000.00	4.65 %	38,150,000.00	4.65 %	41,583,500.00	4.65 %	45,326,015.00	4.65 %	49,405,356.35	4.65 %	53,851,838.42	4.65 %
Scania	15,000,000.00	1.99 %	16,350,000.00	1.99 %	17,821,500.00	1.99 %	19,425,435.00	1.99 %	21,173,724.15	1.99 %	23,079,359.32	1.99 %
Tractor	10,000,000.00	1.33 %	10,900,000.00	1.33 %	11,881,000.00	1.33 %	12,950,290.00	1.33 %	14,115,816.10	1.33 %	15,386,239.55	1.33 %
Unimog	3,800,000.00	0.51 %	4,142,000.00	0.51 %	4,514,780.00	0.51 %	4,921,110.20	0.51 %	5,364,010.12	0.51 %	5,846,771.03	0.51 %
Diesel	60,669,000.00	8.07 %	66,129,210.00	8.07 %	72,080,838.90	8.07 %	78,568,114.40	8.07 %	85,639,244.70	8.07 %	93,346,776.72	8.07 %
Gas,Oil,Grease,Kerosine	2,000,000.00	0.27 %	2,180,000.00	0.27 %	2,376,200.00	0.27 %	2,590,058.00	0.27 %	2,823,163.22	0.27 %	3,077,247.91	0.27 %
Garden	1,400,000.00	0.19 %	1,526,000.00	0.19 %	1,663,340.00	0.19 %	1,813,040.60	0.19 %	1,976,214.25	0.19 %	2,154,073.54	0.19 %
Farms	20,000,000.00	2.66 %	21,800,000.00	2.66 %	23,762,000.00	2.66 %	25,900,580.00	2.66 %	28,231,632.20	2.66 %	30,772,479.10	2.66 %
HLH Cows(expenses)	5,300,000.00	0.70 %	5,777,000.00	0.70 %	6,296,930.00	0.70 %	6,863,653.70	0.70 %	7,481,382.53	0.70 %	8,154,706.96	0.70 %
HLH Grant to HNS	11,500,000.00	1.53 %	12,535,000.00	1.53 %	13,663,150.00	1.53 %	14,892,833.50	1.53 %	16,233,188.52	1.53 %	17,694,175.48	1.53 %
HLH Grant to HSUS	200,000.00	0.03 %	218,000.00	0.03 %	237,620.00	0.03 %	259,005.80	0.03 %	282,316.32	0.03 %	307,724.79	0.03 %
HLH Bookshop	1,500,000.00	0.20 %	1,635,000.00	0.20 %	1,782,150.00	0.20 %	1,942,543.50	0.20 %	2,117,372.42	0.20 %	2,307,935.93	0.20 %
MCH (Including Salaries)	31,000,000.00	4.12 %	33,790,000.00	4.12 %	36,831,100.00	4.12 %	40,145,899.00	4.12 %	43,759,029.91	4.12 %	47,697,342.60	4.12 %
Total	752,119,000	100.00 %	819,809,710	100.00 %	893,592,584	100.00 %	974,015,916	100.00 %	1,061,677,349	100.00 %	1,157,228,310	100.00 %
Scholarships	31,800,000.00	4.23 %	34,662,000.00	4.23 %	37,781,580.00	4.23 %	41,181,922.20	4.23 %	44,888,295.20	4.23 %	48,928,241.77	4.23 %
Total Running Costs	783,919,000	104.23 %	854,471,710	104.23 %	931,374,164	104.23 %	1,015,197,839	104.23 %	1,106,565,644	104.23 %	1,206,156,552	104.23 %

TABLE 24. TENTATIVE TOTAL RUNNING COST PROJECTIONS 2001 - 2006.

## VIII.VIII. CHAPTER 4: TENTATIVE EXPENDITURE PROJECTIONS – TOTAL REHABILITATION AND INVESTMENT COSTS

Strategic investment and rehabilitation costs (2001 US\$, TSh/US\$=900)			
Project type			
Rehabilitation	Estimated Costs	Investment	Estimated Costs
Water rehabilitation –	22,222	Small private ward	27,778
Sanitation – hospital	25,556	HIV prevention project	266,667
Laundry –	86,667	MCH based - Vit A	13,333
Workshop –	33,333	MCH based - Impregnated	133,333
Transport	50,000	Impregnated bed nets -	22,222
Garbage –	5,556	Maternity Waiting Home	16,667
Electricity –	11,111		
Communication	11,111	Psychiatric Unit	33,333
Morgue –	4,444		
Haydom School of Nursing	37,778	Ophthalmologic Unit	50,000
Relatives house	5,556		
Administration / Treasury	13,333	Laboratory	5,556
Operation Theatre / IV unit	6,667		
Radiology department –	20,000	Drug Store	26,667
All wards	31,111	Medical Record Storage	28,889
Staff houses	22,222	Library	70,000
Title deed for hospital and health centre compounds	24,444	Laboratory Assistant Training School	35,556
Ambulance / radio	50,000	Institutional collaboration	5,556
MCH	3,333	Partner awareness	2,222
Medical Equipment	85,556	Vocational Training School	64,444
Paediatric Ward	36,667	Road Maintenance	83,333
Outpatient Department	31,111	Sec. School improvement	34,444
Radiology department –	32,222		
Train Nurses Teachers for	20,000		
HSN Male Dormitory	16,667		
HSN equipment and	11,111		
Staff upgrading	166,667		
Quality Control Project	6,667		
School grants	90,358		
Scholarships	246,459		
Internal education	4,444		
<b>Total</b>	<b>1,212,372</b>		<b>920,000</b>

TABLE 25. TENTATIVE REHABILITATION AND INVESTMENT COSTS PROJECTIONS 2001-2006.

## VIII.IX. CHAPTER 4: TENTATIVE INCOME PROJECTIONS 2001-2006

Tentative Income Projections. Tanzanian Shillings. Inflation rate set at 6% per year.												
Description	Budget 2001	%	Budget 2002	%	Budget 2003	%	Budget 2004	%	Budget 2005	%	Budget 2006	%
Patient Fees	200,000,000.00	26.59 %	218,000,000.00	26.59 %	237,620,000.00	26.59 %	259,005,800.00	26.59 %	282,316,322.00	26.59 %	307,724,790.98	26.59 %
IV Fluid	700,000.00	0.09 %	763,000.00	0.09 %	831,670.00	0.09 %	906,520.30	0.09 %	988,107.13	0.09 %	1,077,036.77	0.09 %
Education, Grants	21,929,840.00	2.92 %	23,903,525.60	2.92 %	26,054,842.90	2.92 %	28,399,778.77	2.92 %	30,955,758.85	2.92 %	33,741,777.15	2.92 %
Gas, Oil, Grease, Kerosene	2,000,000.00	0.27 %	2,180,000.00	0.27 %	2,376,200.00	0.27 %	2,590,058.00	0.27 %	2,823,163.22	0.27 %	3,077,247.91	0.27 %
Diesel	60,669,000.00	8.07 %	66,129,210.00	8.07 %	72,080,838.90	8.07 %	78,568,114.40	8.07 %	85,639,244.70	8.07 %	93,346,776.72	8.07 %
Water	730,000.00	0.10 %	795,700.00	0.10 %	867,313.00	0.10 %	945,371.17	0.10 %	1,030,454.58	0.10 %	1,123,195.49	0.10 %
Electricity	1,200,000.00	0.16 %	1,308,000.00	0.16 %	1,425,720.00	0.16 %	1,554,034.80	0.16 %	1,693,897.93	0.16 %	1,846,348.75	0.16 %
Workshop	45,000,000.00	5.98 %	49,050,000.00	5.98 %	53,464,500.00	5.98 %	58,276,305.00	5.98 %	63,521,172.45	5.98 %	69,238,077.97	5.98 %
Hospital Cars	20,500,000.00	2.73 %	22,345,000.00	2.73 %	24,356,050.00	2.73 %	26,548,094.50	2.73 %	28,937,423.01	2.73 %	31,541,791.08	2.73 %
Ambulance Service	20,400,000.00	2.71 %	22,236,000.00	2.71 %	24,237,240.00	2.71 %	26,418,591.60	2.71 %	28,796,264.84	2.71 %	31,387,928.68	2.71 %
Scania	21,700,000.00	2.89 %	23,653,000.00	2.89 %	25,781,770.00	2.89 %	28,102,129.30	2.89 %	30,631,320.94	2.89 %	33,388,139.82	2.89 %
Tractor	13,800,000.00	1.83 %	15,042,000.00	1.83 %	16,395,780.00	1.83 %	17,871,400.20	1.83 %	19,479,826.22	1.83 %	21,233,010.58	1.83 %
Unimog	7,700,000.00	1.02 %	8,393,000.00	1.02 %	9,148,370.00	1.02 %	9,971,723.30	1.02 %	10,869,178.40	1.02 %	11,847,404.45	1.02 %
House Rent	3,200,000.00	0.43 %	3,488,000.00	0.43 %	3,801,920.00	0.43 %	4,144,092.80	0.43 %	4,517,061.15	0.43 %	4,923,596.66	0.43 %
Guest House	2,200,000.00	0.29 %	2,398,000.00	0.29 %	2,613,820.00	0.29 %	2,849,063.80	0.29 %	3,105,479.54	0.29 %	3,384,972.70	0.29 %
Farms	30,000,000.00	3.99 %	32,700,000.00	3.99 %	35,643,000.00	3.99 %	38,850,870.00	3.99 %	42,347,448.30	3.99 %	46,158,718.65	3.99 %
Garden	1,970,000.00	0.26 %	2,147,300.00	0.26 %	2,340,557.00	0.26 %	2,551,207.13	0.26 %	2,780,815.77	0.26 %	3,031,089.19	0.26 %
HLH Cows	5,300,000.00	0.70 %	5,777,000.00	0.70 %	6,296,930.00	0.70 %	6,863,653.70	0.70 %	7,481,382.53	0.70 %	8,154,706.96	0.70 %
HLH Bookshop	1,800,000.00	0.24 %	1,962,000.00	0.24 %	2,138,580.00	0.24 %	2,331,052.20	0.24 %	2,540,846.90	0.24 %	2,769,523.12	0.24 %
External Assistance	68,000,000.00	9.04 %	74,120,000.00	9.04 %	80,790,800.00	9.04 %	88,061,972.00	9.04 %	95,987,549.48	9.04 %	104,626,428.93	9.04 %
Other Income-HLH	36,057,000.00	4.79 %	39,302,130.00	4.79 %	42,839,321.70	4.79 %	46,694,860.65	4.79 %	50,897,398.11	4.79 %	55,478,163.94	4.79 %
Donor Grant (BN/NORAD/NLM)	105,263,160.00	14.00 %	114,736,844.40	14.00 %	125,063,160.40	14.00 %	136,318,844.83	14.00 %	148,587,540.87	14.00 %	161,960,419.54	14.00 %
Staff & Bed Grant MOH	62,000,000.00	8.24 %	67,580,000.00	8.24 %	73,662,200.00	8.24 %	80,291,798.00	8.24 %	87,518,059.82	8.24 %	95,394,685.20	8.24 %
Gifts for running budget	20,000,000.00	2.66 %	21,800,000.00	2.66 %	23,762,000.00	2.66 %	25,900,580.00	2.66 %	28,231,632.20	2.66 %	30,772,479.10	2.66 %
MCH (MCH Car Mileage)		0.00 %		0.00 %		0.00 %		0.00 %		0.00 %		0.00 %
Special Grant (Famine)		0.00 %		0.00 %		0.00 %		0.00 %		0.00 %		0.00 %
<b>Total</b>	<b>752,119,000.00</b>	<b>100.00 %</b>	<b>819,809,710.00</b>	<b>100.00 %</b>	<b>893,592,583.90</b>	<b>100.00 %</b>	<b>974,015,916.45</b>	<b>100.00 %</b>	<b>1,061,677,348.9</b>	<b>100.00 %</b>	<b>1,157,228,310.34</b>	<b>100.00 %</b>
Basket Fund (Hanang District)	0.00	0.00 %	0.00	0.00 %	0.00	0.00 %	0.00	0.00 %	0.00	0.00 %	0.00	0.00 %
Basket Fund (Mbulu District)	9,878,000	1.31 %	10,253,364	1.25 %	10,642,992	1.19 %	11,047,426	1.13 %	11,467,228	1.08 %	11,902,982	1.03 %
<b>Total Income</b>	<b>761,997,000</b>	<b>101.31 %</b>	<b>830,063,074</b>	<b>101.25 %</b>	<b>904,235,576</b>	<b>101.19 %</b>	<b>985,063,342</b>	<b>101.13 %</b>	<b>1,073,144,577</b>	<b>101.08 %</b>	<b>1,169,131,293</b>	<b>101.03 %</b>
<b>Total Income (Basket Funds and External Assistance not included)</b>	<b>684,119,000.00</b>	<b>0.91</b>	<b>745,689,710.00</b>	<b>0.91</b>	<b>812,801,783.90</b>	<b>0.91</b>	<b>885,953,944.45</b>	<b>0.91</b>	<b>965,689,799.45</b>	<b>0.91</b>	<b>1,052,601,881.40</b>	<b>0.91</b>

TABLE 26. TENTATIVE INCOME PROJECTIONS 2001-2006.

## VIII.X. CHAPTER 4: SUMMARY OF EXPECTED INCOME AND EXPENDITURES

Income and Expenditure in US Dollars (1 USD = 900 TSh)									
Year	Patient Fees	MOH Grants (including Basket Fund)	Basket Fund Grant	NORAD / BN / NLM	Gifts	Income Generating Activities	Income Generating Expenses	Total Income Projected	Total Expenses Projected (including investment and rehabilitation)
2001	222,222	79,864	10,976	116,959	22,222	167,043	127,077	760,132	1,512,966
2002	242,222	86,482	11,393	127,485	24,222	182,077	138,514	828,544	1,377,377
2003	264,022	93,672	11,826	138,959	26,402	198,464	150,980	903,113	1,462,824
2004	287,784	101,488	12,275	151,465	28,778	216,326	164,568	984,393	1,341,979
2005	313,685	109,984	12,741	165,097	31,368	235,795	179,379	1,072,989	1,443,499
2006	341,916	119,220	13,226	179,956	34,192	257,017	195,523	1,169,558	1,554,156

TABLE 27. SUMMARY OF INCOME AND EXPENDITURE PROJECTIONS (PART 1).

Year	Total Rehabilitat ion Costs	Total Investment Costs	Total Running Costs	MOC	Patient Fees as % of MOC	MOH Grants as % of MOC	Unfinanced TRC	Unfinanced Rehabilitation and Investments	Total Unfinanced
2001	365,945	276,000	871,021	676,389	32.9	11.8	110,889	641,945	752,834
2002	243,964	184,000	949,413	737,264	32.9	11.7	120,869	427,964	548,832
2003	243,964	184,000	1,034,860	803,618	32.9	11.7	139,441	427,964	567,405
2004	121,982	92,000	1,127,998	875,943	32.9	11.6	143,604	213,982	357,586
2005	121,982	92,000	1,229,517	954,778	32.9	11.5	156,529	213,982	370,510
2006	121,982	92,000	1,340,174	1,040,708	32.9	11.5	170,616	213,982	384,598

TABLE 28. SUMMARY OF INCOME AND EXPENDITURE PROJECTIONS (PART 2).

## VIII.XI. CHAPTER 4: INCOME AND EXPENDITURE PROJECTIONS — SOME COST CLUSTERS DEFINED

Other Income	MOC Defined
IV Fluid	Salaries/Wages/Allowances
Water	Administration & Representation
Electricity	NPF Employer's Contribution
Workshop	Bedding/Clothes
Cars	Staff & Relatives Treatment
Ambulances	Education/Upgrading
Other	Medical Equipment
MCH	Medicine
<b>Income Generating Defined</b>	Medical-Daily use items
Scania	IV-Fluids
Tractor	Other expenses
Unimog	Food/tea for staff
Diesel	Soap and Cleaning
Gas, Oil, Grease, Kerosene	Electricity
Garden	Water
Farms	Travel & transport
HLH Cows (expenses)	Ambulance Cars
HLH Bookshop	Maintenance HLH
<b>MOH Grants</b>	Office Equipment & Paper
Bed Grants	Workshop ( Excluding Salaries)
Staff Grants	MCH (Including Salaries)
<b>Other Expenses</b>	<b>Salaries</b>
Medical Equipment (incl. Bed/Cloth)	Salaries & Sages
Transport & Travel	NPF Funds
Maintenance & Workshop	Staff & Relatives Treatment
Administration & Office (A&R + Off.Paper)	Food & Tea for staff

TABLE 29. DEFINITIONS OF MAIN COST CLUSTERS.

## VIII.XII. CHAPTER 6: MONITORING AND EVALUATION — AN IN DEPTH OVERVIEW OF POSSIBLE OUTPUT AND INPUT INDICATORS.

The following section is an in-depth continuation of Chapter VI.

### Output Indicators

#### Medical Strategies

The Medical Strategies indicators will focus on the Preventive objectives and the Curative objectives. Preventive indicators will be linked to the MCH, radio call and ambulance activities. The Input indicators will focus on available resources such as manpower and financial indicators. :

- Number of women attending Antenatal Care consultations per clinic. (Monthly)
- Number of children receiving vaccinations and supplemented with Vitamin A. (Monthly)
- Number of pregnant women treated for malaria, urinary tract infections or anaemia. (Monthly)
- Number of radio calls for emergency assistance per month.
- Number of ambulance trips for emergency and obstetric assistance per month.

The Curative indicators will be linked to the activity in the hospital, as well as a few community health indicators:

- |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Quarterly Bed occupancy rate</li> <li>• Per department</li> <li>• Total</li> <li>• Average stay per patient (Quarterly)</li> <li>• Per department</li> <li>• Total</li> <li>• Number of major operations per month</li> <li>• Number of minor operations per month</li> </ul> | <ul style="list-style-type: none"> <li>• Caesarean Section Rate (Yearly)</li> <li>• Case Fatality Rate (Yearly)</li> <li>• TB cure rate (Yearly)</li> <li>• Percentage HIV positive blood donors (Half-yearly)</li> <li>• Top ten diseases OPD (Quarterly)</li> <li>• Top ten reasons for admission IPD (Quarterly)</li> </ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Capacity building and awareness

These indicators will mainly focus on educational activities, but some will be related to the amount of contact between HLH and other institutions.

- |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Number of staff educated per year</li> <li>• Number of in-service seminars per year</li> <li>• For clinical officers</li> <li>• For nurses</li> <li>• Number of staff upgraded per year</li> </ul> | <ul style="list-style-type: none"> <li>• Number of nurses educated per year</li> <li>• Number of foreign students visits per year</li> <li>• Number of HLH staff in exchange programs per year</li> <li>• Number of publications from research at HLH per year (Including grey literature)</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Poverty alleviation and Community Capacity Building

- |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Specified for each project.</li> <li>• Proportion of community participation in each project.</li> <li>• Manpower</li> <li>• Financial input.</li> <li>• Proportion of donor support for each project.</li> <li>• Selected community health indicators (To be defined later this year)</li> </ul> | <ul style="list-style-type: none"> <li>• Number of students educated through schools each year</li> <li>• Secondary school</li> <li>• Trade School</li> <li>• Secondary Upgrading School</li> </ul> <p>Local Purchasing Power indicators as defined by the Tanzanian Poverty Alleviation programme (To be defined later this year)</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **Input Indicators**

Apart from indicators tracking the objectives, H.L.H. will also aim at monitoring the available resources using the same basic framework as indicated previously.

### **Human Resources**

- Number of qualified teachers per student for the HSN
- Number of clinical officers engaged in teaching
- Number of qualified staff per patient days
- Clinical Officers
- Nurses per department
- Nurse assistants per department

### **Technical Resources**

- Number of vaccines available monthly as proportion of needed number for MCH
- Number of HIV kits available monthly as proportion of needed number for the Laboratory.
- Number of TB drugs available monthly as proportion of needed number for the TB ward.
- Number of monthly reports prepared on time per year
- One indicator to be selected for each department.
- Three indicators to be selected by the administration.

### **Financial Resources**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Yearly budget compliance (in percent)</li> <li>• Monthly minimum direct costs overview (see chapter 4)</li> <li>• Percentage of income from national resources (Monthly)</li> <li>• Patient Fees</li> <li>• Government Grant (if possible)</li> <li>• Cost per patient bed day (Monthly)</li> <li>• Minimum operational costs</li> <li>• Salary costs</li> <li>• Investment costs</li> <li>• Main expenses as percent of expenditures (Monthly)</li> <li>• Main expenses as percent of income (Yearly)</li> <li>• Main expenses at each cost centre and department</li> </ul> | <ul style="list-style-type: none"> <li>• Percentage income per patient bed day (Yearly)</li> <li>• Patient Fees</li> <li>• Government Grant</li> <li>• Income Generating Project</li> <li>• Donor Support</li> <li>• Gifts</li> <li>• Percentage income as proportion of total income (Yearly)</li> <li>• Patient fees</li> <li>• Government support</li> <li>• Income generating projects</li> <li>• Donor support</li> <li>• Gifts</li> </ul> |
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## VIII.XIII. LIST OF PUBLICATIONS FROM HLH AND RELATED TO ITS CATCHMENT AREA

Readers of this report with knowledge of additional publications are urged to contact the hospital administration for their inclusion in this list.

### **Social Science publications**

Blystad, Astrid 1992 The pastoral Barabaig: Fertility, recycling and the social order. Cand. Polit. thesis in social anthropology, University of Bergen.

Blystad, Astrid 1995 Peril or penalty: AIDS in the context of social change among the Barabaig. *In* Young people at risk: Fighting AIDS in northern Tanzania. K.-I. Klepp, P.M. Biswalo, and A. Talle, eds. Pp. 86-106. Oslo: Scandinavian University Press.

Blystad, Astrid 1996 "Do Give us Children": The Problem of Fertility among the Pastoral Barbayiig of Tanzania. *In* Managing Scarcity: Human Adaptation in East African Drylands. A.G.M. Ahmed and H.A. Abdel, eds. Pp. 295-317. Addis Ababa: Commercial Printing Enterprise.

Blystad, Astrid 1996 La Chant qui Reveille la Terre. *In* 'Houn- Noukoun: Tambours et Visages'. T. Dorn, ed. Pp. 202-205. Paris: Editions Florent-Massot.

Blystad, Astrid 1999 "Dealing with men's spears": Datooga pastoralists combating male intrusion on female fertility. *In* Those who play with fire: Gender, fertility and transformation in East and Southern Africa. H.L. Moore, T. Sanders, and B. Kaare, eds. Pp. 187-223. London School of Economics Monographs on Social Anthropology. London: The Athlone Press.

Blystad, Astrid 2000 Challenging encounters: Datoga lives in independent Tanzania. *In* Pastoralists and environment: Experiences from the Greater Horn of Africa. L. Manger and A.G.M. Ahmed, eds. Pp. 157-180. Addis Ababa: OSSREA.

Blystad, Astrid 2000 Precarious procreation: Datoga pastoralists at the late 20th century. Dr. Polit. thesis, University of Bergen.

Bura, Mark T. 1974 The Wairaqw concepts of causation, diagnosis and treatment of disease. *Dar es Salaam Medical Journal* 6(1):55-61.

Bura, Mark. W. T. 1984 Pregnancy and child rearing practices among the Wairaqw of Tanzania. Diploma in Tropical Child Health Course, University of Liverpool.

Lane, Charles 1991 Wheat at what cost? CIDA and the Tanzania-Canada wheat program. *In* Conflicts of interest: Canada and the Third World. J. Swift and B. Tomlinson, eds. Pp. 133-160. Toronto, Ont.: Between the Lines.

Lane, Charles 1993 Pastures lost: Alienation of Barabaig land in the context of land policy and legislation in Tanzania. 13th International Congress of Anthropological and Ethnological Sciences, Mexico, 1993.

Lane, Charles 1996 Pastures lost: Barabaig economy, resource tenure, and the alienation of their land in Tanzania. Nairobi: Initiatives Publishers.

Lane, Charles Robert 1986 Participatory research with Barabaig pastoralists in Tanzania: Report: July - December 1986. .

Lane, Charles Robert 1990 Barabaig natural resource management: Sustainable land use under threat of destruction. Volume 12. Geneva: United Nations Institute for Social Development.

Lane, Charles Robert 1991 Alienation of Barabaig Pasture Land: Policy implications for pastoral development in Tanzania. Ph.D thesis, University of Sussex.

Lane, Charles Robert, and J. Pretty, 1990 Displaced pastoralists and transferred wheat technology in Tanzania. Volume SA20. London: International Institute for Environment and Development (IIED).

Lane, Charles Robert, and Ian Scoones, 1991 Barabaig Natural Resource Management: Implications for sustainable savannah land use in pastoral areas of Africa. Paper presented at I.

Rekdal, Ole Bjørn 1994 Kulturell kontinuitet og sosial endring. En studie av iraqw-folket i det nordlige Tanzania. Volume 48. Bergen: Norse.

Rekdal, Ole Bjørn 1996 Money, milk, and sorghum beer: Change and continuity among the Iraqw of northern Tanzania. *Africa* 66(3):367-385.

Rekdal, Ole Bjørn 1998 When hypothesis becomes myth: The Iraqi origin of the Iraqw. *Ethnology* 37(1):17-38.

Rekdal, Ole Bjørn 1999 Cross-cultural healing in East African ethnography. *Medical Anthropology Quarterly* 13(4):458-482.

Rekdal, Ole Bjørn 1999 The invention by tradition: Creativity and change among the Iraqw of northern Tanzania. Dr. Polit. thesis, University of Bergen.

Rekdal, Ole Bjørn, and Astrid Blystad 1999 "We are as sheep and goats": Iraqw and Datooga discourses on fortune, failure, and the future. In "The poor are not us": Poverty and pastoralism in Eastern Africa. D.M. Anderson and V. Broch-Due, eds. Pp. 125-146. Oxford: James Currey.

Sanders, Todd 1998 Making children, making chiefs: Gender, power and ritual legitimacy. *Africa* 68(2):238-262.

Sanders, Todd 1999 "Doing gender" in Africa: Embodying categories and the categorically disembodied. In *Those who play with fire: Gender, fertility and transformation in East and Southern Africa*. H.L. Moore, T. Sanders, and B. Kaare, eds. Pp. 41-82. London School of Economics Monographs on Social Anthropology, vol 69. London: The Athlone Press.

Sanders, Todd 1999 Modernity, wealth, and witchcraft in Tanzania. *Research in Economic Anthropology* 20:117-131.

Schultz, J. 1971 Agrarlandschaftliche Veränderungen in Tanzania. München: Weltforum Verlag.

Talle, Aud 1974 Økonomiske dilemmaer i kombinasjon av buskapshold og økonomisk jordbruk. Mag. Art thesis, University of Oslo.

Talle, Aud, and Stig Holmqvist 1979 Barheida og dei tre konene hans. Oslo: Det Norske Samlaget.

Woodburn, James 1968 An introduction to Hadza ecology. In *Man, the hunter*. R.B. Lee and I. DeVore, eds. Pp. 49-55. New York: Aldine Publishing Company.

Woodburn, James 1968 Stability and flexibility in Hadza residential groupings. In *Man, the hunter*. R.B. Lee and I. DeVore, eds. Pp. 103-110. Chicago: Aldine Publishing Company.

Woodburn, James 1970 Hunters and gatherers. The material culture of the nomadic Hadza. .

Woodburn, James 1979 Minimal politics. The political organization of the Hadza of North Tanzania. In *Politics in leadership. A comparative perspective*. W.A. Shack and P.S. Cohen, eds. Pp. 244-264. Oxford: Clarendon Press.

Woodburn, James 1982 Social dimensions of death in four African hunting and gathering societies. In *Death and the regeneration of life*. M. Bloch and J. Parry, eds: Cambridge University Press.

Woodburn, J. C. 1959 Hadza conceptions of health and illness. One day symposium on attitudes to health and disease among some East African tribes, Kampala, 1959, pp. 89-94. Makerere Institute of Social Research.

Aarsland, Anna Egenomsorg blant iraqw-kvinner i Tanzania. En beskrivende pilotstudie med fokus på egenomsorgsproblemer blant iraqw- kvinner i to landsbyer. Hovedoppgave ved Institutt for sykepleievitenskap, Universitetet i Oslo.

#### **Scientific Publications in International Medical Journals**

Bergsjø P. The Haydom hospital-from the east sun and the west moon. *Tidsskr Nor Lægeforening* 1993 Dec 10; **113** (30): 3778-81..

Olsen B E, Hinderaker SG, Lie RT, Gasheka P, Bærheim A. Bergsjø P, Kvåle G. Diagnosis of urinary tract infections among pregnant women in rural Tanzania; prevalences and correspondence between different diagnostic methods. *Acta Obstet Gynecol Scand* 2000; 79 (9): 729-736.

Olsen BE, Hinderaker SG, Kazaura M, Lie RT, Bergsjø P, Gasheka P, Kvåle G. Estimates of maternal mortality by the sisterhood method in rural northern Tanzania; a household sample and an antenatal clinic sample. *Br J Obstet Gynaecol* 2000; 107 (10):1290-1297.

Olsen BE, Hinderaker SG, Lie RT, Bergsjø P, Gasheka P, Kvåle G. Maternal mortality in northern rural Tanzania; assessment of the completeness of various sources of information. Submitted 2000.

Olsen BE, Hinderaker SG, Bergsjø P, Lie RT, Olsen OHE, Gasheka P, Kvåle G. Direct and indirect obstetric deaths in a hypo-to meso-endemic malaria area in rural northern Tanzania. Submitted 2001.

Hinderaker SG, Olsen BE, Bergsjø P, Lie RT, Bergsjø P, Gasheka P, Kvåle G. Anaemia in pregnancy in highlands of Tanzania. *Acta Obstet Gynecol Scand* 2001; 80 (1): 18-26.

Hinderaker SG, Kruger C, Olsen BE, Naman N, Bergsjø P, Olsen OHE. Continuously low HIV-seroprevalence in pregnant women in a rural area in Tanzania. Submitted 2001.

Hinderaker SG, Olsen BE, Lie RT, Bergsjø P, Gasheka P, Ulvik R, Kvåle G. Causes of anaemia in pregnancy in rural Tanzania. Submitted 2001.

Hinderaker SG, Olsen BE, Bergsjø P, Gasheka P, Lie RT, Kvåle G. Perinatal mortality in northern rural Tanzania. Submitted 2001

#### **Student theses**

Kiserud Thorleif, Ringen Øyvind, Sandøy Roar. Rapport fra studie reise i Øst Afrika. Senter for Internasjonal Helse, Universitetet i Bergen. 1994. ISBN:82-992108-3-6

Kiserud Thorleif, Ringen Øyvind. Befolkningsvekst og ressursgrunnlag. Senter for Internasjonal Helse, Universitetet i Bergen. 1995.

Sandaker Unni E, Sandvik Helene. Helsearbeid i U-land. Rapport fra studietur til Tanzania. Senter for Internasjonal Helse, Universitetet i Bergen. 1994.

Talberg Tonje. Unge kvinner og AIDS i Tanzania: Kulturelle hindringer i forebyggende helseopplysnings arbeid mot spredning av HIV. Senter for Internasjonal Helse, Universitetet i Bergen. 1998.

Modalsli, Kari. Spedbarnsdødelighet i U-land. Senter for Internasjonal Helse, Universitetet i Bergen. 1998.

Veddeng, Anne. Mødredødelighet i U-land. Senter for Internasjonal Helse, Universitetet i Bergen. 1998.

Vik, Anne M. Knowledge, attitudes and practise of family planning in Tanzania. A study based on information from local health workers. Centre for International Health, University of Bergen. 1996.

Njølstad Trude, Erichsen Anne K, Økland Ellen, Hertzberg Anne G, Mohn Eli C, Haugstad Marta. Rapport fra studietur til Tanzania. Vår 93. Senter for Internasjonal Helse, Universitetet i Bergen..

Lundemoen S, Holtedal K, (1996). "Mother and child health clinic attendance and the outcome of pregnancy in rural Tanzania". Fifth year thesis, Medical faculty, University of Tromsø.

Nygaard C, Røsok BI, Bura M, Haukenes G, Haneberg B (1994). "Measles and measles vaccination in some districts in Tanzania". Fifth year thesis, Medical Faculty, University of Bergen.

## VIII.XIV. ABBREVIATIONS USED IN THE PLAN

<b>ACT</b>	Action of Churches Together	<b>ICU</b>	Intensive Care Unit
<b>AGM</b>	Annual General Meeting	<b>IPD</b>	Inpatient department
<b>AMMP</b>	Adult Morbidity and Mortality Project	<b>KCMC</b>	Kilimanjaro Christian Medical College
<b>AMO</b>	Assistant Medical Officer	<b>LFA</b>	Logical Framework Approach
<b>AMREF</b>	American Medical Research Foundation	<b>LMC</b>	Lutheran Mission Coordination
<b>ANC</b>	Antenatal Care	<b>LWF</b>	Lutheran World Federation
<b>BN</b>	Norwegian Missions Development Agency	<b>MAF</b>	Missionary Aviation Fellowship
<b>BoT</b>	Bank of Tanzania	<b>MCH</b>	Maternal Child Care
<b>CBHC</b>	Community Based Health Care	<b>MD</b>	Mbulu Diocese
<b>CCT</b>	Christian Council of Tanzania	<b>MFA</b>	Ministry of Foreign Affairs
<b>CEDHA</b>	Centre for Educational Development in Health, Arusha	<b>MHCP</b>	Managed Health Care Programme
<b>CEO</b>	Chief Executive Officer	<b>MOC</b>	Minimum Operational Costs
<b>CHF</b>	Community Health Funds	<b>MoH</b>	Ministry of Health
<b>CIDA</b>	Canadian International Development Agency	<b>MoiC</b>	Medical Officer in Charge
<b>CIH</b>	Centre for International Health, Bergen.	<b>MUCHS</b>	Muhimbili University College of Health Science
<b>CMO</b>	Chief Medical Officer	<b>NACP</b>	National Aids Control Programme
<b>CSSC</b>	Christian Social Services Commission	<b>NBS</b>	National Bureau of Statistics
<b>DALE</b>	Disability Adjusted Life Expectancy	<b>NCA</b>	Norwegian Church Aid
<b>DANIDA</b>	Danish Development Agency	<b>NGO</b>	Non Governmental Organizations
<b>DDH</b>	District Designated Hospital	<b>NIMR</b>	National Institute for Medical Research
<b>DLM</b>	Danish Lutheran Mission	<b>NLM</b>	Norwegian Lutheran Mission
<b>DMO</b>	District Medical Officer	<b>NOK</b>	Norwegian Kroners
<b>DOTS</b>	Directly Observed Treatment Schedule	<b>NORAD</b>	Norwegian Agency for Development Cooperation
<b>DPBT</b>	Developing a Poverty Baseline, Tanzania	<b>OPD</b>	Outpatient department
<b>ELCA</b>	Evangelical Lutheran Church of America	<b>OT</b>	Operation Theatre
<b>ELCT</b>	Evangelical Lutheran Church in Tanzania	<b>PBD</b>	Patient Bed Days
<b>ENT</b>	Ear Nose & Throat	<b>PHC</b>	Primary Health Care
<b>EPI</b>	Extended Program of Immunization	<b>PRSP</b>	Poverty Reduction Schemes Papers
<b>FINNIDA</b>	Finnish International Development Agency	<b>RCHS</b>	Reproductive and Child Health Survey
<b>GAVI</b>	Global Alliance of Vaccines Initiative	<b>RMO</b>	Regional Medical Officer
<b>GoT</b>	Government of Tanzania	<b>SWAP</b>	Sector Wide Approach Programme
<b>H&amp;O</b>	Hinderaker & Olsen publications	<b>SWC</b>	State of the World Children
<b>HIDC</b>	Highly Indebted Developing Countries	<b>TB</b>	Tuberculosis
<b>HLH</b>	Haydom Lutheran Hospital	<b>TEC</b>	Tanzanian Episcopal Conference
<b>HLH</b>	Haydom Lutheran Hospital	<b>TEHIP</b>	Tanzania Essential Health Intervention Programme
<b>HMC</b>	Hospital Management Committee	<b>THRF</b>	Tanzanian Health Research Forum
<b>HMFRP</b>	Haydom/Mbulu Food Relief Programme	<b>ToR</b>	Terms of Reference
<b>HMIS</b>	Health Management Information System	<b>TSh</b>	Tanzanian Shillings
<b>HNP</b>	Health, Nutrition & Population	<b>USD</b>	United States Dollars
<b>HPUC</b>	Health Programme Unit Coordinator	<b>VA</b>	Voluntary Agencies
<b>HSA</b>	Health Statistics Abstract	<b>VSA</b>	Voluntary Services Agency
<b>HSN</b>	Haydom School of Nursing	<b>VSO</b>	Voluntary Services Overseas
<b>HSUS</b>	Haydom Secondary Upgrading School	<b>WB</b>	World Bank
<b>HTF</b>	Haydom Trust Fund	<b>WDR</b>	World Development Report
		<b>WHO</b>	World Health Organization

TABLE 30. LIST OF ABBREVIATIONS

## VIII.XV. PEOPLE CONSULTED

Name	Function	Organization / Place
Birkeland Hans	Mission Secretary	NLM, Oslo
Booy, D	Country Director	Worldvision, Tanzania
Bukenya, Dr. Daraus	Country Director	AMREF, Dar-es-Salaam
Devane, Dr. Sheila	Project coordinator	Arusha Town Community Mental Health Programme
Føreland, Gunnar	Minister Counsellor	Norwegian Embassy, Dar-es-Salaam
Hetland Gaute	Health consultant	BN, Oslo
Johannsen, J. Winther	Chief Technical Adviser, Health Sector Program Support, MoH	DANIDA, Dar-es-Salaam
Kitua, Dr. Andrew	Director General	NIMR, Dar-es-Salaam
Massawe, Kerstin	Assistant Program Officer, Health Sector	Norwegian Embassy, Dar-es-Salaam
Mbalaki, Gideon	Administrator	ELCT, Arusha
Mbice, Ms. LoeRose	Acting Department Chief, Dept. of Social Services and Women Work	ELCT, Arusha
Mbunjo, Dr.	Medical Officer for NGOs	MoH, Dar-es-Salaam
Mungongo, Dr.	Acting Deputy Director for Health	CSSC, Dar-es-Salaam
Ruharpisa Jason	Deputy Director for Education	CSSC, Dar-es-Salaam
Seland, Dr J.H	Ophthalmologist	Haukeland Hospital, Bergen, Norway
Simba, Sizar	Aids coordinator	ELCT, Arusha
Upunda, Dr. G.	Chief Medical Officer	MoH, Dar-es-Salaam
Ward, D.	Executive Director	Christopher Blinden Mission, Nairobi, Kenya

TABLE 31. PEOPLE CONSULTED.

## VIII.XVI. REFERENCE MATERIAL CONSULTED IN THE REPORT

#	AUTHOR(S)	TITLE	PUBLISHED BY	DATE
1.	Abel-Smith,B	Introduction to Health Policy, Planning and Financing	Longman, London	1994
2.	Bank of Tanzania	Economic Bulletin	Vol XXX No. 2k Bank of Tanzania	2000
3.	Bank of Tanzania	Monthly Economic Review	February-March, Bank of Tanzania	2001
4.	Bosma,J.	Alternative Inpatient Charge System	HLH	1999
5.	Bura, Dr. M	Grants In Aid Regulations	ELCT	2000
6.	Bura, Dr. M	Community Health Funds and Managed Health Care	ELCT	1999
7.	Bura, Dr. M	Monitoring and supervision of Managed Health Care Programme	ELCT	2000
8.	CORAT Africa & Dr. Sigmund Lende	Evaluation report on Bunda Designated District Hospital	Mara Diocese ELCT	2000
9.	CSSC	Operational Guidelines on Costing and Cost Management of Health Care in Church Hospitals in Tanzania	Dar es Salaam	1999
10.	CSSC Institutional Capacity Building Project & Corat Africa	Guidelines for management systems and policies for church health care facilities	CSSC Dar-es-Salaam	1998
11.	Devane, Dr. S	Fourth Annual Report	Arusha Town Community Mental Health Programme	2000
12.	Flessa, Dr. S.	Costing of Health Services of the ELCT	ELCT	1997
13.	Flessa, Dr. S.	Reconciling the Irreconcilable	ELCT	1997
14.	Flessa, Dr. S.	The costs of hospital services: a case study of ELCT church hospitals in Tanzania	Health Policy and Planning; Vol 4	1998
15.	Forss,K. Carlsson,J.	The Quest for Quality – Or can evaluation findings be trusted?	Evaluation 3;481-501	1997
16.	Fowler,Alan	Negotiating relationships: A resource for Non-Governmental development organizations	Paper presented to the Norwegian Church Aid,	2000
17.	Green,A	An introduction to Health Planning in Developing Countries	Oxford Medical Publications Oxford University Press	1992
18.	Grosskurth,H. Mosha,F. Todd,J. et.al.	Impact of improved treatment of sexually transmitted diseases ion HIV infection in rural Tanzania: randomized controlled trial	Lancet 346. 530-536.	August 1995.
19.	Haydom Lutheran Hospital	Annual report 1996	HLH	1998
20.	Haydom Lutheran Hospital	Annual report 1997	HLH	1998
21.	Haydom Lutheran Hospital	Annual report 1998	HLH	1999
22.	Haydom Lutheran Hospital	Annual report 1999	HLH	2000
23.	Haydom Lutheran Hospital	Annual report 2000	HLH	2001
24.	Haydom Lutheran Hospital	Departmental Objectives at HLH; Comprehensive compilation	HLH	2001
25.	Haydom / Mbulu Food Relief Program	End Report to the Ministry of Foreign Affairs, Norway	HMFRP	1999
26.	Hetland, G.	Saksbehandling 1997-2001: Haydom Lutheran Hospital	Bistandsnemnda	2001
27.	Hinderaker SG, Kruger C, Olsen BE, Naman N, Bergsjø P, Olsen OHE.	Continuously low HIV-seroprevalence in pregnant women in a rural area in Tanzania		Submitted 2001
28.	Hinderaker SG, Olsen BE, Bergsjø P, Lie RT, Bergsjø P, Gasheka P, Kvåle G.	Anemia in pregnancy in highlands of Tanzania	Acta Obstet Gynecol Scand; 80 (1): 18-26.	2001
29.	Hinderaker SG, Olsen BE, Lie RT, Bergsjø P, Gasheka P, Ulvik R, Kvåle G	Causes of anaemia in pregnancy in rural Tanzania		Submitted 2001
30.	Hinderaker,SG. Olsen,BE. Bergsjø,P. Gasheka,P. Lie,RT. Kvåle,G.	Perinatal mortality in northern rural Tanzania		Submitted 2001
31.	Koch,V. Hetland,G.	Tjenestereise til Tanzania og Etiopia	Bistandsnemnda	1999
32.	Kwast,B.E	Quality of care in Reproductive Health Programmes: Concepts, Assessments, Barriers and Improvements - An overview.	Midwifery 14, 66-73.	1998.

33.	LaFond,A.	Sustaining Primary Health Care	EARTHSCAN, London	1995
34.	MacLeod,J. Rhode,R	Retrospective follow-up of maternal deaths and their associated risk factors in a rural district of Tanzania	Tropical Medicine and International Health. Vol. 3(2), 130-137	February 1998.
35.	Mbulu Diocese - special committee	HLH - Revised 5-year for 1997-2001	Mbulu Diocese ELCT	1996
36.	Mbulu District Council	Comprehensive District Health Plan	Presidents Office, Regional Administration and Local Government	2001
37.	Ministry of Health	Health Statistics Abstracts	Dar es Salaam	1997
38.	Ministry of Health	Health Statistics Abstracts	Dar es Salaam	1998
39.	Ministry of Health	Staffing Levels for Health Facilities / Institutions	Dar es Salaam	April 1999
40.	Ministry of Health Tanzania	The Health Sector - Plan of action	Dar es Salaam	1999
41.	Ministry of Health, Health Information and Research Section, Planning and Policy Dept.	Health Statistics Abstract 1998 Vol. II: Inventory Data	Dar es Salaam	1998
42.	Ministry of Health, Tanzania	Human Resources for Health Sector in Tanzania: A Five-Year Plan	Dar es Salaam	1996
43.	Ministry of Health, Tanzania	Joint Disbursement System for the Health Sector – Accounting Manual	Dar es Salaam	1999
44.	Ministry of Health, Tanzania	National District Health Planning Guidelines	Dar es Salaam	1998
45.	Ministry of Health, Tanzania	The Health Sector Reform Programme of Work; July 1999 – June 2002	Dar es Salaam	1999
46.	Ministry of Health.	National AIDS Control Programme, HIV/AIDS/STD Surveillance. Report No. 14.	Dar es Salaam	December 1999.
47.	Ministry of Regional Administration and Local Government	Procedures manual for the joint disbursement system for council health basket funds	Dodoma, Tanzania.	2000
48.	Murray,C. & Lopez,A.	Global Comparative Assessments in the Health Sector	WHO, Geneva	1994
49.	Murray,C.& Lopez,A.	The Global Burden of Disease	WHO, World Bank, Harvard School of Public Health	1996
50.	National Bureau of Statistics	Tanzania - Demographic and Health Survey 1996	National Bureau of Statistics, Tanzania & Macro International Inc, USA.	1997
51.	National Bureau of Statistics	Tanzania - Reproductive and Child Health Survey 1999	National Bureau of Statistics, Tanzania & Macro International Inc, USA.	2000
52.	NORAD application by CIH, Bergen	Library- medical information centre in Singida and Arusha regions	CIH, UiB, Bergen	2001
53.	Olsen B E, Hinderaker SG, Lie RT, Gasheka P, Bærheim A. Bergsjø P, Kvåle G	Diagnosis of urinary tract infections among pregnant women in rural Tanzania; prevalences and correspondence between different diagnostic methods	Acta Obstet Gynecol Scand, 79 (9): 729-736.	2000
54.	Olsen BE, Hinderaker SG, Kazaura M, Lie RT, Bergsjø P, Gasheka P, Kvåle G	Estimates of maternal mortality by the sisterhood method in rural northern Tanzania; a household sample and an antenatal clinic sample	Br J Obstet Gynaecol; 107 (10):1290-1297.	2000
55.	Olsen BE, Hinderaker SG, Lie RT, Bergsjø P, Gasheka P, Kvåle G	Maternal mortality in northern rural Tanzania; assessment of the completeness of various sources of information		Submitted 2001
56.	Olsen, Dr.B.E.	Maternal Mortality in Sub-Sahara	CIH,University of Bergen, Norway	2000
57.	Olsen,B.E. Hineraker, S.G. Bergsjø,P. Lie,R.T. Olsen.O.H.E. Gasheka,P. Kvåle,G.	Direct and indirect obstetric deaths in a hypo-to meso-endemic malaria area in rural northern Tanzania		Submitted 2001
58.	Rifkin.B	Lessons from community participation in health programmes	Health Policy and Planning; 1(3): 240-49	1986.
59.	Schmidt,D.H. Rifkin,B.	Measuring participation	International Journal of Health Planning and Management. 11:345-58	1996
60.	Schmidt.D.H, Rifkin.B	Measuring participation: its use as a managerial tool for district health planners based on a case study in Tanzania	Int. J. Health Planning and Management, vol.11, 345-58.	1996.
61.	Semboja,J & Therkildsen,O. Eds.	Service Provision under Stress in East Africa	Centre for Development Research, Denmark	1995
62.	Smith,M.K.	Hospitals in developing countries: a weak link in a weak chain	The Lancet, December Vol 354	2000
63.	Special Study Team	Developing a poverty baseline in Tanzania	National Bureau of Statistics, Tanzania & Oxford Policy Management Ltd., United Kingdom.	2000
64.	Special Study Team	Updating the Poverty Baseline in Tanzania	National Bureau of Statistics, Tanzania & Oxford Policy Management Ltd., United Kingdom.	2000
65.	Torsvik,M	Summary of research course	Haydom School of Nursing	1999
66.	Ugalde,A.	Ideological Dimensions of Community Participation in	Social Science and Medicine; 21(1):41-53	1985

Latin American health Programs.				
67.	UNDP	Development co-operation Report for 1997	Tanzania	1997
68.	UNDP	Human Development Report	New York	1997
69.	UNDP	Human Development Report	New York	1998
70.	UNDP, Graham Hobbs – Economic and Social Research Foundation	The Health Sector-Wide Approach and Health Sector Basket Fund	UNDP, Tanzania, Dar es Salaam	2001
71.	UNICEF	State of the worlds children	New York	1999
72.	Urassa,E. Massawe,S. Lindmark,G. Nystrom,L.	Operational factors affecting maternal mortality in Tanzania	Health Policy and Planning. Vol. 12(1), 50-57..	1997
73.	Villar,J. Bergsjø,P.	Scientific basis for the content of routine antenatal care. I. Philosophy, recent studies, and power to eliminate or alleviate adverse maternal outcomes.	Acta Obstetrica et Gynecologica Scandinavica,76(1), 1-14.,	1997
74.	Walt,G. Rifkin,S.	The political context of Primary Health Care	In: Streefland,P. Chabot,J. (eds): Implementing Primary health Care; Experiences since Alma Ata. Royar Tropical Institute, Amsterdam	1990
75.	WHO	Implementation of the Global Strategy for Health for All by the year 2000	Geneva	1993
76.	WHO	Report on the International Conference on Primary Health Care in Alma Ata, USSR 6-12 September 1978	Geneva	1978
77.	WHO	The World Health Report	Geneva	1997
78.	WHO	World Health Report	Geneva	1998
79.	WHO, ARA Paper number 15	Essential Health Service Packages: Uses, abuse and future directions	WHO, Geneva	1997
80.	WHO, ARA Paper number 8	Experience with organizational and financing reform of the health sector	WHO, Geneva	1994
81.	WHO, Discussion paper 2	Issues in health serviced delivery; Human resources for health	WHO, Geneva	2000
82.	WHO, Report of a WHO Study Group on the Functions of Hospitals at the First Referral Level	The Hospital in Urban and Rural Districts.	WHO, Geneva	1992
83.	Wood, A. ed	Strategies for Sustainability – Africa	The World Conservation Union (IUCN) & EARTHSCAN	1997
84.	Wood, M.	Different Drums	Clarkson N.Potter, New York	1987
85.	World Bank	World Bank Sector Strategy, Health Nutrition & Population,	World Bank, Washington	1997
86.	World Bank Country Study	Tanzania Social Sector Review	WB, Washington	1999
87.	World Bank Sector Strategy	Health Nutrition & Population	Washington	1997
88.	World Bank, Development in Practice Series	Better Health in Africa –Experience and lessons Learned – 3 <sup>rd</sup> ed.	World Bank, Washington	1999
89.	World Bank, Report of an Africa Region Task Force	Taking action for Poverty Reduction in Sub-Saharan Africa	World Bank, Washington	1996
90.	World Bank, World Development Report 1997	The State in a changing world	World Bank ,Oxford: Oxford University Press	1997
91.	World Bank, World Development Report 2000/2001	Attacking Poverty	World Bank, Washington	2000

TABLE 32. REFERENCE MATERIAL CONSULTED.